PROJECT PERFORMANCE ASSESSMENT REPORT

INDIA

STATES’ ROAD INFRASTRUCTURE DEVELOPMENT TECHNICAL ASSISTANCE PROJECT (SCL-41140 AND PPFB2240)

NOVEMBER 29, 2006

Sector, Thematic, and Global Evaluation Division
Independent Evaluation Group
**Currency Equivalents** (annual averages)

*Currency Unit = Indian Rupees (INR)*

<table>
<thead>
<tr>
<th>Year</th>
<th>US$1.00</th>
<th>INR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td></td>
<td>32.8</td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td>35.4</td>
</tr>
<tr>
<td>1997</td>
<td></td>
<td>36.6</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td>41.5</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>43.1</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>45.1</td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td>47.3</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td>48.5</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td>46.3</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td>45.1</td>
</tr>
</tbody>
</table>

**Abbreviations and Acronyms**

- **ADB**: Asian Development Bank
- **AP**: Andhra Pradesh
- **CAS**: Country Assistance Strategy
- **DEA**: Department of Economic Affairs (of the Ministry of Finance)
- **GOI**: Government of India
- **ICR**: Implementation Completion Report
- **IDS**: Institutional Development Strategy
- **IEG**: Independent Evaluation Group
- **MOP**: Memorandum of the President
- **NHS**: National Highway System
- **OED**: Operations Evaluation Department
- **PBM**: Performance Based Maintenance
- **PPF**: Project Preparation Facility of the World Bank
- **PMMS**: Pavement and Maintenance Management System
- **PPAR**: Project Performance Assessment Report
- **PRSP**: Poverty Reduction Strategy Paper
- **PWD**: Public Works Department
- **RAP**: Resettlement Action Plan
- **RDB**: Road Data Bank
- **R&R**: Resettlement and Rehabilitation
- **SAR**: Staff Appraisal Report
- **SRID**: States’ Road Infrastructure Development
- **TA**: Technical Assistance
- **TOR**: Terms of Reference

**Fiscal Year**

Government: **April 1 – March 31**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director-General, Evaluation</td>
<td>Mr. Vinod Thomas</td>
</tr>
<tr>
<td>Director, Independent Evaluation Group, World Bank</td>
<td>Mr. Ajay Chhibber</td>
</tr>
<tr>
<td>Manager, Sector, Thematic and Global Evaluation Division</td>
<td>Mr. Alain Barbu</td>
</tr>
<tr>
<td>Task Manager</td>
<td>Mr. Peter Freeman</td>
</tr>
</tbody>
</table>
About this Report
The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank’s self-evaluation process and to verify that the Bank’s work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEG annually assesses about 25 percent of the Bank’s lending operations. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, IEG staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader IEG studies.

Each PPAR is subject to a peer review process and IEG management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers’ comments are attached to the document that is sent to the Bank’s Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the IEG Rating System
The time-tested evaluation methods used by IEG are suited to the broad range of the World Bank’s work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEG evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (more information is available on the IEG website: http://worldbank.org/oed/eta-mainpage.html).

**Relevance of Objectives:** The extent to which the project’s objectives are consistent with the country’s current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Possible ratings: High, Substantial, Modest, Negligible.

**Efficacy:** The extent to which the project’s objectives were achieved, or expected to be achieved, taking into account their relative importance. Possible ratings: High, Substantial, Modest, Negligible.

**Efficiency:** The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. Possible ratings: High, Substantial, Modest, Negligible. This rating is not generally applied to adjustment operations.

**Sustainability:** The resilience to risk of net benefits flows over time. Possible ratings: Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

**Institutional Development Impact:** The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. Possible ratings: High, Substantial, Modest, Negligible.

**Outcome:** The extent to which the project’s major relevant objectives were achieved, or are expected to be achieved, efficiently. Possible ratings: Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

**Bank Performance:** The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). Possible ratings: Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

**Borrower Performance:** The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. Possible ratings: Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.
Contents

Preface ......................................................................................................................... vii
Summary ....................................................................................................................... xi
1. Background .............................................................................................................. 1
2. Project Design and Implementation ................................................................. 2
3. Evaluation Findings and Ratings ...................................................................... 6
4. Conclusions and Lessons .................................................................................... 13
5. Lessons Learned .................................................................................................. 14
Annex A. Basic Data Sheet ....................................................................................... 15
Borrower Comments ................................................................................................. 17

This report was prepared by Hernan Levy (assisted by Ramachandra Jamm), who assessed the project in September 2005. Romayne Pereira provided administrative support.
### Principal Ratings

<table>
<thead>
<tr>
<th></th>
<th>ICR*</th>
<th>ICR Review*</th>
<th>PPAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Likely</td>
<td>Likely</td>
<td>Likely</td>
</tr>
<tr>
<td>Institutional Development Impact</td>
<td>Modest</td>
<td>Substantial</td>
<td>Modest</td>
</tr>
<tr>
<td>Bank Performance</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Borrower Performance</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

* *The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The ICR Review is an intermediate Independent Evaluation Group (OED) product that seeks to independently verify the findings of the ICR.*

### Key Staff Responsible

<table>
<thead>
<tr>
<th>Project</th>
<th>Task Manager/Leader</th>
<th>Division Chief/ Sector Director</th>
<th>Country Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal</td>
<td>Ernst Huning</td>
<td>Jean-Francois Bauer</td>
<td>Edward Lim</td>
</tr>
<tr>
<td>Completion</td>
<td>Alok Nath Bansal</td>
<td>Guang Z. Chen</td>
<td>Edward Lim</td>
</tr>
</tbody>
</table>
Preface

This is the Project Performance Assessment Report (PPAR) prepared by the Independent Evaluation Group (IEG) for the India States' Road Infrastructure Development Technical Assistance Project (SCL-41140, PPFB-P2230). The loan was approved on December 5, 1996 for an amount of US$51.5 million equivalent. The participating state governments were to provide an additional US$17.0 million equivalent, and the Government of India an additional US$0.5 million. The Borrower was the Government of India, and the Implementing Agency was the Department of Economic Affairs of the Ministry of Finance. The 16 participating state governments (Andra Pradesh, Assam, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mizoram, Orissa, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, and West Bengal) were also partners. The loan became effective on February 14, 1997 and closed on schedule on December 31, 2001, with an amount of US$7.7 million undisbursed that was canceled.

The project was chosen for assessment because it was instrumental in preparing a pipeline of subsequent Bank road projects, which led to a major increase in Bank lending for state road projects. It is also to be used as a case study in the IEG Transport Review currently in preparation.

IEG prepared this report based on an examination of the relevant Memorandum of the President, Implementation Completion Report, legal agreements, project files and archives, as well as other relevant reports, memoranda, and working papers. Discussions were held with Bank staff in both Washington DC and in India. An IEG field mission visited India in September 2005, conducted site visits, and discussed both the project and the effectiveness of Bank assistance with relevant officials and stakeholders. A PPAR workshop attended by officials from five states was held in Delhi on September 6, 2005. The mission appreciates the courtesies and attention given by these interlocutors as well as the support provided by the Bank’s office in Delhi.

The report has been discussed with the Government of India and concerned State Governments (see Annex B) but does not necessarily bear their approval for all its contents, especially where the Bank has stated its judgements/opinions/policy recommendations.
Summary

The India States' Road Infrastructure Development Technical Assistance Project (SRID-TA) was approved by the Bank in 1996 and completed in 2001, on schedule. The project was conceived in the context of a Country Assistance Strategy (CAS) that emphasized continued reform in key sectors, including infrastructure. The project was designed at a time when India was growing at 6-7 percent per year (growth has accelerated since 2000), causing a strong increase in the demand for road transport, and leading the government to put increased emphasis on improving and expanding both the national and the states' road networks.

The project's overall objective was to assist participating states in the preparation of high priority road investments and to promote the carrying out of policy reforms in the provision, financing and maintenance of road infrastructure, while assisting in the preparation of road investments aimed at Bank financing.

The project's performance monitoring indicators divided the project objectives into three areas:

- Support reform for the planning, financing, provision, maintenance and management of road infrastructure by the states' road agencies;
- Support preparation of major road infrastructure proposals for Bank financing, aimed at improved efficiency of states' road networks; and
- Assist states towards increased privatization of road engineering, construction, works supervision and maintenance in the sector.

The outcome of the project is rated Satisfactory. The main objective was achieved. Sixteen states ended up meeting entry conditions and became participants in the project, compared to 15 potential candidate states identified at appraisal. Targets were achieved and surpassed in all three areas with performance indicators, although there was a wide variation among states. At the same time, most targets were modest and not especially difficult to achieve. Progress on privatization, mainly through outsourcing, was uneven, and in several states necessary improvements in administrative capacity to supervise outsourced outputs were lacking. The TA project led to approval by the Bank of seven new state road projects for a total of US$2.2 billion. Several other projects prepared with assistance from the TA project are currently under consideration by the Bank, and other projects whose preparation was assisted by the TA project were financed by other agencies.

Institutional development is rated Modest. Activities related to institutional development were carried out, but they were intended to help prepare institutional development changes rather than carry out reforms. The activities included studies aimed at introducing the states’ road agencies to new methods and technologies, and setting the basis for the introduction of reforms in the management of these agencies at a later stage. In some areas, especially on social assessments and the preparation of resettlement action plans (RAP), there was reluctance on the part of the states to
adopt Bank guidelines. While this has improved during implementation of follow-on road projects, it is still an area where the implementing agencies believe that Bank guidelines are inappropriate for local conditions.

Sustainability is rated Likely. A key indicator of the project’s sustainability is the satisfactory progress, with just minor exceptions, in the implementation of the several follow-on state road projects that were originated by the TA project.

Bank and Borrower performance are rated Satisfactory. The Bank prepared a project with well thought out entry conditions that required the states’ road agencies to undertake commitments for reforming several aspects of road management. Such conditions were essential for the preparation and implementation of the follow on road projects. Despite the difficulty of managing a project with 16 states participating, there was a good supervision effort that helped assure the success of the project. The Borrower worked closely with the Bank in preparing the project, and during implementation state governments generally complied with commitments undertaken in the policy letters signed as entry conditions. However, an area where both the Bank and the Borrower could have done better was in facilitating information exchanges among participating states.

Three main lessons may be derived from this project:

- **The risks of multi-state projects** should be carefully assessed during preparation, especially due to the greater complexity of supervision required. The commitment of the central government implementing agency and the possibility for the Bank to supervise the project from the country office are two key ways to minimize such risks. Systematic exchanges of information during implementation among the participating states should be part of the projects’ design.

- **Entry conditions** requiring commitment to reforms are useful when such commitments are formalized vis-a-vis of both the central government and the Bank; the states are more likely to agree to such commitments if they perceive a realistic expectation of receiving funding from follow-on projects.

- **Resettlement and rehabilitation policies** are an issue which can cause conflict especially in states which are confronted with Bank regulations for the first time. A more intense Bank effort is advocated to discuss the rationale of such regulations with local officials at the outset and, to the extent possible, endeavor to adapt the application of such regulations to local conditions where possible.

Vinod Thomas
Director-General
Independent Evaluation Group
1. Background

1.1 India's economy is the third largest in Asia, after Japan and China. GDP per capita is estimated at $3,100 (2004, at purchasing power parity). During the 1990s, the economy grew at 6-7 percent per year, and has accelerated further after 2000. Services account for about 50 percent of GDP, and the remainder is split about equally between industry and agriculture. The country's area, 3.3 million square kilometers, is about one third that of the United States.

1.2 The Indian population of 1.1 billion is growing at 1.4 percent per year. The population is about 70 percent rural and 30 percent urban. Around two thirds of the population depends on agriculture for their livelihood, and about 25 percent of the population is below the poverty line; over two thirds of the population lives in rural areas. Millions of people residing in rural villages do not have all-weather access to markets and services and about 40 percent of the country's 661,000 have poor accessibility. India's high GDP growth in recent years, coupled with changes in the structure of the economy, and more demand for door-to-door services, has caused transport demand to shift among transport modes, mainly to the advantage of road transport. As a result, whereas in the 1950s the railway carried over 90 percent of freight and three quarters of passenger traffic, it is now the roads that carry the largest share-about 70 percent- of land transport demand.

1.3 Much of the expansion of transport infrastructure over the last 20 years has been in roads. The overall length of the road network has more than doubled, and the core, national highway system has increased by 80 percent since 1985, attaining 57,000 kilometers by 2005. Yet, with the high growth in transport demand and the increasing shift in the demand of land transport from rail to road, the road systems, both national and states level, remain largely inadequate for the needs, as they are saturated and poorly maintained. Over the last 10 years, Bank lending for transport has increased significantly and has radically shifted towards roads. During FY96-05, total Bank transport lending for India reached US$5.2 billion, of which US$4.7 billion for roads, divided between national (42 percent) and state (58 percent) roads. Lending for state roads increased from US$400 million in the five-year period starting in FY96, to US$2.3 billion in the following 5-year period. The main purpose of the SRID-TA project was to help prepare state roads projects.

1.4 The project's ICR was of the intensive learning type. As such, the ICR included feedback from a stakeholder's workshop and a survey. The present PPAR also sought to get the views from stakeholders in a systematic manner, and to this end a workshop and a survey were carried out, the latter by an independent consultant recruited locally.

1.5 The project covered a large number of states, all of which could not be visited by the PPAR mission. The PPAR workshop in New Delhi was intended to cover as many states as possible. All participating states were invited to attend, however participation in the event was limited to five states (Andra Pradesh, Assam, Kerala, Manipur and Tripura). In addition, during the PPAR mission, a visit was made to
2. **Project Design and Implementation**

**PROJECT OBJECTIVES**

2.1 The project’s overall objective was “to assist the participating states in the preparation of high priority road investments and to promote the carrying out of policy reforms by the participating states in the provision, financing and maintenance of road infrastructure, while assisting in the preparation of road investments aimed at Bank financing.” Within this overall objective, the project had five specific objectives to be pursued in each of the project’s participating states:

i. Prepare implementation plans for reforms and major sustainable policy and capacity improvements in the planning, financing, provision, maintenance and management of the (state’s) road transport infrastructure

ii. Prepare major road infrastructure rehabilitation and upgrading proposals, aimed at implementation with Bank financing and/or other external assistance

iii. Implement immediate capacity-building measures in each state’s road agency in project planning and management processes, systems and technology, including improved attention to the needs of the environmental and social aspects of projects

iv. Develop appropriate measures for the improved facilitation of private sector roads investment, and

v. Implement measures aimed at increased privatization of roads engineering, construction and supervision services and road maintenance operations in the sector (in essence, measures to increase outsourcing in road activities).

2.2 The project objectives were consistent with the Country Assistance Strategies (CAS 1995 and its 1996 update) current at the time of approval of the project, in particular with the emphasis on continued reform in key sectors, including infrastructure, implementation of sustainable state-level reforms and substantially increased infrastructure development and investment. In the subsequent CASs, the focus on infrastructure was further emphasized, but with a focus on states undertaking comprehensive reforms. With regard to the TA project, this restriction was a disincentive for states that were not undertaking such reforms, since there was little opportunity for a follow on road investment project. This restriction was softened in the 2004 CAS, with a view to opening up new opportunities for engagement and dialogue with the largest and poorest states.

---

1. As stated in the loan document
2.3 The overall objective was clearly in line with the Government of India's (GOI) approach to strengthening the economy. This objective was underscored by the fact that, while the federal government in the mid-1990s had established a program to finance the national highway system, no equivalent program had been launched for the states’ road systems. The specific reference to “build a pipeline of Bank projects that would assist in carrying out such expansion and improvement” was correct since the Bank was the main lender to India for the development of the road system. On the other hand, the five specific objectives appeared to make the whole project overly complex, especially taking into account that each of the specific objectives was intended to be carried out in each of the participating states.

2.4 Objectives and Performance Indicators. In the Memorandum of the President (MOP)'s table on Project Performance Monitoring indicators the five sub-objectives listed above are merged into three, listed below, which is actually a better description and presentation of the project objectives:

(i) Support reforms for planning, financing, provision, maintenance and management of road infrastructure by the states’ road agencies. This sub-objective in fact focuses on improving the management of the road agencies

(ii) Support the preparation of major road infrastructure proposals for Bank financing, aimed at improved efficiency of states’ road networks; and

(iii) Assist the states towards increased privatization of road engineering, construction, works supervision and maintenance in the sector.

2.5 The three activities (i) improving management, (ii) preparing investment projects, and (iii) reducing the amount in-house work by outsourcing to private companies, are used in this PPAR in the analysis of the project’s performance.

PROJECT COMPONENTS

2.6 The project had the following components for which TA activities would be financed in each participating state:

(i) Project preparation and implementation support. Cost: US$52 million:

- Preparation of road investment plans, including feasibility, preliminary and final engineering, environmental and social assessment, and bid preparation

- Improve the state’s capacity for investment planning, procurement, project implementation and resource management

- Transfer of international best practice methods, skills and technology; and

- Conducting workshops, training programs and other activities aimed at improving the road agency’s effectiveness
(ii) **Provision of policy support and institutional development. Cost: US$15.6 million:**

- Development and implementation of plans for sustainable road sector policy and reforms (organizational, financial, management);

- Studies and preparation of action plans for implementing sustainable improvements to road management policy; and

- Development of plans for increasing outsourcing of the road agency’s engineering, construction and supervision services

(iii) **Project management. Cost: US$0.40 million:**

- Assistance to the implementing agency, Department of Economic Affairs (DEA), throughout the project

2.7 Participation by interested states in the project was subject to the following eligibility criteria:

- Commitment to an agenda of policy, institutional and sector-financing reforms;

- Already undertaken project preparation, studies and works; and

- Willingness to accept Terms of Reference (TOR) following a model TOR provided by the Bank

**Participating States**

2.8 At project appraisal, 15 states had been identified as potential participants in the project. By project completion, 16 States received financing under the project, including states that had not been originally included under the project (Table 1).
Table 1: Original and Actual States Participating in the Project and Funding Allocation

<table>
<thead>
<tr>
<th>State</th>
<th>Original</th>
<th>Final</th>
<th>Original Allocation (US$million)</th>
<th>Final Allocation (US$million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>Yes</td>
<td>Yes</td>
<td>3.70</td>
<td>2.85</td>
</tr>
<tr>
<td>Assam</td>
<td>No</td>
<td>Yes</td>
<td>0.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Bihar</td>
<td>Yes/1</td>
<td>No</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Goa</td>
<td>Yes/1</td>
<td>No</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Gujarat</td>
<td>Yes</td>
<td>Yes</td>
<td>4.20</td>
<td>7.15</td>
</tr>
<tr>
<td>Haryana</td>
<td>Yes</td>
<td>Yes</td>
<td>2.20</td>
<td>1.40</td>
</tr>
<tr>
<td>Karnataka</td>
<td>Yes</td>
<td>Yes</td>
<td>2.70</td>
<td>3.20</td>
</tr>
<tr>
<td>Kerala/1</td>
<td>Yes/1</td>
<td>Yes</td>
<td>0.00</td>
<td>4.50</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>Yes</td>
<td>Yes</td>
<td>3.20</td>
<td>0.40</td>
</tr>
<tr>
<td>Madya Pradesh</td>
<td>Yes</td>
<td>Yes</td>
<td>3.20</td>
<td>1.60</td>
</tr>
<tr>
<td>Manipur</td>
<td>No</td>
<td>Yes</td>
<td>0.00</td>
<td>1.40</td>
</tr>
<tr>
<td>Mizoram</td>
<td>No</td>
<td>Yes</td>
<td>0.00</td>
<td>2.10</td>
</tr>
<tr>
<td>Orissa</td>
<td>Yes</td>
<td>Yes</td>
<td>3.50</td>
<td>3.00</td>
</tr>
<tr>
<td>Punjab</td>
<td>Yes</td>
<td>No</td>
<td>4.20</td>
<td>0.00</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>Yes</td>
<td>Yes</td>
<td>4.20</td>
<td>3.12</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>Yes</td>
<td>Yes</td>
<td>4.50</td>
<td>6.80</td>
</tr>
<tr>
<td>Tripura</td>
<td>No</td>
<td>Yes</td>
<td>0.00</td>
<td>0.80</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>Yes</td>
<td>Yes</td>
<td>3.70</td>
<td>4.50</td>
</tr>
<tr>
<td>West Bengal</td>
<td>Yes</td>
<td>Yes</td>
<td>3.50</td>
<td>2.90</td>
</tr>
<tr>
<td>Special Category 2/</td>
<td>Yes</td>
<td>Yes</td>
<td>5.00</td>
<td>0.20</td>
</tr>
<tr>
<td>Unallocated</td>
<td></td>
<td></td>
<td>4.70</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>52.52</td>
<td>46.42</td>
</tr>
</tbody>
</table>

Sources: MOP and ICR
1/At appraisal, no proposal had been submitted by these States.
2/States with weak economic base warranting up to 90% annual Budget assistance from GOI.
3/Total exceeds Bank project loan since it also includes government contribution.

IMPLEMENTATION ISSUES

Completion of Eligibility Requirements

2.9 There was a wide variation in the time taken by the states to complete the eligibility requirements to join the project, from March 1997 for Maharashtra to November 2000 for Tripura. At the time of the actual approval of the TA loan only three states had met the entry conditions. The long delay that occurred in some cases is surprising considering that the eligibility requirements were relatively simple to meet, since they were essentially commitments rather than implementing actions. Probably the most politically sensitive condition however was the adoption of a resettlement and rehabilitation policy in line with Bank standards. In some of the states, a potential cause for delay in meeting eligibility requirements may also have been the knowledge that a follow-on Bank investment loan was not certain because of the Bank’s policy at the time of restricting lending to states with satisfactory fiscal management.

Project Financing

2.10 As expected, actual project expenditures were fully financed by the Bank, with the government covering any tax expenditure. Bank disbursement amounted to US$43.8 million, or 85 percent of the US$51.5 million loan. Bank funding reached 92.8 percent of the appraisal estimate for project preparation and implementation support, but only 50.4 percent of the estimate for policy support and institutional development.
Resettlement and Rehabilitation

2.11 This was probably the most controversial and sensitive issue, both in the TA project and in the follow-on projects. In the TA project, several states found it difficult to accept the issuance of a Resettlement and Rehabilitation Policy as an access condition. Even when they did accept, it was without conviction, and the states ended up allocating inadequate resources to carry out the social assessments. For those states, their main problem area was the Bank compensation policies, which they viewed as “a way to legalize squatters”.

2.12 As a technical assistance rather than an investment project, the R&R issue in this project was at the concept level rather than actual application of safeguards. Despite the problems encountered at this level, and during application in the follow-on projects, the ICR noted that ‘greater attention to proper implementation of environmental and social safeguards’ was one area of improvement in the road projects that were prepared under the TA project, compared to the road projects approved earlier.

3. Evaluation Findings and Ratings

OUTCOME

3.1 The outcome of the project, based on an analysis of its relevance, efficacy and efficiency, described below, is rated Satisfactory.

RELEVANCE

3.2 Relevance is rated Substantial. The fast growth of the Indian economy has been seriously hampered by transport constraints, especially its road system. Today, roads carry 70 percent of land transport freight, and this percentage is still increasing. The federal government’s program to support the improvement and expansion of the national highway system, which is managed by the central government, did not, and does not, have an equivalent program for the state roads. The Bank has been the main international financier funding road investment in India, and therefore its lending provides a good insight into road investment in India as a whole. During the 10-year period 1991-2000 (when the TA project was already underway), the Bank lent India some US$ 800 million for the National Highway System (NHS) or more than double the $350 million it lent for the sole road state investment project (excluding the TA project) during the period, the Andhra Pradesh (AP) project. The AP project, in fact, was prepared with assistance from the Bank under this TA project. It is important to note that while the central government allocates large amounts to the NHS, no such funding on this scale has been allocated by the state governments for expansion of the state roads.

3.3 The TA project went beyond helping to prepare new investments; it also included as part of its objectives helping the participating states to prepare effective
reforms in the provision, financing and maintenance of road infrastructure. This was a valuable objective, likely inspired by the 1995-96 CAS, aimed at helping the states prepare to improve the efficiency in the management of their road networks. This objective is especially significant because, while the roads in India are generally congested and poorly maintained, condition of the state roads has not kept up with the condition of the national highways.

3.4 The relevance of TA project is further confirmed by the fact that seven new state roads projects (of which the Andra Pradesh has closed and six are underway, see Table below) were approved by the Bank since the TA project was approved in 1997, for a total of $2.2 billion. In addition, the TA project helped prepare a project subsequently approved by the Asian Development Bank (Madhya Pradesh), and helped prepare two other projects for World Bank financing, currently being readied for approval (Orissa and Punjab). In another case (Haryana), a project was prepared and submitted to the Board of the Bank, but was later withdrawn at a period when the Bank suspended new lending for India. Still, in another case (Rajasthan), pre-investment studies were carried out by a TA-financed consultant, but the state government was reluctant to apply to the Bank, apparently because the technical staff was unable to clearly explain the economic benefits that would result from the project.

3.5 Table 2 below shows that, overall, the road projects generated by the TA project are proceeding well, although there are several where the achievement of the development objective or implementation progress is not fully satisfactory.
### Table 2 Follow On Projects and their Current Performance

<table>
<thead>
<tr>
<th>State</th>
<th>Approval Year</th>
<th>Loan Amount</th>
<th>Current Status</th>
<th>Rating Develop.</th>
<th>Rating Implem.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>1998</td>
<td>350</td>
<td>Closed</td>
<td>NA</td>
<td>NA</td>
<td>Since this project is closed, supervision ratings do not apply. Project Outcome was Satisfactory and Institutional Development was rated modest. This project was approved in same FY as the TA project. Preparation was funded by PPF which also funded States preparing to participate in the TA project.</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2001</td>
<td>381</td>
<td>Ongoing</td>
<td>S</td>
<td>S</td>
<td>Due to delays, project unlikely to achieve all expected road works.</td>
</tr>
<tr>
<td>Karnataka</td>
<td>2001</td>
<td>360</td>
<td>Ongoing</td>
<td>S</td>
<td>S</td>
<td>Implementation delays likely to make impossible to achieve all expected benefits.</td>
</tr>
<tr>
<td>Kerala</td>
<td>2002</td>
<td>225</td>
<td>Ongoing</td>
<td>MS</td>
<td>MS</td>
<td>Draft Road Fund legislation ready for submission to State parliament</td>
</tr>
<tr>
<td>Mizoram</td>
<td>2002</td>
<td>60</td>
<td>Ongoing</td>
<td>MS</td>
<td>MS</td>
<td>Inadequate data collection on road condition and traffic, and preparation of maintenance program</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>2003</td>
<td>488</td>
<td>Ongoing</td>
<td>MS</td>
<td>S</td>
<td>Initial slippages in implementation gradually being caught up</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>2003</td>
<td>348</td>
<td>Ongoing</td>
<td>S</td>
<td>MU</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>2212</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL Other Related Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Originaly included in TA project but did not receive any funding</td>
</tr>
<tr>
<td>Orissa</td>
<td></td>
<td>Under preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td></td>
<td>Under preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madya Pradesh</td>
<td></td>
<td>Project Funded by the ADB</td>
<td></td>
<td></td>
<td></td>
<td>Preparation of road project was partially funded under the TA project</td>
</tr>
<tr>
<td>Haryana</td>
<td></td>
<td>Project Funded by Haryana</td>
<td></td>
<td></td>
<td></td>
<td>Project was submitted to the Board but later withdrawn. Project was financed from other sources</td>
</tr>
</tbody>
</table>

Ratings: S=Satisfactory; MS=Moderately Satisfactory; MU=Moderately Unsatisfactory

### Efficacy

3.6 Efficacy is rated **Substantial**. A total of 16 States finally up participated in the project, which is a very high number considering that the MOP had listed only 15 states as being potentially eligible for participating in the project. The MOP’s performance monitoring indicators focused on six states meeting the individual objectives. As shown below, for most of the specific objectives the target was exceeded, and by a considerable margin in some cases. Yet, there was a significant variation in the degree of compliance with the objectives by participating states. The targets, while probably reasonable, were not ambitious, and therefore meeting or even exceeding them was not especially difficult.

3.7 The analysis by individual project objectives, below, is based on the MOP’s presentation of objectives in the Performance Monitoring Indicators table, ICR data,
and PPAR findings. That table groups the five sub-objectives described above into the three following objectives:

**Objective 1: Reforms to Road Management.** Twelve states prepared institutional development strategies that would be the basis for launching sector reforms. The highest success appears to have been in improving project planning, where progress is reported in practically all states. Development of road data banks, including traffic and other data, also appears as an area of improvement. Yet, as shown in the above table, implementation is less than fully satisfactory. Improvements in the social aspects of road investments were less significant. Both the implementation of ongoing follow-on projects and feedback in the PPAR workshop suggest that there is still much resistance to adopting and enforcing Bank guidelines, notably regarding preparation of RAPs. This is exemplified by the lag in implementing the RAPs and land acquisition in ongoing projects as reported in the most recent supervision reports of the following projects: Karnataka, Kerala, Tamil Nadu, and Uttar Pradesh. The almost unanimous sentiment expressed by officials from the five states that attended the PPAR workshop in Delhi was to question the Bank’s guidelines. In fact, officials from several state road agencies interpreted Bank guidelines as an encouragement of “encroachers and squatters.” Over time, the states appear to slowly move towards a better understanding of the Bank’s RAP guidelines, especially in those states with a follow on Bank road project.

**Objective 2: Preparation of Road Infrastructure Proposals.** Fourteen states prepared feasibility studies, which were the basis for the follow-on projects, those approved by the World Bank (seven), those under preparation (two), those prepared for Bank submission but not finally approved (two), and those funded by other sources (two).

**Objective 3: Privatization and Outsourcing.** This project sub-objective appears as a ‘stretch’ of the project’s main objective, which makes no specific reference to facilitating private sector investments. As a result, this activity was given less attention during implementation of the TA project. Yet, the MOP set a target of six states that by the end of the project would initiate studies on relevant reforms and then implement them. In practice, all states made progress in the direction of outsourcing. In that sense, this objective was largely achieved. But, in several states the move to outsourcing was not accompanied by the necessary improvements and strengthening of the administration capacity to supervise the outputs of the outsourced firm. The result was an increase in the number of cases where the Public Works Department (PWD) felt that the quality of the outsourced activities works was under par.

**EFFICIENCY**

3.8 As a Technical Assistance project, no rate of return was applicable.
INSTITUTIONAL DEVELOPMENT IMPACT

3.9 Institutional development impact is rated Modest. While many activities relevant to institutional development was carried out, such activities were intended to help prepare institutional development changes rather than carry out reforms.

3.10 Studies carried out in all participating states, introduced the respective road agencies to new methods and technologies, and set the basis for the later introduction of reforms in the management of the agencies. Yet, as the primary object of the TA project clearly stated, the purpose was to promote reforms (that could be implemented later) rather than to carry out such reforms. Thus, it could not be expected that execution of the project and its components would generate a significant institutional development impact. Furthermore, only about 50 percent of the project funds initially allocated for institutional development activities was actually utilized.

3.11 Feedback during the PPAR workshop confirms this assessment of the institutional development impact. The Tripura representative noted that in some areas, such as maintenance management, there was a raised awareness of the issues, but there was no opportunity to implement new systems. The Assam representative noted that putting the new systems in practice needed to be supported by a major investment project, in part because the state lacked the funding necessary to implement new systems. Representatives of all states attending the workshop reported not being allocated sufficient funding to meet the needs of road maintenance.

3.12 Where there was a more explicit identification of institutional impact, such as in the case of Andra Pradesh, and new systems were actually put in place and were operational, it was difficult to attribute such impact to the TA project, since a follow-on road project had been approved almost concurrently with the TA project. A case in point where new systems were put in place was performance-based maintenance (PBM) programs, and AP state officials reported having 35 routine maintenance and 65 periodic maintenance roads contracted under PBM. These contracts are leading to a substantial decrease in unit maintenance costs relative to the traditional maintenance contracts.

3.13 Among the areas where the states perceived that the TA project had generated important knowledge that would serve for implementing future reforms were systematic assessments of road condition (thanks to the conduct of road condition surveys and the establishment of Road Data Banks-RDBs), contracting methods and maintenance methods, the latter thanks to the production of a maintenance manual. Establishment of RDBs was one area where a new technique had certainly been introduced during the project in some states and was made operational.

3.14 In some other areas, there were clear differences of opinion among attendees to the PPAR workshop about the institutional development impact of the project. For example, in Andhra Pradesh, the TA project (coupled with the subsequent implementation of the AP road project), had generated a greater confidence in outsourcing, which is increasingly being used. Yet, in Kerala, it was felt that outsourcing was being encouraged too much, beyond the ability of the states' road
Representatives from this state also noted that the quality of the engineering consultants was sometimes poor, and this was often discovered late, after the works had started, leading to construction problems. Assam reported that outsourcing had increased litigation (between contractors and the road agency), which was costly to the state in monetary and staff resources.

**Sustainability**

3.15 The project’s sustainability is rated Likely. This is confirmed by the follow-on projects, whose implementation is mostly satisfactory. These projects have benefited from the activities carried out and the commitment given by the state government during the TA project on various aspects on road policies and management.

3.16 In the areas where there is most reluctance to implement agreements or commitments reached during the TA, such as the adoption of appropriate R&R policies, there has been progress and states are using such policies in Bank-financed projects. Several states report that such policies are being used in all road investments, whether Bank-financed or not. Yet, in practically all follow-on projects currently underway there have been problems in the implementation of the RAPs. For example, there is now more than a one-year delay in implementing the RAP in the Tamil Nadu road project.

3.17 Projects under implementation are also confronted with the difficult issues of land acquisition and clearing utilities in the right of way of road improvements. This is an area where appropriate legislation will need to be passed by the states, along the lines of recent national legislation which has considerably improved the situation for the execution of improvement works in the National Highway System.

3.18 Regarding the funding for road maintenance, the TA project did not intend to put in place appropriate mechanisms, but rather to raise awareness of the issue. It would have been too ambitious and beyond the scope of a multi-state TA to attempt more progress in this area. This is a subject that remains critical, since evidence so far is that states have not been able to ensure sufficient funding for the maintenance of their road networks. The federal government does, however, appear committed to help prevent a deterioration of the state roads systems and in 2005, the Central Road Fund, a federal-level fund, approved a major allocation to the states for the funding of road maintenance.

**Bank Performance**

3.19 Bank performance is rated Satisfactory. The Bank prepared a project whose objectives were consistent with the respective CASs, and the project did include a well conceived ‘stretch’ in expectations in terms of the specific objectives to be achieved.

3.20 The entry conditions were well thought out and, although not especially difficult to meet, they required the state road agencies to undertake commitments for reforming various areas of road management. Such commitments demanded
significant internal discussions in the road agencies, and probably with other state agencies, that required time. In preparing the project, the Bank appears to have made good use of past experience from road projects in India.

3.21 Because of the large number of states that actually participated in the project and the large diversity in the capacities of the road agencies of the participating states, the TA project could have been viewed as a risky operation, difficult to supervise and probably unlikely to meet its objectives. At the same time, given the importance of project objectives, it should be viewed as a high risk, high reward operation.

3.22 The fact that the project was able to achieve its objectives is a sign of a good supervision. The ICR reports a total of eight supervision missions, or roughly about two per year. While this is about the standard intensity in most projects, the large number of states posed special difficulties for the supervision of the TA project. On the other hand, the number of supervision missions underestimates the real supervision effort, since there was much telephone communication between Bank project staff and the various state road agencies participating in the project. Such communications were facilitated by the Bank supervision staff being based in Delhi, which is useful considering the 9:30-10:30 hour time difference between Washington and Delhi. Another indication of the good supervision effort is that several of the supervision missions comprised a significant number of Bank staff, including one mission composed of 15 staff and another of seven.

3.23 Another signal of the good performance by the supervision missions is that the project closed on schedule after having met project objectives despite some significant delays in the completion of entry requirements.

**BORROWER PERFORMANCE**

3.24 Borrower performance is rated Satisfactory. The DEA and the Bank cooperated closely during project preparation. A large number of state governments prepared State Policy Letters that allowed them to join the project and access funds from it. During implementation, state government generally complied with commitments undertaken in the policy letters and allocated responsible staff to carry out the project.

3.25 As noted earlier, there were, not surprisingly, significant differences in the performance of the various participating states, but even those performing at a lower level managed to meet project expectations. At the other extreme, some states were quick to set new road management methods and tools in place during implementation.

3.26 Despite reluctance to agree to Bank guidelines on RAPs, and much criticism voiced during the project as reported in supervision reports and as expressed during the PPAR workshop, most states are complying with the guidelines during implementation of the follow on projects.

3.27 One area where the Borrower and the Bank could have been more forthcoming was in encouraging better exchange of information and experience
among participating states. One such exchange was carried out, with participation by several states, on the occasion of the Project Launch Workshop for the follow on project in Karnataka. Several state officials attending the PPAR workshop stressed the importance of conducting similar regular exchanges among participating states.

4. Conclusions and Lessons

Multi-state projects: risks and rewards

4.1 Past experience with multi-state projects has shown that, especially when a large number of states are covered under one project, project risk is increased because supervision becomes resource-intensive, and often the Bank is not able to assign the required level of supervision resources. On the other hand, if the project turns out to be successful, it may be a cost-effective way to generate the expected benefits in a number of states. Thus, such projects may be seen as high risk, high reward projects.

4.2 Based on the experience with the TA project, three factors appear to be critical in helping reduce the risks of such projects: First, a strong central government commitment, with the implication that it is prepared to make the necessary effort to ensure a successful implementation. Second, the possibility for the Bank to supervise the project with staff from the resident office, which reduces supervision costs and facilitates both field visits and telephone communication between the Bank and the participating states. Supervision becomes even more intensive when there is a wide variation in the capacity of these states. Third, that the states are strongly motivated by the benefit they expect from the project. In the case of the TA project, the overriding benefit was the high expectation that follow on investments to improve the state road network would materialize.

Entry conditions

4.3 The project had a well conceived set of entry conditions. Such conditions required state road agencies to demonstrate commitment towards a number of principles involving both the management of the road agency as well as World Bank guidelines. Accepting such principles required the road agencies to open intense internal debates to analyze whether such principles could be applied. The implementation of follow on road projects, despite some problems, shows that the commitments undertaken under the TA project have been useful in helping implement the subsequent project.

Helping preparation of Bank projects as an objective

4.4 The explicit objective of the TA project to help prepare follow-on Bank projects may appear to be a rather narrow objective. Yet this project showed that it is possible to include strategic objectives within the context of this kind of project. In this case the project included both helping prepare the road agencies to later adopt institutional reforms and helping the agencies prepare for investment projects. The
explicit mention regarding preparation of Bank projects was appropriate because the World Bank was, and continues to be, the main external financier of state road investments in India.

**Information Exchange in Multi-State projects**

4.5 A multi-state project provides many experiences and insights whose dissemination and discussion are likely to be of much benefit to participating states as well as other states. This is an area where the project design could have been more explicit, by embedding regular exchanges of information through seminars or workshop among project activities.

**Resettlement and Rehabilitation**

4.6 Reaching agreement on R&R policies was one of the most difficult aspects during implementation of the TA project. The sensitive nature of this issue has been further demonstrated by the recurring problems in the follow-on projects, where in most cases implementation has been delayed due to issues in implementing resettlement action plans. The problem appears to have been particularly acute due to wide gaps in approach between traditional Indian policies and Bank regulations, with Indian officials often believing that Bank policies need to be better adapted to local country conditions.

5. **Lessons Learned**

5.1 The following lessons may be derived from this project:

- *The risks of multi-state projects* should be carefully assessed during preparation, especially due to the greater complexity of supervision required. The commitment of the central government implementing agency and the possibility for the Bank to supervise the project from the country office are two key ways to minimize such risks. Systematic exchanges of information during implementation among the participating states should be part of the projects’ design.

- *Entry conditions* requiring commitment to reforms are useful when such commitments are formalized vis-à-vis of both the central government and the Bank; the states are more likely to agree to such commitments if they perceive a realistic expectation of receiving funding from follow-on projects.

- *Resettlement and rehabilitation* policies are an issue which can cause conflict especially in states which are confronted with Bank regulations for the first time. A more intense Bank effort is advocated to discuss the rationale of such regulations with local officials at the outset and to the extent possible, endeavor to adapt the application of such regulations to local conditions where possible.
Annex A. Basic Data Sheet

INDIA – STATES’ ROAD INFRASTRUCTURE DEVELOPMENT TECHNICAL ASSISTANCE PROJECT (SCL-41140; PPFB-P2240)

Key Project Data (amounts in US$ million)

<table>
<thead>
<tr>
<th></th>
<th>Appraisal estimate</th>
<th>Actual or current estimate</th>
<th>Actual as % of appraisal estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total project costs</td>
<td>68.0</td>
<td>56.94</td>
<td>84.0</td>
</tr>
<tr>
<td>Loan amount</td>
<td>51.5</td>
<td>43.8</td>
<td>85.0</td>
</tr>
<tr>
<td>Cofinancing</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cancellation</td>
<td>-</td>
<td>7.7</td>
<td></td>
</tr>
</tbody>
</table>

Project Dates

<table>
<thead>
<tr>
<th></th>
<th>Original</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board approval</td>
<td>-</td>
<td>12/05/1996</td>
</tr>
<tr>
<td>Signing</td>
<td>-</td>
<td>01/15/1997</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>-</td>
<td>02/14/1997</td>
</tr>
<tr>
<td>Closing date</td>
<td>-</td>
<td>12/31/2001</td>
</tr>
</tbody>
</table>

Staff Inputs (staff weeks)

<table>
<thead>
<tr>
<th>Stage of Project Cycle</th>
<th>No. Staff weeks</th>
<th>Actual/Latest Estimate US$(’000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification/Preparation</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Appraisal/Negotiation</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Supervision</td>
<td>304</td>
<td>693</td>
</tr>
<tr>
<td>ICR</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>324</td>
<td>740</td>
</tr>
</tbody>
</table>

The figures for identification plus appraisal/negotiation cover only the inputs of the Task Manager who was not a Bank financed staff member. His costs were met by a Trust Fund. No other costs for bank staff are found in the Cost Accounting System for lending. It is assumed that other staff working on lending was charging their time to state specific highway project preparation codes (e.g. Haryana, AP)
### Mission Data

<table>
<thead>
<tr>
<th>Date (month/year)</th>
<th>No. of persons</th>
<th>Specializations represented</th>
<th>Performance rating</th>
<th>Impl. Prog.</th>
<th>Dev. Obj.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification/Preparation</td>
<td>03/96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appraisal/Negotiation</td>
<td>06/96</td>
<td>4</td>
<td>Inst. Spec, 2 x Highway Engrs, Ops Offr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12/96</td>
<td>3</td>
<td>Inst. Spec, Highway Engr, Fin Analyst</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td>06/97</td>
<td>1</td>
<td>Prin Trans Spec</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>04/98</td>
<td>1</td>
<td>Prin Trans Spec</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>01/99</td>
<td>3</td>
<td>Prin Trans Spec, Prog Asst, Consultant</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>08/99</td>
<td>15</td>
<td>Highway Engrs x 3, Trans Planner, Inst Spec, Ops Adviser, Env Spec, FM Spec, SD Spec x 4, Prog Asst, Team Assts x 2</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>04/00</td>
<td>3</td>
<td>Trans Planner, Fin Analyst, team Asst.</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>12/00</td>
<td>3</td>
<td>Trans Planner, Prog Analyst, team Asst.</td>
<td>S</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>06/01</td>
<td>4</td>
<td>Trans Planner, Prog Analyst, team Asst.</td>
<td>S</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>10/01</td>
<td>7</td>
<td>Trans Planner, Trans Econ, Trans Spec, Highway Engrs x 3, Team Asst.</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>ICR</td>
<td>01/02</td>
<td>5</td>
<td>Trans Planner, Trans Spec x2, Inst Spec, Team Asst.</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>

**Performance Ratings:** S=Satisfactory; HS=Highly Satisfactory
Annex B - Borrower Comments

Rohit Mathur,
Under Secretary (FB)
Tel: 23094979/Fax: 23092477
Government of India (Bharat Sarkar)
Ministry of Finance (Vitta Mantralaya)
Department of Economic Affairs (Arthik Karya Vibhag)

Dear Mr. Barbu,

New Delhi

Please refer to DEA's letter dated 25th May, 2006 regarding comments of this department on the Draft Project Performance Assessment Report (PPAR) in respect of States Road Infrastructure Development Technical Assistance Project.

As already informed, this department had sent a copy of the draft report to all participants who attended the performance assessment workshop for their comments. Out of these participants, we have received the comments/views from the States of Mizoram, Andhra Pradesh, Gujarat, Manipur & Tamil Nadu on the draft PPAR. A copy of comments/views received from these States is enclosed for your consideration.

Further, the Draft PPAR in respect of States Road Infrastructure Development Technical Assistance Project has also been considered in this department. In addition to partner comments already sent to the World Bank vide letter dated 15th April, 2002 (copy enclosed), the comments of DEA on the draft PPAR are enclosed for your consideration and finalising the PPAR in respect of States Road Infrastructure Development Technical Assistance Project.

Though this department has no objection to the publication of the PPAR report in respect of States Road Infrastructure Development Technical Assistance Project, it is, however, requested that the document should not carry any logo of the Government of India and should carry the following disclaimer on the first page of the report.

"The report has been discussed with the Government of India and concerned State Governments but does not necessarily bear their approval for all its contents, especially where the Bank has stated its judgements/opinions/policy recommendations."

With regards,

Yours sincerely,

(Rohit Mathur)

Alain Barbu,
Manager,
Sector, Thematic and Global Evaluation Division,
Independent Evaluation Group,
1818 H Street N.W.
Washington D.C. 20433,
U.S.A.
Geeta Narayan,
Under Secretary
PH: 3014443
Email: geeta@finance.delhi.nic.in

D.O. No. 10/28/96-FB-VI

Dated 15th April, 2002

Dear

Please refer to World Bank's letter dated 7/2/2002 forwarding therewith the draft Implementation Completion Report of State Road Technical Assistance Project and requesting for 'partner comments' from Department of Economic Affairs.

The partner comments prepared by Department of Economic Affairs are enclosed herewith for further incorporation into the final Implementation Completion Report.

Regards.

Yours sincerely,

Encl. A/A

Shri Alok Bansal,
Senior Transport Planner,
World Bank, Lodi Estate,
New Delhi.
**States Road Infrastructure Development TA project**

**Partner comments: (prepared by DEA)**

The States TA loan made available project preparation funds on a definite and predictable basis and provided a forum for 'demonstration effect' and experience sharing among participating states. In the process it catalysed renewed attention of several states on their highways sector. The preparation/implementation of state highway development projects by Andhra Pradesh, Gujarat, Karnataka, Mizoram, Kerala, Uttar Pradesh and Tamil Nadu covering a total road length of 16751 kilometers and involving an investment of about US$ 2831.50 millions is a direct outcome of this States TA loan project.

Inevitably there was a close linkage in the process and timing of the implementation of the States TA loan and finalisation of the follow-on investment projects for World Bank funding. While States in this category derived numerous benefits (these are already described elsewhere in the Implementation Completion Report) and were supported by close and regular Bank supervision; the supervision and guidance in respect of the other participating States could have been more rigorous. For instance after having spent considerable resources in commissioning feasibility studies and project reports, the next steps remain unclear for these states.

A larger challenge in project design would continue to be ensuring the internalisation, sustenance and replication of the improved procedures and international 'best practices' introduced by such projects by the implementing departments and agencies after the project closure.
Comments of DEA on draft Project Performance Assessment Report (PPAR) in respect of States' Road Infrastructure Development Technical Assistance Project (SCL-41140; PPF-2240)

- A large challenge in project design would continue to be ensuring the internalisation, sustenance and replication of the improved procedures and international 'best practices' introduced by such projects by the implementing departments and agencies after the project closure.
- DEA agrees that the risks of multi-state projects should be carefully assessed during preparation and there should be systematic exchanges of information during implementation among the participating states. Further, the Dissemination and discussion of the experiences and insights is an area where the project design could have been more explicit.
- DEA also agrees that there has been progress on adoption of appropriate R&R policies, yet, practically, all follow-on projects currently underway are having problems in the implementation of the Resettlement Action Plans. Further, most of the Projects under implementation are confronted with the difficult issues of land acquisition and clearing utilities in the right of way of road improvements. Further, DEA agrees that a more intense Bank effort is advocated to discuss the rationale of Bank's guidelines on Resettlement and Rehabilitation with local officials at the outset and to the extent possible and endeavor to adapt the application of such guidelines to local conditions. The issue of capacity building for the purpose and to have much more professional approach on the issues of LA & R&R is already under consideration in DEA in consultation with concerned Ministries/State Govts.
- Adequate stress should be on formulating appropriate policies for the future maintenance of Roads constructed, Road Safety measures and Corridor Management.
To:
The Under Secretary to the Government of India
Ministry of Finance
Department of Economic Affairs
North Block, New Delhi - 110 001
Fax: 011 2309 2477

Kind Attention: Mr. Soumya Chatterjee, Under Secretary to Government of India, MoEF, DBA.

Sub: State Road Infrastructure Development Technical Assistance Project (SCL-41149; PPFB-P2240) – Draft Project Performance Assessment Mission and Case Study – Comments thereon.


Sir,

With reference to the subject and your letter quoted above, I have the honour to state that we have gone through the said report and we found that the report covers all aspects very well and we have no further comments on it. However, it may be added that as for the State of Mizoram, the Government of Mizoram has gained substantial improvement in project preparation, Road Maintenance Management, Private Sector Participations and Institutional changes.

With regards,

Yours sincerely,

(K. LALSAMVLELA)
PROJECT DIRECTOR
GOVERNMENT OF ANDHRA PRADESH
ROADS AND BUILDINGS DEPARTMENT

From
Sri V. Ravindranath, B. Sc, (Engg), MIE,
Chief Engineer (R&B) &
Managing Director APRDC,
Errum Manzil,
Hyderabad – 500 082.

To
The Principal Secretary
T(R&B) Department,
Government of A.P,
Secretariat,
Hyderabad – 500 022.


Sir,

Sub: State Road Infrastructure Development Technical Assistance Project (SCL 41140;
PPFB – P 2240) Draft Project performance Assessment Mission and Case –
Particulars Submitted – Reg.


*******

Adverting to the reference cited, I submit here with the Borrowers Comments on 4114-ln
as desired therein for favour of information.

Encl: As above

Yours faithfully,

For Chief Engineer (R&B) &
Managing Director, APRDC.

Copy submitted to the under Secretary to Government of India, Ministry of Finance Department
State Road infrastructure Development Technical Assistance
Project (SCL – 41140 & PPFB – P2240)
(In response to GoI, MOF, DEA Lr No. 10/28/96-FB-VI-Vol VI
dt: 25-05-2006)

Annexure B: Borrowers Comments

1. General:

The Government of Andhra Pradesh (GOAP) was originally allocated US $ 3.70 Millions financial assistance from the World Bank through Government of India (GoI) for the “State Road Infrastructure Development Technical Assistance Project” (SCL – 41140; PPFB – P2240). The final allocation was for US $ 2.85 millions. The Project effectiveness started on 14-02-1997 and closed by 31-12-2001. The objective of the Project was (i) to assist the participating states in the preparation of high priority road investments and (ii) to promote the carrying out of policy reforms in the provisions, financing and maintenance of road infrastructure.

2. Implementation Details:

The objectives and benefits of the Project have been substantially achieved through the following:

2.1 Project preparation and implementing support:

- Preparation of road investment plans including feasibility, preliminary and final Engineering, environmental and social assessment, and bid preparation:

  The achievement of this component was satisfactory. Feasibility studies were taken up assessing environmental and social aspects. The following crucial studies has been undertaken with the above assistance of Project Preparation Funds (PPF) provided by World Bank.

  1. Base line Socio-Economic Studies.
  2. Road maintenance Study
  3. Institutional Development Study.
  4. Project Coordinating Consultancy for detailed Engineering including Environmental impact agreement.

  These studies have given enough data for critical evaluation of the scenerio in the State, which became the foundation of the mega AP State Highway Project. The studies have also given good insight to the Govt. of the best International
practices, procurement guidance, and other studied in comparison with Indian standards. Hence in the Project of APSHP (i.e., followon Project) the same has been adopted for the Project, resulting in innovative and economical basis of design.

**Environmental Aspects:**

The State have learnt the importance of afforestation, and the Environmental Management Plans (EMP) was implemented successfully. For better output the GOAP had appointed a dedicated Forest Officer from the Forest Department in RBD.

**Land Acquisition:**

The State could also frame a Road Sector Policy specific for the APSH Project. The Resettlement Action Plan (RAP), in land acquisition, has been implemented satisfactorily. The project acquired 521 ha. land for which the LA process has been fully completed and all the land losers received their compensation.

**Resettlement:**

In view of the R&R Policy framed, the quality of housing of PAPs, after displacement, as well as their income has significantly improvement mainly due to the new economic opportunities through the project (including wage employment during construction). The project has successfully dovetailed Government schemes, particularly in providing house sites and housing, to help PAPs in their resettlement.

- **Improve the State's capacity for investment planning, procurement, Project implementation & Resource Management:**

  The achievement of this objective is also rated satisfactory. The project has facilitated major improvements in a number of business processes of RBD, including procurement, maintenance management, data-base planning, quality assurance, road safety and human resources development. GOAP has increased the overall maintenance funding for the state roads by about 66% during the project implementation period.

**Safety Audits:**

RBD has conducted safety audits on all the 1,400 Kms of Roads and has implemented road safety engineering measures such as improved lane marking, improved signs, crash barriers, junction improvements, traffic calming...
measures and reflective studs and lane markings to improve driving safety/comfort during the night driving. The implementation of these measures have significantly improved the safety on the project roads and received lot of appreciation from the road users as reported in the road user satisfaction survey.

- **Transfer of International best practice methods, skills & technology:**

  The achievement of this component is highly satisfactory. The RBD has introduced **performance based contract system** for carrying out routine maintenance of Road. This system is first of its kind in India. This is based on principle of “a stitch in time saves nine”. This makes the Contractor to take all possible steps & initiatives to avoid the damage to the road. By means of which the surface condition of road will be safe guarded and gives more life and comfort to the riders. It also reduces the cost of maintenance of assets. It has been successfully implemented in 4 districts. After successfully implementing the PBMS it has been introduced in the other districts also. These contracts are leading to a substantial decrease in unit maintenance costs relative to the traditional maintenance contracts.

  The new technology called **Crushed Rock Base (CRB)** was introduced in APSHP for the first time in India. The CRB is nothing but a graded aggregate with binding properties. The CRB if laid and compacted at required moisture, it will act as good load bearing layer. It replaces conventional multi asphaltic layer. By eliminating multi asphaltic layers, the cost of constructions is considerably reduced. There will be 30 - 40% of cost savings construction of new roads.

- **Conducting Workshops, Training programmes and other activities aimed at improving the road agency effectiveness:**

  The achievement of this component is also rated satisfactory by conducting the workshops, frequently. The workshops have been conducted at each level right from initiating officer to Head of the Department at their respective regions. Counterpart training with the help of International Consultants is also done under the Project.

2.2 **Provisions of Policy Support and Institutional Development:**

  This component included implementation of an Institutional development action plane (Prepared during Project preparation), which covered a series of institutional development initiatives to improve the business efficiency of the RBD.
As a result of good foundation and skill set out in this Project, AUS Aid was kind enough to give aid for implementing this component, the RBD has prepared Road Policy with a view to improve the Road Network, and ensure more efficient utilisation of funds.

3.0 Project Management.

This component rated satisfactory. The Department of Economic affairs (DEA) has assisted the implementing agency during project preparation.

Main Conclusions:

- In order to utilize the transfer of knowledge effectively, the RBD in GOAP has posted experience staff in dealing such huge projects.
- By utilizing the funds from World Bank in this project, the GOAP has created a prestigious project namely APSHP and successfully achieved the objectives and performed well and rated highly satisfactory.
- With the experience of the 1st project, the GOAP has individually proposed 2nd new project without taking assistance for project preparation. Also successfully got the approval to take up 2nd new project namely AP State Road Project (APSRP).

For Chief Engineer (R&B) &
Managing Director, APRDC.
No.WBP-102006-(61)-C

To
Shri Soumya Chattopadhyay,
Under Secretary to the Government of India,
Ministry of Finance,
Department of Economic Affairs,
NEW DELHI.

Sub:- States Road Infrastructure Development Technical Assistance Project (SCE-41140 : PPFB-P2240)-Draft Project Performance Assessment Mission and Case Study.

Ref:- Your No.10/28/96-FB.VI-Vol.VI dated 25/5/06.

Sir,

With reference to your letter dated 25-5-06 on the subject mentioned above, the general comments of Roads and Buildings Department, Government of Gujarat is as below:

"The findings of the case study reflect an accurate assessment for Gujarat State. All the five objectives were achieved. The subsequent and ongoing institutional strengthening of the Roads and Buildings Department and major investment in State Highway maintenance and upgrading projects (Gujarat State Highway Project) has demonstrated the determination and commitment of the GOG to embark on a sustainable course of road transport infrastructure modernization in line with Gujarat's rapidly growing economy. Many of the Institutional Strengthening objectives have been achieved and the GOG is continuing to progress the remaining reforms to be able to effectively manage the State's highway network to meet the needs of the rapidly growing demand for good all-weather roads.

The Roads and Buildings Department has been willing and able to agree to the Banks guidelines particularly for the Resettlement and Rehabilitation policies.

The Government of Gujarat has enjoyed a significant success in developing private sector participation in road infrastructure development and continues to do so".

Yours faithfully,

(O.P.PANDIT)

Office on Special Duty(SF) to the Government of Gujarat,
Roads and Buildings Department.

LR/16606
No. 5/31/2006-M.S.R.R.D.A/W.II
Office of the Manipur State Rural Roads Development Agency
Secretarial North Block, Imphal

Imphal, the 3rd July, 2006

To
The Under Secretary
Deptt. of Economic Affairs
Ministry of Finance
Government of India, New Delhi.

Dear Sir,

Subject: States Road Infrastructure Development Technical Assistance Project (SCI-41140: PP-B-P2240)—Draft Project Performance Assessment Mission and Case Study.

Reference to your No. 10/28/96-FB.VI-Vcl-VI dt New Delhi, the 26th June, 2005. I am to say that the Draft R.P.A.P in respect of State Road Infrastructure Dev. T.A, has examined and found to be generally acceptable. There is no specific comment to be offered in this regard.

Yours faithfully,

[Signature]
Chief Engineer-Cum-State Quality Co-ordinator
M.S.R.R.D.A
Government of Tamil Nadu
Highways Department

From
Dr. T. V. Somanathan, I.A.S.,
Project Director,
Tamil Nadu Road Sector Project,
NO.48, Dr. Muthulakshmi Road,
Adyar, Chennai-20.

To
Shrimati. Soumya Chattopadhyay,
Under Secretary to the Government of India,
Ministry of Finance,
Department of Economic-Affairs,
New Delhi


Sub: Tamil Nadu Road Sector Project – World Bank Loan Assistance No.4706 IN
– Draft Project Performance Assessment Mission and Case Study – Draft

Ref: Under Secretary to the Government of India, Ministry of Finance, Department
of Economic-Affairs letter dated 10.07.2006

I submit herewith the comments on the draft Project Performance Assessment Report
(PPAR) for kind perusal and necessary action.

Encl: comments on PPAR

For
Project Director,
Tamil Nadu Road Sector Project.
Comments on the draft Project Performance Assessment Report

1. Page 3 - 2.4 (iii) - Increased privatization road engineering, construction work supervision under the caption Objectives and performance indicators &
   Page 3 - Privatization and Outsourcing

(i) Poor quality of Engineering consultants and frequent replacement of personnel:

The quality of Engineering consultants namely DPR consultant and supervision consultant was not up to the requirements. During the selection process the consultant had submitted the proposals with qualified personnel in order to get the services. However during the currency of contract, the consultants had failed to deploy their originally proposed candidates, even though the services were awarded within the scheduled time. Replacement of key personnel is frequently happening after the works had started leading to construction problems and delays. This affects the progress of services as well as continuity of services leading to delaying implementation of the project.

There is no proper mechanism to take action against the consultant for his failure in discharging their duties. Since there are no penal clauses like performance security, liquidated damages, retention money etc., similar to works contracts and the consultancy contract provides for termination clause only; the consultants' liability is very much limited and the clients are left with no option except to accept the performance of consultant as such or go in for termination or arbitration etc which are long drawn process and ultimately the clients' interest gets affected and thereby delayed the project implementation process.

The consultancy contract needs review with regard to incorporating the penal clauses similar to works contract in order to ensure more accountability of consultants.
Size of works contract:

The World Bank's policy on introducing large size of contracts needs to be reviewed.

For example in Tamil Nadu Road Sector Project, the World Bank has insisted to go in for large size of contract package namely TNRSP 01 of value US$ 135 million in order to attract large participation of international firms which may bring best practices and technology transfer.

Though letter of invitation was published twice for global competition with wider publicity, the response was lukewarm and limited firms were qualified and it has not yielded the desired objective. On the other hand, the proposed policy on selection of large size of contract had delayed the procurement process.

Besides, it is observed that size of the package is too high for Indian conditions and it is found that administering the contract of this nature becomes very difficult for all the parties concerned (contractors, consultants and PIU).

It is preferable to have medium-size contracts of US$ 20 - 25 million to suit the local environment which become manageable.

II. Resettlement & Rehabilitation: The policy and safeguard measures of World Bank are essential from the point of resettling the project affected people and providing adequate compensation. The implementation of resettlement & rehabilitation policy in line with the World Bank standards in Indian context is very difficult to implement and cause delay in completion of project.

The resettlement action policy should be evolved in conjunction with local conditions and practices and would be practicable for implementation.

III. Page 11 – para 3.17 & 3.18:

Tamil Nadu is the first State have implemented the Highway Act similar to National Highways authority of India Act, in order to protect the right of way and
so deal with the issues like Land Acquisition and clearing the utilities to improve the situation for the execution of the major works.

Tamil Nadu is the one of the state have improved the backlog of maintenance fund and adequate maintenance expenditure of more than 80% of the finance commission of the incurred by the Highways Department

IV. Page 11 – para 3.16: under the caption of sustainability:

It was mentioned that there was delay of more than one year in implementing RAP in Tamil Nadu Road Sector Project. It is pointed out that the delay was about six months which was mainly due to natural calamities including Tsunami during December 2004 and unprecedented rains during August 2005 – December 2005. This delay was not due to lack of fund allotment or reluctance to implement the commitments. This may be noted for incorporating in the final report.