



1. Project Data

Project ID P143751	Project Name IN: TN Roads II	
Country India	Practice Area(Lead) Transport	
L/C/TF Number(s) IBRD-84990	Closing Date (Original) 30-Jun-2021	Total Project Cost (USD) 300,000,000.00
Bank Approval Date 28-Apr-2015	Closing Date (Actual) 30-Jun-2021	
	IBRD/IDA (USD)	Grants (USD)
Original Commitment	300,000,000.00	0.00
Revised Commitment	300,000,000.00	0.00
Actual	300,000,000.00	0.00

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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) as stated in the Loan Agreement (schedule 1, page 5) and in the Project Appraisal Document (PAD, page 6) is:

" To increase road capacity, enhance quality of maintenance, improve safety and support institutional development of Tamil Nadu's (TN) Core Road Network".



The PDO is parsed as follows for this review:

1. To increase road capacity; 2. To enhance quality of maintenance; 3. To improve road safety; and 4. To support institutional development.

b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

There were three components (PAD, 7-8).

1. Network Improvement. The estimated cost at appraisal was US\$746.45 million. The actual cost US\$439.26 million. This component planned to finance the upgrading and maintenance of selected roads in TN state's core road network (CRN). There were three sub-components:

(i) upgrading and maintenance through Engineering, Procurement and Construction (EPC) contracts for widening approximately 430 kilometers (km) of the Core Road Network (CRN) to two-lane standards with paved shoulders and road maintenance for a five-year period; (ii) upgrading and maintenance through a Public-Private-Partnership (PPP) concession for about 145 km of roads to four-lane standards with road maintenance during the concession period; and (iii) maintenance of roads through multi-year Performance-Based Maintenance Contracts (PBMC) for approximately 600 km of roads for a five- year period.

2. Institutional Capacity Enhancement. The estimated cost at appraisal was US\$11.00 million. The actual cost was US\$6.12 million. This component planned to finance implementation of the institutional capacity enhancement plan (ICEP) developed by the Highways Department (HD) and approved by the state government. Activities in this component included: (i) supporting policy-level actions and commitments for improving mobilization and allocation of resources; (ii) supporting operational level initiatives for enterprise-level efficiency through: (a) process improvements; (b) organizational restructuring; (c) maintaining the integrated the key Information Technology (IT) systems (such as, the Road Management System (RMS), Project Financial Management System (PFMS) and the Road Accident Database Management System (RADMS)); and (iii) training and knowledge management.

3. Road Safety. The estimated cost at appraisal was US\$20.00 million. The actual cost was US\$2.87 million. This component included the following activities; (i) at the state level, awareness, promotion, advisory assistance for monitoring and evaluation, research, training and knowledge transfer; enforcement and compliance by the Police and HD and integrating the RADMS of the road management and the health system, and mainstreaming it through complementary investments; and (ii) at the field level, supporting two districts and a corridor to implement multi sectoral road safety improvement initiatives involving stakeholder departments by assisting in designing a program of interventions and investments for road safety issues, speed management, risk-targeted patrol plans, promoting helmet wearing, trauma care training and services.



e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost. The estimated cost at appraisal was US\$778.20 million. The actual cost was US\$448.25 million.

Project financing. The project was financed by an IBRD loan of US\$300.00 million. The loan was fully disbursed.

Borrower contribution. The borrower contribution was planned at US\$478.20 million. Their actual contribution was significantly less than planned at US\$148.25 million.

Dates. The project was approved on April 28, 2015, became effective on July 10, 2015, and closed as scheduled on June 30, 2021.

Other changes. The project was restructured on March 16, 2021, about three months before the closing date, to retroactively increase the disbursement percentage for civil works.

3. Relevance of Objectives

Rationale

Country context. The project roads connected the coastal state of TN with Karnataka state in the southern part of India. TN's Gross State Domestic Product growth at an average of 8.6% over the 2008 - 2014 period was higher than the national average of 6% during this time period. Road transport was important in TN, in view of the significant economic activity occurring at some distance from the Chennai port in TN.

Sector context. At appraisal, the HD was managing 62,000 km of the network, comprising 4,974 km of National Highways (NH), 11,594 km of State Highways (SH), 11,289 km of Major District Roads (MDR) and 34,160 km of Other District Roads (ODR). At appraisal, the highway sector faced three distinct challenges: inadequate financing for increasing capacity and managing the road assets; insufficient implementation capacity for efficient contracting modes; and poor road safety. These challenges were due to the state's rapid economic growth and consequent increase in the number of motor vehicles and increasing demand for road transport.

Government strategy. At appraisal, the Government of TN's program "*Tamil Nadu State Highway Development Program*", articulated the need for strengthening and widening 4,000 - 5,000 km of high-traffic segments of the CRN. The PDO was consistent with the State's *Vision 2023*. The vision envisaged infrastructure investments of approximately US\$192 billion, with infrastructure spending as a percentage of Gross State Gross Domestic Product rising to 11.5% by 2023, and 42% of financing coming from the private sector.

The PDO is relevant to the Government of India's 2018 "*Strategy for New India @75*". The strategy underscored the need for widening single/intermediate lanes in the national and state highways and improving the regulatory framework for the sector. The PDO is aligned with the State Government's "*Policy Notes 2021*". This note highlighted the long-term state vision to develop the road network to all parts of the state to improve living standards. This note specifically mentioned the need for upgrading high-traffic state



highways to four-lane standards and all major district roads, national and state highways to two-lane standards depending on the traffic intensity.

Bank strategy. The PDO was well-aligned with the Bank strategy at appraisal. The *Country Partnership Strategy (CPS)* for 2013 - 2017, articulated the need for integration through improving connectivity, improving road safety and ensuring asset sustainability. The PDO was well-aligned with Bank's *Finance-Plus vision* that underpinned the Bank's engagement in India with better contracting approaches, capacity enhancement via enterprise-wide mainstreaming of decision support systems based on Information Communication (IT), and multi-sectoral interventions for improving road safety.

The PDO is well-aligned with the Bank's current *Country Partnership Framework (CPF)* for 2018-2022. The CPF reiterated the need for improving connectivity and logistics, and the Focus Area Two of the CPF highlighted the need for enhancing competitiveness and enabling job creation.

Previous Bank experience. This was the second Bank financed road project in TN. The first Tamil Nadu road sector project completed in 2012, contributed to the state's ability to better manage highways, improve road maintenance and road safety. This follow-on project was based on those accomplishments and aimed to address the current challenges the state was facing. As in the previous project, this project aimed to increase the highway capacity and improve institutional strengthening. Unlike the previous project, this project specifically aimed to support the state government in implementing a sustainable road strategy through: (i) innovative contracting structures such as EPC contract, PPP concession and multi-year PBMC; (ii) gradual shift towards allocating more for capacity expansion and maintenance; and (iii) a coordinated approach to road safety at the state and district levels. This review concludes that the level of ambition was appropriate for TN's development needs and strategic framework. Therefore, the relevance of the PDO is High.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase road capacity.

Rationale

Theory of change. The outputs of activities such as upgrading roads to two-lanes through the EPC contract, widening roads to four-lane standards through PPP concessions, and maintaining the road network through PBMC, were expected to increase the road capacity of the state. The causal links between project activities, outputs and outcomes were logical and straightforward, given the established practices and the Bank's long experience with these types of road transport projects; moreover, the intended outcomes were monitorable.



Outputs (ICR, pages 13 -14).

- 1,175 km of the core road network were upgraded when the project closed, exceeding the target of 575 km. Of the 1,175 km of the road network, 91% were upgraded through a combination of EPC contracts, PPP concessions and PBMCs. The remaining 74 km were transferred from the PPP mode to the EPC mode due to the challenging conditions in the contracting industry in the state. The HD department was completing the remaining 74 km under the EPC mode when the project closed.
- The size of the classified road network increased from 11,594 km to 22,898 Km. There were no targets for this indicator.
- As of June 2021, the project had provided 0.70 million-person days of unskilled employment (including 66% to people from local areas).

Outcomes.

The outputs were expected to: (i) increase the percentage of roads that were in good/fair condition (with an International Roughness Index (IRI) of less than four) and (ii) reduce the average travel time on the project-intervened areas.

- The roads that were reported to be in good/fair condition increased from 35.6% at the baseline to 70% when the project closed. This exceeded the target of 45%.
- The average travel time per km on the project roads decreased from 1.25 minutes at the baseline to 0.98 minutes when the project closed, achieving the target of one minute.

Given that the outcomes were realized or exceeded, efficacy of this PDO is substantial.

Rating

Substantial

OBJECTIVE 2

Objective

To enhance quality of maintenance.

Rationale

Theory of change. The outputs discussed above (upgrading roads to two-lanes through the EPC contract, widening/ roads to four-lane standards through PPP concessions, and maintaining the road network through PBMC), were expected to enhance quality of maintenance and improve road quality and reduce the vehicle operating costs of cars and trucks. The causal links between project activities, outputs and outcomes were logical and direct. The intended outcomes were monitorable.

Outputs (ICR, paragraph 19).

The outputs discussed above were relevant to this objective.



Outcomes.

The outputs were expected to contribute to the outcome of reducing the vehicle operating costs (VOC) of cars and trucks.

- With 70% of roads in the project-intervened areas in good/fair condition when the project closed, the average VOCs for cars were reduced from 5.8 Indian Rupee (INR)/km at the baseline to 5.0 INR/km as targeted.
- The average VOCs for trucks were reduced from 24 INR/km at the baseline to 19.3 INR/Km, exceeding the target of 22 INR/km.

Although it is difficult to determine the extent to which the project contributed to the outcome, since average VOCs are dependent on fuel costs which is beyond the project control, it is reasonable to assume that the project activities significantly contributed to realizing the outcome.

Rating

Substantial

OBJECTIVE 3

Objective

To improve road safety.

Rationale

Theory of change. Establishing state-level entities (a road safety leadership group, road safety management cell and road safety reference group), together with road safety demonstration corridors in two districts, rectifying black spots, road safety campaigns and training on enforcement and trauma care, were expected to reduce the number of fatalities due to road accidents. The direct causal links between project activities, outputs and final outcomes were logical and the intended outcomes were monitorable.

Outputs (ICR, pages 10 -11).

- The state level entities were established as targeted.
- Road safety improvements were carried out in 3,206 km of road, exceeding the target of 1,700 km. The improvements included multi-sectoral interventions such as in infrastructure interventions (signage, pedestrian markings and junction improvements) and other non-infrastructure interventions (such as enforcing speed limits and wearing helmets).
- TN updated the Road Safety Policy and the Road Safety Act. These were being reviewed by the state government when the project closed. Eight senior officials from relevant departments were trained overseas on road safety management leadership.
- Road safety audits were completed on 1,500 km of roads. The project used International Road Assessment Program (IRAP) on 528 km of roads in two pilot districts to identify a 100 km demonstration corridor for multi-sectoral road safety interventions such as: (i) road safety awareness program; (ii) preparing road safety awareness materials by the School Education Department; (iii) implementation of automated speed control through speed cameras, an Advance Traffic Management



System and an enforcement system; (iv) highway patrol vehicles for the police, medical equipment and ambulances; (v) establishing centers of excellence in trauma care; and (vi) training first responders for emergency medical response. With the exception of awareness programs in schools which were affected by the COVID -19 crisis, all other activities were completed by the time the project closed.

- Of the 775 blackspots identified by the HD in 2017, 478 were rectified, and the rest were under rectification by the time the project closed.

Outcomes.

The outputs were expected to contribute to the intended outcome of no increase in fatalities due to road accidents in the project-intervened areas when the project closed, as compared to in the baseline.

- The number of road fatalities in the project areas decreased from 452 at the baseline to 147 fatalities when the project closed in December 2021.

In the absence of information on the number of road fatalities in TN when this project was completed, it is not clear whether the outcomes could be fully attributed to project activities in the intervened areas. This is especially so given that actual disbursement for this component was only 10% of the appraisal estimate. This review concludes that given the lack of evidence and unclear attribution, efficacy of this objective is modest.

Rating

Modest

OBJECTIVE 4

Objective

To support institutional development.

Rationale

Theory of change. Activities supported implementation of the institutional capacity enhancement plan which was developed by the HD and endorsed by the state government for the road sector through process improvements, and organizational restructuring for sustaining investments in infrastructure. Activities such as new methods of financing (Engineering Procurement and Construction (EPC), the Public-Private Partnership (PPP) and the Performance-Based Maintenance Contract (PBMC) were expected to support institutional development. The causal links between the project activities, outputs and outcomes were logical and the intended outcomes were monitorable.

Outputs. (ICR, pages 24 - 25).

- The Institutional Capacity Enhancement and Road Safety (ICERS) Cell established within the HD aided in defining the CRN for the state, which formed the critical intermediate link bridging the state's primary network and the national highways.
- A toll policy was prepared as targeted.



- The time taken to prepare, award and implement large-size projects decreased from 48 months at the baseline to 36 months as targeted.
- 3,800 staff engineers were trained on institutional capacity enhancement and road safety.
- The activity associated with road condition data was not completed when the project closed.

Outcomes.

The project activities were expected to improve the efficiency of the HD to manage its road assets through new modes of financing.

- 3,381 km of the state highways were upgraded using new methods of financing (such as the EPC, PPP and PBMC), as compared to none at the baseline and far exceeding the target of 2,000 km.
- Twenty two field divisions implemented at least a large civil works contract through new methods of financing. This exceeded the target of five.

Given that the targets were realized, efficacy of this PDO is substantial.

Rating

Substantial

OVERALL EFFICACY

Rationale

Overall efficacy is substantial, with three of the four objectives rated as substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic analysis. An economic evaluation was conducted both at appraisal and at closure for activities associated with upgrading roads using the Highway Development and Management Model (HDM - 4). These activities accounted for 96% of the appraisal estimate and 98% of the actual cost. The methodology for the analysis entailed comparison of costs and benefits under two scenarios: " without upgrading " and "with upgrading". The benefits were assumed to come from reduction in road user costs of motorized and non-motorized traffic due to the improved roads as a result of: (i) savings in vehicle operation costs (VOC); (ii) travel time savings for passengers and commercial vehicles; (iii) savings in accident costs; and (iv) savings in carbon emissions.



The Net Present Value (NPV) at 12% discount rate was US\$420 million at appraisal and the NPV when the project closed was US\$300 million for EPC roads and US\$169.8 million for roads with PPP concessions. The average ex-post Economic Internal Rate of Return (EIRR) was 24% as compared to the average ex-ante EIRR of 30.9%. The results under a sensitivity analysis with a 20% reduction in benefits confirmed that the EIRRs remained above the minimum required social discount rate or the opportunity cost of capital.

Administrative and operational issues. The project did not have a regular full-time project Director for over three years and some key staff positions (such as the Chief Engineer and the forester) remained vacant for a considerable time, leading to delays in decision-making. Delays in land acquisition for two contracts due to a court case, resulted in delays in compensating the project-affected people. The failure to award two PPP packages resulted in low disbursement (with disbursement at the time of the Mid-Term Review (MTR) being only 36.4%). However, through restructuring and retroactively increasing the disbursement package, the loan was fully disbursed and most of the activities were completed with no extension of the closing date (despite the restrictions due to the COVID -19 pandemic).

In sum, efficiency is assessed as substantial.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	30.90	96.00 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	24.00	98.00 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The PDO was highly relevant to the Government and the Bank strategy. Overall efficacy is substantial, with three of the four objectives rated as substantial. Efficiency is substantial. Taking these ratings into account, overall outcome is satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome



Government commitment. The ICR (paragraph 62) notes that the road assets created under the project are likely to be sustained in the medium term, as the contracts include maintenance periods of five years. The TN Government has showed strong commitment to road safety by establishing Center of Excellence in trauma care and using a multi-sectoral approach to addressing road safety issues. There is however a moderate risk that funding for maintenance might be undermined after five years, given the fiscal constraints facing the state in the wake of the COVID-19 pandemic.

8. Assessment of Bank Performance

a. Quality-at-Entry

The Bank prepared this project based on the experiences from the previous Bank-financed - the Tamil Nadu Road Sector Project - and similar lending operations in India (including on EPC contracts, PBMS, modified-annuity type PPP concessions, and road safety demonstration corridors). The lessons incorporated at design included; (i) a time-bound plan for completing major preparatory actions (including procurement actions), as the previous major highway contracts financed by the Bank routinely faced time and cost overruns due to the inadequate attention to preparation activities; (ii) progressively shifting the Government's allocations to the road sector through larger contracts for exploiting scale economies; and (iii) upgrading works through EPC plus maintenance contracts or PPP concessions for better maintenance of roads (PAD, paragraphs 27 - 30).

The implementation arrangements at appraisal were appropriate. This included: a project implementation unit (PIU) in the HD responsible for day- to- day implementation; and an Institutional Capacity Enhancement and Road Safety Cell in the HD responsible for implementing institutional strengthening and road safety activities.

The preparation team identified several risks at appraisal, including substantial risks due to the low implementation capacity and environmental risks. With mitigation measures, the overall project risk was rated as moderate at appraisal (PAD, paragraph 45). The arrangements made at appraisal for fiduciary compliance were appropriate (discussed in section 10).

There were moderate shortcomings at Quality-at-Entry. The Bank underestimated the HD's ability to implement innovative contract packages. There were also shortcomings with some of the key outcome indicators for monitoring project performance, such as the vehicle operating cost and the indicator for monitoring road safety (discussed in section 10).

Quality-at-Entry Rating

Moderately Satisfactory

b. Quality of supervision



Supervision missions were held twice a year (with thirteen supervision missions during the project lifetime of six years). In the wake of the COVID -19 pandemic, missions were virtual. The Bank was pro-active in identifying operational problems (such as poor or non-performing contracts and delays in procurement) and challenges and recommending solutions. Given the low disbursements until the Mid-Term Review due to the issues with the PPP concessions in two contracts, the Bank helped to restructure the project to: (i) increase the percentage of Bank financing for eligible expenditures under the project to be applied retroactively; and (ii) change the respective length of roads to be upgraded using the EPC and PPP contract modes. The ICR does not provide details on the continuity of leadership during the project lifetime. One shortcoming during supervision was that the issues with the results framework were not addressed.

In sum, overall Bank performance is moderately satisfactory, given the shortcomings at the Quality-at-Entry.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The results framework was logical. Of the four key outcome indicators, two indicators - roads that were reported to be in good and fair condition and average travel time on project roads were appropriate for monitoring project performance.

The key outcome indicator "reduction in vehicle operating cost on project roads" is dependent on fuel costs, which is beyond the control of the project. A comparison of the number of fatalities in the project-intervened areas with the number of fatalities in TN, would have helped to better attribute the results to the project's road safety activities in the intervened areas. The project could have provided a better key outcome indicator to monitor the institutional strengthening component of the project.

The M&E arrangements at appraisal were appropriate. This included: the use of supervision consultants and the Government of TN/PIU field units for monitoring the road upgrading works; a Management Information System (MIS) to track implementation progress; and the PIU to evaluate the socio-economic impact of the project through road user satisfaction surveys using a comparative study of project roads and a controlled sample of similar non-project roads (PAD, paragraphs 36 - 39).

b. M&E Implementation

The shortcomings in M&E design were not corrected during implementation. The ICR (paragraph 43) notes that in initial years, data was not collected diligently for all indicators and there were delays in



updating the data. Moreover, some data on project roads on speed and traffic volumes were unavailable, due to a combination of frequent staff transfers and the impact of the pandemic. However, many of these issues were rectified in the latter years of the project.

c. M&E Utilization

The ICR (paragraph 44) notes that M&E utilization improved significantly in the final years of the project. The M&E data was used for decision-making and the project was restructured based on the M&E data. A user satisfaction survey was undertaken when the project closed (discussed in section 10).

In sum, overall M&E is modest, in view of the shortcomings at design which were not rectified during implementation.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The project was classified as a Category A (Full Assessment) project under the World Bank safeguard policies. Five safeguard policies were triggered at appraisal: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Forests (OP/BP 4.36); Physical Cultural Resources (OP/BP 4.11); and Involuntary Resettlement (OP/BP 4.12) (PAD, page 19).

Environmental Assessment, Natural Habitats, Physical Cultural Resources and Forests. An Environmental Impact Assessment (EIA), an Environmental and Social Management Framework (ESMF), and an Environmental Management Plan (EMP) were prepared at appraisal and publicly disclosed.

Compliance with environmental safeguards was rated as moderately satisfactory during project execution (ICR, paragraph 46). The EMP was adhered to in all contract packages, including the provisions on work safety and labor camp management. At project closure, the compensatory afforestation under one PPP contract was not completed. The ICR noted that Bank team will continue to monitor the completion of this activity. The team clarified that there were no issues with the safeguards on Natural Hazards and Physical Cultural Resources.

Involuntary Resettlement. Land acquisition and resettlement impacts were anticipated at appraisal (PAD, paragraph 57). A Resettlement Policy Framework (RPF) was prepared and publicly disclosed at appraisal.

The project activities involved land acquisition of 169 hectares of private land (an increase from the appraisal estimates of 149 hectares because of changes in alignment) and affected 7,560 landowners and 3,745 informal settlers occupying public lands. Between 87% and 99% of the project-affected people were compensated when the project closed (ICR paragraph 48). The remainder was held up due to ongoing contracts, court cases and non-availability of some of the affected people. Land acquisition and resettlement represented about 8% of the project cost. The project had a Grievance Redress Mechanism.



As of December 2021, 87% of the 596 grievances were addressed. The remaining cases were open when the project closed either because the complainants did not come to the hearing or could not provide the required documentation.

A post-resettlement impact evaluation was conducted in 2021 to assess the outcome of land compensation and resettlement assistance provided to the project-affected people through household surveys, field investigations and focus group. The main conclusions of the survey were: (i) the proportion of people living in permanent houses increased from 33% at the baseline to 90% post resettlement; (ii) 85% of the surveyed families reported that their overall living standards improved or remained unchanged; (iii) 80% reported that their incomes had either increased or remained the same; and (iv) 88% were satisfied with the timely payment of compensation and with the compensation rates.

b. Fiduciary Compliance

Financial management. The Bank conducted a financial management assessment of the PIU at appraisal. The assessment concluded that the financial arrangements of the PIU were adequate (PAD, paragraph 54).

The project's financial management was rated as satisfactory throughout implementation, and there were no major issues during the project lifetime (ICR, paragraph 53). The internal and external audit reports were submitted in a timely fashion. The team confirmed that the audits were unqualified.

Procurement. The Bank conducted a procurement assessment of the PIU at appraisal. The PAD (page 36) noted that many of the PIU staff were involved in the previous Bank-financed project and were familiar with Bank procedures. However, unlike the previous project, this project had newer forms of contracts (EPC, PPP and PBMC. Procurement risk was assessed as substantial at appraisal (PAD, paragraph 55). The mitigation measures incorporated at design included: using skilled staff, using e-procurement, and training staff.

The procurement management was rated as moderately satisfactory during implementation (ICR, paragraph 54). There were some delays against the procurement timelines for some packages and market failure in several procurements (especially the PPP and Road Safety contract) that necessitated retendering. The ICR also notes that there were multiple allegations of fraud and collusion. The ICR noted that an investigation by the Integrity Vice Presidency (INT) substantiated fraud by a local firm, which was subsequently sanctioned.

c. Unintended impacts (Positive or Negative)

The ICR (paragraph 38) noted that the project integrated road safety features and standards through design stage audits of all packages (for a total of 575 km) financed under the project, and also prepared designs for an additional 2,500 km of roads.



d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

The ICR draws the following main lessons from the experience of implementing this project, with some adaptation of language.

1. Longer term engagement can help in driving reforms and building stronger institutions.

This project built on the sector dialogue developed under the previous Bank-financed transport project on innovating contracting formats, road safety and road sector policy. This longer-term engagement helped in implementing an institutional reform program.

2. Data driven multi sectoral approach can help in addressing road safety issues. This project adopted decision-making based on crash data to identify road safety infrastructure investments to manage post-crash response and trauma care. The road safety infrastructure investments and enforcing mandatory wearing of a helmet, monitoring speeding and awareness campaigns helped in reducing fatalities in the project-intervened areas.

3. Establishing dedicated decentralized land acquisition unit with required staff and resources can help in facilitating land acquisition. The impact evaluation conducted at project closure confirmed that in eight of the 13 contracts land was handed over on time and hence delays in construction were avoided.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is clear, well-written and concise. The theory of change provided in the ICR clearly articulates the links between project activities, outputs and outcomes. The ICR provides adequate evidence to assess project



performance. It candidly discusses the issues with the new contracting approaches and draws good lessons from the experience of implementing the project.

There were minor shortcomings. The ICR provides little details on the continuity of leadership. The ICR could have incorporated photographs of roads that were upgraded. This would have enabled the reader to better visualize the changes made under the project.

a. Quality of ICR Rating

Substantial