

## Second Tamil Nadu Road Sector Project (P143751)

SOUTH ASIA | India | Transport Global Practice | IBRD/IDA | Investment Project Financing | FY 2015 | Seq No: 11 | ARCHIVED on 18-May-2020 | ISR39394 |

Implementing Agencies: Government of Tamil Nadu, Republic of India

### **Key Dates**

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Bank Approval Date: 28-Apr-2015	Effectiveness Date: 10-Jul-2015
Planned Mid Term Review Date: 31-Mar-2018	Actual Mid-Term Review Date: 20-Jul-2018
Original Closing Date: 30-Jun-2021	Revised Closing Date: 30-Jun-2021

#### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project development objective is to increase road capacity, enhance quality of maintenance, improve safety and support institutional development of Tamil Nadu's core road network (CRN).

Has the Project Development Objective been changed since Board Approval of the Project Objective?

### Components Table

Name

No

Component A: Network Improvement:(Cost \$746.45 M) Component B: Institutional Capacity Enhancement:(Cost \$11.00 M) Component C: Road Safety:(Cost \$20.00 M)

### **Overall Ratings**

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	Satisfactory	Satisfactory
Overall Implementation Progress (IP)	Satisfactory	Satisfactory
Overall Risk Rating	Substantial	Substantial

#### Implementation Status and Key Decisions

The project consists of three components i.e. Network Improvement, Institutional Capacity Enhancement and Road Safety. The project has become effective in July 2015.

As part of the network improvement, \$275 million (about 90% of the total loan amount) will be utilized for (a) upgrading 430 km of roads to standard 2-lane configuration, through 10 EPC/Engineering Procurement Construction contracts, (b) upgrading of 145 km to 4-lane roads, through 3 PPP concessions, and (c) maintenance of 600 km of roads through 2 PBMC/Performance-based Maintenance Contracts.

9 out of the total 10 EPC contracts have been substantially completed. The works are also in progress in both the PBMC contracts and one PPP contract. One EPC contract (which was terminated) and two remining PPP contracts have to be procured.

The other two components (i.e. Institutional Capacity Enhancement and Road Safety) are also in varying stages of implementation.





## Risks

# Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Low	Low	Low
Macroeconomic	Moderate	Moderate	Substantial
Sector Strategies and Policies	Moderate	Substantial	Moderate
Technical Design of Project or Program	Moderate	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Substantial	Moderate	Moderate
Fiduciary	Moderate	Moderate	Moderate
Environment and Social	Substantial	Substantial	Substantial
Stakeholders	Substantial	Substantial	Substantial
Other			
Overall	Moderate	Substantial	Substantial

## Results

# PDO Indicators by Objectives / Outcomes

increase road capacity, enhance quality of maintenance, improve safety									
►Roads in good and fair condition as a share of total classified roads (Percentage, Custom)									
Baseline Actual (Previous) Actual (Current) End Target									
Value									



	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021			
Comments:	State Highways: 54% Major District Roads: 43% Total Classified Roads: 48.6%						
□Size of the total cla	assified network (Kilometers, Custon	n Supplement)					
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	11,594.00	12,093.00	12,093.00	11,594.00			
► Reduced average transition	avel time per kilometer on project ro	ads (Text, Custom)					
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	1.25 min.	1.19 min/km	1.19 min/km	1 min.			
Date	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021			
Comments:	On the upgraded roads	of about 400 km, the average	e travel time is 1.19 min/km				
►Reduced average V	olume Operating Cost (VOC) on pro	ject roads (Text, Custom)					
► Reduced average V	olume Operating Cost (VOC) on pro Baseline	ject roads (Text, Custom) Actual (Previous)	Actual (Current)	End Target			
			Actual (Current) Cars:5.21 INR/km Trucks:16.87 INR/km.	End Target Cars – 5 INR/km Trucks – 22 INR/km			
Value	Baseline Cars – 5.8 INR/km	Actual (Previous) Cars:5.21 INR/km	Cars:5.21 INR/km	Cars – 5 INR/km			
► Reduced average V Value Date Comments:	Baseline Cars – 5.8 INR/km Trucks – 24 INR/km 19-Dec-2014	Actual (Previous) Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 of about 400 km, the average	Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018	Cars – 5 INR/km Trucks – 22 INR/km 30-Jun-2021			
Value Date Comments:	Baseline Cars – 5.8 INR/km Trucks – 24 INR/km 19-Dec-2014 On the upgraded roads	Actual (Previous) Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 of about 400 km, the average NR/km.	Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 e Vehicle Operating costs ar	Cars – 5 INR/km Trucks – 22 INR/km 30-Jun-2021			
Value Date Comments:	Baseline Cars – 5.8 INR/km Trucks – 24 INR/km 19-Dec-2014 On the upgraded roads INR/km Trucks:16 .87 I	Actual (Previous) Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 of about 400 km, the average NR/km.	Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 e Vehicle Operating costs ar	Cars – 5 INR/km Trucks – 22 INR/km 30-Jun-2021			
Value Date Comments: ►No increase in numt	Baseline Cars – 5.8 INR/km Trucks – 24 INR/km 19-Dec-2014 On the upgraded roads INR/km Trucks:16 .87 I	Actual (Previous) Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 of about 400 km, the average NR/km.	Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 e Vehicle Operating costs ar t roads (Text, Custom)	Cars – 5 INR/km Trucks – 22 INR/km 30-Jun-2021 e as follows: Cars:5.21			
Value Date Comments:	Baseline Cars – 5.8 INR/km Trucks – 24 INR/km 19-Dec-2014 On the upgraded roads INR/km Trucks:16 .87 I ber of annual fatalities from road acc Baseline	Actual (Previous) Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 of about 400 km, the average NR/km.	Cars:5.21 INR/km Trucks:16.87 INR/km. 20-Jul-2018 e Vehicle Operating costs ar t roads (Text, Custom) Actual (Current)	Cars – 5 INR/km Trucks – 22 INR/km 30-Jun-2021 e as follows: Cars:5.21 End Target No increase in			

# Intermediate Results Indicators by Components

Component A: Network Improvement



► Roads rehabilitated,	Non-rural (Kilometers, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	400.00	422.00	600.00			
Date	19-Dec-2014	20-Jul-2018	29-Nov-2019	30-Jun-2021			
Comments:	Construction and rehabilitation of the project roads has progressed well, with 422 km of project road substantially completed.						
► Length of CRN deve	loped using new contracting me	thods (such as EPC, PPP, and	PBMC contracts ) (Kilomet	ers, Custom)			
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	3,000.00 3,000.00		1,700.00			
Date	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021			
Comments:	annuity concession Multi-year PBMC co scope of the TNRS	oads are being developed using contracts, and 750 km through ontracts have been adopted for P Project. PBMC contracts are ngth of 1,564km of State Highw	PBMC contracts. implementation on the wide being implemented in 5 div	er road network outside the visions of the Highways			
► Increase in number of Custom)	of HD circles that have impleme	nted at least a large civil works	contract under the new mo	des of contracting (Number			
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	5.00	5.00	5.00			
Date	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021			
Comments:		are implementing large civil wo some non-project roads.	orks contracts under new mo	odes of contracting (PBMC)			
► Number of Project A	ffected Families that received f	ull compensation and all R&R a	assistance (including % wor	men) (Number, Custom)			
	Baseline	Actual (Previous)	Actual (Current)	End Target			
Value	0.00	8,150.00	8,150.00	9,000.00			
Date	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021			
Comments:	So far, 8150 project 22% are women.	t affected families have received	d full compensation and R&	R assistance. Out of these			
► Local labor among u	nskilled employment created un	der the works contracts (includ	ing women) (Percentage, C	custom)			
			Actual (Current)	End Target			
	Baseline	Actual (Previous)	Actual (Current) End Target 67.00 50.00				
Value	Baseline 0.00	Actual (Previous) 66.00					



Comments:	which exceeds the r The proportion of wo	To date, 607,885 person days of employment have been created and out of this, 67% are from local area, which exceeds the result indicator target of 50%. The proportion of women among unskilled employees by contractors is 7.5% and proposition among local labor is slightly lower with 6.3%.						
► State Road Toll policy	y formulated (Yes/No, Custom)							
	Baseline	Actual (Previous)	Actual (Current)	End Target				
Value	No	No	No	Yes				
Date	19-Dec-2014	19-Dec-2014 20-Jul-2018 20-Jul-2018 30-Jun-2021						
Component B: Institution	nal Capacity Enhancement							
► Enhanced efficiency c	of HD to manage its road netwo	ork (Number, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target				
Value	800.00	883.00	883.00	1,200.00				
Date	19-Dec-2014	20-Jul-2018	20-Jul-2018	30-Jun-2021				
Comments:		∕ear 3 – 883 km (three-year av ajor District Roads, in Year 3 –		ge 1802 km)				
	nt of HD staff (both HQ and field ined) (Percentage, Custom)	d staff) undertaken for preparat	ion and implementation of r	new methods of contracting				
	Baseline	Actual (Previous)	Actual (Current)	End Target				
Value	0.00	0.00	50.00	75.00				
Date	19-Dec-2014	20-Jul-2018	21-Feb-2020	30-Jun-2021				
Comments:	submitted Training of Trainers organized.	een appointed to carry out the t programs have been delivered ent has been demonstrated by	to 31 trainers. Periodic tra	ining on key topics is being				
N Deduced the la	aring, awarding and implementi	ng projects (Months, Custom)						
Reduced time in prep	aning, awaraning and implement							
Reaucea time in prep	Baseline	Actual (Previous)	Actual (Current)	End Target				
		Actual (Previous) 48.00	Actual (Current) 48.00	End Target 36.00				
Reduced time in prep. Value Date	Baseline							
Value	Baseline 48.00 19-Dec-2014	48.00 20-Jul-2018 projects is being maintained an	48.00 20-Jul-2018	36.00 30-Jun-2021				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	To be Initiated	Collection of road condition data using Advanced Data Collection Equipment is ongoing for ODRs. For SHs, road condition data has not been updated since 2015. Road inventory data is being maintained in the system. PFMS implementation piloted in four circles. However, full functionality is not being used. Also, all projects in the four circles are not using PFMS.	Collection of road condition data using Advanced Data Collection Equipment is ongoing for ODRs. For SHs, road condition data has not been updated since 2015. Road inventory data is being maintained in the system. Internal discussion is underway on improving sustainability of road data collection process.	Road Management System mainstreamed for rationalizing road investments / maintenance. PFMS mainstreamed in all Circles and used for monitoring and management of civil works
Date	19-Dec-2014	20-Jul-2018	21-Feb-2020	30-Jun-2021
	Deceline	Actual (Dravieus)	Actual (Current)	End Torget
Value	Baseline 0.00	Actual (Previous)	Actual (Current)	End Target
	Baseline 0.00 19-Dec-2014	Actual (Previous) 1,100.00 20-Jul-2018	Actual (Current) 1,100.00 21-Feb-2020	End Target 1,700.00 30-Jun-2021
Date Comments:	0.00 19-Dec-2014 By Year 3, road safety i apart from rectification of Road safety audits and	1,100.00 20-Jul-2018 improvements have been carried of 2074 blackspots (on non-proje iRAD assessments have been o iffy and prioritise road safety imp	1,100.00 21-Feb-2020 d out in about 1,100 km of ect roads). carried out on 528km of ro rovements	1,700.00 30-Jun-2021 CRN (i.e. project roads
Comments:	0.00 19-Dec-2014 By Year 3, road safety i apart from rectification of Road safety audits and Tiruvannamalai to ident	1,100.00 20-Jul-2018 improvements have been carried of 2074 blackspots (on non-proje iRAD assessments have been o iffy and prioritise road safety imp	1,100.00 21-Feb-2020 d out in about 1,100 km of ect roads). carried out on 528km of ro rovements	1,700.00 30-Jun-2021 CRN (i.e. project roads

audit; 8 senior officials from Highways,

on East Coast Road



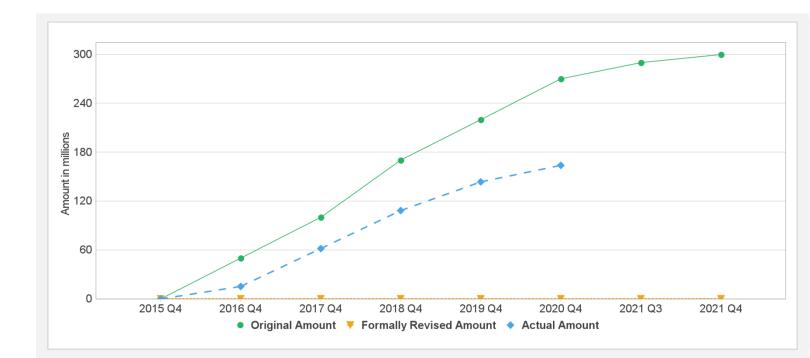
## **Performance-Based Conditions**

## **Data on Financial Performance**

# Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Dis	sbursed
P143751	IBRD-84990	Effective	USD	300.00	300.00	0.00	164.43	135.57		55%
Key Dates	(by loan)									
Project	Loan/Credit/TF	Status	Approval Date	e Signi	ng Date	Effectiveness Da	ate Orig. (	Closing Date	Rev. Closing D	ate
P143751	IBRD-84990	Effective	28-Apr-2015	28-M	ay-2015	10-Jul-2015	30-Ju	n-2021	30-Jun-2021	

## **Cumulative Disbursements**



# **PBC Disbursement**

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC

## **Restructuring History**

There has been no restructuring to date.

## Related Project(s)

P172572-SECOND TAMIL NADU ROAD SECTOR PROJECT ADDITIONAL FINANCING