

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: PIDA709

<b>Project Name</b>	India Second Kerala State Transport Project (P130339)
<b>Region</b>	SOUTH ASIA
<b>Country</b>	India
<b>Sector(s)</b>	Rural and Inter-Urban Roads and Highways (100%)
<b>Lending Instrument</b>	Specific Investment Loan
<b>Project ID</b>	P130339
<b>Borrower(s)</b>	Government of India
<b>Implementing Agency</b>	Kerala State Transport Project
<b>Environmental Category</b>	A-Full Assessment
<b>Date PID Prepared/Updated</b>	15-Mar-2013
<b>Date PID Approved/Disclosed</b>	18-Mar-2013
<b>Estimated Date of Appraisal Completion</b>	01-Mar-2013
<b>Estimated Date of Board Approval</b>	14-May-2013
<b>Decision</b>	The management gave the team authorization to proceed with formal appraisal and negotiations.

## I. Project Context

### Country Context

Kerala has the highest human development outcomes in India with 99 percent literacy, the highest life expectancy and the lowest rates of infant mortality in the country. The economy of Kerala is heavily dependent on the service sector with 21 percent of its Gross Domestic Product (GDP) coming from the secondary sector (i.e. manufacturing and construction); and 15 percent coming from the primary sector (i.e. agriculture and allied activities). Remittances are a significant driver for Kerala's economy accounting for 25 percent of GDP. Public Sector Undertakings (PSU) also play a significant role in Kerala's economy and the state's fiscal affairs. In 2009/2010 the state's 96 PSUs registered turnover equivalent to 5.3 percent of Kerala's 2009/10 GDP and employed approximately 110,000 people.

Despite the impact of the global economic down turn on the national economy, the domestic economy of Kerala performed much better than expected. Between 2006/07 and 2009/10, Kerala's GDP growth rate averaged 3.2 percent. The state's fiscal position improved and is in line with 13th Finance Commission targets thanks to an increase in the state's own tax receipts. The fiscal deficit as percentage of GDP lowered from 3.4 percent in 2009/2010 to 2.79 in 2010/2011. Similarly, the ratio of debt to GDP decreased from 30.5 percent in 2009/2010 to 28.4 percent in 2010/2011. Low capital investment in economic infrastructure has been an unfortunate consequence of fiscal constraints and high revenue expenditures. Kerala's politics have historically shown a strong

socialist influence and a focus on wealth redistribution via public sector employment, and expenditures on social services such as health and education. This has historically challenged the state's ability to promote economic growth and maintain a sound fiscal position. For example, only 10 percent of Kerala's 2012/13 budget will fund capital investment which includes about US\$ 113 million for road and bridge maintenance. Kerala's draft Road Development Policy estimates that improving existing roads alone will require investing US\$ 885 million per year over the next 10 years.

## II. Sectoral and Institutional Context

**Kerala's Transport Network:** Kerala has a dense road network, roughly three times the national average. Whilst Kerala has an extensive road network relative to its geographical size, the poor quality of many roads constrains the state's development. Of the 4,340 km of state highways around 70 percent are still single-lane with 54 percent in poor condition. The dense population and ribbon development along the main transport links have resulted in dispersed settlement patterns with few concentrated urban centers. Much of Kerala resembles a rural-urban continuum which the State Planning Commission has termed 'rurban' development. This type of development adversely affects movement of people and goods by increasing the cost of travel and amount of time taken traveling between centers of socio-economic activity.

**Road Asset Management:** The Public Works Department (PWD) is responsible for managing state highways and major district roads. PWD has a geographically decentralized structure of 'Circles', 'Divisions' and 'Sub-Divisions' to undertake design, procurement, construction, and maintenance operations at the local level. Maintenance is mainly carried out by private contract and tends to be undertaken on an ad-hoc basis steered mainly by urgency. To support improvements in the condition of critical roads, the World Bank contributed towards upgrading of 254km of roads and maintenance of 1200km of state highways as part of an overall framework for improving capacity of the network and strengthening the sector. This first project, Kerala State Transport Project (KSTP I) was delivered through a project implementation unit called KSTP, this unit has now taken responsibility for much of the new project work. KSTP2 will build on the achievements of KSTP1 and address weaknesses in the institution and the road safety improvement agenda.

**Road Safety:** Road safety is a major challenge in many of Kerala's roads. While the number of road crashes in Kerala has been declining from a peak of 42,400 in 2005 to 35,000 in 2011 (a 17 percent reduction), the number of traffic fatalities has increased during the same period from 3,200 to 4,100 (a 27 percent increase). As part of KSTP I a Road Safety Authority (RSA) - the first of its kind in India - headed by the Transport Minister was established in 2007 and this was followed by a Road Safety Fund in 2009 which receives 10 percent of motor vehicles tax, 50 percent of fuel tax and a portion of traffic violations income. The budget of the road safety fund reached about US\$ 10 million in 2011. The fund primarily funds a black-spot improvement program, implemented by the road safety cell of the PWD, and equipment for the traffic police including speed radars and alcoholmeters. It also funds public awareness, education programs, coordination with other agencies and driver training.

**Traffic management:** Related to the road safety issue is the problem of traffic management in a state where development is "rurban". It provides a unique challenge for the smooth and safe flow of traffic through long stretches of road that are semi-urban, and traffic is routinely interrupted by road junctions, road side activity, pedestrians and frequently stopping public transport vehicles. This project will support the design, implementation and evaluation of initiatives aimed at improving traffic management; particularly in dense semi-urban locations. There is also an urgent need for

enhanced community engagement in design and operation of traffic and safety management schemes which this project will promote and pilot in selected locations.

Kerala has developed a draft Road Development Policy for the period 2009-2021. This policy includes proposals for part-funding additional road development and maintenance via existing or proposed State revenue generating powers. By 2021, the policy envisages all state highways to be designed and converted to two lane carriage ways with paved shoulders; and all major district roads to be upgraded to single/intermediate lane roads. Kerala's draft Road Development Policy estimates that roughly Rs 550 crore per annum (about US\$ 104 million) can be raised for road development from the State's own sources such as bridge tolling and State Cess on fuel. However, these additional revenues are small compared to the Rs 4,705 crores (US\$ 885 million) per year of investment which the State's Draft Policy suggests will be necessary to support the roads and bridges sector between 2011 and 2021.

One of the key challenges facing Kerala's road sector is an incomplete state-level framework for funding and financing road sector investments given the financing gap. The PWD is currently exploring how best to involve the private sector in this framework and how to leverage existing revenue streams, such as that from the road fund, to increase debt financing for infrastructure provision. The use of IBRD finance can also help to leverage other financing through high quality appraisal of individual sub-projects. One outcome from this policy debate may be an increased use of annuity-style PPPs for financing, asset development, and maintenance over a defined period. Regardless, the state will need to identify increased funding to support whichever financing methods (public or private) it chooses to deploy. The state's primary options for increasing funding are through (i) user charging (e.g. through higher fuel cess or some form of tolling); or (ii) transfers from the state's other tax revenues. The technical assistance component of this project will support the state in analyzing and articulating these issues on a sector wide level.

### III. Project Development Objectives

The project's development objective is to improve condition, traffic flow and road safety with a focus on vulnerable road users on selected roads in Kerala.

### IV. Project Description

#### Component Name

Component A: Road Network Upgrading and Safety Improvement

Component B: Road Safety Component

Component C: Institutional Strengthening Component

### V. Financing (*in USD Million*)

For Loans/Credits/Others	Amount
Borrower	229.00
International Bank for Reconstruction and Development	216.00
Financing Gap	0.00
Total	445.00

### VI. Implementation

PWD has overall responsibility for implementation of the project. The PWD has delegated the offices of KSTP, which was formed for the KSTP-I, to undertake the day to day management of the

project. The functions of KSTP have now been integrated within the overall PWD structure. A Project Management Team (PMT) has been established within the PWD under the control of the Project Director, KSTP, specifically to manage the project. The PMT will be responsible for planning, budgeting, procurement, implementation, co-ordination, management and monitoring of various components of the project including implementation of the Resettlement Action Plan and the Environmental Action Plan. KSTP will be supported by five divisional offices located at Kottarakkara, Muvattupuzha, Kuttippuram, Kannur, and Ponkunnam each headed by an Executive Engineer.

The project will upgrade 363 km of strategically important State Highways to complete network connectivity in the state with the objective of reducing travel time between key socio-economic centers. Overall 281 km state highways will be upgraded through input based contracts while 82 km state highway is expected to be delivered through a PPP concession to pilot the approach in the state.

A major part of the project will focus on strengthening of road safety management systems in Kerala with the objective of reducing the number of fatalities and serious injuries from traffic crashes in the state. The strategic planning and the development of this work will also be supported and funded in collaboration with the World Bank Global Road Safety Facility (GRSF). The road safety elements will support Multi- sectoral interventions in identified Safe Corridors to demonstrate the effectiveness of road safety best practice. This road safety demonstration corridor will focus on targeted infrastructure design and behavioral interventions with a particular emphasis on measures improving the safety of pedestrians, bicyclists and motorized two-wheelers. In addition, a challenge fund will be set up to help district road safety councils (DRSCs) learn and replicate ideas from the safe corridors through local partnerships.

The project will aim to improve the sustainability of Kerala's state road network with respect to its functional adequacy, financial viability and capacity of key state road sector institutions to deliver road infrastructure and services that are responsive to road user needs. As such specific activities relating to modernization of the sector, community engagement and road user satisfaction will be supported.

KSTP has in place a financial management system that is assessed to be adequate for accounting and reporting purposes. The financial management team in the Finance Wing of KSTP is in place and has experience of implementing KSTP I. The preparation for KSTP2 has taken lessons on procurement management from KSTP1 regarding delays in contract completion due to resettlement problems and poor contract management. At this stage bids for three contracts and the contract for the selection of the supervision consultant have been received, evaluated and award recommendation made. Preparations for all other key packages are at an advanced stage of completion. 98% of land acquisition is complete and the environment management plans for four links have been disclosed while the remainder will be disclosed soon. The Grievance Redressal Mechanism (GRM) designed under KSTP I will continue to be used.

## VII. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x

Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

### VIII. Contact point

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