

Road Safety Challenges and Opportunities in Tamil Nadu

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Abstract

Tamil Nadu is a powerhouse of India's economy, but suffers India's highest rate of fatality and double that of India as a whole. A rapid increase in wealth, population, vehicles, and traffic is occurring within a legacy road transport system that has not been designed and is not being managed to facilitate safe travel. A 2014 review to assess and make recommendations on the capacity of Government institutions to significantly improve road safety within the State has led to the development of a significant multi-year road safety program.

A number of significant capacity building projects are being implemented at a statewide level, including the establishment of an inter-departmental executive group to lead the road safety effort, and a significant investment in the Transport Department's capacity to perform the lead agency role for the State. The State is the centre of the automotive industry in India, and it is intended that a non-government forum is formed to encourage corporates, NGOs and other stakeholders to take significant actions to improve the safety of the road transport system including the safety of their own road traffic operations. A road safety demonstration project is also being developed within the Kancheepuram District, immediately south of Chennai. A range of innovative projects will be launched to complete corridor safety improvements, including working with local administrations on roadside encroachment, and a comprehensive safe systems speed management project.

Introduction

Road traffic is the number one killer of all males aged 15-29 in India, and the estimated socio-economic cost of road trauma in the country is over \$US50 billion per annum. Recorded fatalities on Tamil Nadu's roads increased by almost 60% over the last decade – from 9,570 in 2005 to 15,545 in 2013. The State ranks in the top five in terms of road accidents, fatalities and injuries, accounting for about 14% of total accidents and 12% of persons killed in road accidents in India. In 2012, Tamil Nadu had 22 fatalities per every 100,000 people, which is double the national average of 11 fatalities.

The prognosis is poor. At the core of the road trauma challenge is that a rapid increase in wealth, population, vehicles, and traffic is occurring within a legacy road transport system that has not been designed and is not being managed to facilitate safe travel. Simple analyses of fatalities by vehicle type and road type show for example that motorcycle fatalities quadrupled between 2001 and 2012 which, along with high concentrations of trauma on the National and State Highway networks, must be an urgent priority.

Management Capacity Review

The World Bank and the Government of Tamil Nadu agreed to review the road safety situation in Tamil Nadu and an executive road safety management capacity review was conducted during June and August 2014. The purpose of the review was to support development of an operational framework for road safety as part of a significant multi-year investment programme in Tamil Nadu's road sector – the second Tamil Nadu Road Sector Program (TNRSP II).

This is intended to help establish a robust road safety management system aimed at bringing the

state's challenging road safety outcomes under control. The review analysed and made recommendations on the capacity of Government institutions to significantly improve road safety within the State and has led to the development of a significant multi-year road safety program.

Challenges

A key factor in tackling the growing burden of road traffic injury worldwide is the creation of institutional capacity across a range of interlinking sectors, backed by both strong political commitment and adequate and sustainable resources. Tamil Nadu has developed a road safety policy, established a Road Safety Council, nominated the Transport Department as the lead agency, and established the function of a Road Safety Commissioner. But much more needs to be done.

The strengthening of the road safety lead agency function within the Transport Department is of prime importance. Lead agencies are central to orchestrating a jurisdiction's road safety effort, and the Transport Department's road safety management capacity needs strengthening with the establishment of a Road Safety Management Cell to perform or coordinate a series of critical road safety management functions, and support the Road Safety Commissioner.

Some further findings from the review are set out below:

- a) Road safety in Tamil Nadu is currently analysed only in terms of final results such as fatalities and grievous injuries, or the disaggregation of these results, and considerable effort is required to go deeper to identify the key drivers of this trauma which can be effectively managed.
- b) Greater coordination of activity is needed and improved structures need to be put in place with the establishment of a Road Safety Executive Leadership Group (RSELG) comprising the key agency leaders within Government, and a reference group to engage business and community interests in improving Tamil Nadu's road safety performance
- c) There is evidence of increases in enforcement activity, but all stakeholders agree that much more needs to be done – a concerted capacity building effort is needed along with additional investment in both Police (primarily to increase detection activity) and Transport (primarily to tighten the issue of licences and permits and increase suspension/revocation actions)
- d) The Government has made a significant funding allocation to initiate an infrastructure safety program, and significantly increased the size of its Road Safety Fund in recent years, and a review is now needed to establish necessary expenditure over the next five years, and to improve the quality of activity which is funded
- e) Better definition of results and a supporting monitoring and evaluation programme is needed which should draw heavily in the first instance on the Road Accident Data Management System (RADMS) – this pioneering system has been recommended for use in other States and now needs additional functionality and strengthening
- f) The most notable research and development initiative within Tamil Nadu is the initial iRAP surveys which was recently conducted – it highlighted major primary opportunities to address pedestrian and motorcycle safety and needs to be extended to target GOTN investment in highway safety, and evaluate the results of such investment
- g) Further investment in knowledge transfer activity is needed within individual agencies and across agencies, with priorities including peer to peer exchange within India, and access to international expertise and training as appropriate.

Addressing these significant management challenges is intended to provide the basis for taking opportunities to significantly improve the safety of road users in Tamil Nadu.

Opportunities

The opportunities have been identified in terms of strengthening Statewide management systems, and addressing core safety issues at a localised District level.

Statewide Management Systems

At the strategic statewide level, the primary project support will be directed towards:

- a) Implementing a comprehensive strategic support program including promotion, monitoring and evaluation, capacity building and knowledge transfer
- b) Developing risk-targeted patrol plans and investment in enforcement systems targeting key behaviours for Police Department
- c) Undertaking a regulatory audit and control review (including administrative sanctions) and investment in compliance systems targeting unsafe drivers and operators for the Transport Department
- d) Strengthening the implementation of RADMS including its integration with the road management system and health system.

A feature of the statewide effort is the stronger set of coordination structures across government, while accountabilities for Departments are also specified. A Road Safety Executive Leadership Group (RSELG) has been formed as an inter-disciplinary institutional arrangement with very senior participation from the key line ministries/agencies engaged in road safety agenda – Transport, Police, Health, Education and Highways Departments.

The RSELG will be supported by a Road Safety Management Cell (RSMC), both with participation from the multiple stakeholder departments in the road safety agenda. Of these, RSELG is expected to oversee, guide and provide leadership to the overall road safety policies and interventions, whereas RSMC is expected to play a more operational role in terms of implementing various initiatives and serving as the secretariat to RSELG.

Significant opportunities also exist outside of government. The State is the centre of the automotive industry in India, and it is intended that a non-government forum is formed to encourage corporates, NGOs and other stakeholders to take significant actions to improve the safety of the road transport system including the safety of their own road traffic operations.

District Demonstration Project

At a more operational field level, attention has been given to the integration of local administration into road safety delivery, alongside the development of a corridor safety demonstration project led by the Highways Department. The focus of this more localised activity will be on Kancheepuram District which has the second highest population in Tamil Nadu (which has 32 Districts) and has a mix of traffic which largely represents the state's traffic.

Kancheepuram is adjacent to Chennai and has high visibility as it is one of the major centers of religion, attracting tourists from all over the state and country regularly. It is also highly industrialized – according to a recent Government of India report, the electronic software industry grows by around 50%, the auto and auto ancillary industries by about 15-20% and the leather industry by about 10% annually. The Kancheepuram District is home to several major automotive manufacturing companies such as Hyundai, Ford and Nissan.

Projects being developed within this Kancheepuram Road Safety Demonstration Project (KRSDP) are intended to:

- a) Complement TNRSPII infrastructure safety investment by working with municipalities and panchayats to effectively manage roadside safety issues
- b) Establish good practice speed management program including promotion, speed limit setting, signposting, enforcement and evaluation
- c) Establish risk targeted patrol plans for Kancheepuram Police sub-Districts, and support

- additional equipment for key offences on highways in the District
- d) Establish and implement safety focussed administrative procedures targeting unsafe drivers and transport operators, including appeal and audit processes
 - e) Establish community health promotion campaign to support interventions, including a specific two wheeler helmet wearing promotion
 - f) Support quicker trauma response services and better treatment services.

A management feature of the KRSDP is the involvement of the Kancheepuram District Collector. Each District Collector holds significant administrative powers which brings a capacity to convene and oversee cross-agency delivery at a local level, and will be augmented by a local coordinating and project management structure within Kancheepuram. It will be important to take this opportunity to demonstrate stronger road safety delivery and performance at a District level.

Project delivery features in KRSDP include a specific focus on roadside encroachment and speed management. Encroachment on footpaths and roadways is the primary roadside safety issue in many low and middle income countries. In Tamil Nadu, as elsewhere in India, the issues are complex and connect with much wider socio-economic factors. It is intended that resources are made available for local administrations at a Panchayat level to develop sustainable means of improving the safety of pedestrians and cyclists who are at most risk from encroachment.

A more holistic approach to speed management is also being encouraged, within a safe systems framework. As motorisation continues apace within Kancheepuram, it will be important that some speed limits (such as the 80 km/h limit on the National Highways which run through the District) are maintained, and others are reduced to facilitate safe road environments in villages, or better managed through infrastructure treatment. More strategic advocacy and promotion regarding the seriousness of the issue and enforcement against speeding motorists is also anticipated.

Implementation

With good project management disciplines being specifically augmented with coordination and delivery mechanisms through this significant road safety program itself, it is intended to considerably strengthen the capacity of the Government institutions to deliver safer road environments for their communities. A number of operational initiatives in Kancheepuram will be linked to statewide efforts to strengthen Police enforcement systems, improve the regulatory systems and sanctions applied by the Transport Department, and invest in monitoring and evaluation activity. Processes are underway to mobilise a mix of national and international resources to support this program.