

## Flawed road design is another obstacle

K Ramanujam, TNN | Jun 13, 2011, 03.38am IST

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CHENNAI: The four-lane roads have failed to prevent accidents across the state. The latest being the gruesome accident on the NH4 near [Kancheepuram](#) which killed almost all passengers.

According to studies conducted by [JP Research INC](#), a US-based firm, among the reasons are the design flaws of the newly-laid roads and highways. "The new roads have many design flaws leading to accidents. There is no special lane for vehicles which need to take a U turn or turn left or right. All the vehicles go on the same road and suddenly you find a vehicle taking a turn, leading to accidents," said Jeya Padmanabhan, founder of JP Research INC, which has been conducting studies on the accidents and the road patterns in the state for the last four years.

"We conducted a pilot study on the roads and accidents in Kancheepuram and then on Chennai roads. Currently our team is in Coimbatore and analyzing the traffic problems in the textile city and the reasons for accidents on highways and other arterial roads," said Jeya, a native of Madurai but settled in the US. She holds an MS in [Operations Research and Statistics](#).

According to statistics compiled by the studies on National Highway 45 in Kancheepuram in 2008 and in Coimbatore in 2009 and 2010, accidents involving trucks were the maximum. In an analysis of 123 crashes, 40% of the accidents involved trucks and 25% involved passenger vehicles. Nearly 12% of the accidents involved buses.

Ravishankar Rajaraman, manager, safety group of the Indian arm, said: "The new four-lane roads have to a great extent prevented head-on collisions but still accidents happen due to flaw in the road design and also due to non-compliance of traffic rules by vehicle users." The team uses a scientific method of analysis with GPS logger to determine the accident spot, special crush jig' (a special equipment) to measure the extent of crush to parts of vehicles involved in accidents or the amount of collapse suffered by a vehicle in a collision. "We reach the spot within 30 minutes after we get information about an accident. Police keep us informed about the mishaps," said Ravishankar.

The research firm has been submitting suggestions to the state police regularly on the study findings. "The vehicle manufacturers have commissioned studies and we have given suggestions on the changes needed to be made in the vehicle designs especially those which are meant for Indian roads," said Ravishankar. The team proposes to submit its study findings to the state and central governments soon.

