



INDIA



Road Accidents in India Issues & Dimensions

Ministry of Road Transport & Highways
Government of India



Country's Profile



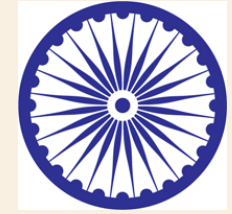
INDIA



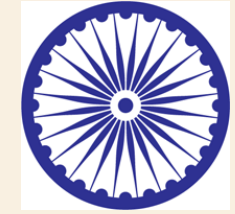
- Home to 1.21 billion people (about 1/6th of world's population)
- Around 72% of India's population lives in villages.
- The sex ratio has fluctuated between 927 – 934 between 1971 to 2001.
- The total fertility rate declined from 4.8 to 3.7 in rural areas and 3.4 to 2.5 to urban areas during 1982 to 1997.
- Life expectancy at birth has increased from around 30 years at independence to 60.7 years in 1996.



Road Accidents : A Snapshot



- Emergence of Road Traffic Injuries (RTIs) a leading cause of Deaths & Disabilities
- India : 2011
 - Accidents 4.97 lakh (annual) (1 every minute)
 - Deaths 1,42,485
(one death every 3.7 minutes)
- Accidents impose significant costs
 - 3% GDP for India (1999-2000)
 - 1% GNP for low income countries
 - 1.5 % GNP for middle income countries
 - 2% GNP for high income countries
- Was 9th leading cause of death in 2004 and expected to be 5th leading cause of death by 2030 world wide.



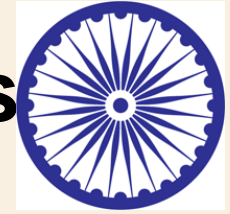
Number of Accidents and Number of Persons Involved: 2002 to 2011

Year	Number of Accidents		Number of Persons		Accident Severity*
	Total	Fatal	Killed	Injured	
2002	4,07,497	73,650 (18.1)	84,674	4,08,711	20.8
2003	4,06,726	73,589 (18.1)	85,998	4,35,122	21.1
2004	4,29,910	79,357 (18.5)	92,618	4,64,521	21.5
2005	4,39,255	83,491 (19.0)	94,968	4,65,282	21.6
2006	4,60,920	93,917 (20.4)	1,05,749	4,96,481	22.9
2007	4,79,216	1,01,161 (21.1)	1,14,444	5,13,340	23.9
2008	4,84,704	1,06,591 (22.0)	1,19,860	5,23,193	24.7
2009	4,86,384	1,10,993 (22.8)	1,25,660	5,15,458	25.8
2010	4,99,628	1,19,558 (23.9)	1,34,513	5,27,512	26.9
2011	4,97,686	1,21,618 (24.4)	1,42,485	5,11,394	28.6

* Accident Severity : No. of Persons Killed per 100 Accidents



India: Incidence of Road Accidents



- Rise in number of accidents, injuries & deaths per lakh of population
 - Reflects rise in motor vehicle population, increase in duration & number of travel trips with rise in income
- Sharp decline in number of accidents, injuries, & deaths per 10,000 vehicles
 - Reflects improved crash worthiness vehicles & occupant protection better enforcement
- Rise in number of accidents, injuries & deaths per 10,000 km
 - Reflects higher exposure to risk due to heterogeneous nature of traffic, lack of traffic separation etc.

Chart 1: Number of Road Accidents, Number of Persons Killed and Number of Persons Injured Per Lakh Population: 1970 – 2011

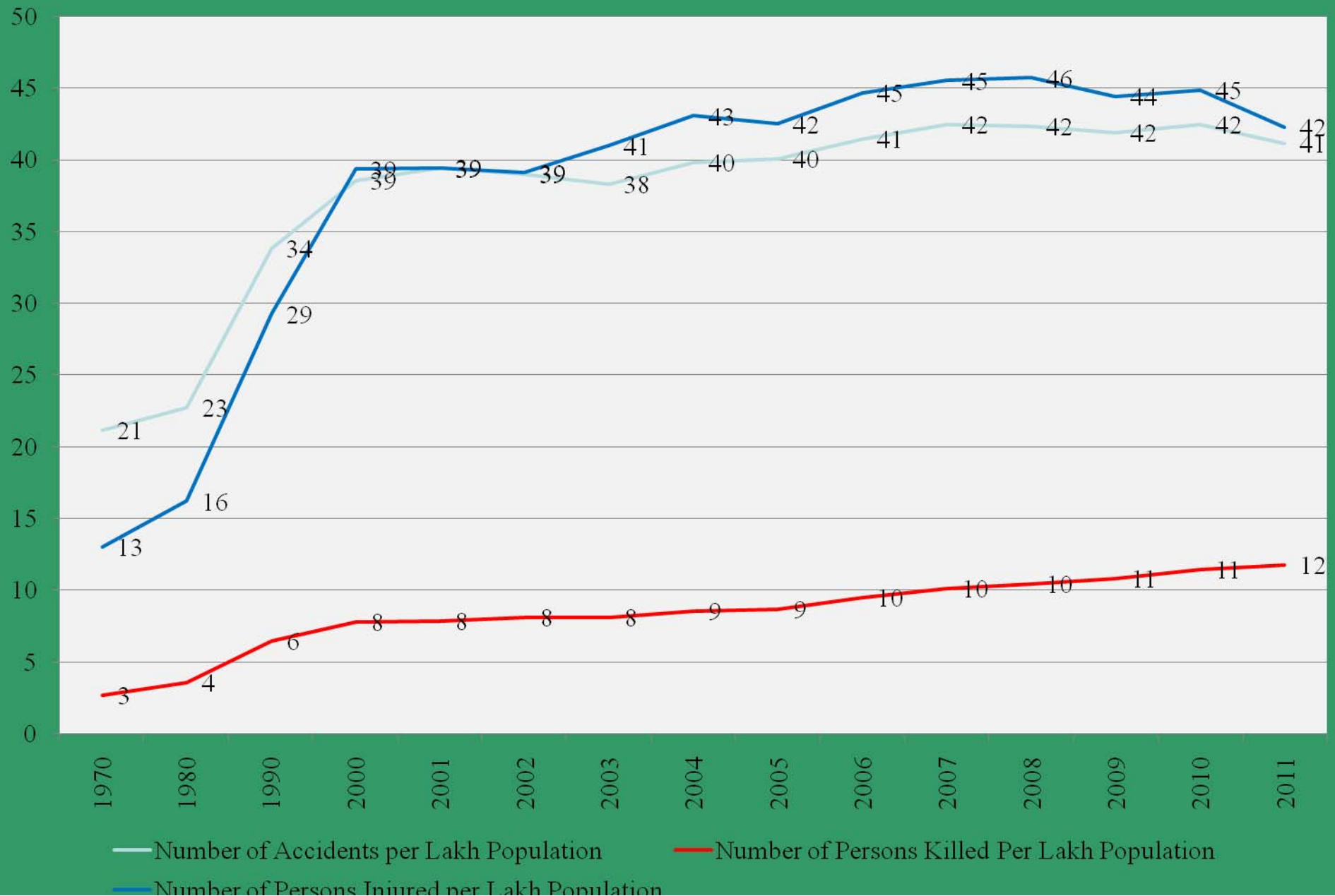




Chart 2: Number of Road Accidents, Number of Persons Killed and Number of Persons Injured Per Ten Thousand Vehicles: 1970 – 2011

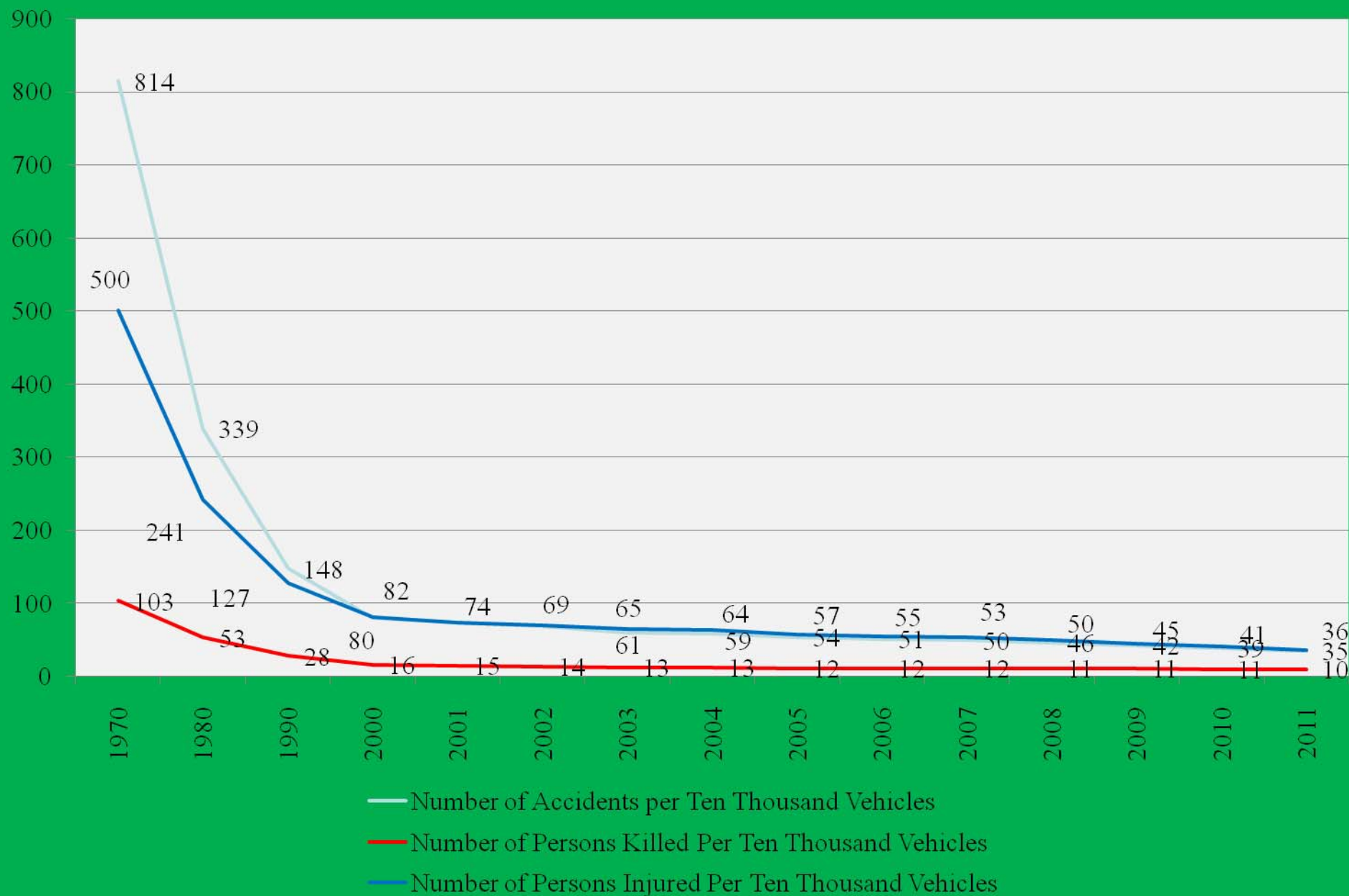
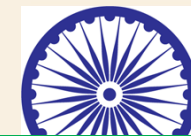
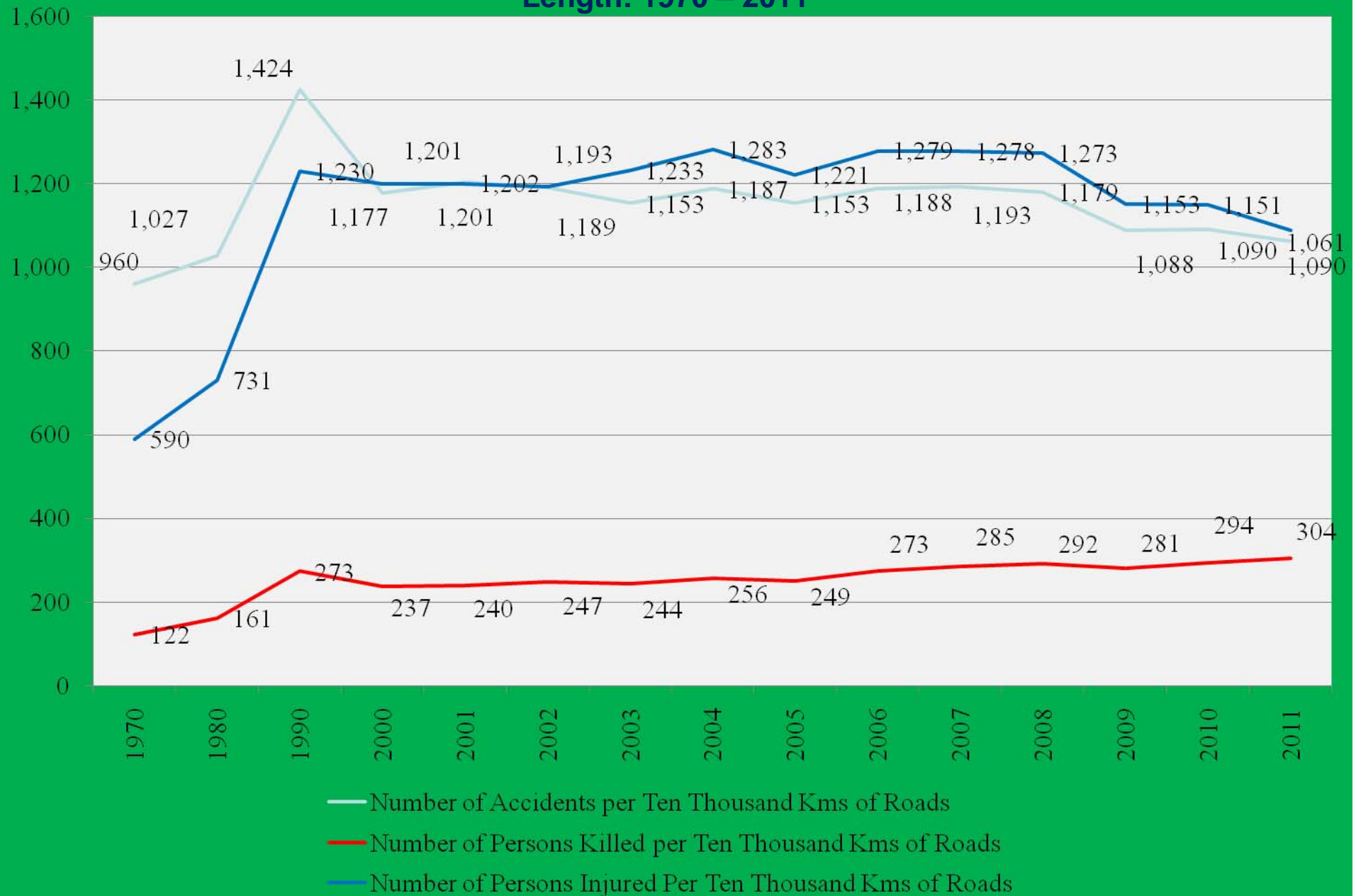
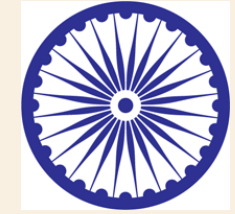




Chart 3: Number of Road Accidents, Number of Persons Killed and Number of Persons Injured Per Ten Thousand Kilometres of Road Length: 1970 – 2011





Number of Accidents, Persons Killed & Injured as per Road Classification

Road Classification	National Highways (2011)	State Highways	Other Roads
No. of Accidents	149,732 (30.1)	122,239 (24.6)	225,715 (45.3)
No. of Persons Killed	52,924 (37.1)	39,033 (27.4)	50,528 (35.5)
No. of Persons Injured	156,008 (30.5)	133,435 (26.1)	221,951 (43.4)

Note: Figures within parentheses indicate share in total accidents, killed and injured in the respective road categories.

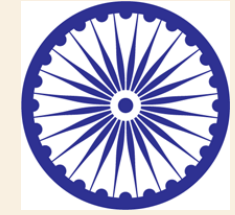
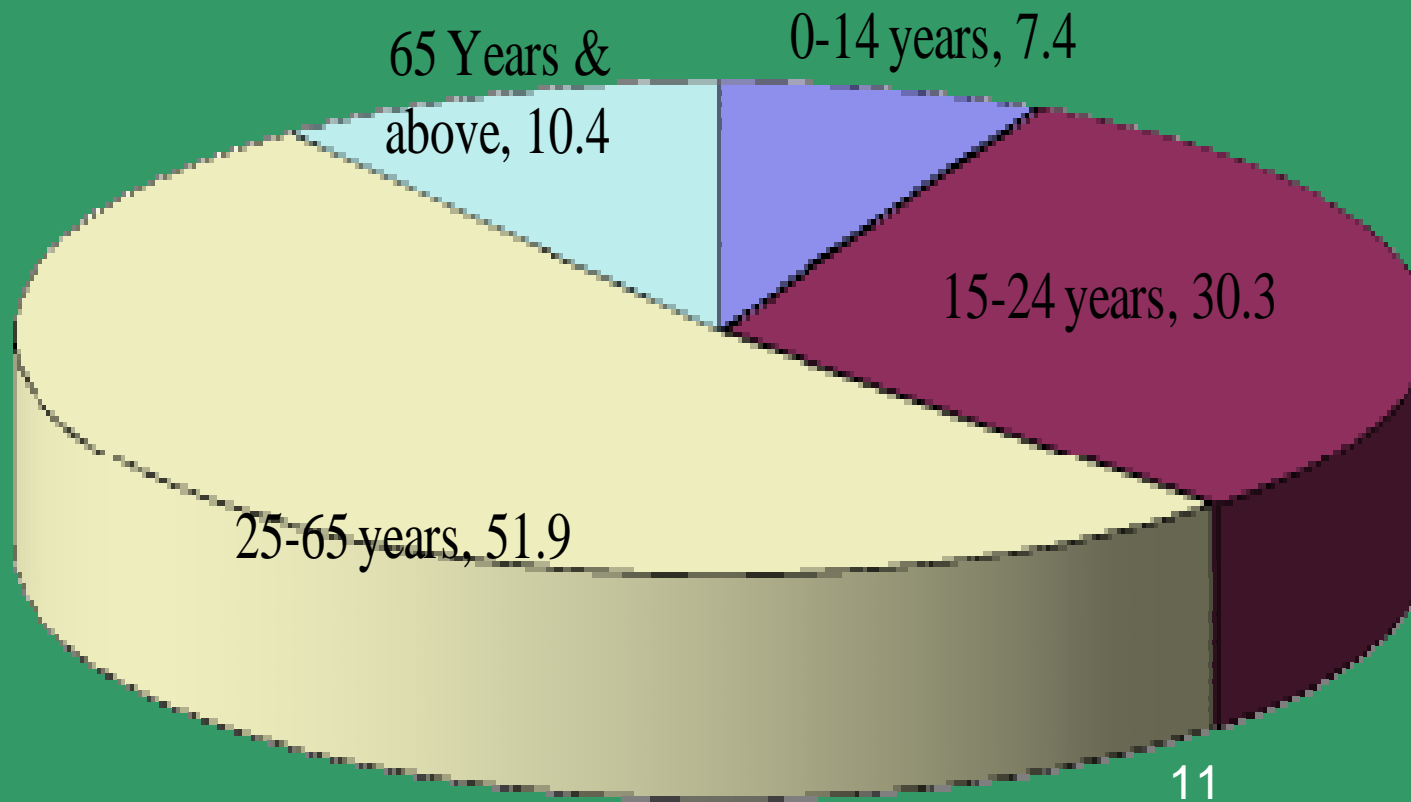


Chart 8: Road Accidents victims (other than Drivers) by Age Group: 2011



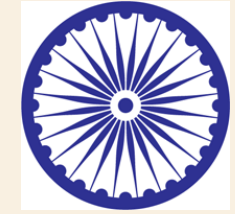
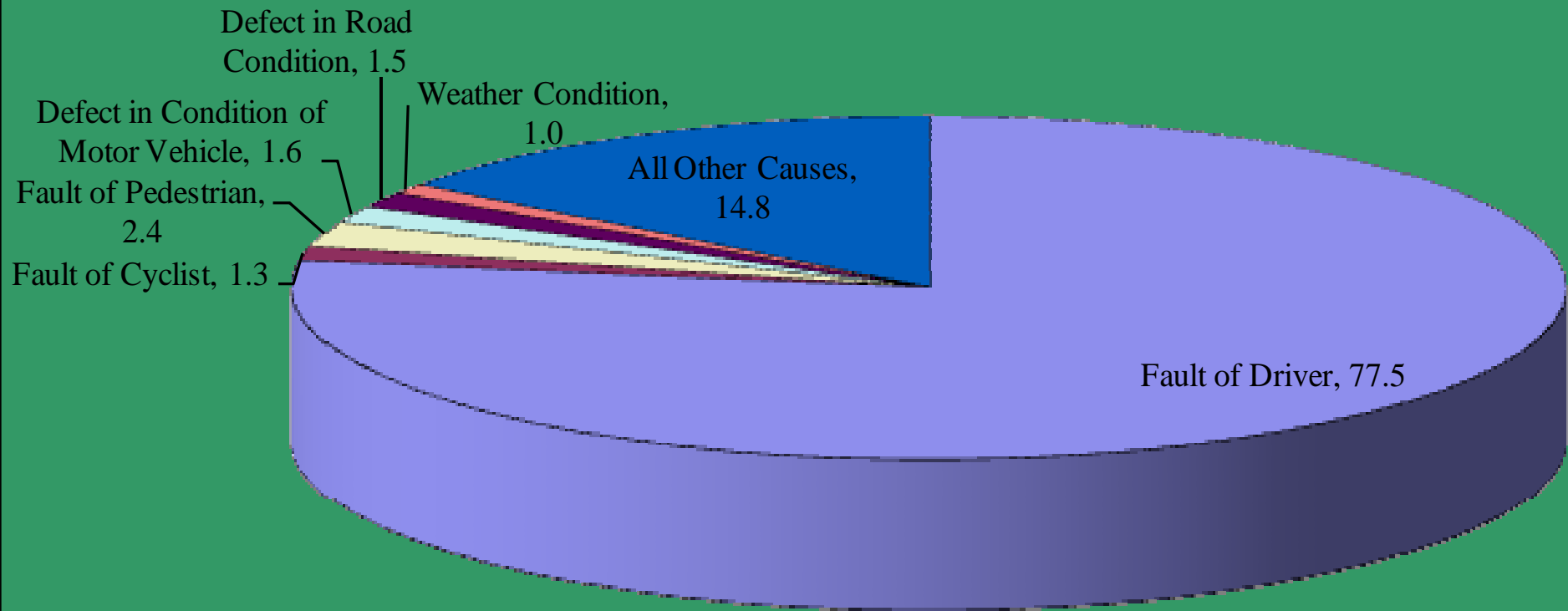
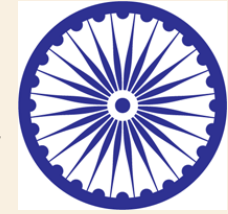


Chart 9: Causes of Road Accidents: 2011





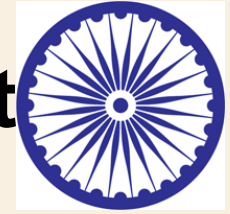
Road Safety (RS) Coordination: Lack of Institutional Mechanism both at Centre & States



- RS multidimensional and multi-sectoral in nature
- Existence of large number of agencies at the Central and State level makes coordination a challenging task
 - MORTH administers the MV Act but its enforcement is with States
 - Road building/engineering with DG(Roads) and NHAI but building codes/manual with IRCC
 - vehicle testing/engineering with M/o Heavy Industry
 - emergency/trauma care with M/o Health
 - RS awareness/education with MORTH
 - weak institutional capacity for RS in MORTH
- NRSC presently serves as a recommendatory policy making body.



Steps taken by Central Government to improve road safety



- National Road Safety Policy approved.
- National Road Safety Council constituted.
 - All States/UTs requested to set up State Road Safety Councils and District Road Safety Committees.
- Adoption of a multi pronged strategy to address the issue of road safety based on 4 Es of Road Safety:
 - (i) Education
 - (ii) Enforcement
 - (iii) Engineering (roads as well as vehicles)
 - (iv) Emergency care.



Multi-Pronged Strategy to improve Road Safety: Steps envisaged



13th meeting of NRSC (held in Feb.2012) discussed the following measures to improve road safety:

- Setting up of State Road Safety Councils and District Committees,
- Setting up of Road Safety Fund at State level and setting aside 50 per cent fines collected for traffic violations for this fund,
- Replication of Tamil Nadu model for implementation of Road Accident Data Management System (RADMS),
- Identification of black spots and treatment thereof,
- Action against over-loading, action against drunken driving and removal of liquor shops on NHs,



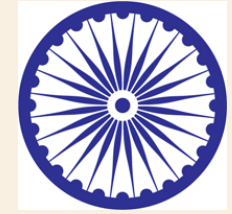
Multi-Pronged Strategy to Road Safety (Contd.)



- Enforcement of use of seat belt by & ISI helmets by 2 wheelers;
- Developing emergency medical services by having a 24X7 call centre with a dedicated common telephone number;
- Road accident crash investigation,
- Conspicuity of non-transport vehicles during night time by fixing reflective tapes,
- Accreditation of IDTRs/DTIs for issuing of permanent driving licenses,
- Compulsory training before issuance of permanent driving license for commercial vehicle drivers
- Improvement of Vahan & Sarathi software to capture legacy data, traffic violations, detection of fake licences;
- Put in place objective & mandatory system of vehicle fitness through accredited I&C Centres subject to audit.



Other Road Safety Initiatives by MoRTH

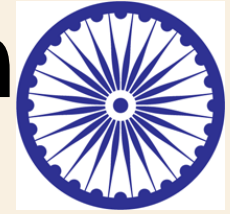


MoRTH has notified 192 National Highways Administrators (NHAs) under the National Highway (Land & Traffic) Act 2002

- NHAs vested with statutory powers to regulate traffic and prevention of damage to NHs by vehicles
- NHAs to function as nodal officers for monitoring road safety measures
- Constitution of Task Force to address various issues on road safety.
 - Task Force to advise MoRTH with concrete suggestions so as to substantially improve road safety.
 - 2 meetings of the Task Force held so far
- Launching of a new trauma care course for doctors and paramedics.
 - 210 persons imparted training at SIMS during the current year.



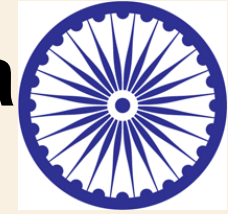
Identification & Rectification of Black Spots



- Top black spots identified by 16 States:
 - Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal
- Of these States, 13 States account for more than 90% of road accident fatalities.
- Rectification of black spots during 2012-13.



Workshops on Road Accidents Data

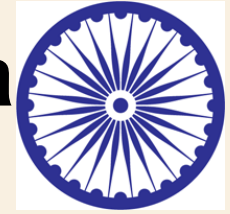


- Conducted by Transport Research Wing
- **Objectives:**
 - To ensure accurate and comprehensive data on road accidents.
 - To ensure timely release of data on road accidents.
- **Participants:** Police personnel involved in collection/ consolidation/ reporting of road accident data
- **5 workshops in Delhi**, attended by 22 States/UTs: 30th June 2011 to 8th July 2011:
 - Arunachal Pradesh, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Manipur, Madhya Pradesh, Maharashtra, Meghalaya, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Uttarakhand, West Bengal, Chandigarh, Delhi, Puducherry

Contd....



Workshops on Road Accidents Data



- **11 State/district level workshops:** 30th July 2011 onwards:
 - Bihar, Chandigarh, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Madhya Pradesh, Rajasthan, Uttarakhand and West Bengal
- Training and workshops have helped reduce time lag in compilation and release data from about 2 years to less than 6 months from the close of reference year



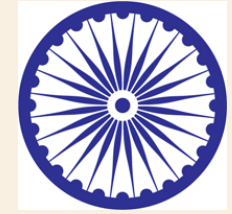
Road Accident Data Management System, Tamil Nadu



- Introduced by Tamil Nadu Government under the aegis of World Bank
- a comprehensive traffic-management system
- RADMS software w.e.f 1.1.2009
 - Create GIS data base
 - Web based access and data flow
 - Seamless report generation/plot results on maps
 - Black Spots identification and analysis



Institutional Mechanism in Tamil Nadu to address Road Safety issues



- The Government of Tamil Nadu has constituted a 19-Member Apex Body known as State Road Safety Council under Section 215 of MVA
 - Members include Minister of Transport, Departments of Transport, Finance, Home, Highways, Municipal Administration, Police and Medical Service.
- Similarly, under MVA District Road Safety Councils (13 members) have been constituted in each district
 - Members include District Collector, Departments of Police, SRTU, Highways, Municipality, NGOs.

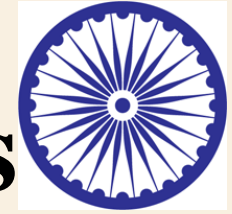


Enforcement

- Strengthen penalties/fines (amendment in MVA)
- Stringent check of overloading
 - Empower police to check overloading
 - Mandatory registration of criminal cases in overloading
- Ensure use of road safety devices (helmets, belts, etc.)
- Heavy penalty for drunken driving
 - conviction under section 185 of MVA should lead to imprisonment and suspension of driving licences
- Overcrowded passenger vehicles should culminate in cancellation of permits.
- School buses annual fitness checks to be mandatory.



Emergency Medical Services



- Need for a National Accident Relief Policy to ensure:
 - prompt relief
 - free trauma care
 - training of-police, teachers, paramedics etc
- Unified Free National Medical Distress Call Number
- Monitoring and periodic audit of Accident Relief Services
- Provide crash rescue vehicles.



Education(Driver Training)



- Vital for success of road safety as 78% of road accidents caused by drivers fault
- Present driver training infrastructure inadequate
- MORTH provides financial assistance for IDTR
 - 13 such institutes were set up during 10th Plan and 9 in the 11th Plan
 - setting up more IDTR proposed in XII FYP
 - viable option to set up such institutes under PPP mode
- Make issue of driving licence objective/non discretionary



Road Design/Vehicle Fitness



- Make road design standards and guidelines consistent with safety requirements & international best practices.
- All State/National Highways to carry pavement markings and road signs as per IRC standards
- Institutionalize courses for RS Auditors
 - Certification courses for RS Auditors
- Subject entire network of NH/SH to RSA
- Accident investigation
 - streamline data collection through GPS/computer interface
 - need for road accident reconstruction/investigation.
- Introduce mandatory Inspection & Certification (I&C) for all categories of vehicles in use in a phased manner



Thank you

