

# **Road Accidents in India, 2012**

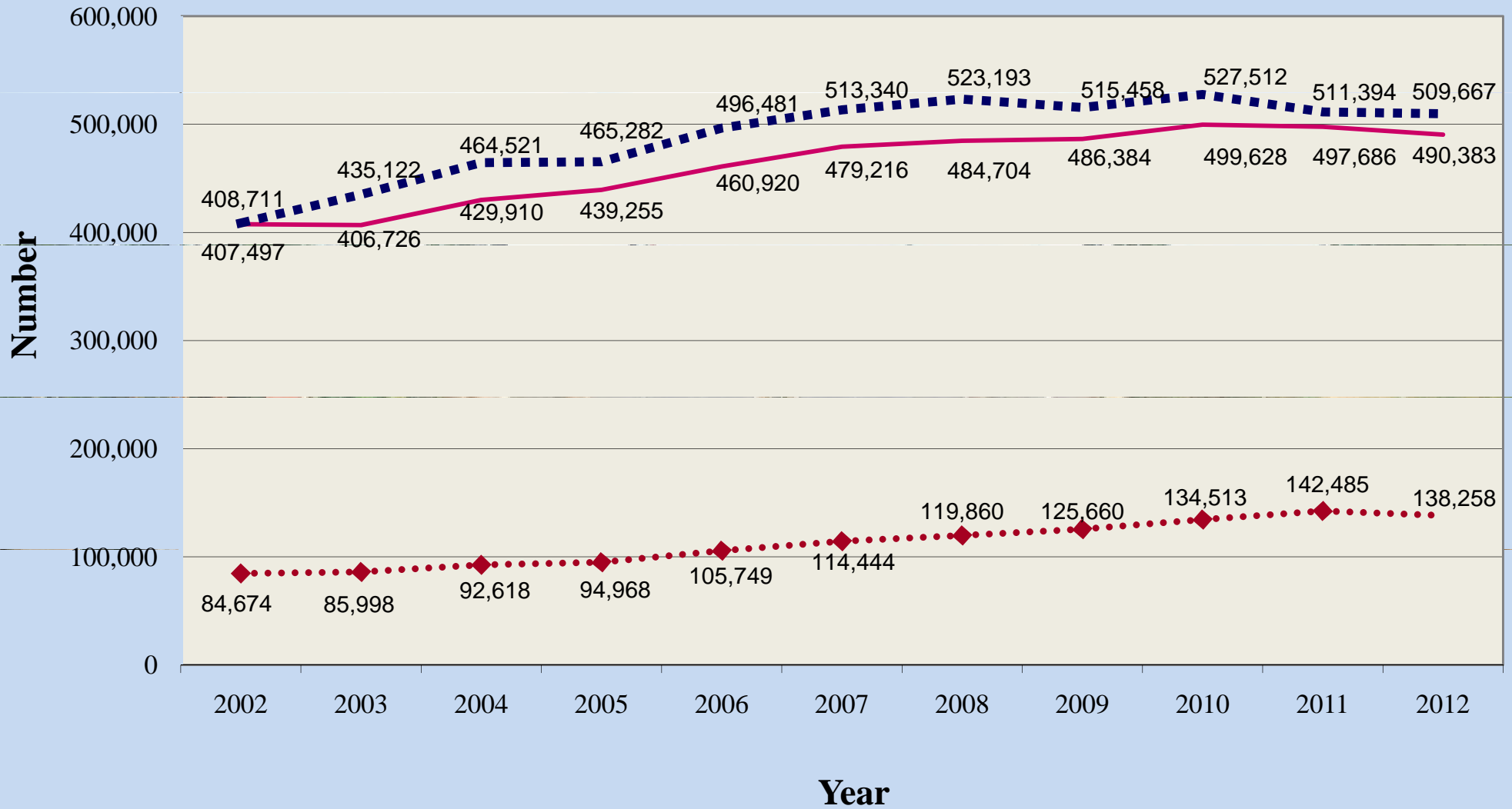
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**Ministry of Road Transport & Highways**

- As a result of concerted and coordinated road safety efforts, there has been a decline in the number of road accidents, fatalities and persons injured in road accidents during 2012.
- Since 2000, for the first time, the total number of road accidents registered a decline in two consecutive years 2011 and 2012.

<b>Road Accidents in India</b>					
<b>Year</b>	<b>Registered Vehicles (in thousands)</b>	<b>Total Accidents (In Numbers)</b>	<b>Accidents/ 10,000 vehicles</b>	<b>Fatalities (in Numbers)</b>	<b>Fatalities/ 10,000 vehicles</b>
2001	54,991	4,05,637	73.8	80,888	14.7
2002	58,924	4,07,497	69.2	84,674	14.4
2003	67,007	4,06,726	60.7	85,998	12.8
2004	72,718	4,29,910	59.1	92,618	12.7
2005	81,502	4,39,255	53.9	94,968	11.7
2006	89,618	4,60,920	51.4	1,05,749	11.8
2007	96,707	4,79,216	49.6	1,14,444	11.8
2008	1,05,353	4,84,704	46.0	1,19,860	11.4
2009	1,14,951	4,86,384	42.3	1,25,660	10.9
2010	1,27,746	4,99,628	39.1	1,34,513	10.5
2011	1,41,866	4,97,686	35.1	1,42,485	10.0
2012	1,59,491	4,90,383	30.7	1,38,258	8.7

Source: Information supplied by States/UTs (Police Departments).

## Total Number of Road Accidents, Persons Killed & Persons Injured during 2002-2012



— Total No. of Road Accidents

◆···· Total No. of Persons Killed

- - - - Total No. of Persons Injured

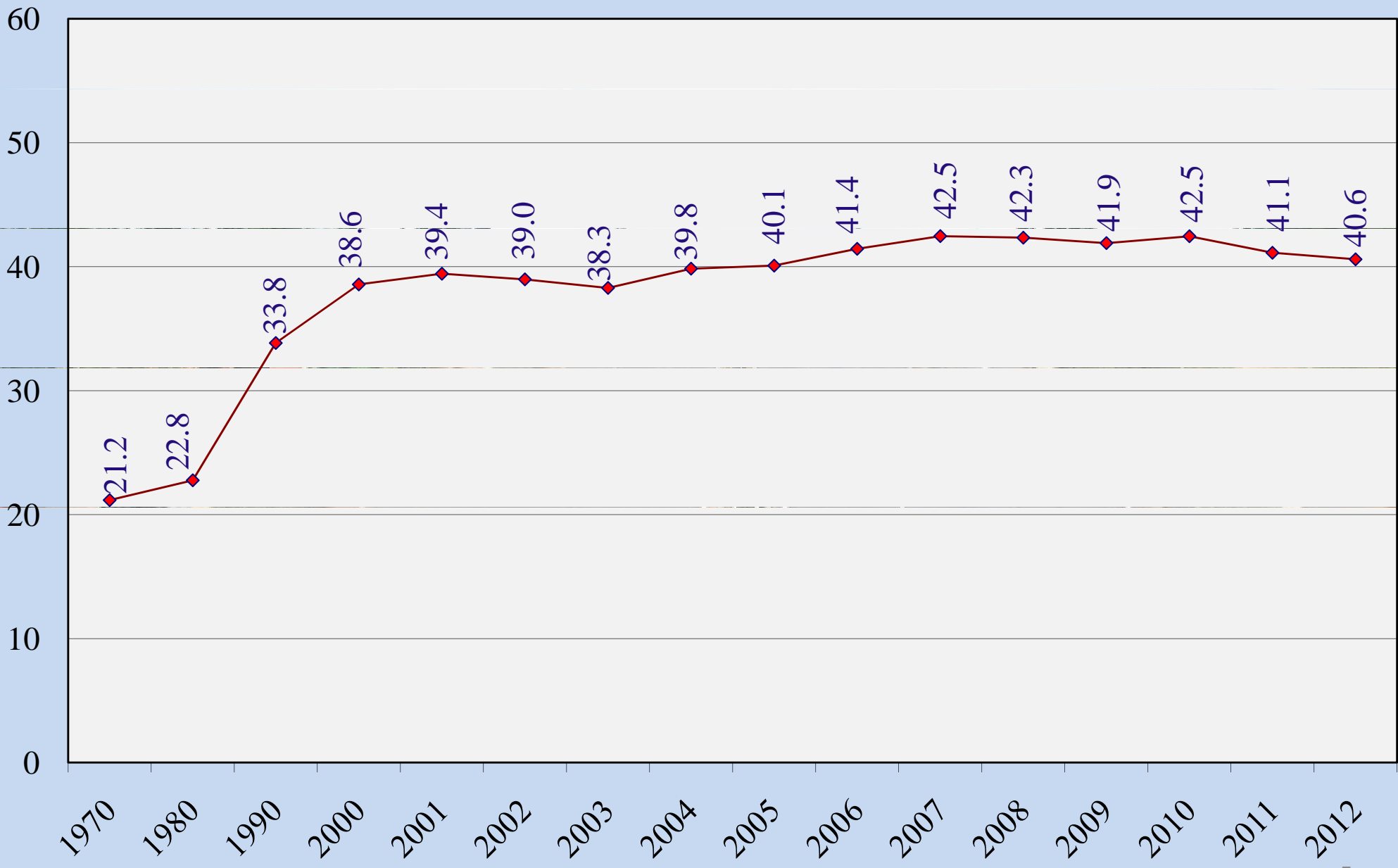
# Road Accident Parameters

<b>% Change in Road Accident Parameters</b>			
<b>Parameter</b>	<b>2011</b>	<b>2012</b>	<b>% change over previous year</b>
Accidents	4,97,686	4,90,383	-1.5
Person Killed	1,42,485	1,38,258	-3.0
Person Injured	5,11,394	5,09,667	-0.3
Accident Severity*	28.6	28.2	-1.4

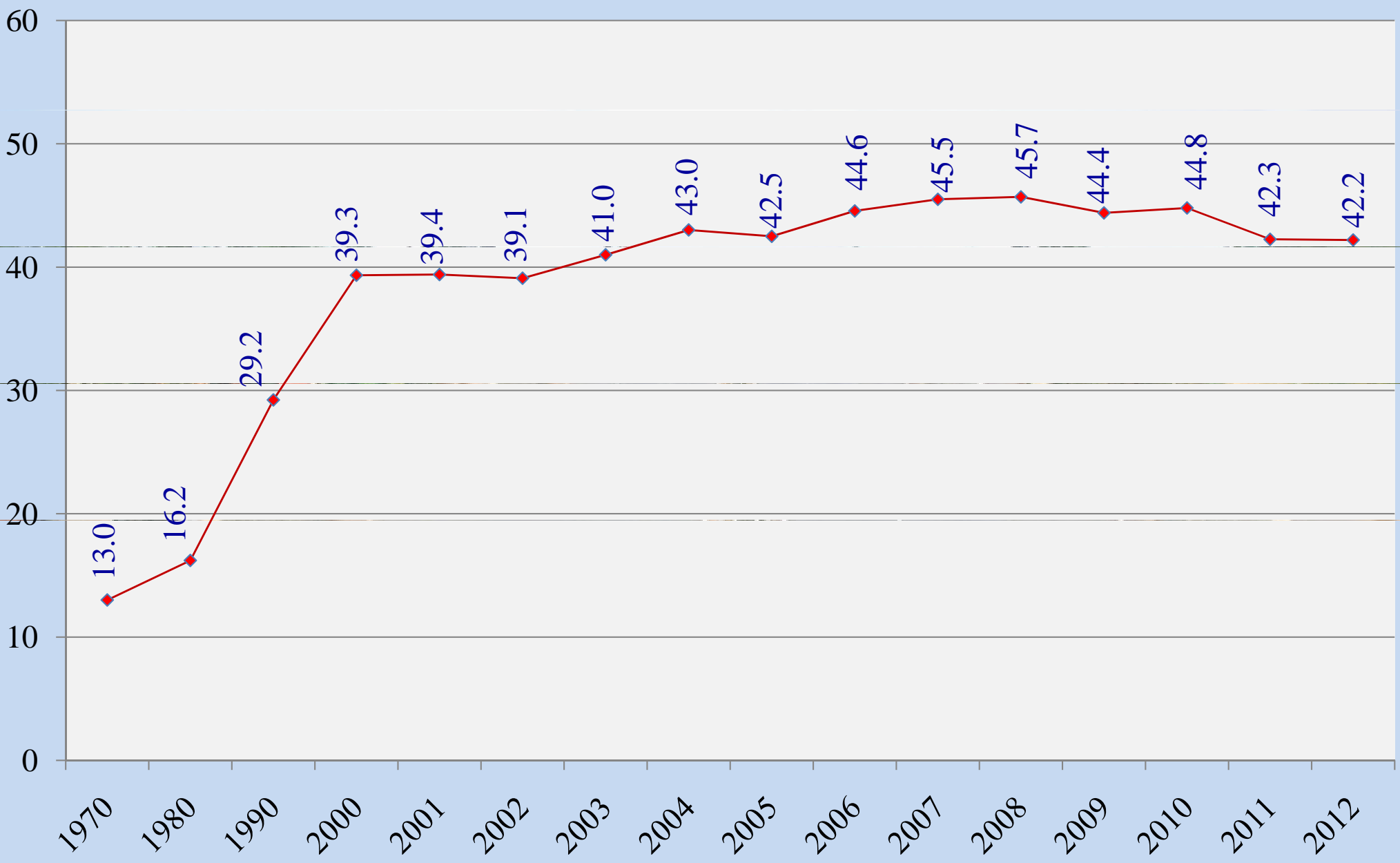
\* Accident Severity : No. of persons killed per 100 accidents

- Growth in the number of persons killed in road accidents moderated from 5.9% in 2011 to 3.0% during 2012.

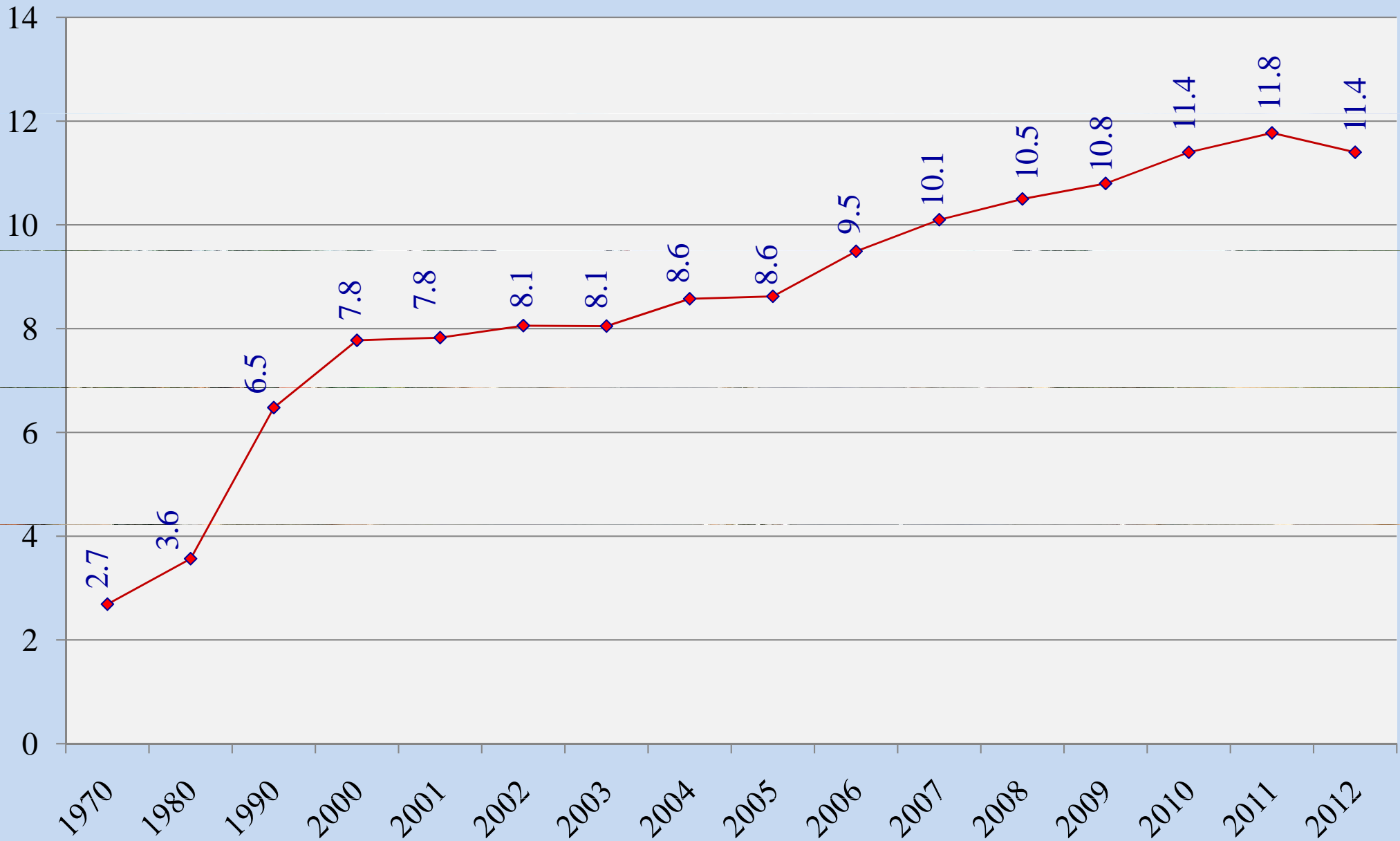
**Number of Road Accidents per Lakh Population (1970-2012)**



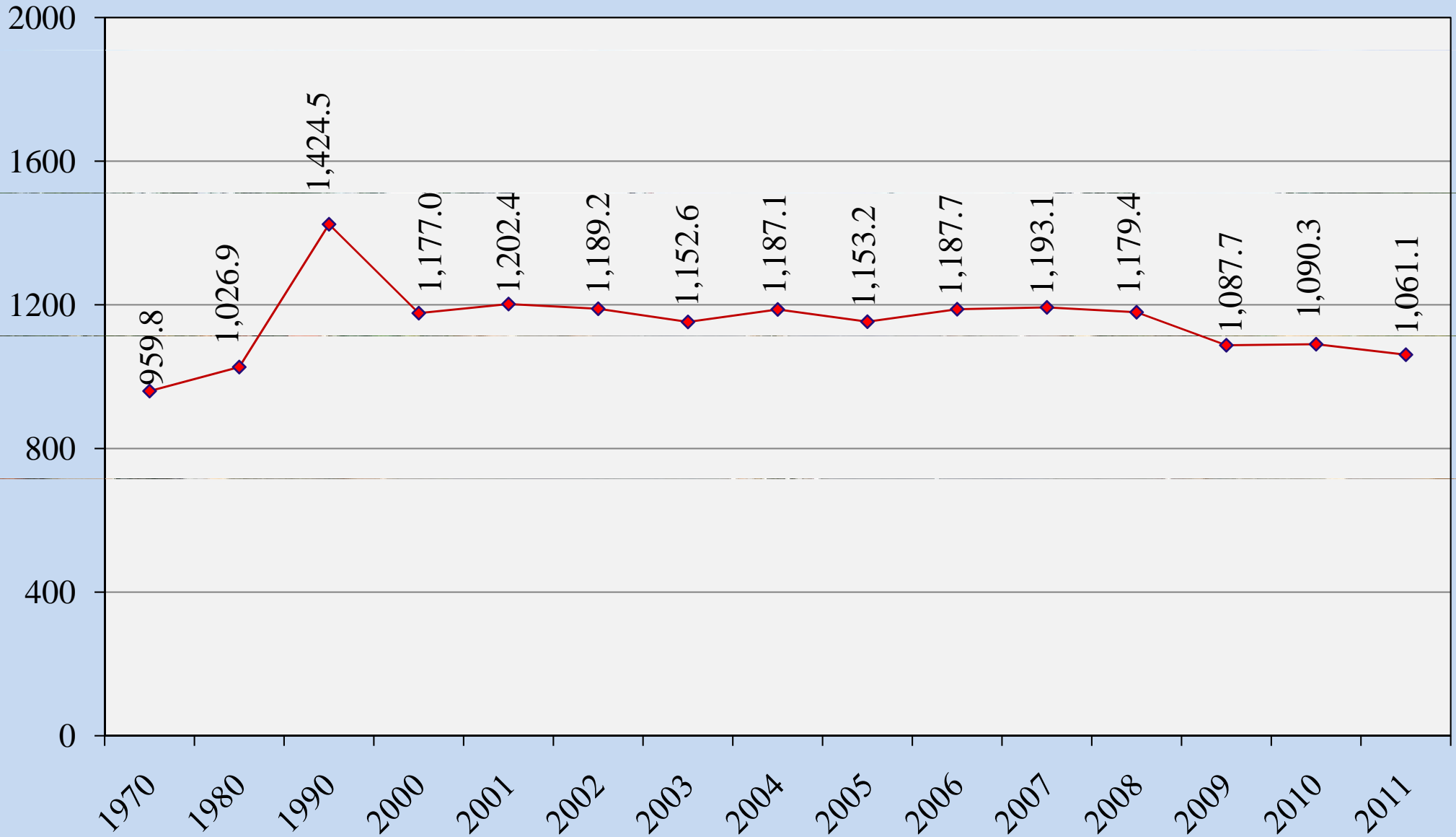
**Number of Persons Injured per lakh population (1970-2012)**



**Number of Persons Killed per lakh Population (1970-2012)**



**Number of Road Accidents per Ten Thousands Kilometers of Road Length  
(1970-2011)**





# Inter-State Comparison for 2012

- Highest share in the number of road accidents (13.8%) - Tamil Nadu
- Highest share in the number of persons injured (15.4%) – Tamil Nadu.
- Highest share in the number of fatalities (11.7%) - Tamil Nadu and Uttar Pradesh.
- 55.5% of total number of road accidents accounted for by
  - Maharashtra
  - Tamil Nadu
  - Madhya Pradesh
  - Karnataka
  - Andhra Pradesh
- 50.7% of total number of persons killed in road accidents accounted for by
  - Uttar Pradesh
  - Tamil Nadu
  - Andhra Pradesh
  - Maharashtra
  - Rajasthan
- 56.6% of total number of persons injured in road accidents accounted for by
  - Tamil Nadu
  - Karnataka
  - Andhra Pradesh
  - Madhya Pradesh
  - Maharashtra

# Inter-City Comparison for 2012

- 22.5% of all road accidents in the country accounted for by 50 cities
- 12.3% of road accident fatalities accounted for by 50 cities
- 15.9% of persons injured in road accidents accounted for by 50 cities
- Amritsar had the highest accident severity\* of 62.5
- Mumbai had the highest number of road accidents – 24,592
- Delhi had the highest number of road accident fatalities – 1,866
- Chennai had the highest number of persons injured – 8,628

\* Accident Severity : No. of persons killed per 100 accidents

# Accidents as per Road Classification

**Number of Accidents, Persons Killed & Injured as per Road Classification (2012)**

Road Classification	National Highways	State Highways	Other Roads
<b>No. of Accidents</b>	1,42,694 (29.1)	1,18,835 (24.2)	2,28,854 (46.7)
<b>No. of Persons Killed</b>	48,768 (35.3)	37,711 (27.3)	51,779 (37.4)
<b>No. of Persons Injured</b>	1,53,502 (30.1)	1,32,170 (25.9)	2,23,995 (44.0)

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

- Other Roads accounted for the highest share in total road accidents (46.7%), number of fatalities (37.4%) and number of persons injured in road accidents (44.0%) during 2012.

# Spatial Distribution of Road Accidents

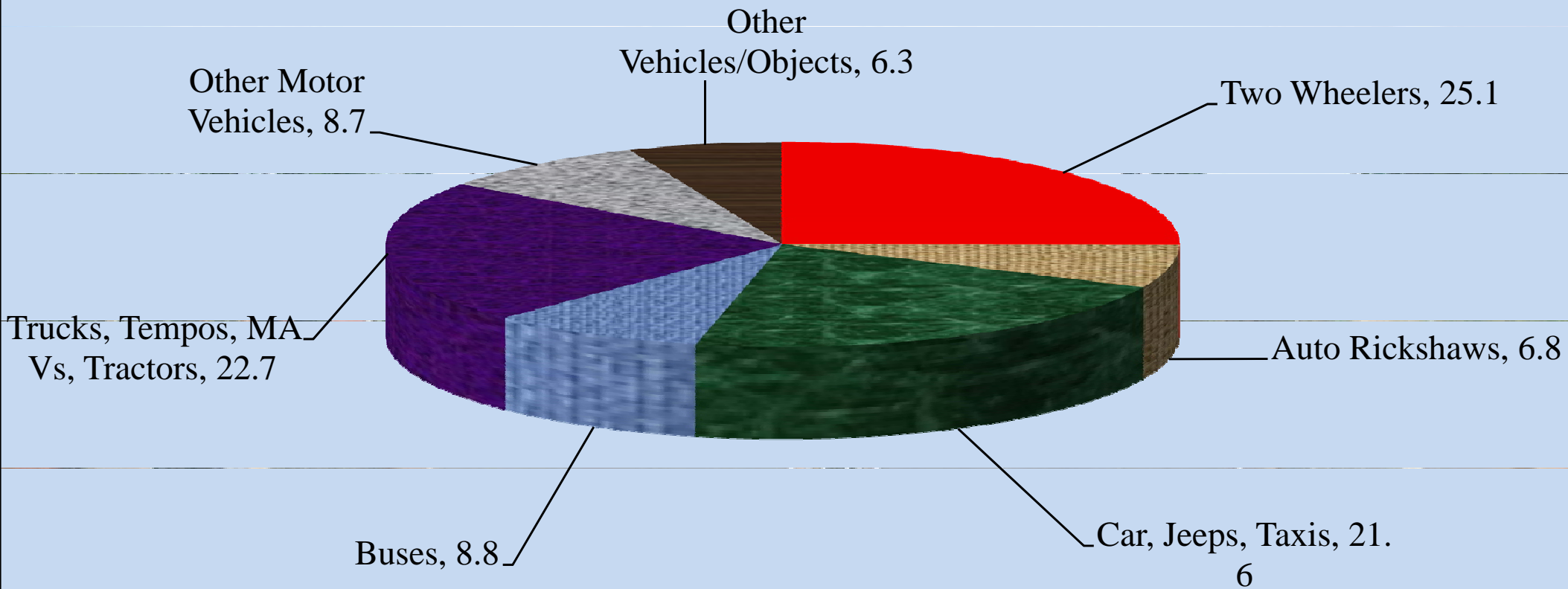
## Total Accidents, Persons Killed and Injured in Rural & Urban Areas (2012)

<b>Category</b>	<b>Total Accidents</b>	<b>Person Killed</b>	<b>Person Injured</b>
<b>Urban Area</b>	2,23,933 (45.7)	53,127 (38.4)	2,03,046 (39.8)
<b>Rural Area</b>	2,66,450 (54.3)	85,131 (61.6)	3,06,621 (60.2)
<b>Total</b>	<b>4,90,383</b> <b>(100.00)</b>	<b>1,38,258</b> <b>(100.00)</b>	<b>5,09,667</b> <b>(100.00)</b>

Note: Figures in parentheses indicate share of the total.

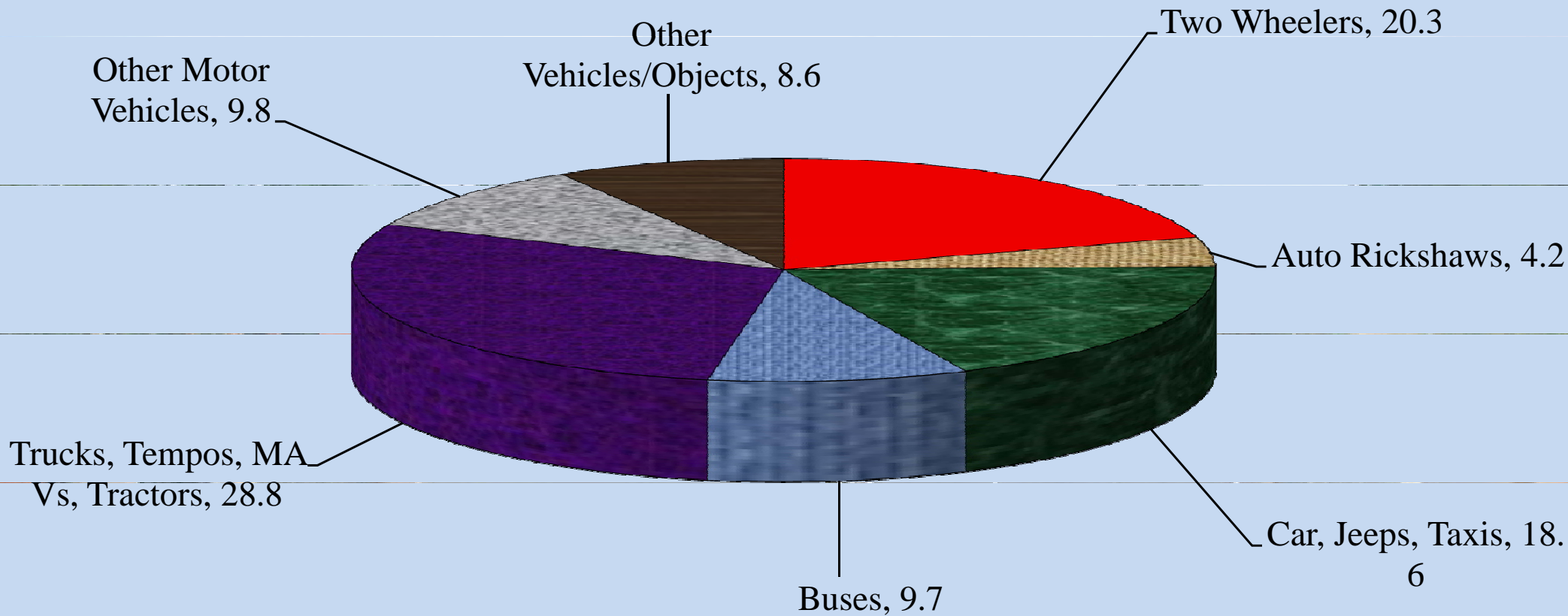
- There were more road accidents in rural areas.
- Rural areas had more fatalities.
- The number of persons injured was also more in rural areas.

# Per cent Share in Total Road Accidents by Type of Motor Vehicle Involved (Primarily Responsible): 2012



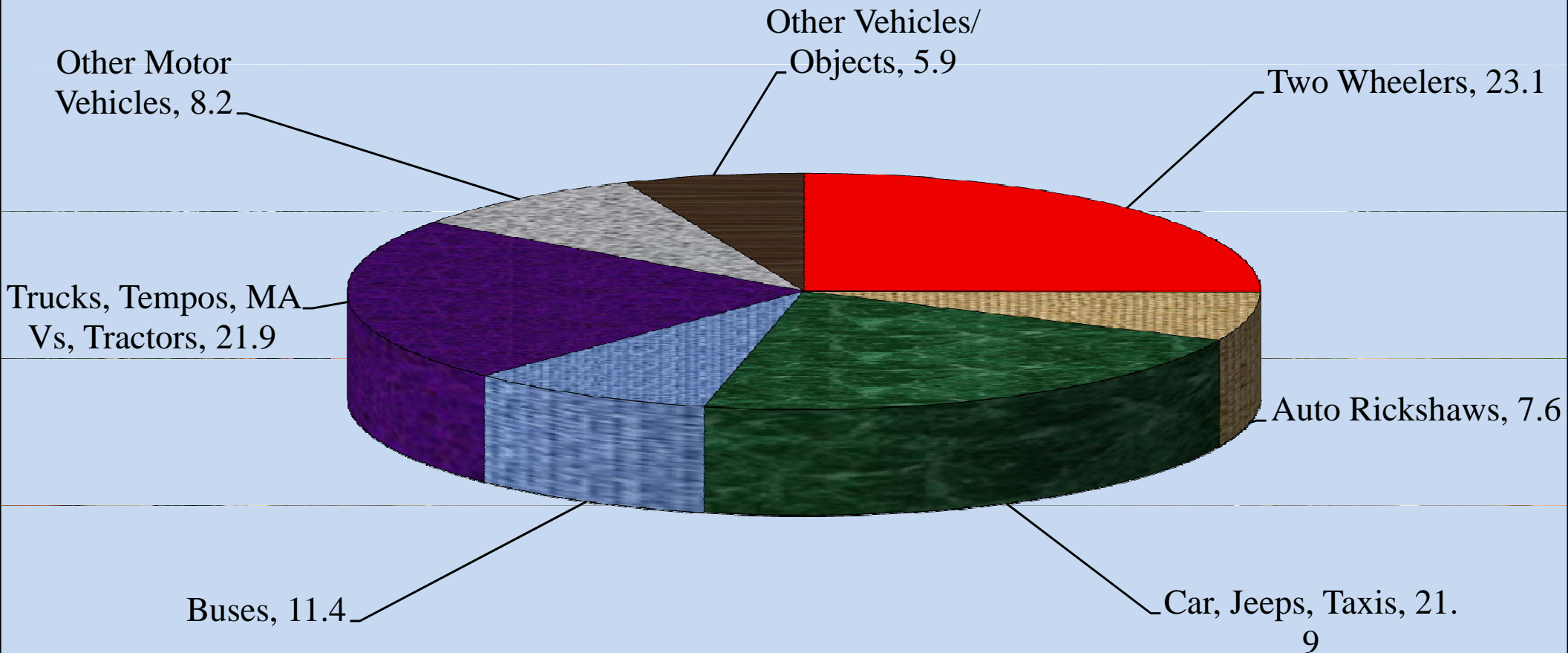
- Two-wheelers accounted for the highest share in road accidents.

**Per cent Share of Persons Killed in Road Accidents by Type of Motor Vehicle  
(Primarily Responsible): 2012**



- Trucks, tempos, MAVs and tractors accounted for the highest share in road fatalities.

**Per cent Share of Persons Injured in Road Accidents by Type of Motor Vehicles  
(Primarily Responsible): 2012**



- Two-wheelers accounted for the highest share in the number of persons injured in road accidents.

# Age Profile of Road Accident Victims

**Age Profile of Road Accident Victims\* (Other than drivers)**

<b>Age Group</b>	<b>0-14</b>	<b>15-24</b>	<b>25-65</b>	<b>65 &amp; above</b>	<b>Total number of person killed**</b>
<b>Year</b>					
2010	5,877 (7.3)	26,272 (32.4)	43,049 (53.1)	5,807 (7.2)	81,005 (100.0)
2011	6,377 (7.4)	26,178 (30.3)	44,841 (51.9)	9,000 (10.4)	86,396 (100.0)
2012	5,879 (7.1)	26,709 (32.3)	43,868 (53.1)	6,173 (7.5)	82,629 (100.0)

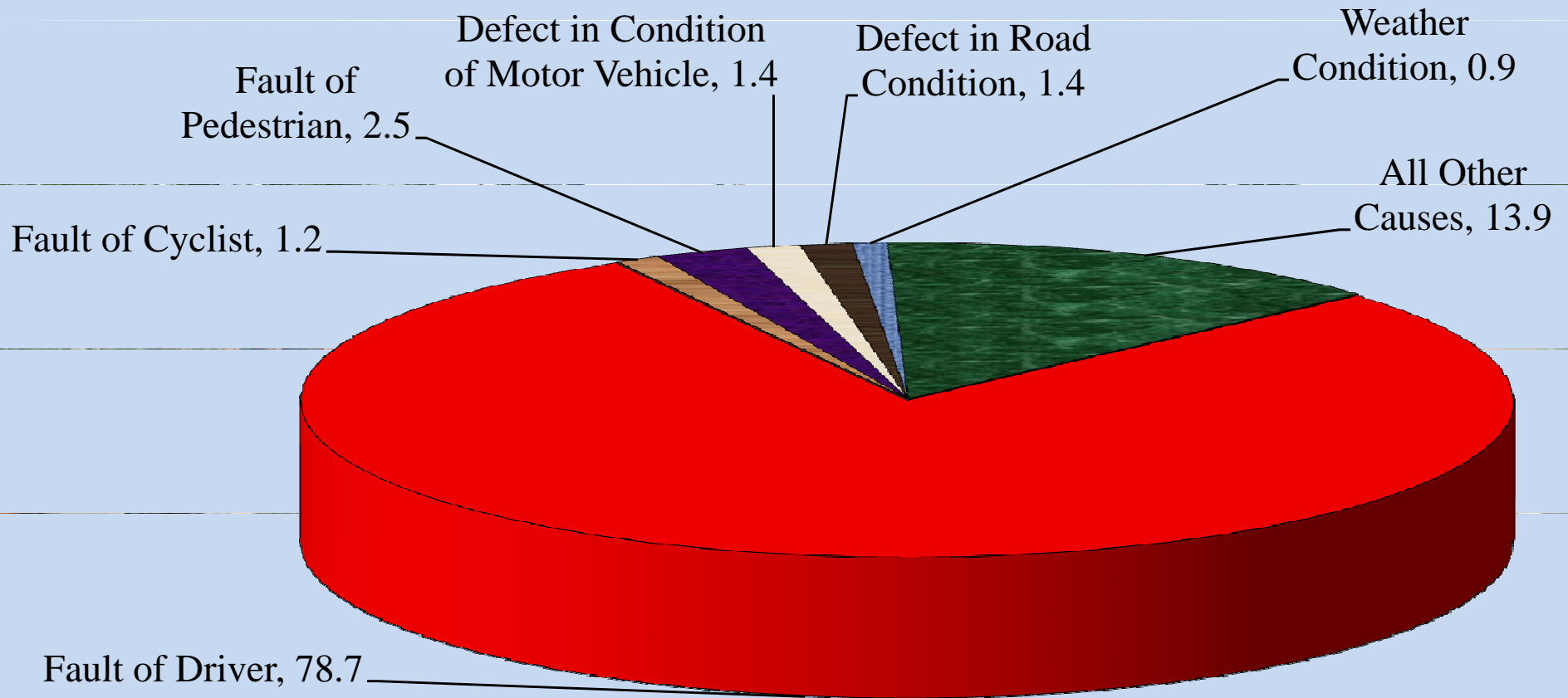
Note: Figures in parentheses pertain to percentage share of road accident victims in respective age groups to the total road accident fatalities (other than drivers)

- The age group 25-65 years accounted for the largest share of road accident fatalities.



# Causes of Road Accidents In India

Causes of Road Accidents in India: 2012



•Drivers' fault accounted for the highest number of road accidents.

# Road Safety:

## Issues for consideration at State Level

- **Institutional mechanism at State level**
  - State Road Safety Council-recommendatory
- **Annual Action Plan for Road Safety**
  - Funding and monitoring
- **Road Accident Data Management**
  - APRAD or any other format (RADMS of Tamil Nadu)
- **Mechanism for enforcement of traffic rules**
  - State of infrastructure for enforcement
- **Steps taken to strengthen Road Safety**
  - Preventing drunken driving and over speeding
  - Overloading of commercial vehicles (weigh in motion weigh bridges)
  - Use of ISI helmets/seat belts
  - Use of retro reflective tapes to prevent rear end collisions

# Road Safety: Issues for consideration-States (Contd.)

- “Vahan” & Sarathi”
  - State of digitization of legacy data, use for enforcement of penalties, e-challans
- Road Design & Geometry
  - Mechanism to identify and rectify black spots
- Traffic calming measures
  - Speed breakers vs rumble strips
- Driver Training & issue of driving licences
  - Status of driver training infrastructure
  - Number of driver training institutes (DTIs)
  - Accreditation & monitoring of DTIs
  - System of testing driving skills: objective vs subjective

# Road Safety: Issues for consideration-States (Contd.)

- System of Inspection & Certification of in use vehicles
  - Visual or objective
  - Road map for ushering 100% objective fitness
- Road Safety Awareness Programme
  - Content, medium and target groups: mass media for road user behaviour
- Emergency medical care for accident victims
  - State of relief infrastructure (ambulances, crash rescue vehicles)
  - Existence of dedicated call numbers, monitoring average response time
  - Funding of o&m for accident relief system

# 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**

**13<sup>th</sup> 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**

# Enforcement

- **Strengthen penalties/fines (amendment in Motor Vehicle Act)**
- **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.**



Thank you