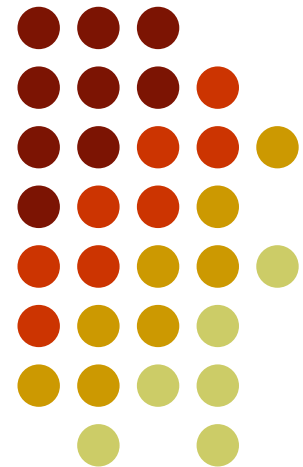


FISITA Panel discussion on Safety

Road Safety in Developing Countries : Case Study India

Dilip Chenoy
Director General
Society of Indian Automobile Manufacturers

SIAM





Presentation Outline

- The Road Network
- The Automotive Industry
 - Society of Indian Automobile Manufacturers
 - Trends
 - Current Performance
- The resultant traffic situation
- Accident data : The trends
- Accident Data: The victims
- Safety Initiatives and Policies in India
 - Government of India
 - Industry

Areas for Cooperation

Indian Road Network : 2nd Largest



Total Length – 3.3 million km

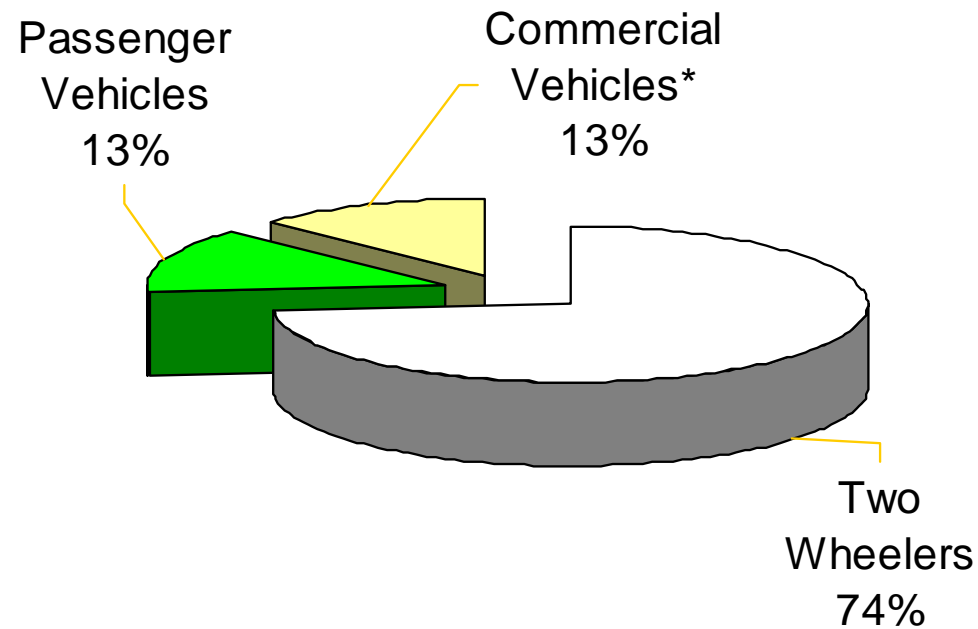
	<u>Length (km)</u>
National Highways	66,590
Expressways	200
State Highways	131,899
Major District Roads	467,763
Rural Roads	2,650,000

- Roads carry 85 % of passenger & 70 % of freight traffic
- National Highways constitute only 2% of length, but carry 40% of the traffic on Indian Roads.

Vehicle Parc



As on March 2008

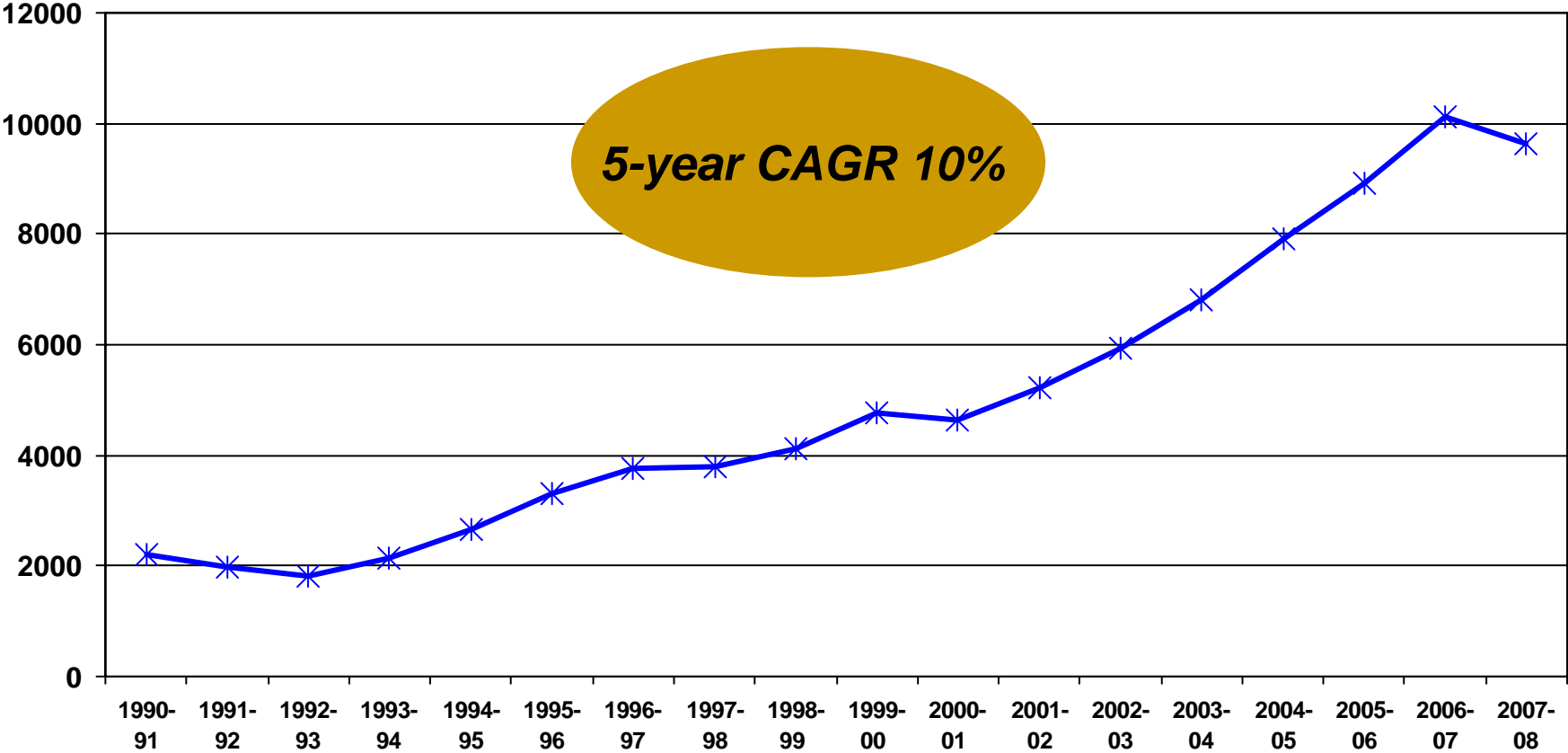


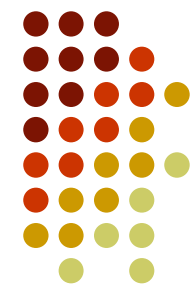
Total Registered Vehicles ~ 109 Mn

Source: Govt. of India Statistics of Registered Vehicles & SIAM estimates

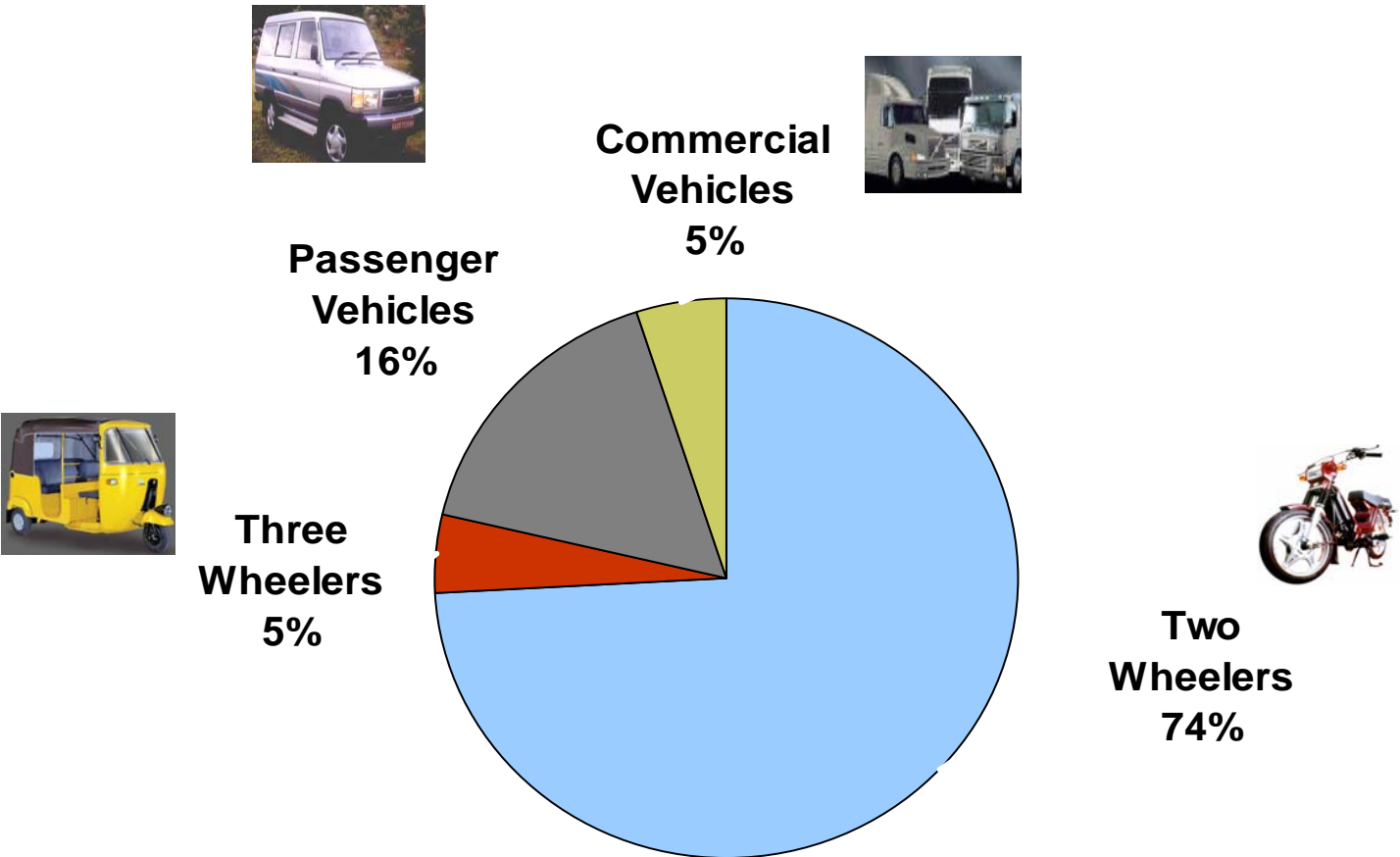
* Include tractor, trailer, three wheelers and others

Industry - Domestic Sales



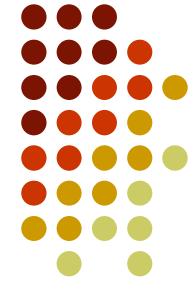
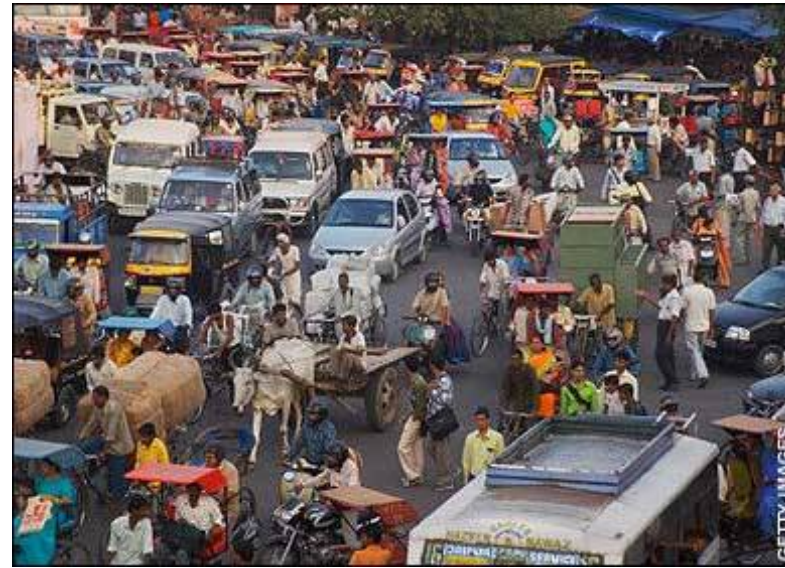


Industry - Composition



Size ~ 10.83 mn vehicles

All figures for 2007-08



Traffic Situation



An estimated 270 people die daily from road accidents in India, where the traffic in such cities as New Delhi is bumper to bumper



MOBILITY CHALLENGE



Vehicle Density

Motor Vehicles per km



Germany	209.6
Taiwan	159.2
UK	87.2
Japan	61.8
France	40.0
USA	35.4
Indonesia	16.8
China	12.6
India	3.2

Delhi – 47.2

Two wheelers : Delhi 98.7

SIAM

Road Construction is underway



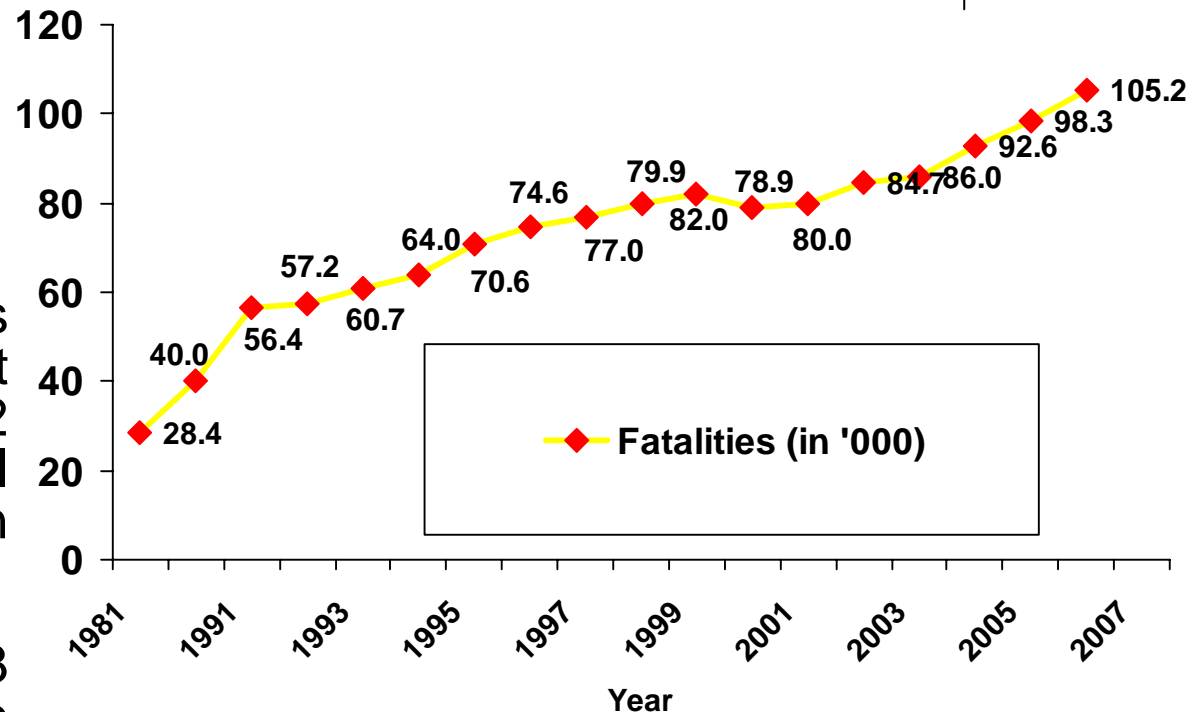


Accident Data



Situation of Road Safety in India

- Fatalities 105725 in 2006
- Every hour
 - 9 people loose lives
 - 39 get injured
- All injuries not reported
- Statistics 382,680 injuries due to road accidents but estimates indicate 1.2 million requiring hospital treatment and 5.6 million sustaining minor injuries
- Social Cost of over 13 billion \$ the country due to road accidents



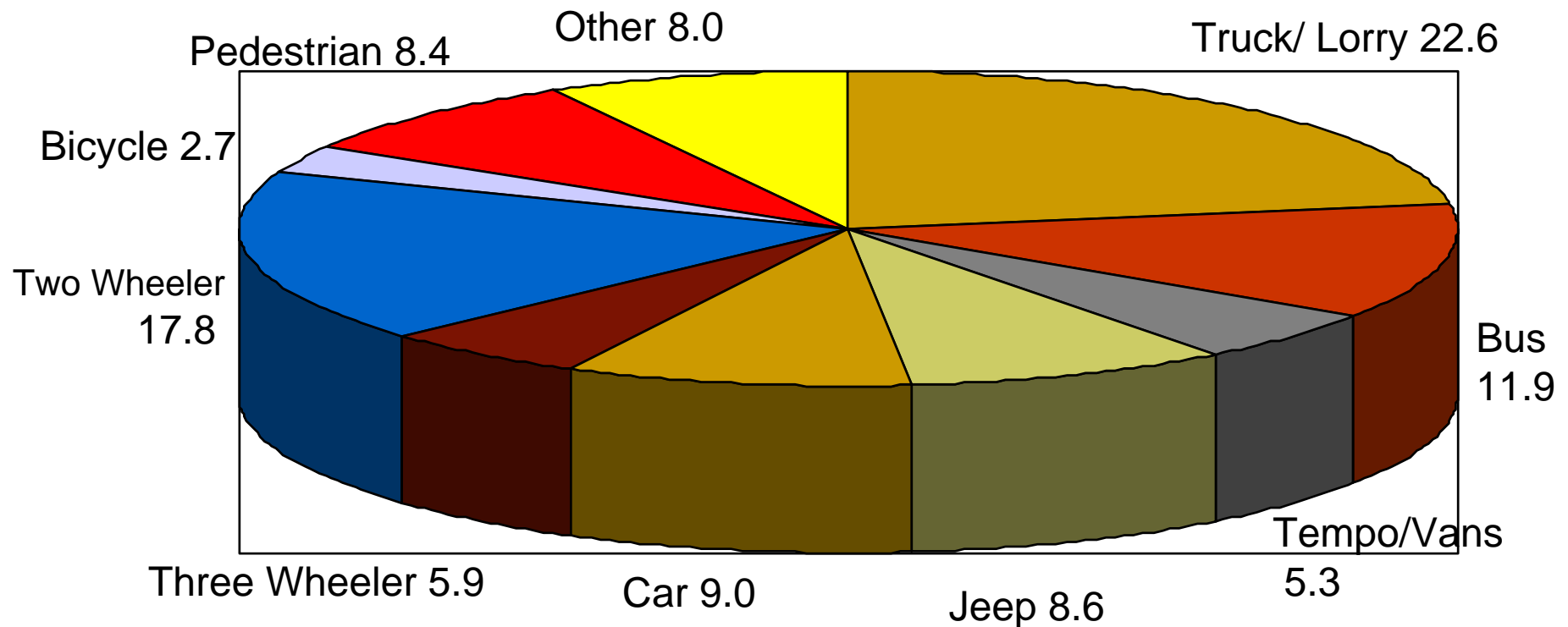
Trends in Road Fatalities

International Comparison



Countries	Number of Fatalities per 10,000 vehicles
India	14.54
Developed	1-2
Other Countries	
●Brazil	4.1
●Mexico	4.6
●Malaysia	5.6

Road Accident Deaths by Type of Vehicle %



Road Safety' : a Public Health Issue

Need an Integrated Approach to Road Safety



- **Driver Training**
- **Public Awareness inculcating discipline**
- **Traffic Planning & Management**
- **Emergency Services (Trauma Care)**
- **Accident Data Collection & Analysis**
- **Vehicle Safety Improvement and Vehicle Fitness**
- **Improvement in Road Design**
- **Inter-state and Inter-departmental coordination (Police, Hospitals, RTOs etc)**
- **Enforcement of rules & Quick legal process**

Road Safety: Challenges and Issues



Areas for Cooperation

- Expertise in Traffic Management and Safety Research
- Road safety professionals in academic, research and training institutions
- Traffic management techniques and road designs
- Institutions working in isolation. No coordination between policy makers, implementing agencies and researchers
- Implementation and enforcement of rules and norms
- Lack of Awareness in public at large
- Allocation of funds for road safety related work
- Absence of a clear monitoring and follow-up agency

Recent Government initiatives



- National Road Safety Council formed
- National Road Safety Board under formulation
- National Road Transport Policy to strengthen Public Transport system and role of independent regulator
- Bus Body & Truck Body Code
- Amendment in Motor Vehicle approved by cabinet
- Smart card based driving license and registration certificates.
- Modernization of the highways and toll collections systems & ITS

National Automotive Testing R&D Infrastructure Project (NATRIP)



Areas for Cooperation

1. State of Art testing, certification and homologation centers at Manesar & Chennai
2. Up-gradation of ARAI, Pune and VRDE, Ahmednagar
3. World-class proving grounds - Pithampur
4. National Center for Testing of Tractors and Off-Road Vehicles - Rae Bareilly
5. ***National facility for accident data analysis and specialized driving training - Rae Bareilly***
6. **National Specialized Hill Area Driving Training Center - Silchar**

Capability Development

NATRIP centres of excellence by 2011



- Noise Vibration & Harshness (NVH) Centre
- Auto components
- Infotronics
- Passive safety
- EMC
- Power train
- Fatigue testing
- Materials
- Vehicle dynamics
- R&D Test Tracks

Government Policy – Safety Standards



- Indian Standards (IS) since late 1960s.
- Central Motor Vehicle Rules (CMVR) in force from 1989.
- State Motor Vehicle Rules in place
- Alignment of Indian regulations with ECE
(Variance from ECE on formatting phraseology & administration)
- Member of WP 29 1998 agreement

Areas for Cooperation

National Road Safety Board



- Setting goals for reducing deaths, injuries and economic losses
- Comprehensive investigation and research of accidents from the standpoint of driver behaviour vehicle factors and traffic environment
- Coordination among states and developing best practice compendium
- Nodal agency for statistics and analysis of traffic records
- International Cooperation
- Proposals to Road Safety Council on measures to reduce accidents.

NRSB a body of professionals drawn from among road design experts, engineers, NGOs, medical and automotive industry experts

SIAM

Safety & ITS : Government initiatives

Areas for Cooperation

- e-ticketing, toll collect
- Sequencing of traffic lights, Intelligent Lights
- Smart Cards
- Smart Driver licensing system
- IT based Driver's recruitment
- Remote road traffic monitoring
- Emergency response systems
- GPS



Society of Indian Automobile Manufacturers



- Apex National Body representing all major Vehicle & Engine Manufacturers in India
- Non-profit Organization
- Promotes Sustainable Development of Automobile Industry in India

SIAM Members



SIAM – SAFE Initiatives : Schools



Areas for Cooperation

- Road Safety Run/ March
- Exhibitions
- Lectures/Street Theatres
- Cultural programmes
- Competitions: Painting, Debate, Skits
- Workshops
- Training Programmes
- Educational trips
- Awards
- Road Safety Literature



SIAM – SAFE Initiatives : Training



Areas for Cooperation

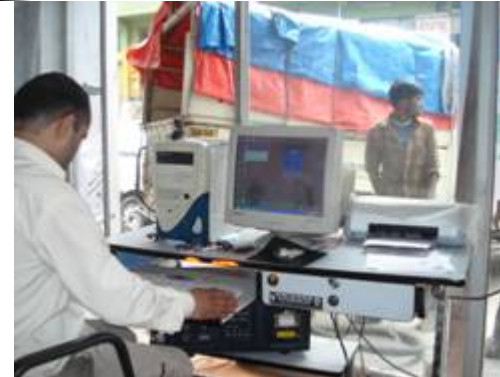
- Drivers
 - Training - Soft Skills Development, Defensive Driving & Vehicle Maintenance
- Public
 - Public Service Message in Print/ Electronic Media
 - Greeting Cards on Road Safety and Emission Control



SIAM – SAFE Initiatives : Emissions

Areas for Cooperation

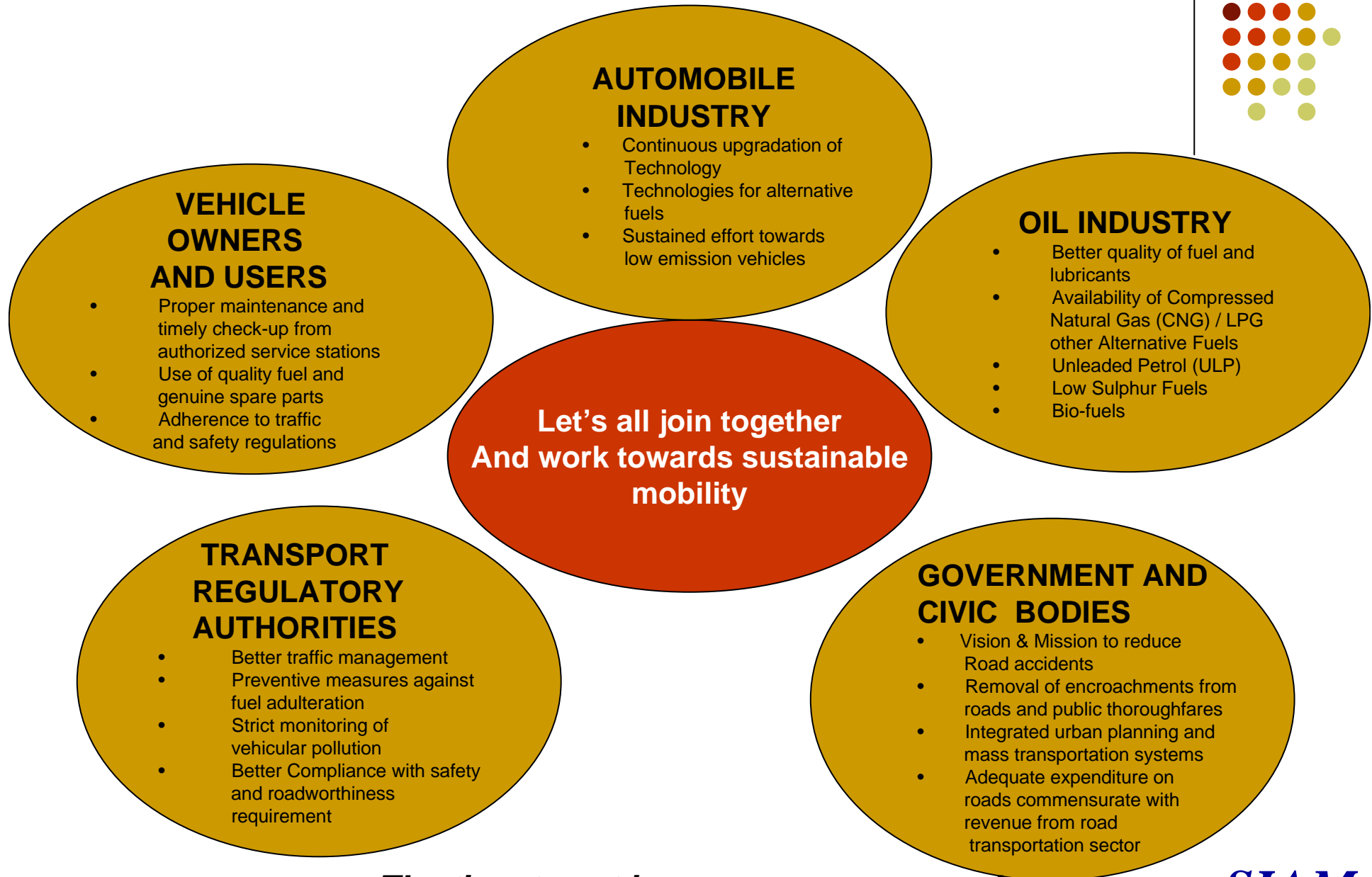
- In use Vehicle Maintenance Drives
Partners – Traffic Police, State Transport Department, NGOs



The Goal



Partnership to meet the challenges of Safety



The time to act is now.....!!!!

Thank you!

Society of Indian Automobile Manufacturers (SIAM)

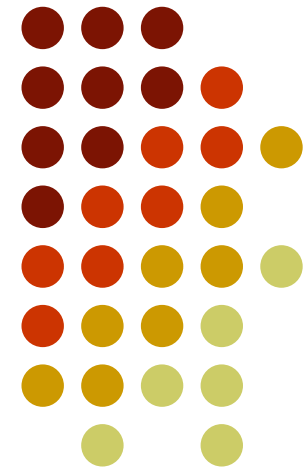
Core 4B, 5th Floor

India Habitat Centre, Lodi Road, New Delhi, India

Phone: +91 11 2464 7810 – 12, Fax: +91 11 2464 8222

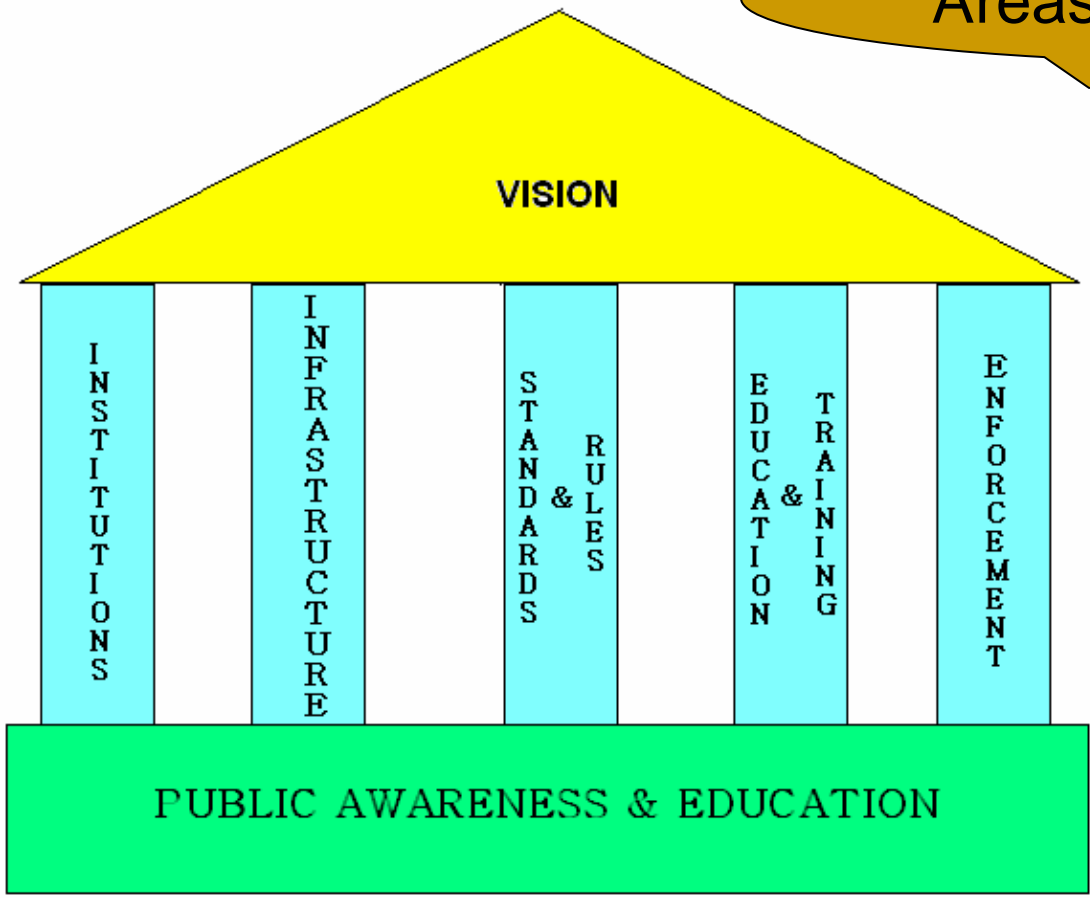
E-mail: dchenoy@siam.in

Website: www.siam.in





Areas for Cooperation



FISITA : Panel Discussion on Safety



- Worldwide progress in the number of road deaths;
- Reasons for the high number of persons killed on the road in specific countries;
- Differences compared to traditional markets like US and EU;
- Possible transfer of implemented actions from traditional markets;
- Actions required regarding vehicle development, infrastructure and road safety education in different markets.