4.1 LACK OF COORDINATION AT NATIONAL LEVEL

In our country the center, state government and local government and also different bodies plan, different scheme and activities for development of various sector like road housing, tourism, auto mobile, agriculture, Aviation, insurance, health and industries. In each of this sectors transport place important role so the activity of transport in various sectors and at various levels whether government or private are needed to be coordinated so that activities, facilities and packages offered to each sector shall have and main common plan and development to suit transport sector

Road accidents are not Luck or fortune this are men made crisis. We are only responsible for increasing number of road accidents. This is not a problem of Indian it is a global problem are country is the biggest democratic country with many laws and ministries but the lack of coordination is the only region for increasing numbers of road accidents. Followings are some national level institutions including central ministries, directors, bureaucrats' having many rules and regulations to cure people but there, one thing is missing that is coordination. This is the biggest failure that we increasing numbers road deaths.

4.1.1 Ministry of Road Transport & Highways

An apex organisation under the Central Government, is entrusted with the task of formulating and administering, in consultation with other Central Ministries/Departments, State Governments/UT Administrations, organisations and individuals, policies for Road Transport, National Highways and Transport Research with a view to increasing the mobility and efficiency of the road transport system in the country. Ministry has two wings: Roads wing and Transport wing.
ROADS WING

Deals with development and maintenance of National Highway in the country.

Main Responsibilities: Planning, development and maintenance of National Highways in the country, Extends technical and financial support to State Governments for the development of state roads and the roads of inter-state connectivity and economic importance, Evolves standard specifications for roads and bridges in the country and Serves as a repository of technical knowledge on roads and bridges.

TRANSPORT WING

Deals with matter relating to Road Transport

Main Responsibilities: Motor Vehicle legislation, Administration of the Motor Vehicles Act, 1988, Taxation of motor vehicles, Compulsory insurance of motor vehicles, Administration of the Road Transport Corporations Act, 1950, And promotion of Transport co-operatives in the field of motor transport, Evolves road safety standards in the form of a National Policy on Road Safety and by preparing and implementing the Annual Road Safety Plan, Collects, compiles and analyses road accident statistics and takes steps for developing a Road Safety Culture in the country by involving the members of public and organising various awareness campaigns, Provides grants-in-aid to Non-Governmental Organisations in accordance with the laid down guidelines.

4.1.2 Ministry of Health and Family Welfare

Union agencies and institutes for research or for the promotion of special studies in medicine and nutrition including all matters relating to -

   (a) Central Research Institute; (b) All India Institute of Hygiene and Public Health; (c) National Institute of Communicable Diseases; (d) Central Drugs Laboratory; (e) Rajkumari Amrit Kaur College of Nursing; (f) Lady Reading Health School; (g) Central Institute of Psychiatry; (h) Dr. Ram Manohar Lohia Hospital and Nursing Home; (i) Safdarjang Hospital; (j) Medical Stores Organisation; (k) B.C.G. Vaccine Laboratory; (l) Jawaharlal Institute of Post-
Graduate Medical Education and Research; (m) Smt. Sucheta Kirpalani Medical College and Hospital and Kalawati Saran Children's Hospital; (n) Central Government Health Scheme (CGHS); (o) Central Health Service; (p) Serologist and Chemical Examiner to the Government of India. (q) Department of AIDS Control (AIDS NIYANTRAN VIBHAG)

All matters relating to the following Institutions-

(a) Central Food Laboratory, (b) Central Food and Standardisation Laboratory, (c) Central Indian Pharmacopoeia Laboratory, (d) All India Institute of Physical Medicine and Rehabilitation, (e) National Tuberculosis Institute, (f) Central Leprosy Teaching and Research Institute, (g) Regional Leprosy Training and Research Centre, Raipur (Uttar Pradesh), Aska (Orissa), Gauripur(West Bengal), Teetulmari (Bihar), (h) Port Quarantine (sea and air) seamen's and marine hospitals and hospitals connected with port quarantine, (i) Port and Air Port Health Organisations, (j) Medical Examination of seamen, (k) International Health Regulations, (l) World Health Organisation (WHO).

Health Programmes relating to-

(a) International aid for Health Programmes, (b) National Programme for Control of Blindness, (c) National Leprosy Eradication Programme. (d) National Tuberculosis Control Programme. (e) National Malaria Eradication Programme. (f) All National Programmes relating to control and eradication of communicable diseases. (g) Bilateral Cultural Exchange Programmes relating to control and eradication of communicable diseases.

Public Health hospitals and dispensaries.

Scientific societies and associations pertaining to subjects dealt with in the Department.

Charitable and religious endowments pertaining to subjects dealt with in the Department. III. LIST OF BUSINESS WITH WHICH THE CENTRAL GOVERNMENT DEAL IN A LEGISLATIVE CAPACITY ONLY FOR THE UNION AND IN BOTH LEGISLATIVE AND EXECUTIVE CAPACITIES FOR ALL UNION TERRITORIES.
All Matters relating to- (a) The Medical profession and medical education. (b) The nursing profession and nursing education. (c) Pharmacists and Pharmacy education. (d) The dental profession and dental education. (e) Mental Health. (f) Drugs Standards. (g) Advertisements relating to drugs and medicines. (h) Prevention of the extension from one State to another of infectious or contagious diseases affecting human beings. (i) Prevention of adulteration of foodstuffs and drugs. IV. MISCELLANEOUS BUSINESS

All Matters relating to- (a) The Medical Council of India. (b) The Central Councils of Health and Family Welfare. (c) Dental Council of India. (d) Indian Nursing Council. (e) Pharmacy Council of India (f) Indian Pharmacopoeia Committee.

Concession of medical attendance and treatment for Central Government servants other than (i) those in Railway Service (ii) those paid from Defence Service Estimates (iii) officers governed by the All India Services (Medical Attendance) Rules, 1954 and (iv) officers governed by the Medical Attendance Rules, 1956.

Medical Examination and Medical Boards for Central Civil Services [other than those controlled by the Department of Railways and those paid from Defence Services Estimates excepting Civilian Services.]

All Matters relating to- (a) Grants to Vallabhbhai Patel Chest Institute (under Delhi university). (b) Grants to Indian Red Cross Society. (c) Spas and Health resorts. (d) Omitted. (e) National Board of Examination. (f) Chittaranjan National Cancer Research Centre. (g) All India Institute of Medical Sciences. (h) Omitted. (i) All India Institute of Speech and Hearing. (j) Pasteur Institute of India. (k) Physiotherapy Training Centre, King Edward Memorial Hospital. (l) National Institute of Mental Health and Neuro Sciences. (m) Hospital Services Consultancy Corporation Limited. V. FAMILY WELFARE MATTERS

Policy and organisation for Family Welfare.

All matters relating to:- (a) National Rural Health Mission. (b) National Commission on Population. (c) Reproductive and Child Health.
Inter-sectoral coordination in accordance with the National Population Policy, Matters related to Janasankhya Sthiarta Kosh and Empowered Action Group, Organisation and direction of education, training and research in all aspects of family welfare including higher training abroad, Production and supply of aids to Family Planning, Liaison with foreign countries and international bodies as regards matters relating to family welfare, Family Welfare Schemes and projects with external assistance, International Institute of Population Sciences, Mumbai, Development and production of audiovisual aids, extensional education and information in relation to population and family welfare, Promoting Public Private Partnership for the Family Welfare Programme.

All Matters relating to following Institutions:- (a) Hindustan Latex Limited, Thiruvananthapuram. (b) National Institute of Health and Family Welfare, New Delhi.


Department of ayurveda, yoga and naturopathy, unani, siddha and homoeopathy (ayush) (ayurveda, yoga aur prakratik chikitsa, unani, siddha aur homoeopathy (ayush) vibhag)

1. Formulation of policy and policy issues for development and propagation of Ayurveda, Siddha, Unani, Homoeopathy, Yoga and Naturopathy systems.

2. Development and implementation of programmes including Central schemes and Centrally sponsored schemes for development and propagation of Ayurveda, Siddha, Unani, Homoeopathy, Yoga and Naturopathy systems.

3. Co-ordination and promotion of research and development including assistance therefore in Ayurveda, Siddha, Unani, Homoeopathy, Yoga and Naturopathy systems.

4. Setting up and maintenance of Central institutions for research and development, education and standards relating to Ayurveda, Siddha, Unani, Homoeopathy, Yoga and Naturopathy systems.
5. All issues and matters requiring action at the level of Government in regard to- (a) Pharmacopoeial Laboratory for Indian Medicine, Ghaziabad; (b) Homoeopathic Pharmacopoeia Laboratory, Ghaziabad; (c) Central Council of Indian Medicines; (d) Central Council of Homoeopathy; (e) Ayurvedic Pharmacopoeia Committee; (f) Homoeopathic Pharmacopoeia Committee; (g) Unani Pharmacopoeia Committee; (h) Siddha Pharmacopoeia Committee; (i) Ayurvedic, Siddha and Unani Drugs Technical Advisory Board; (j) Central Council for Research in Ayurveda and Siddha; (k) Central Council for Research in Homoeopathy; (l) Central Council for Research in Unani Medicine; (m) Central Council for Research in Yoga and Naturopathy; (n) National Institute of Ayurveda; (o) National Institute of Homoeopathy; (p) National Institute of Naturopathy; (q) National Institute of Yoga; (r) National Institute of Unani Medicine; (s) National Institute of Siddha; (t) Institute of Post-Graduate Teaching and Research, Gujarat Ayurveda University; (u) Indian Medicines and Pharmaceuticals Corporation Limited; (v) Rashtriya Ayurveda Vidyapeeth.

6. Education, Training and Research in all aspects of Indian Systems of Medicine including higher training abroad.

7. Matters of cadre formation and control including formation and amendment of recruitment rules, recruitment, promotion and all other service matters relating to Indian Systems of Medicine and Homoeopathy doctors of Central Government Health Scheme including doctors in Indian Systems of Medicine and Homoeopathy central hospitals requiring action at Government level. Note:- Day-to-day administration and management will continue to be with the Director, Central Government Health Scheme.

8. Liaison with foreign countries and international bodies as regards matters relating to Indian Systems of Medicine and Homoeopathy.

9. Matters relating to scientific societies/associations and charitable and religious endowments relating to Indian Systems of Medicine and Homoeopathy.

10. Matters relating to quality and standards for drugs in Indian Systems of Medicine and Homoeopathy to the extent such matters require action at the level of Government.
11. Consultation and coordination with State Governments, Non-Government Organisations and institutions for review of work and programmes in Indian Systems of Medicine and Homoeopathy.


14. Legislative proposals pertaining to Indian Systems of Medicine and Homoeopathy of individual states requiring sanction and concurrence of Government of India. 15. Medicinal Plant Board.

**Department Of Health Research (Swasthya Anusandhan Vibhag)**

1. Promotion and co-ordination of basic, applied and clinical research including clinical trials and operational research in areas related to medical, health, biomedical and medical profession and education through development of infrastructure, manpower and skills in cutting edge areas and management of related information thereto.

2. Promote and provide guidance on research governance issues, including ethical issues in medical and health research.

3. Inter-sectoral coordination and promotion of public - private - partnership in medical, bio-medical and health research related areas.

4. Advanced training in research areas concerning medicine and health, including grant of fellowships for such training in India and abroad.

5. International co-operation in medical and health research, including work related to international conferences in related areas in India and abroad.

6. Technical support for dealing with epidemics and natural calamities.

7. Investigation of outbreaks due to new and exotic agents and development of tools for prevention.

8. Matters relating to scientific societies and associations, Charitable and religious endowments in medicine and health research areas.
9. Coordination between organizations and institutes under the Central and State Governments in areas related to the subjects entrusted to the Department and for the promotion of special studies in medicine and health.

10. Indian Council of Medical Research.

4.1.3 Ministry of Home Affairs

Departments of Ministry of Home Affairs deals with following subjects.

Department of Border Management: Department of Border Management, dealing with management of borders, including coastal borders, strengthening of border guarding and creation of related infrastructure, border areas development, etc.

Department of Internal Security: Department of Internal Security, dealing with the Indian Police Service, Central Police Forces, internal security and law & order, insurgency, terrorism, naxalism, activities of inimical foreign agencies, terrorist financing, rehabilitation, grant of visa and other immigration matters, security clearances, etc.

Department of J & K Affairs: Department of Jammu & Kashmir (J&K) Affairs, dealing with the constitutional provisions in respect of the State of Jammu & Kashmir and all other matters relating to the State excluding those with which the Ministry of External Affairs is concerned.

Department of Home: Dealing with the notification of assumption of office by the President and Vice-President, notification of appointment / resignation of the Prime Minister, Ministers, Governors, nomination to Rajya Sabha / Lok Sabha, Census of population, registration of births and deaths, etc.

Department of Official Language: Dealing with the implementation of the provisions of the Constitution relating to official languages and the provisions of the Official Languages Act, 1963.

Department of States: Dealing with Centre-State relations, Inter-State relations, administration of Union Territories, Freedom Fighters’ pension, Human rights, Prison Reforms, Police Reforms, etc. The Department of Internal Security, Department of States, Department of Home, Department of Jammu and Kashmir
Affairs and Department of Border Management do not function in watertight compartments. They all function under the Union Home Secretary and are inter-linked. There is a designated Secretary for Department of Border Management and Internal Security also.

4.1.4 Ministry of Urban Development and Housing

The Ministry of Urban Development is the apex authority of Government of India at the national level to formulate policies, sponsor and support programme, coordinate the activities of various Central Ministries, State Governments and other nodal authorities and monitor the programmes concerning all the issues of urban development in the country.

The matters pertaining to urban development have been assigned by the Constitution of India to the State Governments. The Constitution (74th Amendment) Act has further delegated many of these functions to the urban local bodies. The constitutional and legal authority of the Govt. of India is limited only to Delhi and other Union Territories and to the subject which State Legislatures authorise the Union Parliament to legislate.

However, the Govt. of India plays a much more important role and exercises a larger influence to shape the policies and programmes of the country as a whole. The national policy issues are decided by the Govt. of India which also allocates resources to the State Governments through various Centrally Sponsored schemes, provides finances through national financial institutions and supports various external assistance programmes for urban development in the country as a whole. The indirect effect of the fiscal, economic and industrial location decisions of the Govt. of India exercise a far more dominant influence on the pattern of urbanisation and real estate investment in the country.

4.1.5 Ministry of Rural Development

Being the nodal Ministry for most of the development and welfare activities in the rural areas, the Ministry of Rural Development plays a pivotal role in the overall development strategy of the country. The vision and mission of the Ministry is sustainable and inclusive growth of rural India through a multipronged
strategy for eradication of poverty by increasing livelihood opportunities, providing social safety net and developing infrastructure for growth. This is expected to improve quality of life in rural India and to correct the developmental imbalances, aiming in the process, to reach out to most disadvantaged sections of the society.

The Ministry of Rural Development consists of two Departments, viz.,

(i) Department of Rural Development,

(ii) Department of Land Resources.

**Secretary of Department of Land Resources.**

The Ministry now consists of two Departments as Department of Rural Development and Department of Land Resources. Broadly, the aims of the Ministry of Rural Development are:

Providing livelihood opportunities to those in need including women and other vulnerable sections with focus on Below Poverty Line (BPL) households,
Providing for the enhancement of livelihood security of households in rural areas by providing at least 100 days of guaranteed wage employment in every financial year to every household demanding it, Provision of all weather rural connectivity to unconnected rural habitations and upgradation of existing roads to provide market access, Providing basic housing and homestead to BPL household in rural areas, Providing social assistance to the elderly, widow and disabled persons, Providing urban amenities in rural areas for improvement of quality of rural life, Capacity development and training of rural development functionaries, Promoting involvement of voluntary agencies and individuals for rural development, Restoring lost or depleted productivity of the land. This is done through watershed development programmes and initiating effective land reform measures for providing land to the landless rural poor.

**4.1.6 Ministry of Financial Services**

The mandate of the Department of Financial Services covers the functioning of Banks, Financial Institutions, Insurance Companies and the National Pension System. The Department is headed by the Secretary, (Financial
Services) who is assisted by two Additional Secretary (AS), six Joint Secretaries (JS), two Economic Advisers (EA) and a Deputy Director General (DDG).

Department of financial services (Vittiya Sewayen Vibhag)

I. INSURANCE


2. Policy relating to life insurance; Administration of the Life Insurance Corporation Act, 1956 (31 of 1956); and related matters, Life Insurance Corporation of India.


4. The responsibility of the Central Government relating to matters concerning centrally administered areas in respect of any of the entries from 1 to 3 above.

II. BANKING

5. All matters relating to Indian banks, whether nationalised or not.

6. All matters relating to foreign banks so far as their operations in India are concerned.

7. All matters relating to Reserve Bank of India.

8. All matters relating to Cooperative Banking.

9. Matters concerning All India Development Financial Institutions, including those relating to, Industrial Development Bank of India (IDBI), IFCI Limited, Small Scale Industrial Development Bank of India (SIDBI) and Industrial Investment Bank of India (IIBI).

10. Matters concerning Export-Import Bank of India.


13. Matters relating to Infrastructure Development Finance Corporation (IDFC) and Infrastructure Leasing and Financial Services (ILFS).


15. Other matters relating to Banking in India.


21. All matters relating to National Housing Bank.

22. Administration of all other statutes, regulations and other laws connected with entries 38, 45 and 46 of the Union List and entry 9 of the Concurrent List.

23. Matters concerning Securitisation and Foreclosure.


31. Administration of the Negotiable Instruments Act, 1881 (26 of 1881).

III. PENSION REFORMS.

4.1.7 Ministry of Human Resource Development

The essence of Human Resource Development is education, which plays a significant and remedial role in balancing the socio-economic fabric of the Country. Since citizens of India are its most valuable resource, our billion-strong nation needs the nurture and care in the form of basic education to achieve a better quality of life. This warrants an all-round development of our citizens, which can be achieved by building strong foundations in education. In pursuance of this mission, the Ministry of Human Resource Development (MHRD) was created on September 26, 1985, through the 174th amendment to the Government of India (Allocation of Business) Rules, 1961. Currently, the MHRD works through two departments:

- Department of School Education & Literacy
- Department of Higher Education

While the Department of School Education & Literacy is responsible for development of school education and literacy in the country, the Department of Higher Education takes care of what is one of the largest Higher Education systems of the world, just after the United States and China.
The Dept of SE & L has its eyes set on the “universalisation of education” and making better citizens out of our young brigade. For this, various new schemes and initiatives are taken up regularly and recently, those schemes and initiatives have also started paying dividends in the form of growing enrolment in schools.

The Dept of HE, on the other hand, is engaged in bringing world class opportunities of higher education and research to the country so that Indian students are not finding lacking when facing an international platform. For this, the Government has launched joint ventures and signed MoUs to help the Indian student benefit from the world opinion.

**Objectives**

The main objectives of the Ministry would be:

Formulating the National Policy on Education and to ensure that it is implemented in letter and spirit, Planned development, including expanding access and improving quality of the educational institutions throughout the country, including in the regions where people do not have easy access to education, Paying special attention to disadvantaged groups like the poor, females and the minorities, Provide financial help in the form of scholarships, loan subsidy, etc to deserving students from deprived sections of the society, Encouraging international cooperation in the field of education, including working closely with the UNESCO and foreign governments as well as Universities, to enhance the educational opportunities in the country.

**4.1.8 Ministry of Heavy Industries**

The Department of Heavy Industry strives to bolster profit making Public Sector Enterprises as well as restructure and revive sick and loss making Public Sector Enterprises under its administrative control. The Department of Heavy Industry seeks to achieve its vision of global automotive excellence through creation of state-of-the-art Research and Testing infrastructure through the National Automotive Testing and R & Amp; D Infrastructure Project (NATRIP). The Department of Heavy Industry seeks to achieve its vision by providing
necessary support to the Auto, Heavy Engineering, Heavy Electricals and Capital Goods Sectors.

The Department of Heavy Industry (DHI) strives to bolster profit making PSEs as well as restructure and revive sick and loss making PSEs under its administrative control, The DHI seeks to achieve its vision of global automotive excellence through creation of state-of-the-art Research and Testing infrastructure through the National Automotive Testing and R&D Infrastructure Project (NATRIP), The DHI seeks to achieve its vision by providing necessary support to the Auto, Heavy Engineering, Heavy Electrical and Capital Goods Sector.

4.1.9 Department of Industrial Policy and Promotion, Govt. of India

The Department of Industrial Policy & Promotion was established in 1995 and has been reconstituted in the year 2000 with the merger of the Department of Industrial Development. Earlier separate Ministries for Small Scale Industries & Agro and Rural Industries (SSI&A&RI) and Heavy Industries and Public Enterprises (HI&PE) were created in October, 1999. With progressive liberalisation of the Indian economy, initiated in July 1991, there has been a consistent shift in the role and functions of this Department. From regulation and administration of the industrial sector, the role of the Department has been transformed into facilitating investment and technology flows and monitoring industrial development in the liberalised environment.

The role and functions of the Department of Industrial Policy and Promotion primarily include: Formulation and implementation of industrial policy and strategies for industrial development in conformity with the development needs and national objectives; Monitoring the industrial growth, in general, and performance of industries specifically assigned to it, in particular, including advice on all industrial and technical matters; Formulation of Foreign Direct Investment (FDI) Policy and promotion, approval and facilitation of FDI; Encouragement to foreign technology collaborations at enterprise level and formulating policy parameters for the same; Formulation of policies relating to Intellectual Property Rights in the fields of Patents, Trademarks, Industrial Designs and Geographical Indications of Goods and administration of regulations,
rules made there under; Administration of Industries (Development & Regulation) Act, 1951; Promoting industrial development of industrially backward areas and the North Eastern Region including International Co-operation for industrial partnerships and; Promotion of productivity, quality and technical cooperation.

4.1.10 Directorate of Advertising and Visual Publicity, Govt. of India

The Directorate of Advertising & Visual Publicity (DAVP) is the nodal agency to undertake multi-media advertising and publicity for various Ministries and Departments of Government of India. Some of the Autonomous Bodies also route their advertisements through DAVP. As a service agency, it endeavours to communicate at grass roots level on behalf of various Central Government Ministries.

The origin of DAVP can be traced to the times of World War-II. Immediately after the out-break of Second World War, the erstwhile government of India appointed a Chief Press Advisor. Besides other things, advertising was also the responsibility of the Chief Press Advisor. A post of Advertising Consultant was created in June 1941 under the Chief Press Advisor. This is where DAVP has its roots. On March 1, 1942, the Advertising Consultant Office became the Advertising Branch of the Department of Information & Broadcasting. Following the expansion in its scope, functions and activities, this Advertising unit was declared an Attached Office of the Ministry of Information & Broadcasting on October 1, 1955. The office also assumed the name of Directorate of Advertising & Visual Publicity (DAVP). DAVP was further declared as Head of a Department on April 4, 1959. By virtue of this declaration, financial and administrative powers were delegated to DAVP.

4.1.11 Direct Benefit Transfer, Govt. of India

A decision was taken in the meeting of the National Committee on Direct Cash Transfer held by Hon'ble Prime Minister that Direct Benefit Transfer (DBT) will be rolled out from 1 January 2013 in 43 identified districts. The purpose of Direct Benefits Transfer is to ensure that benefits go to individuals' bank accounts electronically, minimising tiers involved in fund flow thereby reducing delay in
payment, ensuring accurate targeting of the beneficiary and curbing pilferage and duplication. 28 schemes were identified for DBT rollout in 43 identified districts from 1.1.2013. It was further decided that future benefits under all the 28 schemes would be transferred in the following phased manner - (a) in 20 of the 43 districts, from 1.1.2013 (b) in 11 of the 43 districts after 1.2.2013, and (c) in the remaining 12 of the 43 districts after 1.3.2013.

4.1.12 NITI Aayog

The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015. NITI Aayog is the premier policy ‘Think Tank’ of the Government of India, providing both directional and policy inputs. While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States. The Government of India, in keeping with its reform agenda, constituted the NITI Aayog to replace the Planning Commission instituted in 1950. This was done in order to better serve the needs and aspirations of the people of India. An important evolutionary change from the past, NITI Aayog acts as the quintessential platform of the Government of India to bring States to act together in national interest, and thereby fosters Cooperative Federalism.

4.1.13 National Informatics Centre, Govt. of India

National Informatics Centre (NIC) was established in 1976, and has since emerged as a “prime builder” of e-Government / e-Governance applications up to the grassroots level as well as a promoter of digital opportunities for sustainable development. NIC, through its ICT Network, "NICNET", has institutional linkages with all the Ministries /Departments of the Central Government, 36 State Governments/ Union Territories, and about 688 District administrations of India. NIC has been instrumental in steering e-Government/e-Governance applications in government ministries/departments at the Centre, States, Districts and Blocks, facilitating improvement in government services, wider transparency, promoting decentralized planning and management, resulting in better efficiency and accountability to the people of India.
"Informatics-led-development" programme of the government has been spearheaded by NIC to derive competitive advantage by implementing ICT applications in social & public administration. The following major activities are being undertaken:

- Setting up of ICT Infrastructure
- Implementation of National and State Level e-Governance Projects
- Products and Services
- Consultancy to the government departments
- Research and Development
- Capacity Building

During the last three decades, NIC has implemented many "network centric" application software for Programme implementation in various ministries and departments, using state-of-the-technology software tools. During 1980s and early part of 1990s, the policy thrust was on creating "Management Information System (MIS)" and "Decision Support System (DSS)" for development, planning and responsive administration in governments which led to the genesis of present day "e-Governance" / "e-Government". "Bridging the Digital Divide", "Social and Financial Inclusion through ICT" and "Reaching- the-Unreached" concepts were tried and made operational in the late nineties. NIC has vast expertise and experience in the design, development and operationalisation of various e-Government projects in the areas of Public Administration and Governance like Agriculture & Food, Animal Husbandry, Fisheries, Forestry & Environment, Industry, Health, Education, Budget and Treasury, Fiscal Resources, Transport, Water Resources, Court Management, Rural Development, Land Records and Property registration, Culture & Tourism, Import & Exports facilitation, Social Welfare Services, Micro-level Planning, etc. With increasing awareness leading to demand and availability of ICT infrastructure with better capacities and programme framework, the governance space in the country witnessed a new round of projects and products, covering the entire spectrum of e-Governance including G2C, G2B, G2G, with emphasis on service delivery.
NIC provides Nationwide Common ICT Infrastructure to support e-Governance services to the citizen, Products and Solutions designed to address e-Governance Initiatives, Major e-Governance Projects, State/UT Informatics Support and district level services rendered.

NIC has set up state-of-the-art ICT infrastructure consisting of National and state Data Centres to manage the information systems and websites of Central Ministries/Departments, Disaster Recovery Centres, Network Operations facility to manage heterogeneous networks spread across Bhawans, States and Districts, Certifying Authority, Video-Conferencing and capacity building across the country. National Knowledge Network (NKN) has been set up to connect institutions/organizations carrying out research and development, Higher Education and Governance with speed of the order of multi Gigabits per second. Further, State Government secretariats are connected to the Central Government by very high speed links on Optical Fibre Cable (OFC). Districts are connected to respective State capitals through leased lines.

Various initiatives like Government eProcurement System (GePNIC), Office Management Software (eOffice), Hospital Management System (eHospital), Government Financial Accounting Information System (eLekha), etc. have been taken up which are replicable in various Government organizations.

4.1.14 National Road Safety Council, MoRTH, Govt. of India

National Road Safety Council is an advisory body. It was established under section 215 of Motor Vehicles Act, 1988 with the objective of improving road safety aspects in road transport sector.

The Council is chaired by the Hon’ble Cabinet Minister of the Ministry of Road Transport and Highways (MORTH). The official members of NRSC include the Ministers of State for MORTH, Minister-in-charge of Road Transport in States/UTs, representatives from Ministry of Home Affairs, Human Resource Development, Railways, Department of heavy Industry, Ministry of Environment and Forests, Planning Commission, Secretary of MORTH, Chairman of National Highways Authority of India, Director General of Roads Development of MORTH and Joint Secretary (Transport). The non-official co-opted members
include some Road Safety Award winners, individuals nominated by the Hon’ble Minister of MORTH, Government institutions related to road construction, road safety and insurance and associations related with road safety.

In the meeting of NRSC held in March 2011, MORTH formed five separate working groups on the four Es of road safety, viz. Education, Engineering of Roads, Engineering of Vehicles, Enforcement, and Emergency Care. The five working groups submitted their recommendations in October 2011. Some of the major recommendations are:

**Working Group on Education**

The number of road accidents and fatalities should be reduced to half in the year 2020 with base year 2010 per 10,000 vehicles population. A Comprehensive Plan of Action on the lines of Millennium Development Goals to bring down the road accidents, A National Road Safety Policy and supporting laws to be formulated, State and District Road Safety Councils need to be constituted, 50 per cent of all fines collected should be devoted to road safety activities, A separate Road Safety Education and Awareness Fund needs to be created.

**Working Group on Engineering of Roads**

All National and State Highways should have signages, Road Safety Audit for entire National Highways and State Highways network to be completed.

**Working Group on Engineering of Vehicles**

Requirements related to passive safety, active safety and general safety to be introduced in a planned manner, Major improvements in vehicle designs are required with introduction of full vehicle crash tests, EMC and high technology solutions for better visibility, Introduce mandatory Inspection and Certification requirements for all categories of vehicles.

**Working Group on Emergency Care**

Enunciate a National Accident Relief Policy and a National Trauma System Plan, Deployment of a Pan-India Pre-Hospital Emergency Medical Care Network to ensure a primary crash response time of 8 – 10 minutes.
Working Group on Enforcement

The penalty structure of Motor Vehicles Act, 1988 Act need to be increased, All state police forces need to be empowered to check overloading, There must be no exemption in wearing of helmet. Wearing of seat belt should be compulsory for the driver and the front passenger and on national highways it should be compulsory for even the passengers in the back seat, All enforcement agencies may impress upon the courts of the concerned cities/states that in graver cases of drunken driving, imprisonment must be provided to discourage drunken driving, MORTH is currently examining these recommendations to draw a decadal action plan on road safety at the national, state and district levels.

4.1.15 Bureau of Indian Standards, New Delhi

BIS is the National Standard Body of India established under the BIS Act 1986 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental thereto.

BIS has been providing traceability and tangibility benefits to the national economy in a number of ways - providing safe reliable quality goods; minimizing health hazards to consumers; promoting exports and imports substitute; control over proliferation of varieties etc. through standardization, certification and testing.

4.1.16 Inadequate performance of National Level Institutions in India

4.1.16.1 Transport Research Wing, MoRTH, Govt. of India, New Delhi

Open Government Data (OGD) Platform India - data.gov.in - is a platform for supporting Open Data initiative of Government of India. The portal is intended to be used by Government of India Ministries/ Departments their organizations to publish datasets, documents, services, tools and applications collected by them for public use. It intends to increase transparency in the functioning of Government and also open avenues for many more innovative uses of Government Data to give different perspective.
The base Open Government Data Platform India is a joint initiative of Government of India and US Government. Open Government Data Platform India is also packaged as a product and made available in open source for implementation by countries globally.

The entire product is available for download at the Open Source Code Sharing Platform “GitHub”.

Open Government Data Platform India has 4 (four) major modules, as detailed below, implemented on a single Drupal instance – An Open Source based Content Framework Solution

- Data Management System (DMS) – Module for contributing data catalogs by various government agencies for making those available on the front end website after a due approval process through a defined workflow.

- Content Management System (CMS) – Module for managing and updating various functionalities and content types of the Open Government Data Platform India Platform.

- Visitor Relationship Management (VRM) – Module for collating and disseminating viewer feedback on various data catalogs.

- Communities – Module for community users to interact and share their zeal and views with others, who share common interests as that of theirs.

Currently there is no provision to study and analyze the scientific evidence of accidents in place which is a cause of not being able to define clear suggestions to reduce accidents.

While it is mentioned in Section 135 of the Motor Vehicle Act 1988 that the State Government may, by notification make a scheme to provide for in-depth study on causes and analysis of motor vehicle accidents.

The current scenario is the practice is that the police constable (who is a non-technical person) follows the rule that the bigger vehicle is the cause of the accident and no study on the cause of the accident is practiced. Also there is no evidence collected for the cause of the accident scene within the international
practice limit of 30 minutes by the technical team. No mapping of the accident scene is prepared, point of impact, final resting position, skid marks, scrub marks, gauge marks are not getting recorded, calculation of speed and direction of vehicles are not available.

A team of professionals like Road Engineers (who has completed Road Safety Auditor), Automobile Engineer (with certification of Crash Investigation), IT Engineers (with ITS), Photographers, Videographers, who would be a part of the Crash Investigation team. The Crash Investigation team would be a part of the Crash Investigation Cell/Unit which should be setup in phased manner in the Police Stations (or Traffic Police Stations) in districts across the country. The funding for this cell/unit should be made by the transport department.

Equipments like 3D Laser Scanner, metal and gas cutter, traffic diversion related devices and other equipment should be provided to this team which would record and reconstruct the accident scene and upload the data in time for professionals to work on analyzing the accident. Recording and reporting of the accident would be collected in a professional manner with established standards which would be the basis of standards across the country. Crash Data Retrieval a device similar to the black box in the aircraft should be deployed in the vehicles to reconstruct the crash data, speed, direction, etc. of the accident are made available almost instantaneously for analysis.

A separate place for keeping the crashed vehicles should also be established. In this regard it is recommended to ask the Central Government to define standards to study, reconstruct and analyze road accidents inline of what is followed by the airline industry. While it is understood that the count of air accidents are much less than that of road accidents yet those standards could be considered to form a baseline.

4.1.16.2 Automotive Research Association of India (ARAI, Pune)

ARAI has a strong base of state-of-the-art technology equipments, laboratory facilities and highly qualified and experienced personnel. With these
assets, ARAI has goals, strategies and action plans to achieve fullest customer satisfaction.

ARAI has been providing various services to the Indian Automotive Industry in the areas of design & development and know-how for manufacture & testing of components / system to national / international standards. ARAI shall strive to achieve international recognition in these areas.

ARAI shall seek the valuable guidance and support from association members, from time to time to achieve growth and stability.

With the globalization of economy and business, ARAI shall enlarge its scope of services to meet the requirements of automotive industries anywhere in the world.

ARAI strongly believes that satisfaction of the customer needs on continuing basis is of prime importance to earn the loyalty of the customers. Therefore, emphasis shall be on meeting and exceeding the customer needs through continuing quality improvement with active participation of employees and also the customer.

4.1.16.3 Vehicle Research and Development Establishment (VRDE)

Vehicle Research & Development Establishment (VRDE) is a premier laboratory belonging to DRDO (Defense Research and Development Organization) and is one of the authorized homologation center of the country. NATRiP has allocated Rs.46.50 crore for upgrading the facilities at VRDE which include setting up a state-of-the-art Electro Magnetic Compatibility (EMC) Lab and multi-friction braking test track (ABS testing).

4.1.16.4 The International Center for Automotive Technology (iCAT), Manesar

“To be a world class R & D centre assisting the automotive sector and to render services in the field of automotive design, test & validation.” International Centre for Automotive Technology (ICAT) is an Automotive Testing and R & D centre strategically located at Manesar, Gurgaon –one of the flourishing business
hubs in North India. ICAT is the part of NATRIP Implementation Society (NATIS).

To assist industry in adopting cutting edge technology in component and Vehicle development. Adopt world class work practices in technology services and innovation, build technical expertise driven by team work and commitment. Strive to deliver quality services for total customer satisfaction. Front runner in establishing global standards in the field of automotive testing and R & D.

4.1.16.5 National Automotive Testing and R&D Infrastructure Project (NATRiP)

Create state-of-art research and testing infrastructure to drive India into the future of global automotive excellence. NATRiP aims at setting up of seven state-of-the-art automotive testing and R&D centres across the country and thereby:

Creating core global competencies, Enhancing competitive skills for product development leading to deepening of manufacturing. Synergizing Indias unique capabilities in Information Technology with the automotive sector. Facilitating seamless integration of Indian automotive industry with the world to put India strongly on the global automotive map.

4.1.16.6 Insurance Regulatory and Development Authority (IRDA), Govt. of India

To protect the interest of and secure fair treatment to policyholders. Bring about speedy and orderly growth of the insurance industry (including annuity and superannuation payments), for the benefit of the common man, and to provide long term funds for accelerating growth of the economy; Set, promote, monitor and enforce high standards of integrity, financial soundness, fair dealing and competence of those it regulates; Ensure speedy settlement of genuine claims, to prevent insurance frauds and other malpractices and put in place effective grievance redressal machinery; Promote fairness, transparency and orderly conduct in financial markets dealing with insurance and build a reliable management information system to enforce high standards of financial soundness amongst market players; Take action where such standards are inadequate or
ineffectively enforced. Bring about optimum amount of self-regulation in day-to-
day working of the industry consistent with the requirements of prudential
regulation.

4.1.16.7 Association of State Road Transport Undertaking (ASRTU), New
Delhi

Thriving on challenges, moving on the wheels of innovations and
facilitating seamless integration of India’s State Road Transport Undertakings, to
ensure a world class passenger road transport system reaching all corners of India,
thus making a mark in the global map of Public Road Transport.

Strengthening the Public Transport System in the country by facilitating
improvement of transport infrastructure with enhanced safety standards and
assured service levels, efficient governance, sustainable mobility with
environmental sensitivity and last mile connectivity. Formulation of policies and
facilitating their implementation, advocacy with Ministry and Government
agencies, addressing issues of common interest in various interactive forums for
the benefits of member undertakings. Enhancing the competency of Transport
managers of STUs by participation in National and International Conferences and
Seminars, workshops and training. Providing a common procurement service of
quality automobile components at reasonable prices meeting the standard
specifications to its member.

To provide forum for exchange of ideas on best practices on various issues
to facilitate operational excellence. Facilitate exposure to top management of
SRTUs at National and International best practices through participation in
Conferences/Study tours/workshops. Inspire excellence though innovation and
sharing useful information and cutting edge knowledge & expertise.

4.1.16.8 Central Institute of Road Transport (CIRT), Pune

The Central Institute of Road Transport (CIRT) was established in 1967 on
the joint initiative of the Ministry of Shipping & Transport & the Association of
State Road Transport Undertakings. CIRT is committed to improving the
efficiency & productivity of the transport sector, with particular emphasis on the
STU. CIRT has been offering technical training, consultancy and automobile component testing services to the STU fraternity for the last 45 years. CIRT offers management development programmes covering general management, transport operations and maintenance engineering. The programmes are meant for practising managers in STUs, other organisations operating transport services besides road transport officials. All programmes are residential and their duration ranges from one week to four weeks. In addition, the Institute undertakes consultancy and research assignments on transport policy, transportation planning, traffic management, maintenance management, materials management, human resource management and management information systems.

With the assistance of international agencies such as UNDP and the British Council, CIRT has strengthened its core competence and is now regarded as a major management development centre in the country. CIRT has a sophisticated automobile component testing laboratory, recognised by the Bureau of Indian Standards for testing a wide range of automobile components. ASRTU relies on the test reports of CIRT while awarding rate contracts to automobile component manufacturers. The joint endeavour of ASRTU and CIRT for monitoring the quality of auto parts has stood the test of time and has become an indispensable input for upgrading quality and ensuring cost-effectiveness.

4.1.16.9 National Highway Authority of India (NHAI), New Delhi

"To meet the nation’s need for the provision and maintenance of National Highways network to global standards and to meet user’s expectations in the most time bound and cost effective manner, within the strategic policy framework set by the Government of India and thus promote economic well being and quality of life of the people."

National Highways Authority of India (NHAI) is mandated to implement National Highways Development Project (NHDP) which is India's Largest ever highways project. World class roads with uninterrupted traffic flow. The National Highways have a total length of 71,772 km to serve as the arterial network of the country. The development of National Highways is the responsibility of the Government of India. The Government of India has launched major initiatives to
upgrade and strengthen National Highways through various phases of National Highways Development project (NHDP),

**4.1.16.10 National Highways and Infrastructure Development Corporation (NHIDC)**

National Highways and Infrastructure Development Corporation is a fully owned company of the Ministry of Road Transport & Highways, Government of India. The company promotes, surveys, establishes, designs, builds, operates, maintains and upgrades National Highways and Strategic Roads including interconnecting roads in parts of the country which share international boundaries with neighboring countries. The regional connectivity so enhanced would promote cross border trade and commerce and help safeguard India’s international borders. This would lead to the formation of a more integrated and economically consolidated South and South East Asia. In addition, there would be overall economic benefits for the local population and help integrate the peripheral areas with the mainstream in a more robust manner.

The endeavour of the Company would be to maintain its Office and Sub-Offices and Highways and Infrastructure developed, constructed and maintained by it in a clean manner. The Company has become part of the ‘Swachh Bharat Abhiyan’ with effect from 01.01.2015 and all its employees have taken oath for Swachh Bharat.

**4.1.16.11 Indian Institute of Petroleum (IIP), Dehradun**

CSIR-Indian Institute of Petroleum (CSIR-IIP) is one of the leading constituent laboratories of the Council of Scientific & Industrial Research (CSIR). Established in 1960, the Institute is devoted to multidisciplinary areas of research and development in the downstream sector of hydrocarbon and related industry. It has dedicated experienced and qualified staff and is equipped with comprehensive state-of-art R&D facilities including pilot plants.

The Institute undertakes R&D work in areas of petroleum refining, natural gas, alternative fuels, petrochemicals utilization of petroleum products in IC engines and in industrial and domestic combustion. Institute also provides
technical and analytical services to petroleum refining and related industry including technology transfer for developing novel, state-of-art technologies and products.

The institute maintains its leading position in conducting training programme for technical personnel from refining industry, petrochemical plants, automotive sector, power plants and other related user industries.

CSIR-IIP is committed to provide globally competitive technologies and services for hydrocarbon and related industries. This is achieved through total quality management and by anticipating and exceeding the expectations of customers through innovation, team work and commitment. The acquirement of ISO-9001 certification by the institute in 1998 and its accreditation to ISO:9001-2008 proves its commitment towards quality services and management.

4.1.16.12 Central Road Research Institute (CRRI), New Delhi

Road and road transport infrastructure is essential for socio-economic and technological progress of a nation. R&D efforts provide a key role in developing technologies for construction of better, durable and safer roads and the resulting efficient traffic operation thereon. The Central Road Research Institute, popularly known as CRRI, is the premier national research organization for highways traffic and transport planning and all other allied aspects. It carries out R&D in the areas of road and road transportation and provide highest level of professional consultancy.

CRRI was established in 1952 as a constituent laboratory of the Council of scientific and industrial research (CSIR). The institute is prominently located on Delhi Mathura Road (NH-2) at 5 kms. from Nizamudin Railway Station, in a huge and picturesque complex with a vast and unique variety of infrastructural facilities to undertake research and consultancy activities related to road and runways, traffic and transportation, bridges and geotechnical aspects.

The major R&D programmes of CRRI related to the entire spectrum of pavement design and performance, road condition monitoring, pavement deterioration modeling, maintenance planning and management, pavement
management system, landslide management and hazard mitigation, geotechnical investigations & ground improvement techniques, traffic engineering and management and improved transportation planning technology for emerging urban needs. Besides these, applied research in the area of planning and engineering aspects of rural roads, material characterization, pavement evaluation, highway instrumentation, conditioning monitoring and rehabilitation of bridges, design of high embankments & reinforced earth walls, subways & underpass construction, transportation planning, traffic engineering, road safety and environmental problems, form an integral part of the programme of the institute.

Training is an important activity of the institute. CRRI offers several refresher/ training and development programmes designed to suit the requirement of different target groups. More than 25,000 in-service highway engineers have been trained so far at CRRI.

The institute maintains an active liaison with various highway research organizations both in India and abroad for exchange of information and technical expertise. CRRI is also well represented globally at TRB (USA), ARRB (Australia), TRL (UK), World Road Association (PIARC) etc.

The future R&D programmes of CRRI will focus on safe, speedy and efficient road transportation system with minimal total transportation cost per unit of total transportation infrastructure. A multifaceted approach has thus been adopted with an emphasis on system development, characterization and improvement of materials, pavement evaluation, maintenance monitoring, and upgradation of technology for ground improvement and slope stability enhancement and intelligent transport system.

The task ahead is quite challenging with the increase in road traffic both in terms of volume and axle load, new generation of roads, like expressway and heavy duty roads will be built in the near future. This calls for improved methods of road construction, maintenance and management. CRRI is well equipped to meet this new challenge and is all set for giving the highest level of required R&D support to the road development plans in the country and to other highway agencies in the SAARC and the Asia and the pacific region.
4.16.13 Engineering Staff College of India, Hyderabad

To position ESCI as an outstanding provider of continuously evolving Global Market Responsive trained professionals in the field of Engineering and Technology, Techno-Management, Research, Development Engineers (RD&E) and techno-management professionals dedicated for excellence to deliver innovative solutions that will improve productivity in all sectors of the economy.

To provide qualitative education, training and applied research in the fields of technology and management. To assist the engineering fraternity to be innovative and advanced to meet the challenges in the unbounded world of tomorrow and to be the front line interface between academia, research, industry and other sectors in advanced Engineering/Technological application and Key enabler in fostering High and Thrust area programmes.

4.16.14 Institute of Road Traffic Education (IRTE), Faridabad

Since the creation of the Institute of Road Traffic Education (IRTE) in December 1991, most of our research initiatives have delivered proven results, which can be adapted in developing countries like India for improving the basis of traffic management systems. As a member of the United Nations Road Safety Collaboration and the Commission for Global Road Safety, we support the Decade of Action for Road Safety and implementation of a five pillar Action Plan designed to

Build management capacity, Influence road design and network management, Influence vehicle safety design, Influence road user behaviour and improve post crash care.

Research at IRTE has delivered many important initiatives which have been recognised on a national basis, both by the Government as well as the corporate sector. These include the Traffic Enforcement vehicles – Interceptor, Mobile Crash Investigation and Road Safety Audit Laboratory – CrashLab, the School Conclave programme for imparting road safety education in schools, the National Highway Literacy programme, Journey Risk Management and the Student Traffic Volunteers Scholarship Scheme.
In the process of research, IRTE’s tools, systems and methods of training in all areas of traffic management have been benchmarked and training courses imparted by the institution have been most successful. But our capacities to impart such courses were restricted due to limitations of space and human resources.

Our vision of creating an Umbrella facility for research based training towards capacity building in road safety management for India and other developing countries is taking shape as The College of Traffic Management.

The College is situated on the Aravali Hills, Badhkal Surajkund Road, Faridabad, in the National Capital Territory of Delhi.

The College is currently divided into 5 formal schools: The Centre for Analysis & Research in Road Safety, School of Driver Training, School of Traffic Enforcement, School of Road Safety Education and Media Development, School of Public Health. We welcome financial support towards making the college a comprehensive facility where training and research fulfil the needs for catalyzing safety traffic management in developing and emerging nations.

In this endeavour we invite global partnerships with Universities, Institutions, and Academies, Governments as well as the corporate sector towards sharing knowledge, research and good practices in making this college a world class facility.

**4.1.16.15 Indian Academy of Highway Engineers (IAHE), Noida**

The Institute was registered as a Society in January 1983. Started Operations from a rented accommodation in Delhi since April 1985 with changed name of NITHE. Continued to operate in Delhi till Sept, 2001 and thereafter shifted to its own campus at NOIDA, UP w.e.f. Oct, 2001. Now the Academy organizes training for Highway Sector Engineers and professionals of Central / State Govts., Public & Private sectors. Also imparts training to Highway Professionals from Abroad under various training programs? SAARC countries, Colombo Plan countries and Afro-Asian countries, etc.

To impart training to engineers & professionals of Highway Sector at entry level and during service at different levels of Central & State Govts., Public and
Private sectors. Help highway sector engineers build up character and develop an all round personality as a part of Human Resource Development. Assist various organizations in developing their training institutes and training of their faculty. Promote co-operation and foster exchange of knowledge, ideas and experience in all the sphere of highway engineering among engineers in India and Abroad. Imparts training to Highway sector Professionals from India.

4.1.16.16 Indian Road Congress (IRC), New Delhi

Indian Road Congress is nation’s most representative professional, multifaceted transnational institution, committed to take into cognizance the globally best practices and pool collective wisdom to promote the use of Standard Specifications conforming to cutting edge technologies for construction and maintenance of roads, bridges and road transportation. Focus on effective transport system aiming of zero road crash fatalities and contribute to the economic growth and quality of life. Align itself to global initiatives of environmental strategy for promotion of cleaner, less energy intensive and less polluting construction techniques, use of recycled wastes; minimize drawing of natural resources and encourage the profession to aim at earning carbon credit in life cycle analysis for construction/transportation projects under Environment Management Plan (EMP).

The mission of Indian road congress is to national Forum for sharing of knowledge and to pool our experiences and expertise collectively on the entire range of subjects related with road sector including the connected policy issues on road construction and road transportation. Promote the use of standard specifications confirming to the cutting edge technologies for construction and maintenance of roads, bridges, tunnels and road transportation. Align itself to global initiatives of environmental strategy for promotion of cleaner, less energy intensive and less polluting construction techniques, use of recycled wastes; minimize drawing of natural resources and encourage the profession to aim at earning carbon credit in life cycle analysis for road/transportation projects under Environment Management Plan (EMP). Promote efficient and well integrated transport system that serves the public interest by enhancing mobility and delivery
safe, secure and environmentally responsible. Create mass awareness to follow traffic regulations and ethics thereof. Pool knowledge (Library) with exchange facility through web to the reputed national and international organizations engaged in the profession and shared publications and literature conforming to cutting edge technologies. Advice regarding planning and design, transportation, legislation and research connected with development and maintenance of roads and road transportation.

To be the lead National Forum for sharing of knowledge and to pool our experiences and expertise collectively on the entire range of subjects related with road sector including the connected policy issues on road construction and road transportation. Promote the use of standard specifications confirming to the cutting edge technologies for construction and maintenance of roads, bridges, tunnels and road transportation. Align itself to global initiatives of environmental strategy for promotion of cleaner, less energy intensive and less polluting construction techniques, use of recycled wastes; minimize drawing of natural resources and encourage the profession to aim at earning carbon credit in life cycle analysis for road/transportation projects under Environment Management Plan (EMP). Promote efficient and well integrated transport system that serves the public interest by enhancing mobility and delivery safe, secure and environmentally responsible. Create mass awareness to follow traffic regulations and ethics thereof. Pool knowledge (Library) with exchange facility through web to the reputed national and international organizations engaged in the profession and shared publications and literature conforming to cutting edge technologies. Advice regarding planning and design, transportation, legislation and research connected with development and maintenance of roads and road transportation.

**4.1.16.17 Border Road Organization (BRO)**

Nation's most reputed, multifaceted, transnational, modern construction Organisation committed to meeting the strategic needs of the armed forces with enlightened leadership, a strong, skilled and committed work force, a well ingrained value system and a strong environment conscience. Playing a national
role in socio economic development through its large scale contribution to infrastructure development.

To support the armed forces meet their strategic needs by committed, dedicated and cost effective development and sustenance of the infrastructure. Achieve international levels of quality excellence and time consciousness in a diversified sphere of construction activity in a cost effective manner. Optimise potential and expertise through increased involvement in agency, transnational and national development projects. Attain leadership in development, adoption, assimilation and use of state of the art technology. Create the environment for accurate, real time and effective decision making through optimising use of information technology. Through a focus on core competencies; ensure highest level of skill and proficiency in construction activity. Sustain a sense of values in the Organisation that will ensure a high level of self esteem in each individual and immeasurable synergy in the Organisation. Help enrich the quality of life of the community and ensure all round growth.

Role of the BRO

In Peace : Develop & Maintain the Operational Road Infrastructure of General Staff in the Border Areas. Contribute to the Socio-Economic Development of the Border States.

In War : To Develop & Maintain Roads to Keep Line of Control through in Original Sectors and Re-Deployed Sectors. To Execute Addl Tasks as laid down by the Govt Contributing to the War Effort.

4.1.16.18 Council of Scientific and Industrial Research (CSIR)

The Council of Scientific & Industrial Research (CSIR), known for its cutting edge R&D knowledgebase in diverse S&T areas, is a contemporary R&D organization. Having pan-India presence, CSIR has a dynamic network of 38 national laboratories, 39 outreach centres, 3 Innovation Complexes and 5 units. CSIR’s R&D expertise and experience is embodied in about 4600 active scientists supported by about 8000 scientific and technical personnel.
CSIR covers a wide spectrum of science and technology – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology. It provides significant technological intervention in many areas with regard to societal efforts which include environment, health, drinking water, food, housing, energy, farm and non-farm sectors. Further, CSIR’s role in S&T human resource development is noteworthy.

Pioneer of India’s intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains. CSIR is granted 90% of US patents granted to any Indian publicly funded R&D organization. On an average CSIR files about 200 Indian patents and 250 foreign patents per year. About 13.86% of CSIR patents are licensed - a number which is above the global average. Amongst its peers in publicly funded research organizations in the world, CSIR is a leader in terms of filing and securing patents worldwide.

4.1.16.19 Indian Institute of Technology, New Delhi

To contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and remain a source of pride for all Indians. Generate new knowledge by engaging in cutting-edge research and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and doctoral programmes. Identify, based on an informed perception of Indian, regional and global needs, areas of specialization upon which the institute can concentrate. Undertake collaborative projects which offer opportunities for long-term interaction with academia and industry. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

4.1.16.20 Central Board of Secondary Education, New Delhi

Define appropriate approaches of academic activities to provide stress free, child centered and holistic education to all children without compromising
on quality. Analyze and monitor the quality of academic activities by collecting the feedback from different stakeholders. Develop norms for implementation of various academic activities including quality issues. Control and coordinate the implementation of various academic and training programmes of the Board; to organize academic activities and to supervise other agencies involved in the process. Adapt and innovate methods to achieve academic excellence in conformity with psychological, pedagogical and social principles.

Encourage schools to document the progress of students in a teacher and student friendly way. Propose plans to achieve quality benchmarks in school education consistent with the National goals. Organize various capacity building and empowerment programmes to update the professional competency of teachers. Prescribe conditions of examinations and conduct public examination at the end of Class X and XII. Grant qualifying certificates to successful candidates of the affiliated schools. Fulfill the educational requirements of those students whose parents were employed in transferable jobs. Prescribe and update the course of instructions of examinations. Affiliate institutions for the purpose of examination and raise the academic standards of the country.

Innovations in teaching-learning methodologies by devising students friendly and students centered paradigms. Reforms in examinations and evaluation practices. Skill learning by adding job-oriented and job-linked inputs. Regularly updating the pedagogical skills of the teachers and administrators by conducting in service training programmes, workshops etc

4.1.16.21 All India Council for Technical Education, New Delhi

Technical education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of our nation. In India, technical education is imparted at various levels such as: craftsmanship, diploma, degree, post-graduate and research in specialized fields, catering to various aspects of technological development and economic progress.

The beginning of formal Technical Education in India can be dated back to the mid 19th Century. The major policy initiatives in the pre-independence period
included appointment of the Indian Universities Commission in 1902, issue of the Indian Education policy resolution in 1904 and the Governor General’s policy statement of 1913 stressing the importance of Technical Education, the establishment of IISc in Bangalore, Institute for Sugar, Textile and Leather Technology in Kanpur, N.C.E. in Bengal in 1905 and Industrial schools in several provinces. Significant developments include:

- Constitution of the Technical Education Committee of the Central Advisory Board of Education (CABE) of 1943;
- Preparation of the Sergeant Report of 1944; and
- Formation of the All India Council for Technical Education (AICTE) in 1945 by the Government of India.

All India Council for Technical Education (AICTE) was set-up in November 1945 as a national level Apex Advisory Body to conduct survey on the facilities on technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in, the National Policy of Education (1986), AICTE be vested with statutory authority for planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country.

The Government of India (Ministry of Human Resource Development) also constituted a National Working Group to look into the role of AICTE in the context of proliferation of technical institutions, maintenance of standards and other related matters. The Working Group recommended that AICTE be vested with the necessary statutory authority for making it more effective, which would consequently require restructuring and strengthening with necessary infrastructure and operating mechanisms.

Pursuant to the above recommendations of the National Working Group, the AICTE Bill was introduced in both the Houses of Parliament and passed as the AICTE Act No. 52 of 1987. The Act came into force w.e.f. March 28, 1988. The
statutory All India Council for Technical Education was established on May 12, 1988 with a view to proper planning and coordinated development of technical education system throughout the country, the promotion of qualitative improvement of such education in relation to planned quantitative growth and the regulation and proper maintenance of norms and standards in the technical education system and for matters connected therewith.

The purview of AICTE (the Council) covers programmes of technical education including training and research in Engineering, Technology, Architecture, Town Planning, Management, Pharmacy, Applied Arts and Crafts, Hotel Management and Catering Technology etc. at different levels.

4.1.16.22 National Legal Service Authority, New Delhi

The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987 to provide free Legal Services to the weaker sections of the society and to organize Lok Adalats for amicable settlement of disputes.

Hon’ble Mr. Justice Tirath Singh Thakur, the Chief Justice of India is the Patron-in-Chief and Hon’ble Mr. Justice Anil R. Dave, Judge, Supreme Court of India is the Executive Chairman of the Authority. NALSA is housed at 12/11, Jam Nagar House, New Delhi-110011.

In every State, State Legal Services Authority has been constituted to give effect to the policies and directions of the NALSA and to give free legal services to the people and conduct Lok Adalats in the State. The State Legal Services Authority is headed by Hon’ble the Chief Justice of the respective High Court who is the Patron-in-Chief of the State Legal Services Authority.

In every District, District Legal Services Authority has been constituted to implement Legal Services Programmes in the District. The District Legal Services Authority is situated in the District Courts Complex in every District and chaired by the District Judge of the respective district.
4.2 LACK OF COORDINATION BETWEEN STAKEHOLDER DEPARTMENT AND INSTITUTIONS AT STATE LEVEL

In this chapter total fifteen departments observed and it is observed that not a single department is in coordination with other one i.e. after a grievous accident there is duty of concert police station to investigate. The investigation must be in scientific method after that second concert department is health and welfare department for emergency care, the insurance department will work on reports made by police and health department but there is no coordination between three of these departments. Following departments are working directly or indirectly with transport and road safety.

Role of the State Government

The State Government with the help of the lead agency and the stakeholders departments will plan organizing programs in the entire state. The Panchayati Raj Department will issue letters to all Gram Panchayats to ensure the availability of place and resources for conducting the program. The Urban Development Department (Local Self Government Urban) through Corporation or Municipality will issue directions in all wards or cluster of wards regarding the program. The Education Department will issue letters to all Elementary/Secondary /Higher Education Institutions to inform about this mission for conducting the program. The Police Department will coordinate with the lead agency and the above concerning departments and the concerning Head of the Police Station shall ask the Beat In-charge for successful implementation program in his area. Separate letters to all Police Stations shall be issued by the PHQ in this regards. Apart from that local fairs in villages could also be organized for awareness. Mobile Van/Bus’s registration etc. will be managed by lead agency of the state. Weekly analysis and reporting will be done by the NGO/Agency/Organization and will be submitted to the lead agency and police department. The lead agency shall ensure proper coordination and execution of program in their state and submit the report to the ministry.

Van/Bus will have to target 20,000 people in a year during fairs, carnivals and exhibitions and a minimum of 1500 to 2000 people per fair/carnival. Through
this mission total 900 programs per van/ bus will be organized in a year and around 2 crore (including fairs/ mass) people will get benefit and 10 crore in 5 years through 4500 programs per van/ bus and total 4,50,000 programs by all mobile van/ bus. At starting 15 days trainers training will be held for the trainers. Project will be target basis and result oriented

4.2.1 Transport Department

State transport department is for development and implementation of effective road safety policies. Accountability in meeting road safety objectives and to ensure the effective use of resources. Funds for road safety programs.

4.2.2 Police Department

Separate Traffic Police Stations to be established to deal with the traffic offences. Crime Police Stations and Traffic Police Stations to be made different entities. Even the surveillance systems should be separate. Crime surveillance and traffic surveillance should be done by individual cameras. Scientific crash investigation

4.2.3 Public Works Department

Improve the safety performance of the road network by ensuring that planning, design, construction and maintenance places a high priority on safety outcomes. Apply crash reduction and crash prevention techniques to create safer roads networks for the future. Review and safety audit existing, rehabilitated and new roads to eliminate unnecessary hazardous locations and misleading/absent markings.

4.2.4 Heath & Public Welfare Department

Ensure development of effective emergency medical/services. Advise patients on their fitness to use the road, including the effects of prescribed drugs and medication on road user performance. Provide feedback from injury assessment to improve vehicle occupant protection and road safety policy. Provide health promotion road safety programmes. Liaise with other practitioners in the road safety field to avoid duplication of effort.
4.2.5 Urban Development and Housing Department

Urban Development and Housing department is responsible for Development of Urban Sector of State. Urban Development & Housing (UDH) Department of state is committed for systematic planning and development of cities. As urbanization is taking place rapidly in state, its main motto is to make cities liveable that could become centres of growth.

4.2.6 Rural Development

Being the nodal Ministry for most of the development and welfare activities in the rural areas, the Ministry of Rural Development plays a pivotal role in the overall development strategy of the country. The vision and mission of the Ministry is sustainable and inclusive growth of rural India through a multipronged strategy for eradication of poverty by increasing livelihoods opportunities, providing social safety net and developing infrastructure for growth. This is expected to improve quality of life in rural India and to correct the developmental imbalances, aiming in the process, to reach out to most disadvantaged sections of the society. The Ministry of Rural Development consists of two Departments, viz.,
(i) Department of Rural Development, Department of Land Resources.

4.2.7 Law Department

Department of Law is a part of Ministry of Law & Justice as per the Allocation of Business Rules of State. It is one of the oldest Departments of State. The Law Department performs multifarious functions which are related to legal, administrative and the dispensation of administration of justice in the State. Files relating to legal opinion received from different Government Departments, Corporations and other Public Sector Undertakings are examined and legal opinion / advice tendered. Recommendations of various committees, commissions are also examined and agreement / deeds executed by the State Government with different organizations / bodies / companies etc. are drafted.

4.2.8 Department of Information and Public Relations

Department of Information & Public Relations (DIPR) acts as an important channel between the State Government and the people of the state.
The department is constantly working towards the dissemination of information to the people in regard to policies, public welfare decisions, schemes of the government. The main responsibility of the department is to publicize these schemes to ensure that maximum people are able to avail the optimum benefits of these schemes. The public welfare schemes of the Govt. are publicized through different means like display ads, short films, TV ads, radio ads, audio/visual vans, hoardings etc.

The dept. also uses various public relations levers like press releases, special articles, publications, press conferences, exhibitions etc. to ensure effective communication of Govt. initiatives. In addition, it is also the department's responsibility to convey the public sentiment & reactions, especially regarding grievances back to the government.

4.2.9 Insurance Department/Companies

Assist in the development, sponsorship and funding of crash prevention programmes. Provide premium incentives as a means of encouraging and rewarding safer behaviour. Provide feedback to government and regenerative crash trends and outcomes to assist in the further.

4.2.10 State Transport Undertaking

Offers low fares for passenger's everyday. Spacious and convenient Bus Stands with all amenities for waiting and in-transit passengers. Offers the only means of regularly scheduled intercity transportation to most cities, towns and small villages across the State and neighboring States. Offers reservation facilities for all deluxe and express buses. Provides additional seats during peak travel periods to accommodate passengers. As a socially conscious body offer concessions in fares and facilities to physically challenged. Offers concessional fare to the sick, freedom fighters, widows and families of soldiers who died in war.

4.2.11 NGOs Working in Road Safety

The role of NGOs in spreading public awareness about road safety issues and their participation in other road safety activities was also discussed in detail. The NGOs then shared their field experiences and suggestions with the forum.
4.2.12 Road Owning Agencies Except PWD

Public work department of state government is an agency working for road making and road and taking care of roads but other agencies except public work department which are stakeholders as making and care taking of roads at state level are not effectively playing their road for betterment of roads. There must be a transparent coordination with other stakeholders departments to improve roads.

4.2.13 Driving Training Institute Tier 1 and Tier 2 Level

Require all learner vehicles to display signs. Eduip learner and novice drivers with the necessary skills, attitudes and behaviour needed to drive safely on our roads. Maintain and foster a high standard of driver training, instruction and professionalism. Promote and foster the upgrading of driving skills amongst drivers, particularly drivers of heavy and public service vehicles.

4.2.14 Secondary Education Board

Make a formal commitment to promote effective road safety education in schools and pre-schools so that appropriate behaviour is fostered from early age. Develop links between schools and other agencies, such as the MOT, NRSC and police, in relation to road safety. Assist in the life-long education of road users.

4.2.15 State and District Legal Service Authority

Under Section 19 of Legal service authority Act 1987 Central, State, District and Taluk Legal Services Authority has been created who are responsible for organizing Lok Adalats at such intervals and place. Conciliators for Lok Adalat. Sitting or retired judicial officer, other persons of repute as may be prescribed by the State Government in consultation with the Chief Justice of High Court.

4.2.16 National Informatics Centre

National Informatics Centre (NIC) was established in 1976, and has since emerged as a "prime builder" of e-Government / e-Governance applications up to the grassroots level as well as a promoter of digital opportunities for sustainable
development. NIC, through its ICT Network, "NICNET", has institutional linkages with all the Ministries /Departments of the Central Government, 36 State Governments/ Union Territories, and about 688 District administrations of India. NIC has been instrumental in steering e-Government/e-Governance applications in government ministries/departments at the Centre, States, Districts and Blocks, facilitating improvement in government services, wider transparency, promoting decentralized planning and management, resulting in better efficiency and accountability to the people of India. "Informatics-led-development" programme of the government has been spearheaded by NIC to derive competitive advantage by implementing ICT applications in social & public administration.

4.3 INEFFECTIVE IMPLEMENTATION OF ROAD SAFETY LAWS

4.3.1 Institutional Mechanism

Section 215 of Motor Vehicle Act, 1988, Section 215 constitute committees regarding road safety in three stages central, states, district road safety committee.

Road Safety Councils and Committees

1. The Central Government may, by notification in the Official Gazette, constitute for the country a National Road Safety Council Consisting of a Chairman and such other Members as that Government considers necessary and on such terms and conditions as that Government may determine.

2. A State Government may, by notification in the Official Gazette, constitute for the State a State Road Safety Council consisting of a Chairman and such other Members as that Government considers necessary and on such terms and conditions as that Government may determine.

3. A State Government may, by notification in the Official Gazette, constitute District Road Safety Committee for each district in the State consisting of

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1 Motor Vehicle Act 1988
a Chairman and such other members as that Government considers necessary and on such terms and conditions as that Government may determine.

(4) The Councils and Committees referred to in this section shall discharge such functions relating to the road safety programmes as the Central Government or the State Government, as the case may be, having regard to the objects of the Act, specify.

4.3.1.1 National Road Safety Council

National Road Safety Council is the apex body for road safety established under Section 215 of Motor Vehicles Act 1988. It is chaired by Minister (RT&H) and Ministers-in-charge of Road Transport of States/UTs, DG Police of all States and representatives from the Ministries/Departments such as Home Affairs, Human Resource Development, Railways, Industry, Petroleum & Natural Gas, Environment & Forests, Health & Family Welfare etc. are official members.

S.215.(1) of Act states that the Central Government may by notification in the Official Gazette, constitute for the country a National Road Safety Council consisting of a Chairman and such other members as that government considers necessary and on such terms and conditions as that government may determine.

S.215(4) states that The Council shall discharge such functions relating to road safety programmes as the Central Government may, having regard to the objects of the Motor Vehicle Act, specify.

2. The Terms of Reference and functions of the present NRSC are as under:

(i) To advise on all matters pertaining to planning and coordination of policies, standards of safety in the road transport sector;

(ii) To formulate and recommend road safety programmes for implementation by State Road Safety Organizations as also other State Agencies in-charge of road transportation;

(iii) To suggest areas for research and development to improve safety aspects in the road transport sector including maintenance of statistics of road accidents and their analysis;
(iv) To generally oversee and monitor at the Central level, the road safety measures undertaken by State / UT agencies.

3. The National Road Safety Council (NRSC) was last constituted by the Ministry of Road Transport & Highways vide Gazette Notification dated 31.08.2015. The notifications in respect of the present are placed at annexure. The tenure of the co-opted institutional / individual members is for a period of two years from the date of issue of the Notification. The tenure of the non-official members / institutions of present NRSC will end on 30.08.2017. As per the Gazetted Notification, the NRSC meeting is to be held at least once a year.

4. So far, 16 meetings of NRSC have been held mostly in New Delhi except one in Shimla and another in Coimbatore. The details of NRSC meetings are as under:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Meeting</th>
<th>Date</th>
<th>VENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1st Meeting of NRSC</td>
<td>28.07.1987</td>
<td>New Delhi</td>
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<td>2.</td>
<td>2nd Meeting of NRSC</td>
<td>19.11.1988</td>
<td>New Delhi</td>
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<td>3.</td>
<td>3rd Meeting of NRSC</td>
<td>21.01.1993</td>
<td>New Delhi</td>
</tr>
<tr>
<td>4.</td>
<td>4th Meeting of NRSC</td>
<td>22.12.1994</td>
<td>New Delhi</td>
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<tr>
<td>5.</td>
<td>5th Meeting of NRSC</td>
<td>26.07.1997</td>
<td>New Delhi</td>
</tr>
<tr>
<td>6.</td>
<td>6th Meeting of NRSC</td>
<td>21.06.2001</td>
<td>New Delhi</td>
</tr>
<tr>
<td>7.</td>
<td>7th Meeting of NRSC</td>
<td>15.01.2004</td>
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</tr>
<tr>
<td>8.</td>
<td>8th Meeting of NRSC</td>
<td>28.01.2005</td>
<td>New Delhi</td>
</tr>
<tr>
<td>9.</td>
<td>9th Meeting of NRSC</td>
<td>05.11.2006</td>
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</tr>
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<td>10.</td>
<td>10th Meeting of NRSC</td>
<td>21.04.2007</td>
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</tr>
<tr>
<td>11.</td>
<td>11th Meeting of NRSC</td>
<td>28.01.2009</td>
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<tr>
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<td>12th Meeting of NRSC</td>
<td>25.03.2011</td>
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<td>14.</td>
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<td>New Delhi</td>
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<td>15.</td>
<td>15th Meeting of NRSC</td>
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<td>New Delhi</td>
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<td>16.</td>
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<td>New Delhi</td>
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<tr>
<td>17.</td>
<td>17th Meeting of NRSC</td>
<td>10-01-2017</td>
<td>New Delhi</td>
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</tbody>
</table>
4.3.1.2 State Road Safety Council

**State Road Safety Council** is the body to promote road safety in the states. The States could constitute State Road Safety Council under the Chairmanship of Chief Minister/Transport Minister/Home Minister/Chief Secretary whosoever possible. Road Safety and Traffic Management Committee could be formed under the District Collector. The provisions were made to improve the situation on road safety by taking actionable decisions on the burning issue. But carelessness and disinterest of the States was evident with the fact that after 1989 Uttar Pradesh and Bihar constituted State Road Safety Council in 1995 and 1996 respectively. State Road Safety Council was constituted in the remaining states after 10 to 15 years which indicates that neither the Central Government nor the State governments understood the gravity of the issue.

The detailed status of the State Road Safety Council is illustrated in the table given hereunder.

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### Status of the Road Safety Council in States

<table>
<thead>
<tr>
<th>S. No</th>
<th>State</th>
<th>State Code</th>
<th>Constituted / Reconstituted</th>
<th>Meeting’s Detail</th>
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<td></td>
<td></td>
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<td>In Year</td>
</tr>
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</tr>
<tr>
<td>2.</td>
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<td>2015</td>
</tr>
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<td>3.</td>
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<td>2014</td>
</tr>
<tr>
<td>4.</td>
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<td>Yes</td>
<td>1996/2012</td>
</tr>
<tr>
<td>5.</td>
<td>Chhattisgarh</td>
<td>CG</td>
<td>Yes</td>
<td>2001</td>
</tr>
<tr>
<td>6.</td>
<td>Delhi</td>
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<td>2005</td>
</tr>
<tr>
<td>9.</td>
<td>Haryana</td>
<td>HR</td>
<td>Yes</td>
<td>1998/2014</td>
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</table>

---

2 Ministry of Road Transport & Highways, New Delhi and websites of the State Governments.
<table>
<thead>
<tr>
<th>No.</th>
<th>State</th>
<th>Code</th>
<th>MP</th>
<th>Year(s)</th>
<th>Ministry/Position</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td>10</td>
<td>Himachal Pradesh</td>
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<td>Yes</td>
<td>2008/2014</td>
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<td>1</td>
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<tr>
<td>11</td>
<td>Jammu &amp; Kashmir</td>
<td>JK</td>
<td>Yes</td>
<td>2012/2014</td>
<td>Chief Secretary</td>
<td>-</td>
<td>2</td>
<td>02.08.2016</td>
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<tr>
<td>12</td>
<td>Jharkhand</td>
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<td>Yes</td>
<td>2015</td>
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<td>-</td>
<td>1</td>
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</tr>
<tr>
<td>13</td>
<td>Karnataka</td>
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<td>2013</td>
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<td>1</td>
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<tr>
<td>14</td>
<td>Kerala</td>
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<td>Yes</td>
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<td>18</td>
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<td>1</td>
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<td>1</td>
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<td>1</td>
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<td>23</td>
<td>Rajasthan</td>
<td>RJ</td>
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<td>1</td>
<td>20.06.2016</td>
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<td>1</td>
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<tr>
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<td>2007</td>
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<td>No</td>
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<tr>
<td>26</td>
<td>Telangana</td>
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<td>2015</td>
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<td>2</td>
<td>1</td>
<td>11.08.2016</td>
</tr>
<tr>
<td>27</td>
<td>Tripura</td>
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<td>2015</td>
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<td>21.06.2016</td>
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<tr>
<td>29</td>
<td>Uttar Pradesh</td>
<td>UP</td>
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<td>1995/2014</td>
<td>Transport Minister/Chief Minister</td>
<td>No</td>
<td>1</td>
<td>03.06.2016</td>
</tr>
<tr>
<td>30</td>
<td>West Bengal</td>
<td>WB</td>
<td>Yes</td>
<td>2015</td>
<td>Chief Secretary</td>
<td>1</td>
<td>2</td>
<td>22.08.2016</td>
</tr>
</tbody>
</table>
4.3.1.3 District Road Safety Committee

District Road Safety Committee is to be chaired by the District Collector at each district of the state and is to be scheduled every quarter. All stakeholder departments/ institutions are the members of these meetings. Since the meetings are not being scheduled in many states while some states have not even constituted the committee, the Supreme Court Committee on Road safety has taken a serious view and directed the states to hold these meetings on monthly basis and report back to the committee with the decisions taken.

4.3.2 Formulation and Adoption of Target Based State Road Safety Policy

Ministry of Road Transport and Highway formulate target based stated road safety policy for better in implementation of road safety laws in India it was directed by hon'ble supreme court. Twenty four states in India already declare policy regarding road safety. It is important because, it is target based every state have to submit data regarding road safety to the center government.

The policy made by ministry road transport and highway no doubt is a good start-up for betterment. It is not effected without an action plan there is no time limit to submit data to the center government. It is lack of awareness and knowledge of techniques which are not used by stakeholders.

4.3.3 Annual Target Based Road Safety Action Plan Road Safety Audit


This is regarding issuing of necessary guideline for framing the guideline by states. Kind attention is invited to the UNO’s Decade of Action for Road Safety 2011 to 2020 for bringing down the rate of accident/fatalities due to road accidents by 50% by the end of the year 2020.
It is totally based on data collection. The international action plans are target based. Target are collected by the grass root level force which is police. Indian police is not divided in two parts like America so there no civil police which is for enforcement order law and order. They are not trained for scientific investigation and the data collection is depends on scientific investigation. The police is collecting data for crime and they have the same method to collect data for road accidents without any scientific equipment. So, it is ineffective and inadequate policies.

Figures show that the number of accidents in the year 2010 were 499628 whereas in the year 2015 the figure has gone up to 501423. Similarly, the number of persons who died in road accidents in the year 2010 were 134513 whereas, the figure has gone up in the year 2015 to 146133.

It is pertinent to submit that a review meeting was held in November, 2015 in Brazil. In the Brasilia Declaration India has agreed that by the end of the year 2020, it will take necessary steps for reducing accidents and fatalities to fifty percent. Hon'ble Supreme Court Committee on Road Safety has also directed this Ministry to reduce the road accidents and fatalities by fifty percent by the end of the year 2020.

Accordingly, a Draft Action Plan based on the six pillars of road safety recommended by the United Nations was prepared by this Ministry and was circulated to all the States in December, 2013. The States were asked to fix specific targets for each activity and identify nodal agencies for those activities. They were also asked to allocate resources for implementation. However, 24 States have submitted their action plans which were not Annual Target Based. Meanwhile, a meeting was convened by the Supreme Court Committee on Road Safety on 31.08.2016 with participation of this Ministry and Ministry of Home Affairs to review the follow up actions taken on the directions given in the earlier meetings. Accordingly, a review meeting on the directions of the Supreme Court Committee was convened on 02.09.2016 with all Transport Secretaries of States/UTs. In the meeting, they were requested to comply with the 14 directions given to the States/UTs. They were also asked to fix Annual Targets for reduction.
of accidents & fatalities to achieve 50% reduction in accidents/fatalities by end of the year 2020. They were also requested to prepare year-wise Action Plans for achieving the targets. A D.O. letter from Secretary, MoRTH to all Chief Secretaries has been issued on 31.10.2016 for implementation of the 14 directions given to the states and also to prepare year-wise Action Plans.

Thereafter, an affidavit on behalf of the ATR of States/UTs was filed on 07.11.2016 before the Hon’ble Supreme Court. The Committee has also given directions to this Ministry which are reproduced as under:

a) Examine Road Safety Action Plans sent by the States and forward comments to the Committee.

b) Require the States to set annual targets for reduction of accidents and fatalities and prepare Action Plans without further delay to achieve targets.

c) Draw an Action Plan for reduction of road accidents and fatalities in consultation with States.

In compliance to the above directions, this Ministry has filed an affidavit before the Hon’ble Supreme Court on 02.12.2016 and also assured the Road Safety Committee for submitting the Action Plans as soon as the same are received from the States/UTs probably by end of March, 2017. In this regard, it is submitted that despite Ministry's sponsored Workshops held in 11 States with all the stakeholder Departments and Institutions on road safety awareness, none of them have submitted their revised target oriented Action Plans till date.

Since, we are left with only 4 years (2017 to 2020) to achieve the target of 50% reduction in Road accidents/fatalities, it is very much required to urgently get the States/UTs prepare target oriented resource backed action plans in different action areas of Road Safety to move towards the set target.

For successful implementation of model Action Plan proposed the following guidelines are suggested:

a) Plan Years 2017 to 2020 may be declared as a Special Road Safety Years and special drives in all the areas of Road Safety shall be launched to implement the action plans in their true letter & spirit.
b) Ensure and improve various Road Safety Standards (IRC Standards, AIS Standards, Road User Standards, BIS Standards) and monitor them.

c) The States may also monitor road accidents through a Research Team of the Lead Agency district-wise and police station wise. This monitoring should be aimed at assessing the feedback on the implementation of the action plan.

UNO has declared Decade of Action for Road Safety during 2011-2020 and set a target to bring down the road accident and road accident fatalities by 50% by 2020. India has also accepted the target set by UNO.

However, in our country, instead of reducing, road accident as well as road accident fatalities has increased. In 2010, there were 499628 accidents which has increased to 501423 in 2015. The road accident fatalities were 134513 in 2010 which has increased to 146133 in 2015.

2nd Global High-Level Conference on Road Safety was organized 18-19 November 2015 in Brasilia, Brazil by World Health Organization (WHO). At the close of the Conference, around 2200 delegates adopted the “Brasilia Declaration on Road Safety” through which they agreed ways to halve road traffic deaths by the end of this decade. The Government of India is also committed to achieve this target. Hon'ble Supreme Court Committee on Road Safety has also directed to reduce the road accidents and deaths by fifty percent by the end of 2020.

**Aims, Objectives & Theme:**

MoRTH has issued a comprehensive Pillar-wise Action Plan for implementing Road Safety measures across the country in all the States and UTs in order to reduce down the accident & death rate. The States were asked to fix specific targets for each activity to identify nodal agencies for each activity and to allocate resources for implementation. 24 States have submitted their action plan but annual target to reduce the fatalities set. A meeting was held by the Supreme Court appointed Committee on Road Safety on 31.08.2016 with this Ministry and Ministry of Home Affairs. During the meeting, the Committee issued direction to revise the action plan and it should be based on the annual targets. It was also directed to MoRTH to issue necessary guidelines to States for preparing the Annual Plan.
4.3.4 Ineffective Notified Lead Agency with Adequate, Dedicated and Professional Staff

Road safety is a multi department service which is most important for a common road user it depends on not only law and order but on insurance public work department, education department. These are the pillars which makes road safety easier. But there is lack of an agency which lead all these agencies. There is not only need to established this kind of lead agencies but it is important to implement the work of agencies through adequate, dedicated professional staffs. The motor vehicle 1988 provides through its some of sections that there must be professional staffs but the gazette notification still awaited.

4.3.5 Creation of Separate Dedicated Road Safety Fund

Every development depends on budget. Road safety is a curriculum their the problem of development is separate fund. The center government is not creating any kind of separate dedicated road safety fund to improve road safety programms like. Road safety education and awareness, road safety awareness camps mobile launched, mobile van, Mass programms had grass root.

4.3.6 Road Engineering Measures (Traffic Calming, Black Spot Identification and Rectification, Road Safety Audit)

Protocol for identification and rectification of road accident black spots on National Highways. The present Road Safety scenario on road network in general and on National Highways in particular with a high rate of accidents leaves much to be desired. Though the roads especially National Highways were expected to be developed adopting all Safety Engineering measures including design stage Road Safety Audit at the time of preparation of DPRs and Pre-opening stage Road Safety Audit after completion of the development work,, a significant number of locations even on NHs have remained prone to accidents on the road network in the country including NH network which has already been developed in one scheme or the other, due to several reasons and constraints in the development and maintenance. For improvement of such locations a systematic approach is required which includes a common definition for road accident black spots on
NHs and a sequence of actions with time frame for removal of those black spots. For this purpose the following is the protocol for road accident black spots on National Highways.

Definition of Road Accident Black spot on National Highways: Road Accident Black spot is a stretch of National Highway of about 500m in length in which either 5 road accidents (in all three years put together involving fatalities/grievous injuries) took place during the last 3 calendar years or 10 fatalities (in all three years put together) took place during the last 3 calendar years.

Remedial measures for Rectification of Road accident black spots on NHs: The concerned executing agency should take necessary actions for preliminary inspection, framing of proposal and obtaining of approvals/sanctions as per the guidelines given in OM No RW/NH-15017/ 109/2015 / P&M (RSCE) dated 08.10.2015 and obtain sanctions/approvals for rectification of the accident black spots identified based on accident details of a particular Calendar year by 31st March of the next to subsequent Calendar year (For example sanctions of remedial measures for black spots based on road accident data of the year 2015 by 31st March 2017) The execution of the remedial measures including acquisition of the land for implementation of the road safety measures for removal of black spots should be taken up on top priority and should be completed in minimum possible time commensurate with the size/complexity of the remedial measures as per the respective contract conditions. In any case, short term measures like installation of road signs, road markings, speed reduction measures and repair of damages causing unsafe conditions on the National Highway shall be taken up immediately and completed within 3 months of identification of the road accident black spot. The progress of the execution of these remedial measures should be regularly (on quarterly basis) reported to Road Safety Cell (Engineering) of Ministry of Road Transport & Highways.

Feedback on effectiveness of remedial measures taken:

Concerned executing agencies who executed the remedial measures should obtain Road accident data of the location/stretch where remedial measures are
executed, from concerned Police Authorities on a calendar year basis after the remedial measures are executed and should communicate to the Road Safety Cell (Engineering) by 31st March of the subsequent calendar year till 3 years after completion of remedial measures or the declaration of the remedial measures as effective by Road Safety Cell (Engineering) whichever is later.

4.3.7 Ineffective and Transparent Driving Licensing System

The licensing system in India is not effective. A license which confiscate by authority then the person can issues new license from another district or from another state so licensing system must be unified as a whole. The act must provide strict penal provisions regarding licensing disorder. People are making license from different name and some time it is observed that one person having more than two licenses. The system for making driving licenses is not transparent and the test for driving license is not effective.

4.3.8 Ineffective and Transparent Registration System

The transport registration system in India is not unified. The system is not transparent and not effective. At the first when a vehicle come out from manufacture it must be tested and having certificate for registration and it must be required at the time the vehicle modified but their no effective provisions for such kind of registration in India. Neither the supreme court nor the ministry of road transport and highways is thinking about an effective registration system.

4.3.9 Ineffective and Transparent Permit System

There are some permits which are initially issue by one state and letter on endorsed in another state by the concern state or regional transport authority under Section 88 of the motor vehicle Act i.e. National permit, Auto riksha and taxi permit, maxi cabs, stage carriage permit, temporary permit, rent a cab permits, institution / school bus permit and all India tourist permit but the permit system is not effective and transparent.

4.3.10 Implementation of Vahan 4.0 and Sarathi 4.0 Software

Vaahan for the ministry of road transport and highways has been facilitative computerization of 975 road transport officers across the country. RTO’s issue registration certificate (RC, Driving License) these are valid across
the country. The ministry entrusted national informative center the task to establish and deploy the software VAHAN for vehicle registration and SARATHI for driving licenses for compilation of data with respect to vehicle registration and driving licenses of all the states in state registered and national registered.

The Vahan are Sarathi conceptualized to capture the functionalities as mentioned by center motor vehicle act 1988 as well as state motor vehicle rules with customization in the core product to suite the requirements of 33 states.

4.3.11 Poor Road Safety Law Enforcement

The first meeting of the Working Group Committee was held on 24.05.11 at Transport Bhavan, Sansad Marg, New Delhi. The second meeting of the Working Group Committee was held in Bangalore on 13.06.11. On 30.06.11, Shri S.T. Ramesh, DG & IG Karnataka Police retired from service. The remaining members of the Committee met on 26.09.11 at Transport Bhawan, Sansad Marg, and New Delhi to finalize the recommendations of the Committee.

Road Safety Scenario in the country

In the year 2001, there were 4,05,637 accidents out of which 71,219 were fatal accidents. In these accidents, 80,888 people got killed and 4,05,215 were injured. This figure of accidents has been climbing up consistently and according to provisional figure of 2009, there were 4, 86,384 accidents in the year out of which 1, 10,993 were fatal accidents. 1,25,660 persons were killed in these accidents and 5,15,458 people were injured. While India used to be behind China in number of accidents and fatalities, now India has the dubious distinction of having highest number of accidents and fatalities on the roads. This trend needs to be reversed with all round improvement in the way the traffic and transport is managed in the country. Based on the three meetings, the Committee is of the view that there are certain things which need to be done immediately while others can be done in a long term perspective.

4.3.12 Poor Inspection of Vehicle during Registration and Fitness

The vehicle population has grown rapidly considering India being one of the fastest growing economies. Vehicle fitness and certification process are decade
old and became totally failure in concern with the current scenario a structural vehicle inspection and certification regime would not only take polluting old generation vehicle of the roads but also increase the sale of new generation high technology new vehicle. Public safety is to most important argument for the implementation of inspection and certification centers. Basic safety aspects of the vehicle like break, speedometer, headlight, underbody inspection and exhaust emission are tested / inspected and certified in the instruction and certification centers. Reliable law concerning vehicle testing should be implemented and more important strongly accomplished.

4.3.13 Poor Testing System of License Applicant

The driving license is the only official document which authorized a person to operate motor vehicle. In various Indian states they are administrative by the regional transport authorities / officers. There various kind of driving licenses i.e. MC 50CC, MC EX50CC, FVG-Motorcycle, LMV, LMV-NT, LMV-RT, HJV, HPMV, HTV, TRAILOR.

Tests on basic driving rule are conducted at the Regional Transport Officers when an individual applies for provisional licenses. The theoretical test consist basic road sign question, which are the same car and motorcycle test. There are multiple choice questions including 20 with a choice of possible answers. At least 8 questions should be answer correctly to pass the section. Verbal or written test (Depending on the state) the theory test are completed on the computer, and both must be passed in order to pass the theory test. The testing system is inadequate and insufficient.

4.3.14 Scientific Investigation, Reconstruction and Analysis for Road Accident

The problem of accident is a very acute in highway transportation due to complex how pattern of vehicular traffic, presence of mixed traffic along with pedestrians. Traffic accident leads to loss of life and property. Thus the traffic engineers have to undertake a big responsibility of providing safe traffic movements to the road users and ensure their safety. Road accidents cannot be
totally prevented but by suitable traffic engineering and management the accident rate can be reduced to a certain extent. For this reason systematic study of traffic accidents are required to be carried out. Proper investigation of the cause of accident will help to propose preventive measures in terms of design and control.

**Accident investigation**

The accident data collection involves extensive investigation which involves the following procedure:

1. **Reporting:** It involves basic data collection in form of two methods:
   a) **Motorist accident report** - It is field by the involved motorist involved in all accidents fatal or injurious.
   b) **Police accident report** - It is field by the attendant police officer for all accidents at which an officer is present. This generally includes fatal accidents or mostly accidents involving serious injury required emergency or hospital treatment or which have incurred heavy property damage.

2. **At Scene-Investigation:** It involves obtaining information at scene such as measurement of skid marks, examination of damage of vehicles, photograph of final position of vehicles, examination of condition and functioning of traffic control devices and other road equipments.

3. **Technical Preparation:** This data collection step is needed for organization and interpretation of the study made. In this step measurement of grades, sight distance, preparing drawing of after accident situation, determination of critical and design speed for curves is done.

4. **Professional Reconstruction:** In this step effort is made to determine from whatever data is available how the accident occurs from the available data. This involves accident reconstruction which has been discussed under Section No.7 in details. It is professionally referred as determining behavioral or mediate causes of accident.

5. **Cause Analysis:** It is the effort made to determine why the accident occurred from the data available and the analysis of accident reconstruction studies.
Accident data analysis

The purpose is to find the possible causes of accident related to driver, vehicle, and roadway.

Accident analyses are made to develop information such as:

1. Driver and Pedestrian - Accident occurrence by age groups and relationships of accidents to physical capacities and to psychological test results.

2. Vehicle - Accident occurrence related to characteristic of vehicle, severity, location and extent of damage related to vehicles.

3. Roadway conditions - Relationships of accident occurrence and severity to characteristics of the roadway and roadway condition and relative values of changes related to roadways.

4. It is important to compute accident rate which reflect accident involvement by type of highway.

5. These rates provide a means of comparing the relative safety of different highway and street system and traffic controls. Another is accident involvement by the type of drivers and vehicles associated with accidents.

Accident reconstruction

Accident reconstruction deals with representing the accidents occurred in schematic diagram to determine the pre-collision speed which helps in regulating or enforcing rules to control or check movement of vehicles on road at high speed.

The following data are required to determine the pre-collision speed:

1. Mass of the vehicle

2. Velocities after collision

3. Path of each vehicle as it approaches collision point

Below in Figure 42:4 a schematic diagram of collision of two vehicles is shown that occur during turning movements. This diagram is also known as
collision diagram. Each collision is represented by a set of arrows to show the direction of before and after movement. The collision diagram provides a powerful visual record of accident occurrence over a significant period of time. The collision may be of two types collinear impact or angular collision. Below each of them are described in detail. Collinear impact can be again divided into two types : 1. Rear end collision, 2. Head-on collision.

It can be determined by two theories: 1. Poisson Impact Theory, 2. Energy Theory.

This chapter provides an important subject of highway safety and accident studies. Everything a traffic engineer does, from field studies, planning and design; to control operation is related to the provision of the safety system for vehicular travel. This chapter gives an insight of how the analysis of traffic accident can be done from the viewpoint to reduce it by designing proper safety measure.

4.3.15 Strengthening of Public Transport

Promote Subsidiary Public Transport in India

The transportation system, whether passenger or goods transport, plays the essential role of a catalyst in for the all round development of the country. There are varied means goods transport are available in India and they are in abundance. But the condition of application and availability of public transport in India is worse, especially in the rural areas. It is the fact that eighty percent of the population still resides in rural areas in India and most of them transit to urban areas for higher education or employment.

A huge population on daily basis travels from rural to urban area and vice a versa and it is unfortunate to know that the condition of public transport is pathetic in India. To motivate the mass at large for the optimum utilization of public transport the government would have to introduce a mass campaign, providing comprehensive subsidized means of public transportation.
The Intra-city Transport Medium & Prevailing Issues

The level one of the passenger transportation system to move within the boundaries of a city comprise of the following modes: Bus Rapid Transit System (BRTS), City Buses, Mini / Private Buses, Tempo, Auto Rickshaw, E-Rickshaw.

If we analyze the each mode then we find that a lot of problems are associated with each transport method. Let’s discuss each mode separately.

**BRTS & City Bus:** The facility is not available in every city. The large cities which are densely populated such as the state capitals and level B cities mostly have city buses. In few cities of India BRTS have been introduced but it has not gained considerable success in many cities.

The implementation BRTS involves construction of the designated infrastructure and BRTS corridors across the city which also has certain drawbacks that cannot be ignored:

i) Heavy infrastructure cost

ii) Space for building the designated BRTS corridors

iii) Cannot be implemented in congested areas

In the similar tune the city buses that ply in the city also have few drawbacks:

i) Not enough frequency to cater the passenger load

ii) No pre determined schedule

**Mini / Private Bus:** The cities where BRTS or City buses are not there the public transport is carried through the private buses or mini buses. In big cities private buses also run along with the government buses as the city buses alone cannot cater the passenger load alone. In these buses more people travel then designated seating capacity and they are fabricated to accommodate the crowd. Such passenger vehicle poses severe threat in terms of safety of the passengers. Surprisingly, no vehicle is fabricated keeping the AIS standard in view. Apart from safety these private buses do not complies the standard fare policies prescribed by the Transport Department of that state.
**Tempo:** These are the three wheeled vehicle that run mostly for short routes of eight to ten kilometers. Although they run at slow as compared to the buses but they are more prone to road accidents. The emission generated from the tempos is highly toxic and polluting.

**Auto Rickshaw:** This mode is highly compatible as compared to availability because they are available in abundance. Since they offer private mode of travelling hence they are expensive. Despite the prescribed schedule of tariff they charge out of the limits during the off hours.

**E-Rickshaw:** This is the new mode of transport which is gaining popularity and replacing the man pulled rickshaw. They do not cause noise and air pollution and more convenient for travelling short distance ranging up to five kilometers. Since they are not covered under the existing Motor Vehicle Act 1988, they pose a serious threat for other road users as they are not governed by any law and they are least bothered about the traffic and obeying traffic rules.

Now, besides the issues discussed above, we come up to a concrete conclusion that the mostly people prefer to travel on their own vehicle due to several reasons. Some of them could be recapitulated as:

i) Personal vehicle saves time and the rider is free to choose his/her own route of traveling.

ii) Personal vehicle could be used anywhere anytime at the same cost.

iii) Easy finance schemes have made the purchase of vehicle in everybody’s reach.

iv) At times personal vehicle costs less than using the public transport.

Day by day increasing use of personal vehicles is increasing the traffic congestion on the road and cause air and noise pollution. Few big cities including Delhi and Bangalore have crossed the level of air pollution. The contamination alone causes twenty-five deaths per day in Delhi alone.

**Intercity and Interstate Road Transport India**

The intercity and interstate passenger transport that is chiefly accessed by the mass after railways is State Carriage Buses and private owned vehicles e.g.
buses, traveler and taxis. The private buses ply from one city to other on a set schedule. Private taxis could be hired on demand but they are costly affair and out of reach of the common man.

With the evolving technology and reach of smart phones in every hand has opened a huge market of downloadable mobile apps. Android in the race tops the chart after IOS. The flooding android apps has scintillated and ignited the brain of young entrepreneurs in the country. With the advent of the mobile apps like OLA and Taxi For Sure and Jugnoo etc has revolutionized the transportation market.

Where searching and hiring an auto rickshaw erstwhile had been a tedious task, air conditioned taxis has become approachable by simply tapping at once on the mobile screen and that even too in a bare minimum cost of Rs. 5/- per kilometers.

No doubt the technology has revolutionized the private cab, taxi and auto rental system but the condition of the transport services of State Carriage Buses and Private buses has not much evolved except introducing the Ticket Reservation System.

Like the other mobile apps, the interstate and intercity transport has to be made transparent and answerable. The commuter must be able to locate the bus on his mobile screen which he is supposed to travel.

On the contrary the condition of State Carriage Buses in almost all the state is really worse. According to the Review of the Performance of the State Road Transport Undertakings for April 2014 to March 2015 issued by the Ministry of the Road Transport & Highways (Transport Research Wing), New Delhi, it says

There are total forty six SRTUs with a total of 1,40,497 buses, The number of persons per SRTU bus is high as 7606 and the number of buses per ten lakh population is only 131 according to the population fleet and population of India recorded in 2014, Number of buses per thousand persons in India is only 2. Australia and Brazil top the chart with 4 buses per thousand persons, The average age of the fleet of the SRTU lies between 2 years to 11.8 years. Bihar has highest
proportion of over-aged buses (100%). Whereas BEST Undertaking, Pune Mahamandal did not have over-aged buses in their fleet. The average occupancy ratio recorded as 69% and total revenue collection is Rs 51,033.53 crores, The complete list of the SRTU’s operating in India is given hereunder.

**Transportation System in Rural Areas**

The transportation system in the suburbs of the country is considered worse as compared to the facilities available in the urban areas. People in these areas also use personal vehicles for movement from villages to cities and vice versa.

The excessive usage of highways, lack of traffic rules and not using safety measure turn these road users the most vulnerable. The lack of road network connecting villages to the adjacent cities is one of the major causes of non-availability of public transport vehicles.

Buses that ply to the rural areas are very fewer in number and mostly run on fitness certificate obtained without the auditing the physical condition of the bus. Such endangered vehicles on the road pose a mass threat when an accident occurs.

Apart from these vulnerable buses, people have developed way of doing business by plying their personal vehicles such as jeeps for carrying the passenger load. The personal jeeps and SUVs generally have the passenger capacity of 5 to 8 persons excluding the driver. But these vehicles ply overcrowded with 25 to 30 passengers per vehicle. The sheer sight of the passengers traveling on these vulnerable transport medium could raise anyone’s goose-bumps.

After these jeeps and SUV the next most vulnerable vehicle that runs on rural roads is actually not at all a vehicle rather a fabricated machine that people use for traveling. They call it as *Jugaad* in their local language. These are manmade vehicles which are fabricated by the locals thus by fitting a regular diesel engine. A separate trolley is attached to the main vehicle which is used to carry the passengers. These are the unauthorized vehicles that run without being registered. Driving these vehicles on road is most dangerous as they carry horde of passengers and its mechanism could fail at any moment.
4.4 LACK OF LAW REGARDING NON MOTORIZED VEHICLE

Roads are not only for motorized vehicle but non motorized vehicle also. Non motorized vehicle includes all road users other than machines non as most important transportation vehicles. The roads are arguably the most important public spaces in urban and rural areas and pedestrian are its largest user, but less than 30 percent urban roads in India have footpaths in the last few years, pedestrian fatalities have accounted increased of all road accident death in urban areas.

4.5 INADEQUATE SAFETY MAJORS FOR VEHICLE ENGINEERING

The problem of accident is a very acute in highway transportation due to complex flow pattern of vehicular traffic, presence of mixed traffic along with pedestrians. Traffic accident leads to loss of life and property. Thus the traffic engineers have to undertake a big responsibility of providing safe traffic movements to the road users and ensure their safety. Road accidents cannot be totally prevented but by suitable traffic engineering and management the accident rate can be reduced to a certain extent. For this reason systematic study of traffic accidents are required to be carried out. Proper investigation of the cause of accident will help to propose preventive measures in terms of design and control.

Accident Studies Visual guidance to driver there is consecutive change of picture in drivers mind while he is in motion. The number of factors that the driver can distinguish and clearly fix in his mind is limited.

Factors relating to the road elements of road that directly affect the driving of a vehicle are traffic signs, changes in direction of road, three legged intersection and various other things. Factors connected with traffic Other vehicles, cycles, pedestrians. Factors related indirectly to the vehicle motion Building and structures that strike the eye, vegetation, landscape, etc.

Contrast in visibility of the road should be achieved by provision of elements that differ from its surrounding by colors, pattern such as shoulder strips, shoulder covered with grass, edge markings.

Providing road side vegetation is an effective means. The visibility of crown of trees from a distant location is also very useful in visual guiding.
The provision of guard rails of different contrasting colors also takes drivers attention and prevent from monotonous driving.

Planting trees along side of roadway which has a turning angle attracts attention of the driver and signals that a turn is present ahead. The figure below is another example, when the direction of road has a hazardous at-grade intersection trees are planted in such a way that it seems that there is dense forest ahead and driver automatically tends to stop or reduce the speed of the vehicle so that no conflicts occur at that point. Driver tends to extrapolate the further direction of the road. So it is the responsibility of the traffic engineer to make the driver psychologically confident while driving that reduces the probability of error and prevent mental strain.

4.5.1 No Crash Test / Assessment System of New Manufactured Vehicle

A crash test is a form of destructive testing usually performed in order to ensure safe design standards in crashworthiness and crash compatibility for various modes of transportation or related systems and components.

Types

- **Frontal-impact tests**: which is what most people initially think of when asked about a crash test. These are usually impacts upon a solid concrete wall at a specified speed, but can also be vehicle-vehicle tests. SUVs have been singled out in these tests for a while, due to the high ride-height that they often have.

- **Moderate Overlap tests**: in which only part of the front of the car impacts with a barrier (vehicle). These are important, as impact forces (approximately) remain the same as with a frontal impact test, but a smaller fraction of the car is required to absorb all of the force. These tests are often realized by cars turning into oncoming traffic. This type of testing is done by the U.S.A. Insurance Institute for Highway Safety (IIHS), Euro NCAP, Australasian New Car Assessment Program (ANCAP) and ASEAN NCAP.
- **Small Overlap tests**: this is where only a small portion of the car's structure strikes an object such as a pole or a tree, or if a car were to clip another. This is the most demanding test as it loads the most force onto the cars structure at any given speed. These are usually conducted at 15-20% of the front vehicle structure.

- **Side-impact tests**: these forms of accidents have a very significant likelihood of fatality, as cars do not have a significant crumple zone to absorb the impact forces before an occupant is injured.

- **Roll-over tests**: which tests a car's ability (specifically the pillars holding the roof) to support itself in a dynamic impact. More recently dynamic rollover tests have been proposed as opposed to static crush testing (video).

- **Roadside hardware crash tests**: are used to ensure crash barriers and crash cushions will protect vehicle occupants from roadside hazards, and also to ensure that guard rails, sign posts, light poles and similar appurtenances do not pose an undue hazard to vehicle occupants.

- **Old versus new**: Often an old and big car against a small and new car, or two different generations of the same car model. These tests are performed to show the advancements in crashworthiness.

- **Computer model**: Because of the cost of full-scale crash tests, engineers often run many simulated crash tests using computer models to refine their vehicle or barrier designs before conducting live tests.

- **Sled testing**: A cost-effective way of testing components such as airbags and seat belts is conducting sled crash testing. The two most common types of sled systems are reverse-firing sleds which are fired from a standstill, and decelerating sleds which are accelerated from a starting point and stopped in the crash area with a hydraulic ram.

### 4.5.2 Inadequate Global Standard Inspection and Certification Center

The automotive industries are extremely competitive. To ensure success, manufactures and suppliers, must demonstrate exemplary safety standards, sustainable quality and operational excellence. Many countries insist that motor
vehicle complied with national environmental and safety standards and they are now becoming more focus on implementing legislation to reduce road accidents and the environmental impact of non complaint vehicle. India is not following the global standards of inspection and certification standards whether manufactures are compelled to adhere to strict quality test, inspection and procure universally accepted certification for participating in the international trade. This factor will stimulate the increased adoption of testing, inspection and certification services across industries such as food and beverage, oil and gas, automotive, aerospace and textiles in the next few years.

4.6 INCREASING NUMBER OF ACCIDENTS AND FATALITIES

The Minister of Road Transport & Highways Shri Nitin Gadkari launched the report “Road Accidents in India 2015” in New Delhi today. Road accidents have emerged as a major public health problem globally, and more so in India where almost 5 lakh accidents occurred last year, killing 1,46000 people and leaving thrice the number injured. With one of the highest motorization growth rate in the world, accompanied by rapid expansion in road network and urbanization over the years, our country is faced with serious impacts on road safety levels.

According to the report compiled by the Transport Research Wing, the total number of road accidents increased by 2.5 per cent from 4,89,400 in 2014 to 5,01,423 in 2015. The total number of persons killed in road accidents increased by 4.6 per cent from 1,39,671 in 2014 to 1,46,133 in 2015. Road accident injuries have also increased by 1.4 per cent from 4,93,474 in 2014 to 5,00,279 in 2015. The severity of road accidents, measured in terms of number of persons killed per 100 accidents has increased from 28.5 in 2014 to 29.1 in 2015.

The analysis of road accident data 2015 reveals that about 1,374 accidents and 400 deaths take place every day on Indian roads which further translates into 57 accidents and loss of 17 lives on an average every hour in our country. About 54.1 per cent of all persons killed in road accidents were in the 15 -34 years age group during the year 2015.
Thirteen top states namely Tamil Nadu (69,059), Maharashtra (63,805), Madhya Pradesh (54,947), Karnataka (44,011), Kerala (39,014), Uttar Pradesh (32,385), Andhra Pradesh (24,258), Rajasthan (24,072), Gujarat (23,183), Telengana (21,252), Chattisgarh (14,446), West Bengal (13,208) and Haryana (11,174) together accounted for 86.7 per cent of all road accidents in the country. Around 83.6 per cent of all road accidents fatalities also occurred in the top thirteen states.

4.7 IMPLEMENTATION OF GOOD SAMARITAN LAW/GUIDELINES

The concerned Police official(s) shall allow the Good Samaritan to leave after having informed the Police about an injured person on the road and no further questions shall be asked if the Good Samaritan does not desire to be a witness in the matter.

Examination of Good Samaritan by the Police

- Incase a Good Samaritan chooses to be a witness, his examination by the investigating officer shall, as far as possible, be conducted at a time of his convenience such as his place of residence or business and the investigation officer shall be dressed in place clothes unless the Good Samaritan chooses to visit the police station.

- Incase the Good Samaritan chooses to visit the Police Station, he shall be examined in a single examination in any reasonable and time bound manner without causing any undue delay.

4.8 LACK OF POLITICAL WILL

"The losses due to road accidents have crossed Rs1 trillion annually. The sad part is the establishment knows it. These figures are present in their own records and despite this, there's no political will to resolve the problem," K.K. Kapila.³

According to Planning Commission studies, the total losses to the economy due to road accidents in 1999-2000 were Rs550 billion, some 3 per cent of the country's GDP. The losses take into account victim-related costs, property

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³ President of International Road Federalism
damage and administrative costs. He said stringent checks should be established to curb rising drunken driving.

"The Supreme Court judgement calling for stringent punishments for drunken driving, especially when the driver kills someone, is exemplary but we need to follow the ruling in letter and spirit."

However, "the entire environment is polluted", he claimed, citing short tempers on roads and low regard for traffic rules, by both motorists and pedestrians. The National Crime Records Bureau (NCRB) says 130,000 people were killed in road accidents in 2010. At a recent conference on road safety, Delhi Joint Commissioner of Police (Traffic) Satyendra Garg agreed that many of the penalties set by the Motor Vehicle Act of 1988 were outdated. Giving last year's data, Garg said police arrested some 800,000 traffic violators but archaic penalties are not enough to deter the culprits. The lack of regard for traffic rules and nominal fines are just part of the bigger jigsaw puzzle, said Harman Singh Siddhu of Arrive Safe, a non-government organisation working for road safety.

"The UN declared 2011-2020 as ‘Decade of Action for Road Safety’. But not even a token event was held in India. This shows our [lack of] seriousness about the issue."

The National Road Safety and Traffic Management Board Bill has yet to see the light of day, even though "India accounts for about 10 per cent of road accident fatalities, despite having only 1 per cent of the world's vehicle population". The bill seeks to establish a panel for the development and regulation of road safety, traffic management system and safety standards in highway design and construction.

4.9 LACK OF DEDICATED ENFORCEMENT AGENCY

There is a need for constituting a dedicated enforcement agency to enforce road safety in India. Since law and order was a state subject, Police and related agencies would not be in a position to register crimes. Any move to create a dedicated enforcement agencies could be resisted by the State governments. Nevertheless, it is necessary to have a dedicated force capable of policing the roads using modern technology and equipment as prescribed by section 135 of the
motor vehicle act 1988 Amended in 2015. The agency must be appointed as per section 213 of the motor vehicle Act. Motor Vehicle Officer or any enforcement agency must resist technical staff. It is observed that our investigation department is the police department only and they are not using scientific or technical investigation methods for accidents. There is no equipment which gives accurate speed data at the time of accident but in lack of that data police showing the reason for accident is over speed.

The State governments are not arranging any agency which gives guarantee of continuity, capacity or uniformity in dealing with traffic management and road safety.

A team of professionals like Road Engineers (who has completed Road Safety Auditor), Automobile Engineer (with certification of Crash Investigation), IT Engineers (with ITS), Photographers, Videographers, who would be a part of the Crash Investigation team. The Crash Investigation team would be a part of the Crash Investigation Cell/Unit which should be setup in phased manner in the Police Stations (or Traffic Police Stations) in districts across the country. The funding for this cell/unit should be made by the transport department.

Equipments like 3D Laser Scanner, metal and gas cutter, traffic diversion related devices and other equipment should be provided to this team which would record and reconstruct the accident scene and upload the data in time for professionals to work on analyzing the accident. Recording and reporting of the accident would be collected in a professional manner with established standards which would be the basis of standards across the country. Crash Data Retrieval a device similar to the black box in the aircraft should be deployed in the vehicles to reconstruct the crash data, speed, direction, etc. of the accident are made available almost instantaneously for analysis.

A separate place for keeping the crashed vehicles should also be established. In this regard it is recommended to ask the Central Government to define standards to study, reconstruct and analyze road accidents inline of what is followed by the airline industry. While it is understood that the count of air accidents are much less than that of road accidents yet those standards could be considered to form a baseline.

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