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# Recommendations of the Punjab Governance Reforms Commission Sixth Status Report

The Commission focuses to strengthen citizen security particularly in rural areas through a new policy on Integrated Road Safety inclusive of the Rapid Rural Police Response System in Formal Sector as well as Traffic reforms. The report also addresses gender violence, a pivotal concern with the government by providing the state with an action plan for crime against women





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### Preface

Road Safety is a multi-sectoral and multi-dimensional issue. Its ambit spans engineering aspects of both, roads and vehicles on one hand and the provision of health and hospital services for trauma cases on the other. The success of road safety strategies in all countries depends upon a broad base of support and common action from all stakeholders. To rationalise security and setting up a robust system like Security Board to take timely and appropriate decisions to provide security to persons in need of it; the Commission recommended to strengthen citizen security particularly in rural areas. This report details a new policy on Integrated Road Safety inclusive of the Rapid Rural Police Response System, recommendations on street vendors, hawkers and cycle rickshaw operators and Traffic reforms.

Gender violence is a forefront concern that has been shaping the agenda of government policies, research and other social interventions. The fourth section of the report deals with an Action Plan for Crime against Women for the State of Punjab.

Some of the work in the report deals with similar themes added to the volumes submitted earlier.

**Pramod Kumar**  
Chairman, PGRC

## SECTION I

## NEW POLICY ON INTEGRATED ROAD SAFETY IN PUNJAB

**1.1 Perspective**

In the past 20 - 30 years, road accident fatalities and injuries are increasing at an alarming rate in India including Punjab. The main reasons are phenomenal increase in vehicle population, along with lack of matching initiatives for improvements in road infrastructure/environment and application of modern traffic control and management tools to tackle such problems effectively and efficiently. Economy of the Punjab is based upon Agriculture. State is spread in the area of about 50,362 square kilometer and very well connection with the means of Surface Transport to fulfill state's own domestic demand. Primary state's transportation need is divided into three parts, intercity connectivity, intra city connectivity and rural connectivity. Majority of the passenger trip start and end within the state and only 3-4% of the total traffic is through traffic. One of the goals of the Government of Punjab is for the transportation sector to move to an integrated and sustainable transportation system supporting Punjab's social and economic development and enhancing Punjab's competitiveness in the Indian and global markets. All this cannot be achieved without improving the road safety conditions in the state.

**1.2 Key Challenge**

- 1.2.1 Further Road Safety is a multi-sectoral and multi-dimensional issue. It incorporates the development and management of road infrastructure, provision of safer vehicles, legislation and law enforcement, mobility planning, provision of health and hospital services, child safety, urban land use planning etc. In other words, its ambit spans engineering aspects of both, roads and vehicles on one hand and the provision of health and hospital services for trauma cases (in post-crash scenario) on the other. Road safety is a shared, multi-sectoral, responsibility of the government and a range of civil society stakeholders. The success of road safety strategies in all countries depends upon a broad base of support and common action from all stakeholders. At a plenary meeting of the United Nations General Assembly on 14th April 2004, a resolution co-sponsored by India expressed grave concern about the large number of fatalities in road crashes. The World Health Organization also declared the year 2004 as the Year of Road Safety and launched World Health Day in April 2004 with the slogan – “Road safety is no accident”.

*Note: This section was contributed by Shri Navdeep Asija, Traffic Expert, Task Group on Police Reforms*

Further, the UN Road Safety Collaboration has developed a Global Plan for the Decade of Action for Road Safety 2011-2020 with input from many partners. The Decade of Action for Road Safety is an historic opportunity for India and also for the state of Punjab and many other countries to develop a framework for action which could ultimately save a significant number of lives across the ten-year period.

### 1.2.2 The Policy responses to the key requirements are summarized below;

Sr. No	Requirement	Constraints	Policy Response
1	Integrated approach towards Road Safety	Silo approach of the agencies	The proposed policy would promote road safety on the concept of inform, warn, control, guide and forgive in all the three pre crash, post crash and In crash scenarios.
2	Human Resource Development	Lack in Institutional capacity	The proposal would enable to establish Road Safety Officer at district level and a separate multidisciplinary road safety authority for the state
3	Research and Development	Non availability of any Institute involved in the road safety related research and development work	Proposed policy will facilitate establishing of multidisciplinary road safety institute at one of the premier medical engineering institute of the state
4	Road Safety Database	At present scientifically collected road safety related database is missing, which is must for the policy review and its further implementation	The road safety secretariat at state level in coordination with state police will enable establishing of road safety database management system.
6.	Public Transport	At present Bus Transport and Auto Rickshaw transport which serving the great need of state transport for both intercity and intra city are unorganized and less as per the demand	The proposed policy is giving special emphasis on the promotion and organising both modes along with other mode of Public transport in order to achieve road safety and precedence over personal transport.
7.	Road Design Standards	At present guidelines to incorporate road safety component in terms of designing and BIS is not being practiced by state government	This policy will enable establishing indigenous road safety standards for the state for the urban and rural environment in view of state's traffic characteristics and in much decentralized way. Special work on accidents <b>Black spot</b> treatments using corridor approach.
8.	Non Motor Transport (NMT)	At present non motor transport like cyclist, rickshaw and pedestrians are not given any priority in terms of designing and planning road infrastructure.	Policy will enable to setup Non Motor Transport cell as a part of Road safety secretariat which will take care of the exclusive needs of NMT.
9.	Financial Viability	Lack of budgetary support due to weak financial position of the State.	The policy does not seek any budgetary support but will rely on amendments in the applicable existing Motor Vehicle Acts, allocation of P D funds, Involvement of Insurance companies via creation of separate Road Safety Secretariat Fund.

### 1.3 Punjab- Trailing National Growth

- 1.3.1 The cost of road crashes has been assessed at one to two per cent of GDP in developed countries. A study by the Planning Commission in 2002 estimated the social cost of road accidents in India at Rs.55000 crore annually (2000 prices), which constitutes about 3% of the GDP. It is distressing to note that on an average 9 persons are killed in road accidents every day in Punjab. Besides causing untold misery to the victims' families, casualties in road accidents cause huge economic loss to the society. The present road fatality death rate per lakh population in Punjab is 12 compared to 12.8 of India and 24 of Haryana.
- 1.3.2 What emerged from a review of international best practices was that most countries had a stated policy to reduce road accidents, injuries and fatalities, and had set themselves targets. Punjab State has not yet formulated a National & State Road Safety Policy.

*Safe Roads: Limit Human decision making with that informs, warn, control, guide and forgive the errant behavior of road user.*

### 1.4 Road Network in Punjab

- 1.4.1 The cost of road crashes has been assessed at one to two per cent of GDP in developed countries. A study by the Planning Commission in 2002 estimated the social cost of road accidents in India at Rs.55000 crore annually (2000 prices), which constitutes about 3% of the GDP.
- 1.4.2 It is distressing to note that on an average 10 persons are killed in road accidents every day in Punjab. Besides causing untold misery to the victims' families, casualties in road accidents cause huge economic loss to the society. The present road fatality death rate per lakh population in Punjab is 12 compared to 12.8 of India and 24 of Haryana. Punjab has about 62,298 km of road network comprises 1739km of National Highways and 1503km of State Highways. The details classification kilometer wise of Punjab State

Road Network is given in Table 1 below. 83% of the road fatalities in Punjab are happening on the 4.8% core road network of Punjab comprised 1739km of National Highways and 1503km of State Highways.

*Table 1 : Classification of Road Network*

<b>Road Type</b>	<b>Length in State</b>	<b>Fatalities Percentage</b>
<b>National Highways (NH)</b>	<b>1,739 Kms (2.79%)</b>	<b>36%</b>
<b>State Highways (SH)</b>	<b>1,503 Kms (2%)</b>	<b>46%</b>
<b>Major District Roads (MDRs)</b>	2,107 Kms	
<b>Other District Roads (ODRs)</b>	4,658 Kms	
<b>Link Roads (LR)</b> <b>(PWD-27,229 Kms, PMB – 26,801 Kms)</b>	54,030 Kms	
<b>Total</b>	<b>62,298 Kms</b>	<b>83%</b>

### 1.5 Road Safety Trends in Punjab

Due to continuous efforts of various state department stakeholders Punjab has emerged as trendsetter state in the country where, congestion on roads have been reduced on intercity Road fatalities achieved (2010). Internationally it has been observed that with 1% increase in speed probability of road fatality increased by 5%.

1.5.1 In the last 3 years, a decline trend of about 5% (Figure 1) has been observed in the road fatalities, which is welcoming steps. The probable indicative reasons for the same are enforcement level, better post crash evacuation mechanism, better inter-city public transport policy and rise in fuel price and due to this modal shift of public from personal transport to public transport observed on the core road network. Detailed analyses on the given data are performed in the next section.

## 1.6 Structure

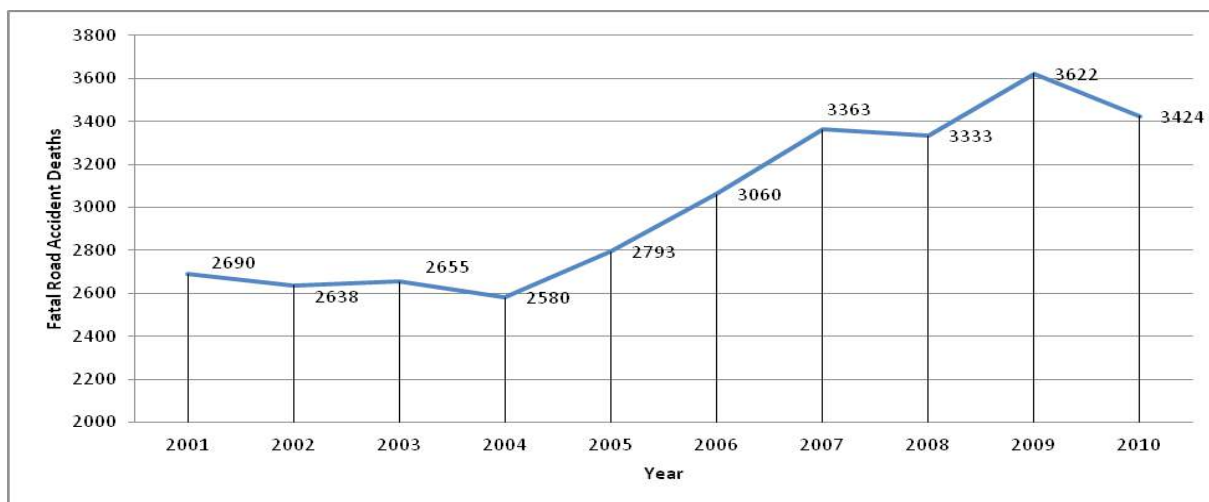
- 1.6.1 This report is divided into six sections. Section 1 deals with general overview on the need of Error! Reference source not found., its need and structure of the report. Section 2 mainly talked about Error! Reference source not found. comprises of detailed statistical analysis of the road crash and other related socio economic data, classification of the problem, health index district wise analysis on the road safety and its related observations. In Section 3 the detailed Error! Reference source not found. are discussed related to the policy including the vision statement and principle. Section 4 mainly covering Strategic Planning for Road Safety, in order to achieve the desired goals, this mainly cover 17 state specific and region specific long and short term solutions and its implementation aspects. In order to implement this policy sufficient financial backup is needed along with the organized structure in the state. Section 5 covers mainly FUNDING MECHANISM and how from existing resources like PWD, insurance sector and enforcement agencies can work together to arrange finances required in order to meet the targets. Section 6 at the last covers
- 1.6.2 Assessment of the Policy **Environment**, verification at different multidisciplinary sectors in order to assess the overall performance of Punjab Road Safety Policy 2013.

### Detailed Statistical Analysis of Road Crash Data of Punjab

#### Road Safety Trends of Punjab State in Past Decade

**Table 2 : Road Safety Trend in Punjab State in the Last Decade 2001-2010**

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Fatal Accident Death	2690	2638	2655	2580	2793	3060	3363	3333	3622	3424	3389



**Figure 1 : Road Fatalities Graph on Punjab in Last Decade 2001-2010 (Source: Director General of Police, Punjab Police)**

### Vehicle Population in Punjab

**Table 3 : Motor Vehicle Population Punjab**

Year	Buses	Cars & Station wagon	Jeeps	Taxis	Three Wheelers	Two Wheelers	Four Wheelers above Truck and Lorries	Three Wheelers	Tractor	Others	Total Motor Vehicles
2010	27146	486670	54798	13231	57879	3956279	149367	20186	498517	10181	5,274,254

**Table 4 : Non Motor Transport Vehicles in Punjab**

Animal Driven/Animal					Slow Moving				Total NMT
Horses and Ponies	Mules	Donkey	Buffalo (Male)	Cow (Male)	Camel	Cycle Rickshaw (Passenger)	Cycle Rickshaw (Cargo)/Rehri	Cycle	
29810	96480	23390	85060	163130	21610	300000	120000	3252000	4,091,480

Source: Statistical Abstract of Punjab, State Transport Department, Punjab

1.6.3 It is very much clear that 46% of the total vehicle in Punjab are Non Motor vehicles mainly animal driver or on peddle power, takes care of the almost equal number of trips originated within the state, as shown in **Figure 2**.



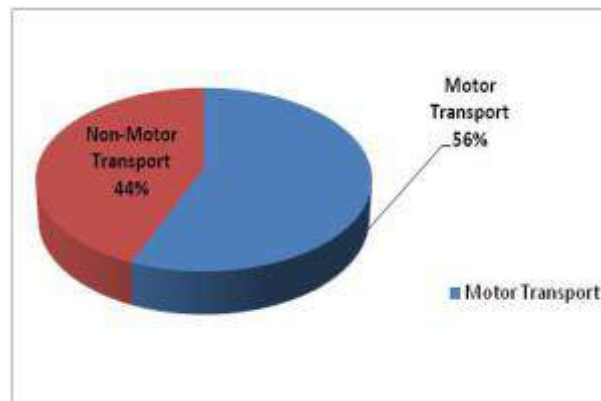


Figure 2 : Ratio of Motor Transport vs. Non Motor Transport Vehicles

## 1.7 Road Crash Trends in Rural and Urban Areas

1.7.1 Presently the ratio of rural: urban accidents are 65: 35 in Punjab, as per Figure 3 given below:

Figure 3 : Road Crash Trends and Rural and Urban areas of Punjab (Source: Punjab Road Safety Assessment Report, PRBDB, 2008)

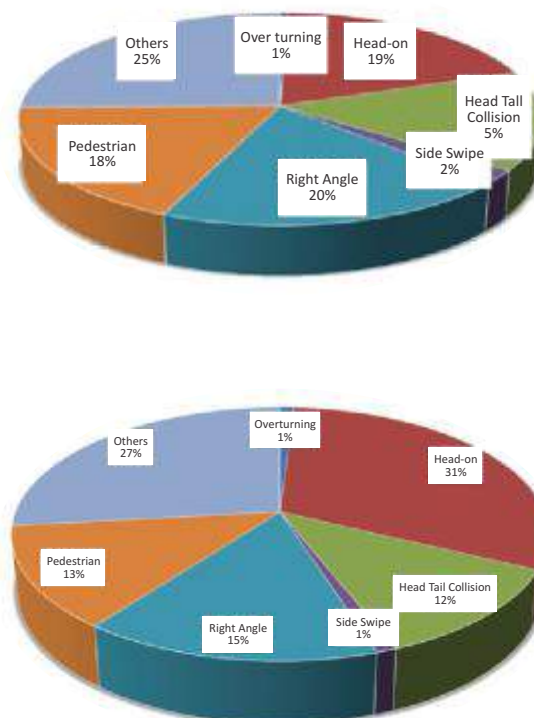


Figure 4 : Road Crash Trends and Rural and Urban areas of Punjab (Source: Punjab Road Safety Assessment Report, PRBDB, 2008)

1.7.2 It is very much clear that in both Urban and rural scenario, the percentage of pedestrian deaths is 18% and 13% respectively, which is very high. They are the people at no fault. Lack of infrastructure for Non Motor transport vehicle and pedestrian is not adequate in the state.

#### Victim vs. Impacting Vehicle Profile

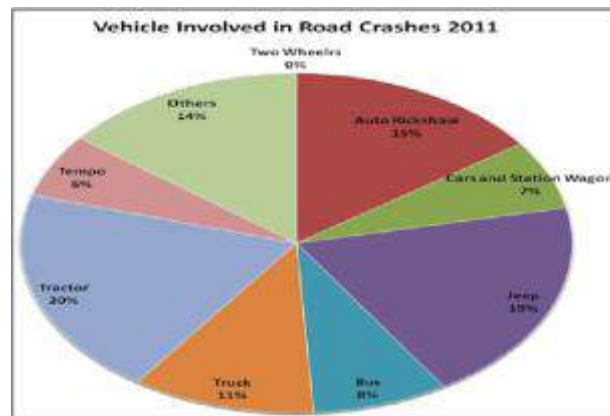


Figure 5 : Modal Share of Registered Motor Vehicles in Punjab

1.7.3 As per Figure 4 share of Tractors in the total Vehicle population of Punjab is 9% but responsible for 20% road fatalities, same is the case of Trucks and Auto Rickshaw.

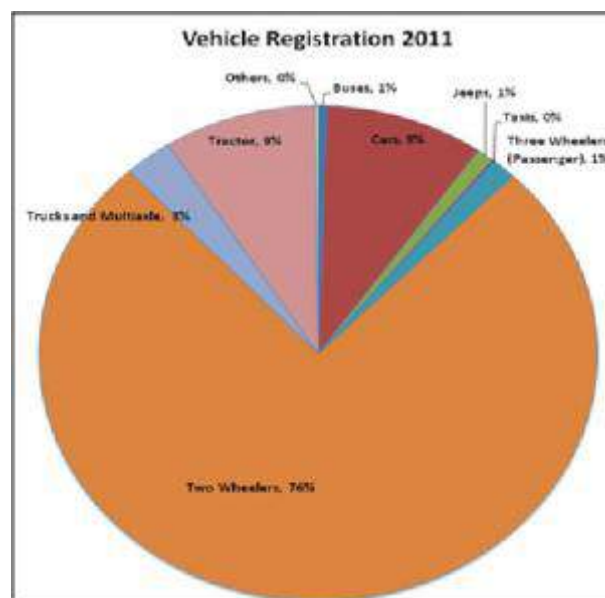


Figure 6 : vehicle Involved in Road Crashes

Source: Statistical Abstract of Punjab 2011

## 1.8 Traffic on different types of roads & fleet composition in Punjab (2010)

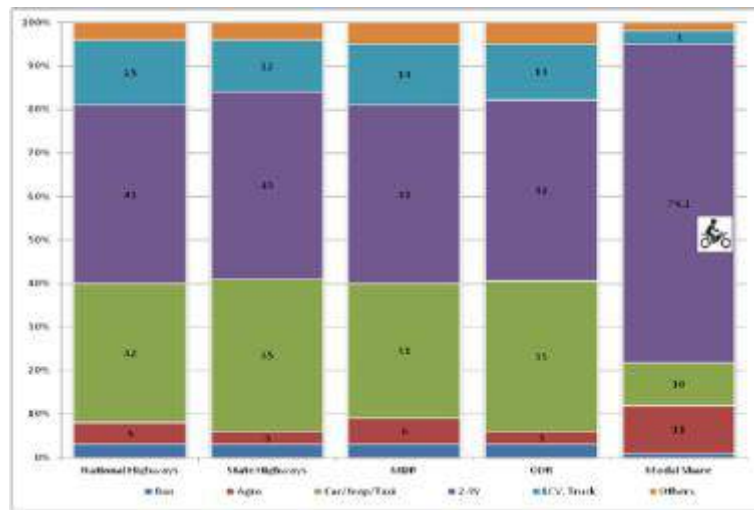


Figure 7 : Modal share on the different types of roads in Punjab

Source: Punjab State Road Sector Project, PRBDB, 2011

- 1.8.1 Majority of the traffic on the core network of highways comprises two wheelers (40%) and cars (30%), and over the period of time, modal share of car showing declining trend and it has also been found that bus occupancy is going on. This is a positive indication as how people are moving towards Public transport and leaving personal transport on intercity routes mainly.

## 1.9 Road Fatalities Health Index Punjab

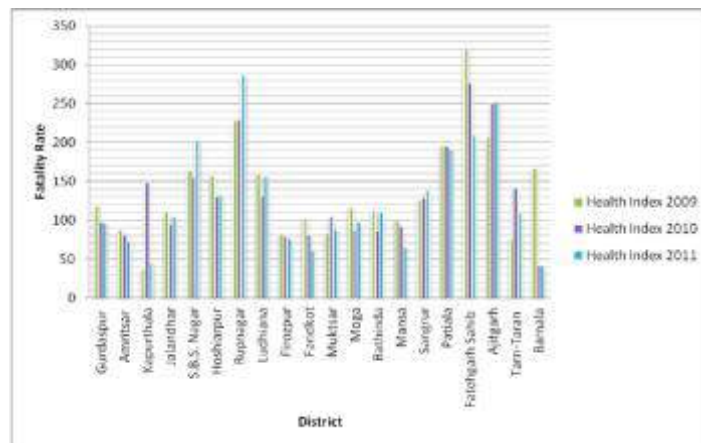
1.9.1 To evaluate further, district wise comparison has been drawn for traffic injury health index.

Traffic fatalities related health index defined as number of fatalities per million populations.

Table 5 and Figure 8 and Figure 9 below highlight the comparison of various districts year wise.

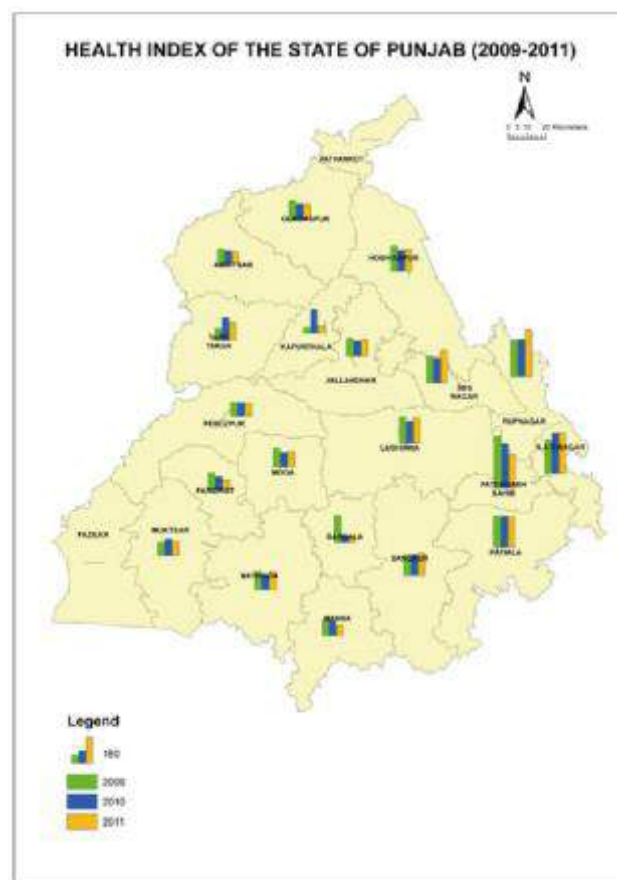
Table 5 : health index comparison for various districts of Punjab for the years 2009, 2010 and 2011

Sr. No.	Year	Year 2009			Year 2010			Year 2011		
	District/Month	Population	Fatalities	Health Index	Population	Fatalities	Health Index	Population	Fatalities	Health Index
	<b>Overall PUNJAB</b>			<b>133</b>			<b>124</b>			<b>122</b>
		26948700	3588		27323857	3387		27704236	3389	
1	Gurdaspur	2256463	269	119	2277645	223	98	2299026	217	96
2	Amritsar	804038	213	88	810824	199	81	817668	176	73
3	Kapurthala	2133328	78	37	2157405	120	148	2181753	97	45
4	Jalandhar	1561183	235	110	1571951	206	95	1582793	224	105
5	S.B.S. Nagar	608747	100	164	611548	95	155	614362	124	204
6	Hoshiarpur	586228	245	157	592982	206	131	599814	207	133
7	Rupnagar	3384030	153	228	3435564	156	230	3487882	192	286
8	Ludhiana	970775	540	160	981473	452	132	992289	528	156
9	Firozpur	1962172	161	82	1994240	159	80	2026831	150	76
10	Faridkot	873869	62	103	888168	50	82	902702	37	61
11	Muktsar	603045	73	84	610481	93	105	618008	77	88
12	Moga	1341029	113	116	1364735	86	88	1388859	95	98
13	Bathinda	751045	151	113	759874	117	86	768808	148	110
14	Mansa	1819574	76	101	1855572	70	92	1892282	49	65
15	Sangrur	2414370	204	126	2452332	210	129	2490891	222	138
16	Patiala	1077296	357	196	1098475	362	195	1120070	348	191
17	Fatehgarh Sahib	671551	188	321	677424	164	277	683349	123	210
18	Ajitgarh	924005	191	207	954571	239	250	986147	233	252
19	Tarn-Taran	1613960	82	76	1634059	155	141	1654408	118	110
20	Barnala	580703	97	167	588447	25	42	596294	24	41



**Figure 8 : Health Index Profile of Various Districts of Punjab**

- 1.9.2 On the basis of predefined four categories of district developed mainly green with fatality rate <75, yellow for <75 and less than >150, orange districts are with rate <150 and less than >225 and subsequently red districts are with fatality rate more than >225.
- 1.9.3 GIS maps of the same were drawn. GIS maps for the road fatalities health index are produced using Arc GIS software and shown in Figure 10 and Figure 11 Figure 12 given below:



**Figure 9 : Three years Road Fatalities Health Index Map (2009-2011)**

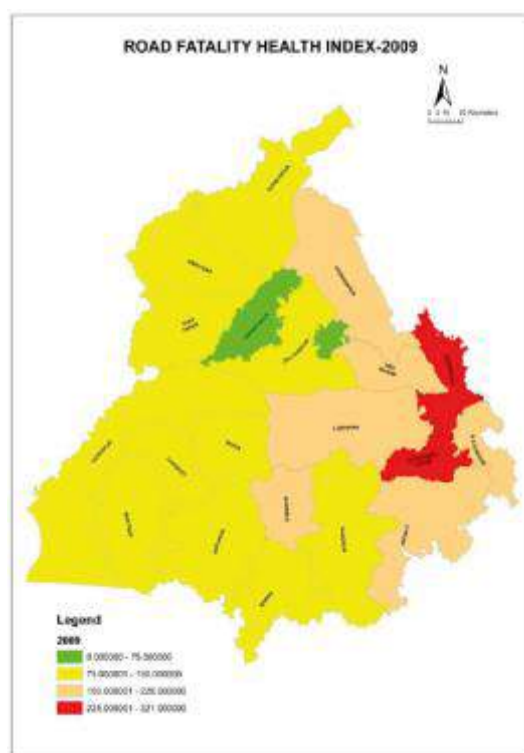


Figure 10 : Road Fatality Health Index of Punjab for the year 2009

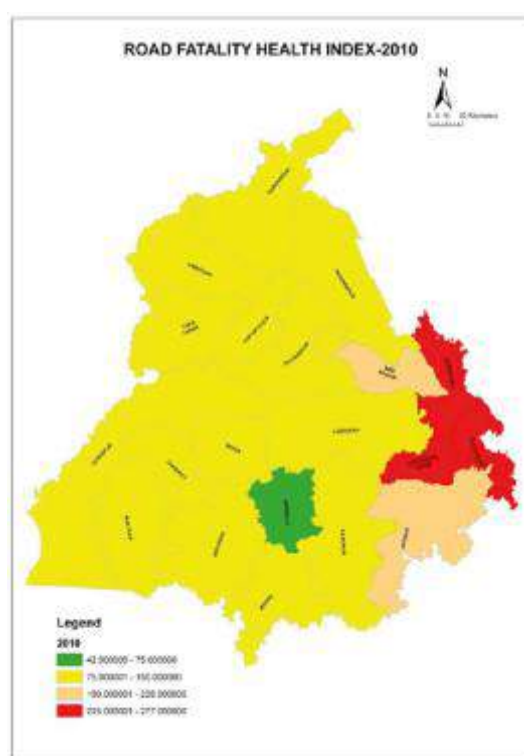
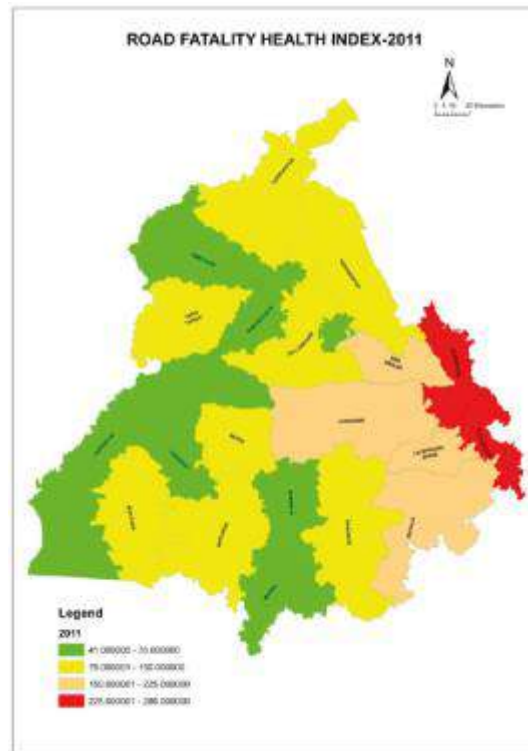


Figure 11 : Road Fatality Health Index of Punjab for the year 2010



## 2.1 Overall Observations on Road Fatalities and Health Index

- (a) It is very clear that overall Punjab observed an improvement in health index related to traffic injuries from 133 in the year 2009 to 122 in the year 2011.
- (b) Road fatalities reduction has been observed at 5%, which is a good indication of improved road safety conditions in the state.
- (c) Districts like Gurdaspur, Amritsar, Mansa, Fathesarh Sahib and Barnala has shown up significant improvement. However the rate difference in all districts is very huge from 41 of Barnala to 286 of Rupnagar in the year 2011.
- (d) Barnala has emerged as one of the leading district showing positive trends in terms of reduction in traffic fatalities from health index of 167 in the year 2009; it has reduced to 41 in the year 2011.
- (e) Shaheed Bhagat Singh Nagar, Sangrur, Ajitgarh and Rupnagar have shown up upward trends in the fatality rate.
- (f) Huge variation in the health index has been observed. To understand it in a better way based upon the health index all districts are further categories in four zones, green districts, yellow districts, orange district and red districts. Range for green district is vary from 0-75, yellow from 76-150, orange from 151-225 and red is 226.
- (g) With about 12 casualties every day, on an average about three thousand five hundred lives are lost every year in road crashes.
- (h) During the year 2011, in 5731 cases of accidents, 3389 lives were lost in accidents while 5021 persons sustained injuries.
- (i) Presently the ratio of rural: urban accidents are 65: 35 in Punjab (Figure 4)
- (j) Analysis of accidents reveals that six major cities of Punjab – Patiala, SAS Nagar, Ludhiana, Amritsar, Jalandhar and Bathinda account for roughly 50% of the total accidents in the state.

- (k) From Figure 2 it is very much clear that 46% of the total vehicle in Punjab are Non Motor vehicles mainly animal driven or on peddle power, takes care of the almost equal number of trips originated within the state.
- (l) As per Figure 4 it is very much clear that in both Urban and rural scenario, the percentage of pedestrian deaths is 18% and 13% respectively, which is very high. They are the people at no fault. Lack of infrastructure for Non Motor transport vehicle and pedestrian is not adequate in the state.
- (m) Roughly 35% of the accidents involving pedestrians, cyclists, Motor Cyclists/ Scooterists and personalised vehicles are reported from urban and semi urban areas.
- (n) The ongoing infrastructural activities in road sectors in the urban areas have created traffic related complexities which require closer interaction between police authorities and agencies involved in road construction activities.
- (o) Earmarking of 50% of funds collected from challan for the purposed of Traffic Education & Improvement of Traffic Infrastructure. (Notification Issued by State Transport Department on 17 August 2012)
- (p) Modal share on different types of roads as shown in Figure 7, indicates that majority of the traffic on the core network of highways comprises two wheelers (40%) and cars (30%), and over the period of time, modal share of car showing declining trend and it has also been found that bus occupancy is going on. This is a positive indication as how people are moving towards Public transport and leaving personal transport on intercity routes mainly.
- (q) As shown in Figure 5 Share of Tractors in the total Vehicle population of Punjab is 9% but responsible for 20% road fatalities, same is the case of Trucks and Auto Rickshaw. These modes need special focus and mode wise its related strategies are formulated in the subsequent part of this report.



## 2.2 Comparison Road Safety India Vs Punjab

Given below Table 6 shows the Comparison of Road Safety Indicators India vs. Punjab

Head	India	Punjab
Total Road Network (km)[1]	3.314 million (as per NHAI record)	62,298 (1.88% of country's total road network length)
Total length of National Highways(km)	65,569 (1.7% of total road network length)	1739 (2.55% of the total road length within the state)
Total Registered Motor Vehicle	13,56,42,219 (estimated)	57,11,715 (2011)[2]
Total Area (sq.km)	3,287,240	50,362
Road length per sq.km area	1.03	1.30
Road length per million population[3]	2738	2248
Total population[4]	1,210,193,422[5]	27,704,236
Total road accident fatalities	136834[6] (2011)	3424 (2010) 3389(2011)
Growth/Decline Trend[7]	11.2% (up)	-1.02% (decline)
fatalities per million population (health burden)	113	122
fatalities per million vehicle (traffic burden)	1009	593

[1] <http://www.nhai.org/roadnetwork.htm>

[2] *Statistical Abstract of Punjab 2011-12, Government of Punjab*

[3] <http://en.wikipedia.org/wiki/India>

[4] *Projected 2008*

[5] *2011 Census*

[6] <http://ncrb.nic.in/>

[7] <http://ncrb.nic.in/>

## 2.3 Strategic Planning for Road Safety

2.3.1 Implementing road safety programs needs a vision, mission and focus. Political commitment is crucial in this process as national and state governments should make a determined effort to address the problem. Capacity strengthening of all involved policymakers and professionals is essential. In total, it requires a scientific, systematic and programmatic approach to develop – implement – monitor and evaluate road safety in the country.

2.3.2 The management system should bring in ownership of the program, accountability, and neutrality; consider present and future developments, limitations of existing systems, current and projected road – vehicle – and land use patterns, financial arrangements and other aspects. Moving ahead from the earlier concepts of educating road users to safe roads, safe vehicles and safe people, it places emphasis on a “Safe Systems Approach” where road environment is used as reference. Global experience has clearly demonstrated that a lead agency staffed by professionals is essential for managing all aspects of traffic safety in a State and country. To deliver road safety in Punjab a holistic policy with lead coordinating agency to coordinate both national and state level is essential in order to all road safety activities.

2.3.3 A Punjab State Road Safety Policy 2013 is proposed with its major focus areas on (Mohan et al. 2009):

- Horizontal coordination with different ministries and agencies
- Vertical coordination within ministries at national and regional levels
- Legislative framework
- Recognition of importance of Non Motor Transport
- Resource mobilization and allocation
- Funding mechanisms
- Delivery of interventions
- Mechanisms for achieving results
- Systems for monitoring and evaluation
- Involvement of civil society and professionals
- Research and technical base and database management

2.3.4 In order to achieved the policy level objective followings are the interventions measures including long term and short terms are proposed for the state of Punjab

## 2.4 Road Safety Database Management System

The Government will provide assistance to local bodies, Police department and others to improve the quality of crash investigation and of data collection, transmission and analysis. A State Road Safety Management System (RSMS) will be established for providing continuity and policy guidelines to this activity.

### 2.5 What is Road Safety Management System

2.5.1 Road Safety Management System (RSMS) makes accident information accessible to the traffic police, road engineering departments, motor vehicles departments, insurance companies and non-government agencies involved in road safety. Besides, this software can be integrated with police records and maintained by the government crime records bureau and road engineering department

2.5.2 Numerous groups are interested in road safety and need to use road crash data. They include road safety professionals, highway engineers, the police, lawyers, research groups, politicians, teachers, statisticians, motor manufacturing companies, vehicle fleet operators, insurance companies and even members of the public (perhaps in relation to an insurance claim). They all tend to have different needs and reasons for wanting the data and, since there are practical limitations on the amount of information that can be collected, the content of crash databases has to balance the data wanted against the burden of collecting and entering data. The database should nevertheless be as reliable and comprehensive as possible. Some of the key reasons for collecting crash and injury data are to:

- Overview the problem,
- Monitor trends
- identify high risk/problem groups
- identify high risk, hazardous locations
- enable objective planning and resource management
- evaluate effectiveness and monitor achievement of targets
- Make international comparisons and
- Provide evidence for prosecution.

## 2.6 Limitations of Existing Data and Its Causes

There are various reasons which made police data unused for the investigation purposes. For the detailed investigations, it is important to have scientific collection of filed data. Following limitations are observations in the existing police accident data and detailed Road Safety Database management system is proposed to develop and made function in order to achieve the homogeneity in the data for further analysis;

### 2.7 Discrepancies in the accident data provided by police with respect to the accident spot were:

- The distance of accident location was given with respect to police station without any direction.
- The names of villages or towns, where the accident had occurred, are mentioned but chainage (in km) from police station or direction of that particular location is found to be missing in most of the cases
- The type (SH/MDR/ODR) or the name of the road was missing in most of the cases.
- The landmarks mentioned against the spot accident location e.g. near hotel/dabha, near market, near petrol pump/school/ gurudwara/ temple and near graveyard/ ceremonials/ hadarori are difficult to identify at later stage especially when road widens or any other development happens at nearby places.
- It has been observed that the road name in FIR generally do not matching with road code and standardize road type by PWD or NHAI.
- The chainage given in FIR are generally not as per PWD km stones.
- In many cases the distance given for a particular accident location in different data sheets by the same police station generally found to be different.
- The kms marked on Survey of India Maps or given on police maps are not matching with the km stones existing on ground.

### 2.8 Causes

- To mark the exact location and the co-ordinates, no GPS instrument is available with the police stations
- Due to lack of training, police personnel were unable to give the reasons of accidents

In the absence of proper identification marks, name boards and km stones, it was difficult for the police persons to classify the roads and mention their road codes As a result of these deficiencies the Consultants had put in a lot of effort, and had to visit several police stations, to match the location with the PWD identification code and starting chasing, and locate them on the Survey of India Topographic survey sheets.

## 2.9 Enforcement- Traffic Police

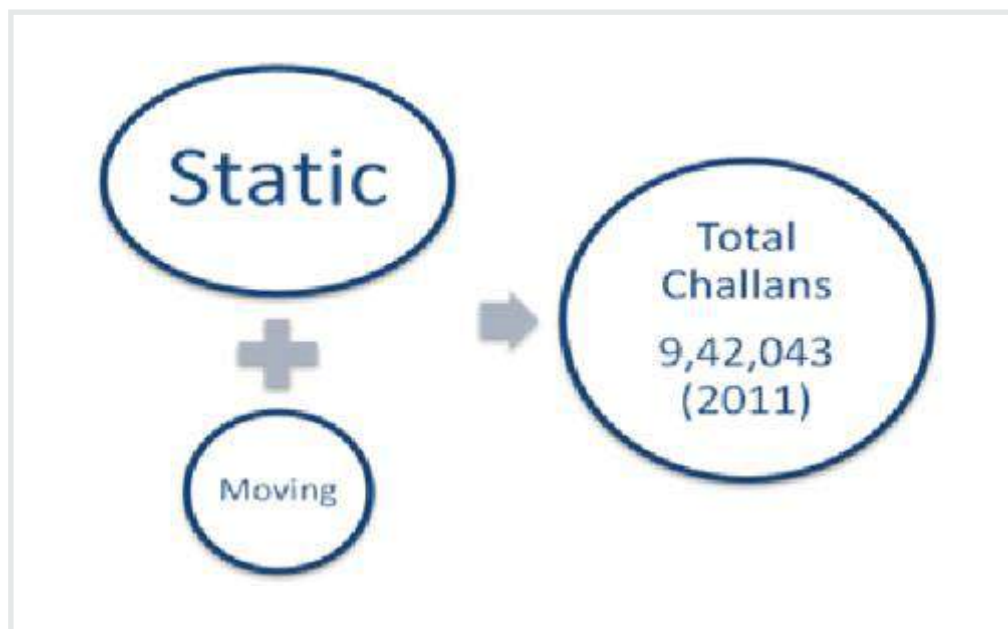


Figure 13 : Total Challan in the year 2011 by Punjab Police Traffic in the state

- 2.9.1 As on date about 1950 officials in the Police force are deployed on traffic duties in the cities as well on the various highways. Out of that about 575 are deployed on Highway patrol. Traffic wing of Punjab Police is headed by an officer of ADGP rank. The Traffic Wing of Punjab was a separate wing till 1992 It was discontinued vide order No. 1/358/9141-11/SPL/3067 dated 03/08/1992 and further It was revived in the year 2001 without creation of any new posts as it was ordered that it has to be staffed from within the existing resources.
- 2.9.2 For the year 2011, a total 942043 motor vehicles were booked for challan under various provisions of Motor Vehicle act. A state generated rupees Total fines recovered was Rs. 20,02,17,500/- from the challan amount. Critical analysis of the same revealed that majority of the vehicle booked under static violations instead of moving violations like black film, number plate, insurance and pollution. These have limited impact on road safety, however lack of electronic gadgets to book vehicles under moving violations are the key reasons as why most of the vehicles are not challan under drink and drive, over speeding etc. In data we found a total of 1049 challan booked under Drink and Drive which makes 0.2% of the total and a total 2699 vehicle booked under over speeding, contribute 0.5% to the total number of challan in the state. From data zero challan on over speeding found in two new districts like Fazilka and Pathankot due to non availability of speed gun Electronic Gadget. Efforts by the state police found to be average 475 challan per Traffic Police personal in the year 2011 in Punjab but as a part of suggestive strategy further special emphasis on moving violations like over speeding, Seat Belt, Drink and Drive and Helmet is required to be done.

### 3.1 Plan of Action

Following key agendas shall be kept in mind while improving road safety enforcement;

- Equal focus on Moving violations like over speeding, drink and drive, seat belt and helmet usage.
- Promote the development and implementation of general deterrence based traffic safety enforcement programs, combined with intensive social marketing programs, targeting high-risk safety behaviors at the State and District levels.
- Establish dedicated highway safety patrol capacity on strategic high-risk roads at the National, State and District levels.
- Participate in the International Road Policing Organization (RoadPOL) to strengthen leadership capacity in road policing and accelerate the transfer of international best practice.
- Establishment of dedicated fully equipped and trained mobile traffic police units.
- Development and piloting of semi-automatic traffic surveillance systems on high-risk transport corridors. Implement recommendations regarding penalties as suggested by the Sunder Committee on amendment of the MVA.
- Increase capacity, knowledge and skills of police agencies with regard to visible, random, uniform enforcement practices

### 3.2 Road Design Standards

Most of present road design documents/specifications were evolved about 10 to 20 years back. The standard on design of urban roads was written 30 years back. Those were the times when the roads and road transport were somewhat neglected areas. Funds for the road sector were quite meager, road transport was not such a popular mode of transport, the number of vehicles was not so large, the issues were limited and a phased approach of development was the norm. It is against this background, most of these documents were served their purpose. The present Design Standards require critical review and modifications to give more focus on Vulnerable Road Users like pedestrians and cyclists (VRUs), separation of fast and slow traffic, removal of conflict areas and points, access issues and holistic design approach starting from planning stage of the basics of hierarchical system of road network. Separate Standards dealing with various aspects are combined for a complete document with liberal illustrations of layouts.

### 3.3 Black Spot treatment

- 3.3.1 Punjab under Punjab State Road Sector Project as a part of Road Safety Assessment Studies identified about 400 Accident black spots on its different core network of highways comprised National, State, Major District and on other district roads. As the work on the up gradation of National Highways is already going on, black spot improvements on National Highways are incorporated as part of construction. For the other roads covering 42 black spots on various state highways and major district roads under Punjab State Road Sector Project has been improved using corridor approach. In order to assess all black spot location, one of the road under PSRSP has been adopted for pilot study. Road fatalities location on 40k road in the past 3 years shows almost after every 3-4km road fatalities are happening mainly at intersection. This gives an idea as instead of using isolated black spot point removal approach, corridor approach to solve black spot is needed.
- 3.3.2 However, its further evaluation and improvement is required as a continuous process. Administrative setup and dedicated road safety officer of an Executive Engineer level has been proposed at district or division level in order to ensure safety on all core road network falling in that area.

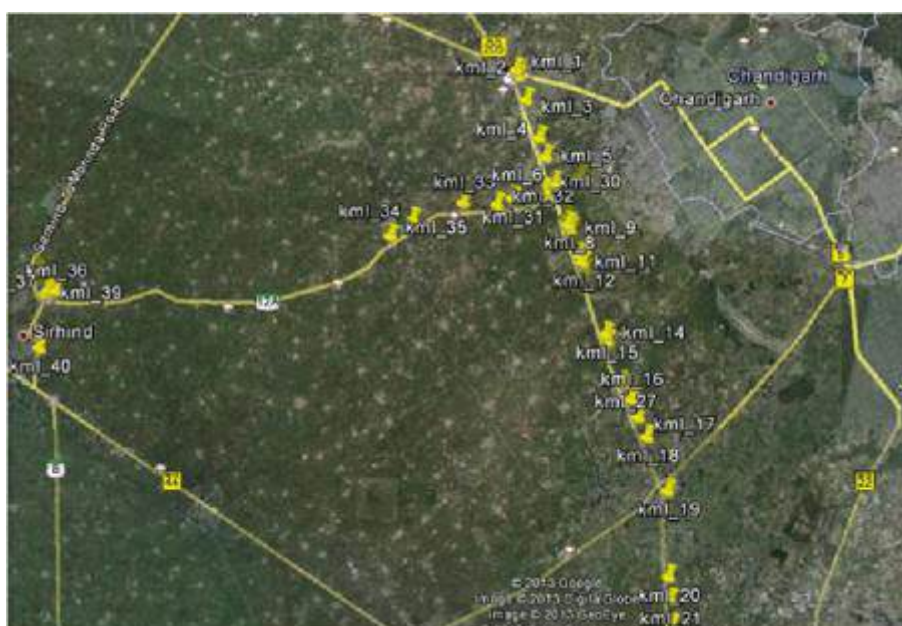


Figure 14 : Black Spot on Kharar Banur Tepla Road



### **3.4 Unmanned Railway Crossings in Punjab**

Unmanned rail level crossings have been identified at approx 903 locations in the entire state of Punjab. Information regarding estimated cost for improvement of unmanned level crossings is being gathered. Meanwhile, Ministry of Railways has communicated that it shall fund the construction of RUBs on all such unmanned railway crossings where TVU (Train Vehicle Unit) is more than 6000.

### **3.5 Vehicle Safety Standards**

The Government will take steps to ensure that safety features are built in at the stage of design, manufacture, usage, operation and maintenance of both motorized and non-motorized vehicles in line with international standards and practices in order to minimize adverse safety and environmental effects of vehicle operation on road users (including pedestrians and bicyclists) and infrastructure. This issue mainly lies with centre, but compliance by the state authorities can be incorporated in the function, mainly related to informal mode of transportation like peter rehra, cycle rickshaw, cycle rickshaw trolley etc.

### **3.6 Human Resource Development**

3.6.1 In Short, we can say Punjab Road Safety is going through a transition, from a very pragmatic approach to very scientific one using data led approach. Our Policies are very much socially equitable and sustainable. Due importance has been given to capacity building as well, as human resource development is the key for the successful implementation of any Policy.

3.6.2 To assess the relative standing of India in production of research output, a study was undertaken to compare the same in four countries: India, China, Brazil, and the USA. The present report was designed to analyze the present situation of the ongoing research, in the field of road traffic safety. The analysis takes into account works mentioned in Scopus, the online bibliographic database of journal articles. A comprehensive search was carried out over the database, covering all years since its inception (1960).



3.6.3 The number of papers published with their origin is shown in Figure 15.

TOPIC	1961-2005				2006-2010			
	BRAZIL	CHINA	INDIA	USA	BRAZIL	CHINA	INDIA	USA
Road Safety	59	230	80	5,299	118	911	120	2,353

Figure 15 : Total number of scientific publications in indexed journals in the areas of road safety and transportation planning for the period 1961-2010 by country of origin.

3.6.4 The data clearly indicate that India has a very little research activity in the area of traffic safety. An examination of the titles of road safety articles from India indicated that a significant proportion were medical case studies. For the period 2006-2010, in the area of road safety China produced 8 times as many scientific articles than India, and Brazil about the same number as India though it is a much smaller country than India. It will take many years for India to catch up with countries like Brazil and China if action is not initiated in the 12th FYP. The following initiatives are recommended;

- Establish State Level multidisciplinary Centre of excellence in the area of road traffic safety in existing institutions of repute. The center so establish must encompass all the disciplines associated with traffic safety.
- Establish at least one injury research Centre in medical institutions to focus on details of road traffic injury.
- Create job opportunities at M.Tech and PhD levels in PWD, Health and Transport department and other road building agencies in Road Safety Units specially created for the purpose.
- State should establish a fund for providing 50 fellowships/sponsor per year for in-service professionals working in various departments concerning road safety to attend international short term courses of repute in the area of road safety.
- State should establish a Road Safety Data Centre/Laboratory for collection and analysis road traffic accident data in collaboration with State Police and various central and international agencies.
- State should sponsor minimum 4 annual conferences on traffic safety in collaboration with various academic and research institutions every year.
- Community Participation

3.6.5 Government alone can't do anything, to evolve people's participation further; government formulated "Punjab Road Safety Council". Now in Punjab we have state level and district level road councils. With the help of Road Safety Council, much local level road safety awareness, safety promotion, use of public transport initiatives have been taken up. Further strengthening and functioning of Road Safety Council can be brought under directorate road safety Punjab.

### 3.7 Punjab Road Safety Award

In order to encourage Community participation and encourage people associated with private or government sector working in the field of road safety recommendations are made Setup of annual “Punjab Road Safety Award” for each active individual/organizations from State's Police, Engineering Department, Para Medical and Medical Department, Politician, Active NGO's, Students and General Public on the basis of their annual performance.

### 3.8 Road Safety Research and Development Centre

Our road safety future is shaped by decisions that affect the amount of trip making, mode of travel used, kinds of infrastructure on which travel takes place, vehicle fleet, technology in use, and the prevailing norms of behavior. While in the past most such decisions were based on intuition and judgment, there is an obvious trend toward decisions based on fact and science. This transition from a “pragmatic” to a more “rational” style of road safety management is hungry for factual knowledge and for professionals to be its purveyors. Consequently, a broad class of professionals, those who influence the future of road safety, needs to be trained in what fact-based road safety knowledge exists. In addition, a vibrant, competent community of road-safety researchers has to be created. They need to be trained in the same road safety knowledge as well as in research methods. Above all they need to be freed from the constraints imposed on them by a myopic class of research administrators, bureaucrats, technocrats, politicians and other existing stakeholders. The best interest of society is to move toward the gradual establishment of the rational style of road safety management. As a first step to achieve this goal, it is important to establish Road Safety R & D Centre.

### 3.9 How will this help

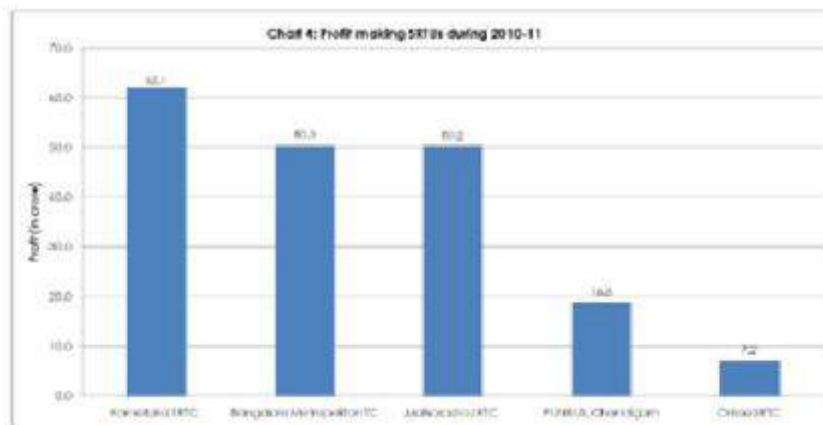
- 3.9.1 Research generates knowledge and knowledge is the engine of progress. In road safety, the generation of knowledge has been very slow. True, the problems are not easy to tackle, the data seldom sufficient, and the conduct of controlled experiments not accepted.
- 3.9.2 It is very important to create a stable research base setup. If this is not done, future progress will be similar to the past. Gone are the days when teeth were extracted by blacksmiths because they had the tongs and blood was let by barbers because they owned razors. Today we expect dentists and physicians to be trained, to acquire experience, and to practice for a long time. Research too is a skill that is acquired by specialized training and by long experience. This is has been a problem all along, but is especially acute now. The transition toward rational road safety management is hungry for information produced by competent researchers. Money is available to do the work and the prospect of much more research money is looming. Who will do the work?

#### 4.1 Key Components of Road Safety Laboratory

- Centralize Road Safety Database management System and Analysis Wing: The objective of this wing to perform certain types of qualitative and quantitative analysis of the existing data to understand road crash phenomena more scientifically. This can work in coordination with various departments.
- Centralise Road Safety Knowledge based –Library facilities, which will help to develop rational style of road safety than pragmatic which was laid on self belief and self interest of the organisations. Access of quality road safety literature is a must.
- Testing Facilities: Road reflective material testing, Helmet and Seat belts testing facilities, vehicle emission testing and other safety gadgets testing. This department can act as certification department with due accreditations.
- Publication and Technical Writing Wing: The objective of this wing to work in coordination with various departments of the Road safety laboratory and get their work professionally published.
- Behavioral Science Department: the objective of this department is to study the behaviour of different type of road users and understand road crashes more scientifically in view of their social economic and system demand parameters.
- Pre medical care and post crash department: the objective of this department is to develop and fine tune policies related to road safety emergency evacuation mechanism.
- IT & Design Department: the purpose of this department is to develop new products related to road safety, like traffic calming devices, better cycling and pedestrian friendly infrastructure. Checking vehicle design standard and their evaluation. Developing new enforcement gadgets like standardisation of road barrier and signage's system, traffic lights design and synchronisation. Developing new GIS based tools to improve road safety. Software development to improve the road safety. This department can consists team of road safety professionals, civil engineers, electronics and computer engineer, product design engineers etc.

## 4.2 Public Transport System- Bus Transport

For the intercity Bus transport Punjab has about 63 buses per 10 lakh population. Population density of Punjab is 550 people per sqkm of area. Comparing to Karnataka which is rated number one State Transport undertaking in terms of Profit making as shown in Figure 16 has 348 buses and population density 319, clearly indicates the mismatch between demand and supply of bus transport service and its need. In order to promote public transport and discourage personal transport policy will propose a special thrust on increase the number of buses for public transportation. Last year Review of the Performance of State Road Transport Undertakings 2010-11 reports by the Road Transport and Highways Department, Government of India revealed that the two leading players of State Transport PUNBUS and Punjab Roadways showed 100.3% and 90.3% average occupancy on all its routes.



## 4.3 How this will Help Road Safety

Bus transport worldwide considered being the safest. In the recent World Bank survey for the core road network of Punjab under Punjab State Road Sector Project revealed that average speed on the core network comprised National Highways, State Highways and Major and Other District road have gone up whilst the modal share of cars has also gone down despite of the fact increase in number of registration in cars. Recent amendment in Punjab State Tax structure on Buses mainly subsidy on luxury buses followed by increase in fuel prices helped people to go for bus transport on intercity routes than personal transport mainly car users . This helped to achieve overall less congestion on roads, faster mobility and road safety. Further promotion of Bus transport at intercity roads and on intra city bus transport is going to help road safety in big way.

Big Buses
a) Ordinary Buses- Rs.2.25 Per Kilometer per vehicle per day
b) Ordinary HV AC Buses(3x2 Seats)- Rs.1.00 Per Kilometer per vehicle per day
c) Integral Coach (2x2 seats buses) - Rs.0.50 Per Kilometer per vehicle per day
2. Stage Carriage Buses coming from Other States:-
a) Buses Registered in other States plying as stage carriage in Punjab which are countersigned under reciprocal agreements- Rs. 3.70 Per Kilometer per vehicle per day
b) Buses Registered in other States plying as stage carriage in Punjab which are not countersigned under reciprocal agreements- Rs. 5.00 Per Kilometer per vehicle per day
3. Mini Buses registered in the State of Punjab:- Rs.30,000/- Per Annum.
4. City Bus Service : buses plying in Municipal limits - Rs. 60/- per seat per quarter
5. City Bus Service : buses plying outside Municipal limits
a) Ordinary Bus: Rs. 4.50/- per Km per bus per day.
b) HV AC Buses: Rs. 2.00/- per Km per bus per day.
c) Integral Coach Bus: Re. 1.00/- per Km per bus per day.
Tourist Buses
a) Ordinary- Rs.6,000/- Per Seat Per Annum
b) Deluxe- Rs.6,000/- Per Seat Per Annum
c) Air Conditioned- Rs.5,000/- Per Seat Per Annum
d) Integral Coach- Rs. 4,000/- Per Seat Per Annum
All India Tourist Permits or any other similar permits registered in other States entering the state of Punjab
a) Ordinary Buses- Rs.2,000/- Per Day Per Vehicle (on 24hours basis)
b) Deluxe Buses- Rs. 3,000/- Per Day Per Vehicle (on 24hours basis)
c) Air Conditioned Buses- Rs.4,000/- Per Day Per Vehicle (on 24hours basis)
3. Omni Bus having Nine Seats excluding driver registered in other States entering and plying in the State of Punjab:- Rs.150/- Per day

#### 4.4 Intermediate Public Transport System

The vast majority of urban and Rural Punjab does not have any organised mass public transport. Out of 157 urban agglomerations (Census 2011) with population over fifty thousand plus, only 4 has public city buses and in one city rail based public transport system has been proposed. In addition, some urban areas are partially served by state road transport corporations' bus routes that pass through. The failure of providing adequate mass public transport to match up with the existing population and city size growth, has led to a range of make-shift solutions where a transport 'service' is provided. These may be classified as intermediate public transport (IPT) or 'para transit' and cover the space between private and mass public transport. IPT modes operate mainly in one of two ways. They can be hired by commuters for door-to-door trips or they can operate as informal public transport by carving out fixed routes and fares. In small and medium towns, IPT forms the dominant mode of transport. Cycle rickshaws and Auto rickshaw were amongst the earliest forms of IPT in Punjab and very popular amongst locals. They fulfill the low carbon mobility needs apart from improving safety and sector. Both these modes need special attention in order to promote better transportation services and road safety.

#### 4.5 Auto Rickshaw

Auto Rickshaws are the second most popular mode of Transportation in India and the only mode of mass transit in Ludhiana. Ignoring or banning this Auto sector would not solve the problem, but in contrast to this encourage everyone to use personal motor transport.

#### 4.6 Opportunity

Auto-rickshaw services in Punjab are predominantly unorganised in nature, wherein services are provided by individual owners/operators competing against each other for the passenger market. This structure, coupled with improper governance, has created significant problems for drivers/passengers, and resulted in negative externalities in the economic, environmental, and social realms. Given that the unorganized structure is a major contributor to the problems afflicting this sector, the opportunity to address these problems lies in the promotion of organized fleet and individual services. Fleet-based auto-rickshaw services can bring notable benefits such as i) brand image, ii) fleet management, iii) introduction of technology to provide dial-a-rickshaw (DAR) services, iv) improvements in operational efficiencies through fleet management, and v) employment benefits to drivers (insurance and advertising revenues).

#### 4.7 Way Forward - Fleet Operation

Given the size of the auto-rickshaw market in Punjab, scaling-up of entrepreneur-driven fleet auto rickshaw services would be important to realize the potential of these services to bring positive change in the auto-rickshaw sector. In addition to the business case, highlighting the “green” (social/ environmental) benefits of fleet services provides the biggest opportunity to attract social investors.

- Environmental benefits: Fleet-based DAR services can help mitigate environmental impacts of auto-rickshaws through improvements in operational efficiencies (reduction of avoidable emissions from empty trips<sup>1</sup> by linking supply to demand) and fleet maintenance programs.
- Social benefits for auto-rickshaw drivers: Provision of fleet-based DAR services can improve the socio-economic condition of drivers by providing them with access to employment benefits, and additional revenue sources such as advertising.
- Social benefits for passengers: Social equity by way of accessible and affordable transportation choices for elderly, women, disabled, and children is a core aspect of promoting sustainable transport services. Fleet DAR services can help meet this goal by providing household access to auto-rickshaws through centralized calling facilities.

#### 4.8 Reforms for Individual Auto Operators

Fixing of per kilometer fair for Autos on yearly basis like Gujarat based upon certain variables like Fuel Prices, Wholesale Price Index, Road and other taxes etc. The prices are kept unchanged for years and this is something which forces every individual autowala not to go by Auto Meter.

#### 4.9 Shared Autos

In Punjab shared Autos rickshaw are very popular and these auto runs on certain fixed routes. Keeping this demand supply equilibrium of route planning is must along with some regulations and authority to manage it in order to achieve agenda of road safety for all.

#### 5.1 Cycle Rickshaw

The National Urban Transport Policy (NUTP 2006) and 12th Plan Working Group on Urban Transport, both envision a more formal role for IPT going forward. This role is similar to that of IPT in developed countries – as a feeder service to mass public transport or for short trips. To date, however, IPT has been largely ignored in transport planning. Government investment has focused on infrastructure that serves personal motor vehicles and even where mass transit projects have been built, little attention has been paid to feeder services. Municipalities rarely provide enabling infrastructure for IPT such as demarcated rickshaw stands and lanes for non-motorized transport (NMT) etc, which adds to road safety in large extent.

5.1.1 The present cycle rickshaw operation mainly in urban areas of Punjab has following salient features;

- (a) At Present in Punjab cycle rickshaw is one of the largest employment generator in informal sector, needs immediate attention of government.
- (b) Every day, a total of about 5.5 crores commuter trips are generated in Punjab, out of which 60 lakhs are only being catered by cycle rickshaw only. Cycle rickshaw takes care of about 11% of the total passenger trips in Punjab.
- (d) Cycle rickshaw in Punjab has emerged as one of the safest mode of transportation, for the year 2009; two fatal deaths are reported on rickshaw.
- (e) Average one cycle rickshaw help to commute 20 people per day and it is a preferred mode of choice of travel ladies and elders for short distance travelling (< 3km).
- (f) One cycle rickshaw saves about 3 liter of fuel per day. To burn one liter of fuel 15.2kg of fresh air is required. Looking into the total environmental calculations cycle rickshaw in Punjab saves about 9 lakh liter of fuel and 13680 ton of fresh air per day.



- (g) Cycle rickshaw globally has been considered as one of the most sustainable mode of transportation. It is socially, environmentally and financially equitable mode of transportation.
- (h) Amritsar and Ludhiana is a Hub for Cycle Rickshaw Industry across the globe.
- (i) As per survey in Amritsar there about 25,000, In Jalandhar about 27,000, In Patiala about 16,000 and in Ludhiana there are about 40,000 cycle rickshaw are operational today providing service of short trip commuting. It is estimated that more than 3 lakh cycle rickshaws are operational in Punjab. Directly and indirectly cycle rickshaw operations is a source of income for more than 3.2 lakh poor families of Punjab. Looking at the population base with an average family size of five, rickshaw providing livelihood to 16 lakh (1.6 million) persons that makes it 6% of the total population of Punjab. In an estimate it is found that for Tier I cities town there is a demand of 1000 cycle rickshaw against the population base of 1 lakh, in Tier II its 750 and in Tier III its demand is 500. Regulation of IPT is a grey area as some of the legislation is outdated (too restrictive) or unclear. Motorized IPT modes are regulated by the central government's Motor Vehicles Act, 1988 and the concomitant rules set by state governments, while non-motorized modes come under state or local government Acts, e.g. Punjab Rickshaws Act, 1976. The relevant authority is responsible for formulating rules on licenses, tariffs, uniforms, insurance and so on in order to promote safety and better transportation management in the state. Details on setting up at Non Motor Transport Cell at corporation level towns like Ludhiana, Amritsar, Mohali, Bathinda, Jalandhar, Amritsar and Patiala and at state level setting up Non Motor Transport Joint Director position is also proposed in the subsequent section of this report.

## 5.2 Cyclist and Pedestrian- Urban Environment

Humans being are born to Walk or Run not to drive. Right to Walk comes under our fundamental rights where as right to drive is subjected to payment of road and other taxes. Under present scenario, mainly our cities are not providing comfortable environment for walking and cycling. If we check our previous years data, compared with kilometer length of roads being constructed, rehabilitated, maintained and upgraded vs length of footpath made/repared is almost negligible. In urban areas presence of footpath becomes more important. We have heterogeneous urban traffic but our road development is very much motor transport centric. Majority of the people who die on roads are cyclist and pedestrians. Under hit and run cases many die. They are people with no choice are majority of them are breadwinner of the society. Absence of untraceable vehicle, who hits them, provides them no claim under third party insurance. It is very important now to create a pedestrian and cyclist friendly environment followed by constitutionalise "People at No Fault" fund in coordination with Insurance agencies under the provisions of Road Safety Funds. Strong implementation of National Urban Transport Policy is very much desirable at this hour, which clearly says "equitable allocation of road space for people and not for vehicles". This fund can be the part of separate road safety body, which has Non Motor transport as one of its department.



### 5.3 Non Motor Transport

As per the data gathered from Animal Husbandry Department, Local Body and state transport, Punjab has about 45 millions Non-Motor Vehicles, which includes, Cycle, Cycle Rickshaw, Tanga, Animal Driven vehicles etc. Share of Motor transport vs. Non motor transport is 56:44 (Table 4). Large part of Punjab economy comes from Non-Motor transport, they are at present providing better rural and intra-city connectivity. Punjab recognized one of the sustainable modes of transportation Rickshaw and introduced with modified form as Ecocabs across the state. The Punjab Cycle Rickshaw Act 1976 is under amendment, in which special provisions are made to promote cycle rickshaw for short trips. In few cities Rickshaw is available on Phone call like taxi services. This is another example of community-government initiative.

### 5.4 Street Vendors and Hawkers

Street Vendors constitute nearly 2% of city population. The average daily income varies from 50-100 Rs. Street vendors operates from footpaths and thus considered as a necessary evil by the authorities and the general public. They provide valuable service but often restrict pedestrian. They make the shopping trip shorter, save time and provide security by their mere presence.

#### 5.4.1 The following Supreme Court comment provides insights on the relations between street vendors and pedestrians;

“if properly regulated according to the exigency of the circumstances the small traders on the sidewalks can considerably add to the comfort and convince of the general public by making available ordinary articles of everyday use for a compatibly lesser price and ordinary person not very effluent while hurrying towards his home after a day's work can pickup these articles without going out of his way to find a regular market. The right to carry the trade of business mention in article 19(1) (g) of the constitution, street pavement, if properly regulated cannot be denied on the ground that streets are meant exclusively for passing or re-passing and no other use“(Sodhan Singh Vs NDMC, 1989)

#### 5.4.2 After years of discussion as to how best to include the vendors in the transportation, the government of India Framed the National Policy on Urban Street Vendors in 2004 and revised in 2009 to make it more comprehensive. This policy promotes 'win-win; solution where the positive benefits of vendors are appreciated but reducing the competition for space with pedestrians by special design. This policy promotes three zones, 'restriction free vending', 'restricted vending zones' and 'no vending zones' taking into account the natural propensity of streets vendors to locate in certain places at certain time in response to pattern demand for their goods/services or the formation of 'natural markets' or traffic congestion and other factors. Other features of this policy are – census of street vendors, provision of ID Cards and license of them, allotment of proper place, shops for transitive business, extension of loans at low interest rate, needs to be taken care by the Ludhiana Authorities at Priority.

- A model market like Sunday Bazaar which is at presently informally being run in the various parts of the city can be regulated.
- Compulsory Vendor and Hawker Space in each location along with Parking space for cycle rickshaw and autos for both Private and Government.

5.4.3 In order to achieve the agenda of road safety, equal promotion of Non Motor transport is very important. A Non Motor Transport division is proposed with following agendas;

## **5.5 Non Motor Transport Division**

5.5.1 As per estimate, at present there are about 3,00,000 cycle rickshaw (cargo and passengers) are operational. The only reason for less number of licenses is the absence of any mechanism of registration like Motor Vehicles. Non-Motor Transport means are good way of commuting within the neighbourhood and for short trips.

5.5.2 Pune was one of the pioneer cities in India which established a NMT Cell in 2008 to address NMT related issues. This cell was established under the Pune Municipal Corporation and Various NGO's like parisar, Pedestrian First Support cell.

With the following objectives, NMT Division under Directorate Road Safety can be created and special cell at each Municipal Corporation Level can be established.

- i) Act as the coordinator between various departments on all NMT related matters.
- ii) Proposed and monitor budgetary allocation for NMT.
- iii) Plan for NMT related infrastructure in the city and ensure their execution
- iv) Put in place design and standard specifications and guidelines for NMT related infrastructure and ensure that all PMC work adhere to them
- v) Establish visibility for walking and cycling by creating distinct signage and ensure their consistent usage.
- vi) Undertake regular surveys of all NMT related infrastructure and ensure their maintenance and usability
- vii) Work with the police to ensure enforcement of rules and regulations that impacts pedestrians and cycling and increase awareness about their rights.
- viii) Make sure that all complaints and suggestions related to walking and cycling are taken up by the relevant authority and follow up the same.
- ix) Promote walking and cycling in the city through outreach and awareness program and special events.
- x) Publish an annual report of all NMT related data for inclusion in the Environment status report.
- xi) Creating and running single door clearance system for the registration of Rickshaw/ Ecocabs in

the each zone of Municipal corporation Ludhiana.

- xii) Arranging bank loans, advertisement for rickshaw men and its institutional tie-up for training of traction men like first aid, traffic safety.
- xiii) Planning of cycle rickshaw as feeder route to rapid public transit/city bus service
- xiv) Operation and Maintenance of the Cycle rickshaw stands in the city.
- xv) Monitoring of Night Shelters mainly meant for homeless urban poor working in Transportation sector like rickshaw traction, bus drivers or auto rickshaw drivers.
- xvi) Regulations and facilitation for Vendors and Hawkers. Implementation of NATIONAL POLICY FOR URBAN STREET VENDORS
- xvii) Looking after the need of creation Car-Free Zones within the various Parts of the City.

## **5.6 Emergency Medical Services for Road Crashes**

The Government will strive to ensure that all persons involved in road accidents benefit from speedy and effective trauma care and management. The essential functions of such a service would include the provision of rescue operation and administration of first aid at the site of an accident and the transport of the victim from accident site to nearby hospital. Hospitals alongside the National Highways and State Highways would be adequately equipped to provide for trauma care and rehabilitation.

## **5.7 Post Crash Trauma Care**

Prevailing Problems in the Accident & Emergency Care Delivery

Existing ambulances are more like transport vehicles and any vehicle suitable to carry a supine patient is called an ambulance without consideration to the overall ambulance design w.r.t. patient care, comfort & ergonomics; currently there is no 'National Ambulance Code' in the country which specifies the minimum National Specifications for various types of Ambulances, in-adequate care during transportation due to lack of trained Emergency Medical Technicians/para medico (EMT's) and existing unskilled manpower in the country and state are the key reasons.

- a. Appropriate healthcare facilities are not available within reasonable distances
- b. There is a mismatch between the healthcare facility capacity vis a vis the catchment area resulting in overcrowding at the limited number of available facilities
- c. Infrastructure at the existing healthcare facilities is deficient due to lack of funds or poor planning
- d. Inadequately equipped healthcare facilities due to lack of National Standards and Guidelines regarding the same

- e. Sub-optimal quality care at the existing health facilities due to inadequately skilled manpower
- f. Lack of standard written Protocols regarding the handling of a patient on his arrival at the healthcare facility
- g. Lack of accountability and monitoring mechanisms to ensure timely and optimal care

## **5.8 RECOMMENDATIONS**

### **5.8.1 For Immediate Implementation:**

#### **Review & Audit of the Existing Schemes:**

- The scope of National 108 service should be further expanded to cover all the state and national highways and major district roads.
- State Highways Accident Relief Services Scheme (SHARSS) like National Highways Accident Relief Services Scheme.
- A periodic audit for the already supplied Ambulances & Cranes should be done w.r.t. their location, availability, utilization, efficacy, manpower, uptime, etc.
- All CRV's & Ambulances should be accessible by the National Medical Relief Toll Free Number (102), integrated under a State Highway Accident Relief Network and closely linked with the state EMS.
- The State Medical Relief Toll Free Numbers 108, 100 and 1073 should be well advertised by displaying prominent signage at every 2 – 5 kms on core network or at near all the existing black spots.

### **5.8.2 Incident Management System (IMS) – NHAI**

- The specifications for the Ambulances, Patrol Cars & CRV's should be prepared, updated & standardised to remove ambiguity and ensure uniformity in form and function mainly on the toll and private roads.
- A periodic audit for the already awarded contracts should be done w.r.t. the quality of service being rendered, quality of vehicles being used as patrol cars, ambulance and cranes, their utilisation, linkages, uptime, etc to ensure they are meeting with the T&C of the contract in spirit.
- The response time of 30 minutes for the Ambulances, Cranes, etc to reach the site needs to be reduced to 10 minutes. To ensure this, a close liaison with the corresponding other evacuation network is a must.

### **5.8.3 Emergency Medical Services (EMS) System**

- State Framework for the EMS System with the aim of providing effective and economical emergency care should be developed so as to maintain uniformity and continuity across the country.

- This framework should specify the broad specifications, guidelines and protocols for the various components of EMS System viz. Ambulances, Trauma Centres, Emergency Departments, Emergency Medical Technicians, Communication, Dispatch Centers, Command & Control Posts, etc.
- All the district should develop their respective EMS Systems within this predefined framework of state EMS
- All police officers, drivers, teachers and paramedical personnel should be trained in basic first aid practices. Minimum Five institutions should be identified in the state to conduct such programmes based on uniform methodologies.

#### 5.8.4 Short Term Measures (1-2 Years For Realization)

- Short term EMS programmes of 4 – 5 days duration should be developed in select institutions for CMO's and nurses working in emergency rooms.
- Deployment of a Pre-Hospital Emergency Medical Care Network to ensure a primary crash response time of 8 – 10 minutes. This network should be adequately supported by a unified toll free number, seamless communication, centralized dispatch, medical direction, triage protocols & crash rescue units.
- To verify , audit & designate the existing healthcare facilities along the Highways and upgrade those found deficient to minimum defined levels & to plan for new facilities where there is a deficit so as to ensure the availability of one emergency care facility at every 50km along the national highways.
- Capacity building and regular training in EMS to all involved in trauma care supplemented by training in First Aid to the public
- Encourage research & development into post-crash response by identifying and funding 5 major health care institutions of excellence in the state.

#### 5.8.5 Long Term Measures (3-5 Years For Realization)

- All district hospitals and community health centers across the state should be developed as integrated trauma care centers with appropriate manpower and facilities mainly falling near the core road network of the state.
- Augmentation in capacity and resources of available Medical establishments along highways as given in Table 8.
- Plan for rehabilitation centers for the trauma care victims
- Standardize minimum specifications for various types of Emergency Response Vehicles viz. First Responders, Patient Transport and other types of specialized Ambulances, Crash Rescue Vehicles, Dispatch Centers, Command & Control Centers, etc. so as to bring homogeneity in the system across the country.
- Assured essential emergency care to all citizens.

## Trauma Care Centers along Highways in Punjab

NH 1			NH-64		
1.	DH Amritsar	100	40.	DH Sangrur	100
2.	DH Ludhiana	200	41.	SDH Barnala	100
3.	DH Jalandhar	400	42.	SDH Rajpura	100
4.	SDH Baba Bakala	50	43.	CHC Bhuchio Mandi	30
5.	SDH Phagwara	100	44.	CHC Rampura Phool	30
6.	SDH Phillaur	50	45.	CHC Dhanaula	30
7.	SDH Khanna	100	46.	CHC Bhawanigarh	30
8.	SDH Mandi Gobindgarh	50	47.	CHC Kauli	30
9.	CHC Jandiala	30	NH-64 A		
10.	CHC Kartarpur	30	48.	CHC Sangat	30
11.	CHC Sahnewal	30	NH-70		
12.	CHC Payal	30	49.	DH Hoshiarpur	200
13.	PHC Ladowal	30	50.	CHC Adampur	30
NH 1A			NH-71		
14.	SDH Pathankot	100	51.	SDH Nakodar	50
15.	SDH Mukerian	100	52.	CHC Shahkot	30
16.	SDH Dasuya	100	53.	CHC Patran	30
17.	CHC Tanda	30	54.	PHC Mehatpur	30
18.	CHC Kala Bakra	30	NH-95		
19.	PHC Raipur Rasulpur	30	55.	DH Ferozepur	100
NH 10			56.	DH Moga	100
20.	SDH Fazilka	100	57.	SDH Jagraon	50
NH 15			58.	SDH Samrala	50
21.	DH Gurdaspur	100	59.	SDH Khamanon	30
22.	DH Faridkot	50	60.	CHC Ferozeshah	30
23.	DH Bathinda	100	61.	CHC Sidhwanbet	30
24.	SDH Malout	50	INTERSTATE HIGHWAYS		
25.	SDH Abohar	100	62.	DH Nawanshahr	100
26.	SDH Zira	50	63.	SDH Garhshankar	50
27.	DH Tarn-Taran	100	64.	CHC Bholkalota	30
28.	SDH Batala	50	65.	CHC - Banga	30
29.	CHC Gidderbaha	30	66.	CHC Lohian Khas	30
30.	CHC Kot Kapura	30			
31.	CHC Goniana	30			
32.	CHC Sarhali	30			
33.	CHC Naushera Pannunan	30			
34.	DH Ropar	100			
35.	DH Mohali	100			
36.	SDH Anandpur Sahib	100			
37.	SDH Kharar	50			
38.	CHC Derabassi	30			
39.	CHC Kurali	30			

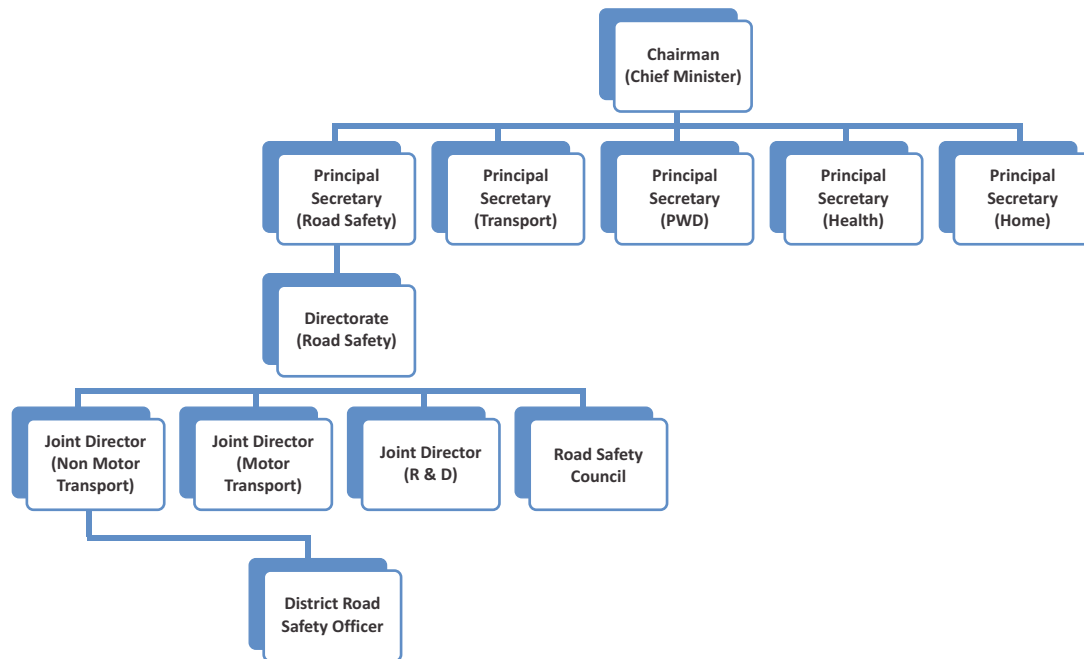
## 5.9 Unified Road Safety Agency for the State

5.9.1 At present road safety and road transport is being dealt by more than 16 state government departments mainly;

- State and District Punjab State Road Safety Council
- Assembly Committee on Road Safety
- Punjab State Transportation Society
- Public Works Department (B &R)
- Punjab Infrastructure Development Board
- Punjab Road & Bridges Development Board
- Punjab Urban Planning & Development Authority
- Punjab Mandi Board and Market Committees
- Local Bodies Department
- Punjab Municipal Infrastructure Development Company
- State Transport Authority
- Regional Transport Authority
- Punjab Roadways
- Punjab State Bus State Management Company Limited
- Punjab Police (Traffic)
- Punjab Infrastructure Regulatory Authority
- Punjab State Health Department

5.9.2 This makes road safety overall as a complex phenomena. Interdepartmental policies and coordination is missing and very much subjective in nature. To address this issue a Unified Road Safety Agency on Road Safety is proposed for the state. The proposed road safety agency will have focus equal focus on Motor Transport and Non Motor Transport.

## 6.1 Proposed Organizational Structure of Directorate, Punjab Road Safety



## 6.2 Education And Awareness

Road safety is in a critical state in Punjab as well in India and needs a systematic effort to change the behavior of all citizens through a cultural shift to inculcate a safety culture. The basic instinct of flouting rules needs to be changed to respect the rules of the road, so that all road users become safe. Not only those travelling inside a steel bodied vehicle should be safe, but all others who are exposed to the vagaries of the environment and are vulnerable like the 2-wheeler rider, cyclist and the pedestrians, constituting the highest proportion in road fatalities and injuries, should be equally safe. To educate and bring awareness in the population on road safety, a massive programme of education and awareness campaign is required to be undertaken. This will have many features for addressing the weaknesses in the system, as well as in improving the awareness levels. This will include educating the system managers covering safety through curriculum based education and in the form of campaign for better awareness encompassing safe behavior and safety culture. There is a whole range of awareness which is required to be brought into the system, so that systemic problems get connected. In addition to this, general public is to be exhorted with the road safety scenario and its implication on individual and the country, regularly for a very long time so as to bring in permanent behavioral changes. Education of road users should move beyond preaching to accepting safety as a way of life and the rights of people to safety in traffic environments.



### 6.3 Awareness Campaigns

There is a whole range of awareness which is required to be brought into the system, so that systemic problems get connected. In addition to this, the general public is to be exhorted with the road safety scenario and its implication on individual and the country, regularly for a very long time so as to bring in permanent behavioral changes. The following categories of campaigns will be necessary:

- Public Awareness Campaign
- Television Promos
- Live Discussion on Television
- Live and Let Live” Programme on TV
- Do's and Don'ts of Road Safety
- Celebrity Endorsement on Television
- Radio Programmes
- Newspaper Campaigns
- Short Films in Cinema Halls
- Road Safety Posters
- Hoardings carrying Road Safety Messages
- The Supreme Court's ruling that no common person will be prosecuted or put to unnecessary interrogation on bringing an accident victim to hospital needs to be given lot of publicity across the country.
- *Nukkad Natak* (Street plays)
- Use of Local Cable Network
- Short public meetings of locals in the market place or business centers of small towns and villages using loud speakers and a very effective in communicating to the public for short duration on a specific topic; and the road safety issues can be talked in such meetings
- Distribution of Leaflets.

## 6.4 Road Safety Education

### 6.4.1 Education of Officials in the System

Capacity building of policy makers and programme managers is crucial to increase the role of safety in traffic environments, incorporating safety features at the time of design of vehicles and roads, and to formulate safety policies and programmes. The government officials in urban and non-urban areas, involved in building and managing roads and road transport, are to be sensitized about their responsibilities in respect of compliance to road safety, and on how to deliver the same with due accountability. Some of these are listed here under:

#### 6.4.2 NHAI, PWD and Police Department

Many of the officials are not aware of the safety requirements in the planning, design and operations of the road systems. All of them need to attend workshops for training and educating them for getting acquainted with the safety problems in their correct perspective. For example the Traffic Police, many a times, would not have knowledge of managing traffic, and his decision in handling traffic at a junction or in an area could be wrong or sub-optimal.

#### 6.4.3 Consultants/Designers, NGOs and Corporate

For enhancing the capacity of the system in handling the road safety problems, the government and private stakeholders need to be trained and educated with regard to planning, design and management of the road system.

#### 6.4.4 School Curriculum Development

The main aim of road safety education should be based on the following principles:

- To instill the knowledge necessary to understand road traffic rules, and for safety on the road
- To aim at appropriate and safe behavior in specific traffic situations
- To develop awareness of the importance and usefulness of respecting road safety rules and measures.

#### 6.4.5 Different human resource strengthening programmes should be developed to include engineers, police, transport and health officials on formulating, developing, implementing, monitoring and evaluating road safety policies and programmes.

## 6.5 Driver Training

### 6.5.1 Present Scenario

For want of any credible data with the regulatory agencies, it is estimated that there are more than 300 driver and traffic training institutes in Punjab state. Majority of the driving schools are for LMV Drivers. There are about a two institutes with proper facilities to train HMV Drivers and SV Drivers. There are no dedicated facilities for Training of trainers. There are very few schools / institutes who organize structured training for the trainers. These driving schools can train at the most 2 million novices in driving training. Less than 2% of the schools are in the organized sector. Low enforcement on quality in the schools in terms of Instructors and methodology is common.

### 6.5.2 Policy intervention

- Framework for evolving policy guidelines on all aspects of driver training (driver training schools, driver licensing, training, periodical certification, and health guidelines) should be formulated at the state level.
- A Directorate Road Safety/District road safety officer as regulatory agency should be promoted to coordinate all aspects of driver training
- All large public and private sector companies should develop and implement a fleet safety policy
- All existing driver training programmes should be evaluated for content, duration, methods and outcome and need based programmes should be developed.
- All registered companies, corporate and Government Departments should employ drivers having certificate from an accredited institute / school only.
- Auditing and grading of driving schools
- Registered companies / corporate / Government Departments should employ only trained drivers.
- Transparent and fair process of licensing

### 6.5.3 Training of Trainers

- All the trainers shall be selected, trained and certified by recognized Training centres.
- All Drivers Training School shall employ only certified and licensed trainers.
- Based on level of compliance to rules for setting up driving schools, the driving schools shall be graded as A, B, C, D or E. Grade schools are such that they fully comply with the rules. B, C, D or E grades are for lesser compliance.

### 6.5.4 Driving training infrastructure

- Transport Department provides a scheme for setting up Driver Training Institute at state level
- Before they start imparting driving training in driving schools, they should attend “TRAINERS TRAINING” at recognized National Institutes.
- To ensure that the needs are met driver training schools should be encouraged to come up in the PPP mode.

## 6.6 Funding Mechanism

### 6.6.1 Centre Share

An allocation of Rs. 15264 crore has been made under the Central Road Fund for the year 2010-11 to all states and UT's. The allocated funds from the CRF earmarked for the States are further allocated to various states based on the 60% fuel consumption and 40% geographical area of the State. (CRF is collected through Rs 2/ cess on sale of petrol and high speed diesel). Last year Rs 164.34 crore was granted to Punjab state under CRF for national highways alone.

- 6.6.2 The Committee on Road Safety & Traffic Management constituted under the chairmanship of Shri S. Sundar, former Secretary, MoST also formulated and recommended a National Road Safety Policy for consideration of the Government. The Ministry has approved adoption of the policy. The National Road Safety Policy envisages greater emphasis on awareness on road safety issues, establishment of road safety information database, strengthening of driving license system and training, better enforcement of road safety laws etc. The policy also envisages setting up of a dedicated agency namely National Road Safety & Traffic Management Board to oversee the road safety activities in the country. A Bill to create the National Road Safety and Traffic Management Board was introduced in Lok Sabha on 04th May, 2010 which was referred to Department related Parliamentary Standing Committee for examination. The Committee has submitted its report to the Chairman, Rajya Sabha on 21st July, 2010. The recommendations of the Committee are being examined. As per sundar Committee recommendations 1% of CRF shall be allocated for the road safety to the state.

## 6.7 Insurance Companies

Involvement of Insurance Companies: In developing nations; majority of the road safety related work has been taken care by the Insurance Companies. In an estimate it has been found that in Punjab average 1200 Crore annual insurance amount is being collected by the General Insurance companies related to Motor Vehicles (Non Life Segment). As a part of their corporate social responsibility and through recommendations of Insurance Regulatory Authorities of India; on the pattern of Insurance Institute of Highway Safety (IIHS), USA similar institute/agency can be planned for Punjab. <http://www.iihs.org/>.

## 6.8 Insurance Regulatory and Development Authority and Corporate Social Responsibility

State can request to centre government under the provision of Insurance Regulatory and Development Authority Act, 1999 Section 14 (2) (p) specifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector.

## 6.9 Third Party Claim

6.9.1 There are two quite different kinds of insurance involved in the damages system. One is Third Party liability insurance, which is just called liability insurance by insurance companies and the other one is first party insurance.

A third party insurance policy is a policy under which the insurance company agrees to indemnify the insured person, if he is sued or held legally liable for injuries or damage done to a third party. The insured is one party, the insurance company is the second party, and the person you (the insured) injure who claims damages against you is the third party.

*Aeron-Thomas, A (2002) The Role of the Motor Insurance Industry in Preventing and Compensating Road Casualties'. Scoping Study - TRL, Crowthorne, UK prepared for DFID*

*Byrnes, P. (2001) The Impact of Bodily Injury Claims on the UK Insurance and Reinsurance Market. Knowledge Management, IUA.*

*Downing, A. (1997) Accident Costing in Indonesia. Proc. International Conference on Road Safety, 24-27 July 1997. Andhra University, India.*

*The Tribune : 17th December 2012 : Fatehgarh Sahib, Ropar roads most unsafe – by Megha Mann*

*Section 145(g) of Motor Vehicle Act, "third party" includes the Government (National Insurance Co. Ltd. v. Fakir Chand), "third party" should include everyone (other than the contracting parties to the insurance policy), be it a person traveling in another vehicle, one walking on the road or a passenger in the vehicle itself which is the subject matter of insurance policy.*

*The Motor Vehicles Act, 1988 which came into force on 1st July, 1988 and which is divided into XIV Chapters, 217 Sections and two schedules, makes it compulsory for every motor vehicle to be insured. Chapters X, XI and XII of the 1988 Act deals with compensation provisions. Sections 140 to 144 (Ch.X) deal with liability without fault in certain cases. Chapter XI (Ss. 145 to 164) deals with insurance of motor vehicles against third party risks.*

6.9.2 In the year 2009-10 as per the report of IRDA the total premium under Third party collected through motor insurance was Rs 3,583.37 Crore out of which 2,920.53 crore was paid as claim, means a saving of 662.84 crore towards third party Insurance Pool. Punjab share in total vehicle population of the country is about 4%, which means estimated 25 crore can be added through third party insurance to state budget.

## 7.1 State Share

7.1.1 PWD and Mandi Board Annual Budget of State Public Works Department and Punjab Mandi Board are in the tune of 7000 crore. 1% road safety fee can be imposed on all types of roads and bridges contracts and special fund under directorate road safety can be created, which can be implemented through separate road safety agency for the state.

### 7.1.2 Share from Transportation Department

1% share from the revenue collected by State Transportation department collected as a registration, permit and by getting royalty of high security number can be collected under road safety fee. Rs 10/- as royalty being considered from each new high security number plate towards transportation department, which can be contributed to road safety pool

*Insurance Regulatory Authority of India Report Number IB/Motor/Report-2/2010 title Summary Motor Report 2009-10. [http://www.irda.gov.in/ADMINCMS/cms/frmGeneral\\_NoYearList.aspx?DF=AR&mid=35.2](http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_NoYearList.aspx?DF=AR&mid=35.2) makes average revenue of Rs 25 lakhs per annum plus 1% of the total revenue receipt by the transport department makes it total of about 2 crore towards annual road safety pool.*

### 7.1.3 From State Police Department

In the year 2010 rupees 18.67 crore and in the year 2009 rupees 11.43 crore revenue was collected by the state traffic police through traffic challans. In the year 2011 a total 806617 challans and in the year 2009 a total 352654 challans were registered by traffic Police. As per the Provision given in the motor vehicle to impose the levy of Rs 10/- per challans can be implemented in order to upgrade the traffic enforcement infrastructure of the police with same amount

As per the Provision of Section 211 of Motor Vehicle Act 1988, which enable state government to levy fee on motorist state that Any rule which the Central Government or the State Government is empowered to make under this Act may, notwithstanding the absence of any express provision to that effect, provide for the levy of such fees in respect of applications,

amendment of documents, issue of certificates, licenses, permits, tests, endorsements, badges, plates, countersignatures, authorization, supply of statistics or copies of documents or orders and for any other purpose or matter involving the rendering of any service by the officers or authorities under this Act or any rule made there under as may be considered necessary:

Provided that the Government may, if it considers necessary so to do, in the public interest, by general or special order, exempt any class of persons from the payment of any such fee either in part or in full.

For the year 2010 against the 806617, with levy of rupees 10/- per challans, state could have been collected an amount of 80 lakhs. From the present project figures via additional road safety levy on each challan, state can generate about 1.5 crore rupees annually. The details of estimated figures for road safety funds from various existing mechanism is given in Table 9

*Table 9 : Details of Revenue collection for Road Safety Fund in the state*

Sr No.	Expected Centre Share		State Share			Total
	Through Provisions on CRF	Insurance Companies	PWD and Mandi Board	State Transportation Department	State Traffic Police	
Estimated Figure for 2013	2 Crore	25 Crore	70 Crore	2 Crore	1.5 Crore	99.5 Crore

## 7.2 Assessment of the Policy Environment

The key purpose to bring this road safety policy is to bring down number of road fatalities and accidents for the state of Punjab. Apart from individual departmental performance as described below, overall each district shall be assigned with bench mark in order to evaluate their performance on road safety. Senior Superintendent of Police and District Road safety officer shall be jointly made in charge for this along with other agencies. At present fatality rate per million populations in Punjab is 12.1, below the national average of 12.8. Each district yearly evaluated based upon type of vehicles registration, number of challan, number of fatalities and overall road safety and transportation infrastructure ranking. Further evaluation of the policy shall be done on following basis;

## 7.3 Political Leadership

The Political leadership is very much keen to improve the overall road safety in the state. Political leadership is looking forward for the new ideas and scheme which can give new direction to the state road safety. Formulation of Road Safety Council, Unified Traffic and Transport Authority are the few key initiatives being undertaken by the state government.

#### **7.4 Public at Large**

Public at large is mainly concerned about the Road Safety. Everyday state loses 10 valuable lives in road crashes. Community through its various initiatives has already supported the cause. More than 200 ambulances donated by public or charitable organizations are being operational in the various parts of the state. At village and panchayat level community has undertaken many initiatives to improve even black spots in their nearby vicinity.

#### **7.5 Judiciary**

Many suo motu and Public Interest Litigations are pending against the state to take some corrective measures to improve road safety. On the direction of Punjab and Haryana High Court high powered committees under the chairmanship of chief secretary establish to assess and improve the road safety conditions in the state.

#### **7.6 Public Works Department and Road Construction Agencies**

Public Works Department and other road construction agencies are showing their willingness to improve road safety. Under Punjab State Road Sector Project, road safety strategy has been formulated and implemented. More than 400 black spots across the state have been identified and its improvement work is in progress. Road safety has become essential component of the road construction. Further State Infrastructure Regulatory Authority is keeping his eyes on the private BOT operators and ensuring implementation of road safety provisions as prescribed in their contractual provisions.

#### **7.7 Enforcement Agencies- Traffic Police**

Traffic wing of Punjab Police is already working hard to improve the road safety conditions in the state. With the help of World Health Organization and Punjab State Health Corporation RS-10 project is being implemented in the Jalandhar district of Punjab. Many other initiatives on drink and drive, over speeding state traffic police showing its firm commitment towards road safety.

#### **7.8 Health Department**

Health department is primarily responsible for the post crash scenario and trauma care. Introduction of recent 108 services has helped many road crash victims to reach hospitals. As per the official figures more than 12000 road crash victims were evacuated and transferred to the nearby primary or secondary hospital by the state police apex committee on traffic and road safety ambulances and almost about 26000 road accident victims by the newly introduced 108 service by the Department of Health Punjab. Time to time analysis on response time, evacuation time of road accident victim by the various post crash services extended by the state individually or in coordination with community shall be evaluated.



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Ref Type: Generic

## **CYCLE RICKSHAW, STREET VENDOR AND HAWKERS: INFORMAL SECTOR IN PUNJAB**

### **8.2 Perspective**

Cycle rickshaw based intermediate public transport is advantageous to society. This kind of carrier reduces pollution, eliminates fuel consumption, is low-cost, ensures road safety and increases employment and promotes small scale industries. It is estimated that more than 3 lakh cycle rickshaws are operational in the state of Punjab. According to the 2011 Census, population of Punjab is 2.74 Crores that is living in 54.1 Lakh households which generates about 55 million passenger trips per day. 37.5% of the total population resides in urban areas. In Punjab, as per the last census, from a total 214 urban agglomerations only 3 cities have inter-city public transportation system. Remaining 211 cities largely rely on their own modes of transport and on cycle rickshaw and auto rickshaw. Directly and indirectly these operations are a source of income for more than 3.2 lakh mainly, urban poor families of the state. Viewing the population base with an average family size of five, livelihood to 16 lakh (1.6 million) persons is being provided by the rickshaw, that makes it 6% of the total population of Punjab is catered by the intermediate public conveyer. Cycle rickshaw emerged as one of the safest mode of transportation in 2009 (with two fatal incidents reported on rickshaw).

Another important segment of the informal sector is the street vendors and hawkers, providing consumers with convenient and accessible retail options. On an average 750 vendors/hawkers provide services mainly to urban and rural Punjab. This makes a sizeable segment of the population's livelihood dependent upon vending and hawking. As per estimates, 208075 vendors and hawkers are operational in Punjab. Around 2 Lakh households' main source of income is linked with vending and hawking.

Presently, cycle rickshaw, vending hawking is one of the largest employment generators in informal sector that needs immediate attention of the state government. On an average one cycle rickshaw help to commute 20 people per day and it is a preferred mode of travel especially by ladies and elders for short distance traveling (< 3km). Street vendors and Hawkers exist only because the consumers want them. A total of five lakh poor families are involved in this informal sector. People in this business are land less labour and the urban poor.

Informal sector provides citizen friendly, valuable services and addresses the following noteworthy benefits:

- Service of citizen friendly passenger and retail goods transportation at door step.
- Livelihood
- Environment and sustainable development
- Social Inclusion and citizen-friendly services

In addition proving useful goods and food article at door step via non polluting ways, vending itself add safety and security to social life. Poorly lit stretches and parks, and narrow footpaths make women feel insecure and vulnerable but presence of vendors and hawkers make them feel safe in public places.

### 8.3 Table : Estimated Numbers of Vendors and Hawkers in Punjab

Vendors and Hawkers Families	Cycle Rickshaw Families	Total Families	Livelihood of People would be Impacted
2 Lakhs	3 Lakhs	5 Lakhs	25 Lakhs

Globally cycle rickshaw is considered as one of the most sustainable modes of transportation. It is socially, environmentally and financially equitable mode of transportation. One cycle rickshaw saves about 3 liter of fuel per day and a vendor/hawker average directly and indirectly also saves about 3.5 litre of fuel per day. To burn one liter of fuel 15.2kg of fresh air is required. Looking into the total environmental calculations cycle rickshaw, vendor hawkers in Punjab saves about 16 lakh liter of fuel per day.

Every day, a total of about 5.5 crores (550 million) commuter trips are generated, out of which 60 lakhs (6 million) are being catered by cycle rickshaw alone. It takes care of about 11% of the total passenger trips. Amritsar and Ludhiana is a hub for Cycle Rickshaw Industry across the globe. As per survey conducted in Amritsar there about 25,000, In Jalandhar about 27,000, In Patiala about 16,000 and in Ludhiana there are approximately 40,000 cycle rickshaw are operational today providing service of short trip commuting.

### 8.4 Issues related to Cycle Rickshaw, Vendors and Hawkers

#### 8.4.1 Age Limit

Presently, the applicable Acts restrict the age limit for rickshaw operations between 45 and 50 years. Whilst in contrast to Motor Vehicles Act 1988, a person of age 16-18 years can drive a car or motor vehicle, apart from commercial vehicles. In the case of Motor vehicles, it is purely linked with the Medical fitness of the driver. We all understand the motor vehicle operations involve greater risk and danger as compared with driving cycle rickshaw that has a maximum speed of 20km/hr. Evidently, many rickshaw operators are 60 years and above in age and despite being healthy become victims of law due to restricting age limit. Incidentally, cycling is a healthy exercise that keeps you fit even in older age. Such impractical imposition through the Act made the very existence of many rickshaw operators, illegal and that further involved their harassment by Police and Municipal Authorities. The upper age limit in the Act can be linked with the medical fitness of rickshaw driver.

#### 8.4.2 Registration not Licensing

Instead of licensing, simple registration mechanism can be adopted like as in the case of cars/motorcycle and other motor vehicles. Fee based regulation of numbers is required rather than licensed based quotas along with providing year round open registration system. E.g. in Delhi as per Municipal Act the quota for cycle rickshaw has been restricted to 90,000 in 1980 and was not revised even after 33 years. No rational basis is available for this magical number. However, even if fixation of number of rickshaw needs to be restricted, it should be based upon

the Population Base of the city, overall mobility plan and futuristic demands.

Similarly, in the case of Vending and Hawking, licenses are not issued at various municipalities. Due to this in Mohali Municipal Corporation alone, As per the survey conducted by IDC in 2014, it is estimated about 3000 operational vendors and hawkers, pay an average rupees 650/- per month as bribe to municipal authorities to run their business. That makes it about 20 lakh per month. However this situation is more prevalent in corporation towns.

**Table : Average 59% of the respondent Hawkers and Vendor accepted they Pay bribe**

Bribe Range	0	300	500	700	1,000	1,200	1,500	2,000	2,500	3,000	4,000	Total
% Vendor & Hawker Pay	42 (41%)	2 (2%)	14 (14%)	1 (1%)	26 (25%)	1 (1%)	8 (8%)	3 (3%)	2 (2%)	2 (2%)	1 (1%)	102 (100%)

#### 8.4.3 Rental and Fleet operations

Municipal body can grant or renew license to an institution to be plied through any person. But the rickshaw cannot be used for hire. The present Act, does not allow anyone to hold more than one rickshaw. The licenses to widows, disabled and institutions can be given based upon their needs but maximum up to five. This means that person who is born as a rickshaw puller has to die as a one as well! He cannot make further investment to buy another rickshaw.

In big cities it has been observed that many migrants operate the rickshaw during their initial days of arrival in the city. They take rickshaw on rent from some rickshaw fleet operators. They don't want to own a rickshaw, as they do not have any initial capital investment to make, permanent parking space or permanent residence to live. Further during the off season or festival time, they visit back their native place, then in that case who will take care of their rickshaw and where they will park it. Presently, the Act does not provide flexibility of any kind, for renting/handing over a rickshaw to anyone else besides the owner; the rickshaw driver has to be the owner.

***When the owner of an airline acquires an additional fleet of planes, or a truck owner manages to expand his fleet to several hundred vehicles, he is celebrated as a successful entrepreneur. But when a person comes to acquire a few dozen or a few hundred rickshaws, owner gets to be stigmatized as a mafia don - Manushi***

By enacting a law that prohibits a person from owning more than one rickshaw and by insisting that “owner must also be puller” and in fact the existing Act legislated that:

- A person who begins his life as a puller, must die as a puller;
- The poor must remain manual laborers all their lives;
- The poor are not allowed to become even petty entrepreneurs.

Further the Act itself is an unconstitutional violation of the fundamental right under Sub Clause (g) of Clause (I) of Article 19 of the Constitution to carry on occupation or business. Since a similar restriction is not imposed on taxi drivers, buses, three wheeler auto rickshaw drivers and other vehicles plying for public hire, the present Rickshaw Act and by Laws violates the fundamental rights guaranteed by Articles 14 and 16 of the Constitution. .

In the case of vendor and hawkers they need to take prior license from Municipal Authorities. In Mohali no license has been issued post 1988, this is hugely unfair on the part of Municipal Corporation that is running an enforcement drive in the absence of issuing license(s). Survey result found that all 102 respondents were without license.

#### **8.4.4 Redefining “Rickshaw Puller”**

The present Act specify rickshaw driver as “Rickshaw Puller”, puller was old terminology, that is no more applicable in the three - wheeled cycle-rickshaw driven by a manual peddle power and includes all its components and accessories. Rickshaw puller terminology more was applicable to the old rickshaws that were operated on two wheels and in the front a one or two manual labour used to pull by hands. The existing three-wheeled cycle rickshaw design is a modified version of the same, in which human traction power is being used as like his one of the skill, and through manual 0.25 horse power mechanical energy generated is being used for rickshaw running. These peddle Indian soldiers are no more “Puller” but traction men or rickshaw/Eco-cab drivers. This definition needs amendment in act.

#### **8.4.5 Confiscation and Destruction of Rickshaws and Rehris**

In the case of rickshaw, and rehris as applicable per Punjab Municipal Act 1911 and Cycle Rickshaw Act 1976, Municipal Authorities can confiscate and destroy the rickshaw instead of just booking for fines. This needs immediate amendments in the existing Act. In the case of Motor Vehicle they can only fine and can't confiscate. Supreme Court of India has already declared this act on part of the municipality, as unconstitutional.

#### **8.4.6 Vending and Hawking Zones**

Present planned city concept does not provide any space for the organic development of this eco friendly community based upon local demand. Western model of city planning, where an important constitute of Indian cities “street food” is missing. This planning mistake makes presence of each vendor and hawker illegal and negative in the eyes of Public and enforcement authorities.

## 8.5 PLAN OF ACTION-PUNJAB

### 8.5.1 Deliverables

1. Providing them with “Sewa Card”, that will facilitate along with a Photo Identity and unique ID allowing them to avail other facilities. An online databank created via Suvidha Centre will keep record of their Permanent and Local address along with their other social economical data. This card will facilitate them to run their vending hawking business by paying suitable fee and for rickshaw pullers the same shall be made available at nominal fee of Rs 1.
2. Extension of Rashtriya Swasth Bima Yojna to the Informal Sector, may or may not be having BPL Cards
3. Facilitation to get License to run food business from Health Department under Prevention of Food Adulteration Act, 1954; the same service may be notified under Right to Service Act.
4. Facilitation for Swalambhan Pension Scheme, under New Pension Scheme, as on demand.
5. Setting up of Grievance Redressed cell for the informal sector. The membership of which includes representatives of civil society, administration and representations of informal sectors and their unions.
6. Close User Group (CUG) for Mobile Connection – Free Inter calling
7. Improvement of Last Mile Connectivity Services by planning cycle rickshaw and auto rickshaw as feeder service to city bus service via Dial-a Rickshaw facility.
8. Extension of Atta-Dal Scheme to 5 Lakh Vendor, Hawkers and Cycle Rickshaw Operators. Most of them are covered under various schemes already.
9. Bus Pass for the Travel with 50% concession.
10. Waiver for House Tax and Water Supply Bills those who have houses here.
11. Arrangement of Credit/Loan Facility to Vendor, Hawker and Cycle Rickshaw operators via DRI Schemes.
12. Digital Empowerment: facilitating them with mobile phone at 50% subsidized rates.
13. Free Night Shelters facility for the sleeping homeless.  
Four essential vending services be allowed in each residential area (unless and until high security zone) under mandatory services for city life.
  - a. Dhobi -Ironing
  - b. Basic Cycle Repair-No Sale
  - c. Cobbler for Shoe Repair
  - d. Tandoor for (Packing and Not Sitting and Standing)

### 8.5.2 Structural Reforms

1. In order to promote food culture in every city, creation of Night Food Street by dedicating one area for street vending. This includes creating of Drinking Water, Sanitation facility along with sitting area. Preferable this can be done by selecting one of the natural market areas mostly exists in all cities of Punjab. Facilitation of natural market where sellers and buyers have traditionally congregated for more than a specified period for the sale and purchase of specific products or services and has been determined as such by the local authority.
2. Dedicated Cycle Rickshaw and Auto Rickshaw parking facility with all Bus Shelters of City Bus Service for the improvement of Last mile connectivity.
3. For the Inclusive planning and allow organic development of the city, a city Planning guidelines under PUDA act to facilitate vending, hawking and cycle rickshaw operation.
4. Construction of state-of-the-art “Rain Basera” for the homeless population working in informal sector
5. Provision to provide them new rickshaw and hand pulled cards on easy loan or under welfare schemes. Pictures are shown in the next section of this report.

### 8.5.3 Policy Level Reforms

6. At present VAT of cycle rickshaw tyre tube is 12.5% and VAT on Cycle Rickshaw complete is about 6.05%. Since these are the green modes of transportation, exemption of any form of such tax on the purchase of new vehicle and spares mainly tyre and tube, that requires replacement after every 6 months, needs to be given.
7. Under Punjab Cycle Rickshaw Act 1976, waiving off the upper age limit of 45 for rickshaw driving and linking it with Physical fitness of driver like motor vehicle act. First registration up to age of 50 and then subsequent renewal after every 10 years.
8. Scrapping of Licensing system and facilitation with Easy online registration system under Punjab Municipal Law 1911 via Suvidha Centre and registration service shall be made compulsory Under Right to Service Act.
9. **Section 34 of the Police Act No person shall cause obstruction in any street or public place by–**
  - Allowing animals or vehicle
  - Leaving any vehicle standing or fastening any cattle in the street or in the public place
  - Using any part of a street or public place as a halting place for vehicles or cattle
  - Leaving any box, bale package or other things whatsoever or upon a street for an unreasonable length of time or contrary to any regulation
  - By exposing anything for sale or setting out anything for sale in or upon any stall, booth, and board cask basket or in any other way whatsoever.



These two provisions create the contradiction between a legal 'licensed' vendor and 'illegal' obstruction or causing nuisance resulting in physical eviction of even licensed vendors. The report recommends that Punjab Police shall amend the Police Act Rules/Regulations there under and add a rider as follows:

“Except in case of street vendors / hawkers and service providers with certain reasonable regulations”

10. The policy emphasizes in Municipal Laws so that stationary vendors should be allocated space /stall either open or covered on license basis after photo census / survey for initial period of 10 years that may be extended to another 10 years.
11. Inclusion under Swaran Jyanti Shehri Rojgar Yojan for building Houses and Residential Colonies for Homeless/Vendors/Hawkers.
12. Notification of Prevention of Food Adulteration Act, 1954 under Right to Service Act for providing them license to run business within 24 hours of application under “Sewa Card”

#### **8.5.4 Workable Possibilities**

- In order to attract registration, a simple Registration Process for Vendor, Hawker and Cycle Rickshaw Operators at Suvidha Kendra with Nominal Fee as Token money and Service of Registration certificate for Cycle Rickshaw/Vendor/Hawker may be notified under Right to Service Act.
- Vending & Hawking Master Plan with Zoning of the city in consultation with stakeholders mainly Vendor and Hawkers
- Creation of Special Purpose Vehicle (SPV) comprises of the municipal commissioner, representatives of street vendors, local authority, planning authority, local police, resident welfare association and other traders associations in the form of Society for the smooth operations of the system. This will eventually act as Town/City Vending Committee (TVC).
- The registration card will enable them to avail various services likes, Mobile Connection, Health Insurance, credit facility and other welfare schemes benefit by Government



## PICTURES OF NEW CYCLE RICKSHAW AND VEGETABLE CARTS

## New Rickshaw: Fazilka Ecocabs Model



Figure : New Lightweight Rickshaw with more Luggage Space and Advertisement space



Figure : Another model of Fazilka Ecocabs for Chandigarh

### New Rickshaw: Fazilka Ecocabs Model



Figure : Picture of Info-Thela for Rural areas



Figure : Vegetable carts



## RAPID RURAL POLICE RESPONSE SYSTEM

### 8.6 Perspective

Further, to Commission's recommendations to rationalise security and setting up a robust system like Security Board to take timely and appropriate decisions to provide security to persons in need of it. It is being recommended to strengthen citizen security particularly in rural areas. The human resource and vehicles now available due to withdrawal of status-oriented security, should be deployed to provide security services to the common citizens.

### 8.7 Need For Rapid Rural Police Response System

The Commission recommends to establish a Rapid Rural Police Response System in the state of Punjab for reducing the police response time to distress calls in rural areas by providing state-of-the-art networking of GPS-fitted fully equipped and manned vehicles with the district control rooms. These recommendations have been arrived at after intensive deliberations by the task force on Police Reforms, chaired by Dr. A.A. Siddiqui with major inputs from the police department. Modern and well-equipped police control rooms have become functional in the six corporation towns of Ludhiana, Jalandhar, Amritsar, Mohali, Bathinda and Patiala while even the smaller towns have rudimentary PCRs operational. It is felt that a similar kind of quick police response system needs to be established in rural areas to cater to their policing needs.

### 8.8 Features

The Rapid Rural Police Response System will have the following two major components:-

- (I) GPS-fitted vehicles stationed at strategic locations all over the state in rural areas
- (ii) Upgradation of existing district control rooms for monitoring and controlling the GPS-fitted vehicles, receiving distress calls on number 100 and channelizing the police response

### 8.9 Objectives

The main objectives of the Rapid Rural Police Response System include among others:-

- (i) Immediate and timely response of police to any situation, especially related to crime, law & order, women in distress, emergency needs of senior citizens, etc.
- (ii) Maintaining high visibility/presence of police force for inspiring confidence among the rural masses and to act as a deterrent to activities of criminals/anti-social elements
- (iii) Providing comprehensive and round-the-clock security cover in rural areas by strengthening area security
- (iv) Maintaining an efficient system of communications between district PCR, different police stations, with adjoining districts and with state headquarters
- (v) Ensuring effective implementation of area sealing, red alert and contingency plans
- (vi) Acting as information centres for the district police

### 9.1 Organisational Scheme

It is also recommended to provide one GPS-fitted fully equipped four-wheeler to each of the 289 police stations comprising the four police zones, excluding the police stations under the jurisdiction of three police commissionerates and the police stations comprising the municipal areas of Patiala, Mohali and Bathinda. The objective is to provide mobility and response capacity to the police in rural and semi-urban areas thereby establishing the rural police response system and strengthening the police response system in semi-urban police stations as well. The zone-wise and district-wise number of police stations is as under:-

Patiala Zone	-	81
Jalandhar Zone	-	66
Bathinda Zone	-	78
Border Range	-	64
<b>TOTAL</b>	-	<b>289</b>

Zone	Name of district	Number of rural/ semi-urban police stations
Patiala Zone	Patiala	18
	Sangrur	22
	Barnala	12
	Rupnagar	09
	S.B.S. Nagar	10
	S.A.S. Nagar	10
	<b>TOTAL</b>	<b>81</b>
Jalandhar Zone	Jalandhar Rural	15
	Kapurthala	15
	Hoshiarpur	15
	Ludhiana Rural	07
	Khanna	06
	Fatehgarh Sahib	08
	<b>TOTAL</b>	<b>66</b>
Bathinda Zone	Bathinda	15*
	Ferozepur	12
	Mansa	11
	Muktsar	10
	Faridkot	07
	Moga	13
	Fazilka	10
	<b>TOTAL</b>	<b>78</b>
Border Range	Amritsar Rural	17
	Tarn Taran	14
	Batala	13
	Gurdaspur	12
	Pathankot	08
	<b>TOTAL</b>	<b>64</b>
<b>GRAND TOTAL</b>		<b>289</b>

\* excluding municipal areas of Bathinda, Patiala and Mohali

## 8.2 Equipments In Response Vehicle

It is suggested to deploy the basic model of four wheelers ( cars, jeeps as the response vehicle to be used at 289 locations in the state for operationalising the rapid rural police response system. The details the vehicle and the equipments recommended to be provided to the response vehicle are as under:-

- (a) Four wheelers ( Cars , jeeps)
- (b) Warning lights fitted with PA system
- (c) Reflector tapes for insignia
- (d) Vehicle-fitted GPS
- (e) Traffic cones 10 nos.
- (f) Two meter roll of yellow warning tape
- (g) Dragon light
- (h) Stretcher
- (i) First-Aid kit
- (j) Multi-purpose police waist belt with slots for handcuff / batons/ walkie-talkies–3 nos.
- (l) Reflecting jackets- 4 nos.
- (m) Video camera
- (n) Mobile phone
- (o) Wireless Set

## 8.3 Upgradation of Control Room

The control rooms monitoring and directing the functioning of these GPS-fitted vehicles can be established at district level or at range levels for cost reduction. The components for establishing a modern control room to function like a call centre would be as under:

- (i) Multi-line EPBX
- (ii) CTI server (Call Terminal Interface 1.8 GHz.)
- (iii) AVLS (Automatic Vehicle Location Server)
- (iv) Database server

- (v) Voice logger server
- (vi) Work stations for 2 call takers & 1 dispatcher
- (vii) 5 KW UPS
- (viii) 15 KVA silent genset
- (ix) Network components

Note: For the purpose of on map location of rural patrol vehicles Google map will be used. However digital mapping of rural areas is essential to have detailed on ground information about various facilities along with their locations. The same can be put to use by all the departments of the Govt.

## AN ACTION PLAN FOR CRIME AGAINST WOMEN

### 9.4 Perspective

- 9.4.1 Gender violence is a forefront concern that has been shaping the agenda of government policies, research and other social interventions. The efforts have ranged from transforming the structural conditions that deprive women life chances, to ameliorating the situation of physical abuse and discrimination. In 1993, the U.N. declaration on violence against women recognised all gender based violence as abuse of human rights. Further impetus came from the Beijing World Conference in 1994 which in its platform of action adopted combating violence against women as one of the requisites in improving women's situation.
- 9.4.2 The domain of gender violence targets aberrations of conduct or violations of the dominant gender differentiating norms, roles, values or practices. In operational terms, most violent acts directly target women, but its range of causality and also impact cannot be captured in term of sex differentials.
- 9.4.3 While not denying the fact that the majority of the victims of gender violence are females, that males are also victims of this violence cannot be ignored. To illustrate, stigmatisation of all those males who are lacking in capacity to uphold values of patriarchy are seen and presented as unmanly. For instance, when terrorism was at peak in Punjab many husbands watched helplessly when their family and women were abused by the police and militants. These men were seen as not performing the role of a protector. There were number of instances where men committed suicides because they could not intervene or protect their women from rape.
- 9.4.4 The argument advanced is that individual and institutional violence against women is a factor of gender ideology rather than universal male subjugation of the female. The rule making and adjudication is ideologically rooted in the institutions, gender roles, norms, practices and beliefs rather than controlled by individuals. Thus gender violence is not restricted to violence against women but violence based on gender subjectivities which manifests not only on women but men also.

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*Note: This section includes contributions of Justice K.S. Garewal (Retd.) and Dr. Rainuka Dagar ( Director, Research) Gender Studies at IDC, Chandigarh.*

## 9.5 What Is Gender?

“Refers to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time-specific and are changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies, there are differences and inequalities between women and men in the responsibilities assigned, activities undertaken, access to and control over resources, as well as the decision-making opportunities. Gender is a part of the broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age”.

## 9.6 Why Gender Is Important In Policing?

The Punjab Police Act 2007 was a response to the police reforms initiatives in the country. There is a recognition that the police service-delivery needs to be brought into public domain to capture citizen trust, to institutionalize international human rights standards within policing and to check crime and maintain law and order. The mainstreaming of the gender issues into policing services reflects police commitment to the vulnerable sections and equips police personnel for effective service-delivery to the population on the margins of society.

### 9.6.1 The Protection of Women

It is the police which is responsible for the protection of citizens, maintenance of law and public order. In order to protect women, the police needs to recognize that women face different forms of violence and need different strategies and domain for their protection. For example, crimes against men are largely in the domain of public sphere, whereas crimes against women, to a large extent, occur within the domestic context or in the sexual domain both of which are private spaces that the state institutions consider outside their realm of protection. It is the duty of the police to prevent, protect and reduce the violence against women. In the context of Punjab, it is particularly difficult to protect women from violence given the socio-cultural context of gender (refer to Box 1). The police capacities need to be built for a gender-responsive service-delivery. Punjab Police commitment to protecting women includes provisions for checking domestic violence, gender-sensitive response and increasing women staff. Some of the relevant commitment of the Punjab Police Act and Strategic Plan are as follows:



### 9.6.1 Curtailing Domestic Violence: The Punjab Police Act No. 10 of 2008

The Senior Superintendent of Police of a district, shall get registered and established Community Police Resource Centre in the district, which may include among other things, streamlining police service delivery mechanism and initiatives aimed at dissemination of information, redressal of public grievances, checking domestic violence, assistance to elders, traffic education and management, child protection, victim relief and checking drug menace.

### 9.6.2 Relevant goals of Punjab Police Strategic Plan

Goal 3 – To implement special programmes to tackle crimes against vulnerable and under privileged sections of society with special reference to women, children and weaker sections.

Goal 5 – To inculcate discipline, pro-people orientation and up-gradation of the skills of police personnel to optimize efficiency and effectiveness in service delivery.

Goal 6 – To respond with sensitivity and in a just manner to the ethnic, religious, gender and class diversities.

Goal 7 – To ensure representation of diversity in the police force with special reference to caste and gender as per the existing guidelines of the various Commissions.

Goal 8 – To enhance community participation and co-operation in the delivery of police services and strengthen the ongoing initiatives in community policing.

Goal 9 – To make police systems more accessible to the people through introduction of transparent and accountable police performance.

Goal 15 – Effective grievance redressal system through responsive and transparent policing.

Traditionally, the police has been inaccessible to women and protecting women's rights is challenging in the context of enforcement-oriented mechanisms and practices. A brief mapping of gender challenges for the police in Punjab is provided.

#### 9.7 Gender Challenges For Policing In Punjab

### 9.7.1 Increasingly unsafe conditions for women

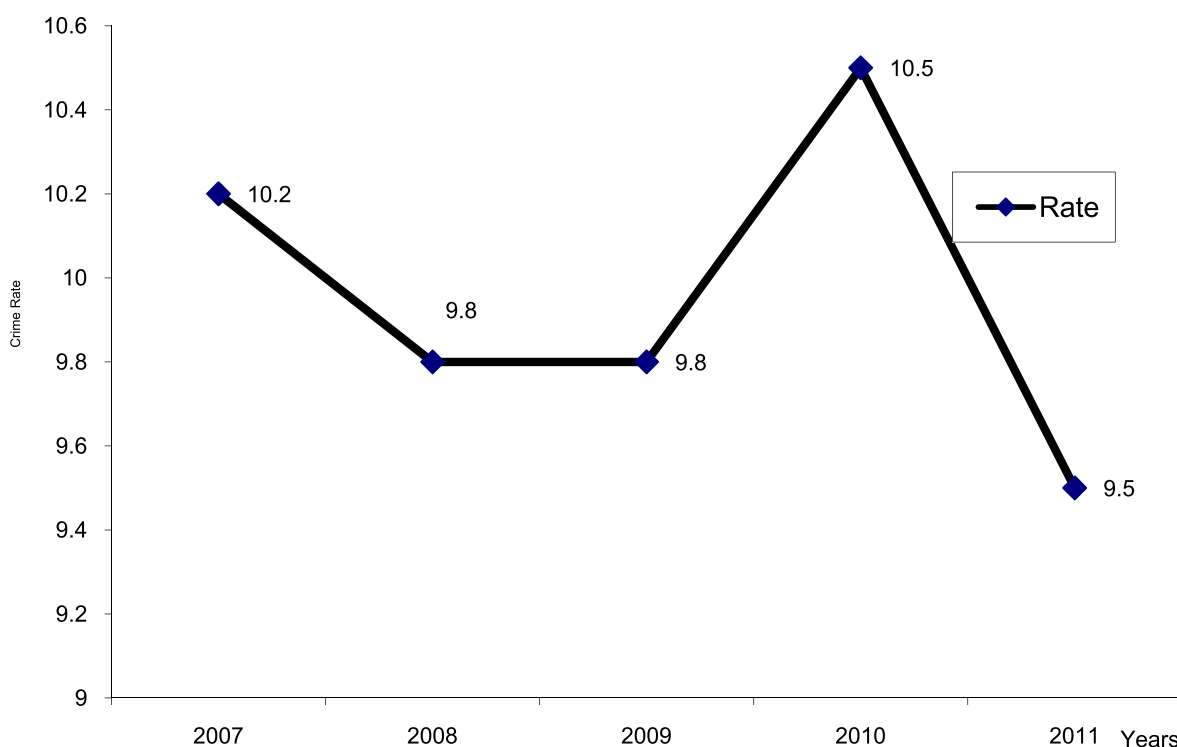
The extent of violence that women face and the increasing incidence of violence against women point to the urgency of protecting women from abuse.

### 9.7.2 Reported Crime Against women in India and Punjab

Women may become the victim of any of the general crime such as murder, robbery cheating etc. only the crime which are directed specifically against women are characterized as “Crime against Women”. This is the way Crime in India an annual publication defines it. Crime in India records annual statistics on following type of crime against women. Under IPC it records data on Rape, Kidnapping & Abduction for specified purposes, Homicide for Dowry, Dowry Deaths or their attempts, Torture - both mental and physical ,Molestation, Sexual Harassment (Eve Teasing), Importation of girls (upto 21years of age) and under SLL the gender specific laws for which crime statistics are recorded throughout the country are - Immoral Traffic (Prevention) Act, 1956, Dowry Prohibition Act, 196, Indecent Representation of Women (Prohibition) Act, 1986, Sati Prevention Act, 1987.

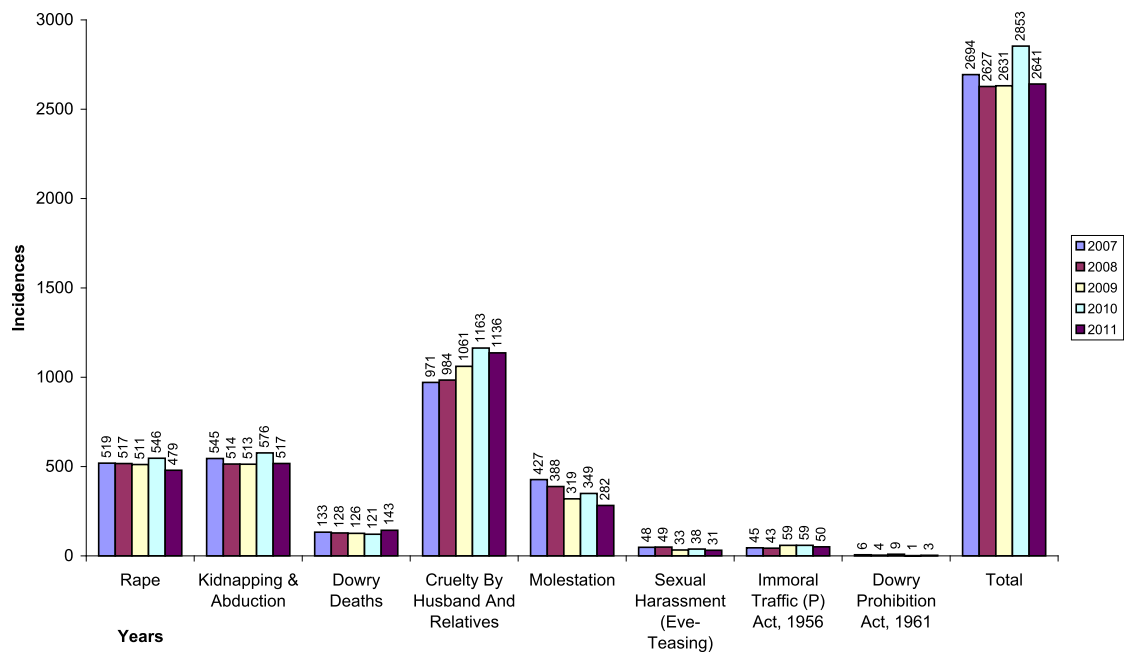
9.7.3 In 2011 Punjab registered 2641 cases of crime against women and its contribution in national figure was of 1.16 percent and crime rate after one lakh population was 9.5. It was positioned at 11th for its crime rate and 17th for its percentage contribution in national tally. In last 5 years Punjab crime against women rate dipped from 10.2 to 9.5.

Rate of Total Cognizable Crime Against Women in Punjab in Last 5 Years

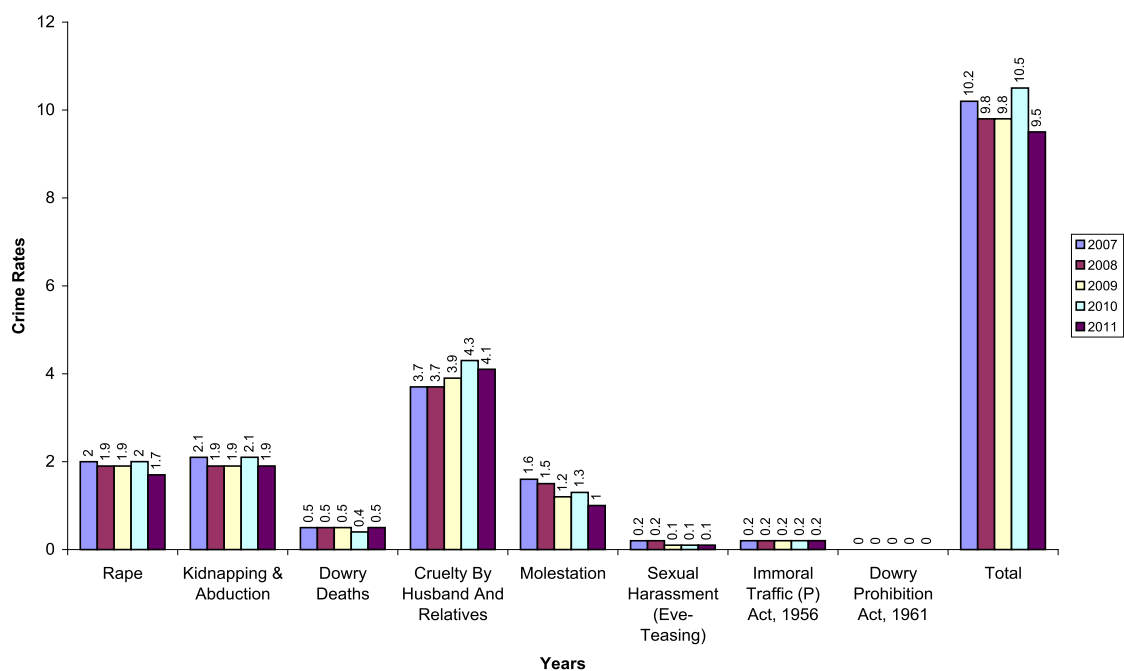


9.7.4 Graphical presentation of incidence and rates of different types of crimes against women in five years from 2007 to 2011 shows that there was in general fall in 2011 in crime incidences and crime rates comparison to 2010.

**Last 5 years' Incidences of Different Crimes against Women in Punjab**

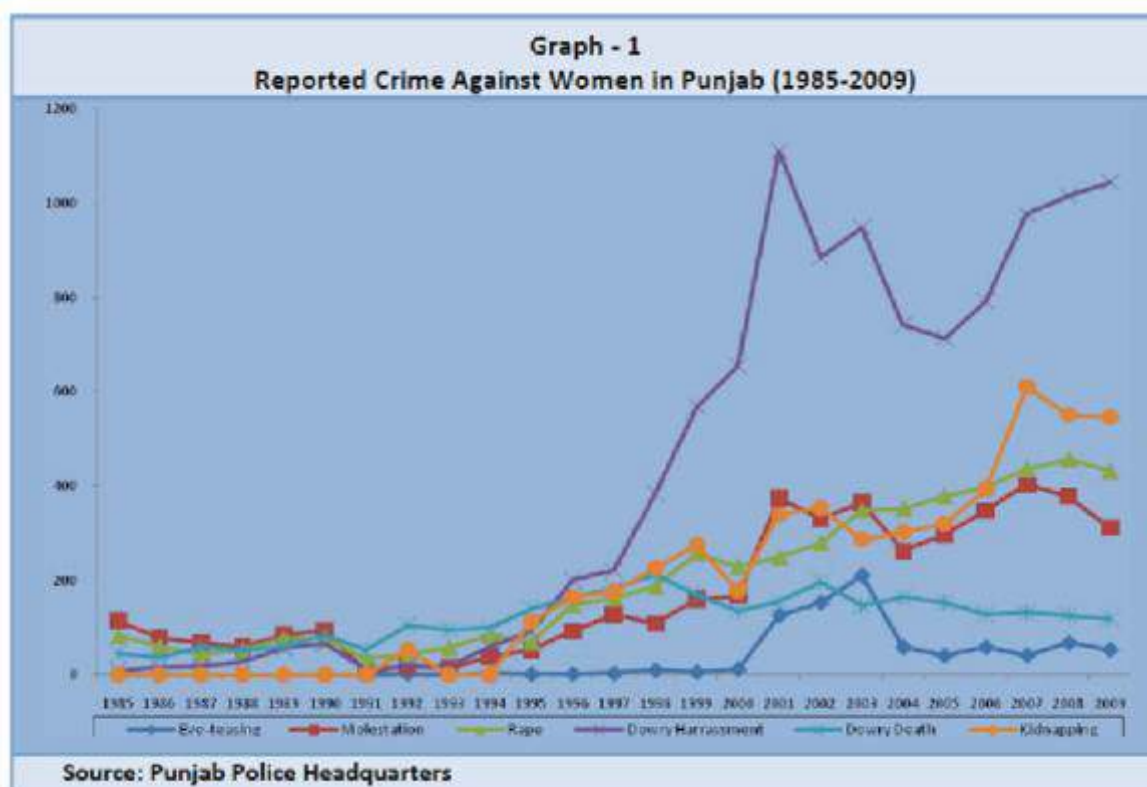


**Last 5 years' Rates of Different Crimes against Women in Punjab**



9.7.5 Crime statistics of last five years from 2007 to 2011 over above mentioned crime heads divulges the gravity of the situation that how much women in our society are unsafe. Though this is still incomplete picture as many research findings suggest that number of unreported cases of crime against women are much more than the reported number. From 2007 to 2011 in period of five years there was 23.4 percent increase in overall crime against women and if we further dissect it in different crime heads kidnapping and abduction increased 74.2 percent, cruelty by husband 30.5 percent, rape 16.7 percent and molestation 10.9 percent.

9.7.6 A look at the reported data on crime against women reveals that everyday more than seven women fall victim to the violent crimes such as dowry harassment, dowry death, rape, molestation and sexual harassment. In the past two decades, the rate of increase in the crime against women has been a phenomenal 806 per cent. For specific forms such as rape and dowry deaths, the increase has been as much as 456 per cent and 698 per cent times respectively, while dowry harassment has recorded an alarming increase of 894 per cent from 1985 to 2009.



**(a) Police Not Approached For Redressal Of Crime**

- (i) Reported crime, which has registered a phenomenal increase, does not capture the actual extent of gender violence against women. A large number of cases remain unreported. Certain forms of violence do not get reported at all. Wife-beating has been one such form though cases under Domestic Violence Act were first registered in 2006. Similarly, no cases of dowry demand are registered. The misuse of sex determination tests was declared a crime in Punjab in 1994 and in India in 1995, yet in 1996, only one case was reported. Social invisibility attached to the crimes against women and the fear of social stigma contributes to the non registration of such crimes with the police. While crimes like rape carry the fear of stigma, caste-rapes remain unperceived as violation in a caste hierarchical society. In a study of the atrocities against women in Punjab, non-reporting was found high and it varied according to the nature of the crime and its acceptability in the society.

<b>Table 1</b>		
<b>Ratios of Reported to Unreported Atrocities in Punjab</b>		
<b>Reported</b>		<b>Unreported</b>
<b>1</b>	<b>Rape</b>	<b>68</b>
<b>1</b>	<b>Molestation</b>	<b>374</b>
<b>1</b>	<b>Eve-teasing</b>	<b>9177</b>
<b>1</b>	<b>Dowry Death</b>	<b>27</b>
<b>1</b>	<b>Dowry Harassment</b>	<b>299</b>
<b>Source: I.D.C. Survey, 1994</b>		

Newman, Graeme, Gregory J. Howard. *Op. cit.* (1999), p.11  
 Pramod Kumar, Dagar, Rainuka (1995), *Atrocities Against Women in Punjab*, Chandigarh: Institute for Development and Communication.

- (ii) For each reported case of rape, 68 went unreported. As many as 374 cases of molestation went unreported against one reported case. Eve-teasing is a relatively 'new crime', which was reported for the first time in 1992. The extent of unreported cases, however, reflects the widespread nature of the practice with 9177 unreported incidents against each reported case.
- (iii) A comparison between the unreported cases of dowry harassment and those that were reported reveals that for every reported case, an astonishing 299 go unreported. That a large number of dowry harassment cases remain unregistered is substantiated by a look at the cases that are brought to the women cells, NGOs and Panchayats for compromise or reconciliation.
- (iv) A later study revealed that every fourth household in Punjab acknowledged having faced a dowry demand, while every 28th household mentioned having faced dowry harassment and every 3rd household accepted the occurrence of wife-beating. The extent of violence against women is much larger than what is acknowledged by the states across the world.

Table – 2 Nth Households That Acknowledged Forms of Violence	
Form of violence	Total
Dowry demand	4 <sup>th</sup>
Dowry harassment	28 <sup>th</sup>
Dowry death	100 <sup>th</sup>
Wife-beating	3 <sup>rd</sup>
Rape	66 <sup>th</sup>
Molestation	200 <sup>th</sup>
Eve-teasing	9 <sup>th</sup>
Sexual exploitation	50 <sup>th</sup>
Source: - IDC Survey, 2000	

Dagar, Rainuka (2001) *Combating Violence Against Women*,  
Chandigarh: Institute for Development and  
Communication Heise, Lori L.; Pitanguy, J. and Germain, A. (1994) *Violence Against Women: The  
Hidden Health Burden*, World Bank Discussion Paper 255, Washington: World Bank.

- (v) The problem, which the enforcement agencies face while dealing with atrocities against women, is that even when an atrocity is accepted as violence, it still may not be voiced. Perceived abuse against women may remain confined to the home or in the minds of the victims for fear of stigma, subjugative patriarchal structures, lack of legal literacy and even financial compulsions, which make it difficult for a woman to fight a legal battle. The Dowry Act and Domestic Violence Act, 2005 takes into consideration the social hesitation to approach police services directly in familial matters and provide for access through dowry prohibition and domestic violence protection officers. Free legal services, counselling and shelters are some of the supportive services that are being provided to assist the women caught in situations of violence.
- (b) **Police intervention sought only against extreme brutality**
  - (i) The task of dispensing justice to women victims of violence is made difficult when cases are reported to the police only when the abuse has amplified to its extreme manifestations. It must be noted that a large number of violations against women occur as a process rather than an act of violence.
  - (ii) Socialisation of the norms and values of patriarchy provide for the acceptance of certain acts of injustice against women and, as such, are not perceived as gender abuse. Wife-beating is generally considered to be normal and is accepted as part of family life. While wife-beating per se is rampant in households, its visibility is largely restricted to 'incidents of wife-bashing or wife-battering'. Similarly, sex determination test may not be perceived as an abuse by certain individuals, yet to others it may constitute abuse of the female gender. Another aspect pertaining to the invisibility of gender-related abuse is that certain behaviour may be perceived as an abuse in one context, yet in another, it may be viewed as normal. For instance, eve-teasing by college youth may be seen as an interactive behaviour of the young. Yet, eve-teasing by persons from the lower strata may be perceived as an affront. When an abuse is not perceived to be an abuse, apparently it ceases to be a problem. Consequently, it becomes difficult for the police to prevent or protect women from such abuse, which is not perceived as such. Even when certain cases are brought to the notice of the police, there is hesitation to intervene in the issues that are perceived to be outside the domain of police and are considered to be involving a lesser degree of violence.

**(c) Police perceived to be gender-biased**

Subjugative and oppressive situations for women are normal in the Punjabi society and are accepted by all, even the women themselves. Thus, even if a woman reports an abuse to her friends, the community, the Panchayat or the police, many a time, she herself is perceived to be the wrongdoer. In wife-beating or bashing incidents, it is common for the woman to be told even by the police that she must have provoked her husband therefore, she got what she deserved. Even in cases of rape or eve-teasing, the woman is blamed for inviting the situation on her, either by dressing in a provocative manner or by moving alone in dark or lonely places. Reporting of crime against women also suffers due to the popular perception regarding the insensitivity and gender bias of the police.

**(d) Police lacks a victimology perspective**

- (i) The enforcement perspective promotes the police as an instrument of the law to bring the culprits to book, but then it acts as a barrier to the aspect of service delivery. Catering to the needs of the victim is seen to be outside the scope of police duty. The institution is governed by crime requirements where investigations have primacy and there is no provision for addressing the human suffering. The system, in fact, lacks a victimology perspective, specifically in the context of women. There are no requisites of medical aid such as a doctor on call, a medical ward, psychiatrist, counsellor or even a social worker within the police station. While it is a pre-requisite for a rape victim to be medically examined by a government doctor to substantiate the abuse, the contact remains part of the investigative procedures rather than the treatment for the physical and mental/emotional ordeal. The administration of relief in terms of psychosomatic and physical injury remains unattended, let alone counselling of the family members, which also remains a far cry.
- (ii) The incorporation of a rights approach requires a two-fold measure- addressing the needs of the victim and of being grounded in the gender reality. Thus, while the crime of rape or molestation is committed only on an individual female, the entire family may feel violated.

**(e) Re-victimisation by Police**

The police personnel lack sensitivity to gender issues and compound the problem by allowing the structures of patriarchy to redefine the issues of women victimisation, which results in victim blaming. Rather than catering to the victim, the police responds to gender norms that reflect the victim's abetment to crime. Thus, in cases of wife-beating or rape, the female is

perceived to have provoked the abuse against her own self. The perpetrator-victim dichotomy gets absolved and male aggression is naturalised. Beliefs apportioning the blame to women for inciting sexual abuse reflects not only the attitude of the police but also that of other institutions including the state and medical agencies despite legal recognition of a female's need for protection. In fact, victim-blaming by the institutions has been exposed as re-victimisation of the violated female. In other words, the police functionaries become partisan to the violence suffered and dispense customary justice through victim-blaming. Victim-targeting is not restricted to the women sufferers and can also be directed at the male members of the family. Re-victimisation may also occur when the victim faces sexual abuse from the protectors themselves – a fallen or disgraced woman is considered accessible to male advances.

### **9.8 Multi-Pronged Strategy To Check Crime Against Women**

- (a) There should be severest punishment for heinous crime like rape. But most important thing is assured justice delivery. In other words, the need is to restore people's confidence in justice delivery system. Rather than merely focussing on the quantum of punishment it would be worthwhile to make criminal justice system effective enough to at least punish criminals in speedy manner.
- (b) All other crimes against women like eve-teasing, molestation should be clubbed under the term sexual harassment.

### **9.9 Three pronged strategy**

We are prioritizing three-pronged strategy to curb crime against women.

- (a) Reporting of crime

It is an established fact that most of these crimes go unreported due to various reasons. And one of the reasons is that women do not prefer to go to police stations. Punjab Government has setup Saanjh Kendras at the police station level, sub-division level and district level. These are jointly run by the civil society and the police. These centres are authorized to register complaints and receipts are given to the complainant.

These complaints have to be dealt in a time-bound manner. To make SHO accountable – it has been proposed to include the time-bound disposal of these complaints in the Right to Service Act.



(b) To make the process of registration transparent and speedy

It has also been suggested to expedite the process to register these complaints online as well as in Saanjh Kendras located at the thana, sub-division and district levels. This will facilitate registration of complaints without going to police stations particularly for crimes against women.

Globally, the process of criminal justice system ranging from registration of crime to investigation to charge-sheeting to conviction has been labelled as champagne glass. In other words, number of complaints lodged become slander with every step it follows in the criminal justice system. Number of complaints registered is much lower than the number of complaints received. Further, only small number of complaints are investigated, which are reduced at the time of submission of charge-sheet in the courts. Consequently, all this is reflected in nominal conviction rate.

In 2011, 2,31,877 complaints were received. Only in 22 per cent of these cases were registered. The status of complaints not registered should be put online with reasons for their non-registration and action be taken if these are rejected with malafide intentions. Out of 22 per cent of the cases registered, 67 per cent cases were investigated in 2011. The remaining 33 per cent registered cases were not investigated. And, charge-sheets were filed only in 54 per cent of the cases under investigation.

(c) Services for Victims

(i) Recording of Statement of Victim

- Gender violence victim's statement should be recorded by a woman police officer.
- Victim's medical examination should be conducted by a woman medical officer.
- Victim should be provided immediate medical aid for any physical injuries suffered.
- Victim should also be provided immediate counselling for the psychological trauma suffered by her.

(ii) Compensation for Victims

- Victims should be provided immediate compensation under section 357A CrPC through District Legal Service Authority (DLSA) but on the condition that she supports the prosecution case.

(iii) Legal Aid

- DLSA should provide a legal aid counsel to the victim, preferably a woman lawyer. If necessary the victim should be safe-housed as a witness protection measure and provided a pseudo identity during the course of the trial.

## (iv) Institutional Framework for Victim Relief

- Victim Relief Centre should be activated in each Saanjh Kendras catering to the need of the victims, their rights, needs and expectations. Particular efforts have to be made to improve the police response to the victims of sexual and violent crime. There is need for specially trained women officers to avoid insensitive questioning. It should be possible to enlist the help of the society, NGOs and voluntary agencies for this purpose. The reservoir of knowledge and experience of the retired officers from the Judiciary, Police, Revenue and other departments could also be tapped for the purpose.
- Specially trained volunteers should handle counselling and other victim support schemes – right to be heard, right to be kept informed about the progress of 'their case', to provide information, to be protected by the law enforcement agencies, and to receive respect, recognition and support. Main functions of these units should be:

Administration	Functions
<ul style="list-style-type: none"> <li>Conciliation between the disputing parties.</li> <li>If conciliation fails then either registration of case or refer to court as per the merit</li> <li>Ensuring the rehabilitation of the women</li> <li>Monitoring the conciliated cases to avoid any recidivism</li> </ul>	<ul style="list-style-type: none"> <li>In-charge women shall also be the Protection Officer under Domestic Violence Act</li> <li>Arbitration in cases which are referred from police stations or cases in which women complainant directly approached</li> <li>To provide relief to women and rehabilitation through network of government and non-government organisations</li> <li>Counselling and arbitration committee of 5 members</li> <li>Referring and suggesting further course of action in unresolved cases for registration of FIR or to court</li> </ul>

## (v) Speedy Delivery of Justice

The investigation continues to be sluggish and slow. It is proposed that a departmental task group should monitor and initiate action against indiscretion of the concerned officials for not investigating complaints in a time-bound manner. It has been noticed that charge-sheet rate is very low. A monitoring system needs to be set up to ensure time-bound filling of charge-sheet in the courts.

### 10.1 Quality And Efficiency In Investigation

To improve the quality and efficiency in investigation the following steps should be taken;

- (a) Each police station should have a separate Investigation Wing.
- (b) Each district should have an Advance Investigation Wing to investigate heinous crimes in a professional and scientific manner. This will enhance the quality of justice delivery leading to high conviction rate. These wings should be equipped with latest technology.

### 10.2 Quality Investigation

#### 10.2.1 Well-equipped Forensic Lab

All police districts should have access to well-equipped and well-staffed forensic labs where scientific evidence can be quickly analyzed and results conveyed to the investigators in shortest possible time.

#### 10.2.2 Investigators Trained for Investigation in Gender Crimes

The investigation wing must recruit more women at the Assistant Sub-Inspector level for gender balance and should be generally sensitised to women issues.

#### 10.2.3 Coordination between Investigation and Prosecution Co-ordination between the investigator and the prosecutor during the course of the investigation should be an integrated one. These two wings must work as a team.

#### 10.2.4 Strengthening of Prosecution Wing

Prosecution of rape cases must be strengthened by improving the service conditions of Prosecutors. Pay scales of the cadre of prosecutors should be upgraded to achieve pay parity with the Trial Judges before whom they appear. Their over-all work load should be rationalized and their skills enhanced through induction training and continued legal education. National Judicial Academy and State Judicial Academies should develop training programmes for prosecutors. Each prosecutor should be provided computers and a decent law library. The Trial Judge should also be required to appraise the performance of the prosecutors and provide their comments to the reporting officers at the time of preparation of their ACRs. Prosecution remains the weakest link in our criminal justice system.

#### 10.2.5 Prosecutor-General

Every state should appoint a Prosecutor-General of the same rank as Director-General of Police, to head the prosecution department and be responsible and accountable for failure of prosecution. At present no one takes the blame if the prosecution does not end in conviction. Prosecutor-General should be a well trained criminal lawyer, strong, independent and impartial. Prosecutor-General should also be empowered to withdraw prosecution in appropriate cases.

#### 10.2.6 Efficient Trial: Fast Track Courts

It has been proposed to set up fast track courts in the state to speedily dispose off crime related cases against women.

##### (a) Sentencing Guidelines

Sentencing guidelines be developed to enable trial courts to uniformly award appropriate sentences in cases of rape and molestation. When a person accused of rape is charged with committing a series of offences then he should be sentenced to consecutive terms and not concurrent terms as is the common practice nowadays.

##### (b) Criminal Case Monitoring System

Criminal case monitoring or tracking system should be developed to enable victims, investigators, prosecutors, judges and even the defence counsel to keep a track of the movement of cases through the criminal justice system from the time of registration of FIR till the conclusion of trial/appeal and release of the convict after completing sentence.

### 10.3. Prevention of Crime Against Women

#### 10.3.1 Tracking Potential Offenders

Persons charged with or convicted of offences relating to women should be tracked and their neighbours informed of the presence of such persons in the neighbourhood so that no woman falls an unwitting prey to such men.

#### 10.3.2 Restatement of Law

The entire case law in cases relating to crimes against women requires to be re-stated by a responsible group of jurists under the aegis of National Judicial Academy or Indian Law Institute, so that the current criminal jurisprudence is clearly understood by trial judges, police investigators, public prosecutors and the criminal bar bringing about uniformity in its application.

#### 10.3.3 Suspension of State Incentives

As a deterrent, it is proposed that the accused where the charges have been framed in the courts against the accused relating rape and sexual harassment should not be entitled to state's incentives till the person is acquitted by the court. These entitlements include various verifications by police like character, no objection to travel abroad, income, caste certificates leading to renewal or issuance of driving, passport and other licenses.

#### 10.3.4 Model Gender Code of Conduct

Each institution like school, college, government department, private enterprise, public and private transport have to implement revised Model Gender Code of Conduct to check sexual harassment. The model gender code of conduct needs to be prepared in consultation with the various stakeholders.

#### 10.3.5 Mapping Gender Crime Spots

Each city should map black spots where possibility of crime against women is high. Accordingly, a plan to check these violations should be put in place. The plan may include regular police patrol, spread of beat system and installation of CCTV cameras for regular monitoring.

#### 10.3.6 Monitoring of Public Transport System

- (a) The public and private bus transport needs to be equipped with the GPRS system to monitor their movement. Efforts should be made to replace normal taxis with the Radio-Taxis in the cities for regulation.
- (b) Traffic rules to be strictly imposed to check intimidation of women on the road.

#### 10.3.6 Civil Society Engagement

State-wide community-police oversights proposed to be activated to build public pressure on the anti-social elements not to indulge in such activities and launch awareness campaigns. In Punjab, these community-police oversights are in existence and attached with each police station, Deputy Superintendent of Police Office at the sub-division level and SSP level at the district.

#### 10.3.7 Cyber Crime Tracking

The cyber crime unit should start an online complaint system to track the obscene messages and calls leading to mental harassment of women. Strict action should be taken and the violator should be deprived of any telephone connection for one year. For the necessary procedural amendments may be introduced at earliest.

### Reported Crime against Women in Punjab

#### Incidence & Rate of Crime Committed Against Women in States, UTs and Cities During 2011

Sl. No	State UT	Incidence	Percentage Contribution to All India total	Population in Lakhs	Rate of total Cognizable Crime	Rank as per Rate of Total Cognizable Crime*	Rank as per Percentage Share*
1	ANDHRA PRADESH	28246	12.35	846.65	33.4	32	34
2	ARUNACHAL PR	171	0.07	13.83	12.4	16	11
3	ASSAM	11503	5.03	311.69	36.9	34	29
4	BIHAR	10231	4.47	1038.04	9.9	14	27
5	CHHATTISGARH	4219	1.85	255.4	16.5	24	20
6	GOA	127	0.06	14.58	8.7	6	8
7	GUJARAT	8815	3.86	603.83	14.6	20	24
8	HARYANA	5491	2.40	253.53	21.7	25	22
9	HIMACHAL PRADESH	997	0.44	68.57	14.5	19	15
10	JAMMU & KASHMIR	3146	1.38	125.49	25.1	28	19
11	JHARKHAND	3132	1.37	329.66	9.5	10	18
12	KARNATAKA	9594	4.20	611.31	15.7	23	26
13	KERALA	11288	4.94	333.88	33.8	33	28
14	MADHYA PRADESH	16599	7.26	725.98	22.9	27	31
15	MAHARASHTRA	15728	6.88	1123.73	14.0	18	30
16	MANIPUR	247	0.11	27.22	9.1	8	12
17	MEGHALAYA	269	0.12	29.64	9.1	9	13
18	MIZORAM	167	0.07	10.91	15.3	22	10
19	NAGALAND	38	0.02	19.81	1.9	2	4
20	ODISHA	9433	4.13	419.47	22.5	26	25
21	<b>PUNJAB</b>	<b>2641</b>	<b>1.16</b>	<b>277.04</b>	<b>9.5</b>	<b>11</b>	<b>17</b>
22	RAJASTHAN	19888	8.70	686.21	29.0	29	32
23	SIKKIM	55	0.02	6.08	9.0	7	6
24	TAMIL NADU	6940	3.04	721.39	9.6	12	23
25	TRIPURA	1358	0.59	36.71	37.0	35	16
26	UTTAR PRADESH	22639	9.90	1995.81	11.3	15	33
27	UTTARAKHAND	996	0.44	101.17	9.8	13	14
28	WEST BENGAL	29133	12.74	913.48	31.9	31	35
29	A & N ISLANDS	51	0.02	3.8	13.4	17	5
30	CHANDIGARH	156	0.07	10.55	14.8	21	9
31	D & N HAVELI	18	0.01	3.43	5.2	4	3
32	DAMAN & DIU	11	0.00	2.43	4.5	3	2
33	DELHI	5234	2.29	167.53	31.2	30	21
34	LAKSHADWEEP	0	0.00	0.64	0.0	1	1
35	PUDUCHERRY	89	0.04	12.44	7.2	5	7
	<b>TOTAL (ALL-INDIA)</b>	<b>228650</b>	<b>100.00</b>	<b>12101.93</b>	<b>18.9</b>		

Crime in India 2011

\* Lowest Rank for Lowest Value

**Crime Head-wise Incidents of Crime Against Women during 2007 - 2011 and Percentage variation in 2011 over 2010**

Sl. No.	Crime Head	Year					Percentage variation in 2011 over 2010	Percentage variation in 2011 over 2007
		2007	2008	2009	2010	2011		
1.	Rape (Sec. 376 IPC)	20,737	21,467	21,397	22,172	24,206	9.2	16.7
2.	Kidnapping & Abduction(Sec. 363 to 373IPC)	20,416	22,939	25,741	29,795	35,565	19.4	74.2
3.	Dowry Death (Sec. 302 / 304 IPC)	8,093	8,172	8,383	8,391	8,618	2.7	6.5
4.	Cruelty By Husband and Relatives (Sec. 498-A IPC)	75,930	81,344	89,546	94,041	99,135	5.4	30.6
5.	Molestation (Sec. 354 IPC)	38,734	40,413	38,711	40,613	42,968	5.8	10.9
6.	Sexual Harassment (Sec. 509 IPC)	10,950	12,214	11,009	9,961	8,570	-14	-21.7
7.	Importation of Girls (Sec. 366-B IPC)	61	67	48	36	80	122.2	31.1
8.	Sati Prevention Act, 1987	0	1	0	0	1	100	100.0
9.	Immoral Traffic (Prevention) Act, 1956	3,568	2,659	2,474	2,499	2,435	-2.6	-31.8
10.	Indecent Representation of Women (Prohibition) Act, 1986	1,200	1,025	845	895	453	-49.4	-62.3
11.	Dowry Prohibition Act, 1961	5,623	5,555	5,650	5,182	6,619	27.7	17.7
	Total	185312	195856	203804	213585	228650	7.1	23.4
Crime in India 2011								



## Punjab State Road Safety Policy 2013 Framework of Action..

Navdeep Asija

Punjab Governance Reform Commission

13 February 2013

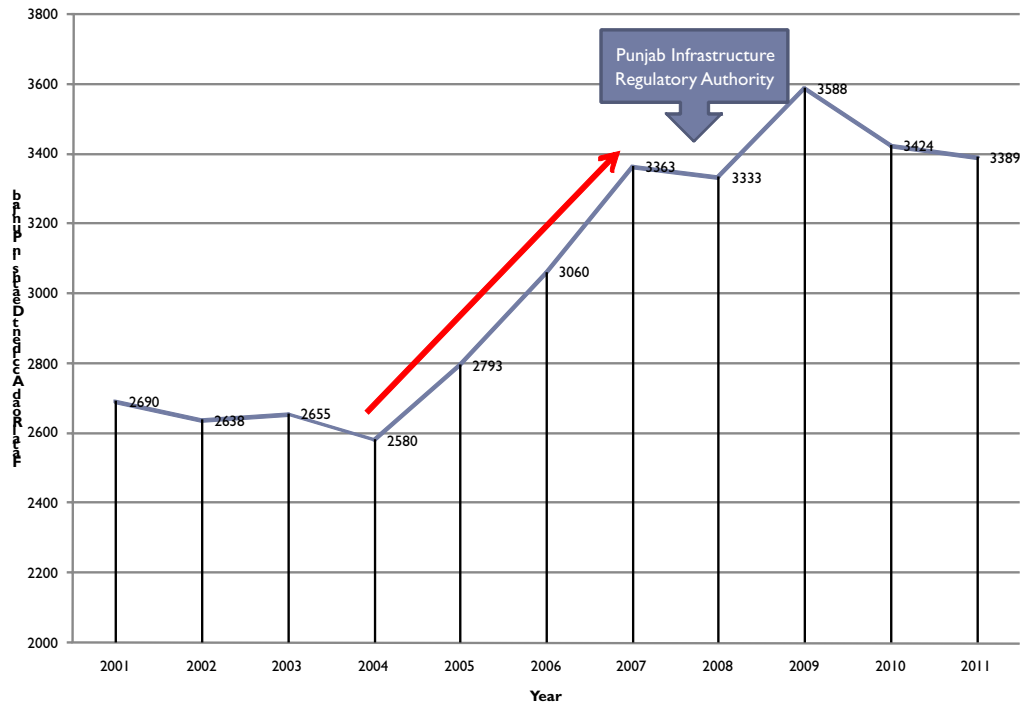
### Transportation and Road Safety Characteristics of Punjab

- ▶ Road Transportation System of Punjab is Divided into Three Categories
  - ▶ Urban Transport – Intracity Transport
  - ▶ City/Town to City/Town Transport – Intercity Transport
  - ▶ City to Rural Transport – Mainly Informal (Rural to Rural)
- ▶ About 13 People die everyday on Punjab's Road
- ▶ 83-85% deaths are occurring at 5% of the road network mainly National Highways, State Highways and Major District Roads.
- ▶ Every fifth Patient in our Hospitals is a Road Accident Victim
- ▶ A total 143 Cities/towns/urban agglomeration in Punjab- Public Transport System available only in 4 cities.
- ▶ About 60 million passenger trips are generated everyday in Punjab. Majority of the passenger trip start and end within the state and only 3-4% of the total traffic is through traffic.
- ▶ Informal Sector Transport is Playing Important Role in Punjab's Transportation.
- ▶ More than 21 Departments are working in the area of Road Safety – Integration and Accountability

Source : <http://www.citypopulation.de/India-Punjab.html>



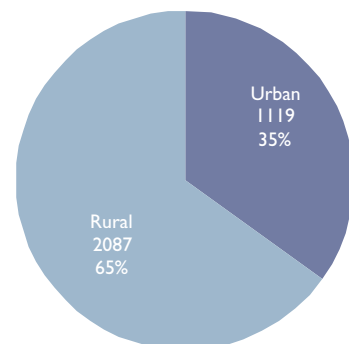
### Road Fatalities Trend in Punjab (2001-11)



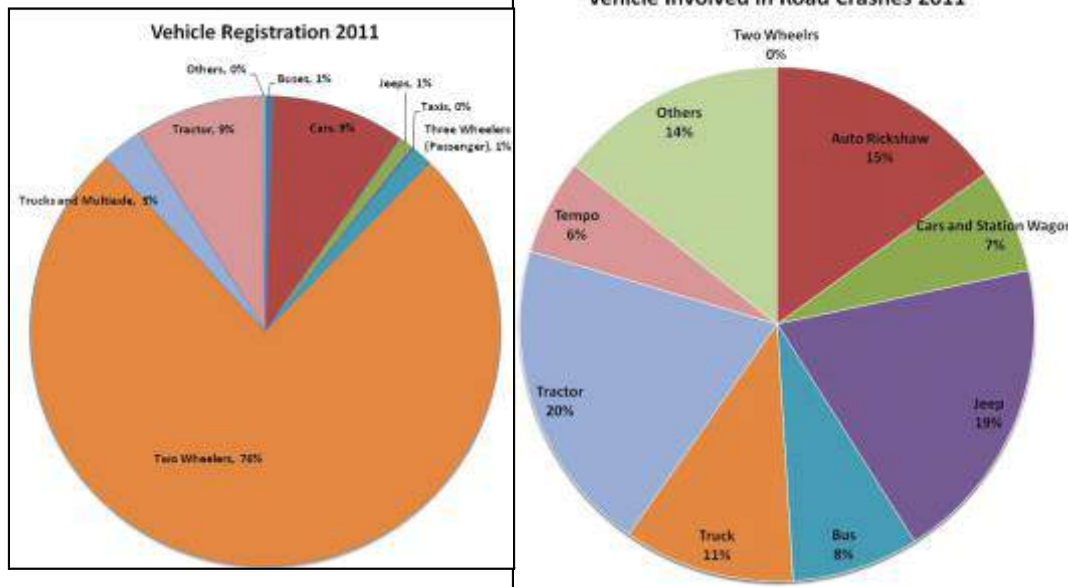
### Punjab Road Network

Road Type	Length in State	Fatalities Percentage
National Highways (NH)	1,739 Kms (2.79%)	36%
State Highways (SH)	1,503 Kms (2%)	46%
Major District Roads (MDRs)	2,107 Kms	
Other District Roads (ODRs)	4,658 Kms	
Link Roads (LR)	54,030 Kms	
(PWD-27,229 Kms, PMB - 26,801 Kms)		
<b>Total</b>	<b>62,298 Kms</b>	<b>83%</b>

Rural Vs Urban Area Road Fatality Ratio

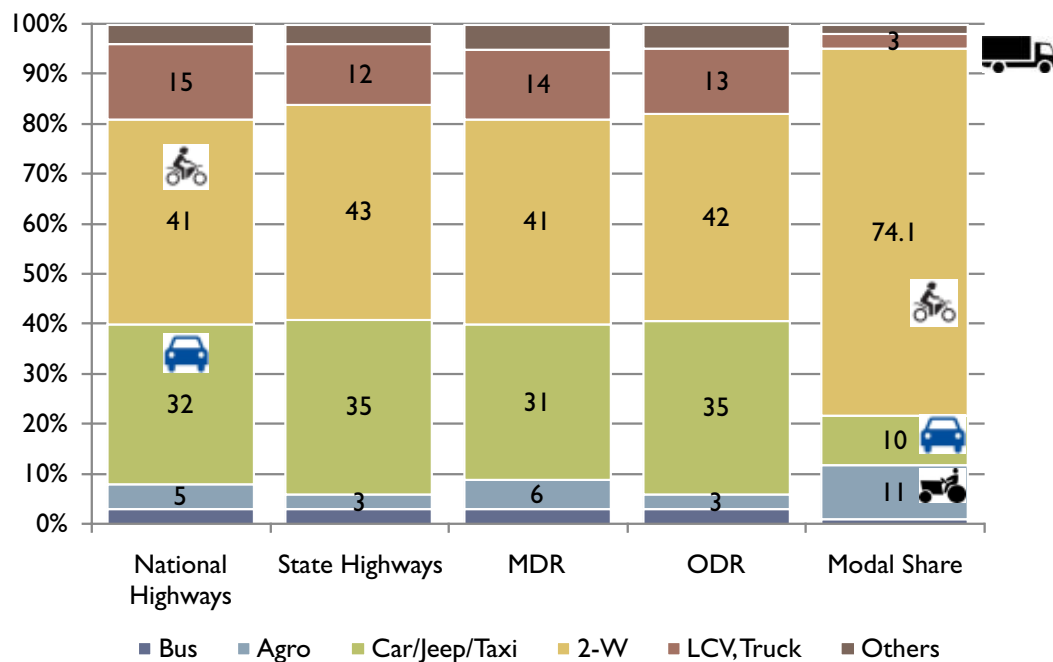


## Registered Vehicle Vs. Involvement in Road Crash

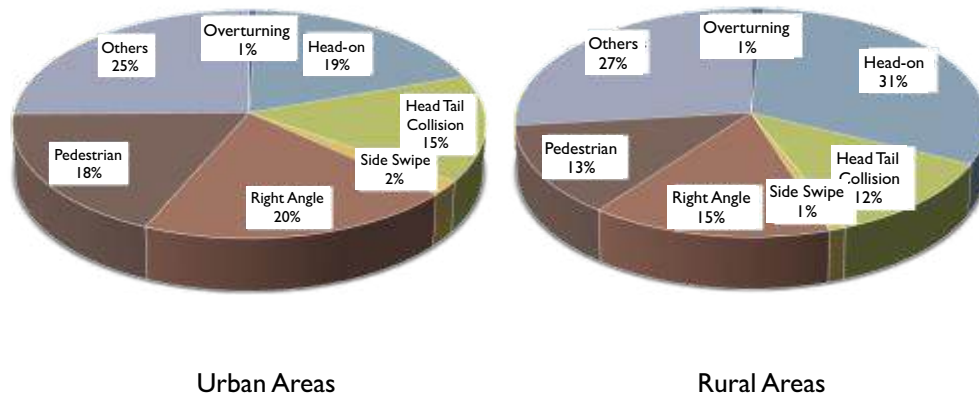


Tractors, Jeeps and Truck are the vulnerable vehicles (2011)

## Traffic on different types of roads & fleet composition in Punjab (2010)



## Road Crash Trends



Road Safety Assessment Report- PRBDB

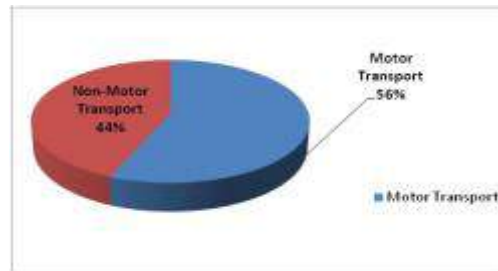
## Modal Share for City Population Plus 1 Million – Urban Road Safety

Mode	Trip Mode Share	Average Trip Length
Walking	32%	1.22
Cycling	20%	3.88
Intermediate Public Transport	5%	8.83
Two wheelers	13%	7.74
Public Transport	17%	10.75
Car	13%	11.50
Metro	1%	11.60



Source: Walkability in Indian Cities, Clear Air Initiative for Asian Cities (CAIAsia) Centre, March 2011

## Non Motor Transport (NMT)



Motor Vehicles	Non-Motor Transport
5,274,254 (2010)	
5,71,1715 (2011) – 8% Growth	4,091,480

Animal Driven/Animal					Slow Moving					Total NMT
Horses and Ponies	Mules	Donkey	Buffalo (Male)	Cow (Male)	Camel	Cycle Rickshaw (Passenger)	Cycle Rickshaw (Cargo)/Rehri	Rehri (Four Wheel)	Bicycle	
29810	96480	23390	85060	163130	21610	300000	120000	Unknown	3252000	4,091,480

## Triggering Factors

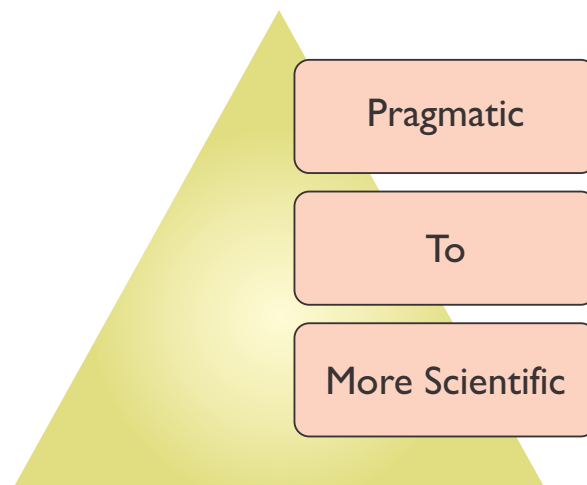
- ▶ Over speeding
- ▶ Private Transportation vs. Public Transportation
- ▶ Use of Alcohol
- ▶ Agricultural State- Seasonal Factors
- ▶ Neglected Non Motor Traffic in Physical Planning
- ▶ Trauma Care and Police Station Rescue Coordination
- ▶ Primary HealthCare Help to Road Accident Victim

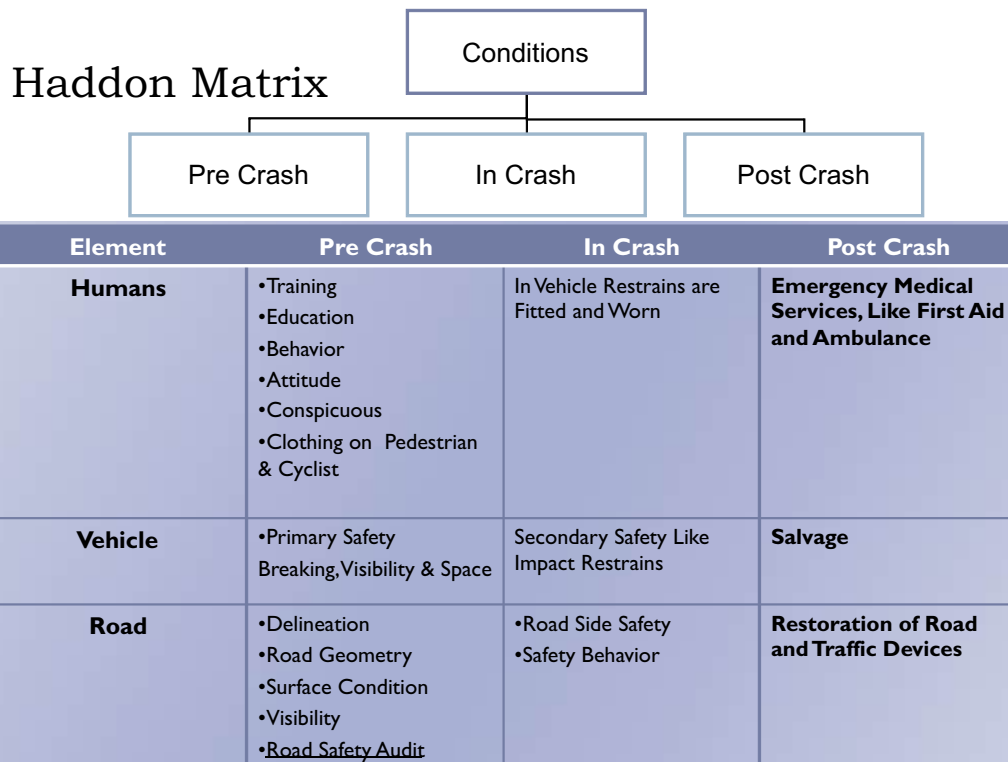
## Plan of Action

Road Ahead...

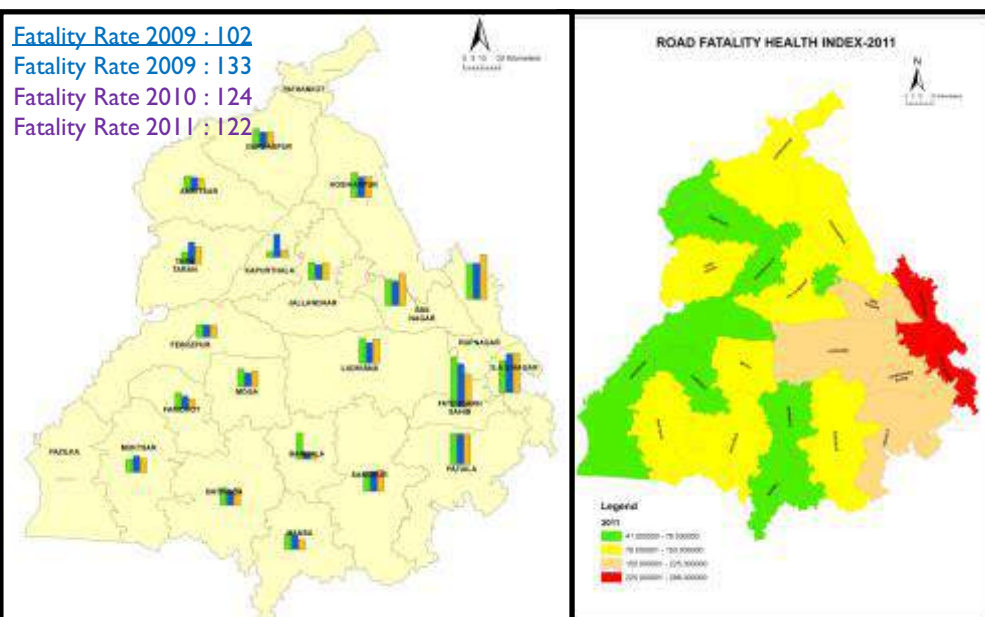
### Present Road Safety Approach

- Road safety is largely preventable and predictable phenomena
- Road Safety is No Accident
- ਰੱਬ ਦਾ ਭਾਣਾ ?

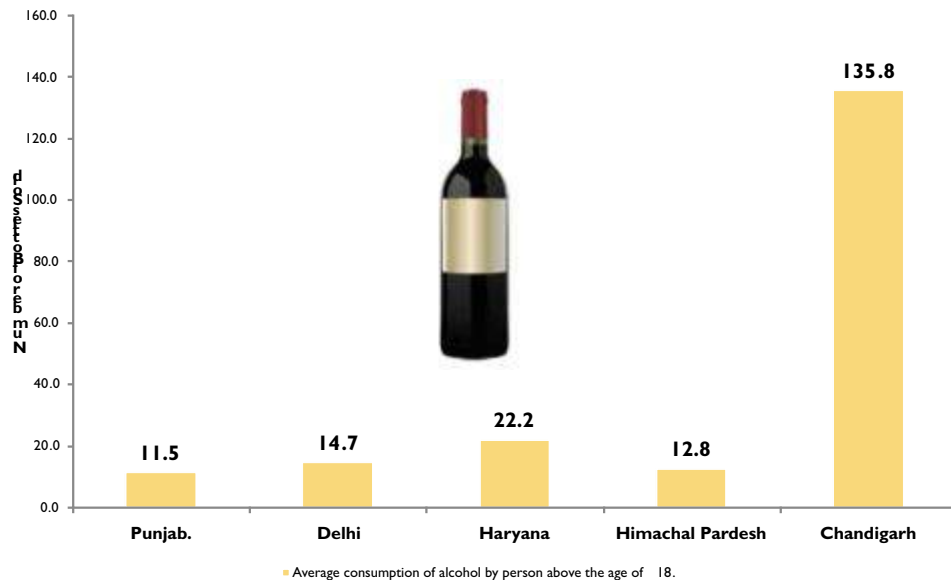




## District Wise Road Evaluation Benchmarks



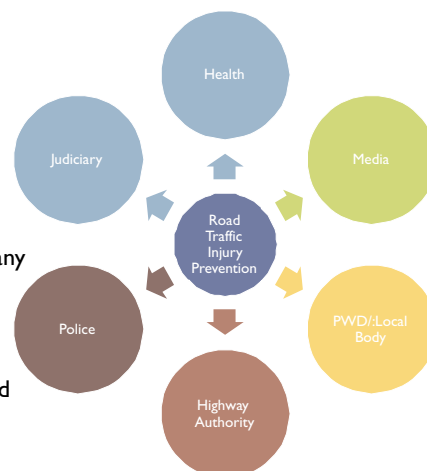
## Average Consumption of Alcohol by Person above the age of 18.



Source : People for Transparency, Kamal Anand, Sangrur

## Multiple agencies Handling Road Safety in the State-Multidisciplinary Approach

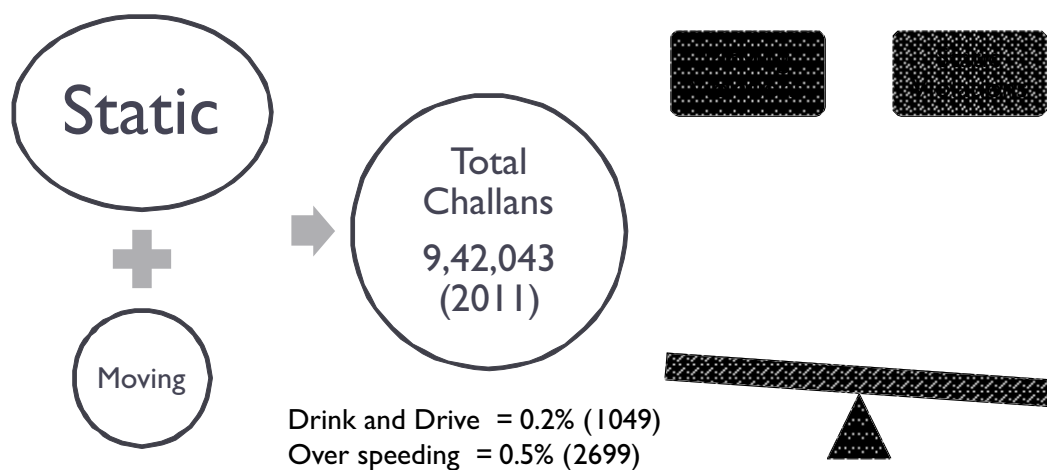
- ▶ State and District Punjab State Road Safety Council
- ▶ Assembly Committee on Road Safety
- ▶ Punjab State Transportation Society
- ▶ Public Works Department (B & R)
- ▶ Punjab Infrastructure Development Board
- ▶ Punjab Road & Bridges Development Board
- ▶ Punjab Urban Planning & Development Authority
- ▶ Punjab Mandi Board and Market Committees
- ▶ Local Bodies Department
- ▶ Punjab Municipal Infrastructure Development Company
- ▶ State Transport Authority
- ▶ Regional Transport Authority
- ▶ Punjab Roadways
- ▶ Punjab State Bus State Management Company Limited
- ▶ Punjab Police (Traffic)
- ▶ Punjab Infrastructure Regulatory Authority
- ▶ Punjab State Health Department



## Enforcement & Regulatory Agencies - Traffic Police

Ready to Implement

### Moving vs. Static Violations



- Zero Challan on Over speeding in New Districts like Fazilka and Pathankot due to Non Availability of Electronic Gadget
- Average 475 Challan per Traffic Police personal per year in Punjab



## Point of Action

- ▶ Immediately Procurement of Road Safety Gadgets for the State Police via money collected from 50% compoundable challan fees like Alcometer and Speed Guns.
- ▶ The Traffic Wing of Punjab was a separate wing till 1992. It was discontinued vide order No. I/358/9141-I I/SPL/3067 dated 03/08/1992. The wing was revived in the year 2001 without creation of any new posts as it was ordered that it has to be staffed from within the existing resources- Proposal Due
- ▶ Revival of Highway Patrolling.
- ▶ Adjustment of Traffic Aid Post w.r.t identified Black Spot in area
- ▶ Private Participation in Traffic management – fee under Section 211 of MV Act.
- ▶ Special Emphasis on Moving Violations like Over speeding, Seat Belt, Drink and Drive and Helmet.

## Implementation : Road Safety Database Management System

- ▶ [www.punjabroadsafety.org](http://www.punjabroadsafety.org)



# Road Infrastructure Agencies Punjab PWD/Mandi Board

Inter City Transport

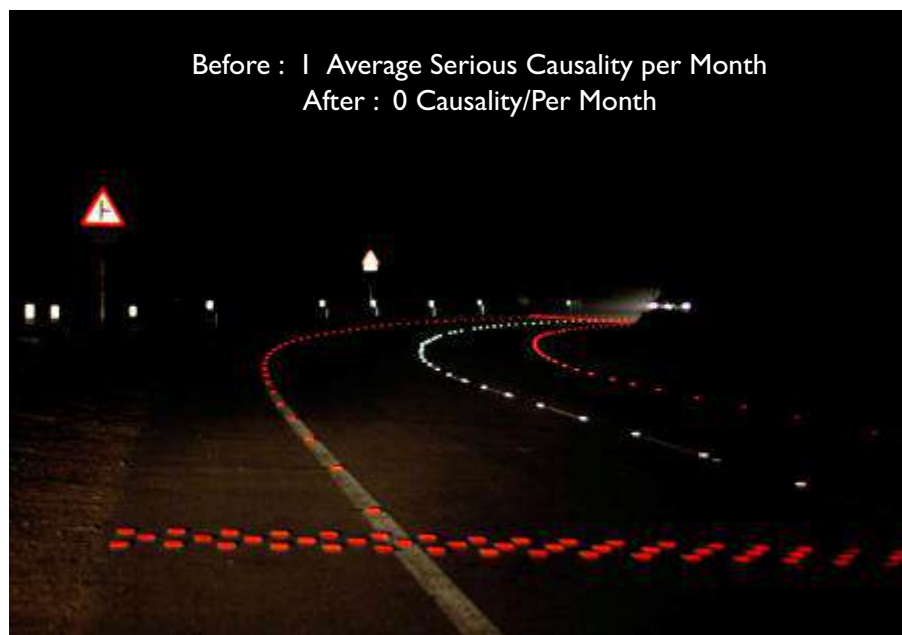
## PWD/Mandi Board

- ▶ Appointment of Road Safety Officer in each District of Punjab :  
Person of Level of XEN and In charge of Min 75km of National Highways, 75km of State Highways and 100 km of Major District Road and 200km of Other District Roads like National Highways Authority of India
- ▶ Mandatory Road Safety Audit of each Road under consideration for Up gradation, New, Rehabilitation or Periodic Maintenance.
- ▶ Use of NAREGA Labor for the Road Sides and Shoulder Maintenance, Control on Vegetative Growth Obstructing View– Revival of old Beldar System via NAREGA.
- ▶ Black Spot Improvement using Corridor Approach. Monitoring and Evaluation for all NH, SH and ODR on priority basis.
- ▶ Performance Review of BOT/Private Roads for Road Safety.
- ▶ Development of Road Safety Standard to State Specific Conditions

## Black Spot Treatment – Landran-Banur



## Black Spot Treatment- Khanpur Junction



# Urban Transport Local Body

Intra City Transport

## Non Motor and Para Transit Cell at Corporation Cities

- ▶ About 3 Lakh Cycle Rickshaw Transport 6 million passengers per day in Punjab, 10% of the Total Passenger Trips in Punjab
- ▶ More than 60 thousand Auto Rickshaw Transport 50-60 passenger per day. Lowest per passenger/km emission. Minimum use of Urban Space and the Most Safest



Registration and Not Licensing based upon  
Population Based Quota

### On Street 4-Wheeler Parking Cost Comparison- 2011

City	Euros	Rupees
Amsterdam	5	320
London	4	256
Stockholm	3.87	248
Paris	3.6	231
Copenhagen	3	192
Barcelona	2.85	183
Antwerp	2.5	160
Munich	2.5	160
Budapest	2	128
Hamburg	2	128
Ahmedabad	---	5
Pune	---	5
Chennai	---	5

Michael Kodransky :CSE Parking Reforms for a Livable City, ITDP

### Suggestions : Local Body- Urban Transport

- ▶ Strengthening Public Transport System- Low Carbon Mobility
- ▶ Introduction of Non-Motor Transport and Para Transit Cell at Corporation Cities and District Headquarters. Single Door Registration & Clearance System
- ▶ Bicycle and Walking Inclusive Planning for future cities– Master Plan ( Town and Country Planning Department)
- ▶ To make all cities of Punjab – Cycling and walking for short trips.
- ▶ Parking Policy for the State – Revenue for Road Safety

*"A Developed Country is not a place where poor have cars.  
It's where the rich use Public Transportation"*

## Post Crash Scenario

Health Department

### Post Crash and Health Status

- ▶ Ambulance Service 108 has shown up significant result in the state.
- ▶ Incentivizing people who help road crash victim.
- ▶ Setting up and Up gradation of better trauma care centers on the Primary Road Network comprised NH, SH, MDR and ODR at a distance of 60km.
- ▶ Instant financial Help for the people at No Fault, in the case of “Pedestrian and Cyclist”, Hit and Run cases– the sole bread winner of the family.
- ▶ Cashless Medical Treatment at Government Hospital for road accident victims.
- ▶ Declaring ‘Road Crash’ as Public Health problem

## **Human Resource Development, Road Safety Education and Awareness**

### Capacity Building

#### Capacity Building

- ▶ Special Training for the Highway Patrol Police
- ▶ Road Safety Research and Development – At Guru Nanak Dev Engineering College, Ludhiana (1 Crore)
- ▶ Development of Civil/Mechanical Engineering Curriculum on Road Safety and Vehicle Safety – Punjab Technical University
- ▶ Road Traffic Laboratory – Punjab Police
- ▶ Driving Training Institutes – Heavy and Light
- ▶ Job Creation and Training
- ▶ Involvement of Insurance Companies in Road Safety

## Road Safety Funds

### Punjab Road Safety Fund

Motor Own Damaged		Motor Third Party		Total	
2010-11	2009-10	2010-11	2009-10	2010-11	2009-10
424,17	341,25	203,48	176,03	627,65	517,28

Source : IRDA 2011

Sr No.	Expected Centre Share		State Share			Total
	Through Provisions on CRF	Insurance Companies	PWD and Mandi Board	State Transportation Department	State Traffic Police	
Estimated Figure for 2013	2 Crore	25 Crore	70 Crore	2 Crore	1.5 Crore	99.5 Crore

Motor vehicle Act 211 :To Impose fee