GOVERNMENT OF PUNJAB

DEPARTMENT OF TRANSPORT (Transport-II Branch)

NOTIFICATION

The 20th November, 2014

No. 4/119/2010-2T2 (PF)/349087/1.—In exercise of the powers conferred by Section 215(4) of the Motor Vehicles Act, 1988 and all other powers enabling him in this regard the Governor of Punjab is pleased to notify the Punjab State Road Safety Policy 2014 as under:-

POLICY

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, intracity 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 precrash, post crash and In crash scenarios.
2	Human Resource Development	Lack in Institutional apacity	The proposal would enable to establish Road Safety 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.
1	Road Safety	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.
5	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 organizing both modes along with other mode of Public transport in order to achieve road safety and precedence over personal transport.
5	Road Design Standards	At present guidelines to incorporate road safety component in terms of designing and B is not being practiced by state Government.	This policy with enable establishing indigenous road safety standards for the state for the urban and rural environment in view of state traffic characteristics and in much decentralized way. Special work on a accidents Black spot treatments using corridor approach.
	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.
	Financial Viability	Lack of budgetary support due to weak financial position of the state	The policy does not seek budgetary support but will rely on amendments in the applicable existing Motor Vehicle Acts, allocation of PD 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 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.

1.4 Road Network in Punjab

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- 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.

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)				
Total	62,298 Kms	83%		

Table 1: Classification of Road Network

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. Section 2 mainly 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 details 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 State.

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	2690	2638	2655 2580	2793 3060	3363 3333	3622	3424	3389		
	Death		•			an Salah Lawan) *	5 1,4,			

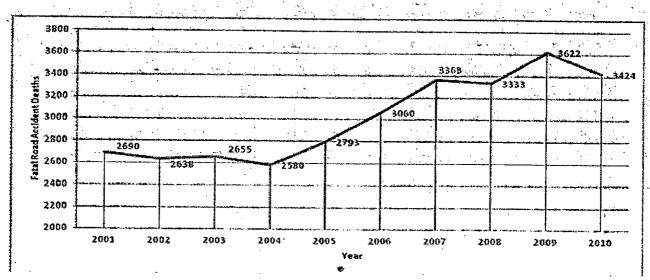


Figure 1: Road Fatalities Graph on Punjab in Last Decade 2001-2010 (Source: Director General of Police, Punjab Police)

Vehicle Population in Punjab

Table 3: Motor Vehicle Population Punjab

Year	Buses	Cars &	Jeeps	Taxies	Three	Two	Four	Three	Tractor	Others	Total
		Station			Wheelers	Wheelers	Wheelers	wheelers			Motor
		wagon			•		above				Vehicles
							Truck and				
				,			Lorries				
2010	27146	486670	54798	13231	57879	3956279	149367	20186	498517	10181	52,74,254

Table 4: Non Motor Transport Vehicles in Punjab

Animal D	riven/Anima	al				Slow Moving			
Horses	· · · · · · · · · · · · · · · · · · ·					Cycle	Cycle		
and			Buffalo	Cow	-/-	Rickshaw	Rickshaw		
Ponies	Mules	Donkey	(Male)	(Male)	Camel	(Passenger)	(Cargo)/Rehri	Cycle	Total NMT
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 anima driver or on peddle power, takes care of the almost equal number of trips originated within the state, as shown in Figure 2.

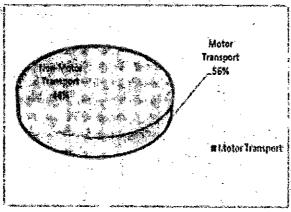
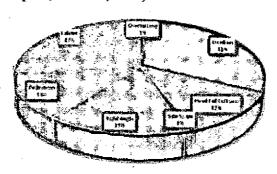


Figure 2: Ratio of Motor Transport vs. Non Motor Transport Vehicles

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)



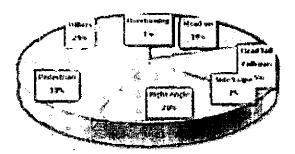


Figure 4: Road Crash Trends and Rural and Urban areas of Punjab (Source: Punjab Road Safety Assessment Report, PRBDB, 2008)

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

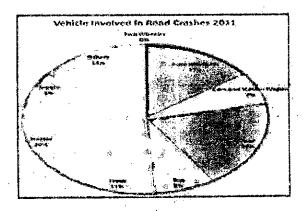


Figure 5: Modal Share of Registered Motor Vehicles in Punjab

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.

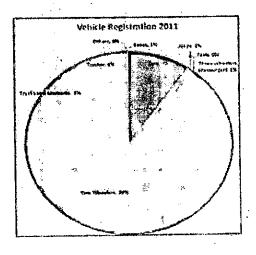


Figure 6: vehicle Involved in Road Crashes

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

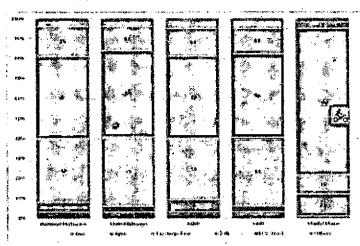


Figure 7: Modal share on the different types of roads in Punjab

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 distracts year wise.

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

Sr.	Year		Year 2009			Year 2010)		Year 2011	l
No.	·		:			-			·	
			-	Health		,	Health			Health
	District/Month	Population	Fatalities	Index	Population	Fatalities	Index	Population	Fatalities	Index
	Overall Punjab	26948700	3588	133	27323857	3387	124	27704236	3389	122
1	Gurdaspur	2256463	269	119	2277645	223	98	2299026	217	96
2	Amritsar	804038	213	88	810824	199	81	817668	176	<i>7</i> 3
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	Ferozepur	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	3 0		•		
15	Sangrur	2414370	204	126		70	92	1892282	49	65
16	Patiala	1077296	 -		2452332	210	129	2490891	222	138
17	Fatehgarh Sahib		357	196	1098475	362	195	1120070	348	191
18			188	321	677424	164	277	683349	123	252
	Ajitgarh	924005 .	191	207	954571	239	250	986147	233	
19	Tarn-Taran	1613960	82	76	1634059	155	141	1654408		252
20	Barnala	580703	97	167	588447				118	110
				107	J00 11 /	25	<u>42</u>	596294	24	41

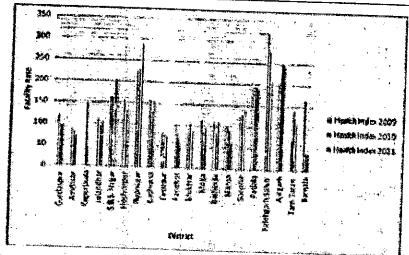


Figure 8: Health Index Profile of Various Districts of Punjab

- 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:

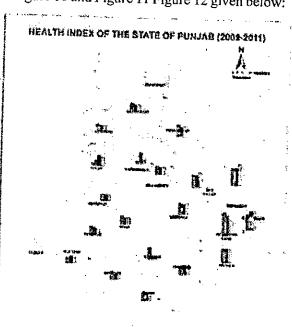


Figure 9: Three years Road Fatalities Health Index Map (2009-2011)

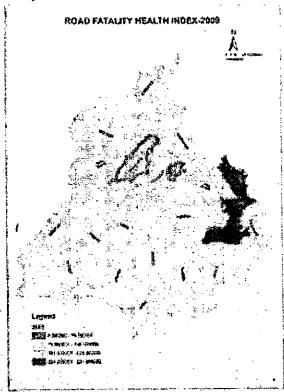


Figure 10: Road Fatality Health Index of Punjab for the year 2009

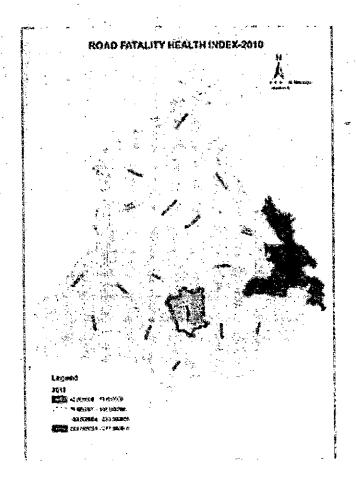
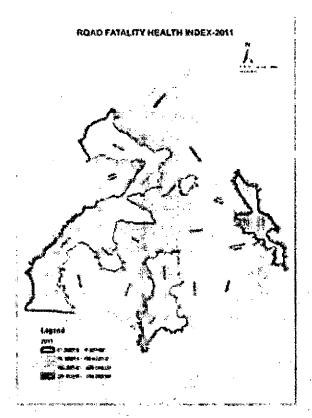


Figure 11: Road Fatality Health Index of Punjab for the year 2010



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, Fathegarh 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.

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- (g) With about 12 causalities 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)
- (i) Analysis of accidents reveals that six major cities of Puniah 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 driver 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 personalized 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) 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.
- (p) 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)	
	65,569 (1.7% of total road net	1739 (2.55% of the total length
	work 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		
Road length per millon population [3]	-	
Total Population [4]	1,210,193,422[5]	27,704,236
Total road accident fatalities	136834[6] (2011)	3424 (2010)
		3389(2011)
	11.2% (up)	-1.02% (decline)
Fatalities per million population		
(health burden)		
Fatalities per million		
burden)		

[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

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- [6] http://ncrb.nic.in/
- [7] http://ncrb.nic.in/

Strategic Planning for Road Safety

- 2.3.1 Implementing road safety programms 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 2014 is proposed with its major focus areas on:
 - 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.

Causes

2.8

3.1

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.

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 (Road POL) to strengthen leadership capacity in road policing and accelerate the transfer of international best practice.
- Establishment of dedicated fully equipped and trained mobile enforcement agencies in State.
- Increase capacity, knowledge and skills of enforcement 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

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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. 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.



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.

3.6.3

3.6.4

3.7

3.8

4.1

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.

Transport Department 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.

1

Community Participation

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.

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 Transport, Police, Engineering Department, Para Medical and Medical Department, Politician, Active NGO's, Students and General Public on the basis of their annual performance.

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. 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 in Transport Department.

Key Components of Road Safety Laboratory

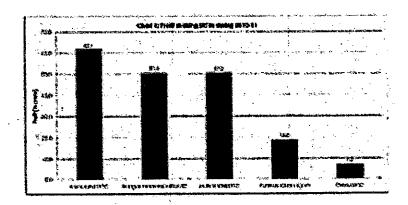
Centralize Road Safety Database management System and Analysis Wing: The objective of this wing to perform certain types of qualitative and quantitative analysis of the existing data to understand road crash phenomena more scientifically. This can work in coordination with various departments.

- 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.



How this will Help Road Safety

1.3

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.

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 matchup 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.

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).</p>
- (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.
- As per survey in Amritsar there about 25,000, In Jalandhar about 27,000, In Patiala about 16,000 and in (i) 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 nonmotorized 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 Division 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/repaired 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 Local Government Department, 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 intracity 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

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 convenience 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)
- 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 Authorities at Priority.

5.5 Non Motor Transport Division

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 neighborhood and for short trips.

- 5.5.2 With the following objectives, NMT Division under Local Government Department can be created and special cell at each Municipal Corporation Level can be established.
- 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
 - 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.
 - 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; 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
- 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
 - 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 10minutes. 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 FMS 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.

5.9 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 in calculate 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 weakness in the system, as well as improving the awareness the levels. This will include educating the system mangers 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 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.

Awareness Campaigns

5.0

There is a whole range of awareness which is required to be brought into the system, so that systematic 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 Discussions on Television
- Live and Let Live "Programmes 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 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.

6.1 Road Safety Education

6.1.1 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:

6.1.2 NHAl, Transport, 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.

6.1.3 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.

6.1.4 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.
- 6.1.5 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.

6.2 Driver Training

6.2.1 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 is one institute with proper facilities to train HMV 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.

6.2.2 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.
- 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

5.2.3 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.

5.2.4 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.

Funding Mechanism

5.3.1 Centre Share

6.3

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.

5.3.2 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 sunder Committee recommendations

6.4 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.

6.4.1 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.

6.4.2 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 some estimated amount as a part of their corporate social responsibility can be added through third party insurance to Road Safety Fund.

7.1 State Share

Details of Revenue collection for Road Safety Fund in the state

Sr. No.	Expacted C	entre Share		State Share				
	Through	Insurance	PWD and	State	State	Any Other		
	Provisions	Companies	Mandi	Transportation	Traffic	department		
	on CRF		Board	Department '	Police			
Estimated	2 Crore							
Figure for			•		_	_		
2014								

The decision regarding share contribution of each relevant State Government Department in above said revenue collection for Road Safety fund in State shall be discussed in Punjab Road Safety Council on the basis of actual annual budget/revenue collection of each such department and shall be finalized therein.

Chandigarh
The 19th November, 2014

ANURAG AGARWAL
Secretary to Government of Punjab

Department of Transport.

0644/12-2014/Pb. Govt. Press, S.A.S. Nagar