

# ROAD ACCIDENT SCENARIA IN HIMACHAL PRADESH

**YEAR 2020-21** 



LEAD AGENCY/ROAD SAFETY CELL, DIRECTORATE OF TRANSPORT, HIMACHAL PRADESH, SHIMLA-171004

#### INTRODUCTION

Himachal Pradesh is a very beautiful and charming hilly State. Its scenic beauty, serene and pleasant atmosphere attract the tourists from every nook and corner of the country and all over the world every year. Its elegant rivers and streams, delightful valleys and snow clad high mountains make the Himachal a place worth visiting throughout the year. During the recent past, the financial status of the people of Himachal Pradesh has improved and as such the vehicle population has also been increased drastically. Every year, thousands of tourist and other commercial and goods vehicles enter in the State from all over the country due to which the congestion of traffic also increased on the National Highways and State Highways considerably. Since the Himachal Pradesh is the abode of numerous "Gods and Goddess" and various places of worship are situated here, "Religious Tourism" is one of the various features of the State and lacs of devotees from different religions use to visit Himachal every year and volume of vehicular traffic also increases manifold on the roads.

The annual average rate of road traffic accidents, fatalities and injuries in Himachal Pradesh is 3000, 1200 and 5000 respectively which shows that State is witnessing more than eight accidents, three fatalities and 13 injuries every 24 hours which is a matter of concern for a small State like Himachal Pradesh.

The road traffic accidents and resultant fatalities and injuries are the major concern of the State. In order to curve the menace of road traffic accidents, all possible efforts are being put forth by the State Govt. by associating all the stakeholder departments and people from every walk of life. Being tough hilly terrain and varied and difficult topography of the State, it becomes hard to provide immediate emergency care to the road

Accidents victims which remain one of the major factors attributing to the high rate of fatalities. The Lead Agency/ Road Safety Cell, Department of Transport is committed to make all the road users aware about the importance of traffic laws/ rules and precautions to be taken while driving on the roads of Himachal Pradesh.

#### GEOGRAPHICAL CONDITION OF HIMACHAL PRADESH

Himachal Pradesh extends over an area of 55,673 sq. kms. It is situated in the Western Himalaya and most of the area of the state falls within the range of hilly terrain. Due to extreme variation in elevation, great variation occurs in the climatic conditions of Himachal Pradesh. The climate varies according to the elevation, type of terrain and topography from hot to cold, alpine, and glacial.

#### POPULATION OF HIMACHAL PRADESH

As per the Census of year 2011, total human population of Himachal Pradesh is 68, 64,602 and projected population for the year 2022 is 76,90,0

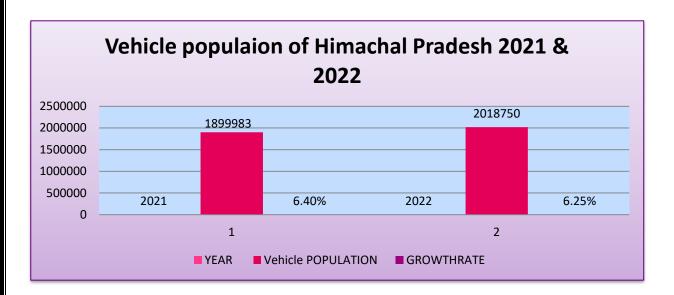
Population of H.P. (2011 Census)	Population (2001 Census)	% Growth (2001- 2011)	Rural Pop.	Urban Pop.	Area Km²	Density per Km <sup>2</sup> )
68,64,602	6,077,900 Lac	12.95%	61,77,050 Lac	6,88,552 Lac	55,673	123

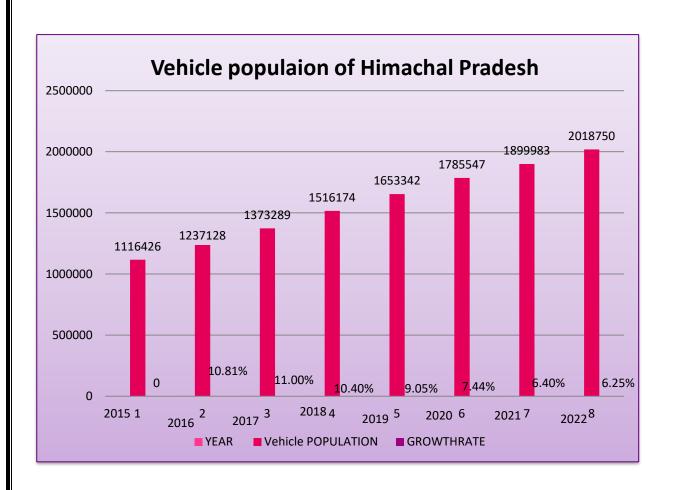
#### **VEHICLE POPULATION OF HIMACHAL PRADESH**

As far as the population of registered vehicles in H.P. is concerned, at the end of the year 2020 the number of all types of vehicles registered in H.P. was 1785547 and during the year 2021, total 114436 new vehicles registered in H.P. and at the end of year 2021 the population of registered vehicles in H.P. was 1899983. The below table shows that registration of number of vehicles form year 2015 to 2021 has been considerably increased by 70.18%.

YEAR	VEHICLE POPULATION	GROWTH RATE
2015	1116426	-
2016	1237128	10.81%
2017	1373289	11.00%
2018	1516174	10.40%
2019	1653342	9.05%
2020	1785547	7.44%
2021	1899983	6.40%

## GROWTH RATE OF VEHICLE POPULATION FOR THE LAST FIVE YEARS I.E. FROM 2017 TO 2021 IS 38.35%.





#### **ROAD NETWORK IN H.P. 2020-21**

<b>Year</b> \	<b>Total road</b>	Motorable	Motorable	Motorable	Jeepable	Less
District	length (in	Four Lane	<b>Dubble Lane</b>	Single	in Kms.	Than
	Kms)	(in Kms.)	in Kms.	Lane in		Jeepa
				Kms.		ble in
						Kms
2	3	4	5	6	7	8
2017-18	37586	62	2081	33742	984	717
2018-19	37591	102	2046	35443	1012	717
2019-20	39475	102	2079	35443	1128	723
2020-21	39512	189	2059	36304	954	6
L	DIST	TRICT WISE I	ROAD LENGTH	[		
Bilaspur	1968.933	66	142.575	1689.518	70.84	0
Chamba	3201.952	0	174.742	2666.954	360.256	0
Hamirpur	2211.85	0	121.555	2090.295	0	0
Kangra	6511.458	0	395.67	6092.088	23.7	0
Kinnaur	963.558	0	34	825.998	103.56	0
Kullu	2194.238	10	90.5	2050.023	43.715	0
Lahaul and Spiti	998.566	0	161.39	802.551	34.625	0
Mandi	6519	53	162.525	6120.055	183.42	0
Shimla	6188.048	0	284.94	5800.323	102.785	0
Sirmour	3327.72	0	156.7	3157.72	13.3	0
Solan	3240.168	43	177.475	3001.733	17.96	0
**	2196.00	16.6	156.545	2006.745	0.2	6
Una	2180.09	10.0	130.343	2000.715	0.2	
	2 2017-18 2018-19 2019-20 2020-21  Bilaspur Chamba Hamirpur Kangra Kinnaur Kullu Lahaul and Spiti Mandi Shimla Sirmour Solan	District       length (in Kms)         2       3         2017-18       37586         2018-19       37591         2019-20       39475         2020-21       39512         DIST         Bilaspur       1968.933         Chamba       3201.952         Hamirpur       2211.85         Kangra       6511.458         Kinnaur       963.558         Kullu       2194.238         Lahaul       998.566         and Spiti       Mandi         Mandi       6519         Shimla       6188.048         Sirmour       3327.72         Solan       3240.168	District         length (in Kms.)         Four Lane (in Kms.)           2         3         4           2017-18         37586         62           2018-19         37591         102           2019-20         39475         102           2020-21         39512         189           DISTRICT WISE I           Bilaspur         1968.933         66           Chamba         3201.952         0           Hamirpur         2211.85         0           Kangra         6511.458         0           Kinnaur         963.558         0           Kullu         2194.238         10           Lahaul         998.566         0           and Spiti         Mandi         6519         53           Shimla         6188.048         0           Sirmour         3327.72         0           Solan         3240.168         43	District         length (in Kms.)         Four Lane (in Kms.)         Dubble Lane in Kms.           2         3         4         5           2017-18         37586         62         2081           2018-19         37591         102         2046           2019-20         39475         102         2079           2020-21         39512         189         2059           DISTRICT WISE ROAD LENGTH           Bilaspur         1968.933         66         142.575           Chamba         3201.952         0         174.742           Hamirpur         2211.85         0         121.555           Kangra         6511.458         0         395.67           Kinnaur         963.558         0         34           Kullu         2194.238         10         90.5           Lahaul         998.566         0         161.39           Mandi         6519         53         162.525           Shimla         6188.048         0         284.94           Sirmour         3327.72         0         156.7           Solan         3240.168         43         177.475	District         length (in Kms.)         Four Lane (in Kms.)         Dubble Lane in Kms.         Single Lane in Kms.           2         3         4         5         6           2017-18         37586         62         2081         33742           2018-19         37591         102         2046         35443           2019-20         39475         102         2079         35443           2020-21         39512         189         2059         36304           DISTRICT WISE ROAD LENGTH           Bilaspur         1968.933         66         142.575         1689.518           Chamba         3201.952         0         174.742         2666.954           Hamirpur         2211.85         0         121.555         2090.295           Kangra         6511.458         0         395.67         6092.088           Kinnaur         963.558         0         34         825.998           Kullu         2194.238         10         90.5         2050.023           Lahaul         998.566         0         161.39         802.551           Mandi         6519         53         162.525         6120.055           Shimla	District         length (in Kms.)         Four Lane (in Kms.)         Dubble Lane in Kms.         In Kms.           2         3         4         5         6         7           2017-18         37586         62         2081         33742         984           2018-19         37591         102         2046         35443         1012           2019-20         39475         102         2079         35443         1128           2020-21         39512         189         2059         36304         954           DISTRICT WISE ROAD LENGTH           Bilaspur         1968.933         66         142.575         1689.518         70.84           Chamba         3201.952         0         174.742         2666.954         360.256           Hamirpur         2211.85         0         121.555         2090.295         0           Kangra         6511.458         0         395.67         6092.088         23.7           Kinnaur         963.558         0         34         825.998         103.56           Kullu         2194.238         10         90.5         2050.023         43.715           Lahaul         998.566         0

Source: HP Statistical Department website

#### **ROAD NETWORK IN H.P. 2021-22**

Year/	Total Road	Motor-	Motor-able	Motorable	Jeepable	Less
District	Length	able	double lane	Single lane		than
		Four lane				Jeep
						able
1.	2.	3.	4.	5.	6.	7.
2016-17	36,623	••	2,453	32,469	305	1,396
2017-18	37,586	62	2,081	33,742	984	717
2018-19	38,854	102	2,046	34,577	1,012	717
2019-20,	39,475	102	2,079	35,444	1,128	723
2020-21	39512	189	2059	36304	954	6
2021-22	40,329.680	261.894	1,584.115	37,398.991	1084.680	0.000
		DISTI	RICT WISE	ROAD LEN	GTH	
1.Bilaspur	2013.144	78.190	94.175	1725.779	115.000	0.000
2. Chamba	2958.568	0.000	63.500	2562.734	362.334	0.000
3.Hamirpu	2359.317	0.000	110.625	2231.557	17.135	0.000
r						
4.Kangra	6515.096	0.000	272.359	6192.237	50.464	0.000
5. Kinnaur	1004.929	0.000	155.350	738.452	111.127	0.000
6. Kullu	2125.463	20.045	68.345	1992.258	44.815	0.000
7.Lahul &	1006.071	0.000	168.340	803.106	34.625	0.000
Spiti						
8.Mandi	7139.782	83.920	68.500	6772.302	215.060	0.000
9.Shimla	6670.581	0.000	300.930	6266.794	102.860	0.000
10.Sirmou	3202.307	7.000	22.280	3159.727	13.300	0.000
r						
11.Solan	3120.239	54.139	194.650	2853.490	17.960	0.000
12.Una	2184.180	18.600	65.025	2100.555	0.000	0.000

**Source: HP Statistical Department website** 

Growth rate of road length from the year 2016-17 to 2021-22  $\,$ 

#### LEAD AGENCY/ROAD SAFETY CELL:

As per the direction of Hon'ble Supreme Court Committee on Road Safety, a dedicated Lead Agency/Road Safety Cell has been established in the Directorate of Transport Himachal Pradesh vide HP govt. Notification No.TPT-F(9)/3/2016-III dated 16-07-2019 and with the appointment of Executive Engineer from PWD department and DY.SP from Police Department, Deputy Director, Education Department and Deputy Director from Transport department and supporting staff, this road safety cell has made functional. The functions of the Lead Agency/Road Safety Cell shall be as follow: -

- (i) To work as a secretariat for the State Road Safety Council, arrange meetings of the Council issue it's Minutes and monitor the implementation of the decisions of the Council by the concerned Department of the State.
- (ii) To co-ordinate with the concerned Departments of the State Govt. to ensure implementation of the direction issued from time to time by Supreme Court Committee on Road Safety and furnish Compliance Report in a time bound manner.
- (iii) To ensure implementation of the directions given by the Central State Govt. from time to time.
- (iv) To notify annual targets for reduction of accidents and fatalities as fixed by the State and draw up an Annual Action Plan to achieve the targets and monitor its implementation.
- (v) To collate on a regular basis data on road accidents and analysis the data to identify areas/road stretches and categories of accident victims who should be focused upon.
- (vi) To manage the Road Safety Fund and ensure that the fund is effectively utilized.
- (vii) Any other task related to road safety assigned by the Government from time to time.

#### LEAD AGENCY/ROAD SAFETY CELL (HR STATUS) NAME OF POST SANCTIONED PRESENT REMARKS (CREATED ON 16.07.2019) STRENGTH **STATUS** HEADED BY DIRECTOR TRANSPORT ADDITIONAL COMMISSIONER **EXECUTIVE ENGINEER** ON SECONDMENT FROM PWD 3. DY.S.P ON SECONDMENT FROM POLICE 4. DY. DIRECTOR (HEALTH) ON SECONDMENT FROM HEALTH DY. DIRECTOR (EDUCATION) ON SECONDMENT FROM EDUCATION DY. DIRECTOR (TRANSPORT) CREATED BY UPGRADING ONE 1 EXISTING POST OF RTO 7. JUNIOR OFFICE ASSISTANT (IT) TO BE ATTACHED WITH 4 OFFICERS AT SR. NO. 1 TO 4 8. CLASS-(IV) 3 9. **PROGRAMMER** 10. COMPUTER OPERATOR (ACTT.) 2 2 ON OUTSOURCE BASIS

#### ROAD ACCIDENT DATA MANAGEMENT SYSTEM (RADMS)

In order to support the improvement of Road Safety situation in the State of Himachal Pradesh, the Govt. of HP had implemented integrated Microsoft Accident Analysis Program (iMAAP) from the month of August 2015 which was a crash data management system developed by Transport Research Laboratory (TRL), UK based Consultancy Service. This application is called RADMS-Road Accident Data Management System. This application was used by the Stakeholder department i.e. Police, PWD, Health & Transport department. RADMS was used for capturing the crash reports by Police, HPPWD, Health and Transport department. This application was helpful in developing data led, result oriented countermeasures programs and strategies in order to reduce the frequency of Road traffic accidents, fatalities and injuries by implementing remedial measures and required interventions. Now, the RADMS application has been replaced with the implementation of integrated Road Accident Database (iRAD) in the State from 15th November 2022.

# Implementation of integrated Road Accident Database (iRAD)

### in Himachal Pradesh

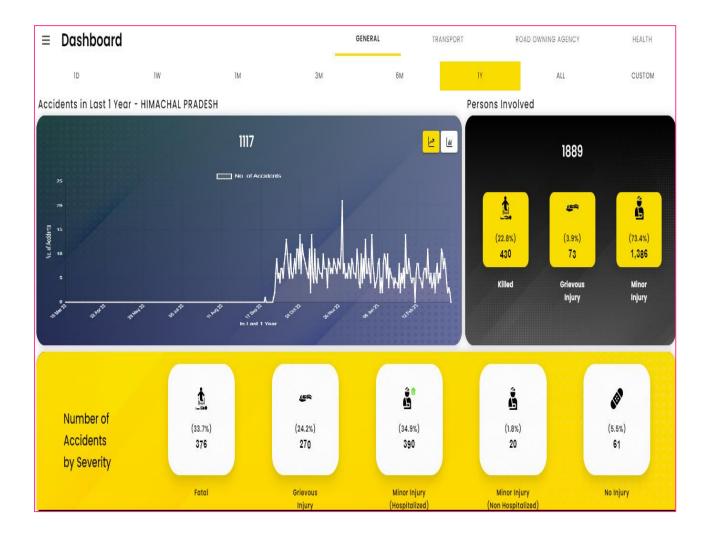
The Integrated Road Accident Database (iRAD) Project is an initiative of the Ministry of Road Transport and Highways (MoRTH), Government of India and funded by World Bank, with the objective to improve road safety in the country.

NICSI & IIT Madras have been jointly entrusted to carry out design, Development, Training, and implementation of iRAD project along with research & analysis activities. NICSI is responsible for Development of iRAD mobile (Android and iOS) & web application to facilitate collection & analysis of road accident data, establishing the required cloud infrastructure / Server setup and its maintenance, training to users/stakeholders, establishment of helpdesk & Program roll-out across India. IITM is associated with architecture designing, organizing stakeholder conferences, development of training content and training of trainers/master trainers, research & data analytics activities. The NIC, HP is the implementing agency of iRAD in H.P.

The objective of the project is to establish nationwide accurate and uniform road accident data collection mechanism. For this purpose, iRAD mobile & web application has been developed. This will facilitate road accident data collection by 4 stakeholders i.e. Police, Transport, Highways & Health Departments following Standard Operating Procedure (SOP). Through collection of road accident data from all over the country, road accident database will be developed. The collected data will be analysed using different data analytics technique for identification of accident prone areas and causes of the accidents. The analysis output will be represented in appropriate dashboards, accessible to higher authorities of stakeholder departments and MoRTH and accordingly, strategies will be formed for the reduction of number of road accidents in all and enhance road safety

After imparting the necessary trainings to handle the iRAD application to the stakeholder departments, the State has started making entries of road accident data in iRAD application w.e.f. 1st October 2022.

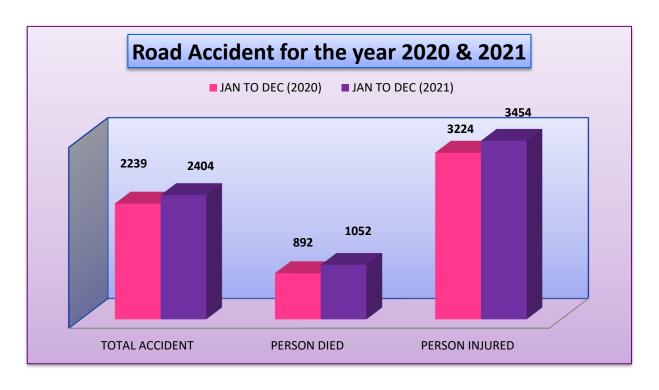
#### IRAD DASHBOARD OF HP



## COMPARATIVE ANALYSES OF ROAD TRAFFIC ACCIDENTS IN HIMACHAL PRADESH FOR THE YEAR 2020 & 2021

## COMPARATIVE DATA OF ACCIDENTS OCCURRED DURING (JAN TO DEC) 2020 & 2021

ACCIDENTS	<b>JAN TO DEC (2020)</b>	<b>JAN TO DEC (2021)</b>
TOTAL ACCIDENTS	2239	2404
PERSON DIED	892	1052
PERSON INJURED	3224	3454



PERCENTAGE INCREASE IN NUMBER OF ACCIDENTS = 7.36%

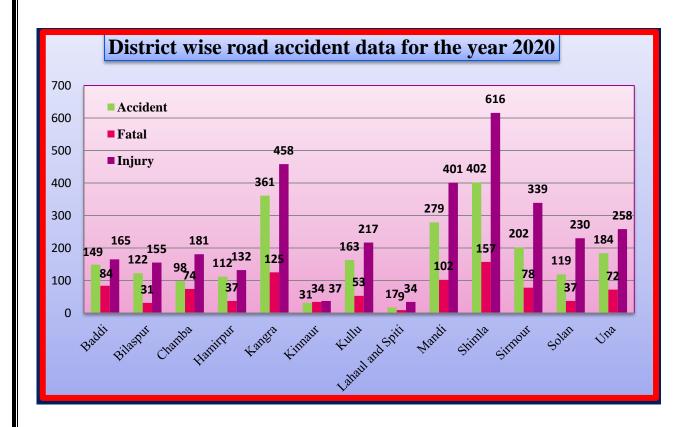
PERCENTAGE INCREASE IN NUMBER OF ACCIDENTS = 17.69%

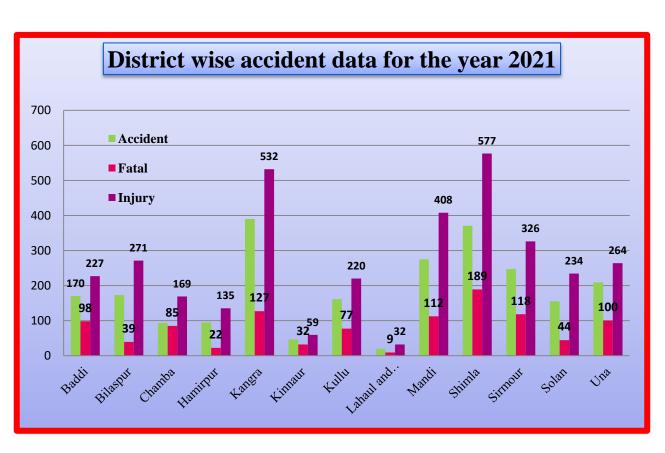
PERCENTAGE INCREASE IN NUMBER OF ACCIDENTS = 7.19%

As per the comparative road accident data for the year 2020 & 2021, the numbers of road traffic accidents, fatalities and injuries have been increased during the year 2021 by 7.36%, 17.69% and 7.19% over the year 2020. During the year 2020, due to the spread of Covid-19 and imposition of complete and partial lockdown in the State, very few number of vehicles were allowed to ply on the roads which attributed in the reduction the number of road traffic accident in the State. However, if we compare the road accident data of 2019 and 2021, there is considerable decrease in the number of road traffic accident during the year 2021 by 16.32%, decrease in the number of fatalities by 8.20% and injuries by 29.56%.

### District wise comparative road accident data for the year 2020 & 2021

District	District wise comparative road accident data for the year 2020 & 2021								
District		Year	2020		Year 20	)21			
	No of			No of			+/- % of	accident, fa	talities and
	Accidents	Fatal	injury	Accidents	Fatal	injury		injuries	
Baddi	149	84	165	170	98	227	14.09 %	16.66%	37.57%
Bilaspur	122	30	156	173	39	271	41.80%	30%	73.71%
Chamba	98	74	181	93	85	169	-5.10%	14.86%	-6.62%
Hamirpur	112	37	132	95	22	135	-15.17%	-40.54%	2.27%
Kangra	361	125	458	390	127	532	8.03%	1.6%	16.15%
Kinnaur	31	34	37	46	32	59	48.38%	- 5.88%	59.45%
Kullu	163	53	217	161	77	220	-1.22%	45.88%	1.38%
Lahaul									
&Spiti	17	9	34	19	9	32	11.76%	0	5.88%
Mandi	279	102	401	275	112	408	1.43%	9.80%	1.74%
Shimla	402	157	616	371	189	577	-7.71%	16.93%	-6.77%
Sirmour	202	78	339	247	118	326	22.57%	51.28%	-3.83%
Solan	119	37	230	155	44	234	18.09%	15.90%	1.73%
Una	184	72	258	209	100	264	13.58%	38.88%	2.32%
Total	2,239	892	3224	2,404	1,052	3454	7.36%	17.93%	7.13%





During the year 2020, more than half number of road traffic accidents i.e. 55.64% accidents took place only in four districts namely district Shimla by 17.95%, Kangra by 16.21%, Mandi by 17.46% and district Sirmour by 9.02%. Further, 52.45% road accident fatalities also took place in four districts namely District Shimla by 17.60%, Kangra by 14.01%, Mandi by 11.43% and Police district Baddi by 9.41%. Similarly, 56.24% road traffic injuries also occurred in four districts i.e. district Shimla by 19.10%, Kangra by 14.20%, Mandi by 12.43% and district Sirmour by 10.51%.

During the year, 2021, out of 2404 accidents, 62.06% accidents occurred in five districts namely district Kangra by 16.22%, district Shimla by 15.43%, district Mandi by 11.43% district Sirmour by 10.27% and district Una by 8.69%.

As far as the rate of fatalities during the year 2021 is concerned, 61.38% fatalities also took place in these five districts i.e. district Shimla by 17.96%, district Kangra by 12.07%, district Sirmour by 11.21%, district Mandi by 10.64% and district Una by 9.50%.

Similarly, 60.98% injuries took place in these five district i.e. district Shimla by 16.70%, district Kangra by 15.40%, district Mandi by 11.81%, district Sirmour by 9.43% and district Una by 7.64%.

The comparative analyses of road accident data for the year 2020 & 2021 shows that certain increase in the number of accident, fatalities and injuries has been witnessed during the year 2021 over the year 2020.

During the year 2021, number of road traffic accidents have been increased by 7.36%, fatalities by 17.69 % and injuries by 7.19%. During the year 2021, nine districts including Police district Baddi have witnessed the increase in the number of accident i.e. district Kinnaur by 48.38%, district Bilaspur by 41.80%, district Sirmour by 22.57%, district Solan by 18.09%, district Una by 13.58%, Police district Baddi by 14.9%, district L&S by 11.76%, district Kangra by 8.03% and district Mandi by 1.03%.

As far as the decrease in the number of road traffic accident during the year 2021 is concerned, only four districts have witnessed the decrease i.e district Hamirpur by -

15.17%, district Shimla by -7.71% district Chamba by -5.88% and district Kullu by -1.22%.

Similarly, during the year 2021, numbers of fatalities have been increased in 11 districts i.e. in district Sirmour by 51.28%, district Kullu by 45.88%, district Una by 38.88%, district Bilaspur by 30%, district Shimla by 16.93%, district Baddi by 16.66%, district Solan by 15.90%, district Chamba by 14.86%, district Mandi by 9.80% and district Kangra by 1.06%.

Only two districts witnessed decrease in the number of fatalities during the year 2021 i.e. district Hamirpur by -40.54% and district Kinnaur by -5.88%.

The comparative road accident data of injured persons for the year 2020 and 2021 shows that during the year 2021, ten districts including Police district Baddi witnessed increase in the number of injuries i.e. district Bilaspur by 73.71%, district Kinnaur by 59.45%, Police district Baddi by 37.57%, district Kangra by 16.15%, district L&S by 5.88%, district Una by 2.32% district Hamirpur by 2.27%, district Mandi by 1.74%, district Solan by 1.73% and district Kullu by 1.38%.

Only 03 districts recorded decrease in the number of injuries in the State during the year 2021 over the year 2020 i.e. district Shimla by -6.77%, district Chamba by -6.62% and district Sirmour by -3.83%.

The above comparative analysis of road traffic accidents during the year 2020 & 2021 shows that most of the road traffic accidents, fatalities and injuries occurred only in three districts namely district Kangra, Shimla and Mandi by around 45%, 42% and 45% respectively.

The landed area of these three districts is only 26.62% as compared to the total area of the State whereas the human population is 48.42% as per the 2011 Census. Similarly, the vehicles population of these three districts constitute 48% of total vehicles registered in H.P. during the financial year 2021-22

Since, the district Shimla and Kangra are famous tourist destination and the National Highways which are now being constructed as four-lane road by National Highway Authority of India (NHAI), besides the number of registered vehicles in these districts, lacs of tourist and other vehicles entre and ply on the roads of these three districts every year. Many famous religious places are also situated in district Kangra and lacs of pilgrims/ devotees use to visit these worship places every year.

Pathankot-Mandi National Highway is used by numerous tourist and other vehicles which passes through the territory of district Kangra. The district Mandi also witnesses the visit of lacs of tourist vehicles throughout the year undertaking journey towards world famous tourist destination Kullu and Manali through this district. Now with the construction and opening of Atal Tunnel, the access towards Lahaul & Spiti has become easy for all people including tourists throughout the year which has increased the number of vehicular population manifold the Pathankot-Mandi and Kiratpur-Nerchowk National Highway crossing through Mandi district.

On above mentioned three National Highways, the heavy rush of vehicles throughout the year remains responsible for the occurrence of road traffic accidents and resultant fatalities and injuries.

In district Kangra, due to the overloading of vehicles carrying devotees/pilgrims to various places of worship soften met with accidents and the causes of these accidents mostly remain over-turning of vehicles due to the excessive load of passengers, hilly terrain, over speeding and carelessness of the drivers.

In district Mandi, numerous road traffic accidents are happening on Bilaspur-Sundarnagar-Mandi National Highway due to the over-speeding by the drivers of the vehicles.

In district Shimla, during the Apple Season from mid-July to mid-October every year, thousands of heavy, medium and small goods transport vehicles of the State

and from other States use to ply through the roads of this district for the transportation of apple to the market of Himachal and other States.

Similarly, heavy volume of transport vehicles crosses through the territory of district Mandi towards Kullu and Manali for the same purpose. Due to the overloading of goods transport vehicles and adverse condition of roads due to ss rainy season, a lot of accidents are taking place every year resulting in a number of fatalities and injuries to the drivers and passengers of the vehicles besides financial loss to the apple growers and the owners of the ill-fated vehicles. Also, medium and small goods transport vehicles are used to transport the apple and other fruits/vegetables through the link roads connected with the orchards often met with accidents due to the condition of the roads, foul weather and over-loading of these vehicles.

However, apart from above mentioned three districts having high rate of road traffic accidents, fatalities and injuries, the Police district Baddi has comparatively much higher average rate of accidents as per the number of Police Stations. District Kangra, Shimla and Mandi have 49 Police Stations in all and Police district Baddi has only 06 Police Stations. These three districts have witnessed 1036 road traffic accidents during the year 2021 and the average rate of accidents per Police Station in these three districts is 21 whereas in district Baddi, the average rate of accidents is 28 per Police Station. Similarly the average rate of fatalities and injuries in district Kangra, Shimla and Mandi is 9 & 31 per Police Station respectively whereas Police district Baddi has witnessed average rate of fatalities and injuries by 16 and 38 per Police Station respectively which is much higher than the average of these three districts.

Being Asia's biggest pharmaceutical hub, thousands of industries have been established in Baddi Barotiwal and Nalagarh (BBN) and also the Nalagarh Truck Union being the Asia's largest Truck Union, thousands of goods carrier and other vehicles including LMV and two wheelers use to ply on the roads of BBN every day.

Thousands of workers and industrialists use to commute daily to and from BBN from Chandigarh, parts of Haryana, Punjab and Himachal which increases the flow of traffic on the roads of BBN especially during peak hours. More than half of the vehicles registered in BBN are two wheeler and also vulnerable to road traffic accidents. Heavy rush of goods and other vehicles in limited area of BBN increases the danger of road traffic accidents manifold. Since most of the vehicles are two wheeler used by the factory workers and local people, accidents with heavy vehicles prove to be fatal and the reasons are over-speeding, rash and negligent driving, wrong overtaking, non-wearing of helmet, triple riding and driving under the influence of drugs and alcohol.

\* \* \* \*

#### CAUSES OF ACCIDENTS (JAN TO DEC) 2020 & 2021

1.	HUMAN ERROR	2020	HUMAN ERROR	2021
	Changed lanes		Changed lanes	
I	without care	102	without care	143
Ii	Dangerous driving	239	Dangerous driving	637
Iii	Dangerous overtaking	117	Dangerous overtaking	165
	Driving against flow		Driving against flow	
Iv	of traffic	6	of traffic	16
	Non respect of rights		Non respect of rights	
V	of way rules	62	of way rules	62
Vi	Speed	1400	Speed	956
	Suspected		Suspected	
Vii	drugs/alcohol	76	drugs/alcohol	67
viii	Turning without care	161	Turning without care	207

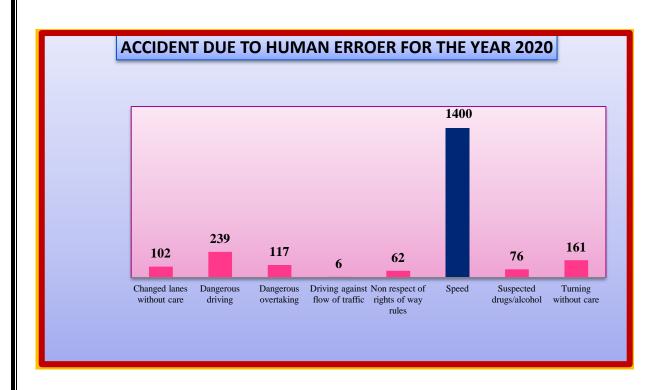
	TOTAL	2163	TOTAL	2253
2.	OTHER FACTOR		OTHER FACTOR	
I	Blind bend	18	Blind bend	46
Ii	Slippery road surface	17	Slippery road surface	18
iii	Uneven road surface	6	Uneven road surface	16
Iv	Adverse weather	0	Adverse weather	6
	Suspected vehicle	4	Suspected vehicle	1
v	defect		defect	
	Non-Provision of		Non-Provision of	
	Parapets/crash barrier		Parapets/crash barrier	
Vi	on outer curve	31	on outer curve	64
VII	Other	0	Other	0
	total	76	total	151
	Grand total	2239	Grand total	2404
	1+2		1+2	

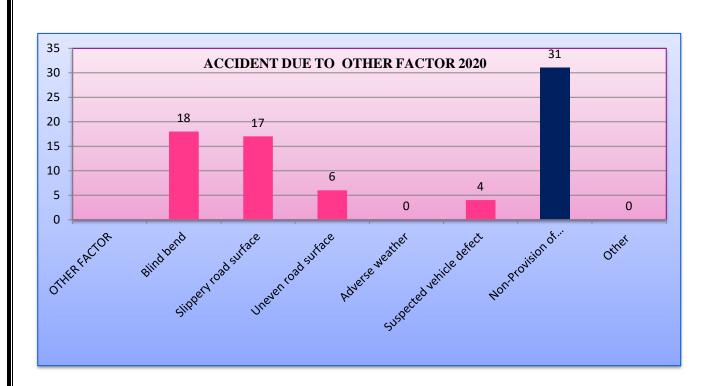
(2020)

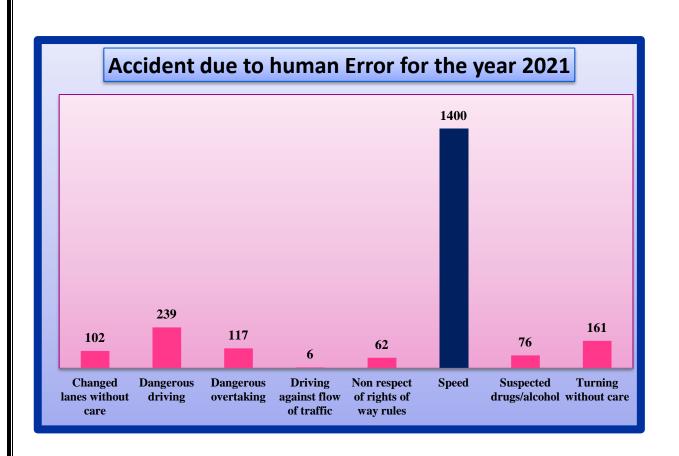
PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =96.60%
PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR = 3.39%

(2021)

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR = 93.71%
PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR = 6.28%









As far as the comparative road accident data according to causes of accidents for the year 2020-2021 is concerned, during the year 2020, 96.60% accidents took place due to human error and 3.39% due to other factors. During the year 2021, 93.71% accident occurred due to human error and 6.28% due to other factors. The comparative data shows that the year 2021 has witnessed increase in the number of accidents due to dangerous driving by 166.52%, dangerous overtaking by 41.02%, changed lane without care by 40.19%, and turning without care by 28.57% which is a matter of concern. However, number of accident due to speed has been decreased by 31.71% and suspected drug/ alcohol by 11.84%. This decrease due to speed and suspected drug/ alcohol is very good and welcome sign which is the result of strict traffic law enforcement by the use of Speed Radar/ Speed Guns and Alco Meter being used by the Police department and various sawareness campaigns being undertaken by the Lead Agency/ Road Safety Cell.

Further, accidents due to other factors have witnessed increase in the number of accidents due to Blind Bend by 155.55%, and due to Non- Provision of Parapets/Crash Barriers by 106.45% during the year 2021 over the year 2020.

The menace of over speeding, dangerous driving, dangerous overtaking, turning without care and changing lane without care is mostly proving fatal leaving family members and near dear of the accident victims helpless for life. These violations are often done by the young road users and the age group between 21 to 45 years is most vulnerable group who use to travel by light motor vehicles and two wheelers.

Due to their young age, being energetic and having natural zeal to feel thrill in doing extreme things while driving or riding, they tend to drive carelessly putting not only their own lives in risk but they also pose undue and sometimes unavoidable danger to other road users. Listening music in high volume, use of drugs and alcohol, use of mobile phone while driving, racing and the attitude of being at the forefront and behavioural attitude are main reasons behind their carelessness.

Younger road users whether driver/rider or passengers when travelling in the company of persons of their own age group most often feel free to make their wishes come true as they are influenced from the acts being done in movies/ advertisements by filmy heroes and their sports and youth icons. As the age grows, the attitude of the drivers/riders and passengers travelling in private vehicles also get changed with the attainment of maturity.

In Himachal Pradesh, around 50% accidents take place on National Highways and the reason for the most of the accidents remain over-speeding. Distracted driving and driving under the influence of drugs and alcohol are the other main causes of road traffic accidents. However, with the use of Alco meter by the Police department and enhancement in the provisions of penalty and imprisonment for drunken driving in Motor Vehicle Act 1988, little reduction in the number of road traffic accidents during the year 2021 over the year 2020 has been seen. However, it is only alcohol which could be detected by instant checking with the use of Alco Sensor and if taken in excess, the same is also detectable with the smell and the body language of the driver/ rider.

But the consumption of other narcotics and psychotropic substances by the drivers/ riders such as opium, cannabis, poppy husk and above all, synthetic drugs which is trending now a days called "Chitta" and other similar kind of drugs cannot be detected with the use of any device on the spot. Mostly, such type of drugs are used by the drivers of commercials and goods vehicles to reduce the effect of the sleep and fatigue in order to drive for over and excessive hours. But the "Chitta" and other similar synthetic drugs are being used by the young generation at large which is not only harmful to the mental and physical health of the person taking it but the use of these drugs are also responsible for the road traffic accidents, fatalities and injuries. Taking these drugs in excess quantity also lead to the impairment of the driving ability of the driver.

Due to the ever increasing number of vehicular population in the State of H.P., the number of traffic law violation has also been increased considerably. During the year 2020, total 1014641 number challans for different traffic violations were issued by the Police department whereas during the year 2021, number of challans increased to 1019490.

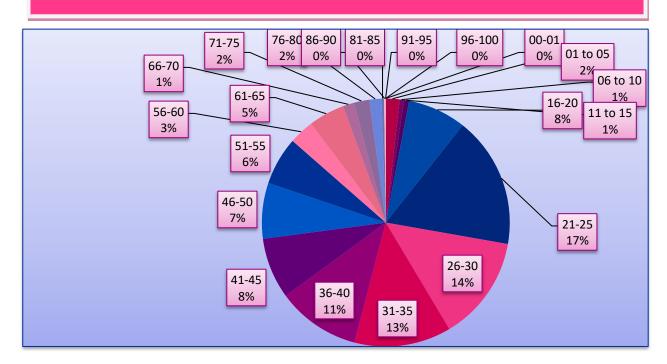
Installation of ITMS Systems and Automatic Challaning System is the need of the hour as it will ensure zero human intervention as such type of violation cannot be challenged in the court of law. Presently 15 ITMS have been installed in the State and more such equipments will be installed by the State to make the road users to abide by traffic laws thus thereby saving precious human lives

However, the accidents due to other factors are much less in number than human error but these type of accident are dangerous and take heavy toll on the precious human lives, therefore, appropriate interventions are required to be implemented at the accident prone stretches in the State. The State of Himachal Pradesh is taking every possible steps to ensure safety and security of road users. For the rectification of Black Spots and Vulnerable Spots sufficient amount is being allocated to the HPPWD through budgetary provision. Also, Crash Barrier Policy, 2021 has been put in place to reduce the number of accident due to ran off road.

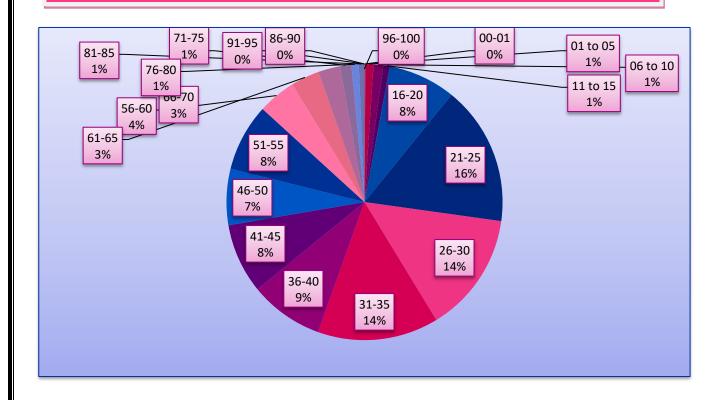
## ACCIDENT CLASSIFIED ACCORDING TO AGE OF PEROSN FOR THE YEAR 2020 & 2021

		2020	20	)21
Age of				
injured				
person	fatal	Injury	Fatal	Injury
00-01	0	0	1	3
01 to 05	16	51	10	64
06 to 10	5	60	12	64
11 to 15	6	84	8	87
16-20	68	391	83	355
21-25	153	603	172	671
26-30	122	497	148	520
31-35	113	401	149	429
36-40	97	295	91	311
41-45	71	238	86	288
46-50	65	207	69	205
51-55	56	140	83	157
56-60	29	111	47	120
61-65	42	73	35	84
66-70	13	32	27	42
71-75	18	20	14	27
76-80	14	11	9	18
81-85	3	7	7	10
86-90	2	2	0	0
91-95	0	0	0	0
96-100	0	0	0	0
Total	893	3223	1051	3455

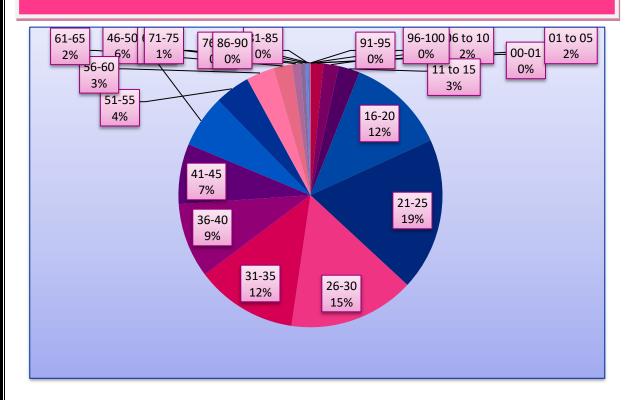
### Age wise fatality for the year 2020



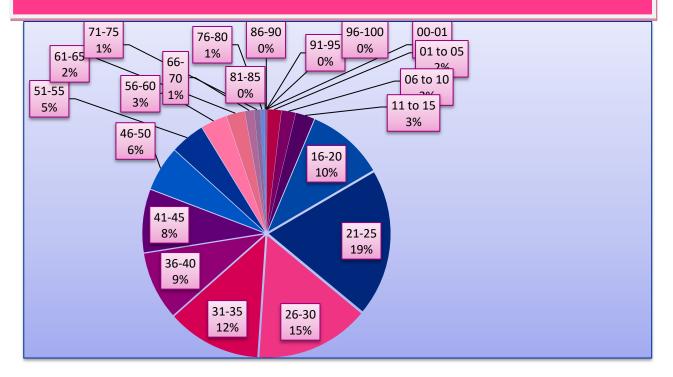
### Age wise fatality for the year 2020



## Age wise Injury for the year 2020



### Age wise Injury for the year 2021



On the analyses of comparative road accident data regarding age group wise persons involved in road traffic accident for the year 2020-2021, it transpires that road users falling within the age group of 16-45 years are most vulnerable for road traffic fatalities and injuries.

During the year 2020 this age group suffered 69.86% fatalities and during the year 2020, the fatality rate of this age group was also the same i.e. 69.33%. During the year 2020, person falling within the age group of 21-25 years suffered highest rate of injured i.e. 17.13%, age group between 16-20 suffered 7.61%, person aged between 26-30 years suffered 13,.66%, age group between 31-35 years suffered 12.65%, the road user of the age group between 36- 40 years succumbed to the accident injuries by 10.86% and age group between 41-45 years lost their lives in accident injuries by 7.95%.

During the year 2021 the scenario of fatalities in road traffic accident was almost the same as compared to the accident fatalities of year 2020 as per the number of accident. The age group of 21-25 years suffered highest number of fatalities by 16.36%, persons aged between 26-30 years by 14.08%, between 31-35 years by 14.17%, between 36 to 40 years by 8.65% and between 41-45 year suffered fatalities by 8.18%.

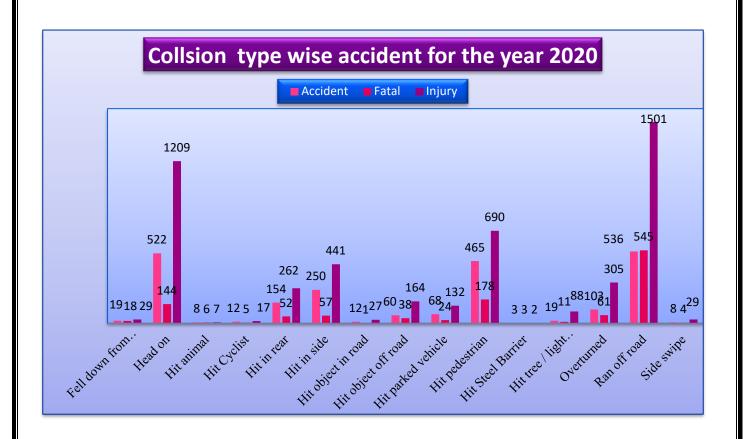
Similarly, the rate of injuries suffered by the age group of 16-45 years remained almost same during the year 2020 and 2021 i.e. 75.22% & 74.93% respectively. During the year 2020 & 2021 highest number of injured person were between the age group of 21-25 years i.e. 18.70% & 19.42% respectively. The age group between 16-20 suffered injuries by 12.13 & 10. 27%, persons between the age of 26-30 years injured by 15.42% & 15.05%, the age group of 31-35 years injured by 12.44 & 12.41%, age group between 36-40 years suffered injuries by 9.15 & 9.00%, and persons of the age group of 41-45 years injured by 7.38 & 8.33% respectively.

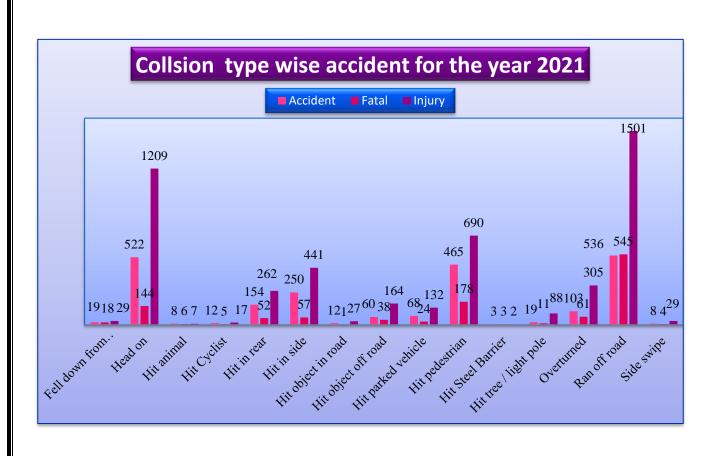
It is a matter of deep concern that more than half of the road traffic injuries are being suffered by the young person falling within the age group of 16-35 years. The loss of life at any age is mournful but losing life at young age is very painful to the near and dear of the accident victims and this irreparable loss cannot be forgot by a normal person easily. The parents of the youngsters always expect bright future for their children and the sudden shock of the untimely demise or grievous injuries in road traffic accidents shatter their dreams all in a once and they broke down for the rest of their lives bearing the burden of this misfortune which can be averted if the youngster road user follow traffic laws/ rules. Young people are full of energy and enthusiasm and they always try to imitate the things which thrill them. Driving vehicles in over speed and non-wearing of seat belt and helmet, rash and negligent driving/ dangerous driving, changing lane without care, dangerous overtaking and driving under the influence of drugs and alcohol are the main reasons of accident fatalities and injuries being suffered by the youngsters. Some voungsters use to drive vehicles without driving license and before attaining the age of getting valid driver license.

Continuous strict traffic law enforcement and intensive awareness programmes are required to be carry out simultaneously as every year thousands of youngsters getting driving licenses and use to drive vehicles in contravention of traffic laws/rules making themselves more vulnerable for road traffic accidents, fatalities and injuries. The above mentioned road accident data shows that as the age grow and the road user attain maturity, their involvement in road traffic accidents decreasing constantly which suggests that when youngster are single and enjoying their life on the income of their parents/ guardians, they often remain careless and do not think about the consequences of the road traffic accidents. Hence, much focus is required to put on the younger road users and it also require negative advertising expressing the plight of the road traffic accident victims, their family members and health, legal and financial implications arising due to the noncompliance of the traffic laws and rules.

## ACCIDENT CLASSIFIED ACCORDING TO TYPE OF COLLISION FOR THE YEAR 2020& 2021

Collision Type	2020			2021		
	Accident	Fatal	Injury	Accident	Fatal	Injury
Fell down from vehicle	19	18	29	22	9	20
Head on	522	144	1209	563	107	906
Hit animal	8	6	7	9	1	3
Hit Cyclist	12	5	17	23	5	14
Hit in rear	154	52	262	149	47	175
Hit in side	250	57	441	264	43	340
Hit object in road	12	1	27	21	3	18
Hit object off road	60	38	164	77	26	80
Hit parked vehicle	68	24	132	58	8	57
Hit pedestrian	465	178	690	534	142	461
Hit Steel Barrier	3	3	2	6	0	0
Hit tree / light pole	19	11	88	27	12	24
Overturned	103	61	305	98	42	192
Ran off road	536	545	1501	537	446	927
Side swipe	8	4	29	16	2	6
Total	2,239	1,147	4,903	2,404	893	3223





On the analyses of comparative road accident data pertaining to the type of collision for the year 2020 -2021, it has been came on record that most of the accidents i.e. 90.96 % during the year 2020 and 89.22% during the year 2021 took place due to the six type of collision i.e. Head on Collision by 23.31% & 23.41%, Hit in Rear by 6.87 % & 6.19%, Hit in Side by 11.16% & 10.9%, Hit Pedestrian by 20.70% & 22.21%, vehicle Overturned by 4.60% & 4.07% and due to vehicle Ran Off Road by 22.33% respectively.

Out of above 90.96% & 89.22% accidents due to six type of main collision during the year 2020 & 2021, only three type of collision remained causes of more than 65% accidents in the State i.e. Head on Collision, Hit Pedestrian and vehicle Ran Off Road by 67.94% & 67.95 % respectively.

Similarly, the rate of fatalities caused by these above mentioned six type of collision during the year 2020 & 2021 is 90.40% & 92.59% respectively. The fatalities caused during the year 2020 & 2021 due to Head on Collision by 12.55% & 11.98%, Hit in Rear by 4.53% & 526%, Hit in Side by 4.96% & 4.81%, Hit Pedestrian by 15.15% & 15.90%, vehicle Overturned by 5.31% & 4.70 % and due to vehicle Ran Off Road by 47.51% & 49.94% respectively.

Similarly, during the year 2020 & 2021, more than 75% fatalities i.e. 75.57% & 77.82% took place due to the three main type of collision i.e. Head on Collision, Hit Pedestrian and vehicle Ran Off Road.

As far as the accident injuries caused by type of collision during the year 2020 & 2021 are concerned, these six type of collision caused 89.90% & 93.08% injuries respectively. The rate of injuries due to type of collision i.e. Head on Collision by 24.65% & 28.11%, Hit in Rear by 5.34% & 5.42%, Hit in Side by 8.99% & 10.54%, Hit Pedestrian by 14.07%, vehicle Overturned by 6.22% & 5.95% and due to vehicle Ran Off Road remained by 30.61% & 28.76% respectively during the year 2020 & 2021.

Also, around 70 % injuries i.e. 69.97% & 71.17% injuries took place during the year 2020& 2021 respectively due to the only three main type of collision i.e. Head on Collision, Hit Pedestrian and vehicle Ran Off Road.

The above analyses of the road traffic accident during the year 2020 & 2021 due to type of collision shows that around 70% accident, fatalities and injuries are taking place due to three type of main collision i.e. Head on Collision, Hit Pedestrian and vehicle Ran Off Road. Driving vehicle in excessive speed, rash and negligent driving, driver's distraction, driving under the influence of drug and alcohol, reckless overtaking, driving in wrong side, driver's fatigue, inexperienced driver and whether condition are the main causes of head on collision. Sometimes animals on the road also cause head on collision as driver cannot correct the veering of the steering within required time and crash with the vehicle coming from the opposite direction.

As far as the intensity of injuries due to head on collision are concerned, it depends on the speed of the collided vehicles. If both the vehicles hitting each other traveling at a speed of 50 KM per hour, the impact of the collision will be the same as a vehicle travelling at the speed of 100KM per hour hit a stationary object. Many accident victims suffer very serious injuries due to head on collision and require intensive medical care and treatment and even long term rehabilitation. Mostly the drivers and passengers sitting on the front seats suffer fatalities and grievous injuries.

The second main cause of road traffic accident and resultant injuries and fatalities is vehicle hitting the pedestrian which is a matter of deep concern. Over seeding Rash and negligent driving, violation of traffic laws/ rules, consumption of drug and alcohol, fatigue, hearing impairment of the pedestrian, intoxicated pedestrian, carelessness, crossing road at wrong side, walking on carriageway are the main causes of hit pedestrian. Poor street lights, slick pavements, potholes and inadequate

sinages are also prove dangerous to the pedestrian. The intensity of the injuries to the pedestrian depend upon the impact of automobile with the pedestrian, art of pedestrian body struck by vehicle, portion of vehicle impacting pedestrian and part of body impacting ground. Some of the grievous injuries received by pedestrian lead to fatality and partial and permanent disability of the accident victim.

In order to reduce the number of accident due to hit pedestrian, traffic rule and road rules are required to be followed by both the driver of the vehicle and pedestrian. Generally we see the signboards along the road side as "Keep Left". As per the regulation 4 of Motor Vehicle(Driving) Regulation 2017, all the drivers while plying vehicle on the road are required to keep the vehicle left of the carriageway.

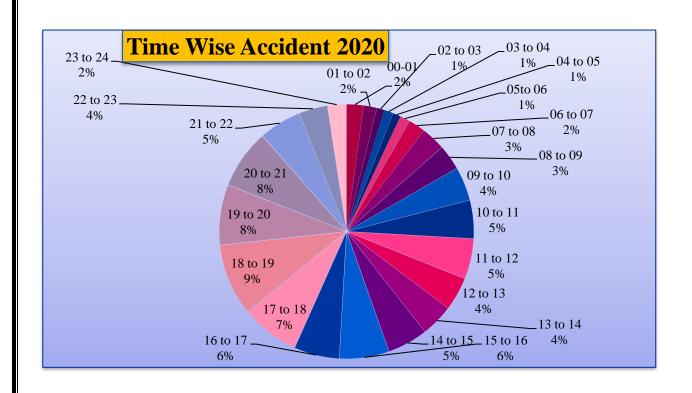
However, as far as the question of pedestrian is concerned, it is not the left side of the road they required to choose while walking on a busy road wherever it is possible. Due to certain unavoidable constraints, it is not possible to construct footpath, underpass and foot over bridge on all the roads. Walking on the right side of the road will provide safety to the pedestrian from the vehicle coming from the rear side. If the vehicle coming from the opposite side is posing some danger to the pedestrian, they can adjudge the danger and can move to the safer place immediately. Also the driver of the vehicle will drive the vehicle cautiously on seeing the pedestrian coming from the opposite side. Besides saving precious human lives, this practice will also keep effective check on the menace of eve-teasing and chain snatching etc. occurring on the roads.

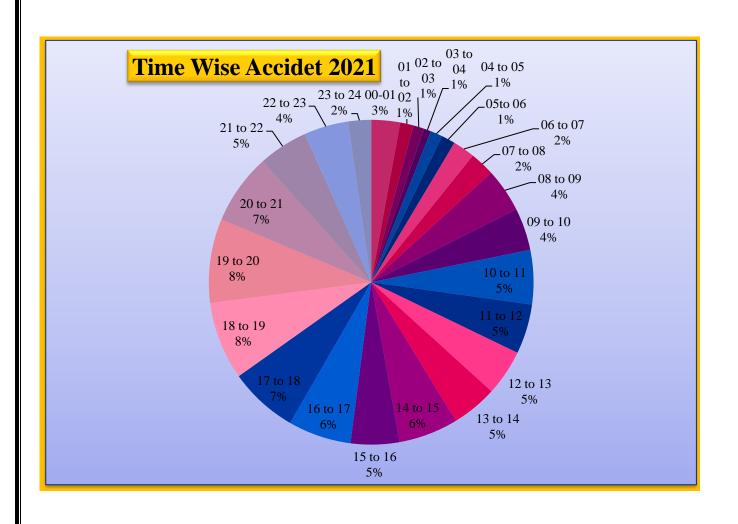
As far as the number of accident, fatalities and injuries due to vehicle ran off rad is concerned, due to the varied and difficult terrain and topography of the State, once the vehicle rolled down the road, the chances of survival are very less. Over speeding, rash and negligent driving, dangerous overtaking, intoxication, fatigue of driver, condition of road, non-provision of parapet and crash barriers, carelessness, weather condition, land slide, fitness of vehicle are the main causes of vehicle ran off

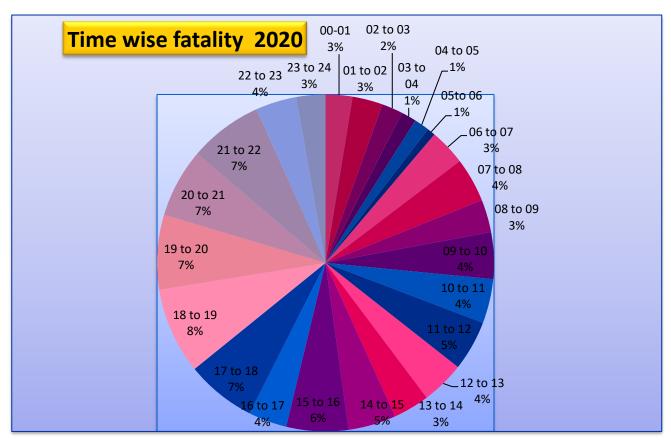
road. The gravity of the accident and resultant injuries and fatalities intensifies in case of passenger vehicle ran off the road because with limited emergency care resources, it becomes very difficult to provide timely medical help and rescue of the accident victims due to the tough geographical condition of the State. These accidents are taking heavy toll on the lives of accident victims in hilly states like Himachal Pradesh. The rate of road traffic accident, fatalities and injuries are highest due to the vehicle ran off road in the State of H.P. With the installation of crash barriers along the high accident prone road stretches, the considerable decrease in the number of accidents due to ran off the road has been seen in the State. Driving cautiously on the roads of hilly State and follow all the traffic rules will help in lowering the number of road traffic accident and resultant fatalities and injuries.

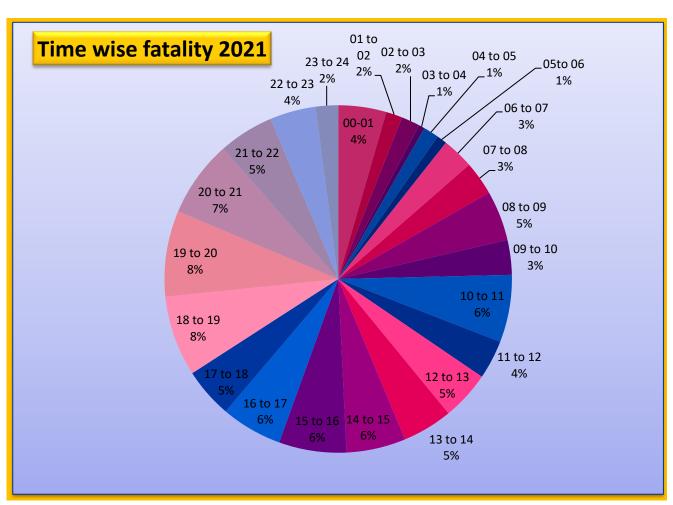
## TIME WISE ROAD TRAFFIC ACCIDENT DATA FOR THE YEAR 2020 & 2021

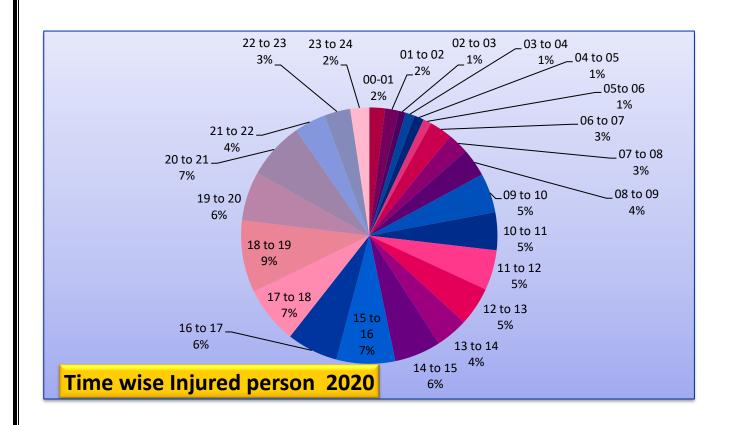
	Time	wise accid	ent data for	the year 2020	) & 2021	
		2020			2021	
Accident Time	Accident	Fatal	Injury	Accident	Fatal	Injury
00-01	48	23	64	69	47	89
01 to 02	38	26	56	32	16	53
02 to 03	22	18	28	26	18	45
03 to 04	26	13	37	17	6	22
04 to 05	22	13	40	29	15	35
05to 06	29	7	33	33	10	47
06 to 07	48	31	93	53	31	74
07 to 08	69	38	86	59	33	121
08 to 09	72	28	114	105	49	120
09 to 10	97	40	160	101	34	198
10 to 11	109	38	154	130	66	229
11 to 12	115	43	163	119	38	200
12 to 13	95	37	158	110	48	169
13 to 14	93	31	132	109	49	154
14 to 15	115	41	188	143	58	250
15 to 16	142	53	239	116	66	164
16 to 17	129	33	208	151	60	212
17 to 18	167	60	233	165	49	252
18 to 19	205	74	293	187	79	275
19 to 20	172	64	200	201	84	215
20 to 21	169	59	233	169	75	212
21 to 22	121	63	128	119	54	133
22 to 23	82	35	106	106	45	121
23 to 24	54	25	77	55	22	64
Total	2,239	893	3,223	2,404	1,052	3,454

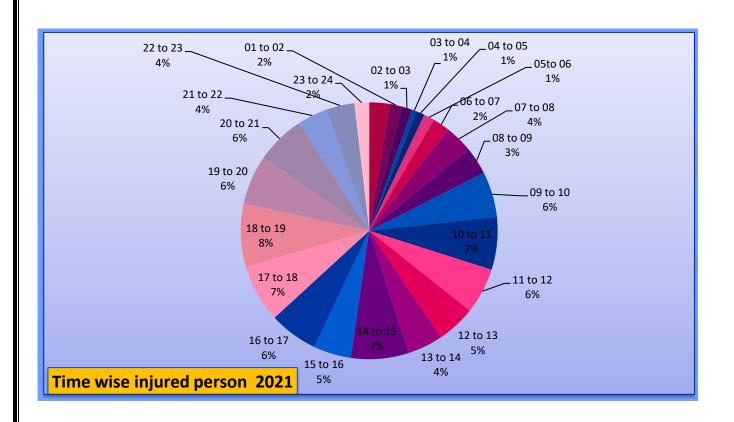












The time wise comparative road accident data for the year 2020 & 2021 shows that most of the accident occurred during the period of eight hours from 2:00 PM to 10 PM i.e. by 55% and 52% respectively. During this time span, the State has witnessed the number of accident from 2-3 PM by 5% & 6%, 3:00-4:00 PM by 6% & 5%, 4:00-5:00 PM by 6% & 6%, 5:00-6:00 PM by 7% & 7%, 6:00-7:00 PM by 9% & 8%, 7:00-8:00 PM by 8% & 8%, 8:00-9:00 PM by 8% & 7% and from 9:00-10:00 PM by 5% & 5% respectively.

However, during the year 2020 & 2021, maximum number of road accident took place within the time span of four hour i.e. from 5:00 PM to 9:00 PM by 32% and 30% respectively. From 8:00 AM-2:00 PM, the rate of accident remained 25% & 28% and from 10:00PM to 8:00 AM 19% & 18 % respectively.

As far as the numbers of fatalities are concerned, during the year 2020 & 2021, more than 50% fatalities happened from 2:00 PM to 10:00 PM i.e. by 51% equally during both the years.

The maximum number of fatalities took place during the year 2020 & 2021 within a span of five hours i.e. from 5:00 PM to 10:00 PM by 36% and 33% respectively.

From 10:00 PM to 8:00 AM the rate of fatalities during the year 2020 & 2021 remained 25% and 17% and from 8:00AM to 2:00 PM was 19% & 28% respectively.

The comparative analyses of the road accident data pertaining to the time wise injuries suffered by the accident victims during the year 2020-2021 shows that most of the injuries happened during a period of seven hour by 48% & 45% respectively. The accident victims suffered injuries during the year 2020-2021 from 2:00-3:00PM by 6% & 7%, 3:00 - 4:00 PM by 7% & 5%, 4:00-5:00 PM by 6% & 6%, 5:00-6:00 PM by 7% & 7%, 6:00-7:00 PM by 9% & 8%, 7:00-8:00 PM by 6% & 6% and 8:00-9:00 PM by 7% & 6% respectively.

During the year 2020& 2021, from 10:00 PM to 8:00 AM accident victims suffered injuries by 23% & 22%, from 8:00 AM to 2:00 PM by 28 & 35% respectively.

The analyses of time wise comparative road accident data for the year 2020 & 2021 transpires that more than 50% accident took place from 2:00 PM to 10:00 PM but the time span of four hour i.e. from 5:00 PM to 9:00 PM is crucial from road safety point of view. During this period the flow of traffic is increased on the roads as most of the people are use to return to their home/ residences form their work places/ business establishments. Over speeding, rash and negligent driving, dangerous overtaking, intoxication, defective vehicle, fatigue of drivers and overloading are the main causes of accidents and non-provision of crash barriers and road lights, pot holes, high beam lights, road rage, driving in wrong side and carelessness on blind bends further aggravate the gravity of the accident

The analyses of time wise comparative road accident data for the year 2020 & 2021 transpires that more than 50% accident took place from 2:00 PM to 10:00 PM but the time span of four hour i.e. from 5:00 PM to 9:00 PM is crucial from road safety point of view. During this period the flow of traffic is increased on the roads as most of the people are use to return to their home/ residences form their work places/ business establishments. Over speeding, rash and negligent driving, dangerous overtaking, intoxication, defective vehicle, fatigue of drivers are the main causes of accidents and non-provision of crash barriers and road lights, pot holes, high beam lights, road rage, driving in wrong side and carelessness on blind bends further aggravate the gravity of the accident Non bearing of helmet and seat belt become the cause of fatality and grievous injuries.

Use of mobile phone while driving is also one of the main causes leading to road traffic accident. Use of handheld communication devices while driving has been defined under section 184 of MV Act 1988 as dangerous driving. Some road user use head set to use mobile phone while driving but it is also an offence and become the cause of road traffic accident as it disturb the concentration of the drivers. As per the Rule 165 of The Central Motor Vehicle Rules1989, use of handheld communication devices while driving shall solely be used for route navigation in such a manner that shall not disturb the concentration of the driver while driving.

Over loading in commercial and transport vehicles especially in passenger vehicles is one of the causes of road traffic accidents. Drivers of private buses and vehicles carrying devotees on it often allow overloading which lead to the overturn of the vehicles on the road leading to fatalities and serious injuries. Such type of accident often occurred during day time. During marriage and other functions overloading of passengers sometimes turn into fatal accident making the occasion mournful.

It also becomes difficult for the Police, rescue team and Good Samaritans to find out the location of the accidental vehicles which rolled down from road into the gorge and rivers due to the night time. This situation certainly leads to the fatality of injured persons. Some time when accident occurred at deserted places, Police and public do not get to know timely about the accident and the victims which is a major cause of fatalities during night time.

Use of reflective tapes in front and rear side of the vehicle is a must as it provide safeguard to the vehicle from other vehicles. Pedestrian using the road during the night time should take every precaution and walking on the right side of the road and wearing retro reflective outdoor cloths and shoes so that they may be easily visible.

Wrong parking on the road also becomes the cause of road accident. Proper parking and use of retro reflective tape make the vehicle visible for other vehicles which could avoid sudden striking by other vehicle.

Physical fitness of the driver especially vision clarity either with or without spectacles is very important while driving at night time. Regular eye checking and wearing right spectacles is necessary for the drivers especially for the drivers of passenger and commercial vehicles who use to travel at night time. Use of alcohol and other drugs and night blindness contribute to make the vision blur which could lead to road traffic accident.

During foul weather and rainy season, travelling should be avoided in night time except in extreme exigency. Low visibility, slippery roads, land slide and sudden and heavy flow of water add to the gravity of the accident. Sometimes wild animals also become the cause of accident; hence clearly visible cautionary boards required to be erected at such places and road users must apply their mind in to safeguard them in case of any hindrance is caused by such animals.

Since no separate indicators have been provided in the vehicles to allow the vehicle coming from the rear side to take pass from right side and to take a turn to the right side, besides using indicator, indication by hand signal should also be given to avoid any confusion to the driver of other

	Vehicle involved in Road Accident for the year 2020										
District	Bus	Jeep	Motor Car	Motor cycle / scooter	Truck	Other Vehicle	Total				
Baddi	7	13	28	108	52	41	246				
Bilaspur	4	13	61	57	49	21	202				
Chamba	2	22	47	28	16	12	131				
Hamirpur	3	7	56	55	15	34	161				
Kangra	17	25	152	241	52	69	566				
Kinnaur	0	12	16	2	2	15	35				
Kullu	6	15	96	59	15	15	219				
Lahaul and Spiti	0	5	4	0	9	13	20				
Mandi	12	34	157	109	51	56	411				
Shimla	16	73	298	55	60	33	554				
Sirmour	9	24	72	130	35	30	299				
Solan	11	14	66	38	30	14	174				
Una	6	15	64	141	42	128	317				
Total	93	272	1117	1023	428	322	3335				

## Percentage of vehicle involved in accident during the year 2021:

1 Bus = 2.47 %

2. Jeep = 8.64%

3. Motor Car = 32.87%

4. M/Cycle/Scooter =32.31%

5. Truck = 11.62%

**6. Other Vehicle** = 12.13%

	Vehi	icle inv	olved in roa	d accident for the ye	ar 2021		
District	Bus	Jeep	Motor Car	Motor cycle /	Truck	Other vehicle	Total
				scooter			
Baddi	7	18	45	122	47	43	282
Bilaspur	8	10	86	87	53	36	280
Chamba	4	20	37	25	15	9	110
Hamirpur	3	13	49	64	12	10	151
Kangra	11	31	164	250	64	92	612
Kinnaur	1	7	35	4	4	1	52
Kullu	4	33	78	58	10	31	214
Lahaul and Spiti	0	3	7	3	6	3	22
Mandi	13	36	144	122	46	51	412
Shimla	16	77	260	55	47	42	497
Sirmour	4	27	91	148	38	44	352
Solan	11	19	99	56	47	22	254
Una	6	13	71	154	24	47	315
Total	88	307	1166	1148	413	431	3553

### PERCENTAGE OF VEHICLE INVOLVED IN ACCIDENT DURING THE YEAR 2021:

1 Bus = 2.47 %

2. Jeep = 8.64%

3. Motor Car = 32.87%

4. M/Cycle/Scooter =32.31%

5. Truck = 11.62%

6. Other Vehicle = 12.13%

On the analysis of comparative road traffic accident data for the year 2020-2021 according to the Category of Vehicles involved in Road Traffic Accidents, it came on fore that most of the vehicles involved in accidents were Motor Car by 33.49% and 32.87% respectively. The second type of vehicle involved in Road Traffic Accidents were two-wheelers i.e. Motor Cycle/Scooter by 30.67% & 32.31%, Truck by 12.85% & 11.62%, Jeep by 8.15% & 8.64%, Bus by 2.78% & 2.47% and other vehicles by 9.56% & 12.13% respectively.

The above analyses of the categories of vehicles involved in most of the accident shows that private motor car is the vehicle which is being used by most of the people while travelling due to the comfort and it also protect the privacy of the passengers. With the increase of per capita income in the State of H.P. most of the salaried class and people earning through other means of earning such as business, agriculture and horticulture have the capacity to own their own car.

The main causes of involvement of motor cars in road traffic accidents in the State of Himachal are driving vehicle in over-speeding, rash and negligent driving, dangerous overtaking, driving under the influence of drug and alcohol, use of, non-wearing of seat belt, distracted driving such as use of mobile phone and playing loud music while driving, turning without care, use of high beam light at night time and non –adherence to the mandatory and cautionary traffic signals/ signs and road markings etc.

The impacts of the head on collision accident of motor car with heavy vehicle enhance the gravity of fatality and injury of the driver and passengers of the vehicle. However, motor cars of new models are equipped with sophisticated safety features, but it depends upon the speed of the car and the impacting vehicle that to what extent these safety features are effective to save the accident victims from suffering fatalities and injuries.

If the Motor cars carrying passengers to its full capacity roll down the road, that too in hilly area like Himachal Pradesh having dangerously deep gorge and valleys, rivers and streams, it take heavy toll on human lives as the chances of survival are much less. In most of such cases, safety features also prove ineffective due to the gravity of the accident, distance and topography of the area.

The above mentioned traffic rules violations that attributed to the human negligence further aggravated by other causes i.e. condition of road, pot holes, non-provision of road lights, parapet and crash barriers, non-installation of delineators and retro reflective bands along the road side, foul weather, landslides, sudden flow of flooded water, and vehicle default etc.

As far as the involvement of two wheelers in road traffic accident in the state of H.P. is concerned, Motor Cycle and scooter are used in very large number in the state. In Himachal Pradesh more than half of the vehicle population is of two wheeler and their involvement in road traffic accidents comes next to the motor cars.

In Himachal Pradesh, these two wheelers are used mostly in four districts having plain areas i.e. district Sirmour, Solan, Una and Kangra. The two wheelers are used mostly by the youngsters and they tend to drive in over-speeding and rash and negligent manner and none-wearing of helmet by the rider and the pillion enhance the intensity of the fatalities and grievous injuries. They feel thrill in riding to their wishes as they are highly influenced by their filmy Heroes, Sports and Youth icons. They always want to imitate them forgetting that these scenes are shoot with taking all necessary precautions.

Most of the two wheeler accidents took place either by head on collision with other vehicle, other vehicle hitting the two wheeler, two wheeler hitting the parked vehicles and static object, skidding on slippery road and applying sudden break when in excessive speed. Triple riding become the cause of disbalance of the two wheeler causing fatalities and serious injuries to the accident victims.

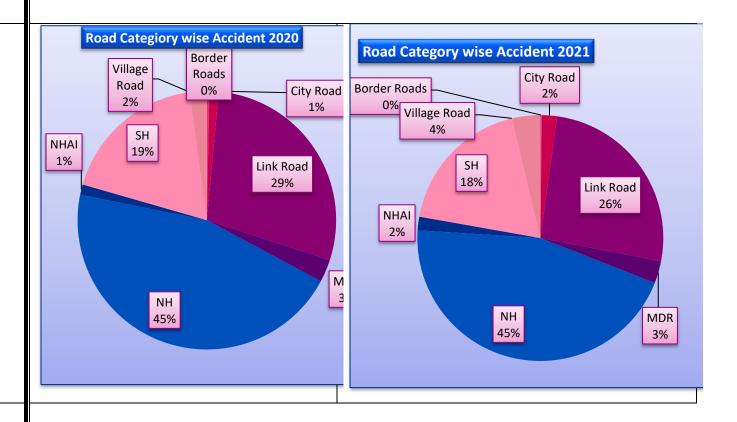
It is often seen that minor children who have not attained the age of getting valid driving license use to ride the two wheeler and that too by violating all the laws/rules. They poise danger not to themselves only but to the drivers/ passengers of other vehicles and pedestrians. However, with the amendment in MV Act 1988, the implementation of the provisions of enhanced penalty and stringent punishment to the parents of the minor children who allow them to take the vehicle has started to yield results.

Since two wheelers are vulnerable to fatalities and serious injuries, riding in accordance with the provisions of traffic rules/ laws is the only "Mantra" to avoid any untoward incident.

## ROAD ACCIDENT DATA CLASSIFIED ACCORDING TO ROAD CATEGORY FOR THE YEAR 2020 & 2021.

# ACCIDENT CLASSIFIED ACCORDING TO ROAD CATEGORY FOR THE YEAR 2020 &2021

	2	2020		2021			
Road Category	Accident	Fatal	injury	Accident	Fatal	injury	
Border Roads	7	5	16	5	2	9	
City Road	26	8	32	48	13	51	
Link Road	639	365	915	621	363	917	
MDR	63	22	85	70	18	104	
NH	1,015	303	1,556	1,083	389	1503	
NHAI	29	9	34	43	21	82	
SH	412	162	519	445	183	678	
Village Road	48	19	66	89	63	110	
Total	2,239	893	3,223	2,404	1,052	3454	



The analyses of comparative road traffic accident according to road category for the year 2020 & 2021 shows that highest number of road traffic accidents took place on National Highways by 45% in each year. The road category which witnessed the second highest number of accidents during the year 2020 & 2021 is Link Road which witnesses road accidents by 29% & 26%, State Highways by 19% & 18% respectively and Major District Road by 3% in each year and Village Road by 3% & 4% respectively.

As far as the fatalities during the year 2020 & 2021 according to the road category is concerned, most of the fatalities took place on Link Road by 41% & 35%, National Highway by 34% & 37%, State Highways by 18% & 17%, Major District Road by 2% each year and Village Road by 2% & 6% respectively.

The maximum number of injuries suffered by accident victims on category of Road of during the year 2020 & 2021 on National Highways by 48% & 44%, Link Road by 28% & 27%, State Highways by 16% & 20% respectively, Major District Road by 3% in each year and Village Road by 2% & 3% respectively.

National Highways play very important role in the socio-economic development of the State but like national statistics, most of the road traffic accidents take place on National Highways followed by Link Road and State Highways. The lengths of National Highways in the State constitute only 6.45% of the total road length. The main causes of highest number of road traffic accidents on NH is over speeding, rash and negligent driving/ distracted driving, dangerous overtaking, turning without care, changing lane without care and driving under the influence of drugs and alcohol, fatigue of driver. Since the conditions of NH in the State are much better than other roads, road user often tend to drive in excessive speed leading to higher number of accidents.

The National Highways in the State are also used by the higher number of vehicles as being tourist destination; most of the famous tourist places and religious places in the State are connected with these NH. Every year numerous tourists and pilgrims use to visit Himachal by using National Highways resulting in congestion of vehicular traffic and violation of traffic rules.

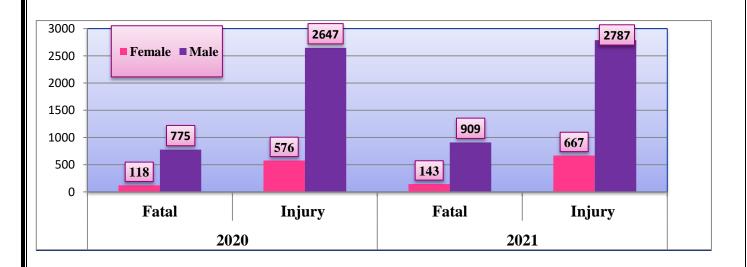
As far as the number of fatalities according to the category of roads in the State is concerned, most of them happen of Link Roads in the State. However, the numbers of accidents on these roads are considerably less than on National Highways, but being single roads and often far from the emergency care facilities, the intensity of the road traffic injuries aggravate as it took much time to provide timely and due medical care to the accident victims and they succumbed to their injuries before getting the medical help or it is too late to save their lives due to the excessive loss of blood etc. Since the traffic on the link roads are less and these roads are crossing through deserted areas, sometimes local people and Police get to know about the accident after delayed information leading to the fatalities of the grievously injured persons. Night time, weather condition and topography of the area, non-provisioning of parapet & crash barriers, sinages, proper road marking and pot holes further add to the gravity of the accident as it make difficult to carry out rescue operation immediately.

The highest numbers of injuries are also happening on National Highways as the occurrences of number of accidents are higher on these roads. Since, timely medical care usually made available to the injured persons of road accident on NH, the rate of fatalities as compared to the Link Road are less.

The number of Road traffic accident, fatalities and injuries on State Highways are less in number as compared to the NH and Link Roads. But since State Highways constitute only 11.66% of total road length in the State, the rate of road traffic accident, fatalities and injuries occurring on these roads are higher than Link Roads as the volume of traffic on the State highways is also higher in number as compared to the Link Roads in H.P.

COMPARATIVE DATA CLASSIFIED ACCORDING TO THE INVOLVEMENT OF MALE AND FEMALE IN ROAD TRAFFIC ACCIDENT DURING THE YEAR 2020-2021.

Gender Wise Accident data for the Year 2020 & 2021								
	2	2020	2021					
Sex of injured person	Fatal	Injury	Fatal	Injury				
Female	118	576	143	667				
Male	775	2647	909	2787				
Total	893	3223	1,052	3454				



The comparative analysis of gender-wise road accident data for the year 2020-21 reveals that gender-wise involvement in maximum number of road traffic fatalities is of Male person by 86.78% & 86.40% respectively whereas the number of female accident victims succumbed to their road traffic injuries remained 13.22% & 13.59% respectively. Similarly the rate of injuries suffered by male persons during the year 2020-21 is 82.12% & 80.68% respectively and by female accident victims by 17.87% & 19.31% respectively.

In Himachal Pradesh, the women are playing very important role in the field of road safety. The above analyses shows that maximum number of road users involved in road accident fatalities and injuries are male person and female road users involved in much less road traffic accidents. However, it is a matter of fact that women drivers in Himachal Pradesh holding only 7.39% driving licenses and they also use to travel less than male, but it is also the truth that maximum females drivers/riders and road users obey traffic rules sincerely and there are very few cases where females are involve in road traffic accidents due to the fault on their part.

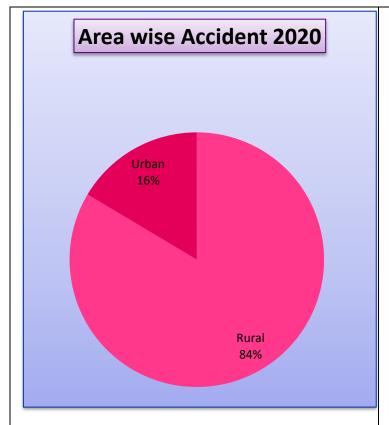
Apart from holding valid driving licenses and driving vehicles, the female also form an integral part of considerable volume of passengers travelling through their own vehicles with their family members, relatives, colleagues and also by hiring taxies. It is worth notable here that when female ad children are travelling in private vehicles with their family members, most often the male members of the family drive the vehicles sincerely and in normal speed. They seldom try to violate the traffic laws/rules which ensure safe and secure journey to all the family members.

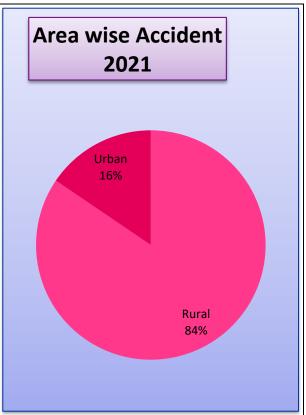
Male persons, especially young road users between the age group of 18 to 35 years drive/ ride the vehicles by violating the traffic rules and become the victim of unfortunate road traffic accidents. However, such incidents cannot be predicted but could be avoided to a large extent if road young male road users follow traffic law/rules as a safety measure and not just because of the fear of traffic Challan by the Police and Transport department

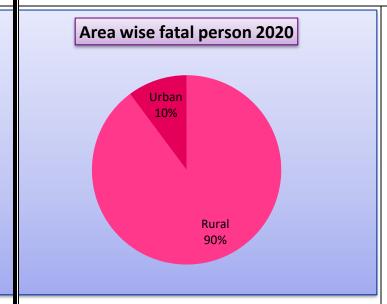
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## ACCIDENT CLASSIFIED ACCORDING TO THE AREA WISE FATALITIES AND INJURIES DURING THE YEAR 2020& 2021.

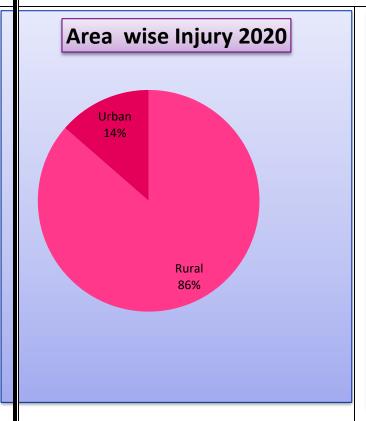
	Area wise Accident for the year 2020 & 2021								
	2020		2021						
AREA									
TYPE	ACCIDENT	FATAL	INJURY	ACCIDENT	FATAL	INJURY			
Rural	1,871	802	2785	2031	968	3026			
Urban	368	91	438	373	84	428			
Total	2,239	893	3223	2404	1052	3454			

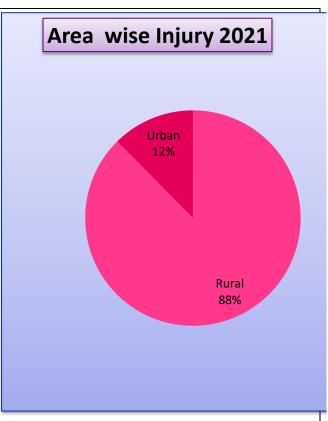












The comparative analyses of road traffic accident data for the year 2020-21 according to the area where most of the accidents, fatalities & injuries took place, transpires that Rural area witnessed 84%, 90% & 92% and Urban area witnessed 16%, 10% & 8% respectively.

The State of Himachal Pradesh lives in villages. The city area is much less in the State as compared to the urban area. Most of the roads have been constructed in the rural areas as most of the population in Himachal hails from rural area. Therefore, maximum number of road users are also from rural areas and maximum length of all road categories which is used by road users including daily commuter in private and passenger vehicles, tourists and pilgrims vehicles, goods and commercial vehicles and all types of other vehicles falls under rural area.

Less than 15 percent accidents and resultant fatalities and injuries take place on the roads falling under urban area. One of the reasons for less number of these accidents in urban areas is that the road users often drive their vehicles in controlled speed because there are very fewer road stretches which goes unnoticed by the traffic law enforcement agencies i.e. Police and Transport departments. With the installation of ITMS and use of electronic enforcement devices, the menace of traffic rules violation has lessen in urban area. As far as the effective traffic law enforcement on the roads falling under rural area in hilly state like Himachal is concerned, it is not possible to cover all the area by the visibility of law traffic personnel due to the limited human resources in the Stat

Since the prompt medical facilities are available in and around the urban areas, hence the number of fatalities and injuries are also much less in these area as compared to the urban area.

JUNCTION WISE ROAD ACCIDENT DATA FOR THE YEAR 2020 & 2021

		2020		2021			
		Fatal	Injured		Fatal	Injured	
Junction Type	Accident	Person	Person	Accident	Person	Person	
Four Arm							
Junction	0	0	0	3	0	5	
No Junction	2,178	874	3149	2,324	1,026	3352	
<b>T-Junction</b>	50	16	49	61	23	67	
<b>Y-Junction</b>	11	3	25	16	3	30	
Total	2,239	893	3223	2,404	1,052	3454	

On the comparative analysis of junction wise road traffic accidents fatalities and injuries for the year 2020 & 2021, it has came on record that very few number of road traffic accidents, fatalities and injuries have taken place at junction in the State i.e. on "T" Junction by 2%, 2% & 1% and by 2%, 2% and 2% respectively. Similarly, "Y" Junction has contributed in the occurrence of road traffic accidents only 1% in each year, fatalities by 0% in each year and injuries by 1% in each year.

The junctions in the State are very less vulnerable to road traffic accidents, fatalities and injuries as the speed of the vehicles which approached from the lower hierarchy roads to the main roads is often very low due to the condition of the roads. Jig-jag and curvy lower hierarchy roads of the State do not allow the road users to drive in excessive speed & negligent manner. Further, low volume of traffic on the main roads provide sufficient opportunities to the road users joining the main road to assess the situation on the road and allow them to turn their vehicles to the left or right side of the main road safely.

However, due to the ever increasing vehicle population and improvement in road infrastructure in the State, the risk of road traffic accidents and resultant fatalities and injuries on junctions cannot be ruled out. At least on the busy junctions having high volume of vehicular traffic and being used by the high number of road users required to be rectified by implementing required interventions to make them safe for future generation. Mandatory & advance cautionary traffic sign boards, signals, road markings, convex mirrors, speed breakers, rumble strips, solar blinkers etc. are required to be put in place.

ACTIVITIES BEING UNDERTAKEN BY THE STATE TO REDUCE THE NUMBER OF ROAD TRAFFIC ACCIDENTS, RESULTANT FATALITIES AND INJURIES.

### • <u>ENFORCEMENT</u>

- In order to make the road users abide by traffic laws/rules, with a motive to reduce the number of road traffic accidents, fatalities and injuries, the HP Police Department is preparing its annual action plan. During the year 2020-21, target of 10% reduction in road traffic accidents and 30% increase in enforcement of various offenses under MV Act were set.
- During the year 2021, the Police Department had issued 1018490 challans for various traffic violations as compared to the 1014641 challans issued during the year 2020. However, there is only slight difference in number of challans during the year 2021 over the year 2020. The details of traffic challans issued by the Police department during the last five years i.e. from year 2018 to 2022 is as under:-

Year	Total No of	Total No of	Total fine
	Challans during	Challans	realized during
	the year	compounding	the year
		during the year	
2018	833164	651559	230038725
2019	1095549	780816	304225405
2020	1014641	751779	208895219
2021	1018490	615000	251900010
2022	859592	206236	361177350
Total	48214216	3005390	1356236709

During the year 2020, a very few vehicles were allowed to ply on roads in the State during the imposition of complete and partial lockdown but due to the empty roads, various road traffic rules were violated by the road users by driving vehicles in

excessive speed, rash and negligent driving etc. As far as the number of traffic challans issued during the year 2021 is concerned, a considerable decrease in the number of challans has been witnessed as compared to the year 2019 when the vehicles were plying on the roads of Himachal in routine manner. The reason for this reduction is the implementation of enhanced penalty provisions under MV Act, 1988 which has been modified as per the mandate of Motor Vehicle (amendment act 2019). The State Govt. vide notification dated 20-07-2021 has notified the modified fine and compounding limits of fines for various offences under MVAct by applying multiplier of 1.5. However, the number of traffic violation has been decreased during the year 2021 as compared to the year 2020 but the amount of fine has been increased due to the modified fine.

In order to reduce the number of road traffic accidents and to make the road user abide by traffic laws/rules, the Himachal Pradesh Police has been equipped with traffic enforcement gadgets as per the details given below:-

> \*\*\*\*

# TRAFFIC ENFORCEMENT EQUIPMENT DISTRIBUTED TO DISTRICT / UNITS.

S.N.	Distt./Uni t	Alco sensors	Smoke Meters	Gas Anal yzer	Las er Spe	Noise Mete r	Doppl er Radar	ITMS	Body worn camer	Body worn camer	Mo bile Pho	Integrated handheld terminal	handheld terminal for
				s	ed Rad ar		s		a	a with 4G,W i-Fi &	ne for e-	for e- challaning	e- challaning SBI(pinela
										GPS	chall aning		<b>b</b> )
1.	Bilaspur	22	02	01	09	03	05	02	15	92	30	38	45
2.	Chamba	39	02	02	09	03	04	01	15	102	45	40	55
3.	Hamirpu r	22	01	01	09	03	05	01	10	105	30	41	55
4.	Kangra	56	02	02	14	03	10	02	30	222	115	80	85
5.	Kinnaur	22	01	01	06	02	02	01	05	40	19	10	25
6.	Kullu	51	01	01	10	03	06	02	25	192	70	55	50
7.	L&S	11	01	01	05	02	00	02	05	31	10	08	13
8.	Mandi	46	01	01	13	03	08	01	20	158	78	65	56
9.	Shimla	61	02	02	13	04	11	00	35	221	140	95	85
10.	Sirmour	31	01	01	09	03	06	00	10	134	36	32	40
11.	Solan	36	02	02	11	03	07	01	20	130	72	32	40
12.	Una	24	01	01	10	03	07	06	10	90	60	25	65
13.	BBN	30	01	01	08	02	06	02	10	94	40	45	35
14.	HWPCR	01	00	00	00	00	01	00	00	00	00	00	00
15.	HWPNR	01	00	00	00	00	01	00	00	00	00	00	00
16.	HWPSR	00	00	00	00	00	00	00	00	00	00	00	00
17.	SDPO NLG	01	00	00	00	00	00	00	00	00	00	00	00
18.	SDPO PWN	01	00	00	00	00	00	00	00	00	00	00	00
19.	TTR	05	00	00	01	00	02	00	00	20	05	02	00
20.	PTC	00	00	00	01	00	00	00	05	00	00	00	00

	Daroh												
21.	SV&AC B	00	00	00	00	00	00	00	00	04	00	00	00
	Total	460	18	17	128	37	81	21	215	1635	750	568	649

### **ROAD SAFETY AWARENESS ACTIVITIES:**

- ➤ The HP Govt. is committed to bring down the number of road traffic accidents in the State. In furtherance of its objectives, various awareness programs and activities are being undertaken by the Lead Agency/Road Safety Cell. During the year 2021, a month long road safety activities were undertaken during the observance of National Road Safety Month (NRSM). The inaugural function of the National Road Safety Month was celebrated at The Ridge Shimla which was presided over by Sh. Jairam Thakur the than Hon'ble Chief Minister Himachal Pradesh and the closing function was organized at Himachal Pradesh Public Administration Institute (HIPA) Shimla presided over by then Chief Secretary to the Govt. of HP. During the celebration of NRSM various road safety activities were organized at the level of Directorate of Transport and in all the districts by the District Administration and RTOs by associating all the stakeholders and people from every walk of life.
- During the NRSM, in order to sensitize the drivers of Himachal Road Transport Corporation, Mahila Mandals and voluntaries of Nehru Yuva Kendra were also organized at Directorate level at HIPA.
- A painting competition on various road safety themes was also organized for the students of Fine Art College, Shimla. The exhibition of the paintings prepared by

the students was displayed on the occasion of closing ceremony of NRSM at HIPA, Shimla.

- In order to inculcate a sense of responsibility towards Road Safety at an early age, during the year 2021, an initiative was taken by the Lead Agency/Road Safety Cell to develop curriculum on Road Safety for the students of class VI to X. The task of development of curriculum was assigned to the State Council for Education Research and Training (SCERT), Solan. The curriculum was prepared by the SCERT within stipulated period and the same has been included in the syllabus and has started teaching in the schools from the last academic session.
- Further, to make the road users and general public familiar about the road accident scenario in Himachal Pradesh and importance of traffic laws / rules and the role of Good Samaritan, during the year 2021, work for the preparation of two booklets titled "Sadak Suraksha-Jeevan Raksha" and "Good Samaritan" was started and after the publication of these booklets one lakh copy of each booklet have been distributed throughout the State through Regional Transport Officers (RTOs).
  - Also to spread awareness among the young generation and prospective driving license holders, Road Safety Clubs have been established in 135 colleges and 1878 Sr. Secondary Schools in Himachal Pradesh and an amount of ₹25,000/- and ₹10,000/- were allocated to each colleges and schools respectively. The road safety workshops organized by these clubs are also being attended randomly by the officers of Lead Agency/ Road Safety Cell. Students and teachers are apprised about the road accident scenario in Himachal Pradesh through presentation to call the attention of the youngsters who are prospective drivers/riders of the future.
  - ➤ Various awareness programs are also being carried out through social media, electronic media, print media etc. Jingles of different road safety themes such as

based on road accident data, tourist specific, season specific etc aired on FM radios for wide spread awareness of the road users.

- Poster and banners on different road safety messages play important role to educate the road user and general public. Big banners and sun-boards on different road safety themes/ messages have been displayed in the premises and galleries of the lift of Himachal Pradesh Tourism Department at clearly visible places. This lift is used by thousands of people including tourists from all over the country and world as well everyday to reach the Mall Road from Cart Road, Shimla and has proved better platform for the spread of awareness on road safety among people from all walk of life.
- Also, during the traffic checking by the officers and staff of Transport department, as a part of awareness, counseling of the drivers and road users are also being done by distributing pamphlets and other printed road safety materials throughout the State.

## • IMPROVEMENT OF ROAD INFRASTRUCTURE

➤ In order to make the roads in Himachal Pradesh safer for all the road users, requisite fund is being allocated to the Himachal Pradesh Public Works Department (HPPWD) through budgetary provision for the rectification of Black Spots and Vulnerable Spots. The present status of Black Spots and vulnerable/potential spot is as under:-

BLACK SP	OTS – AS PER D	EFINITION OF N	MINISTRY
Agency	Total Black	Rectified	Balance
	Spots		
Regional Office	67	27	40
NHAI Shimla			
Regional Office	04	04	-
NHAI			
Chandigarh			
BRO	01	01	-
Baddi-	01	01	-
Barotiwala-			
Nalagarh			
Development			
Authority			
(BBNDA)			
HPPWD	27	26	01
HPPWD (NH)	47	40	07
TOTAL	147	99	48

#### VULNERABLE/POTENTIAL SPOTS IDENTIFIED BY GVK, EMRI-108, HRTC & POLICE DEPARTMENT Total Vulnerable Rectified Agency Balance **Spots** PWD 1,342 675 667 NHAI 57 57 BRO 02 02 NHPC 04 01 03 TOTAL 1,445 **876 569**

# • POLICY FOR REPLACEMENT/ MAINTENANCE OF DAMAGED CRASH BARRIERS

- As per the mandate of Hon'ble Supreme Court Committee on Road Safety and for the reduction of run-off— the road accidents on hill roads and maintaining the standard roadside protection to ensure safety and security of the travelling people and vehicles, the State Govt. has notified the protocol for the repair and replacement of crash barriers during day and night, the State Govt. Till march 2023, HPPWD has installed 696341 running meter (696) km W-Beam crash barriers at previously identified back spots, vulnerable locations and sharp curve in large and thrie beam crash barriers are also being installed on NH.
- It is an established fact that installation of crash barriers at accident prone road stretches/ Black Spots and Vulnerable Spots, the rate of accidents due to vehicles ran-off road have been decreased considerably which take heavy toll on precious human lives.

### • MEDICAL EMERGENCY SERVICES:- TRAUMA CARE CENTERS:-

- Based on the operational guidelines released by the Govt. of India as a reference tool for the policy maker at the State, the State Govt. has prepared five-year State Plan for developing trauma care facilities along National Highways in Himachal Pradesh under the "Capacity Building for Developing Trauma Care Facilities on National Highways.
- ➤ It is an accepted fact of Trauma Care that if basic life support, first aid and replacement of fluids can arrange within the first hour of the injuries (Golden Hour), lives of many of accident victims can be saved. The basic objective of Trauma care strategy is to provide stabilization to the injured person within golden hour. If trauma care facilities are provided to the accident victim immediately after the incident, death and disability are preventable to some extent. The strategic activities to achieve this objective are (1) Initial stabilization of accident victim by trained manpower (2) Rapid Transportation and (3) Developed medical facilities to treat such cases.
- ➤ Under this scheme, the aim of the Govt. is to provide speedy and effective trauma care and health management. This service would include the provision of rescue operation and administration of first -aid at site of an accident and transportation of the accident victim for the accident site to the nearby trauma care hospital
- ➤ The detail of existing/ proposed trauma care center in Himachal Pradesh is as under:-

Sr. No.	District	Location and Level of Trauma Center	Time line with remarks
1.	Bilaspur	RH Bilaspur, Level- III(DHS)	Functional Since 2012
2.	Kullu	RH Kullu, Level-III(DHS)	Functional Since 2014
3.	Mandi	GMC Nerchowk, Mandi, Level-III(DME)	Functional Since 2022
4.	Shimla	IGMC Shimla Level-I(DME)	Near Completion
5.	do	MGMSC Khaneri(Rampur) Level-III (DHS)	Near completion. Physical work completed: 80%

6.	do	CHC Kotkhai, Level-III	Tender process in progress		
		(DHS)			
7.	Solan	CHC Nalagarh, Level-III	Construction work		
		(DHS)	completed. Procurement of		
			equipment under process		
8.	do	RH Solan, Level-III (DHS)	200 bedded hospital level -		
			III trauma Center and 50		
			bedded MCH Wing is		
			being constructed at		
			Kather By Pass		
			Chambaghat, Solan and this		
			unit would come up as a		
			comprehensive unit and not		
			as a separate Trauma center		
9.	Una	RH Una Level-III (DHS)	Under Process		
10.	Kangra	RPGMC Tanda, Level-II	Near Completion		
		(DME)			
11.	Hamirpur	GMC Hamirpur, Level-III	Under Process		
		(DME)			
12.	Chamba	GMC Chamba, Level-III	Functional		
		(DME)			
13.	Sirmour	GMC Nahan, Level-III	Proposed		
		(DME)			
14.	Kinnaur	RH Reckong Peo, Level-III	Proposed		
		(DHS)			
15.	Lahul & Spiti	RH Keylong, Level-III	Proposed		
		(DHS)			
L		i .			

- ➤ On the completion of all these trauma centers, the desired objectives of bringing down the preventable death in road traffic accidents to 10% will be achieved.
- ➤ The main strategies of the plan are:-
  - 1. Ensure definitive treatment for the injured within the Golden Hour at the nearest Public Health Institution.

- 2. Basic life support ambulances at every 50 Km along the Highways.
- 3. Designated Trauma care facilities viz. Level-I,II & III at every 100 Km. on the National Highways by up -grading the existing Govt. Healthcare facilities to the appropriate level in terms of infrastructure, equipment and manpower.
- 4. Advanced Life Support Ambulances at trauma care facilities for inter facility transfer.
- 5. Integrated communication network to enable the public to reach the trauma care systems and for the various components of the systems viz. trauma centers, ambulances etc.
- 6. Appropriate skill training to various human resources viz. Doctors, Paramedics etc. working in the trauma care system.
- 7. To develop a State Injury Surveillance System & Trauma Registry.
- 8. To spread awareness regarding injury prevention and road safety among the general public.

### • REVISION OF SPEED LIMIT

- > Maximum Speed per hour in kilometers on roads in Himachal Pradesh.
- ➤ The State of Himachal Pradesh has notified the revised maximum speed limit in the State of Himachal Pradesh vide notification No. TPT-A (3)-9/2020. Dated 20.01.2021 having regard to the nature of roads, public safety and convenience of other road users/general public, in respect of the class of vehicles as shown in the table below:-

	Class of Motor Vehicles	strips/Div iders) Plain/Rol ling	(Mountainous/ Steep terrain Cross slope greater than	All Road within Municipal Limits/City/ Towns/ Built- up rural areas	PMGSY/ NABAR	Roads <5 m width Jeepabl	Near Schools, Hospitals Restricted/ Sealed Roads
1.	Motor vehicles used for carriage of passengers comprising not more than eight seats in addition to the driver's seat (M1 Category Vehicles).		55		25	25	20
2.	Motor vehicles	55	45	40	25	25	20

	used for						
	carriage of						
	passengers						
	comprising						
	nine or more						
	than eight seats						
	in addition to						
	the driver's						
	seat (M2 & M3						
	Category						
	Vehicles).						
	More vehicles						
	used for 50 40						
3.	25 carriage of						
	goods (All N	50	40	25	25		30
	Category						
	Vehicles).						
4.	Motor Cycles	<b>60</b>	55	20	25	25	20
		60	55	30	25	25	20
	Quadricycle						
5.	Zuudi io yolo	30	30	20	25	25	30
6.	Three wheeled	40	40	20	25	25	20
	vehicles						

- No challan shall be done if speed exceeds only upto 5% of the notified speed limits.
- ➤ Keeping in view the hilly terrain and topography of the State and the gravity of road traffic accidents due to over-speeding, maximum speed limit has been fixed as 65 Km. per hour on NH/SH.

# • INSTITUTE OF DRIVING TRAINING AND RESEARCH (IDTRR), PAPLOG, SARKAGHAT, DISTRICT MANDI.

In order to improve road safety by providing training to all categories of drivers both in organized and unorganized sector to prepare skilled drivers, the Ministry of Road Transport and Highways has sanctioned IDTR at Paplog, Sarkaghat, Mandi at an estimate cost of ₹1250.66 lakh with a target of training to the 400 drivers of Heavy Vehicles and 500 drivers of Light Vehicles and 130 Driving Instructors per annum. This institute is functioning under the governing body and has started imparting training to the drivers. The IDTR is being run and managed by HRTC. In hilly State like Himachal Pradesh, if a passenger vehicle met with an accident, it takes heavy toll on precious human lives. Since, most of the road traffic accidents are occurred due to human error, this situation will certainly improve by making the drivers of public service vehicles skilled thus thereby saving precious human lives.

### • INSPECTION AND CERTIFICATION CENTRE, BADDI DISTRICT SOLAN

A MoRTH sponsored Inspection and Certification Centre for vehicle fitness is under construction at Baddi, District Solan. The cost of the project is 16,35, 00,000/- out of which Rs. 16.35 Cr is being provided by the MoRTH, Rs. 3.65 Cr. is State share and Rs. 62.55 lac has been allocated from road safety fund. The project is likely to be completed in the month of September 2023. With the functioning of the I& C Centre Baddi, there will be zero human intervention in I the process of issuing the vehicle fitness certificate which will certainly improve road safety as numerous road traffic accidents taking place due to the mechanical defect of vehicles.

## • EMERGENCY RESPONSE SUPPORT SYSTEM (ERSS)-112 -NATIONAL EMERGENCY NUMBER.

- ➤ With a motive to provide immediate response in case of any emergency, ERSS-112, single national emergency number was launched in the State of Himachal Pradesh on 28<sup>th</sup> November 2018 at Mandi by the then Union Home Minister, Sh. Raj Nath Singh. Himachal Pradesh is the first State in the country to have introduced and implement the ERSS. The Command-and-Control Centre of ERSS has been established in Police Headquarters at Shimla which works for 24\*7. In case of any emergency, if voice call, text message, whats app massage or E-mail is received in Command and Control Centre, the same is immediately forwarded to the concerned Police Station, 108/102 ambulances and Disaster Management Cell sat up in H.P. Secretariat as per the nature of the emergency.
- ➤ All the Police Station vehicles have been fitted with Mobile Data Terminal devices integrated with GPS and GPRS. All the Police vehicles are visible on big screen established in Command and Control Centre. If a call is received on 112 in case of any road traffic accident in Command and Control Centre, the same is be forwarded to the nearest Police vehicle irrespective of territorial jurisdiction of a Police Station for immediate response, 108/102 Ambulance and Disaster Management Cell for immediate response.

#### • VEHICLE LOCATION TRACKING DEVICE (VLTD)

- ➤ Department of Transport, Himachal Pradesh has initiated tracking all public service vehicles and goods vehicles having National Permit registered in Himachal Pradesh in phased manner. As part of this project, a vehicle tracking platform (https://vltd.hp.gov.in) has been developed and Command and Control Centre of VLTD has been established in the Directorate of Transport and is functional for 24\*7.
- ➤ HPDT VLTD was inaugurated by the Hon'ble CM of Himachal Pradesh Shri Jai Ram Thakur on dated 19-07-2022. The AIS-140-based Vehicle Tracking & Management System aims to provide

- a real-time monitoring and tracking facility for all public transport vehicles in the State for better safety and enforcement.
- As per the mandate of the MoRTH, all the passengers/ public service vehicles such as Buses/ Taxis/ Maxi Cabs and goods vehicles having national permit registered on or after 01.01.2019 shall be equipped with location tracking devices with panic buttons for requesting emergency response through alerts. In case of any emergency when the user presses the panic button an alert is forwarded to ERSS and HPDT Monitoring Centre. Himachal is the first State to have integrated VLTD with ERSS for quick response in case of emergency.
- ➤ Presently 20000 vehicles fitted with VLTD is being monitored and the number of such vehicles are increasing on day to day basis.
- Apart from tracking of vehicles plying at any place in the country and panic button for any type of emergency, the VLTD has been equipped with special feature from road safety point of view. If a vehicle fitted with VLTD tilted in case if any road traffic accident, the alert will be received in the Control Centre of VLTD. The operator then calls the user/owner of the vehicle and in case of road traffic accident; the same is communicated to ERSS and further to the concerned agencies for prompt response. This feature is very useful when VLTD fitted vehicle is met with an accident at night time and at deserted place.

### • SCHOOL SAFETY GUIDELINES:

To ensure the safety and security of school children and avoid any untoward incident while travelling in school buses and other school vehicles, Govt. of H.P. department of Transport, has notified the Himachal Pradesh Motor Vehicle (first Amendment rules 2018) vide which transport related school safety conditions have been made mandatory for all categories of school vehicles. These conditions comprise detailed general conditions applicable to all categories of school vehicles, category wise conditions for self-operated buses/ vehicles by schools, for the private contract carriage/ Himachal Road Transport Corporation buses taken of lease by the schools and Motor cabs / Maxi cabs vehicles used to provide transportation facilities to school children.

Transport department to ensure that the conditions stipulated in the above notification is being complied with by all the school vehicles. In case of any violation and non- compliance, appropriate action is taken as per the provision of law. The motive behind the implementation of these conditions is to ensure safe and secure journey for the school children and to avoid road traffic accidents due to human error and fitness of vehicles.

- PRADHAV- WIPE OUT THE DRUGS FROM DEVBHUMI- AN INTIATIVE TO CURVE THE MENACE OF DRUG ABUSE WITH THE ACTIVE PARTICIPATION OF YOTH OF THE STATE.
- In order to rope in the youth of the State for the development of strategies for the eradication of drugs and narcotics from Himachal Pradesh, H.P. Crime Investigation Department(CID) launched a campaign seeking suggestions from youth to wipe out drug menace from the state.
- Since use of synthetic drugs such as "Heroine" also called "Chitta" is trending among the youth of the State which is responsible besides other health and social impact, towards involvement of youngsters in road traffic accidents and resultant fatalities and injuries. The consumption of such type of drugs is not detectable on the spot as in the case of alcohol consumption which is detectable with the use of Alco Sensor. The road accident data of Himachal shows that most of the road traffic accident victims are persons between the age group of 21 to 35 years.
- ➤ The State Govt. is very much concerned about the emerging trend of synthetic and other drugs, Narcotics and Psychotropic substance among youth of the State. With an objective to make Himachal a Drug free State, during the ongoing Vidhan Sabha

session on 4<sup>th</sup> April 2023, the State Govt. has passed a resolution to make the law against drug abuse more stringent and the same will be sent to the Union Govt. for amendment in NDPS Act.

- In order to eradicate this menace from the State, both implementation and enforcement of stringent law and awareness on the ill effect and health, legal, financial and social consequences of use of drugs and narcotics are required to run simultaneously. Persons involved in the trade and peddling of drugs required to be dealt strictly and when such cases are registered, financial investigation is also carried out to forfeit and attach the property accumulated through illegal trading and peddling of these drugs.
- ➤ This initiative of the Govt. and State CID certainly prove milestone to make the Himachal drug Free State and it will also contribute to save the precious lives of youth of the State they are losing in road traffic accidents while driving or riding under the influence of drugs.

The State of Himachal Pradesh is committed to make the roads of Himachal Pradesh safer for all road users and this will possible with the active participation of people from all walks of life in this pious cause. The initiatives being undertaken by the State Govt. has also yielded effective results in the past as in spite of ever increasing number of vehicle population, the State has witnessed decrease in the number road traffic accidents, fatalities and injuries. Sincere efforts are being put forth to achieve the objective to halves the number of road traffic accidents by the year 2030.

## "JAI HIND