

TRANSPORT DEPARTMENT, LEAD
AGENCY/ROAD SAFETY CELL

ROAD ACCIDENT SCENARIO IN
HIMACHAL PRADESH

AGUUST 2015 TO DECEMBER 2020



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Lead Agency / Road Safety Cell

GENERAL OVERVIEW OF STATE OF HIMACHAL PRADESH AND ROAD ACCIDENT SCENARIO UPTO YEAR 2020.

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. The climate varies according to the elevation, type of terrain and topography from hot to cold, alpine, and glacial.

POPULATION OF HIMACHAL PRADESH

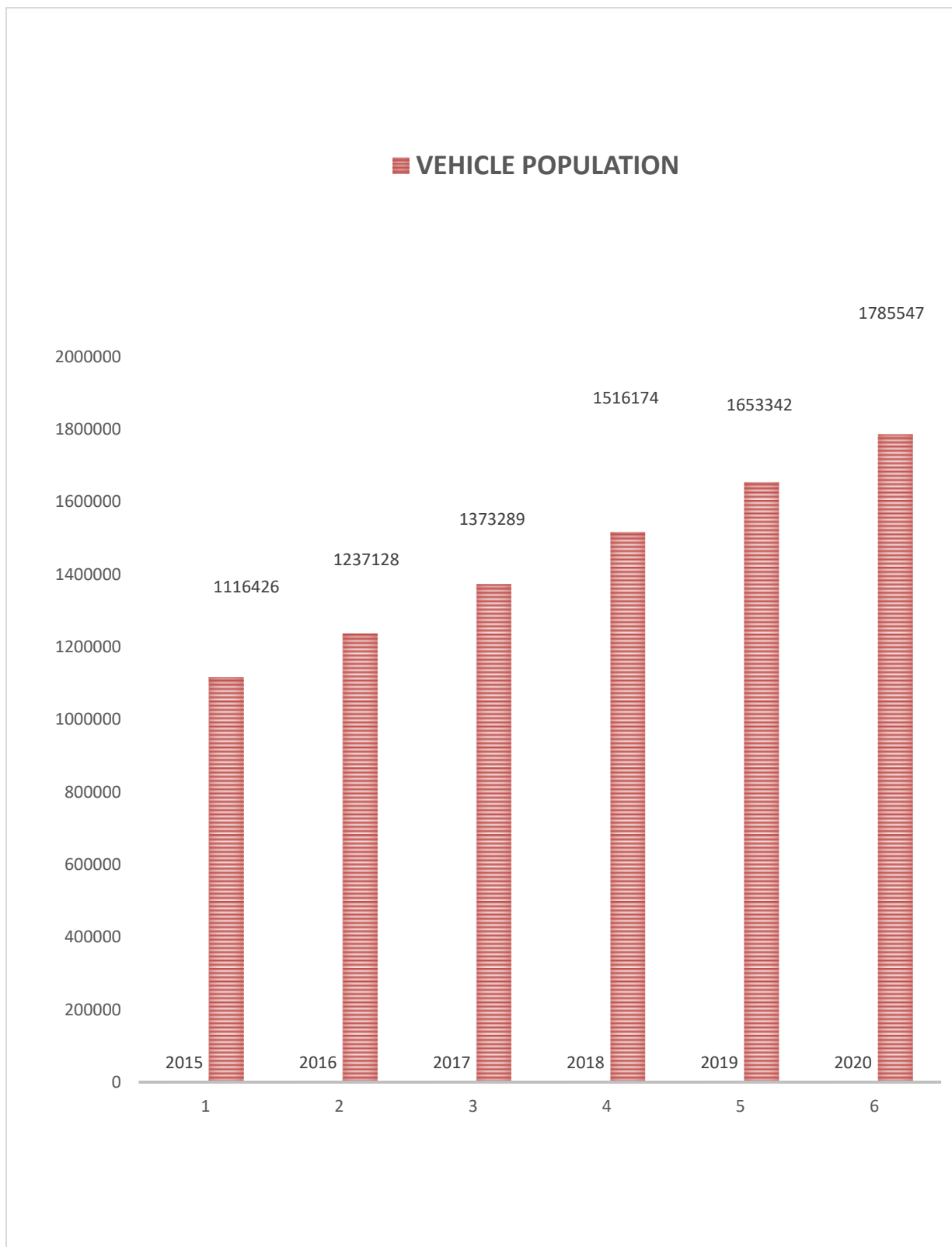
Populati on of H.P. (2011 Census)	Populatio n (2001 Census)	% Growth (2001- 2011)	Rural Pop.	Urban Pop.	Are a km²	Density (per km²)
68,64,602	6,077,900 Lac	12.95%	61,77,050 Lac	6,88,552 Lac	55,673	123

As per the Census 2011, total population of Himachal Pradesh is 68, 64,602 and projected population for the year 2020 is 74 lac.

VEHICLE POPULATION OF HIMACHAL PRADESH

As far as the population of registered vehicles in H.P. is concerned, at the end of the year 2015 i.e. on 31-12-2015, total registered vehicles in the State were 11, 16,426. During the year 2016, 1, 20,702 vehicles were registered and at the end of year 2016, total vehicle population was 12, 37,128. Similarly, 136168 and 142885 vehicles were registered during the year 2017 & 2018 respectively. During the year 2019, total 137161 vehicles were registered in the State and total vehicle population up to 31-12-2019 was 1653342. During the year 2020 total, 132, 205 vehicles were registered and at the end of year 2020, 1785547 vehicles were registered in Himachal Pradesh.

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%



ROAD NETWORK IN HIMACHAL PRADESH

In a hilly state like Himachal Pradesh, the entire progress depends primarily on the development of roads. It is not possible to provide appreciable length of railways in these areas. No movement of any type of material and persons in various fields like agriculture, horticulture, industry is at all possible unless there is a well-developed system of roads and road transport. Thus, the roads constitute the very life line of Himachal's economy. The density of motor-able roads per 100 sq. kms. of area in Himachal Pradesh stood at 65.97 km. as at the end of 2018-19.

Himachal Pradesh State has a good road network. During the year 2017-18 the total Road length in the State of Himachal Pradesh was 37,586 and at the end of Financial year 2018-19 total road length was 38,454. The road length in Himachal Pradesh increased to 39475 K.M. during the financial year 2019-20. There are 19 **National Highways** with total length of 2,592 Kms. (HPPWD=1238 Kms./NHAI=785 Kms/BRO=569 Kms.) and 108 **State Highways**/Major District Road(MDR) with total length of 4681.035kms.

TRANSPORT:

Road transport is the principal mode of transportation in Himachal Pradesh. Passenger Transport is managed by a Government owned Himachal Road Transport Corporation (H.R.T.C.) and a fleet of Private Buses. As on 31st March, 2019 this Corporation had 3,103 Stage Carriage buses and 65 Attached buses, 22 trucks and 89 other vehicles. At the end of the financial year 2019-20, number of Corporation Stage Carriage buses increased to 3,161, Trucks to 24 Nos, Attached buses to 71 Nos and other vehicles to 100 Nos with a total of 3,356 vehicles. Total No. of Private Stage Carriage buses in the State is 3267. There are only two narrow gauge Railway Lines connecting Shimla with Kalka (96km.) and Jogindernagar with Pathankot (113 km.) and one 33 km. broad gauge railway line from Nangaldam to Charuru of Una District. At present there are only three Airports namely Shimla at Jubbar-Hatti, Kangra at Gaggal and Kullu at Bhuntar.

ROAD NETWORK IN HP 2017-18

Year/District	Total Road Length	Motorable Four lane	Motorable double lane	Motorable Single lane	Jeepable	Less than Jeep able
1.	2.	3.	4.	5.	6.	7.
2014-15	35,583	..	2,416	31,499	272	1,396
2015-16	36,049	..	2,416	31,953	284	1,396
2016-17	36,623	..	2,453	32,469	305	1,396
2017-18	37,586	62	2,081	33,742	984	717
DISTRICT WISE						
1.Bilaspur	1815	5	173	1628	3	6
2. Chamba	3989	0	244	2842	555	348
3.Hamirpur	2078	0	146	1929	3	0
4.Kangra	5533	0	290	5224	19	0
5. Kinnaur	1204	0	45	908	86	165
6. Kullu	2104	0	118	1976	0	10
7.Lahul & Spiti	1209	0	95	1069	35	10
8.Mandi	5785	17	153	5338	167	110
9.Shimla	5141	0	209	4844	83	5
10.Sirmour	3417	0	179	3173	15	50
11.Solan	3168	23	203	2911	18	13
12.Una	2143	17	226	1900	0	0

ROAD NETWORK IN HP 2018-19

Year/District	Total Road Length	Motorable Four lane	Motorable double lane	Motorable Single lane	Jeep-able	Less than 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
DISTRICT WISE						
1.Bilaspur	1777	5	173	1590	3	6
2. Chamba	3482	0	224	2337	573	348
3.Hamirpur	1992	0	166	1823	3	0
4.Kangra	6394	0	305	5966	23	0
5. Kinnaur	1134	0	45	839	85	165
6. Kullu	2047	0	118	1919	0	10
7.Lahul & Spiti	1331	0	95	1191	35	10
8.Mandi	6008	50	151	5528	169	110
9.Shimla	5873	0	286	5494	88	5
10.Sirmour	3253	0	158	3030	15	50
11.Solan	3114	30	154	2899	18	13
12.Una	2149	17	171	1961	0	0

ROAD NETWORK IN HP 2019-20

Year/ District	Total Road Length	Motor-able Four lane	Motor-able double lane	Motorable Single lane	Jeep- able	Less than 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	39475	102	2079	35444	1128	723
DISTRICT WISE						
1.Bilaspur	1925	5	173	1623	118	6
2. Chamba	3580	0	224	2435	573	348
3.Hamirpur	2032	0	170	1859	3	0
4.Kangra	6388	0	320	6045	23	0
5. Kinnaur	1160	0	45	865	85	165
6. Kullu	2124	0	118	1996	0	10
7.Lahul & Spiti	1362	0	109	1208	35	10
8.Mandi	6256	50	151	5576	169	110
9.Shimla	5993	0	286	5614	88	5
10.Sirmour	3296	0	158	3073	15	50
11.Solan	3155	30	154	2940	18	13
12.Una	2204	17	171	2009	1	6

SOURCE: HP STATISTICAL DEPARTMENT.

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 has implemented integrated Microsoft Accident Analysis Program (iMAAP) from the month of August 2015 which is 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 is being used by the Stake holder department i.e. Police, PWD, Health & Transport department. RADMS is used for capturing the crash reports by Police and links to related data sources from different stake holders. This application is helpful in developing data led, result oriented countermeasures program and strategies in order to reduce the frequency of Road traffic accidents, fatalities and injuries by implementing remedial measures and required interventions.

FUNCTIONING OF RADMS:

RADMS is primarily concerned with the capture and electronic storage of Police Accident report information and its subsequent analysis to improve Road Safety systematically with primarily object of RADMS is to improve Road Safety situation in Himachal Pradesh by providing access to timely, complete and relevant information on Road accident. To implement this system in the State of Himachal Pradesh, Samsung Tablets have been provided to all the Police stations in Himachal Pradesh. When information of accident received in Police Station, investigating Officer rushed to the spot with the tablet and records the relevant fields pertaining to the accident spot and also captures the exact location by using GPS system in the tablet. This accident information can be uploaded offline and

Online. Rest of the fields pertaining to Police department is filled in the Police Station and then synced from tablet to the Central Accident Database called ADMC, Accident Data Management Cell. After all the field of Police Department is filled the other stakeholder department gets access to the accident data and required to fill their respective fields. The data is stored digitally in the Central Accident Database and then analyzed to devise remedial strategies and precautionary measures in order to reduce the frequency of road traffic accidents and to devise remedial measures.

NOTE: SINCE THE RADMS STARTED FUNCTIONING IN THE STATE FROM AUGUST 2015, HENCE, ROAD ACCIDENT DATA ON THE APPLICATION IS AVAILABLE ONLY FROM THE MONTH OF AUGUST 2015.

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 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.

COMPARATIVE DATA ANALYSES OF ROAD
TRAFFIC ACCIDENTS IN HIMACHAL PRADESH FOR THE
YEAR 2016 TO 2020

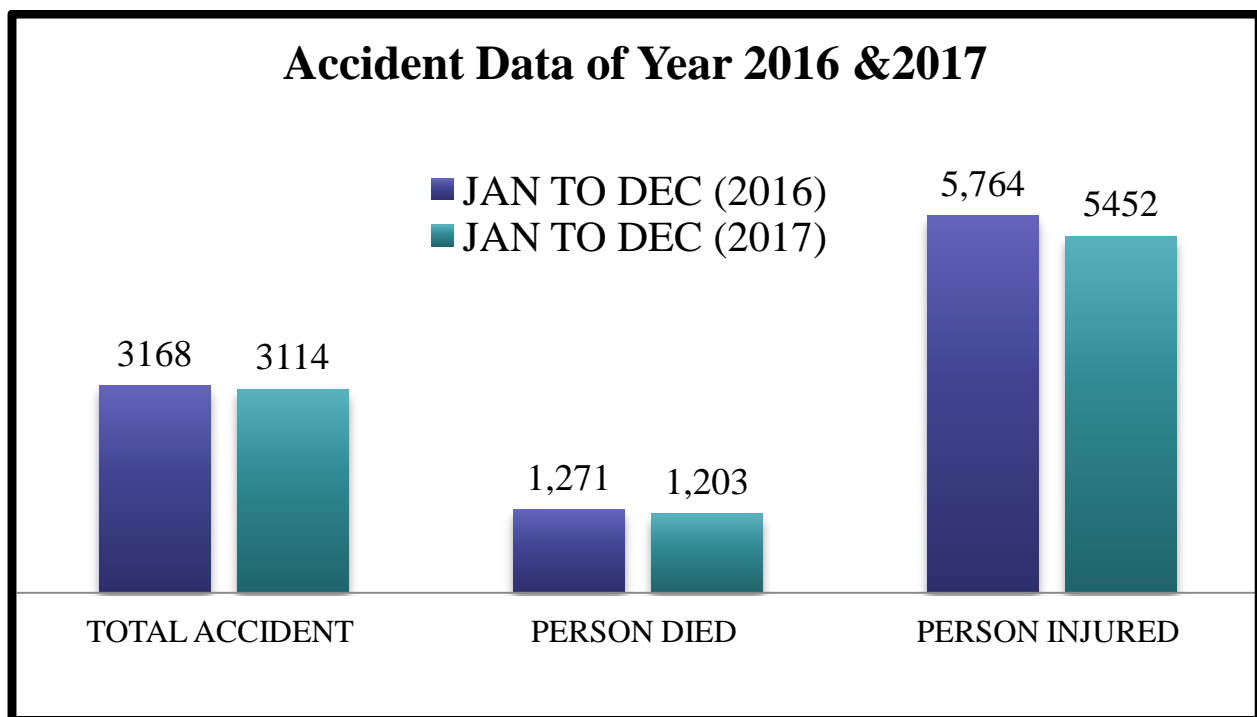
During the year 2018, total 3110 road traffic accident took place due to which 1208 people were killed and 5551 persons got injured.

During the year 2019, total 2873 Road traffic accident took place in Himachal Pradesh in which 1146 persons lost their lives and 4904 people got injured. During the year 2020, 2239 accidents took place in Himachal Pradesh wherein 892 persons lost their lives and 3224 persons got injured.

A slight decrease of 7.62 % in No. of road traffic accident, 5.13% decrease in fatalities and 11.65% in injuries has been witnessed in the year 2019 as compared to the year 2018. However, during the year 2020, there is considerable decrease in number of road traffic accidents by 22.06 %, fatalities by 22.16% and injuries by 34.25 % as compared to the year 2019 but this may be attributed to the imposition of Lockdown during the year 2020. The comparative data of Road traffic accident, fatalities and injuries in Himachal Pradesh for the period from year 2016-17, 2017-18 and 2018-19 and 2019-20 is as under:-

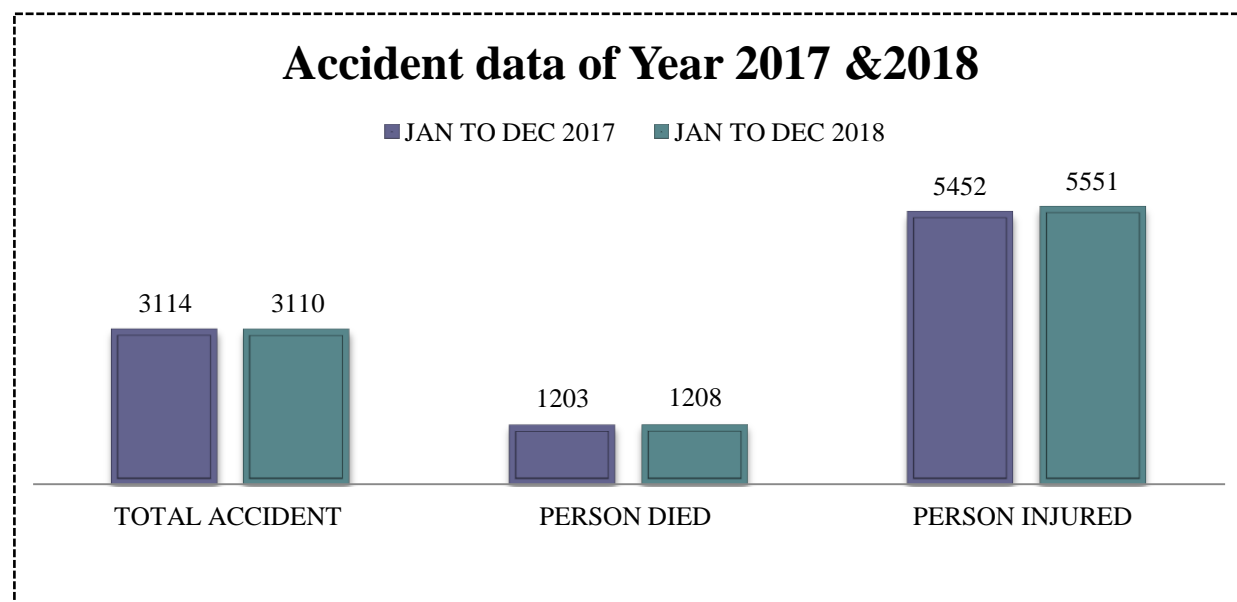
**COMPARATIVE DATA OF ACCIDENT OCCURRED DURING
(JAN TO DEC) 2016 & 2017**

ACCIDENTS	JAN TO DEC (2016)	JAN TO DEC (2017)
TOTAL ACCIDENT	3168	3114
PERSON DIED	1,271	1,203
PERSON INJURED	5,764	5452
PERCENTAGE DECREASE IN NO OF ACCIDENTS =1.70% PERCENTAGE DECREASE IN NO OF DIED PERSON =5.35% PERCENTAGE DECREASE IN NO OF INJURED PERSON =5.41%		



COMPARATIVE DATA OF ACCIDENT OCCURRED DURING (2017 & 2018)

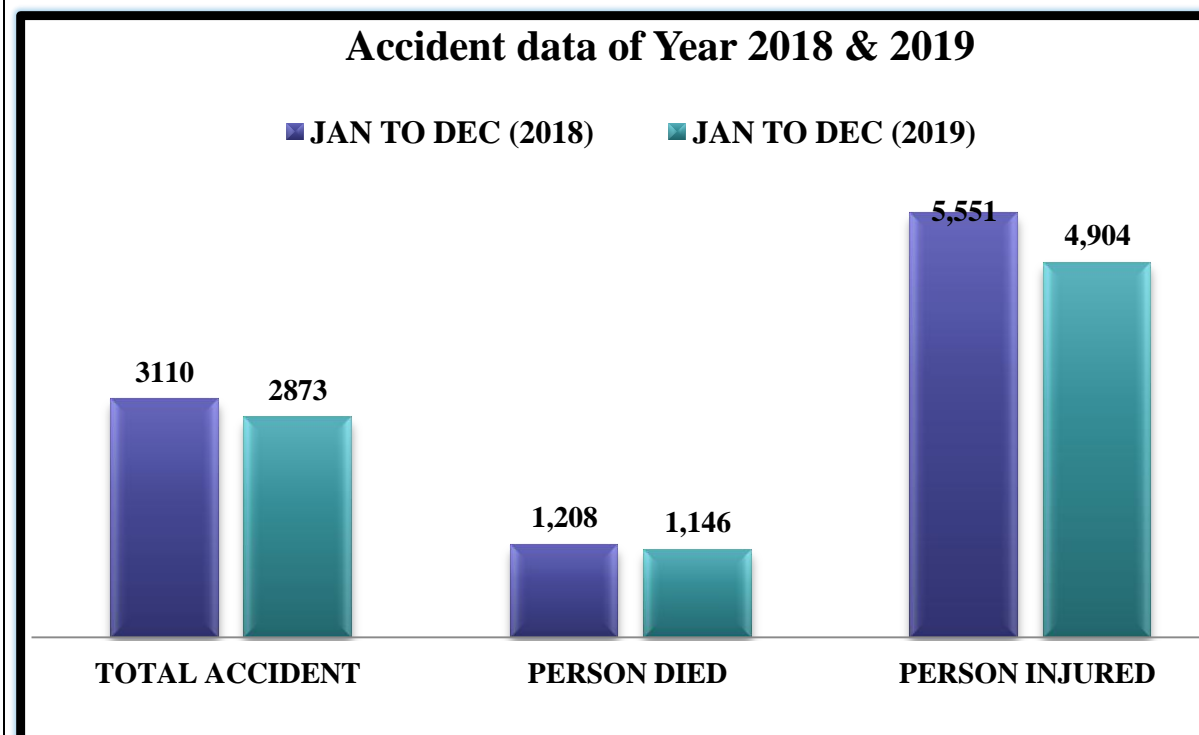
ACCIDENTS	JAN TO DEC 2017	JAN TO DEC 2018
TOTAL ACCIDENT	3114	3110
PERSON DIED	1203	1208
PERSON INJURED	5452	5551
<p>PERCENTAGE DECREASE IN NO OF ACCIDENTS = 0.12%</p> <p>PERCENTAGE INCREASE IN NO OF DIED PERSON = 0.41%</p> <p>PERCENTAGE INCREASE IN NO OF INJURED PERSON = 1.78%</p>		



COMPARATIVE DATA OF ACCIDENT OCCURRED DURING (2018 & 2019)

ACCIDENTS	JAN TO DEC (2018)	JAN TO DEC (2019)
TOTAL ACCIDENT	3110	2873
PERSON DIED	1,208	1,146
PERSON INJURED	5,551	4,904

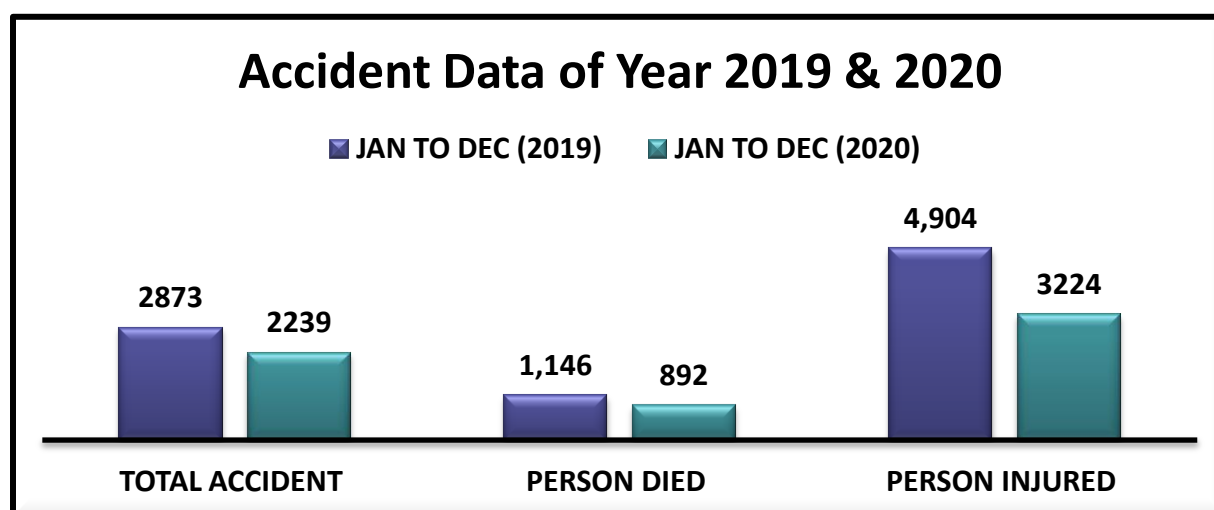
PERCENTAGE DECREASE IN NO OF ACCIDENTS =7.62%
 PERCENTAGE DECREASE IN NO OF DIED PERSON =5.13%
 PERCENTAGE DECREASE IN NO OF INJURED PERSON =11.65%



COMPARATIVE DATA OF ACCIDENT OCCURRED DURING (JAN TO DEC) 2019 & 2020

ACCIDENTS	JAN TO DEC (2019)	JAN TO DEC (2020)
TOTAL ACCIDENT	2873	2239
PERSON DIED	1,146	892
PERSON INJURED	4,904	3224

PERCENTAGE DECREASE IN NO OF ACCIDENTS =22.06%
PERCENTAGE DECREASE IN NO OF DIED PERSON =22.16%
PERCENTAGE DECREASE IN NO OF INJURED PERSON =34.25%



As a result of intensive awareness campaign through Print, Electronic and Social Media, enforcement of traffic laws and efforts of Police and Transport Department, the State has witnessed persistent and considerable decrease in the percentage of Road Traffic Accident, fatalities and injuries over the previous years i.e. from the year 2016 to till date by 29.32%, 29.74% and 44.08%. District wise comparative road accident data of Himachal Pradesh for the period

from August-2015-2016, 2016-2017, 2017-2018, 2018-2019 and 2019-2020 is given in the table below:-

<i>District wise accident data for the year (2015)</i>						
<i>District</i>	<i>No of Accident</i>	<i>Percentage of Accident</i>	<i>Fatal person</i>	<i>Percentage of Fatal Person</i>	<i>Injured person</i>	<i>Percentage of Injured Person</i>
<i>Baddi</i>	167	5.53.%	76	6.93 %	178	3.39 %
<i>Bilaspur</i>	220	7.29 %	55	5.01 %	298	5.68 %
<i>Chamba</i>	115	3.81%	88	8.02%	169	3.22 %
<i>Hamirpur</i>	142	4.70 %	41	3.74 %	192	3.66 %
<i>Kangra</i>	483	16.1 %	90	8.21 %	867	16.54 %
<i>Kinnaur</i>	37	1.22 %	51	4.65 %	58	1.10 %
<i>Kullu</i>	185	6.13 %	104	9.48 %	375	7.15 %
<i>Lahaul and Spiti</i>	13	0.43 %	8	0.72 %	19	0.36 %
<i>Mandi</i>	430	14.26 %	137	12.5%	860	16.41 %
<i>Shimla</i>	461	15.29 %	202	18.43 %	835	15.93 %
<i>Sirmour</i>	265	8.78 %	95	8.66 %	538	10.26 %
<i>Solan</i>	237	7.86 %	48	4.37 %	449	8.57 %
<i>Una</i>	260	8.62 %	101	9.21 %	401	7.65%
<i>Total</i>	<i>3015</i>	<i>100</i>	<i>1096</i>	<i>100</i>	<i>5239</i>	<i>100</i>

The analysis of Road Traffic Accident Data for the year 2015 transpires that maximum numbers of the accidents occurred in three district namely Kangra, Mandi and Shimla. Out of 3015 accidents, 45.65% accidents took place in these three districts. Most of the accidents took place in Kangra District by 16.1%, Shimla by 15.29% and Mandi by 14.26%. Lowest number of accidents witnessed in District Lahaul & Spiti by 0.43% and District Kinnaur by 1.22%.

Most of the fatalities took place in 04 districts i.e. Kullu, Mandi, Shimla and Una which is 49.63% of total fatalities. District Shimla witnessed the highest number of fatalities by 18.43%, Mandi by 12.5%, Kullu by 9.48% and Una by 9.21%. Lowest number of fatalities took place in district Lahaul & Spiti by 0.72% and district Hamirpur by 3.74%.

The highest number of injuries i.e. 59.17% injuries took place in four districts namely district Kangra by 16.54%, Mandi by 16.41%, Shimla by 15.93% and Sirmour by 10.26%. Lowest numbers of injuries took place in district Lahaul & Spiti by 0.36% and district Kinnaur by 1.10%.

DISTRICT WISE COMPARATIVE ACCIDENT DATA FOR THE YEAR 2016-2017

District wise accident data for the year 2016				District wise accident data for the year 2017			% of Comparative data of Year 2016 &2017		
District	No. of Accident	Fatal	injury	No. of accident	fatal	injury	No. of accident	fatal	injury
Baddi	183	84	237	178	66	203	-2.72%	-21%	-14%
Bilaspur	217	48	345	193	38	386	-11%	-21%	-11%
Chamba	127	96	274	119	60	271	-6%	-38%	-1%
Hamirpur	139	40	230	120	37	271	-14%	-8%	17.82%
Kangra	527	154	940	523	158	947	-1%	3%	0.74%
Kinnaur	43	32	71	34	33	60	-21%	3%	15%
Kullu	202	94	326	168	74	287	-17%	21%	-12%
Lahaul &S	18	19	29	25	14	66	38%	-26%	127.56%
Mandi	462	161	1115	424	127	735	-8%	-21%	-34%
Shimla	487	220	925	480	261	822	-1%	18%	-11%
Sirmour	243	107	418	306	125	508	25.92%	-14%	21%
Solan	229	63	395	252	63	406	10.04%	0%	2.72%
Una	291	153	459	292	147	490	0.34%	-4%	6%
Total	3,168	1,271	5764	3,114	1,203	5452	-1.70%	-5%	-5%

The analysis of Road Traffic Accident Data fetched from RADMS reveals that during the year 2016, out of 3168 accidents, highest number of road traffic accidents i.e. 46.58% accidents occurred in three districts namely Kangra District by 16.63 %, Shimla by 15.37 % and Mandi by 14.58%.

Most of the fatalities i.e. 54.37 % fatalities took place in four districts i.e. district Shimla by 17.30%, Mandi by 12.66%, Kangra by 12.11% and district Una by 12.03% . Similarly, highest number of injuries took place in three districts i.e. district Kangra by 16.30%, Mandi by 19.34% and Shimla by 16.04%. Lowest number of accidents, fatalities and injuries took place in district Lahaul & Spiti by 0.56%, 1.49% & 0.50% and in District Kinnaur by 1.35%, 2.51% & 1.23% respectively.

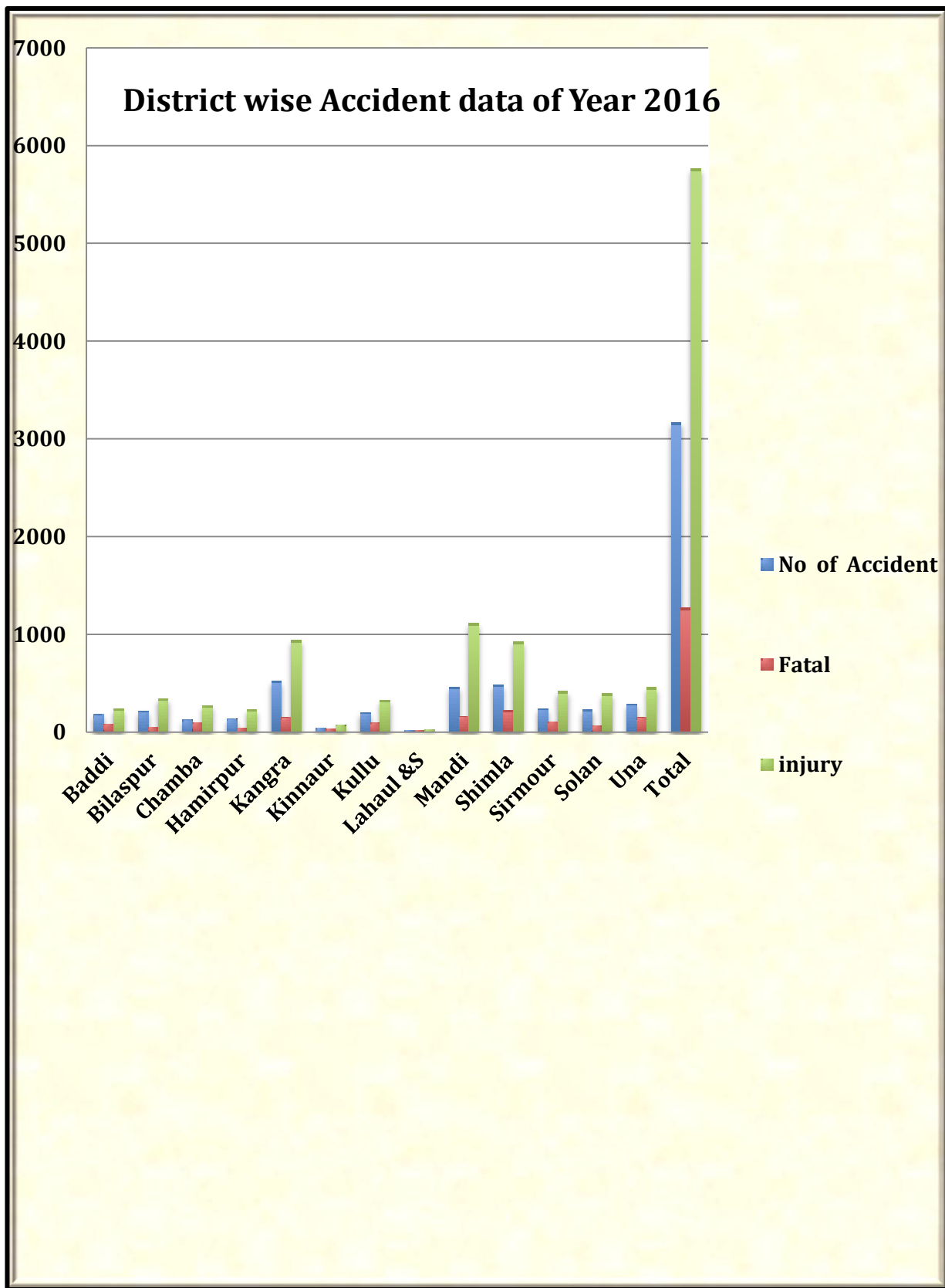
During the year 2017, out of 3114 road traffic accidents in H.P., 55.63% accidents occurred in four districts namely district Kangra by 16.79%, Shimla by 15.41%, Mandi by 13.61%, and district Sirmour by 9.82%. Lowest number of accidents during 2017 took place in district Lahaul & Spiti by 0.80% and Kinnaur by 1.09%.

Further, during the year 2017, out of 1203 numbers of fatalities, highest number of fatalities took place in five districts by 67.97% namely district Shimla by 21.69%, Kangra by 13.13%, Una by 12.21%, Mandi by 10.55% and district Sirmour by 10.39%. Lowest number of fatalities took place in district Lahaul & Spiti by 1.16% and Kinnaur by 2.74%.

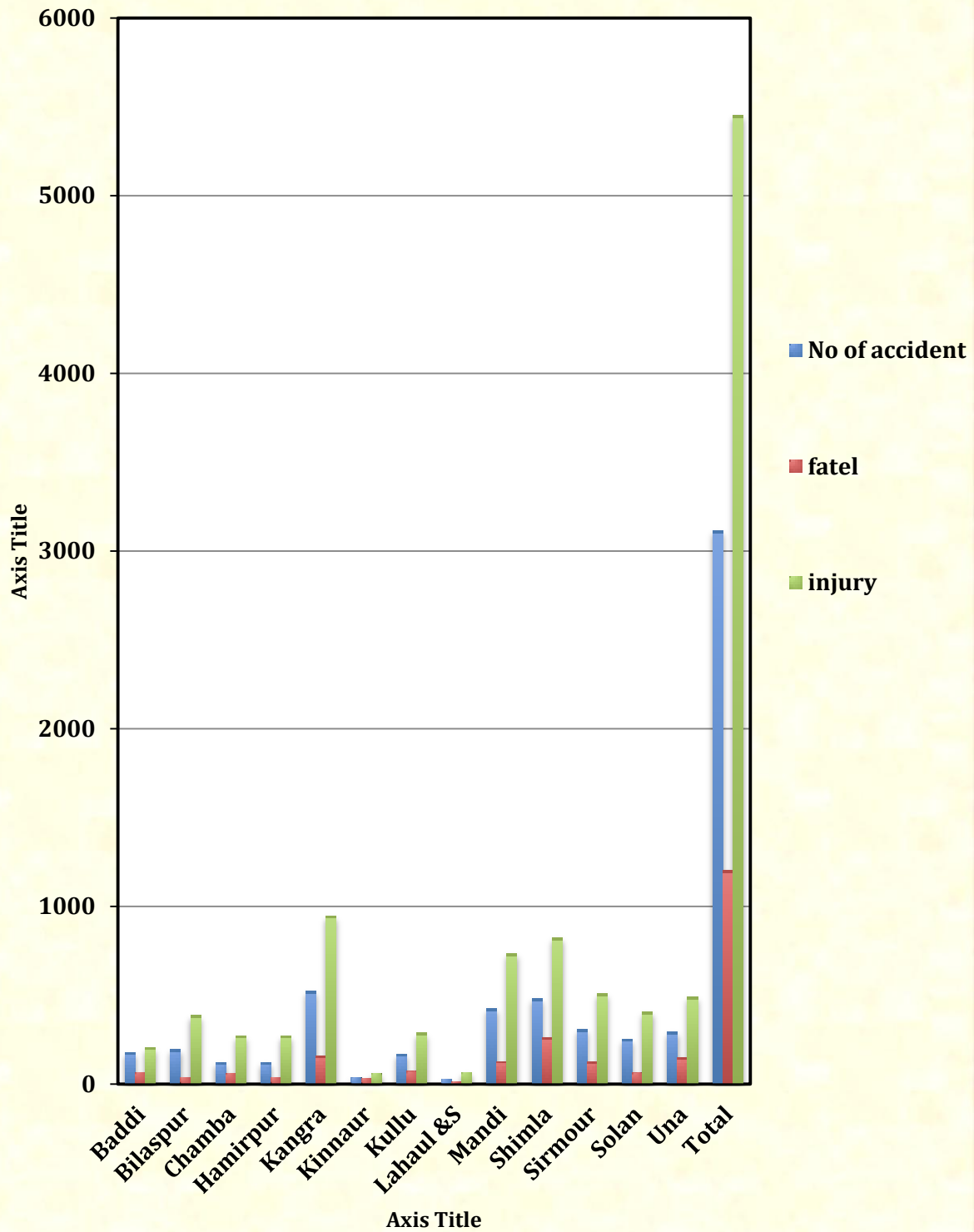
Highest number of injuries i.e. 64.2% road traffic injuries took place in five districts namely district Kangra by 17.36%, Shimla by 15.07%, Mandi by 13.48%, Sirmour by 9.31% and district Una by 8.98%. Lowest number of injuries took place in district Kinnaur by 1.10% and Lahaul & Spiti by 1.21%.

The analyses of the road accident data shows that road traffic accident, fatalities and injuries have been decreased during the year 2017 as compared to the year 2016 by 1.70%, 5% & 5% respectively. Numbers of accidents during the year 2017 have been increased only in four districts namely Lahaul & Spiti by 38%, Sirmour by 25.92 %, Solan by 10.04% and district Una by 0.34%. Similarly, number of fatalities also increased only in four districts namely District Kangra by 3%, District Kinnaur by 3%, District Kullu by 21% and Shimla by 18%.

As far as the number of injuries are concerned, it has been increased in six districts namely District Hamirpur by, 17.82%, District Kangra by 0.74%, District Lahaul and Spiti by 127.56%, District Sirmour by 21%, District Solan by 2.72% and District Una by 6%. District Lahaul & Spiti has witnessed increased number of accidents and injuries during the year 2017, but also there is considerable decrease in fatality by -26%. Also, Lahaul & Spiti district has lowest number of accidents i.e. 18 and 25 out of 3168 and 3114 during the year 2016 & 2017 respectively as compared to the other districts in the State.



District wise Accident data of year 2017



CAUSES OF ACCIDENT(JAN TO DEC) 2016 & 2017				
1	CAUSES	1-1-2016 to 31-12-2016	HUMAN ERROR	1-1-2017 to 31-12-2017
i	CHANGED LANE WITHOUT CARE	75	CHANGED LANE WITHOUT CARE	28
ii	DANGEROUS DRIVING	885	DANGEROUS DRIVING	1341
iii	DANGEROUS OVERTAKING	187	DANGEROUS OVERTAKING	206
iv	DRIVING AGAINST FLOW OF TRAFFIC	20	DRIVING AGAINST FLOW OF TRAFFIC	10
v	NON RESPECT OF RIGHTS OF WAY RULES	163	NON RESPECT OF RIGHTS OF WAY RULES	33
vi	SPEED	1,191	SPEED	899
vii	SUSPECTED DRUGS / ALCOHOL	88	SUSPECTED DRUGS / ALCOHOL	215
vii	TURNING WITHOUT CARE	313	TURNING WITHOUT CARE	249
	TOTAL	2922	TOTAL	2981
2	OTHER FACTOR		OTHER FACTOR	
i	BLIND BAND	135	BLIND BAND	47
ii	SLIPPERY ROAD SURFACE	32	SLIPPERY ROAD SURFACE	15
iii	ADVERSE WEATHER	3	ADVERSE WEATHER	3
iv	SUSPECTED VEHICLE DEFECT	26	SUSPECTED VEHICLE DEFECT	45
v	UNEVEN ROAD SURFACE	49	UNEVEN ROAD SURFACE	15
vi	NON PROVISION OF PARAPETS / CRASH BARRIER ON OUTER CURVE	1	NON PROVISION OF PARAPETS / CRASH BARRIER ON OUTER	8
	TOTAL	246	TOTAL	133
	GRAND TOTAL	3168	GRATOTAL	3114

2016

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =92.23%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =7.76%

2017

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =95.72%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.27%

On the analyses of road accident data for the year 2016-2017, it has come on record that about 95% accidents occurred due to human error and over speeding, dangerous driving, dangerous overtaking and turning without care are the main causes of road traffic accidents leading to fatalities and injuries to the drivers, passengers and road user.

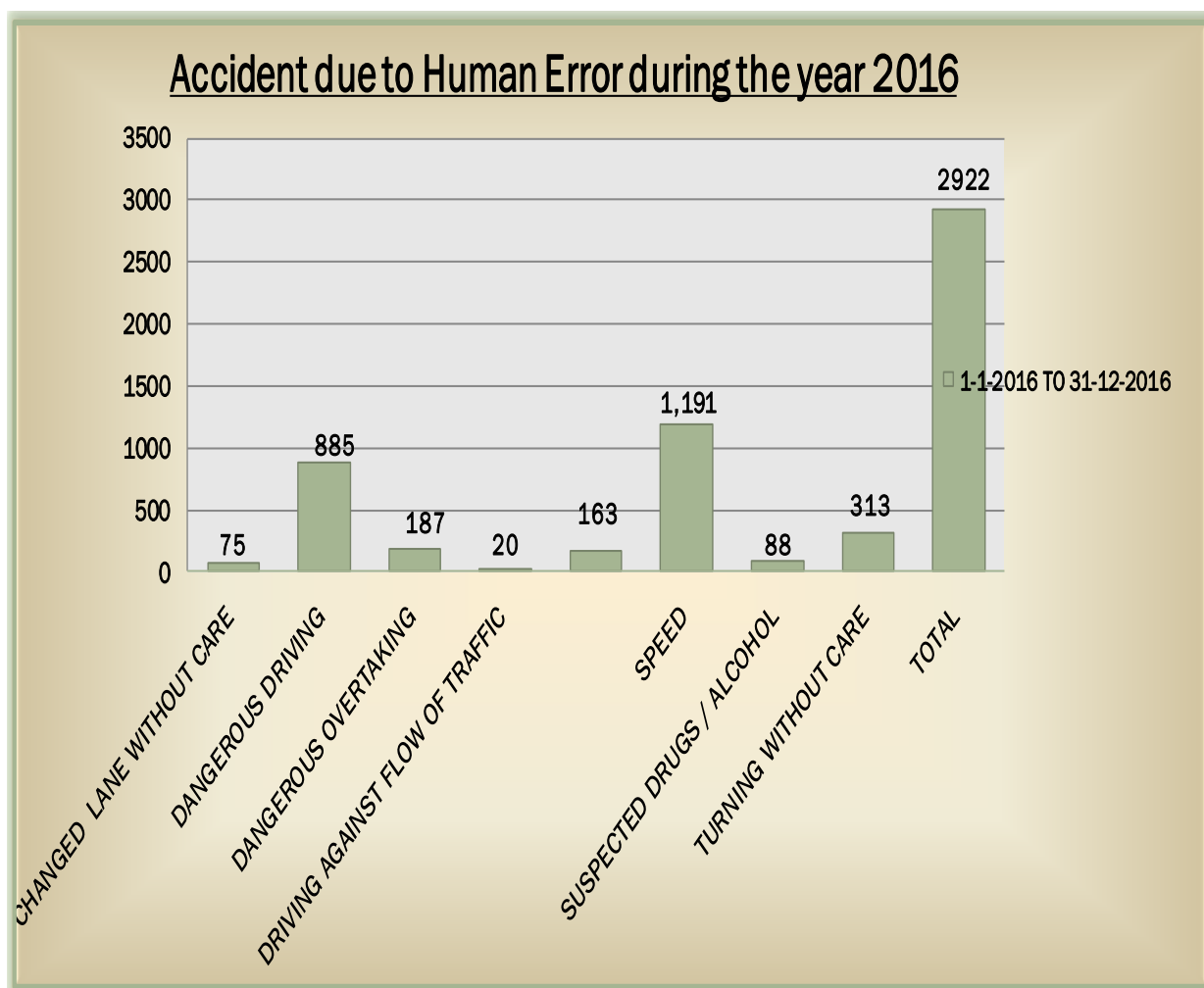
During the year 2016, out of 3168 road traffic accident, 2922 were occurred due to human error and only 246 accidents attributed to the other factors. Similarly, during the year 2017, considerable number of 2981 out of 3114 accident occurred due to human error which is a matter of concern. The analyses show that numbers of dangerous driving have been increased by 51.52% during 2017 over the year 2016, dangerous overtaking by 10.16%, and suspected drugs/alcohol by 144.31%.

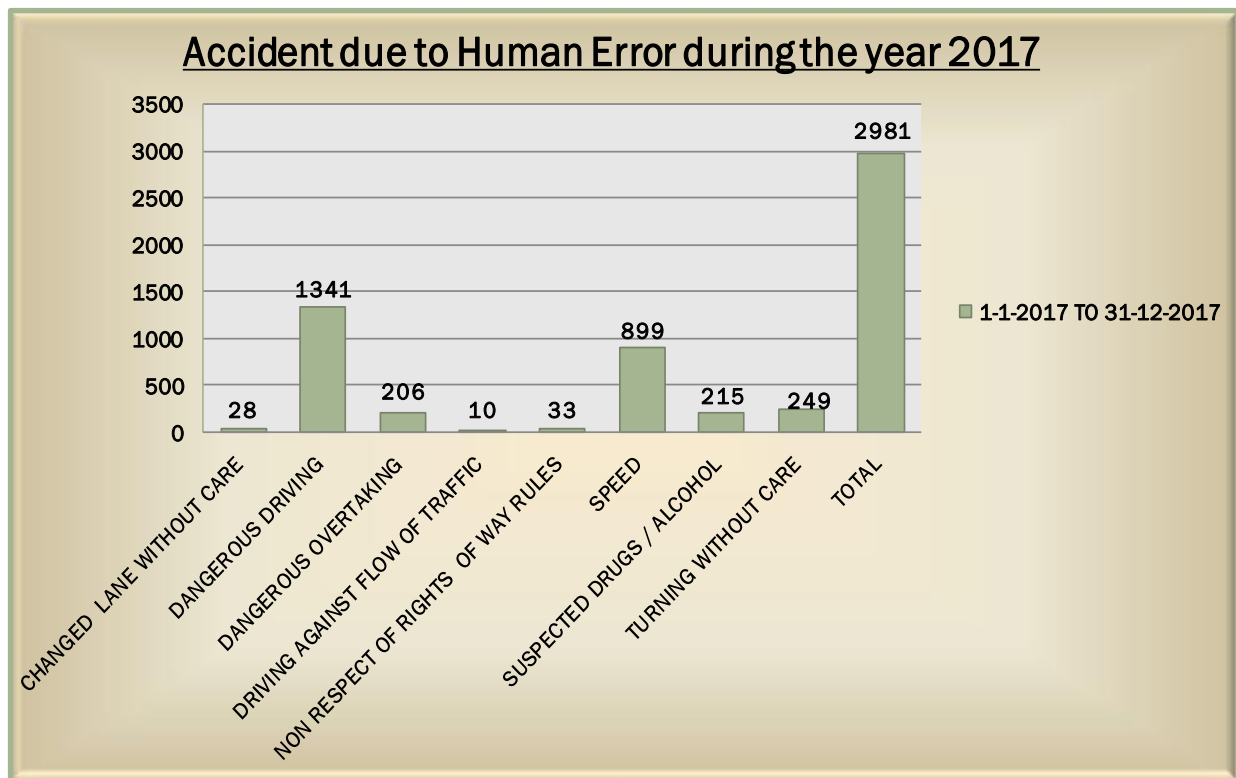
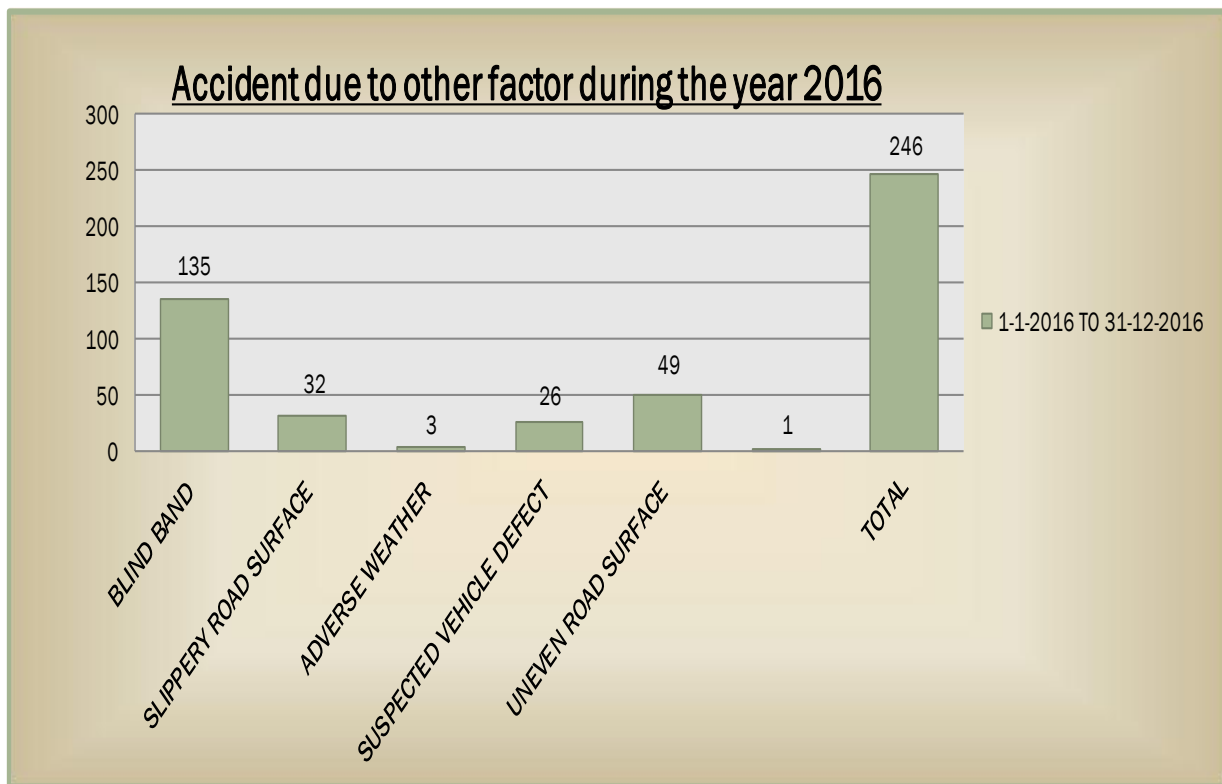
However, considerable decrease has been witnessed in number of accident due to “SPEED” by 24.51% which certainly was a good sign from the road safety point of view because in Himachal Pradesh, most of the accidents happened due to “over-speeding”. Also, there is considerable reduction in the number of accidents due to other factors during 2017 than the previous year by 45.93%.

However, during the year 2017, there is considerable increase in number of accidents due to suspected drugs/alcohol by 144.31 % which is certainly an alarming number.

However, on the other hand, Himachal Pradesh being a hilly State has tough terrain and topography which also attribute to the higher rate of fatalities and injuries. Due to the condition of roads and non-provisioning of Parapets, Crash

Barriers and proper Signage, road markings, hazardous sign boards, delineators, studs and proper lightening system along the road side, the incidents of vehicles running off the road are one of the major causes of fatalities and serious injuries as the vehicle, especially passenger vehicle, once rolled down the road, chances of survival are very slight. Due to the above mentioned factors, the fatality rate per lac human population and per 10,000 vehicle population is on the higher side in the State as compared to the National average.







COLLISION TYPE COMPARATIVE ROAD ACCIDENT DATA FOR THE YEAR 2016-2017

Year 2016				Year 2017			Percentage of comparative data for the year 2016-2017	
Sr. No.	Collision Type	Number of accident	Number of Vehicle	Collision Type	Number of accident	Number of Vehicle	% of accident	% of Vehicle
1	Fell down from vehicle	31	31	Fell down from vehicle	25	26	-19.35%	-16.12%
2.	Head on	726	1,478	Head on	700	1,424	-3.58%	-3.65%
3.	Hit animal	12	13	Hit animal	11	11	-8.33%	-15.38%
4.	Hit cyclist	24	24	Hit cyclist	20	20	-16.66%	-16.66%
5.	Hit in rear	211	432	Hit in rear	194	412	-12.21%	-4.62%
6.	Hit in side	320	623	Hit in side	362	740	13.12%	18.78%
7.	Hit object in road	61	68	Hit object in road	49	53	-19.67%	-22.05%
8.	Hit object off road	87	90	Hit object off road	87	89	0%	-1.11%
9.	Hit parked vehicle	74	181	Hit parked vehicle	89	215	20.27%	18.78%
10.	Hit pedestrian	722	727	Hit pedestrian	702	719	-2.77%	-1.10%
11.	Hit steel barrier	1	1	Hit steel barrier	3	3	200%	200%

12.	Hit tree/light pole	42	43	Hit tree/light pole	59	61	40.47%	41.80%
13.	Other	0	0		2	2	100%	100%
14.	Overturnd	107	113	Overturnd	115	121	7.47%	7.07%
15.	Ran off road	687	698	Ran off road	656	666	-4.51%	-4.58%
16.	Side Swipe	63	95	Side Swipe	40	73	-36.50%	-23.15%
	Total	3168	4617	Total	3114	4635		

The comparative analyses of the collision type road accident data for the year 2016-2017 reveals that during the year 2016, maximum number of accidents i.e. 67.39% accident took place due to three type of collision i.e. Head on collision, Hit pedestrian and vehicles Ran off road. Similarly, maximum number of vehicle involvement in accident also due to these three type of collision i.e. 62.87%. Head on collision caused 22.91% accidents and vehicles involved were 32.01%, Hit pedestrian caused 22.79% accidents and vehicles involved were 15.74% and 21.68% accident caused due to vehicle Ran off road and number of vehicle were 15.11%.

During the year 2017, maximum accidents also happened due to above mentioned three type of collision. Most of the accident occurred due to Hit pedestrian collision i.e. 22.54%, and vehicle involved were 15.51%., Head on collision caused 22.47% accidents and vehicle involved were 30.72%. Accidents occurred due to vehicles Ran off road were 21.06% and vehicles involved were

14.36%. Hit in side and Hit in rear remained the 4th and 5th type of collision attributed to number of accidents and involvement of vehicles.

The analyses of collision wise data and causes of accidents during the year 2016 reveal that more than 60% accidents occurred due to these three types of collision in H.P. and main reasons are “Over Speed” and “Dangerous Driving” which caused 67.52% accident during the year 2016 i.e. 37.59% by “Speed” and 27.93% by “dangerous Driving”.

Similarly, during the year 2017, out of 3114 accidents, 71.92 % accidents occurred due to “Over Speeding” and “Dangerous Driving”. In a hilly State like Himachal Pradesh, road accident due to the vehicle running off the road always resulting in high number of fatalities. It is a matter of concern that Hit pedestrian collision remained the second type in the year 2016 and first type of collision in the year 2017 causing highest number of accidents.

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2016

Number of type of vehicles involved in accident during the year 2016							
Name of District	Motor Car	M/Cycle/S cooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	41	107	11	61	9	55	284
Bilaspur	95	75	22	98	37	28	355
Chamba	56	44	23	7	13	17	160
Hamirpur	56	80	8	23	22	23	212
Kangra	201	322	54	51	56	92	776
Kinnaur	21	1	14	5	2	3	46
Kullu	87	70	28	22	17	39	263
Lahaul &S	4	1	6	5	0	3	19
Mandi	220	192	65	70	55	64	666
Shimla	346	72	91	61	30	46	646
Sirmour	102	133	32	42	7	31	347
Solan	141	77	25	54	35	31	363
Una	114	197	27	46	25	71	480
Total	1484	1371	406	545	308	493	4617

Percentage of vehicle involved in accident during the year 2016:

- (1) Motor Car = 32.14%
- (2) M/Cycle/Scooter = 29.69%
- (3) Jeep = 8.79%
- (4) Truck=11.80%
- (5) Bus= 6.67%
- (6) Other vehicles=10.67%

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2017

Number of type of vehicles involved in accident during the year 2017							
Name of District	Motor Car	M/Cycle/S cooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	33	111	10	43	15	64	276
Bilaspur	89	77	21	70	23	30	310
Chamba	43	47	22	18	10	18	158
Hamirpur	54	64	10	22	16	18	184
Kangra	196	282	46	63	46	146	779
Kinnaur	17	1	10	5	0	2	35
Kullu	74	45	29	20	10	35	213
Lahaul &S	7	7	6	2	1	6	29
Mandi	231	187	65	62	39	55	639
Shimla	317	61	108	90	33	67	676
Sirmour	102	154	42	68	14	75	455
Solan	133	87	31	70	28	47	396
Una	122	194	21	47	20	81	485
Total	1418	1317	421	580	255	644	4635

Percentage of vehicle involved in accident during the year 2017:

- (1) Motor Car = 30.59%
- (2) M/Cycle/Scooter = 28.41%
- (3) Jeep = 9.08%
- (4) Truck=12.51%
- (5) Bus= 5.50%
- (6) Other vehicles= 13.89%

**COMPARATIVE DATA OF VEHICLES INVOLVED IN
ACCIDENT DURING THE YEAR 2016-2017**

Sr. No.	Year 2016	Year 2017	Percentage
1.	Motor Car = 32.14%	Motor Car =30.59%	-1.55%
2.	M/Cycle/Scooter = 29.69%	M/Cycle/Scooter = 28.41%	-1.28%
3.	Jeep = 8.79%	Jeep = 9.08%	0.29%
4.	Truck=11.80%	Truck=12.51%	0.71%
5.	Bus= 6.67%	Bus= 5.50%	-1.17%
6.	Other vehicles=10.67%	Other vehicles= 13.89%	3.22%

DISTRICT WISE COMPARATIVE ROAD ACCIDENT DATA
OF H.P. FOR THE PERIOD FROM 2017-2018

District wise accident data for the year 2017				District wise accident data for the year 2018			Percentage of comparative data of 2017-18		
District	No. of Accident	Fatal	injury	No. of Accident	Fatal	injury	Accident	Fatal	Injury
Baddi	178	66	203	182	59	222	2%	-11%	9.35%
Bilaspur	193	38	386	190	61	432	-2%	-38%	12%
Chamba	119	60	271	138	70	269	15.96%	16.66%	-1%
Hamirpur	120	37	271	140	36	191	16.66%	-3%	-30%
Kangra	523	158	947	548	196	920	5%	24.05%	-3%
Kinnaur	34	33	60	47	32	98	38.23%	-3%	63%
Kullu	168	74	287	201	96	337	20%	30%	17%
Lahaul & S	25	14	66	16	4	34	-36%	-71%	-48%
Mandi	424	127	735	374	106	700	-12%	-17%	-5%
Shimla	480	261	822	523	250	981	8%	-4%	19.34%
Sirmour	306	125	508	264	107	484	-14%	-14%	-5%
Solan	252	63	406	204	49	383	-19%	-22%	-6%
Una	292	147	490	283	142	500	-3%	-3%	-2%
Total	3,114	1,203	5452	3,110	1,208	5551	-0.12 %	0.41%	1.78%

During the year 2017, 55.63% accident occurred in four districts namely district Kangra by 16.79%, Mandi by 13.61%, Shimla by 15.41 and district Sirmour by 9.82%. Similarly, 55.76% fatalities also took place in four districts namely district Kangra by 13.13%, Mandi by 10.55%, Shimla by 21.69% and district Sirmour by 10.39%.

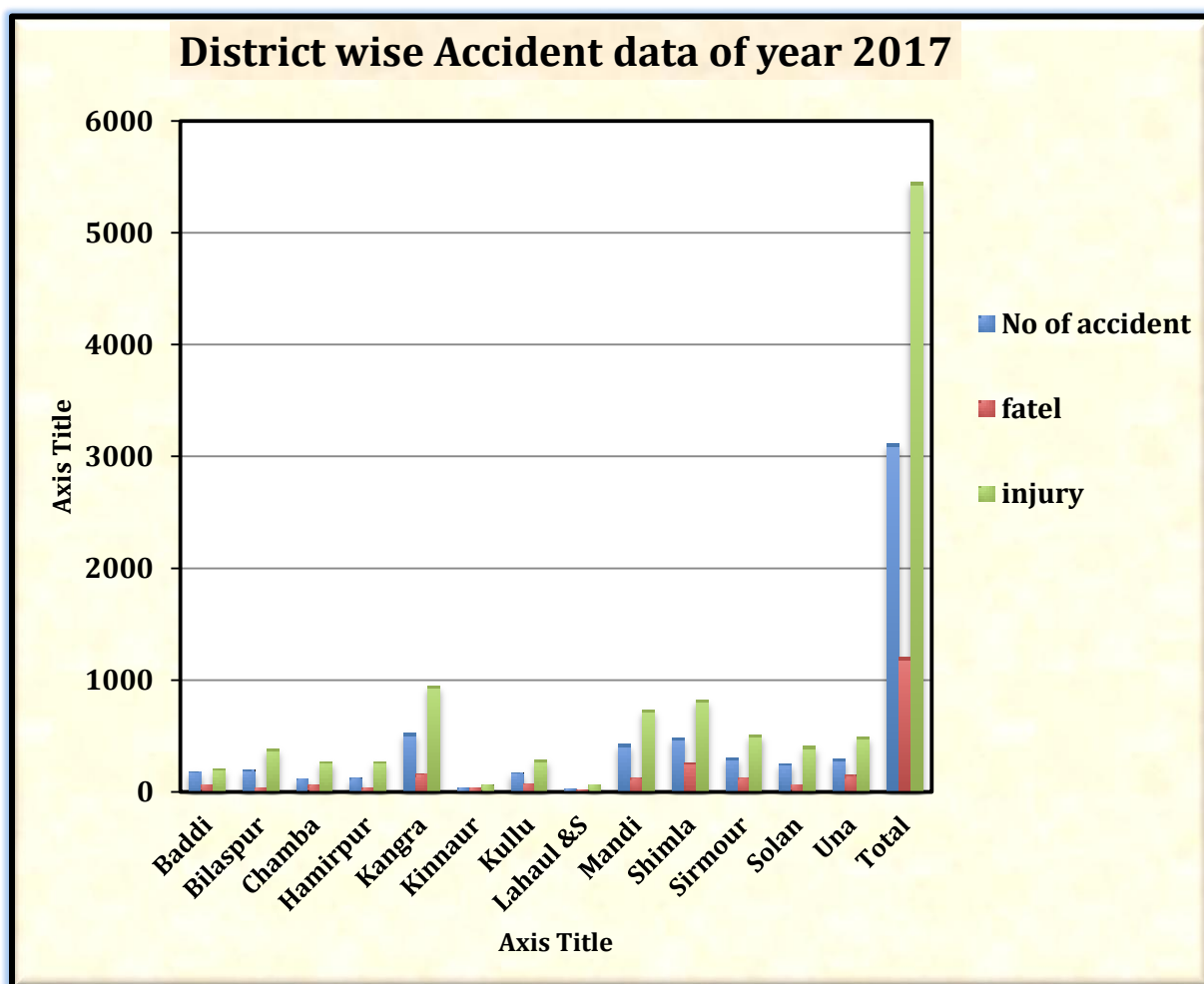
Most of the injuries i.e. 55.22% injuries also took place in four Districts namely district Kangra by 17.36%, Shimla by 15.07%, Mandi by 13.48% and district Sirmour by 9.31%.

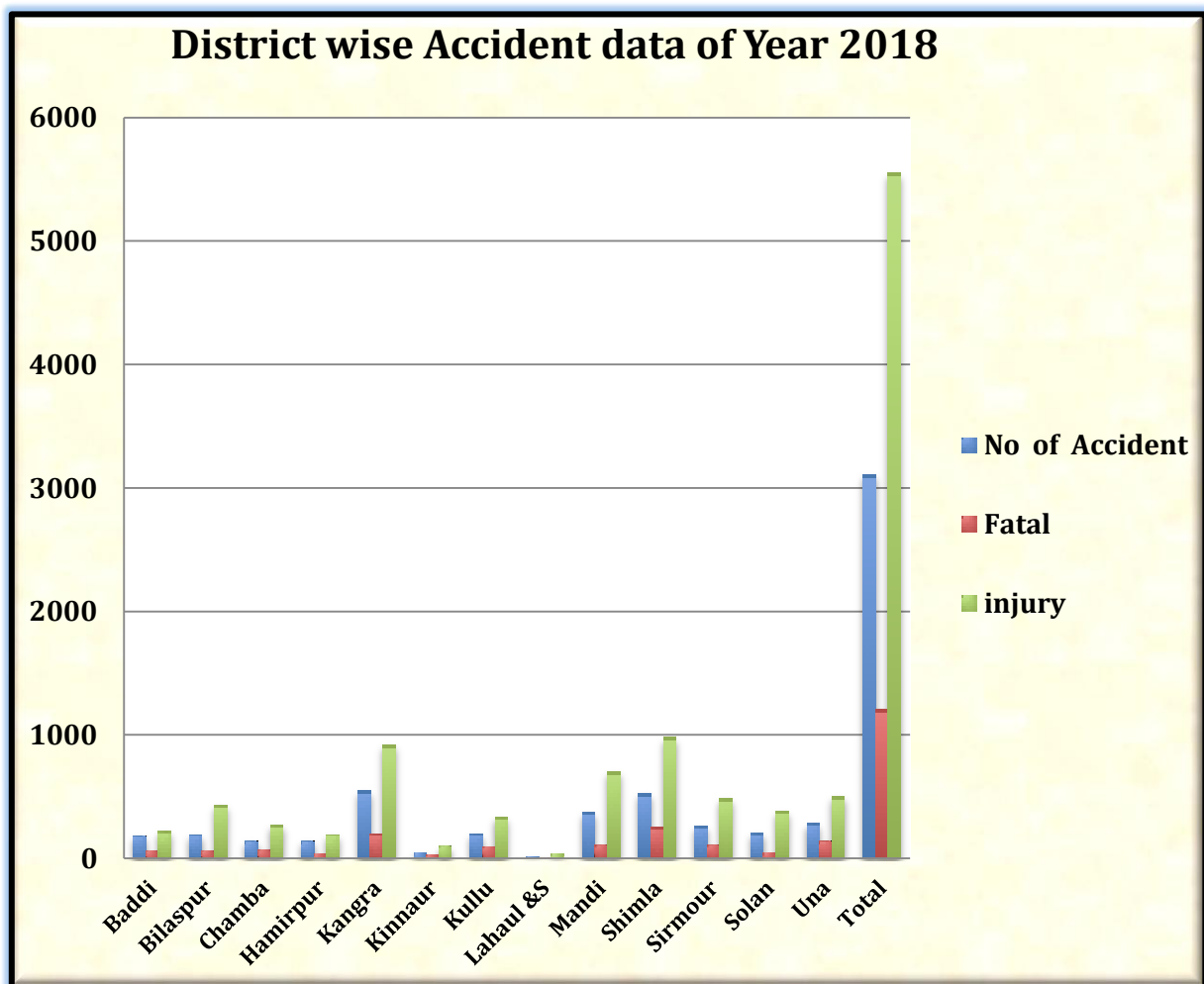
During the year 2018, most of the accidents i.e. 46.45% occurred only in three District namely District Kangra by 17.62%, Shimla District by 16.81% and District Mandi by 12.02% . Most of the fatalities i.e. took place in district Shimla by 20.69%, Kangra by 16.22%, Sirmour by 8.85% and districts Mandi by 8.77%. Similarly 46.85% of injuries took place only in three district namely district Shimla by 17.67%, Kangra by 16.57%, and district Mandi by 12.61%.

As compared to the accident data of year 2017 to the year 2018, increase in number of accidents has been witnessed in six districts namely district Kinnaur by 38.23%, Una by 19%, Hamirpur by 16.66%, Shimla by 8% , Kangra by 5% and Police District Baddi by 2%. There is slight reduction of 0.12% in the number of total accidents, 0.41% increase in fatalities and 1.78% increase in injuries during the year 2018 over the year 2017. Hike in number of fatalities has been recorded only in three districts i.e. district Kangra by 24.05 % , Kullu by 29% and district Chamba by 16.66%. Also hike in number of injuries has been witnesses

only in five districts i.e. Police district Baddi by 9.35%, district Bilaspur by 11%, Kullu by 47% Shimla by 19.34%, and district Kinnaur by 63%.

The analyses of the comparative road traffic accident data for the year 2017-2018 shows that the number of accident, fatalities and injuries during the year 2018 remained almost same as happened during the year 2017 with slight decrease in the number of accidents by 0.12% and slight increase in the number of fatalities and injuries by 0.41 and 1.78% respectively.





ANALYSES OF CAUSES OF ROAD TRAFFIC ACCIDENT IN HIMACHAL PRADESH FOR THE PERIOD FOR 2017-18.

Causes of accident (Jan to Dec) 2017 & 2018				
1	HUMAN ERROR	1-1-2017 TO 31-12-2017	HUMAN ERROR	1-1-2018 TO 31-12-2018
i	CHANGED LANE WITHOUT CARE	28	CHANGED LANCED WITHOUT CARE	47
ii	DANGEROUS DRIVING	1341	DANGEROUS DRIVING	298
iii	DANGEROUS OVERTAKING	206	DANGEROUS OVERTAKING	199
iv	DRIVING AGAINST FLOW OF TRAFFIC	10	DRIVING AGAINST FLOW OF TRAFFIC	37
V	NON RESPECT OF RIGHTS OF WAY RULES	33	NON RESPECT OF RIGHTS OF WAY RULES	143
vi	SPEED	899	SPEED	1,600
vii	SUSPECTED DRUGS / ALCOHOL	215	SUSPECTED DRUGS / ALCOHOL	121
vii	TURNING WITHOUT CARE	249	TURNING WITHOUT CARE	525
	TOTAL	2981	TOTAL	2970
2	OTHER FACTIOR	2017	OTHER FACTOR	2018
I	BLIND BAND	47	BLIND BAND	48
Ii	SLIPPERY ROAD SURFACE	15	SLIPPERY ROAD SURFACE	13
Iii	ADVERSE WEATHER	3	ADVERSE WEATHER	18
Iv	SUSPECTED VEHICLE DEFECT	45	SUSPECTED VEHICLE DEFECT	2
v	UNEVEN ROAD SURFACE	15	UNEVEN ROAD SURFACE	28
vi	NON PROVISION OF PARAPETS / CRASH BARRIER ON OUTER CURVE	8	NON PROVISION OF PARAPETS / CRASH BARRIER ON OUTER	31
	TOTAL	133	TOTAL	140
	GRAND TOTAL	3114	GRAND TOTAL	3110

2017

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =95.72%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.27%

2018

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =95.49%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.50%

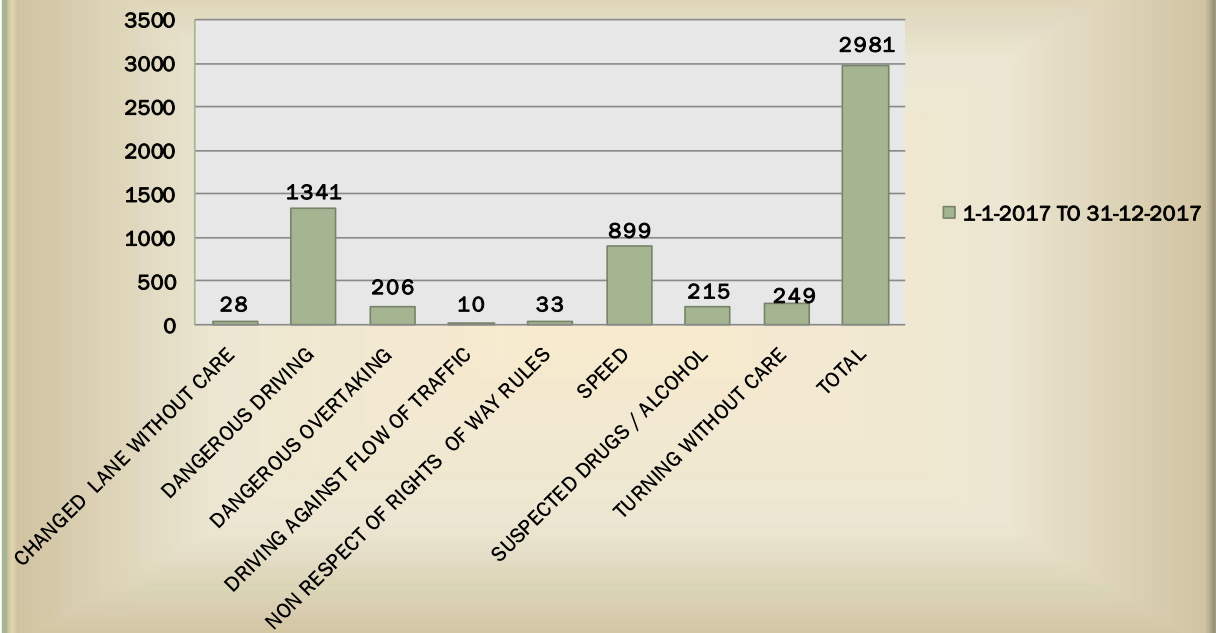
The analyses of road accident data for the period for the year 2017-2018, revealed that during the year 2017, 95.72 % accidents occurred due to human error and Dangerous Driving, Dangerous overtaking, Speed, Suspected drug/Alcohol and Turning without care are the main causes. During the year 2018, the rate of accidents occurred due to human error are 95.49% and Dangerous Driving, Dangerous overtaking, Non-Respect of Right of Ways Rules, Turning without Care and Suspected Drug/Alcohol remained the main causes of road traffic accidents leading to fatalities and injuries to the drivers, passengers and road user. During the year 2017 only 4.27% accidents and during 2018 4.50 % accidents attributed to the other reasons than human error. During the year 2017, out of 3114 road traffic accident, 2981 accidents occurred due to human error and only 133 accidents happened due to other factors. Similarly, during the year 2018, considerable number of 2970 accidents out of 3110 accident occurred due to human error. There is slight decrease in the number of accidents due to human error during the year 2018 by 0.36% and decrease due to other reasons is by 0.12%.

The analyses of the causes of road traffic accident show that numbers of accident due to “Changed Lane Without Care” have been increased by 26.32%, “Speed” by 77.97% and “Turning Without Care” by 110 % during 2018 than the year 2017. However, considerable decrease has been witnessed in number of accident due to “Dangerous Driving ” by 349.32%, Dangerous Overtaking by 3.39% and Suspected Drugs/Alcohol by 43.72%. Since highest number of road traffic accidents are being occurred due to “Speed” leading to fatalities and serious injuries, being human error, this menace is required to be

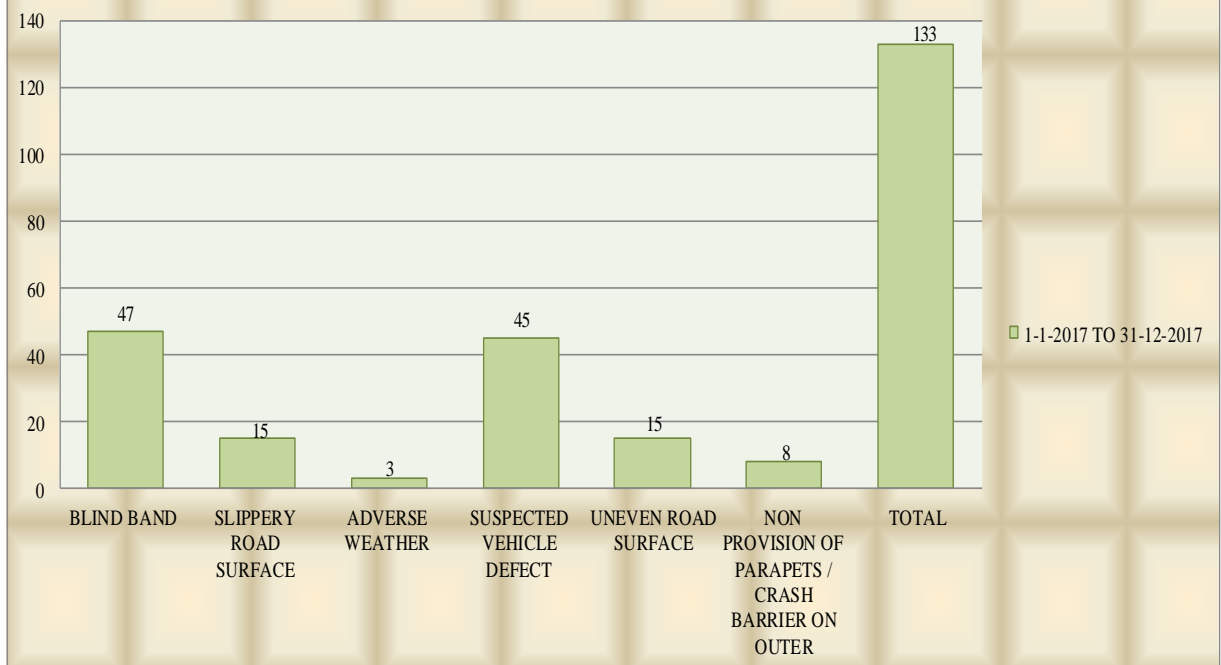
addressed by strict law enforcement besides effective and constant awareness campaign. The ill-effect and repercussions of road traffic accidents being caused by driving vehicles in excessive speed are required to be publicize effectively by incorporating contents appealing to the senses as generally people do not pay any heed towards a normal request, message, information or direction regarding importance of traffic laws rules and regulations. Further, provision of enhanced penalties, especially suspension/ cancellation of driving licenses and imprisonment will certainly play a vital role in reducing the frequency of road traffic accidents taking place due to over speed. Curriculum on road safety for the school students at an early age will provide us with a society of responsible citizen having pretty good knowledge of traffic laws/rules/ regulations, their violation and repercussions, road traffic sinages, signals, road markings and other related issues such as proper procedure of getting valid driving license, fitness of vehicles, duties, rights and responsibilities while driving a vehicle and as a road user.

Also, proper and effective implementation of required interventions such as fixing of “Speed Governors” and installation of “Automated Speed Radar ” at places prone to accidents and where people use to drive vehicles in excessive speed is need of the hour. Moreover, providing adequate numbers of fully equipped “Interceptor Vehicles” fitted with “Crash Lab” to enforcement agencies will prove “Mile Stone” in keeping effective check on the activities of violators of traffic laws and dealing them with the help of digital evidences.

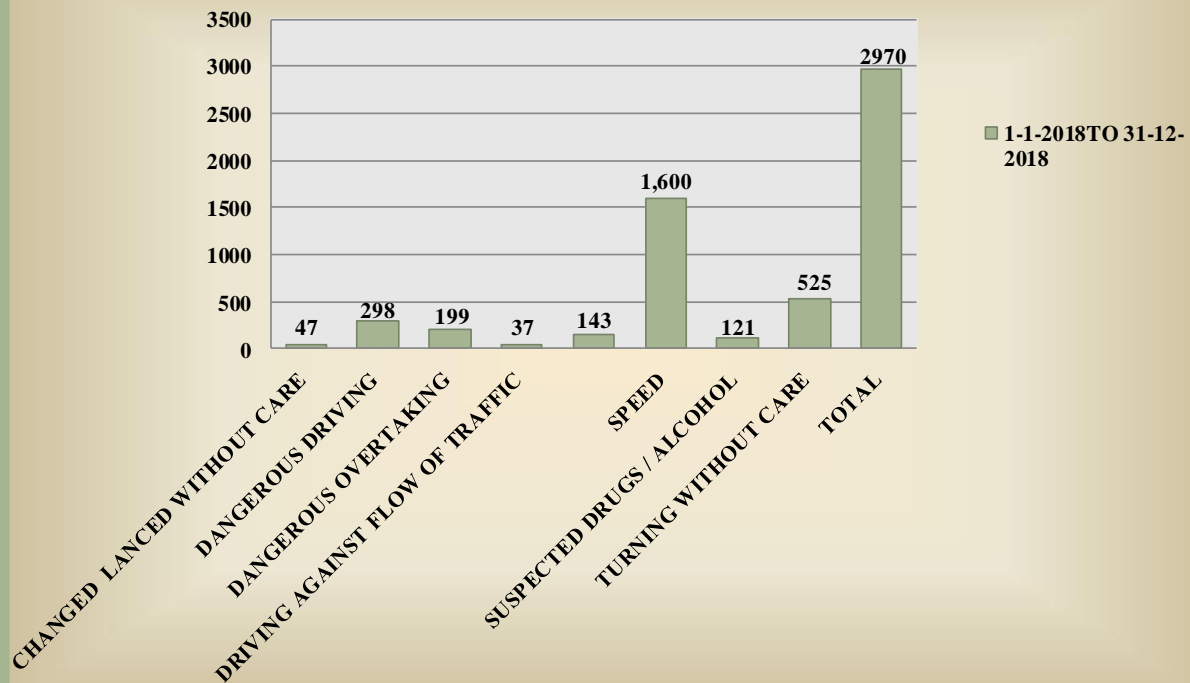
Accident due to Human Error during the year 2017



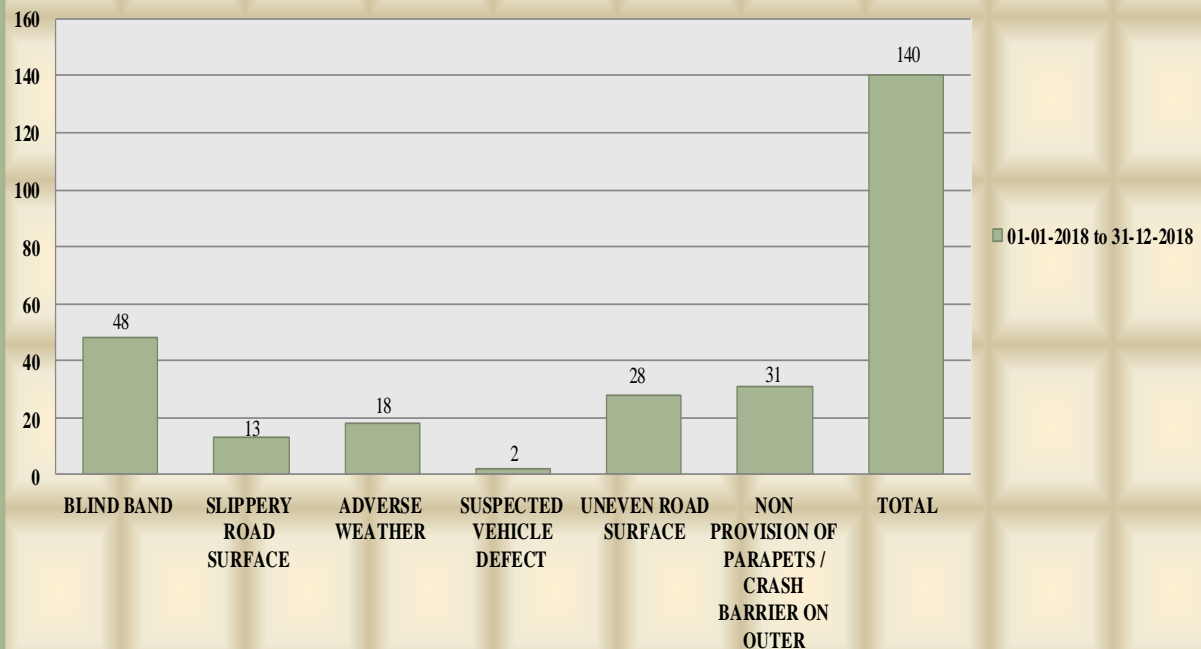
Accident due to other factor during the year 2017



Accident due to Human Error during the year 2018



Accident due to other factor during the year 2018



COLLISION TYPE COMPARATIVE ROAD ACCIDENT DATA FOR THE YEAR 2017-2018

Year 2017				Year 2018			Percentage of comparative data for the year 2017-2018	
Sr . N o.	Collision Type	Number of accident	Number of Vehicle	Collision Type	Number of accident	Number of Vehicle	% of accident	% of Vehicle
1	Fell down from vehicle	25	26	Fell down from vehicle	26	28	4%	7.69%
2.	Head on	700	1,424	Head on	636	1,302	-9.14%	-8.56%
3.	Hit animal	11	11	Hit animal	17	18	54.54%	63.63%
4.	Hit cyclist	20	20	Hit cyclist	28	30	40%	50%
5.	Hit in rear	194	412	Hit in rear	165	353	-14.94%	-14.32%
6.	Hit in side	362	740	Hit in side	396	801	9.33%	8.24%
7.	Hit object in road	49	53	Hit object in road	31	42	-36.73%	-20.75%

8.	Hit object off road	87	89	Hit object off road	115	120	32.18%	34.83%
9.	Hit parked vehicle	89	215	Hit parked vehicle	109	256	22.74	19.06%
10.	Hit pedestrian	702	719	Hit pedestrian	699	722	-0.42%	0.41%
11.	Hit steel barrier	3	3	Hit steel barrier	2	3	-33.33%	0%
12.	Hit tree/light pole	59	61	Hit tree/light pole	49	52	-16.94%	-14.75%
13.	Other	2	2	Other	2	3	0%	50%
14.	Overturned	115	121	Overturned	155	163	34.78%	34.71%
15.	Ran off road	656	666	Ran off road	653	657	-0.45%	-1.35%
16.	Side Swipe	40	73	Side Swipe	27	52	-32.5%	-28.76%
17.	Total	3114	4635	Total	3110	4602		

During the year 2018, 63.91% accidents took place due to three type of collision i.e. Hit pedestrian, Ran off road and Head on collision i.e Hit Pedestrian by 22.47%, Ran off road by 20.99% and Head on collision by 20.45%. Fourth and fifth collision caused most of the accident remained Hit in side and Hit in rear by 12.73% and 5.30% respectively.

During the year 2018, 75.64% vehicles involved in four type of collision i.e. 28.29% in Head on collision, 17.40% in Hit in side, 15.68% in Hit pedestrian and 14.27% in vehicle Ran off road collision. 7.67% vehicles involved in accident caused by Hit in rear collision.

The comparative road accident data for the period 2017-2018 shows that during the year 2017 main reason of above mentioned three type of collision remained “Dangerous Driving” and “Over Speed” causing 72.46% accidents in the State i.e. 43.6% due to dangerous driving and 28.86% due to over speeding.

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2017

Number of type of vehicles involved in accident during the year 2017							
Name of District	Motor Car	M/Cycle/ Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	33	111	10	43	15	64	276
Bilaspur	89	77	21	70	23	30	310
Chamba	43	47	22	18	10	18	158
Hamirpur	54	64	10	22	16	18	184
Kangra	196	282	46	63	46	146	779
Kinnaur	17	1	10	5	0	2	35
Kullu	74	45	29	20	10	35	213
Lahaul &Spiti	7	7	6	2	1	6	29
Mandi	231	187	65	62	39	55	639
Shimla	317	61	108	90	33	67	676
Sirmour	102	154	42	68	14	75	455
Solan	133	87	31	70	28	47	396
Una	122	194	21	47	20	81	485
Total	1418	1317	421	580	255	644	4635

Percentage of vehicle involved in accident during the year 2017:

- (1) Motor Car = 30.59%
- (2) M/Cycle/Scooter = 28.41%
- (3) Jeep = 9.08%
- (4) Truck=12.51%
- (5) Bus= 5.50%
- (6) Other vehicles= 13.89

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2018

Number of type of vehicles involved in accident during the year 2018							
Name of District	Motor Car	M/Cycle /Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	45	121	16	42	11	66	301
Bilaspur	79	76	10	78	25	36	304
Chamba	57	45	26	14	8	19	169
Hamirpur	62	88	4	19	11	31	215
Kangra	197	357	43	52	56	114	819
Kinnaur	28	5	11	2	3	3	52
Kullu	111	65	33	17	16	37	279
Lahaul &Spiti	4	3	3	3	0	5	18
Mandi	198	159	54	38	31	77	557
Shimla	372	80	107	62	40	78	739
Sirmour	92	143	35	50	12	46	378
Solan	115	72	22	55	13	40	317
Una	110	181	20	50	23	70	454
Total	1470	1395	384	482	249	622	4602

Percentage of vehicle involved in accident during the year 2018:

- (1) Motor Car = 31.94%
- (2) M/Cycle/Scooter = 30.31%
- (3) Jeep = 8.34%
- (4) Truck=10.47%
- (5) Bus= 5.41
- (6) Other vehicles= 13.51%

**COMPARATIVE DATA OF NUMBER OF VEHICLES
INVOLVED IN ACCIDENT DURING THE YEAR 2017 & 2018.**

Sr. No.	Year 2017	Year 2018	Percentage
1.	Motor Car = 30.59%	Motor Car = 31.94%	-0.31%
2.	M/Cycle/Scooter = 28.41%	M/Cycle/Scooter = 30.31%	-0.67%
3.	Jeep = 9.08%	Jeep = 8.34%	0.71%
4.	Truck=12.51%	Truck=10.47%	-0.43%
5.	Bus= 5.50%	Bus= 5.41%	0.24%
6.	Other vehicles= 13.89%	Other vehicles= 13.51%	0.45%

DISTRICT WISE COMPARATIVE ROAD ACCIDENT DATA OF H.P. FOR THE PERIOD 2018-2019

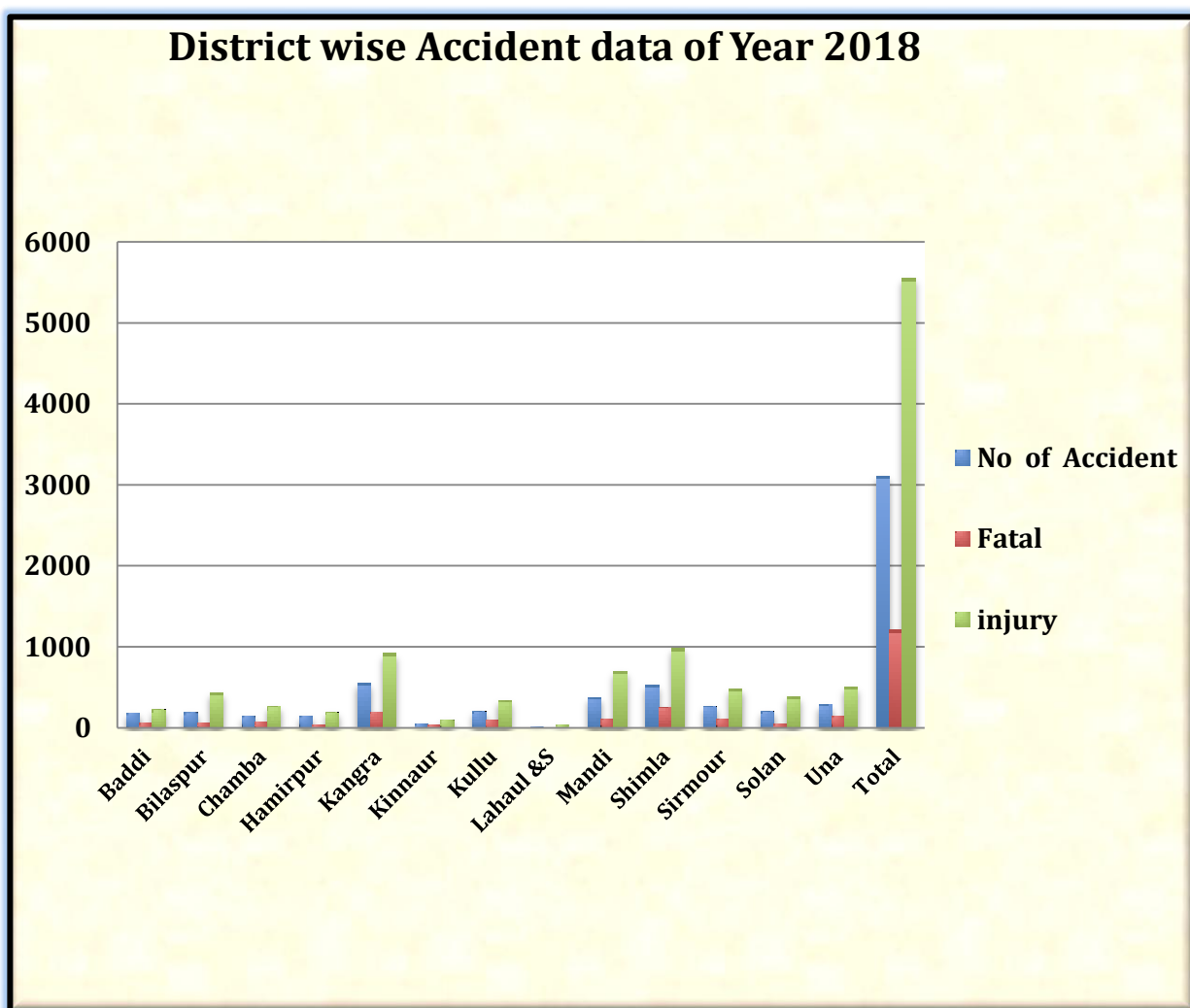
District wise accident data for the year 2018				District wise accident data for the year 2019			Percentage wise comparative data for year 2018-19		
District	Accident	Fatal	Injury	Accident	Fatal	Injury	Accident	Fatal	Injury
Baddi	182	59	222	170	75	238	-7%	27%	7%
Bilaspur	190	61	432	150	35	363	-21%	-43%	-16%
Chamba	138	70	269	115	78	207	-17%	11.42%	-23%
Hamirpur	140	36	191	114	35	185	-19%	2.85%	-3%
Kangra	548	196	920	496	156	856	-9%	-20%	-7%
Kinnaur	47	32	98	39	36	58	-17%	12%	-41%
Kullu	201	96	337	207	134	379	3%	39%	12.46%
Lahaul &Spiti	16	4	34	9	4	13	-44%	0%	-62%
Mandi	374	106	700	352	109	624	-6%	2.83%	-11%
Shimla	523	250	981	514	186	847	-2%	-26%	-14%
Sirmour	264	107	484	274	116	435	4%	8%	-10%
Solan	204	49	383	167	43	261	-18%	-12%	-32%
Una	283	142	500	266	139	438	-6%	-2%	-12%
Total	3,110	1,208	5551	2,873	1,146	4904	-8%	-5%	-11.65%

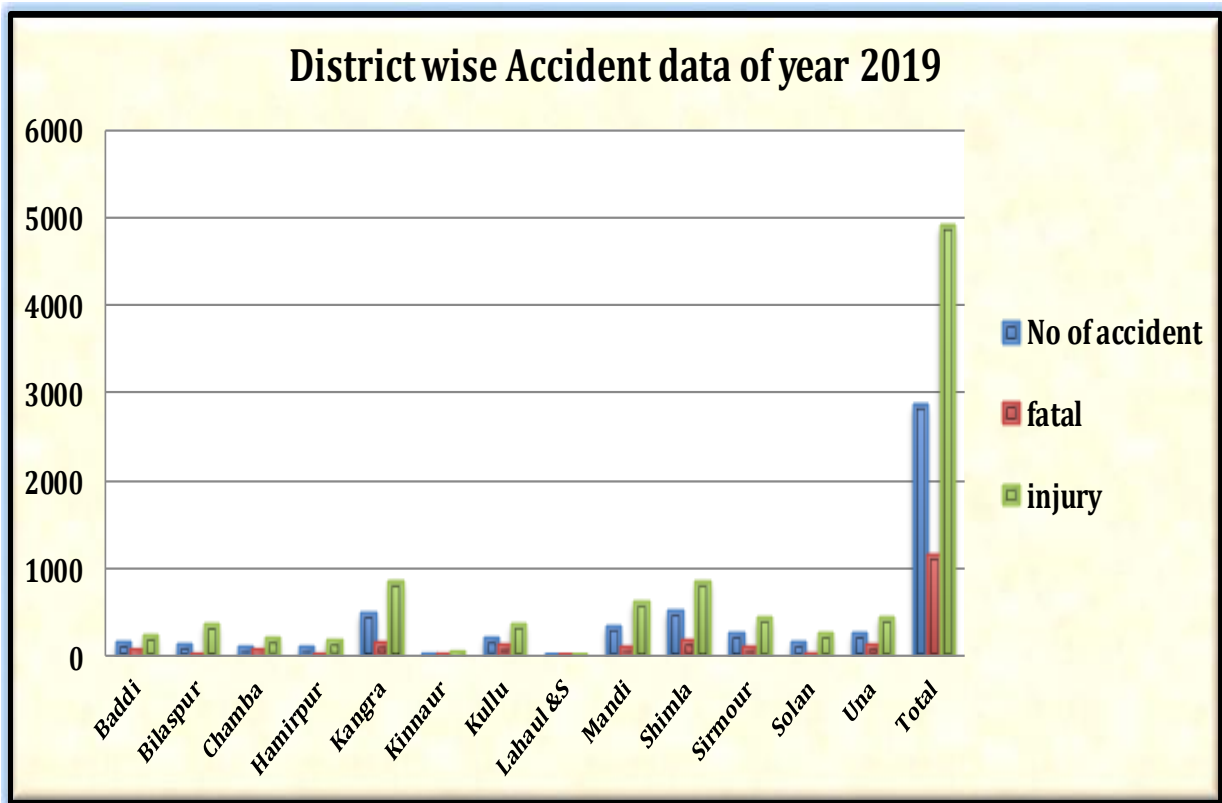
During the year 2018, 61.04% accidents took place in five districts i.e. district Kangra by 17.62%, Shimla by 16.81% ,Mandi by 9.67%, Una by 9.09% and Sirmaur by 8.48%. Most of the fatalities i.e. 66.28% also occurred in above five districts i.e. district Shimla by 20.69%, Kangra by 16.22%, Una by 11.75%, Sirmour by 8.85% and Mandi by 8.77%. Similarly, most of the injuries i.e. 64.56% injuries also took place in above districts namely district Shimla by 17.67%, Kangra by 16.57%, Mandi by 12.61%, Una by 9.00% and district Sirmour by 8.71% .

During the year 2019, highest number of accidents i.e. 66.22% accidents occurred in five districts i.e. district Shimla by 17.89% ,Kangra by 17.26%, Mandi by 12.25%, Sirmour by 9.53% and district Una by 9.29%.

Most of the fatalities i.e. 51.65% fatalities occurred in six district namely district Shimla by 16.23%, Kangra by 13.61%, Una by 12.12%, Kullu by 11.69, and Sirmour by 10.12%. Similarly, 65.24% road accident injuries also took place in five districts i.e. district Kangra by 17.45%, Mandi by 12.72%, Shimla by 17.27%, Sirmour by 8.87% and district Una by 8.93%.

Comparative analyses of road accident data for the year 2018-19 reveals that road traffic accidents have been decreased by 7.62%, fatalities by 5 % and injuries by 11.65 % during the year 2019 as compared to the accident data of 2018. During the year 2019, number of accidents increased only in two districts namely Kullu by 3% and Sirmour by 3.78%. Fatalities have been increased only in six districts namely district Kullu by 39.58%, Kinnaur by 12.5% and Chamba by 11.42% and Mandi by 2.83% and district Hamirpur by 2.77%. Number of injuries have increased only in two districts namely Baddi by 7% and district Kullu by 12.46%.





During the year 2019, District Shimla has witnessed highest number of accidents and fatalities while Kangra has highest number of injuries. During this period, there is considerable decrease in the number of accidents, fatality and Injury than the previous year i.e. year 2018.

ANALYSES OF CAUSES OF ROAD TRAFFIC ACCIDENT IN HIMACHAL PRADESH FOR THE PERIOD 2018-2019.

CAUSES OF ACCIDENTS (JAN TO DEC) 2018 & 2019				
1.	HUMAN ERROR	2018	HUMAN ERROR	2019
I	Changed lanes without care	47	Changed lanes without care	44
Ii	Dangerous driving	298	Dangerous driving	129
Iii	Dangerous overtaking	199	Dangerous overtaking	180
Iv	Driving against flow of traffic	37	Driving against flow of traffic	5
V	Non respect of rights of way rules	143	Non respect of rights of way rules	136
Vi	Speed	1,600	Speed	1806
Vii	Suspected drugs/alcohol	121	Suspected drugs/alcohol	75
Viii	Turning without care	525	Turning without care	363
	TOTAL	2970	TOTAL	2738
2.	OTHER FACTOR	2018	OTHER FACTOR	2019
i	Blind bend	48	Blind bend	46
ii	Slippery road surface	13	Slippery road surface	9
iii	Uneven road surface	18	Uneven road surface	13
iv	Adverse weather	2	Adverse weather	3
v	Suspected vehicle defect	28	Suspected vehicle defect	13
vi	Non-Provision of Parapets/crash barrier on outer curve	31	Non-Provision of Parapets/crash barrier on outer curve	51
	Total	140	total	135
	Grand total 1+2	3110	Grand total 1+2	2873

2018

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =95.49%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.50%

2019

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR=95.30%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.69%

The accident data pertaining to the causes of accidents during the year 2018-2019 shows that 95.49% accidents occurred during the year 2018 due to human errors and only 4.51% accidents attributed to other reasons i.e. Blind Bend, Slippery roads and other weather condition, Non-Provisions of Crash Barriers/Parapet on outer curves etc. Similarly, during the year 2019, 95.30% accidents took place due to human error and only 4.69% road traffic accidents occurred due to other reasons than human errors. During the year 2018, Dangerous Driving, Dangerous Overtaking, Non- respect of Right of Way rules, Speed, Suspected Drug/Alcohol and Turning without care are the main causes of road traffic accidents attributed to the fatalities and injuries. Only 4.50% and 4.69% accidents attributed to reason other than human error during the year 2018 & 2019 respectively.

During the year 2018, out of total 3110 road accidents highest number of road traffic accidents occurred due to Speed by 51.44%, Turning Without Care by 16.88%, Dangerous Driving by 9.58%, Dangerous overtaking by 6.39%, Non Respect of Right of Ways Rules by 4.59% and Suspected drug /Alcohol by 3.89%.

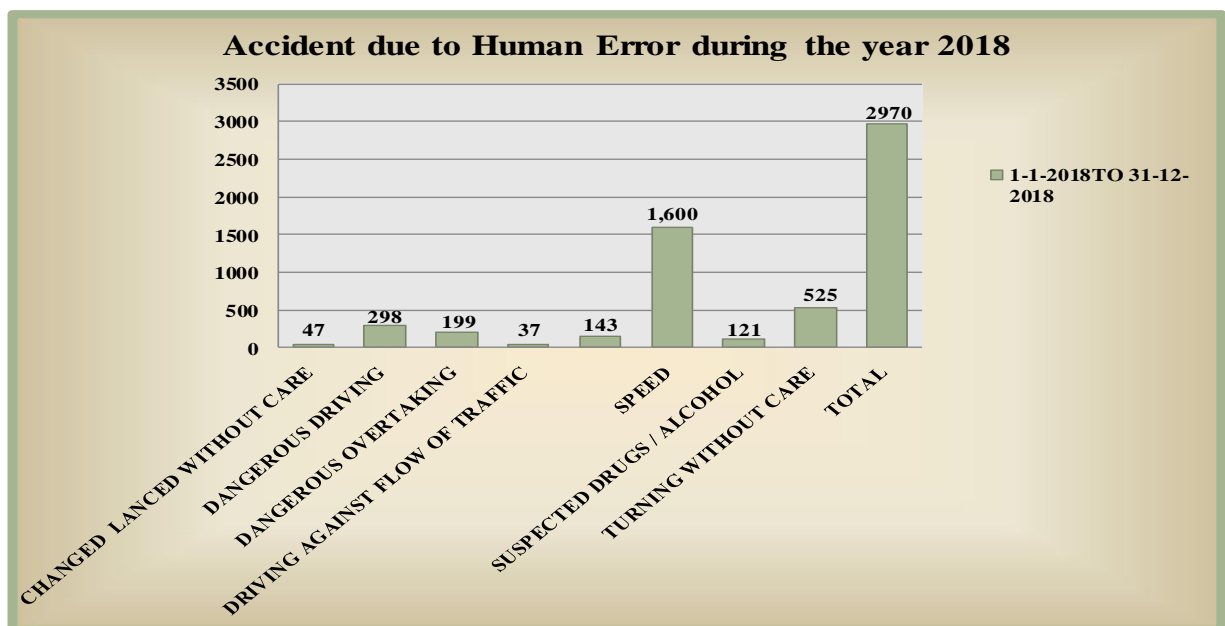
As far as the analyses of road accident data for the year 2019 is concerned, out of total 2873 accidents, 2738 road traffic accidents took place due to human errors. Most of the road accidents occurred due to Speed by 62.86%, turning without Care by 12.63%, Dangerous overtaking by 6.26%, Non- Respect of Way of Rules by 4.73% and dangerous driving by 4.49%.

As per the comparative data of year 2018 & 2019, number road traffic accidents have been increased only due to “Speed” by 12.85 % during the year 2019 as compared to year 2018. Decrease in number of accidents due to “Changed Lane

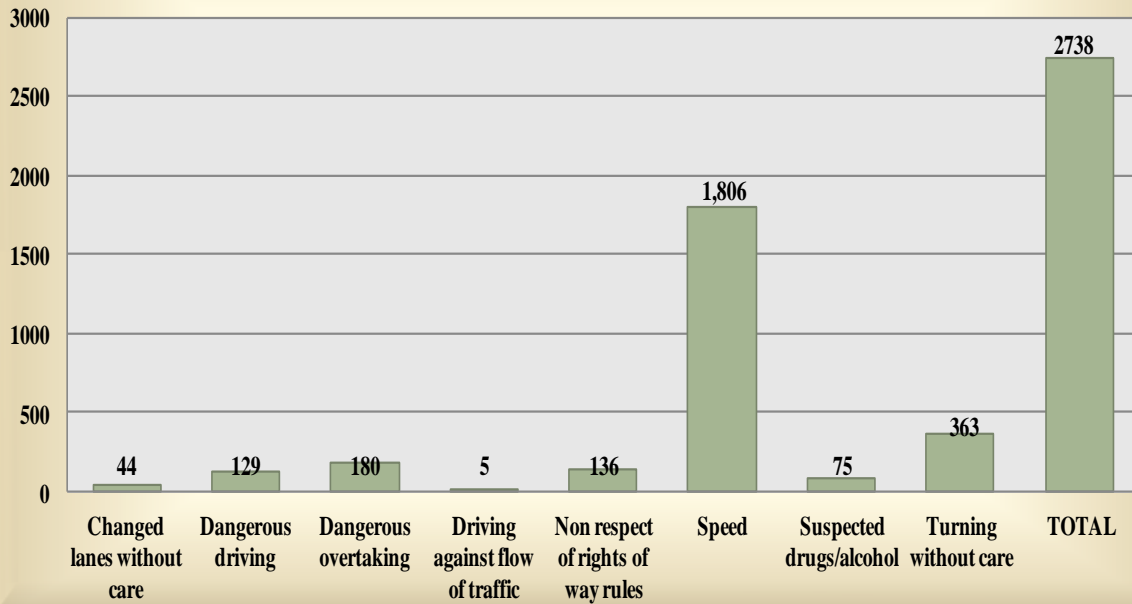
without care” has been witnessed by 6.38%, “Dangerous Driving” by 56.71%, “Dangerous Overtaking” by 9.45%, “Driving Against Flow of Traffic” by 86.48%, “Non -Respect of Right of Way Rules” by 4.89%, “Suspected Drug/ Alcohol” by 38.01% and “turning without care” by 30.85%.

As far as the other factor are concerned, road traffic accidents due to Other Factors increased during the year 2018 only by two reasons i.e. due to Blind Bend by 4.16% and Non Provision of Parapet/ Crash barrier on Outer Curve by 39.21%.

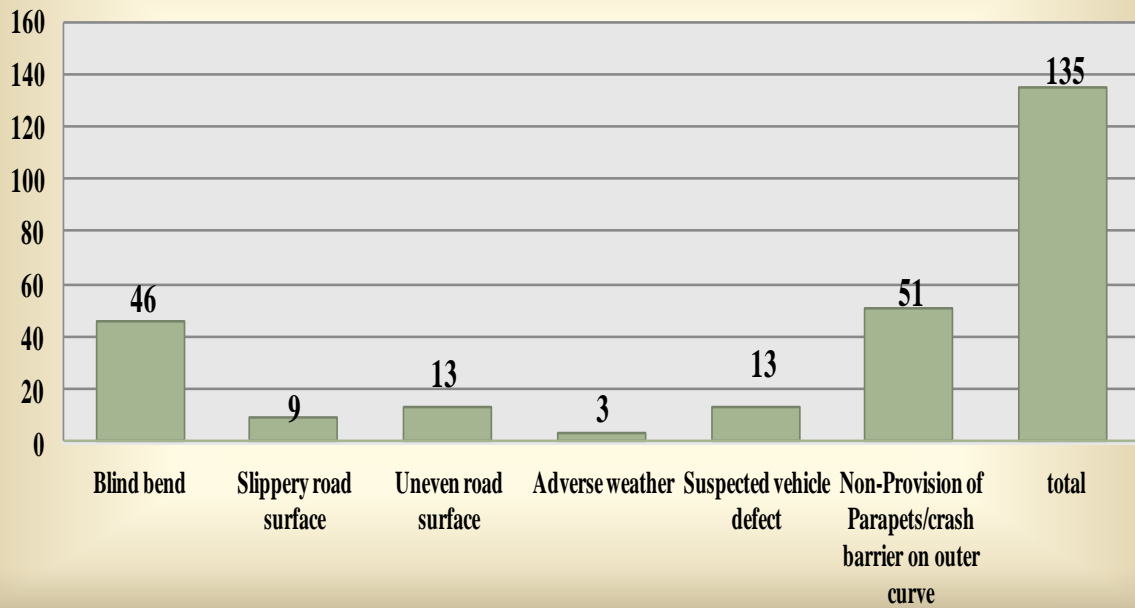
Thus, keeping in view the analyses of causes of road traffic accidents, there is need to focus on Over- Speed, Dangerous Driving, Dangerous Overtaking, Turning without care, Non-Respect of Ways of Rules and Suspected Drugs/Alcohol by way of awareness campaign under IEC component and strict enforcement of traffic rules/laws in order to reduce the frequency of road traffic accidents, fatalities and injuries in the State.



Accident due to Human Error during the year 2019



Accident due to other factor during the year 2019



COLLISION TYPE COMPARATIVE ROAD ACCIDENT DATA FOR THE YEAR 2018-2019

Year 2018				Year 2019			Percentage of comparative data for the year 2018-2019	
Sr. No.	Collision Type	Number of accident	Number of Vehicle	Collision Type	Number of accident	Number of Vehicle	% of accident	% of Vehicle
1	Fell down from vehicle	26	28	Fell down from vehicle	37	43	4.23%	53.57%
2.	Head on	636	1,302	Head on	640	1,304	0.62%	0.15%
3.	Hit animal	17	18	Hit animal	14	15	-17.64%	-16.66%
4.	Hit cyclist	28	30	Hit cyclist	16	16	-42.85%	-46.66%
5.	Hit in rear	165	353	Hit in rear	191	409	15.75%	15.86%
6.	Hit in side	396	801	Hit in side	295	588	-25.50%	-26.59%
7.	Hit object in road	31	42	Hit object in road	6	7	-80.64%	-83.33%
8.	Hit object off road	115	120	Hit object off road	80	84	-30.43%	-30%
9.	Hit parked vehicle	109	256	Hit parked vehicle	97	246	-11%	-3.90%
10.	Hit pedestrian	699	722	Hit pedestrian	672	692	-1%	-4.15%
11.	Hit steel barrier	2	3	Hit steel barrier	3	3	50%	0%
12.	Hit tree/light pole	49	52	Hit tree/light pole	34	35	-30.61%	-32.69%
13.	Other	2	3	Other	0	0	0%	0%
14.	Overtuned	155	163	Overtuned	129	139	-16.77%	-14.72%

15.	Ran off road	653	657	Ran off road	639	641	-2.14%	-2.43%
16.	Side Swipe	27	52	Side Swipe	20	39	-25.92%	-25%
	Total	3110	4602	Total	2873	4,261		

During the year 2018, however causes of accidents in the State due to dangerous driving has witnesses considerable decrease from 43.6% to 9.58% but number of accident increased due to speed from 28.86% to 51.44%, and Turing without Care from 7.99% to 16.88% .

During the year 2019, 67.9% accidents took place due to three type of collision i.e. Hit pedestrian, Ran off road and Head on collision i.e Hit Pedestrian by 22.47%, Ran off road by 20.99% and Head on collision by 20.45%. Fourth and fifth collision caused most of the accident remained Hit in side and Hit in rear by 10.26% and 6.64% respectively.

During the year 2019, 75.62% vehicles involved in four type of collision i.e. 30.60% in Head on collision, 16.24% in Hit pedestrian, 14.99% in vehicle Ran off road and 13.79% in Hit in side collision. 9.59% vehicles involved in accident caused by Hit in rear collision.

The comparative accident data for the period 2018-2019 shows that during the year 2018 main reason of above mentioned type of collision remained “Over Speed” and “Turning without Care” causing 75.49% accidents in the State i.e. 62.86% due to Speed and 12.63% due to Turning without Care.

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2018

Number of type of vehicles involved in accident during the year 2018							
Name of District	Motor Car	M/Cycle /Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	45	121	16	42	11	66	301
Bilaspur	79	76	10	78	25	36	304
Chamba	57	45	26	14	8	19	169
Hamirpur	62	88	4	19	11	31	215
Kangra	197	357	43	52	56	114	819
Kinnaur	28	5	11	2	3	3	52
Kullu	111	65	33	17	16	37	279
Lahaul &Spit	4	3	3	3	0	5	18
Mandi	198	159	54	38	31	77	557
Shimla	372	80	107	62	40	78	739
Sirmour	92	143	35	50	12	46	378
Solan	115	72	22	55	13	40	317
Una	110	181	20	50	23	70	454
Total	1470	1395	384	482	249	622	4602

Percentage of vehicle involved in accident during the year 2018 :

- (1) Motor Car = 31.94%**
- (2) M/Cycle/Scooter = 30.31%**
- (3) Jeep = 8.34%**
- (4) Truck=10.47%**
- (5) Bus= 5.41%**
- (6) Other vehicles= 13.51%**

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2019

Number of type of vehicles involved in accident during the year 2019							
Name of District	Motor Car	M/Cycle/ Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	41	104	17	50	8	48	268
Bilaspur	63	58	21	66	16	30	254
Chamba	53	35	22	11	5	16	142
Hamirpur	42	72	5	15	13	22	169
Kangra	185	315	38	41	58	114	751
Kinnaur	21	1	15	2	0	4	43
Kullu	79	70	31	16	17	69	282
Lahaul &S	3	1	2	2	0	2	10
Mandi	190	138	38	51	37	66	520
Shimla	374	71	121	74	40	55	735
Sirmour	93	171	25	31	11	60	391
Solan	110	56	24	37	12	19	258
Una	94	171	27	32	24	90	438
Total	1348	1263	386	428	241	595	4261

Percentage of vehicle involved in accident during the year 2019:

- (1) Motor Car = 31.63%**
- (2) M/Cycle/Scooter = 29.64%**
- (3) Jeep = 9.05%**
- (4) Truck=10.04%**
- (5) Bus= 5.65%**
- (6) Other vehicles= 13.96%**

**COMPARATIVE DATA OF NUMBER OF VEHICLES
INVOLVED IN ACCIDENT DURING THE YEAR 2018 & 2019.**

Sr. No.	Year 2018	Year 2019	Percentage
1.	Motor Car = 31.94%	Motor Car = 31.63	-0.31%
2.	M/Cycle/Scooter = 30.31%	M/Cycle/Scooter = 29.64%	-0.67%
3.	Jeep = 8.34%	Jeep = 9.05%	0.71%
4.	Truck=10.47%	Truck=10.04%	-0.43%
5.	Bus= 5.41%	Bus= 5.65%	0.24%
6.	Other vehicles= 13.51%	Other vehicles= 13.96%	0.45%

DISTRICT WISE COMPARATIVE ROAD ACCIDENT DATA FOR THE YEAR 2019-2020

District wise accident data for the year 2019				District wise accident data for the year 2020			Percentage wise comparative data for year 2019-20		
District	No of Accident	Fatal	Injury	No of Accident	Fatal	Injury	No of Accident	Fatal	Injury
Baddi	170	75	238	149	84	165	-12%	12%	-30.67%
Bilaspur	150	35	363	122	30	156	-18.66%	-14.28%	-57%
Chamba	115	78	207	98	74	181	-14.78%	-5.12%	-12.56%
Hamirpur	114	35	185	112	37	132	-1.75%	5.40%	-28.64%
Kangra	496	156	856	361	125	458	-27.21%	-19.87%	-46.49%
Kinnaur	39	36	58	31	34	37	-20.51%	-5.55%	-36.20%
Kullu	207	134	379	163	53	217	-21.25%	-60.44%	-42.74%
Lahaul &Spiti	9	4	13	17	9	34	88.88%	12.5%	161.53%
Mandi	352	109	624	279	102	401	-20.73%	-6.42%	-35.73%
Shimla	514	186	847	402	157	616	-21.78%	-15.59%	-27.27%
Sirmour	274	116	435	202	78	339	-26.27%	-32.75%	-28.65%
Solan	167	43	261	119	37	230	-28.74%	-13.95%	-11.87%
Una	266	139	438	184	72	258	-30.82%	-24.45%	-41.09%
Total	2,873	1,146	4904	2,239	892	3224	-22.06%	-22.16%	-34.25%

During the year 2019, highest number of accidents i.e. 66.22% accidents occurred in five districts i.e. district Shimla by 17.89%, Kangra by 17.26%, Mandi by 12.25%, Sirmaur by 9.53% and district Una by 9.29%.

Most of the fatalities i.e. 51.65% fatalities occurred in six district namely district Shimla by 16.23%, Kangra by 13.61%, Una by 12.12%, Kullu by 11.69, and Sirmaur by 10.12% Similarly, 65.24% road accident injuries also took place in five districts i.e. district Kangra by 17.45%, district Mandi by 12.72%, district Shimla by 17.27%, district Sirmour by 8.87% and district Una by 8.93%.

During the year 2020, more than half number of road traffic accidents i.e. 55.64% accidents took place 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%.

The comparative analyses of road accident data for the year 2019-2020 shows that considerable decrease in number of accidents, fatalities and injuries has been witnessed during the year 2020 than the year 2019. During 2020, accidents have been decreased by 22.06%, fatalities by 22.16% and injuries by 34.25%. During the year 2020, numbers of accidents have been increased only in one district i.e. District Lahaul & Spiti by 89%. But as far as the number of accidents is concerned, it is only 0.75% of the total accidents occurred in the State during the

year 2020. The number of accidents jumped from 09 to 17 during 2020 which is due to the heavy flow of vehicles due to the opening of “Atal Tunnel” which flooded the Lahul and Spiti with tourist from all over the country and world. People, especially tourists, use to drive vehicle in excessive speed inside the tunnel and after crossing it leading to rise in the number of accidents and fatalities.

Similarly, number of fatalities have been increased only in two districts namely Police district Baddi by 12% and District Lahaul and Spiti by 125%. However the numbers of fatalities is 9.41% and 1% respectively of the total fatalities.

As far as the number of road accident injuries is concerned, it has been increased only in one district i.e. district Lahaul and Spiti by 162% during the year 2020 but the number of injuries is only 1.05%.

The accident data relating to the causes of accidents during the year 2019-2020 fetched from RADMS reveals that during the year 2019 95.30% road traffic accidents took place due to human errors and only 4.69% happened due to other reason than human errors. During the year 2020, number of accidents due to human errors increased to 96.60% and due to other than human errors it was only 3.39%.

During the year 2019, Dangerous driving, Dangerous overtaking, No respect of right of way rules, Speed, Turning without care and suspected drug/alcohol were the main causes of accidents in the State. Out of 2873 road accidents, 2738 accidents happened due to human error and Speed remained the main cause

which attributed to 62.86% accidents leading to fatalities and severe injuries. Turning without care caused 12.63%, Dangerous driving by 6.26%, Non respect of ways rule by 4.73% and dangerous driving by 4.49% while by Suspected Drugs/alcohol it was 2.61%.

During the year 2020, Changed lane without care, Dangerous Driving, Dangerous overtaking, Speed, Suspected Drug/alcohol and Turning without care were the main causes of road traffic accidents in the State. Out of 2239 accidents, 2163 accidents occurred due to human errors and 76 accidents attributed to the other reasons.

The comparative data of causes of accidents between the year 2019 - 2020 shows that the year 2020 has witnessed increased in accidents due to Change lane without care by 131%, Dangerous driving by 85.27%, and Suspected drugs/alcohol by 1.33%. However, State has witnessed sharp decrease in main cause of accident in the State i.e. Speed by 22.48%, Dangerous driving by 35%, Non respect of right of way rules by 54.41% and turning without care by 55.64%. As far as the factor other than human error is concerned, increase in number of accidents have been witnessed only due to Slippery road surface by 89 % during the year 2020 than the year 2019 but the number of accidents due to this factor is 0.75 % only. However considerable decrease in road traffic accidents due to Blind Bend has been seen by 60.86%, uneven road surface by 53.84%, adverse weather by 100%, suspected vehicle defect by 69.23% and Non- provision of Parapet/Crash barriers on outer curve by 38.46%.

Though, considerable decrease in number of road traffic accidents, fatalities and injuries has been witnessed during the year 2020 but the same could be attributed to the imposition of complete Lockdown w.e.f. 23.03.2020 to 14.07.2020 and also some other restrictions thereafter in the State of Himachal Pradesh.

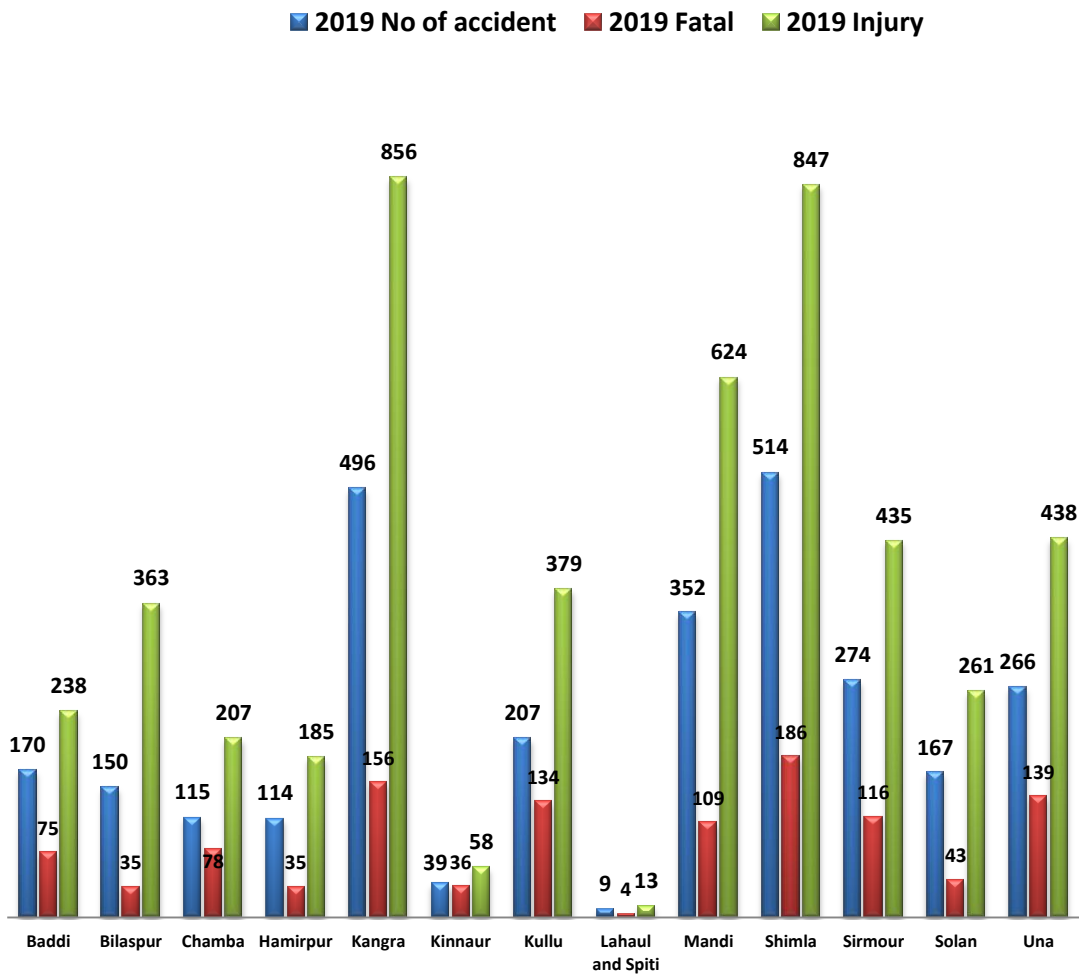
However, on the analyses of causes of accidents during the Lockdown period and its corresponding period of year 2019, it has been came on fore that 61.53% accidents took place due to Speed during the year 2019 whereas it was 65.70% during the year 2020. The above analyses shows that vehicles permitted to ply during the Lockdown period in the State and some private vehicles in contravention of the terms and condition imposed during this period used to drive in excessive speed as the roads were empty at that time.

Therefore, in order to curve this menace of overspending resulting in loss of precious human lives and injuries leading to temporary and permanent disability, social and financial suffering to accident victims and their family members, strict enforcement of traffic law/rules besides intensive awareness campaign is the need of the hour.

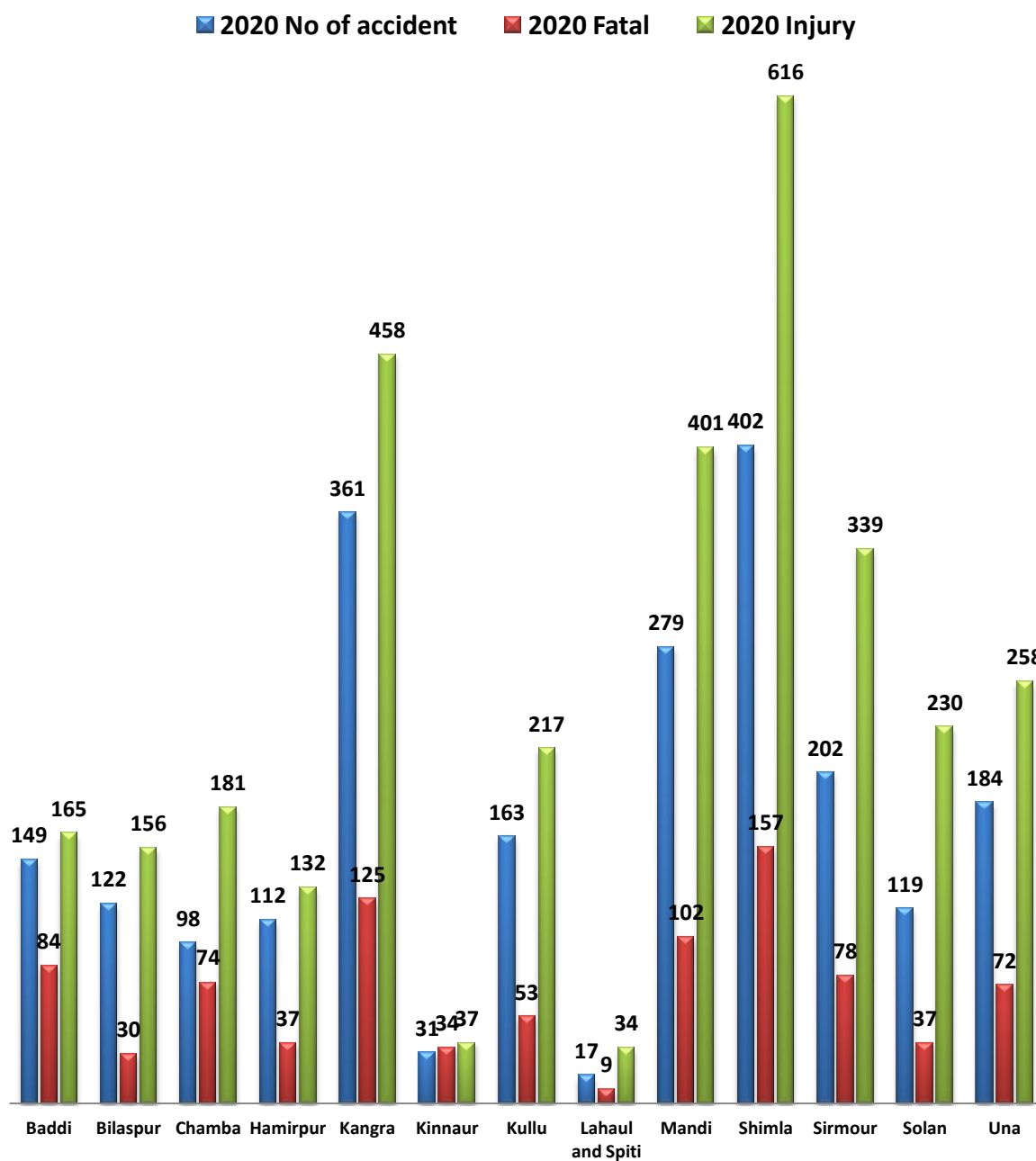
However, in country like India, where people will abide by traffic laws and rules only due to the fear of Traffic Challans and not for the safety of themselves and others, it will take a long period to make the people to adhered to such laws/rules and become responsible citizens. Therefore, each and every efforts are required to be put forth by all the stakeholder departments in association with private agencies/NGOs, Local Bodies, School/Colleges/ other

educational institutions and people from every walk of life so that road safety may be developed s a “Culture” among the society.

District wise Accident data for the year 2019



District wise Road Accident data of the year 2020



CAUSES OF ACCIDENTS (JAN TO DEC) 2019 & 2020

1.	HUMAN ERROR	2019	HUMAN ERROR	2020
I	Changed lanes without care	44	Changed lanes without care	102
Ii	Dangerous driving	129	Dangerous driving	239
Iii	Dangerous overtaking	180	Dangerous overtaking	117
Iv	Driving against flow of traffic	5	Driving against flow of traffic	6
V	Non respect of rights of way rules	136	Non respect of rights of way rules	62
Vi	Speed	1806	Speed	1400
Vii	Suspected drugs/alcohol	75	Suspected drugs/alcohol	76
viii	Turning without care	363	Turning without care	161
	TOTAL	2738	TOTAL	2163
2.	OTHER FACTOR	2019	OTHER FACTOR	
I	Blind bend	46	Blind bend	18
Ii	Slippery road surface	9	Slippery road surface	17
iii	Uneven road surface	13	Uneven road surface	6
Iv	Adverse weather	3	Adverse weather	0
v	Suspected vehicle defect	13	Suspected vehicle defect	4
Vi	Non-Provision of Parapets/crash barrier on outer curve	51	Non-Provision of Parapets/crash barrier on outer curve	31
	total	135	total	76
	Grand total 1+2	2873	Grand total 1+2	2239

2019

PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR =95.30%

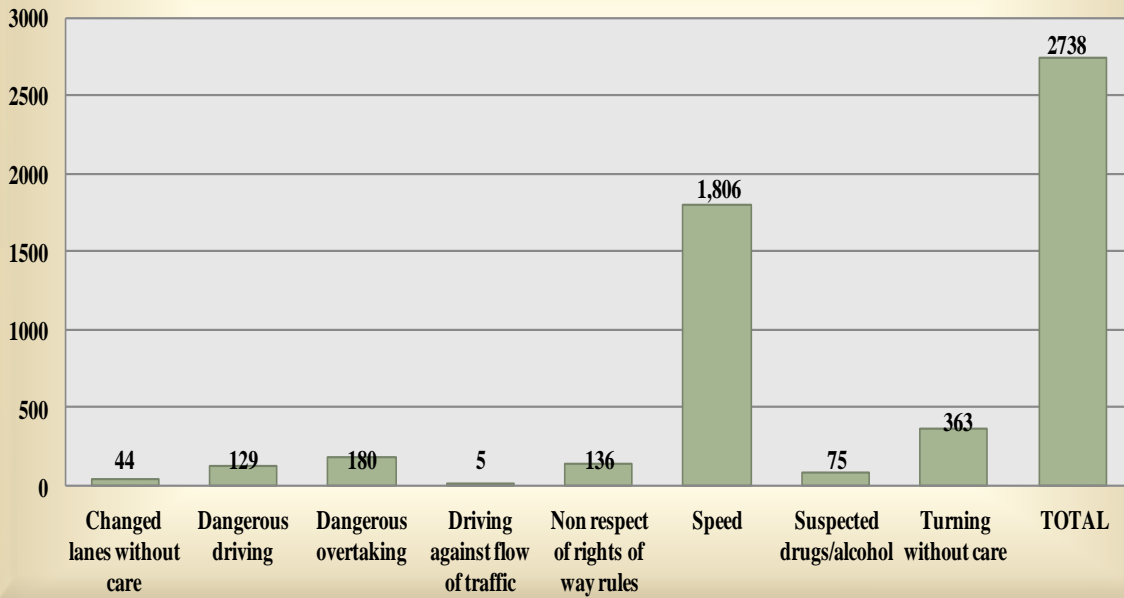
PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =4.69%

2020

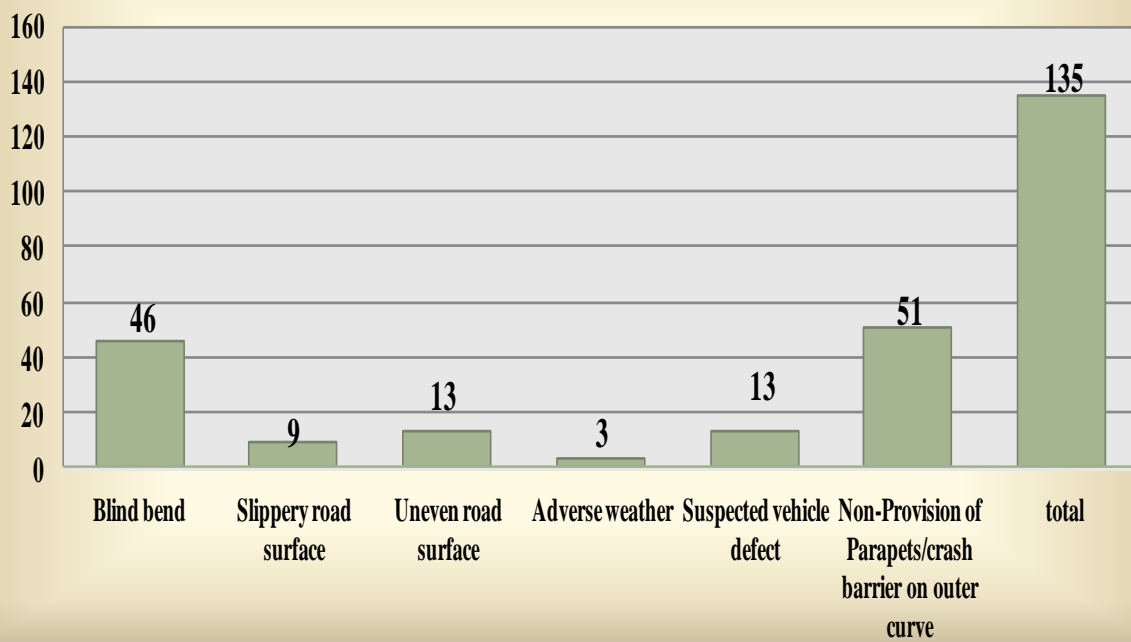
PERCENTAGE OF ACCIDENT DUE TO HUMAN ERROR=96.60%

PERCENTAGE OF ACCIDENT DUE TO OTHER FACTOR =3.39%

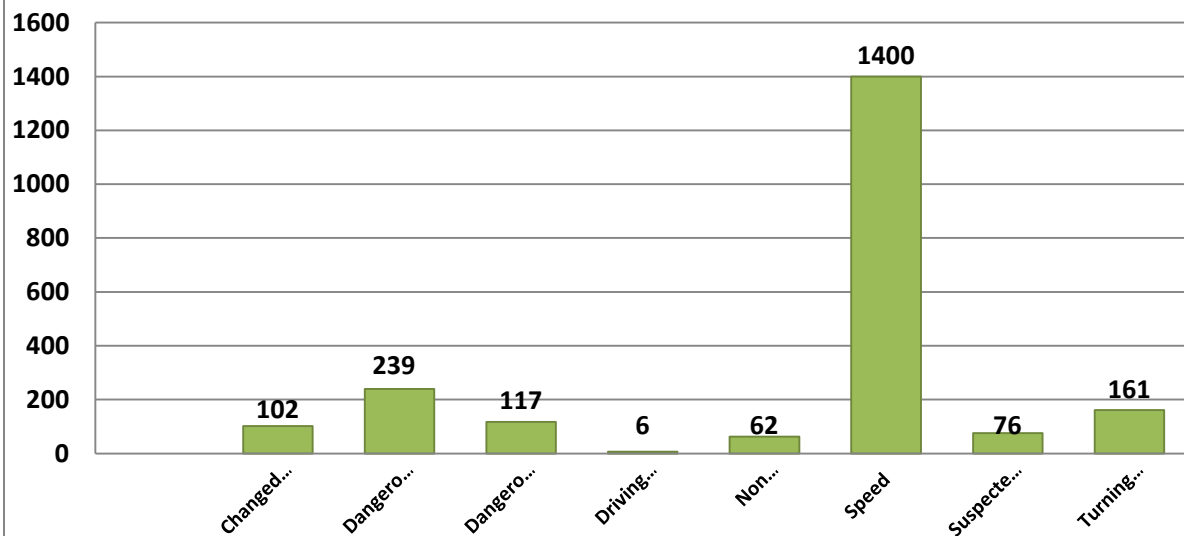
Accident due to Human Error during the year 2019



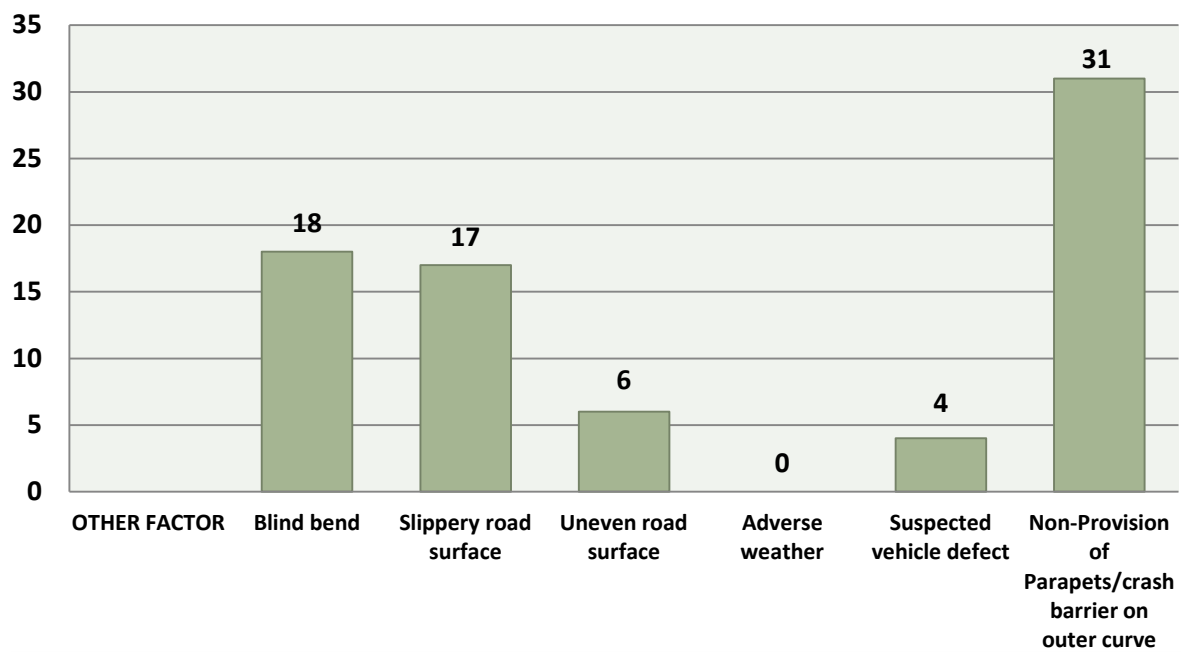
Accident due to other factor during the year 2019



Accident due to Human Error during the year 2020



Accident due to Other Factor during the year 2020



The comparative data of causes of accidents between the year 2019 - 2020 shows that the year 2020 has witnessed increased in accidents due to Change lane without care by 131%, Dangerous driving by 85.27%, and Suspected drugs/alcohol by 1.33%. However, State has witnessed sharp decrease in main cause of accident in the State i.e. Speed by 22.48%, Dangerous driving by 35%, Non respect of right of way rules by 54.41% and turning without care by 55.64%.

As far as the factor other than human error is concerned, increase in number of accidents have been witnessed only due to Slippery road surface by 89 % during the year 2020 than the year 2019 but the number of accidents due to this factor is 0.75 % only. However considerable decrease in road traffic accidents due to Blind Bend has been seen by 60.86%, uneven road surface by 53.84%, adverse weather by 100%, suspected vehicle defect by 69.23% and Non- provision of Parapet/Crash barriers on outer curve by 38.46%.

Though, considerable decrease in number of road traffic accidents, fatalities and injuries has been witnessed during the year 2020 but the same could be attributed to the imposition of complete Lockdown w.e.f. 23.03.2020 to 14.07.2020 and also some other restrictions thereafter in the State of Himachal Pradesh.

However, on the analyses of causes of accidents during the Lockdown period and its corresponding period of year 2019, it has been came on fore that 61.53% accidents took place due to Speed during the year 2019 whereas it was 65.70% during the year 2020. The above analyses shows that vehicles permitted to ply during the Lockdown period in the State and some private vehicles in

contravention of the terms and condition imposed during this period used to drive in excessive speed as the roads were empty at that time.

Therefore, in order to curb this menace of overspending resulting in loss of precious human lives and injuries leading to temporary and permanent disability, social and financial suffering to accident victims and their family members, strict enforcement of traffic law/rules besides intensive awareness campaign is the need of the hour.

However, in country like India, where people will abide by traffic laws and rules only due to the fear of Traffic Challans and not for the safety of themselves and others, it will take a long period to make the people to adhere to such laws/rules and become responsible citizens. Therefore, each and every effort are required to be put forth by all the stakeholder departments in association with private agencies/NGOs, Local Bodies, School/Colleges/ other educational institutions and people from every walk of life so that road safety may be developed as a “Culture” among the society.

COLLISION TYPE COMPARATIVE ROAD ACCIDENT DATA **FOR THE YEAR 2019-2020**

Year 2019				Year 2020			Percentage of comparative data for the year 2019-2020	
Sr. No.	Collision Type	Number of accident	Number of Vehicle	Collision Type	Number of accident	Number of Vehicle	% of accident	% of Vehicle
1	Fell down from vehicle	37	43	Fell down from vehicle	19	19	-48.64%	-55.81%
2.	Head on	640	1,304	Head on	520	1,059	-18.75%	-18.78%
3.	Hit animal	14	15	Hit animal	8	8	-42.85%	-46.66%
4.	Hit cyclist	16	16	Hit cyclist	12	12	-25%	-25%
5.	Hit in rear	191	409	Hit in rear	154	317	-19.37%	-22.49%
6.	Hit in side	295	588	Hit in side	251	512	-14.91%	-12.92%
7.	Hit object in road	6	7	Hit object in road	12	13	100%	85.71%
8.	Hit object off road	80	84	Hit object off road	60	61	-25%	-27.38%
9.	Hit parked vehicle	97	246	Hit parked vehicle	68	156	-29.89%	-36.58%
10.	Hit pedestrian	672	692	Hit pedestrian	465	492	-30.80%	-28.90%
11.	Hit steel barrier	3	3	Hit steel barrier	3	3	0%	0%

12.	Hit tree/light pole	34	35	Hit tree/light pole	19	19	-44.11%	-45.71%
14.	Overturnd	129	139	Overturnd	103	110	-20.15%	-20.86%
15.	Ran off road	639	641	Ran off road	537	540	-15.96%	-15.75%
16.	Side Swipe	20	39	Side Swipe	8	14	-60%	-64.10%
	Total	2873	4,261	Total	2239	3335		

During the year 2019, number of accidents in the State due to “Speed” have been increased from 51.44% to 62.86% but number of accident reduced due to “Turing Without Care” from 16.88% to 12.63% and due to “Dangerous Driving” from 9.58% to 6.26% .

During the year 2020, 67.96% accidents took place due to three type of collision i.e. Ran off road, Head on collision and Hit pedestrian i.e Ran off road by 23.98%, Head on collision by 23.22% and Hit Pedestrian by 20.76%. Fourth and fifth collision caused most of the accident remained Hit in side and Hit in rear by 11.21% and 6.87% respectively.

During the year 2020, 78.01% vehicles involved in four type of collision i.e. 31.75% in Head on collision, 16.19% in Ran off road, 15.32% in Hit in Side and 14.75% in Hit pedestrian. 9.50% vehicles involved in accident caused by Hit in rear collision.

The comparative accident data for the period 2019-2020 shows that during the year 2019 main reason for above mentioned type of collision remained “Over Speed” and “Turning without Care” causing 75.49% accidents in the State i.e. 62.86% due to Speed and 12.63% due to Turning without Care.

During the year 2020 main reasons of collision remained “Over Speed” and “Dangerous Driving” causing 73.19% accident i.e. 62.62% by Speed and 10.67% by Dangerous Driving.

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2019

Number of type of vehicles involved in accident during the year 2019							
Name of District	Motor Car	M/Cycle /Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	41	104	17	50	8	48	268
Bilaspur	63	58	21	66	16	30	254
Chamba	53	35	22	11	5	16	142
Hamirpur	42	72	5	15	13	22	169
Kangra	185	315	38	41	58	114	751
Kinnaur	21	1	15	2	0	4	43
Kullu	79	70	31	16	17	69	282
Lahaul &Spiti	3	1	2	2	0	2	10
Mandi	190	138	38	51	37	66	520
Shimla	374	71	121	74	40	55	735
Sirmour	93	171	25	31	11	60	391
Solan	110	56	24	37	12	19	258
Una	94	171	27	32	24	90	438
Total	1348	1263	386	428	241	595	4261

Percentage of vehicle involved in accident during the year 2019:

- (1) Motor Car = 31.63%
- (2) M/Cycle/Scooter = 29.64%
- (3) Jeep = 9.05%
- (4) Truck=10.04%
- (5) Bus= 5.65%
- (6) Other vehicles= 13.96%

VEHICLE TYPE WISE ROAD ACCIDENT DATA FOR THE YEAR 2020

Number of type of vehicles involved in accident during the year 2020							
Name of District	Motor Car	M/Cycle/ Scooter	Jeep	Truck	Bus	Other vehicle	Total
Baddi	28	108	13	52	7	38	246
Bilaspur	61	57	13	49	5	17	202
Chamba	47	28	22	16	2	16	131
Hamirpur	56	55	7	15	4	24	161
Kangra	152	241	25	52	17	79	566
Kinnaur	16	2	12	2	0	3	35
Kullu	96	59	15	15	6	28	219
Lahaul &Spiti	4	0	5	9	0	2	20
Mandi	157	109	34	51	12	48	411
Shimla	298	55	73	60	16	52	554
Sirmour	72	130	24	35	9	29	299
Solan	66	38	14	30	11	15	174
Una	64	141	15	42	6	49	317
Total	1117	1023	272	428	95	400	3335

Percentage of vehicle involved in accident during the year 2020 :

- (1) Motor Car = 33.49%**
- (2) M/Cycle/Scooter = 30.67%**
- (3) Jeep = 8.15%**
- (4) Truck=12.85%**
- (5) Bus= 2.84%**
- (6) Other vehicles= 11.99%**

**COMPARATIVE DATA OF NUMBER OF VEHICLES
INVOLVED IN ACCIDENT DURING THE YEAR 2018 & 2019**

Sr. No.	Year 2019	Year 2020	Percentage
1.	Motor Car = 31.63%	Motor Car =33.49%	1.86%
2.	M/Cycle/Scooter = 29.64%	M/Cycle/Scooter = 30.67%	1.03%
3.	Jeep = 9.05%	Jeep = 8.15%	-0.9%
4.	Truck=10.04%	Truck=12.85%	2.81%
5.	Bus= 5.65%	Bus= 2.84%	-2.81%
6.	Other vehicles= 13.96%	Other vehicles=11.99%	-1.97%

**ROAD CATEGORY WISE DATA FOR THE PERIOD FROM
THE CALENDAR YEAR 2016 TO 2020**

Road Category wise accident data for the year 2016 to 2020					
Road Category	2016	2017	2018	2019	2020
Border road	0	3	0	7	7
City Road	112	135	140	58	27
Link Road	846	855	887	806	644
NH	1,575	1,484	1,456	1395	1016
SH	635	637	627	578	419
Village road	0	0	0	17	41
MDR	0	0	0	12	55
NHAI	0	0	0	0	30
Total	3168	3114	3110	2873	2239

On the analyses of the road category wise data for the period from the year 2016 to 2020, it has been transpired that during the year 2016, 3.53% accidents occurred on City Road, 26.70% on Link Road, 49.71 on NH, and 20.04% on the State Highways

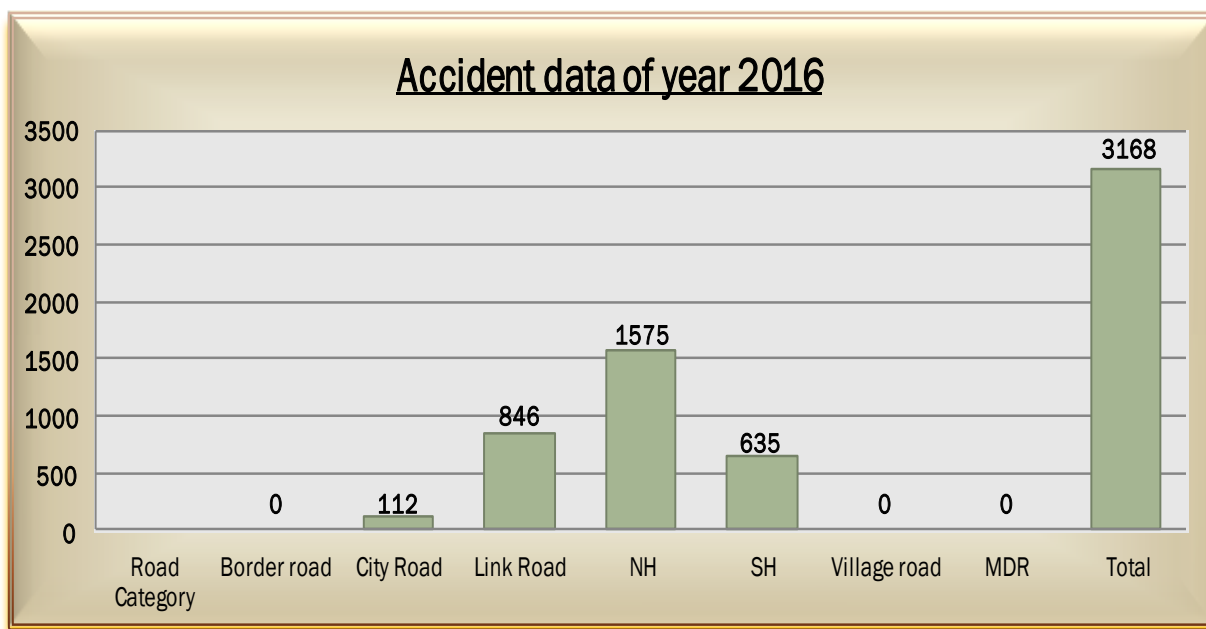
During the year 2017, only 3 accidents i.e. 0.09% accident took place on Border Road, 4.33% on City Roads, 27.45% on Link Roads, 47.65% on NH and 20.45% on State Highways/MDRs.

During 2018, 4.50% accidents occurred on City Roads, 28.52% on Link Roads, 46.81% on NH and 20.16% on State Highways/MDRs. As far as the road accidents during the year 2019 are concerned, out of 2873 accidents only 7 accident took place on Border Roads i.e. 0.24% of the total accidents, 2.01% on City Roads, 28.05% on Link Road, 48.55% on NH, 20.11% on State Highways, 0.59% on Village Road and 0.41% on MDR.

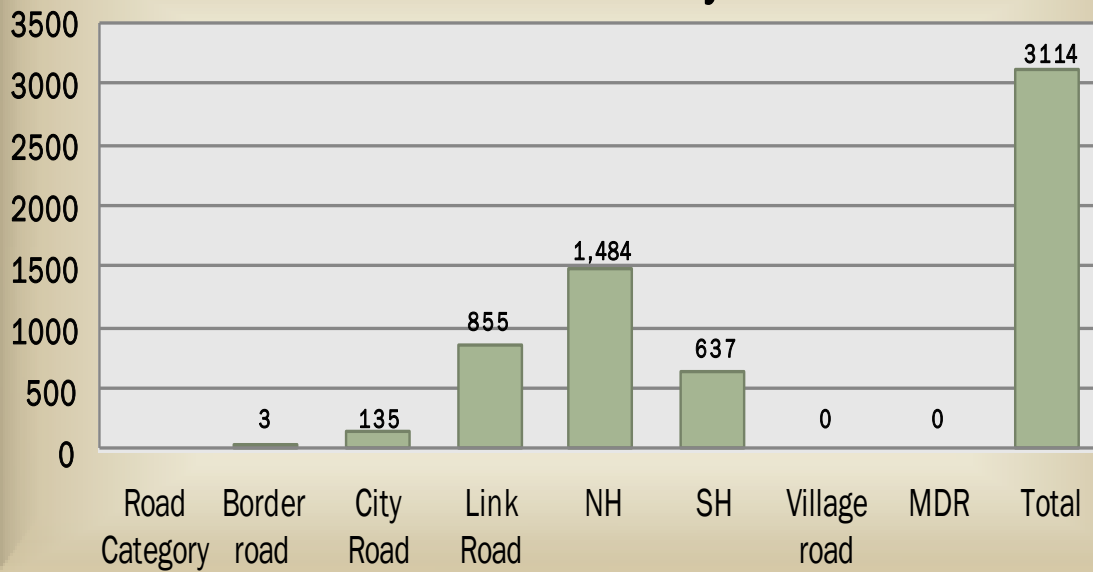
On City Roads, accidents have been increased from 2016 to 2018 but decreased during the year 2019 to 2.01% and as compared to the previous year 2018 which was 4.50% .similarly; numbers of accidents have been decreased on Link road during the year 2019 from 28.52% to 28.05% over the year 2018. However, the numbers of accidents on National Highways, which are highest in numbers, have been decreased constantly from the year 2016 to 2019 year by year.

The Road Category wise accident data for the period from year 2016 to 2020 provides that National Highway is the main type of Road Category on which

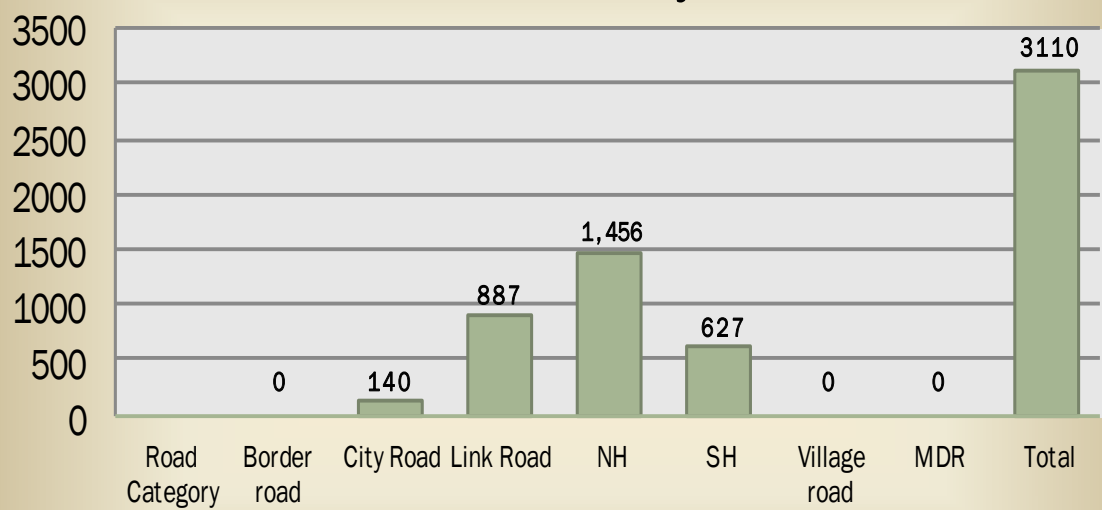
most of the accidents took place due to over speeding followed by Link Road, State Highways and City Road respectively. However, the numbers of accidents being occurred on National Highway have been decreased year by year i.e. from 1575 to 1016 in comparison to the figure of year 2016 to the year 2020. Since highest number of road traffic accidents on the National Highways occurred due to “Over Speeding,” as the roads are in good condition, metalled and smooth for driving, effective highway patrolling and use of enforcement equipment such as “Automatic Speed Radar”, “Speed Guns” and “Interceptor vehicles” besides provision of parapet and Crash Barriers proper traffic sinages and road marking and intensive awareness campaign through IEC activities is required to make the road user abide by traffic laws and rules.



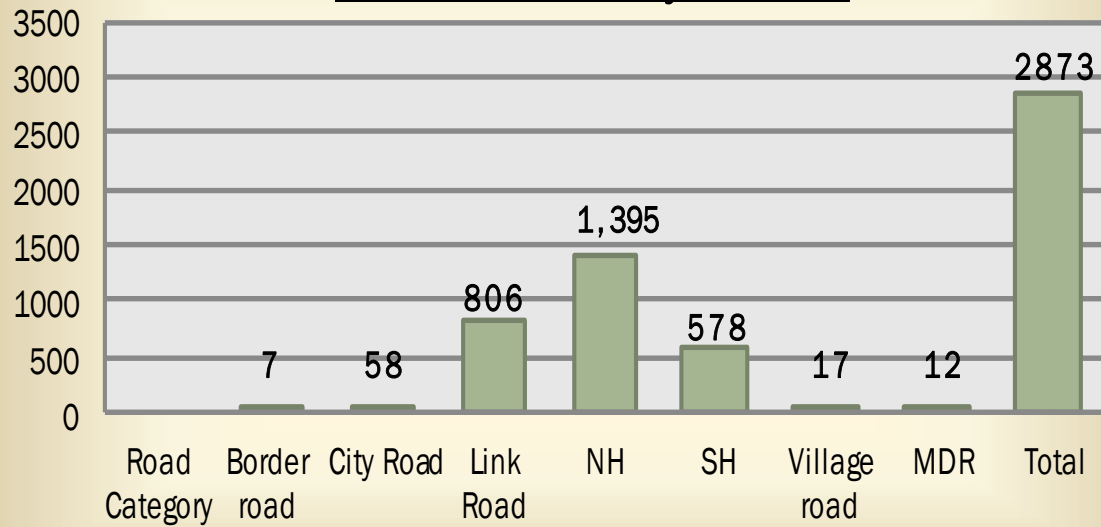
Accident data of year 2017



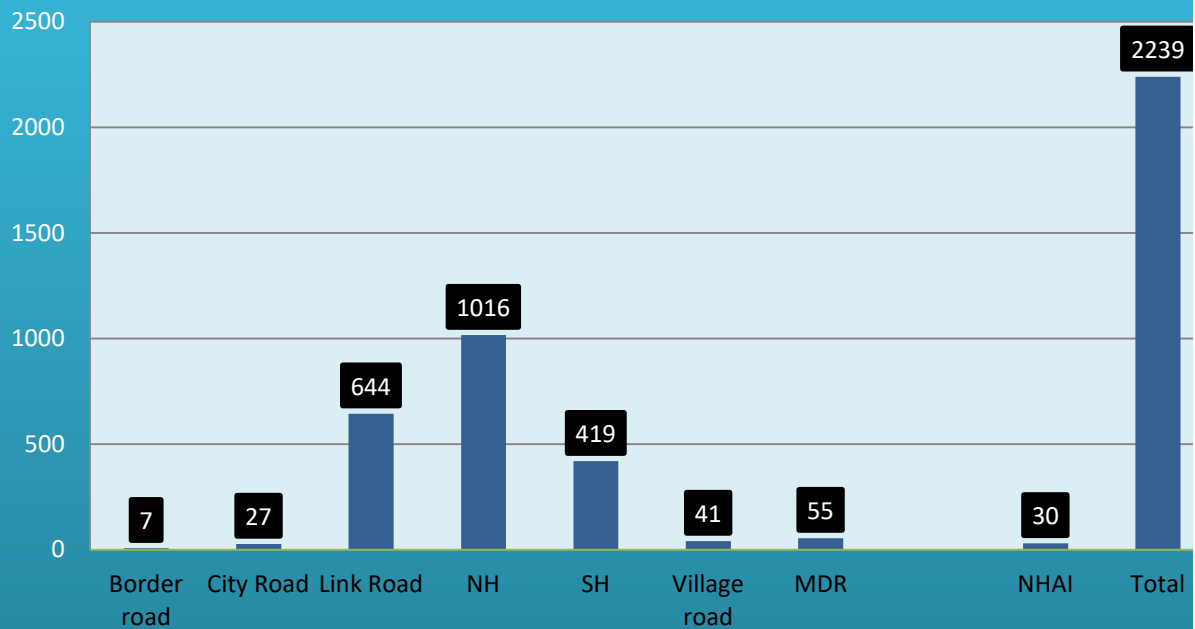
Accident data of year 2018



Accident data of year 2019



Road Category wise Accident data 2020



ACCIDENT CCURRED ON NATIONAL HIGHWAY AND STATE HIGHWAY AND NUMBER OF FATAL & INJURED PERSON DURING 1-08-2015 TO 2020						
National Highway				State Highway		
Year	Road Accident	Fatal person	Injured person	Road Accident	Fatal Accident	Injured person
1-08-2015 to 31-12-2015	657	226	1081	267	94	406
2016	1575	546	2575	635	265	1171
2017	1484	540	2665	637	215	1001
2018	1456	473	2559	627	236	1105
2019	1395	486	2328	578	220	933
2020	1016	305	1558	419	161	527

During the period from 01-August 2015 to 2020, the numbers of accidents, fatalities and injuries have been decreased on National Highway and State Highways than the previous years except some increase in number of accidents, fatalities and injuries during the year 2017 & 2018 as shown in the above table.

During the period from year 2016 to 2020, road traffic accidents on National Highways have been decreased constantly by 5.74% during the year 2017 over the year 2016, 1.88 in the year 2018 over the year 2017 and 4.18% during the year 2019 over the year 2018 and 27.16% during the year 2020 than the year 2019.

However, rate of fatalities has been decreased during the year 2017 by 1.09%, during the year 2018 by 12.40% over the year 2017 but increased by 2.74% during the year 2018 as compared to the year 2019. During the year 2020 fatality rate has been decreased by 37.24% than the year 2019.

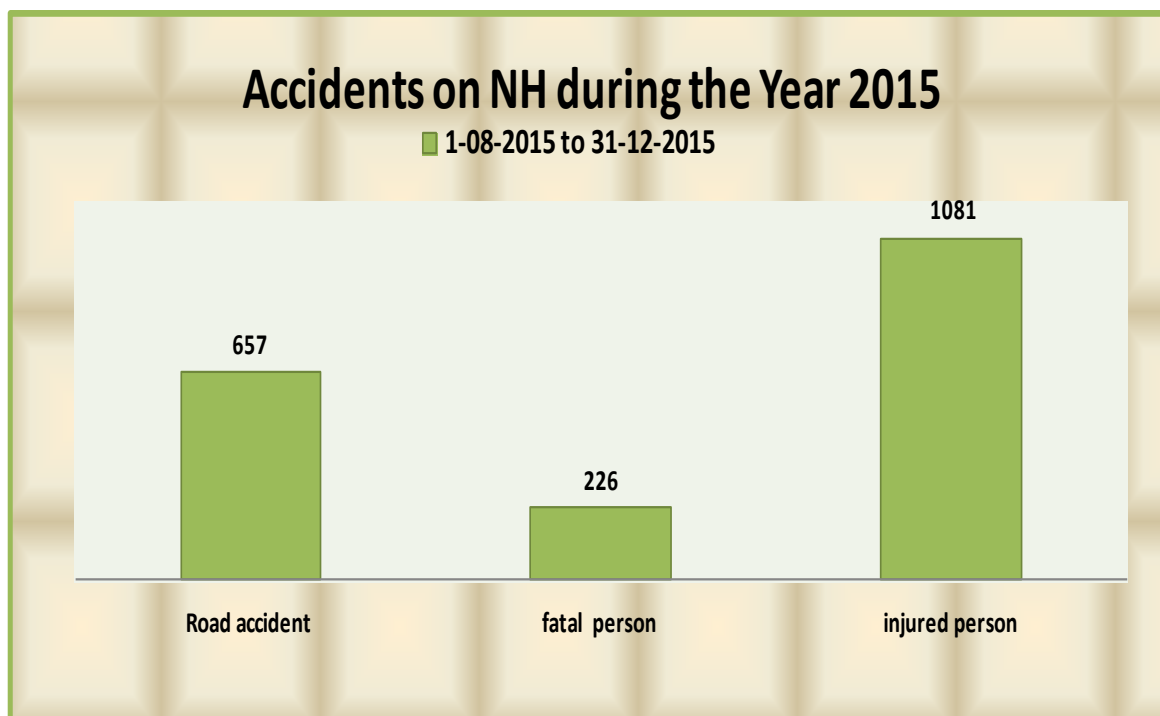
As far as the injuries on National Highways are concerned, during the year 2017 it has witnessed an increase by 3.49% than the year 2016 but subsequently decreased by 3.97% during the year 2018 than the year 2017, by 9.02% during the year 2019 over the year 2018 and 33.07% during 2020 than the year 2019.

On the State Highways, number of accidents have been increased slightly by 02 accidents i.e 0.31% during 2017 over the year 2016 but subsequently decreased by 1.56% in the year 2018, 7.81% during the year 2019 and 27.50% during the year 2020 than the year 2019.

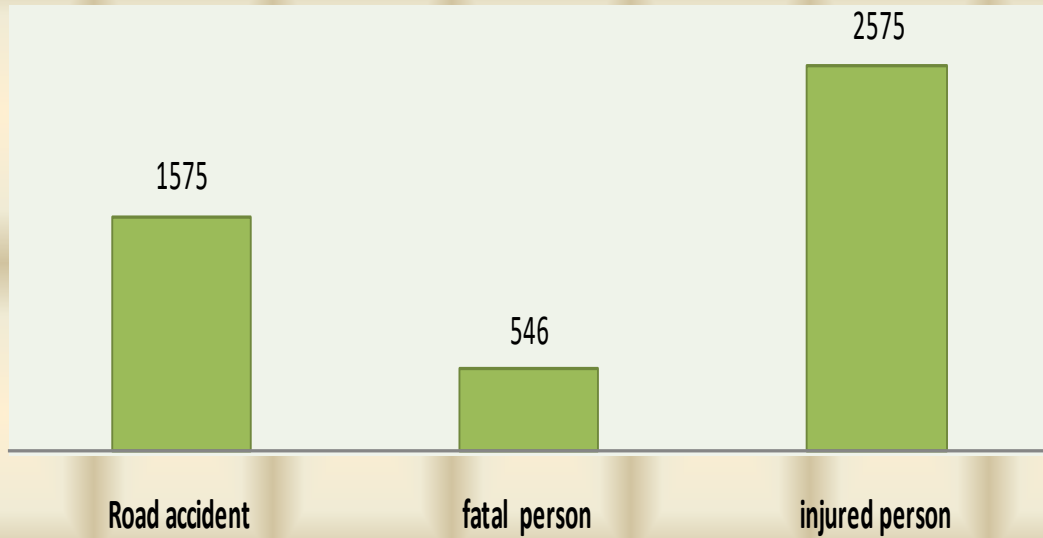
The number of Fatalities on State Highways have been decreased during the year 2017 by 18.86% over the year 2016 whereas the same has been increased during the year 2018 by 9.76% over the year 2017 but subsequently decreased during the year 2019 by 6.77% than the year 2018 and 26.81% during the year 2020 over the year 2019.

Similarly, number of injured persons on State Highways have been decreased by 14.51% during the year 2017 over the year 2016 but increased during the year 2018 by 10.38% over the year 2017. However, the same have been decreased by 15.56% during the year 2019 and 43.51% during 2020 than the previous years.

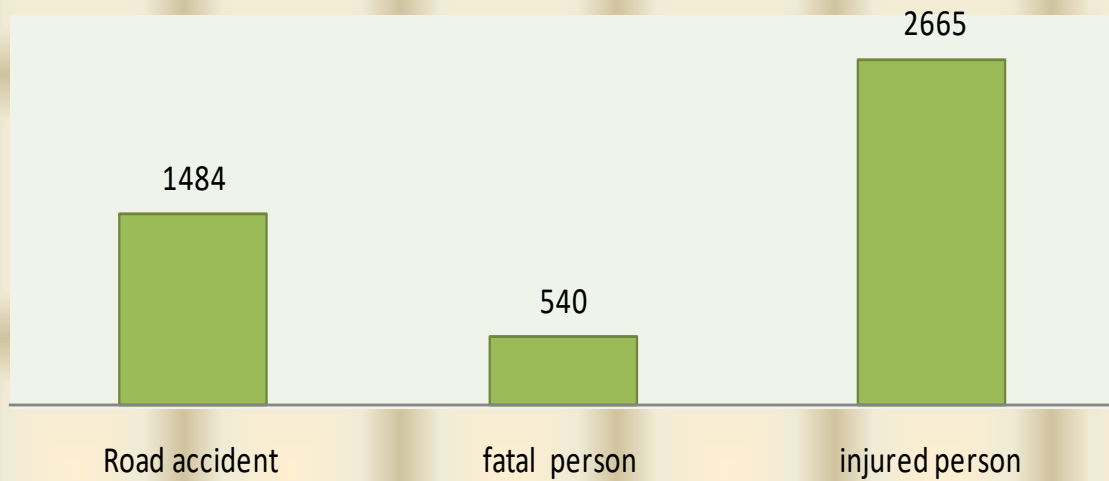
Effective Patrolling and strict traffic law enforcement on National Highways, State Highways and City Roads during the peak hours is must for the reduction of number of road traffic accidents, fatalities and injuries. Also, keeping in view the behavioral attitude of the public/road user of the Country, vide publicity of “Negative Awareness” reflecting the ill-effects of road traffic accidents, fatalities and grievous injuries on the accident victims, family members and dependents of the accident victims is required to be undertaken in order to make the people adhere to the traffic laws and rules. Furthers, to get desired results, enforcement agencies are required to be provided with sufficient traffic personnel, law enforcement equipment of latest technology along interceptor Vehicles and adequate Patrolling Vehicles as per the requirement of each District in the State.

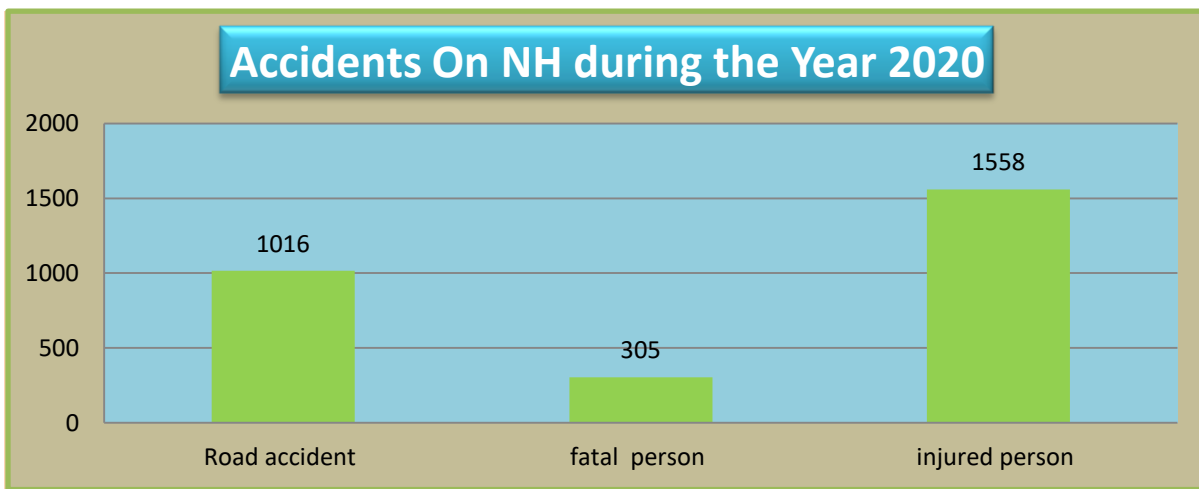
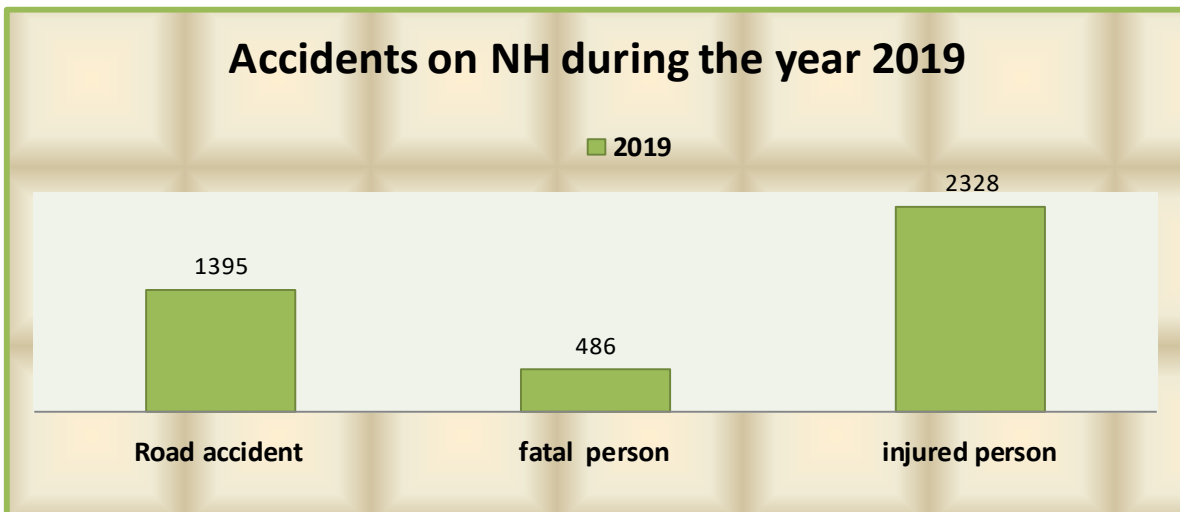
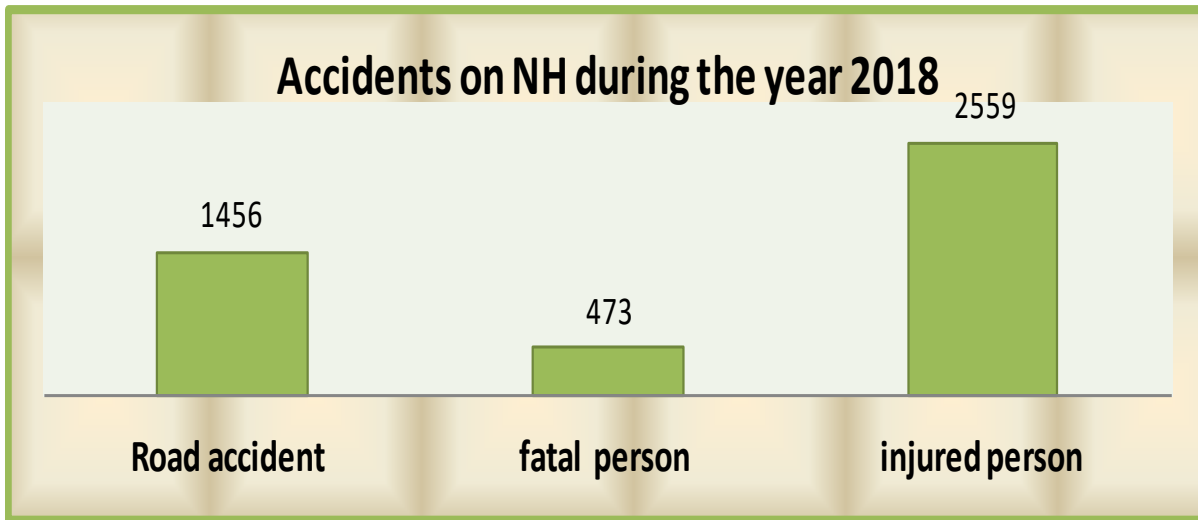


Accidents on NH during the year 2016



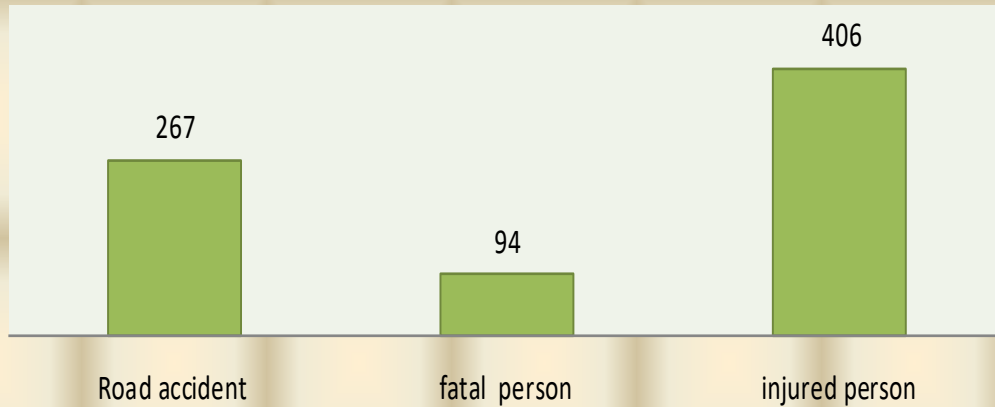
Accidents on NH during the year 2017





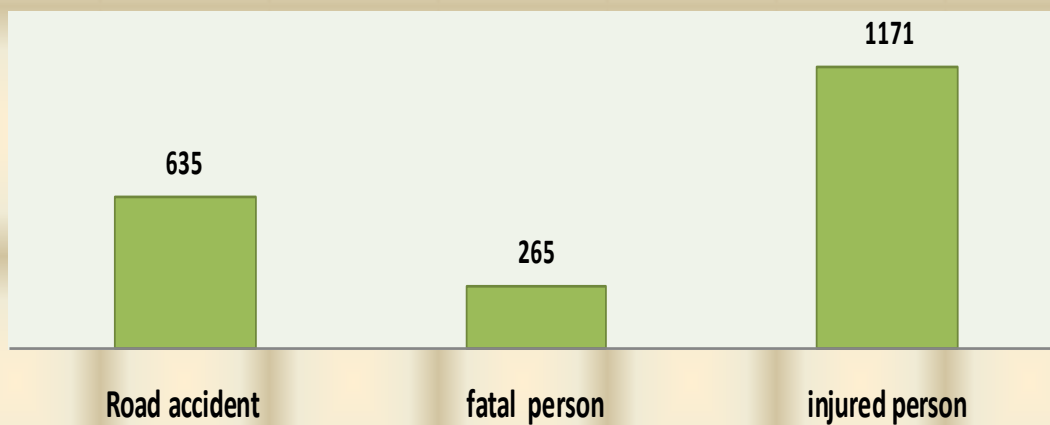
Accidents on State Highway during the year 2015

■ 1-08-2015 to 31-12-2015



Accidents on State Highway during the year 2016

■ 2016



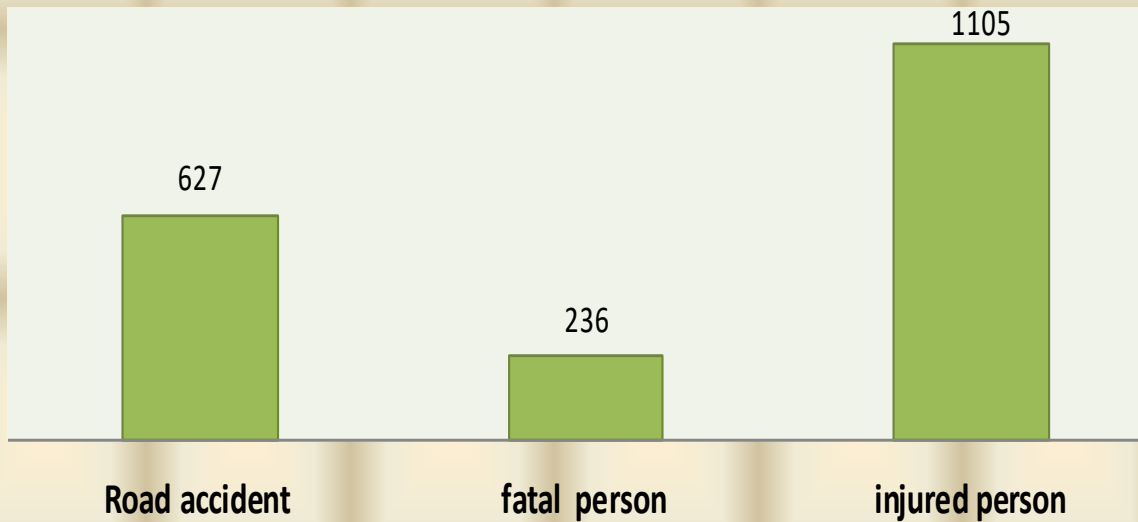
Accidents on State Highway during the year 2017

■ 2017

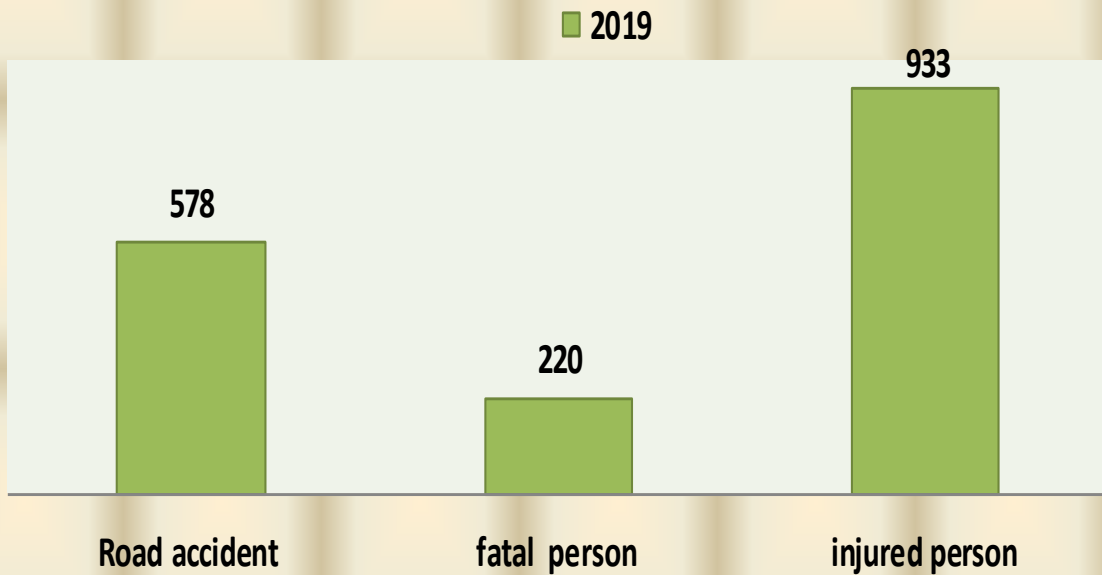


Accidents on State Highway during the year 2018

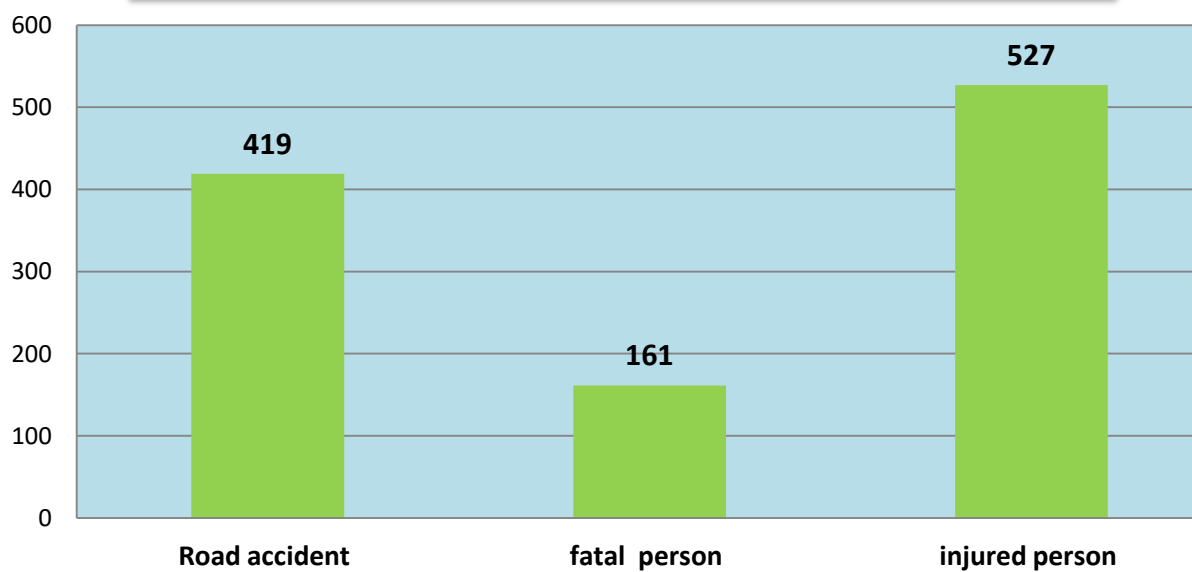
■ 2018



Accidents on State Highway during the year 2019



Accidents on state Highway during the year 2020



**AGE GROUP WISE COMPARATIVE DATA OF FATAL
AND INJURED PERSONS FOR THE YEAR 2016-2017**

Age of injured and fatal person	Fatal	injury	Age of injured and fatal person	Fatal	Injury
1-1-2016 to 31-12-2016			1-1-2017 to 31-12-2017		
0 to 12 month	0	7	0 to 12 month	0	0
01 to 05	19	101	01 to 05	0	0
06 to 10	31	135	06 to 10	26	79
11 to 15	16	191	11 to 15	25	153
16-20	120	713	16-20	25	191
21-25	219	1068	21-25	107	643
26-30	196	847	26-30	185	934
31-35	118	626	31-35	169	813
36-40	127	584	36-40	139	619
41-45	108	421	41-45	118	548
46-50	92	349	46-50	99	398
51-55	75	241	51-55	85	356
56-60	54	204	56-60	72	240
61-65	36	121	61-65	48	207
66-70	23	67	66-70	54	126
71-75	16	40	71-75	13	64
76-80	7	32	76-80	12	43
81-85	10	11	81-85	9	21
86-90	2	5	86-90	11	14
91-95	1	1	91-95	5	3
96-100	1	0	96-100	1	0
Total	1,271	5764	Total	1203	5,452

AGE GROUP WISE COMPARATIVE DATA OF FATAL AND INJURED PERSONS FOR THE YEAR 2018-2020

Age of injured and fatal person	2018		2019		2020	
	Fatal	injury	Fatal	injury	Fatal	injury
01 to 05	20	98	25	64	16	51
06 to 10	29	162	18	164	5	60
11 to 15	28	190	12	171	6	84
16-20	82	688	110	649	68	391
21-25	181	1033	185	836	153	603
26-30	175	822	156	686	122	497
31-35	154	639	128	543	113	401
36-40	105	490	114	455	97	295
41-45	139	428	101	325	71	238
46-50	89	323	89	303	65	207
51-55	65	254	56	245	56	140
56-60	50	175	53	181	29	111
61-65	42	99	41	129	42	73
66-70	15	74	31	67	13	33
71-75	10	37	14	42	18	20
76-80	17	25	7	30	14	11
81-85	5	12	3	8	3	7
86-90	2	2	1	3	1	2
91-95	0	0	1	3	0	0
96-100	0	0	1	0	0	0
Total	1,208	5551	1,146	4904	892	3224

On the analysis of Age Group wise road traffic accident data of three i.e. from year 2018 to 2020, it has come on record that during the year 2018, maximum fatalities occurred between the age group of 21st to 25 year which is highest number of any age group falling within a period of five years. The fatality rate between the age group of 26- 30 year i.e. within 5 year is 14.48% and injury rate is 15.88% whereas fatalities rate between the age group of 21-25 is 14.98% and injury rate is 18.60% .

The fatalities rate between 0-15 years is 6.37% and injury rate is 8.10%. Further, the fatality rate between the age group of 16-25 years is 21.77% and injury rate is 31%.

Fatalities rate between the age group of 16-20 years is 6.78 % and injury rate is 12.39% .The percentage of fatalities between the age group of 21- 30 year is 29.47% and injury rate is 33.41%. The age group between 31-40 years suffered fatalities by 21.44% and injuries by 20.33%. Further, Fatality rate between the age group of 36-45 years is 20.19% and injury rate is 16.53%. Age group of 46-60 years has suffered fatalities by 16.08 % and injury by 13.45%. The fatality between the age group of 61-70 years is 04.71% and injury rate is 03.11 %.

The overall analysis of the road accident data for the year 2018 shows that the persons between the age group of 16-45 years have suffered maximum fatalities by 69.20% and injury by 73.86%. The age group within five years with highest number of fatalities is 21-25 years. Within the period of 10 year, the maximum rate of fatalities is between the age group of 21-30 years by 29.47% and injury

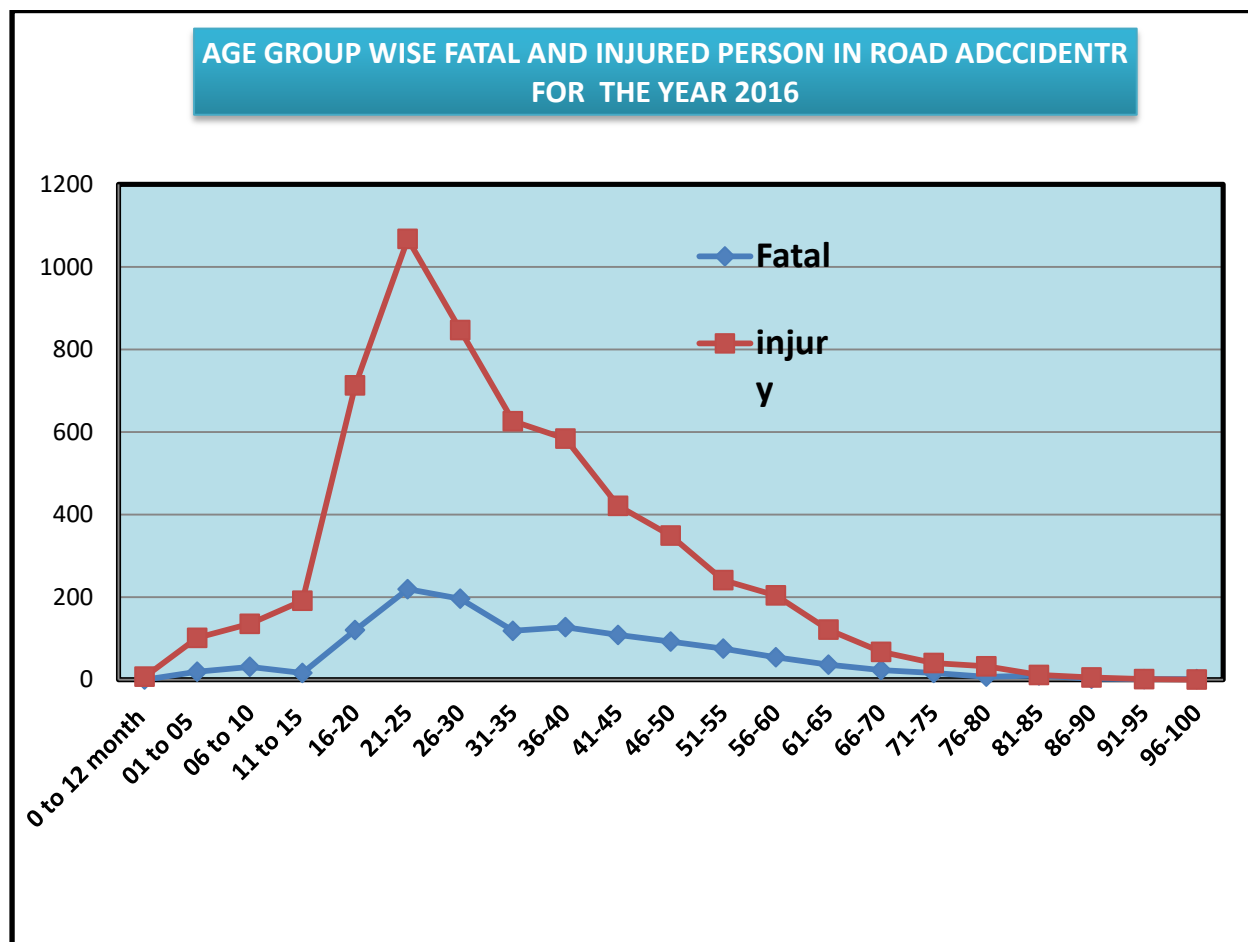
rate by 33.41%. Similarly the rate of fatalities within 15 years is highest between the age group of 21-35 years by 42.21% and injury by 44.92%.

Similarly, on the analysis of age group wise road traffic accident data for the year 2019, it has been transpired that fatality and injury rate is almost same as compared to the year 2018. During analysis, it has been found that within the period of 5 years, the higher fatality and injury rate is between the age group of 21-25 years by 16.14% and by 17.4% respectively. As far as the period of 10 years is concerned, the highest fatality and injury rate is between the age group of 21-30 years i.e. 29.75 % and 31.3% respectively. Similarly, as for the period of 15 years, most of the fatalities and injuries suffered by the age group between 21 to 35 years by 40.92% and 42.10% respectively. Overall highest rate of fatalities and injuries has been suffered by the working age group between 21-45 years.

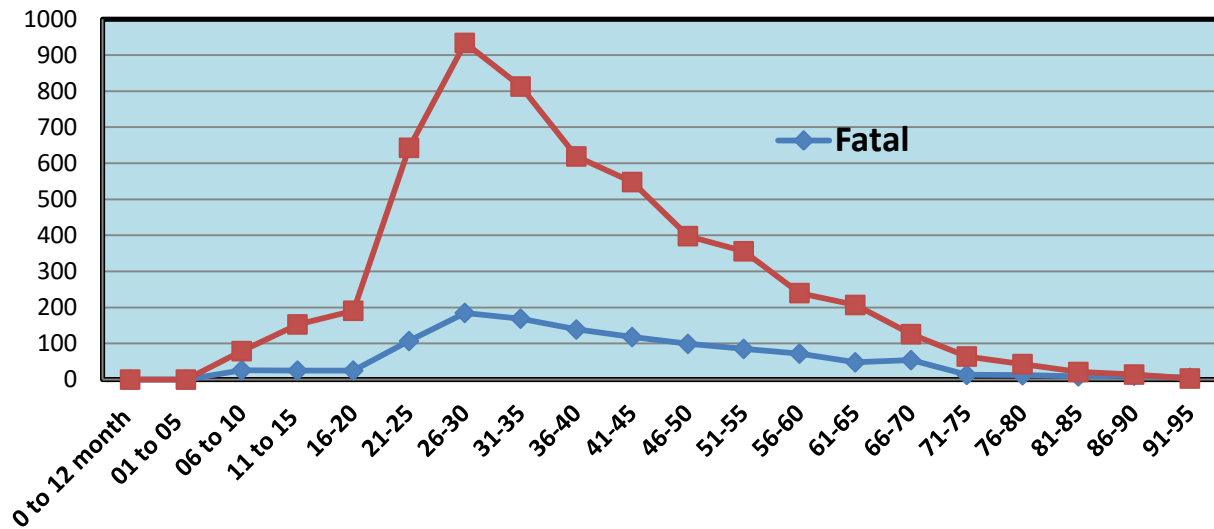
Also, during the year 2020, the age group falling between 21 to 45 years is the victim of highest fatalities and injuries i.e. by 62% and 63% respectively. The age group within the five years has suffered highest fatalities and injuries by the age group of 21 to 25 years by 17.71 and 18.70% respectively. The age group falling between 21 to 30 years, i.e. a period of 10 years, has suffered highest fatality and injury by 30.82% and 34.11%. Similarly age group falling within the period of 15 years i.e. 21 to 35 years highest fatalities and injuries has been suffered by this age group by 43.59% and 45.31%.

Thus, It is evident from the above analysis of the age group wise road accident data for the year 2018 to 2020 that the maximum number of fatalities and injuries have taken place between the working age group of 21-45 years by

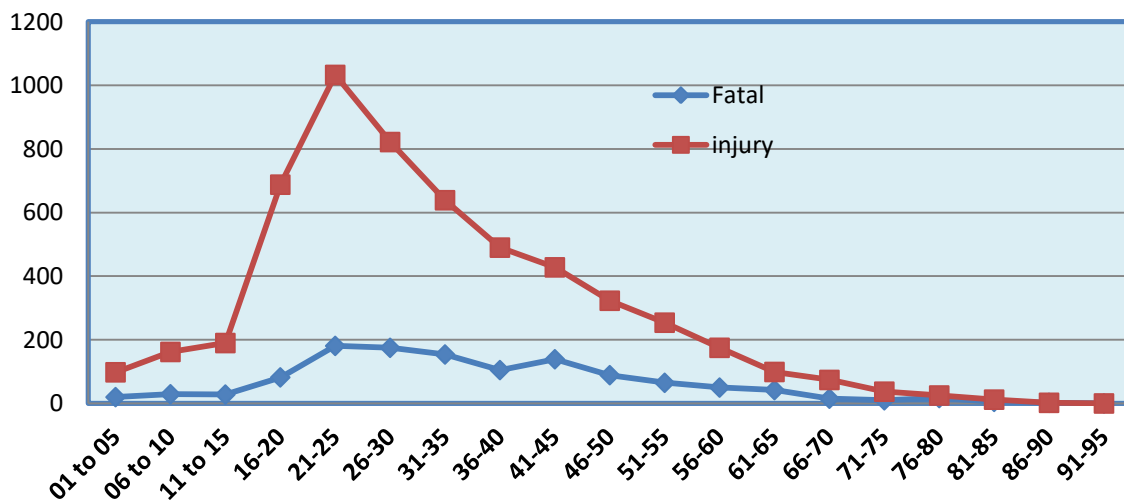
62.41% & 61.46% during the year 2018, 59.68% & 58.01% during the year 2019 and 62% & 63% during the year 2020. The persons of this age group fall within the age of attaining valid driving licenses, further growing -up and reaching to the middle age of maturity which suggest that most of these persons/road users must having valid driving licensees and might have in good health. Therefore, it can be safely concluded that most of the accidents occurred due to human error leading to the fatalities and grievous injury caused by the drivers/ road users due to non-adherence to the traffic laws /rules and regulations which require strict enforcement of traffic laws besides a massive awareness campaign.



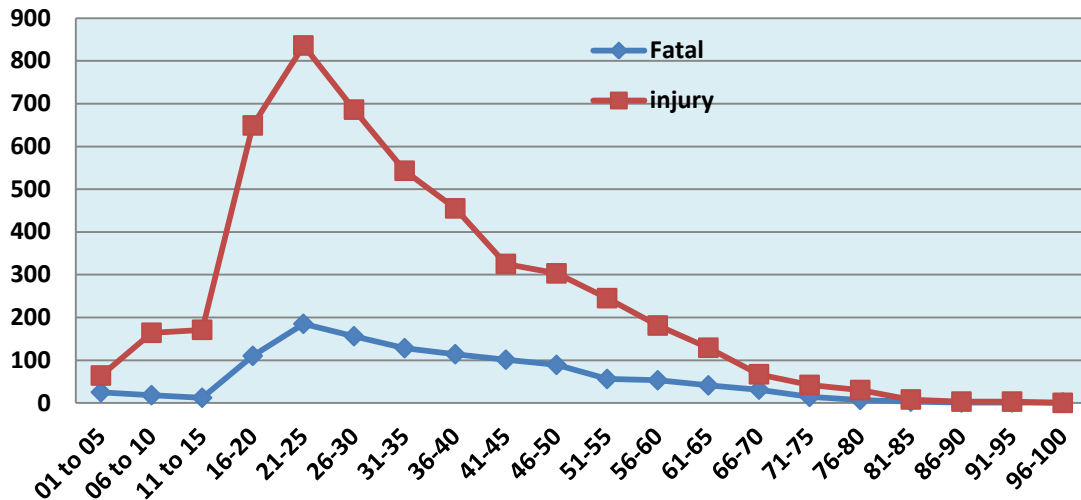
AGE GROUP WISE FATAL AND INJURED PERSON ON ROAD ACCIDENT FOR THE YEAR 2017



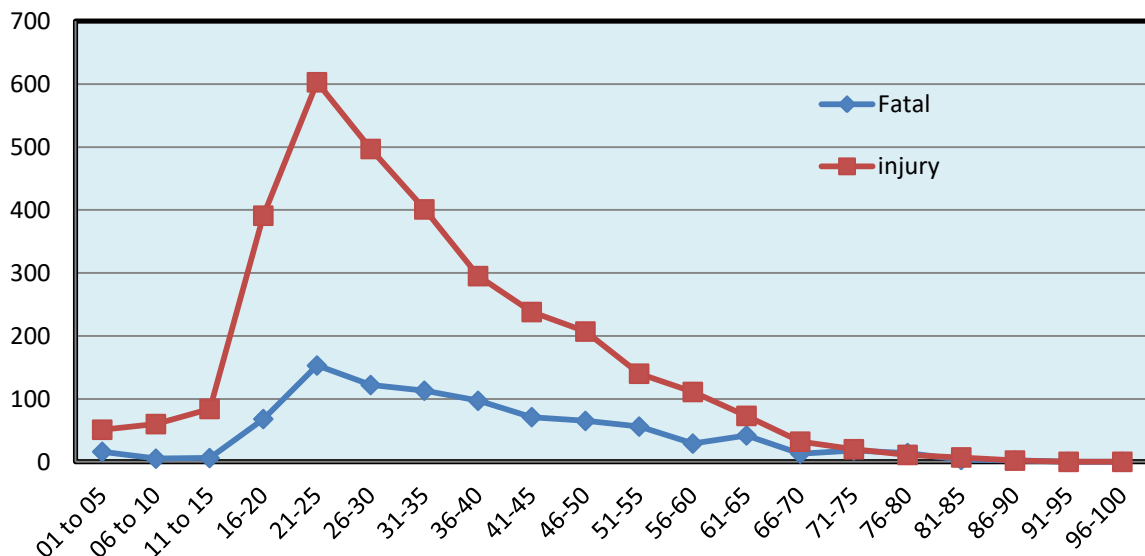
Age Group wise Fatal and Injured person in Road Accident for the year 2018



Age Group wise Fatal and Injured Person in Road Accident For the Year 2019



Age Group wise Fatal and Injured Person in Road Accident for the year 2020

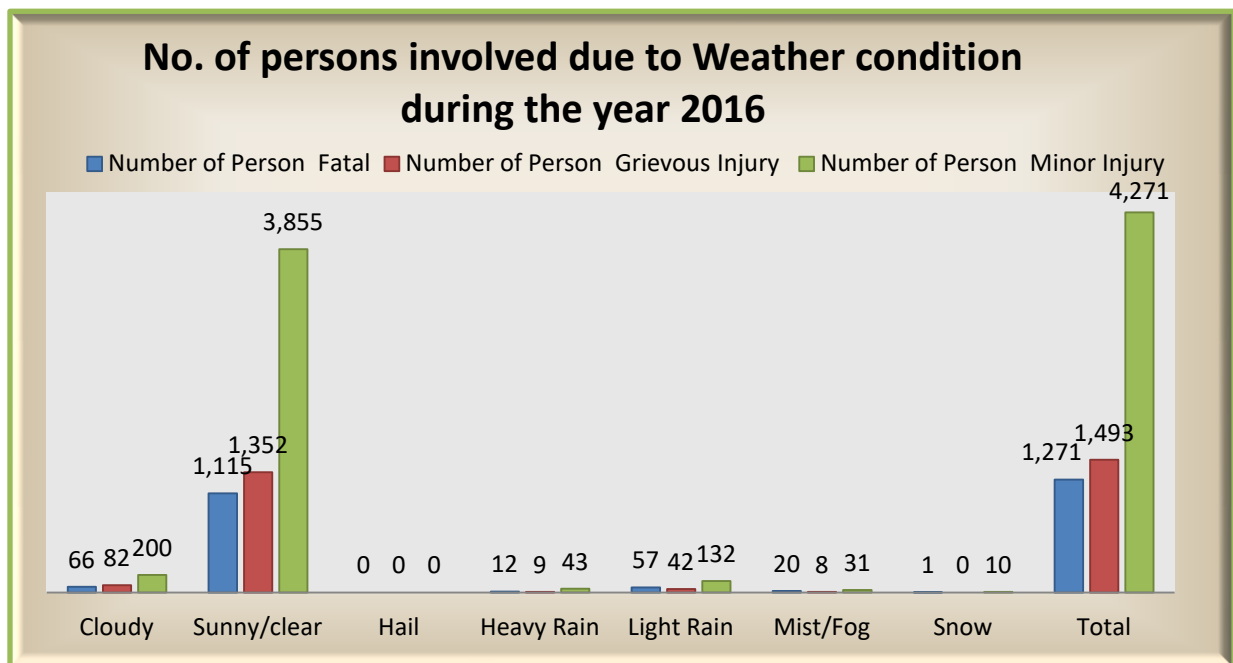
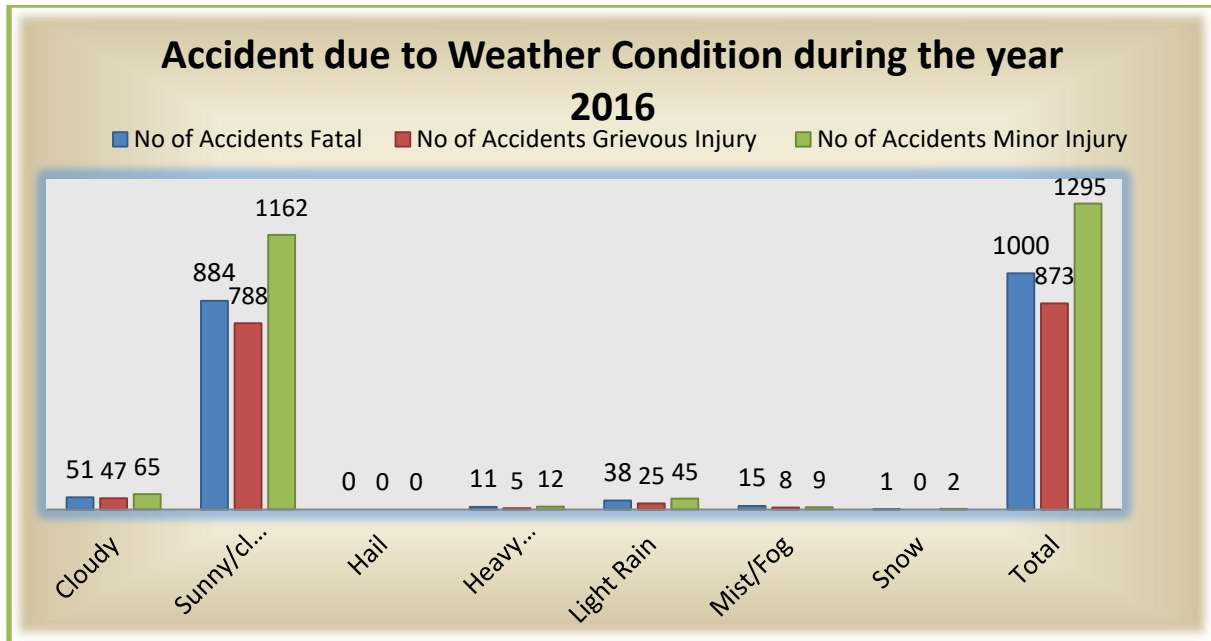


ACCIDENT DATA ACCORDING TO WEATHER CONDITION FOR THE YEAR 2016

Accidents Classified According to Weather Condition for The Year 2016						
No of Accidents				Number of Person		
Weather Condition	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury
Cloudy	51	47	65	66	82	200
Sunny/clear	884	788	1162	1,115	1,352	3,855
Hail	0	0	0	0	0	0
Heavy Rain	11	5	12	12	9	43
Light Rain	38	25	45	57	42	132
Mist/Fog	15	8	9	20	8	31
Snow	1	0	2	1	0	10
Total	1000	873	1295	1,271	1,493	4,271

As per the analyses of the whether condition wise road accident data for the year 2016, maximum numbers of fatal road accidents took place during Sunny/Clear weather by 88.4% whereas accidents causing grievous injuries occurred during Sunny/Clear whether by 90.26% and minor injuries by 89.72%. Due to cloudy weather, only 5.1 % fatal accidents took place, during 2016, grievous injuries by 5.38% and minor injuries by 5.01%. Heavy Rain caused fatal accidents by 1.1%, grievous injuries by 0.57% and minor injuries by 0.92%. Fatal accidents caused by Light Rain are 3.8%, grievous injuries by 2.86% and minor injuries by 3.47%. Mist/Fog caused fatal accident by 1.5%. 67.72% fatalities took place during the

Sunny/Clear weather. 5.19% fatalities occurred due to Cloudy Weather, grievous injuries by 5.49% and minor injuries by 4.68%.



ACCIDENT DATA ACCORDING TO WEATHER CONDITION FOR THE YEAR 2017

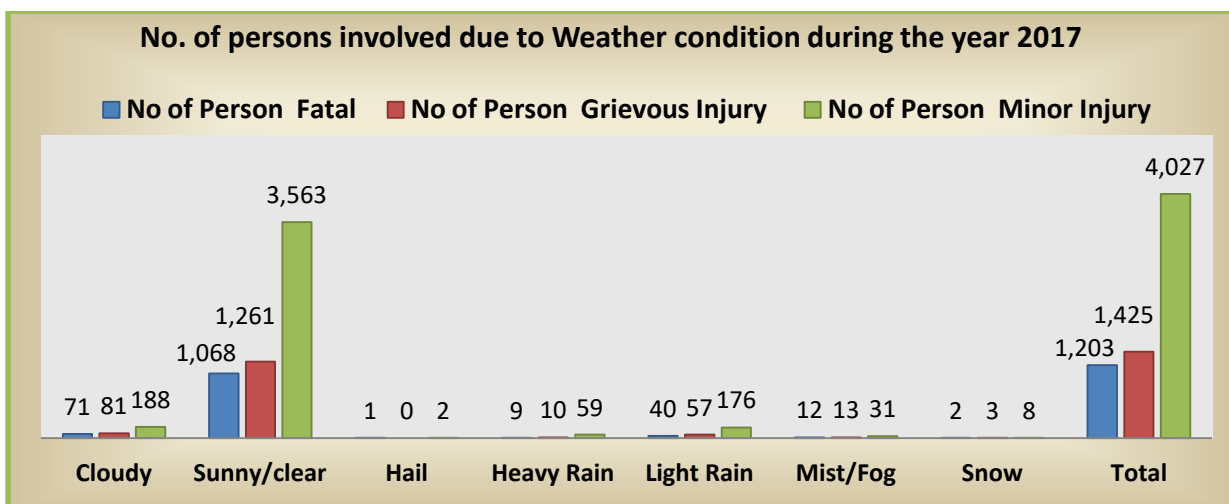
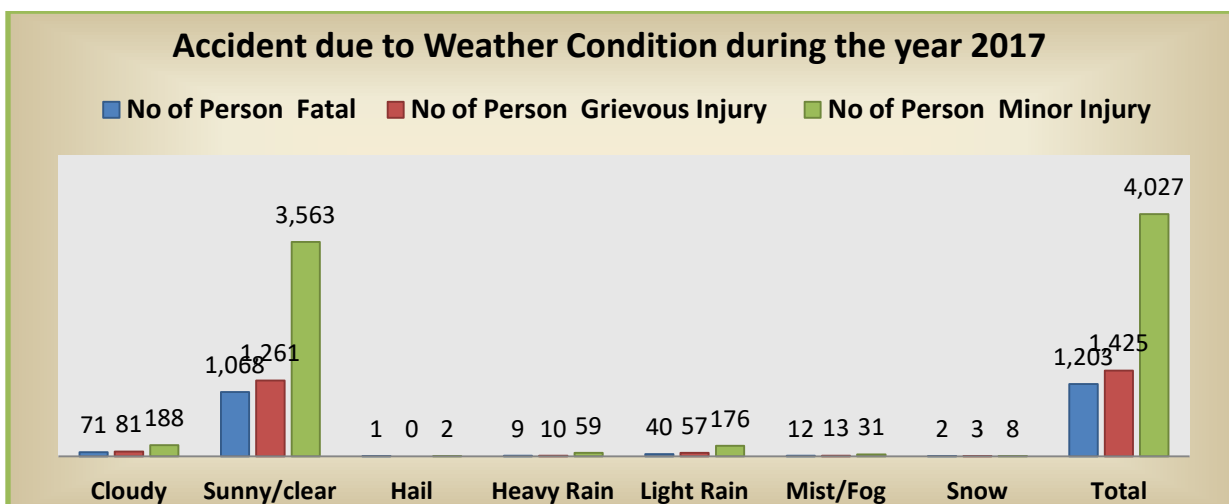
Accidents Classified According to Weather Condition for The Year 2017						
Number of Accident				Number of Person		
Weather Condition	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury
Cloudy	61	56	67	71	81	188
Sunny/clear	796	842	1095	1,068	1,261	3,563
Hail	1	0	1	1	0	2
Heavy Rain	8	9	11	9	10	59
Light Rain	30	43	60	40	57	176
Mist/Fog	9	9	10	12	13	31
Snow	2	1	3	2	3	8
Total	907	960	1247	1,203	1,425	4,027

During the year 2017, most of the fatal accidents with grievous and minor injuries took place during sunny/clear whether. The second cause remained cloudy weather and the third one was light rain. Similarly, the highest number of person died, received grievous and minor injuries were also witnessed during the sunny/clear whether.

Number of fatal road traffic accidents during the year 2017 during Sunny/ Clear whether was 86.76%, grievous injuries by 87.70% and minor injuries by 87.81%. Fatal accidents during Cloudy Weather occurred by 0.67%, accidents causing grievous injuries by 5.83% and grievous injuries by 5.37%.

During Heavy Rain, fatal accidents occurred by 0.88%, accident caused grievous injuries by 0.93% and minor injuries by 0.88%. During the year 2017, Light Rain caused 3.30 % fatal accident whereas; accident caused grievous injuries by 4.47% and minor injuries by 4.81%.

Fatalities caused during the year 2017 during Sunny/Clear weather were 88.77%, grievous injuries by 88.49% and minor injuries by 88.47%. During Cloudy Weather, number of fatalities was 5.90%, persons suffered grievous injuries was 5.68% and minor injuries by 4.67%.



ACCIDENT DATA ACCORDING TO WEATHER CONDITION FOR THE YEAR 2018

Accidents Classified According to Weather Condition for The Year 2018						
No of Accidents				Number of Person		
Weather Condition	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury
Cloudy	52	54	79	81	81	266
Sunny/clear	796	916	1004	1,006	1,262	3,435
Hail	0	0	0	39	20	90
Heavy Rain	19	8	12	56	55	263
Light Rain	43	39	47	19	12	28
Mist/Fog	9	6	12	6	2	25
Snow	5	1	4			
strong wind	1	1	2	1	1	11
Total	925	1025	1160	1,208	1,433	4,118

During the year 2018, most of the fatal accidents with grievous and minor injuries took place during sunny/clear whether. The second cause remained cloudy weather and the third one was light rain. Similarly, the highest number of person died, received grievous and minor injuries were also during the sunny/clear whether.

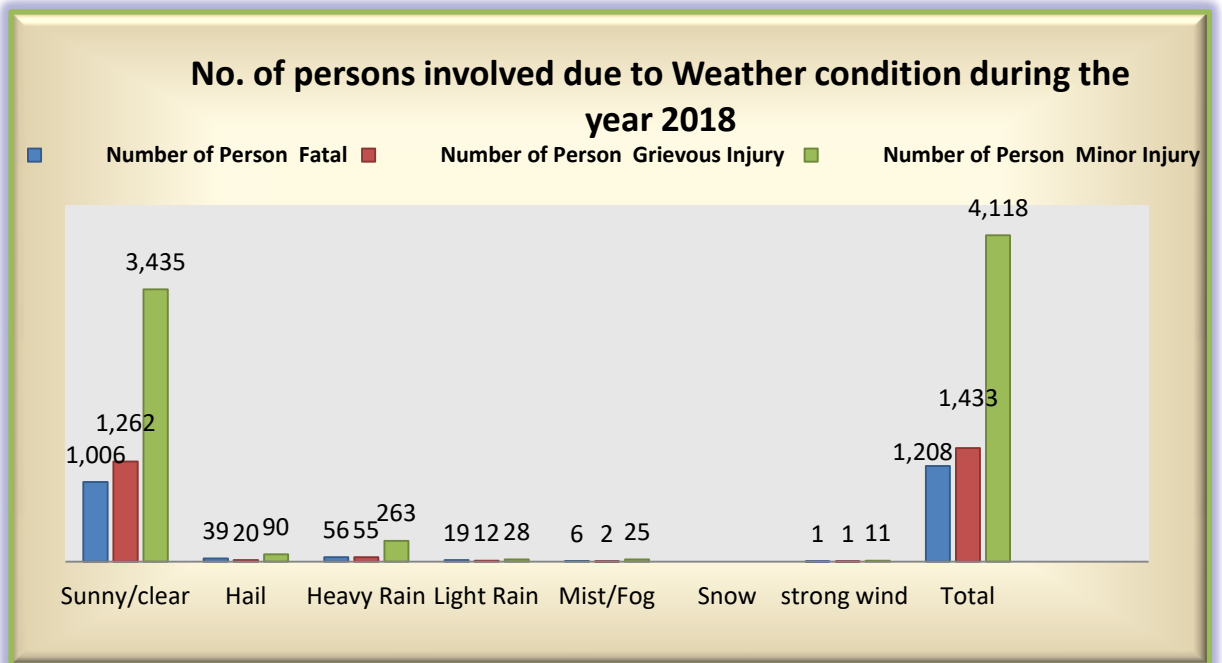
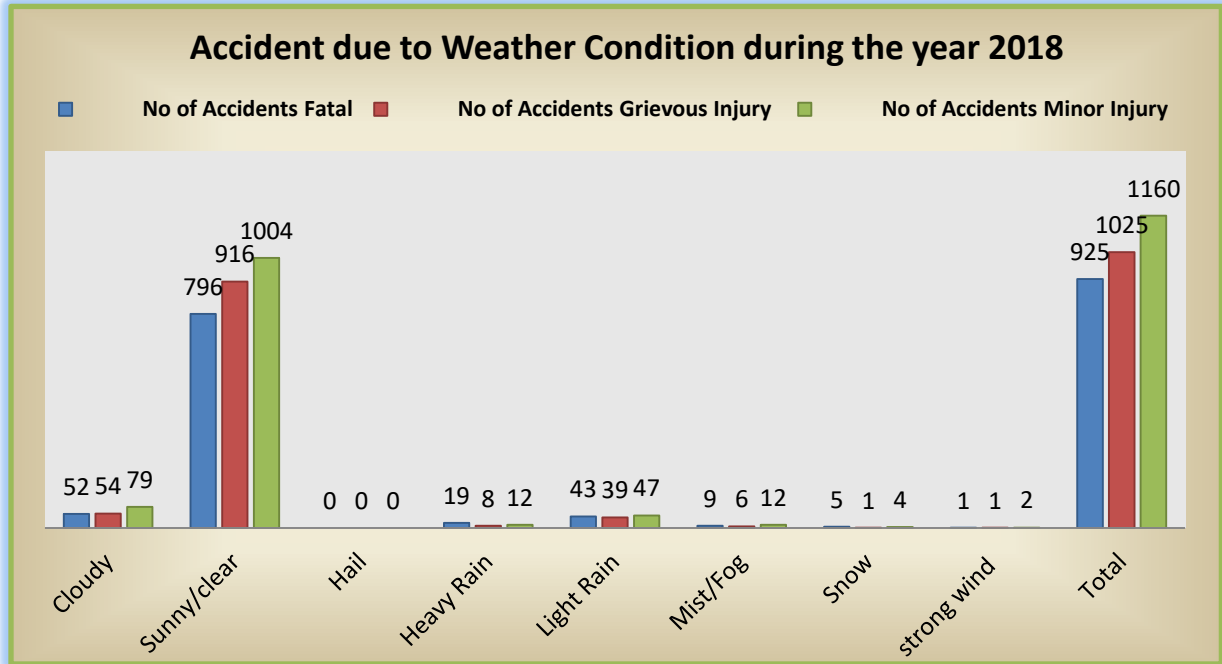
The Highest numbers of fatal road accidents during 2018 caused during the Sunny/Clear weather by 86.05%. Second cause of fatal road accidents due to weather was Cloudy Weather which caused 5.62 accidents.

Similarly, Most of the accidents causing Grievous and Minor Injuries also took place during Sunny/Clear weather by 89.36% and 86.55% respectively. During Cloudy Weather, accidents caused grievous injuries by 5.26% and Minor Injuries by 6.81%. During Heavy Rain, accidents caused grievous injuries by 0.78% and Minor Injuries by 1.03%. Accident during Light Rain caused grievous injury by 3.80% and Minor Injuries by 4.05%.

During the year 2018, most of the fatalities took place during Sunny/Clear weather by 87.27%, grievous injures by 88.06% and Minor Injuries by 83.41%. During Cloudy weather, fatality rate was 6.70%, Grievous and Minor Injuries by 5.65 % & 6.45% respectively. During Light Rain, accidents caused Fatalities by 1.57%, Grievous Injuries by 0.83% and Minor Injuries by 0.67%. Mist/Fog and Strong Wind caused 0.49% & 0.08% Fatalities, Grievous Injuries by 0.13% & 0.06% and Minor Injuries by 0.60% & 0.26% respectively.

During the year 2018, numbers of Fatalities are higher in Heavy Rain as compared to the number of accidents during Light Rain during the year 2016 & 2017. Cautionary boards are required to be installed at places where chances of accident due to foul weather such as low visibility, slippery road and land slide prone areas etc. To avoid collision in foul weather, proper indicator,

headlight/fog light are required to be used for the convenience of the driver of the vehicle and other road users.



ACCIDENT DATA ACCORDING TO WEATHER CONDITION FOR THE YEAR 2019

Accidents Classified According to Weather Condition for the Year 2019						
No of Accidents				Number of Person		
Weather Condition	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury
Cloudy	50	46	68	98	61	281
Sunny/clear	811	837	853	969	1,196	2,915
Heavy Rain	17	6	10	21	13	43
Light Rain	39	36	75	43	51	282
Mist/Fog	7	5	4	8	7	29
Snow	6	2	1	7	4	22
Total	930	932	1011	1,146	1,332	3,572

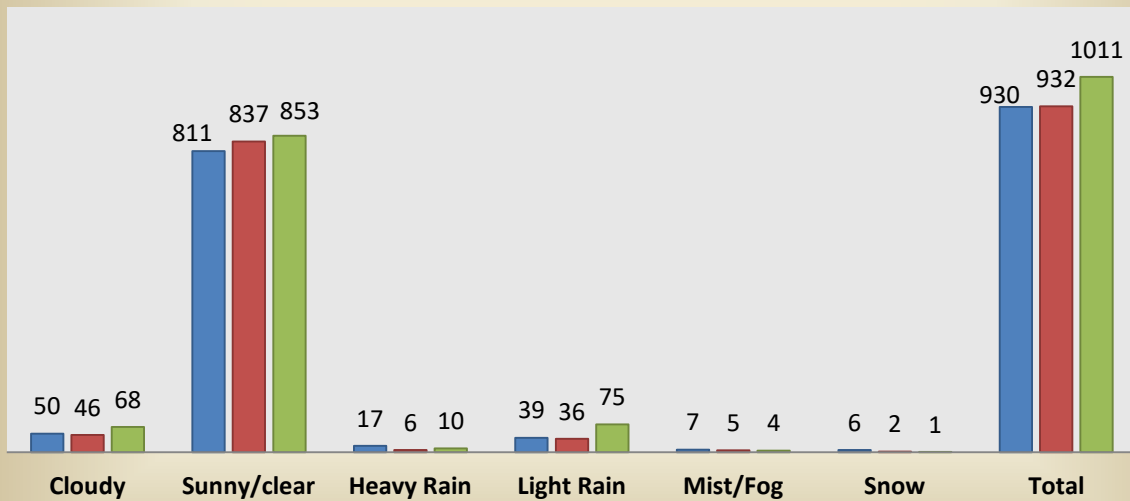
During the year 2019, most of the fatal accidents with grievous and minor injuries took place during Sunny/Clear whether. The second cause remained cloudy weather and the third one was light rain. Similarly, the maximum number fatalities, grievous and minor injuries took place during sunny/clear whether. Second and third causes of number of accidents resulting in fatalities, grievous and minor injuries were cloudy weather and light rain respectively.

Year 2019 witnessed most of the road traffic accidents causing fatalities during Sunny/Cloudy weather by 87.20%. Road Traffic Accidents caused Grievous injuries during Sunny/Clear weather is 89.80% and Minor Injuries is 84.37%. The Cloudy weather being the second cause of road traffic accident in the State caused Fatal Accidents by 5.37, accidents causing Grievous Injuries by 4.93% and Minor Injuries by 6.72%. The third weather condition i.e. Light Rain caused Fatal Accidents by 4.19%, accidents caused Grievous Injuries by 3.86% and Minor Injuries 7.41%. Fourth weather condition i.e. Heavy Rain attributed to the rate of Fatal Accidents by 1.82%, accidents caused grievous injuries by 0.64% and Minor Injuries by 0.98%. Further, weather condition during Mist/Fog and Snow caused Fatal Accidents by 0.75% & 0.64%, accidents caused Grievous Injuries by 0.53% & 0.21% and minor Injuries by 0.39% & 0.09% respectively.

Similarly, during the year 2019, highest number of Fatalities took place during the Sunny/ Clear weather is by 84.55 %, Grievous Injuries by 89.78 % and Minor Injuries by 81.60 %. Next weather condition being Cloudy Weather caused Fatalities by 8.55 %, Grievous Injuries by 4.57% and Minor Injuries by 7.86 %. Third weather condition causing highest number of fatalities i.e. Light Rain attributed to 3.75 %, Grievous Injuries by 3.82% and Minor Injuries by 7.89 %. Fourth weather condition i.e. Heavy Rain caused fatalities by 1.83 %, Grievous Injuries by 0.97 % and Minor Injuries by 1.20%. The last Two weather conditions i.e. Mist/Fog & Snow caused Fatalities by 0.69 % & 0.61 %, Grievous Injuries by 0.52 % & 0.30% and Minor Injuries by 0.81 % & 0.61% respectively.

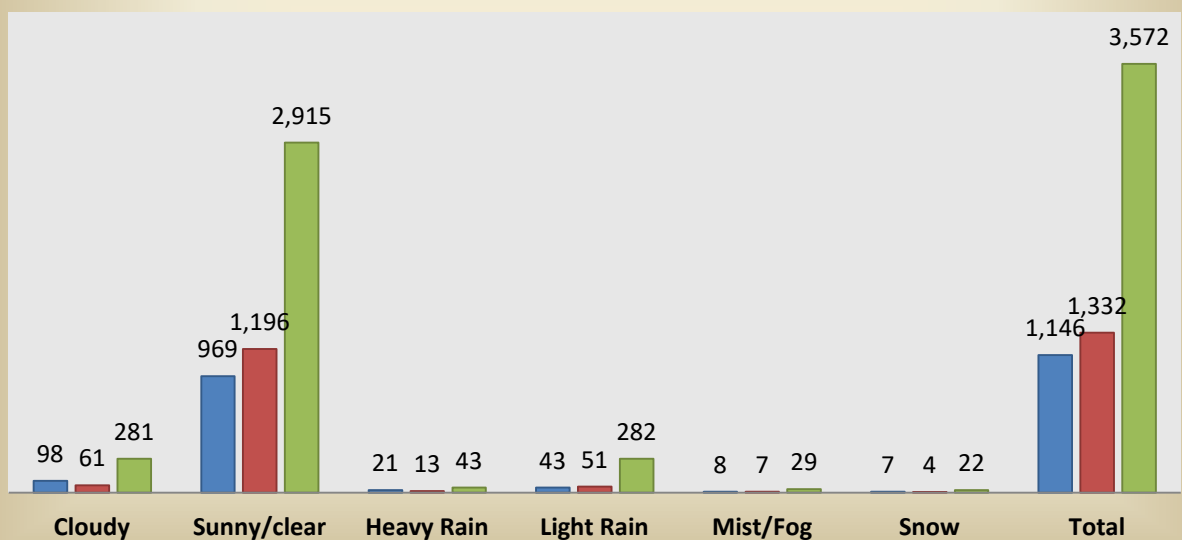
Accident due to Weather Condition during the year 2019

■ No of Accidents Fatal ■ No of Accidents Grievous Injury ■ No of Accidents Minor Injury



No. of persons involved due to Weather condition during the year 2019

■ No of Person Fatal ■ No of Person Grievous Injury ■ No of Person Minor Injury

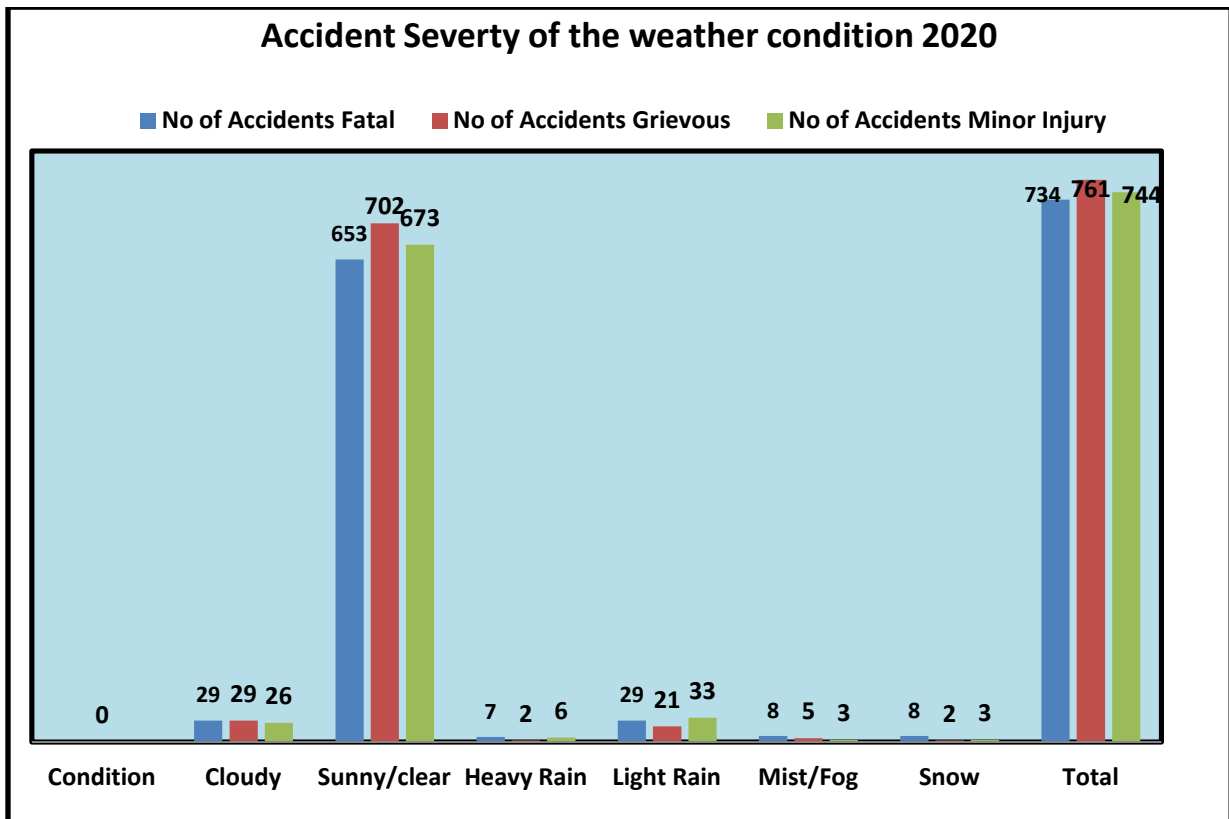


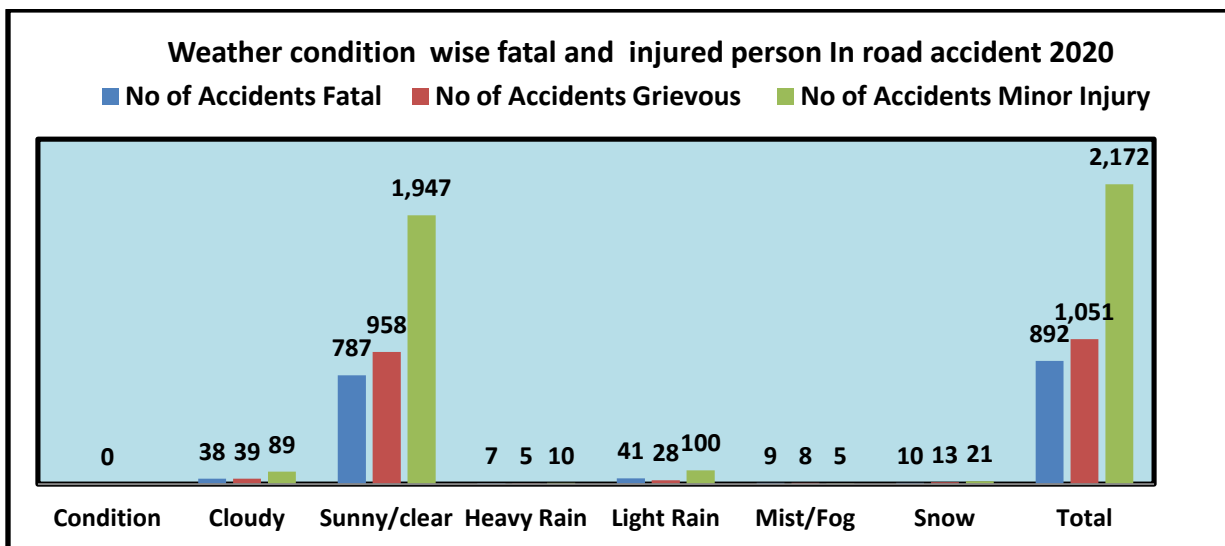
ACCIDENT DATA ACCORDING TO WEATHER CONDITION FOR THE YEAR 2020

Accidents Classified According to Weather Condition for The Year 2020						
Weather Condition	No of Accidents			Number of Person		
	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury
Cloudy	29	29	26	38	39	89
Sunny/clear	653	702	673	787	958	1,947
Heavy Rain	7	2	6	7	5	10
Light Rain	29	21	33	41	28	100
Mist/Fog	8	5	3	9	8	6
Snow	8	2	3	10	13	21
Total	734	761	744	892	1,051	2,173

The year 2020 also witnessed highest number of road traffic accidents, fatalities and injuries during the Sunny/ clear weather. Accidents causing fatalities by 88.96%, grievous injuries by 92.24% and minor injuries by 90.45% took place during Sunny/clear weather. Cloudy weather being second weather condition caused fatal road traffic by 3.95%, causing grievous and minor injuries by 3.81% and 3.44% respectively. Light rain as third weather condition caused fatal accident by 3.95%, and accident causing grievous and minor injuries are 2.75% & 4.43% respectively. Fourth and fifth weather condition responsible for accident causing fatalities are Mist/Fog and Snow caused fatal accident by 1.08% each, accident causing grievous and minor injuries by 0.65% & 0.40% and 0.02% & 0.40% respectively. Heavy Rain being last weather condition caused fatal accident by 0.95%, grievous and minor injuries by 0.26% & 0.80%.

As far as the number of fatalities, grievous and minor injuries took place during the year 2020 are concerned, most of them occurred during the Sunny/ clear weather by 88.22%, 91.15% & 89.59% respectively. Light Rain being second weather condition caused fatality by 4.59%, grievous and minor injuries by 2.66% & 4.60% respectively. Third weather condition remained Cloudy weather which caused fatality by 4.26%, grievous and minor injuries by 3.71% & 4.09%. Snowy weather being forth weather condition caused fatality by 1.12%, grievous and minor injuries by 1.23% & 0.96% respectively. Mist/Fog caused fatality by 1.00%, grievous and minor injuries by 0.76% & 0.27%. The last weather condition causing road accident is Heavy Rain which caused fatality by 0.78%, grievous and minor injuries by 0.47% & 0.46% respectively.





Hence, overall analyses of road accident data for the period from the year 2016 to 2020 reveals that maximum number of accident, fatalities and injuries occurred during the Sunny/Clear weather which suggest that weather condition is slightly responsible for road traffic accidents in the State of H.P. and that most of the road traffic accidents are taking place due to Human error. Due to the hilly terrain and tough topography of the State, every caution is required to be taken while driving during rainy and snow season. Warnings and cautions are required to be followed in later and spirit to avoid and untoward incidents. If not necessary, driving and travel should be avoided in foul and adverse weather. However, the road traffic accidents are not predictable but avoidable to a large extent if the traffic laws are obeyed not as a compulsion but as safety measure.

TIME WISE COMPARATIVE ACCIDENT DATA FOR THE YEAR 2018 TO 2020

2018				2019			2020		
Time	Accident	Fatal	Injury	Accident	Fatal	Injury	Accident	Fatal	Injury
00-01	64	35	78	77	41	105	48	23	64
01 to 02	46	21	66	41	17	56	38	26	56
02 to 03	44	23	73	32	10	49	22	18	28
03 to 04	29	18	46	33	17	73	26	13	37
04 to 05	24	9	28	34	14	96	22	13	40
05to 06	34	12	44	32	10	63	29	7	33
06 to 07	56	19	118	52	22	113	48	31	93
07 to 08	81	39	177	69	30	143	69	38	86
08 to 09	123	69	348	114	46	220	72	28	114
09 to 10	126	43	313	135	43	335	97	39	161
10 to 11	150	55	295	147	56	288	109	38	154
11 to 12	172	73	264	137	52	308	115	43	163
12 to 13	178	58	341	137	51	238	95	37	158
13 to 14	160	51	285	147	51	221	93	31	132
14 to 15	191	113	442	149	47	234	115	41	188
15 to 16	190	72	347	187	61	325	142	53	239
16 to 17	197	61	412	182	114	321	128	33	207
17 to 18	223	64	400	207	72	404	167	60	233
18 to 19	240	77	383	199	75	267	205	74	293
19 to 20	217	88	340	215	88	346	172	64	200
20 to 21	196	68	260	222	75	289	170	59	234
21 to 22	176	65	241	129	55	164	121	63	128
22 to 23	106	34	132	125	59	155	82	35	106
23 to 24	87	41	118	71	40	91	54	25	77
Total	3,110	1,208	5551	2,873	1,146	4904	2,239	892	3224

The time wise road traffic accident data analyses for the year 2018 reveals that within a period of five hours, most of the accidents occurred between 17 PM to 22 PM i.e. by 33.82%, whereas 6.20% accidents occurred between 22:00 PM to 24:00 PM. The accident rate between 00: AM to 08 AM is 12.54%. Further, 24.08 % accidents took place between 8:00 AM to 13 P.M. and 23.72% between 13 to 17 PM.

Similarly, highest rate of fatalities and injuries has also been noticed between 17 PM to 22 PM by 33.82% and 29.96%. The fatality and injury rate between 22 PM to 24 PM is 6.20% and 4.50%. The fatality and injury rate between 00AM to 08:00 AM is 14.56 & 11.34%, between 08:00 AM to 13:00 PM 24.66 & 28.12%, between 13:00 PM to 17:00 PM 29.88 & 26.76% respectively.

During the year 2019, most of the road traffic accidents, fatalities and injuries also occurred between 17:00 to 22:00 PM i.e. 33.83%, 31.84 and 29.97%. The accident rate between 22:00 PM to 24:00 PM is 6.82% and fatality and injury rate is 8.63%& 5.01% respectively. The accident rate between 00:00 AM to 08:00 AM is 12.87%, fatality and injury rate is 14.04% & 14.23%, between 08:00 AM to 13:00 PM, accident rate is 23.32%, fatality and injury rate is 21.64% & 28.32%, between 13:00 PM to 17 PM , accident rate is 29.34%, fatality and injury rate is 27.05 and 26.63% respectively.

Similarly, during the year 2020, most of the accidents, fatalities and injuries also took place between 17:00 PM to 22:00 PM by 37.29%, 35.87% and 33.74%. Between 22:00 PM to 24:00 PM, accidents took place by 6.07%, fatalities and injuries by 6.72 and 5.67%. The accident rate between 00 to 8:00 AM is 13.48%

and fatality and injuries rate is 13.94% & 13.55% respectively. 21.79% accidents took place between 08:00 AM to 13:00 PM and fatality and injury occurred by 20.73% and 23.26%. Between 13:00 PM to 17:00 PM, accidents took place by 21.34%, fatality and injury rate is 17.71% and 23.75% respectively.

The above analyses of accident, fatalities and injuries figures in the State shows that however, maximum happenings occurred during day time i.e. about 48% accidents took place between 00:8 AM to 17:00 PM. But as far as the analyses of occurrence of accidents within a period of five hours are concerned, most of them happened between 17:00 PM to 22:00 PM.

The analyses of time wise data for the year 2018 to 2020 shows that maximum number of road traffic accidents, fatalities and injuries occurred during day time between 08:00 AM to 17:00 PM. However, highest number of accidents within a period of five hours took place between 17:00 PM to 22:00 PM which suggest that this is the time when flow of traffic is maximum on the roads because during this time people are returning to home from their work places and tend to drive fast and in excessive speed. Secondly, night time and darkness, condition of roads, non- provision of parapet, crash barriers reflective studs/cats eyes, road side lights and vehicle being driven with high beam head light also attribute to road traffic accidents leading to fatalities and injuries. Thirdly, being off time from work, for some people, this is the time for leisure and pleasure and drunken driving becomes one of the main causes of road traffic accidents in hilly State where drinking is normal due to the culture in some region and adverse weather condition. Last but not the least, road user

behavior has emerged one of the major causes of these accidents whether in a state of intoxication or unnecessary haughtiness. Such type of attitude and egoistic behavior i.e. wrong or forceful overtaking, not giving pass to other vehicle and if other vehicle takes pass, making it their prestige issue and causing unwanted “Road Rage”, careless driving and not adhering to the traffic laws thus leading to fatalities and severe injuries.

Therefore, during this particular time, regular strict traffic law enforcement and effective implementation of road safety interventions is required to be taken in order to reduce the frequency of accidents, fatalities and injuries. Besides, especial workshop on “Attitude and Behavioral Change of Road Users” by engaging the services of Psychiatrist and Specialists for drivers/ road users at regular interval is also necessary.

GENDER WISE ACCIDENT FATALITY DATA FOR THE YEAR 2016 TO 2020

Gender wise age profile of accident deaths for the Calendar years 2016 to 2020										
	2016		2017		2018		2019		2020	
Age-Group	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Ma le	Fe- male	Male
Less than 18	24	42	24	52	35	42	20	35	16	11
18-25	42	297	27	265	26	237	37	258	17	204
25-35	34	280	30	278	30	299	26	258	12	223
35-45	34	201	32	185	30	214	25	190	15	153
45-60	45	176	43	162	44	160	42	156	32	118
60 and above	19	77	20	85	24	67	24	75	26	65
Total	198	1073	176	1027	189	1019	174	972	118	774

The analyses of gender wise fatality rate from the year 2016 to 2020 reveals that numbers of female fatalities are much less as compared to the fatality rate of male accident victims. During the year 2016, only 15.57% female succumbed to their accidental injuries whereas fatality rate of male was 84.42%.

During the year 2017, fatality rate of female accident victims was 14.63% and male fatality rate is 85.39%. The year 2018 witnessed female fatality by 15.64% and male fatality by 84.35%. During the year 2019, female accident victims suffered fatality by 15.18% and male accident victims by 84.81%. Similarly, during the year 2020, female accident victims suffered fatalities by 13.22% and male fatality rate was 86.77%.

On the analyses of the overall gender wise road accident fatalities from the year 2016 to 2020, it has been found that maximum number of fatalities took place between the age group of 18-60 years. During the year 2016 the fatality rate of female of this age group is 12.19% and male fatality rate is 75.05%. Female and male accident victims suffered fatality during the year 2017 by 10.97% & 73.98% respectively. Similarly, during the year 2018, female and male accident victims between the age group of 18-60 years suffered fatality by 10.76% & 75.33% respectively. During the year 2019, the fatality rate of female of this age group is 11.34% and male fatality rate is 75.21%. Similarly during the year 2020 within the age group of 18-60 years, female accident victims suffered fatality by 9.69% and male fatality was 89.03%.

Thus, the analyses of the road accident fatalities of male persons falling within a particular age group succumbed to road traffic accident injuries is concerned, the age group between 18-25 year, a period of eight years, has suffered highest number of fatalities during the period from year 2016 to 2020. The road user of this age group are young and energetic and they feel thrill in driving vehicles in excessive speed being influenced from their “Filmy Heroes” and Sports Icons.

Similarly, the drivers/road users between the age group from 25-35 years, a period of 10 years, have suffered almost the same rate of fatalities as suffered by the age group of 18-25 years. The persons of this age group are also young and energetic and most of them also use to drive vehicles in excessive speed. The overall highest fatality rate of female and male accident victims from the year 2016 to 2020 between the age group 18-25 years is 2.56% and 22.01% respectively. Similarly, the fatality rate of female and male of age group between 25-35 years is 2.24% and 23.47%.

It is pertinent to mention here that the fatality rate of female is much less than the male accident victims which suggests that women are cautious and most of them abide by traffic laws and rules while driving vehicle and it is also true that most of the male person drive vehicle sensibly under prescribed speed limit when female and family members are travelling with them. The gender wise fatality data shows that female accident victim fatality rate between the age group of 45-60 years is much more than other younger age group falling within 18-45 years of age. This high fatality rate may be due to the old age and less resistance power to bear the sudden shock and injuries.

Since the young generation especially male persons always tend to make their wishes come true by hook or by crook, hence as and when they get chance, they never hesitate to do things they have in their minds by ignoring the repercussions. To make the younger generation abide by the traffic laws, rules and regulations, one time solution whether by strict enforcement or by awareness campaign is not sufficient as every day so many prospective young

road users are becoming regular road user after attaining the age of getting valid driving licenses and they have their own dream and desires.

Thus, in order to instill a sense of responsibility towards the safety of one's own self and other road users while driving a vehicle, whether two wheeler or four wheeler, besides effective and strict enforcement of traffic laws, intensive and persistent awareness campaign at grass root level starting from the Schools children and including persons of all ages and from every walks of life is the need of the hour keeping in view the frequency of road traffic accidents, fatalities and injuries which is, however, not predictable but avoidable to a large extent.

JUNCTION TYPE WISE ACCIDENT DATA FOR THE PERIOD JANUARY TO DECEMBER (2016 & 2017)

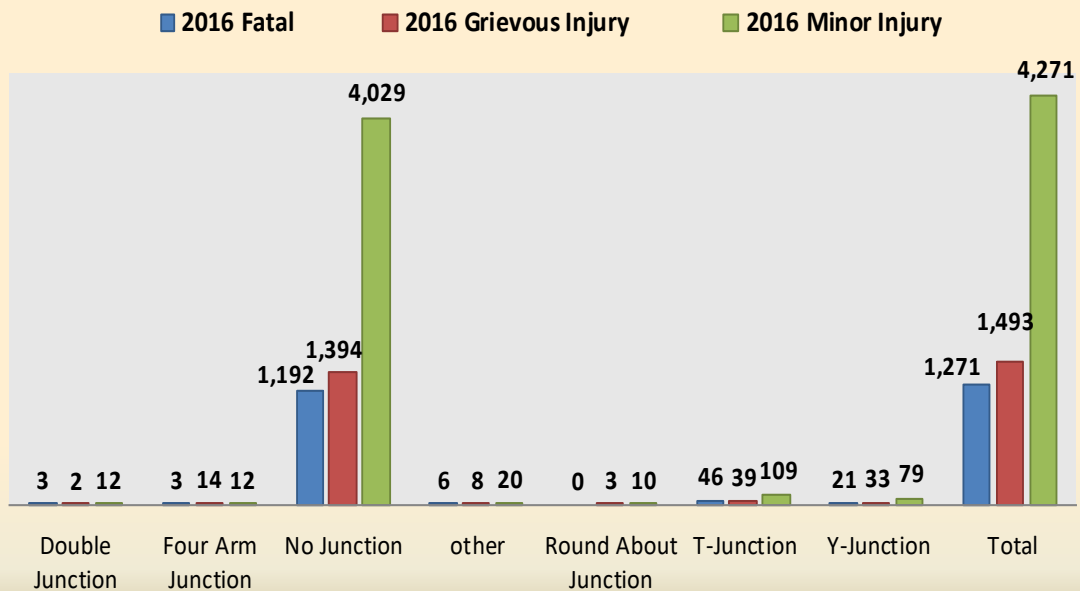
	2016			2017			Comparative data of year 2016-17		
Junction Type	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury	Percentage of fatality	Percentage of grievous injury	Percentage of minor injury
Double Junction	3	2	12	0	0	0	-100%	-100%	-100%
Four Arm Junction	3	14	12	5	4	11	67%	-71%	-8%
No Junction	1,192	1,394	4,029	1170	1373	3920	-2%	-2%	-3%
other	6	8	20	0	0	0	-100%	-100%	-100%
Round About Junction	0	3	10	0	1	3	0%	-67%	70%
T-Junction	46	39	109	21	38	67	-54%	3%	-39%
Y-Junction	21	33	79	7	9	26	-67%	-73%	-67%
Total	1,271	1,493	4,271	1203	1,425	4027	-5%	-5%	-6%

On the analyses of the road accident data regarding causes of accidents due to Junctions on different roads during the year 2016-2017, it has been found that during the year 2016, out of 1271 fatalities, only 79 fatalities occurred on the junctions whereas during 2017 only 33 fatalities happened on junctions out of 1203 fatalities in H.P which is 6.21% and 2.74 % respectively. Out of these fatalities, most of the fatalities occurred on “T” & “Y” Junctions.

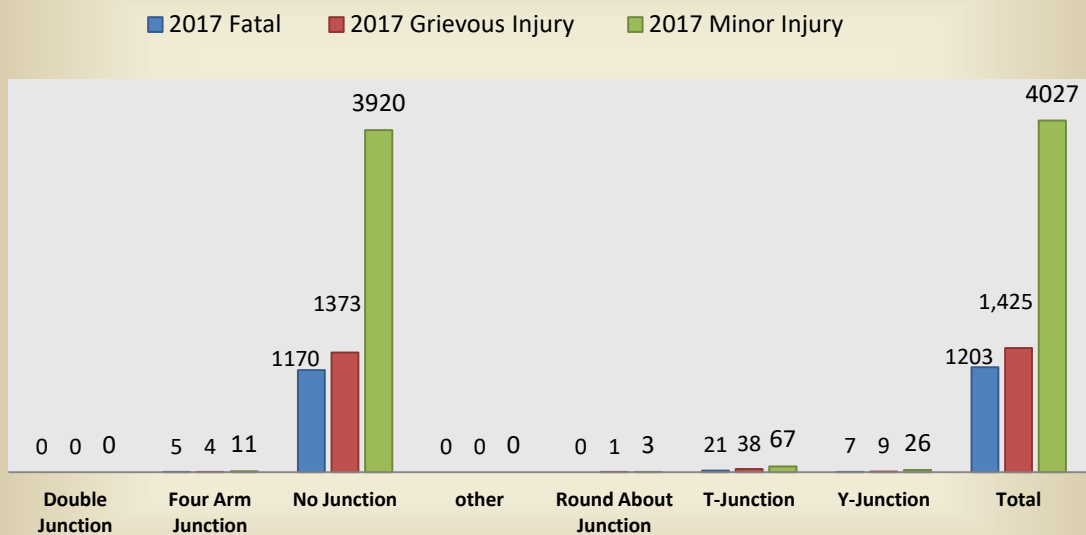
As per the comparative analyses of Junction type accidents during the year 2016-17, reduction in the number of fatalities, grievous and minor injuries have been recorded during the year 2017 than the year 2016 except 66% hike in fatalities on “Four Arm Junctions” i.e. 03 fatalities to 05 fatalities and 70% hike in minor injuries on “Round About Junctions” i.e. 0 (Nil) fatality to 01 fatality. Similarly, only 10 minor injuries took place on ‘Round About Junction’ during 2017 as compared to the NIL number during the year 2016.

Therefore, the analyses of the data of fatalities, grievous and minor injuries during the year 2016 show that 93.78% fatality, 93.36% grievous injuries and 94.33% minor injuries occurred on non-Junction roads. Similarly, during the year 2017, 97.25% fatalities, 96.35% grievous injuries and 97.34% minor injuries took place on non-Junction roads. The above analyses suggest that Junctions has played a very slight role in the State in causing road traffic accidents, fatalities and grievous injuries but keeping in view the ever rising numbers of new vehicles in the State, required interventions are needed in order to make these Junctions user friendly and safer for all road users.

Accident due to Junction type during the year 2016



Accident due to Junction type during the year 2017



JUNCTION TYPE WISE ACCIDENT DATA FOR THE PERIOD JANUARY TO DECEMBER (2018-2019)

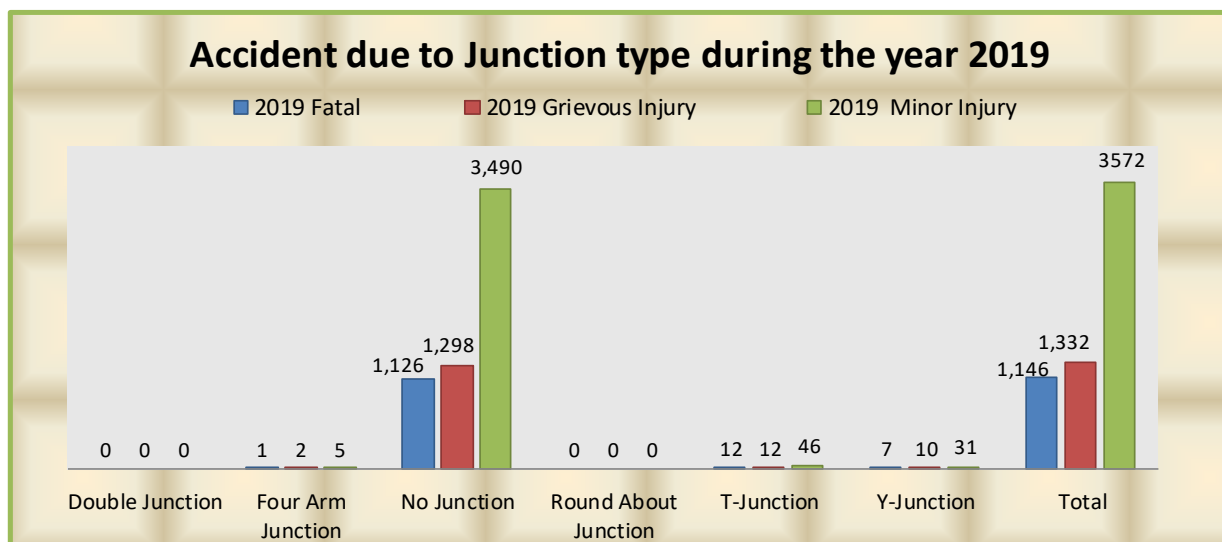
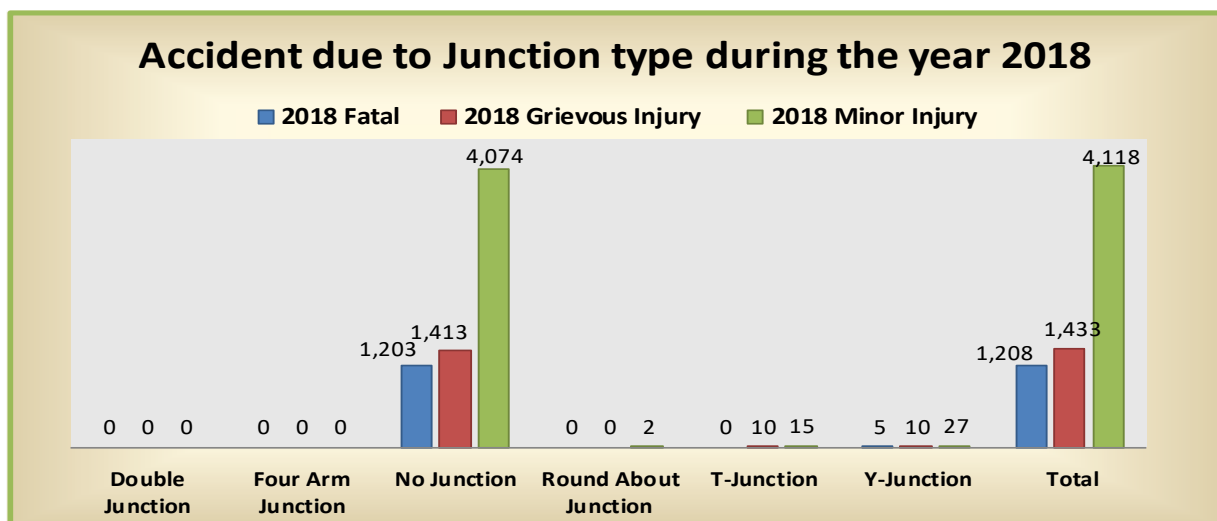
Junction Type	2018			2019			Percentage of Comparative data of year 2018-19		
	Fatal	Grievous Injury	Minor Injury	Fatal	Grievous Injury	Minor Injury	Fatal	G. Injury	M. Injury
Double Junction	0	0	0	0	0	0	0%	0%	0%
Four Arm Junction	0	0	0	1	2	5	100%	200%	500%
No Junction	1,203	1,413	4,074	1,126	1,298	3,490	-6%	-8%	-14%
Round About Junction	0	0	2	0	0	0	0%	0%	100%
T-Junction	0	10	15	12	12	46	100%	-17%	206.6%
Y-Junction	5	10	27	7	10	31	28%	0%	14.81%
Total	1,208	1,433	4,118	1,146	1,332	3572	-5%	-7%	-13%

The analyses of road accident data for the period from year 2018-2019 reveals that out of total 1208 fatalities during the year 2018, only 5 person i.e. 0.41 fatalities occurred on Junctions. Out of 1433 grievous injuries only 20 numbers i.e. 01.39% took place on “T “and “Y” junction. Similarly, out of 4118 minor injuries, only 44 injuries i.e. 1.06% occurred on Junctions.

During the year 2019, out of 1146 fatalities only 20 fatalities i.e. 1.74% took place on junction As far as the grievous injuries are concerned, out of 1132 injuries. only 24 i.e. 1.80% occurred on Junctions. Similarly, out of 3572 minor

injuries, only 82 minor injuries occurred due on Junction Roads which is only 2.29% of total injuries.

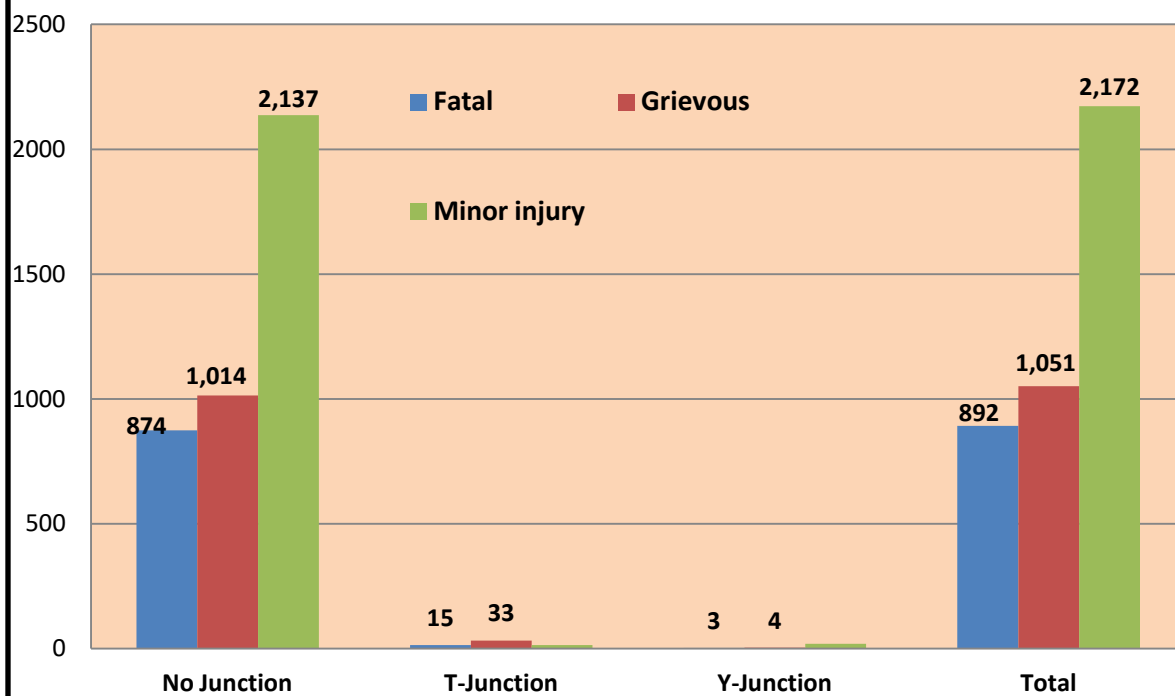
On 'T' Junction fatalities have been increased by 100%, Grievous injuries decreased by 17% and minor injuries increased by 206%. On Four Arm Junction, fatality, grievous and minor injuries have been increased by 100%, 200% and 500%.

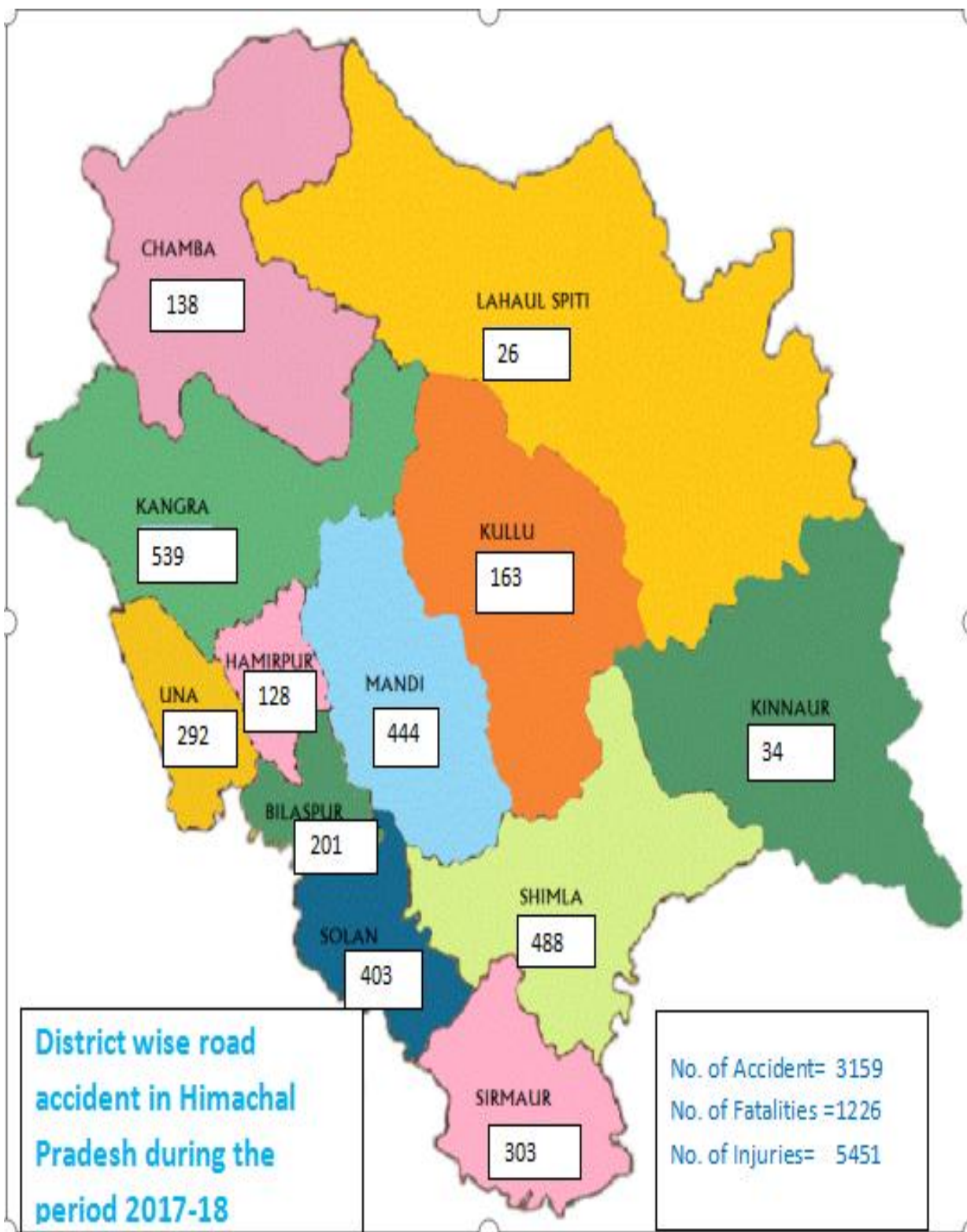


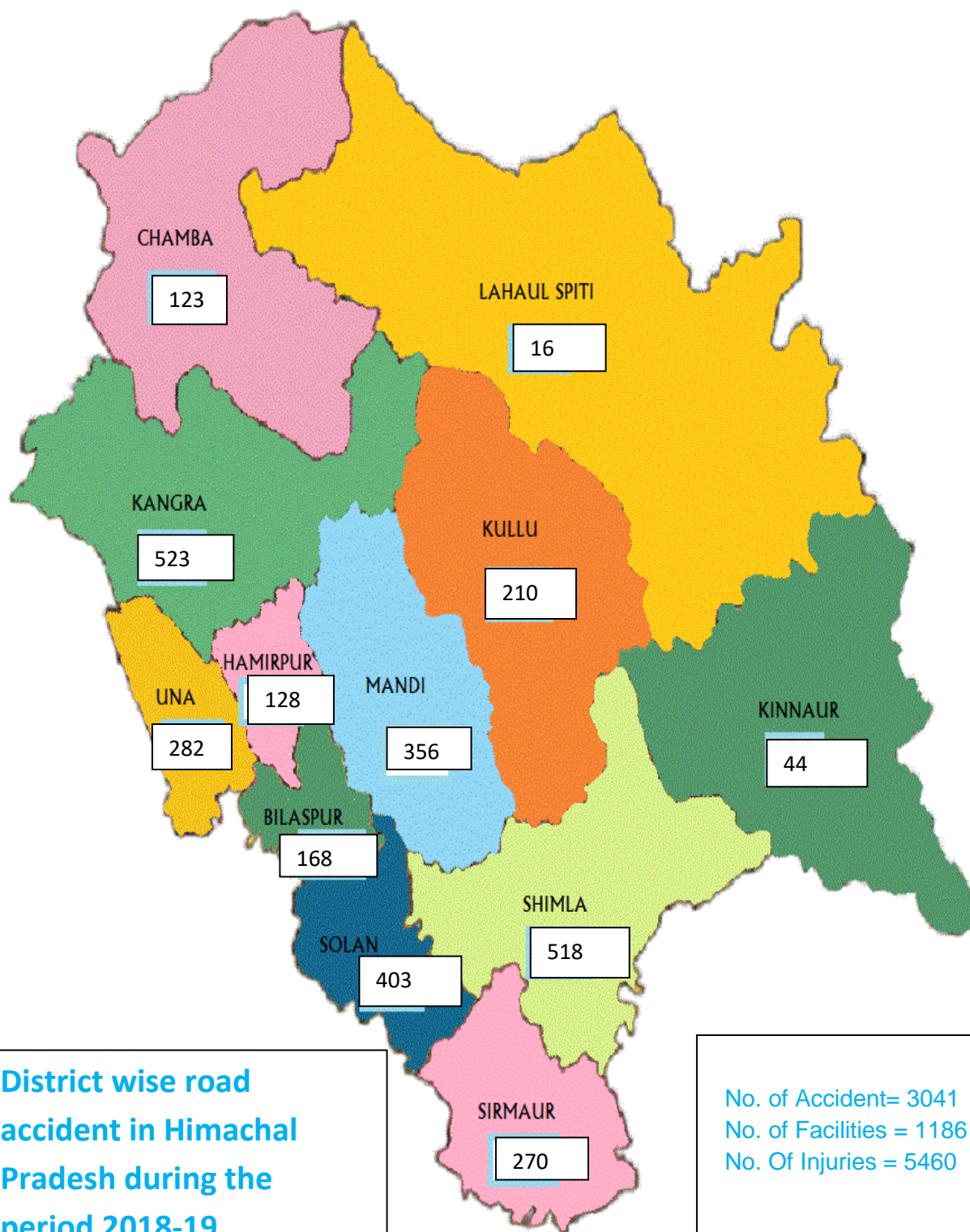
Junction Type wise accident Data for the Year 2020

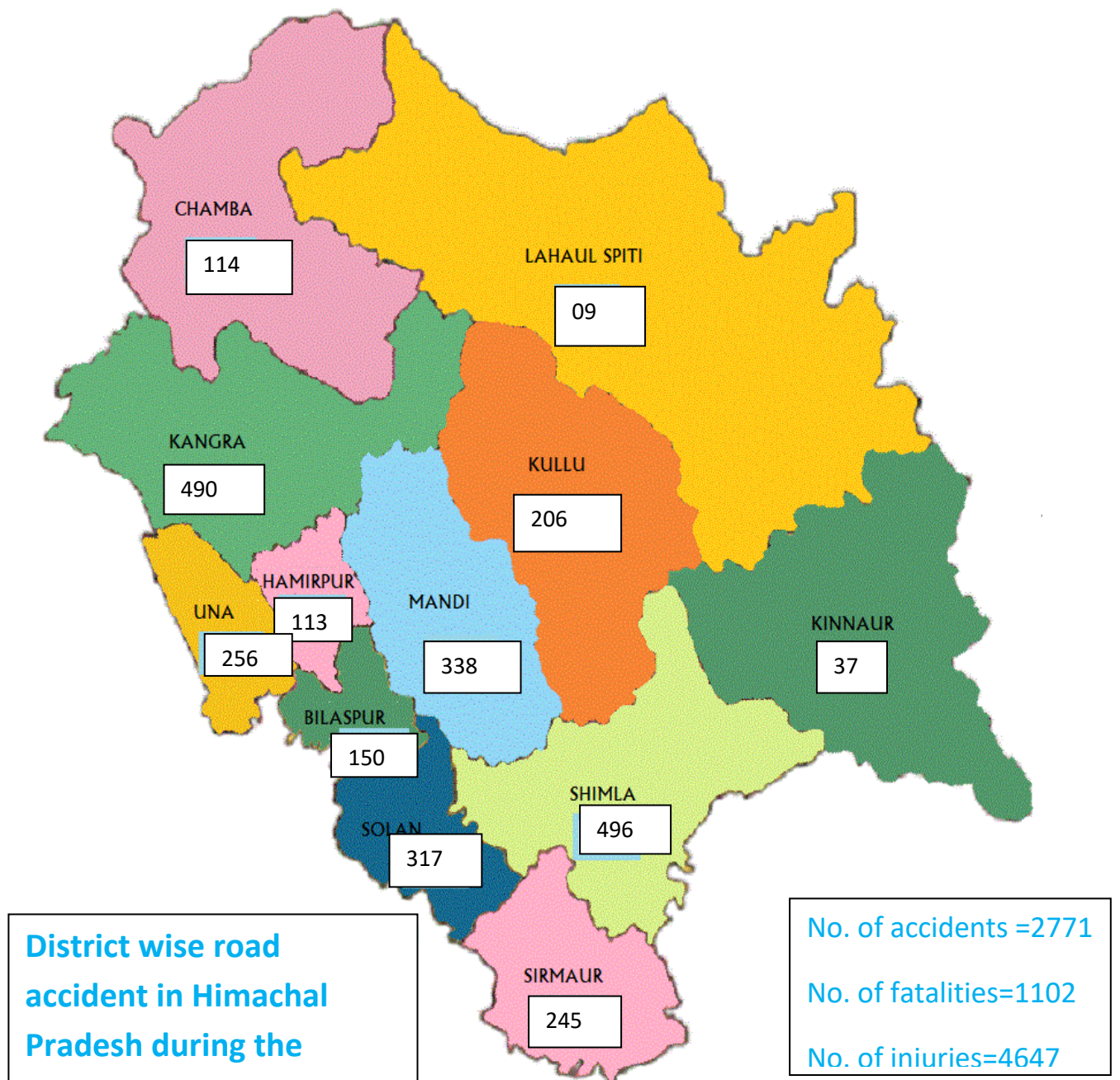
Junction Type	Fatal	Grievous	Minor Injury
No Junction	874	1,014	2,137
T-Junction	15	33	15
Y-Junction	3	4	20
Total	892	1,051	2,172

Junction Type wise Accident Data For the Period 2020



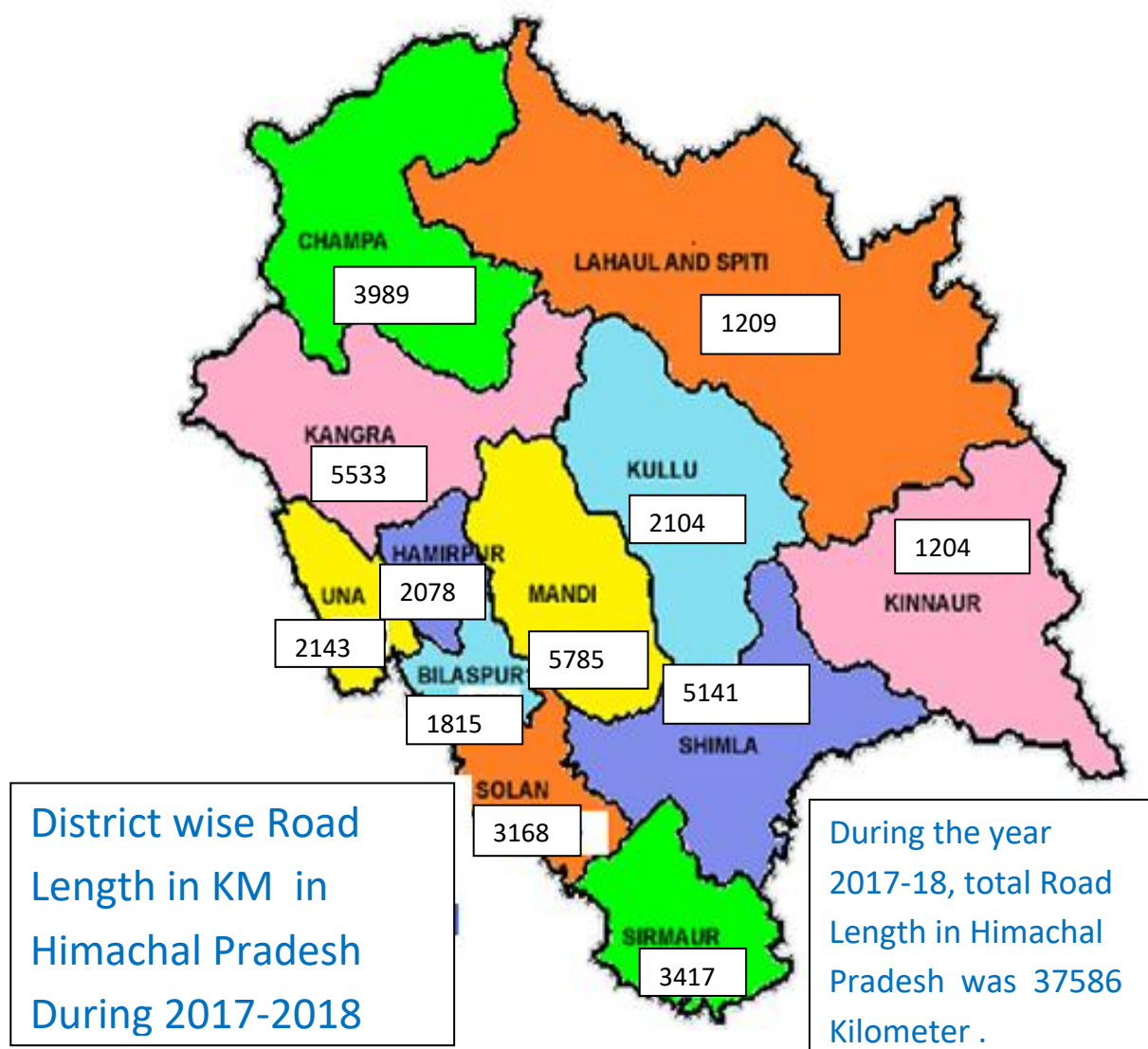


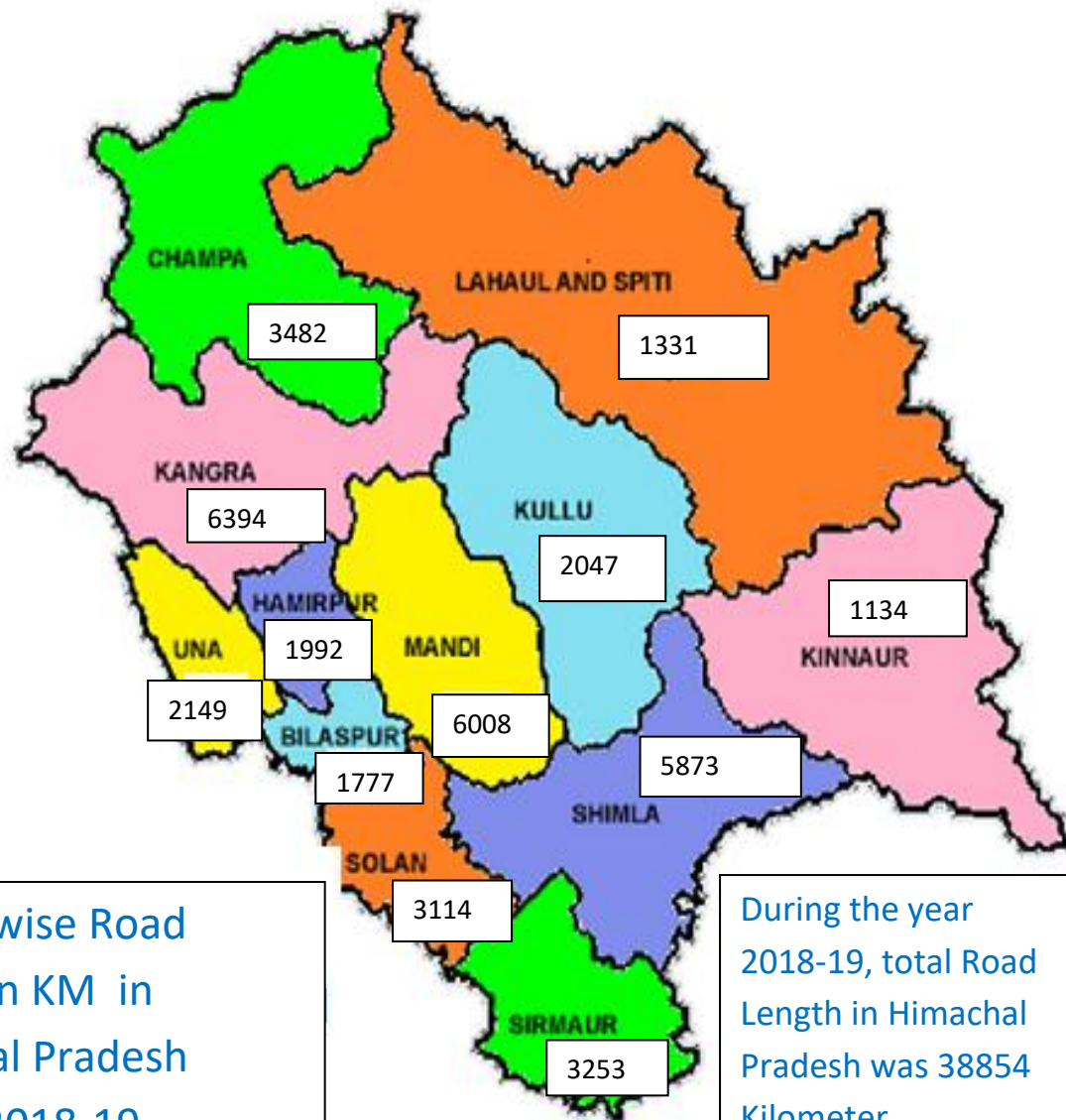




The comparative data of road traffic accidents for financial year 2017-18, 2018-19 and 2019-20 shows that there is decrease in the number accidents during the financial year 2018-19 by 3.73% than the year 2017-18 and fatalities rate by

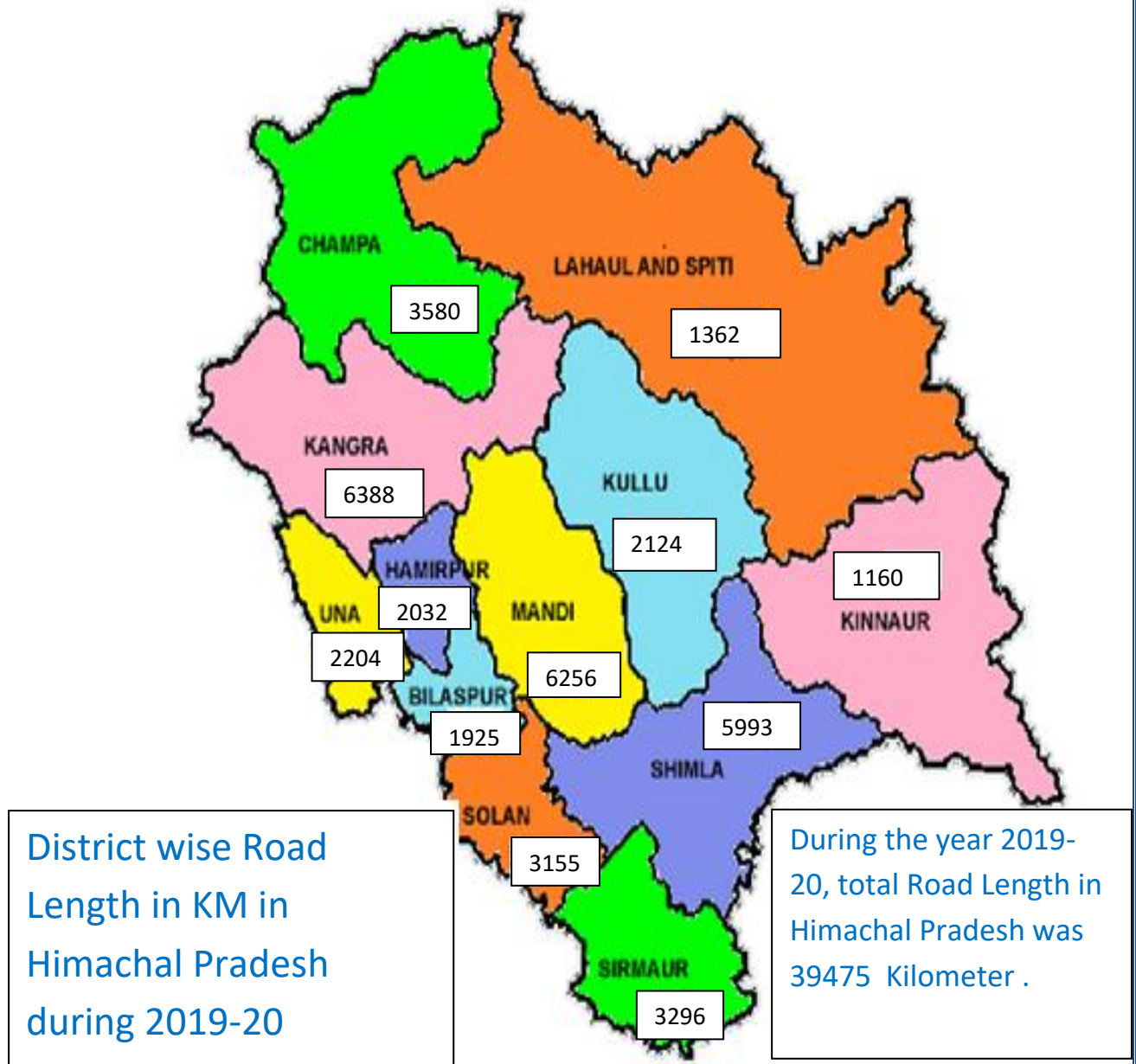
3.26%. However, very slight increase in the rate of injuries has been witnessed during the year 2018-19 over the year 2017-18 by 0.16 %. During the financial year 2019-20 State of H.P. has witnessed decrease in the number of accident by 8.87%, fatalities by 7.08% and injuries by 14.89% than the year 2018-19.



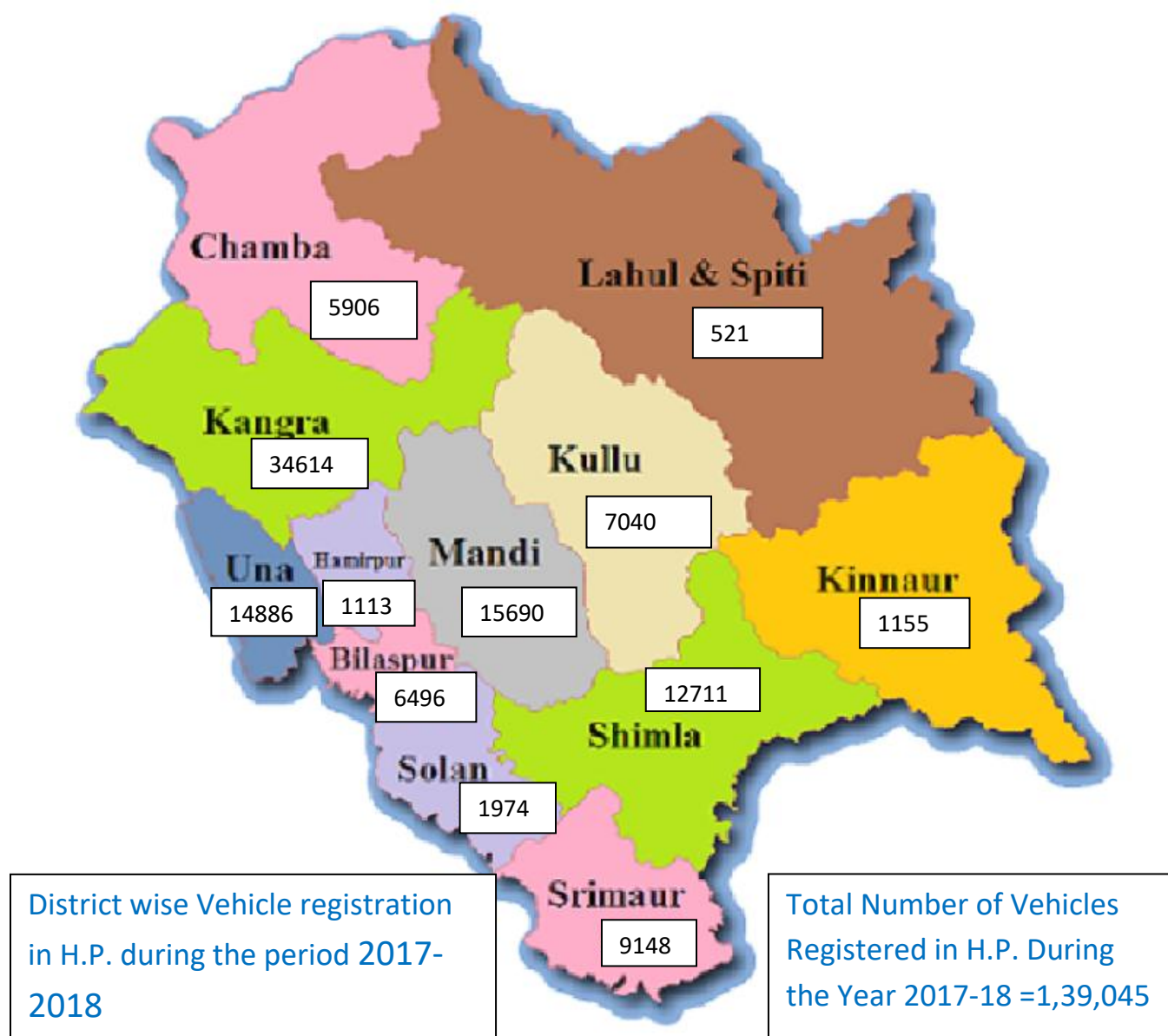


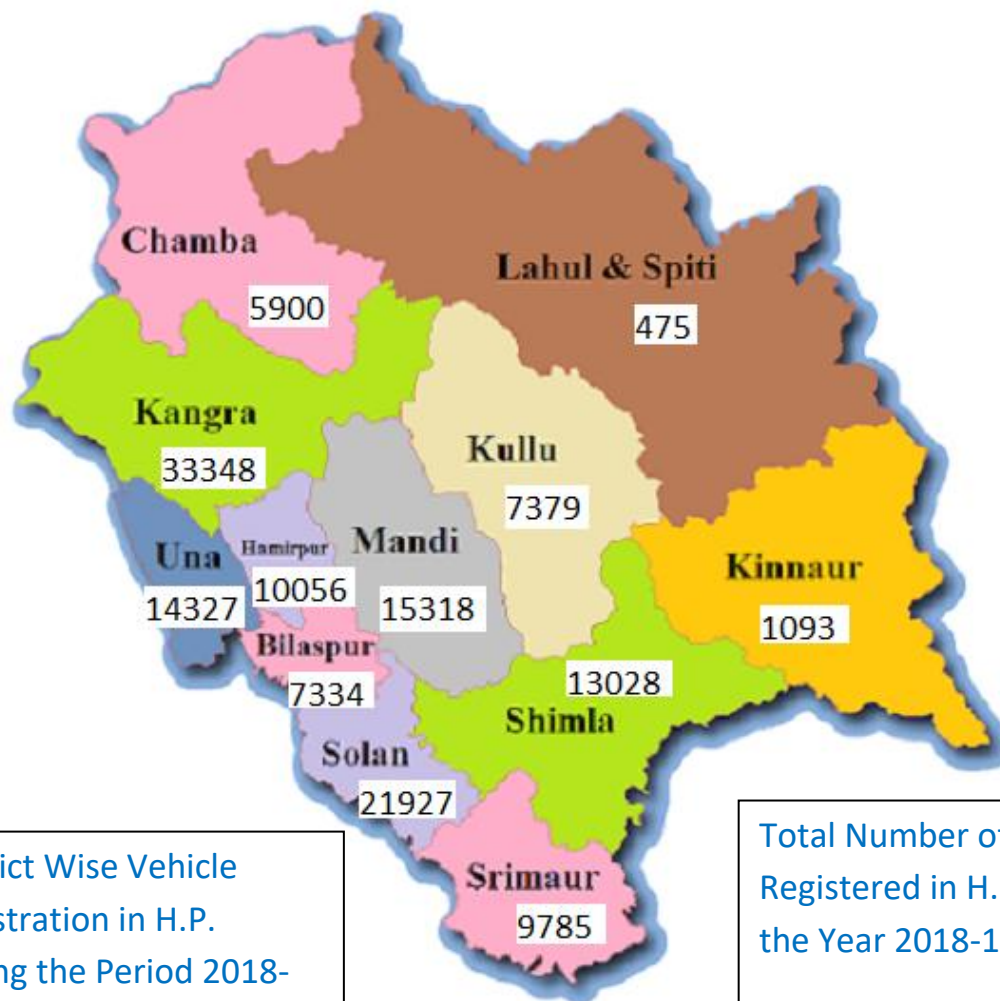
District wise Road Length in KM in Himachal Pradesh During 2018-19

During the year 2018-19, total Road Length in Himachal Pradesh was 38854 Kilometer.



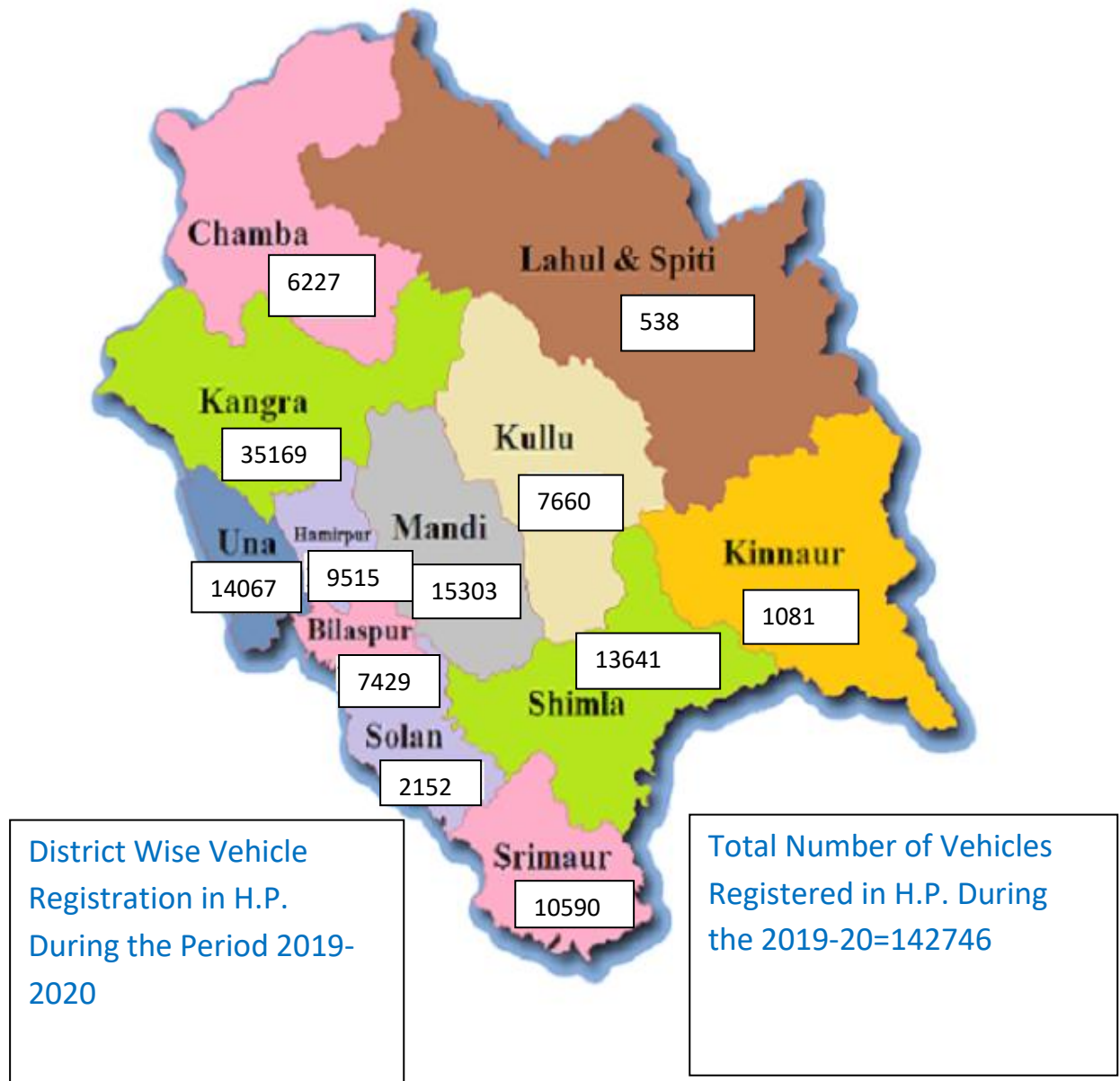
During the year 2017-18, total road length in Himachal Pradesh was 37586 Km whereas during the financial year 2018-19, the road network increased to 38854 Km by 1268 Km i.e. 3.37% over the year 2016-17 and during the year 2019-20, it increased to 39475 Km by 621 Km i.e. only 1.57% .





District Wise Vehicle
Registration in H.P.
During the Period 2018-
2019

Total Number of Vehicles
Registered in H.P. During
the Year 2018-19 =1,39,970



During the year 2017-2018, total 139045 numbers of new vehicles were registered in Himachal Pradesh whereas during the period 2018-2019 139970 new vehicles registered in the State of Himachal Pradesh which shows that more than 100% registration has taken place as compared to the year 2017-18. Similarly, 142746 vehicles registered in H.P. during the year 2019-20 which is also more than 100% than the previous year.

The analyses of road traffic accident data, length of roads and registration of vehicles in the State of Himachal Pradesh during the financial year 2017-18 and 2018-19 transpires that during the year 2017-18 total road length in Himachal Pradesh was 37586 Km. which increased to 38854 Km. By 1268 Km i.e. 3.37% during the year 2018-19.

The total number of new vehicles registered in H.P. during 2017-18 was 139045 whereas during 2018-19, 139970 more new vehicles were registered in H.P. which counts to more than hundred percent over the year 2017-18 due to which roads in the State certainly flooded with new vehicles resulting in congestion of traffic flow on the roads as the increase in the road length is almost negligible as compared to the vehicle population.

Similarly, during the financial year 2019-20, 1,42,746 more new vehicles registered in Himachal Pradesh which counts to 102% than the previous year registration. However, in comparison to the surge in vehicle population, the road length increased from 38854 Km to 39475 Km to an extent of 621 Km i.e. only 1.57%.

Therefore, it is but obvious that during the year 2018-19 with the increase of road length to an extent of only 1268 Km i.e. 3.37%, during the year 2019-20 only 621 Km and vehicle population to 139970 and 142746 number respectively i.e. more than 100% during the year 2018-19 and 2019-20 over the previous year, one can expect some increase in the number of road traffic accidents too. But contrary to that, we have a reason to heave a sigh of relief as the State of Himachal Pradesh has witnessed slight reduction in road traffic accidents during the year 2018-19 by 3.73% and fatalities by 3.26%. However, there is slight increase in the number of injuries but it is only by 0.16%.

Similarly, during the financial year 2019-20, there is 8.87% reduction in road traffic accidents, 7.08% in fatalities and 14.89% in injuries as compared to the financial year 2018-19.

ROAD TRAFFIC ACCIDENT SCENARIO IN KANGRA, SHIMLA AND MANDI DISTRICT DURING THE YEAR 2017-18

Total landed area of Himachal Pradesh = 55673 Sq. Km.

Total Population of Himachal Pradesh as per 2011 Census =6864602.

Projected population up to the end of 2020 =74 Lac.

Sr. No.	District	Area with parentage	Population (2011 Census) with percentage	Road length with percentage	New Vehicle registration	Number of Accidents with percentage
1	Kangra	5739 Sq. Mtrs. (10.30%)	1510075 lac (21.94%)	5533 KM (14.72%)	34614	539 (17.06 %)
2.	Shimla	5131 Sq. Mtrs. (9.21%)	814010 lac (11.85%)	5141 KM (13.67%)	12711	488 (15.40 %)
3.	Mandi	3950 Sq. Mtrs.	999777 lac (14.56%)	5785 KM (15.39%)	15690	444 (14.05 %)

**ROAD TRAFFIC ACCIDENT SCENARIO IN KANGRA,
SHIMLA AND MANDI DISTRICT DURING THE YEAR
2018-19**

Sr. No.	District	Area with percent age	Population with percentage	Road length with percentage	New vehicles registratio n	Accidents with percentage
1.	Kangra	5739 Sq. Mtrs. (10.30 %)	1510075 lac (21.94%)	6394 K.M. (16.45%)	33448	523 17.19%
2.	Shimla	5131 Sq. Mtrs(10 .30%)	814010 lac (11.85%)	5873 K.M. (15.11%)	13028	518 17.03%
3.	Mandi	3950 Sq. Mtrs.	999777 lac (14.56%)	6008 K.M. 15.46 %)	15318	356 11.71%

ROAD TRAFFIC ACCIDENT SCENARIO IN KANGRA, SHIMLA AND MANDI DISTRICT DURING THE YEAR 2019-20

Sr. No.	District	Area with percentage	Population with percentage	Road length with percentage	New vehicles registration	Accidents with percentage
1.	Kangra	5739 Sq. Mtrs. (10.30%)	1510075 lac (21.94%)	6388 K.M. (16.18%)	33448	490 17.68%
2.	Shimla	5131 Sq. Mtrs. (10.30%)	814010 lac (11.85%)	5873 K.M. (15.18%)	13028	496 17.89%
3.	Mandi	3950 Sq. Mtrs.	999777 lac (14.56%)	6256 K.M. 15.84 %)	15318	338 12.19%

On the in-depth analysis of Road Traffic Accident occurred in the State of Himachal Pradesh during the financial year 2017-18, 2018-19 and 2019-20, it has come on fore that highest number of accidents, fatalities and injuries took place only in three districts namely District Kangra, Shimla and Mandi.

The landed area of these three districts becomes 26.62% of the total landed area of Himachal Pradesh i.e. District Kangra by 10.30%, Shimla by 9.21% and District Mandi by 7.09%.

However, the landed area being covered by these three districts is about 1/4th of the total area of the State of H.P. but the human population of these three districts is 48.42% of the entire State.

As far as the road length of these three districts is concerned, during the year 2017-18, it was 16559 KM i.e. 43.78% as compared to the rest of the State. District Kangra had road network of 14.72%, Shimla 13.67% and District Mandi had 15.39%. During the year 2018-19, road length of these three districts increased to 18275 Km. by 1816 more Km. i.e. 47.02% of the entire State. The total road length of District Kangra was 16.45%, District Shimla was 15.46% and District Mandi was 15.11%.

During the financial year 2019-20, there is no increase in road length in District Kangra rather road length has decreased to 06 Km. which may be due to the construction of bridges or construction of new road in place of old road. Road length of these three districts was 47.2% of the entire State i.e. District Kangra by 16.18 Km., District Shimla by 15.18 Km. and District Mandi by 15.84 Km.

Similarly, during the year 2017-18, number of new vehicles registered in these three districts was 45.31% of the total vehicles registered in the State. During the year 2018-19, 44.06% more new vehicles registered in these three districts out of the total registration in Himachal Pradesh. Similarly, during the year 2019-20, number of new vehicles registered in these three districts was 44.91% i.e. District Kangra 24.63 %, Shimla 9.55%& Mandi was 10.72%.

But instead of having less landed area measuring to only about 1/4th of the entire landed area of the State, these three districts are having almost half of the human population, vehicle population and road length of the entire State due to which the maximum number of accidents are taking place in these three districts only with highest number of fatalities and injuries.

During the year 2017-18, out of 3159 road traffic accidents, 1471 number i.e. 46.56% accident occurred in these three districts. Highest number of accidents took place in District Kangra by 17.06%, Shimla by 15.44% and Mandi by 14.05%.

As far as the rate of fatalities is concerned, 47.96% fatalities took place in three districts i.e. District Shimla by 22.35%, Kangra by 14.68% & Mandi by 10.92%.

Similarly 49.07% injuries took place in these three districts i.e. District Shimla by 17.81%, District Kangra by 17.17% and District Mandi by 14.09%.

During the year 2018-19, 45.93% road traffic accidents took place in these three districts i.e. District Kangra by 17.19%, Shimla by 17.03% and Mandi by 11.70%. As far as the fatality rate is concerned 43.42% fatalities occurred in these three districts i.e. District Shimla by 20.32%, Kangra by 14.58% and Mandi by 8.51%. Similarly, rate of injuries in these three districts during the year 2018-19 is 44.67%. District Kangra by 17.32%, District Shimla by 15.60% and District Mandi by 11.73%.

During the financial year 2019-20, 47.78% accidents occurred in these three districts i.e. District Kangra by 17.68%, Shimla by 17.89% & Mandi by 12.19%.

As far as the fatality rate is concerned, 40.46% fatalities happened in these three districts i.e. District Kangra by 14.70%, District Shimla by 15.42% and District Mandi by 10.34%.

Similarly, 46.9% injuries took place in there district i.e. District Shimla by 17.08%, District Shimla by 17.19% and District Mandi by 12.63%.

Since these three districts has highest number of human and vehicle population and road length as compared to the landed area of these three districts with rest of the State, in order to reduce the frequency of road traffic accidents, fatalities and injuries, special attention is required to be given on remedial measures and required interventions. Keeping in view the behavioral attitude of the road users in present scenario, strict and effective enforcement of traffic laws/rules/regulations is required besides organizing awareness campaign through IEC component i.e. campaign through mass media including “Short Documentary Films”, “Nukkad-Naataks” Workshops and seminars etc. to make the public aware about the ill-effects and repercussions of road traffic accidents by incorporating the road accident data reflecting the number of accident, fatality and injuries and consequences being faced by the accidents victims, their family members and dependents.

The road traffic accidents resulting in fatalities and serious injuries exert very deep impact on the society and Nation as well. The screening of short documentary films reflecting ill- effect and plight of the victims of accidents and their family members/dependents will certainly instill sense of responsibility and respect to the traffic laws in the mind of drivers/road user and general public. As a part of awareness campaign, LED Scroll Screens displaying the updated road accident data are also required to be installed at prominent places like bus-stands, hospitals, malls and near school, colleges and other educational institutions. Road Safety Ambassadors may play important role in educating the people around them about the safety measures and road traffic laws, therefore more and more willing and concerned people are required to be encouraged to come forward and become Road Safety Ambassadors.

Further, the wide publicity of concept of “Good Samaritan” is required to be undertaken effectively so that maximum number of people are encouraged to extend their timely help during the “Golden Hour” to the accident victims without any fear of being involved in any investigation procedure and harassment at the hand of Police and Medical department so that precious human lives could be saved.

INITIATIVES BEING UNDERTAKEN BY THE STATE OF H.P. TOWARDS ROAD SAFETY.

The State of Himachal Pradesh is committed to develop road safety as a “Culture” amongst the public of the State and other road users so that frequency of road traffic accident could be reduced and precious human lives be saved. The annual average rate of road traffic accident, fatality and injuries in Himachal Pradesh is 3000, 1200 and 5000 respectively which shows that we are 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.

In order to serve as a “Welfare State”, Himachal Pradesh is taking effective remedial measures to curb this menace which could be avoided by adopting required safety measures and adhering to the traffic laws and rules.

Police and Transport departments are the key stakeholder undertaking effective implementation of traffic law enforcement in the State. In order to make the people abide by traffic laws and rules and to adopt required safety measures, enforcement agencies in the State are not only implementing the strict enforcement of traffic laws but the “counseling” of the violators is also being done on the spot by explaining them the benefits of adhering to the traffic laws and further financial and legal consensuses they will have to face if the offence is repeated time and again.

THE DETAIL OF TRAFFIC CHALLANS, COMPOUNDING OF CHALLAN AND FINE REALIZED THEREFROM FROM THE YEAR 2010 TO MAY2021 DONE BY POLICE DEPARTMENT IS AS UNDER:-

Year	Total No. Of Challans during the year	Total No. Of Challans compounded during the year	Total fine realized during the year
2010	286221	204927	76450264
2011	335064	243268	89163110
2012	394483	293086	104367510
2013	431359	330239	119701316
2014	523452	400554	130800870
2015	603201	455791	144352100
2016	708839	478186	169050810
2017	628597	450164	150125705
2018	833164	651559	230038725
2019	1095549	780816	304225405
2020	1014641	751779	208895219

- Apart from challaning the vehicles violating the traffic laws, in compliance to the directions given by the Hon'ble Supreme Court Committee on Road Safety vide letter dated 17.11.2015 and as per the section 19 of Indian MV Act 1988 read with rule 21 of the Central Motor Vehicle Rules 1989, during the year 2018, Himachal Pradesh Police Department has recommended suspension/cancellation of 7573 licenses of violator of different offences i.e. red light jumping, over-speeding, over-loading in goods carriers, carrying person in goods carrier, using mobile phone while driving and driving under the influence of drinks and drugs. Similarly, during the year 2019 and 2020, 8175 and 3382 driving licenses have been recommended for suspension/cancellation respectively for the above offences.

- The Himachal Pradesh Police has 136 Police Stations, 164 Police Posts/Police Assistance Rooms (PARs) & 54 Traffic Barriers in 13 Police districts spread across the State and has access to the citizens from all walks of life up to ward level. The jurisdiction of each Police Station and Police Post have been divided into beats and as such beat Police Personnel cover whole area of the jurisdiction of concerned Police Station and Police Posts. Since the Police is directly connected with general public and enforcing the traffic laws hence, the awareness campaign being launched by the Police Department is very much effective and result yielding.

- Beside above, before the spread of COVID-19, regular awareness campaign were being organized by the State Police by visiting schools, colleges and other educational institutions wherein Police officers including gazetted Police officers

were personally visiting the above institutions and interacting with the students on road safety laws/rules and on safety of road user which will be resumed after the pandemic is over. The State Police has constituted “Road Safety Clubs” at Police Station level where citizens from all walks of life are associated and required interventions for better implementation of road safety measures are discussed and public participation is solicited.

- In furtherance of the above initiatives, the State Police has also launched “Traffic Warden” Scheme where students of the senior classes of various schools are requested to regulate road usage by the children during school hours along with traffic personnel.
- Further, regular awareness camps are also being organized through various stakeholders like Taxi Unions, Heavy Goods Vehicle Unions, NGOs as well as general public. Also, the social media platform is being used for the awareness purpose which includes Facebook pages and Twitter accounts.
- Also, the school buses /taxis are being checked regularly by the Police and Transport Department to ensure the safety and security of school children. Necessary direction/instructions are being issued to the field functionaries which are being complied accordingly. ***However, the above activities in the school/colleges and other educational institutions were on a hold because of the closing of these School/ institutions due to the spread of COVID-19 which are being resumed by observing the proper Covid protocol.***

- For the effective enforcement of traffic laws, State Police has been equipped with enforcement equipment like Doppler Radar and Speed- Guns to keep strict vigil on the violation of Speed Limit and Alco-Sensors to reduce the frequency of road traffic accidents happening due to drunken driving. Further, in order to enhance the efficiency of Police Department and fulfill the inadequacy of enforcement equipment and vehicles required for the purpose of road safety, a proposal of 13 “Interceptors” along with required vehicles for patrolling and enforcement equipment amounting to Rs. 9.12 Crores under consideration of the H.P. Govt.

ROAD SAFETY AWARENESS CAMPAIGN BY THE TRANSPORT DEPARTMENT

➤ In order to redress the issue for reducing the frequency of road traffic accidents, the Department of Transport had launched a “Road Safety Awareness Programme” which was inaugurated by Hon'ble Chief Minister, Himachal Pradesh on 04.08.2019. The department has formulated Road Safety Strategy for the awareness of general public and school children were also sensitized towards Road Safety during this special campaign at initial stage and it is being followed by strict enforcement. Painting and Slogan Writing Competition through online mode, Road Safety Workshops are some activities that are being formulated by the department of Transport so as to spread meaningful message regarding Road Safety and Safe Driving among the society.

➤ Public awareness Programs:-

➤ Marathon

In order to create awareness amongst general public, school children, drivers and pedestrians, Department of Transport Himachal Pradesh organized a State level Marathon “**DAUD SURAKSHA KI**” which was flagged off from “The Ridge” Shimla by Hon'ble Chief Minister Himachal Pradesh on 4th August 2019. Races for different categories i.e. 20 Km for men, 10 Km for women and 06 Km for below 20 years and 03 Km for

senior citizens were organized and the winners were awarded with cash prizes for the same.

➤ **Pamphlets**

In order to make people aware about the amendment in Motor Vehicle Act, pamphlets have been supplied to all RTOs for further distribution to general public through newspapers.

➤ **Calendars:**

Department of Transport has also launched a New Year Campaign as a part of publicity measure to sensitize motorists about safety while driving on Road. During the programme, the department focused on spreading traffic awareness through distribution of New Year Calendar to general public, all transport associations and all Govt. offices.

➤ **Jingles on Road Safety**

Jingles on road safety were launched by Hon'ble Chief Minister on 4th August 2019, which are being aired through radio FM i.e. Radio Mirchi , Big FM and All India Radio on daily basis as radio is one of the most effective mediums to utilize in this campaign.

➤ **Social Media Campaign (Face book)**

The Department of Transport Himachal Pradesh has launched a Road Safety Awareness Program through Social Media (Facebook/

YouTube/Twitter) so as to create awareness amongst general public through slogans, videos and posters etc.

- In order to spread the message of road safety, Department of Transport Himachal Pradesh had organized an Online Slogan Writing Competition at College and University level for a period of one month w.e.f 1st November 2019 to 30th November 2019 in the entire State. These slogans helped in spreading meaningful message regarding Road Safety and Safe Driving among the society.

- **Painting Competition**

So far, painting and slogan writing competitions have been conducted in 29 sub-divisions of the State as a part of road safety campaign by Transport Department. Around 6000 students took part in the competition. The participants, who stood first, second and third in each sub-division have been awarded with souvenirs and cash prizes.

- **Road Safety Week:**

To give all the stakeholders an opportunity to take part in concerted action for the cause, "**National Road Safety Week**" is observed throughout the state every year in order to highlight and emphasize the need for safe driving. It is also an opportunity for all stakeholders to contribute to the cause by undertaking activities to promote the concept of road safety as a "Culture Campaign". The **31st Road Safety week** was observed from 11th January to 17th January 2020.

In the State of Himachal Pradesh “Black Spots” defined by the Ministry of Transport and Highways are being identified by the Police and PWD department jointly and vulnerable spots/accident prone areas by the Himachal Road Transport Corporation (HRTC) and 108 GVK ambulance services which are being rectified by the concerned HPPWD, CPWD, NHAI and BRO in their respective jurisdiction, detail of which is as under:

BLACK SPOTS				
S.No.	Total No. of Black Spots	Rectified	In Progress	Balance
1.	90	72	1	17
2.	195 (POLICE)	79	51	65
VULNERABLE /ACCIDENT SPOTS				
3.	169 (HRTC)	29	-	140
4.	505 (GVK)	348	-	157

The State of Himachal Pradesh is seamlessly making its all over efforts by ensuring the participation and contribution of all the stakeholder departments and public in general to reduce the frequency of road traffic accidents and to make Himachal as “Safer State” for all the road users. We hope that by putting forth our concerted and effective efforts, we will certainly be able to achieve our goal to make road safety as a “Culture” in the State of Himachal Pradesh.

“JAI HIND”

During the period from year 2016-2020, road traffic accidents on National Highways have been decreased constantly by 5.74% during the year 2017 over the year 2016, 1.88

in the year 2018 over the year 2017 and 4.18% during the year 2019 over the year 2018 and 27.16 % during the year 2020 than the year 2019.

However, rate of fatalities has been decreased during the year 2017 by 1.09%, during the year 2018 by 12.40% over the year 2017 but increased by 2.74% during the year 2018 as compared to the year 2019. During the year 2020 fatality rate has been decreased by 37.24% than the year 2019.

As far as the injuries on National Highways are concerned, during the year 2017 it has witnessed an increase by 3.49% than the year 2016 but subsequently decreased by 3.97% during the year 2018 than the year 2017, by 9.02% during the year 2019 over the year 2018 and 33.07% during 2020 than the year 2019.

On State Highways, number of accidents have been increased slightly by 02 accidents i.e. 0.31% during 2017 over the year 2016 but subsequently decreased by 1.56% in the year 2018, 7.81% during the year 2019 and 27.50 % during the year 2020 than the year 2019.

The number of Fatalities on State Highways have been decreased during the year 2017 by 18.86% over the year 2016 whereas the same has been increased during the year 2018 by 9.76% over the year 2017 but subsequently decreased during the year 2019 by 6.77% than the year 2018 and 26.81% during the year 2020 over the year 2019.

Similarly, number of injured persons on State Highways have been decreased by 14.51% during the year 2017 over the year 2016 but increased during the year 2018 by 10.38% over the year 2017. However, the same have been decreased by 15.56% during the year 2019 and 43.51 % during 2020 than the previous years.

Effective Patrolling and strict traffic law enforcement on National Highways, State Highways and City Roads during the peak hours is must for the reduction of number of road traffic accidents, fatalities and injuries. Also, keeping in view the behavioral attitude of the public/road user of the Country, vide publicity of “Negative Awareness” reflecting the ill- effects of road traffic accidents, fatalities and grievous injuries on the accident victims, family members and dependents of the accident victims is required to be undertaken in order to make the people adhere to the traffic laws and rules. Further, to get the desired results, enforcement agencies are required to be provided with sufficient traffic personnel, law enforcement equipment of latest technology along with Interceptor Vehicles and adequate Patrolling Vehicles as per the requirement of each District in the State.

