



STATISTICS OF ROAD ACCIDENTS IN BANGALORE: AN ANALYSIS

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ABSTRACT

The national highways accounts for the highest of accidents person killed and injured in the road accident in Bangalore. Bangalore alone accounted for nearly 1/6th of total accidents, one tenth of persons killed in accidents and one seventh of persons injured in India. The highest number of accidents occurred in national highways. It is the duty of every citizen to follow the traffic rules strictly so that accidents can be avoided. Health of the nation is more important than the wealth of the nation. Road safety is a major public health concern. So attention must be given to road safety measures. Strict implementation of road safety measures reduces road accidents, injuries and fatality. Road accidents cause both tangible and intangible costs to the economy. Some of the tangible costs include damage to the vehicle (replacement and repairs costs) administrator costs, Medical treatment, reduction in output due to injury and death etc. Intangible costs include pain, grief and suffering and risk of being involved in accidents to the economy is in billions. Sure all vehicles and medicines are important; this amount depletes the scarce foreign exchange available in the economy.

INTRODUCTION

Road accidents cause direct impact on the social and physical environment whenever a person is involved in an accident, most likely the family will have to sustain the medical burden or alternatively in the event of death, the whole family may become financially vulnerable on the later period in terms of number of accidents Bangalore accounts for more than 90 per lakh of population and more than 3,000 accidents 10,000 km of roads usage. Hence an analysis is made to know the position of Bangalore compared to whole of India in the number of accidents, person killed etc.

OBJECTIVES

- ⇒ To analyze number of road accidents, persons killed and injured in the national highways and state highways.
- ⇒ To assess the share of Bangalore in the total number of road accidents, persons killed and injured in India.

Date Source: Secondary data is used for analysis dates are collected from traffic zone and nodal centers across Bangalore and transport and highways transport research wing government of Karnataka.

Period of study: This study is conferred to a period of 2009-2012.

RESULTS & DISCUSSION

It is clear from table-1 that Bangalore number of accidents in other roads has the highest share of 36.1% compared to national highways, 33.7% and state highways 30.2% number of persons killed has the highest share of 36.8% in national highways and number of persons injured has the highest share of 34.8% in other roads during 2010 on 2011 state highways. Had the highest share in numbers of accidents (41.2%), persons killed (40.4%) and injured (40.1%) in road accidents.

TABLE -1

In 2012 National highways had the highest shares in numbers of accidents (34.9%) persons killed (38.4%) and injured (35.8%) in the road accidents. During 2010 and 2011, NH had the highest shares in numbers of accidents, persons killed and injured in the road accidents this, the NH accounted for highest in number of accidents, persons killed and injured in road accident in Bangalore.

Number of accidents, persons killed and injured as per road classification in Bangalore (2009 - 2012)

YEAR	ROAD CLASSIFICATION	NH	SH	OTHER ROADS
2009	No of accidents	19158 (34.9%)	24912 (41.2%)	16339 (27.1%)
	No of persons killed	4417 (38.4%)	5165 (40.4%)	3202 (25%)
	No persons injured	22059 (35.8%)	28192 (40.1%)	20,000 (28.5%)
2010	No of accidents	21198 (34.9%)	18994 (31.2%)	20652 (33.9%)
	No of persons killed	5282 (38.4%)	4510 (32.8%)	3954 (28.8%)
	No persons injured	25272 (35.8%)	22278 (31.6%)	22954 (32.6%)
2011	No of accidents	24083 (37.1%)	20722 (31.9%)	20191 (31%)
	No of persons killed	6333 (41.1%)	5250 (34.1%)	3826 (24.8%)
	No persons injured	28890 (38.3%)	23822 (31.6%)	22733 (30.1%)
2012	No of accidents	22932 (34.8%)	20920 (31.8%)	22021 (33.4%)
	No of persons killed	6052 (39.2%)	5025 (32.6%)	4345 (28.2%)
	No persons injured	27104 (36.5%)	23098 (31.1%)	24043 (32.4%)
Avg	No of accidents	107281 (34.5%)	103346 (33.2%)	100585 (32.3%)
	No of persons killed	26514 (38.2%)	23681 (34.1%)	19202 (27.7%)
	No persons injured	127655 (35.3%)	119411 (33%)	114478 (31.7%)

TABLE – 2

Reveals that roads others NH and SH has the highest share in the number of accidents, persons killed and injured in the road accidents during 2009-2012. Between NH and SH, NH accounted for a greater share during to study period.

Hence the other roads followed by NH accounts for the highest number of accidents, persons killed and injured in road accidents during the study period,

Number of accidents, persons killed and injured as per road classification in India (2009 - 2012)

YEAR	ROAD CLASSIFICATION	NH	SH	OTHER ROADS
2009	No of accidents	1,37995 (28.5%)	123972 (25.6%)	227737 (45.9%)
	No of persons killed	42670(35.6%)	34081(28.4%)	43109 (36%)
	No persons injured	49693 (28.6%)	143078(27.5%)	229792 (43.9%)
2010	No of accidents	42511 (29.3%)	115992 (23.8%)	227881 (46.9%)
	No of persons killed	45222 (36%)	34093 (27.1%)	46345 (36.9%)
	No persons injured	52816 (29.6%)	131517 (25.5%)	231125 (44.9%)
2011	No of accidents	49929 (30%)	122406 (24.5%)	227293 (45.5%)
	No of persons killed	48466 (36%)	36771 (27.3%)	49276 (36.6%)
	No persons injured	65012 (31.3%)	137364 (26%)	225136 (42.7%)
2012	No of accidents	49372 (30.1%)	122239 (24.6%)	225715 (45.3%)
	No of persons killed	52924 (37.1%)	39033 (27.4%)	50528 (35.5%)
	No persons injured	56008(30.5%)	133435 (26.1%)	221951 (43.4%)
Avg	No of accidents	19089 (29.4%)	601517 (24.6%)	1127012 (46%)
	No of persons killed	29894 (36.1%)	175666 (27.6%)	231402 (36.3%)
	No persons injured	778409 (30%)	680283 (26.3%)	1132205 (43.7%)

TABLE – 3

Indicate that of the total number of road accidents in India, Bangalore accounted for nearly 12.5% during 2010,2011and 2012 during 2010,2011and 2012 share of Bangalore

increased by 0.5%and 0.7% respectively of the 28 states and 7 union territories' Bangalore in Karnataka done accounted for nearly 1/6th of total accidents.

Total numbers of road accidents in Bangalore and India (2009 - 2012)

Year	Bangalore	India	Share of Bangalore to other states
2009	60409	484704	12.5%
2010	60794	486384	12.5%
2011	64996	499628	13%
2012	65873	497686	13.2%

TABLE – 4

Indicates that of the total number of persons killed in India, Bangalore alone accounted for 10.5%, 10.7%, and 10.9% .during

2009,2010,2011,2012. Bangalore accounted for a decrease of 0.7%.

Total number of persons killed in Bangalore and in India (2009 - 2012)

Year	Bangalore	India	Share of Bangalore to other states
2009	12784	119860	10.7%
2010	13746	125660	10.9%
2011	15409	134513	11.5%
2012	15422	142485	10.8%

TABLE – 5

Indicates that of the total number of persons injured in India Bangalore accounted for 13.9% during 2009. During 2010 share of Bangalore decreased by 0.5%. During 2009, 2010 and 2011 share of Bangalore increased by 0.3%, 0, 9%, 1.1% respectively.

Total number of persons injured in Bangalore and in India (2009 – 2012)

Year	Bangalore	India	Share of Bangalore to other states
2009	70251	523193	13.4%
2010	70504	515458	13.7%
2011	75445	527512	14.3%
2012	74245	511394	14.5%

The main causes of increasing of road accidents are

- ⊗ Not knowing or not adopting correct driving habits
- ⊗ Increasing number of new generation vehicles especially two wheelers
- ⊗ Aggressive driving behavior of Heavy vehicle drivers especially private Buses and Tipper Lorries
- ⊗ Drivers sleeping whole driving heavy vehicles due to fatigue creep
- ⊗ Over speeding
- ⊗ Bad condition of roads and absence of different lanes
- ⊗ Driver/riders ignorance of road conditions, road signs and environment factors
- ⊗ Driver/Riders Ignorance or violation of traffic rules
- ⊗ Drink and driving /Driving without seat belt
- ⊗ Driving without helmet

Average Road Accidents in Bangalore December 2009 To 2012 (Per Month)

YEAR	NO OF PERSONS KILLED		TOTAL	NO OF PERSONS INJURED		TOTAL
	M	F		M	F	
2009	58	13	71	375	91	466
2010	46	06	52	314	90	404
2011	61	06	67	313	100	413
2012	54	12	66	294	93	387
TOTAL	219	37	256	1296	374	1670

Age and Sex Wise Analysis of Persons Injured

SL.NO.	AGE	2009		2010		2011		2012	
		M	F	M	F	M	F	M	F
1	Below 6 yrs	96	35	75	43	58	44	54	50
2	7 to 18 yrs	315	150	276	175	256	108	210	91
3	19 to 30 yrs	1786	379	1750	409	1542	373	1355	341
4	31 to 50 yrs	1559	463	1474	350	1404	387	1258	378
5	Above 51 yrs	672	213	591	200	580	224	552	182
	TOTAL	4428	1240	4166	1177	3840	1136	3429	1042

Age and Sex Analysis of Persons Killed

SL.NO.	AGE	2009		2010		2011		2012	
		M	F	M	F	M	F	M	F
1	Below 6 yrs	9	11	10	10	8	3	15	11
2	7 to 18 yrs	39	09	28	06	18	07	26	09
3	19 to 30 yrs	219	29	274	27	240	31	225	24
4	31 to 50 yrs	202	47	254	51	231	29	201	36
5	Above 51 yrs	149	47	152	46	149	46	166	42
TOTAL		618	143	718	140	646	116	633	122

HOW TO AVOID ROAD ACCIDENTS

All road users should remember that road is to be shared amongst all. Requirement of different road users may differ according to circumstances and observation of traffic rules and consideration for the fellow users can reduce congestions, traffic jams and accidents all road users must ensure that they obey traffic

rules at all terms (including traffic signals), give preference to emergency vehicles, five engines and the like, should use signals when necessary/ turning, overtaking etc. Park only in designated areas, give due considerations to pedestrians and keep within the permitted speed limit.

Hour - Wise Accidents

YEAR	1-06 HRS	06-09 HRS	09-12 HRS	12-15 HRS	15-18 HRS	18-21 HRS	21-24 HRS	TOTAL
2009	563	922	1162	1110	1167	1176	775	6875
2010	480	744	1050	931	1002	1032	749	5988
2011	367	724	1061	1039	1088	1033	712	6024
2012	360	684	946	985	965	955	607	5502
YEAR	1-06 HRS	06-09 HRS	09-12 HRS	12-15 HRS	15-18 HRS	18-21 HRS	21-24 HRS	TOTAL

CONCLUSION

The NH accounts for the highest number of accidents, persons killed and injured in the road accidents in Bangalore. Bangalore alone accounted for 1/6th of total accidents. One tenth of persons killed in accidents and one seventh of the highest number of accidents every citizen to follow the traffic rules strictly so that accidents can be avoided. Health of the nation is more important than the wealth of the nation. Road safety is a major public health concern so attention must be given to road safety measures. Strict implementation of road safety measures reduces road accidents injuries and fatality. All sources of data obtained are from Primary and Secondary sources.

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