CHAPTER – 1A

TRAFFIC ACCIDENTS

Introduction

India has a well-knit and coordinated system of transport which plays an important role in development of economic activities by promoting fair distribution of produced goods and services. The share of transport sector in Gross Domestic Product (GDP) of India is steadily growing. It is one of the key indicators in assessment of socio-economic development of the country. Since traffic accidents are indicator of bottlenecks and other hindrances in smooth flow of traffic, hence NCRB collects detailed data on traffic accidents including road accidents for inferring the trend and patterns of traffic accidents for devising appropriate preventive strategies.

The Bureau collects data on ‘Traffic Accidents’ comprising of (i) Road Accidents (ii) Railway Accidents and (iii) Railway Crossing Accidents, as these are the major contributors of accidental deaths.

Number of ‘Traffic Accidents’ in the country have increased from 4,74,515 in 2017 to 4,74,638 in 2018. (However, the rate of deaths in road accidents per thousand vehicles i.e. 0.6 has remained same as it was in 2017). Maximum increase in number of traffic accidents cases in States was reported in Uttar Pradesh (from 38,324 in 2017 to 40,783 in 2018) followed by Kerala (from 38,943 in 2017 to 40,619 in 2018) and Bihar (from 10,623 in 2017 to 11,405 in 2018). On the other hand, maximum decrease was reported in Tamil Nadu (from 67,595 in 2017 to 66,110 in 2018) [Table-1A.1].

4,74,638 traffic accidents resulted in injuries to 4,49,981 persons and 1,78,832 deaths during 2018. State of Uttar Pradesh (26,329 deaths) followed by Maharashtra (17,664 deaths) and Tamil Nadu (14,247 deaths) have reported maximum fatalities in traffic accidents in the country; these 3 States accounted for 14.7%, 9.9% and 8.0% of total deaths in traffic accidents respectively and collectively accounted for 32.6% (58,240 out of 1,78,832) of total fatalities reported at all India level during 2018.

The percentage share of traffic accidental deaths in total accidental deaths due to ‘Other Causes’ has increased from 39.2% in 2014 to 44.2% in 2018. A rising trend was seen in absolute number of deaths in ‘Traffic Accidents’ since 2014 to 2018. Number of deaths have increased by 1.8% (from 1,75,586 in 2017 to 1,78,832 in 2018) in 2018 over 2017 [Table-1A(A)].

A total of 4,74,638 traffic accidents comprising of 4,45,514 road accidents, 27,643 railway accidents and 1,481 railway crossing accidents were reported; these accidents caused 1,52,780, 24,545 and 1,507 deaths respectively during 2018.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Road Accidents</th>
<th>Railway Accidents</th>
<th>Railway Crossing Accidents</th>
<th>Total Traffic Accidents</th>
<th>Total Accidental Deaths due to ‘Other Causes’</th>
<th>Percentage Share of ‘Traffic Accidental Deaths’ in Accidental Deaths due to ‘Other Causes’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>1,41,526</td>
<td>25,006</td>
<td>2,575</td>
<td>1,69,107</td>
<td>4,31,556</td>
<td>39.2%</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>1,48,707</td>
<td>26,066</td>
<td>2,650</td>
<td>1,77,423</td>
<td>4,13,457</td>
<td>42.9%</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>1,51,801</td>
<td>22,970</td>
<td>3,133</td>
<td>1,77,904</td>
<td>4,09,537</td>
<td>43.4%</td>
</tr>
<tr>
<td>4</td>
<td>2017</td>
<td>1,50,093</td>
<td>23,959</td>
<td>1,534</td>
<td>1,75,586</td>
<td>3,89,441</td>
<td>45.1%</td>
</tr>
<tr>
<td>5</td>
<td>2018</td>
<td>1,52,780</td>
<td>24,545</td>
<td>1,507</td>
<td>1,78,832</td>
<td>4,04,933</td>
<td>44.2%</td>
</tr>
</tbody>
</table>

*As per data provided by States/UTs.*

Accidental Deaths & Suicides in India 2018 [118]
Accidental Deaths & Suicides in India 2018
As per data provided by States/UTs.
Month-wise patterns of traffic accidents reveal that maximum number of ‘Traffic Accidents’ have occurred in the month of January which accounted for 9.0% (42,949 out of 4,74,638) of total traffic accidents during the year 2018. The month-wise break-up of ‘Traffic Accidents’ for each State/UT/City are presented in Table-1A.5.

Time of occurrence-wise analysis of traffic accidents reveal that maximum number of ‘Traffic Accidents’ have taken place during 18:00 hrs – 21:00 hrs and 15:00 hrs – 18:00 hrs, accounting for 18.7% (88,792 out of 4,74,638) and 17.0% (80,746 out of 4,74,638) of total traffic accidents respectively during the year 2018. State/UT-wise ‘Traffic Accidents by time of occurrence is presented in Table-1A.6.

Road Accidents

The Bureau has made an effort to capture comprehensive information on road accidents using the revised proformae and published the first report for the year 2014 and this edition is fifth in the series.

A total of 4,45,514 road accident cases were reported during 2018. Road accident cases in the country have decreased from 4,45,730 in 2017 to 4,45,514 in 2018 [Table-1A.1]. The fatalities in road accidents have increased by 1.8% (from 1,50,093 in 2017 to 1,52,780 in 2018) during 2018 over 2017. The Table-1A(A) can be referred to see the patterns of ‘Road Accidental Deaths’.

The number of vehicles, number of road accidents along with resultant fatalities and injuries therefrom, their percentage variations over previous year and the rate of accidental deaths per thousand vehicles during the last five years are presented in Table–1A(B). It is observed that the rate of deaths per thousand vehicles in 2018 has remained same as it was in 2017.

4,45,514 road accidents caused 1,52,780 deaths and injuries to 4,46,518 persons during 2018. Generally road accidents have caused more injuries than deaths, but in Bihar, Punjab and Uttar Pradesh, road accidents caused more deaths compared to persons injured. In Bihar, 9,600 road accidents caused 6,729 deaths & injuries to 6,679 persons, in Punjab, 6,424 road accidents caused 4,738 deaths and injuries to 3,339 persons and in Uttar Pradesh, 36,855 road accidents caused 22,541 deaths and injuries to 22,322 persons. [Table-1A.2].

### TABLE–1A(B)

**Growth in Number of Vehicles and Road Accidents in India (2014–2018)**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Year</th>
<th>Road Accidents (in thousand)</th>
<th>% Variation over Previous Year</th>
<th>Persons Injured (in thousand)</th>
<th>% Variation over Previous Year</th>
<th>Persons Killed (in Nos.)</th>
<th>% Variation Over Previous Year</th>
<th>No. of Vehicles (in Thousand)#</th>
<th>% Variation over previous Year</th>
<th>Rate of Deaths per thousand Vehicles (Col.7/Col.9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>450.9</td>
<td>1.8%</td>
<td>477.7</td>
<td>1.7%</td>
<td>1,41,526</td>
<td>3.0%</td>
<td>1,82,445</td>
<td>-</td>
<td>0.8</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>464.7</td>
<td>3.1%</td>
<td>482.4</td>
<td>1.0%</td>
<td>1,48,707</td>
<td>5.1%</td>
<td>2,10,023</td>
<td>15.1%</td>
<td>0.7</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>473.0</td>
<td>1.8%</td>
<td>485.5</td>
<td>0.6%</td>
<td>1,51,801</td>
<td>2.1%</td>
<td>2,30,031</td>
<td>9.5%</td>
<td>0.7</td>
</tr>
<tr>
<td>4</td>
<td>2017</td>
<td>445.7</td>
<td>-5.8%</td>
<td>456.2</td>
<td>-6.0%</td>
<td>1,50,093</td>
<td>-1.1%</td>
<td>2,53,311</td>
<td>10.1%</td>
<td>0.6</td>
</tr>
<tr>
<td>5</td>
<td>2018</td>
<td>445.5</td>
<td>-0.0%</td>
<td>446.5</td>
<td>-2.1%</td>
<td>1,52,780</td>
<td>1.8%</td>
<td>2,53,311*</td>
<td>-</td>
<td>0.6</td>
</tr>
</tbody>
</table>

# Source: Road Accidents in India - 2018, TRW, MoRT&H, as per latest published data.
* figures of the previous year used due to non-availability of data.

- As per data provided by States/UTs.
Accidental Deaths & Suicides in India 2018
During 2018, two wheelers have accounted for maximum fatal road accidents (54,610 deaths), contributing 35.7% of total road accidental deaths, followed by trucks/lorries (24,260 deaths) (15.9%), cars (21,290 deaths) (13.9%) and buses (10,514 deaths) (6.9%) [**Table-1A.3**].

Majority of deaths due to two wheelers accidents were reported in Uttar Pradesh (6,474 deaths) and Maharashtra (6,389 deaths), accounting for 11.9% and 11.7% of total deaths due to two wheeled vehicles respectively. Large number of deaths due to trucks/lorries accidents (5,295 out of 24,260) were reported in Uttar Pradesh, accounting for 21.8% and large number of deaths due to car accidents (3,096 out of 21,290) were also reported in Uttar Pradesh (14.5%) of total such accidents. 18.9% (1,989 out of 10,514) and 14.0% (1,471 out of 10,514) of total fatal road accidents due to buses were reported in Uttar Pradesh and Tamil Nadu respectively. Deaths of 12.0% (1,254 out of 10,482) of pedestrians in road accidents was reported in Tamil Nadu during 2018 [**Table-1A.4**].

The month-wise distribution of ‘Road Accidents’ shows that most of road accidents were reported in the month of January (40,606 cases), contributing 9.1% of total road accidents. Majority of accidents in this month (January) have been reported in Tamil Nadu, accounting for 14.3% of total accidents reported (5,798 out of 40,606 cases) in the month of January [**Table-1A.5**].

**FIGURE–1A.1**
Vehicle wise Road Accident Deaths during 2018

**FIGURE–1A.2**
Month-wise occurrence of Road Accidents during 2018

- As per data provided by States/UTs.
Most of road accidents (84,940 out of 4,45,514 cases) were reported during 18:00 hrs to 21:00 hrs (Night), accounting for 19.1% of total road accidents. During 18:00 hrs to 21:00 hrs (Night), majority of road accidents were reported in Tamil Nadu (14,238 cases), Madhya Pradesh (8,988 cases) and Kerala (8,382 cases). Time period ‘15:00 hrs to 18:00 (Day)’ and ‘12:00 hrs to 15:00 hrs (Day)’ accounted for 17.3% (77,229 cases) and 15.2% (67,809 cases) of total road accidents during 2018 [Table-1A.6].

Road-wise classification of accidents is presented in Table-1A.7. As per road classification, the National Highways which has a share of only 1.9% of total road length* (1.14 Lakh KMs out of 58 Lakh KMs) accounted for highest road accidents, contributing 28.9% of total road accidents. State Highways having the share of 2.97% (1.75 Lakh KMs) of total road length have reported 25.1% of road accidents in the country. However, a considerable number of road accidents were also reported on other roads. These accounted for 45.4% of total such accidents during 2018.

A total of 2,699 cases of road accidents were also reported on Expressways which caused injuries to 1,894 persons and deaths of 1,253 persons. The highest number of deaths in road accidents was reported on the National Highways accounting for 33.2% (50,771 out of 1,52,780) followed by State Highways (26.5%) (40,457 deaths). A total of 60,299 persons died due to road accidents on the other roads during 2018.

State/UT-wise patterns revealed that maximum fatalities in road accidents on the National Highways took place in Uttar Pradesh (13.6%) (6,928 out of 50,771 deaths) followed by Tamil Nadu (8.8%) (4,492 deaths), Karnataka (7.8%) (3,936 deaths), Maharashtra (7.6%) (3,867 deaths) and Rajasthan (7.4%) (3,762 deaths) during 2018.

Maximum number of accidents on State Highways in the country occurred in Tamil Nadu (22,849 cases). Maximum fatalities in road accidents on State Highways were reported in Uttar Pradesh (6,375 out of 40,457 deaths) which accounted for 15.8% of total deaths due to road accidents on State Highways, followed by Tamil Nadu (10.6%) during 2018. Maximum fatalities on the Expressways was reported in Uttar Pradesh contributing 61.0% (764 out 1,253) followed by Maharashtra (8.5%), Gujarat (7.5%), West Bengal (5.0%) and Jharkhand (4.4%) during 2018. [Table-1A.7]

### TABLE–1A(C)

**Road Accidental Deaths in every 100 km-2018**

(Road Category wise)

<table>
<thead>
<tr>
<th>Type of Road</th>
<th>Length of Road (in KM*)</th>
<th>Road Accident Cases</th>
<th>Total Number of Deaths</th>
<th>Cases per 100 KM</th>
<th>Deaths per 100 KM</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Highways</td>
<td>114158</td>
<td>128573</td>
<td>50771</td>
<td>113</td>
<td>44</td>
</tr>
<tr>
<td>State Highways</td>
<td>175036</td>
<td>111857</td>
<td>40457</td>
<td>64</td>
<td>23</td>
</tr>
<tr>
<td>Other Roads</td>
<td>5608477</td>
<td>205084</td>
<td>61552</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5897671</td>
<td>445514</td>
<td>152780</td>
<td>8</td>
<td>3</td>
</tr>
</tbody>
</table>

- As per data provided by States/UTs.

* Source: Road Accidents in India – 2018, Ministry of Road Transport & Highways
Cause-wise distribution of road accidents (which also include unmanned railway crossing accidents) is presented in Table-1A.8. Cause-wise analysis of road accidents revealed that most of road accidents were due to over-speeding accounting for 59.3% of total accidents (2,64,158 out of 4,45,554 cases) which caused 84,346 deaths and injuries to 2,74,997 persons. Dangerous/careless driving or overtaking caused 1,09,695 accidents which resulted in 41,653 deaths and injuries to 1,00,458 persons during 2018. 2.5% (10,923 out of 4,45,554 cases) of such accidents were due to poor weather condition. Driving under influence of drug/alcohol contributed 2.0% of total accidents which resulted in injuries to 8,342 persons & 3,272 deaths in the country.

FIGURE–1A.3
Major Causes of Road Accident Deaths during 2018

- As per data provided by States/UTs.

Cause - wise analysis of fatal road accidents revealed that 55.2% (84,346 out of 1,52,820 deaths) and 27.3% (41,653 out of 152,820 deaths) of fatalities in road accidents were due to over-speeding and dangerous/careless driving or overtaking respectively. Poor weather conditions and mechanical defects in motor vehicles caused 2.9% (4,506 deaths) and 1.4% (2,127 deaths) of total deaths due to road accidents respectively during 2018.

Large number of deaths in road accidents due to over-speeding were reported in Tamil Nadu (10.9%) (9,224 out of 84,346 deaths) followed by Karnataka (10.7%) (9,014 out of 84,346 deaths). Dangerous/careless driving or overtaking caused maximum fatalities in Uttar Pradesh (12,573 out of 41,653) which accounted for 30.2% of total deaths followed by 10.3% (4,289) deaths in Maharashtra. Maximum fatalities due to driving under influence of drug/alcohol were reported in Uttar Pradesh (23.0%) followed by Jharkhand (16.6%), Rajasthan (8.7%) and Odisha (6.5%) of total deaths in such road accidents in country respectively during 2018 [Table-1A.9].

A total of 40 accidental deaths were reported at un-manned railways crossing. 30.0% of such deaths were reported in Tripura (12 out of 12 deaths) during 2018 [Table-1A.9].

Place of occurrence - wise patterns of road accidents reveal that 58.2% of total accidents have occurred in rural areas (2,59,161 out of 4,45,514 cases) and 41.8% in urban areas (1,86,353 out of 4,45,514 cases) during 2018. Both in rural as well as urban area most of the accidents were reported at places near residential area. 29.4% (76,294 out of 2,59,161 cases) accidents in rural area and 32.3% (60,192 out of 1,86,353 cases) in urban area have taken place near residential area. 5.5% of road accidents in urban area took place at pedestrian crossing (10,302, out of 1,86,353 cases) during 2018. Besides, 8.6% (38,285 out of 4,45,514 cases) of road accidents in the country have taken place near schools, college or other educational institutions during 2018 [Table 1A.10].

Uttar Pradesh followed by Tamil Nadu have reported 28.9% and 7.1% of total deaths due to road accidents near schools/college/other educational institutes in urban area respectively. Uttar Pradesh also reported highest fatalities due to road accidents at places near to residential area (urban area) accounting for 15.9% of total such deaths during 2018 [Table-1A.11].
Accidental Deaths & Suicides in India 2018

STATE/UT - WISE ROAD ACCIDENT DEATHS DURING 2018

- As per data provided by States/UTs.

Map Powered by DevInfo, UNICEF
Railway Accidents

A total of 27,643 cases of ‘Railway Accidents’ were reported, showing an increase of 1.6% during the year 2018 over 2017 (27,197). 27,643 railways accidents caused injuries to 3,431 persons and 24,545 deaths during 2018 [Table–1A.1 & 1A.2].

Maximum railway accidents were reported in Maharashtra accounting for 23.0% (6,349 out of 27,643 cases) followed by Uttar Pradesh (11.8%) (3,272 cases). These two States have also reported highest fatalities in railways accidents, accounting for 15.5% (3,801 out of 24,545 deaths) and 12.6% (3,095 deaths) of total deaths in railways accidents respectively. 2,563 out of 3,431 persons injured in railways accidents were reported in Maharashtra alone during 2018 [Table 1A.2].

The month-wise distribution of ‘Railway Accidents’ shows that most of railway accidents were reported in the month of June (2,568 cases), contributing 9.3% of total railway accidents. Maharashtra (565 out of 2,568 cases) has reported maximum railways accidents in the month of June, accounting for 22.0% of total such accidents [Table-1A.5].

Most of railway accidents (4,442 out of 27,643) have taken place during 09:00 hrs to 12:00 hrs (Day), accounting for 16.1% of total railway accidents. 15.7% (4,345 cases) railways accidents were reported during ‘06:00 hrs to 09:00 hrs (Day)’. Maharashtra has reported maximum accidents during 18:00 hrs to 21:00 hrs (Night) and 09:00 hrs to 12:00 hrs (Day), accounting for 28.2% (1,031 cases) and 22.2% (986 cases) respectively [Table-1A.6].

State/UT - wise classification of railways accidents is presented in Table-1A.12. The analysis of classification of railway accidents revealed that incidents of ‘Fall from Trains or Collision with People at Track’ constituted majority of railway accidents (68.4%) (18,894 out of 27,643). State of Maharashtra has reported the majority of such cases, accounting for 19.3% (3,646 out of 18,894 cases) of total cases of fall from train or collision of trains with people at track. A total of 16,702 persons died due to either fall from trains or collision of trains with people at tracks, accounting for 68.0% of total deaths in railway accidents (24,545 deaths).

State/UT - wise causes of railways accidents is presented in Table-1A.13. Majority of States/UTs have furnished railways accidents under unclassified category ‘Other Causes’, a total of 27,082 out of 27,643 cases of railways accidents were furnished under ‘Other Cause’ (fall of persons from trains/ persons coming under trains, comes under this category). During 2018, a total of 93 cases of railways accidents occurred due to fault of driver. Mechanical defects (like poor design, track faults, bridge/tunnel collapse, etc.) caused 302, 77 and 18 railways accidents in Jharkhand, Uttar Pradesh and Bihar respectively. In Uttar Pradesh, a total of 92 persons died in railways accidents due to fault of driver. Mechanical defects (like poor design, track faults, bridge/tunnel collapse, etc.) led to loss of 449 lives in railways accidents during 2018.

Maximum railway crossing accidents were reported in Uttar Pradesh accounting for 44.3% (656 out of 1,481 cases) followed by Bihar (15.0%) (222 cases) and Kerala (12.2%) (180 cases). These States have also reported highest fatalities in railway crossing accidents, accounting for 46.0% (693 out of 1,507 deaths), 14.7% (222 deaths) and 11.8% (178 deaths) respectively during 2018 [Table-1A.2].

Traffic Accidents in Cities

A total of 71,258 traffic accidents were reported in 53 cities during 2018. 71,258 traffic accidents caused injuries to 61,187 persons and 16,909 deaths. The maximum fatalities in traffic accidents was reported in Delhi City (2,325 deaths) followed by Chennai (1,260 deaths) and Jaipur (752 deaths) [Table-1A.2].

Road Accidents (69,490 cases) accounted for 97.5% of total traffic accidents in 53 mega cities during 2018. Chennai accounted for 10.9% (7,580 out of 69,490 cases) of total road accidents reported in 53 mega cities followed by Delhi City (8.3%) (5,788 cases) and Bengaluru (6.6%) (4,611 cases). However, the large number of fatal road accidents were reported in Delhi City (1,445 deaths) followed
by Chennai (1,260 deaths), accounting for 9.5% and 8.3% of total deaths due to road accidents in 53 mega cities respectively during 2018.

Cause-wise analysis of road accidents (including unmanned railway crossing) revealed that most of road accident deaths (including unmanned railway crossing) in 53 mega cities were due to over-speeding which accounted for 56.8% (8,678 out of 15,276 deaths) of total deaths due to road accidents during 2018. Dangerous or Careless Driving/Over-taking etc. also caused 24.7% of total deaths due to road accidents (3,776 out of 15,276 deaths). Driving under influence of drug/alcohol had caused 1.8% (279 out of 15,276 deaths) of fatalities in road accidents. Among 53 mega cities, most of fatalities due to driving under influence of drug/alcohol were reported in Chennai (55 out of 279 deaths) [Table-1A.9].

Place of occurrence – wise deaths in road accidents reveals that most of fatalities due to road accidents have taken place near residential area, contributing 36.1% (5,514 out of 15,265 deaths) of deaths in road accidents in 53 mega cities, followed by 8.9% (1,355 out of 15,265 deaths) near factory/industrial area and 7.1% near schools/college/other educational institutions (1,084 out of 15,265 deaths). Out of 53 mega cities, Chennai (346 deaths) followed by Hyderabad (113 deaths) have reported maximum cases of road accidents at pedestrian crossing. [Table-1A.11]. As per road-wise classification of road accidents, 20.6% of total road accidents in 53 mega cities were reported at the National Highways. 27.1% of fatalities in road accidents were reported at the National Highways during 2018 [Table-1A.7].

A total of 1,572 railway accidents were reported in 53 mega cities where in Delhi City has reported maximum incidents by contributing 63.0% of total railway accidents during 2018.

As per data provided by States/UTs.
As per data provided by States/UTs.

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Accidental Deaths & Suicides in India 2018