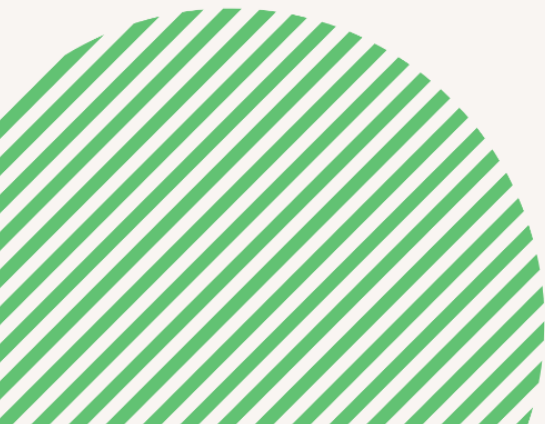
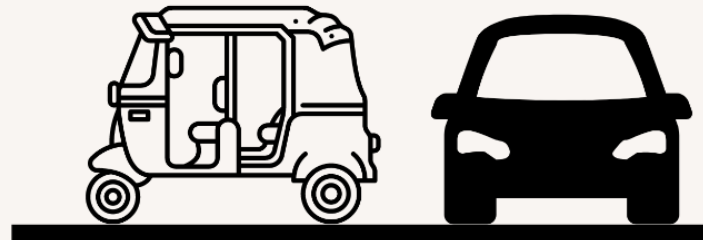


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DELHI
ROAD CRASH
FATALITIES
REPORT



REPORT BY



TRANSPORT DEPARTMENT

Government of NCT of Delhi

SUPPORTED BY



TECHNICAL PARTNERS



**Bloomberg
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INITIATIVE FOR GLOBAL ROAD SAFETY



**Vital
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TRIP-C

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	7
ABBREVIATIONS	7
EXECUTIVE SUMMARY	8
INTRODUCTION	10
METHODOLOGY	12
RESULTS	13
TREND IN ROAD CRASH DEATHS IN DELHI	13
Fatal crashes and deaths, 2012 to 2021	13
DEATHS BY ROAD USER TYPE	14
Crash deaths by road user type, 2021	14
Crash deaths by road user type and gender, 2021	15
ROAD CRASH DEATHS BY AGE AND GENDER	16
Road crash deaths by gender distribution, 2021	16
Road crash deaths by age and gender, 2021	17
Road crash death rates by age and gender, 2021	17
Motorcyclist deaths by age and gender, 2021	18
Motorcyclist death rates by age and gender, 2021	18
Pedestrian deaths by age and gender, 2021	19
Pedestrian death rates by age and gender, 2021	19
ROAD CRASH DEATHS BY MONTH, TIME & DAY	20
Fatal crashes and deaths by month, 2021	20
Fatal crashes by time of day, 2021	21
Road crash deaths by day and time of week, 2021	22
AT-FAULT VEHICLE TYPES & DRIVERS	23
Known at-fault vehicle types, 2021	23
Gender distribution of at-fault drivers, 2021	24
Age distribution of at-fault drivers, 2021	24
At-fault vehicles and fatal crash victims by road user type	25
FATAL HIT-AND-RUN CRASHES, 2021	26
Hit & Runs: Motorcyclist & Pedestrian Deaths; 2020 vs 2021	26
Fatal hit-and-run crashes, 2014 to 2021	27
Hit & Run Crash Deaths By Road User Types, 2021	27
Hit & Run Fatalities By Age, 2021	28
Hit-and-run crash death rates by age, 2021	28

HIGH RISK LOCATIONS	29
High-risk corridors with 2 or more deaths per km, 2020-2021	29
Corridors with 2 or more pedestrians deaths per km, 2020-2021	31
Corridors with 2 or more motorcyclists deaths per km, 2020-2021	31
Corridors with more than 3 cyclists killed per km, 2020-2021	32
Corridors with 2 or more deaths per km due to hit-and-run crashes, 2020-2021	33
High-Risk Areas, 2020-2021	34
CRASH HEAT MAPS	35

PREFACE



Every year, hundreds of lives are cut short as a result of road crashes. The socio-economic burden of road crashes is disproportionately borne by families of road crash victims. In India, pedestrians, bicyclists and motorcyclists, represent 64.2 % of road users killed as per 'Road Accidents in India- 2020' MoRTH report. These vulnerable road users are often least protected in the event of a road crash.

According to the 2021, 'Delhi Road Crash Fatalities Report' there were 1,199 fatal crashes and 1,238 fatalities. These crashes are preventable with the implementation of data-led interventions and evidence-based approaches to saving lives.

The data analysis undertaken through the report made by the Road Safety Lead Agency of the Transport Department, working with the global road safety experts from Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS), has initiated proactive steps to mitigate the crashes.

Along with the BIGRS partners, IIT-Delhi and Save Life Foundation, the Department has actively been working on 14 crash-prone junction redesign in order to make streets safer for all. Additionally, more than 2,300 Delhi Traffic police officials have been trained in the past six months by IACP and GDCI in an effort to improve their understanding and on ground proactive response ensuring safety on roads. With the #SadakSurakshitDilliSurakshit social media campaign launched last year and the safe school zones initiative, the Delhi government is taking urgent measures to reduce road crashes in the city.

Delhi is leading by example in the country by having dedicated lanes for buses. The strict enforcement of the bus lane campaign has resulted in ensuring roads are safer for vehicles and pedestrians.

I congratulate the Road Safety Lead Agency for their concerted efforts towards making the annual Delhi Road Crash Fatalities Report. I am certain that this data driven approach will help Delhi city truly become a safe city for everyone.

A handwritten signature in black ink, appearing to read 'Ashish Kundra'.

Shri. Ashish Kundra, IAS
Principal Secretary Cum Transport Commissioner
Transport Department, Govt of NCT of Delhi



We are very pleased to collaborate for a 2nd year with the Transport Department, GNCTD to produce this annual report on road traffic injuries and deaths. Road traffic injuries cut short far too many lives in Delhi and permanently affect thousands more through disabilities and lost family breadwinners.

As we have all learned over the past two years of the COVID-19 pandemic, responding to any public health challenge requires good data in order to understand where, when, and in whom the risks are greatest, to target interventions, and to monitor the effectiveness of our actions. Road traffic injuries represent a clear public health threat to citizens in the course of their day to day lives moving around where they live, work, and play. Over 45% of those killed are pedestrians or cyclists, who pose little or no threat to other road users yet suffer a disproportionate burden of the toll of crashes.

This report represents an effort to provide all those with a prevention role to play with clear information and analyses to support action. We congratulate the Delhi Transport Department, Road Safety Lead Agency, and Delhi Traffic Police, for their commitment to undertaking that action, informed evidence. We look forward to continuing working together in the future with a shared goal of safer streets for all those living and working in Delhi.

A handwritten signature in black ink, appearing to read 'Sara Whitehead'.

Dr Sara Whitehead
Public Health and Preventive Medicine Consultant
Vital Strategies

ACKNOWLEDGEMENTS

Delhi is one of the 30 cities globally participating in the Bloomberg Philanthropies Initiative for Global Road Safety (BIGRS). In 2020, BIGRS started supporting the Delhi government in implementing evidence-based road safety interventions to reduce road injuries and deaths. One of the elements of the initiative is to strengthen road safety data, available with city authorities in order to improve data-led intervention planning, monitoring, and evaluation.

This work has been possible with the continued support of the Road Safety Lead Agency of the Transport Department, Delhi Traffic Police, BIGRS, and all its partners working together to bring this report together.

We gratefully acknowledge the financial support received from Bloomberg Philanthropies, which made the production of this report possible.

ABBREVIATIONS

BIGRS	Bloomberg Philanthropies Initiative for the Global Road Safety
DND	Delhi Noida Delhi
FIR	First Information Report
FOB	Foot Over Bridge
GDP	Gross Domestic Product
GTK	Grand Trunk Karnal
IIT	Indian Institute of Technology
KM	Kilometer
ITO	Income Tax Office
MORTH	Ministry of Road Transport and Highways
NH	National Highway
RSLA	Road Safety Lead Agency
RTIs	Road Traffic Injuries
TRIP	Transportation Research and Injury Prevention
UN	United Nations
WHO	World Health Organization

EXECUTIVE SUMMARY

Road traffic injuries (RTIs) are the eighth leading cause of deaths globally, with approximately 1.35 million people getting killed in preventable crashes each year¹. Between 20 to 50 million people suffer non-fatal injuries, with many of them incurring life-long disabilities. RTIs result in economic losses to the individuals involved, their families, and the nation as a whole. These losses are due to the cost of treatment, loss of income for those killed or disabled by the injury, and family members taking time off to care for the disabled². Road traffic crashes cost India between three to five percent of its GDP.³ The second UN Decade of Action for Road Safety 2011-2020 did make some progress, but the burden of deaths and injuries still remains high.⁴ According to the WHO's 2018 Global Status Report on Road Safety, 50 percent of the world's road deaths are among motorcyclists (23%), pedestrians (22%), and cyclists (5%), also known as "vulnerable road users".

As per the report of the Ministry of Road Transport and Highways (MoRTH) on 2020 crash statistics,⁵ 131,714 persons were killed in road crashes in India. Road traffic injuries continue to be the leading cause of deaths, hospitalization, and disabilities in the country. India has one percent of the vehicle population but accounts for 11 percent of all the fatalities globally. A 2021 World Bank Report states that the fatality rate for post-crash and the socio-economic burden of care are higher among low-income households⁶.

The Road Safety Lead Agency of the Delhi Transport Department, in its 2020⁷ crash analysis, reported 1,163 fatal crashes and 1,197 fatalities, which increased to 1,199 fatal crashes and 1,238 fatalities in 2021. The increase in fatal crashes and fatalities may be attributed at least in part to the easing of lockdown restrictions and the associated increase in mobility. In 2021, motorcyclists (43%) and pedestrians (42%)

¹ WHO (World Health Organization). 2018. Global Status Report on Road Safety 2018. https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/.

² World Health Organization. (2021, June 21). Road Traffic Injuries Fact Sheets (<https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>)

³ Hartwig, Schafer and Piyush Tewari, World Bank Blogs, 28 Mar. 2021, blogs.worldbank.org/endpovertyinsouthasia/how-do-poor-cope-road-crashes-india.

⁴ WHO (World Health Organization). 2015. Global Status Report on Road Safety 2015. <https://www.afro.who.int/publications/global-status-report-road-safety-2015>

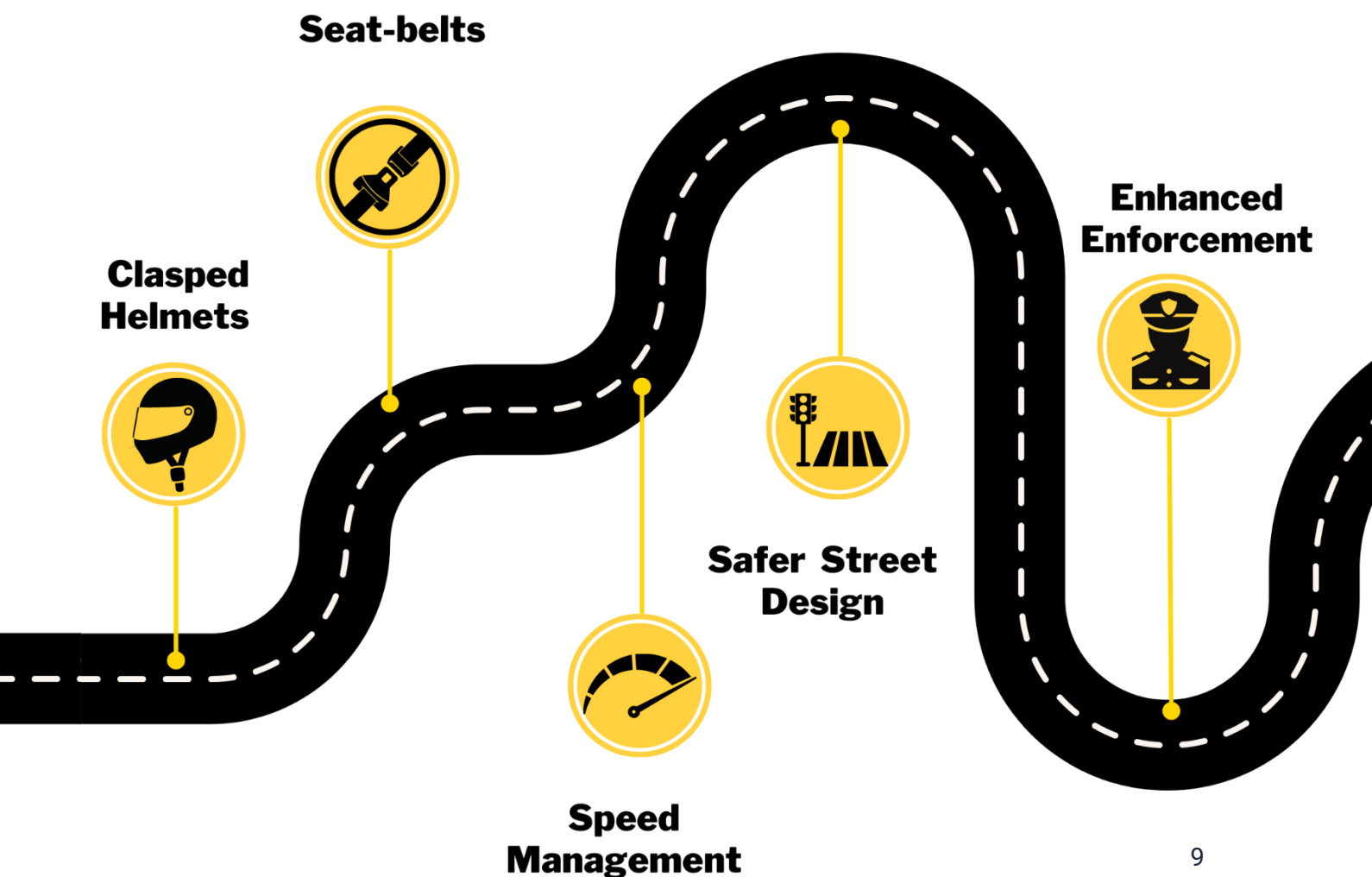
⁵ Government of India, Ministry of Road Transport and Highway Transport Research Wing. 2019. Road Accidents in India - 2018. https://morth.nic.in/sites/default/files/Road_Accidednt.pdf.

⁶ World Bank. 2021. Traffic Crash Injuries and Disabilities: The Burden on Indian Society. <https://www.worldbank.org/en/country/india/publication/traffic-crash-injuries-and-disabilities-the-burden-on-indian-society>

⁷ <https://transport.delhi.gov.in/sites/default/files/All-PDF/2020%20Delhi%20Road%20Crash%20Fatalities%20Report.pdf>

accounted for 85 percent of all the fatalities. A total of 93 percent of the deaths occurred among vulnerable road users (pedestrians, motorcyclists, cyclists and auto rickshaw occupants-both motorized and electric), which is higher than the national average of 57 percent. Of all the fatalities, 89 percent of deaths occurred among males and 11 percent among females. The largest proportion of deaths occurred among male adults aged between 20 to 39 years. Of all the female deaths, 71 were pedestrians followed by 37 pillion riders. The fatalities peaked on weekends, with the highest fatalities recorded on Saturdays between 2200 to 2400 hours. Heavy vehicles and light motor vehicles were responsible for 74 percent of all the crashes reported where the causal vehicle was known where the causal vehicle was known. The percentage of hit-and-run crashes increased from 51 percent in 2020 to 59 percent in 2021. This may indicate lack of adequate enforcement in high risk areas, which in turn, results in hit-and-run crashes.

The data source for this report is police crash data records. This data shows the need for action on clasped motorcycle helmets, seatbelt, speed management, enhanced enforcement during high risk times, and safer street designs for motorcyclists and pedestrians. This report is intended to inform and provide guidance to all city stakeholders.



INTRODUCTION

Two years since the pandemic gripped India and the world, it changed our way of living and brought to light the importance of a system to prevent such future outbreaks. The public health emergency forced us to evolve and take stock of our losses and commit in urgency to saving lives. Road crashes have been taking this toll on us for decades and need to be treated with the same resolve.

Every year, road crashes kill 1.35 million people in preventable road crashes and cause injuries to 20 to 50 million, many of whom suffer life-long disability and a daily life of hardship. In India alone, 131,714 persons were killed in 366,138 crashes in 2020, as per MoRTH.

The 2021 Delhi Road Crash Fatalities Report is a step towards enhancing road safety surveillance data to respond to road crashes with urgency. This report highlights the road crash situation in Delhi in 2021. In Delhi, the Transport Department, Delhi Traffic Police and the Health Department work together on the surveillance system to utilize the available crash data. The three departments play a vital role in understanding why the crashes occur, how to respond to them, and how to prevent them in order to save lives.

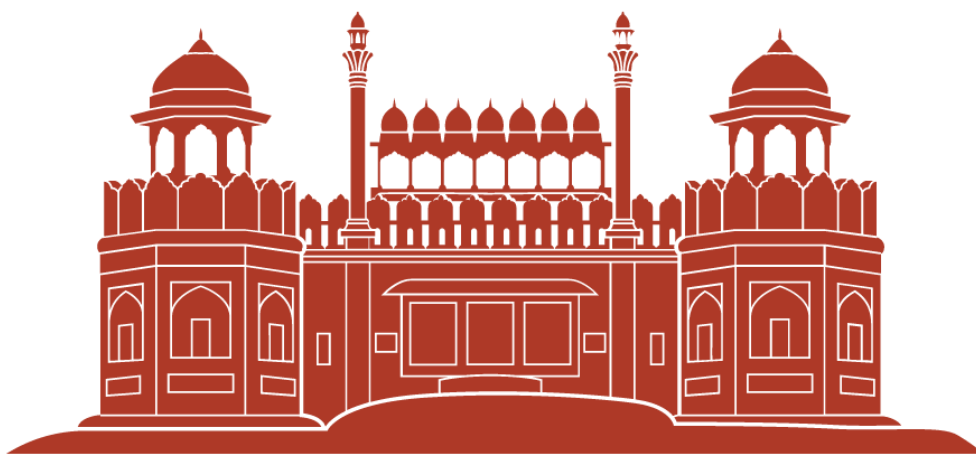
In succession to the previous year's report, this annual report will further aid the road safety work in Delhi in deep collaboration with the key authorities in Delhi. As a result of the 2020 Road Crash Fatalities Report, 16 high risk corridors and 22 high risk areas have been identified and the Transport Department took the initiative to start redesigning these locations with support from leading urban planners and street design experts.

The report is prepared in collaboration with BIGRS and the Road Safety Lead Agency (RSLA) of the Transport Department. The RSLA was set up in 2017 as per directives of the Supreme Court Committee on Road Safety. It has been mandated to collate road injury crash data periodically, analyze the data to identify high risk areas/road stretches and at risk road user types. The following report is a step towards enhancing road crash data monitoring in Delhi and presents an analysis of the data extracted from FIRs of the fatal crashes reported in 2021.

This report aims to increase the understanding of the type, times, and locations of fatal crashes, and the profiles of those involved, so that more targeted interventions can be undertaken to prevent fatal crashes.

Specific evidence-based campaigns and public service announcements can be aimed at targeted audiences. The police can be trained and deployed to target the most relevant risk factors, times, and places. Intersections and corridors can be made safer in zones identified as high risk areas.

Additionally, in order for stakeholders to manage the efforts to reduce fatal crashes, they need to be able to measure and monitor them. This report is a step in that process, and the BIGRS partners look forward to continuing to support the government to enhance Delhi's road crash surveillance system, thereby helping the city reduce crashes, injuries, and deaths.



SADAKSURAKSHIT
DILLISURAKSHIT

METHODOLOGY

Data Sources

A list of Delhi Police's First Information Reports (FIRs) of 2021 fatal crashes in the Government of National Capital Territory (GNCTD) was provided to the Transport Department in March 2021 by the Accident Research Cell of the Delhi Traffic Police. Using the FIR numbers, the embedded staff of the BIGRS-India, individually queried and entered into a database, each FIR using the Delhi Police's public database (<https://www.delhipolice.nic.in/view-fir.html>).

Analysis

The narrative data from the FIRs were manually analyzed for important variables, and text location descriptions were assigned geo-coordinates using Google Maps. The corridor lengths were measured on Google Maps and some of the corridor lengths were available on GeolQ (<https://geoiq.io/>). Geospatial analysis was done with ArcGIS and QGIS. Statistical analysis was done with Microsoft Excel. There were reported crash cases that occurred before 2021 but registered in 2021. These crashes were excluded from this analysis.

Limitations

The data was abstracted from FIRs which contain information captured in the nascent stages of investigation. The information is collected from the legal perspective. Some crash variables may not be available in FIRs which are later captured by Delhi Traffic Police for their crash analysis. FIRs capture very limited information on road safety risk factors. .

Report preparation

This effort was made possible with the support of the Transport Department, Delhi Traffic Police, and BIGRS. Yatin Pimple, Surveillance Coordinator, BIGRS-Delhi embedded team was responsible for data cleaning, analysis with support from Dr Sara Whitehead, Grant Ennis and Lievanta Millar, Vital Strategies; Rohit David, Farhan Shaikh, KL Yadav and Divya Jindal from BIGRS Delhi, provided critical guidance and support throughout the process. The report was technically reviewed by Prof. Geetam Tiwari from TRIP Centre, IIT-D.

TRENDS IN ROAD CRASH DEATHS

Fatal Crashes & Deaths In Delhi, 2012-2021

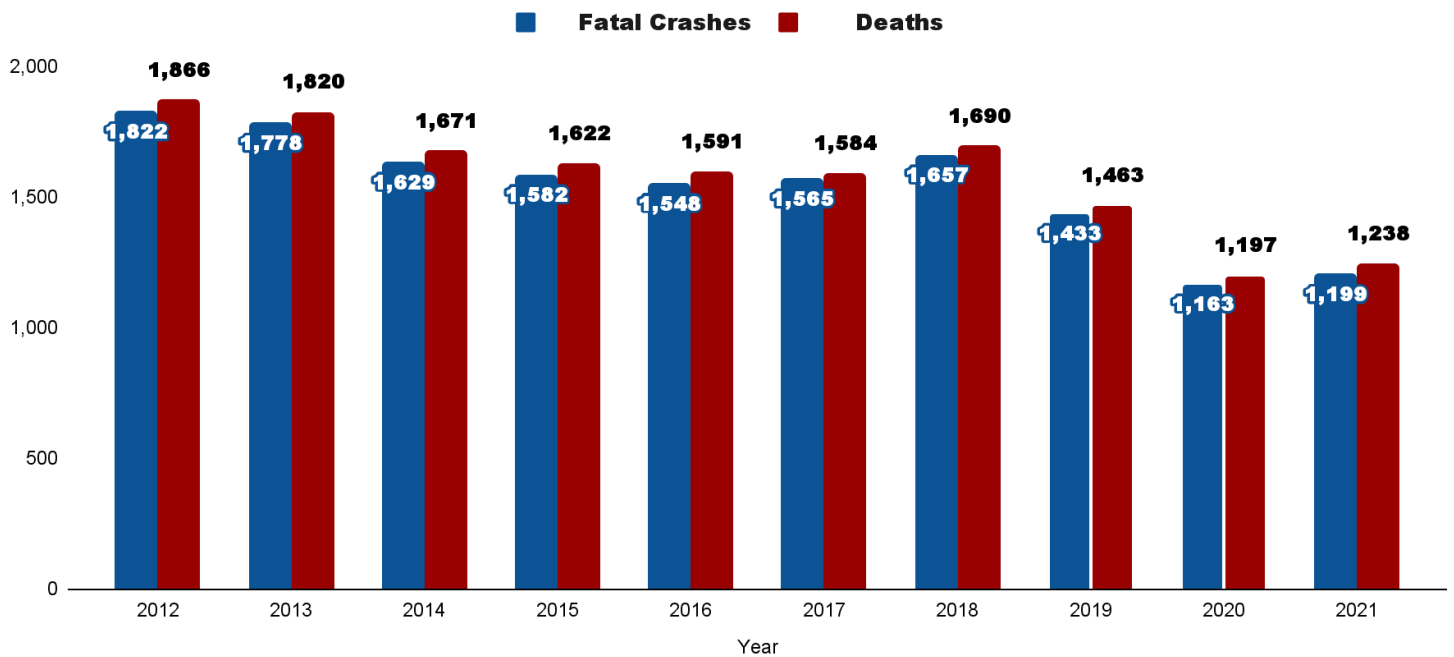


Figure 1

In 2021, 1,238 persons were killed as compared to 1,866 persons killed in 2012, a 37 percent decline in 10 years. The increase of more than three percent in road crash deaths since 2020 may be partly attributed to the easing of lockdown restriction in Delhi.



DEATHS BY ROAD USER TYPE

Crash Deaths By Road User Type, 2021

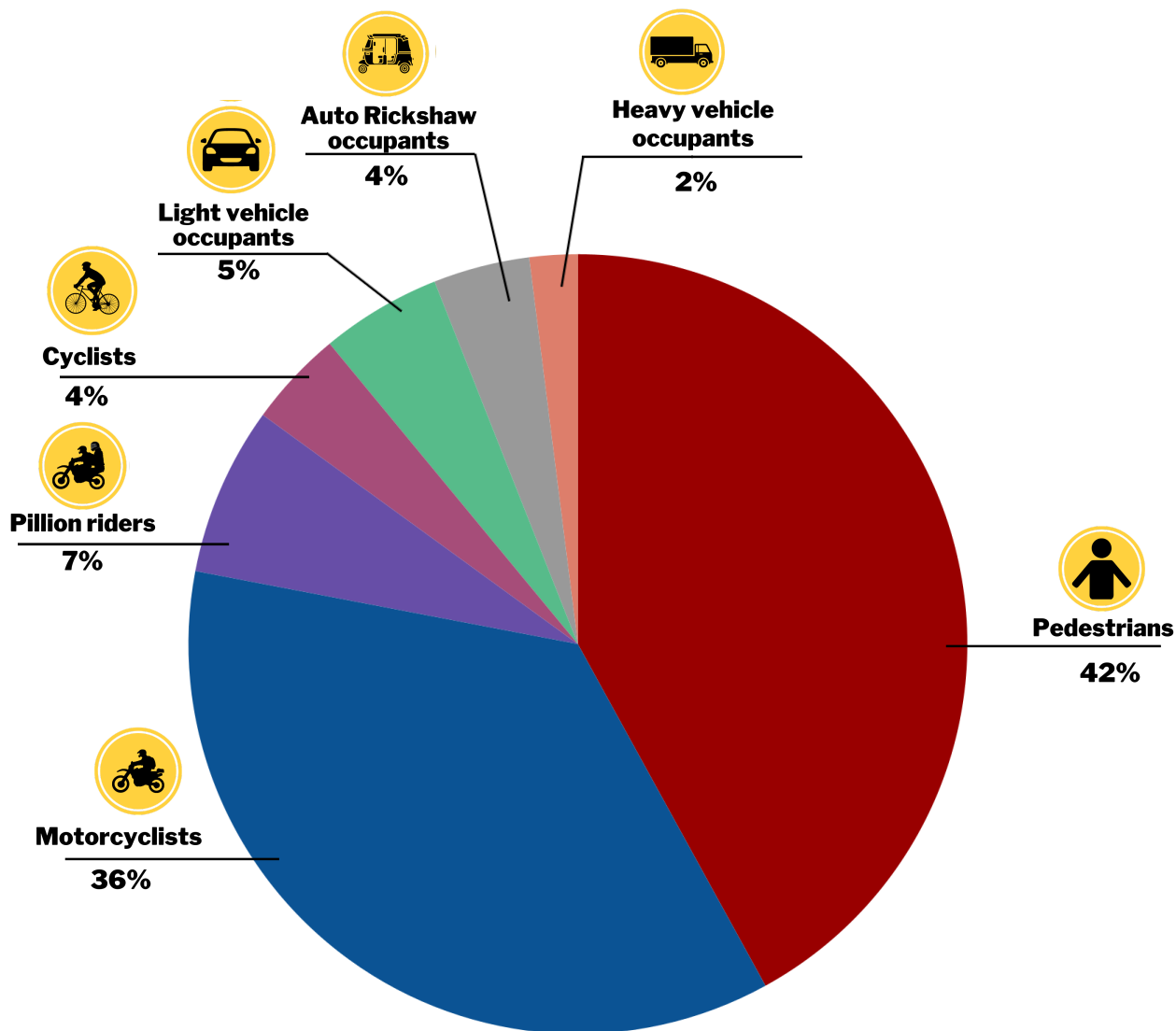


Figure 2

Motorcyclists (both riders and pillion riders) accounted for 43 percent and pedestrians for 42 percent of all the deaths. A total of 93 percent of the deaths occurred among vulnerable road users (pedestrians, motorcyclists, cyclists and auto rickshaw occupants- both motorized and electric).

Light vehicle occupants - Includes car/jeep/van/taxi occupants

Heavy vehicle occupants - Includes heavy vehicles/bus/tempo/tractor occupants

Auto Rickshaw occupants - Includes both motorized and electric auto rickshaws

Crash Deaths By Road User Type & Gender, 2021

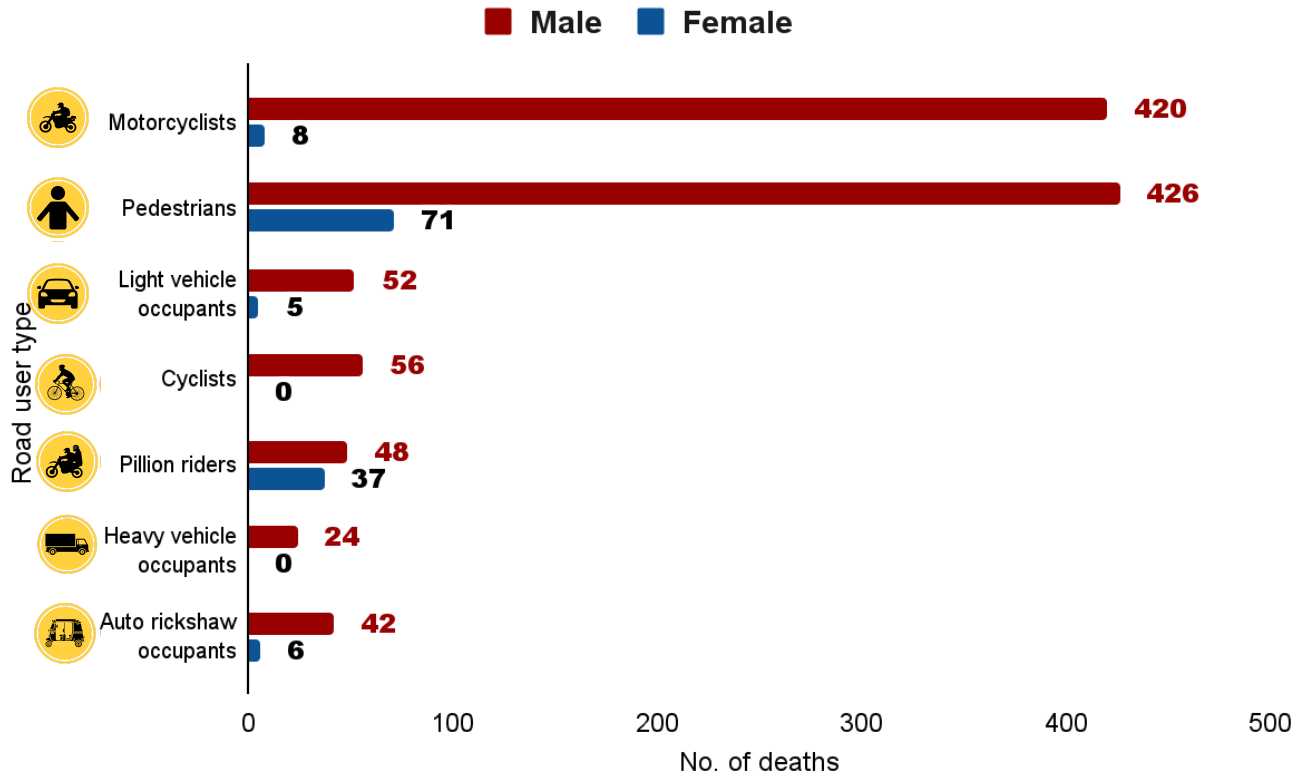
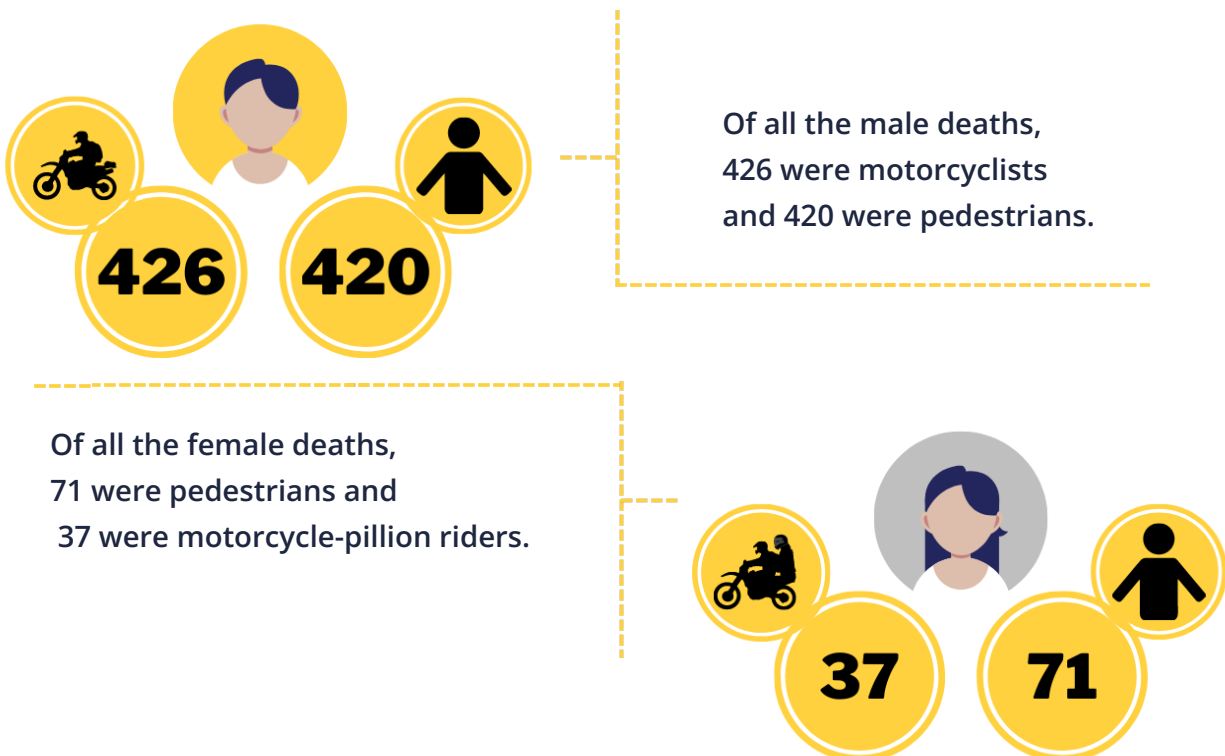


Figure 3





ROAD CRASH DEATHS BY AGE AND GENDER

Road Crash Deaths By Gender Distribution, 2021

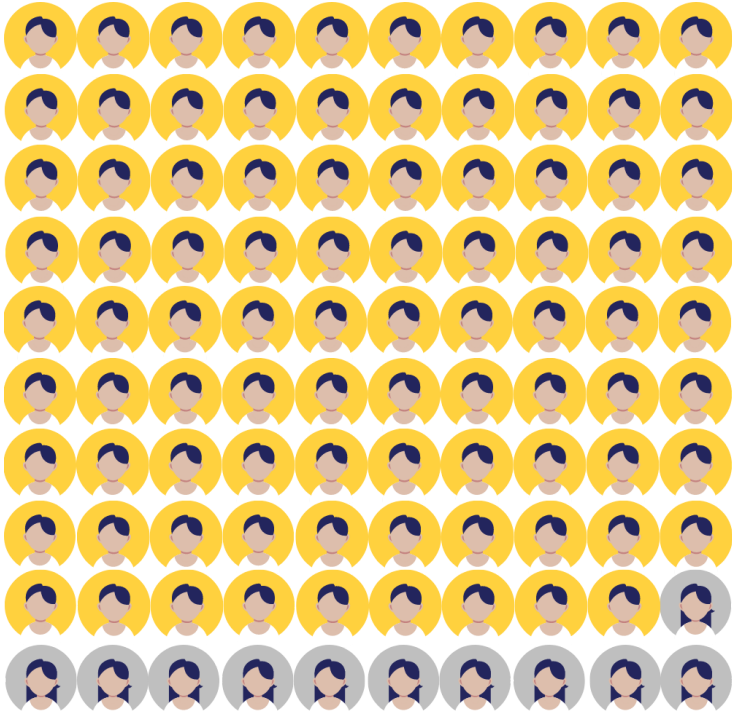


Figure 4

With 1,068 males killed in road crashes, they accounted for 89 percent of total deaths.

Road Crash Deaths By Age & Gender, 2021

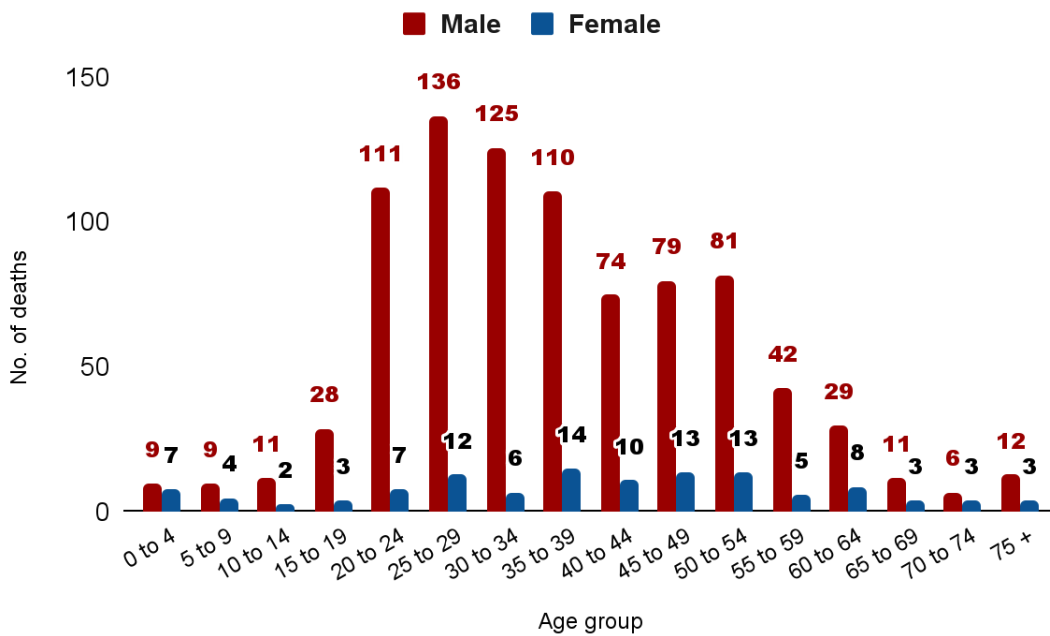


Figure 5

The largest proportion of road deaths occurred among adults aged between 20 to 39 years old. Among females, there was no pronounced age pattern among road crash deaths.

Road Crash Death Rates By Age & Gender, 2021

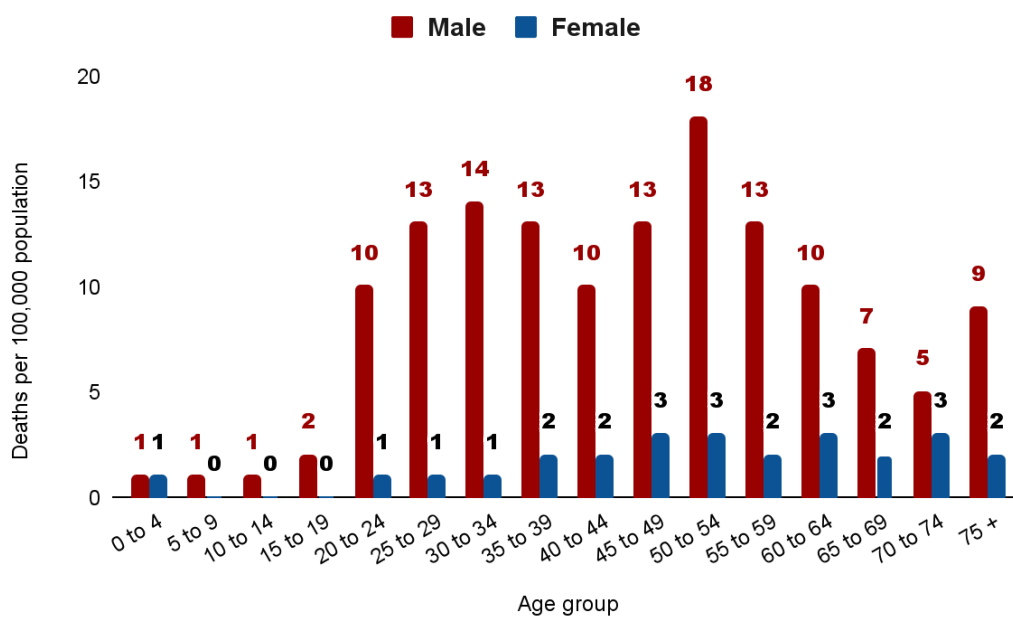


Figure 6

Death risk is relatively higher for men aged between 50 to 54 years. Among women, road traffic death risk was highest over age 45.

Motorcyclist Deaths By Age & Gender, 2021

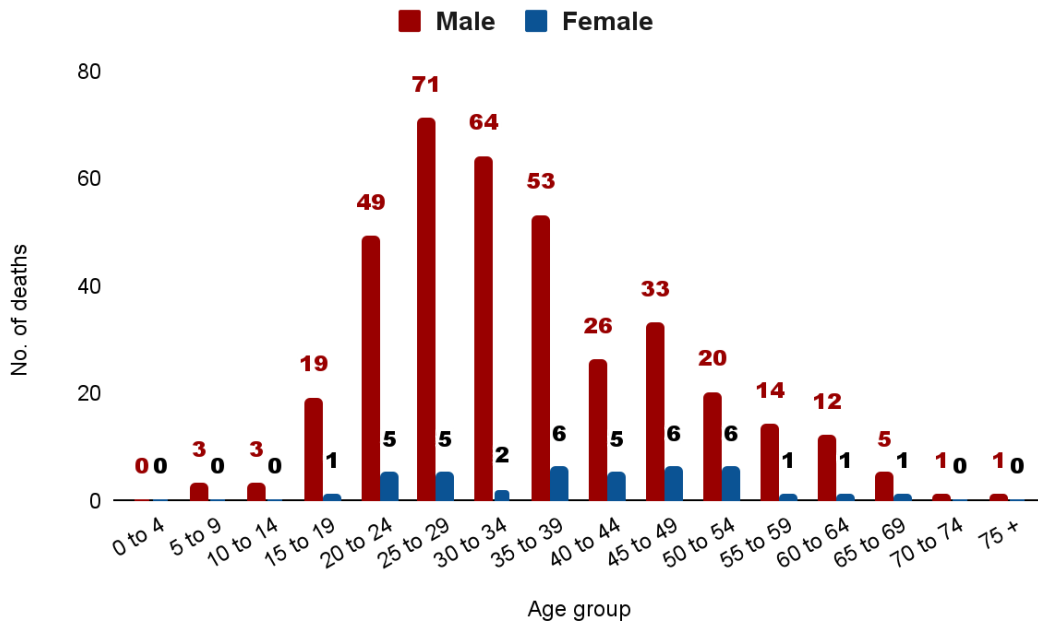


Figure 7

Younger men aged 20 to 34 years accounted for the highest number of deaths among motorcyclists.

Motorcyclist Death Rates By Age & Gender, 2021

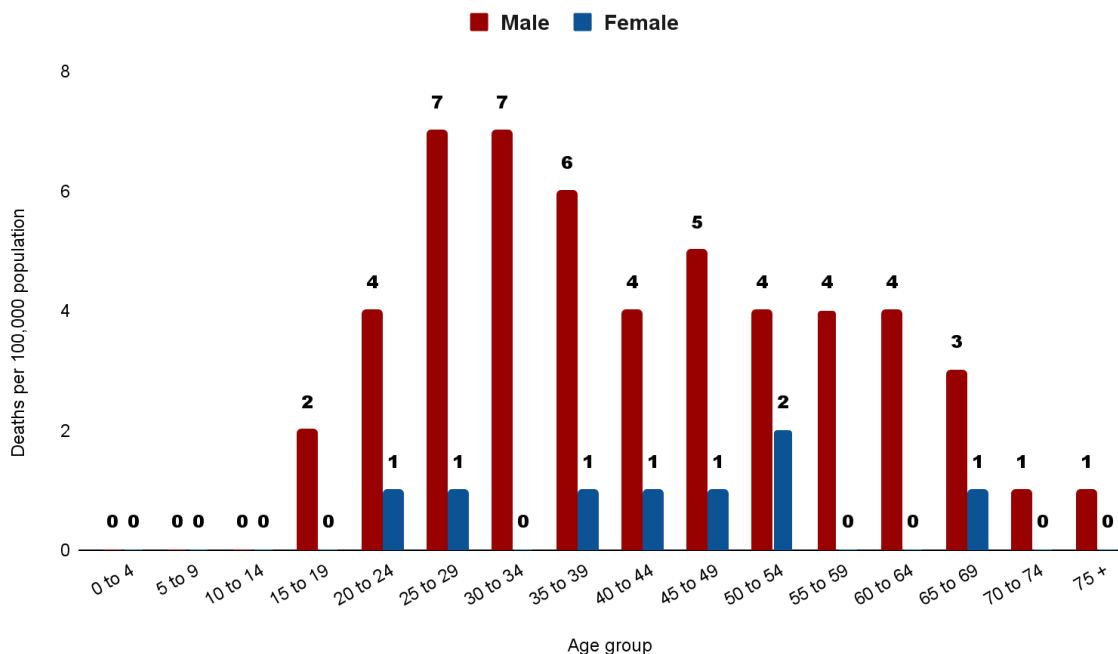


Figure 8

Age-specific deaths among motorcyclists per lakh population were also highest among 25 to 34 year-old men.

Pedestrian Deaths By Age & Gender, 2021

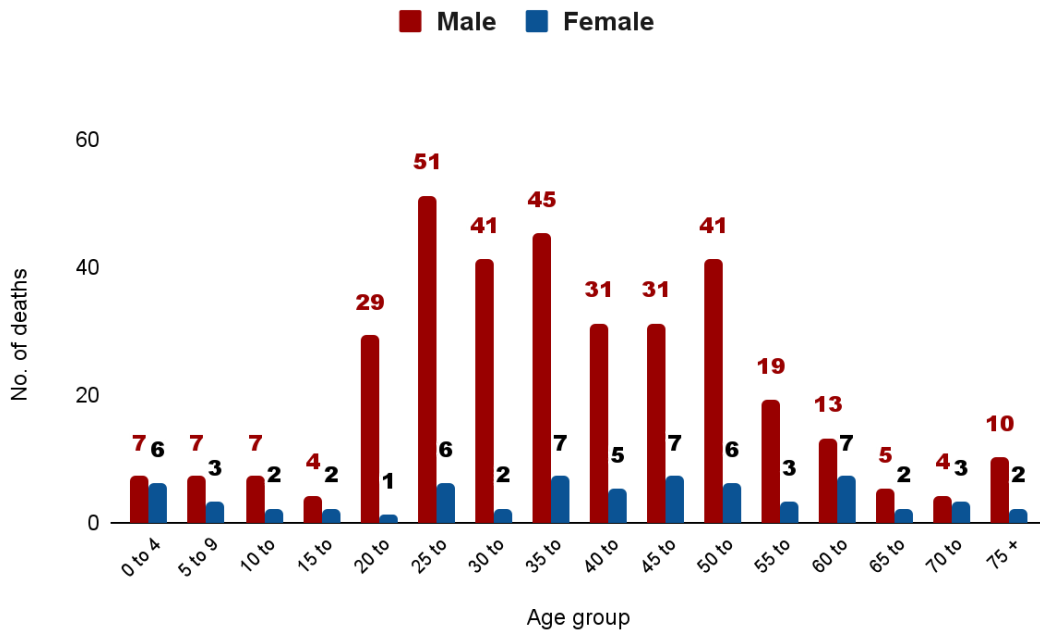


Figure 9

Pedestrian deaths were highest among men aged between 25 to 29 years.

Pedestrian Death Rates By Age & Gender, 2021

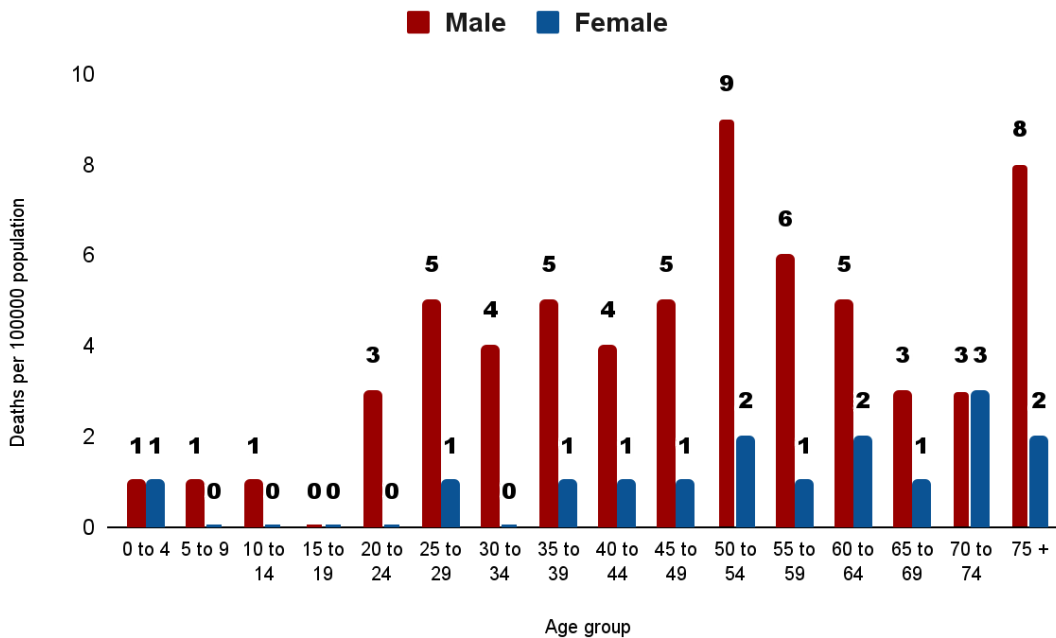
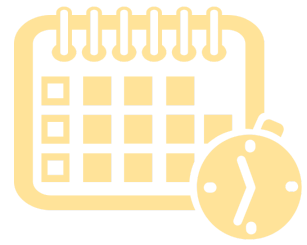


Figure 10

The pedestrian death rate per lakh population was highest among men aged between 50 to 54 years and highest among women aged 70-74 years.



ROAD CRASH DEATHS BY MONTH, TIME & DAY

Fatal Crashes & Deaths By Month, 2021

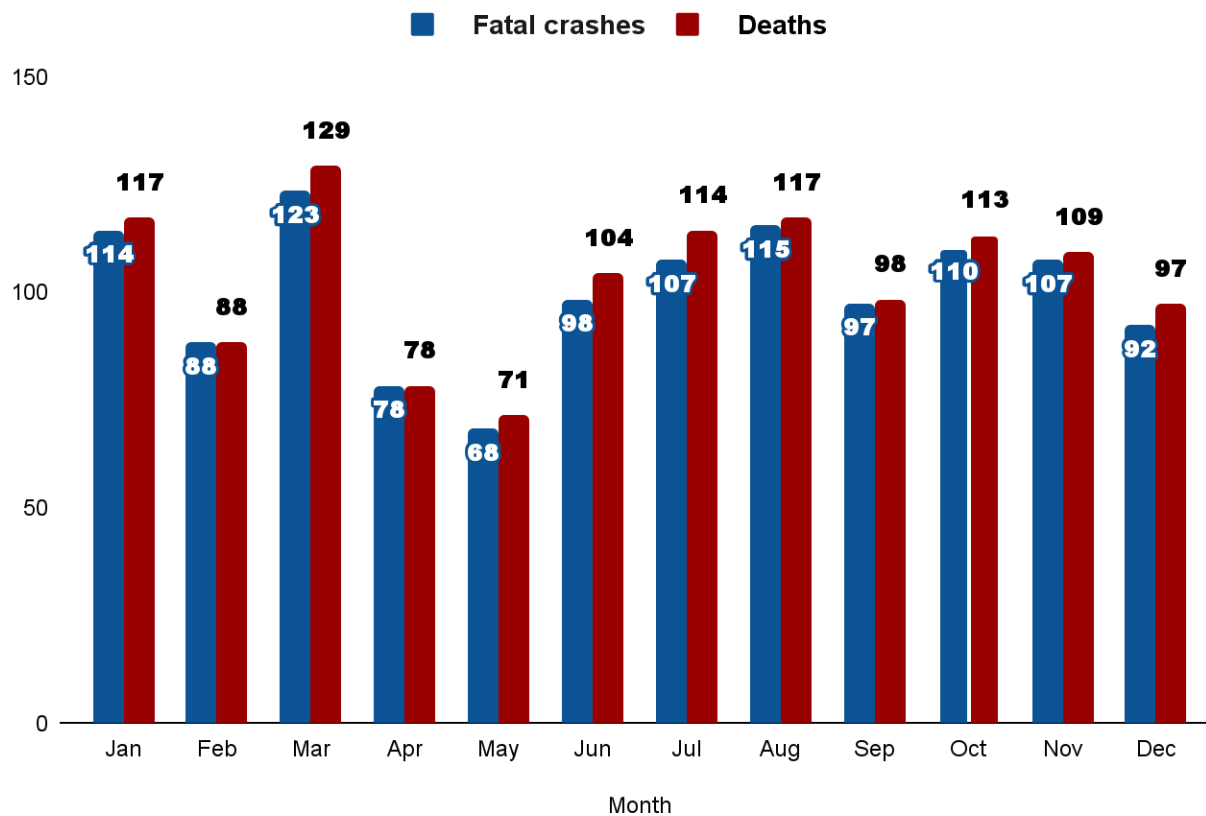
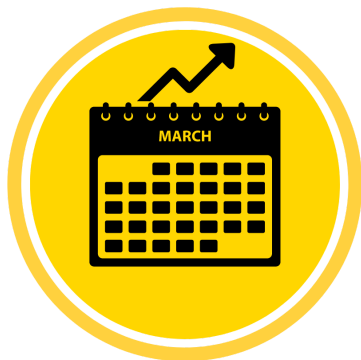


Figure 11



The number of fatal crashes as well as deaths was highest in March. There was a sudden decline in crashes in April and May at the time of the partial lockdown due to the COVID-19 pandemic.

Fatal Crashes By Time Of Day, 2021

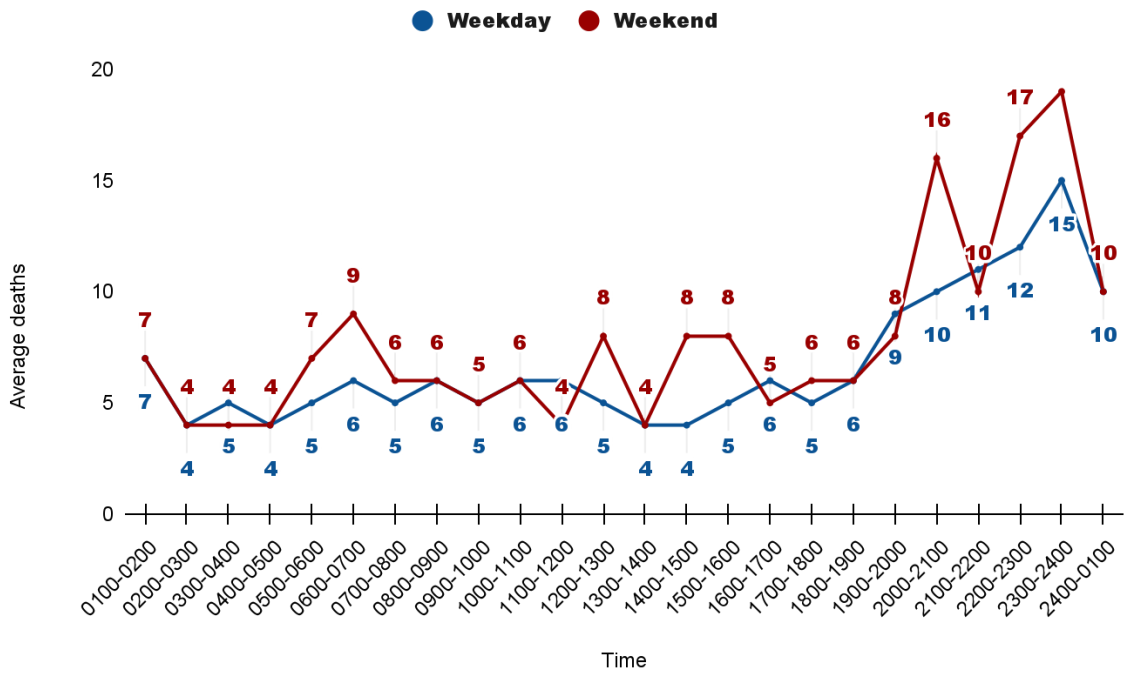


Figure 12

Time of most fatal crashes

Fatal crashes occurred most frequently between 2000-0100 hrs on both weekdays and weekends, with a peak at 2300-2400 hrs.



**8pm
-
1am**

**Weekends
& Weekdays**

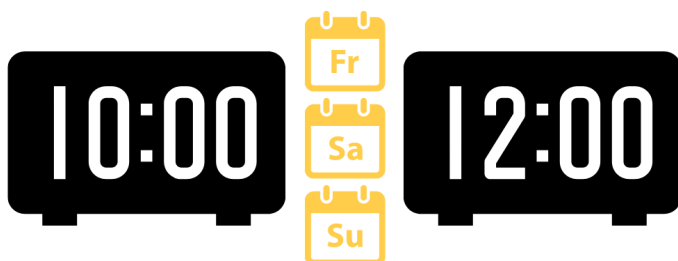
**11pm
-
12am**

Peak crash timing

Crash Deaths By Day & Time Of Week 2021

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
2400-0200	24	22	16	9	15	12	21	119
0200-0400	6	9	8	8	12	7	7	57
0400-0600	12	6	4	8	13	7	14	64
0600-0800	11	10	16	10	11	18	10	86
0800-1000	7	6	10	13	16	11	9	72
1000-1200	12	8	16	11	11	10	8	76
1200-1400	11	7	9	6	9	14	8	64
1400-1600	13	10	7	8	8	18	13	77
1600-1800	9	12	12	9	9	14	8	73
1800-2000	12	13	17	16	18	14	12	102
2000-2200	22	23	24	17	19	28	22	155
2200-2400	19	23	28	30	34	37	34	205
Total	158	149	167	145	175	190	166	1150

Table 1



Road crash deaths were most frequent on Fridays, Saturdays and Sundays between 2200-2400 hrs and also peaked between 2200-2400 hrs on Saturday.

AT-FAULT VEHICLES & DRIVERS



Known At-Fault Vehicle Types, 2021

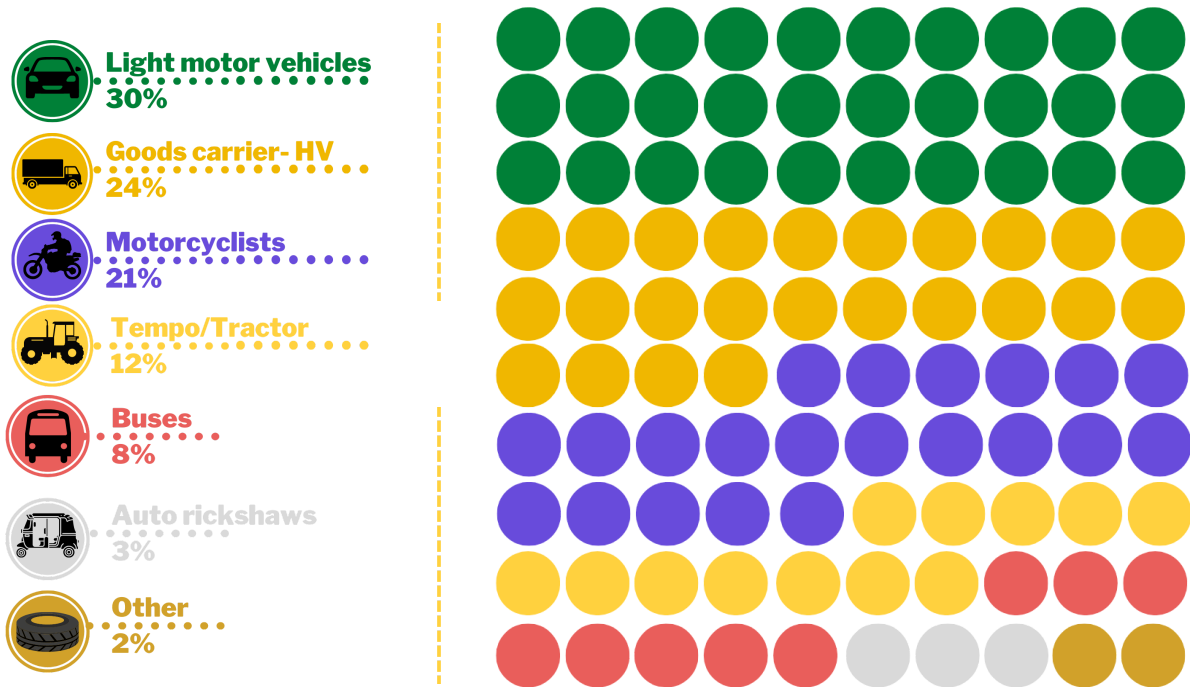
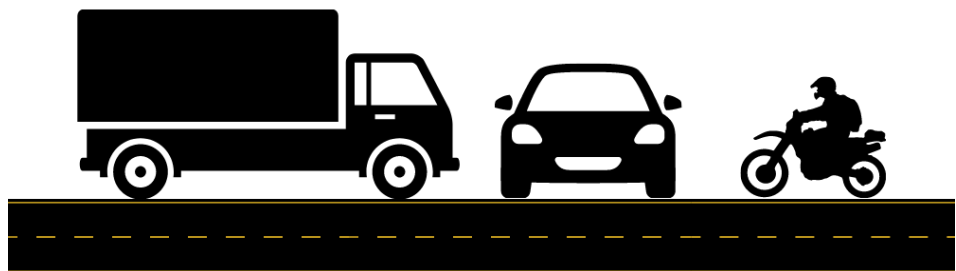


Figure 13

Heavy vehicles were responsible for 44 percent of the crashes where the causal vehicle was known, followed by light motor vehicles and motorcyclists. Note that the colliding vehicle was not known in the 40 percent of fatal crashes.



Gender Distribution Of At-Fault Drivers, 2021



Figure 14

Age Distribution Of At-Fault Drivers, 2021

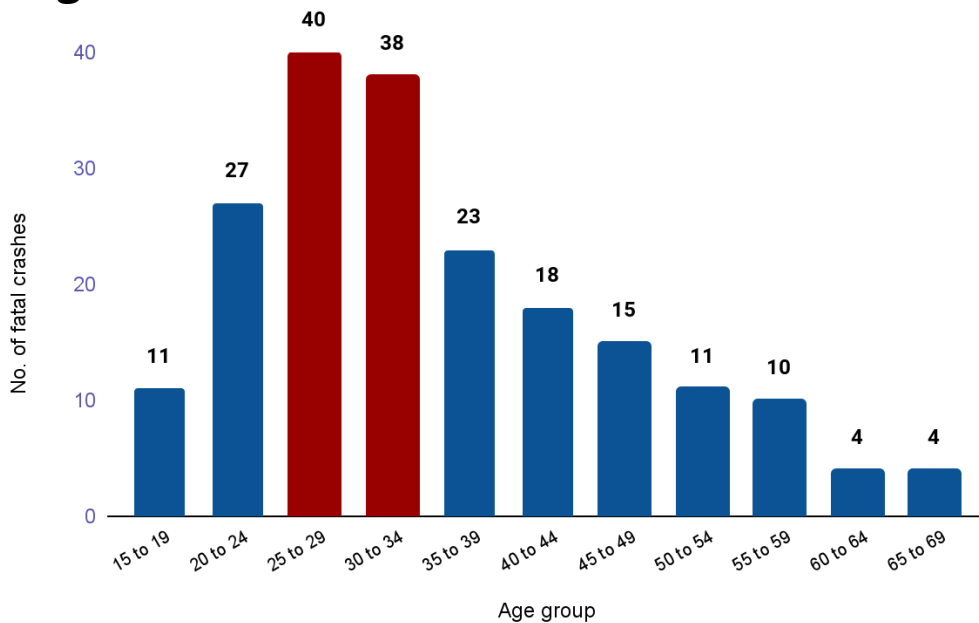


Figure 15

Among drivers whose age was documented, 25 to 34 years old were responsible for most of the fatal crashes in 2021. The age of at-fault drivers was not recorded in most of the crashes. Cases with unknown age were excluded.

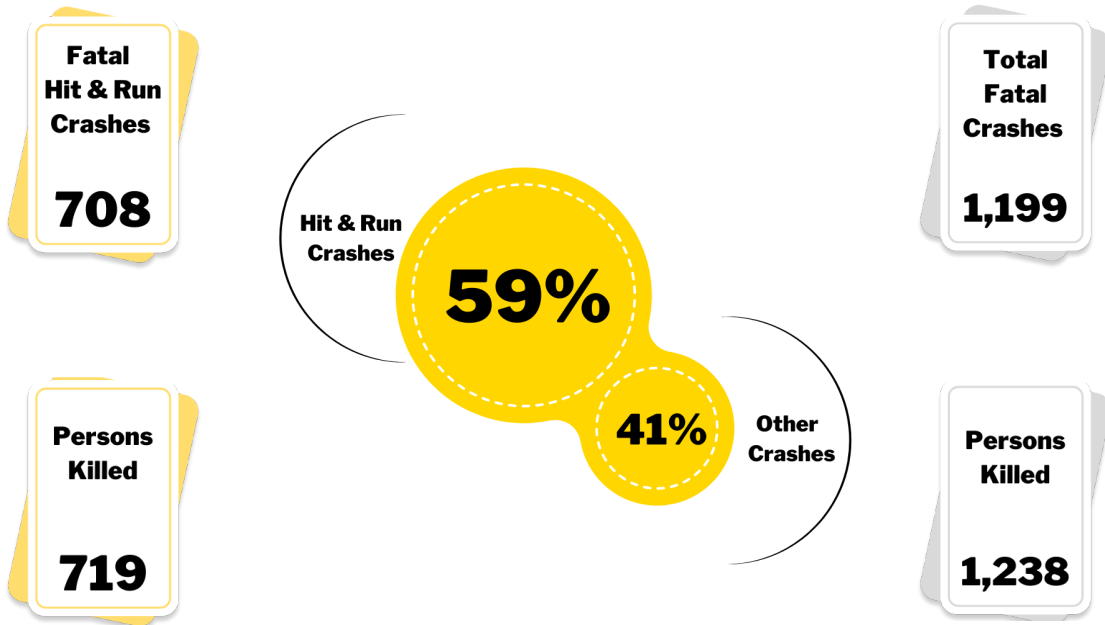
At-Fault Vehicles & Fatal Crash Victims By Road User Type

Victim road user type	At-fault vehicles							
	Light motor vehicles	Heavy vehicles (goods carrier)	Motor-cycles	Tempo/Tractor	Bus	Auto Rickshaw	Single vehicle crashes	Unknown
Pedestrians	76	53	35	34	18	10	0	290
Motorcyclists and pillion riders	70	94	31	36	34	5	81	173
Auto Rickshaw occupants	5	10	0	2	5	2	6	6
Cyclists/ Cycle rickshaw occupants	20	9	5	6	2	0	0	14
Light vehicle occupants	17	9	0	0	4	0	24	3
Heavy vehicle occupants	2	1	0	9	3	1	8	1
Other	4	1	1	1	1	0	4	0
Total deaths	194	177	72	88	67	18	123	487

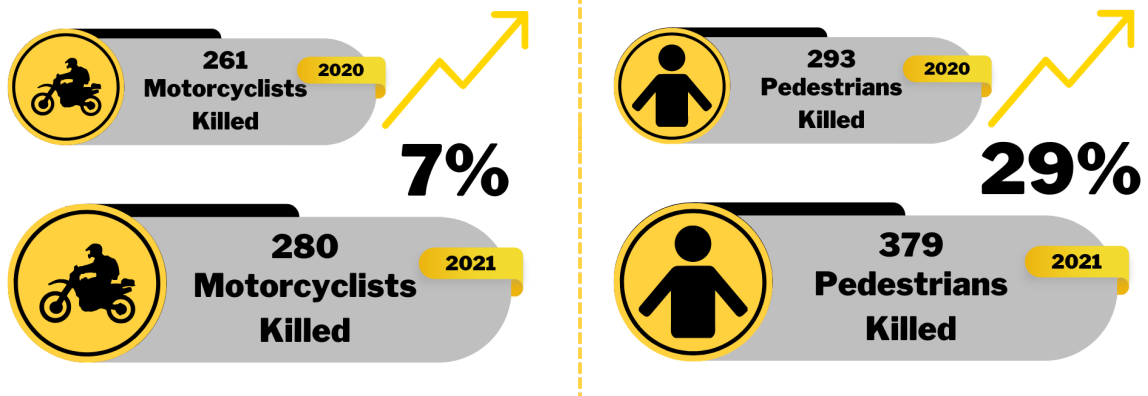
Table 2

Light motor vehicles and heavy vehicles (goods carriers) were responsible for most of the pedestrians and motorcyclist deaths respectively. Most cyclists were killed by light motor vehicles. 81 persons were killed in single vehicle crashes involving motorcyclists.

FATAL HIT & RUN CRASHES 2021



Hit & Runs: Motorcyclist & Pedestrian Deaths; 2020 vs 2021



Fatal Hit-And-Run Crashes, 2014-2021

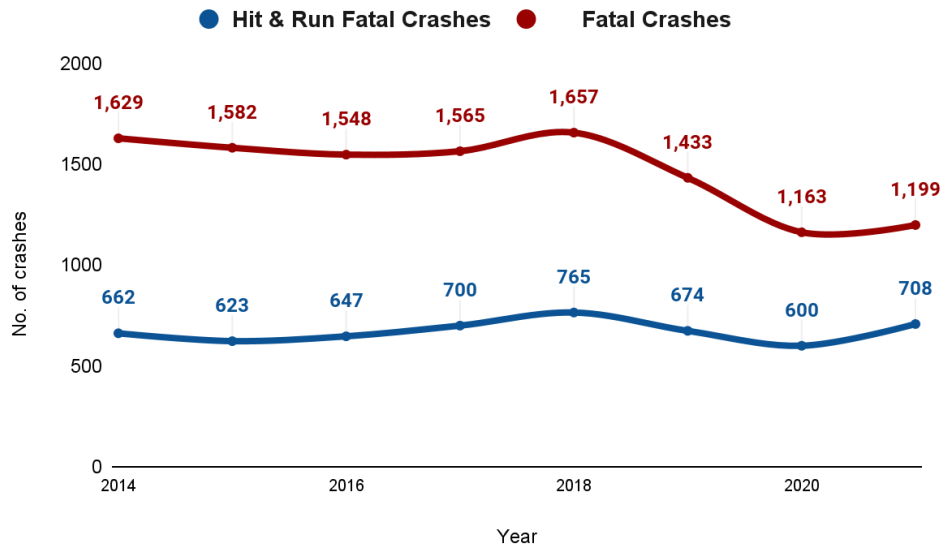


Figure 16

Hit-and-run crashes have increased from 600 in 2020 to 708 in 2021 accounting for 59 percent of fatal crashes.

Hit & Run Crash Deaths By Road User Types, 2021

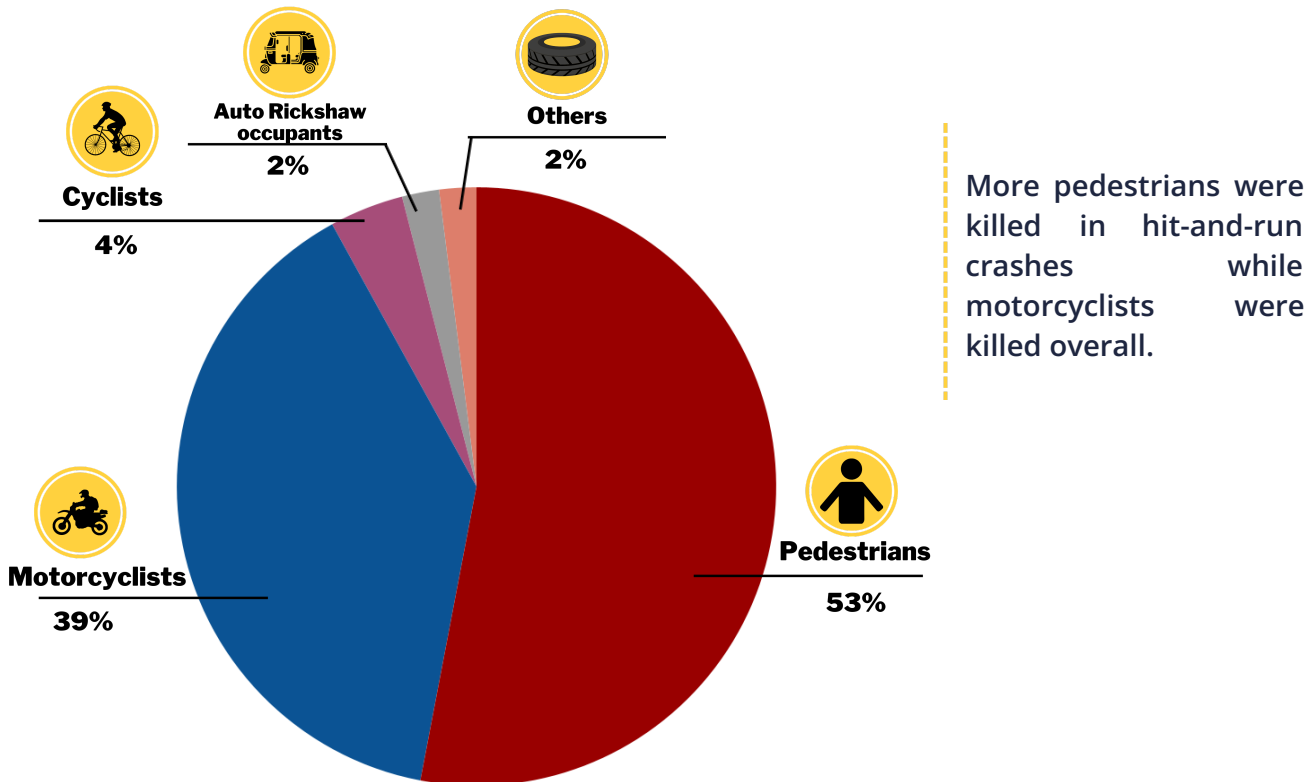


Figure 17

Hit & Run Fatalities By Age, 2021

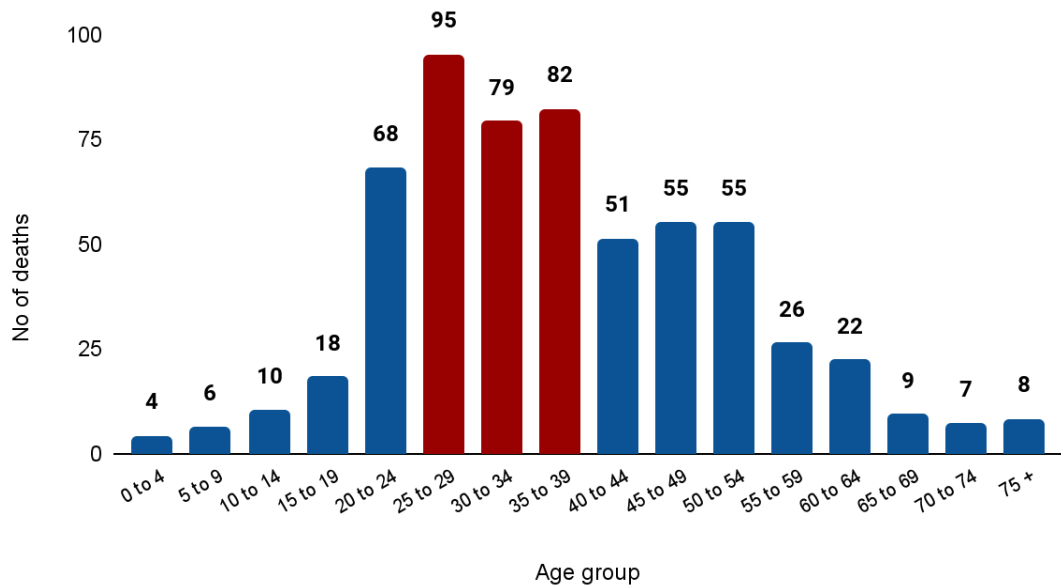


Figure 18

Most of the victims of hit-and-run crashes were in the age group of 25 to 29 years old.

Hit-And-Run Crash Death Rates By Age, 2021

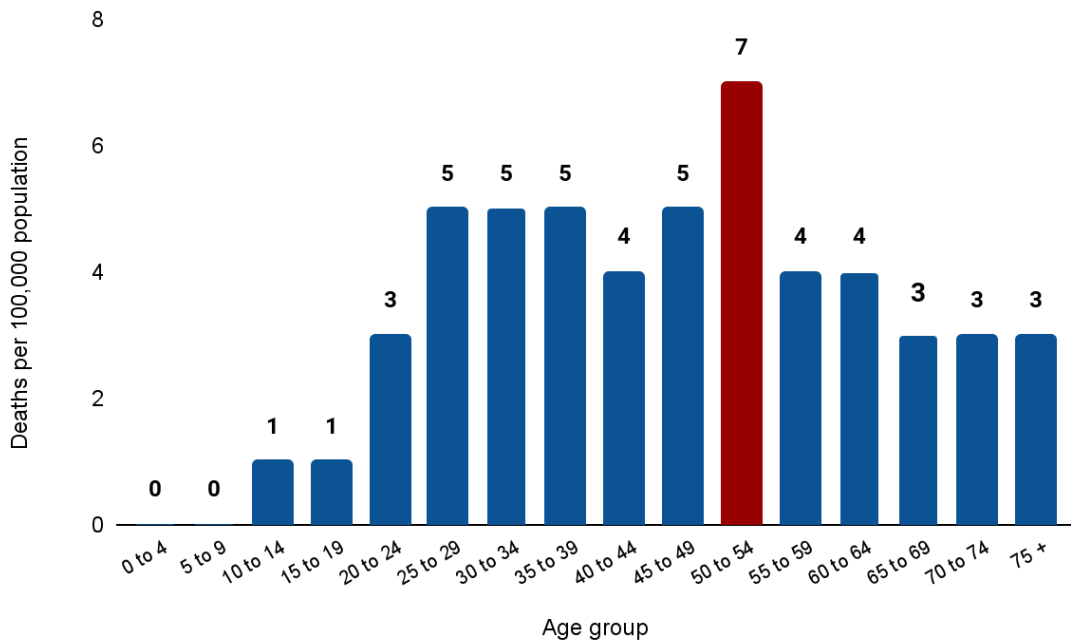


Figure 19

The road crash death rate per 100,000 population was highest among people aged between 50 to 54 years.

HIGH RISK LOCATIONS



High-Risk Corridors With Two Or More Deaths Per Km, 2020-2021

Sr. No.	Corridor/ Road name	Persons killed in 2020 and 2021	Deaths per km
1	Ring Road Bypass- Gate no 6, IG Stadium towards Marghat Hanuman Mandir (5.2 kms)	32	6
2	GT Karnal Road- Azadpur Chowk to Singhu Border (20 kms)	91	5
3	Outer Ring Road (47 kms)	196	4
4	Rohtak Road- Punjabi Bagh Metro station to Tikri Border (20 kms)	75	4
5	NH-8- Delhi-Haryana South West border to Pratap Chowk, Delhi Cantonment (13 kms)	53	4
6	Wazirabad Road- MCD Toll Booth Bhopura border to Ramghat- Wazirabad (11.1 kms)	45	4
7	Grand Trunk Road- Dilshad Garden Metro Station to ISBT Kashmere Gate (10 kms)	35	4
8	Ring Road (55 kms)	149	3
9	Najafgarh Road- Rajouri Garden metro station to Najafgarh Metro Station (16.5 kms)	52	3
10	Mehrauli Badarpur Road- Intersection of Crescent road to Faridabad border (11 kms)	38	3

Table 3.1

Sr. No.	Corridor/ Road name	Persons killed in 2020 and 2021	Deaths per km
11	NH-24- Ghazipur Border to Indraprastha Park (8.6 kms)	27	3
12	New Rohtak Road- Punjabi Bagh Metro station towards Rani Jhansi Road (6.3 kms)	18	3
13	Dev Prakash Shastri Road- Loha Mandi T-point to Indian Agricultural Statistics Research Institute (5 kms)	15	3
14	Road no. 201- DXR Point Dwarka to Maharaja Agrasen Hospital (5.3 kms)	14	3
15	Maa Anandmayee Marg- Kalkaji Flyover towards Mehrauli- Badarpur Road (5.4 kms)	14	3
16	Netaji Subhash Marg- Delhi Gate Junction to Chatta Rail Junction (3 kms)	10	3
17	Pusta Road- MCD Toll Ankur Vihar to Nigam Parishad near Lalita Park (12.3 kms)	29	2
18	Mathura Road- Tilak Bridge Red Light to Badarpur Border (17 kms)	29	2
19	Pankha Road-Uttam Nagar East Metro Station towards Cariappa Marg (7 kms)	16	2
20	Vikas Marg- Delhi Secretariat to Karkari Mor Flyover (5.3 kms)	12	2

Table 3.2

Ring Road Bypass recorded the highest number of persons killed per kilometer. Outer Ring Road and Ring Road reported the highest number of persons killed in 2021. Identification of high risk corridors/stretchers supports planning engineering and enforcement interventions focusing mainly on speed management and road safety risk factors such as use of clasped helmets by rider and pillion rider, use of seat-belt and drink driving.

Corridors With Two Or More Pedestrian Deaths Per Km, 2020-2021

Sr No.	Corridor/ Road name	Pedestrians Killed in 2020-2021	Deaths per KM
1	Netaji Subhash Marg- Delhi Gate Junction to Chatta Rail Junction (3 kms)	8	3
2	GT Karnal Road- Azadpur Chowk to Singhu Border (20 kms)	52	3
3	Ring Road Bypass- Gate no 6 IG Stadium towards Marghat Hanuman Mandir (5.2 kms)	13	3
4	Wazirabad Road- MCD Toll Booth Bhopura border to Ramghat- Wazirabad (11.1 kms)	19	2
5	New Rohtak Road- Punjabi Bagh Metro station towards Rani Jhansi Road (6.3 kms)	10	2

Table 4

Netaji Subhash Marg has recorded the highest number of pedestrian deaths per kilometer. While Outer Ring Road has recorded 64 pedestrian deaths with 1 death per km.

Corridors With Two Or More Motorcyclist Deaths Per Km, 2020-2021

Sr No.	Corridor/ Road name	Motorcyclists Killed in 2020-2021	Deaths per KM
1	Ring Road Bypass- Gate no 6 IG Stadium towards Marghat Hanuman Mandir (5.2 kms)	14	3
2	Outer Ring Road (47 kms)	98	2
3	Rohtak Road- Punjabi Bagh Metro station to Tikri Border (20 kms)	36	2
4	NH-8- Delhi-Haryana South West border to Pratap chowk, Delhi Cantonment (13 kms)	28	2
5	Wazirabad Road- MCD Toll Booth Bhopura border to Ramghat- Wazirabad (11.1 kms)	20	2
6	Mehrauli Badarpur Road- Intersection of Crescent road to Faridabad border (11 kms)	17	2
7	Grand Trunk Road- Dilshad Garden Metro Station to	15	2

ISBT Kashmere Gate (10 kms)			
8	NH-24- Ghazipur Border to Indraprastha Park (8.6 kms)	13	2
9	Dev Prakash Shastri Road- Loha Mandi T-point to Indian Agricultural Statistics Research Institute (5 kms)	11	2
10	Vikas Marg- Delhi Secretariat to Karkari Mor Flyover (5.3 kms)	9	2

Table 5

Ring Road Bypass has recorded the highest number of motorcyclist deaths per kilometer and Outer Ring Road has reported the highest number of motorcyclist deaths in 2021.

Corridors With More Than Three Cyclists Killed Per Km, 2020-2021

Sr No.	Corridor/ Road name	Cyclists Killed in 2020-2021
1	Rohtak Road- Punjabi Bagh Metro station to Tikri Border (20 kms)	6
2	Ring Road (55 kms)	5
3	Pusta Road- MCD Toll Ankur Vihar to Nigam Parishad near Lalita Park (12.3 kms)	5
4	Mathura Road- Tilak Bridge Red Light to Badarpur Border (17 kms)	4
5	Najafgarh Road- Rajouri Garden metro station to Najafgarh Metro Station (16.5 kms)	4
6	Outer Ring Road (47 kms)	4
7	Grand Trunk Road- Dilshad Garden Metro Station to ISBT Kashmere Gate (10 kms)	3
8	Mehrauli Badarpur Road- Intersection of Crescent road to Faridabad border (11 kms)	3
9	Mehrauli Gurgaon Road- Chattarpur Metro Station towards Guru Dronacharya Metro Station (8 kms)	3
10	NH-8- Delhi-Haryana SouthWest border to Pratap chowk, Delhi Cantonment (13 kms)	3

Table 6

Rohtak Road recorded the highest number of cyclist deaths 6 followed by Ring Road recording 5 cyclists deaths.

Corridors With Two Or More Deaths Per Km Due To Hit-And-Run Crashes, 2020-2021

Sr No.	Corridor/ Road name	Persons Killed in 2020-2021	Deaths per km
1	Outer Ring Road (47 kms)	125	3
2	GT Karnal Road- Azadpur Chowk to Singhu Border (20 kms)	57	3
3	NH-8- Delhi-Haryana SouthWest border to Pratap chowk, Delhi Cantonment (13 kms)	35	3
4	Mehrauli Badarpur Road- Intersection of Crescent road to Faridabad border (11 kms)	28	3
5	Ring Road Bypass- Gate no 6 IG Stadium towards Marghat Hanuman Mandir (5.2 kms)	18	3
6	Rohtak Road- Punjabi Bagh Metro station to Tikri Border (20 kms)	39	2
7	Najafgarh Road- Rajouri Garden metro station to Najafgarh Metro Station (16.5 kms)	26	2
8	Wazirabad Road- MCD Toll Booth Bhopura border to Ramghat- Wazirabad (11.1 kms)	22	2
9	Pusta Road- MCD Toll Ankur Vihar to Nigam Parishad near Lalita Park (12.3 kms)	19	2
10	Grand Trunk Road- Dilshad Garden Metro Station to ISBT Kashmere Gate (10 kms)	17	2
11	NH-24- Ghazipur Border to Indraprastha Park (8.6 kms)	15	2
12	Vikas Marg- Delhi Secretariat to Karkari Mor Flyover (5.3 kms)	10	2

Table 7

In 2020 and 2021, Outer Ring Road recorded the highest number of deaths, with 125 persons killed. This translates to three deaths per km, due to hit-and-run crashes.

High Risk Areas With More Than Seven Fatal Crashes Within 250 Meters Radius Of Location, 2020-2021

Sr No.	Junction/ Intersection/ Location	Crashes
1	Mukarba Chowk	13
2	Intersection of Outer Ring Road and Wazirabad Road near Signature Bridge	10
3	Nirankari Chowk	10
4	Seelampur Chowk	10
5	Peeragarhi Chowk	10
6	Azadpur Chowk	9
7	Outer Ring Road- In Front of Rohini Court near Madhuban Chowk	9
8	Dabri crossing roundabout	9
9	Intersection of Grand Trunk Road and Main Libaspur Road	9
10	Punjabi Bagh Chowk	9
11	Gazipur Roundabout	8
12	Chirag Delhi bus-stop FOB on LBS Marg	8
13	Intersection of Raja Ram Kohli Marg and Pushta Road- opposite Chacha Nehru Bal Chikitsalaya	8
14	Zakhira Flyover- Intersection of Rohtak Road and Satguru Ram Singh Road	7
15	Mundka Metro Station	7
16	Intersection of Ring Road and Ring Road Bypass near Yamuna Bazar	7
17	Near Akshardham Metro Station	7

Table 8

The above high risk areas have been identified using GIS mapping and “Blackspots” definition notified by MoRTH to identify areas with more than five fatal crashes in the past three years. A total of 69 crash spots, with more than five fatal crashes in the last two years, have been identified. The table above contains 17 high risk areas with more than seven fatal crashes in the last two years. These high risk areas should further be studied by road owning agencies and redeveloped to make streets safer for all road users.

CRASH HEAT MAPS

Heat Map Of Fatal Crashes, Delhi 2020-2021

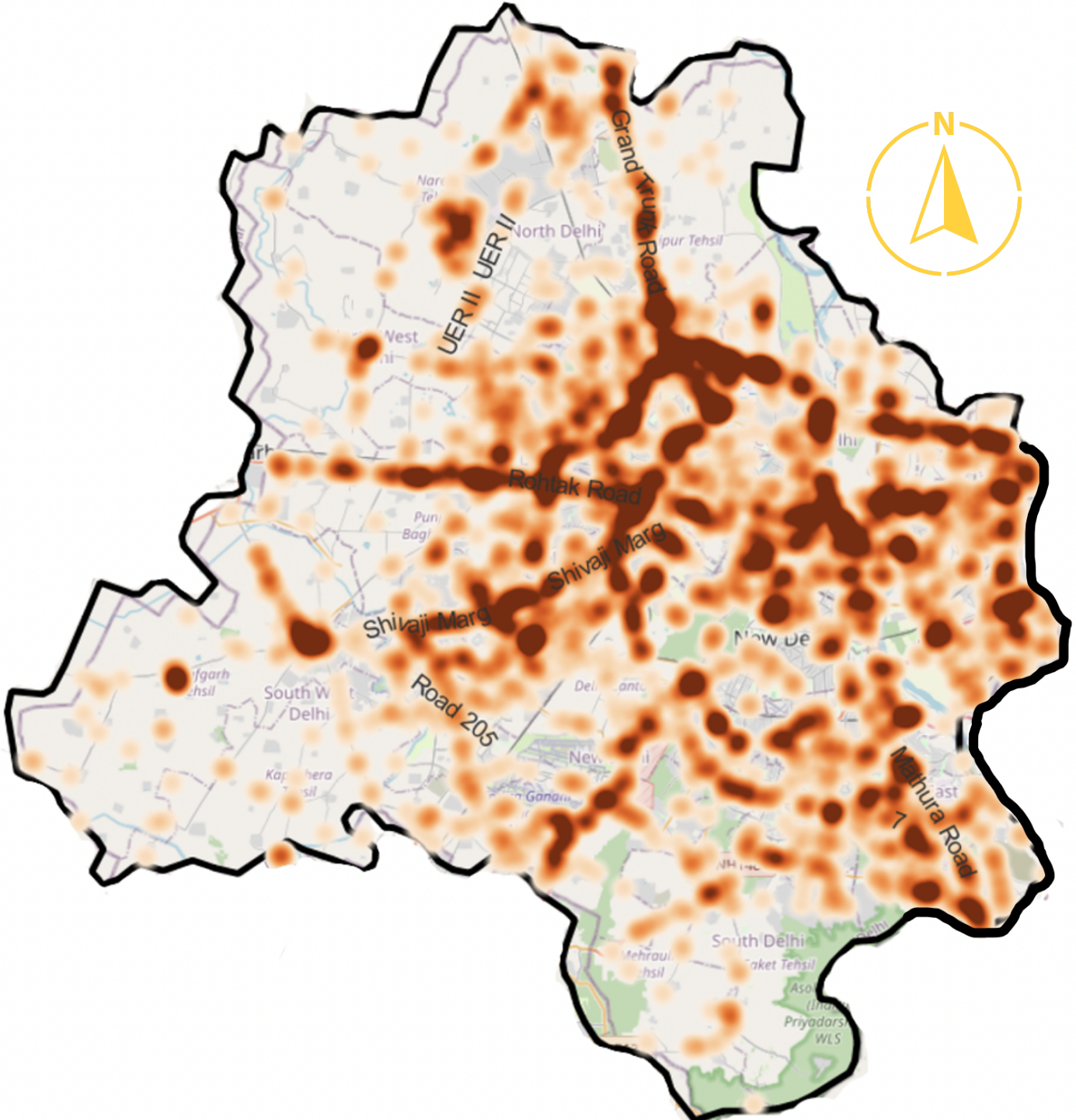


Figure 20

This heat map shows the fatal crashes and the locations where they happen. The areas in red represent areas with a high incidence of fatal crashes.

