



2021 Preliminary Fatality Report Findings

TRAFFIC SAFETY RESEARCH AND EVALUATION GROUP (TSREG)

THE UNIVERSITY OF GEORGIA

COLLEGE OF PUBLIC HEALTH

DEPARTMENT OF HEALTH PROMOTION & BEHAVIOR



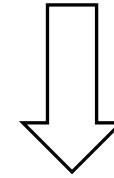
Background

TSREG examines and evaluates traffic fatality data and trends in the state of Georgia.

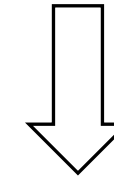
The fatality data and trends are presented to GOHS in the form of the Preliminary Fatality Report each year.

Collecting the Data

January 1, 2021 - December 31, 2021



TSREG received daily fatality “report” emails from GDOT. Information about incident date, time, location, fatality victim demographics, and safety equipment usage were entered into TSREG’s internal database.



The Georgia Electronic Accident Reporting System (GEARS) online database was used to cross-reference and clean GDOT daily fatality data. Additional factors found in GEARS that were not provided in GDOT emails were recorded. The 2017 Georgia Motor Vehicle Crash Report Overlay was used for analysis.

Methods



Methods

Cleaning the Data

TSREG's database was cross-referenced with the Fatal Crash Recording System (FCRS) using SPSS software by matching Accident Number/MRN. The FCRS data was used to validate the TSREG fatality database.

- When discrepancies between the two databases were discovered, GEARS was used to clarify the discrepancy.
- All duplicate entries were removed from the dataset.
- Pit Maneuvers (PITM) were excluded from data analysis in accordance with FARS reporting (n=2). Fatalities that indicated a fetus were excluded from data analysis (n=2).
- If “No Contributing Factors” was the only Operator Contributing Factor listed in the fatality report, it was included in TSREG's database. If it was listed with other factors, it was excluded as a contributing factor from analysis.



TSREG reported a total of 1,818 roadway fatalities in Georgia in 2021.

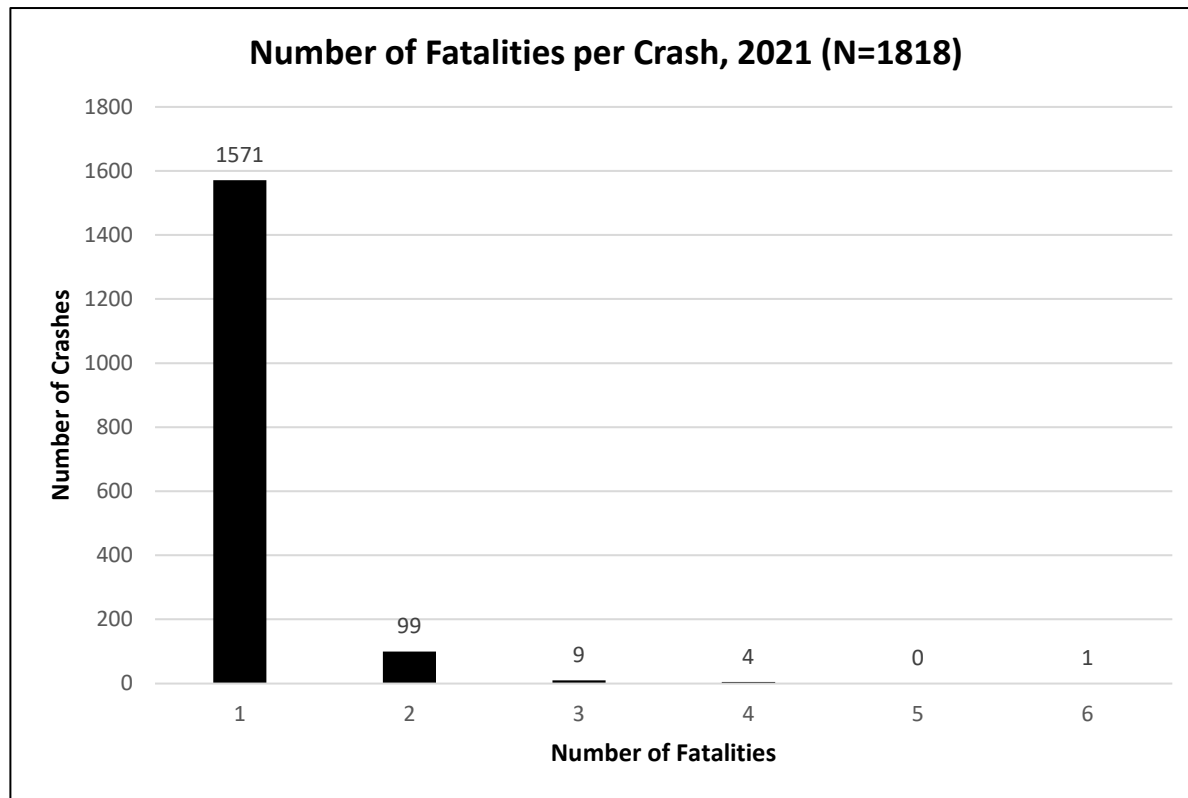
All 2021 fatality data is preliminary.

Roadway fatality data is final when validated and released by NHTSA through the Fatality Accident Reporting System (FARS).



Results

NUMBER OF FATALITIES PER CRASH

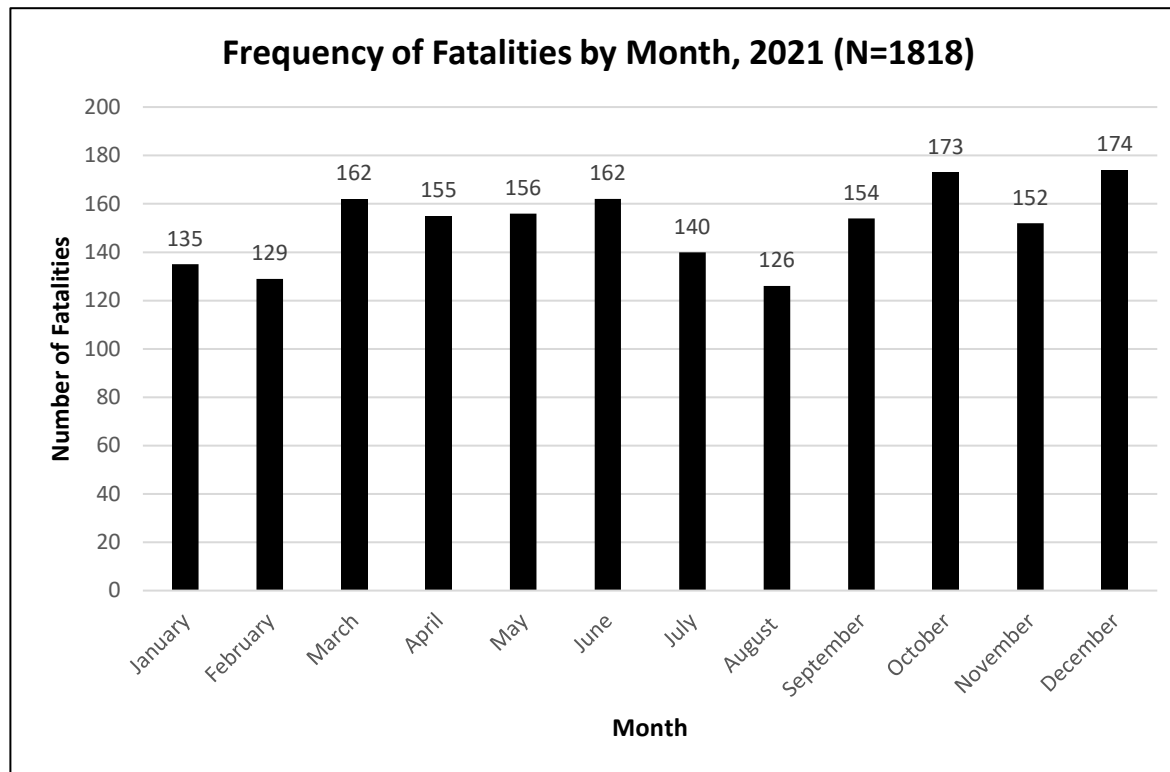


- Most fatal crashes resulted in one fatality
- 99 fatal crashes included two fatalities



Results

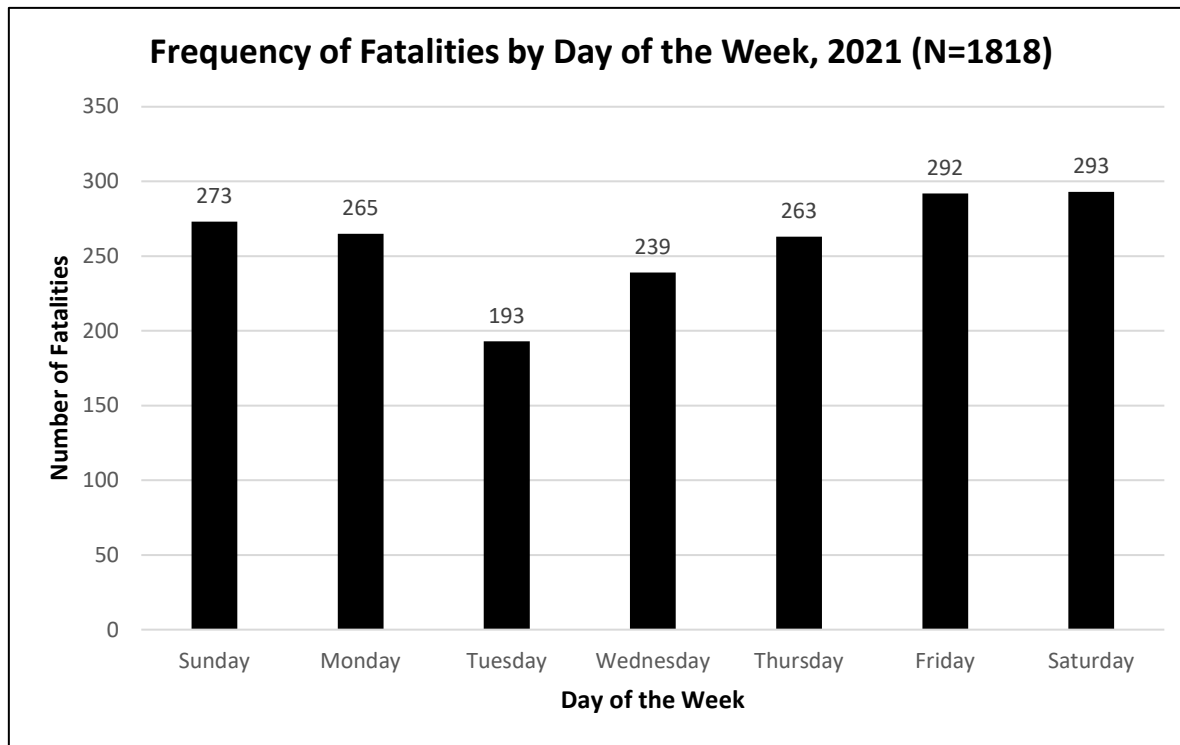
BY MONTH



- Overall, fairly equal distribution of fatalities across the year.
- December, October, March, and June had the most fatalities; August had the least fatalities.

Results

BY DAY OF THE WEEK

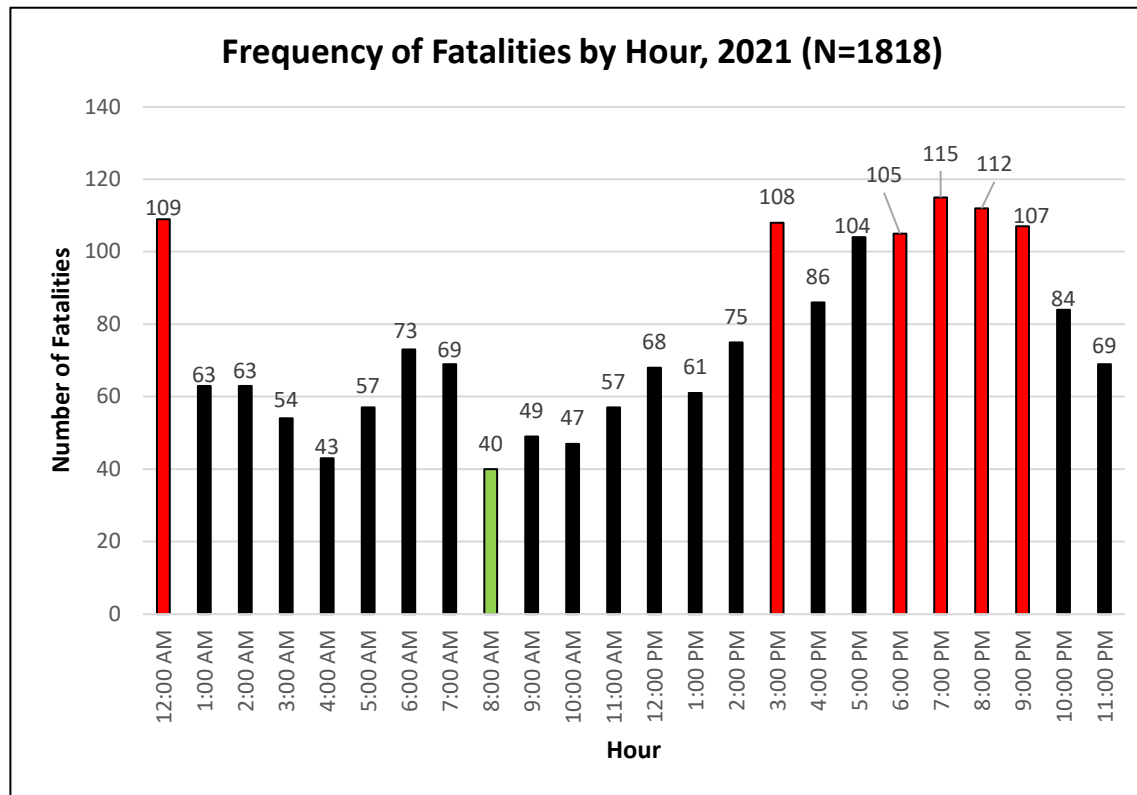


- A higher number of fatalities occur on Friday and Saturday. A lower number of fatalities occur on Tuesday and Wednesday.



Results

BY HOUR

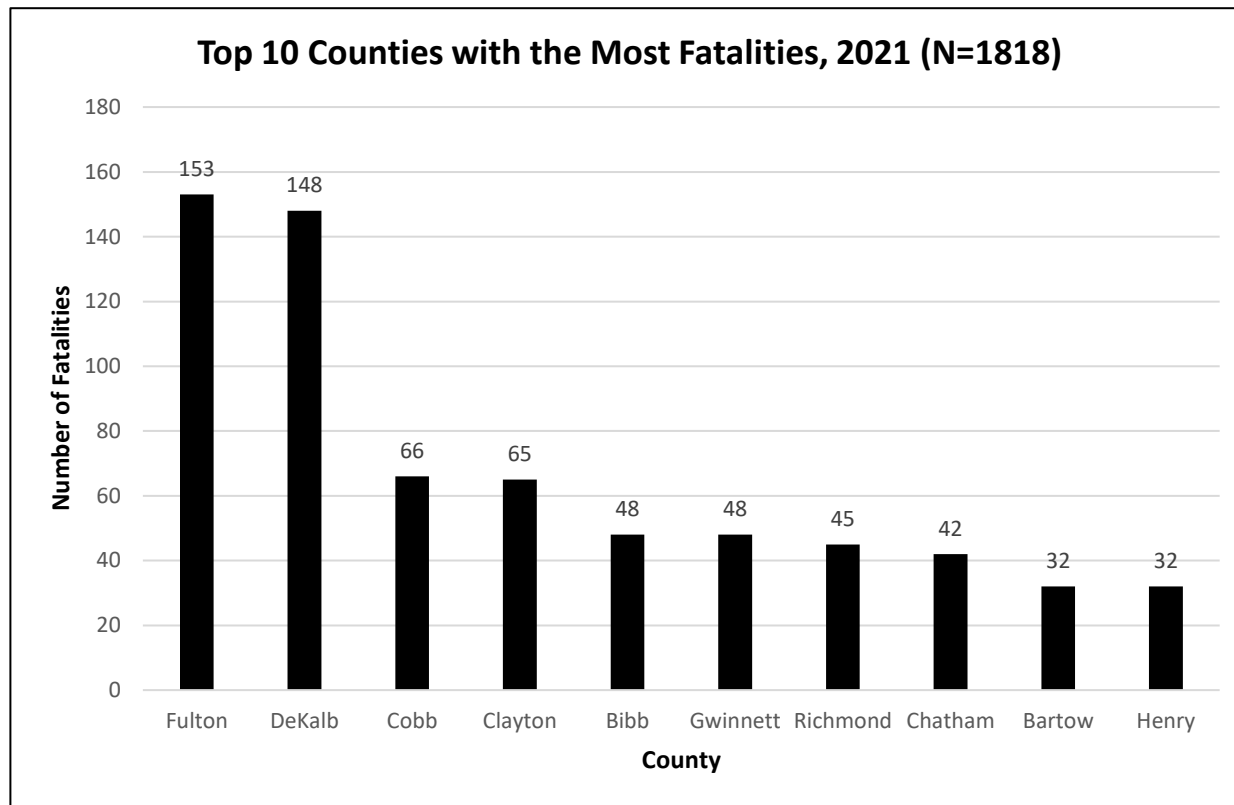


- First quarter of the day (12:00AM-5:59AM)
21.5% of all total fatalities
- Second quarter of the day (6:00AM-11:59AM)
18.4%
- Third quarter of the day (12:00PM-5:59PM)
27.5%
- Fourth quarter of the day (6:00PM-11:59PM)
32.6%



Results

BY COUNTY

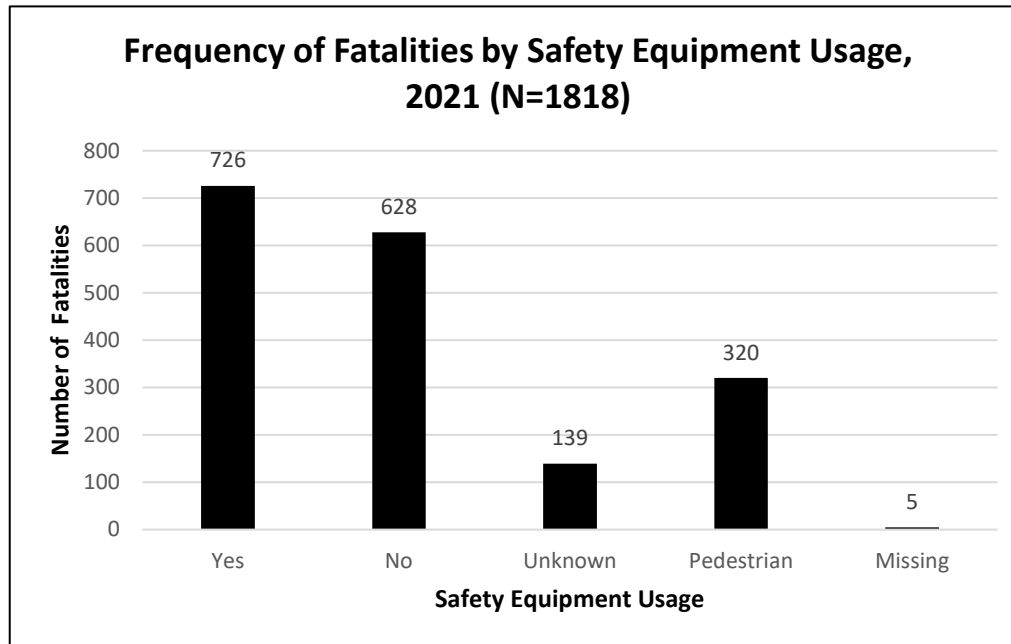


- Fulton: 8.4% of all roadway fatalities
- DeKalb: 8.1%
- Cobb: 3.6%
- Clayton: 3.6%
- Bibb: 2.6%
- Gwinnett: 2.6%



Results

BY SAFETY EQUIPMENT USAGE*



- Safety equipment used: 39.9%
- Safety equipment not used: 34.5%
- Unknown safety equipment usage: 7.6%
- Pedestrian fatalities: 17.6%
- Missing data: 0.4%

*Pedestrian fatalities, by nature, do not involve traditional safety equipment like seat belts. For this reason, TSREG opted to put these fatalities in a category of their own. This provides a more accurate picture of all fatalities and seat belt usage.



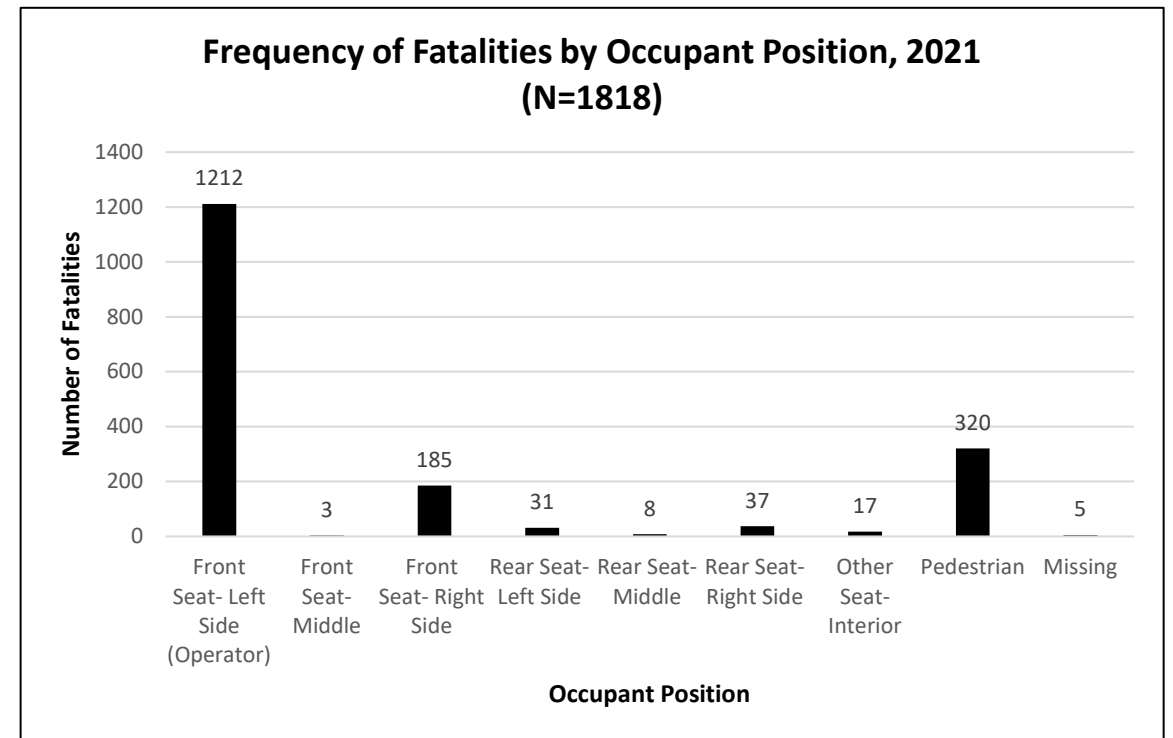
Results

BY VEHICLE TYPE

Top 5 vehicles involved in a roadway fatality:

1. Passenger car (n=660; 36.3%)
2. Sports Utility Vehicle (SUV) (n=270; 14.9%)
3. Pickup truck (n=243; 13.4%)
4. Motorcycle (n=170; 9.4%)
5. Van (n=38; 2.1%)

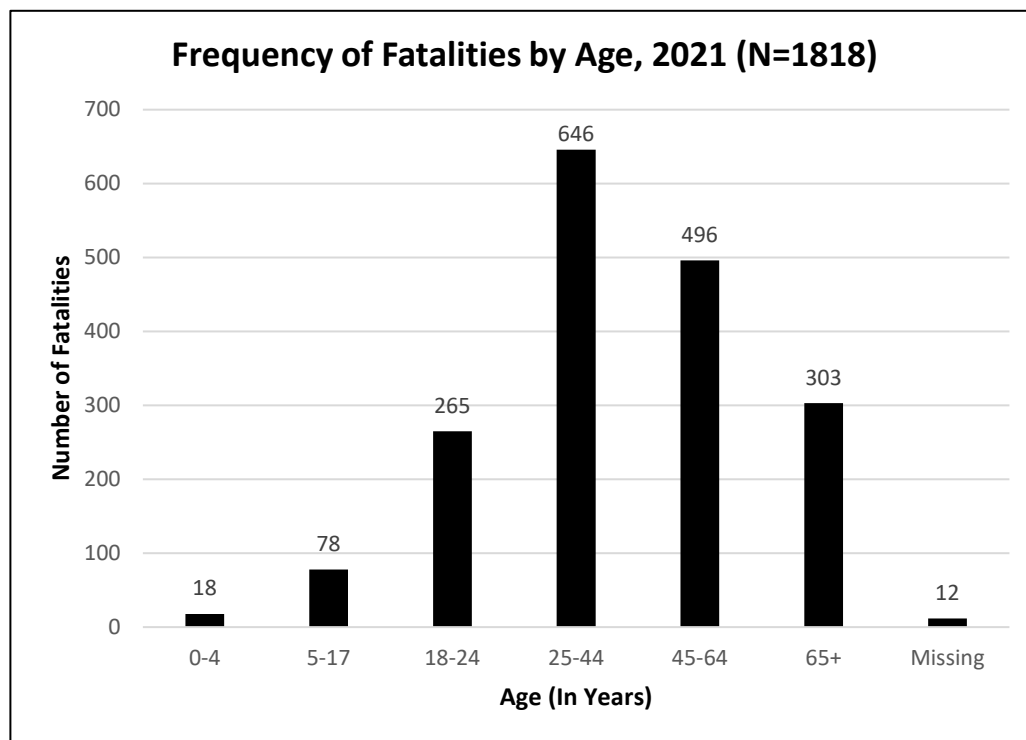
BY OCCUPANT POSITION



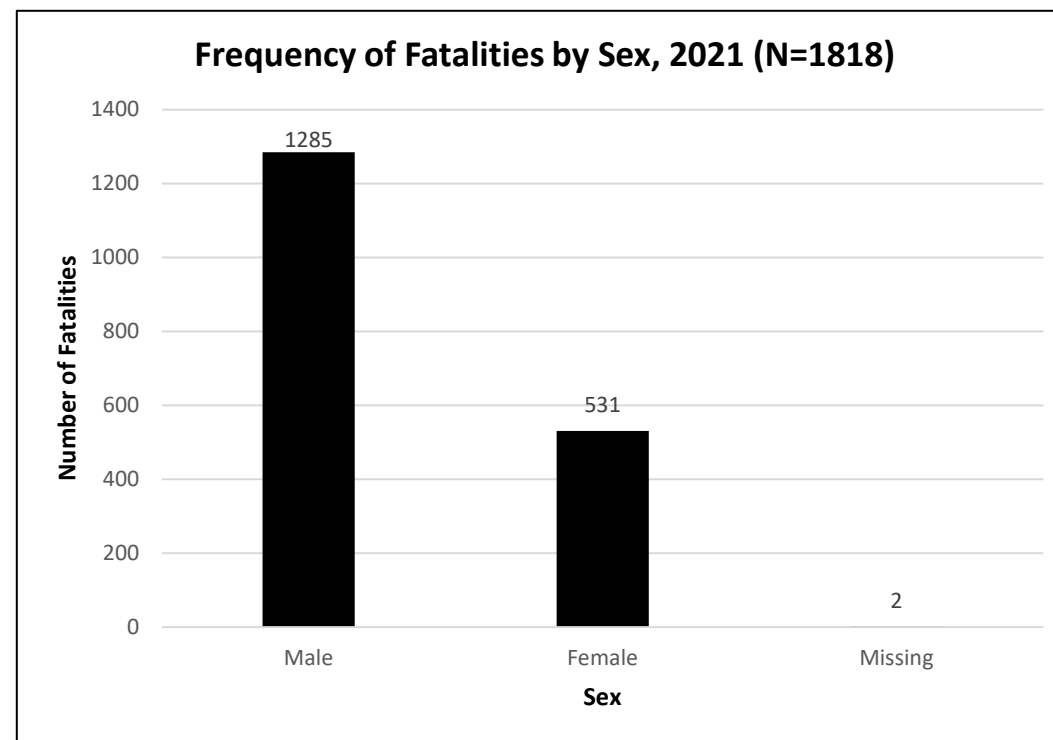


Results

BY AGE

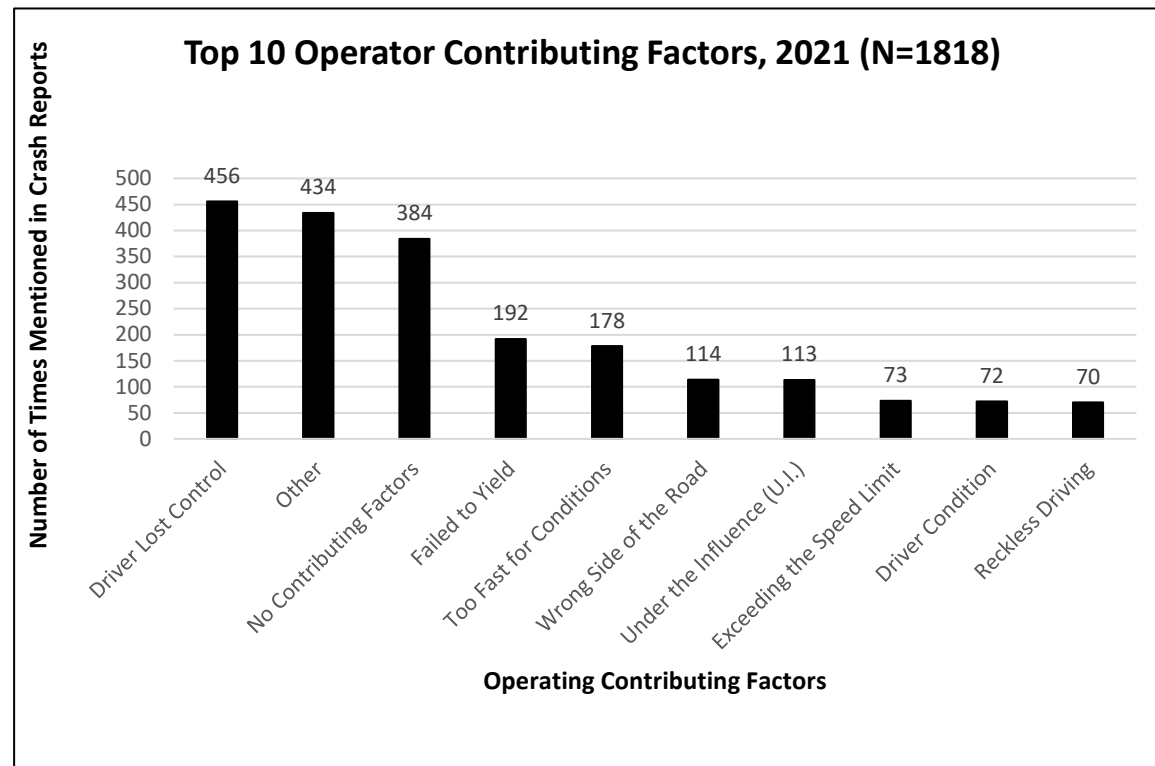


BY SEX



Results

BY OPERATOR CONTRIBUTING FACTORS

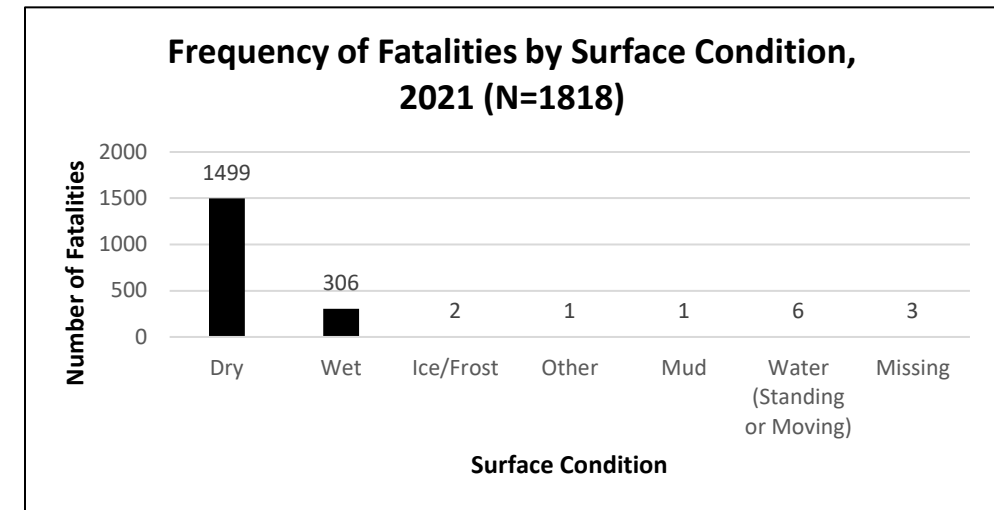
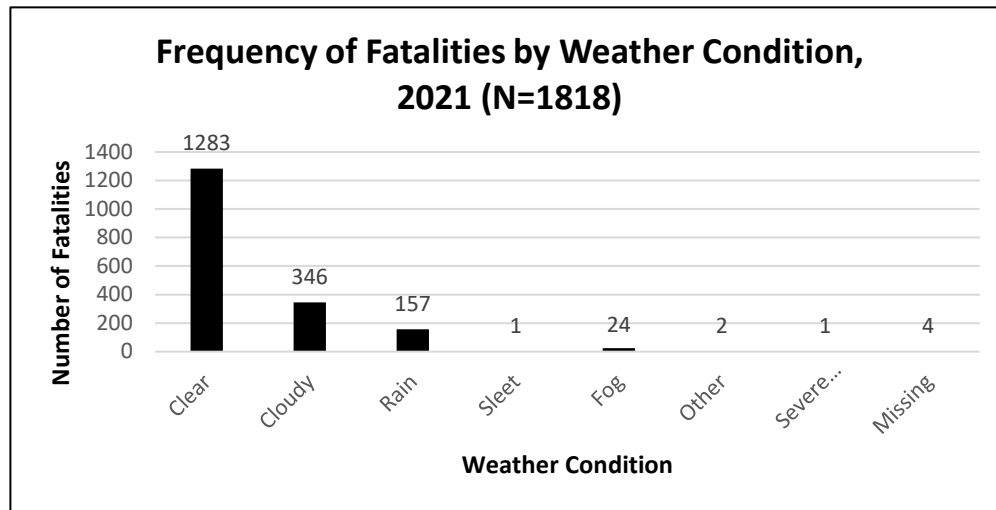


- Upcoming changes to remove “No Contributing Factors” and “Other” as options for Operating Contributing Factors.



Results

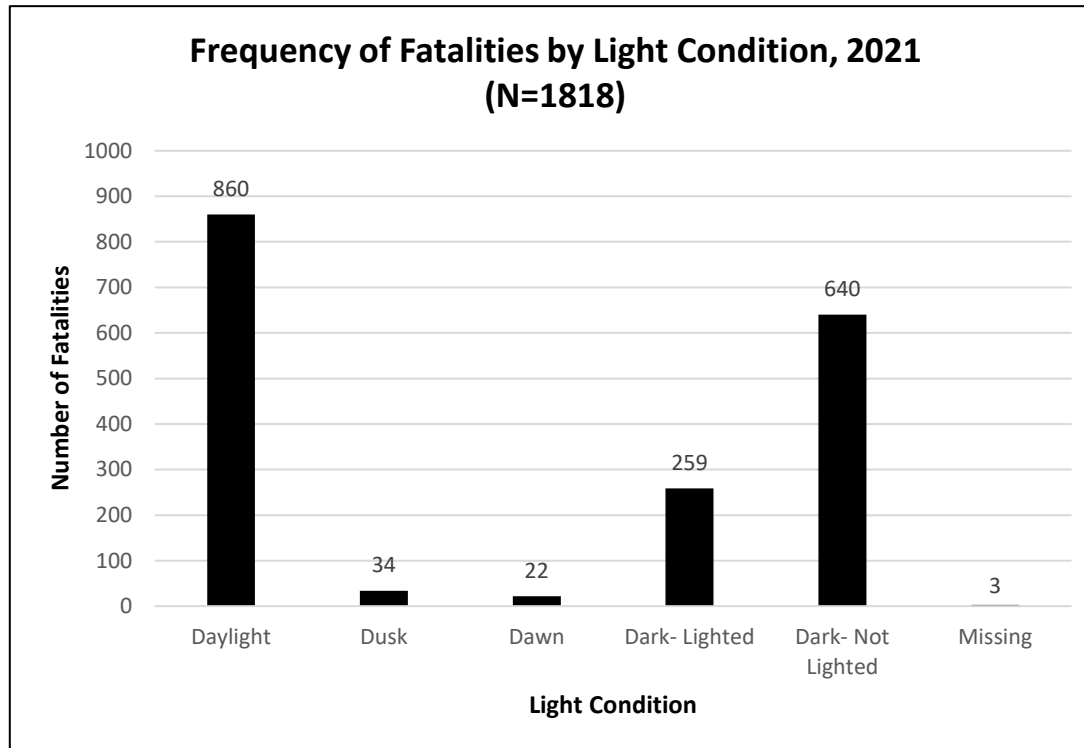
BY WEATHER AND SURFACE CONDITIONS



- Weather: Clear (70.6%), Cloudy (19.0%), Rain (8.6%)
- Surface: Dry (82.5%), Wet (16.8%)
- Clear/Dry conditions and Cloudy/Wet conditions mirror each other

Results

BY LIGHT CONDITION

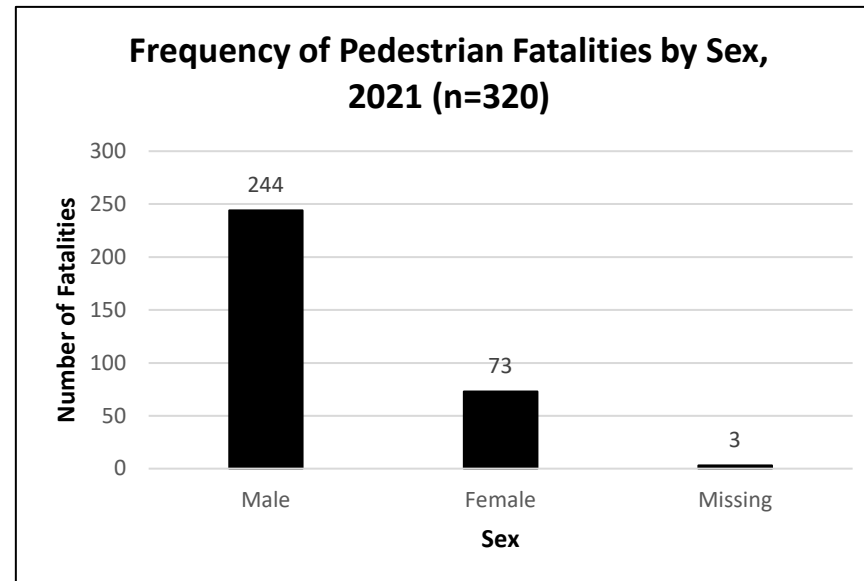
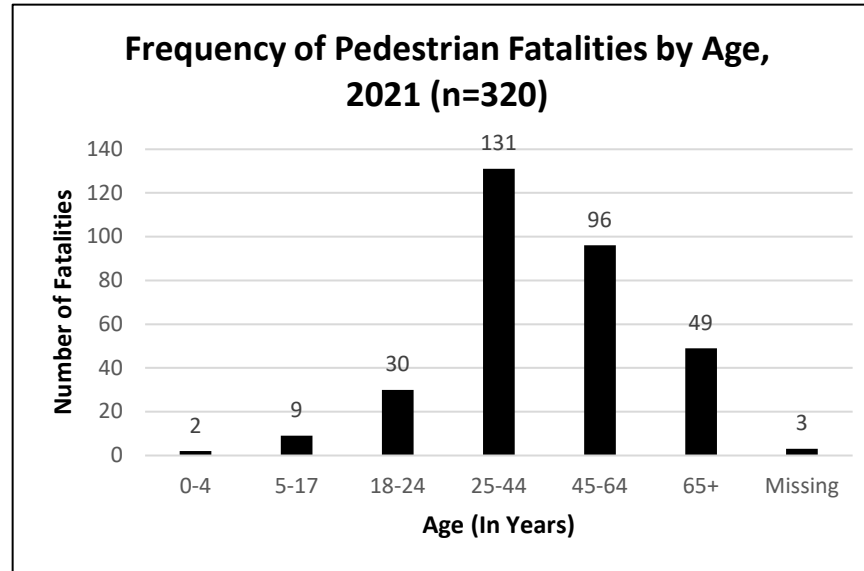


- Daylight: 47.3%
- Dark- Not Lighted: 35.2%
- Dark- Lighted: 14.2%
- Dusk: 1.9%
- Dawn: 1.2%
- Missing data: 0.2%



Trends

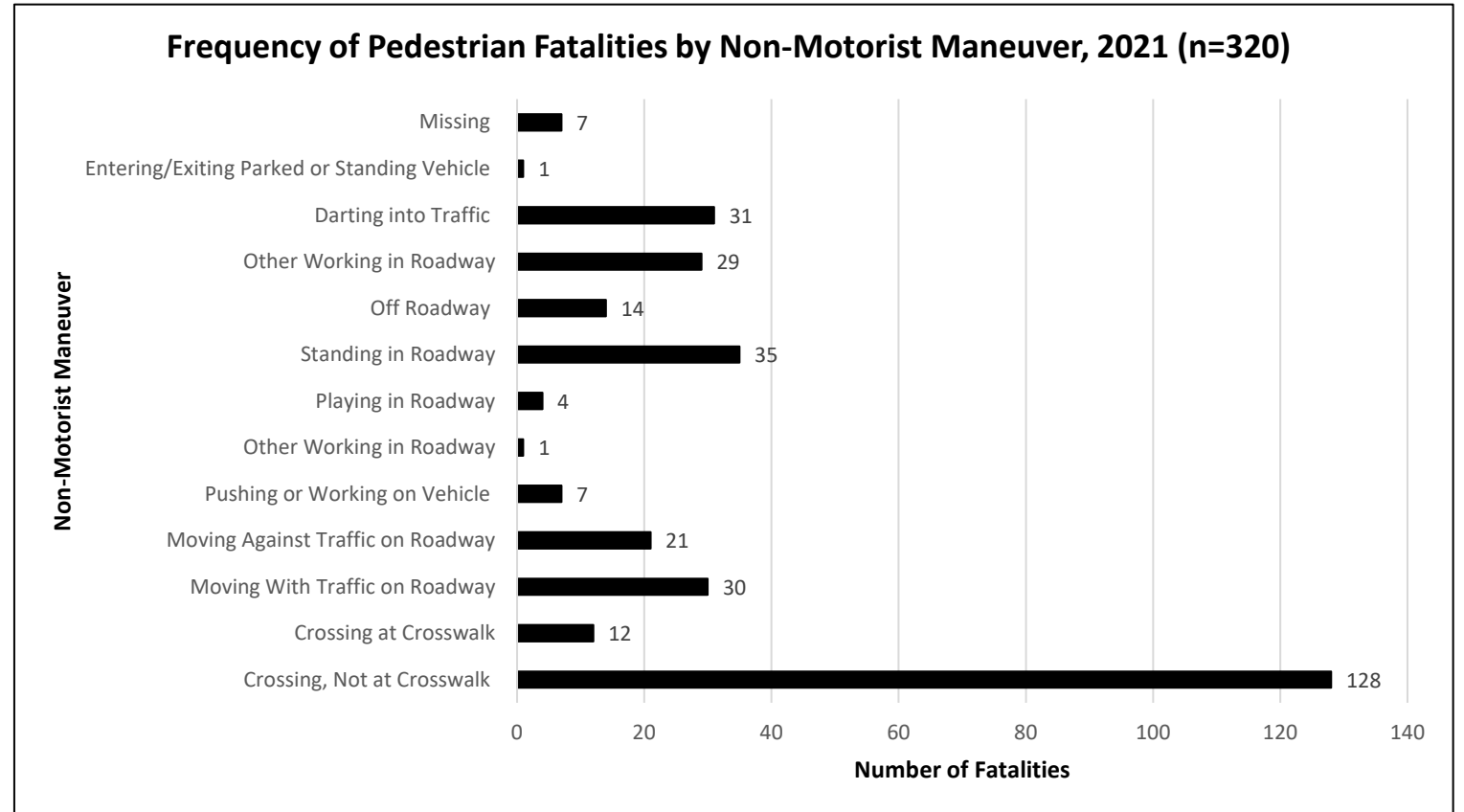
Pedestrians (n=320)



- Fatalities by age follow the same trend line as all fatalities.
- Pedestrians ages 25-44 years old account for 40.9% of all pedestrian fatalities.
- Males account for 76.3% of pedestrian fatalities and females account for 22.8%.



Pedestrians (n=320)

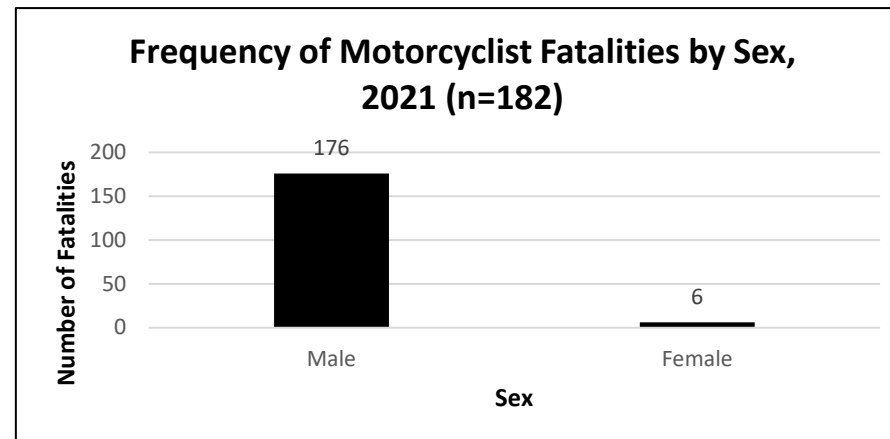
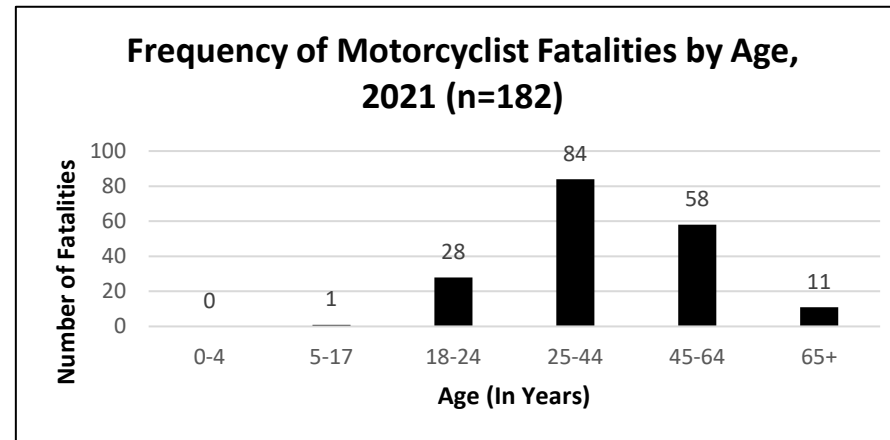


- “Not Crossing at Crosswalk” is attributed to 40.0% of all pedestrian fatalities.



Motorcyclists (n=182)

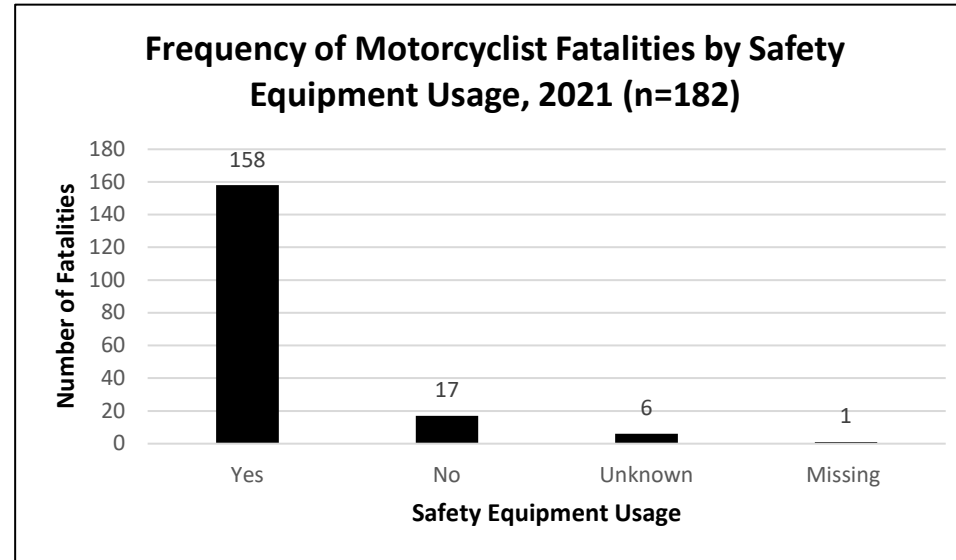
According to GOHS (2021), “a motorcyclist is a general term to refer to either the rider (motorcycle operator) or passenger.” The term motorcycle “includes two or three-wheeled motorcycles, off-road motorcycles, moped, motor scooters, minibikes, and pocket bikes.”



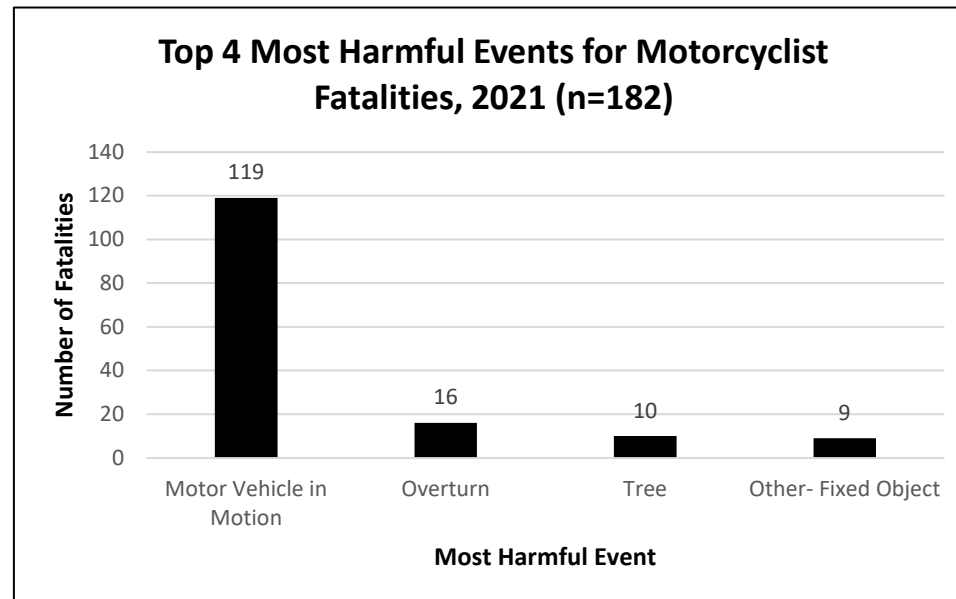
- Fatalities by age follow the same trend line as all fatalities.
- Motorcyclists ages 25-44 years old account for almost half of all motorcycle fatalities.
- 96.7% of all motorcyclist fatalities are male.



Motorcyclists (n=182)



- 86.8% of all motorcyclists killed on Georgia roadways were wearing a motorcycle helmet.



Speeding (n=293)

“A speeding-related crash is when any driver in the crash receives a speeding-related traffic violation or if a police officer indicates that racing, driving too fast for conditions, exceeding the posted speed limit, or evading the police was a contributing factor in the crash”
(GOHS, 2022).

Speed-related crash Operator Contributing Factors accounted for 16.1% of all 2021 roadway traffic fatalities.

Operator Contributing Factors:

- Driving Too Fast for Conditions (n=178; 9.8%)
- Exceeding the Speed Limit (n=73; 4.0%)
- Disregard Police- Evasion (n=36; 2.0%)
- Racing (n=6; 0.3%)



Under the Influence (U.I.)

TSREG reported **113** instances of impaired driving-related fatalities in 2021 which is **6.2%** of all fatal crashes.

There are various ways to determine if a road user is under the influence within GEARS. Police reports have the option to 1.) mark “Under the Influence” as an Operator Contributing Factor, 2.) make a determination of “Operator/Pedestrian Condition,” and 3.) indicate if an alcohol-test has been given, and if so, the results.

For this analysis, TSREG is only looking at the Operator Contributing Factor of “Under the Influence” which does not specify which substance an individual is under the influence of.



Distracted Driving

TSREG reported **38** instances of distracted driving-related fatalities in 2021 which is **2.1%** of all fatal crashes.

There are 8 Operator Contributing Factors related to distracted driving. Six of 8 factors were reported in 2021.*

- 1. Inattentive or Other Distraction (Distracted)**
 - n=25; 1.4%
- 2. Other Interior Distraction (Distracted)**
 - n=5; 0.3%
- 3. Talking on Hand-Held Device (Distracted)**
 - n=4; 0.2%
- 4. Other Activity- Mobile Device (Distracted)**
 - n=2; 0.1%
- 5. Occupant Distraction (Distracted)**
 - n=1; 0.05%
- 6. Other Exterior Distraction (Distracted)**
 - n=1; 0.05%

*Not cited: “Texting (Distracted)” and “Talking on Hands-Free Device (Distracted)”





Conclusions

LIMITATIONS

- All data is preliminary.
- The evaluation is only as good as the data recorded.
- Not all law enforcement agencies in the state of Georgia use the GEARS database.
- Potentially inconsistent reporting between law enforcement officials.

RECOMMENDATIONS

- Revise the Georgia Motor Vehicle Crash Report Overlay.
 - In the works...
- Encourage more law enforcement agencies to use the GEARS database.
- Engage in conversations with stakeholders about how U.I. crashes are reported at the state level.

Let's have a conversation.

COMMENTS?

QUESTIONS?



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