Georgia Traffic Safety Facts

2020 Data

August 2022

Key Findings

- In 2020, 14 percent of all traffic fatalities involved at least one large truck— 234 persons fatality injured.
- Between 2019 and 2020, the number of traffic fatalities involving large trucks increased by 15 percent, and the rate of fatalities involving large trucks per VMT traveled by large trucks increased by 21 percent.
- Eighty-five percent of crashes that involve large truck-related crashes involved other vehicles and 15 percent were single-vehicle large truck crashes.
- Among all the traffic-related fatalities and serious injuries involving large trucks, 77 percent were occupants of other vehicles, 16 percent were the large truck operators, 5 percent were non motorists, and 2 percent were large truck passengers.
- A greater percentage of large trucks crashes occur on interstate systems for both urban and rural roadways segments. Sixty-six percent of all Georgia large truck crashes involved drivers with a Georgia license, and 20 percent were licensed from a bordering state.
- Large truck operators losing control is the top contributing factor for operators involved in single-vehicle crashes—49 percent of operators lost control of their vehicle moments before colliding with another object that was not another vehicle.
- The average age of the CDL licensed drivers is 52.2 years for both male and female CDL holders.

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Large Trucks

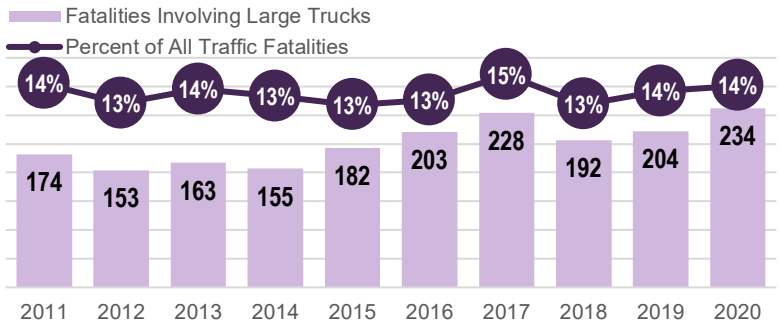
For this fact sheet, a large truck is defined as any commercial or non-commercial, medium or heavy truck with a gross vehicle weight rating greater than 10,000 pounds. Large trucks include tractor trailers, single panel trucks, large pickup trucks, large cargo vans, single-unit trucks, and other combination trucks. Buses and motor homes are not included in the definition of large trucks. See 'Data Considerations' for large truck vehicle classification descriptions. *The involvement of large truck operators in traffic crashes does not imply these operators caused the crash either by their actions or failure to act.*

This fact sheet contains information from the Fatality Analysis Reporting System (FARS), Motor Carrier Management Information System (MCMIS), Georgia Department of Transportation (GDOT) crash data modified by Crash Outcomes Data Evaluation System (CODES) at the Department of Public Health (DPH), and the Georgia Department of Driver Services (DDS). Refer to the 'Data Considerations' section regarding the data and information presented at the end of this publication.

Motor Vehicle Fatalities and Serious Injuries Involving Large Trucks

In 2020, there were 1,664 fatalities that occurred in motor vehicle traffic crashes on Georgia roadways – the largest number of traffic fatalities since 2006. Fourteen percent of all traffic fatalities (234 persons fatality injured) involved at least one large truck (Figure 1). Traffic fatalities involving large trucks increased by 15 percent in the previous year (from 204 in 2019 to 234 in 2020), and by 34 percent within the past decade (from 174 in 2011 to 234 in 2020).

Figure 1. **Number and Percent of Traffic Fatalities that Involved Large Trucks, 2011-2020**



Source: FARS 2011-2020

Table 1 presents the number of total traffic fatalities, estimated vehicle miles traveled by large trucks (single unit and combination), and fatalities that involve large trucks. Between 2019 and 2020:

- The estimated VMT by large trucks decreased by 5 percent; however, the proportion of all VMT by trucks increased by a net 3.8 percent point change (from 8.6 to 12.4).
- The proportion of all traffic fatalities that involve large trucks increased by less than a one percent point change (from 13.7 to 14.1).
- The rate of fatalities involving large trucks per VMT traveled by large trucks increased by 21 percent (from 1.35 to 1.63).

Table 1. **Rate and Percent of Traffic Fatalities that Involve Large Trucks, 2016-2020**

Year	Total Traffic Fatalities	VMT by Large Trucks		Fatalities Involving Large Trucks		
		Estimated VMT by Large Trucks (millions)*	Percent all VMT	Number	Percent of All Traffic Fatalities	Rate (Fatalities per 100M VMT by Large Trucks)
2016	1,556	**	**	203	13.0%	**
2017	1,540	12,070	7.4%	228	14.8%	1.89
2018	1,504	16,330	9.4%	192	12.8%	1.18
2019	1,491	15,090	8.6%	204	13.7%	1.35
2020	1,664	14,349	12.4%	234	14.1%	1.63

Note: Rates are calculated using VMT estimates, and percent of distribution used by large trucks obtained from FHWA Office of Highway Policy Information Highway Statistics. See data considerations for more information.
Source: MCMIS 2016-2020, FHWA 2017-2020, FARS 2016-2020

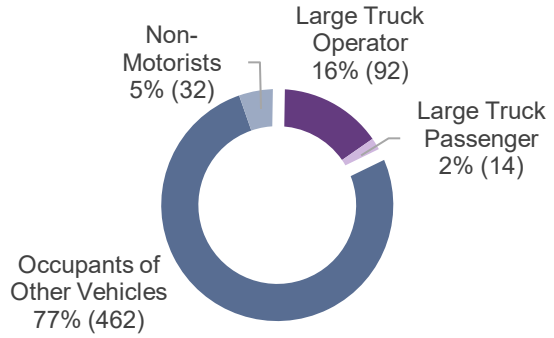
In 2020, there were 5,621 large trucks[1] involved in motor vehicle traffic crashes that resulted in 366 serious injuries[2], and 234 fatalities[3]. Most large truck-related crashes involved other vehicles — 85 percent involved at least one other vehicle besides the large truck (4,326 out of 5,096 motor vehicle traffic crashes). Eighty-nine percent of serious injuries and 82 percent of all fatalities that involved large trucks occurred in multi-vehicle crashes.

Figure 2 shows the percent of fatalities or serious injuries among all persons involved in crashes with at least one large truck in 2020. Among all the fatal and serious injuries involving large trucks:

- 18 percent were occupants in the large truck (represented by purple in Figure 4).
  - 16 percent were the large truck operator
  - 2 percent were large truck passengers
- 82 percent were occupants of other vehicles or non-motorists (represented by blue in Figure 4).
  - 77 percent were occupants of vehicles that were *not* a large truck vehicle body type.
  - 5 percent were non-motorists (i.e., pedestrians or bicyclists).

Based on known restraint use, 22 percent of all seriously and fatally injured truck operators were unrestrained, and 78 percent were restrained.

Figure 2. **Percent of Persons Fatally or Seriously Injured in Crashes involving Large Trucks by Person Type, 2020**



366 Serious Injuries
234 Fatal Injuries
Source: CODES 2020, FARS 2020

[1] 2020 MCMIS
[2] 2020 CODES defines suspected serious injuries as injuries are reported by law enforcement and used when any injury, other than fatal injury, prevents the injured person from walking, driving, or normally continuing the activities the person was capable of before the injury occurred.
[3] 2020 FARS

Crash Characteristics

According to MCMIS, there were 5,096 motor vehicle traffic crashes that involved at least one large truck in 2020—a 17 percent increase compared to 4,887 large truck crashes that occurred in 2019. The number of crashes where persons involved were fatally injured increased by 4 percent. Table 2 shows the number of traffic crashes that involved large trucks between 2016 and 2020 by injury severity.

Table 2. **Traffic Crashes, Serious Injury Crashes, and Fatal Crashes that Involved Large Trucks, 2016-2020**

Year	Fatal Crashes Involving Large Trucks	Suspected Serious Injury Crashes Involving Large Trucks	Traffic Crashes Involving Large Trucks
2016	192	1,027*	5,418
2017	207	927*	5,874
2018	179	446	5,787
2019	180	320	4,887
2020	210	320	5,096

* DOT-523 Crash Report Manual Version 3.0 was revised in January 2018 with a more detailed definition for serious injury. Source: MCMIS 2016-2020, FARS 2016-2020, CODES 2016-2020

Urban vs. Rural Roadway Classifications[4]

In 2020, 1.5 percent of all motor vehicle traffic crashes involved at least one large truck, and there were 1.46 fatal crashes that involved large trucks for every 100M miles traveled by large trucks statewide in Georgia. (Table 3). Traffic crashes involving large trucks are more frequent on urban roadway segments than rural roadway segments. A greater percentage of motor vehicle crashes that involve large trucks occur on interstate systems for both urban and rural roadways segments.

- The urban roadways accounted for 52 percent of fatal crashes (110 out of 210) and 75 percent of traffic crashes involving large trucks (3,820 out of 5,096). The rate of urban fatal crashes was highest on *other urban arterials.*
- The rural roadways accounted for 48 percent of fatal crashes and 25 percent of traffic crashes involving large trucks. The rate of rural fatal crashes was highest on other *rural arterials*.

Table 3. **Number and Rate (per 100M VMT by Large Trucks) of Fatal Crashes and Traffic Crashes Involving Large Trucks by Roadway Classification, 2020**

Roadway Classification[4]	Fatal Crashes		Traffic Crashes	
	Number	Rate per 100M VMT by Large Trucks	Number	Percent of all Motor Vehicle Traffic Crashes
Urban Roadways	**110**	**1.42**	**3,820**	**1.4%**
Interstate Systems	37	1.38	1,618	**4.3%**
Other Arterials*	64	**3.10**	1,479	1.0%
Other**	9	0.30	723	< 1%
Rural Roadways	**99**	**2.29**	**1,238**	**2.9%**
Interstate Systems	21	1.19	403	**9.0%**
Other Arterials	51	**3.61**	507	3.2%
Other	27	2.37	328	1.5%
Statewide***	**210**	**1.46**	**5,096**	**1.5%**

* Other arterials include freeways, expressways, principal arterials, and minor arterials. ** Other roads include collectors and local roads.
*** Statewide total includes crashes with unknown roadway classification
Source: MCMIS 2020, Numetric 2020, FARS 2020, FHWA 2020

Table 4 shows the percent of crashes involving large trucks by geographical region (i.e., county groupings) and roadway classification in 2020. Most crashes involving large trucks statewide and across all regions occurred on the interstate system and principal arterial roadways. Additionally, 45 percent of all traffic crashes involving large trucks occurred in the ten counties of the Atlanta region.

[4]Urban roadway classifications are urban road systems located in urban clusters (or metropolitan areas) of at least 2,500 persons and may occur within the rural counties. This is different than urban counties that have a residential population more than 50,000 persons.

Table 4. **Motor Vehicle Traffic Crashes Involving Large Trucks by Georgia Region and Roadway Classification, 2020**

Roadway Classification	Atlanta Region Counties	Other Urban Counties	Rural Counties	Statewide
Interstate	24%	9%	7%	40%
Principal Arterial	6%	8%	6%	**21%**
Minor Arterial	6%	7%	5%	**18%**
Collectors	2%	3%	4%	**9%**
Local	3%	3%	2%	**8%**
Other	1%	< 1%	< 1%	**2%**
Unknown	< 1%	< 1%	< 1%	**2%**
All Roadways	**45%**	**32%**	**24%**	**100%**

Note: The sum of the individual cells may not equal row or column totals due to rounding error. Crashes involving large trucks with unknown roadway classification are included in all roadways. Source: Numetric 2020

Environmental Characteristics

Table 5 summarizes the environmental characteristics of where and when fatal crashes and traffic crashes involving large trucks occurred in 2020. Fatal crashes and all traffic crashes have similar environmental characteristics in terms of location of the crash, lighting and weather conditions, seasonality, and time of day. Among the fatal crashes that involve large trucks in 2020,

- 72 percent occurred at non-intersection locations;
- 60 percent occurred in daylight conditions;
- 80 percent occurred during the weekday, while 57 percent occurred during the daytime hours (6:00 a.m. to 5:59 p.m.) during the weekday;
- 70 percent occurred in clear weather conditions; and
- 35 percent occurred in the fall season.

Table 5. **Motor Vehicle Crashes Involving Large Trucks by Environmental Characteristics, 2020**

Environmental Characteristics	Fatal Crashes Involving Large Trucks		Traffic Crashes Involving Large Trucks	
	Number	Percent	Number	Percent
Location *				
Intersection (or related)	58	28%	1,507	30%
Non-Intersection	151	72%	2,931	58%
Other	1	0%	652	13%
Light Conditions				
Dark	75	36%	1,319	26%
Daylight	126	60%	3,624	71%
Dawn	6	3%	69	1%
Dusk	3	1%	59	1%
Day of Week / Time of Day *				
Weekday	**168**	80%	**4,248**	83%
Nighttime	48	23%	907	18%
Daytime	120	57%	3,341	66%
Weekend	**41**	20%	**842**	17%
Nighttime	24	11%	497	10%
Daytime	17	8%	345	7%
Weather Conditions				
Clear	147	70%	3,406	63%
Cloudy	31	15%	1,088	20%
Rain	24	11%	827	15%
Other	8	4%	82	2%
Season				
Winter	41	20%	1,285	25%
Spring	49	23%	1,077	21%
Summer	47	22%	1,263	25%
Fall	73	35%	1,465	29%

Weekday – 6:00 a.m. Monday to 5:59 p.m. Friday
Weekend – 6:00 p.m. Friday to 5:59 a.m. Monday
Daytime – 6:00 a.m. to 5:59 p.m.
Nighttime – 6:00 p.m. to 5:59 a.m.
*See data considerations for definitions of intersection and non-intersection locations
Source: MCMIS 2020, CODES 2020, FARS 2020

Contributing Circumstances

In 2020, 85 percent of all crashes involving large trucks also involved other vehicles (multi-vehicle crashes), and 15 percent were single-vehicle large truck crashes. The most harmful event in large truck crashes was collisions with other motor vehicles in transport for multi-vehicle crashes, and the overturn of the large truck (non-collision related) for single-vehicle crashes.

Passenger vehicles[5] were more frequently involved in crashes with large trucks than other vehicle types. The most common manner of collision in multi-vehicle crashes involving large trucks was angle, and rear-end crashes for serious injury and other non-fatal crashes. For fatal crashes involving large trucks, angle collisions and collisions with other objects that are not motor vehicles were the highest rank manner of collisions. *The manner of collision is not vehicle specific and does not identify which vehicle or driver was at fault.* Table 5 below shows the highest-rank manner of collision for multi-vehicle traffic, injury, and fatal crashes that involve large trucks.

Table 6. **Highest Rank Manner of Collision for *Multi-Vehicle* Crashes Involving Large Trucks by Crash Type, 2020**

Rank	Fatal Crashes		Serious Injury Crashes		Traffic Crashes	
	Manner of Collision	% of crashes	Manner of Collision	% of crashes	Manner of Collision	% of crashes
1	Angle	40%	Angle	41%	Angle	31%
2	Rear end (Front-to-rear)	31%	Rear end (Front-to-rear)	28%	Rear end (Front-to-rear)	28%
3	Head on (Front-to-front)	13%	*Not a collision with a motor vehicle	15%	Sideswipe same direction	18%
4	*Not a collision with a motor vehicle	10%	Head on (Front-to-front)	7%	*Not a collision with a motor vehicle	17%

* The first harmful event was not a collision with a motor vehicle in transport
Source: MCMIS 2020, Numetric 2020; FARS 2020, CODES 2020

Large truck operators losing control is the top contributing factor among operators involved in single-vehicle crashes. In 2020, 49 percent of operators lost control of their truck moments before they collided with another object that was not another vehicle (Table 7). The top contributing factors among large truck operators involved in multi-vehicle crashes were following too closely (11 percent) and changing lanes improperly (7 percent). The top factors for other drivers involved in multi-vehicle crashes with large trucks were following too closely (12 percent) and failure to yield (10 percent). *This does not imply that the large truck operators or other drivers caused the crash either by their actions or failure to act.*

Table 7. **Top Contributing Factors with All Traffic Crashes Involving Large Trucks by Number of Vehicles Involved and Person Type, 2020**

Rank	Single Vehicle Crashes		Multi-Vehicle Crashes			
	Large Truck Operator		Large Truck Operator		Other Driver	
	Description	% of all operators	Description	% of all operators	Description	% of all drivers
1	Operator lost control	49%	Following too close	11%	Following too close	12%
2	Other	23%	Lane Change Improperly	7%	Failed to yield	10%
3	Speeding	21%	Other	6%	Other	8%
4	Confirmed Distraction	6%	Failed to yield	5%	Driver lost control	5%

Source: CODES 2020; FARS 2020

[5] Passenger vehicles include passenger cars, pickup trucks, vans, and sport utility vehicles (SUVs).

Commercial Driver Licensing

A commercial driver's license (CDL) allows drivers over the age of 18 years to operate large and heavy trucks. Class A CDL designations permit drivers to operate a truck trailer or tractor-semitrailer combination in which the combined weight exceeds 26,001 pounds and the unit being towed exceeds 10,000 pounds. Class B CDL designations permit drivers to operate single vehicles weighing 26,001 or more pounds, and the unit being towed is less than 10,000 pounds.

Between 2019 and 2020:

- CDL holders (Class A, Class B, or CDL learners permit) increased by nearly 17 percent
- CDL holders aged 18-to-20 years increased by 19 percent
- Georgia crashes involving large truck operators with valid CDL designations increased by 5 percent, and with invalid designations decreased by 13 percent.

In 2020, 66 percent of all Georgia large truck crashes involved operators with a Georgia commercial driver license (CDL), and 20 percent were licensed from a bordering state. The number of crashes involving large truck operators licensed in bordering states increased by 2 percent (from 1,060 in 2019 to 1,077 in 2020).

Table 8. **2019-2020 Percent Change in Commercial Driver Licenses, License Status for Large Truck Operators Involved in Crashes, and License Issuing State of Large Truck Operators involved in Crashes**

Measure	2019-2020 Percent Change
All Georgia Licensed Drivers	
Commercial Drivers Licenses (CDLs)	▲ 17%
Class A	▲ 17%
Class B	▲ 16%
Class CLP (learner permit)	▲ 17%
Other License Classes	▲ 10%
CDL holders aged 18-20 years	▲ 19%
Large Truck Operators Involved in Georgia Crashes	
Commercial Drivers Licenses (CDLs)	▲ 5%
Class A	▲ 5%
Class B	▲ 12%
Other license Class or status not valid to operate a commercial vehicle	▽ -13%
Hazmat Endorsements	--
State of License Issuance for Large Truck Operator Involved in Georgia Crashes	
Georgia	▲ 5%
Georgia Bordering States	▲ 2%
Florida	▽ -3%
Alabama	▽ -6%
South Carolina	▲ 8%
North Carolina	▲ 14%
Tennessee	▲ 11%
All other States	▲ 10%

Source: DOR 2019-2020, MCMIS 2019-2020

Demographics

Drivers in the 45-to-54 age group have the highest proportion of licensed CDLs compared to other age groups. The average age of the CDL licensed drivers is 52.2 years for both male and female CDL holders. Drivers aged 45-to-54 also represent the highest proportion of drivers involved in serious injury and fatal crashes and properly licensed drivers involved in all traffic crashes (Table 9).

Younger drivers aged 18-to-24 represented 2 percent of all CDL holders, 3 percent of all properly licensed drivers involved in crashes, and 3 percent of all truck operators involved in serious injury or fatal crashes.

Table 9. **Licensed Drivers with Commercial Driver Licenses, Licensure Status of Operators Involved in Traffic Crashes, and Operators Involved in Serious or Fatal Injury Crashes, 2020**

Age Group	Drivers with CDLs Class A or Class B			Licensure Status of Truck Operators Involved in Crashes		Truck Operators Involved in Fatal or Serious Injury Crashes		
	Female	Male	Total	Class A/B	Undesignated Class	Female	Male	Total*
Less than 18	--	--	--	--	--	--	--	--
18-24	1%	2%	2%	3%	1%	4%	3%	3%
18-20	< 1%	< 1%	< 1%	< 1%	< 1%	4%	--	1%
21-24	1%	2%	2%	3%	< 1%	--	3%	3%
25-34	10%	12%	12%	17%	13%	23%	17%	17%
35-44	17%	18%	18%	24%	17%	27%	21%	21%
45-54	28%	26%	26%	26%	17%	23%	28%	27%
55-64	28%	24%	25%	22%	20%	19%	24%	24%
65+	15%	17%	17%	7%	3%	4%	7%	7%
Unknown	--	--	--	1%	30%	--	< 1%	1%
TOTAL*	**52,280** 100%	**328,743** 100%	**381,023** 100%	**4,447** 100%	**149** 100%	**26** 100%	**538** 100%	**575** 100%

Note: The sum of the individual cells may not equal row or column totals due to rounding error.
*Total includes large truck operators with unknown sex or unknown age.
Source: DDS 2020, MCMIS 2020, FARS 2020, CODES 2020

Data Definitions and Considerations:

A large truck is any commercial or non-commercial, medium or heavy truck with a gross vehicle weight rating greater than 10,000 pounds. Large trucks include tractor trailers, single panel trucks, large pickup trucks, large cargo vans (i.e., ambulances), single-unit trucks (i.e., construction equipment), and other combination trucks (i.e., multi-trailer trucks). Buses and motor homes are not included in the definition of large trucks.

A traffic crash is defined as an incident that involved one or more motor vehicles where at least one vehicle was in transport, and the crash originated on a public traffic way, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded.

Fatal crashes are defined as crashes involving a motor vehicle traveling on a traffic way customarily open to the public and resulting in the death of a motorist or a non-motorist within 30 days of the crash.

Serious injuries are those suspected serious injuries reported by law enforcement and used when any injury, other than fatal injury, prevents the injured person from walking, driving, or normally continuing the activities the person was capable of before the injury occurred.

Vehicle miles traveled (VMT) by trucks statewide and by roadway type were calculated using VMT estimates, and the percent of distribution used by large trucks obtained from the FHWA Office of Highway Policy Information Highway Statistics.

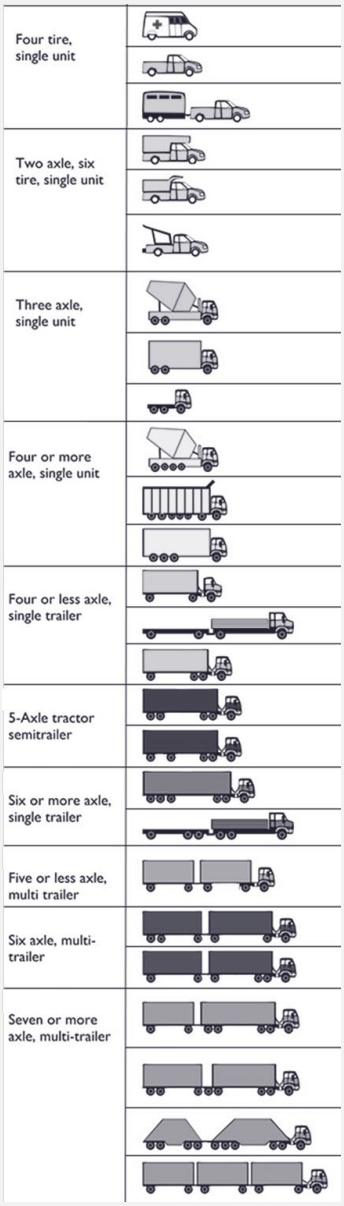
Urban and rural roadway classifications are defined according to 23 USC 101(a)(33) where census tracts population of 5,000 residents or more are considered urban, and areas with less than 5,000 residents are considered rural.

Rural counties are counties that have a population of less than 50,000 according to the United States decennial census of 2010 or any future such census (OCGA Section 31-6-2). This is different than roadway classifications, where urban road systems can be located in urban clusters (or metropolitan areas) of at least 2,500 persons within rural counties.

"At Intersection" is used when a crash occurs on a roadway either in the intersection or in the area between a crosswalk and the perimeter of the intersection. "Not at Intersection" is when the crash occurs more than 50 feet out from the perimeter of an intersection, and the crash is not identified as related to the movement of vehicles through an intersection.

Contributing circumstances capture the precrash elements or improper actions of persons (motorcycle operators, pedestrians, bicyclists, and other motorists) that may have caused the crash. Contributing factors in fatal and non-fatal crashes are often underreported in the datasets. There is at least one record per person involved in a fatal crash (FARS Data) and some missing records for persons involved in motor vehicle traffic crashes (Crash Data).

Large Truck Vehicle Classification



Combination units have four or more axles

Source: Adopted from Federal Highway Administration (FHWA) vehicle classifications

Additional Information:

Other traffic safety facts are available online at the Georgia Governor's Office of Highway Safety and Crash Outcomes Data Evaluation Systems (CODES): Risky Driving, Traffic Safety During the COVID-19 Public Health Emergency, Distracted Drivers, Occupant Protection, Non-Motorist (Pedestrians and Bicyclists), Motorcycle Safety, Young Adult Drivers, and Older Drivers.

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