Georgia Traffic Safety Facts

2019 Data

April 2021

In this fact sheet, information is presented as follows.

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This fact sheet contains information from the Fatality Analysis Reporting System (FARS), Georgia Department of Transportation (GDOT) crash data modified by Crash Outcomes Data Evaluation System (CODES) at the Department of Public Health (DPH), Georgia Emergency Medical Services Information System (GEMSIS), Hospital Discharge Data, Emergency Room Data, and the Georgia Trauma Registry. Refer to the Data Considerations section at the end of this publication regarding the data and information presented.



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PEDESTRIANS AND BICYCLISTS (Non-Motorists)

Non-motorists, as defined for this fact sheet, include pedestrians and bicyclists. In some cases where pedestrian and bicyclist injuries are discussed, traffic and non-traffic (i.e., occurring on any place other than a traffic way – trail, driveway, parking lot, or sidewalk) incidences are included in the aggregate reporting.

2019 Key Findings

Although pedestrians and bicyclists represented less than one percent of all individuals involved in motor vehicle crashes (0.4 percent), they accounted for 17 percent of all traffic fatalities.

Pedestrians

- There were 236 pedestrians fatally injured in traffic crashes, a 22 percent increase from the 194 pedestrian fatalities in 2015.
- Half of the pedestrian fatalities were Black/African American, Non-Hispanic and more than twice (2.7 times) as likely to be fatally injured compared to White, Non-Hispanics.
- Sixty percent of all pedestrian crashes occurred within the Atlanta region.
- Seventy-nine percent of pedestrian fatalities occurred at locations that were not intersections.
- Twenty-five percent of all motor vehicle traffic fatalities within the 55-to-64 age group were pedestrians.
- The motor vehicle pedestrian-related hospitalization and emergency room visit charges were \$171 million for Georgia residents.

Bicyclists

- There was an average of 24 bicyclist fatalities in traffic crashes between 2015-2019.
- The bicyclist crash rate is highest in urban counties outside of the Atlanta region.
- Bicyclists aged 15-to-20 years have the highest rate of suspected serious crash injuries compared to other age groups.
- Among the bicyclists treated at trauma care facilities, individuals aged 10-to-14 years had the highest rate of trauma care compared to any other age group.
- The motor vehicle bicyclist-related hospitalization and emergency room visit charges were \$17 million for Georgia residents.

Non-Motorist Fatalities and Fatality Rates

In 2019, there were 236 pedestrians and 21 bicyclists fatally injured in motor vehicle traffic crashes in the state of Georgia (Figure 1). The number of pedestrian fatalities in traffic crashes increased by 22 percent from 194 pedestrian fatalities in 2015 to 236 in 2019. There was an average of 24 bicyclist fatalities in traffic crashes between 2015-2019.





Source: Fatality Analysis Reporting System (FARS) 2010-2019

Although non-motorists represented less than one percent of all persons involved in motor vehicle crashes (0.4 percent), they accounted for 17 percent of all traffic fatalities. This a net two percent decrease from the previous year. There were approximately 2 pedestrian and bicyclist fatalities for every 100,000 population¹ in 2019. Figure 2 shows the rate and percent of non-motorist traffic fatalities for the past decade.

Figure 2: Rate and Percent of Non-Motorist Traffic Fatalities, 2010-2019



Source: Fatality Analysis Reporting System (FARS) 2010–2019; OASIS 2010-2019 population estimates

¹ Although the calculated rate uses the Georgia residential population, the pedestrian and bicyclist fatalities on Georgia roadways may not be residents of Georgia.

Table 1 presents the number of total traffic fatalities, Georgia population, and non-motorist fatalities (pedestrians and bicyclists) from 2010 to 2019.

- The number of total traffic fatalities increased by 20 percent from 1,247 in 2010 to 1,491 in 2019.
- The number of non-motorist fatalities increased by 38 percent from 186 in 2010 to 257 in 2019.
- The rate of non-motorist fatalities increased by 26 percent from 1.92 to 2.42 fatalities per 100,000 population.

Urban vs. Rural² Non-Motorist Crashes

In 2019, 62 out of 159 Georgia counties experienced at least one non-motorist traffic fatality. There were 29.86 pedestrians per 100,000 population and 7.58 bicyclists per 100,000 population involved in motor vehicle traffic crashes across the state of Georgia (Figure 3).

In Georgia, non-motorist crashes are more frequent in the urban areas than rural areas (residential population less than 50,000 people).

- Pedestrian crashes and crash rate are highest within the ten counties of the Atlanta Region³ – 40.86 pedestrians per 100,000 population.
- Bicyclist crashes and crash rate are highest within the 31 other urban counties – 10.20 bicyclists per 100,000 population.

Table 1: Rate and Percent of Non-Motorist Traffic Fatalities, 2010-2019

	Total	Georgia	Pedestrian and Bicyclis Fatalities		icyclist
Year	Traffic Fatalities	Population	Number	Percent of All Traffic Fatalities	Rate per 100,000 Population
2010	1,247	9,712,587	186	15%	1.92
2011	1,226	9,815,210	144	12%	1.47
2012	1,192	9,919,945	184	15%	1.85
2013	1,180	9,992,167	204	17%	2.04
2014	1,164	10,097,343	182	16%	1.80
2015	1,432	10,214,860	217	15%	2.12
2016	1,556	10,310,371	261	17%	2.53
2017	1,540	10,429,379	268	17%	2.57
2018	1,504	10,519,475	291	19%	2.77
2019	1,491	10,617,423	257	17%	2.42

Source: Fatality Analysis Reporting System (FARS) 2010–2019; OASIS 2010-2019 population estimates

Table 2: Pedestrians and Bicyclists Involved in TrafficCrashes and Population by Region Type, 2019

Region	Pedestrian Crashes	Bicyclist Crashes	Region Population
Atlanta Region (10 counites)	1,903	324	4,656,875
Other Urban (31 counties)	943	380	3,725,651
Rural Counties (118 counties)	324	101	2,234,897
Statewide (GA)	3,170	805	10,617,423

Figure 3: Pedestrian and Bicyclist Crash Rate by Region Type, 2019



Source: Crash data revised by CODES 2019; OASIS 2019 population estimates

² Rural counties are counties that have a residential population less than 50,000 persons. 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 the rural counties.

³ The Atlanta Region includes the ten counties that are defined by the Atlanta Regional Commission (ARC): Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, and Rockdale counties.

Pedestrians Crashes within the Atlanta Region

In 2019, the Atlanta Region accounted for 44 percent of the state population. However, 60 percent (1,802 out of 2,986) of all pedestrian crashes, 47 percent (184 out of 395) of all pedestrian suspected serious injuries⁴, and 56 percent (133 out of 236) of all pedestrian fatal injuries occurred within this area.

The counties with the highest number of pedestrian fatalities in were: Fulton (38 pedestrian fatalities), DeKalb (28), Clayton (20), Cobb (20), and Gwinnett (15). Within the Atlanta region, 20 percent of pedestrian fatalities (27 out of 133) occurred on the interstate and 29 percent of pedestrian fatalities (39 out of 133) occurred on the other principal arterials that include freeways and multilane highways (Figure 4).

In Fulton County, there were a total of 727 pedestrians involved in motor vehicle traffic crashes – 23 percent of these crashes were either a fatal injury or suspected serious injury. In 2019, 68.33 out of every 100,000 population were involved in a pedestrian crash and 6.77 out of every 100,000 population were a fatally or seriously injured pedestrian. Also notable, 19.61 out of every 100,000 population were a fatally or seriously injured pedestrian in Clayton County.

Figure 5 shows the locations of pedestrian fatal and serious injury crashes in the Atlanta region for 2019. The table accompanying Figure 5, shows the number and rate of pedestrians involved in motor vehicle traffic crashes for 2019 for counties within the Atlanta region. The table also shows the number, percent, and rates of pedestrian fatal and suspected serious injuries.

Figure 4: Atlanta Region Pedestrian Fatalities by Roadway Classification, 2019



Principal arterials include freeways, multilane highways (e.g., Buford Highway). Minor arterials are other important multilane roadways that supplement the highways (e.g., Spring Street). Collector roads are roads that connect local roads and streets with arterials (e.g., McAfee Road and McLendon Drive)

Figure 5: Atlanta Region Pedestrian Crashes, Fatalities, and Suspected Serious Injuries, 2019



Note: One suspected serious injury pedestrian crash and three fatal pedestrian crash locations in the Atlanta Region are not shown on the mapped. Source: FARS and Crash data revised by CODES (2019)

		strian shes		Total Pedestrian Fatalities & Suspected Serious Injuries		
County	Number	Rate per 100,000 Population	Number	Percent of all Pedestrian Crashes within County	Rate per 100,000 Population	
Fulton	727	68.33	72	23%	6.77	
Dekalb	422	55.58	88	21%	11.59	
Gwinnett	209	22.32	28	13%	2.99	
Clayton	178	60.91	56	31%	19.16	
Cobb	149	19.60	41	28%	5.39	
Henry	34	14.50	7	21%	2.98	
Cherokee	27	10.43	7	26%	2.71	
Rockdale	24	26.40	6	25%	6.60	
Douglas	23	15.72	9	39%	6.15	
Fayette	9	7.87	3	33%	2.62	
Atlanta Region	1,802	38.70	317	18%	6.81	

⁴ Suspected serious injuries are reported by law enforcement and used when any injury, other than fatal injury, prevent the injured person from walking, driving, or normally continuing the activities the person was capable of before the injury occurred.

Bicyclist Crashes

In 2019, 89 counties experienced at least one bicycle crash. Fortyfour percent (347 out of 793) of all statewide bicycle crashes and 38 percent (33 out of 88) of all bicyclist suspected serious injuries and fatalies occurred within five counties. Table 3 shows the number of bicyclist crashes, bicyclists involved in crashes, and bicyclist fatalities and suspected serious injuries for the top five counties that experienced higher bicyclist crash incidents with motor vehicles compared to other regions.

Table 3: Bicycle Crashes, Suspected Serious Injuries and Fatalities for Top Counties, 2019

Counties with at Least One Bicycle Crash	Bicycle Crashes	Bicyclist Involved in Crashes	Bicyclist Suspected Serious Injuries and Fatalities		
			Number	Percent	
Top 5 Urban Counties	347	353	33	38%	
Fulton	85	88	10	11%	
Chatham	82	83	9	10%	
DeKalb	76	77	7	8%	
Cobb	57	57	4	5%	
Gwinnett	47	48	3	3%	
Other Urban Counties (48 Counties)	347	351	42	48%	
Rural Counties (36 Counties)	99	101	13	15%	
Total (89 Counties)	793	805	88	100%	

Note: More than one bicyclist can be involved in a single motor vehicle traffic crash Source: FARS 2019; Crash data revised by CODES 2019

Environmental Characteristics

Table 4 shows information on environmental characteristics (location of crash, land use, and light condition) describing where and when pedestrian and bicyclist fatalities occurred in 2019.

- Seventeen percent of the non-motorist fatalities occurred at intersections, 78 percent occurred at locations that were not intersections, and 5 percent occurred at intersection-related locations (defined below).
- One of every four non-motorists fatally injured (25 percent) were struck in crashes that involved hitand-run drivers – majority were pedestrians (66 out of 68).
- More non-motorist fatalities occurred in the dark (86 percent) than in daylight (12 percent).

Table 4: Pedestrian and Bicyclist Fatalities by Environmental Characteristics, 2019

Environmental	Pedestrian Fatalities		Bicyclist Fatalities		Total Non-Motorist Fatalities	
Characteristics	Number	Percent	Number	Percent	Number	Percent
Location *						
Not at Intersection	186	79%	14	67%	200	78%
At Intersection	39	17%	5	24%	44	17%
Intersection-Related	10	4%	2	10%	12	5%
Non-Trafficway Location	1	0%		0%	1	0%
Hit-and-Run						
Yes	66	27%	2	10%	68	25 %
No	180	73%	19	90%	199	75%
Light Conditions						
Dark	205	87%	16	76%	221	86%
Daylight	27	11%	5	24%	32	12%
Dawn	3	1%		0%	3	1%
Dusk	1	0%		0%	1	0%

* "At Intersection" is used when a person is on a roadway either (1) in the intersection, (2) in the area between a crosswalk and the perimeter of the intersection, or (3) in a crosswalk (marked or unmarked) adjacent to an intersection. "Intersection-Related" is used when a person is within the trafficway 50 feet out from the perimeter of an intersection area or if the crash is related to the flow of traffic through an intersection. "Not at Intersection" is when the person is 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. "Non-Trafficway Locations" are crashes that occur outside the boundaries of the trafficway (i.e., driveways or parking lots).

Season and Time of Day

Figure 6 contains information on the season and time of day when pedestrian and bicyclist fatalities occurred in 2019.

- Among those non-motorists fatally injured, 79 percent (203 out of 257) occurred during the nighttime hours (6:00 p.m. 5:59 a.m.).
- Twenty-six percent of pedestrian and bicyclist fatalities occurred in the fall months (September to November) during the nighttime hours.
- Three percent of pedestrian and bicyclist fatalities occurred in the summer months (June to August) during the daytime hours (6:00 a.m. – 5:59 p.m.).

Figure 6: Pedestrian and Bicyclist Fatalities (Count and Percent) by Season and Time of Day, 2019



Note: One pedestrian crash as unknown time of fatal crash reported. Source: Fatality Analysis Reporting System (FARS) 2019

Time of Day and Day of Week

Figure 7 shows the percent of all motor vehicle traffic fatalities that were pedestrians or bicyclists by time of day and day of the week in 2019.

- One-third (33 percent) of <u>all</u> traffic fatalities that occurred on a weekday between 6:00 p.m. and 11:59 p.m. were either a pedestrian or bicyclist (78 out of the 239 total traffic fatalities that occurred during that time period).
- Only one percent of <u>all</u> weekend traffic fatalities that occurred between 12:00 p.m. and 5:59 p.m. were either a pedestrian or bicyclist (1 out of the 139 total traffic fatalities that occurred during that time period).

Figure 7: Percent of <u>All</u> Traffic Fatalities that were Pedestrians or Bicyclists, by Time of Day and Day of Week, 2019



Weekday: 6 a.m. Monday to 5:59 p.m. Friday Weekend: 6 p.m. Friday to 5:59 a.m. Monday

Source: Fatality Analysis Reporting System (FARS) 2019

Demographics

Age

Table 5 contains the number of pedestrians and bicyclists fatally injured in 2019 by age group. Within each age group, the percentages are calculated as the total number of pedestrian or bicyclist fatalities divided by the total number of people fatally injured in motor vehicle crashes within the age group.

- Twenty-five percent of all motor vehicle traffic fatalities within the 55-to-64 age group were pedestrians (54 out of 212).
- The 55-to-64 age group also represents the largest number of pedestrian and bicyclist fatalities, 54 out of 236 and 7 out of 21, respectively.

Table 5: Total Traffic Fatalities, Pedestrian Fatalities, and Bicyclist Fatalities by Age Group, 2019

Age Group	Total Traffic				cyclist alities	
(Years)	Fatalities	Number	Percent	Number	Percent	
Children (≤ 14)	51	6	12%	1	2%	
15-20	110	12	11%	4	4%	
21-24	121	18	15%	1	1%	
25-34	281	48	17%	3	1%	
35-44	216	33	15%	4	2%	
45-54	214	35	16%			
55-64	212	54	25%	7	3%	
65-74	160	24	15%	1	1%	
75-84	87	4	5%			
85+	39	2	5%			
TOTAL	1,491	236	16%	21	1%	

Source: Fatality Analysis Reporting System (FARS) 2019

Older Pedestrian Population

In 2019, pedestrians aged 65+ years represented 8 percent (231 out of 2,986) of all pedestrians involved in crashes, 8 percent of all pedestrians suspected serious injuries (33 out of 395), and 13 percent of all pedestrians fatally injured (30 out of 236). Table 6 and Figure 8 shows the number and percent of pedestrian fatalities by age group from 2015 to 2019.

Table 6: Number of Pedestrian Suspected SeriousInjuries and Fatalities by Age Group, 2015-2019

Age Group	2015	2016	2017	2018	2019
Less than 55 years	622	667	715	441	444
55-64	110	111	138	85	113
65+	57	68	92	64	63
Unknown	3	1	1	2	11
TOTAL	792	847	946	592	631

Figure 8: Percent of Pedestrian Suspected Serious Injuries and Fatalities by Age Group, 2015-2019



Figure 9 contains the rate of non-motorists by sex involved in crashes, suspected serious injuries, and fatalities in 2019. For each sex, the fatality rate per 100,000 population is calculated by age group.

- The male incident rates were more than double the female incident rates. The male non-motorist crash rate per 100,000 population was 39.24 compared to 17.37 for females.
- The male non-motorist serious injury rate per 100,000 population was 6.59 compared to 2.20 for females.
- The male non-motorist fatality rate per 100,000 population was 3.57 compared to 1.34 for females – males are more than twice (2.7 times) as likely to be fatally injured compared to females.

Figure 9: Rate of Non-Motorists Involved in Crashes, Suspected Serious Injuries, and Fatalities by Sex, 2019



Source: Fatality Analysis Reporting System (FARS) 2019; 2019 crash data revised by CODES; OASIS 2019 population estimates

Pedestrian Race/Hispanic Origin

In 2019, Black/African American, Non-Hispanics represented half (50 percent) of pedestrians fatally injured in motor vehicle traffic crashes and 32 percent of the Georgia residential population – compared to White, Non-Hispanics that represent 31 percent of pedestrian fatalities and 52 percent of the population (Table 7).

The Black/African American, Non-Hispanic pedestrian fatality rate was higher than any other race – 3.48 per 100,000 population (Figure 10). Black/African American, Non-Hispanics are more than twice (2.7 times) as likely to be fatally injured compared to White, Non-Hispanics.

According to the American Community Survey⁵, an estimated 59 percent of Black/African American, Non-Hispanics use public transportation (excluding taxicabs) as a means of transportation to work in Georgia.

Table 7: Pedestrian Fatalities by Race/Hispanic Origin, 2019

Race / Hispanic Origin	Percent of Georgia Population	Number	Percent	Rate per 100,000 Population
Hispanic	10%	16	7%	1.53
White, Non-Hispanic	52%	72	31%	1.30
Black/African American, Non-Hispanic	32%	117	50%	3.48
American Indian, Non- Hispanic/Unknown	0.2%			
Asian, Non-Hispanic	4%	2	1%	0.44
All Other Non-Hispanic or Race	2%			
Unknown Race and Unknown Hispanic	0%	29	12%	
TOTAL	100%	236	100%	2.22

Note: Race and Hispanic origin is not available in crash records. Source: Fatality Analysis Reporting System (FARS) 2019; OASIS 2019

Figure 10: Pedestrian Fatality Rates (per 100,000 Population) by Race/Hispanic Origin, 2019



Note: Race and Hispanic origin is not available in crash records.

Source: Fatality Analysis Reporting System (FARS) 2019; OASIS 2019

Sex

Non-Motorist Injuries

The following section describes various responses to serious injuries experienced by pedestrians and bicyclists involved in motor vehicle traffic crashes and non-traffic crash incidents. Injured pedestrians and bicyclists can be counted multiple times for each response (e.g., an injured person may be counted as an emergency room visit, hospitalization, and/or trauma center patient). The various responses to injuries are described below.



Suspected Serious Crash Injuries are reported by law enforcement responding to a motor vehicle crash scene. Suspected serious injury is used when any injury, other than fatal injury, prevent the injured person from walking, driving, or normally continuing the activities the person was capable of before the injury occurred.



Emergency Medical Services include all ground and air transports to an emergency facility for patients who are injured and require medical care in the state of Georgia.



Trauma Center patients are identified as those with serious injuries that meet specific criteria. Identification and treatment guidelines are established by the American College of Surgeons and followed by the State of GA along with the CDC Field Triage Criteria. Participating hospitals (voluntary) are designated or verified as trauma centers Level I, II, III or IV. Level I and II facilities are able to treat the most critical patients.



Emergency Room and Hospitalizations include Georgia resident discharges from Georgia non-federal acute care hospitals. Emergency room visits include individuals who were discharged directly from the ER. Hospitalizations includes individuals who may have visited the emergency room.

Suspected Serious Crash Injuries

According to the police crash reports, there were 2,986 pedestrian crashes, 2,170 pedestrians involved in motor vehicle traffic crashes, and 395 suspected serious injuries among pedestrians in 2019 statewide.

In the same year, the crash reports show 793 bicyclist crashes, 805 bicyclists involved in motor vehicle traffic crashes, and 88 suspected serious injuries among bicyclists.

Table 8 shows the number of non-motorist crashes, persons involved in crashes, and suspected serious injuries between 2015-2019.

	Pedestrian					t
Year	Crashes	Pedestrian Involved	Suspected Serious Injuries	Crashes	Bicyclist Involved	Suspected Serious Injuries
2015	3,521	3,774	598	701	705	35
2016	3,834	4,064	615	695	703	29
2017	3,521	3,774	693	686	689	60
2018	2,172	2,316	331	550	555	38
2019	2,986	3,170	395	793	805	88

Table 8: Non-Motorist Crashes and Serious Injuries. 2015-2019

Note: There can be multiple non-motorists involved in a single motor vehicle crash. Source: Georgia Department of Transportation 2015-2019 crash data revised by CODES (extracted from GEARS on March 2021) Pedestrians aged 55-to-64 years have the highest rate of suspected serious injuries compared to other age groups. In 2019, there were 8.64 suspected serious injuries among pedestrians for every 100,000 population aged 55-to-64 years (Figure 11).

Bicyclists aged 15-to-20 years have the highest rate of suspected serious injuries compared to other age groups, followed by bicyclists in the 55-to-64 age group. In 2019, there were 16.80 suspected serious injuries among bicyclists for every 100,000 population aged 15-to-20 years and 8.64 serious injuries among bicyclists for every 100,000 population aged 55to-64 years (Figure 11).

Emergency Medical Services

In 2019, the Emergency Medical Services (EMS) transported a total of 2,102 pedestrians and 510 bicyclists involved in motor vehicle traffic crashes and non-traffic incidents to a hospital facility (Table 9). Twenty percent of all pedestrians transported by EMS were 25-to-34 years of age. Injured pedestrians and bicyclists ages 15-to-20 years had the highest rate of EMS transports compared to other age groups. In 2019, 33.45 pedestrians and 9.04 bicyclists for every 100,000 population aged 15-to-20 years were transported by EMS.

In 2019, the counties with the highest number of pedestrian and bicyclist transports by EMS were:

- Fulton (643)
- DeKalb (222)
- Cobb (89)
- Clayton (69)
- Gwinnett (65)

Figure 11: Pedestrian and Bicyclist Fatalities and Suspected Serious Injury Rates by Age Group (*Traffic*), 2019



Note: Persons with age zero are not included. Source: 2019 Crash data revised by CODES

Table 9: Pedestrian and Bicyclist Transported by Emergency Medical Services (*Traffic and Non-Traffic*⁶), 2019

Age	Р	edestrian		Bicyclist		
Group	Number	Percent	Rate	Number	Percent	Rate
<5	44	2%	6.70	6	1%	0.91
5-9	70	3%	10.21	17	3%	2.48
10-14	102	5%	14.02	48	9%	6.60
15-20	296	14%	33.45	80	16%	9.04
21-24	83	4%	14.70	6	1%	1.06
25-34	414	20%	27.72	60	12%	4.02
35-44	282	13%	20.42	59	12%	4.27
45-54	321	15%	22.93	87	17%	6.22
55-64	286	14%	21.87	85	17%	6.50
65+	193	9%	12.72	59	12%	3.89
Unknown	11	1%		3	1%	
Total	2,102	100%	19.80	510	100%	4.80

Note: Non-traffic incidences occur on any place other than a traffic way – trail, driveway, parking lot, or sidewalk

Source: Georgia Emergency Medical Services Information System (GEMSIS) 2019

⁶ Non-traffic incidences occur on any place other than a traffic way – trail, driveway, parking lot, or sidewalk.

Emergency Room Visits & Hospitalizations

Pedestrians

In 2019, there were a total of 3,440 emergency room visits and hospitalizations⁷ related to motor vehicle incidents involving pedestrians. Pedestrians aged 21-to-24 years had the highest rate of emergency room visits -55.62 visits for every 100,000 population. Pedestrians aged 55-to-64 years had the highest rate of hospitalizations compared to other age groups -11.01 visits for every 100,000 population (Table 10).

The total motor vehicle related (traffic and non-traffic) hospitalization and emergency room charges among pedestrian in Georgia was \$170.89 million.

Bicyclists

In 2019, there were a total of 635 emergency room visits and hospitalizations related to motor vehicle incidents involving bicyclists. Bicyclists aged 21-to-24 years had the highest rate of emergency room visits and hospitalizations - 9.92 ER visits and 1.59 hospitalizations for every 100,000 population (Table 11).

The total motor vehicle related (traffic and non-traffic) hospitalization and emergency room charges among bicyclists in Georgia was \$16.70 million.

Table 10: Number, Percent, and Rate of Pedestrian Emergency Room Visits and Hospitalizations by Age Group (Traffic and Non-Traffic), 2019

Age	Emerge	ency Roon	n Visits	Hospitalizations		
Group	Number	Percent	Rate	Number	Percent	Rate
<10	115	4%	8.57	7	1%	0.52
10-14	81	3%	11.14	12	2%	1.65
15-20	255	10%	28.82	37	5%	4.18
21-24	314	12%	55.62	55	7%	9.74
25-34	615	23%	41.19	136	18%	9.11
35-44	424	16%	30.70	110	15%	7.97
45-54	379	14%	27.08	134	18%	9.57
55-64	286	11%	21.87	144	19%	11.01
65+	213	8%	14.04	123	16%	8.11
Total	2,682	100%	25.26	758	100%	7.14

Note: The first external cause of injury diagnosis was considered. See data considerations for more information. Source: Georgia Department of Public Health, Office of Health Indicators for Planning (OHIP) Hospital Inpatient Discharge and Emergency Room Visit Data 2019; OASIS 2019 Estimated Population

Table 11: Number, Percent, and Rate of Bicyclist Emergency
Room Visits and Hospitalizations by Age Group (Traffic and Non-
<i>Traffic</i>), 2019

Age Group	Emergency Room Visits			Hospitalizations		
	Number	Percent	Rate	Number	Percent	Rate
<10	40	7%	2.98	< 5	0%	**
10-14	37	7%	5.09	< 5	2%	**
15-20	82	15%	9.27	< 5	4%	**
21-24	56	10%	9.92	9	10%	1.59
25-34	85	16%	5.69	14	15%	0.94
35-44	87	16%	6.30	12	13%	0.87
45-54	61	11%	4.36	18	20%	1.29
55-64	66	12%	5.05	18	20%	1.38
65+	29	5%	1.91	15	16%	0.99
Total	543	100%	5.11	92	100%	0.87

Note: The first external cause of injury diagnosis was considered. See data considerations for more information. Source: Georgia Department of Public Health, Office of Health Indicators for Planning (OHIP) Hospital Inpatient Discharge and Emergency Room Visit Data 2019; OASIS 2019 Estimated Population

⁷ Hospitalizations may include individuals that visited the emergency room. Emergency room visit include individuals who were discharged ⁷ Hospitalizations may include individuals that visited the emergency room. Emergency room, because and the emergency room visits are for Georgia residents only, while fatalities can be a person out of state. Page 11

Trauma Center Patients

According to the data for the Georgia Trauma Registry, motor vehicle-related incidents (motor vehicle occupants, motorcyclists, pedestrians, and bicyclists) accounted for 32.4 percent of all injuries treated by designated and non-designated Trauma Centers⁸ in 2019 across the state of Georgia.

In 2019, there were a total of 1,141 pedestrians and 519 bicyclists identified as trauma patients treated within Georgia Trauma Centers. Seventeen percent of all trauma center pedestrian patients were 25-to-34 years of age and 20 percent of all bicyclist patients were 55to-64 years of age (Table 12).

Pedestrians aged 55-to-64 years had the highest rate of trauma care compared to any other age group – 13.61 trauma patients for every 100,000 population. Bicyclists aged 10-to-14 years had the highest rate of trauma care compared to any other age group – 9.90 trauma patients for every 100,000 population (Table 12).

Nearly one out of every three patients (35 percent) of pedestrians treated at the trauma centers had minor injuries and 16 percent had very severe injuries. Nearly half (49 percent) of bicyclists treated at trauma centers had minor injuries and 6 percent had very severe injuries (Figure 12).

Table 12: Number, Percent, and Rate of Pedestrian and BicyclistTrauma Center Patients by Age Group, 2019

Age	Pedestrian			Bicyclist		
Group	Number	Percent	Rate	Number	Percent	Rate
<10	71	6%	5.29	89	17%	6.63
10-14	62	5%	8.52	72	14%	9.90
15-20	85	7%	9.61	32	6%	3.62
21-24	69	6%	12.22	12	2%	2.13
25-34	198	17%	13.26	46	9%	3.08
35-44	168	15%	12.17	48	9%	3.48
45-54	170	15%	12.15	68	13%	4.86
55-64	178	16%	13.61	103	20%	7.88
65+	140	12%	9.23	49	9%	3.23
Total	1,141	100%	10.75	519	100%	4.89

Source: Georgia Trauma Registry 2019

Figure 12: Trauma Registry Pedestrian and Bicyclist Injuries Treated by Injury Severity Score, 2019



⁸ Not all hospitals are designated as Trauma Centers.

Contributing Circumstances

The top four *pedestrian* contributing circumstances among those fatally injured in 2019 (Figure 13):

- Failure to yield right-of-way (55 percent);
- Improper crossing of roadway or intersection (jaywalking) (44 percent);
- In roadway improperly (standing, lying, working, playing, etc.) (18 percent); and,
- Not visible (dark clothing, no lighting, etc.) (14 percent).

Other contributing circumstances among *drivers* involved in *all pedestrian-related crashes* include (Figure 14):

- Suspected distracted drivers⁹ (61 percent of all drivers involved in pedestrian-related motor vehicle crashes);
- Driver failed to yield (16 percent);
- Speeding or aggressive driver (6 percent);
- Confirmed distracted driver (3 percent); and
- Confirmed impaired driver (1 percent).

Figure 13: Contributing Circumstances among <u>Pedestrians</u> Fatally Injured, 2019



Source: Fatality Analysis Reporting System (FARS) 2015 and 2019 There can be one or more contributing circumstance for each pedestrian fatal crash.

Figure 14: Contributing Circumstances among <u>Drivers</u> Involved in Pedestrian-Related Motor Vehicle Crashes, 2019



Source: 2019 crash data revised by CODES

There can be one or more contributing circumstance for each driver involved in a pedestrian-related motor vehicle crash.

Safety Equipment & Protective Gear

Pedestrian Safety Equipment Use

Safety equipment for pedestrians include clothing or materials that make the pedestrian more visible to others. This can include reflective gear and the use of lights (white in the front, and red in the back) at night or dusk when visibility is poor.

Safety equipment use among pedestrians is a relatively new field in the police crash reports, and in 2019 safety equipment use was recorded for 36 percent of all pedestrians involved in motor vehicle traffic crashes (1,150 out of 3,170 pedestrians). Of those pedestrians with known equipment use, 6 percent were using lighting or reflective clothing (61 out of 1,150).

Bicycle Helmet Use

In 2019, safety equipment use was recorded for 72 percent of all bicyclists involved in motor vehicle traffic crashes (581 out of 805 bicyclists). Of those bicyclists with known equipment use, 29 percent were wearing a helmet, reflective clothing, or using lighting (170 out of 581).

Between 2015 and 2019, there were a total of 118 bicyclist fatalities in Georgia. Nineteen percent of all bicyclists fatally injured were helmeted.

⁹ See the 2019 Distracted Drivers Georgia Traffic Safety Facts "Data Considerations" section for more information on the suspected-distracted driver definition established by CODES.

Alcohol Involvement

Alcohol involvement is defined as whether alcohol was consumed by the pedestrian before the crash; the presence of alcohol may or may not be a contributing factor in the crash. "No alcohol" refers to a blood alcohol concentration (BAC) of .00 grams per deciliter (g/dL). Table 13 shows information on the pedestrians fatally injured in traffic crashes by alcohol involvement and age group for 2015 and 2019.

- An estimated 17 percent of pedestrians fatally injured had BACs of .08 g/dL or higher in 2019, compared to 23 percent in 2015.
- In 2019, pedestrians fatally injured in the 45-to-54 age group had the highest percentage (31 percent) with BACs of .08 g/dL or higher compared to other age groups. In 2015, pedestrians in the 25-to-34 age group had the highest percentage (36 percent) with BACs of .08 g/dL or higher.

2015 2019 Total Percentage Percentage Percentage Total Percentage Percentage Percentage Percentage Percentage Age Pedestrian With With With With Pedestrian With With With With Group No Alcohol BAC = .01+ BAC = BAC = BAC = .01+ BAC = BAC = Fatalities Fatalities No Alcohol (BAC = .00)g/dL .01–.07 g/dL .08+ g/dL (BAC = .00)g/dL .01–.07 g/dL .08+ g/dL g/dL) g/dL) <15 6 100% 6 100% ----------------15-20 13 92% 8% 8% 12 75% 25% 25% ------21-24 11 73% 27% 9% 18% 18 89% 11% ---11% 25-34 33 52% 46% 9% 36% 48 71% 21% 6% 15% 35-44 29 52% 41% 10% 31% 33 73% 18% 3% 15% 45-54 30 63% 33% 30% 35 54% 40% 9% 31% 3% 55-64 41 63% 34% 15% 20% 54 72% 20% 4% 17% 65+ 29 86% 14% 3% 10% 30 87% 10% 0% 10% Unknown 2 100% --------------------67% 30% 8% 23% 236 73% 21% 4% 17% 194 Total

Table 13: Pedestrian Fatalities and Alcohol Involvement by Age Group, 2015 and 2019

Source: FARS 2015 and 2019

Personal Conveyances

According to National Highway Traffic Safety Admiration (NHTSA), people fatally injured in motor vehicle traffic crashes who were on "personal conveyances" are not classified as pedestrians. "Personal conveyances" are defined as roller skates, inline skates, skateboards, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities. Table 14 presents the distribution of people fatally injured on personal conveyances as a percentage of total traffic fatalities in 2015-2019. FARS does not contain information about the type of personal conveyances used by those fatally injured in traffic crashes.

Table 14: Total Traffic Fatalities and PersonalConveyance Fatalities, 2015–2019

Year	Total Traffic	Personal Conveyance		
i cui	Fatalities	Number	Percent	
2015	1,432	9	0.6%	
2016	1,556	2	0.1%	
2017	1,540	6	0.4%	
2018	1,504	4	0.3%	
2019	1,491	11	0.7%	

Data Definitions and Considerations:

This fact sheet defines a pedestrian as any person on foot, walking, running, jogging, hiking, sitting, or lying down who is involved in a motor vehicle traffic crash. These exclude people on personal conveyances like roller skates, inline skates, skateboards, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities. Bicyclists and other cyclists include riders of two-wheel, nonmotorized vehicles, tricycles, and unicycles powered solely by pedals.

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 trafficway, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded. However, in some cases where pedestrian and bicyclist injuries are discussed, traffic and non-traffic (i.e., occurring on any place other than a traffic way – trail, driveway, parking lot, or sidewalk) incidences are included in the aggregate reporting.

Fatal crashes are defined as crashes that involve a motor vehicle traveling on a trafficway customarily open to the public and that resulted 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, prevent the injured person from walking, driving, or normally continuing the activities the person was capable of before the injury occurred.

The National Center for Health Statistics (NCHS), the Federal agency responsible for use of the International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10) in the United States, has developed a clinical modification (CM) of the classification for morbidity (EMS, trauma, hospital, and ER data) purposes. ICD-10 Codes used were– Pedestrian traffic - V02-V04 (.1,.9), V09.2, Pedestrian non-traffic - V02-V04 (.0), V01, V05, V06, V09 (.0,.1,.3,.9), Pedal cyclist traffic - V12-V14 (.3-.9) V19 (.4-.6), Pedal cyclist non-traffic - V19(.4-.6), V10-V11, V12-V14(.0-.2), V15-V18, V19(.0-.3,.8,.9).

Contributing circumstances capture the precrash elements or improper actions of persons (pedestrians, bicyclists, other cyclists, and motorists) that may have caused the crash. 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).

The Fatality Analytics Reporting System (FARS) and crash data expanded the safety equipment field to include new attributes related to non-motorist safety equipment (e.g., reflective equipment/clothing, protective pad, lighting, and other safety equipment) These new attributes were added after 2017 and may impact the trending and interpreting of safety equipment use over time. Additionally, FARS data allow the entry of multiple safety equipment being used in a single fatal crash event.

Blood Alcohol Concentration (BAC) values are imputed to address the problem of missing blood alcohol test results in FARS data system. A multiple imputation methodology is employed to generate specific values of BAC for persons involved in fatal crashes.

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 (O.C.G.A. 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 the rural counties

For More Information:

The shorter Fact Sheet for non-motorists can be found on the Georgia Department of Transportation (GDOT) website: <u>http://www.dot.ga.gov/DS/SafetyOperation/SBS</u>

Other fact sheets and traffic safety topics are available on the Governor's Office of Highway Safety website: <u>https://www.gahighwaysafety.org/highway-safety/shsp/</u> The suggested APA format citation for this document is:

Georgia Crash Outcomes Data Evaluation System. (2021, April). *Pedestrians and Bicyclists: 2019 data.* (Georgia Traffic Safety Facts). Atlanta, GA: Governor's Office of Highway Safety.