

Safety Performance

General Highway Safety Trends

Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fatalities	1,180	1,164	1,432	1,556	1,540	1,505	1,492	1,664	1,840
Serious Injuries	4,694	4,446	4,896	5,206	5,370	6,401	7,308	7,625	8,654
Fatality rate (per HMVMT)	1.081	1.045	1.214	1.280	1.219	1.142	1.128	1.439	1.525
Serious injury rate (per HMVMT)	4.301	3.993	4.152	4.282	4.251	4.856	5.523	6.593	7.171
Number non-motorized fatalities	209	183	226	265	274	296	268	312	338
Number of non-motorized serious injuries	254	265	281	292	370	334	433	481	495

Provide additional discussion related to general highway safety trends.

Georgia DOT has been working with the SHSP TRCC / CODES and Data task teams to evaluate the coding of (A) Suspected Serious Injury data recorded on the state’s crash reports. We studied the consistency and alignment to EMS and hospital data. Based upon our findings, we reached out to our local FHWA and NHTSA representatives and advised them that we have updated our (A) Suspected Serious Injury quantities. It is the state’s desire to continually improve the quality of our reporting, and this report reflects the revisions to our (A) Suspected Serious Injury data.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2023 Targets *

Number of Fatalities:1680.0

Describe the basis for established target, including how it supports SHSP goals.

While the 5-year rolling average number of traffic fatalities has steadily increased since 2014, Georgia experienced three consecutive years of decreases in the annual number of traffic fatalities between 2017 and

2022 Georgia Highway Safety Improvement Program

2019. However, the traffic-related fatalities increased in 2020 and in 2021, perhaps as an indirect impact of the COVID-19 pandemic responses.

The state's goal is to maintain traffic fatalities under the projected **1,680** (2019-2023 rolling average) by 2023

Number of Serious Injuries:8966.0

Describe the basis for established target, including how it supports SHSP goals.

The 5-year rolling average number of serious traffic injuries has steadily increased since 2014, with substantial increases in 2020 and 2021. Due to COVID-19 pandemic responses in 2020, there was less traffic volume and fewer vehicle miles traveled than in 2019. The increase in fatalities and serious injuries indicated that the traffic crashes that occurred tended to be more severe – indicative of drivers engaging in more risky driving behaviors such as speeding. In 2020, there was a 4 percent increase in the number of traffic-related serious injuries that occurred as a result of a motor vehicle crash on Georgia roadways according to police crash reports from 2019 to 2020.

The state's goal is to maintain serious injuries in traffic crashes under the projected **8,966** (2019-2023 rolling average) by 2023

Fatality Rate:1.360

Describe the basis for established target, including how it supports SHSP goals.

Similar to the overall traffic fatalities performance measure (C-1), the 5-year rolling average traffic fatality rate per 100M VMT has steadily increased since 2014. Due to COVID-19 pandemic responses in 2020, there was less traffic volume and fewer vehicle miles traveled than in 2019. The increase in fatalities and serious injuries indicated that the traffic crashes that occurred tended to be more severe. Therefore, the rate of fatal injuries for every 100 million VMT increased in 2020; 34 percent increase in the fatality rate (from 1.12 in 2019 to 1.49 in 2020)

The state's goal is to maintain traffic fatalities per 100M VMT under the projected **1.36** (2019-2023 rolling average) by 2023.

Serious Injury Rate:7.679

Describe the basis for established target, including how it supports SHSP goals.

Similar to the overall traffic fatalities performance measure (C-1), the 5-year rolling average traffic fatality rate per 100M VMT has steadily increased since 2014. Due to COVID-19 pandemic responses in 2020, there was less traffic volume and fewer vehicle miles traveled than in 2019. The increase in fatalities and serious injuries indicated that the traffic crashes that occurred tended to be more severe. Therefore, the rate of serious injuries for every 100 million VMT increased in 2020; 20 percent increase in the serious injury rate (from 5.47 in 2019 to 6.58 in 2020).

The state's goal is to maintain serious injuries in traffic crashes per 100M VMT under the projected **7.679** (2019-2023 rolling average) by 2023

Total Number of Non-Motorized Fatalities and Serious Injuries:802.0

Describe the basis for established target, including how it supports SHSP goals.

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The 5-year rolling average number of non-motorized fatalities has steadily increased since 2011. The number of pedestrian fatalities increased by 18% from 236 in 2019 to 279 in 2020. Between 2016 and 2020, there was an average of 271 pedestrian fatalities each year. The number of bicyclist fatalities increased by 11 fatalities from 21 in 2019 to 32 in 2020. Between 2016 and 2020, there was an average of 25 bicyclist fatalities each year.

The state's goal is to maintain the number of non-motorist serious injuries and fatalities under the projected **802** (2019-2023 rolling average) by 2023

GDOT, GOHS, our state agency partners, and local organizations use the statewide five-year rolling average (2016-2020 FARS data) to determine the annual targets and progress status for each traffic safety performance measure. Specifically, the team plots the five most recent data points to determine the “best fit” model (linear or quadratic polynomial) that shows the relationship between the five-year rolling average and time. The model with the highest R2 value (reflective of a correlation between the five-year rolling average and time) is used to derive the FY2023 target values and determine FY2022 progress status. It's important to note that five-year rolling averages are designed to smooth the data and reduce the variations that may appear in the raw annual time series; therefore, the correlation values (R2) are usually higher for models with the five-year moving average compared to models with annual raw values.

OTHER CONSIDERATIONS

The public health emergency responses to the COVID-19 pandemic had unprecedented restrictions on travel in the state of Georgia. Due to the Governor of Georgia's Executive Order declaring a public health state of emergency issued on March 14, 2020, a substantial proportion of the population did not travel, particularly on roadways and public transportation systems. Despite the decrease in traffic volume and fewer vehicle miles traveled in 2020, Georgia experienced an increase in traffic-related fatalities and serious injuries—indicative that traffic crashes tended to be more severe when they occurred, and drivers were engaging in more risky driving behaviors. Traffic-related data, such as VMT and motor vehicle crashes, show that the travel environment in Georgia is returning to the pre-pandemic norms as of early 2021.

Many traffic safety practitioners and data analysts consider the 2020 year to be an anomaly; however, the full impact of the COVID-19 pandemic on traffic safety is still unknown. The methodology used to determine the FY2022 traffic safety performance measures progress status and the FY2023 targets were **not adjusted** to address the rise in 2020 traffic fatalities due to the COVID-19 public health emergency responses. As such, the statistical projections show that many of the FY2022 targets were not met. Additionally, future targets that will be established may be distorted and perhaps overestimated since the 2020 anomaly will be included in the 5-year rolling average analyses for fiscal years 2023-2028.