U.S. Department of Transportation
National Highway Traffic Safety Administration

TRAFFIC SAFETY FACTS
Crash • Stats

NHTSA

DOT HS 813 118 A Brief Statistical Summary June 2021 (revised)

Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2020

Introduction and Summary

NHTSA previously issued a report on projected traffic fatalities and fatality rate per 100 million vehicle miles traveled (VMT) by sub-categories for the first half of 2020 (*Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories Through June 2020,* Report No. DOT HS 813 054). In that report the remarkable trend of several important sub-category factors, which are consistent with the changes in fatalities and fatality rate per 100 million VMT from March to June 2020 as compared to the corresponding months of 2019, are identified and reported.

These changes in fatalities and fatality rate per 100 million VMT have continued since June 2020. The decrease in VMT was largely due to the stay-at-home orders that started in mid-March 2020, followed by the first full month of stay-at-home measures in April. During May, some States began to reopen in some way while almost all States partially reopened by June. After June, States continued to adapt their local and statewide COVID-19 guidelines and assess specific reopening and potential re-closing efforts accordingly.

This NHTSA report is being issued after conducting a special analysis of the fatalities and the fatality rate per 100 million VMT by sub-categories through December 2020. The analysis is based on ratio-adjusted estimates of 2020 fatal crash data coded thus far into NHTSA's Fatality Analysis Reporting System (FARS), as described in the Data and Methodology section.

Some categories showed large shifts in fatalities and fatality rates for a given month, compared to the corresponding month in 2019. For instance, the share of fatalities on rural local/collector roads went from 18 percent in April 2019 to 22 percent in April 2020, a 4-percentage-point increase. Correspondingly, the total fatalities (fatality counts) on rural local/collector roads increased from 6,755 in 2019 to 7,524 in 2020, an 11-percent increase. In summary, the traffic fatalities (fatality counts) in the following categories showed large increases in 2020 as compared to 2019:

- on rural local/collector roads (up 11%), urban interstates (up 15%), and urban local/collector roads (up 12%);
- during nighttime (up 11%);
- during the weekend (up 9%);
- in older vehicles 10 years or older (up 6%);
- in rollover crashes (up 9%);
- occupant ejection (up 20%);
- in single-vehicle crashes (up 9%);
- in speeding-related crashes (up 11%);
- in the 16-to-24 age group (up 15%), the 25-to-34 age group (up 18%), and the 35-to-44 age group (up 14%);
- males (up 9%);
- unrestrained occupants of passenger vehicles (up 15%);
- Black people (up 23%); and
- in police-reported alcohol involvement crashes (up 9%).

The category that generally decreased was older people (65 and older), down 9 percent. In addition, the increasing trend of the total fatality rate per 100 million VMT from March to December 2020, was strongly driven by the increases in fatality rate per 100 million VMT on rural local/collector roads, as well as rural and urban arterial roadways.

The total projected motorcyclist fatalities increased by 9 percent from 2019 to 2020. Pedestrian fatalities are projected to remain unchanged in 2020 as compared to 2019 (up 0%). The total projected pedalcyclist fatalities increased

from 2019 to 2020 by 5 percent. Fatalities in crashes involving at least one large truck are projected to decline from 2019 to 2020 (down 2%).

Data and Methodology

NHTSA uses the Early Notification (EN) data and Monthly Fatality Counts (MFC) data for the early estimate of motor vehicle traffic fatalities every month. However, EN and MFCs do not include detailed crash characteristics and information necessary to compute fatality counts and fatality rates by sub-categories. NHTSA's FARS data includes such detailed information but is incomplete at this point since not every case has been been entered into FARS. This analysis adjusts fatal crash cases currently coded for 2020 into NHTSA's FARS and scales it up to the projected fatality counts in the 2020 early estimates report (*Early Estimate of Motor Vehicle Traffic Fatalities in 2020,* Report No. DOT HS 813 115).

The estimates of fatalities by sub-categories are carried out in two steps. The first step is to inflate current 2020 total cases coded into NHTSA's FARS data *(FARS_20)* to the first half estimated total fatalities *(F_Est_20)* that are from the early estimated fatalities based on latest EN and MFC data. In general, the inflation rate *(IR)* is calculated by the fomula:

$$IR = \frac{F\_Est\_20}{FARS\_20}$$

Inflation rates are computed for each month (m) and region (r) for a total of 60 inflation rates (6 months x 10 regions):

$$IR_{mr} = \frac{F\_Est\_20_{mr}}{FARS\_20_{mr}}$$

For example, in the calculation performed in September 2020, the inflation rates range from 0.932 (there are five IR_{mr} values less than 1) to 1.912. Generally, the earlier the crash month the smaller the inflation rate as the data has relatively stabilized. In the second step, the inflation rate (IR_{mr}) is then used as the *weight* in the frequency calculation for the estimate of fatalities by each sub-category variable. For instance, to compute the estimated male fatailites in month m and region r, the count of male fatalities in FARS, $FARS\_20\ (Gender_{male})_{mr}$, is weighted by the inflation rate IR_{mr} as follows, $F\_Est\ (Gender_{male})_{mr} = FARS\_20\ (Gender_{male})_{mr} \times IR_{mr}$. For a different interpretation, the estimated number of male fatalities in month m and region r can also be seen as the estimated fatalities in month m and region r multiplied by the fraction of male fatalities in FARS data *(FARS_20)* for month m and region r:

$$F_{Est\_20(Gender_{male})_{mr}} = F\_Est\_20_{mr} \times \left(\frac{FARS\_20(Gender_{male})_{mr}}{FARS\_20_{mr}}\right)$$

The metric NHTSA examined is the relative proportion of fatalities in each level of the sub-category variables (the *percentage distribution* of fatalities) or the *percentage* of the total fatalities. Estimated fatalities by sub-categories may vary due to the continuous updating of 2020 FARS data $(FARS\_20_{mr})$, especially for several sub-category variables (e.g., speeding, roadway departure, and police-reported alcohol involvement) that may take extra time to report and code (see *"Limitations"* section). Since the results (the *percentage distribution* of fatalities or the *percentage* of the total fatalities) are identical or fairly close in three calculations performed during three consecutive months, these estimates are considered to be relatively stable. Finally, the actual yearly fatality counts (fatalities) and the percentage change in fatalities from 2019 to 2020 for each level of the sub-category variables are also presented.

Results

NHTSA reviewed factors that may be linked to changes in driving and travel pattern and transportation options owing to COVID-19 emergency measures. The remarkable trend of several sub-categories are identified and reported below; they are consistent with the changes in fatalities and fatality rate from March to December 2020 as compared to the corresponding months of 2019.

Fatalities

The findings for the trends of sub-category variables are based on the comparison of the metric, the *percentage distribution* of fatalities or the *percentage* of total fatalities, between the same months of 2019 and 2020 (labeled by [19] and [20] in the comparisons of 2-year results). The estimated results, including the actual yearly fatality counts (fatalities) and the percentage change in fatalities from 2019 to 2020 for each sub-category variable, are summarized as follows (see Tables 1 and 2 and Figure 1 for details).

Roadway and Environmental Factors

- The proportion of fatalities in *rural* areas increased in 5 of the 10 months from March to December (Figure 1). For example, the greatest increase occurred in April (46% [20] versus 43% [19]). Total estimated fatalities increased by 7 percent in *rural* areas from 2019 to 2020. Specifically, as shown in Table 1, the share of traffic fatalities on rural local/collector roads increased in most months from March to December. The greatest increase was in April (22% [20] versus 18% [19]). There was also an increase on *urban interstate roads* from August to October. Total estimated fatalities increased on *urban interstates* (up 15%), *rural local/collector roads* (up 11%), and *urban local/collector roads* (up 12%) in 2020, as compared to 2019.

- The proportion of fatalities during *nighttime* (6 p.m. to 5:59 a.m.) increased in most months from March to December (Figure 1). The greatest increase occurred during September (55% [20] versus 50% [19]). Total estimated fatalities during *nighttime* increased by 11 percent from 2019 to 2020.
- As displayed in Figure 1, the proportion of fatalities occurring during the *weekend* (6 p.m. Friday to 5:59 a.m. Monday) increased in most months from March to December. The greatest increase occurred in May (46% [20] versus 40% [19]). In addition, the greatest increase in the proportion of fatalities occurred on *weekdays* (6 a.m. Monday to 5:59 p.m. Friday) in June (60% [20] versus 53% [19]) – more traveling for work as almost all States partially reopened by June. Total estimated fatalities increased by 9 percent during *weekends* from 2019 to 2020.
- The proportion of passenger vehicle occupant fatalities that occurred during *out-of-State* travel decreased in most months from March to December (Figure 1) – with the least in April (7% [20] versus 10% [19]). However, this proportion increased in November (11% [20] versus 8% [19]) – potentially due to the Thanksgiving holiday travel period. Total estimated passenger vehicle occupant fatalities decreased by 2 percent during *out-of-State* travel from 2019 to 2020.

Vehicle-Related Characteristics

- Passenger vehicle occupant fatalities, as a proportion of all fatalities, that occurred in *older vehicles* (vehicle age ≥ 10 years.) increased from April to July and in December (Figure 1). The greatest increase occurred in April (69% [20] versus 64% [19]). This might be related to the fact that the sales/use of used vehicles increased during the COVID-19 pandemic.[1] Total estimated passenger vehicle occupant fatalities increased by 6 percent in *older vehicles* from 2019 to 2020.
- Vehicle occupant fatalities in *rollover* crashes, as a proportion of all fatalities, increased in most months from March to December (Figure 1). The greatest increase occurred in March (25% [20] versus 22% [19]) and June (27% [20] versus 24% [19]). Total estimated vehicle occupant fatalities in *rollover* crashes increased by 9 percent from 2019 to 2020.
- Fatally injured vehicle occupants (excluding motorcycles) *who were ejected*, as a proportion of all fatalities, increased in most months from March to December (Figure 1). The greatest increase occurred in June (27% [20] versus 21% [19]). Total estimated fatalities for vehicle occupants (excluding motorcycles) *who were ejected* increased by 20 percent from 2019 to 2020. This might be largely due to the increase in *unrestrained* passenger vehicle occupant fatalities, as described in the person-related characteristics section.
- Fatalities in *single-vehicle* crashes, as a proportion of all fatalities, increased in most months from March to December (Table 1). The greatest increase occurred in April (60% [20] versus 55% [19]). Total estimated fatalities in *single-vehicle* crashes increased by 9 percent from 2019 to 2020.
- As shown in Table 1, *roadway departure* related fatalities, as a proportion of all fatalities, increased in March (51% [20] versus 49% [19], April (54% [20] versus 50% [19]), May (53% [20] versus 50% [19]), and June (53% [20] versus 52% [19]). Total estimated fatalities in *roadway departure* related crashes increased by 3 percent from 2019 to 2020.
- *Speeding-related* fatalities, as a proportion of overall fatalities, increased from March to August (Table 2). The greatest increase occurred in April (32% [20] versus 26% [19]) and May (32% [20] versus 27% [19]). Specifically, the increases were most pronounced in *Region 6 (TX, NM, LA, MS, OK)* from March to September and in November. Annual projected fatality counts in *speeding-related* crashes increased by 11 percent from 2019 to 2020.

Person-Related Characteristics

- As shown in Table 1, traffic fatalities among *young* people (16 to 44 years old), as a proportion of all fatalities, increased in most months from March to December. The greatest increase occurred in April (18% [20] versus 15% [19]) and June (19% [20] versus 15% [19]) for the 16-to-24 age group. Correspondingly, traffic fatalities of *older* people (age 65+), as a proportion of all fatalities, decreased from March to December (older adults have largely stayed at home during the COVID-19 health emergency). Total estimated fatalities increased by 15 percent for the *16-to-24* age group, by 18 percent for the *25-to-34* age group, and by 14 percent for the *35-to-44* age group, but decreased by 9 percent for people *65 and older* from 2019 to 2020.
- Male fatalities, as a proportion of overall fatalities, increased in most months from March to December (Table 1). The greatest increase occurred in May (75% [20] versus 72% [19]). Total estimated *male* fatalities increased by 9 percent from 2019 to 2020.

[1] Colias, M. (2020, July 3). During COVID-19 pandemic, the used-car lot is hot. *The Wall Street Journal.*

- *Unrestrained* passenger vehicle (PV) occupant fatalities, as a proportion of all PV occupant fatalities, increased from March to December (Figure 1). The greatest increase occurred in April (55% [20] versus 45% [19], followed by May (52% [20] versus 45% [19]) and June (53% [20] versus 46% [19]). Total estimated *unrestrained* passenger vehicle occupant fatalities increased by 15 percent from 2019 to 2020.
- As shown in Table 2, *Black* fatalities, as a proportion of all fatalities, increased in most months from March to December. The greatest increase occurred in June (20% [20] versus 15% [19]). Total estimated *Black* fatalities increased by 23 percent from 2019 to 2020.
- As shown in Table 2, fatalities in *police-reported, alcohol-involved* crashes, as a percentage of all fatalities, increased in June (21% [20] versus 20% [19]), August (21% [20] versus 19% [19]), and October and November (18% [20] versus 17% [19]). Total estimated fatalities in *police-reported, alcohol-involved* crashes increased by 9 percent from 2019 to 2020. This measure is different from NHTSA's traditional reporting of alcohol-impaired-driving crashes, which is based on both reported and imputed blood alcohol concentration (BAC) values. BAC values have a significant reporting lag and will be finalized later this year, which is why this analysis used police-reported alcohol involvement to get an indication of changes from 2019 to 2020.

Fatalities by Person Type and in Crashes Involving Large Trucks

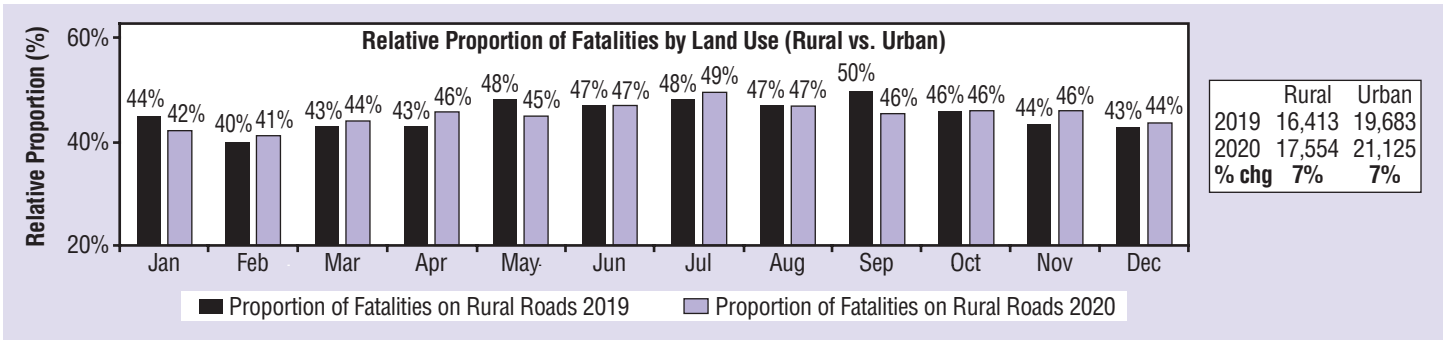
- Fatalities among *motorcyclists,* as a percentage of total fatalities, decreased in most months from March to December (Table 2). However, the total projected *motorcyclist* fatalities increased by 9 percent from 2019 to 2020.
- Fatalities among *pedestrians,* as a percentage of total fatalities, decreased in most months from March to December (Table 2). Total projected *pedestrian* fatalities are almost unchanged from 2019 to 2020 (up 0%).
- Fatalities among *pedalcyclists,* as a percentage of total fatalities, are almost unchanged from March to December 2020 (Table 2). Total projected *pedalcyclist* fatalities increased by 5 percent from 2019 to 2020.
- Fatalities *in crashes involving at least one large truck (gross vehicle weight rating of more than 10,000 lbs),* as a percentage of total fatalities, decreased in most months from March to December (Table 2). Total estimated fatalities in *crashes involving at least one large truck,* decreased by 2 percent from 2019 to 2020. This estimate is based on involvement of large trucks, both commercial and non-commercial, in the crashes.

Table 1: Relative Proportion of Fatalities by Roadway Function Class, Age Group, Gender, and Crash Type, 2019–2020

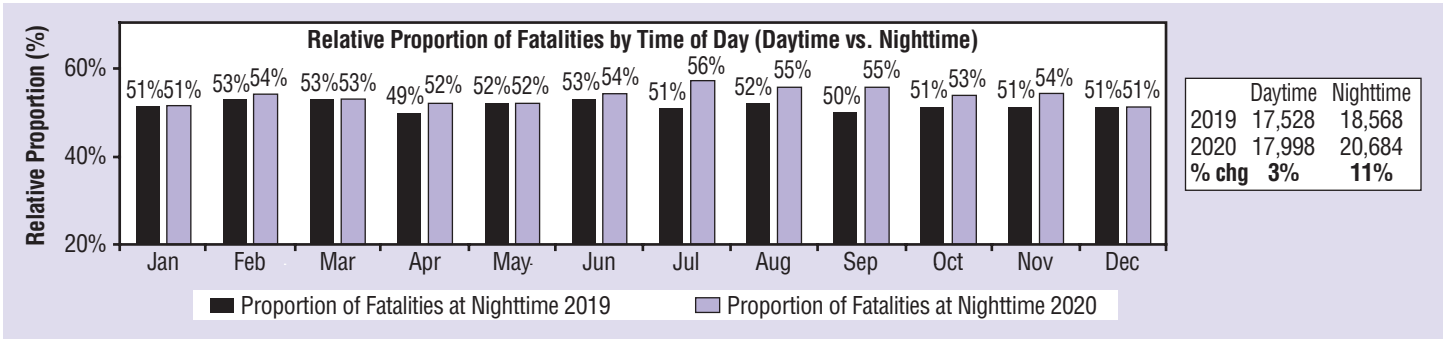
Total Fatalities		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	% change 2019–2020
2019		2,664	2,388	2,764	2,817	3,166	3,189	3,294	3,351	3,308	3,197	3,050	2,908	36,096	
2020		2,665	2,675	2,560	2,310	3,095	3,715	3,770	3,820	3,715	3,795	3,430	3,130	38,680	7%
Roadway Function Class															
2019	Rural Interstate	6%	5%	6%	6%	6%	5%	5%	5%	5%	6%	5%	5%	1,987	
	Urban Interstate	8%	8%	9%	8%	8%	7%	8%	6%	7%	7%	8%	7%	2,686	
	Rural Arterial	21%	20%	21%	19%	21%	22%	22%	22%	22%	22%	21%	21%	7,662	
	Urban Arterial	37%	40%	36%	37%	33%	34%	32%	35%	33%	36%	37%	37%	12,763	
	Rural Collector/ Local	17%	15%	16%	18%	20%	20%	21%	20%	22%	18%	17%	17%	6,755	
	Urban Collector/Local	12%	12%	12%	12%	11%	12%	12%	12%	11%	11%	12%	13%	4,243	
2020	Rural Interstate	5%	5%	5%	5%	5%	5%	5%	6%	5%	6%	5%	5%	2,049	3%
	Urban Interstate	6%	9%	9%	10%	8%	8%	8%	8%	9%	8%	7%	7%	3,080	15%
	Rural Arterial	20%	20%	19%	18%	20%	21%	22%	21%	22%	21%	21%	20%	7,898	3%
	Urban Arterial	40%	38%	36%	32%	34%	34%	31%	32%	34%	34%	34%	38%	13,397	5%
	Rural Collector/ Local	17%	15%	19%	22%	20%	21%	21%	21%	18%	19%	19%	19%	7,524	11%
	Urban Collector/Local	12%	13%	12%	13%	12%	12%	13%	12%	12%	12%	13%	11%	4,735	12%
Age Group															
2019	<16	4%	3%	3%	3%	4%	4%	4%	3%	3%	3%	4%	3%	1,226	
	16–24	14%	16%	17%	15%	17%	15%	16%	16%	15%	15%	16%	16%	5,633	
	25–34	18%	17%	18%	19%	18%	18%	19%	18%	19%	18%	17%	18%	6,560	
	35–44	14%	14%	14%	15%	14%	14%	14%	14%	15%	15%	13%	14%	5,126	
	45–54	14%	14%	12%	14%	13%	15%	14%	14%	14%	14%	14%	12%	4,967	
	55–64	15%	15%	16%	13%	14%	15%	15%	15%	15%	15%	15%	16%	5,357	
	65+	22%	21%	21%	20%	19%	19%	18%	19%	20%	20%	21%	21%	7,227	
2020	<16	3%	3%	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%	1,266	3%
	16–24	16%	16%	17%	18%	17%	19%	16%	17%	16%	15%	17%	16%	6,454	15%
	25–34	18%	19%	19%	21%	20%	20%	20%	21%	20%	20%	20%	20%	7,714	18%
	35–44	14%	14%	15%	15%	15%	14%	16%	16%	17%	15%	14%	15%	5,862	14%
	45–54	15%	13%	14%	12%	14%	14%	13%	14%	13%	13%	13%	13%	5,190	4%
	55–64	15%	14%	16%	16%	15%	14%	14%	14%	14%	15%	14%	15%	5,623	5%
	65+	21%	21%	17%	14%	16%	15%	16%	16%	16%	18%	18%	18%	6,571	-9%
Gender															
2019	Male	69%	71%	71%	72%	72%	71%	73%	72%	73%	71%	69%	68%	25,664	
	Female	31%	29%	29%	28%	28%	29%	27%	28%	27%	29%	31%	32%	10,432	
2020	Male	70%	71%	71%	73%	75%	73%	74%	73%	73%	72%	71%	70%	27,967	9%
	Female	30%	29%	29%	27%	25%	27%	26%	27%	27%	28%	29%	30%	10,712	3%
Crash Type 1: Single- vs. Multi-Vehicle															
2019	Single-Vehicle	54%	57%	53%	55%	54%	53%	55%	55%	55%	55%	55%	55%	19,733	
	Multi-Vehicle	46%	43%	47%	45%	46%	47%	45%	45%	45%	45%	45%	45%	16,363	
2020	Single-Vehicle	56%	54%	57%	60%	58%	55%	56%	55%	55%	53%	57%	56%	21,596	9%
	Multi-Vehicle	44%	46%	43%	40%	42%	45%	44%	45%	45%	47%	43%	44%	17,084	4%
Crash Type 2: Roadway Departure Related															
2019	Departure	49%	48%	49%	50%	50%	52%	51%	50%	50%	48%	48%	49%	17,939	
	On-Road	51%	52%	51%	50%	50%	48%	49%	50%	50%	52%	52%	51%	18,157	
2020	Departure	48%	50%	51%	54%	53%	53%	51%	49%	48%	45%	41%	37%	18,553	3%
	On-Road	52%	50%	49%	46%	47%	47%	49%	51%	52%	55%	59%	63%	20,126	11%

Notes: The last two columns contain the actual yearly fatality counts and the percentage change from 2019 to 2020. Unknown cases are proportionally distributed. Numbers in bold red/blue indicate the increase/decrease in the month of (or whole) 2020 as compared to the corresponding month of (or whole) 2019 (in bold black).
Source: FARS 2019 ARF, 2020 statistical projection

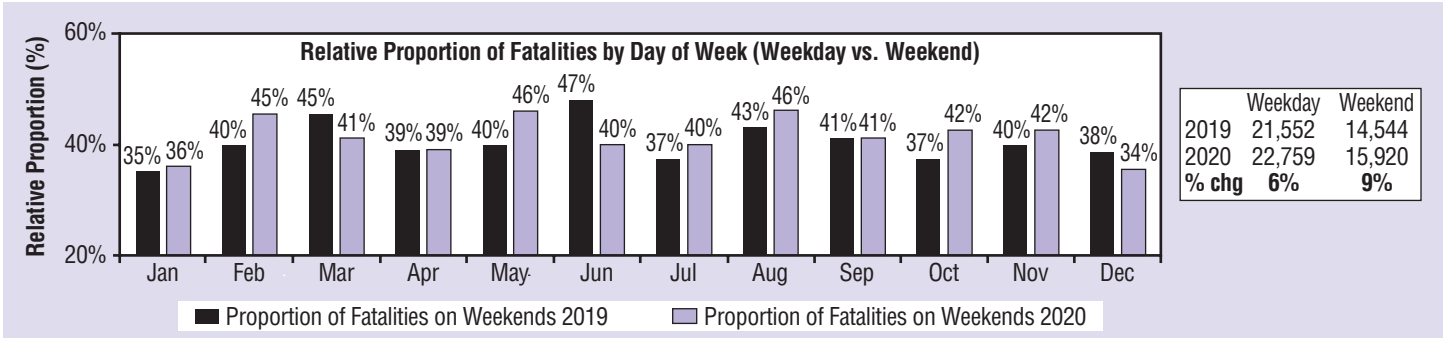
Figure 1: Relative Proportion of Total Fatalities by Land Use, Time of Day, Day of the Week, Gender, Passenger Vehicle Occupant Fatalities by Restraint Use, Vehicle Age, Vehicle Travel Pattern, Vehicle Occupant Fatalities by Rollover Occurrence, and Ejection Status, 2019–2020



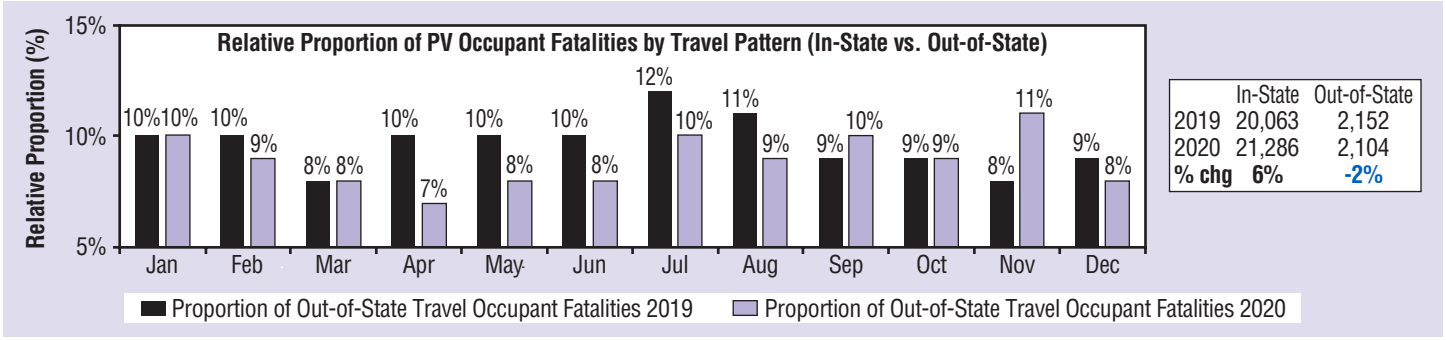
	Rural	Urban
2019	16,413	19,683
2020	17,554	21,125
% chg	**7%**	**7%**



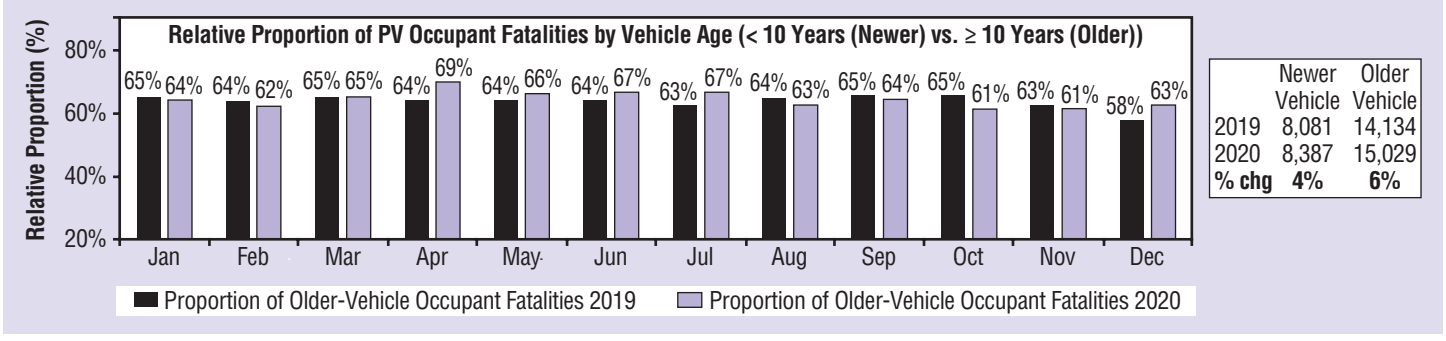
	Daytime	Nighttime
2019	17,528	18,568
2020	17,998	20,684
% chg	**3%**	**11%**



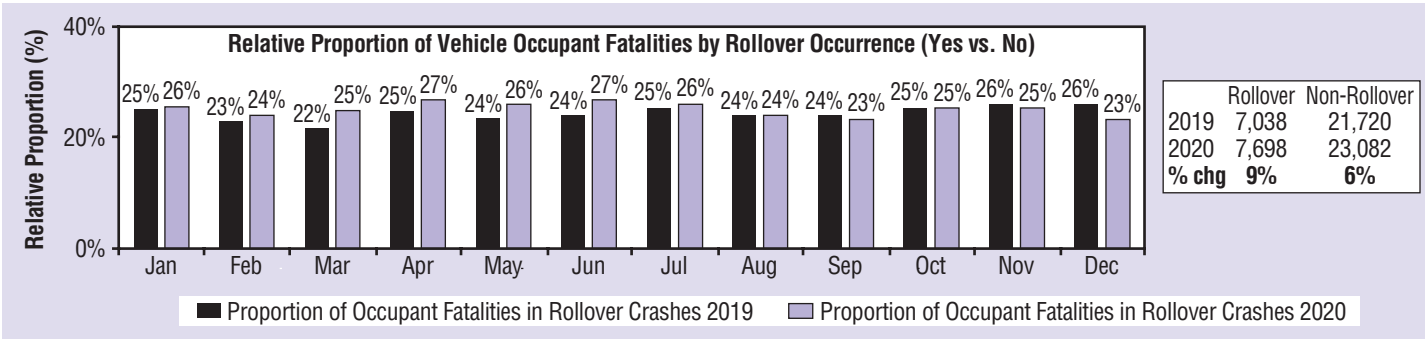
	Weekday	Weekend
2019	21,552	14,544
2020	22,759	15,920
% chg	**6%**	**9%**



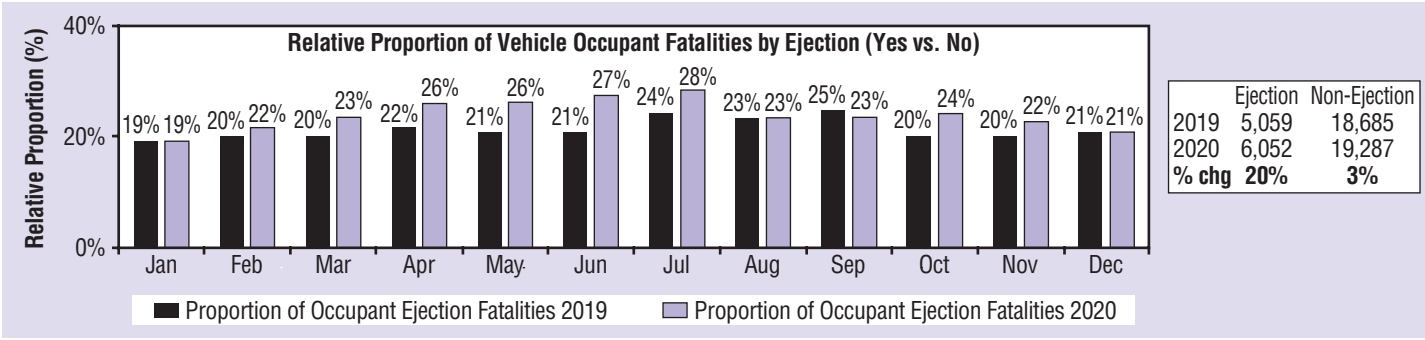
	In-State	Out-of-State
2019	20,063	2,152
2020	21,286	2,104
% chg	**6%**	**-2%**



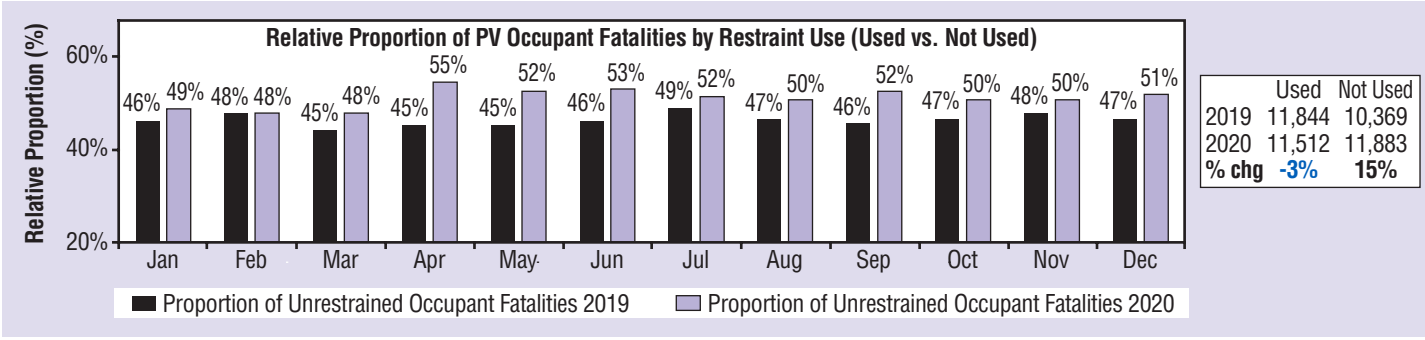
	Newer Vehicle	Older Vehicle
2019	8,081	14,134
2020	8,387	15,029
% chg	**4%**	**6%**



	Rollover	Non-Rollover
2019	7,038	21,720
2020	7,698	23,082
% chg	**9%**	**6%**



	Ejection	Non-Ejection
2019	5,059	18,685
2020	6,052	19,287
% chg	**20%**	**3%**



	Used	Not Used
2019	11,844	10,369
2020	11,512	11,883
% chg	**-3%**	**15%**

Notes: The box to the right of the charts contain the actual yearly fatality counts and the percentage change from 2019 to 2020. Unknown cases are proportionally distributed.
Source: FARS 2019 ARF, 2020 statistical projection

Table 2: Fatalities by Person Type and in Large-Truck-Related Crashes and Police-Reported Alcohol-Involved Crashes; by Person's Race; and in Speeding-Related Crashes by NHTSA Region, as a Percentage of Total Fatalities, 2019–2020

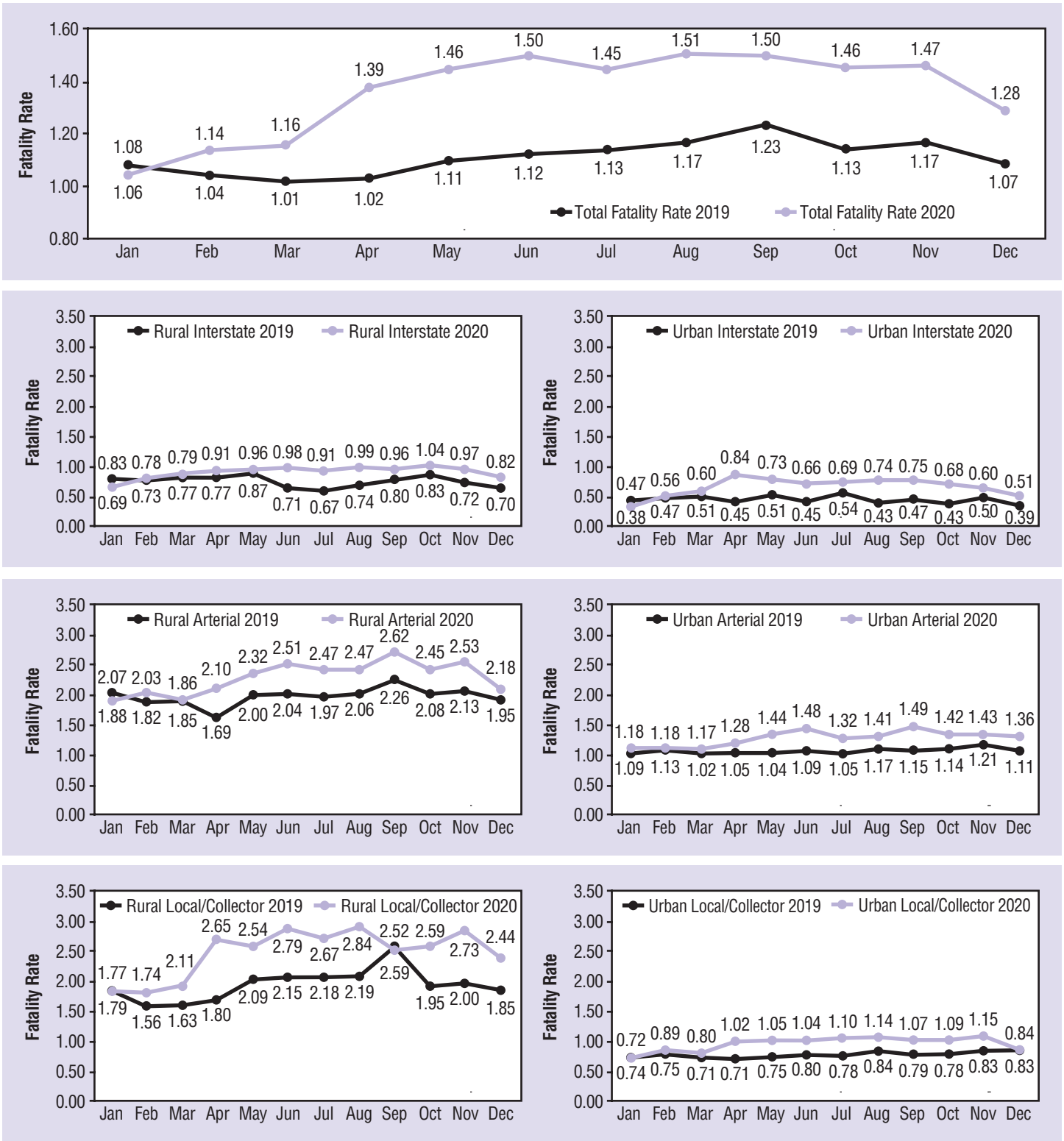
Fatalities		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	% change 2019–2020
2019		2,664	2,388	2,764	2,817	3,166	3,189	3,294	3,351	3,308	3,197	3,050	2,908	36,096	
2020		2,665	2,675	2,560	2,310	3,095	3,715	3,770	3,820	3,715	3,795	3,430	3,130	38,680	7%
Motorcyclists	2019	5%	7%	12%	15%	18%	20%	20%	20%	19%	12%	8%	6%	5,015	
	2020	6%	8%	12%	15%	18%	18%	19%	19%	18%	14%	10%	6%	5,458	9%
Pedestrians	2019	22%	22%	18%	16%	14%	13%	14%	15%	16%	19%	20%	21%	6,205	
	2020	23%	20%	18%	13%	14%	12%	14%	13%	16%	16%	18%	18%	6,236	0%
Pedalcyclists	2019	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	846	
	2020	2%	1%	2%	3%	3%	2%	3%	3%	2%	2%	2%	2%	891	5%
Involving Large Trucks	2019	15%	14%	14%	14%	13%	13%	14%	13%	15%	15%	14%	13%	5,005	
	2020	14%	13%	12%	13%	11%	13%	12%	13%	13%	14%	11%	13%	4,895	-2%
Alcohol-Involved	2019	18%	18%	19%	18%	20%	20%	20%	19%	19%	17%	17%	19%	6.704	
	2020	18%	20%	19%	18%	20%	21%	20%	21%	18%	18%	18%	15%	7,324	9%
Person's Race															
White	2019	76%	77%	79%	77%	76%	79%	78%	79%	80%	77%	77%	79%	28,058	
	2020	75%	75%	76%	74%	75%	74%	75%	76%	75%	78%	74%	75%	29,092	4%
Black	2019	17%	18%	17%	18%	19%	15%	17%	15%	16%	18%	18%	16%	6,090	
	2020	19%	19%	19%	20%	20%	20%	20%	19%	20%	18%	21%	20%	7,494	23%
American Indian	2019	2%	1%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	583	
	2020	2%	2%	2%	1%	1%	2%	2%	2%	2%	2%	1%	2%	645	11%
Asian/Pacific Islander	2019	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	792	
	2020	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	565	-29%
All Other Races	2019	2%	2%	1%	2%	2%	2%	1%	2%	1%	2%	1%	2%	573	
	2020	3%	2%	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	884	54%
Speeding-Related															
Overall	2019	26%	27%	27%	26%	27%	28%	25%	26%	26%	25%	26%	26%	9,478	
	2020	27%	27%	29%	32%	32%	31%	30%	27%	26%	25%	20%	21%	10,490	11%
Region 1	2019	44%	37%	35%	29%	35%	31%	30%	31%	23%	32%	33%	29%	220	
	2020	20%	44%	28%	38%	26%	30%	33%	24%	28%	24%	30%	33%	218	-1%
Region 2	2019	31%	33%	32%	36%	36%	38%	32%	27%	29%	29%	26%	28%	876	
	2020	38%	28%	35%	39%	40%	37%	37%	31%	32%	35%	28%	34%	1,060	21%
Region 3	2019	21%	27%	28%	20%	23%	29%	21%	25%	22%	23%	25%	24%	923	
	2020	22%	23%	30%	36%	34%	32%	32%	24%	24%	21%	22%	20%	1,111	20%
Region 4	2019	18%	15%	17%	18%	20%	22%	17%	20%	20%	18%	18%	16%	1,415	
	2020	17%	20%	18%	23%	22%	22%	21%	22%	19%	18%	13%	15%	1,571	11%
Region 5	2019	32%	31%	33%	31%	31%	28%	27%	24%	28%	26%	26%	31%	1,399	
	2020	27%	26%	32%	37%	31%	32%	31%	23%	26%	27%	26%	31%	1,527	9%
Region 6	2019	24%	23%	26%	26%	26%	23%	24%	31%	31%	27%	28%	30%	1,608	
	2020	32%	32%	34%	31%	38%	32%	30%	33%	32%	27%	31%	26%	2,018	25%
Region 7	2019	34%	37%	26%	31%	26%	25%	29%	31%	24%	28%	31%	28%	689	
	2020	34%	28%	28%	32%	37%	32%	26%	30%	32%	29%	25%	27%	771	12%
Region 8	2019	31%	43%	34%	32%	37%	34%	26%	33%	25%	26%	41%	39%	491	
	2020	30%	28%	40%	35%	35%	36%	41%	33%	29%	35%	33%	44%	538	10%
Region 9	2019	32%	34%	32%	32%	34%	32%	27%	28%	28%	28%	29%	30%	1,434	
	2020	32%	31%	34%	37%	31%	35%	34%	27%	27%	22%	2%	2%	1,271	-11%
Region 10	2019	28%	33%	35%	28%	25%	33%	33%	22%	29%	26%	24%	26%	423	
	2020	22%	30%	27%	41%	30%	38%	24%	23%	26%	25%	21%	22%	410	-3%

Notes: The last two columns contain the actual yearly fatality counts and the percentage change from 2019 to 2020. Unknown cases are proportionally distributed. Numbers in bold red/blue indicate the increase/decrease in the month of (or whole) 2020 as compared to the corresponding month of (or whole) 2019 (in bold black).
Source: FARS 2019 ARF, 2020 statistical projection

Fatality Rate

The total fatality rate per 100 million VMT is broken down by roadway function class: rural versus urban interstate, arterial, local/collector/street. The results shown in Figure 2 indicate that the increased trend of the total fatality rate per 100 million VMT from March to December 2020, was mainly driven by the fatality rate per 100 million VMT on the rural *local/collector/street,* rural and urban *arterial* roadways.

Figure 2: Total Fatality Rate per 100 Million VMT and the Fatality Rate per 100 Million VMT by Roadway Function Class, 2019–2020



Note: Unknown cases are proportionally distributed.
Sources: FARS 2019 ARF, 2020 statistical projection; VMT - FHWA December 2020 TVT

Limitations

In this study the crashes currently coded for 2020 into NHTSA's FARS data are used as a basis for constructing the gross estimates of traffic fatalities by sub-categories. The results from this analysis can be affected by two factors. First, any COVID-19 pandemic-related lag to the fatal crash investigation and reporting are unknown and not captured in these projections. Second, the traditional FARS identification and reporting lag issue could also affect these estimates. The estimates for the month and the sub-categories for particular regions with higher inflation rates *(IR_{mr})* are more likely to affect the sensitivity of the overall projections. Also, these calculations assume that the cases not yet coded into 2020 FARS are similar in the sub-categories to those that are already in the 2020 FARS. In short, the estimated results are subject to change as more information gets coded into these cases, as well as when more cases are entered into the 2020 FARS *($FARS\_20_{mr}$)*. These results may also change subject to the revision of the total estimated fatalities *($F\_Est\_20_{mr}$)* for 2020.

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For questions regarding the information presented in this document, please contact NCSArequests@dot.gov. Internet users may access this Crash•Stats and other general information on traffic safety at crashstats.nhtsa.dot.gov/#/.