



# Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories Through June 2020

## Introduction and Summary

NHTSA has already issued a projection report of traffic fatalities and the fatality rate per 100 million vehicle miles traveled (VMT) for the first half of 2020 (*Early Estimate of Motor Vehicle Traffic Fatalities for the First Half (Jan–Jun) of 2020*, Report No. DOT HS 813 004). In that report, the traffic fatalities and fatality rate per 100 M VMT projected apparent changes during March to June of 2020 compared to the corresponding months of 2019. These changes are primarily due to the impact of COVID-19 pandemic stay-at-home or shelter-in-place measures. While the stay-at-home orders started mid-March, April was the first full month of stay-at-home measures in place across the Nation. Some States began reopening in some way in May, and almost all States partially reopened by June.

In order to understand some underlying reasons for these changes during March to June 2020, this special supplementary report is being issued by NHTSA to take a closer look into the trends of monthly traffic fatalities and fatality rates by various sub-categories such as age, land use, and roadway function class through June of 2020 and making a comparison to the corresponding month of 2019. NHTSA has released a report (*Examination of the Traffic Safety Environment During the Second Quarter of 2020: Special Report*, Report No. DOT HS 813 011) that examines the national changes in roadway travel and drivers' behavior and their impact on motor vehicle crashes and fatalities since the start of the COVID-19 public health emergency, using an array of data sources. In comparison, this report represents the first analysis of the 2020 fatal crash data coded thus far into NHTSA's Fatality Analysis Reporting System (FARS).

Some sub-categories showed large shifts in fatalities and fatality rates for a given month, compared to the same month of 2019. For instance, the share of fatalities in rural areas went from 43% in April 2019 to 47% in April 2020, a 4-percentage-point increase. In total, the following sub-

categories increased by 4 percentage points or more in a given month, compared to same month of 2019: rural areas (April and June), rural local/collector roadways (April), weekends (May) and weekdays (June), older vehicles 10 years or older (April), rollover crashes (June), occupant ejection (May and June), single-vehicle crashes (April and May), young people 16 to 24 years old (June), unrestrained occupants of passenger vehicles (April–June), and African Americans (June). The sole category that decreased by 4 percentage points or more was older people 65 and older (March, April, and June). In summary this presents a picture in which the traffic fatalities during April to June 2020 were more rural, involved more people 16 to 24 years old, were associated with risk-taking behaviors such as riding without a seat belt, and involved rollovers and ejections (which occur more often at high speeds and when occupants are unrestrained). In addition, the strikingly increasing trend of the total fatality rate per 100 M VMT from March to June 2020, is strongly driven by the fatality rate per 100 M VMT on the rural local/collector, arterial, and interstate roadways.

It is important to understand that this analysis is not based on final FARS crash counts. The results are based on ratio-adjusted estimates as described in the Data and Methodology section. Also, this analysis does not include any State-level estimates.

## 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 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 first half early estimates report.

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 ( $F_{Est}$ ) which are from the early estimated fatalities based on latest EN and MFC data (this has been updated since the published projections). In general, the inflation rate ( $IR$ ) is calculated by the formula:

$$IR = \frac{F_{Est}}{FARS_{20}}$$

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

$$IR_{mr} = \frac{F_{Est_{mr}}}{FARS_{20_{mr}}}$$

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. 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 fatalities 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 first half 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  $r$ :

$$F_{Est(Gender_{male})_{mr}} = F_{Est_{mr}} \times \left( \frac{FARS_{20}(Gender_{male})_{mr}}{FARS_{20_{mr}}} \right)$$

Instead of the fatality counts (fatalities), the metric NHTSA examined is the relative proportion of fatalities in each level of the sub-category variables (i.e., 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) 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 August, September, and October 2020, these estimates are considered to have been relatively stable.

## 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,<sup>1</sup> which are consistent with the changes in fatalities and fatality rate per 100 M VMT from March to June 2020 as compared to the corresponding month of 2019, are identified and reported below.

### Fatalities

The findings about the trends of sub-category variables are based on the comparison of the metric, i.e., the *percentage distribution* of fatalities or the *percentage* of total fatalities, between the same month of 2019 and 2020 (labeled by [19] and [20] in the following comparisons of 2 years results). The estimated results 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 from March to June (Figure 1). The largest increase occurred in June (53% [20] versus 47% [19]), followed by April (47% [20] versus 43% [19]).

Specifically, as shown in Table 1, the share of traffic fatalities on *rural local/collector* roads increased from March to June. The largest increase is in April (22% [20] versus 18% [19]). There is also an increase on *rural arterial* roads in May (22% [20] versus 21% [19]) and June (25% [20] versus 22% [19]).

- As shown in Table 1, the proportion of fatalities in *Region 5 (MN, IL, WI, IN, OH, MI)* increased in June (16% [20] versus 14% [19]).
- The proportion of fatalities during *nighttime* (6 p.m. to 5:59 a.m.) increased in March, April, and June (Figure 1). The largest increase occurred during April (52% [20] versus 49% [19]).
- 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 May (46% [20] versus 40% [19]). The proportion of fatalities occurring on *week-days* (6 a.m. Monday to 5:59 p.m. Friday) increased in March (59% [20] versus 55% [19]) – the stay-at-home orders due to the COVID-19 pandemic started in mid-March; and again in June (59% [20] versus 53% [19]) – when there was more traveling for work as almost all States partially reopened by June.

<sup>1</sup> Alcohol-related traffic crash fatalities are not examined here due to lagging data acquisition.

- The proportion of passenger vehicle occupant fatalities that occurred during *out-of-State* travel decreased from April to June (Figure 1) – reaching the lowest in April (7% [20] *versus* 10% [19]) and slowly increasing through May (8% [20] *versus* 10% [19]) and June (9% [20] *versus* 10% [19]).

### Vehicle-Related Characteristics

- Passenger vehicle occupant fatalities, as a proportion of all fatalities, that occurred in *older vehicles* (vehicle age  $\geq 10$  years) increased from April to June (Figure 1). The largest increase occurred in April (68% [20] *versus* 64% [19]). This might be related to the fact that sales of used vehicles increased during the COVID-19 pandemic.<sup>2</sup>
- Vehicle occupant fatalities that occurred in *rollover* crashes, as a proportion of all fatalities, increased from March to June (Figure 1). The largest increase occurred in June (28% [20] *versus* 24% [19]).
- Fatally injured vehicle (excluding motorcycles) occupants *who were ejected*, as a proportion of all fatalities, increased from March to June (Figure 1). The largest increase occurred in June (27% [20] *versus* 21% [19]), followed by May (26% [20] *versus* 21% [19]) and April (26% [20] *versus* 22% [19]).
- Fatalities in *single-vehicle* crashes, as a proportion of all fatalities, increased during March through June (Table 2). The largest increase occurred in April (61% [20] *versus* 55% [19]), followed by May (59% [20] *versus* 54% [19]).
- As shown in Table 2, *roadway departure* related fatalities, as a proportion of all fatalities, increased in April (51% [20] *versus* 50% [19]) and May (51% [20] *versus* 50% [19]).
- *Speeding-related* fatalities, as a proportion of overall fatalities, increased each month April through June (Table 2). The largest increase occurred in April (29% [20] *versus* 26% [19]) and May (30% [20] *versus* 27% [19]). Specifically, the increases were most pronounced in *Region 6 (TX, NM, LA, MS, OK)*, *Region 7 (NE, KS, AR, MO, IA)*, and *Region 10 (ID, MT, WA, OR, AK)* from March to June.

### 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 from March to June. The largest increase occurred in June (19% [20] *versus* 15% [19]) and April (18% [20] *versus* 15% [19]) for the 16-to-24 age group.

Correspondingly, traffic deaths of *older* people (ages 65+), as a proportion of all fatalities, decreased (more older adults may have stayed home during the COVID-19 health emergency). Large decreases in the proportion of all fatalities that were *older* people (65+) deaths occurred in all four months: March (16% [20] *versus* 21% [19]), April (14% [20] *versus* 20% [19]), May (16% [20] *versus* 19% [19]), and June (14% [20] *versus* 19% [19]).

- Male fatalities, as a proportion of overall fatalities, increased from April through June (Figure 1). The largest increase occurred in May (75% [20] *versus* 72% [19]).
- Passenger vehicle (PV) *unrestrained* occupant fatalities, as a proportion of all PV vehicle occupant fatalities, increased from March to June (Figure 1). The largest increase occurred in April (56% [20] *versus* 45% [19]), followed by May (52% [20] *versus* 45% [19]) and June (53% [20] *versus* 46% [19]).
- As demonstrated in Table 2, *African-American* fatalities, as a proportion of all fatalities, increased in April (20% [20] *versus* 18% [19]) and June (20% [20] *versus* 15% [19]).

Finally, as shown in Table 2, fatalities among *motorcyclists*, *pedestrians*, *pedalcyclists*, and fatalities in crashes *involving at least one large truck*, as a percentage of total fatalities, decreased from March to June 2020 as compared to the corresponding month of 2019. However, it should be pointed out here that if we look at the *fatality counts* (= percentage  $\times$  total fatalities), it increased for *motorcyclist* deaths in June (658 [20] *versus* 631 [19]), *pedestrian* deaths in June (420 [20] *versus* 409 [19]), *pedalcyclist* deaths in May (83 [20] *versus* 68 [19]) and June (88 [20] *versus* 82 [19]), and in crashes *involving at least one large truck* in June (467 [20] *versus* 399 [19]).

<sup>2</sup> Colias, M. (2020, July 3). During covid-19 pandemic, the used-car lot is hot. *The Wall Street Journal*.

**Table 1: Relative Proportion of Fatalities by Roadway Function Class, Age Group, and Region for 2019–2020**

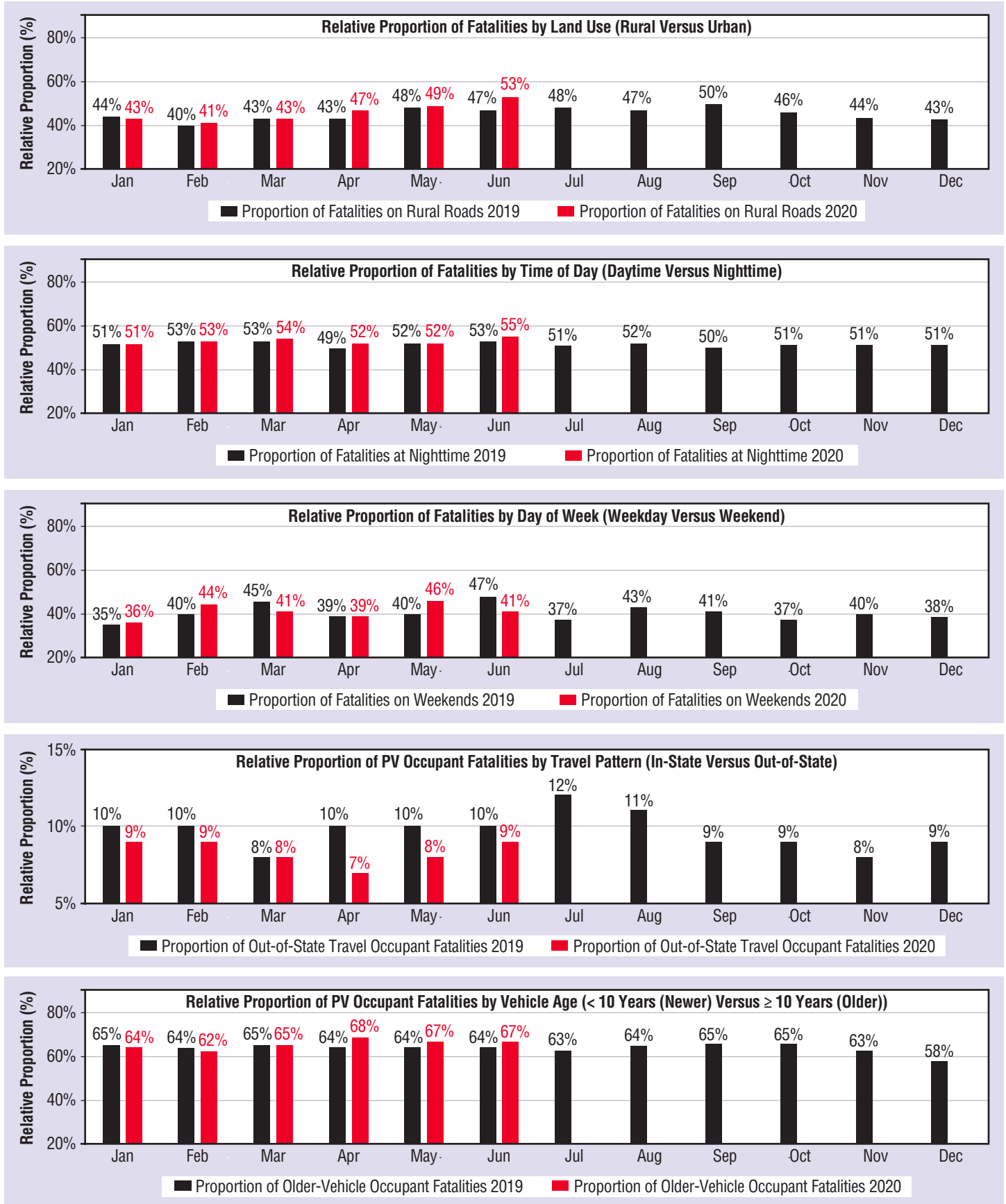
Total Fatalities	2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	2020	2,664	2,388	2,764	2,817	3,166	3,189	3,294	3,351	3,308	3,197	3,050	2,908
<b>Roadway Function Class</b>													
2019	Rural Interstate	6%	5%	6%	6%	6%	5%	5%	5%	5%	6%	5%	5%
	Urban Interstate	8%	8%	9%	8%	8%	7%	8%	6%	7%	7%	8%	7%
	Rural Arterial	21%	20%	21%	19%	<b>21%</b>	<b>22%</b>	22%	22%	22%	22%	21%	21%
	Urban Arterial	37%	40%	36%	<b>37%</b>	33%	<b>34%</b>	32%	35%	33%	36%	37%	37%
	Rural Collector/Local	17%	15%	<b>16%</b>	<b>18%</b>	<b>20%</b>	<b>20%</b>	21%	20%	22%	18%	17%	17%
	Urban Collector/Local	12%	12%	12%	12%	11%	<b>12%</b>	12%	12%	11%	11%	12%	13%
	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2020	Rural Interstate	5%	5%	6%	5%	6%	6%						
	Urban Interstate	6%	8%	9%	9%	8%	7%						
	Rural Arterial	20%	20%	20%	19%	<b>22%</b>	<b>25%</b>						
	Urban Arterial	40%	38%	37%	<b>31%</b>	33%	<b>30%</b>						
	Rural Collector/Local	17%	15%	<b>17%</b>	<b>22%</b>	<b>21%</b>	<b>22%</b>						
	Urban Collector/Local	12%	13%	11%	13%	11%	<b>10%</b>						
	Total	100%	100%	100%	100%	100%	100%						
<b>Age Group</b>													
2019	<16	4%	3%	3%	3%	4%	4%	4%	3%	3%	3%	4%	3%
	16-24	14%	16%	17%	<b>15%</b>	17%	<b>15%</b>	16%	16%	15%	15%	16%	16%
	25-34	18%	17%	<b>18%</b>	<b>19%</b>	<b>18%</b>	<b>18%</b>	19%	18%	19%	18%	17%	18%
	35-44	14%	14%	<b>14%</b>	15%	<b>14%</b>	14%	14%	14%	15%	15%	13%	14%
	45-54	14%	14%	12%	14%	13%	15%	14%	14%	14%	14%	14%	12%
	55-64	15%	15%	16%	13%	14%	15%	15%	15%	15%	15%	15%	16%
	65+	22%	21%	<b>21%</b>	<b>20%</b>	<b>19%</b>	<b>19%</b>	18%	19%	20%	20%	21%	21%
	Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
2020	<16	3%	3%	3%	3%	4%	3%						
	16-24	16%	16%	17%	<b>18%</b>	17%	<b>19%</b>						
	25-34	18%	19%	<b>19%</b>	<b>21%</b>	<b>19%</b>	<b>21%</b>						
	35-44	14%	14%	<b>15%</b>	15%	<b>15%</b>	14%						
	45-54	15%	13%	14%	13%	14%	14%						
	55-64	14%	14%	16%	16%	15%	14%						
	65+	20%	21%	<b>16%</b>	<b>14%</b>	<b>16%</b>	<b>14%</b>						
	Total	100%	100%	100%	100%	100%	100%						
<b>Region</b>													
2019	Region 1	2%	2%	2%	2%	1%	3%	3%	2%	2%	2%	2%	2%
	Region 2	8%	8%	6%	8%	8%	8%	9%	8%	8%	9%	6%	8%
	Region 3	10%	11%	10%	11%	<b>12%</b>	<b>11%</b>	10%	11%	12%	11%	10%	8%
	Region 4	23%	24%	25%	22%	22%	20%	19%	19%	20%	19%	22%	23%
	Region 5	11%	12%	12%	12%	13%	<b>14%</b>	15%	16%	14%	15%	13%	13%
	Region 6	17%	17%	17%	18%	16%	16%	17%	16%	16%	16%	17%	20%
	Region 7	6%	6%	6%	7%	7%	7%	7%	7%	7%	7%	6%	7%
	Region 8	3%	3%	4%	4%	4%	4%	5%	5%	5%	5%	4%	4%
	Region 9	15%	14%	13%	13%	13%	<b>13%</b>	12%	12%	12%	13%	15%	12%
	Region 10	4%	4%	4%	3%	4%	5%	5%	5%	4%	4%	4%	4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
2020	Region 1	2%	1%	2%	2%	2%	2%						
	Region 2	9%	7%	7%	7%	7%	9%						
	Region 3	11%	10%	12%	12%	<b>10%</b>	<b>9%</b>						
	Region 4	22%	24%	26%	22%	22%	<b>20%</b>						
	Region 5	11%	11%	11%	12%	13%	<b>16%</b>						
	Region 6	18%	18%	18%	19%	17%	16%						
	Region 7	6%	7%	6%	7%	6%	8%						
	Region 8	3%	3%	3%	5%	4%	4%						
	Region 9	14%	15%	12%	12%	14%	<b>11%</b>						
	Region 10	3%	3%	3%	3%	4%	5%						
Total	100%	100%	100%	100%	100%	100%							

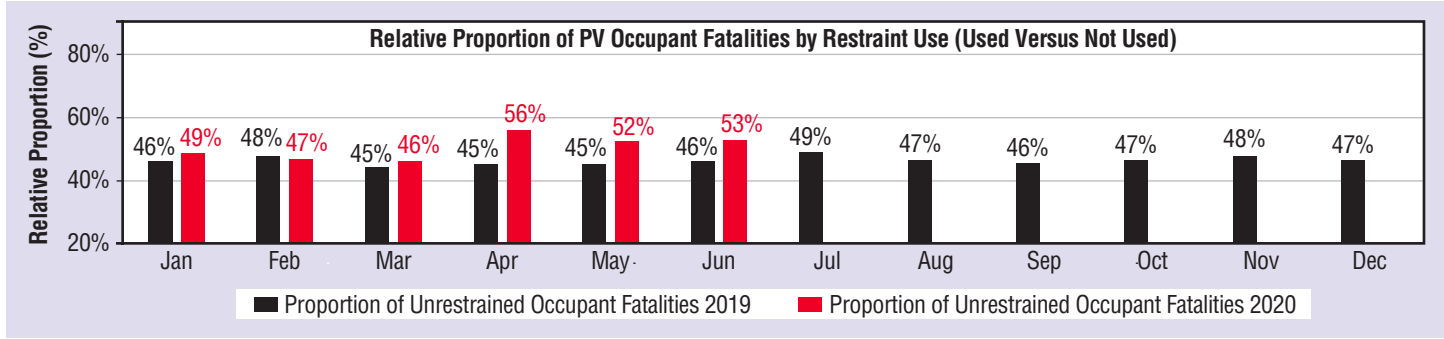
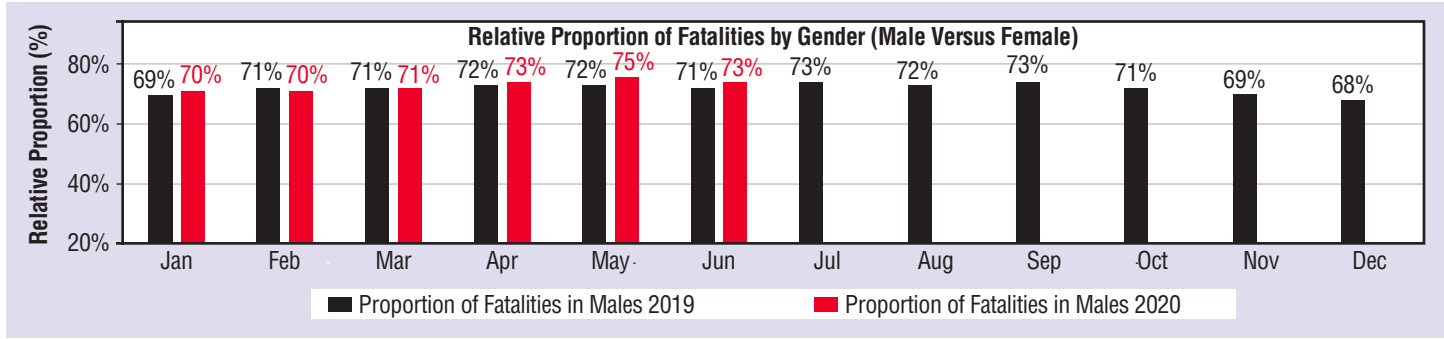
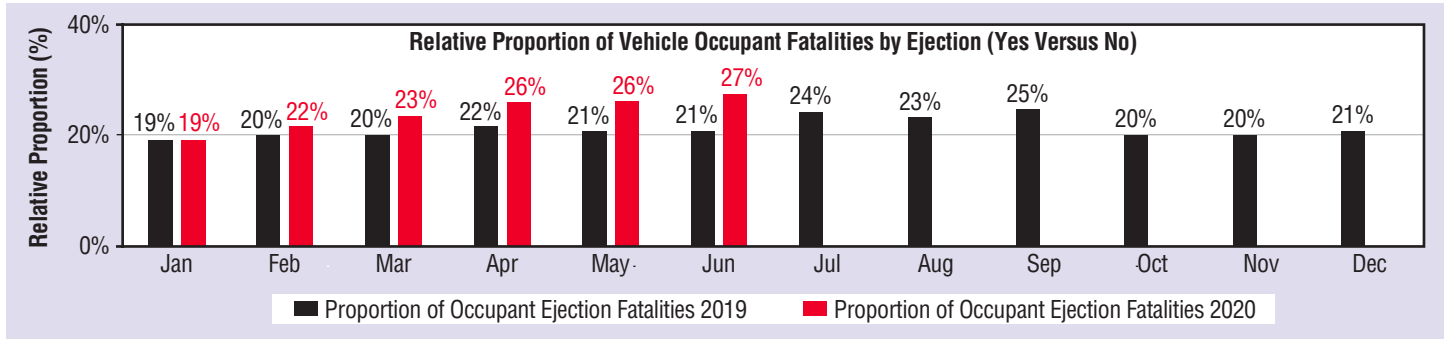
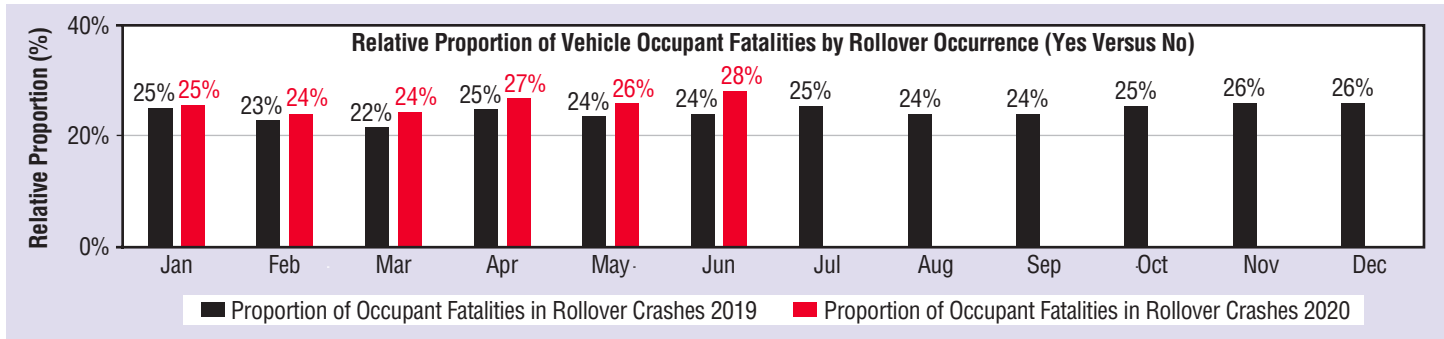
Note: Unknown cases are proportionally distributed.

Numbers in bold red/blue indicate the increase/decrease in the month in 2020 as compared to the corresponding month in 2019 (in bold black).

Source: 2019 FARS ARF, 2020 FARS Internal Data Mart and 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 for 2019–2020**





Note: Unknown cases are proportionally distributed.  
 Source: 2019 FARS ARF, 2020 FARS Internal Data Mart and Statistical Projection.

**Table 2: Fatalities by Crash and Person Type and Person's Race as a Percentage of Total Fatalities for 2019–2020**

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
<b>Total Fatalities</b>	2019	2,664	2,388	<b>2,764</b>	<b>2,817</b>	<b>2,817</b>	<b>3,189</b>	3,294	3,351	3,308	3,197	3,050	2,908		
	2020	2,650	2,660	<b>2,550</b>	<b>2,290</b>	<b>2,290</b>	<b>3,660</b>								
Single-Vehicle Crashes	2019	54%	57%	<b>53%</b>	<b>55%</b>	<b>54%</b>	<b>53%</b>	55%	55%	55%	55%	55%	55%		
	2020	56%	54%	<b>57%</b>	<b>61%</b>	<b>59%</b>	<b>56%</b>								
Roadway Departure Related	2019	49%	48%	49%	<b>50%</b>	<b>50%</b>	52%	51%	50%	50%	48%	48%	49%		
	2020	48%	47%	48%	<b>51%</b>	<b>51%</b>	51%								
Motorcyclist	2019	5%	7%	12%	15%	18%	<b>20%</b>	20%	20%	19%	12%	8%	6%		
	2020	6%	8%	12%	15%	17%	<b>18%</b>								
Pedestrian	2019	22%	22%	18%	<b>16%</b>	14%	<b>13%</b>	14%	15%	16%	19%	20%	21%		
	2020	23%	20%	18%	<b>13%</b>	14%	<b>11%</b>								
Pedalcyclist	2019	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%		
	2020	2%	1%	2%	2%	3%	2%								
Involving at Least One Large Truck	2019	15%	14%	<b>14%</b>	<b>14%</b>	<b>13%</b>	13%	14%	13%	15%	15%	14%	13%		
	2020	14%	13%	<b>11%</b>	<b>12%</b>	<b>11%</b>	13%								
Person's Race	White	2019	76%	77%	<b>79%</b>	<b>77%</b>	<b>76%</b>	<b>79%</b>	78%	79%	80%	77%	79%	77%	
		2020	75%	77%	<b>77%</b>	<b>75%</b>	<b>75%</b>	<b>76%</b>							
	African American	2019	17%	18%	17%	<b>18%</b>	19%	<b>15%</b>	17%	15%	16%	18%	16%	18%	
		2020	19%	18%	18%	<b>20%</b>	19%	<b>20%</b>							
	American Indian	2019	2%	1%	2%	1%	<b>2%</b>	2%	2%	2%	2%	2%	2%	2%	
		2020	1%	2%	1%	1%	<b>1%</b>	2%							
	Asian/Pac. Islander	2019	3%	3%	2%	<b>2%</b>	<b>2%</b>	<b>2%</b>	2%	2%	2%	2%	2%	2%	
		2020	2%	2%	2%	<b>1%</b>	<b>1%</b>	<b>1%</b>							
	All Other Races	2019	2%	2%	1%	2%	2%	2%	1%	2%	1%	2%	2%	1%	
		2020	3%	2%	2%	3%	3%	2%							
	Speeding-Related	Overall	2019	26%	27%	27%	<b>26%</b>	<b>27%</b>	<b>28%</b>	25%	26%	26%	25%	26%	26%
			2020	27%	25%	27%	<b>29%</b>	<b>30%</b>	<b>29%</b>						
Region 1		2019	44%	37%	35%	29%	35%	31%	30%	31%	23%	32%	29%	33%	
		2020	19%	42%	27%	39%	27%	27%							
Region 2		2019	31%	33%	32%	36%	36%	38%	32%	27%	29%	29%	28%	26%	
		2020	35%	29%	34%	39%	36%	36%							
Region 3		2019	21%	27%	28%	20%	23%	29%	21%	25%	22%	23%	24%	25%	
		2020	22%	17%	18%	20%	20%	30%							
Region 4		2019	18%	15%	17%	18%	20%	22%	17%	20%	20%	18%	16%	18%	
		2020	17%	18%	18%	24%	21%	22%							
Region 5		2019	32%	31%	33%	31%	31%	28%	27%	24%	28%	26%	31%	26%	
		2020	26%	26%	31%	32%	32%	29%							
Region 6		2019	24%	23%	<b>26%</b>	<b>26%</b>	<b>26%</b>	<b>23%</b>	24%	31%	31%	27%	30%	28%	
		2020	32%	32%	<b>34%</b>	<b>29%</b>	<b>37%</b>	<b>32%</b>							
Region 7		2019	34%	37%	<b>26%</b>	<b>31%</b>	<b>26%</b>	<b>25%</b>	29%	31%	24%	28%	28%	31%	
		2020	34%	28%	<b>28%</b>	<b>32%</b>	<b>37%</b>	<b>33%</b>							
Region 8		2019	31%	43%	34%	32%	37%	34%	26%	33%	25%	26%	39%	41%	
		2020	30%	27%	37%	34%	34%	35%							
Region 9		2019	32%	34%	32%	32%	34%	32%	27%	28%	28%	28%	30%	29%	
		2020	32%	30%	33%	33%	29%	28%							
Region 10	2019	28%	33%	35%	<b>28%</b>	<b>25%</b>	<b>33%</b>	33%	22%	29%	26%	26%	24%		
	2020	24%	32%	32%	<b>43%</b>	<b>35%</b>	<b>40%</b>								

Note: Unknown cases are proportionally distributed.

Numbers in bold red/blue indicate the increase/decrease in the month in 2020 as compared to the corresponding month in 2019 (in bold black).

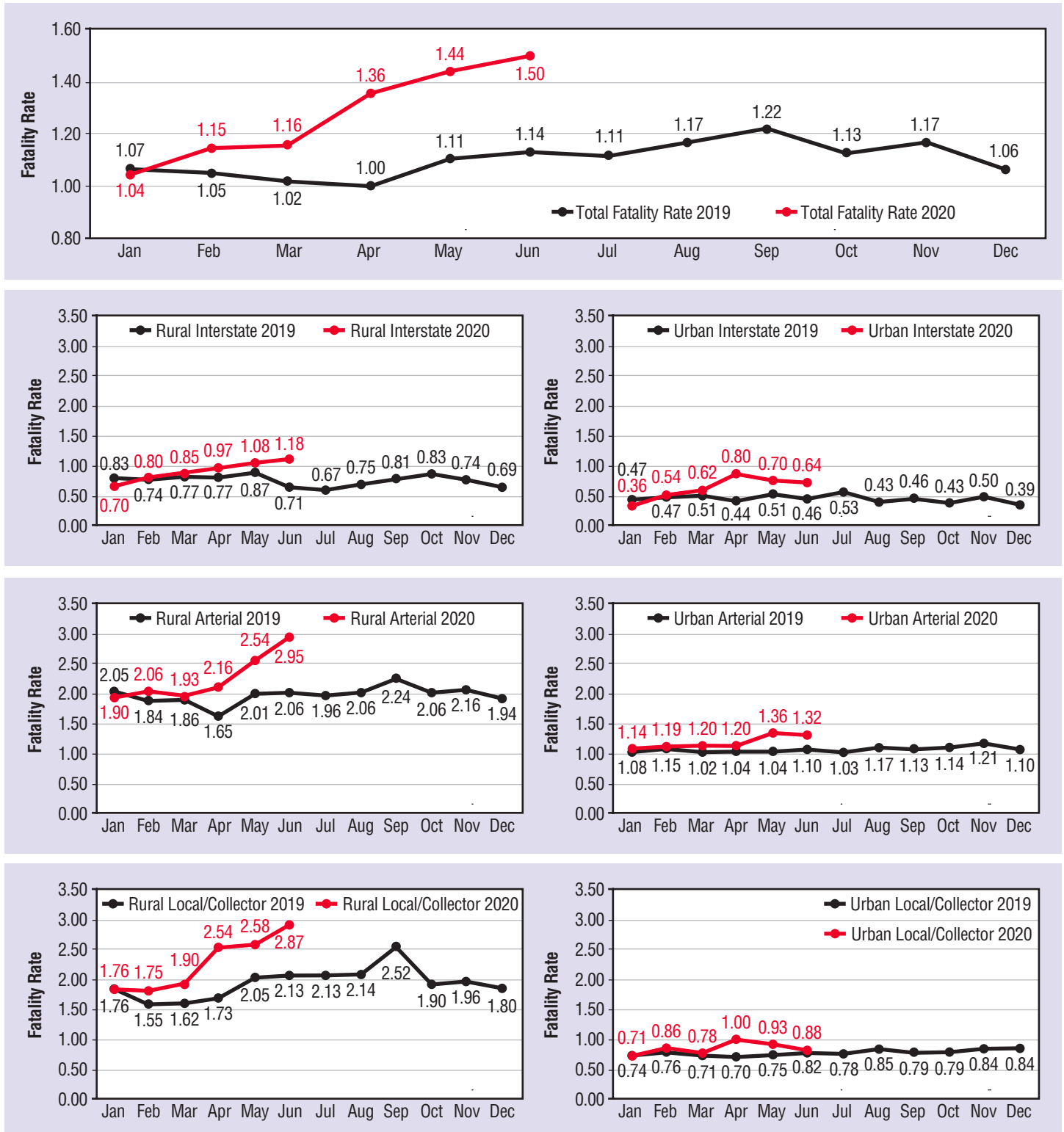
Source: 2019 FARS ARF, 2020 FARS Internal Data Mart and Statistical Projection.

### Fatality Rate

We break down the total fatality rate per 100 M VMT by roadway function class: rural *versus* urban interstate, arterial, local/collector/street. It shows that the increased trend of the total fatality rate per 100 M VMT from March

to June 2020 is mainly driven by the fatality rate per 100 M VMT on the *rural local/collector/street, arterial, and interstate roadways* (see Figure 2).

**Figure 2: Total Fatality Rate and Fatality Rate by Roadway Function Class for 2019–2020**



Note: Unknown cases are proportionally distributed.

Sources: FARS 2019 ARF, 2020 Internal Data Mart and Statistical Projection, FHWA August 2020 TVT for 2019 & 2020 VMT



## Limitations

In this study the crashes currently coded for 2020 into NHTSA's FARS 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, the COVID-19 pandemic-related lag to fatal crash investigation and reporting. Second, the traditional FARS identification and reporting lag issue. The estimates thus for the month and the sub-categories dominated by particular regions with higher inflation rate ( $IR_{mr}$ ) are more

likely to be affected. 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 2020 FARS ( $FARS_{20mr}$ ). These results may also change subject to the revision of the total estimated fatalities ( $F_{Est_{mr}}$ ) for 2020.



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