

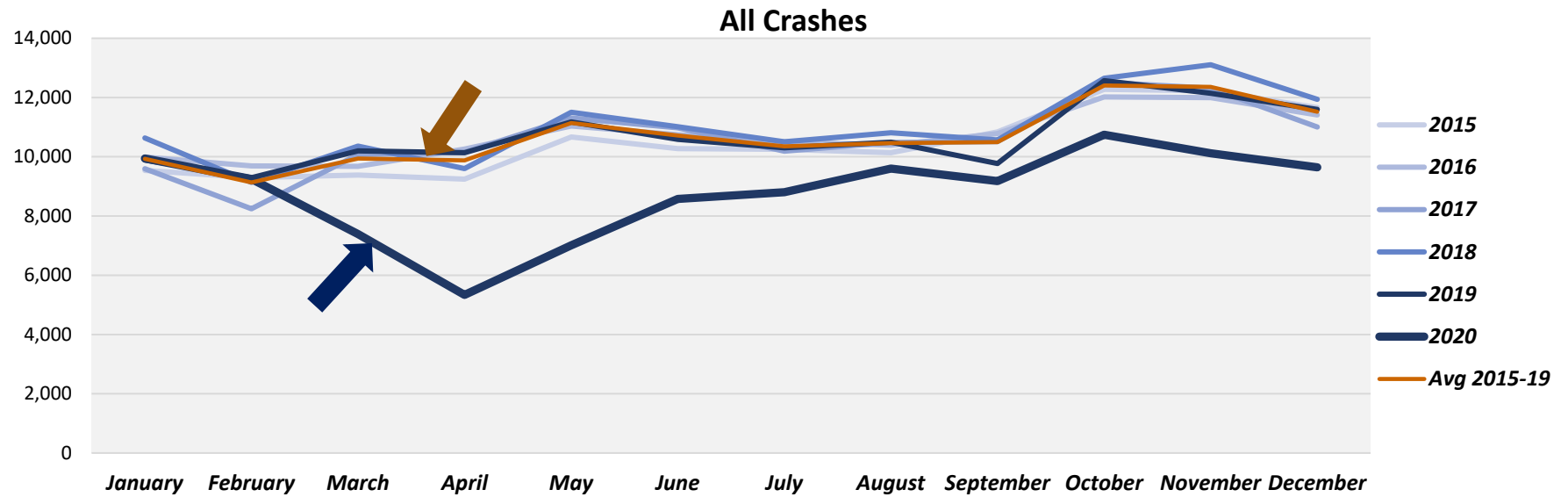
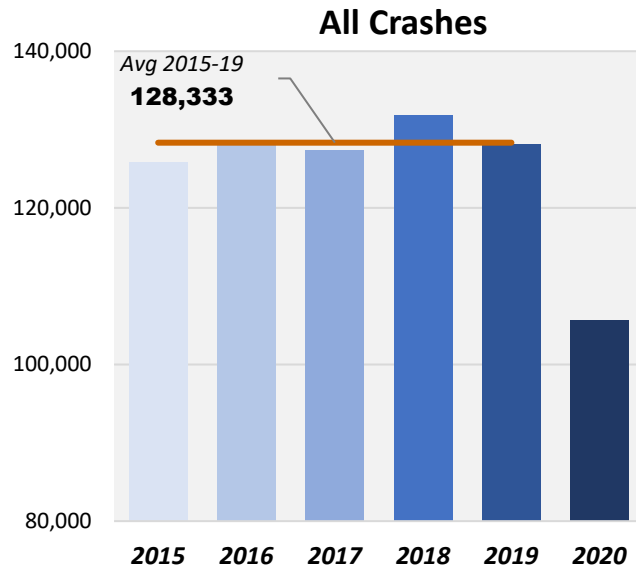
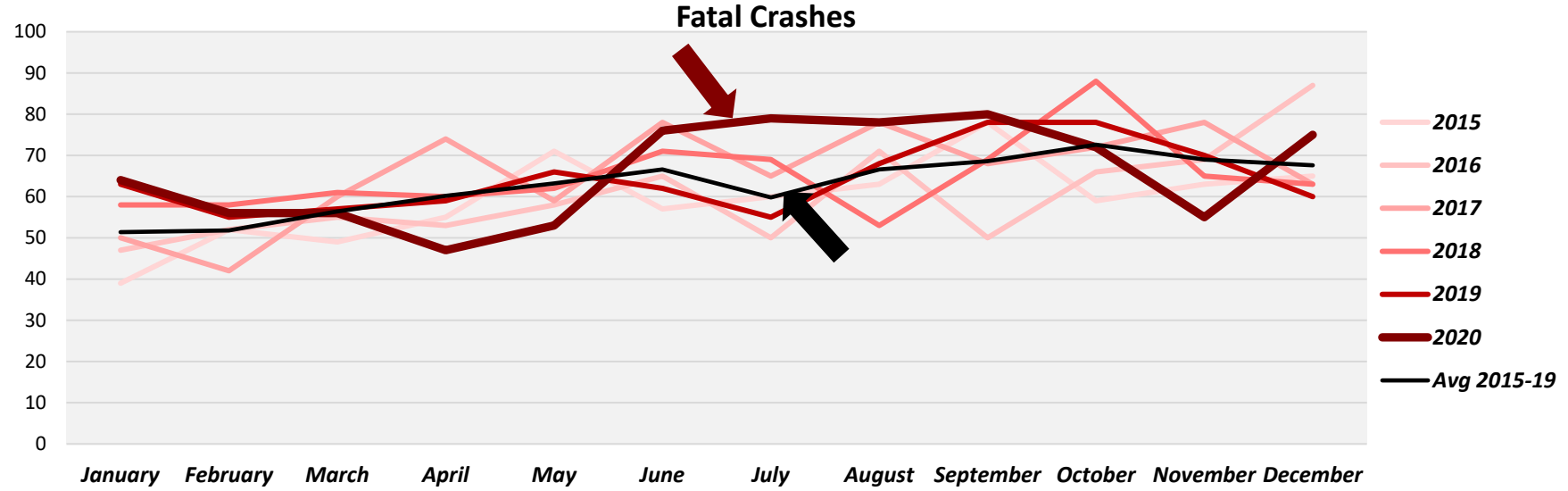
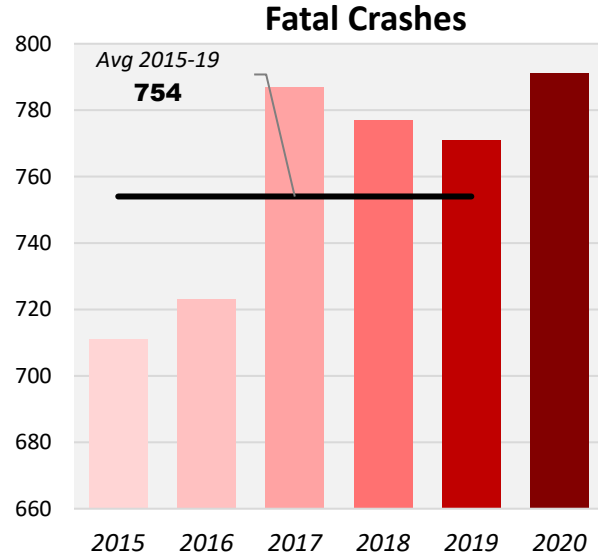
Crash Data to Problem ID: In Pursuit of Answers

Tuesday, July 20, 2021 9:30am – 11:00am

Dr. Kathleen Hancock, PE
Virginia Tech

Crash History

2015 – 2020

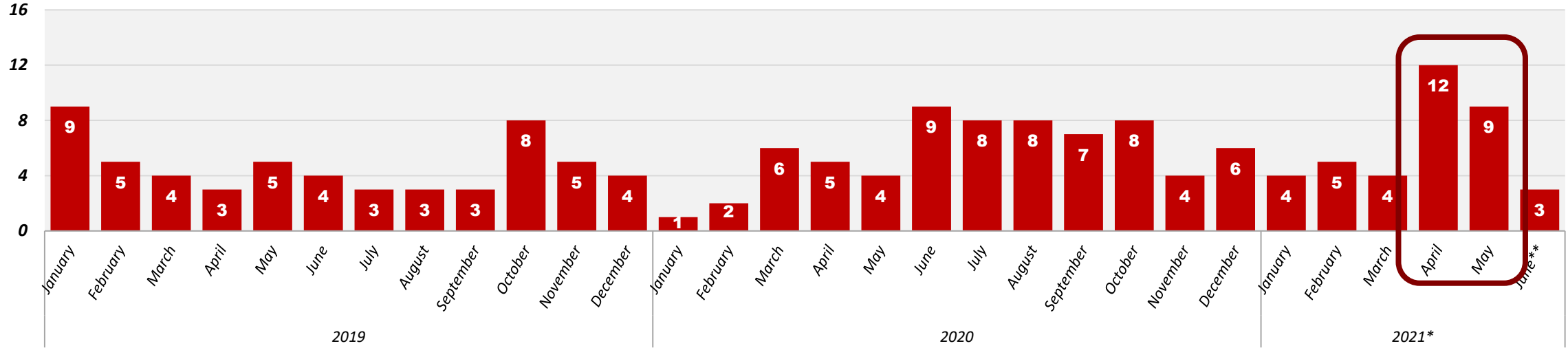


| | 2019 vs 2020 | | | 3-year Average vs 2020 <i>(2017-2019 vs 2020)</i> | | | 5-year Average vs 2020 <i>(2015-2019 vs 2020)</i> | | |
|--|----------------------|----------------|----------|--|----------|---------|--|--|--|
| | 2019 | 2020 | % | 2017-19 | % | 2015-19 | % | | |
| All Crashes | All Crashes | | | | | | | | |
| Vehicle Crashes | 128,168 | 105,600 | -17.6% ▼ | 129,121 | -18.2% ▼ | 128,333 | -17.7% ▼ | | |
| Alcohol-Related Crashes | 7,048 | 6,624 | -6.0% ▼ | 7,171 | -7.6% ▼ | 7,317 | -9.5% ▼ | | |
| Speed-Related Crashes | 24,396 | 22,085 | -9.5% ▼ | 24,595 | -10.2% ▼ | 24,643 | -10.4% ▼ | | |
| Crashes Involving Unrestrained Occupants | 3,665 | 3,720 | 1.5% ▲ | 3,710 | 0.3% ▲ | 3,807 | -2.3% ▼ | | |
| Crashes Involving Teen Drivers | 17,600 | 14,428 | -18.0% ▼ | 18,240 | -20.9% ▼ | 18,336 | -21.3% ▼ | | |
| Crashes Involving Motorcycles | 1,960 | 1,827 | -6.8% ▼ | 1,957 | -6.6% ▼ | 1,970 | -7.3% ▼ | | |
| Crashes Involving Pedestrians | 1,625 | 1,242 | -23.6% ▼ | 1,618 | -23.3% ▼ | 1,642 | -24.4% ▼ | | |
| Fatal Crashes | Fatal Crashes | | | | | | | | |
| Fatal Crashes | 771 | 791 | 2.6% ▲ | 778 | 1.6% ▲ | 754 | 4.9% ▲ | | |
| Alcohol-Related Fatal Crashes | 252 | 254 | 0.8% ▲ | 249 | 2.0% ▲ | 245 | 3.5% ▲ | | |
| Speed-Related Fatal Crashes | 316 | 369 | 16.8% ▲ | 309 | 19.5% ▲ | 304 | 21.3% ▲ | | |
| Fatal Crashes Involving Unrestrained Occupants | 339 | 386 | 13.9% ▲ | 334 | 15.6% ▲ | 335 | 15.1% ▲ | | |
| Crashes Involving Teen Drivers | 55 | 67 | 21.8% ▲ | 59 | 13.6% ▲ | 62 | 8.1% ▲ | | |
| Fatal Crashes Involving Motorcycles | 83 | 88 | 6.0% ▲ | 93 | -5.0% ▼ | 84 | 5.0% ▲ | | |
| Fatal Crashes Involving Pedestrians | 125 | 113 | -9.6% ▼ | 120 | -5.6% ▼ | 112 | 1.3% ▲ | | |
| Fatalities | Fatalities | | | | | | | | |
| Total Fatalities | 827 | 847 | 2.4% ▲ | 830 | 2.1% ▲ | 801 | 5.8% ▲ | | |
| Alcohol-Related Fatalities | 264 | 272 | 3.0% ▲ | 263 | 3.3% ▲ | 259 | 5.2% ▲ | | |
| Speed-Related Fatalities | 347 | 401 | 15.6% ▲ | 333 | 20.3% ▲ | 328 | 22.3% ▲ | | |
| Unrestrained Fatalities | 329 | 367 | 11.6% ▲ | 322 | 14.0% ▲ | 325 | 13.0% ▲ | | |
| Fatalities in Crashes Involving Teen Drivers | 65 | 72 | 10.8% ▲ | 64 | 12.5% ▲ | 66 | 8.8% ▲ | | |
| Motorcycle Fatalities | 89 | 87 | -2.2% ▼ | 95 | -8.1% ▼ | 85 | 2.1% ▲ | | |
| Pedestrians Fatalities | 124 | 114 | -8.1% ▼ | 120 | -5.3% ▼ | 112 | 1.8% ▲ | | |

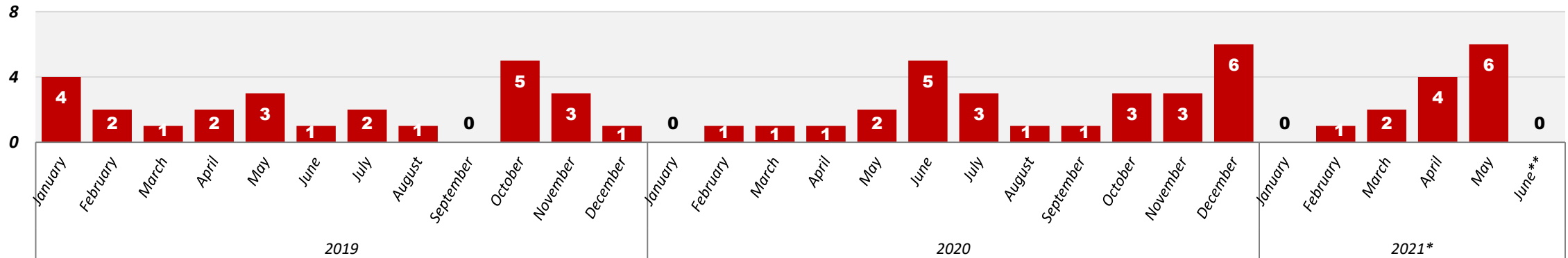
Fatal Crashes Involving Teen Drivers

2019 – 2021*

Teen Drivers Involved in Fatal Crashes



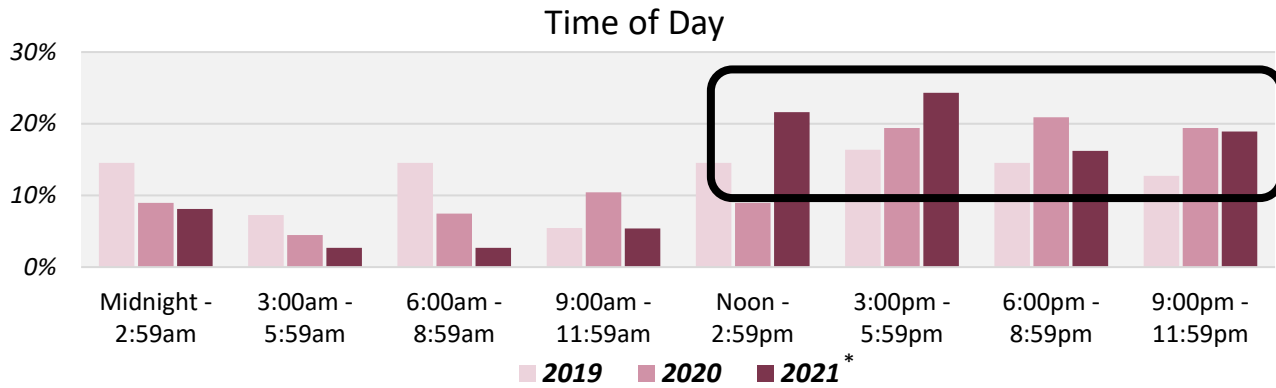
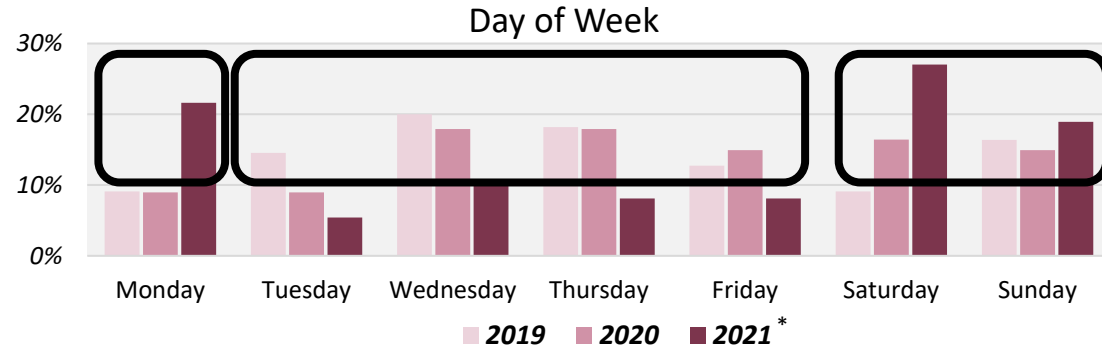
Teen Drivers Killed in Fatal Crashes



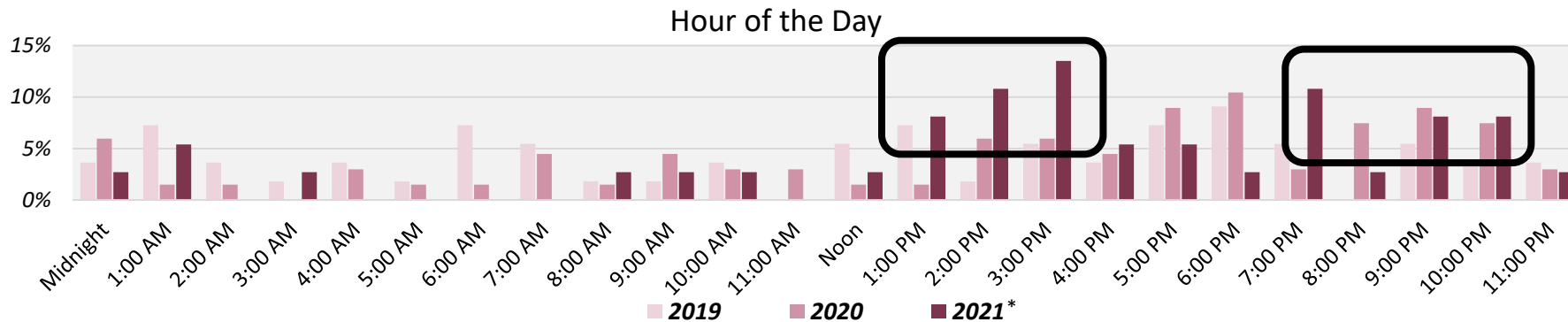
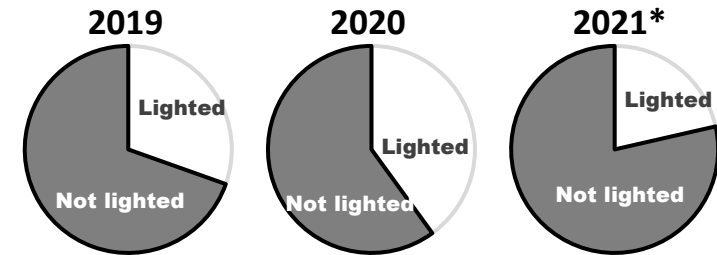
* 2021 information in TREDIS as of June 11 and is preliminary

When Fatal Crashes Involving Teens Occur

2019 – 2021*



Nighttime Light Conditions



* 2021 information in TREDIS as of June 11 and is preliminary

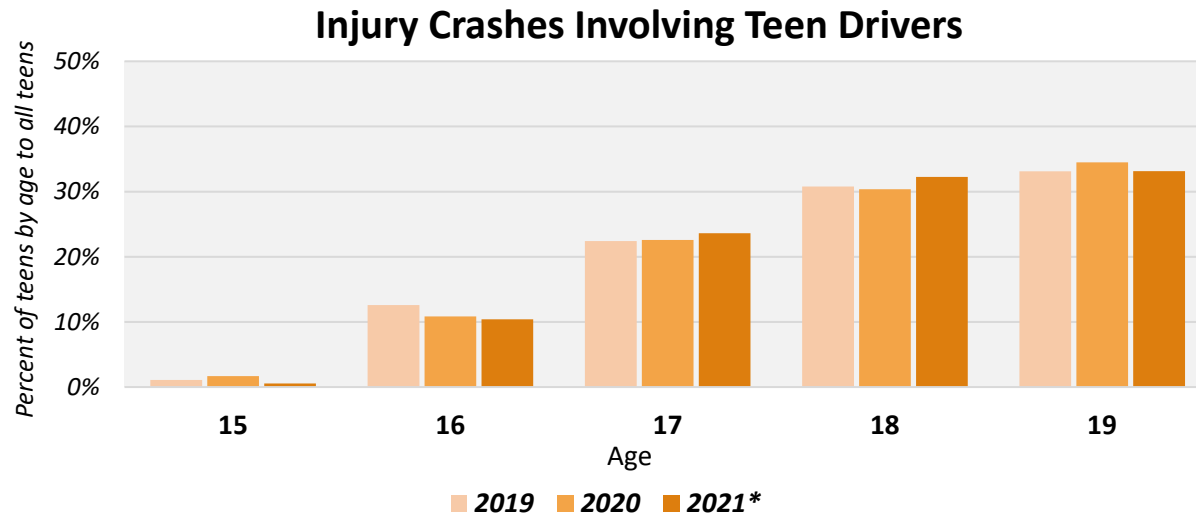
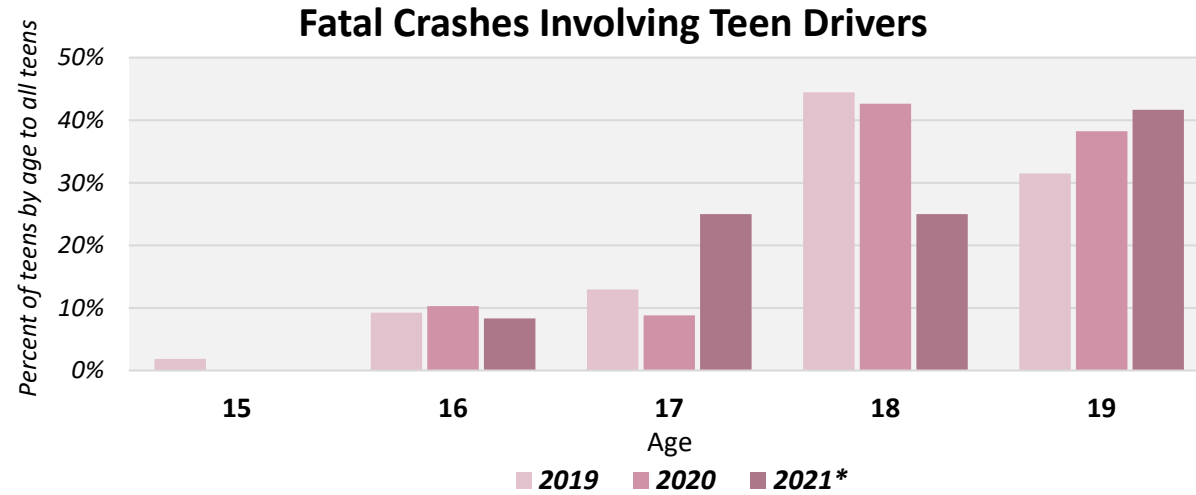
Crashes Involving Teen Drivers

2019 – 2021*

| | 2019 vs 2020 | | | 2020 vs 2021* (January 1 through May 31) | | |
|---|----------------------|--------|----------|---|-------|----------|
| | 2019 | 2020 | % | 2020 | 2021* | % |
| All Crashes Involving Teen Drivers | All Crashes | | | | | |
| Vehicle Crashes | 17,600 | 14,428 | -18.0% ▼ | 5,180 | 3,988 | -23.0% ▼ |
| Alcohol-Related Crashes | 359 | 380 | 5.8% ▲ | 143 | 92 | -35.7% ▼ |
| Speed-Related Crashes | 3,815 | 3,390 | -11.1% ▼ | 1,234 | 957 | -22.4% ▼ |
| Crashes Involving Unrestrained Occupants | 517 | 508 | -1.7% ▼ | 186 | 146 | -21.5% ▼ |
| Crashes Involving Motorcycles | 128 | 104 | -18.8% ▼ | 23 | 24 | 4.3% ▲ |
| Crashes Involving Pedestrians | 74 | 79 | 6.8% ▲ | 30 | 15 | -50.0% ▼ |
| Fatal Crashes Involving Teen Drivers | Fatal Crashes | | | | | |
| Fatal Crashes | 55 | 67 | 21.8% ▲ | 18 | 35 | 94.4% ▲ |
| Alcohol-Related Fatal Crashes | 8 | 14 | 75.0% ▲ | 2 | 1 | -50.0% ▼ |
| Speed-Related Fatal Crashes | 34 | 44 | 29.4% ▲ | 10 | 16 | 60.0% ▲ |
| Fatal Crashes Involving Unrestrained Occupants | 31 | 35 | 12.9% ▲ | 9 | 22 | 144.4% ▲ |
| Fatal Crashes Involving Motorcycles | 3 | 4 | 33.3% ▲ | 0 | 1 | 100.0% ▲ |
| Fatal Crashes Involving Pedestrians | 4 | 12 | 200.0% ▲ | 4 | 2 | -50.0% ▼ |
| Fatalities in Crashes Involving Teen Drivers | Fatalities | | | | | |
| Total Fatalities | 65 | 72 | 10.8% ▲ | 19 | 38 | 100.0% ▲ |
| Alcohol-Related Fatalities | 8 | 14 | 75.0% ▲ | 2 | 2 | 0.0% ↔ |
| Speed-Related Fatalities | 42 | 48 | 14.3% ▲ | 11 | 18 | 63.6% ▲ |
| Unrestrained Fatalities | 34 | 39 | 14.7% ▲ | 10 | 24 | 140.0% ▲ |
| Motorcycle Fatalities | 3 | 4 | 33.3% ▲ | 0 | 1 | 100.0% ▲ |
| Pedestrians Fatalities | 4 | 13 | 225.0% ▲ | 4 | 2 | -50.0% ▼ |

Age of Teen Drivers in Fatal and Injury Crashes

2019 – 2021*

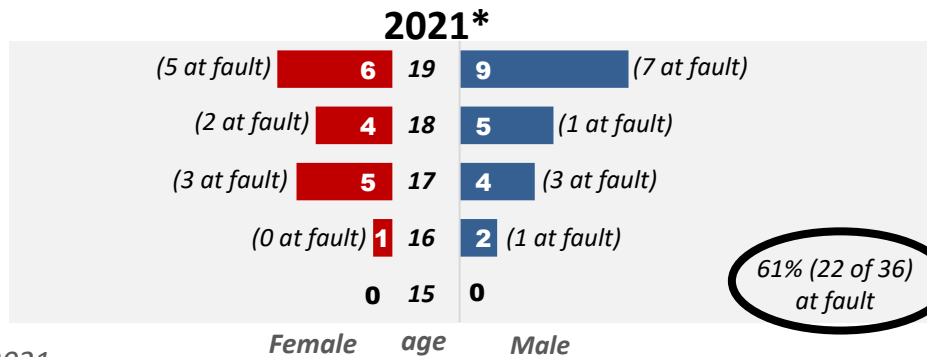
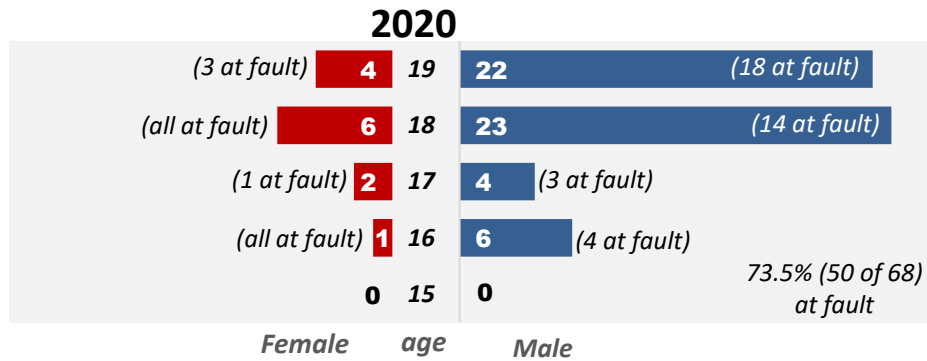
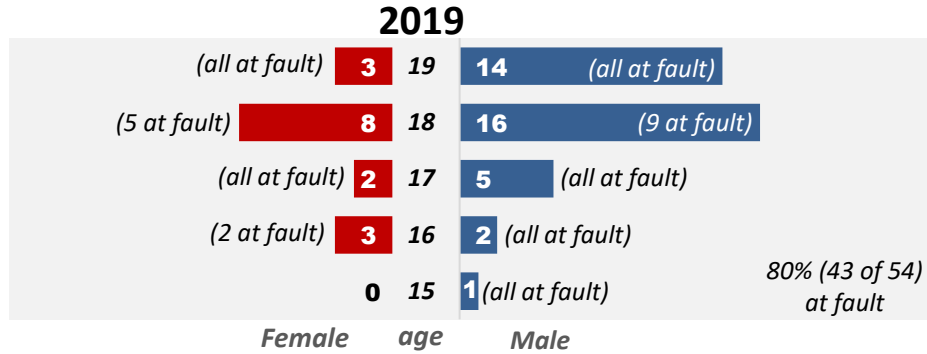


* 2021 information in TREDIS as of June 11 and is preliminary

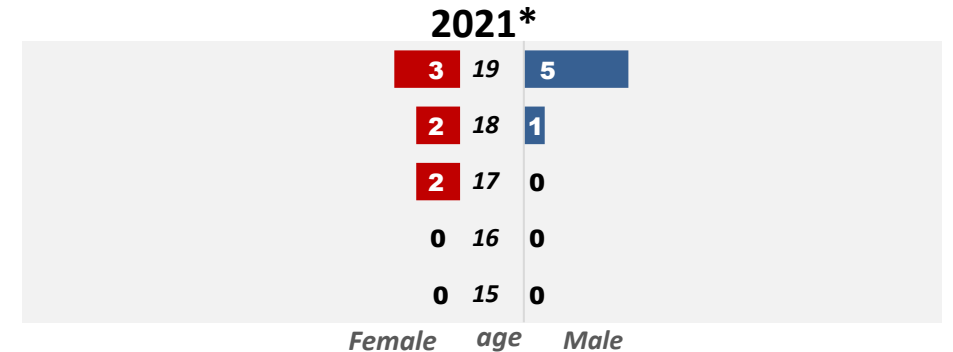
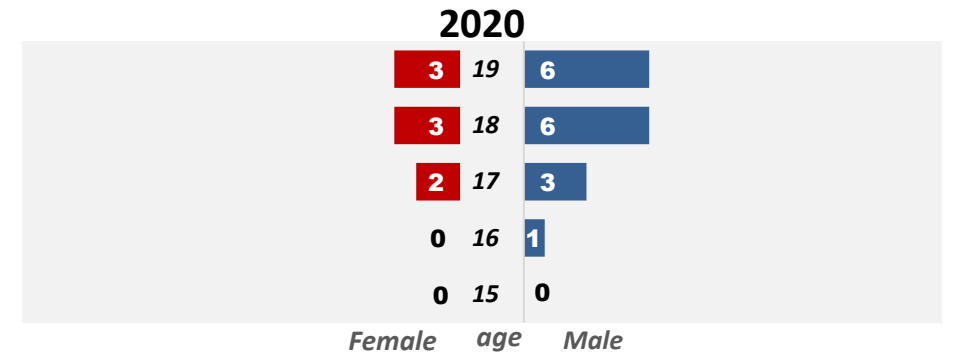
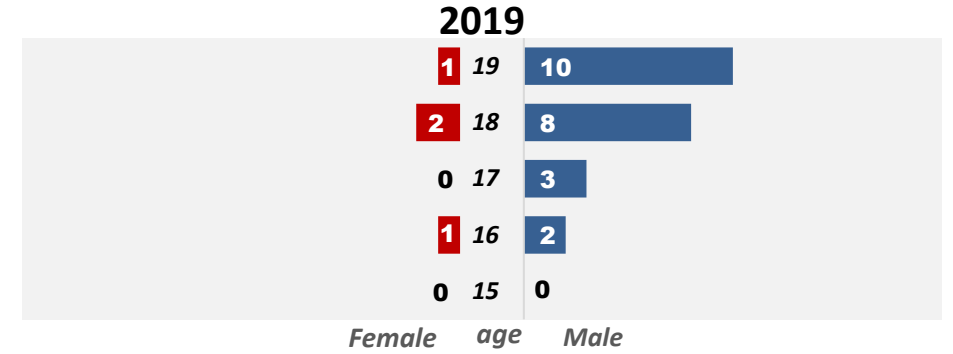
Age and Gender of Teen Drivers

2019 – 2021*

Teen Drivers In Fatal Crashes



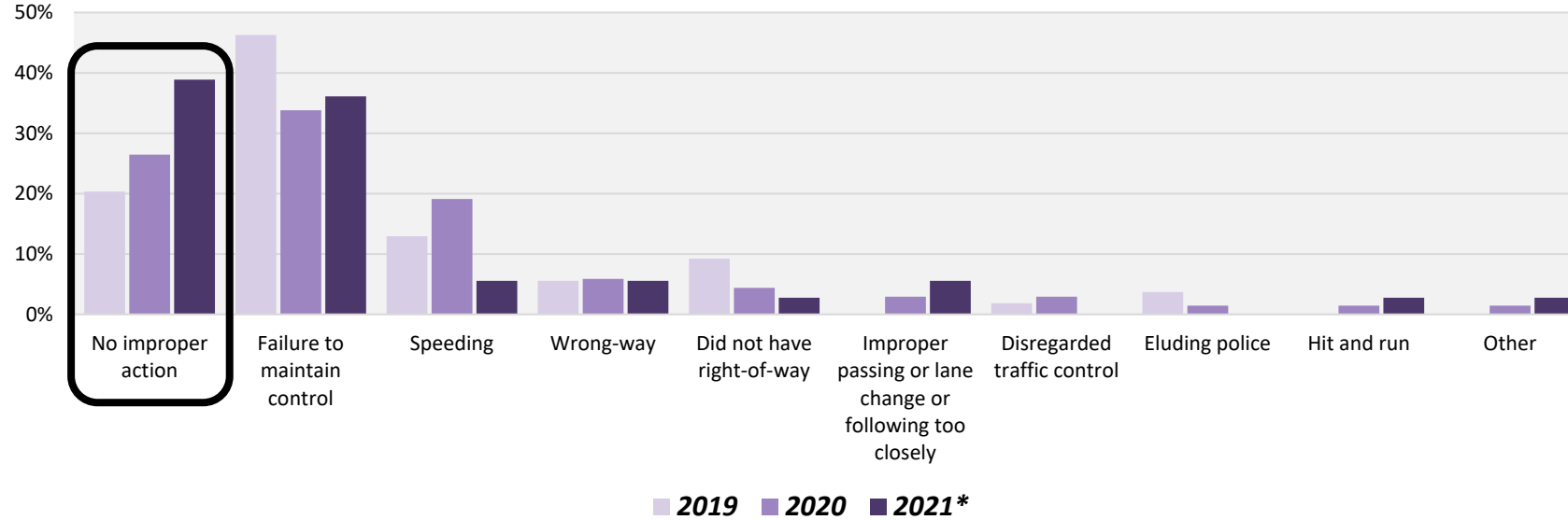
Teen Driver Fatalities



Teen Driver Actions in Fatal Crashes

2019 – 2021*

Action of Teen Drivers

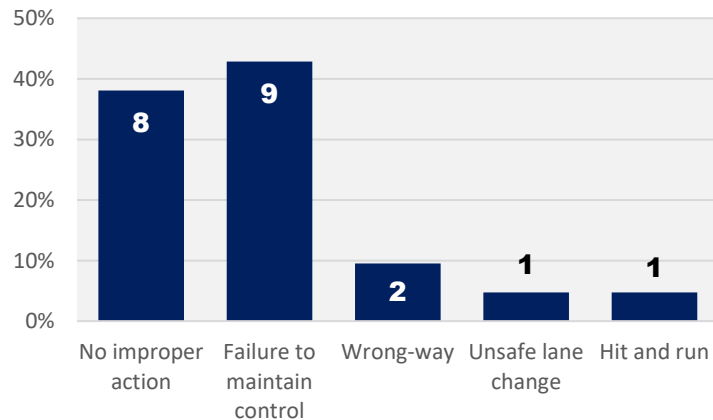


Driver Distraction (19 drivers)

| | 2019 | 2020 | 2021* |
|-------------------|-----------|----------|----------|
| Roadside incident | 0 | 1 | 0 |
| Fatigue | 3 | 0 | 1 |
| Passengers | 2 | 0 | 0 |
| Radio | 0 | 0 | 1 |
| Cell phone | 1 | 1 | 0 |
| Eyes not on road | 0 | 3 | 0 |
| Day dreaming | 1 | 0 | 0 |
| Other | 3 | 1 | 1 |
| TOTAL | 10 | 6 | 3 |

Of 8 drivers with **No Improper Action** by the teen driver:

- 1 crash involved a bicycle
- 3 crashes involved speeding by other drivers

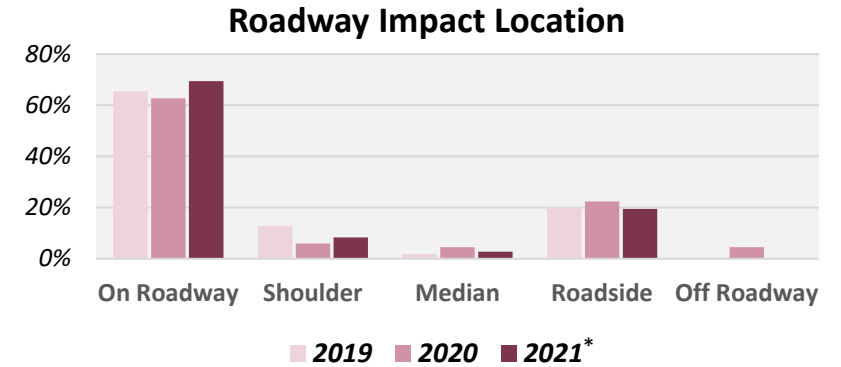
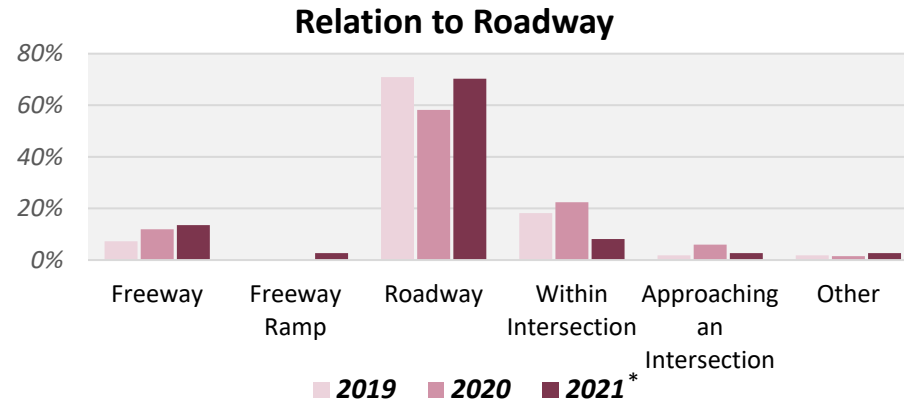
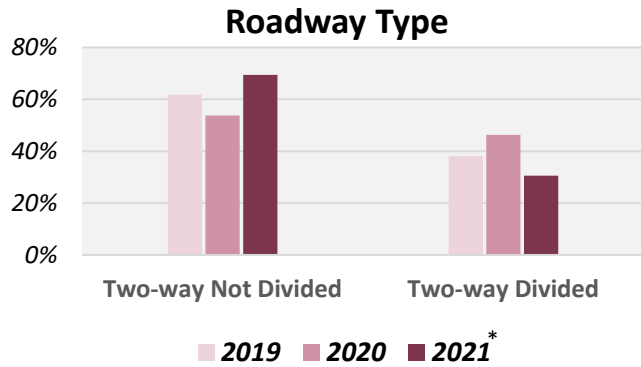
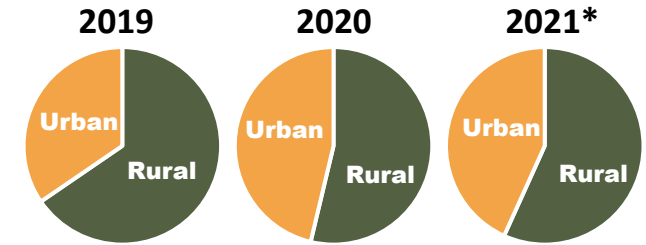
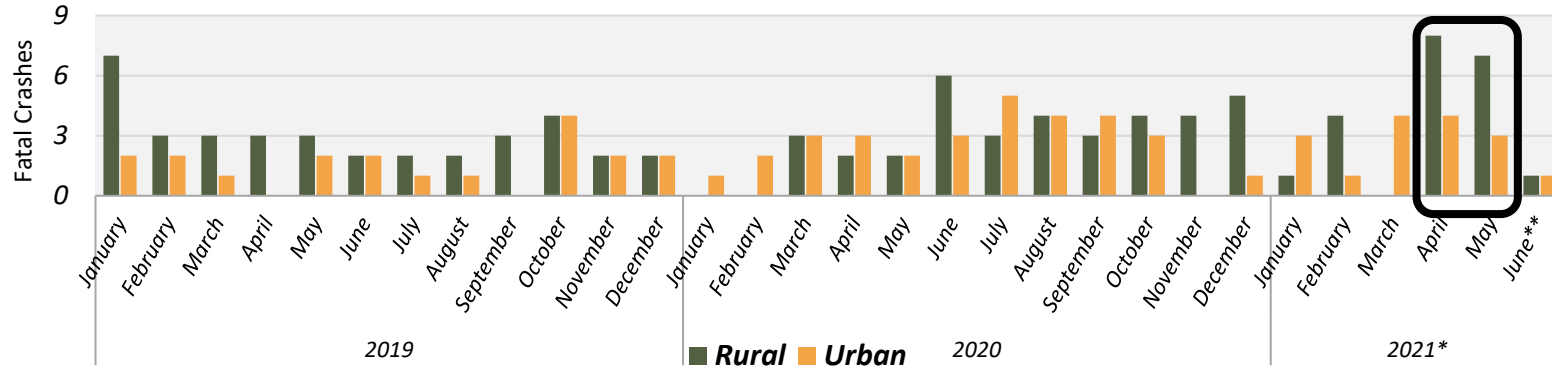


April and May 2021*

* 2021 information in TREDs as of June 11 and is preliminary

Location of Fatal Crashes Involving Teen Drivers 2019 – 2021*

Fatal Crashes Involving Teen Drivers



Adding location

