What are the impacts of COVID-19 to traffic safety?

An examination of fatal crashes for March through May 28\textsuperscript{th}, shows the difference in fatal crashes during the same time period last year. This data is based on preliminary information provided by officers at the time of the crash and is subject to change once the final investigation is completed.

<table>
<thead>
<tr>
<th>Statewide</th>
<th>2019</th>
<th>2020</th>
<th>Difference</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bikes</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>12</td>
<td>7</td>
<td>-5</td>
<td>-42%</td>
</tr>
<tr>
<td>Motorcycles</td>
<td>21</td>
<td>22</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Over 65</td>
<td>28</td>
<td>24</td>
<td>-4</td>
<td>-14%</td>
</tr>
<tr>
<td>Under 19</td>
<td>10</td>
<td>13</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>DUI</td>
<td>32</td>
<td>20</td>
<td>-12</td>
<td>-38%</td>
</tr>
<tr>
<td>Distracted</td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>150%</td>
</tr>
<tr>
<td>Speed</td>
<td>17</td>
<td>18</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Total Fatal Crashes</td>
<td>109</td>
<td>82</td>
<td>-27</td>
<td>-25%</td>
</tr>
</tbody>
</table>

*The DUI data is what was available at the time of publication. 2019 toxicology was used for 2019 data and includes positive tests for alcohol or drugs. 2020 DUI is based on officer opinion and is anticipated to increase when toxicology results are available later this year.*
This analysis looked at a sampling of Interstate volumes for comparison and does not reflect the full statewide AADT volumes. The percent change shows how the recent drop in volumes compares to changes in the crashes by severity.

Crashes are likely under reported due to delays in investigations and submission or reports during this time and should be considered preliminary. However, it is interesting to note that the drop in fatal crashes has not matched the drop in traffic volumes.

**Potential Impacting Criteria:**

1. **Law Enforcement has been on “Accident Alert.”**

   A number of law enforcement agencies are on or have been on accident alert in response to COVID-19. While law enforcement agencies are on accident alert, individuals involved in a crash are directed to submit a crash report online. These reports, often referred to as “counter reports” are not included in CDOT’s crash data because an official police report is not filled out.

   **Impacts:**
   
   a. Crash number or reports that include property damage only crash numbers may not reflect the actual number of crashes.
b. Counter report data is only available to CDOT as monthly totals and no other fields including location information is available for analysis.

What does "Accident Alert" mean?

"ACCIDENT ALERT" is defined as those times when weather conditions are so severe that State Troopers and Police Officers are unable to respond to the large volume of motor vehicle crashes.

While accident alert is in effect, Troopers and or Police Officers will only respond if the following circumstances exist:

- Vehicles are disabled due to damage.
- Accident involves a fatality or an injury requiring medical attention.
- Alcohol or drugs are involved.
- Accident is an alleged hit and run.
- There is damage to public property other than wildlife, i.e. a highway guardrail.

From the Colorado State Patrol’s website:

https://www.colorado.gov/pacific/csp/crash-information

2. Non-essential staff, such as records clerks, may be working remotely. This results in delayed submission of records to the Department of Revenue and the Colorado Department of Transportation.

Impacts:
   a. Reported crash numbers may increase as additional records are received.
   b. Thorough analysis of the impacts of COVID-19 may not be possible for some time.

3. Crash data is created by law enforcement officers in the field, and once the investigation is completed, these records are submitted to the Department of Revenue, both electronically and on paper. Pre-COVID-19, CDOT received approximately 90% of the crash records within three months.

Impacts:
Due to delays in submission of crash records, the full crash picture may not be available until later this year or even longer.
4. Vehicle Miles Traveled (VMT) decreased significantly as people remained home, reducing traffic volumes and the number of crashes.

Impacts:
   a. Crash rates calculated now from VMT may vary.

It is unclear at this time what the long term impacts of COVID-19 will be on traffic volumes and the number of crashes. Changes in remote work models, businesses reducing or changing staffing models may impact traffic volumes and crash numbers, some drivers may choose driving over using public transportation increasing traffic volumes during certain times, and other may choose to use other forms of transportation such as bicycles, e-bikes, scooters and other micro-mobility options changing traffic patterns further. CDOT continues to analyze the available data and monitor the changing situation.

Please feel free to reach out to the Crash Data Intelligence Unit team with any data requests or questions.

Alisa Babler, PE
alisa.babler@state.co.us
M: 720-347-8050

BoYan Quinn, PE
BoYan.Quinn@state.co.us

Paul Clayton
Paul.Clayton@state.co.us