Commercial Motor Vehicles: Alabama Crash Trends

The 2022 Southeast CMV Safety Research Summit

Jesse Norris - Center for Advanced Public Safety (CAPS)
Using Safety Portal: Agenda for CMV and Rural CMV Crashes

• Overview of crashes and CMV involved crashes
  • Notable trends

• Safety Portal first look
  • CMV rural crashes

• Safety Portal closer look
  • CMV rural fatal crashes

• Incorporating Excel
Crash Trends

2019-2021: Yearly Averages
• Crashes: 148,491
• Fatal Crashes: 864
• Serious Injury Crashes: 3,794

2021 (+ or - Average)
• Crashes: 152,088 (2.4%)
• Fatal Crashes: 888 (2.8%)
• Serious Injury Crashes: (2.7%)
CMV Trends

2019-2021: CMV Yearly Averages
• Crashes: 8,398
• Fatal Crashes: 105
• Serious Injury Crashes: 257

CMV 2021 (+ or - Average)
• Crashes: 8,640 (2.9%)
• Fatal Crashes: 99 (6.0%)
• Serious Injury Crashes: 260 (1.2%)
CMV Summary Trends

2019-2021: CMV Crash Averages
• 5.7% of all crashes
• 12.2% of fatal crashes
• 5.3% of serious injury crashes

2021 CMV Crash Trends
• 2.9% crash increase
• 6% fatal crash decrease
• 6.8% serious injury crash increase
CMV Summary Trends

% CMV Crashes 2019-2021
2019-2021 Safety Portal
CMV Rural Crash Trends

2019-2021: CMV Crash Averages
• 8.7% of all crashes
• 13.9% of fatal crashes
• 7.8% of serious injury crashes

2021 CMV Crash Trends
• 8.5% crash increase
• 2.8% fatal crash decrease
• 0.2% serious injury crash increase
2019-2021 CMV Rural Summary Trends

% CMV Crashes 2019-2021

- Fatal Injury: 14.0%
- Suspected Serious Injury: 8.0%
- Suspected Minor Injury: 8.0%
- Possible Injury: 6.0%
- Property Damage Only: 9.0%
- Totals: 11.0%

[Bar chart showing percentage breakdown from 2019]
2019-2021 Safety Portal: Rural CMV Crashes

- Improper Load: Yes - CU is a CMV (5,796), No - CU is Not CMV (3,278), CU is Not a Vehicle (14), CU is Unknown (226)

- Defective Equipment: E Fatigued/Drunk, E Swerved to Avoid Vehicle, Driving too Fast for Conditions

- Highway Classifications
  - Interstate: 3,500
  - Federal: 1,700
  - State: 2,900
  - County: 1,300
  - Municipal: 900
  - Private Property: 600

- E Manner of Crash: Non-Collision, Single Vehicle Crash (all types), Head-on (front to front), Angle (front to side)

- Connected to: i20

- Filter: Rural, CMV Involved
2019-2021 Safety Portal: Rural CMV Crashes

**Value**
- Yes - CU is a CMV: 68
- No - CU is Not CMV: 140
- CU is Not a Vehicle: 6
- CU is Unknown: 2

**Highway Classifications**

**AL Crash -- E Manner of Crash**

- Interstate
- State
- County

**AL Crash -- Highway Classifications**

- Crash Severity: Categories: Fatal Injury
2019-2021 CMV Rural Crash Trends

2019-2021 Rural CMV Crashes: Primary Contributing Circumstance

- Traveling Wrong Way/Wrong Side
- E Distacted By Electronic Communication Device
- E Ran Stop Sign
- DUI
- Over Speed Limit
- E Crossed Centerline
- E Failed To Yield Right-Of-Way From Stop Sign
- Driving Too Fast For Conditions
- Unseen Object/Person/Vehicle
- Improper Lane Change/Use

Rural Fatal | Rural
2019-2021 CMV Rural Crash Trends

2019-2021 Rural CMV Crashes: Causal Unit

- CU IS NOT A VEHICLE
- CU IS UNKNOWN
- NO - CU IS NOT CMV
- YES - CU IS A CMV

Rural Fatal | Rural
2019-2021 CMV Rural Crash Trends

2019-2021 Rural CMV Crashes:
Manner of Crash
2019-2021 CMV Rural Crash Trends

2019-2021 Rural CMV Crashes: Highway Classification

- Private Property
- Municipal
- County
- State
- Federal
- Interstate

Rural Fatal | Rural

0.0% | 10.0% | 20.0% | 30.0% | 40.0% | 50.0% | 60.0%
### 2019-2021 Rural CMV Crashes: Highway Classification

<table>
<thead>
<tr>
<th>Highway Classification</th>
<th>Rural</th>
<th>Rural Fatal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>48.5%</td>
<td>32.9%</td>
</tr>
<tr>
<td>Federal</td>
<td>0.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>State</td>
<td>34.3%</td>
<td>34.2%</td>
</tr>
<tr>
<td>County</td>
<td>16.7%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Municipal</td>
<td>0.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Private Property</td>
<td>0.1%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### Values Counts

- Interstate: 4515, 0.484754
- Federal: 17, 0.001825
- State: 3193, 0.342817
- County: 1554, 0.166846
- Municipal: 24, 0.002577
- Private Property: 11, 0.001118

<table>
<thead>
<tr>
<th>Values</th>
<th>Counts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>216</td>
</tr>
<tr>
<td>Federal</td>
<td>0</td>
</tr>
<tr>
<td>State</td>
<td>117</td>
</tr>
<tr>
<td>County</td>
<td>28</td>
</tr>
<tr>
<td>Municipal</td>
<td>0</td>
</tr>
<tr>
<td>Private Property</td>
<td>0</td>
</tr>
</tbody>
</table>
The Safety Portal is where I go to get all my data.

Thank You ATI, CAPS, UA, and Rhonda

• Questions or Comments
• Come by the CAPS booth
  • Say hello 😊