GHSA Analysis of Non-motorist Safety Issues

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Pedestrian Spotlight Reports

• Provide early look at pedestrian fatality count for previous year, months before FARS data released in Fall

• Data analysis based on preliminary fatality counts provided by all State Highway Safety Offices (SHSOs)

• Report includes some basic analysis of FARS data

• Mathematical adjustments made to preliminary data based on historical underreporting
Historical Pedestrian Fatality Data: U.S. 1979-2019
2020 Projection – Number of Pedestrian Deaths

- GHSA projects 6,721 pedestrian fatalities in 2020
- By comparison, 6,412 pedestrian fatalities in 2019
Projected Change in Ped Fatality Counts: 2019 vs. 2020

Number of States

<table>
<thead>
<tr>
<th>Increase</th>
<th>Decrease</th>
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<td>32</td>
<td>19</td>
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• 2020 experienced large (13.2%) drop in VMT due to COVID 19 pandemic.

• Thus, on mileage basis, GHSA projects 21% increase in pedestrian fatality rate per 1B VMT compared with 2019.

• Larger than any annual percent increase ever recorded since FARS established in 1975.
Annual % Change in Ped Fatality Rate per 1B VMT (since availability of FARS data in 1975)

* 2020 projected
Perennial Fatal Pedestrian Crash Factors

**Light Condition**
- Dark, 75%
- Daylight, 20%
- Dawn/Dusk, 4%

**Relation to Intersection**
- Not At Intersection, 74%
- At Intersection, 25%
- Other/Unknown, 1%

2019 FARS Data
Number of Ped Fatalities by Light Condition, 2010-2019

Daylight (54% increase)

Dark (16% increase)
Perennial Fatal Pedestrian Crash Factors

Percent of Pedestrians Ages 16+ and Drivers Involved in Fatal Pedestrian Crashes with Known BACs $\geq 0.08$

- Pedestrians: 32%
- Drivers: 13%

Number of Pedestrian Fatalities with Known BAC $\geq 0.08$ by Age

- <21: 42
- 21-24: 125
- 25-34: 382
- 35-44: 359
- 45-54: 397
- 55-64: 423
- 65-74: 143
- 75+: 60

2019 FARS Data
Number of Pedestrians Killed in Single-Vehicle Crashes by Vehicle Type, 2019

- **Passenger Cars**: 2,149
- **SUVs**: 1,071
- **Pickups**: 929
- **Vans**: 280
- **Large Trucks**: 354
- **Buses**: 51
- **Other/Unknown**: 569
A Right to the Road

• Analyzed 1975-2015 FARS bicycle crash data to identify trends associated with who is being killed, when/where crashes are more likely to occur, and why.

Figure 1: U.S. Bicyclist Fatalities, 1975-2015
Diverging Trends in Frequency of Bicyclist Fatalities by Age

Figure 2: U.S. Bicyclist Fatalities by Age, 1975-2015

- Over 20 years old: + 240%
- Age 20 and under: - 88%
Average Age of US Bicyclist Fatalities by Age: 2004-2015
US Bicyclist Fatalities by Time of Day: 2015

- Mid - 6 AM: 12%
- 6 AM - Noon: 20%
- Noon - 6 PM: 28%
- 6 PM - Mid: 41%
US Bicyclist Fatalities by Helmet Use: 2015

- Non-Helmet: 54%
- Helmet: 29%
- Unknown: 17%
Analysis of Traffic Fatalities by Race and Ethnicity

• Reviewed prior research and data to assess impact of fatal traffic crashes on Black, Indigenous and People of Color (BIPOC).

• Also identified actions states and communities can take to advance equity in traffic safety.

• Part of broader GHSA effort to help achieve racial justice and equity.
Previous Research

• When measured against all causes of death, MV crashes account for disproportionately large percentages of fatalities for BIPOC populations, particularly among Native American and Hispanic persons.

• Black children ages 4–15: highest rates of non-motorist fatalities as a percentage of all MV fatalities.

• Native American/Alaskan Native persons: highest annualized, age-adjusted traffic-related pedestrian death rates.

• Native American persons: highest percentage of alcohol-involved driver, passenger and pedestrian fatalities.

• Census tracts where low-income and BIPOC populations are more concentrated: measurably higher levels of traffic, and higher speed arterials.
Key Findings from Analysis of 2015-2019 FARS Data:

- Compared with all other racial groups, American Indian/Alaskan Native persons: substantially higher per-capita rate of total traffic fatalities.

- Black persons: second highest rate of total traffic deaths; this was true for total traffic deaths, pedestrian traffic deaths, and bicyclist traffic deaths.

- Asian persons: lowest per-capita rate of involvement for virtually all categories of traffic deaths.

- White persons: generally have lower traffic fatality rates than BIPOC populations.
Pedestrian Traffic Deaths per 100K Population by Race

Figure 7: Pedestrian Traffic Deaths per 100,000 Population, U.S. 2015-2019
Bicyclist Traffic Deaths per 100K Population by Race

Figure 9: Bicyclist Traffic Deaths per 100,000 Population, U.S. 2015-2019
How Can We Reduce Non-motorist Fatalities and Injuries?

• Five E Approach:

- Engineering
- Enforcement
- Education
- EMS
- Equity
Measures to Reduce Pedestrian Fatalities and Injuries

• Engineering
  • Speed Management
  • RFBs, Pedestrian Hybrid Beacons, LPIs
  • Refuge islands; Enhanced street lighting

• Enforcement
  • Impaired and distracted driving; speeding

• Education
  • Focus on changing culture and building support for traffic enforcement

• EMS
  • Ensure best chance of post-crash survival and equitable treatment

• Equity
  • Prioritize underserved populations disproportionately involved in fatal pedestrian crashes
Measures to Reduce **Bicyclist** Fatalities and Injuries

- **Engineering**
  - Marked Bike Lanes, Bicycle Boulevards, Bike Boxes, Bicycle Traffic Lights, Enhanced Street Lighting, Speed Management

- **Enforcement**
  - Bicycle/Pedestrian Focused High Visibility Enforcement
  - Address Speeding, Red Light Running, and Distracted/Impaired Driving
  - Police Officer Training (including equity focus)

- **Education**
  - Bicycle Safety Programs for Children
  - Educate Motorists about their Choices
  - The Value of Wearing a Bicycle Helmet Cannot be Overstated

- **Safe Biking Laws and Regulations**
  - Safe Passing Laws
  - Bicycling-Under-the-Influence (BUI) Laws
Measures to Help Achieve Racial Justice and Equity

• Prioritize planning/investment in infrastructure safety measures in underserved/lower socioeconomic communities.

• Treat traffic crash involvement as a health disparity issue.

• Ensure diverse representation in transportation agency leadership positions and on committees tasked with developing safety plans.

• Develop new, research-based interventions that prevent traffic crashes before they occur and before enforcement activities are required.

• Develop safety education campaigns/outreach efforts with BIPOC input to address needs and culture of BIPOC communities.

• Implement/alter traffic enforcement programs only with local BIPOC community engagement.

• Assess how current enforcement approaches can exacerbate racial/socioeconomic issues; work with stakeholders to identify/implement solutions.
Next: Rolf and Krista will elaborate on efforts to reduce non-motorist fatalities and injuries.