DATA TOOL FOR SAFE STREETS ACT
Progress Report

Miriam Schoenbaum

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DATA SOURCE

- **Data Montgomery crash open data**
  - **Non-motorist dataset**
  - **Incident dataset**
  - **Updated weekly (Fridays)**
  - **Read in live**
- **Maryland State Police crash data download**
  - **Updated daily**
  - **Not read in live**
  - **Includes age and gender**
- **BOTH PULL FROM THE SAME SOURCE: Automated Collision Report System forms filled out by police officers**

QUALITY OF DATA SOURCE

- The data come from police officers.

- Police officers are humans.

- Most police officers are not trained data people.

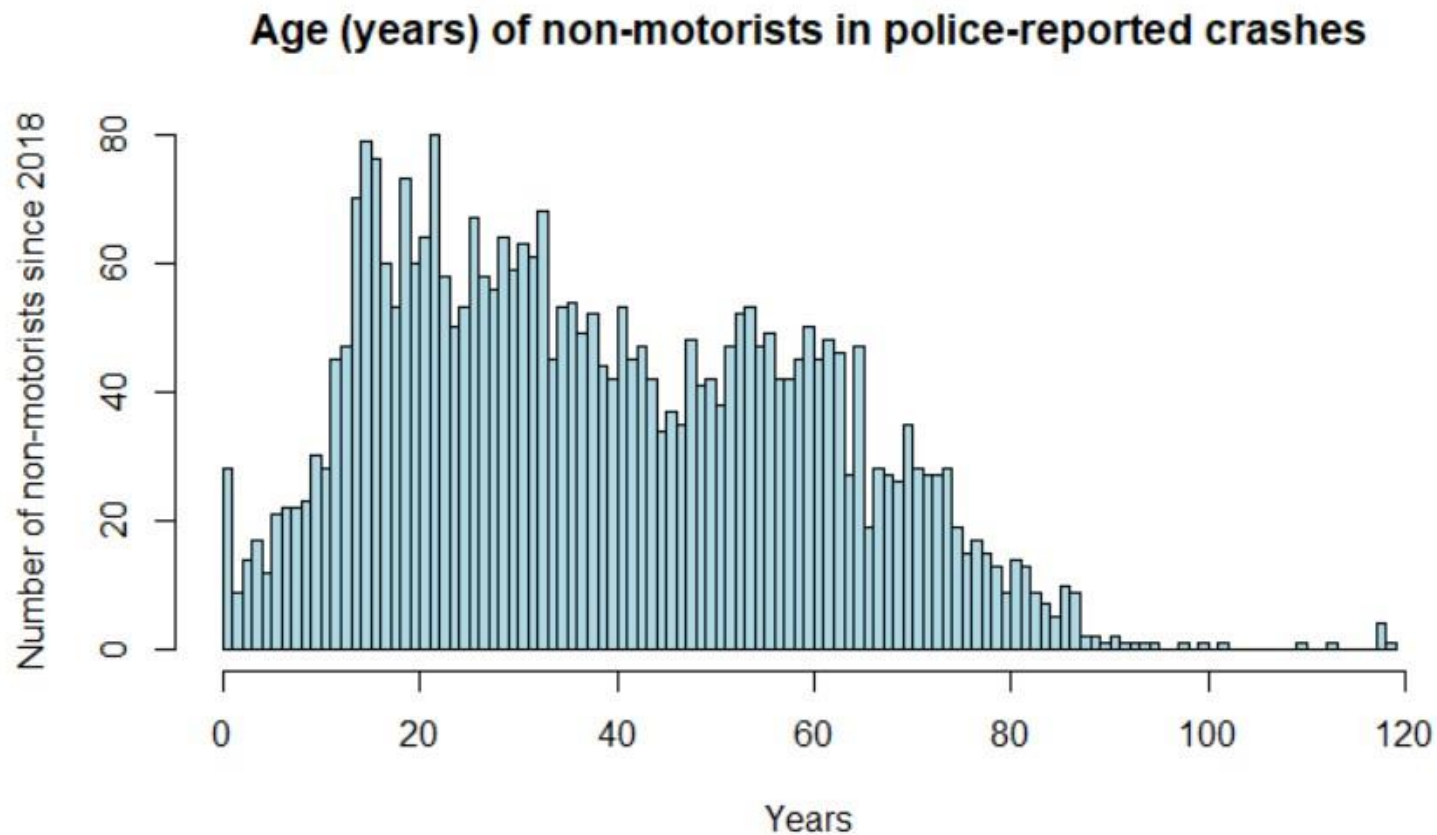- Best description of data quality: "It is what it is."

DATA INGESTION AND WRANGLING

- Read in Data Montgomery datasets.

- Selected, downloaded, and read in state police crash dataset (report number, non-motorist date of birth, gender, and non-motorist ID).

- Merged Data Montgomery incident dataset to non-motorist dataset.

- Then merged in state police crash dataset.

- Wrangled dates for month, year, day of the week.

- Calculated age at time of crash.

- Created a lot of binary variables.
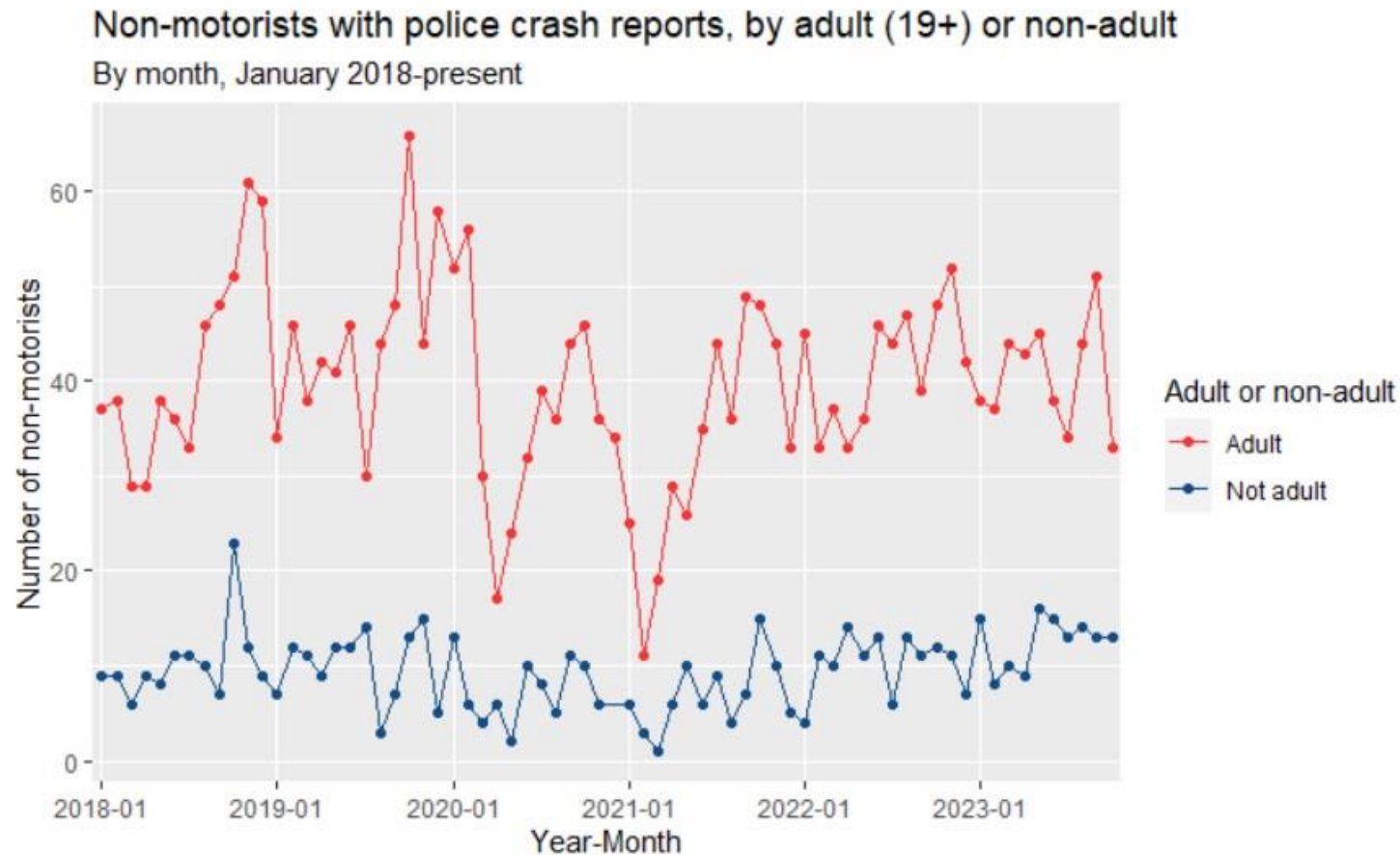
- Created output dataset to put into ArcGIS.

Ages of non-motorists, in crashes with police reports in Montgomery County, since 2018
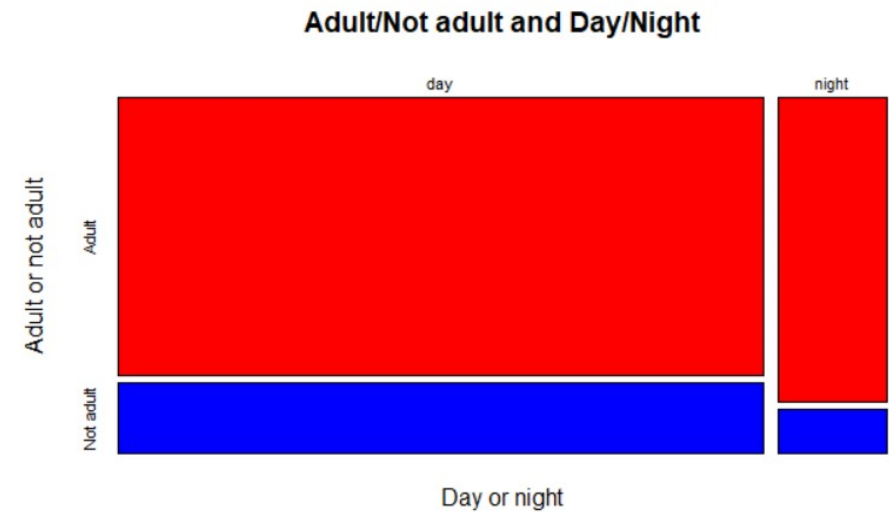

Age (years) of non-motorists in police-reported crashes

Age categories of non-motorists in crashes with police reports, in Montgomery County since 2019

Non-motorists with police crash reports, by adult (19+) or non-adult

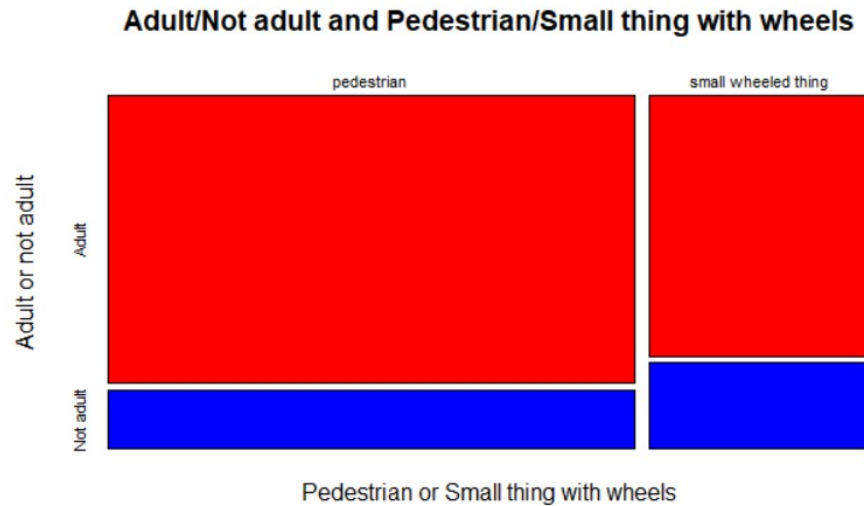By month, January 2018-present

Non-adult non-motorists in crashes were less likely to have been seriously or fatally injured, compared to adult non-motorists.

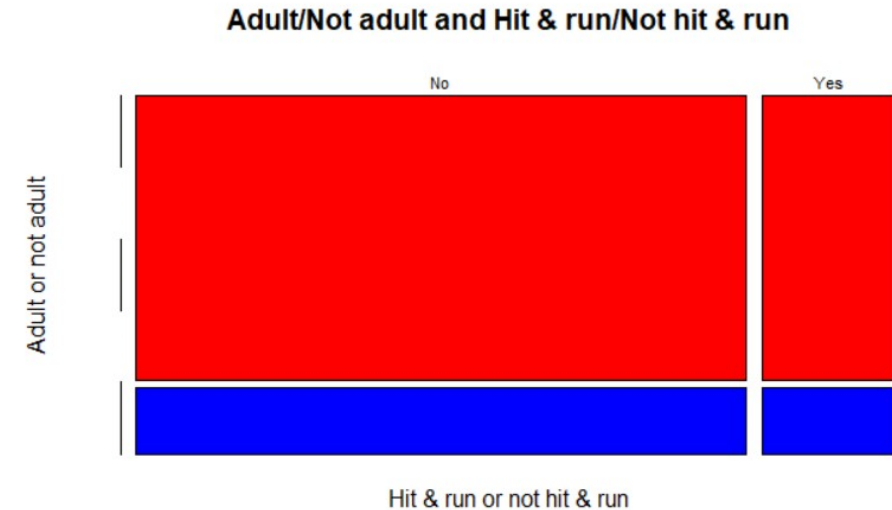**Non-adult non-motorists were less likely to have been hit at night (9 pm to 7 am), compared to adult non-motorists.**

Adult/Not adult and Serious/fatal or Not serious/fatal injury

Adult/Not adult and Day/Night

Non-adult non-motorists in crashes were more likely to have been using small things with wheels (bicycles, scooters, skateboards, strollers) vs. walking, compared to adult non-motorists.
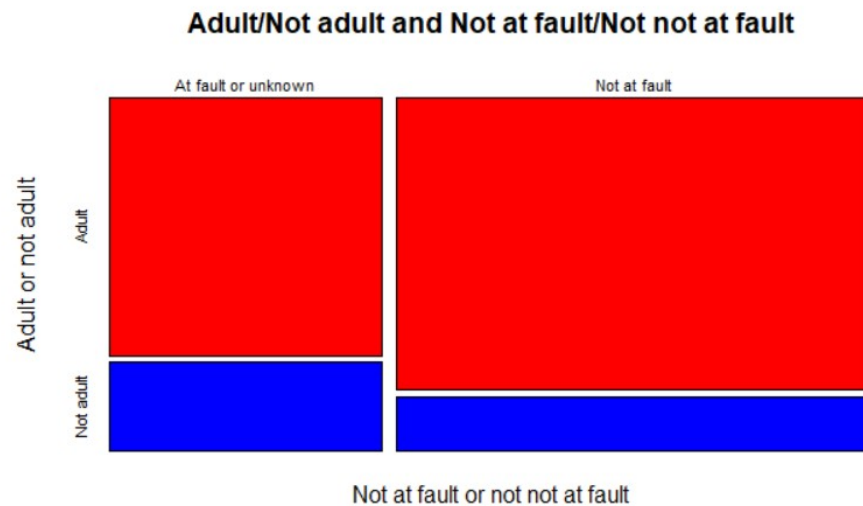
Non-adult and adult non-motorists in crashes were equally likely to have been hit by a driver who then drove away.

Adult/Not adult and Pedestrian/Small thing with wheels

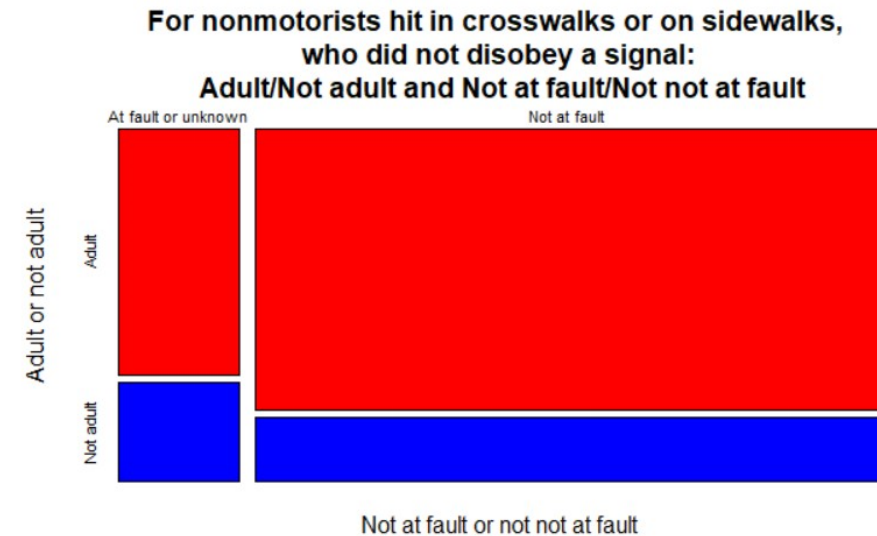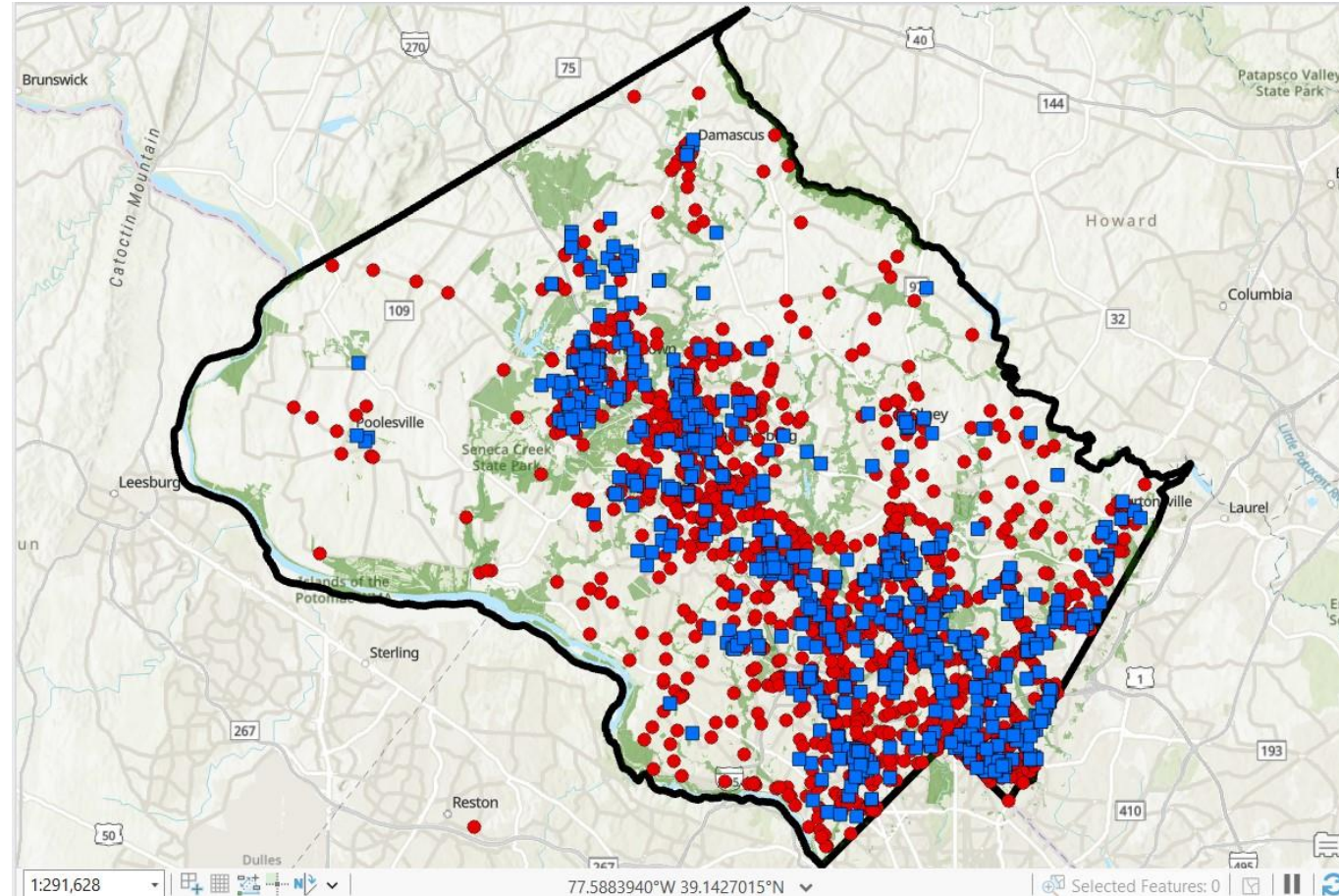Adult/Not adult and Hit & run/Not hit & run

Police were more likely to find non-adult non-motorists at fault in crashes, compared to adult non-motorists

Even for non-motorists hit in crosswalks or on sidewalks, who did not disobey a signal, police were more likely to find non-adult non-motorists at fault, compared to adult non-motorists.

Adult/Not adult and Not at fault/Not not at fault

For nonmotorists hit in crosswalks or on sidewalks, who did not disobey a signal: Adult/Not adult and Not at fault/Not not at fault

Geocoded locations from crash reports involving non-motorists (red circle = adult, blue square = non-adult)

Data product for Safe Streets Act

Identify crashes involving non-motorists (of any age) that occurred

- **on a road controlled by the county, AND**

- **in a county-established "school zone", OR**

- **within a designated school walk zone between 7 am and 9 pm on a school day, OR**

- **at a school bus stop**

New county law goes into effect on July 1, 2025.

QUESTIONS?