Team 52 Abstract
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Data Set 1

Our data set concerns traffic trends for commuters in Montgomery County, MD. The center of our analysis is the number of miles driven to work for each commuter. By summing and comparing these data, we can better understand the nature of the county's commute and provide suggestions to improve traffic conditions. The basic component of each calculation is deciding which mileages to add, filtered by day of the week, method of commute, and by location. The process is repeated with other years to gain a greater understanding of how these trends change over time, with the most recent year being 2019.

The most critical trend is that a large majority of commuters drive alone to work. A weekday average of almost 66% of commuters drive alone. If only 5% more people carpooled, the county would save around 9450 VMT (vehicle miles traveled) per commute and twice that per day. We investigate how many commuters could reasonably be swayed with existing programs by examining their current successes.

Further analysis is done with parking costs, work programs to promote carpooling, and alternate schedules to identify which approaches will incentivize commutes with fewer miles traveled. These will vary by location, so we will tailor our results to the specific TMD involved.