## The Impact of Metro Fare Increases on Traffic Accidents in Washington, D.C.

In the summer of 2024, Metro fares in Washington, D.C., increased by 12.5

The question is straightforward: Did the 2024 Metro fare increase push more people to drive, and if so, did that lead to more traffic accidents? A significant fare hike can make daily Metro use less affordable, especially for lower-income commuters who rely on public transit. As a result, some may switch to driving older, less-safe vehicles, carpooling in overcrowded conditions, or even biking or walking in areas with poor pedestrian infrastructure. If enough people make these shifts, the result could be an increase in congestion and road-related incidents.

To explore this, I plan to analyze data on Metro ridership before and after the fare increase, along with citywide traffic accident reports. By controlling for factors such as gas prices, seasonal traffic patterns, and other transit changes, I aim to isolate the effect of the fare hike on accident rates.

If a connection exists, it raises important policy considerations. Metro fare increases are often framed as a necessary financial decision, but if they contribute to more accidents, they may create additional public costs in the form of emergency response services, medical expenses, and lost productivity. Understanding this dynamic could help inform future transit pricing decisions and highlight the need for alternative solutions, such as fare subsidies for low-income riders or better infrastructure for those who shift to other modes of transportation.

At its core, this research seeks to understand how transit pricing decisions affect urban mobility and public safety. The 2024 Metro fare hike was a major financial adjustment for commuters, but its effects may extend beyond the Metro system itself, influencing the broader safety and functionality of D.C.'s transportation network.