## JOEL SHAPIRO

## Fly or Drive?

Your job in Chicago has required that that you go to Milwaukee, WI for a meeting at the Milwaukee airport. Is it safer for you to fly or drive?

## Assume the following:

- You live very near Chicago's O'Hare airport
- You always wear a seatbelt and are sober while driving
- The distance to Milwaukee is 71 miles
- In 2023, there were 40,100 auto traffic deaths in the U.S.
- 90% of plane accidents occur during the takeoff or landing phase
- There are approximately 0.2 deaths per 10 billion miles flown
- The risk of being in a fatal car crash while sober and wearing a seatbelt is only 20% of the risk for the general population

**Assignment:** Provide a complete answer to "is it safer to drive or fly?" by doing the following: 1) clearly answer the question and support your answer with the appropriate calculations 2) clearly lay out the additional assumptions you need to make to answer this question (you will definitely need to make assumptions) and 3) clearly show the calculations you used to inform your answer.

**Format of deliverable:** The format should be a very clear presentation that, if required, you could deliver in no more than 3 minutes. It can be in powerpoint / keynote, but doesn't have to be.

## \*\*Two important notes.

First, do NOT simply look online for the relative driving / flying risk. The point of this assignment is for you to determine what information is and is not important and to build your own model and identify your own assumptions. Reporting someone else's findings or methodologies is just a waste of time.