How Density Causes Congestion

Most of us have seen this chart of how driving per capita decreases with increasing population density, but there is more to the story.

**Daily Trips vs. Population Density**

1990 NPTS (Dunphy & Fisher)

Note that driving only decreases slightly until density approaches that of New York City. Do we want to be more like New York? Why don’t we just move to New York? (Red text are our additions.)

**The Secret Missing Line**

They don’t tell you that increased population density means that there are more people in each square mile, and few use transit, so the number of car trips per square mile increases as the number of people increase. That is the secret they hid from you --- increased trips per square mile increases congestion - more trips in the same space as shown by the red line:

(Red line is Daily Trips/Person multiplied by People/Square Mile)