


How can we bore  
everybody?

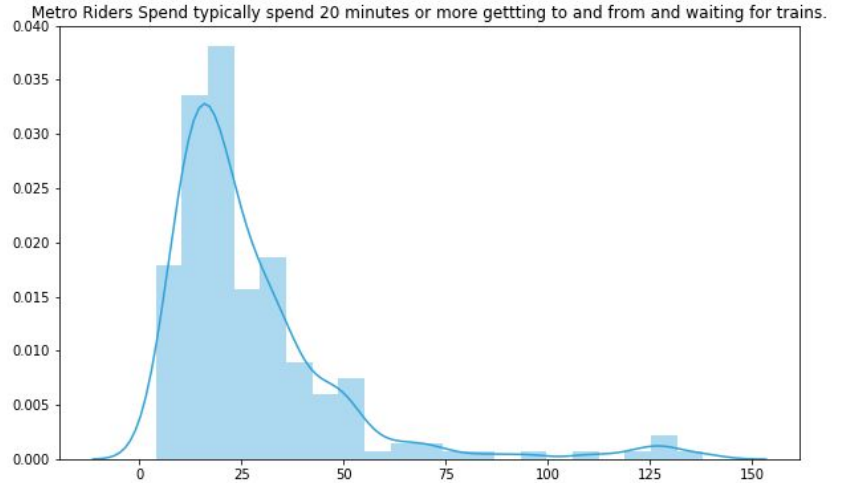
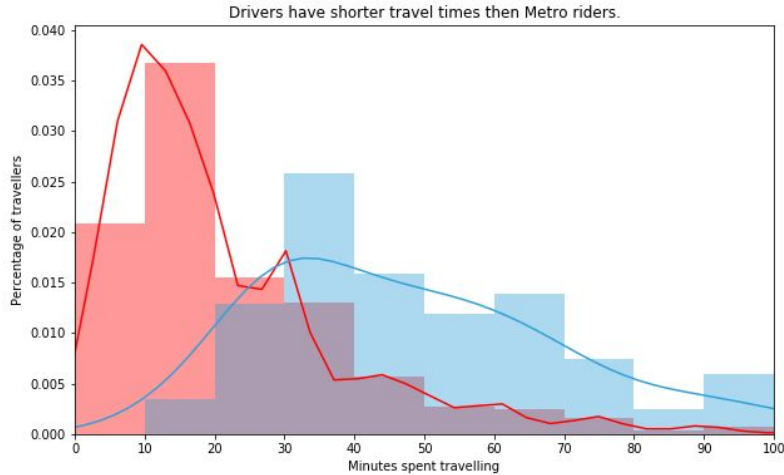


# What is the Loop?

(It's just like a hyperloop but much more calm.)
















# Giving up the car has some downsides...



# If only we knew why people were getting on the metro

## Codebook Browser

Survey: 2017 NHTS  
Dataset: Day Trip

Codebook	Variable	Description
	CDIVMSAR	Grouping of household by combination of census division, MSA status, and presence of a subway system when population greater than 1 million
	CENSUS_D	2010 Census division classification for the respondent's home address
	CENSUS_R	Census region classification for home address
	DRIVER	Driver status, derived
	DROP_PRK	Parked or Dropped Off at Station
	DRVR_FLG	Respondent drove on trip
	DRVRCNT	Number of drivers in household
	DWELTIME	Time at destination
	EDUC	Educational Attainment
	ENDTIME	Trip End Time (HHMM)
	GASPRICE	Price of gasoline, in cents, on respondent's travel day
	HBHTNRNT	Category of the percent of renter-occupied housing in the census block group of the household's home location
	HBPPOPDN	Category of population density (persons per square mile) in the census block group of the household's home location
	HBRESDN	Category of housing units per square mile in the census block group of the household's home location
	HH_CBSA	Core Based Statistical Area (CBSA) FIPS code for the respondent's home address
	HH_HISP	Hispanic status of household respondent
	HH_ONTD	Number of household members on trip including respondent
	HH_RACE	Race of household respondent
	HHFAMINC	Household income
	HHMEMDRV	Household member drove on trip
	HHRESP	Person identifier of household respondent
	HHSIZE	Count of household members
	HHSTATE	Household state
	HHSTFIPS	State FIPS for household address
	HHVEHCNT	Count of Household vehicles
	HOMEOWN	Home Ownership

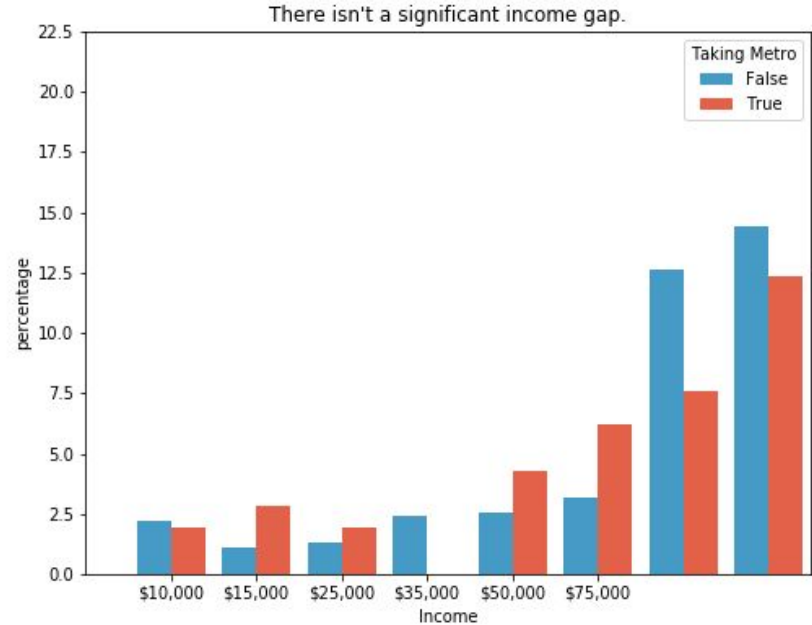
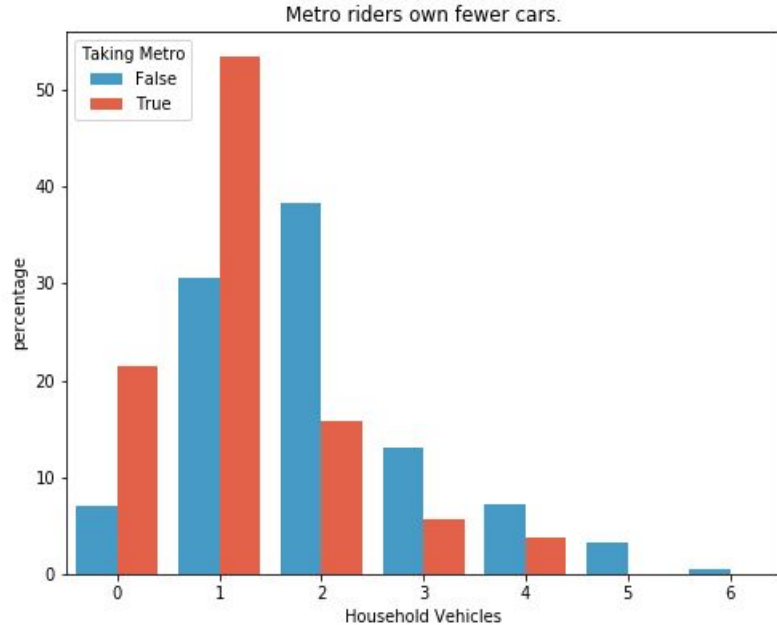
<https://nhts.ornl.gov/>

<https://nhts.ornl.gov/tables09/CodebookBrowser.aspx>

```
df = pd.read_csv('C:\\\\Users\\J...')
df.shape
```

(923572, 102)

# Personal preference appears to be important



# Two things matter, very, very much

Is there a station within a short walk of your home?

(work is somewhat less good as a predictor)

	Instrumental Variable	Importance for Random Forest
1	Within 15 minutes of transit	0.543347
3	Going to Work	0.390497
2	Car Owner	0.065801
0	Miles Traveled	0.000355109

Are you going to work?

	Instrumental Variable	Importance for Extra Trees
1	Within 15 minutes of transit	0.482957
3	Going to Work	0.400237
2	Car Owner	0.115642
0	Miles Traveled	0.00116391

# The Lean Into It Approach

Scroll down for the  
app below

# Could preferences be changed?

Within the next two months, census tract level data of commuter flows will be released for the past five years.

Differences may be apparent between neighboring tracts might reveal additional economic relationships between preferences and geography.

