

America's Next Top Model

Allison Schlissel
Project McNulty
August 5, 2016



(not that one)

CHALLENGE

Is it possible to predict how a county will vote in a presidential election purely based on that county's demographics?

Exclude: incumbency, past voting record

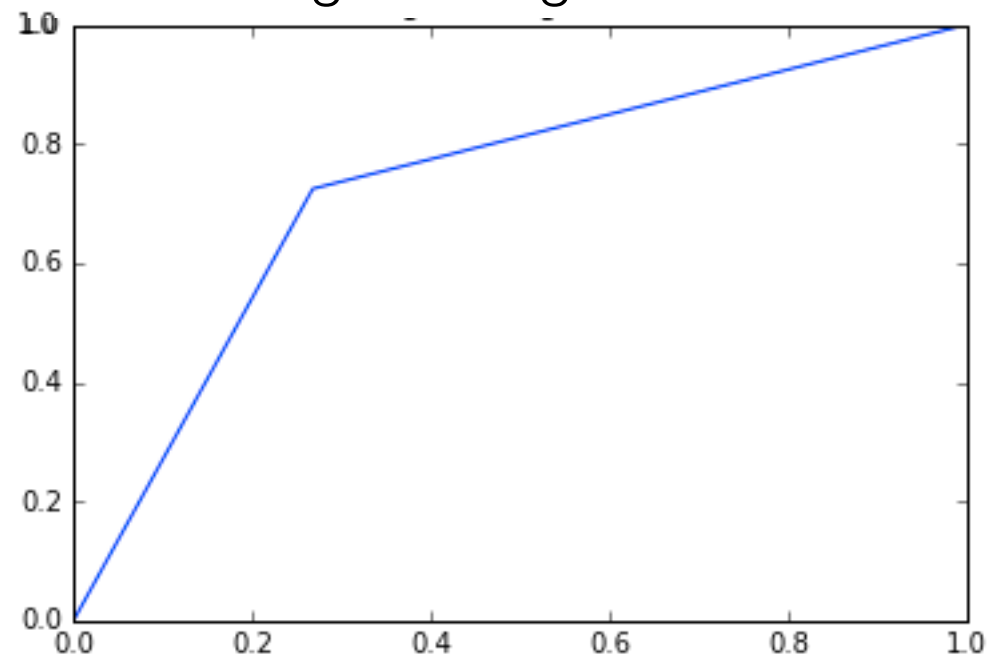
DATA

- 2008 American Community Survey (Census)
- 2008 presidential election county results (USA Today)
- County population: 20,000+
- 743 features

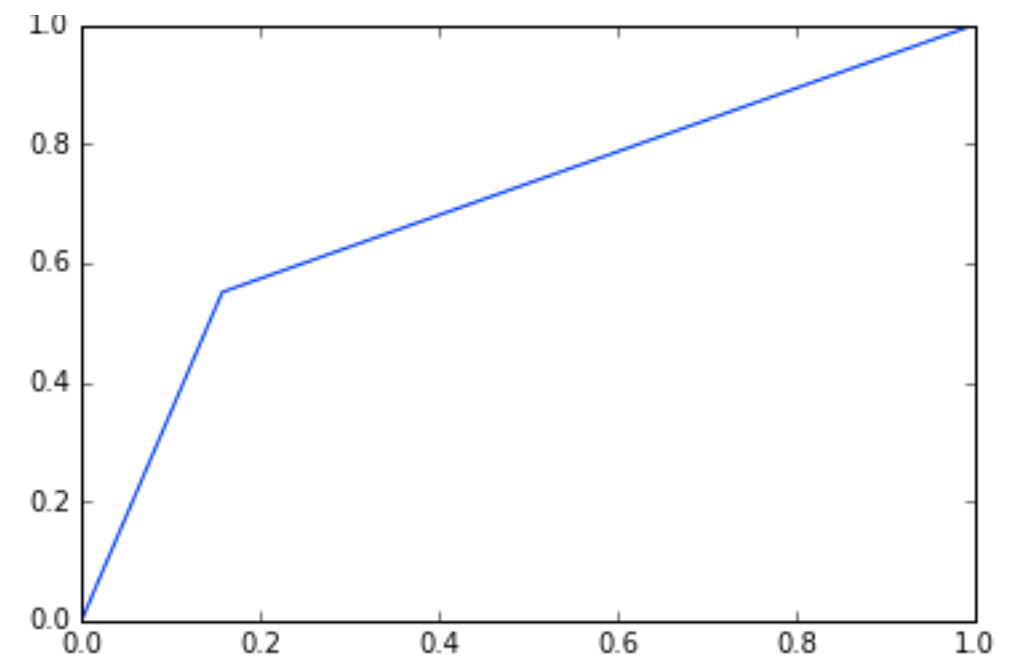


CLASSIFIERS

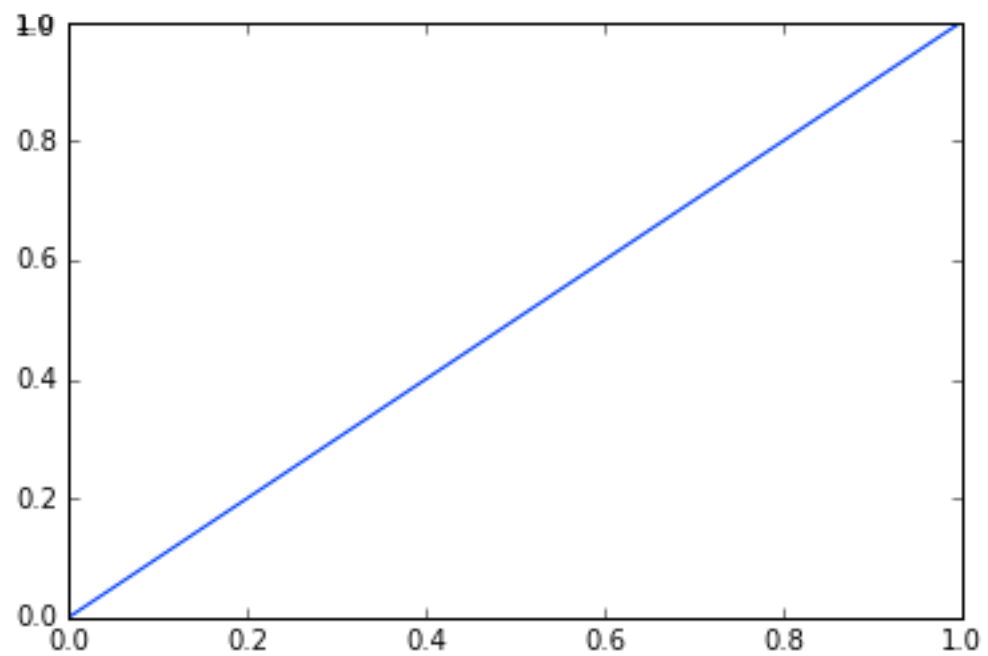
Logistic Regression



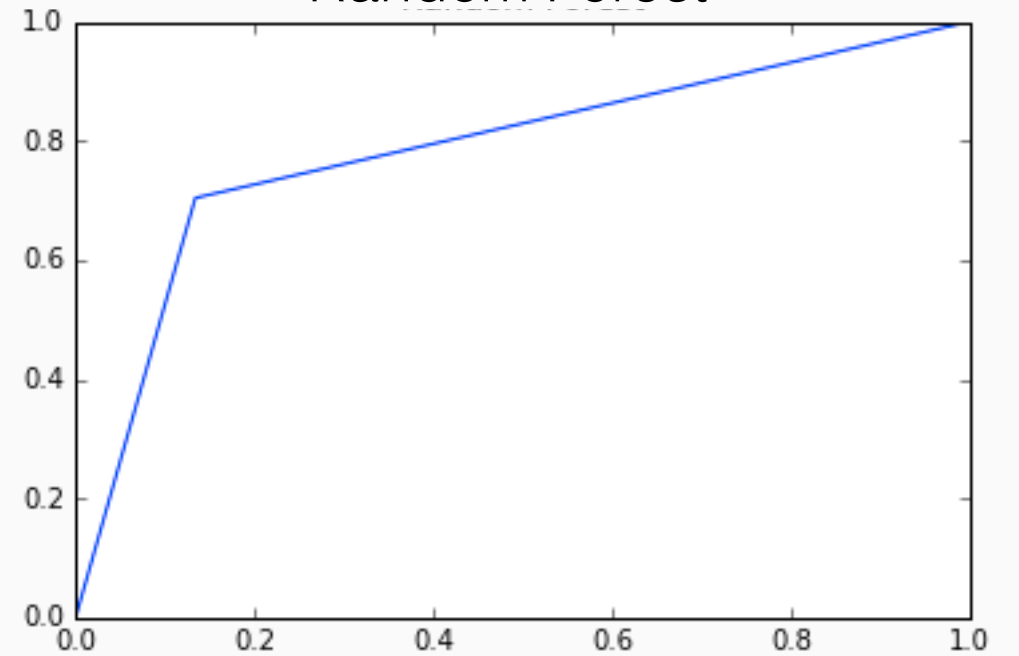
KNN



SVC

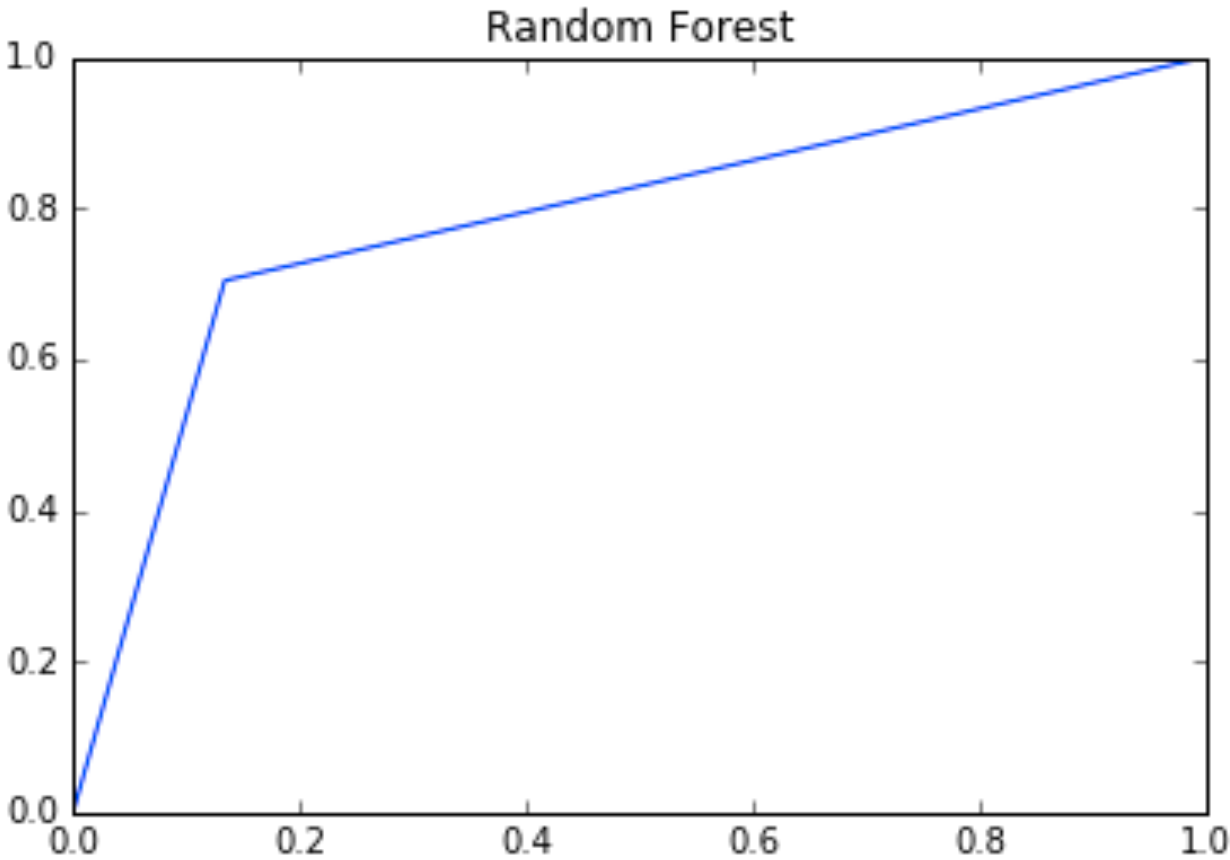


Random Forest



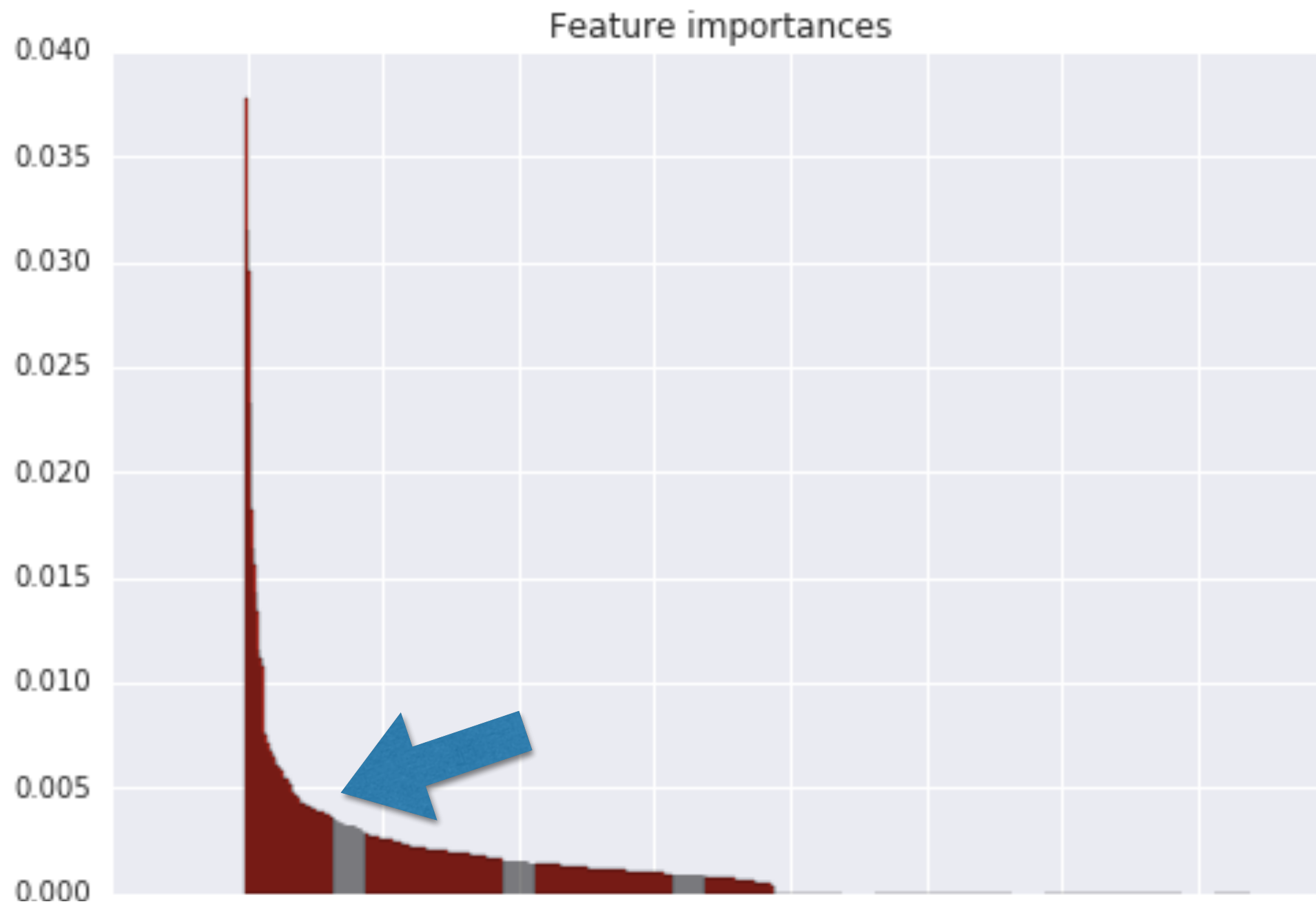
RANDOM FOREST

AUC Score: 0.785111682468



	Precision	Recall	F1-Score
0	0.79	0.87	0.83
1	0.80	0.70	0.75
Avg-Total	0.80	0.80	0.79

FEATURES



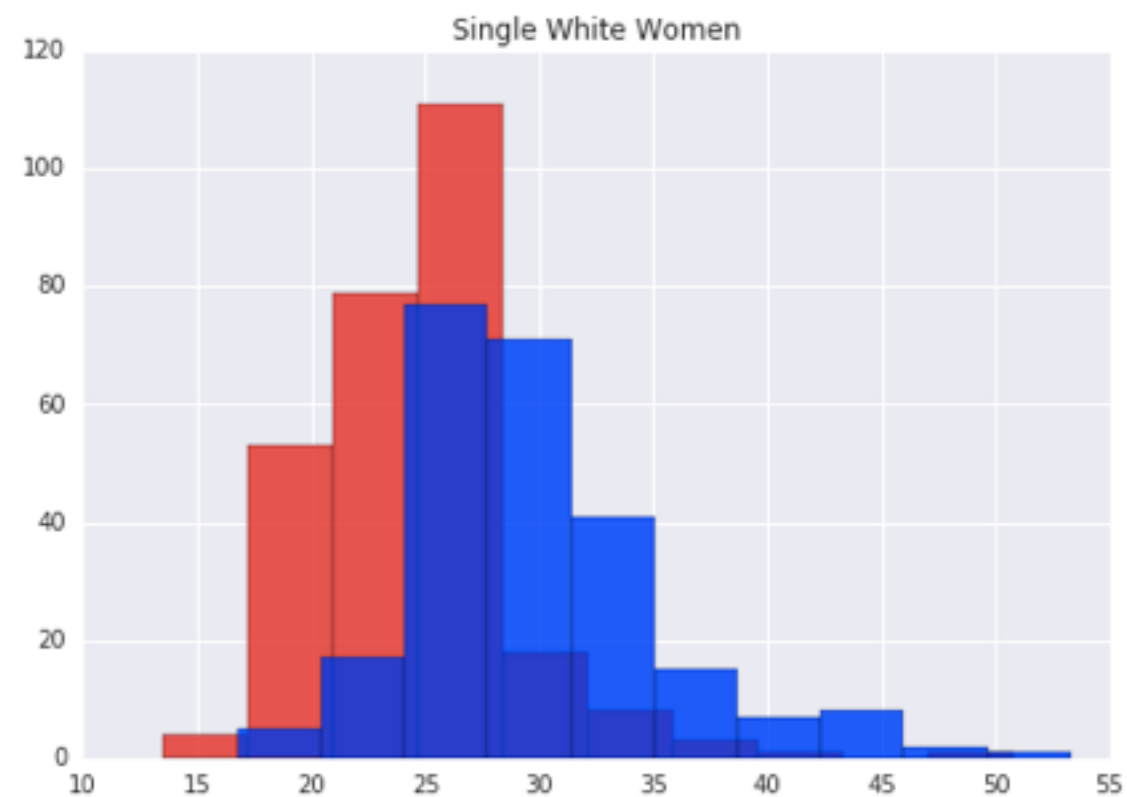
TOP 10: Women & Poverty

1. Married white women
2. Never married white women
3. Employed women living below poverty level
4. Men living below poverty level
5. Employed people living below poverty level
6. Part time workers/ seasonal workers living below poverty level
7. People who worked less than full time in past 12 months living below poverty level
8. Male population 18-24
9. All people living below 50% poverty level
10. Never married women, U.S. citizens

MAKES SENSE!



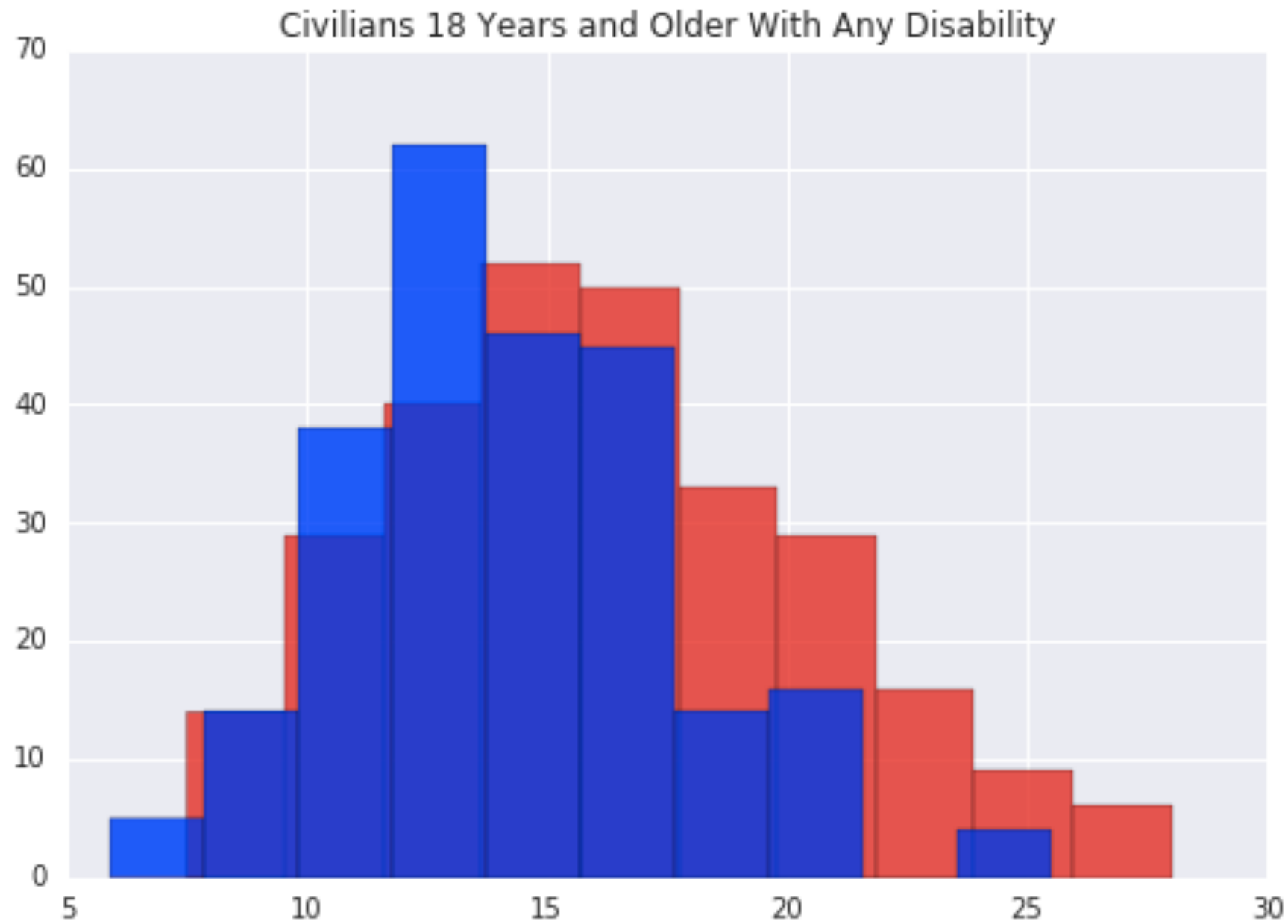
MARRIED WHITE WOMEN VS. SINGLE WHITE WOMEN



WOMEN IN POVERTY



PEOPLE WITH DISABILITIES



TAKEAWAYS

- Demographics give us a good idea of how the general election will vote
- Next steps: explore when the demographics change that cause a vote change
- Who runs the (free) world? GIRLS

THANK YOU

