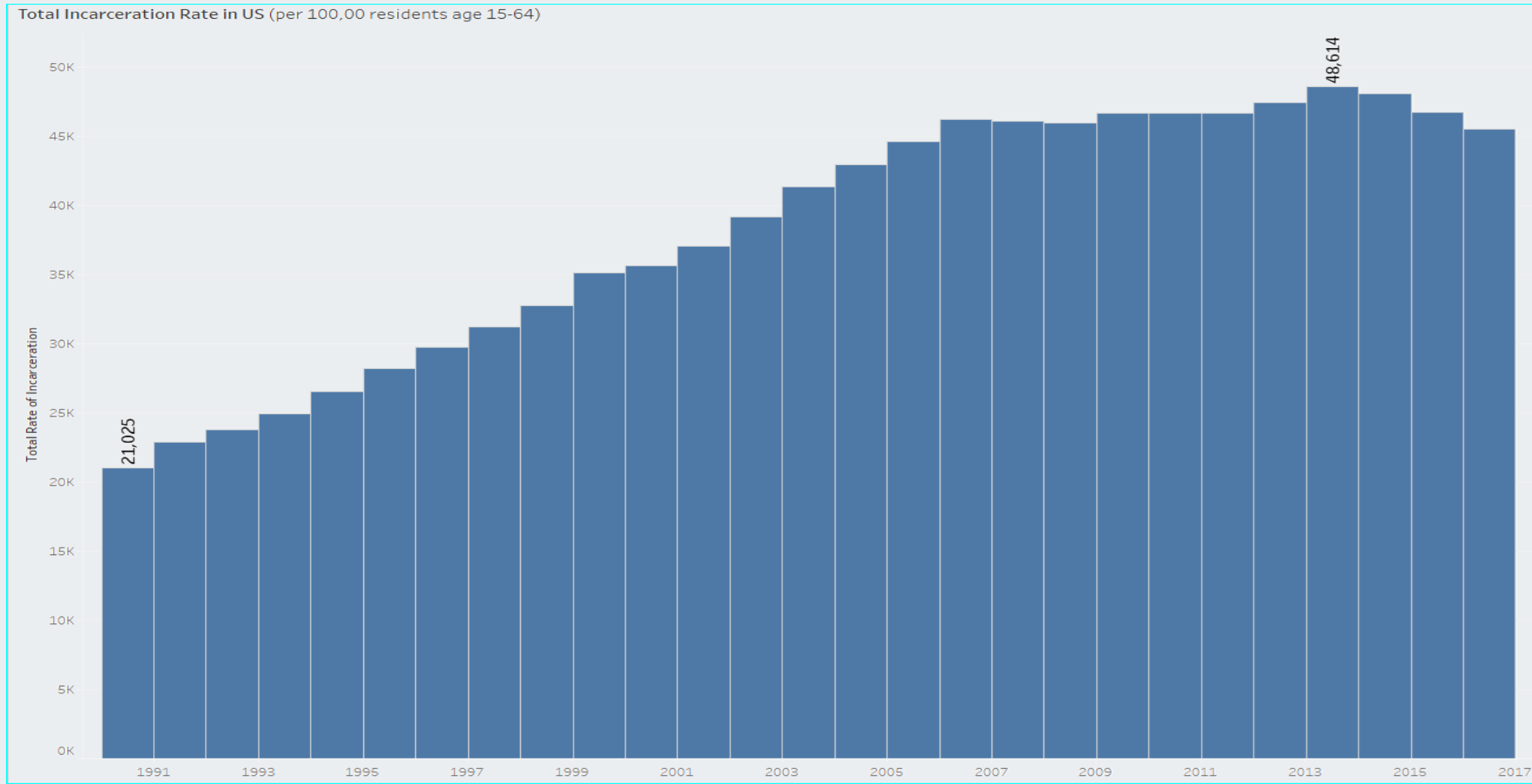




## **U.S. Incarceration Rate Comparison**

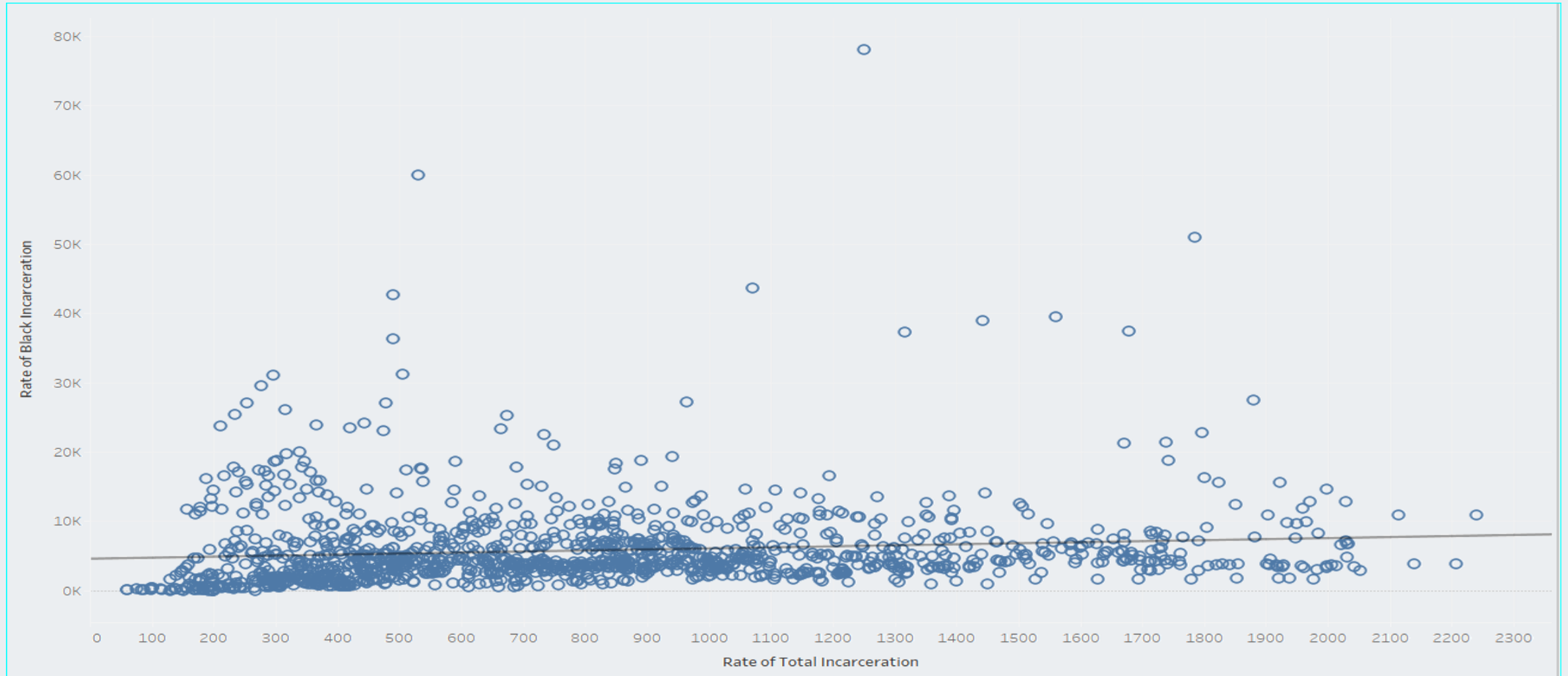
# The Rate of Incarceration in the U.S. has risen steadily since 1990, peaking in 2014, and then slowly falling.

This study compares the rate of Black incarceration rates to total incarceration rates. All numbers are rates per 100,000 residents.



# Correlation Between the Rate of Black Incarceration and Total Incarceration

Using linear regression, the line is almost horizontal, showing that there is very little correlation between the rate of black incarceration and total incarceration. In addition there is high variance as illustrated by the many data points that fall far from the regression line.



# Correlation Between the Rate of White Incarceration and Total Incarceration

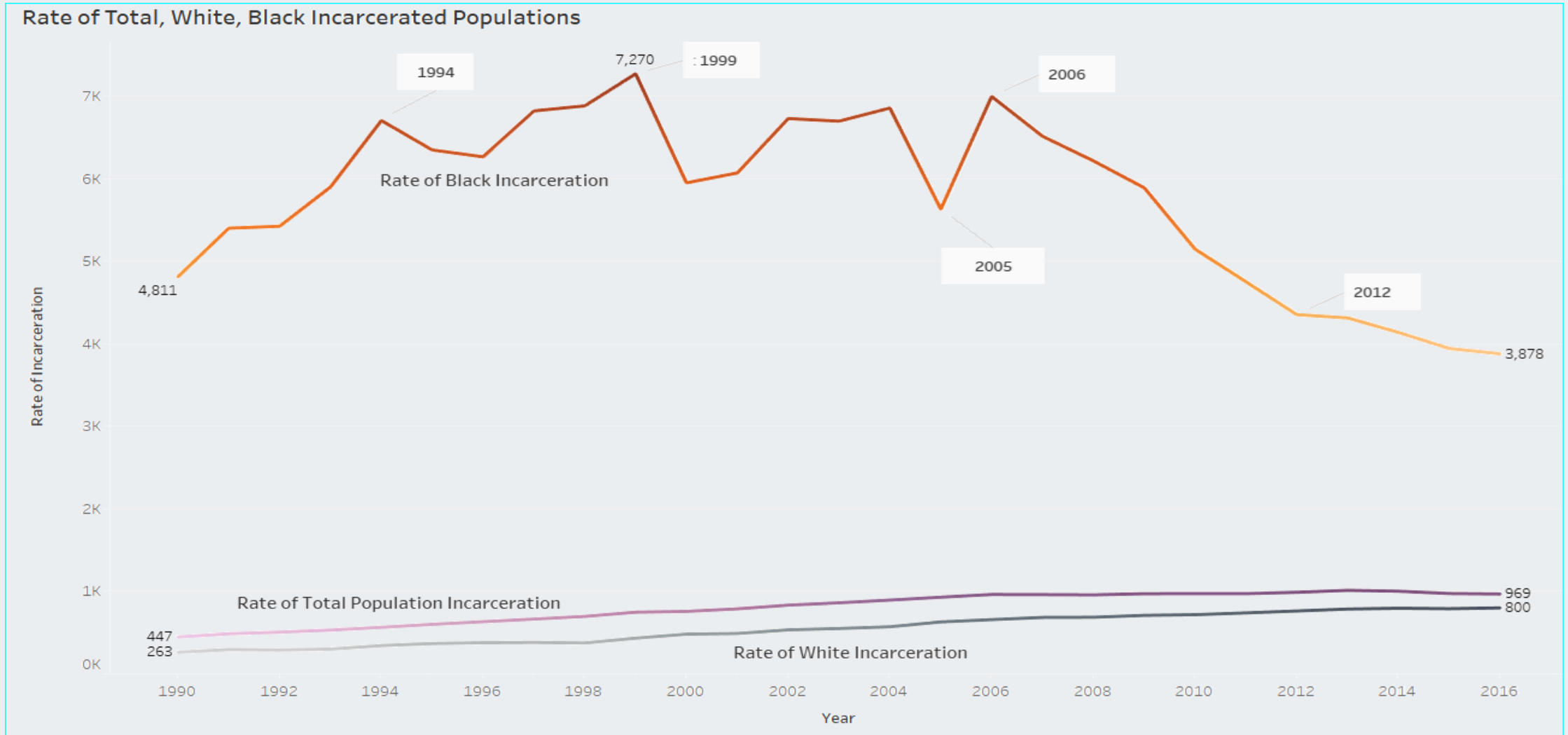
On the other hand, when comparing the rate of white incarceration to total incarceration, there is close correlation with much less variance.

*Hypothesis: In the U.S. the rate of incarceration in the total population will not predict rate of incarceration in the Black population.*



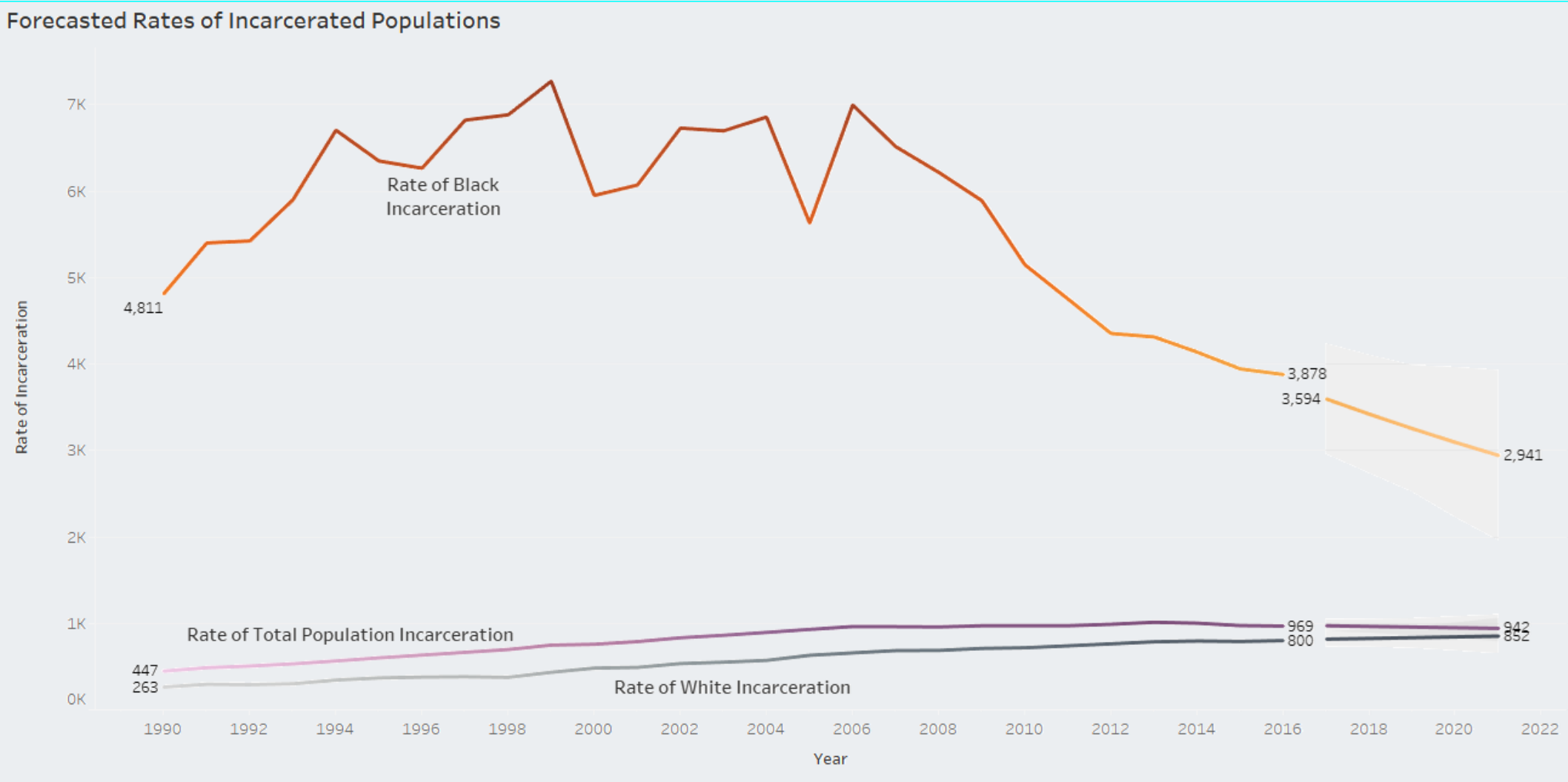
# Hypothesis is True

The rate of Black incarceration is much higher than the total population rate. It is worth exploring the sharp downward trend in Black incarceration rate while the total population rate is slowly rising.



# Forecast

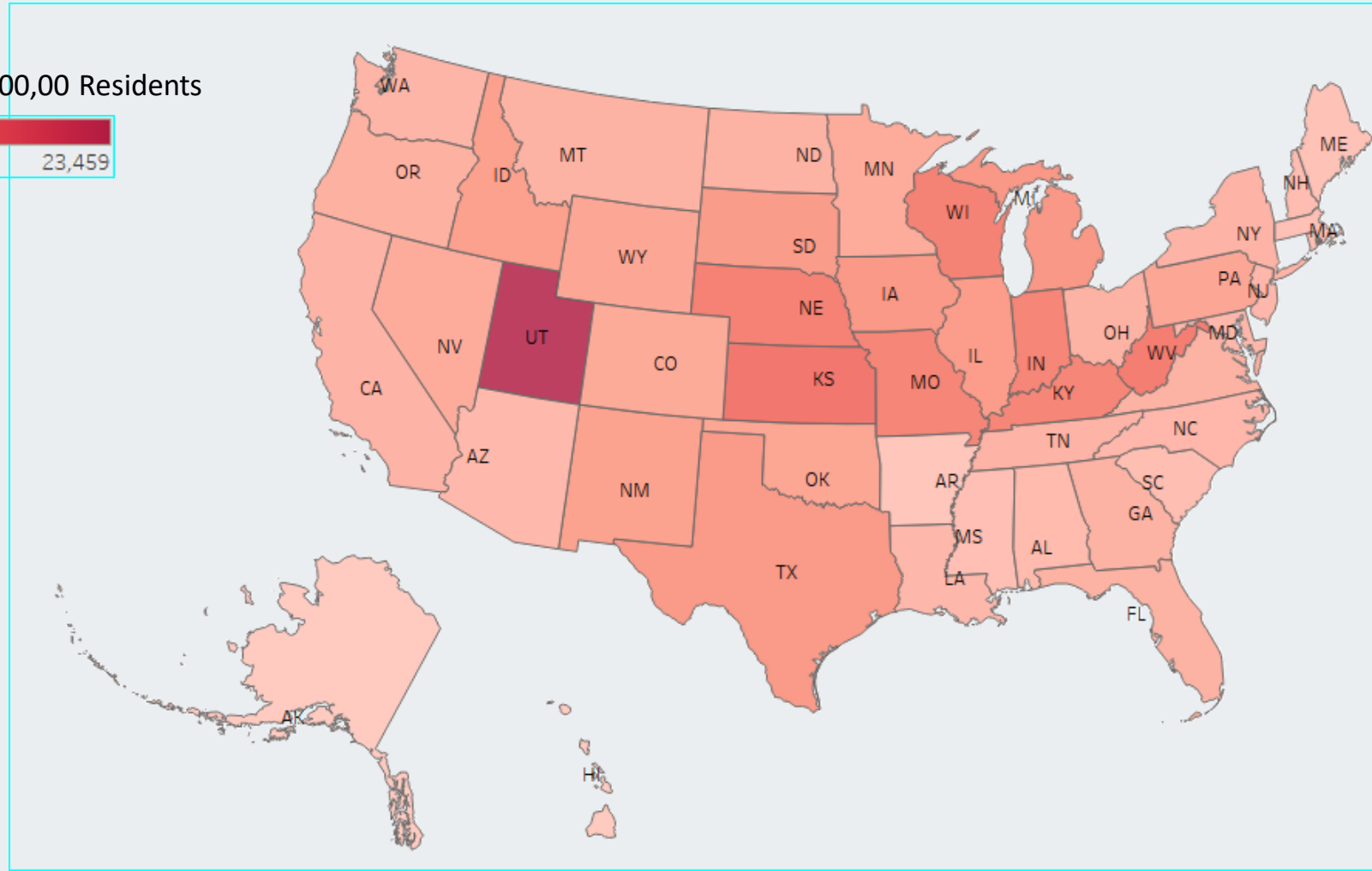
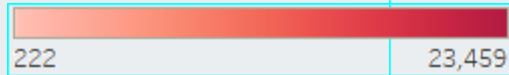
A five year forecast shows the rate of Black incarceration continuing the downward trend while total incarceration levels off.



# Next Steps

Since most incarceration is not on the federal level, but on the state and county<sup>1</sup>, one way to explore these trends is to look into the change in state, county and city laws from 1990-2016. As shown below, there is a large variation in Black incarceration by state.

Black Incarceration Rate Per 100,00 Residents



## Limitations of this Study

- Data was sourced from the [Vera Institute of Justice](#). Since youth under age 15 and adults over 64 are at very low risk of jail incarceration, Vera removed these age groups from the dataset.
- Since there were many null values in the years 1970-1989 and 2017-2018, this study used only data from 1990-2016.

## Endnote

<sup>1</sup> [Criminal Justice Reform at the State Level](#), Brennan Center for Justice, retrieved 8/6/2021

## For More Information

- Visit this study's [Github](#)
- [Tableau Visualizations](#)