

Does the color of
your skin give you a
citation?

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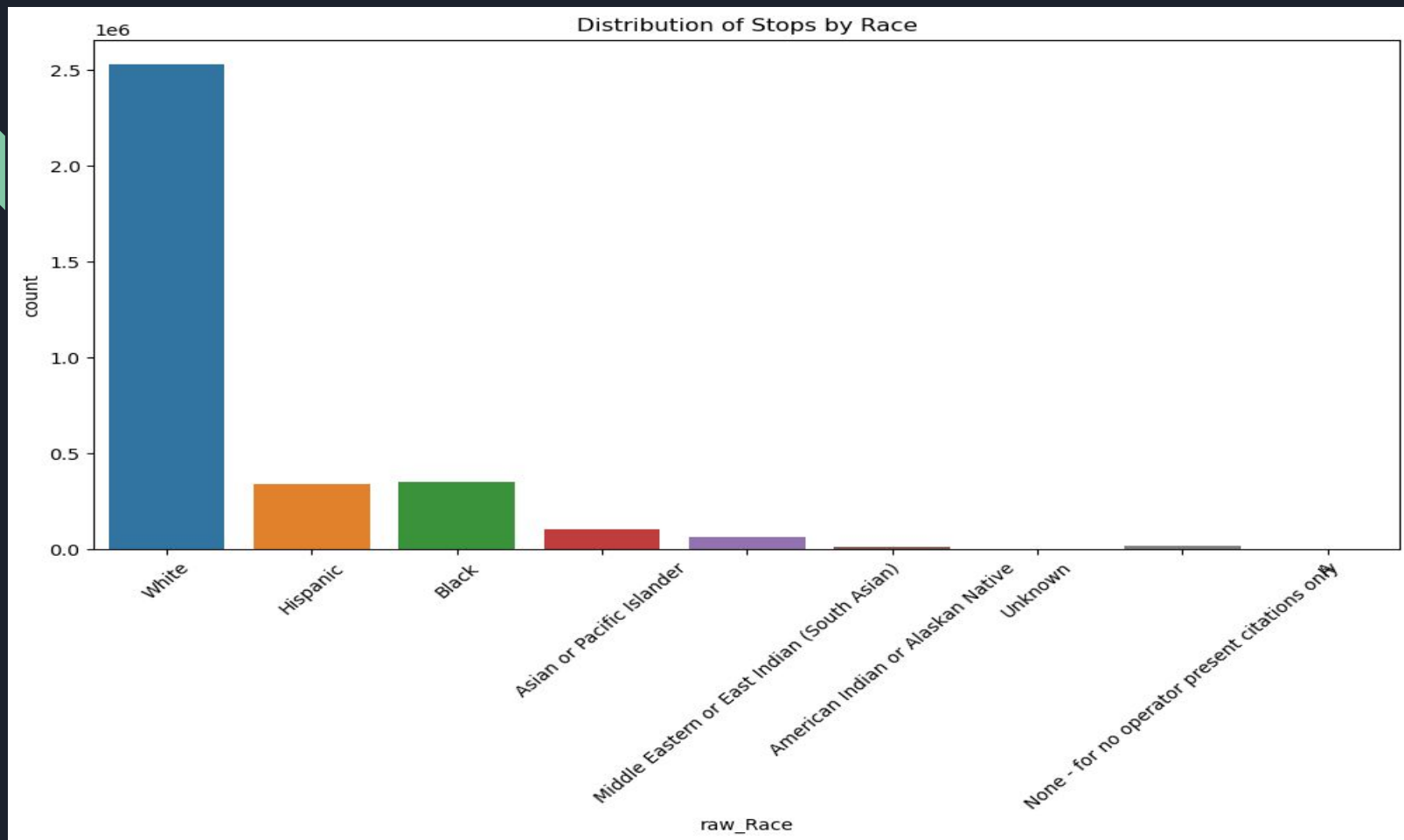
Intro


There has always been a stigma when it comes to police officers and their tendencies. Many Americans feel that our police officers are unjust and make stereotypes. I have never experience this inequality firsthand, and did not want to stand with one side or the other. That's why I did my research and let the numbers and stats shape my view. In these slides, we will go over data from my home state of Massachusetts containing information on millions of real police stops.



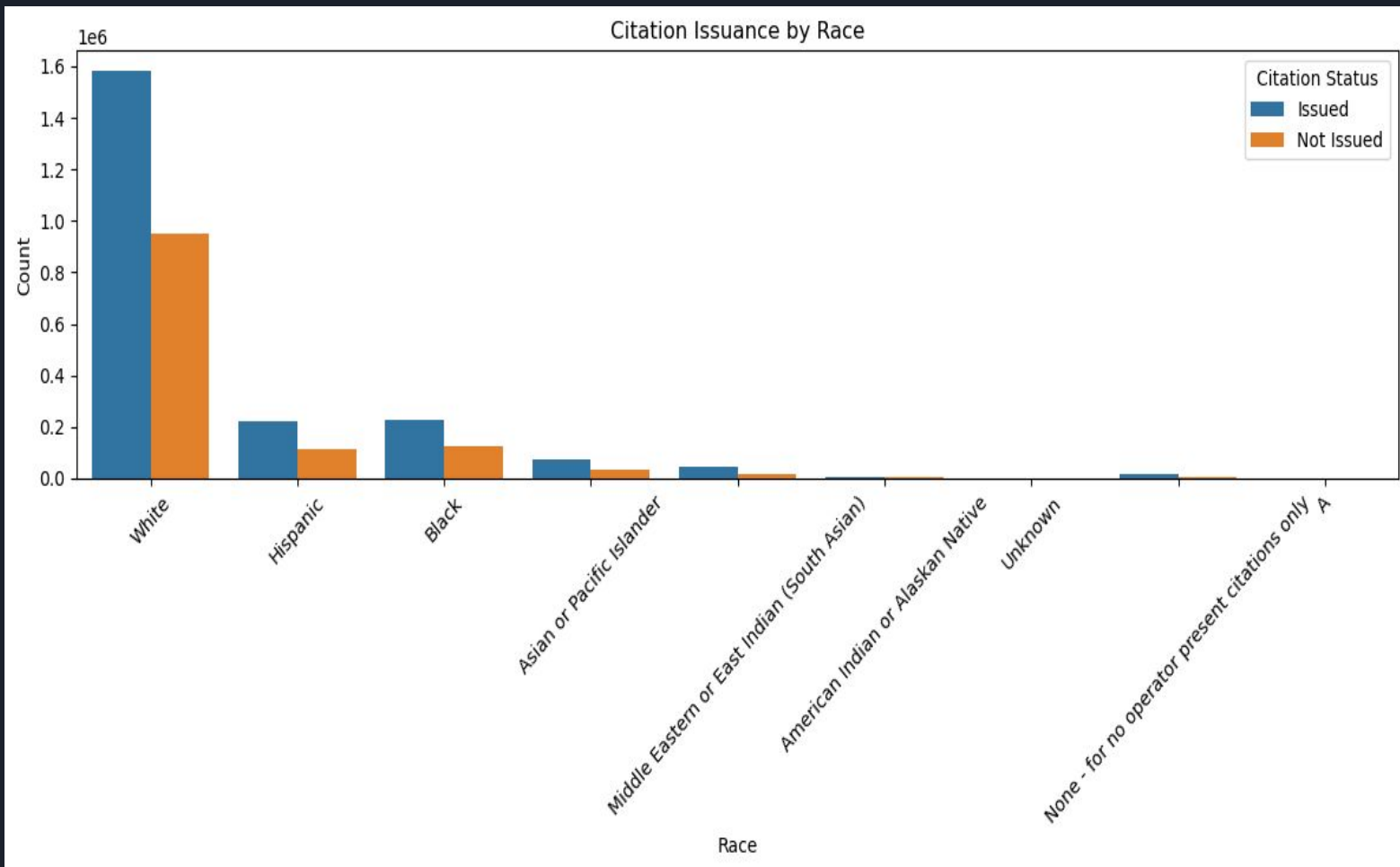
The Null Hypothesis/Distribution of Stops by Race

Before diving into the data, I formed my null hypothesis. My null hypothesis is that race is correlated to citation issuance in the state of Massachusetts. To break the ice, this race that many feel is unfairly treated by the police is African American. Let's take a look at the distribution of stops by race. —>





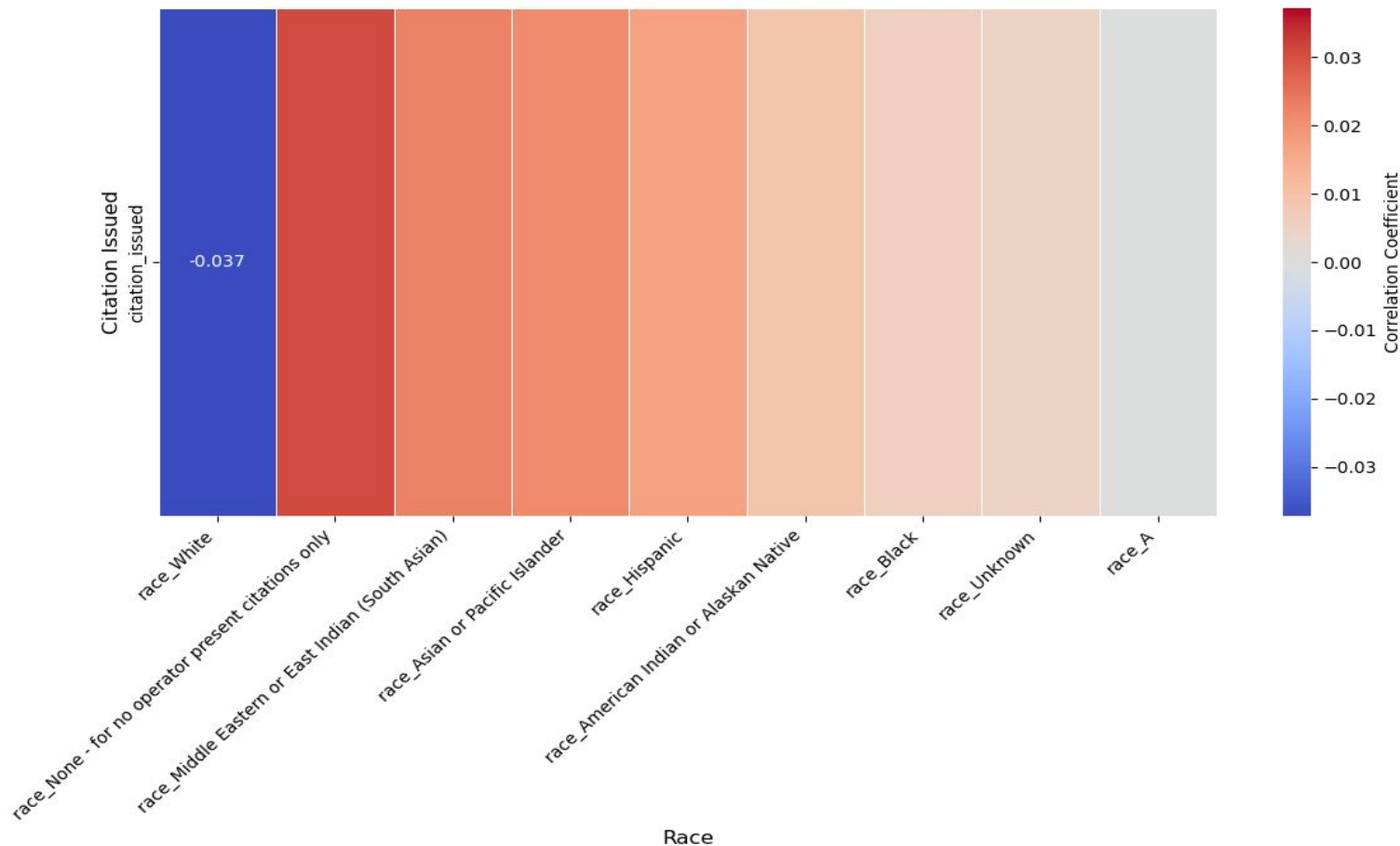
We see that the white race is stopped almost exponentially more than any other race, which makes sense as 69.9% of the MA population is white according to the U.S Census Bureau. This makes sense so far, but are they being issued citations? What about the other races? Let's take a look.





We see that just about half the time, a citation is issued, regardless of race, but this is just surface level. Let's dive a little deeper and take a look at some numbers.

Correlation: Race vs Citation Issuance





Correlation

As shown, we can see there is little to no correlation. Here are the numbers:

White: Correlation = -0.0372, p-value = 0.0000

Hispanic: Correlation = 0.0169, p-value = 0.0000

Black: Correlation = 0.0060, p-value = 0.0000

Asian or Pacific Islander: Correlation = 0.0212, p-value = 0.0000

Middle Eastern or East Indian (South Asian): Correlation = 0.0224, p-value = 0.0000

American Indian or Alaskan Native: Correlation = 0.0090, p-value = 0.0000



Conclusion

In conclusion, we can see there is no correlation between race and citation issuance. This disproves my null hypothesis. The distribution of citation issuance between races is almost identical between them, as well with no statistical correlation.