

### **Data Story to Accompany**

The final visualization is in the packaged notebook and labeled “Final Dashboard”.

For our capstone project, we are working with the North Carolina Office of State Budget and Management (OSBM). With significant uncertainty about the accuracy and bias of the 2020 decennial Census, we are helping evaluate the quality of the Census population and housing counts within North Carolina. Additionally, we are investigating datasets that can help adjust the counts to reduce bias and increase accuracy.

The purpose of this visualization is to demonstrate how Census counts differ from previous estimates, to show areas of potential overcount and undercount, and how they vary by demographic groups. The visualization is meant for our main stakeholder, Michael Cline, State Demographer at NC OSBM. The goal is that this visualization will help him see our results in an interactive format, and will help him make decisions about his own estimates.

The data story we are presenting is in three parts:

1. The difference between counts and estimates varies geographically across North Carolina.
2. When splitting North Carolina counties into groups (based on demographic and economic characteristics), we can see that error differs by group.
3. One important correlate is race: while many demographic groups vary across North Carolina, counties with a >5% undercount have higher Black and American Indian Alaska/Native population, and a lower White population.