

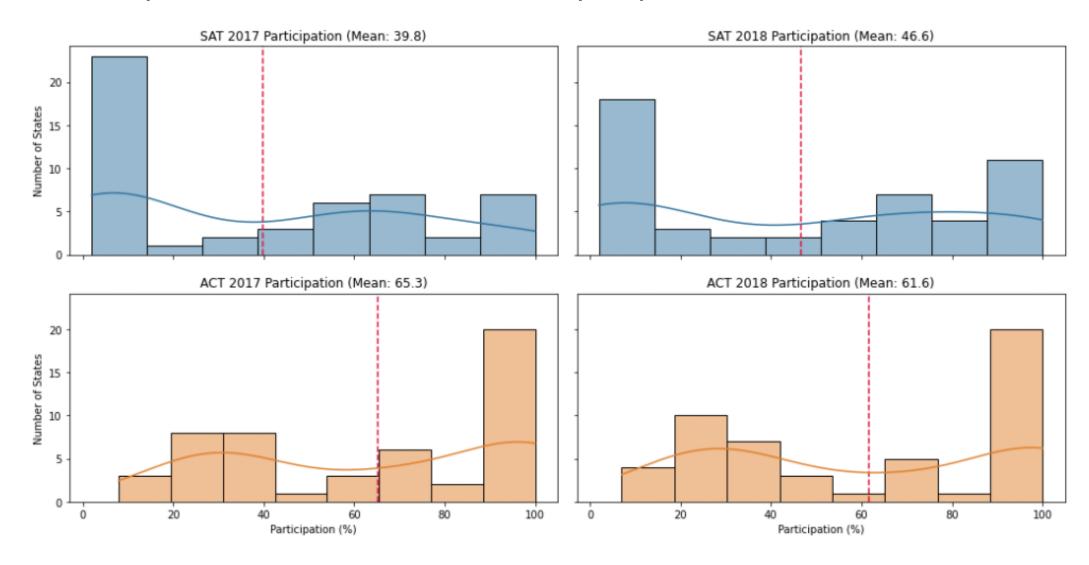
### Analyzing SAT & ACT Test Results

Benjamin Dornel – DSI 18 November 2020

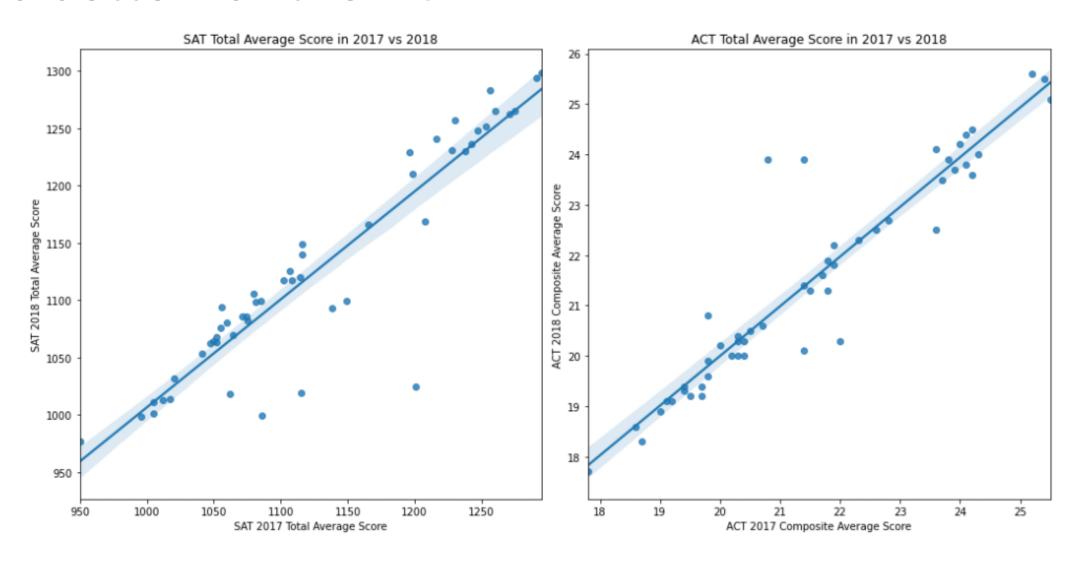


# ACT vs SAT: Which test is more popular?

#### Clearly, the ACT is more popular than the SAT

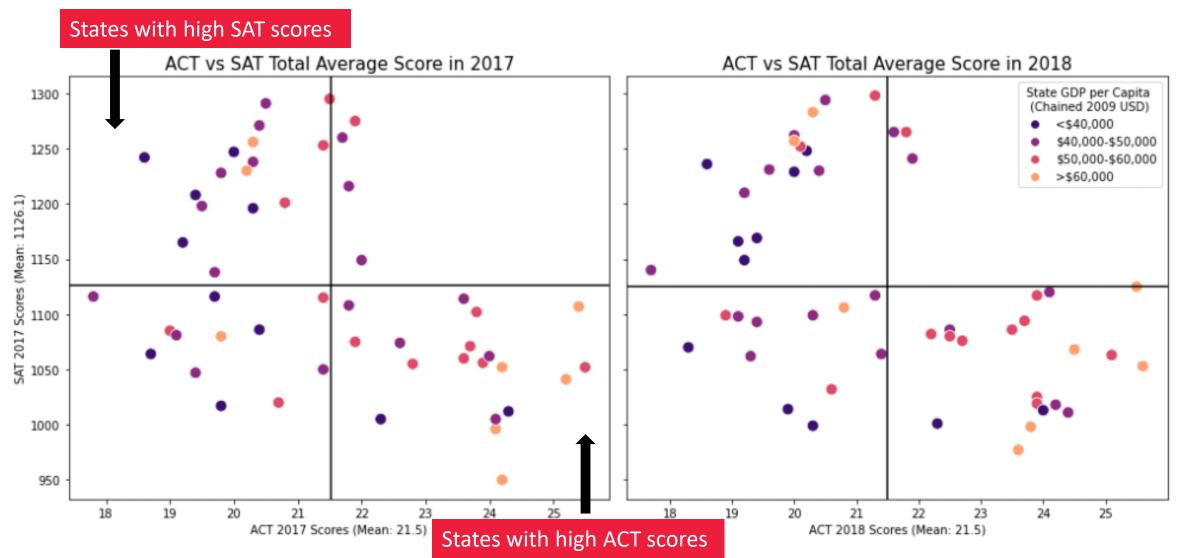


## But why? Correlation of scores year-over-year is better for the ACT.



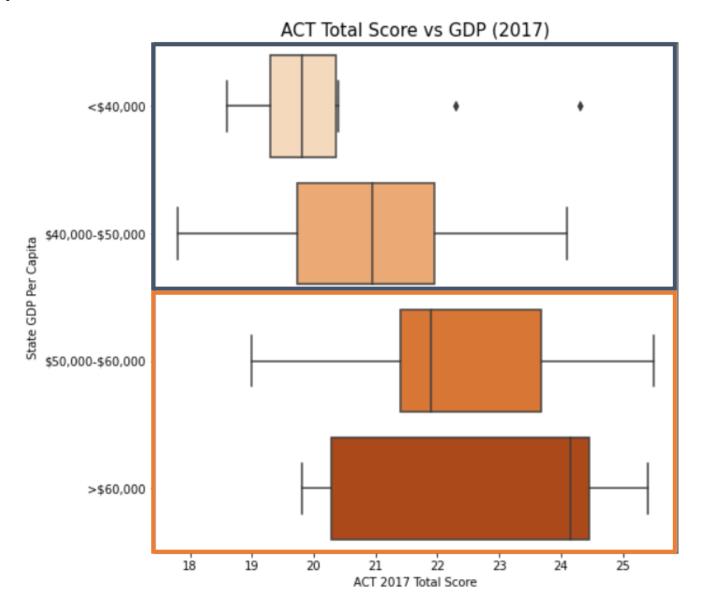
# So how can we boost SAT participation rates?

## Looking at the data shows that poor states have relatively higher SAT scores and lower ACT scores.



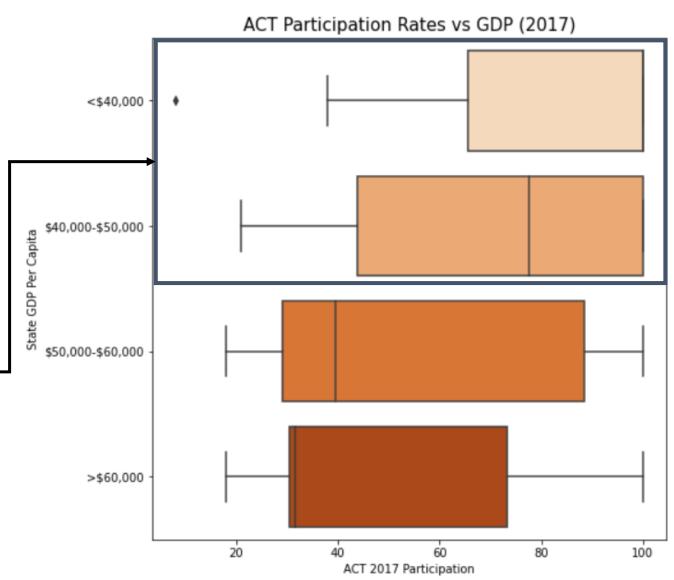
#### ACT Total Score vs GDP

- States with a low GDP per Capita tend to have relatively poor ACT scores.
- In comparison, states
  with a GDP per Capita
  of above \$50,000 have
  higher ACT scores.



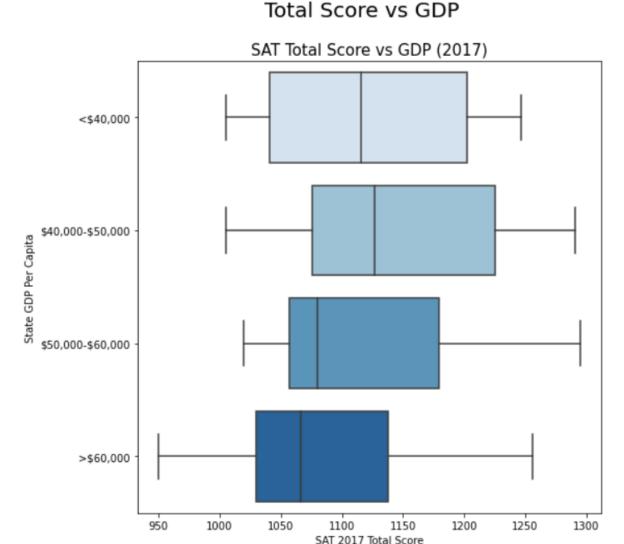
#### ACT Participation Rates vs GDP

- Despite this, states with a low GDP per Capita have high ACT participation rates.
- There are 19 states with:
   1. Relatively low GDP per capita (>\$50,000)
  - 2. High ACT participation rates (>50%)
  - 3. Below average ACT scores (>21.5)

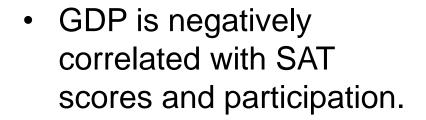


## The SAT seems to be more equitable in comparison

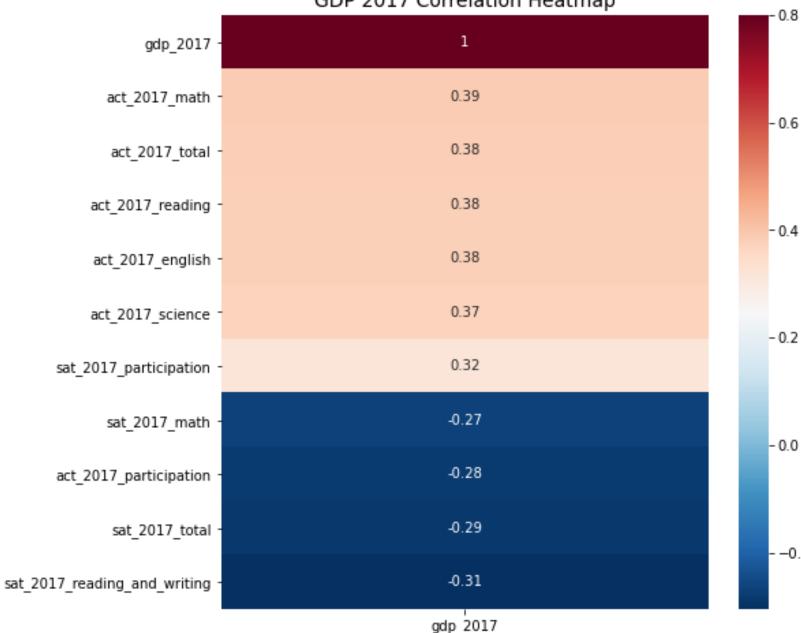
- This could be due to policies that support low-income students, such as the <u>SAT Fee Waiver</u>.
- The SAT also assigns low-income students with <u>Landscape</u>, an adversity score system.
- This suggests that lower income states can perform well on the SAT despite lower levels of educational funding.



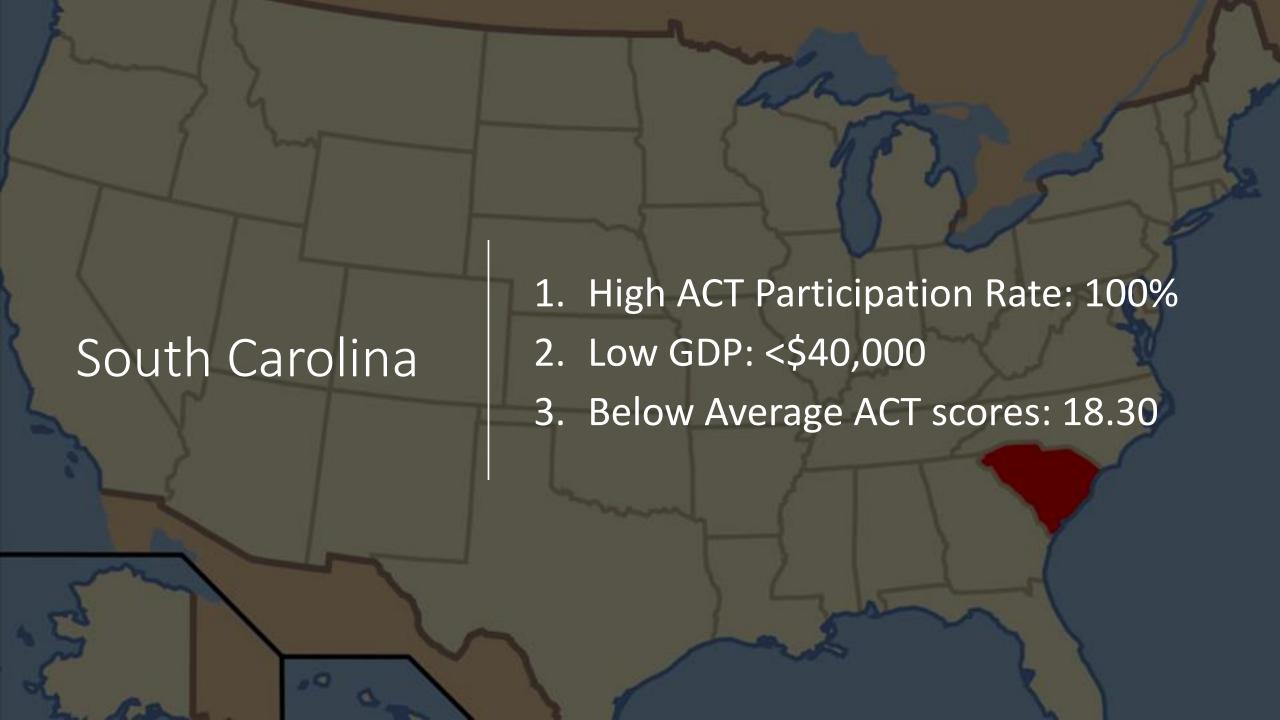




- GDP is positively correlated with ACT scores and participation.
- Hence, the higher a state's GDP, the higher their ACT test scores.
- The opposite is true for SAT test scores.



# So, which state should the College Board target?



## However, we need to keep in mind that correlation != causation.

- While the SAT may be more socially equitable than the ACT due to the policies like the fee waivers for low-income students, research shows that standardized test measures generally show a negative correlation between socioeconomic status and test results (NC Gov 2017).
- The College Board must continue to work with states to address this issue. This
  could mean incorporating other forms of testing such as portfolio-based
  assessment or adaptive testing.
- With COVID-19 changing the landscape of standardized testing, the College Board must continue to adapt the SAT to the times we are now in.

### Appendix

