



SAT & ACT Analysis

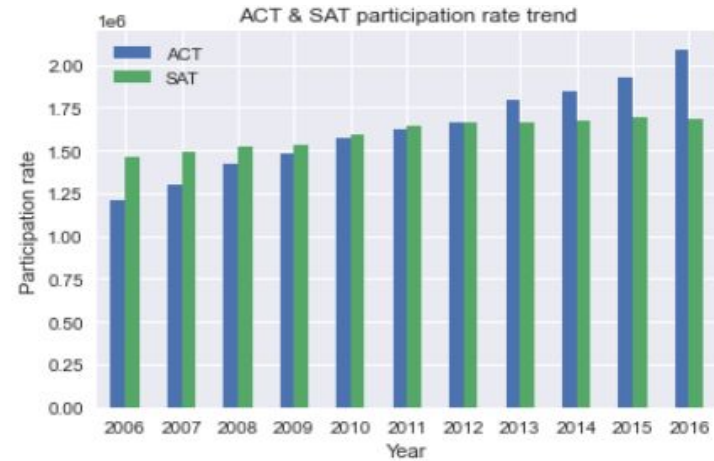
Project Team 1
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Problem Statement

- Since 1926, SAT is the most well known standardized test in US. Over the past decade, ACT has been gaining substantial popularity. From 2012 onwards, its number of ACT test takers exceeds SAT.
- It is important to study the statistical relationship of participation rate and scores. This is to gain insights for participation rate improvement recommendations.

SAT year participation rate from 2006 to 2016:



* raw data extracted from:

<https://www.applerouth.com/blog/2016/09/08/the-act-reigns-supreme-in-2016/>

Executive Summary

Key Highlights of the analysis:

For this project, we will focus on 2017 and 2018 datasets:

- It was observed that participation rate is inversely proportional to their respective scores
- SAT participation rate median is 14% higher in 2018
- In 2018, ACT participation rate median is 14% higher than SAT

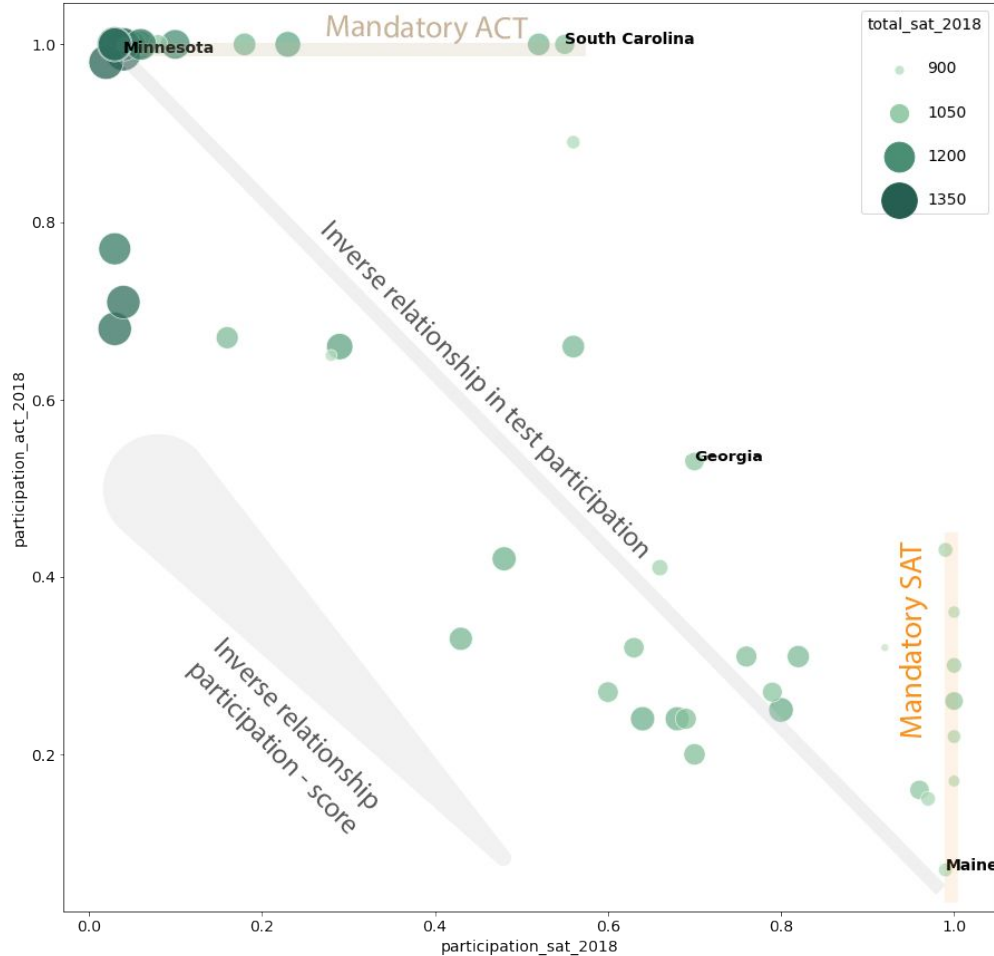
Research Findings

- Colorado and Illinois show drastic participation rate improvement to 100% in 2018.

Appropriate Recommendations

- Convince respective states to adopt SAT test as a statewide mandatory test.
- Improving SAT test in various areas

Participation in 2018 in relation to SAT test scores



Majority of population are only taking either tests

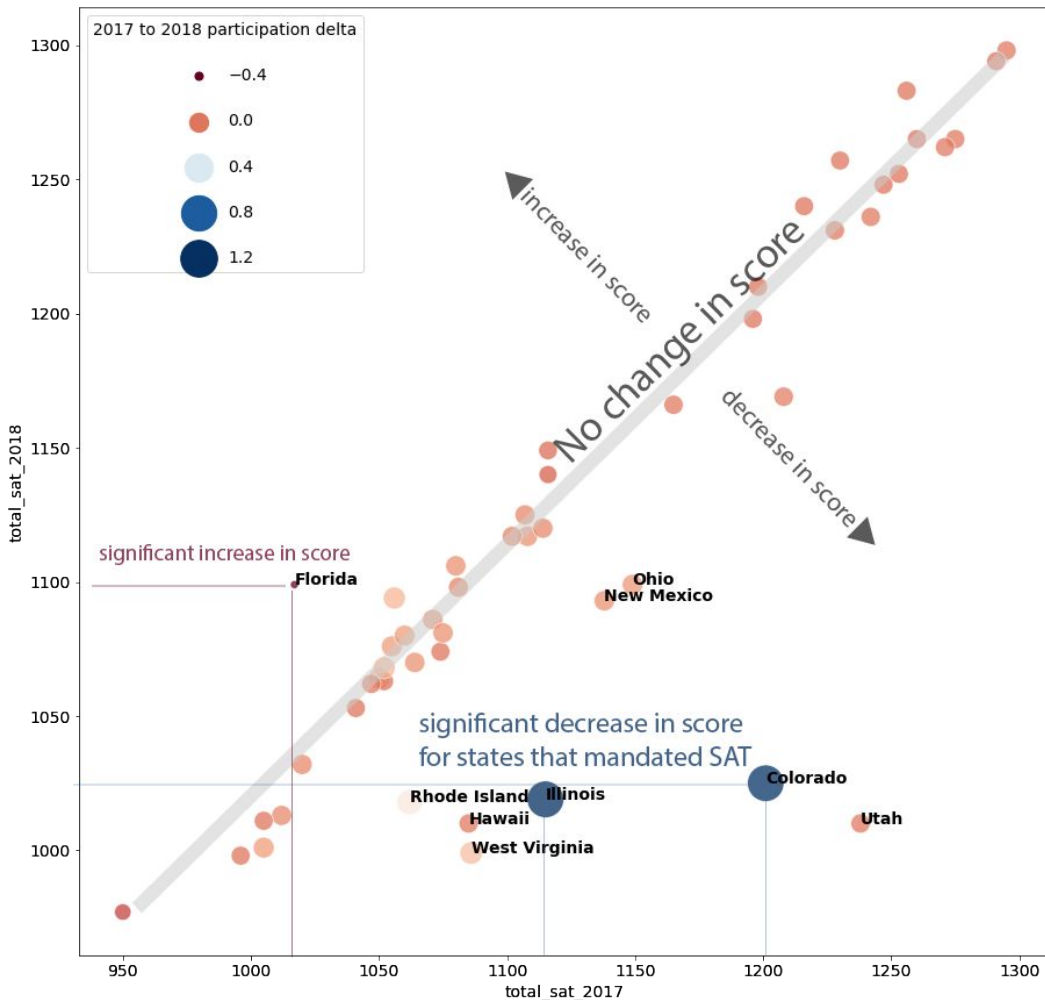
Higher ACT participation
Lower SAT participation

High Achievers have inelastic demand for SAT

Lower SAT participation
Higher SAT mean score

Not everyone cares about good grades

Mandatory SAT participation states
all have lower mean scores



Colorado & Illinois

Students that are forced to take SAT are not prepared

Sharp increase in participation

Sharp decrease in score

Utah

States that are heavily entrenched in ACT may lose interest in SAT

4% SAT participation

Mandated ACT in 1999

Greatest decrease in SAT score

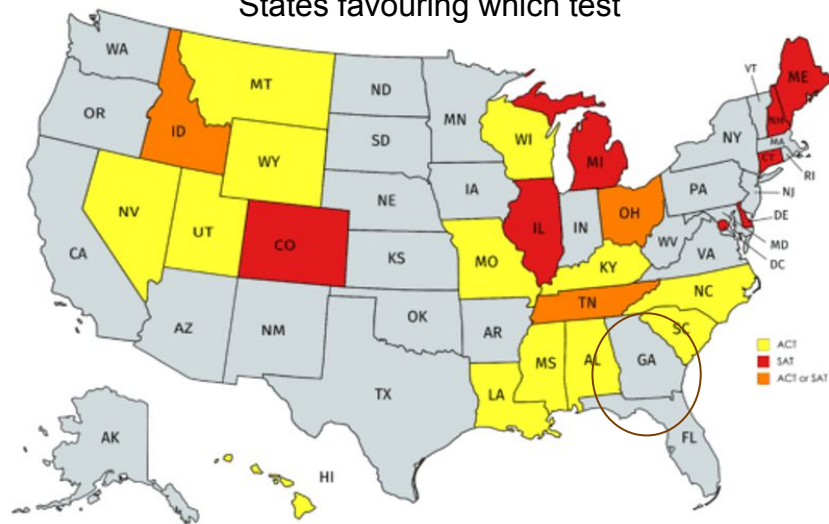
Conclusion

- Participation rate of each test depends heavily on the state's policies.
 - States with mandatory testing will have higher participation
- Lower participation rate have a higher mean score.
 - Bias selection - only better performing students would take the test which result in a higher average score
- 14% Increased in the median participation rate for SAT 2018
 - Colorado and Illinois switched to SAT in 2018
- Research found that accessibility and affordability are some of the key factors in helping States to decide which is a better testing tool, hence increasing participation rate

Why choose Georgia?

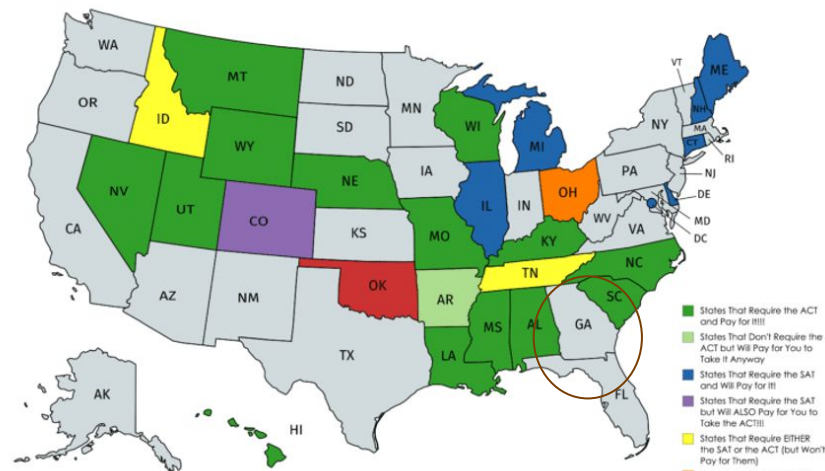
Georgia is still sitting on the fence when choosing which test to take

States favouring which test



Created with mapchart.net ©

States that pay for student's test



Created with mapchart.net ©

<https://magoosh.com/hs/act/2017/states-that-require-the-act-or-sat/>

Recommendations

Product

- Revise testing structure to suit curriculum
- Improve testing convenience

Price

- Extend income eligible scheme (fee waiver to low income households)
- Offer testing and preparation material at a discount to the state

Place

- Materials should be readily available in schools and online
- Offer mock test to 10th graders in school

Promotion

- Online and offline marketing strategy
- Position brand that help students to succeed



Affordable



Thank you