

# **ACT/SAT TRENDS IN 2017-2019**



# PROBLEM STATEMENT

This project aims to:

- Identify states that have decreasing ACT and SAT participation rates
- Check the rate of participation for three different groups of states
- Compare the participation rate of western, eastern and central states

# DATASETS

- Datasets with participation rates for 51 states
- For 2017, 2018 and 2019
- For ACT and SAT

# HIGHEST AND LOWEST PARTICIPATIONS

ACT			SAT	
year	Minimum Participation	Maximum Participation	Minimum Participation	Maximum Participation
2017	Maine	Alabama	Iowa	Connecticut
2018	Maine	Alabama	North Dakota	Colorado
2019	Maine	Alabama	North Dakota	Colorado

# STATES WITH DECREASING PARTICIPATION /ACT

state	act_participation_2017	act_participation_2018	act_participation_2019
California	0.31	0.27	0.23
Colorado	1.00	0.30	0.27
Connecticut	0.31	0.26	0.22
Delaware	0.18	0.17	0.13
Florida	0.73	0.66	0.54
Georgia	0.55	0.53	0.49
Hawaii	0.90	0.89	0.80
Idaho	0.38	0.36	0.31
Illinois	0.93	0.43	0.35
Indiana	0.35	0.32	0.29
Maine	0.08	0.07	0.06

Massachusetts	0.29	0.25	0.21
Michigan	0.29	0.22	0.19
Minnesota	1.00	0.99	0.95
New Hampshire	0.18	0.16	0.14
New Jersey	0.34	0.31	0.25
New York	0.31	0.27	0.22
Pennsylvania	0.23	0.20	0.17
Rhode Island	0.21	0.15	0.12
South Dakota	0.80	0.77	0.75
Vermont	0.29	0.24	0.20
Virginia	0.29	0.24	0.21
West Virginia	0.69	0.65	0.49

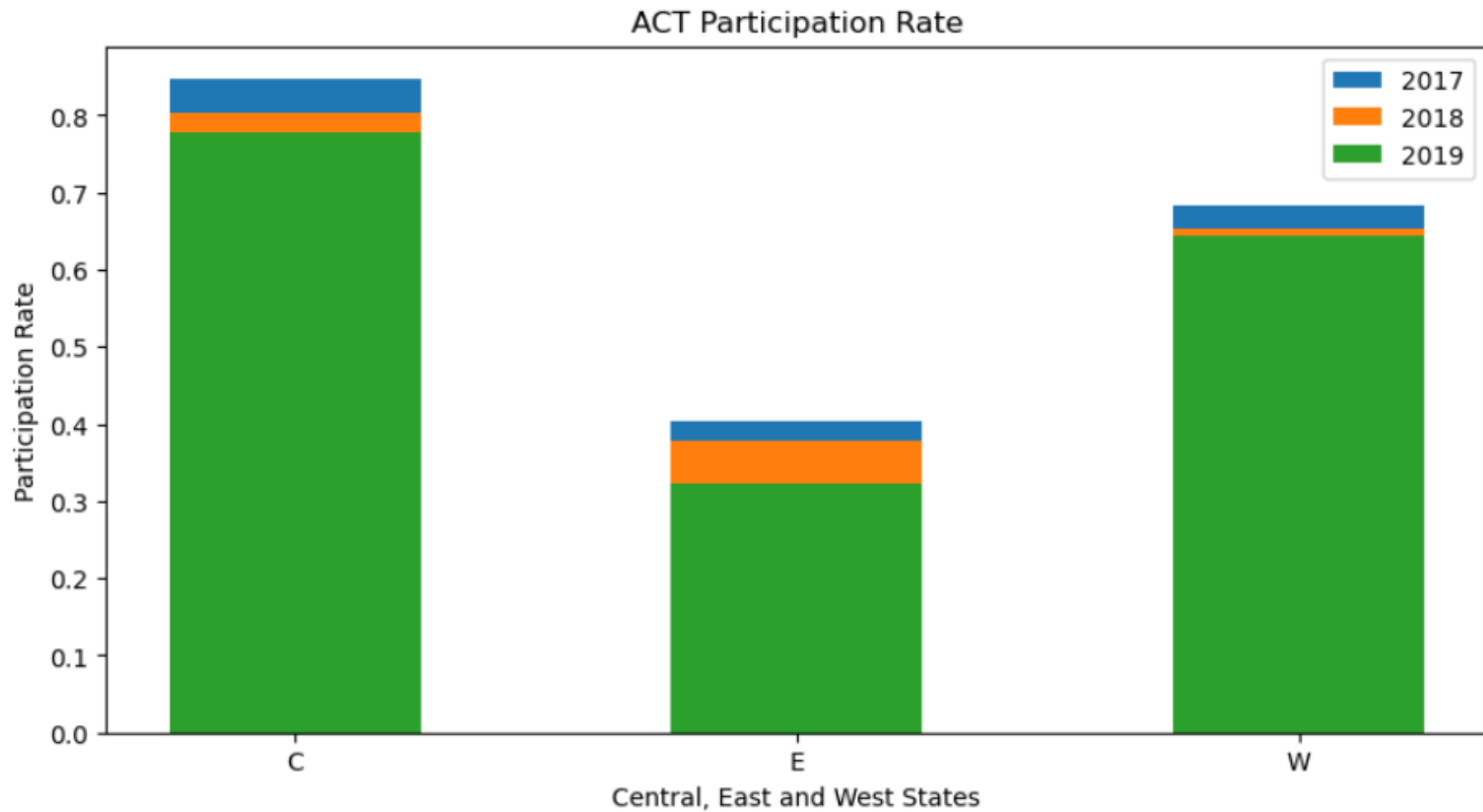
# STATES WITH DECREASING PARTICIPATION /SAT

state	sat_participation_2017	sat_participation_2018	sat_participation_2019
Nevada	0.26	0.23	0.2

# AVERAGE PARTICIPATION OF WEST, EAST AND CENTER/ACT

	act_participation_2017	act_participation_2018	act_participation_2019
states_geo			
C	0.847143	0.802381	0.778571
E	0.404444	0.377222	0.323889
W	0.684167	0.653333	0.645000

# AVERAGE PARTICIPATION OF WEST, EAST AND CENTER/ACT

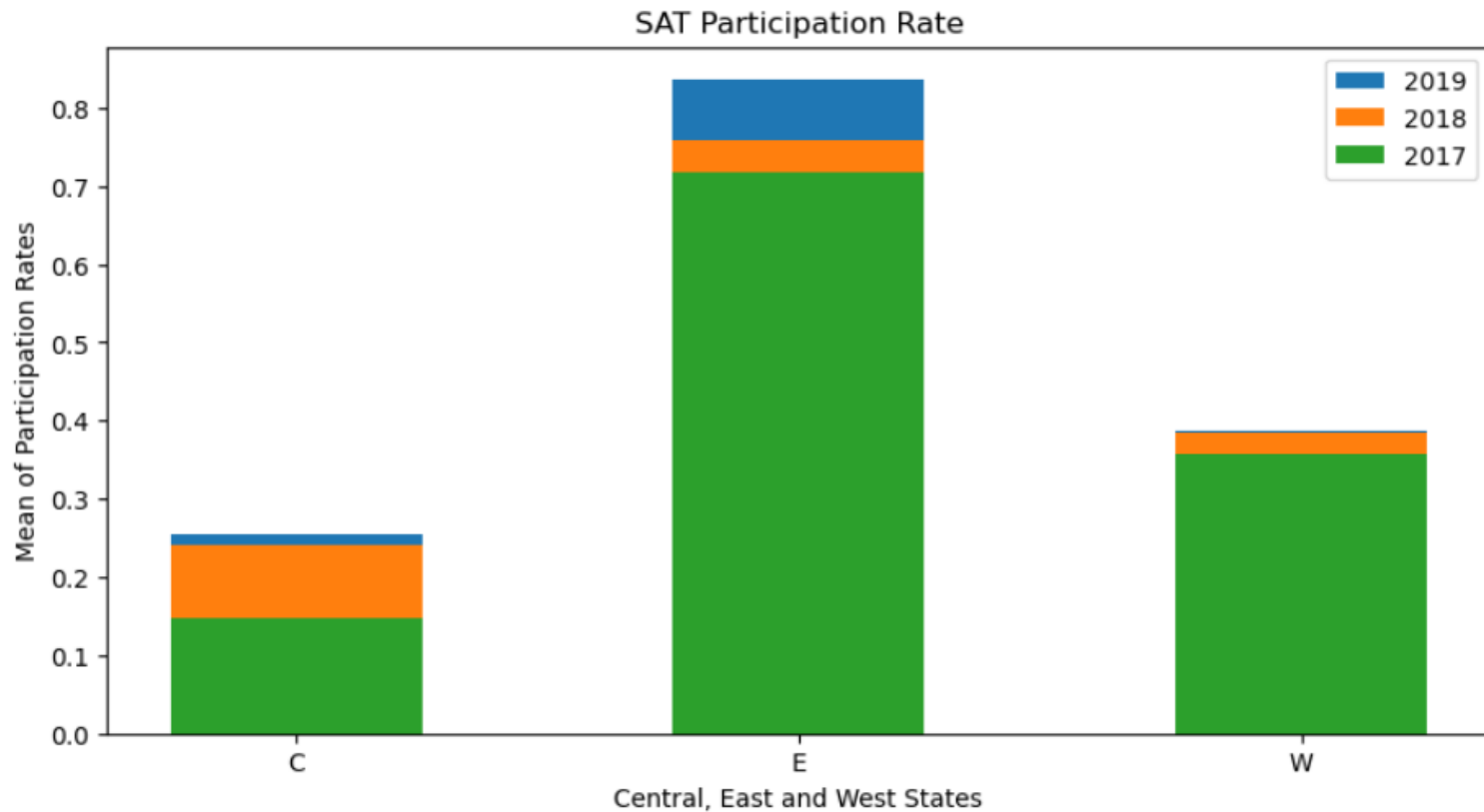




# AVERAGE PARTICIPATION OF WEST, EAST AND CENTER/SAT

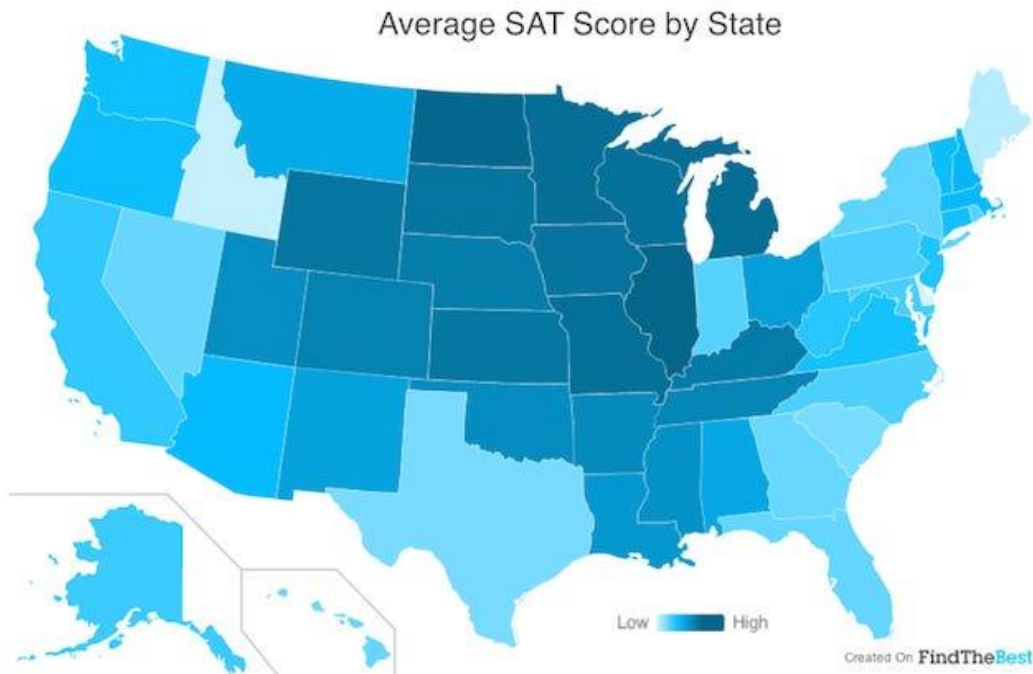
	sat_participation_2017	sat_participation_2018	sat_participation_2019
states_geo			
C	0.147619	0.241905	0.253810
E	0.717222	0.757778	0.836111
W	0.357500	0.384167	0.386667

# AVERAGE PARTICIPATION OF WEST, EAST AND CENTER/SAT



# MORE TRENDS

Central US with the highest Average SAT Score



# RESULTS

- Good job on the change! SAT Participation rate increased!
- ACT participation rate decreased.
- The lowest SAT participation rate is for central states and the highest is for eastern states.
- The lowest ACT participation rate is for eastern states and the highest is for central states.

# RESOURCES

- <https://stackoverflow.com/>
- <https://www.geeksforgeeks.org/>
- <https://www.minotdailynews.com/news/local-news/2017/04/a-brief-history-of-the-sat-and-act/>
- <https://pandas.pydata.org/>

Thank you for your time