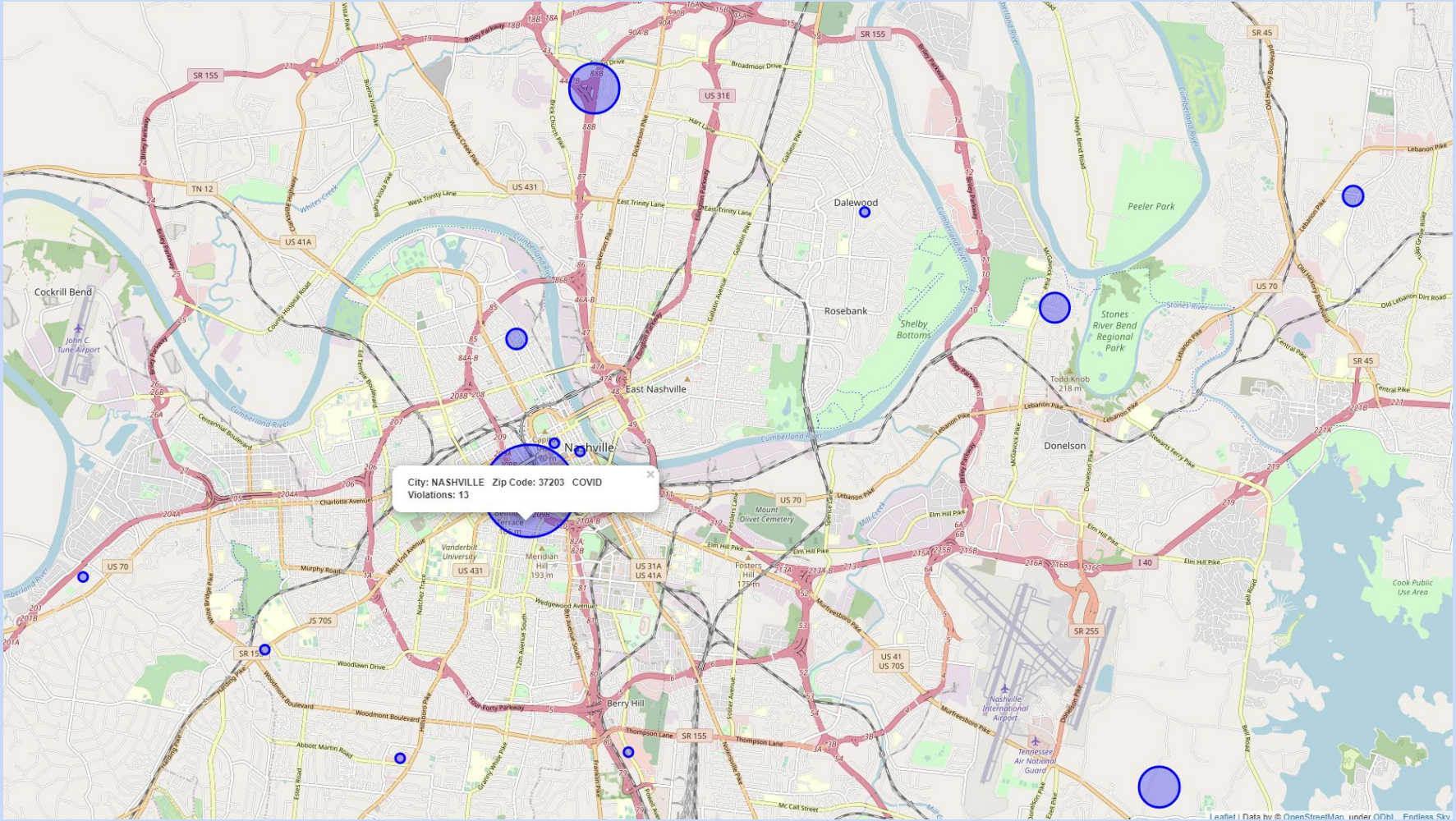
COVID-19 in Davidson County

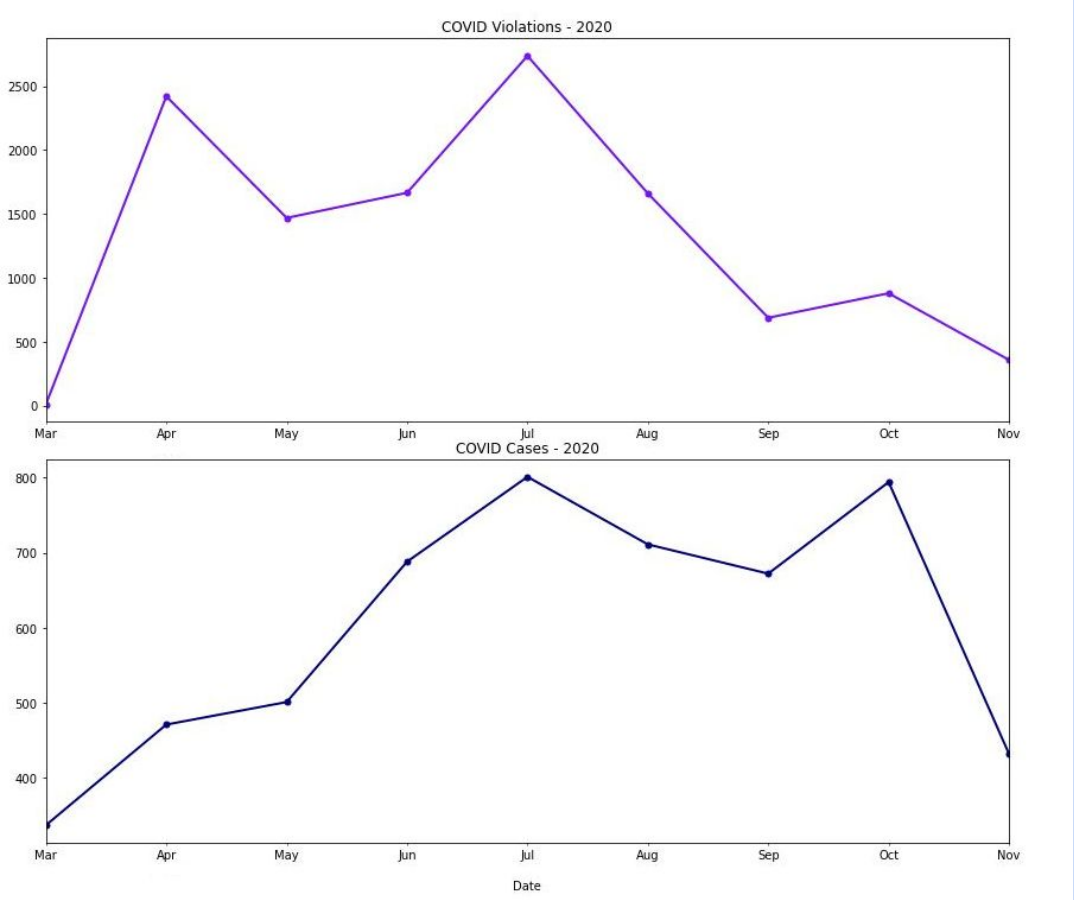
Violations, Masks, and Colleges

Reported COVID-19 Violations in Davidson County

The area with the most reported violations is the Gulch, or the 37203 zip code (Davidson County - Nashville)

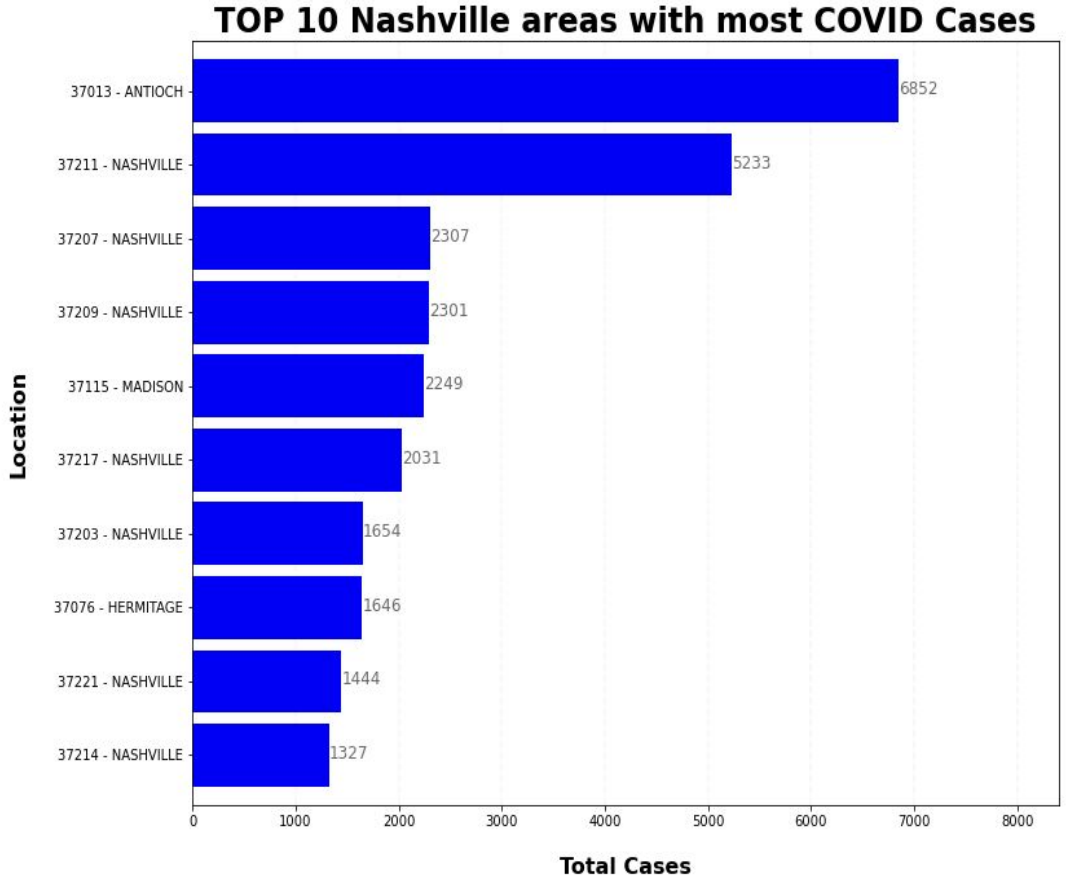


Total COVID-19 Cases & Violations in 2020



At the zip code level, COVID-19 cases and violations have a moderate positive correlation of .517. However, the reporting of violations dropped at a much steeper rate than the decline in cases from July to September, so going forward, this may not necessarily hold true.

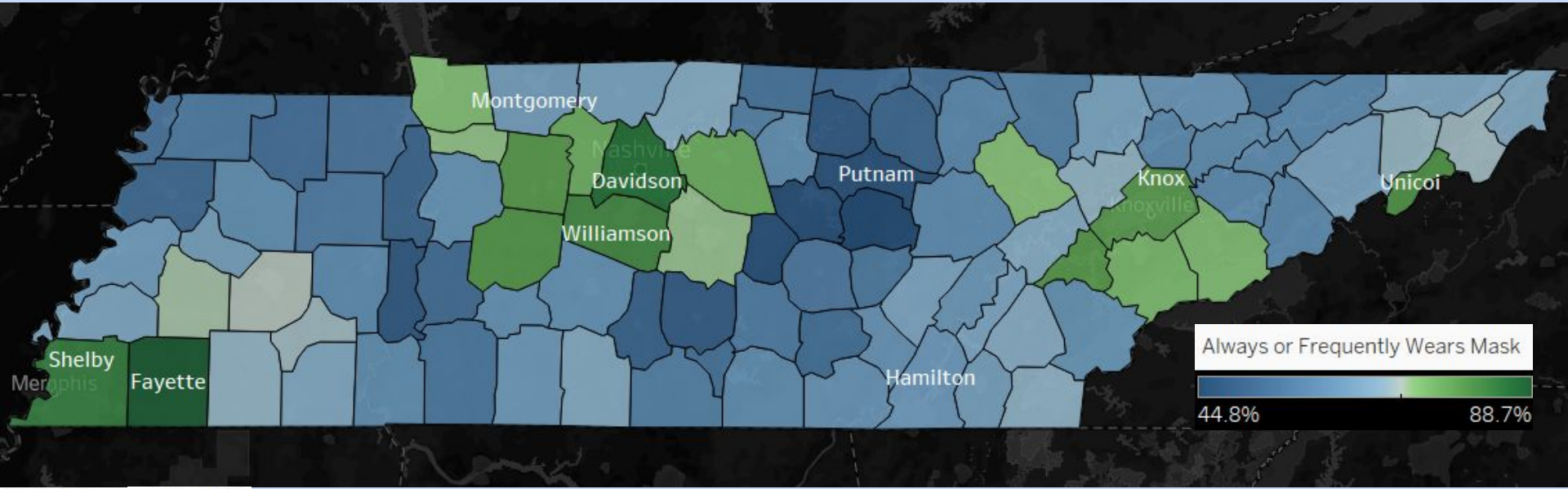
Top 10 Areas in Nashville with the Most COVID Cases



zip	count	Rank	city
37013	6852	1	ANTIOCH
37211	5233	2	NASHVILLE
37207	2307	4	NASHVILLE
37209	2301	5	NASHVILLE
37115	2249	6	MADISON
37217	2031	7	NASHVILLE
37203	1654	8	NASHVILLE
37076	1646	9	HERMITAGE
37221	1444	10	NASHVILLE

Davidson County Mask Usage

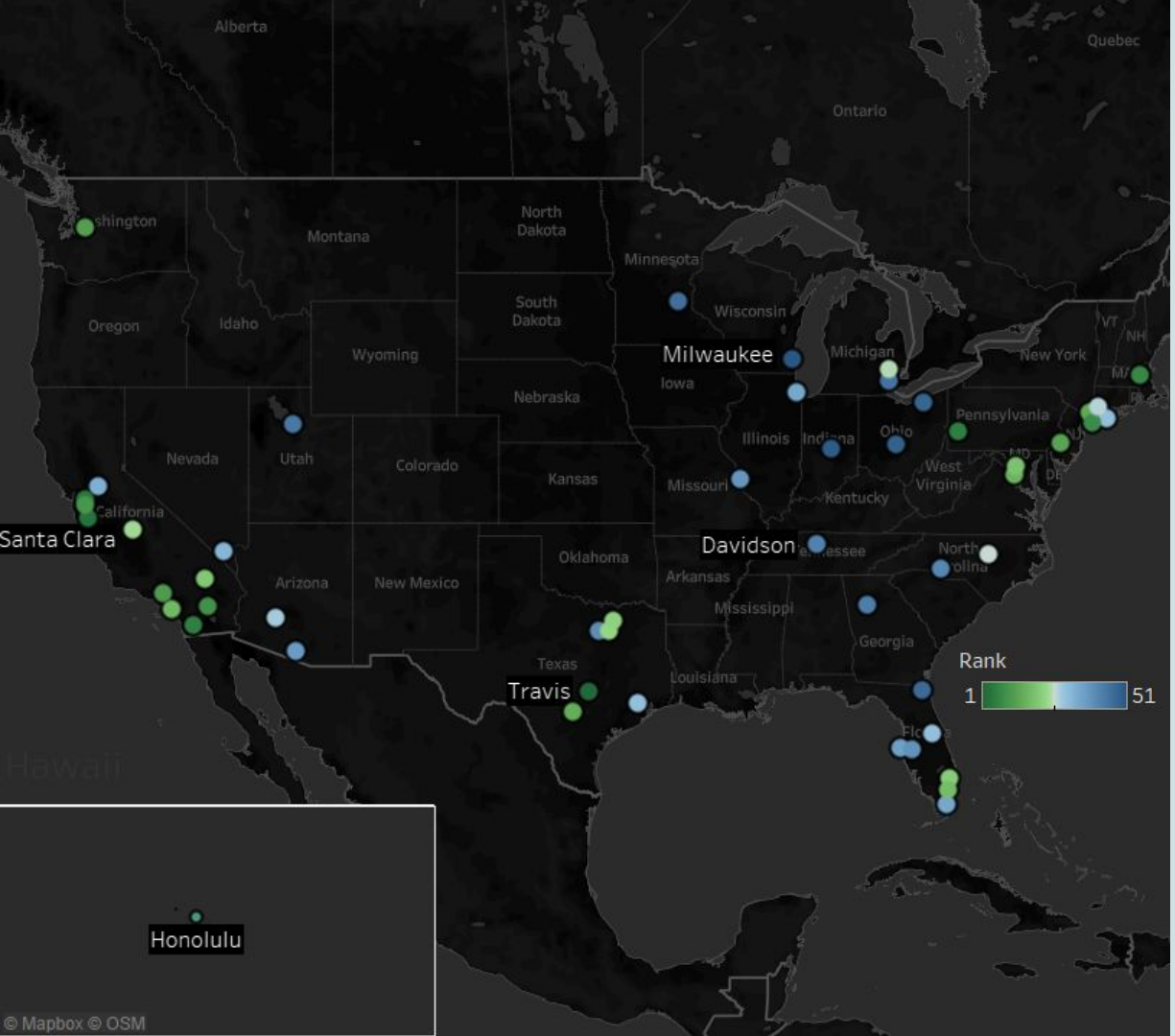
Mask Usage in Tennessee Counties



County	Mask %
Fayette	88.7%
Davidson	85.8%
Shelby	83.7%
Williamson	81.6%
Unicoi	80.3%
Hickman	79.8%
Loudon	79.2%
Dickson	79.1%
Knox	78.8%

Tennessee counties' average % of respondents who always or frequently wear masks:

63.67%



County	State	Mask %
Travis	Texas	95.3%
Honolulu	Hawaii	94.9%
Santa Clara	California	93.2%
Contra Costa	California	92.7%
Allegheny	Pennsylvania	92.6%
San Diego	California	92.6%
Middlesex	Massachusetts	92.5%
Nassau	New York	92.1%
Riverside	California	91.9%
Alameda	California	91.8%
Davidson	Tennessee	85.8%
Milwaukee	Wisconsin	76.1%

US counties' average % of respondents who always or frequently wear masks:

71.54%

Highest COVID-19 Case Days by Zip Code

Top 10 Days by Cases within a Zip Code

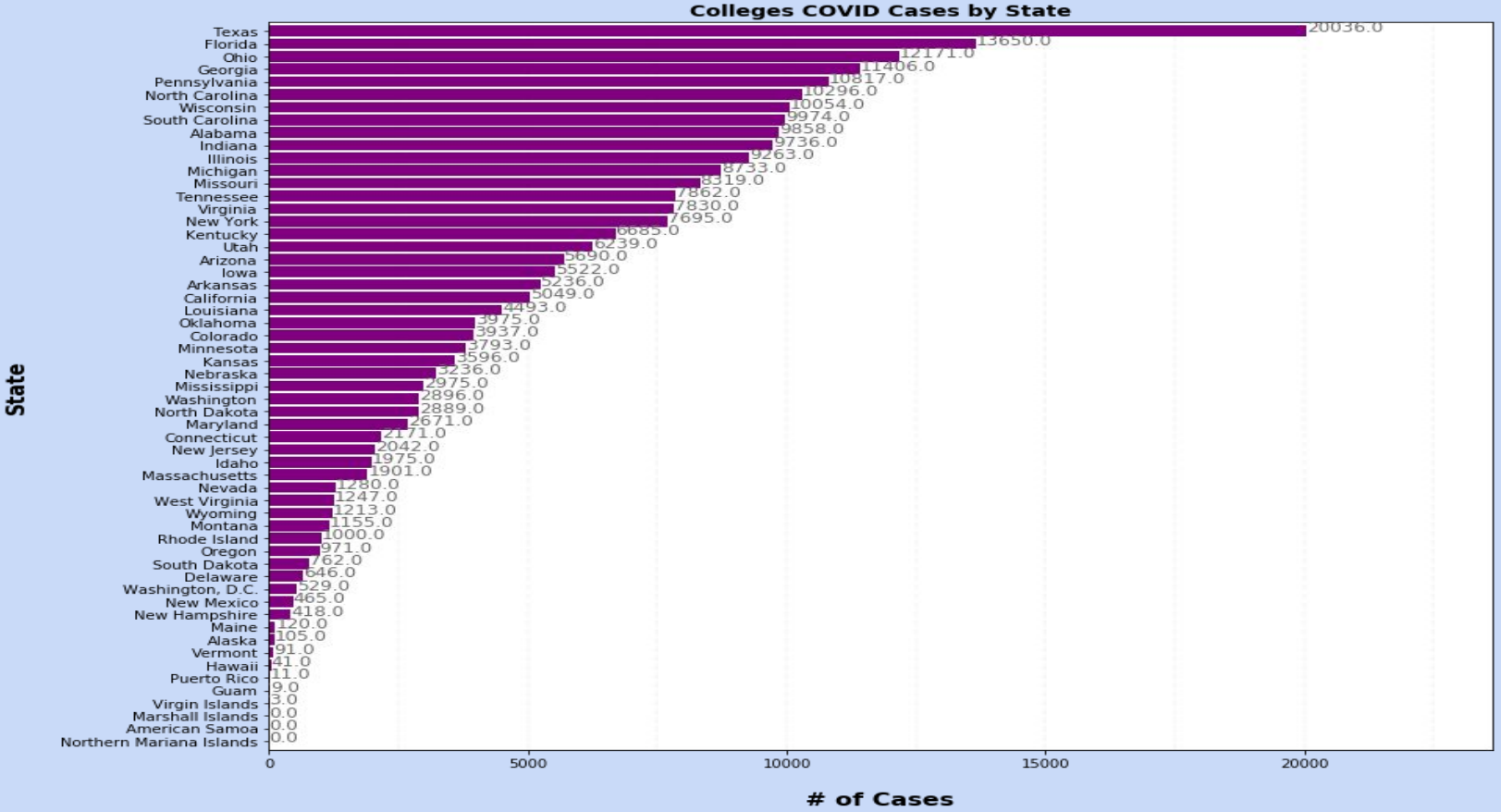
	Date	Zip Code	Cases
0	6/24/2020	37211	159
1	8/4/2020	37211	131
2	11/9/2020	37013	127
3	9/4/2020	unspecified	125
4	7/6/2020	37013	119
5	9/3/2020	unspecified	100
6	11/9/2020	unspecified	98
7	11/10/2020	37013	98
8	7/8/2020	37013	94
9	7/13/2020	37013	93

Interestingly, the only one of these days that had an associated cluster was August 4 in the 37211 zip code, which was linked to a CoreCivic cluster of 122 cases.

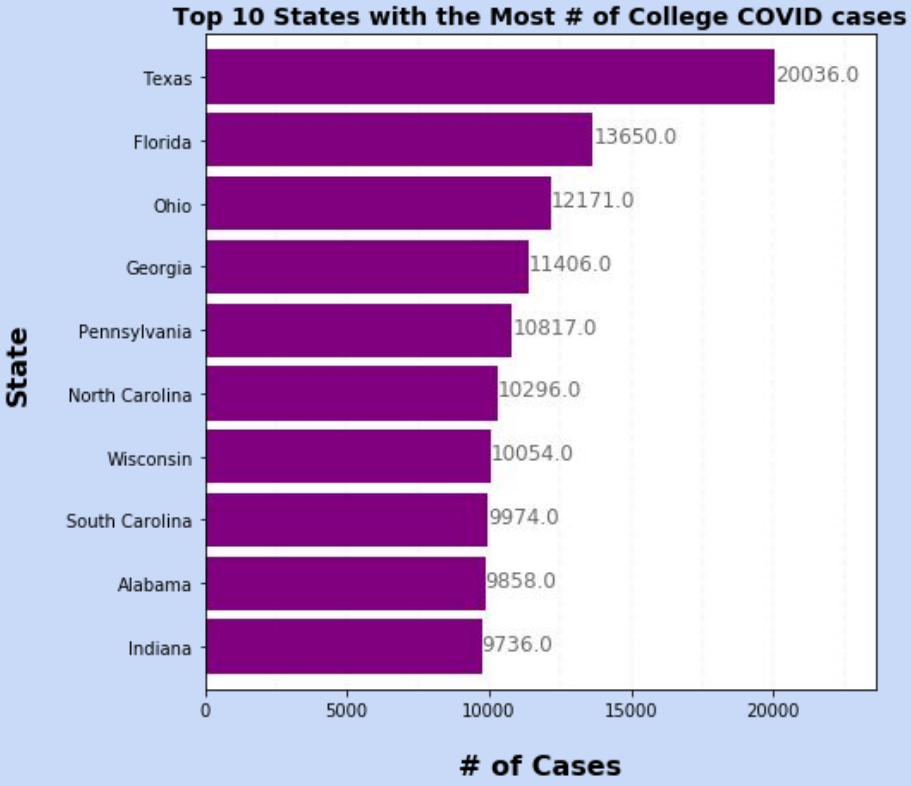
As of November 10, 2020

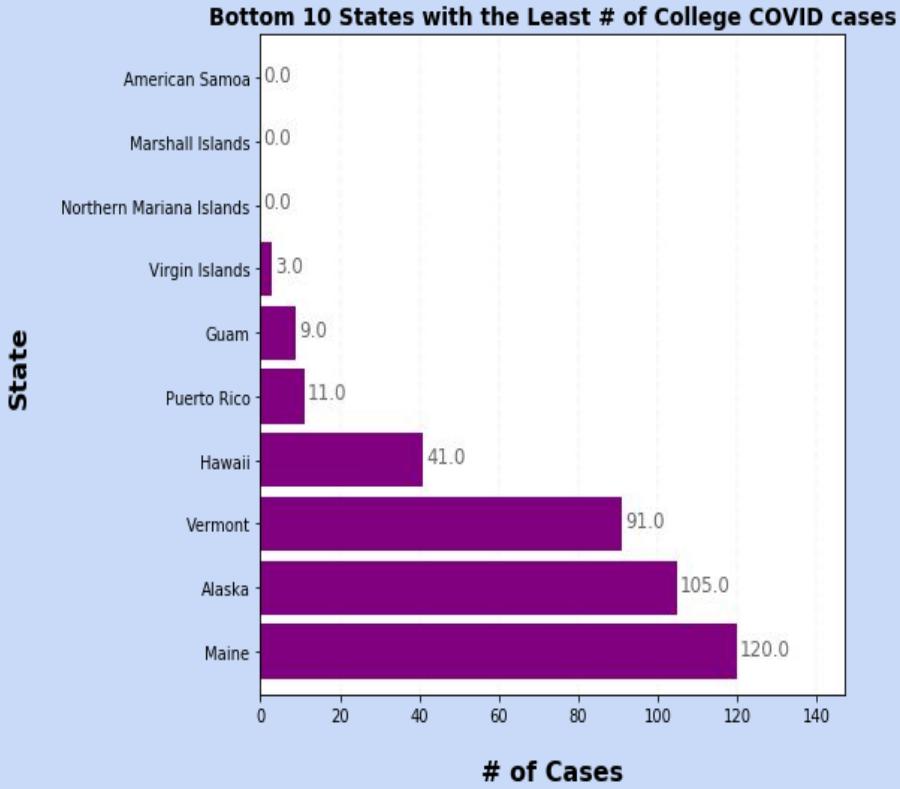
COVID-19 and College Campuses

Let's Explore COVID Cases in Colleges by State



Top and Bottom 10 States/U.S. Territories by College COVID Cases



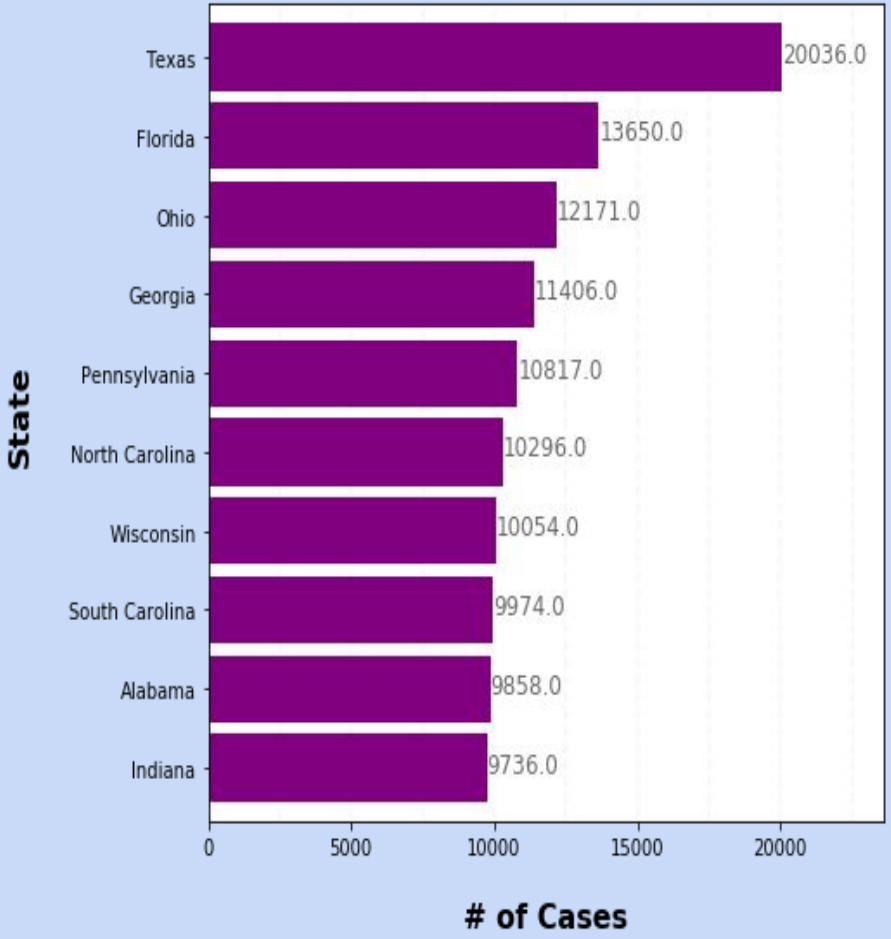


Is there a correlation between the number of colleges in a state and the number of COVID cases?

Top 10 States with the Greatest # of Colleges

New York	154
Pennsylvania	112
Florida	90
Texas	82
California	81
Ohio	67
Tennessee	65
Minnesota	58
Massachusetts	57
Kentucky	52

Top 10 States with the Most # of College COVID cases

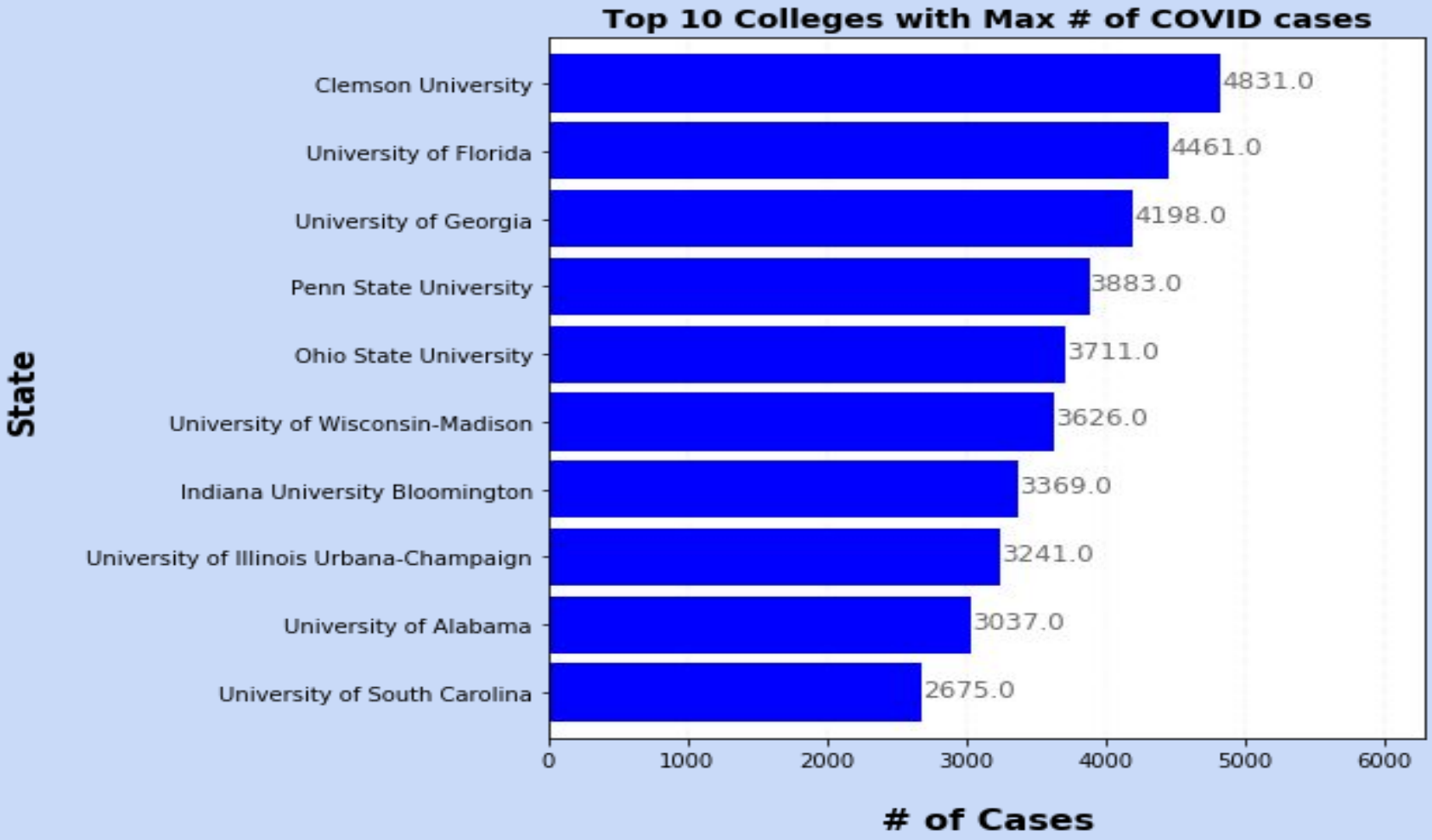


Can you guess which college had the highest number of COVID cases?

The Winner Is...

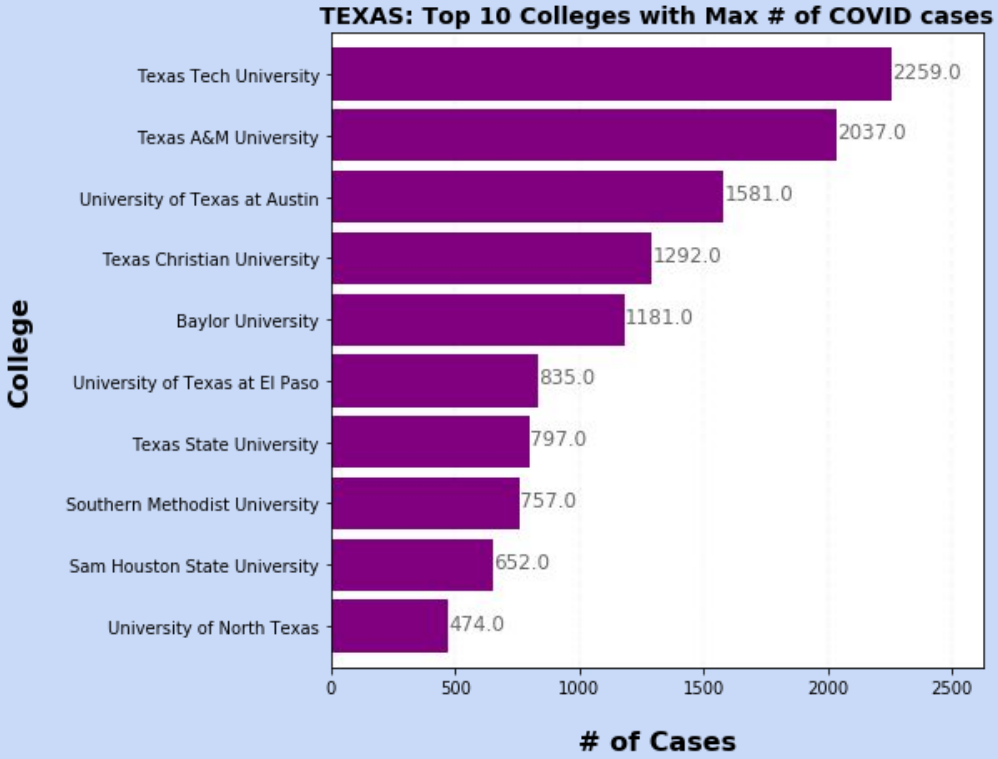
date	2020-11-05
state	South Carolina
county	Pickens
city	Clemson
ipeds_id	217882
college	Clemson University
cases	4831

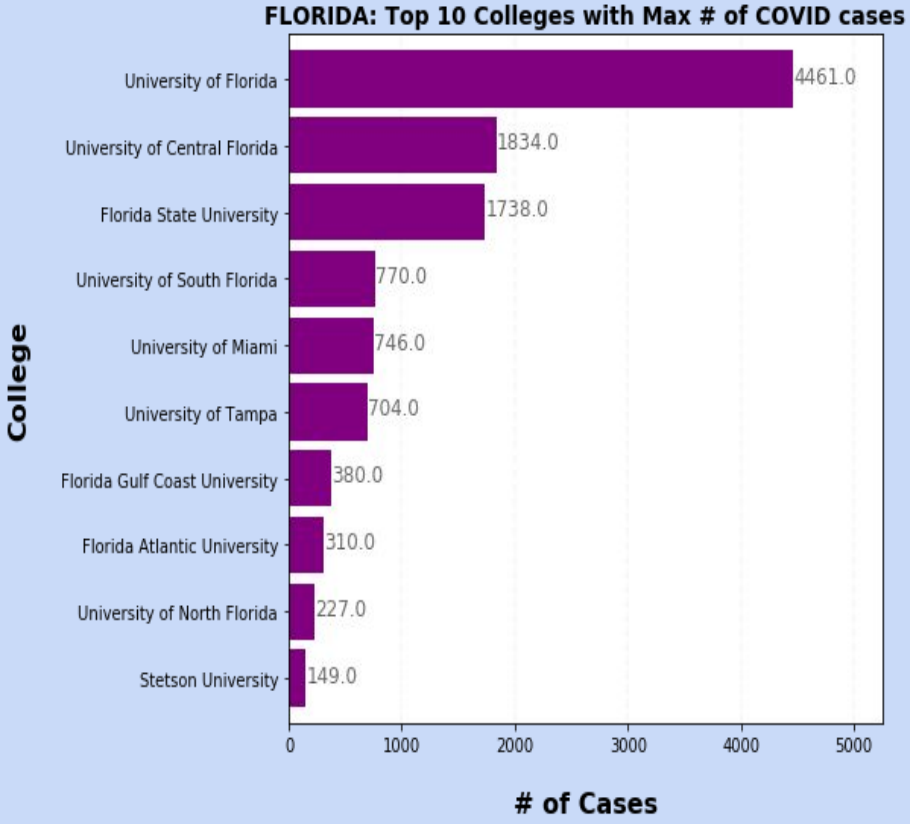
The college with the most COVID cases as of November 11, 2020

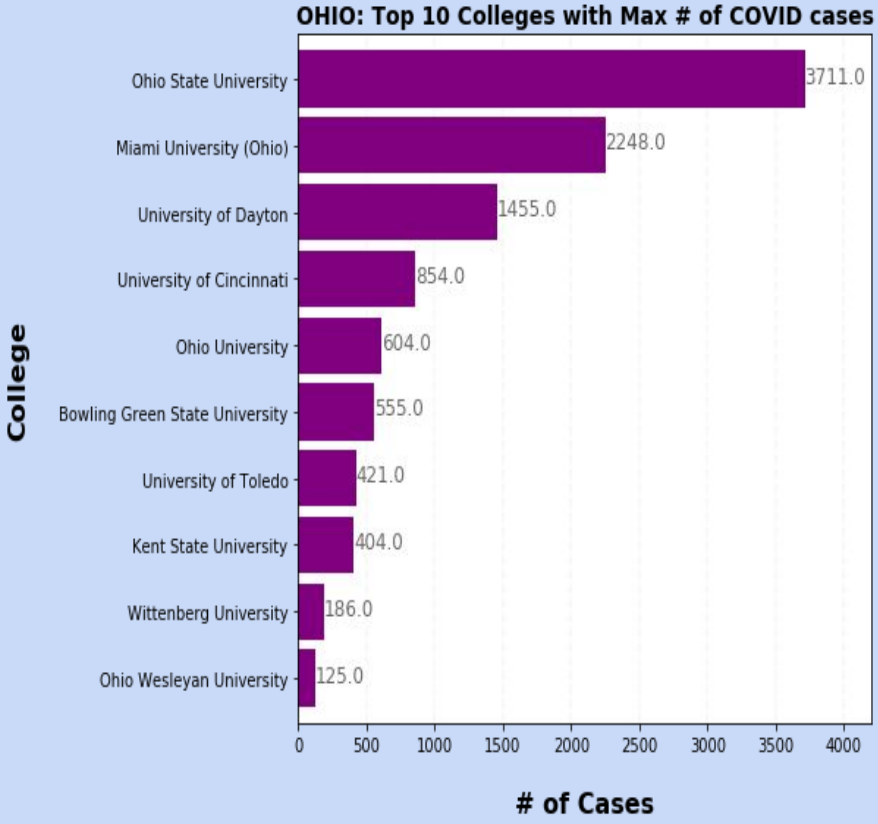

Top 10 Colleges with Max # of COVID cases
Clemson University
University of Florida
University of Georgia
Penn State University
Ohio State University
University of Wisconsin-Madison
Indiana University Bloomington
University of Illinois Urbana-Champaign
University of Alabama
University of South Carolina
4831.0
4461.0
4198.0
3883.0
3711.0
3626.0
3369.0
3241.0
3037.0
2675.0
State
0
1000
2000
3000
4000
5000
6000
# of Cases

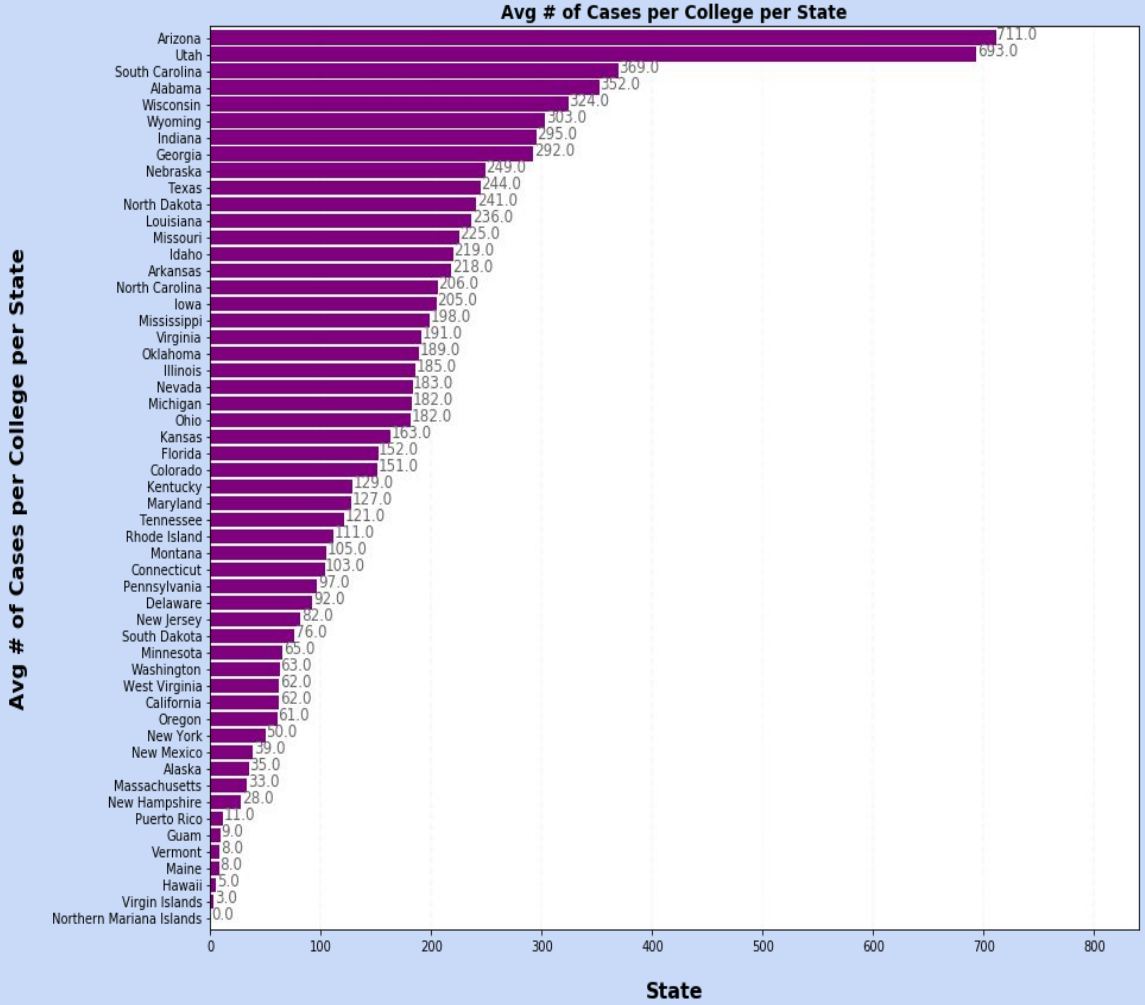
Now… let's look at the top 10 colleges with the most COVID cases in the top 3 states

state	cases
Texas	20036.0
Florida	13650.0
Ohio	12171.0




FLORIDA: Top 10 Colleges with Max # of COVID cases
College
University of Florida
University of Central Florida
Florida State University
University of South Florida
University of Miami
University of Tampa
Florida Gulf Coast University
Florida Atlantic University
University of North Florida
Stetson University
4461.0
1834.0
1738.0
770.0
746.0
704.0
380.0
310.0
227.0
149.0
0
1000
2000
3000
4000
5000
# of Cases


OHIO: Top 10 Colleges with Max # of COVID cases
College
Ohio State University
Miami University (Ohio)
University of Dayton
University of Cincinnati
Ohio University
Bowling Green State University
University of Toledo
Kent State University
Wittenberg University
Ohio Wesleyan University
3711.0
2248.0
1455.0
854.0
604.0
555.0
421.0
404.0
186.0
125.0
0
500
1000
1500
2000
2500
3000
3500
4000
# of Cases



# of Colleges:
Arizona - 8,
Utah - 9,
South Carolina - 27,
Alabama - 28,
Wisconsin - 31.
However, they have the highest avg. # of cases per college.

Conclusions

- COVID violations tended to be concentrated around downtown Nashville.
- After reaching a peak in July, COVID violation reports have sharply declined since, with little regard to cases. As such, they may not necessarily reflect improved compliance or lower risk
- Davidson County has good mask compliance relative to the rest of the state of Tennessee, as well as the country as a whole, but somewhat poor compliance compared to the top 50 most populous counties in the US

Conclusions (continued)

- Cluster sizes have noticeably shrunk over the past few months, perhaps indicating a greater emphasis on tracing uncovering smaller events
- New York and California are two of the largest states, and both were heavily affected by COVID during the first wave, but neither is in the top 10 of college campus cases. Policies around remote learning are likely playing a role.

Additional Sources

- https://www.census.gov/data/datasets.html