



University of Florida Election Lab

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# Voter Turnout Rates Among Metropolitan Statistical Areas in the 2016 and 2020 Presidential Elections

## Summary

The Houston Endowment commissioned the Election Lab at the University of Florida to produce a report on the Houston area's turnout rates.

This report is the first of two reports. The purpose of this report is to provide November general election turnout rates of Houston area in comparison to other large United States large metropolises and to other Texas urban areas.

The primary finding of this report is Houston area's turnout rates in presidential elections is driven largely by factors outside the influence of the Houston Endowment. Turnout rates increase when a state's presidential election is competitive, leading to an increase in mobilization strategies used by the campaigns in their fight for an Electoral College majority, which in turn results in a rise in voter interest. Texas scores low on voter convenience laws that are known to be positively correlated with voter turnout, laws which are determined by state officials. Demographic patterns that shape turnout, particularly education levels, are largely outside of direct influence of Houston communities to affect, other than to promote more education and attracting highly educated workers to the region.

The good news is that with respect to one of these factors, the competitiveness of presidential elections, Texas is becoming more competitive and this appears to have lifted turnout rates statewide and within the Houston area between the 2016 and 2020 elections, as well as Texas as a whole.

Presidential elections and state laws are largely outside the control of the Houston community. We recommend investments in civic education, which may have positive effects on the public's participation in elections across the national, state, and local levels.

The second report expected to be delivered to the Houston Endowment in June, 2024 will report the findings from a feasibility study of collecting local election data for comparison of local turnout rates across these large municipalities. Local elections generally have much lower turnout than presidential elections and are affected more by local conditions.

Some local elections are held concurrently with November general elections, but many are not; they are often held on their own dates separate from other, higher offices. We might thus expect to find turnout rates for local elections not to follow presidential patterns described in this report.

Frequently, local elections are not run by election administrators, but are instead run by the locality holding the election. As a consequence of these circumstances there is often no central reporting of local election results. For example, Texas' Independent School District election results are often reported on school district websites, not via county election offices. We seek to determine the scope of these challenges so that we can determine the effort required to collect and compare local turnout rates across the country.

We are pleased to report that we have nearly completed collecting all of the recent local election data that we could for the Houston area and have moved to data collection for other metropolitan areas.

As we do this local election data collection task, we are investigating the creation of an artificial intelligence tool to automate website scraping of local election data. While this may reduce some data collection effort, our experience with local data collection is that we often still need to contact localities directly when their information cannot be discovered online.

We make these data and documentation for this report available publicly on the University of Florida Election Lab's website.

## Who We Are

The Election Lab at the University of Florida is a collaboration of faculty and students who study voting and elections through analyses of survey and election data. Our mission is to provide timely and accurate statistics, software, reports, and other useful information, primarily regarding voting and elections in the United States.

Dr. Michael McDonald, Professor of Political Science at the University of Florida, is a co-author of this report. He produces what are widely considered to be the most reliable United States turnout rate reports of those eligible to vote and leads the production of precinct election data used widely by governments, courts, and media. He has authored or co-authored four books and written numerous academic articles on elections.

Dr. Brian Amos, Assistant Professor at Wichita State University, is a co-author of this report. He provided statistics analyzed in this report using methodologies he developed for merging data reported in geographically non-conforming boundaries, such as occurs with election results and census data.

A diverse team of five research assistants are assisting with local data collection. These data collection efforts dovetail with the Voting and Election Science Team's collection of precinct boundaries and results for general elections, led by Dr. Steve Gerontakis, Research Associate at the University of Florida.

## Voter Turnout Among Large Metropolitan Regions

The federal Office of Management and Budget defines a Metropolitan Statistical Area (MSA) as a collection of urban counties. As detailed in the accompanying methodology appendix, MSAs are composed of an inner core county and adjacent counties with a threshold number of commuters to the inner core county.

Table 1 lists the twenty-five most populous MSAs according to their 2020 citizen voting-age population (CVAP) as estimated by the Census Bureau's American Community Survey. These MSAs have CVAP populations ranging from 1.8 million for the smallest on the list (Portland, OR) to 13.4 million for the largest (Los Angeles, CA). Houston's MSA is the sixth largest, with a CVAP of 4.3 million.

The MSAs listed in Table 1 are ranked by the average CVAP turnout rates of the 2016 and 2020 November General Elections. The overall United States CVAP turnout rate is provided for reference.<sup>1</sup>

The MSA turnout rates in Table 1 to a large degree reflect patterns in statewide turnout rates. The Minneapolis MSA has the highest turnout rates among all the most populous MSAs, as does the state of Minnesota among all states. Minnesota high presidential election turnout rates are attributable generally to three factors:

- 1.. Minnesota is often a **battleground state**, drawing the attention of the presidential campaigns and the media. The nature of the United States' Electoral College effectively concentrates presidential election competition into a few battleground states. Battleground states tend to have higher turnout rates than non-battleground states in presidential elections. Voters are mobilized to vote by the presidential campaigns, and further motivated by the perception that their vote will matter due to how close the state's election will be.
- 2.. Minnesota generally makes it easier to vote. Chief among these voter-friendly policies is **Same Day Registration** (SDR), whereby eligible individuals can register and vote even on Election Day. This policy is well-known to correlate with higher turnout rates in numerous studies.<sup>2</sup> Conversely, states with registration deadlines preceding Election Day tend to have lower turnout rates.
- 3.. Minnesota's electorate is **highly educated**. Education is known to be correlated with turnout.<sup>3</sup> Indeed, the norther tier of U.S. states tend to have higher education levels than the lower tier.

The Denver MSA shares these attributes with Minneapolis. Likewise, the state of Colorado tends to rank highly among state turnout rates. In addition, Colorado conducts **vote-by-mail elections**, whereby election officials automatically send a mail ballot to all active registered voters. A larger share of mail ballots correlates with higher turnout rates, possibly because of the ease mail balloting affords some voters.<sup>4</sup>

These examples of Minneapolis and Denver illuminate the patterns in Table 1. MSAs above the United States national turnout rates tend to have all or some combination of the factors present in Minneapolis or Denver. Conversely, those MSAs below the national turnout rate tend to have an absence of these factors.

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<sup>1</sup> For United States national and state turnout rates, see: <https://election.lab.ufl.edu/voter-turnout/>

<sup>2</sup> For example, see: Michael P. McDonald. 2008. "Portable Voter Registration." *Political Behavior* 30(4): 491–501.

<sup>3</sup> For CVAP turnout rates by education levels, as reported in the Census Bureau's Current Population Survey November Voting and Registration Supplement, see: <https://election.lab.ufl.edu/voter-turnout/turnout-demographics/>

<sup>4</sup> See: Michael P. McDonald, Juliana K. Mucci, Enrijeta Shino, and Daniel A. Smith. 2023. "Mail Voting and Voter Turnout." *Election Law Journal*. Available at: <https://doi.org/10.1089/elj.2022.0078>.

**Table 1. Twenty-Five Most Populous MSAs Ranked by Average 2016 and 2020 November General Election Turnout Rates**

<b>MSA</b>	<b>2016 Turnout Rate</b>	<b>2020 Turnout Rate</b>	<b>2016- 2020 Average Turnout Rate</b>
Minneapolis-St. Paul-Bloomington, MN-WI	74.4%	81.1%	77.8%
Denver-Aurora-Lakewood, CO	70.8%	79.5%	75.2%
Washington-Arlington-Alexandria, DC-VA-MD-WV	68.6%	74.5%	71.5%
Portland-Vancouver-Hillsboro, OR-WA	64.7%	76.9%	70.8%
Boston-Cambridge-Newton, MA-NH	68.1%	73.2%	70.7%
Detroit-Warren-Dearborn, MI	65.7%	74.1%	69.9%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	66.6%	73.2%	69.9%
Seattle-Tacoma-Bellevue, WA	63.4%	75.9%	69.7%
Charlotte-Concord-Gastonia, NC-SC	63.7%	74.0%	68.8%
Miami-Fort Lauderdale-Pompano Beach, FL	63.9%	73.0%	68.5%
Pittsburgh, PA	64.8%	72.2%	68.5%
Tampa-St. Petersburg-Clearwater, FL	63.5%	71.8%	67.6%
San Francisco-Oakland-Berkeley, CA	62.3%	72.2%	67.2%
St. Louis, MO-IL	64.7%	68.5%	66.6%
Orlando-Kissimmee-Sanford, FL	62.8%	69.9%	66.3%
Atlanta-Sandy Springs-Alpharetta, GA	60.6%	70.8%	65.7%
Baltimore-Columbia-Towson, MD	62.8%	67.3%	65.1%
Chicago-Naperville-Elgin, IL-IN-WI	61.3%	66.5%	63.9%
San Diego-Chula Vista-Carlsbad, CA	57.7%	70.1%	63.9%
<b>United States</b>	<b>60.5%</b>	<b>66.6%</b>	<b>63.6%</b>
Los Angeles-Long Beach-Anaheim, CA	55.4%	68.1%	61.7%
New York-Newark-Jersey City, NY-NJ-PA	58.4%	63.6%	61.0%
Phoenix-Mesa-Chandler, AZ	52.6%	68.2%	60.4%
Dallas-Fort Worth-Arlington, TX	52.8%	64.0%	58.4%
Houston-The Woodlands-Sugar Land, TX	51.0%	61.9%	56.5%
Riverside-San Bernardino-Ontario, CA	48.5%	61.9%	55.2%

The low ranking of the Houston, TX MSA (twenty-fourth) is thus better understood in light of these factors. Texas is not generally considered to be battleground state. In the 2016 presidential election, Texas was well below the national turnout rate by 9.5 percentage points. Texas has gradually become more competitive in recent presidential election cycles as the state has become more diverse and highly educated out-of-state migrants have settled in the fast-growing metro areas in the state. As evident of this trend, in the 2020 presidential election Houston's turnout rate narrowed to 4.7 percentage points lower than the national rate.

Texas's voting policies likely contribute to its lower turnout rates, as well. Texas does not have Same Day Registration; instead, the state requires eligible individuals to register thirty days prior to Election Day, the longest period permitted under federal law.

Furthermore, as a state that requires an excuse to vote by absentee ballot, Texas has low usage of mail balloting. Although being age sixty-five or older is one of those valid excuses, the options allowed for those younger than sixty-five is more limited.<sup>5</sup> Indeed, Texas is generally considered to be a voter *unfriendly* state, ranking fifth from the bottom of an overall cost of voting index.<sup>6</sup>

Table 2 illustrates that Houston's low ranking relative to MSAs nationally is more a product of Texas-specific circumstances. Table 2 ranks the turnout rates of all twenty-five of Texas's MSAs. (Texas has twenty-five MSAs, which happens to be a coincidence with the twenty-five populous MSAs presented in Table 1.) All of Texas' MSAs have average 2016 and 2020 turnout rates below the national rate. The Austin MSA comes closest, and indeed was above the national rate in 2020. This is likely due to its relatively highly educated electorate, and the fact that it is a state capital with a sizable workforce that values government. The Houston MSA ranks fourth among all Texas MSAs, notably higher than some of the smaller-sized MSAs, the smallest being Victoria, TX with a 2020 CVAP of seven hundred thousand people.

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<sup>5</sup> For Texas absentee ballot policies, see: <https://www.sos.texas.gov/elections/voter/reqabbbm.shtml>

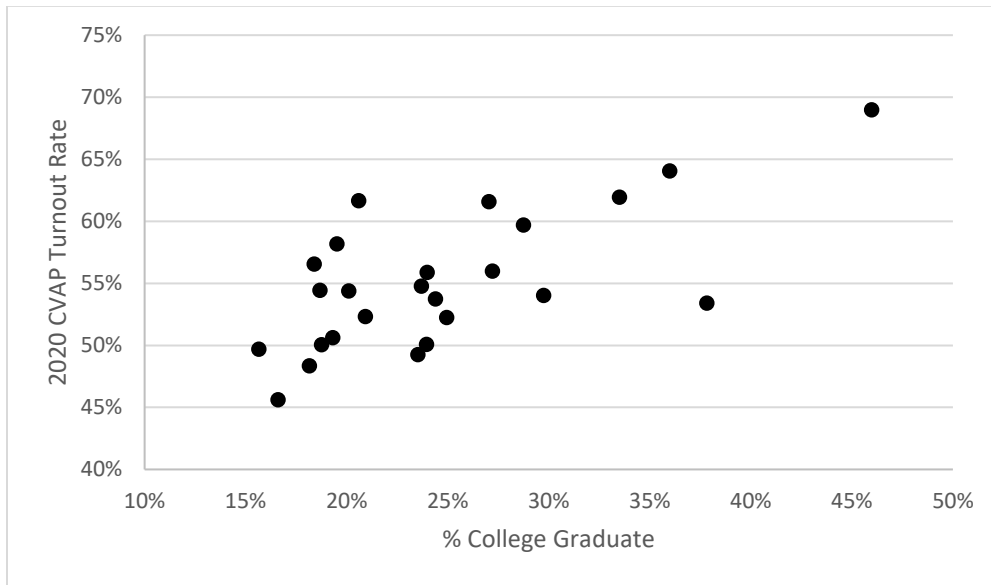
<sup>6</sup> See: <https://costofvotingindex.com/>

**Table 2. Twenty-Five Texas MSAs Ranked by Average 2016 and 2020 November General Election Turnout Rates**

<b>MSA</b>	<b>2016 Turnout Rate</b>	<b>2020 Turnout Rate</b>	<b>2016- 2020 Average Turnout Rate</b>
<b>United States</b>	<b>60.5%</b>	<b>66.6%</b>	<b>63.6%</b>
<b>Austin-Round Rock-Georgetown, TX</b>	55.9%	69.0%	62.4%
<b>Dallas-Fort Worth-Arlington, TX</b>	52.8%	64.0%	58.4%
<b>Tyler, TX</b>	52.8%	61.6%	57.2%
<b>Houston-The Woodlands-Sugar Land, TX</b>	51.0%	61.9%	56.5%
<b>Sherman-Denison, TX</b>	51.0%	61.6%	56.3%
<b>Longview, TX</b>	51.4%	58.2%	54.8%
<b>Beaumont-Port Arthur, TX</b>	50.9%	56.5%	53.7%
<b>San Antonio-New Braunfels, TX</b>	47.6%	59.7%	53.7%
<b>Amarillo, TX</b>	48.7%	55.9%	52.3%
<b>Texarkana, TX-AR</b>	50.0%	54.4%	52.2%
<b>Victoria, TX</b>	49.4%	54.4%	51.9%
<b>Midland, TX</b>	46.6%	56.0%	51.3%
<b>Abilene, TX</b>	45.5%	53.7%	49.6%
<b>Lubbock, TX</b>	45.0%	54.0%	49.5%
<b>Waco, TX</b>	45.0%	53.9%	49.4%
<b>College Station-Bryan, TX</b>	44.6%	53.4%	49.0%
<b>San Angelo, TX</b>	45.0%	52.5%	48.7%
<b>Wichita Falls, TX</b>	42.2%	51.4%	46.8%
<b>Corpus Christi, TX</b>	41.9%	51.6%	46.8%
<b>El Paso, TX</b>	42.9%	50.1%	46.5%
<b>McAllen-Edinburg-Mission, TX</b>	42.0%	50.6%	46.3%
<b>Laredo, TX</b>	42.5%	50.0%	46.3%
<b>Killeen-Temple, TX</b>	39.5%	49.2%	44.4%
<b>Brownsville-Harlingen, TX</b>	40.4%	48.3%	44.4%
<b>Odessa, TX</b>	36.9%	45.6%	41.3%

Figure 1 illustrates the relationship between education levels and turnout rates among Texas' twenty-five MSAs. The x-axis of the plot is the percentage of the population twenty-five years old or older with a four-year college degree or post-doctoral degree, and the y-axis is the percentage of citizens of voting-age who participated in the 2020 presidential election.

**Figure 1. Percent College Educated vs. 2020 CVAP Turnout Rate for Twenty-Five Texas MSAs**



The relationship between education levels and turnout rates in Figure 1 is fairly evident, but there is some variation present in addition to that which can be explained by education alone. Other demographic factors that are related to turnout are age, race, and indicators of community ties, such as marriage, homeownership, and belonging to groups such as churches or other community organizations. Older people generally have higher turnout rates; non-Hispanic Whites tend to have higher turnout rates than other racial and ethnic groups; and those with strong community ties tend to have higher turnout rates. Age, for example, helps explain why the university town of College Station (the dot in the lower righthand corner of the plot below the apparent trendline) has a relatively higher educated electorate but does not have quite the same level of turnout as one might otherwise expect.

## Recommendations

The analysis here suggests that Houston's presidential turnout rates are largely a product of factors beyond the control of Houston's community; namely, the competitiveness of Texas in presidential elections, the state's election laws, and demographic patterns shaped by migration and other factors.

The good news is that with respect to one factor, Houston's turnout rate should continue to increase in presidential elections relative to national turnout rates. As Texas continues to become more competitive in presidential elections, the statewide turnout rate should increase as campaigns spend more resources mobilizing voters and as voters perceive their vote to matter more to the outcome. This is already evident in Texas' increasing turnout rate from the 2016 and 2020 presidential elections. The 2020 presidential



election was a modern historic election for turnout, witnessing the highest turnout rate since 1900.<sup>7</sup> It is unclear if such high levels of engagement can be sustained. However, even if national turnout rates decline from the extraordinary high 2020 levels, if Texas continues to become more competitive in presidential and state elections, its statewide turnout rate should continue to come more in line with the national turnout rate, thus raising the Houston area's presidential turnout rate.

There are actions that the Houston community can engage in to increase civic participation generally, and voter turnout specifically. Chief among these is civic education, which is related to education. Mobilization efforts to increase civic participation through messaging and contacts with potential voters are known to increase turnout in experiments conducted by researchers working in collaboration with community groups and campaigns.<sup>8</sup> Such mobilization efforts are likely to have larger effects in lower-turnout environments where other election stimuli are absent.

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<sup>7</sup> See: Michael P. McDonald. 2022. *From Pandemic to Insurrection: Voting in the 2020 Presidential Election*. Berlin, Germany: DeGruyter.

<sup>8</sup> There have been numerous randomized control experiments conducted on messaging strategies to increase voter turnout. See, for example: Donald P. Green and Alan S. Gerber. 2019. *Get Out the Vote: How to Increase Voter Turnout*. Washington DC: Brookings Institution Press.

## Methodology Appendix

### Metropolitan Statistical Areas

Metropolitan Statistical Areas, or MSAs, are groups of counties surrounding an inner core city. The Office of Management and Budget (OMB) is tasked with defining MSAs every decennial census. For the 2020 census, adopted new criteria for MSAs that largely followed prior definitions (See Table A1).<sup>9</sup>

**Table A1. Metropolitan Statistical Area Definition**

**A core county composed of a city of at least 50,000 people or have an urbanized area (defined by the Census Bureau) of at least 100,000 people.**

**Counties surrounding the core county are included if they have a threshold level of commuting to the core county, as determined by responses to the Census Bureau’s American Community Survey.**

We use these MSA delineations for the 2020 decennial census for this report. The Census Bureau publishes maps of the United States’ 384 MSAs on their website.<sup>10</sup>

### Turnout Rate Numerator

The numerator for our turnout rates is the total number of votes cast in the 2016 and 2020 November general elections in the presidential election. These data are drawn from the Voting and Election Science Team’s (VEST) precinct data collection disseminated by the University of Florida Election Lab.<sup>11</sup>

MSAs are larger than precincts and composed of entire counties. As part of VEST’s quality control, we verify that votes reported within precincts sum to the county votes as recorded by election offices in their certified election results.

### Turnout Rate Denominator

Our denominator for our turnout rate is the citizen voting-age population (CVAP) of the MSA.<sup>12</sup> We use the Census Bureau’s American Community Survey’s five-year estimates for CVAP. The American Community Survey is an annual large-scale survey designed to replace the decennial census’s long-form questionnaire after the 2000 decennial census. Among its many questions is citizenship status, which we use for our turnout rate denominator.

While the ACS is a large annual survey of a million respondents nationwide, the Census Bureau compiles responses into five-year increments to provide more reliable estimates for smaller jurisdictions. While MSAs are large, they are individually relatively small compared to the nation.

The Census Bureau recommends the best ACS population estimate for a given year is the mid-point year of the five-year ACS. Following this recommendation, we use the 2014-2018 five-year ACS for our 2016

<sup>9</sup> For the MSA definitions updated for the 2020 decade, see: <https://www.federalregister.gov/documents/2021/07/16/2021-15159/2020-standards-for-delineating-core-based-statistical-areas>

<sup>10</sup> Maps of MSAs can be found here: <https://www.census.gov/geographies/reference-maps/2020/demo/state-maps.html>

<sup>11</sup> Available at: <https://election.lab.ufl.edu/precinct-data/>

<sup>12</sup> We do not make additional adjustments for those eligible to vote, such as ineligible felons and eligible overseas citizens. The primary limiting factor is the limited availability of these data within MSAs. For the ACS data, see: <https://www.census.gov/programs-surveys/acs/data.html>

CVAP estimate. We use the 2017-2021 for our 2020 estimate because at the time of this report, the 2018-2022 five-year ACS data have not been released.<sup>13</sup>

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<sup>13</sup> American Community Survey data are available at: <https://www.census.gov/programs-surveys/acs/data.html>