

Writing Sample

Luke Bellinger

Posibilidades: An Analysis of Hispanic Voting Power in Texas

Originally developed for GOV 325 Political Parties, taught by Daron Shaw

Color Version

Abstract

First, I use satellite data and population change data from the Texas Demographic Center to revise estimates of population in Voter Tabulation Districts (VTDs). I then use ecological inference simulations to determine that voter turnout among citizen voter age population (CVAP) is around 30 percent for all elections, and as low as 20 percent in some. I aggregate precinct-level posterior draws from the ecological inference simulations and population estimates to determine the contours of turnout and partisan share of new voter turnout necessary to affect certain electoral outcomes, such as a Democratic majority in legislative chambers or quorum-sized Republican supermajority in the House.

Working Paper ¹ 11/12/2025

Most Recent Version and Supplemental Material and Code and Print Version:

lukecbellinger.github.io/hispanic_redistricting

1 Introduction

What does the future hold for Latino politics? Whereas the answer would have been obvious in previous years, but recent shifts in vote choice in the Latino community have tested the perceived hold Democrats have on Latino votes (Corral and Leal 2024, 343). An interesting puzzle that arises out of Texas is how changing vote choice among Latinos will affect the composition of state legislatures.

Democratic vote choice among Latinos is decreasing, and Republican vote choice is increasing, though a majority of Latinos remain Democrats (Fraga, Wakefield, and Fisk 2025). This shift has been marked by the rise of Donald Trump and his populist, socially conservative and fiscally liberal appeals (Corral and Leal, 2024). In addition, his campaign work targeting specific sectors of Latinos, rather than going after them as a whole electorate, has netted him some gains among socially conservative Latinos, for example, Evangelicals (Corral and Leal, 2024, Ramos, 2024). This shifting vote choice is necessarily relevant to elections in Texas. Texas Republicans, perhaps unaware that Latino areas would shift Republican, or perhaps in a bid to push aside the uncommitted and possible fleeting new Latino Republican vote, enacted a districting plan that split much of the Rio Grande Valley, El Paso, the Borderlands, San Antonio, and Latino enclaves in other cities into cracked and packed districts (Texas Legislature, 2020) in which elections are as uncompetitive as possible. Also of note is that this shifting vote choice gives Latinos less legal recourse where their districts are gerrymandered (Roberts 2023).

I test the effect that changing Latino vote choice will have on election using the

current State House and State Senate maps by computing precinct level ecological regression estimates (King 1997), for racial group support of each party and aggregate those estimates to the district level to simulate alternative elections in each State House district.

I find that the largest effect that changing Latino vote choice can have is in the Texas House, where Republicans can gain quorum-proof majority with only a very slight change in Latino partisan vote. Alternatively, Latino Democratic partisanship and turnout would have to reach record high levels to approach the Democrats gaining a majority in the Texas House. The seats that can change parties based on Latino vote choice alone are predominantly Latino and mostly in the Borderlands and other Latino areas.

Despite all of the bluster from the media about the shifting loyalties of the Latino electorate, massive shifts in Latino vote choice are not enough to tip either chamber of the Texas Legislature in favor of Democrats, though Latino vote choice in the House may change the balance enough to make Democrat blocking of legislation easier by needing fewer Republican electors.

2 Partisanism and Hispanics

Partisanship among Hispanics has been predominantly Democratic but rather ambivalent. Democratic Party identification among Hispanics as of 2022 is likely between 50 and 60 percent, a decline from the 60 to 70 percent during the Obama years (Fraga, Wakefield, and Fisk 2025). Republican identification is also rising among older generations of Hispanics, whereas Independent identification is rising

for younger Hispanics (Fraga, Wakefield, and Fisk 2025).

Several factors affect Hispanic voter behavior; during the 2024 elections, Hispanic men and Hispanics who attend church were more likely to vote Republican (Garcia-Rios et al. 2025). Most important issues among Hispanics recently include inflation, jobs, immigration, and abortion policy; those who consider immigration and inflation to be salient were more likely to vote Republican, whereas women who consider abortion to be salient are more likely to vote Democratic (Garcia-Rios et al. 2025). These issue positions also interact with education status: “Individuals who have less than a college degree are more likely to view immigration and the border as an important political issue than those with a college degree, therefore suggesting that those of lower socioeconomic status may view this as more of a threat. (Garcia-Rios et al. 2025, 18).” Furthermore, in the 2020 election, Biden had 8% lower Hispanic support than Clinton in 2016, with lower-income Hispanics shifting towards Trump, as well as Catholics (Fraga, Velez, and West 2025). In 2020, the Hispanic percentage in a census tract was a positive predictor of Trump gains in 2016, with the average tract that is 80% Hispanic having a 15-point shift towards Trump between 2016 and 2020 (Fraga, Velez, and West 2025).

The Trump effect on the Hispanic vote is unique, as even his 2016 bid outperformed Romney’s 2012 campaign among low-income Hispanics. Counterintuitively enough, the shift towards Republicans among Hispanics is seen most among poorer Hispanics and those who live in overwhelmingly Hispanic areas, which do not make up a traditional base of any conservative American party in history. Even his dog-whistling or just whistling (‘they’re sending rapists’ etc.) was not nearly as poorly

received by Hispanics as Democrats may have hoped: “Trump received a some what lower Hispanic vote share than did Romney, the degree of this underperformance was surprisingly modest in light of his campaign rhetoric, [and] Democratic Party efforts to highlight this rhetoric, and media coverage that accentuated the divide between Hispanics and Trump. (Corral and Leal 2020, 1128).”

Hispanics, however, are not Liberals or Progressive per se, they fit well into a populist camp, favoring bigger government rather than smaller, while also holding on to conservative social values (Corral and Leal, 2024, 343). As such, it is not entirely surprising that Hispanics have shifted in favor of Trump, just as they did Bush some time ago (Corral and Leal, 2024, 342). This is what has struck me about the political leaning of Hispanics for as long as I’ve been doing race and ethnic politics; Hispanics may be socially progressive or socially conservative, but almost all are fiscally liberal, broadly in favor of spending on things like Medicare, Social Security, etc. (Corral and Leal, 2024, 344). Thus even the most historically conservative Hispanics, Miami Cubans, remain in favor of the Affordable Care Act (Corral and Leal 2024, 344), otherwise loathed by other Republicans.

Part of this shift towards the Republicans also comes from Evangelicalism rising in the Hispanic electorate. Evangelicals of all stripes fit well within the Trump movement, as their belief that God is coming to America soon and that American society is being corrupted by progressive social values, including the increasing acceptance of homosexuality and abortion (Ramos 2024). Much of Ramos’ ethnographic work took place in South Texas, one of the areas that this paper studies. Trump’s targeting of Hispanic communities through Evangelical movements (and Democrats’ lack of

similar messaging) are part of his recent successes in the Hispanic electorate (Corral and Leal 2024, 347-348). Hispanics, are not, however, as homogeneous as anybody makes them out to be. What, then will happen to elections as this vote choice shifts?

In Texas, both Democrats and Republicans gerrymander to make elections as uncompetitive as possible. ² The current House districts map, plan H2316, includes many unusual districts, such as District 55 in Killeen, which is an enclave of District 54, District 21 near Beaumont (Dade Phelan's district) which is not contiguous at high tide, and District 33 in the Dallas area, which is made up of two halves separated by a lake. These nonsensical salamanders have they effect of making most elections in Texas uncompetitive. As race and partisanship are highly correlated in Texas, partisan gerrymandering leads to gerrymandering in minority communities, these maps implicate the VRA. Voting Rights Act precedent set in the case of *Thornburg v. Gingles* and reaffirmed in *Allen v. Milligan* requires the drawing of majority-minority-group districts if:

- “The ‘minority group must be sufficiently large and [geographically] (original emphasis) compact to constitute a majority in a reasonably configured district.’”
- “Second, the minority group must be able to show that it is politically cohesive.”
- “The minority must be able to demonstrate that the white majority votes sufficiently as a bloc to enable it . . . to defeat the minority’s preferred candidate.” (Roberts 2023, syllabus)

Thus, voting as a unified bloc is mandatory to prevent gerrymandering of a minority group. Given that the Hispanic vote has shifted, especially in Texas, it is unclear whether there would be legal redress for gerrymandering in Hispanic communities. Thus, evaluating how Hispanic communities in Texas are affected by gerrymandering is an important avenue of research that can shine light on the extent to which Hispanic communities can wield electoral power under the current gerrymandered map.

3 Research Design

The goal of this paper is to infer Hispanic partisanship and turnout in the last few elections and to determine under what conditions of partisanship and turnout certain outcomes happen. Specifically: I want to know what percentage of Hispanics would have to turn out and vote Democrat for the Democrats to gain a majority in the Texas House (76 seats) or a majority in the Texas Senate. I also want to know what percentage of Hispanics would have to vote Republican for the Republicans to gain a supermajority in the House (101 seats), which would insulate them from quorum-breaking from the Democratic House caucus. For the first step of the research—figuring out how many Hispanics already turn out and vote Democratic or Republican, I use ecological inference.

Ecological inference is a proposed method of making inferences about groups from aggregate data (King 1997). Originally proposed as a way to measure voter turnout between White and Black people at the precinct level, it can also be applied to vote

choice in precincts as well. The basic ecological inference model is as follows:

$$T_i = \beta_i^b X_i + \beta_i^w (1 - X_i)$$

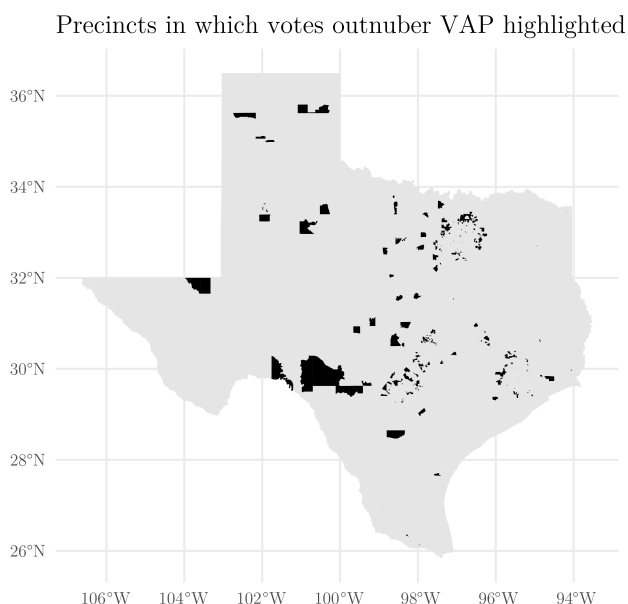
where T_i is the proportion of support for a candidate, X_i is the proportion of a district that is of a particular group, and β_i^b and β_i^w are regression coefficients for the proportion of group members that support a candidate and the proportion of non-group members that support a candidate. This model was originally made to work with two groups (White and Black) and two outcomes (vote or no vote). There are multiple proposed versions that can be used for more than two groups. The $R \times C$ method changes the global odds of a group's vote based on each precinct and includes both bayesian and frequentist formulas for calculating betas (Rosen et al. 2001). Another approach is iterative ecological inference, which calculates 2 by 2 ecological inference models for each group by aggregating all other groups into one column and all other candidates into one row such that each beta is based on in-group/out-group share an in-candidate/out-candidate share (King 1997; Barreto et al. 2022). Though $R \times C$ EI was previously thought to be the more valid method for multiple groups, iterative EI has been found to be just as valid while also being less computationally taxing and simpler (Barreto et al. 2022). Iterative EI does not sum to 100, making it less useful when making inferences with multiple party outcomes. Ecological inference has been used in at least 20 cases in the last two decades, and it has less measurement bias than previous methods, such as ecological regression or neighborhood models (de Benedictis-Kessner 2015). Though ecological

inference is commonly used by courts in VRA claims, usage of this model is disputed (Elmendorf and Spencer 2015).

For this paper, I use ecological inference simulations with on each combination of population estimate and election, running models for State House, State Senate, U.S. House, U.S. Senate, Gubernatorial, and Presidential general elections from 2018-2024, which is 19 elections in total.

These simulations assume three outcome categories, Republican, Democrat, and non-voter, and include four race: White, Black, Hispanic, and Asian. A large portion of the data work for this paper involved creating the very population estimates necessary to create a “non-voter” bucket for the ecological inference. The original version of this paper only included ecological inference estimates for partisan-

ship and not turnout because of a serious error in the data—many precincts had more votes than VAP (according the the Texas redistricting datasets). This is likely caused by two problems: first, the VAP estimates come from 2020, and there has been vast population growth in many areas of Texas between 2020 and 2024. Second, Census data may miss people living in *colonias* that are hard to sample because of a lack of

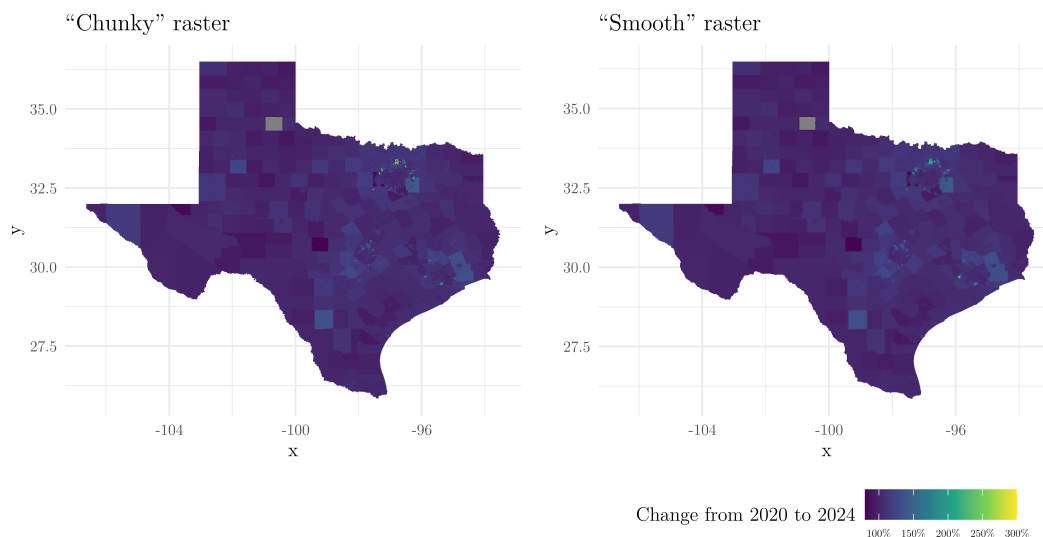


addresses and low response rates. Certain privacy considerations also create heterogeneous error by underestimating voter registration within Hispanic VTD's (Kenny et al. 2021).

3.1 Small-area estimates of population

To mitigate the issues in Texas' estimation of population within VTDs, I create multiple sets of population estimates using different methods. My first option is to use updated population estimates produced by the Texas Demographic Center. These estimates revise census counts for counties and places with a mixture of ratio-correlation models based on births, deaths, and vehicle registrations and surveys of school districts (Texas Demographic Center 2025). I merge place- and county-level data by subtracting population estimates of cities' increases from the counties that they are in, I have estimates for percent increases in both cities and unincorporated areas of counties compared to 2020. I then rasterize the percent changes across the polygons of cities and counties and project the means of .01 degree (36 arcseconds or 1,100 meters) raster pixels within VTD polygon boundaries onto VTD data. A flaw of this method is that neighboring VTD's may have spatially discontinuous changes in percentage change estimates, so I also estimate another raster which is smoothed with a lagged mean of a five by five square moving window of surrounding raster pixels to create a smoother raster in order to pick up more suspected autocorrelation between VTD's on the boundaries of city and county polygons. The first estimate is referred to as the chunky raster and the second is referred to as the smooth raster. This method yields percent increases or decreases from the 2020 estimation, but still

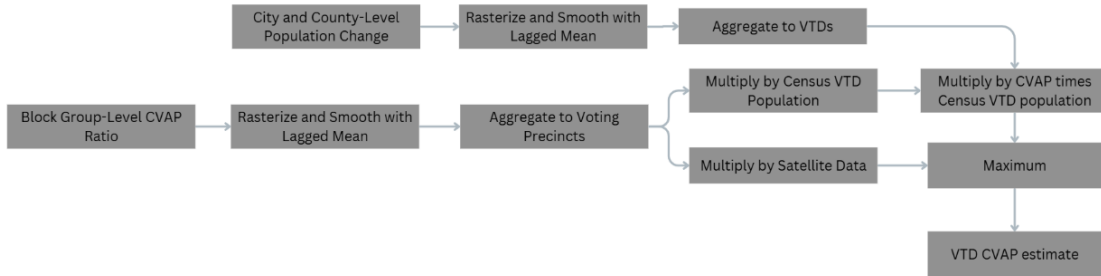
contains VTD's in which votes outnumber estimated population. It is, however, an improvement from a validity standpoint to have year-level estimates for population within VTDs.



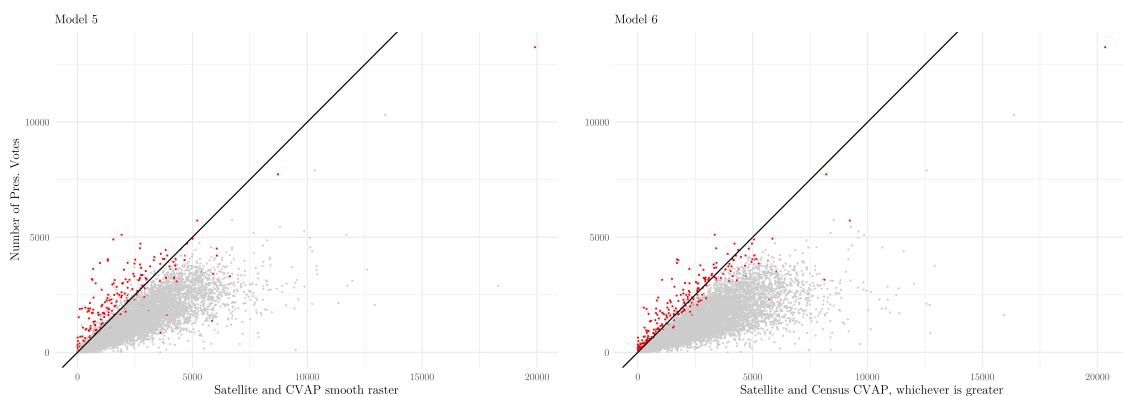
As an alternative, I also use population estimates based on satellite data, made by the WorldPop project (Bondarenko et al. 2025). These estimates are more commonly used in IR or comparative research and provide data for low-income countries and places where governmental population data may be non-existent or less accurate. Given that many areas in the Texas borderlands are not adequately sampled due to lack of addresses, population estimates based on satellite data have been identified as a possible alternative for assessing demographics in Texas *colonias* in the field of public health (Juarez et al. 2022; Parcher and Humberson 2009). The WorldPop population estimates are provided at the size of 3 arcsecond (100 meter) pixels and these pixels are aggregated to VTD's. These estimates are useful for finding people

that the Census misses, but may still underestimate the populations of those living in slums. Additionally, these population estimates only provide total population, rather than voting-age population (VAP) or citizen voting-age population (CVAP). These estimates are also partially based on census data but also include some adjustment for housing blocks. Thus, I also rasterize the ratio of CVAP to total population for census blocks and smooth it with a lagged mean of five by five pixels. I apply this raster of CVAP to the satellite data to make a new estimate of CVAP that is not as connected to census data. Finally, In cases where the census-based population outnumbered the satellite-inferred population and the satellite-inferred CVAP was less than the number of votes, I used the census-based population instead.

Making of final CVAP estimate 6



The last population estimate still underestimates CVAP to Votes in around 600 precincts, but it is an improvement on all of the previous estimates of population and it can be easily interpreted as an estimate of CVAP.



3.2 Model Specifications

Because of the aforementioned problems in estimating voter turnout among Hispanics in Texas, I estimate the same ecological inference models on every type of population estimate. Model 1 is based on the original 2020 VAP, Model 2 is based on the chunky raster, Model 3 is based on the smooth raster and Model 4 is based on the WorldPop satellite data. A drawback of all of these approaches is that none of the estimates are for CVAP, which means that the turnout outcomes of the models cannot truly be interpreted as the turnout of people who can vote. Model 5 is the Satellite Data multiplied by the CVAP raster, and Model 6 is the maximum of Satellite Data times CVAP or Census times population growth raster times CVAP raster. Additionally, the problem with votes outnumbering population still remains. Finally, Model 7 uses registration data by precinct, which is available for all elections. However, given that registering to vote in Texas is difficult, (unlike states with automatic registration), registered voters (RV) represent a unique class of voters that are already likely to vote.

Model	Data Source	Outcome	Notes
1	TX Redistricting Data	VAP	Tied to 2020, error as year increases
2	Chunky Raster	VAP	Estimates change sharply between neighboring precincts
3	Smooth Raster	VAP	More valid than chunky raster
4	WorldPop Satellite Data	Population	Most valid estimation, least valid turnout interpretation
5	Satellite times CVAP	CVAP	
6	Max of Satellite times CVAP or Census times Smooth Raster times CVAP	CVAP	Only CVAP outcome, most valid turnout interpretation
7	Registration Data	RV	Suppressed registration selects certain types of people

I estimate models 1 through 7 for all elections except those in 2020. Because 2020 is the reference year, an adjustment for population growth is unnecessary, so I only do not estimate models 2 through 4 for that year. In the end, I ran 126 ecological inference models. Each was sample 10000 times, I would like to have had a larger sample, but it was necessary to return the precinct-level posterior draws for the next part of the research design, and returning the precinct betas for any greater sample would immediately crash the computer, given that the precinct betas are returned as an array of $4 \times 3 \times \text{approximately } 9000 \times n$ of samples.

3.3 Election Outcomes

In order to simulate the three outcomes of interest, I compute the number of seats gained for each party in each seat as (for precinct i , party j , non-hispanic race k ,

and seat m):

$$\begin{aligned} \text{Votes}_j &= (\beta_{ik} \times CVAP_k) + (\%Democrat \times \%Turnout \times CVAP_{Hispanic}) \\ \text{Winner}_{Democrat} &= 1 \text{ when } \text{Votes}_{Democrat} > \text{Votes}_{Republican} \\ \text{Number of seats}_{Democrat} &= \sum \text{Winner}_j \end{aligned}$$

such that precinct-level votes are counted for the remainder of the races by their betas and population estimates and that the precinct-level votes of Hispanics are a function of % Democrat and % turnout, which can be varied. I compute the outcome of House elections under all levels of turnout and Democrat voting between 0 and 1, with a resolution of 0.008. I then use contour lines to graph which areas of turnout and Democrat voting have the desired outcomes. I do this rather than fitting some type of model because the outcome of elections filtered through the aggregation of gerrymandered districts may be somewhat unpredictable. ³

4 Results

To present my results, I first check the model specifications to see differences in my small-area precinct population estimates. Then I more closely analyze descriptive voter trends between 2018 and 2024 from ecological inference models from the final CVAP estimate (model 6) and registered voters (model 7). I then present the results of the simulations of turnout and Democrat percentage. ⁴

4.1 Population Estimates



For the first three models, I am surprised to see that running ecological inference models for VAP in 2020 is not significantly different from revising up population estimates based on population growth. I think that no significant difference exists

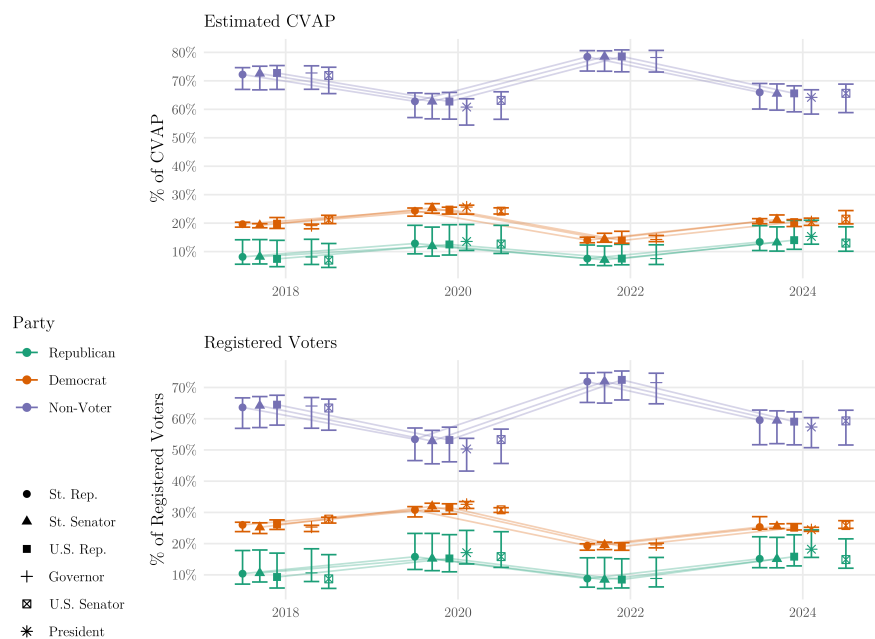
because the broken precincts are removed from the ecological inference, and most of the remaining precincts (that were never close to broken) exist in all three models. Returning a handful of precincts back to the models does little to change the estimation of the EI. For CVAP, taking the maximum of the satellite and census leads to a higher confidence interval for non-voters, which is to be expected as the estimation rewards precincts that have greater distance between CVAP and number of votes. The registered voters model is the most optimistic model in terms of Hispanic turnout, but this is to be expected as voter registration is not easy in Texas.

4.2 Trends in Texas Hispanic Partisanship and Turnout

Partisanship, as expected, has been trending Republican among recent elections. 2020 appears to have been the high water mark for Democrat votes as a percentage of all votes in the aggregate (greatest separation between error bars), with the electorate being estimated at around 60% Democratic. 2020 is also the high water mark for Hispanic voter turnout, likely because of the easing of voting restrictions due to COVID, though voter turnout in 2024 is not significantly different from 2020. In presidential years, Hispanic turnout is between 38% and 56% of registered voters and between 31% and 41% of CVAP. In the worst election turnout, the 2022 midterm, turnout among registered voters is between 26% and 35% and among CVAP it is between 19% and 27%. For White CVAP in the same election, turnout is between 41% and 49%. Thus, Hispanic voter turnout is *drastically* lower than White voter turnout. Also of note is that the highest water mark for Democrat identification

was the Cruz-O'Rourke senate election of 2018, in Which O'Rourke won 47% of the overall vote, and 75% of the Hispanic vote. Finally, in the most recent election, the difference of Hispanic vote between Republican and Democrat was insignificant for the Presidential race among registered voters and in most elections among CVAP. The general trends to be taken from the ecological inference models are that the gap in Hispanic partisanship is narrowing in Texas and that Hispanic voter turnout is very low.

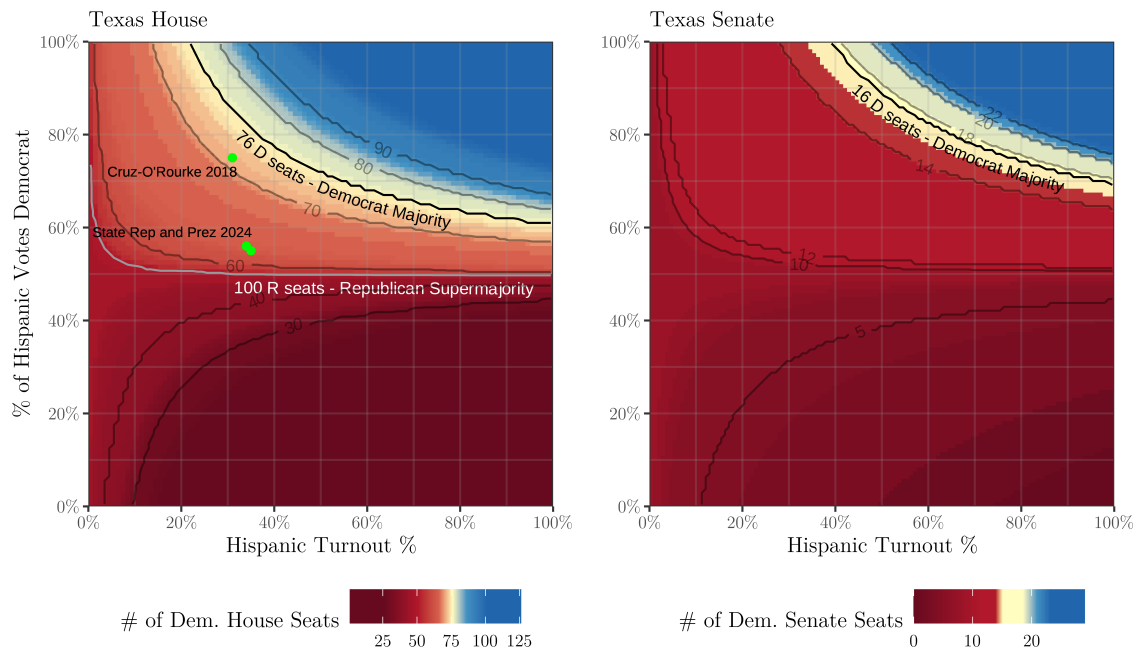
Partisanship and Turnout among Texas Hispanics



4.3 Contours of Elections

Starting with the house districts map, it seems that if Hispanic voters do not turn out at all, Republicans end up winning around 100 seats. Also, if Hispanic partisanship dips below 50% at any level of turnout, Republicans win a supermajority in the House

Electoral Outcomes at Varying Levels of Hispanic Turnout and Partisanship



of representatives. As turnout increases, the effect of Democrat percentage on the number of seats won by Democrats becomes greater. Notably, if Hispanic Democrat votes only dip 5%-6% below where they currently are, Republicans would win a supermajority in the house. This is the most likely electoral outcome in the real world, especially given a turn in Hispanic partisanship recently. This means that Republicans soon may not have to worry about Democrat lawmakers abandoning the state upon the Governor calling a special session. On the other hand, Hispanic partisanship, given turnout at current levels, would need to near 90% for Democrats

to win a majority in the House. If Hispanics were to vote at the high water mark, the 2018 Senate election, Democrats would win 71 seats. Even though this would not be a majority, it would be close enough to allow for Democrats to make gains on bills by cooperating with a small handful of Republican defectors. For example, two Democrats voted against Greg Abbott's final school voucher bill, with many more Republicans opposing initial versions (Scherer 2025). Even though a House majority for Democrats may be unlikely, every gained Democrat seat makes rare Democrat wins easier by requiring fewer Republican defectors.

House districts have an expected population of around 200,000 whereas Senate districts have more than 1 million. As such, Hispanic turnout and partisanship alone are less likely to change the composition of the Texas senate. Hispanic turnout and partisanship would need to be vastly higher than present levels to affect a change in the leadership of the Senate.

5 So now what?

It seems that Hispanic Democrat turnout alone is not sufficient to cause Democrats to gain control of either chamber. For Democrats to win the house, they would need to put up record-breaking numbers in both Democrat voting and turnout among Hispanics. This is perhaps expected given the state of the gerrymandered map, which makes competition difficult and discourages that precise outcome. In a future version of this paper, I want to include more analysis of voting power of Whites as well. Remember that both White and Hispanic Texans make up 40% of the population of the state, so either group should have sufficient pull such as to affect political outcomes.

On the other hand, if Hispanics were to move towards the Republicans, they could easily shift the balance of the house further towards the Republicans, preventing quorum-breaking (the last mechanism Democrats have to stall legislation).

Given previous literature, it is unclear whether the small Hispanic shift to Republicans is significant enough to grow by the next districting cycle, or whether Trump’s momentary popularity and populism may fade away to a more popular Democratic candidate, as Bush’s popularity faded for Obama’s. If it were to do so, it would be interesting to see if Republicans try to gain more votes by using increasing Republicanism in the Rio Grande Valley to their advantage. If so, Republicans may gain an extremely powerful coalition that would make Texas government even less competitive than it already is.

Of course, individuals are more complicated than their race alone, which is precisely why I include outcomes that benefit both parties. I am not working under the assumption that Hispanics alone ought to be the only group analyzed. However, in my conversation with Hispanic politics people and in my anecdotal observation of the decision-making of the Texas Democrat Party, I have seen a shift towards focusing on “turning out” Hispanics, regardless of their partisanship, assuming that the simple act of getting them to vote would lead to a Democratic wave in Texas. I think that this paper has demonstrated that this is untrue, and calls into question the efficacy of turnout-based strategies on the Democrat side. It may instead make more sense to spend resources on keeping Hispanics Democrats because the alternative, which Republicans are rapidly capitalizing on, is far closer than a Democrat victory.

Notes

1. Keep in mind that this is a working paper, and is not a final product.
2. I asked Tom Oliverson about redistricting during his bid for speaker. He said that the redistricting committee agreed on creating as many “safe” seats as possible, for both Republicans and Democrats, and that Democrats have historically participated in Republican gerrymandering.
3. Cleaning of variables partially done with Github Copilot; double-checked.
4. All images are very high quality. You can zoom in.

References

- Barreto, Matt, Loren Collingwood, Sergio Garcia-Rios, and Kassra AR Oskooii. 2022. “Estimating candidate support in voting rights act cases: Comparing iterative ei and ei-r×c methods”. *Sociological methods research* 51 (1): 271–304.
- Bondarenko, M., R. Priyatikanto, N. Tejedor-Garavito, W. Zhang, T. McKeen, A. Cunningham, T. Woods, J. Hilton, D. Cihan, B. Nosatiuk, T. Brinkhoff, A. Tatem, and A. Sorichetta. 2025. “Constrained estimates of 2015–2030 total number of people per grid square at a resolution of 3 arc (approximately 100m at the equator) r2025a version v1”. Global Demographic Data Project - Funded by The Bill and Melinda Gates Foundation (INV-045237).
- Corral, Álvaro J and David L Leal. 2024. “When demography is (not) destiny: Exploring identity and issue cross-pressures among latino voters in the 2020 presidential election”. *Social Science Quarterly* 105 (4): 1239–1252.
- de Benedictis-Kessner, Justin. 2015. “Evidence in voting rights act litigation: Producing accurate estimates of racial voting patterns”. *Election law journal* 14 (4): 361–381.
- Elmendorf, Christopher S. and Douglas M. Spencer. 2015. “Administering section 2 of the voting rights act after ”shelby county””. *Columbia law review* 115 (8): 2143–2217.
- Fraga, Bernard, Derek Wakefield, and Colin Fisk. 2025. “Partisan change with generational turnover: Latino party identification from 1989–2022”.
- Fraga, Bernard L, Yamil R Velez, and Emily A West. 2025. “Reversion to the mean, or their version of the dream? latino voting in an age of populism”. *American Political Science Review* 119 (1): 517–525.
- Garcia-Rios, Sergio I, Angela E Gutierrez, Angela X Ocampo, and Angie N Ocampo-Roland. 2025. “The 2024 presidential election through latino lenses: Priorities and vote choice”. In *The Forum*, Volume 22, pp. 369–391. De Gruyter.

- Juarez, Jose G, Ester Carbajal, Katherine L Dickinson, Selene Garcia-Luna, Nga Vuong, John-Paul Mutebi, Ryan R Hemme, Ismael Badillo-Vargas, and Gabriel L Hamer. 2022. “The unreachable doorbells of south texas: community engagement in colonias on the us-mexico border for mosquito control”. *BMC Public Health* 22 (1):1176.
- Kenny, Christopher T, Shiro Kuriwaki, Cory McCartan, Evan TR Rosenman, Tyler Simko, and Kosuke Imai. 2021. “The use of differential privacy for census data and its impact on redistricting: The case of the 2020 us census”. *Science advances* 7 (41):eabk3283.
- King, Gary. 1997 - 1997. *A solution to the ecological inference problem : reconstructing individual behavior from aggregate data / Gary King*. (Course Book ed.). Princeton, N.J: Princeton University Press.
- Parcher, Jean W and Delbert G Humberson. 2009. “Using gis to assess priorities of infrastructure and health needs of” colonias” along the united states-mexico border”. *Journal of Latin American Geography*:129–148.
- Ramos, Paola. 2024. *Defectors: the rise of the Latino far right and what it means for America*. Pantheon Books.
- Roberts, John. 2023, 06. *Allen v. Milligan*. United States Supreme Court.
- Rosen, Ori, Wenxin Jiang, Gary King, and Martin A. Tanner. 2001. “Bayesian and frequentist inference for ecological inference: The $r \times c$ case”. *Statistica Neerlandica* 55 (2):134–156.
- Scherer, Jasper. 2025, May. “How greg abbott took a flailing school voucher movement and turned it into a winning issue”.
- Texas Demographic Center. 2025. *Estimates of the Total Populations of Counties and Places in Texas for July 1, 2024 and January 1, 2025*.