

Scott, Nelson, DeSantis, Gillum & Beyond: A Look at 2018 Florida Precinct Returns by Jack Reilly Ph.D., Jack K. Belk Jr. M.A., Annika Kufrovich, Jennifer Lin & Rory Renzy, New College of Florida in Sarasota

ABSTRACT: Midterm elections are typically seen as a referendum on the sitting President of the United States. In 2018, general popular discontent with Donald Trump led to sweeping Democratic advances in the national U.S. House, state Governorships, state Houses and state Senates. Only an advantageous national Senate map prevented national Republicans from suffering losses on almost all fronts. Yet Florida seemed to buck the nation-wide trend. Perhaps the prototypical purple state at the national level, but typically Republican at the state-level, Florida only elected a single Democrat in a state-wide race in 2018: Agriculture-Commissioner Nikki Fried. In its two most prominent races, for U.S. Senate and for Governor, Republicans won by vanishingly small margins. Such narrow races, along with the general counter trend to the national stage, begs for further analysis. This paper uses fine-grained precinct-level data, along with the Florida voter file, to examine geographic and demographic correlates of the 2018 vote in the Sunshine State.

The 2018 United States Midterm elections were—to use the scientific term—a big deal. Framed largely as a political referendum on the mold-breaking Trump Presidency, Democrats were favored from the beginning and enjoyed clear advantages in candidate recruitment (and retirements),¹ fundraising² and polling.³ The question, rather than whether the Democrats would improve their standing, was how much they would or even secure a “Blue wave” victory. Media headlines almost wrote themselves. Would voters issue a stunning rebuke of the first two years of Donald Trump’s Presidency? Or would strong economic numbers and the President’s controversial characteristic style staunch the bleeding and keep the Republican Party on track? Would progressive backlash and eye-popping Democratic fundraising numbers be enough? How would the uneven U.S. Senate map—dominated by Democrats, many in tough races in Red Republican states—play into all of this?

Amid all of the swirling uncertainty, it seemed to some that Florida, of all places, was primed for a year of predictable change. Polls consistently suggested narrow, but clear margins for Democrats in the two major statewide races: Bill Nelson appeared on track to secure reelection to the United States Senate over Rick Scott,⁴ while Andrew Gillum held an even more stable lead over Ron DeSantis and appeared likely to win the Governor’s mansion.⁵ Most forecasters concurred. All of FiveThirtyEight’s three models suggested that each Democrat had at least a 70% chance of winning,⁶ Larry Sabato’s Crystal Ball classified each seat as “Lean Democrat,”⁷ and betting markets identified both Gillum and Nelson as slight favorites.⁸

Of course, Florida did not behave as expected. While the “Blue wave” swept Democrats to power in the U.S. House, added Democrats to governorships, and saw increased numbers of Democrats in State

¹ <https://www.brookings.edu/blog/fixgov/2017/05/25/candidate-recruitment-2018-election/>

² <https://fivethirtyeight.com/features/election-update-the-democrats-unprecedented-fundraising-edge-is-scary-for-republicans-and-for-our-model/>

³ <https://projects.fivethirtyeight.com/congress-generic-ballot-polls/>

⁴ https://www.realclearpolitics.com/epolls/2018/senate/fl/florida_senate_scott_vs_nelson-6246.html

⁵ https://www.realclearpolitics.com/epolls/2018/governor/fl/florida_governor_desantis_vs_gillum-6518.html

⁶ Silver 2018a; Silver 2018b.

⁷ <http://www.centerforpolitics.org/crystalball/2018-senate/> & <http://www.centerforpolitics.org/crystalball/2018-governor/>

⁸ <https://floridapolitics.com/archives/280258-gillum-nelson-predictit>

Senates and State Houses across the county, Florida largely—in its two most watched races—bucked the trend. Ron DeSantis and Rick Scott each squeaked out razor thin victories, with DeSantis beating Gillum by just 32,463 votes and Scott taking Nelson’s U.S. Senate seat by an even more scant 10,033 votes. A third high-profile race—that for Agricultural-Commissioner—was even closer, with Democrat Nikki Fried beating Republican Matt Caldwell for Agriculture-Commissioner by a mere 5,307 votes.⁹ The narrow margins triggered recounts and clashes between candidates and parties. With the specter of the 2000 Presidential recount in the background, both sides of the aisle accused each other of attempts to steal the election, irregularities in Broward county (again) muddied the issue, and in the end after a long the election night the controversial winners ultimately were confirmed victorious.¹⁰

Nonetheless, the razor-thin margins inspire curiosity. With over 6,000 precincts in Florida, a difference of just one to three votes per precinct could have made the difference in these three races, making it feel like every vote and everything mattered to the election. Small fluctuations in turn-out, ballot design issues, third-party candidacies, minor candidate decisions on the campaign trail—each and any of these might have been the difference between a Gillum or DeSantis as Governor, or a U.S. Senator under Nelson or Scott, or an Agricultural Commission headed by Fried or Caldwell.

For example, 31,517 people who voted for a candidate in the Governor’s race did not cast a ballot in the U.S. Senate race. However, despite the heightened participation in the Governor’s race, Gillum attracted fewer total votes than Nelson did. This complicated state of affairs is possible because the Governor’s race included several third-party candidates, while the U.S. Senate race never does. In other words, a significant number of people who voted for the Democratic Senate candidate did not vote for the Democratic candidate for Governor. If every Florida voter who cast a ballot for Nelson had also cast a ballot for Gillum, Florida would likely now have a Democratic governor.¹¹

This, of course, is not unheard of. People often, maybe even usually, feel differently about different politicians, even when they share the same party and third parties playing spoiler is as old a story as exists in American politics, not to mention in single member district plurality elections more generally.¹² In this case, there are countless reasons why voters might have felt more comfortable supporting Nelson. Bill Nelson was more experienced, and a well-known figure in Florida politics. He was also running as an incumbent, having served in the U.S. Senate for almost 20 years. He was also older than Andrew Gillum, potentially a key factor in a state where more than 25% of the voting age population is older than 65.¹³ Nelson, unlike Gillum, ran on a centrist platform, which may have won him the support of independents and some Republicans. And finally, candidate race may have played a factor, with Bill Nelson being White and Andrew Gillum Black. Differences on the Republican side were just as noteworthy: compared to DeSantis, Scott was older, had a much more prominent prior career in politics and business, and arguably possessed a much more polarizing political history.

Yet despite all these reasons voters may have been more inclined to support Nelson than Gillum (or Gillum than Nelson, or Scott than DeSantis, etc.), the striking thing about the 2018 results is just how rarely

⁹ Two other statewide races were close but a little more decisive, with just under three points separating Jimmy Patronis from Jeremy Ring in the CFO race and six points separating Ashley Moody and Sean Shaw in the Attorney-General race.

¹⁰ Many voters in Broward County—the State of Florida’s second most populous county—may not have seen the Florida Senate race on the ballot due to ballot design issues. See: <https://www.washingtonpost.com/outlook/2018/11/12/how-badly-designed-ballot-might-have-swayed-election-florida/>

¹¹ 8,220,494 ballots were cast in the Governor’s race, with DeSantis winning 4,076,186 votes, Gillum winning 4,043,723, and the remaining candidates taking the rest; 8,188,977 ballots were cast in the U.S. Senate race, with Scott winning 4,099,505 and Nelson winning 4,089,472.

¹² Duverger 1954.

¹³ https://www.census.gov/library/visualizations/2016/comm/citizen_voting_age_population/cb16-tps18_florida.html

these differences mattered, and how much pure partisanship seemed to drive the results. At a county level, the correlation between the two-party vote share in the Governor's race and the two-party vote share in the U.S. Senate race is a striking 0.99—as is the correlation between either one of the aforementioned races and the two-party vote share in the 2016 Presidential elections. County level vote shares in the final close race, that of Democrat Nikki Fried and Republican Matt Caldwell for Commissioner of Agriculture, were also correlated at 0.99 with each of the other races as well. Voters, it seems, are casting party-line ballots more and more, and at least in Florida, seem to have remained remarkably consistent from the 2016 to 2018 elections.

Yet in an election with its two major races decided by just tens of thousands of votes out of a total of 21 million citizens and 13 million voters, we cannot help but wonder: what differentiated those few tens of thousands? What voters could Gillum or Nelson (or Caldwell) have convinced to join their cause? In the world of casual conversation, conjecture is king. But if we want to offer anything more than a half-hearted “maybe if...” we need to turn to the evidence. Do any of the proposed explanations survive empirical testing? In other words, can we make any confident claims as to why some people voted for Democrat candidate Bill Nelson, but not for Democrat Andrew Gillum? Or why Fried, alone among Democrats, was able to cross the line first and seal the deal? If not, can we at least make some claims as to the kinds of precincts, if not people, that granted Fried and Nelson extra support?

In this paper, we make use of publicly available data from the Florida Voter File and precinct-level election returns to identify, at the margins, where voters (via their precincts and counties) differed in the 2018 elections. This data affords us the ability to look at, with as fine-grained a method as possible, the differences between the kinds of places that voted for different candidates in the 2018 elections. Beyond the notable cases of the Senate and Governor races, we also examine the three additional statewide competitions: the race for Florida's Attorney-General, Commissioner of Agriculture and Chief Financial Officer, with the Agriculture race being particularly interesting as the only race where a Democrat (Nikki Fried) won.

Demographics and Voting

A long and coherent stream of literature establishes that demographic factors, such as education, income, age, marital status, place of residence and race, are associated with both turnout as well as support for particular candidates and parties.¹⁴ Some of these trends form the most well-known truisms of American politics: minorities (and especially African-Americans) do prefer Democrats, the young also prefer Democrats, while the wealthy prefer Republicans, and so on and so forth. Furthermore, individual candidate factors, such as gender, race, experience, incumbency and even vocal pitch can influence voters' support for candidates.¹⁵ Many voters have preferences for representatives like them and their communities, or candidates that they feel they could “have a beer with”; such familiarity can stand as a proxy for similarity of political interests and is easier to process than understanding the interests of the entire country,¹⁶ especially given citizens' general low lack of knowledge about politics and lack of political ideological constraint.¹⁷

Of particular relevance for this paper, given the candidates in the top-line races in the 2018 Florida general election, is the role played by race—of the candidate, of the voter, and of the interaction between the two. Race and racial attitudes continues to play an important role in recent American elections,¹⁸ and furthermore, there is a clear link between the race of a candidate and their electoral performance.¹⁹ Perhaps most famously, the Bradley effect suggests that black candidates may earn fewer actual votes

¹⁴ Campbell et al. 1960; Wolfinger & Rosenstone 1980; Anoll 2018.

¹⁵ Lawless & Fox 2010; Miller & Shanks 1996; Klofstad 2016.

¹⁶ Harden & Clark 2016.

¹⁷ Converse 1964; Zaller and others 1992; Carpini & Keeter 1996.

¹⁸ Algara & Hale 2019; Hooghe & Dassonneville 2018; Schaffner, MacWilliams & Nteta 2018.

¹⁹ Sonenshein 1990; Sigelman et al. 1995.

than polls indicate, due to the fact that whites from both major parties are less likely to vote for black candidates than they claim in public opinion surveys.²⁰ Bowen and Clark found that at least some part of this phenomena can be seen as an outgrowth of “descriptive representation”—the tendency for voters to generally prefer representatives that look like they do.²¹ Therefore, it seems likely that in-group effects especially based on race might be at play in a large, diverse state such as Florida. This analysis can also be expanded to understanding the influence of age or gender in candidate support.

County Geographic Analysis

Existing research indicates that analyzing comprehensive statewide data is an effective way to explore the relationship between demographics and voting.²² To that end, we make use of the publicly-available Florida Voter File and precinct-level returns released by the Florida Department of State to take a detailed look at the 2018 Florida Election. Although it is possible that the reasons behind the observed vote differential could be purely policy-based, because most voters are political, ideological, and policy innocents, we expect that demographic features such as race, age, gender, income and party registration at the precinct level will be significant predictors of candidate preference.²³

In Figure 1, we present choropleth maps of Florida counties where each county is colored by the two-party vote share. A few things immediately stand out. First, the maps make clear that most of the counties in Florida lean Republican, while more dense urban counties lean Democratic—a feature common to elections across the United States and Florida.²⁴ As mentioned earlier in this paper, the majority of residents in Florida tend to be older and white individuals, and this is especially the case in rural areas. Urban and rural areas, however, are not universally Democratic or Republican; some counties with major urban centers (such as Miami-Dade, Broward and Orange) show strong Democratic support, while others (Hillsborough, Pinellas and Duval) are much more restrained and even occasionally Republican. Likewise, smaller areas tend to be more Republican, but this also varies. Some counties around the big bend region and panhandle are particularly dark shades of red (Dixie, Lafayette, Gilchrist and Holmes), while others appear in lighter shades—or even blue, in the case of counties with small cities in them (Alachua County and Gainesville, Leon County and Tallahassee as state capital).

Overall, while such maps are visually tantalizing, it is difficult to draw authoritative conclusions. For many of the counties, the shading differs only marginally between each of the sub-figures. It is much more informative to look at Figure 2, which compares the performance of the Democratic candidates in the three closest races. In addition, Figure 2 shows the performance of the two less close races compared to the U.S. Senate race.²⁵ Effectively, this map shows which Democratic candidate outperformed the other in which county. For instance, in Sarasota county, Bill Nelson won 46.05% of the two-party vote, while Andrew Gillum won 45.62% of the two-party vote. Thus, while both candidates lost, Nelson slightly outperformed Gillum, and so Sarasota County is colored as a light Nelson advantage.

These figures make it easy to see, for instance, that Fried performed slight better than the top-line candidates, and that Shaw floundered in nearly every corner of the state. Based only on this visual investigation, it would appear that both Gillum and Fried did very well in Democratic strongholds such as Broward, Orange, Osceola, Duval and Miami-Dade County. Fried did especially well on the Florida west

²⁰ Washington 2006; Hopkins 2009.

²¹ Bowen & Clark 2014.

²² Hersh & Nall 2016.

²³ Converse 1964.

²⁴ Gelman 2009; Cramer 2016.

²⁵ For ease of discussion, we talk mostly about “Democratic” candidates here, but as all vote shares are just two-party-vote shares, what is said can be easily directly reversed for the Republican perspective.

coast as well, and over-performed in Citrus, Hernando, Pasco, Pinellas, Hillsborough, Polk, Sarasota and Manatee counties when compared to Nelson. While Fried did not outright win each of those counties, her comparatively robust performance there was crucial to her statewide victory.

What is perhaps most noteworthy about these maps, though, is how much better Nelson did compared to the other Democrats—and especially to Gillum—in rural areas in general, and especially along the Big Bend Counties of Dixie, Lafayette, Gilchrist, Taylor and the surrounding areas. While, given the strong correlation between county vote shares overall, we should be careful to not overstate the magnitude of the effect, it is clear that Nelson remained a slightly different kind of candidate than the other Democrats—one whose incumbency, perhaps, buoyed him a little more in White rural areas than an ordinary Democrat could expect. We will keep this insight in mind as we take a deeper look into the demographic correlates of precinct voting behavior.

Figure 1: Florida Counties Colored by the 2018 Two-Party Vote

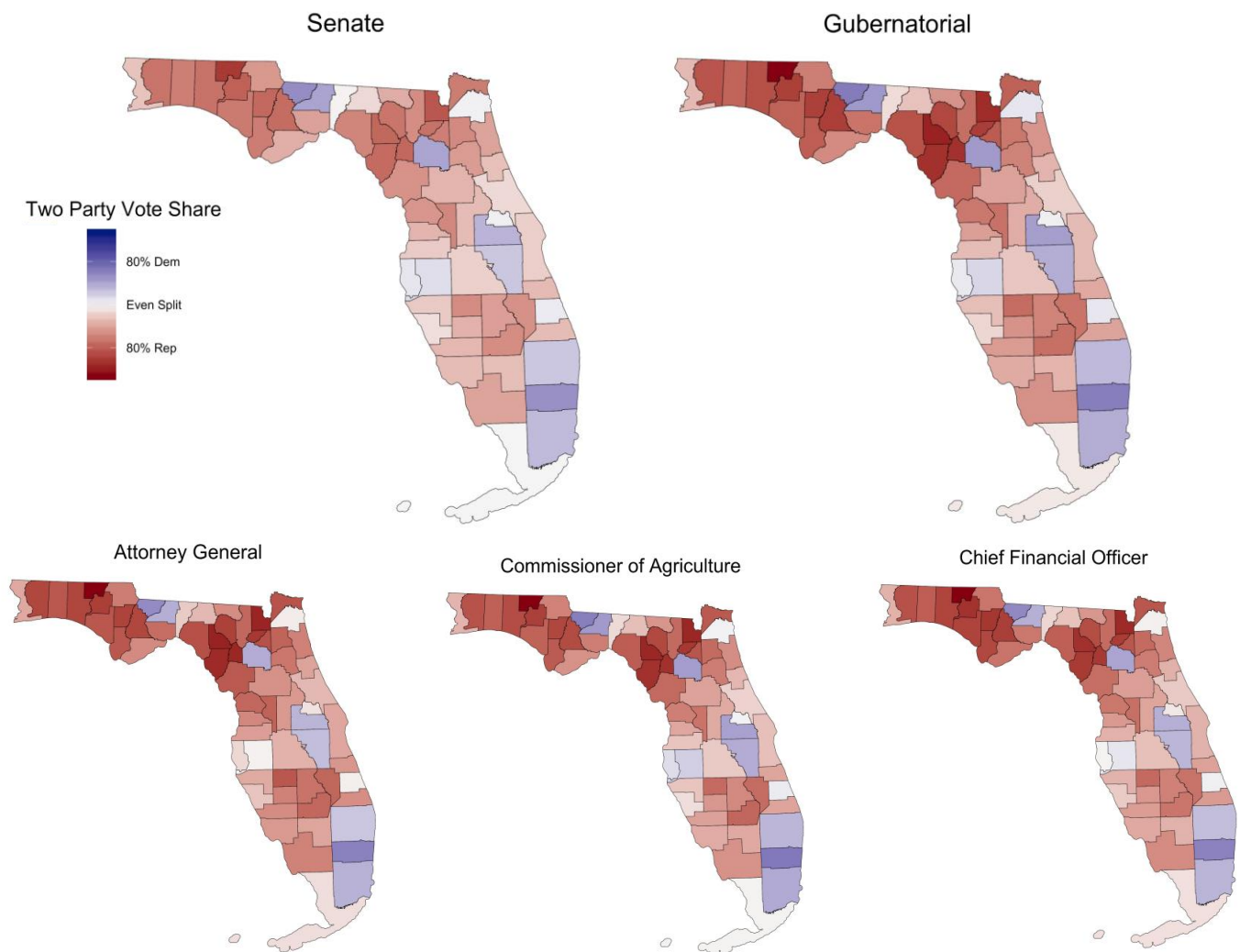
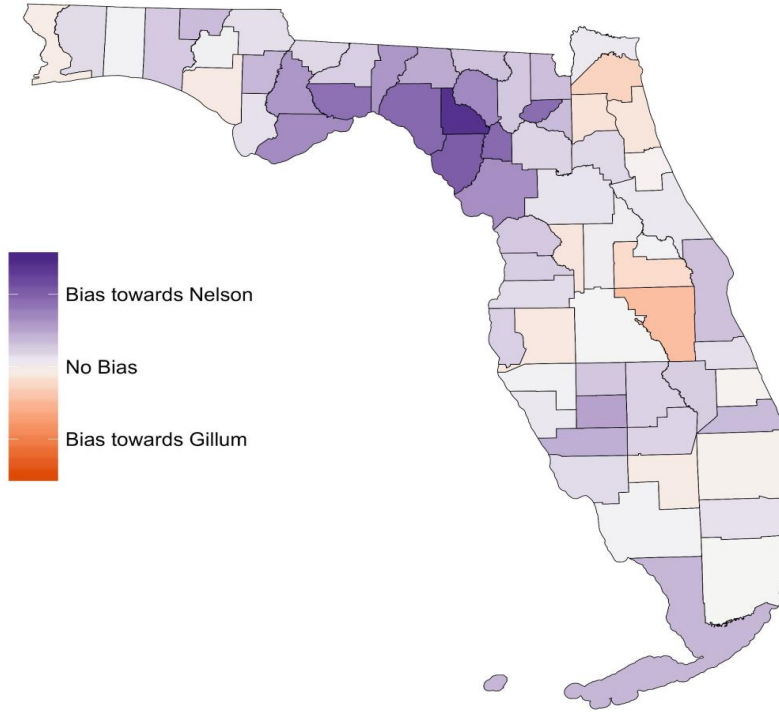
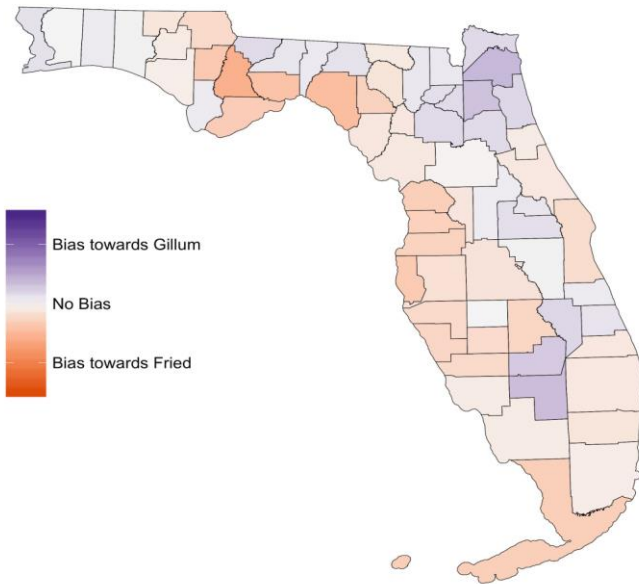


Figure 2: Florida Counties Colored by Relative Democratic Candidate Performance

Nelson (Sen.) and Gillum (Gov.)



Gillum (Gov.) and Fried (Ag. Commissioner)



Nelson (Sen.) and Fried (Ag. Commissioner)

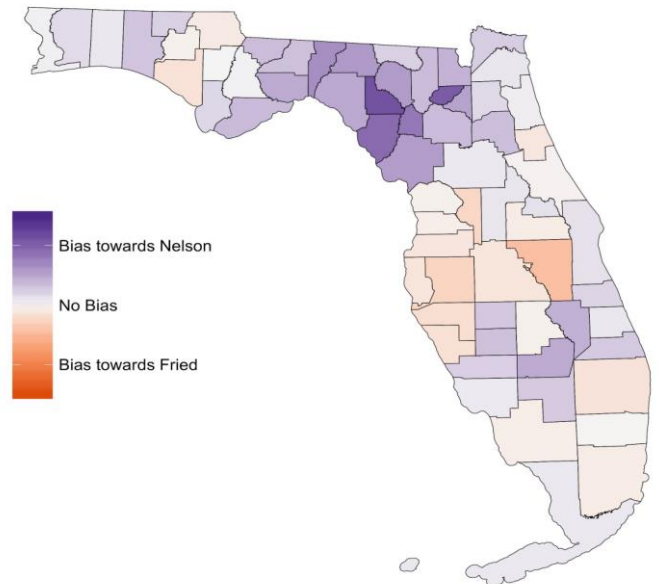
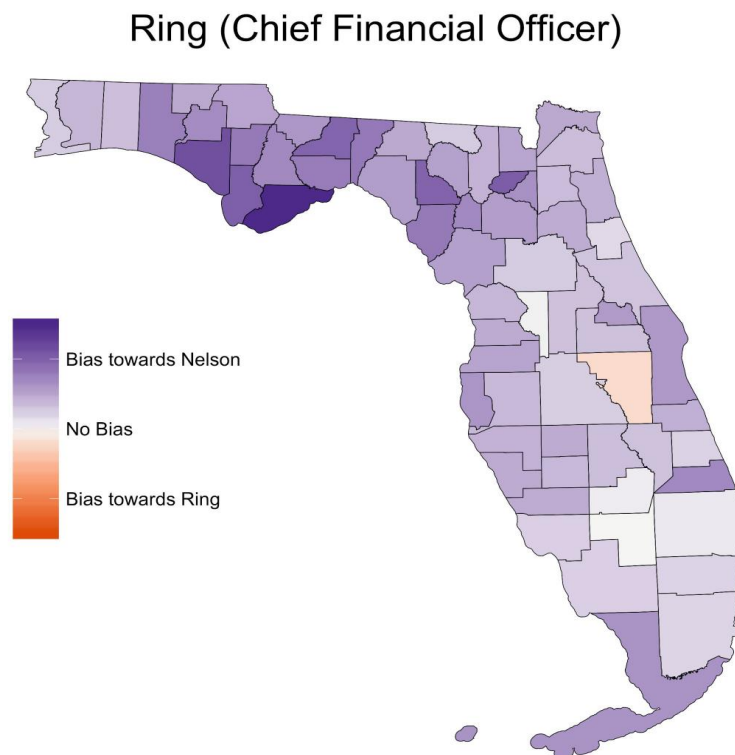
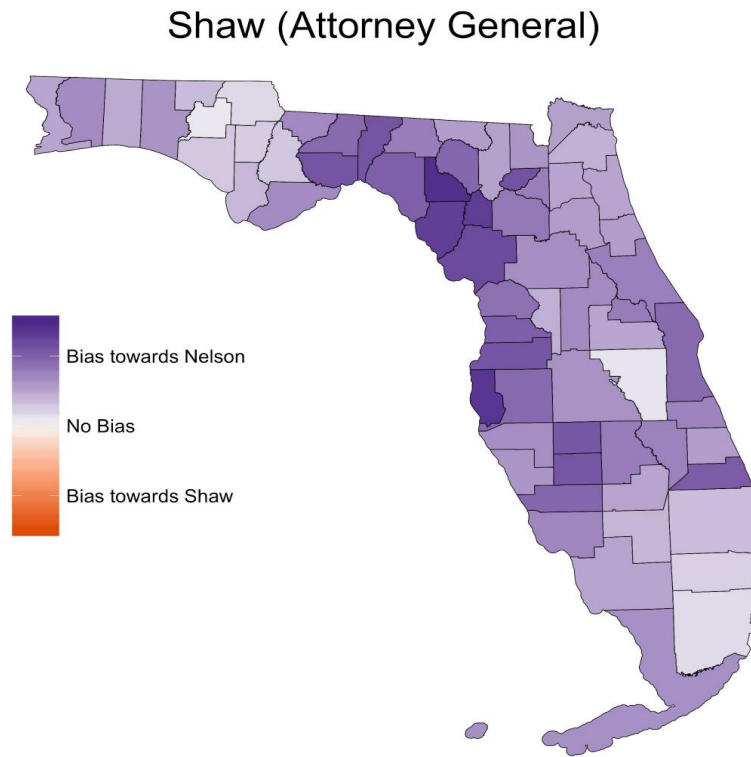


Figure 3: Florida Counties Colored by Democratic Candidate Performance Compared to Nelson



Precinct Statistical Analysis

Table 1: Predicting Democratic Share of Two-Party Vote in Florida Precincts with a Party ID Variable

	Governor	Senate	Attorney Gen.	Ag Comm.	CFO
Pct. Female	0.058*** (6.05)	0.052*** (5.24)	0.036*** (3.76)	0.053*** (5.30)	0.052*** (5.38)
Median Age	0.017 (1.84)	0.015 (1.51)	0.040*** (4.35)	0.029** (2.97)	0.048*** (5.12)
Pct. Black	0.704*** (63.17)	0.701*** (61.12)	0.733*** (67.23)	0.698*** (60.15)	0.716*** (64.15)
Pct. Hispanic	0.176*** (22.60)	0.167*** (20.82)	0.208*** (27.40)	0.180*** (22.19)	0.189*** (24.26)
Pct. Other Race	0.305*** (36.47)	0.296*** (34.34)	0.304*** (37.13)	0.308*** (35.29)	0.311*** (37.04)
Median Income	0.006 (0.79)	0.009 (1.15)	0.014 (1.81)	0.017* (2.01)	0.004 (0.55)
No. of registered voters	-0.029*** (-4.03)	-0.042*** (-5.67)	-0.038*** (-5.43)	-0.034*** (-4.56)	-0.037*** (-5.12)
R^2	0.724	0.707	0.736	0.701	0.723
N	5613	5614	5613	5613	5613

Standardized beta coefficients; t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

For statistical analysis of demographic vote trends, we turn to a smaller geography: the precinct. This allows for more precise estimates of demographic trends, as well as a significant increase in sample size for statistical modeling. At core, the primary story remains the same: Democratic and Republican vote shares across precincts are highly correlated. In fact, the weakest correlation between candidate performance is 0.987 (the correlation between two-party vote share in the race for Attorney-General and U.S. Senate).

In Table 1, we use ordinary least squares to model the Democratic share of the precinct level two-party vote as a function of standard demographic indicators, including gender, race, age, income and the number of registered voters in the precinct. Precinct race, age, gender and number of registered voters are all generated directly from the Florida voter file, yielding maximally precise statistics of the make-up of voters who actually turned-out to vote in their precincts. Median income, which does not exist in the voter file, was created from Census data mapped on to precincts as closely as possible.²⁶

Table 2 models the Democratic share of the vote in a similar way, but adds precinct party identification percentages in as well. To allow for easy comparison of estimated effect magnitudes, we make use of standardized regression coefficients. Positive coefficients indicate greater support for Democratic candidates, negative coefficients indicate weaker support for Democratic candidates. Thus, based on Table 2, we can suggest that a standard deviation increase in the percentage of Hispanic voters in a precinct yields a 0.033 standard deviation decrease in the precinct vote percentage for the Democratic candidate (Gillum) in the Governor’s race, a standard deviation increase in median income yields a 0.053 standard deviation increase in precinct vote percentage for Gillum, etc.²⁷

²⁶ To estimate median income at the precinct level, we take the Zip Code level median income estimates from the Census American Community Survey and match it to each individual in the Florida Voter File by zip code. From there, we aggregate up to the precinct, creating a weighted average of zip code median income at the precinct level.

²⁷ There are several especially small precincts that make statistical modeling difficult and often prove to be significant, high-leverage outliers. As a result, we exclude precincts with fewer than 100 registered voters (192 precincts or 3.3% of the total dataset) from our regression analyses. Including these precincts does not fundamentally change the substance of our conclusions, just decreases their statistical certainty and diminishes the predictive power of the model slightly.

Table 2: Predicting Democratic share of Two-Party Vote in Florida Precincts with a Party ID Variable

	Governor	Senate	Attorney Gen.	Ag Comm.	CFO
Pct. Republican	-0.835*** (-124.09)	-0.887*** (-134.25)	-0.841*** (-133.76)	-0.875*** (-131.27)	-0.853*** (-136.49)
Pct. No Party	0.038*** (6.78)	0.015** (2.70)	0.015** (2.90)	0.049*** (8.81)	0.038*** (7.33)
Pct. Female	0.017*** (3.98)	0.008 (1.85)	-0.007 (-1.66)	0.011* (2.46)	0.010* (2.49)
Median Age	-0.003 (-0.63)	-0.005 (-1.30)	0.021*** (5.41)	0.008 (1.84)	0.028*** (7.15)
Pct. Black	0.168*** (22.62)	0.125*** (17.14)	0.186*** (26.86)	0.140*** (19.02)	0.169*** (24.57)
Pct. Hispanic	-0.033*** (-7.95)	-0.042*** (-10.34)	0.009* (2.38)	-0.043*** (-10.50)	-0.024*** (-6.13)
Pct. Other Race	0.041*** (9.75)	0.024*** (5.88)	0.046*** (11.78)	0.028*** (6.67)	0.042*** (10.58)
Median Income	0.053*** (14.37)	0.062*** (17.15)	0.063*** (18.50)	0.064*** (17.69)	0.052*** (15.24)
No. of registered voters	0.027*** (8.25)	0.019*** (5.86)	0.019*** (6.31)	0.024*** (7.40)	0.020*** (6.66)
R^2	0.945	0.947	0.952	0.946	0.953
N	5613	5614	5613	5613	5613

Standardized beta coefficients; t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

As we expected, these demographic models perform well. Across all races, we are able to explain roughly 70% of the variation in vote share without including party identification, and 95% of the variation in the dependent variable with party identification. Our independent variables, for the most part, behave as expected. Precincts with more Republicans are less supportive of Democratic candidates, but the opposite is true for Independents.²⁸ It would appear, actually, that precincts with more voters registered as “no party” are more supportive of Democratic candidates across the board than precincts with high levels of Democratic registration, likely illustrating the number of old “Southern Democrat” voters who have still not changed their registration in Florida, despite primarily voting for Republicans.²⁹

The interpretation of the gender variable is somewhat more ambiguous and inconsistent across models, especially once party identification is controlled for, with Table 2 suggesting that more female voters in a precinct yielded larger vote shares for Democrats in every race but Attorney-General, where the coefficient is statistically insignificant, but slightly negative, indicating greater Republican support. Given that

²⁸ Voters that are not members of any party, typically referred to as “independents” are recorded as “no party affiliation” in Florida records.

²⁹ Black & Black 2002.

Republican Attorney-General candidate Moody was female, this is, if not expected, unsurprising. The overall weakness of gender as a predictor, however, is noteworthy—especially compared to other demographic features like race—and underscores an important yet frequently misunderstood truth of voting behavior and ideology: the gender gap is typically not nearly as wide as the race gap in American politics.³⁰ That said, there is not much variation by gender across precinct compared to variation by income and especially race, so gender is somewhat difficult to interpret in these models. As with gender, minimal variation in age across precincts also makes it somewhat more difficult to distinguish meaningful relationships between the median age of a precinct and support for the Democratic candidate.

Interpretation of the race variables, however, is straightforward: precincts with more black voters are more supportive of Democratic candidates, and this relationship is especially pronounced when the candidate in question is Black. After the party registration variables, this variable is the most important term in the model. In fact, if we remove every other independent variable and only use Pct. Black to predict the Democratic vote share in each race, the value exceeds 0.5 for all five models (not shown). Interestingly, this association does not exist for all minority groups. Once we control for party identification in Table 2, precincts with more Hispanic voters favor Republican candidates. This might seem unusual, but two features of help explain it. First, unlike most Hispanics, Cuban-Americans, one of the largest Hispanic groups in Florida, tend to prefer the Republican party.³¹ Second, DeSantis' running mate Jeannette Nunez is Hispanic, potentially providing additional reasons for Hispanic voters to lean towards Republicans this year, as well as potential increase in women support. Precincts with larger populations of other minority groups lean more towards the Democrats.

The median income variable suggests that wealthier precincts are more Democratic, which is somewhat surprising considering that wealthy individuals historically vote for Republican candidates, even if the strength of this relationship is changing recently.³² However, it must be remembered that precincts with more wealth are also more urban, while the actual rurality of a precinct is difficult to measure and thus not controlled for here. While we control for the number of voters in a precinct (and increased numbers of voters does suggest a more Democratic precinct), using population size alone is a notoriously poor measure of rurality and urbanity.³³

To aid interpretation of the overall model, we present the predicted vote share received by each statewide candidate in different hypothetical precincts in Table 3. The first row of the table, for example, indicates that our model predicted that Andrew Gillum would take 52.1% of the vote in an average precinct, Bill Nelson take 52.3%, Sean Shaw take 49.5% and so on.³⁴ In this case, an “average precinct” is one where all of the demographic variables are at their mean. The next row lists the predicted vote share for each of the five candidates in a hypothetical precinct where the percentage of female voters is two standard deviations above the mean (this would be a precinct where 65% of the voters are female); the following row shows predictions for a precinct where the percentage of female voters is two standard deviations below the mean. We do this for each independent variable in the model, allowing us to examine what would happen to hypothetical precincts if we just altered one demographic characteristic at a time, keeping other

³⁰ Tyson 2018.

³¹ Krogstad and Flores 2016.

³² Gelman 2009.

³³ Waldorf 2006; Belk 2019.

³⁴ While these numbers may seem odd, at first, given that Senator Bill Nelson did not win re-election in 2016, it is important to remember that the average precinct does not represent the average voter and that precincts have varying numbers of voters in them. Even if Nelson won the average precinct, the average voter was relatively less likely to vote for him than for ex-Governor Rick Scott as the 2016 voting showed, while Scott was by far the most active everywhere on the ground.

demographic features the same.³⁵ However, because these precincts are hypothetical, it is important to recognize that they do not exactly match what real precincts look like. Instead, this table is a useful way to explore the relative performance of each candidate with different groups. For instance, the row for “Median Age (-2 sd)” tells us that Gillum and Nelson both did slightly better in younger precincts, but Shaw (Attorney General), Fried (Agriculture) and Ring (CFO) all did slightly worse.

Table 3: Predicting Democratic Performance in Florida Precincts.

	Governor	Senate	AG	Agriculture	CFO
Average Precinct	0.521	0.523	0.495	0.524	0.507
Pct. Female (-2 sd)	0.511	0.519	0.499	0.518	0.502
Pct. Female (+2 sd)	0.530	0.527	0.491	0.529	0.513
Median Age (-2 sd)	0.522	0.525	0.486	0.521	0.496
Median Age (+2 sd)	0.520	0.521	0.504	0.527	0.519
Pct. White (+2 sd)	0.487	0.504	0.450	0.500	0.472
Pct. White (-2 sd)	0.576	0.555	0.569	0.561	0.565
Pct. Black (+2 sd)	0.584	0.570	0.562	0.577	0.569
Pct. Black (-2 sd)	0.499	0.507	0.471	0.505	0.485
Pct. Hispanic (+2 sd)	0.488	0.494	0.477	0.492	0.478
Pct. Hispanic (-2 sd)	0.533	0.534	0.501	0.535	0.518
Pct. Other (+2 sd)	0.539	0.533	0.515	0.535	0.525
Pct. Other (-2 sd)	0.507	0.516	0.480	0.515	0.494
Pct. Rep (+2 sd)	0.158	0.164	0.133	0.150	0.140
Pct. Rep (-2 sd)	0.882	0.880	0.854	0.896	0.873
Pct. NPA (+2 sd)	0.601	0.594	0.566	0.610	0.589
Pct. NPA (-2 sd)	0.431	0.443	0.414	0.427	0.416
Pct. Dem (+2 sd)	0.727	0.743	0.715	0.731	0.717
Pct. Dem (-2 sd)	0.303	0.292	0.263	0.304	0.286
Income (-2 sd)	0.500	0.500	0.469	0.498	0.486
Income (+2 sd)	0.542	0.547	0.521	0.549	0.528
Registered Voters (-2 sd)	0.513	0.518	0.489	0.517	0.501
Registered Voters (+2 sd)	0.532	0.531	0.503	0.533	0.515

Overall, these results largely confirm standard expectations. Increasing the number of voters who are female gives the largest boost to the female candidate and actually penalizes Shaw, who ran against a female opponent. The fact that Democrats have a larger projected vote share in wealthy and large precincts is strong indirect evidence that Democrats did better in urban areas. Although all Democrats benefit from

³⁵ When we adjust values for race or party registration variables, we update complimentary values so they always sum to 100%. In other words, when we “increase” the percentage of a precinct’s voters that are Black, we adjust the percentages for Whites, Hispanics and “other race” individuals so that we are not using impossible parameters to make predictions.

increasing the percentage of a precinct's voters who are Black, such a theoretical increase gives a much larger boost to the two Black Democratic candidates.

The same cannot be said for hypothetical adjustments to the percentage of a precinct that is White. Compare the performance of each candidate in a precinct where the percentage of registered Whites is 2 standard deviations above and below the mean. Gillum (Governor), Shaw (Attorney-General) and Ring (CFO), all suffer a roughly 10 points drop in expected performance when the percentage of Whites increases. In sharp contrast, Fried (Agriculture) and Nelson (U.S. Senate), the two Democrats who performed best in this most recent election, do not see the same type of swing; their expected performance dips by only 5 points. It is not clear that being a white candidate is the cause of this performance difference: Ring (CFO) does not perform well in these hypothetical very White precincts even though he is White. But whatever the cause, this clear difference in performance based on the Whiteness of a precinct almost certainly helps explain the strong statewide performance of Fried and Nelson. The majority of Florida's voting age population is White, so candidates have much to gain by limiting their losses in very White precincts.

At the same time, the estimated percentages also suggest how minor many of these demographic effects are next to partisanship. While two standard deviation changes in partisanship result in wild swings in estimated precinct vote percentages, most of the other demographic features result in comparatively minor vote shifts, underscoring again the important role that partisanship plays in voting decisions.

Discussion and Conclusion

In this study, we took a preliminary look at how precinct-level demographic indicators could be used to better understand the sources of votes for the five statewide Democratic candidates in the 2018 Florida midterm elections. By using publicly-available statewide data, we built models that provide us with what we believe is the best look at understanding how five candidates of the same party could have slightly different vote totals and bases of support. Indicators such as race, gender, age and party identification can provide insight on what individuals desire from a politician, and who they are most likely to support. As expected, where "descriptive representation" could arise, most typically in the form of race and gender, it did, although party identification remained a much more important factor—as would be expected, given the closeness of and high level of correlation between vote totals in all races.

Moving towards analyzing vote results at the precinct level allows us to look at very fine grained data about candidate performance and turnout without relying on noisy survey and exit poll data. While limitations remain—we can only talk about precincts, not individual voters—this kind of analysis is particularly useful for drawing conclusions when races are extremely close. For example, the largest publicly available election survey in 2018 (measured by sample size) is the Cooperative Congressional Election Study, with 60,000 respondents across the United States and 3,846 in Florida alone. Yet using this survey to look at differences in the Scott/Nelson race and DeSantis/Gillum race is extremely difficult. The kind of ticket splitting that we examine here is so uncommon that there are not enough observations in the CCES data to make analyzing it worthwhile. Without tens of thousands of survey responses in Florida it is not possible to make confident claims about individual level behavior at such narrow margins.

In conclusion, while the results of the 2018 Florida election were strikingly close, there are a few interesting tidbits that can be drawn out. Fried, for example, did not win by commanding a dramatically different base than the other Democrats—she won by performing just a tiny bit better with independents, almost as well as Gillum among African-Americans, and better than all other Democrats other than Nelson among whites. She also held down Republican margins in crucial areas of the state compared to Gillum, especially bordering the Gulf Coast, while marginally outperforming Senator Nelson in South and Central Florida. There is no magic bullet for Democrats lurking in this data—just a

few minor differences in an otherwise very similar coalition that turned out to be just enough for Fried, but not enough for Nelson and Gillum.

Table 4: Descriptive Statistics for Select Precinct Level Variables

	Mean	Std. Deviation	Min	Median	Max	N
Pct. Female	0.54	0.06	0.00	0.53	1.00	5812
Median Age	55.05	6.99	20	54	90	5812
Pct. White	0.63	0.30	0.00	0.74	1.00	5812
Pct. Black	0.15	0.22	0.00	0.06	1.00	5812
Pct. Hispanic	0.15	0.21	0.00	0.07	1.00	5812
Pct. Other Race	0.06	0.04	0.00	0.05	1.00	5812
Median Income	53902.53	17481.74	19138.00	50565.00	177000.00	5806
Pct. Republican	0.37	0.17	0.00	0.39	1.00	5812
Pct. Democrat	0.41	0.18	0.00	0.38	1.00	5812
Pct. No Party	0.20	0.07	0.00	0.21	1.00	5812
No. of registered voters	2273.18	1546.48	1.00	2003.50	13353.00	5812
Dem. Governor vote share	0.52	0.21	0.00	0.50	1.00	5810
Dem. Senate vote share	0.52	0.20	0.00	0.50	1.00	5811
Dem. Attorney Gen. vote share	0.49	0.21	0.00	0.46	1.00	5810
Dem. Ag Comm. vote share	0.52	0.20	0.00	0.50	1.00	5810
Dem. CFO vote share	0.51	0.20	0.00	0.48	1.00	5809

BIBLIOGRAPHY

- Algara, Carlos & Isaac Hale. "The Distorting Effects of Racial Animus on Proximity Voting in the 2016 Elections." *Electoral Studies*, 58 (2) (2019): p.58–69.
- Anoll, Allison P. "What Makes a Good Neighbor? Race, Place and Norms of Political Participation." *American Political Science Review*, 112 (3) (2018): p.494–508.
- Belk, Jack. "Rural Politics: An Exploration of Rurality and Political Behavior." B.A. Thesis, Sarasota: New College of Florida, 2019).
- Black, Earl & Merle Black. *The Rise of Southern Republicans* (Cambridge, MA: Harvard University Press, 2002).
- Bowen, Daniel C. & Christopher J Clark. "Revisiting Descriptive Representation in Congress: Assessing the Effect of Race on the Constituent–Legislator Relationship." *Political Research Quarterly*, 67 (3) (2014): p.695–707.
- Campbell, Angus, Philip E. Converse, Warren E. Miller & Donald E. Stokes. *The American Voter* (New York: Wiley & Sons, 1960).
- Carpini, Michael X. Delli & Scott Keeter. *What Americans Know About Politics and Why It Matters* (Yale University Press, 1996).
- Converse, Philip E. "The Nature of Belief Systems in Mass Publics" in D.E. Apter, ed., *Ideology and Discontent* (New York: Free Press of Glencoe, 1964).

- Cramer, Katherine J. *The Politics of Resentment: Rural Consciousness in Wisconsin & the Rise of Scott Walker* (University of Chicago Press, 2016).
- Duverger, Maurice. *Political Parties: Their Organization and Activity in the Modern State* (John Wiley & Sons, 1954).
- Gelman, Andrew. *Red State, Blue State, Rich State, Poor State: Why Americans Vote the Way They Do-Expanded Edition* (Princeton University Press, 2009).
- Harden, Jeffrey J. & Christopher J Clark. "A Legislature or a Legislator Like Me? Citizen Demand for Collective and Dyadic Political Representation." *American Politics Research*, 44 (2) (2016): p.247–271.
- Hersh, Eitan D. & Clayton Nall. "The Primacy of Race in the Geography of Income-Based Voting: New Evidence from Public Voting Records." *American Journal of Political Science*, 60 (2) (2016): p.289–303.
- Hooghe, Marc & Ruth Dassonneville. "Explaining the Trump Vote: The Effect of Racist Resentment and Anti-Immigrant Sentiments." *PS: Political Science & Politics*, 51 (3) (2018): p.528–534.
- Hopkins, Daniel J., "No More Wilder Effect, Never a Whitman Effect: When and Why Polls Mislead About Black and Female Candidates." *The Journal of Politics*, 71 (3) (2009): p.769–781.
- Klofstad, Casey A. "Candidate Voice Pitch Influences Election Outcomes." *Political Psychology* 37 (5) (2016): p.725–738.
- Krogstad, Jens Manuel & Antonio Flores. "Unlike Other Latinos, About Half of Cuban Voters in Florida Backed Trump." *FactTank*. Pew Research Center (2016). <https://www.pewresearch.org/fact-tank/2016/11/15/unlike-other-latinos-about-half-of-cuban-voters-in-florida-backed-trump/>
- Lawless, Jennifer L. & Richard L Fox. *It Still Takes a Candidate: Why Women Don't Run for Office* (Cambridge University Press, 2010).
- Miller, Warren E. & J. Merrill Shanks. *The New American Voter* (Cambridge, MA: Harvard University Press, 1996).
- Schaffner, Brian F, Matthew MacWilliams & Tatishe Nteta. "Understanding White Polarization in the 2016 Vote for President: The Sobering Role of Racism and Sexism." *Political Science Quarterly*, 133 (1) (2018): p.9–34.
- Sigelman, Carol K, Lee Sigelman, Barbara J Walkosz & Michael Nitz. "Black Candidates, White Voters: Understanding Racial Bias in Political Perceptions" in *American Journal of Political Science*, 39 (1) (1995): p.243–265.
- Silver, Nate. "2018 Midterm Election Forecast: Senate, Florida" (2018a), on-line. <https://projects.fivethirtyeight.com/2018-midterm-election-forecast/senate/florida/>.
- . "Forecasting the Races for Governor" (2018b), on-line. https://projects.fivethirtyeight.com/2018-midterm-election-forecast/governor/?ex_cid=midterms-header.
- Sonenshein, Raphael J. "Can Black Candidates Win Statewide Elections?" *Political Science Quarterly*, 105 (2) (1990): p.219–241.
- Tyson, Alec. "The 2018 Midterm Vote: Divisions by Race, Gender, Education." *Pew Research Center: FactTank* (8 November 2018).
- Waldorf, Brigitte S., "A Continuous Multi-Dimensional Measure of Rurality: Moving Beyond Threshold Measures." (2006).
- Washington, Ebonya. "How Black Candidates Affect Voter Turnout." *Quarterly Journal of Economics*, 121 (3) (2006): p.973–998.
- Wolfinger, Raymond E. & Steven J. Rosenstone. *Who Votes?* (Yale University Press, 1980).
- Zaller, John R. *The Nature and Origins of Mass Opinion* (Cambridge University Press, 1992).

AUTHORS

Jack Reilly, Ph.D., is Associate-Professor of Political Science at New College of Florida in Sarasota and holds a Ph.D. from the University of California-Davis and a B.A. from Reed College. His work focuses on elections, political behavior and computational Social Sciences.

Jack K. Belk Jr., M.A., graduated in 2019 from New College of Florida in Sarasota with a concentration in Political Science and Finance. He will attend Duke University-Law School in Fall 2020.

Annika Kufrovich is an Undergraduate student in Political Science and Statistics at New College of Florida in Sarasota.

Jennifer Lin is an Undergraduate student in Psychology and Political Science at New College of Florida in Sarasota.

Rory Renzy is an Undergraduate student in Political Science and Economics at New College of Florida in Sarasota.