United States District Court

for the Northern District of Alabama

Chestnut v. Merrill,
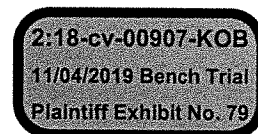
No. 2:18-cv-907-KOB

March 8, 2018

Expert Report of Maxwell Palmer, Ph.D.

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Maxwell Palmer

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Statement of Inquiry

1. I have been asked to evaluate the extent to which voting is racially polarized in southern Alabama, including the 1st, 2nd, 3rd, and 7th Congressional Districts under the redistricting plan enacted by the Alabama State Legislature in 2011.

Summary of Analysis and Findings

2. I find strong evidence of racially polarized voting in the 1st, 2nd, 3rd, and 7th Congressional Districts (the Focus Area). African American and white voters consistently support different candidates. Across every election I analyzed, the African American-preferred candidate on average won 94% of the African American vote and only 17% of the white vote in the focus area.

3. African American-preferred candidates are largely unable to win elections in the focus region. Across an analysis of 18 statewide elections, the African American-preferred candidate was able to win only two. In analyses of the 2018 elections at the precinct-level, African American-preferred candidates were only able to win elections in the 7th Congressional District.

Qualifications

4. I am currently an Assistant Professor of Political Science at Boston University. I joined the faculty at Boston University in 2014, after completing my Ph.D. in Political Science at Harvard University. In 2017 I was also appointed a Junior Faculty Fellow at the Hariri Institute for Computing at Boston University. I teach and conduct research on American politics and political methodology.

5. I have published academic work in leading peer-reviewed academic journals, including the *American Political Science Review*, *Journal of Politics*, *Journal of Empirical Legal Studies*, and *Perspectives on Politics*. I have published work on redistricting in the *Ohio State University Law Review* and the *Journal of Politics*. My curriculum vitae is attached to this report. My published research uses a variety of analytical approaches, including statistics, geographic analysis, and simulations.

6. I have served as an expert witness or litigation consultant on numerous cases involving the Voting Rights Act, including redistricting, voter identification, and early voting. I testified as an expert in redistricting and data analysis as it pertains to redistricting before the U.S. District Court for the Eastern District of Virginia in *Bethune Hill v. Virginia* (3:14-cv-00852-REP-AWA-BMK) and before the U.S. District Court for the Southern District of Mississippi in *Thomas v. Bryant* (3:18-CV-441-CWR-FKB). I worked as a data analyst assisting testifying experts in multiple cases concerning congressional and state legislative districting, including: *Perez v. Perry*, in the U.S. District Court for the Western District of Texas (No. 5:11-cv-00360); *LULAC v. Edwards Aquifer Authority* in the U.S. District Court for the Western District of Texas, San Antonio Division (No. 5:12cv620-OLG,); *Harris v. McCrory* in the U. S. District Court

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for the Middle District of North Carolina (No. 1:2013cv00949); *Guy v. Miller* in the U.S. District Court for Nevada (No. 11-OC-00042-1B); *In re Senate Joint Resolution of Legislative Apportionment* in the Florida Supreme Court (Nos. 2012-CA-412, 2012-CA-490); and *Romo v. Detzner* in the Circuit Court of the Second Judicial Circuit in Florida (No. 2012 CA 412).

7.   I am being compensated at a rate of $350/hour for my work in this case.

Geographic Area and Elections Analyzed

8.   For the purpose of my analysis, I examined elections in the 1st, 2nd, 3rd, and 7th Congressional Districts.

- The 1st District includes Baldwin, Escambia, Mobile, Monroe, and Washington counties, and parts of Clarke County.

- The 2nd District includes Autauga, Barbour, Bullock, Butler, Coffee, Conecuh, Covington, Crenshaw, Dale, Elmore, Geneva, Henry, Houston, and Pike counties, and parts of Montgomery County.

- The 3rd District includes Calhoun, Chambers, Clay, Cleburne, Lee, Macon, Randolph, Russell, St. Clair, Talladega, and Tallapoosa counties, and parts of Cherokee and Montgomery counties.

- The 7th District includes Choctaw, Dallas, Greene, Hale, Lowndes, Marengo, Perry, Pickens, Sumter, and Wilcox counties, and parts of Clarke, Jefferson, Montgomery, and Tuscaloosa counties.

- I refer to the combined areas of these four congressional districts, along with the remainder of any county that is partially in these districts and other congressional districts, as the "focus area" for my analysis.[1]

9.   Figure 1 maps the focus area. The shaded portions of Figure 1 show the counties and congressional districts included in my analysis, and the solid black line marks the full boundary of each congressional district.

10. To analyze racially polarized voting in the focus area, I examined election results from the 2012, 2014, 2016, and 2018 general elections, and the 2017 special election for U.S. Senate. I included elections for U.S. Congress (endogenous elections), and statewide elections (exogenous).[2]

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[1] Jefferson County is split between the 6th and 7th districts, Tuscaloosa County is split between the 4th and 7th districts, and Cherokee County is split between the 3rd and 4th districts. The full counties are included in the focus area, but not in analyses of the individual districts alone.

[2] The statewide elections analyzed include elections for U.S President, U.S. Senate, Governor, Lieutenant Governor, Secretary of State, Attorney General, State Auditor, Treasurer, Commissioner of Agriculture and

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11. In analyzing racially polarized voting in each election, I used a statistical procedure, ecological inference (EI), that estimates group-level preferences based on aggregate data. While the primary focus of this analysis is on racially polarized voting between African American and white voters, I also added a third group, "other", which includes Hispanics, Asians, Native Americans, and voters who did not identify their race when registering to vote, in the analysis.[3] I excluded third party and write-in candidates, and analyzed votes for the two major-party candidates in each contested election. The results of this analysis are estimates of the percentage of each group (African Americans, whites, and others) that voted for each candidate in each election. The results include both a mean estimate (the most likely vote share), and a 95% confidence interval.[4]

12. I used ecological inference analysis on two different datasets. First, I used county-level election results and data on voter registration by race to analyze racially polarized voting at the county level for the 2012, 2014, 2016, and 2018 general elections, as well as the special election for U.S. Senate in 2017. Second, I used precinct-level data to estimate racially polarized voting at the precinct level for the 2018 general elections. Due to data constraints, I was only able to use precinct-level data for 2018. This analysis offers increased precision in my estimates of racially polarized voting because there is more information about racial voting patterns at the precinct level than at the county level.

County-Level Analysis

13. To analyze racially polarized voting at the county level, I relied on election results and county-level voter registration data from 2012 to 2018 from the Alabama Secretary of State.[5] The voter registration data includes voter race, based on voters' self-identified race when registering to vote.[6]

Industries, Chief Justice of the State Supreme Court, and Associate Justice of the State Supreme Court. I excluded elections for state legislature, as these districts partially overlap with the congressional district boundaries and include different subsets of voters in the area relevant to this case.

[3] Combining the "other" group with whites does not substantively impact the results of the analysis or alter my conclusions.

[4] The 95% confidence interval is a measure of uncertainty in the estimates from the model. For example, the model might estimate that 94% of the members of a group voted for a particular candidate, with a 95% confidence interval of 91-96%. This means that based on the data and the model assumptions, we can be 95% confident that the true level of support is in the range of 91-96%, with 94% being the most likely value. Larger confidence intervals reflect a higher degree of uncertainty in the estimates, while smaller confidence intervals reflect less uncertainty.

[5] https://www.sos.alabama.gov/alabama-votes/voter/election-data

[6] For 2018 only, the Secretary of State's website also included voter turnout by race. While I use voter registration by race in my analysis here to maintain consistency over the different election years, using turnout by race produces substantively similar results and supports the same conclusions.

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14. In all of the analyses below, I analyzed racially polarized voting using three demographic groups: African Americans, whites, and other. The "other" group included self-identified Hispanics, Asians, Native Americans, voters of other races, and voters whose race is unknown.[7]

15. For the county-level ecological inference analysis, I examined all of the counties in the focus area as whole, as there are not enough counties in each congressional district to analyze them separately. Consequently, I was only able to analyze the exogenous, statewide elections. For each election, I ran the ecological inference algorithm and then analyze the results.

16. Interpreting the results of the ecological inference models proceeded in two general stages. First, I examined the support for each candidate by each demographic group to determine if members of the group vote cohesively in support of a single candidate. When a significant majority of the group supports a single candidate, I can then identify that candidate as the group's "candidate of choice." If the group's support is roughly evenly divided between the two candidates, then the group does not cohesively support a single candidate and there is not an identifiable candidate of choice. Second, after identifying the candidate of choice for each group (or the lack of such a candidate), I then compared the preferences of African American and white voters. When African American and white voters share the same candidate of choice, or when one or both groups do not have an identifiable candidate of choice, then voting is not polarized. Evidence of racially polarized voting is found when African American and white candidates have different candidates of choice.

17. Figure 2 presents the results of the county-level ecological inference analyses.[8] For each contest examined, the text on the left identifies the candidate of choice for each demographic group.

18. In every election examined in the focus area, both African American and white voters have clearly identifiable candidates of choice, and in all cases African American and white voters cohesively support opposing candidates.

19. The plot to the right in each figure displays the level of support by each group for the African American candidate of choice. The estimated level of support by African American voters is depicted with a black circle, and by white voters with a white circle. The vertical lines to either side of each circle mark the bounds of the 95% confidence intervals, which reflect uncertainty in the estimate.

20. In all cases, African American voters strongly support their candidate of choice, with an average estimated vote share of 94.1%. White voters strongly oppose these candidates, with an average estimated vote share of only 16.7%.

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[7] In 2018, voters in the "other" group made up 3.3% of registered voters statewide and 3.1% of registered voters in the focus area.

[8] Table 1 presents the numerical estimated displayed in Figure 2.

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21. These results demonstrate high levels of racially polarized voting in the focus area.

22. Having identified the African American candidate of choice in each contest, I now turn to their ability to win elections in these districts. Table 2 presents the results of each election in the forty-five counties constituting the focus area. For each election, I calculate the vote share obtained by the African American and white-preferred candidates.

23. Across all 23 statewide contests analyzed, the African American-preferred candidate won only twice. In all other cases, the white-preferred candidate won the majority of the vote.

24. The African American-preferred candidate won the majority of the vote in the focus area in only two contests: the 2012 election for Chief Justice of the Alabama Supreme Court, and the 2017 special election for U.S. Senate. In both cases, the white-preferred candidate was Roy Moore, a former Chief Justice of the Alabama Supreme Court. Moore is a uniquely controversial figure in Alabama politics, having been removed from his position on the Supreme Court in 2003, and later suspended from his position on the Supreme Court in 2016 following his 2012 election. In the 2017 U.S. Senate election, Moore was also accused of sexual assault and misconduct by several women.[9] Moore's unique unpopularity is highlighted by a recent statement of the National Republican Senate Committee on the 2020 Senate race: "'The NRSC's official stance is ABRM: anyone but Roy Moore,' said Kevin McLaughlin, the committee's executive director. 'The only thing Doug Jones and I agree on is that his only prayer for electoral success in 2020 is a rematch with Roy Moore.'"[10]

Precinct-Level Analysis

25. The previous analysis at the county level provides strong evidence of racial polarization and the inability of African American-preferred candidates to win in most elections due to white bloc voting. I supplement that analysis here with a precinct-level analysis of the 2018 general election. Precinct-level analysis offers two advantages. First, I am able to analyze the endogenous elections for U.S. House in each district. Second, due to the larger number of data points at the precinct level, I am able to measure racially polarized voting in each congressional district separately, as well as in the focus area as a whole.

26. To analyze racially polarized voting at the precinct level, I relied primarily on two data sources:

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[9] Notwithstanding these potentially distinguishing features of Mr. Moore's candidacy, 70.9% of white voters voted for Moore in 2012 and 66.3% of white voters voted for Moore in 2017. *See* Table 1.

[10] https://www.politico.com/newsletters/playbook-pm/2019/02/28/netanyahu-indicted-pelosi-attempts-to-wrangle-dems-and-says-noko-won-the-summit-401605?tab=most-read

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- Precinct-level elections results for the 2018 general election from the Alabama Secretary of State.[11]

- A snapshot of the Alabama voter file following the 2018 general election, provided by the Alabama Secretary of State, dated January 3, 2019. This file lists every individual voter in Alabama as of January 3, their self-identified race, county, voting precinct, and whether they voted in the 2018 general election. This file is used to estimate the percentage of registered voters by race in each precinct for the 2018 election.[12]

27. There are several challenges in combining the voter file snapshot and the precinct election returns into a cohesive dataset for analyzing racially polarized voting. First, I use the voter file to estimate the number of registered voters, by race, in each election precinct. The available voter file is dated two months after the election. This is necessary because, due to how the statewide voter file is administered in Alabama, there is a lag between the date of the election and when counties report voter participation for each voter.[13] The state identified the January 3, 2019 voter file as the snapshot closest to the election with the appropriate voter history data. Such a lag means that voters who died or moved out of state (or otherwise became non-voters) after the election may not be included. Voters who moved and re-registered to vote after the election may now be assigned a different precinct.

28. While this time difference may introduce some small inaccuracies to the count of voters by race in each precinct, these differences are not substantively meaningful. To test for changes in registered voters by race, I compared the percentage of African American and white registered voters in each county, from November 2018 to January 2019, based on registration reports from the Alabama Secretary of State. In every county in the focus area, the demographics of registered voters are essentially the same; the largest change of any racial group in any county was less than 0.25 percentage points.

29. The second challenge in assembling precinct-level data is matching the precincts in the voter file to the precincts in the election returns. For some counties this is a

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[11] https://www.sos.alabama.gov/alabama-votes/voter/election-data

[12] This file, along with voter snapshot files for the 2012, 2014, and 2016 elections, were provided to me on February 15, 2019. As described below, working with these files and matching the voter registration precincts to the precinct-level election returns is a slow and time-consuming process. Additionally, the file matching precincts in the voter file to precincts in the election returns in some counties, *see supra* n.14, was provided to me on February 19, 2019, and then, too, only for 2018 elections. Consequently, I was only able to assemble data for the 2018 election.

[13] Source: Email from Jim Davis (Alabama Attorney General's Office) to counsel, Feb. 11, 2019: "The voter registration database contains fields for the elections in which a voter has cast a ballot, but that information is not uploaded instantaneously. Local election officials update that information for each election, and it takes several weeks for that to happen. That means that a copy of the database saved the day after the election would not contain the information you requested; we have to go several weeks after the election to be confident that local officials have had enough time to update the voter records."

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straightforward task, as the precincts in both data sources use the same names. In other cases names are spelled differently, different abbreviations are used, or precincts are identified using a mix of precinct names and numbers, such that the two data sets must be carefully matched together, one precinct at a time.[14] However, some counties could not be matched because the voter file included only precinct numbers, the election returns included only precinct names, and I did not have a way to match these together.[15] Additionally, there were 20 precincts in the voter file across the other counties that could not be matched because there was not a correspondingly named precinct in the election returns. Finally, I removed an additional 18 precincts from the dataset where the number of voters in the voter file was less than 75% of the number of votes cast for that precinct in the election returns.

30. Overall, I was able to match voter file precincts to election return precincts for more than 90% of the 2018 general election voters from the voter file, and for more than 90% of the ballots cast from the precinct-level election returns. The unmatched areas are demographically similar to those that are matched. 90.4% of Black voters and 90.4% of white voters were matched to their election precinct. Consequently, the unmatched precincts should not bias the results of the ecological inference analysis.

31. Absentee and provisional ballots are recorded at the county level rather than the precinct level. I assigned absentee and provision votes for each candidate to individual precincts based on the precinct's share of the total in-precinct votes cast for that candidate in each county.[16]

32. Figures 3–7 present the results of the precinct-level ecological inference analyses.[17] The first four figures present ecological inference estimates for each congressional district area separately. Figure 7 examines the entire focus area (statewide races only). For each contest examined, the text on the left identifies the candidate of choice for each demographic group.

33. In every election examined, in each congressional district and in the focus area as a whole, both African American and white voters have clearly identifiable candidates of choice, and in all cases African American and white voters cohesively support opposing candidates.

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[14] Some of the matching was facilitated using a file provided by the defendant that provided precinct names and numbers for some counties.

[15] The following counties could not be matched and are excluded from the precinct-level analysis: Calhoun, Cherokee, Covington, Hale, Henry, Macon, Perry, Russell, Sumter, and Wilcox. Wilcox is excluded because there were a large number of precinct names that did not match between the two files.

[16] Assigning absentee and provisional ballots to precincts has little impact on the ecological inference results; excluding these ballots does not substantively alter my results or conclusions.

[17] Footnote: Tables 3–7 present the numerical estimated displayed in Figures 3–7.

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34. The plot to the right in each figure displays the level of support by each group for the African American candidate of choice. The estimated level of support by African American voters is depicted with a black circle, and by white voters with a white circle. The vertical lines to either side of each circle mark the bounds of the 95% confidence intervals, which reflect uncertainty in the estimate.

35. In all cases, African American voters strongly support their candidate of choice, with an average estimated vote share in the focus area of 98.3%. White voters strongly oppose these candidates, with an average estimated vote share in the focus area of only 17.4%.

36. These results demonstrate high levels of racially polarized voting in the focus area and each congressional district individually. The average difference in support for the African American candidate of choice in each district was 78.7 percentage points in CD 1, 85.7 percentage points in CD 2, 81.9 percentage points in CD 3, 77.9 percentage points in CD 7, and 80.9 percentage points in the focus area.

37. Having identified the African American candidate of choice in each contest, I now turn to their ability to win elections in these districts. Table 8 presents the actual results of each election in each of the four congressional districts. For each election, I calculate the vote share obtained by the African American and white-preferred candidates.

38. In the 1st, 2nd, and 3rd Congressional Districts, the African American-preferred candidates lose the elections for U.S. House, as well as all seven statewide contests. In the 7th Congressional District alone, the African-American preferred candidate is able to win each election by large margins.[18]

39. The precinct-level analysis is fully consistent with the results of the county-level analysis. When comparing the racial polarization estimates for the focus area, the two analyses produce similar results and both analyses support the same conclusion: there is a high level of racially polarized voting in the focus area.

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[18] The African American candidates of choice won at least 70% of the vote in District 7 in every contest analyzed.
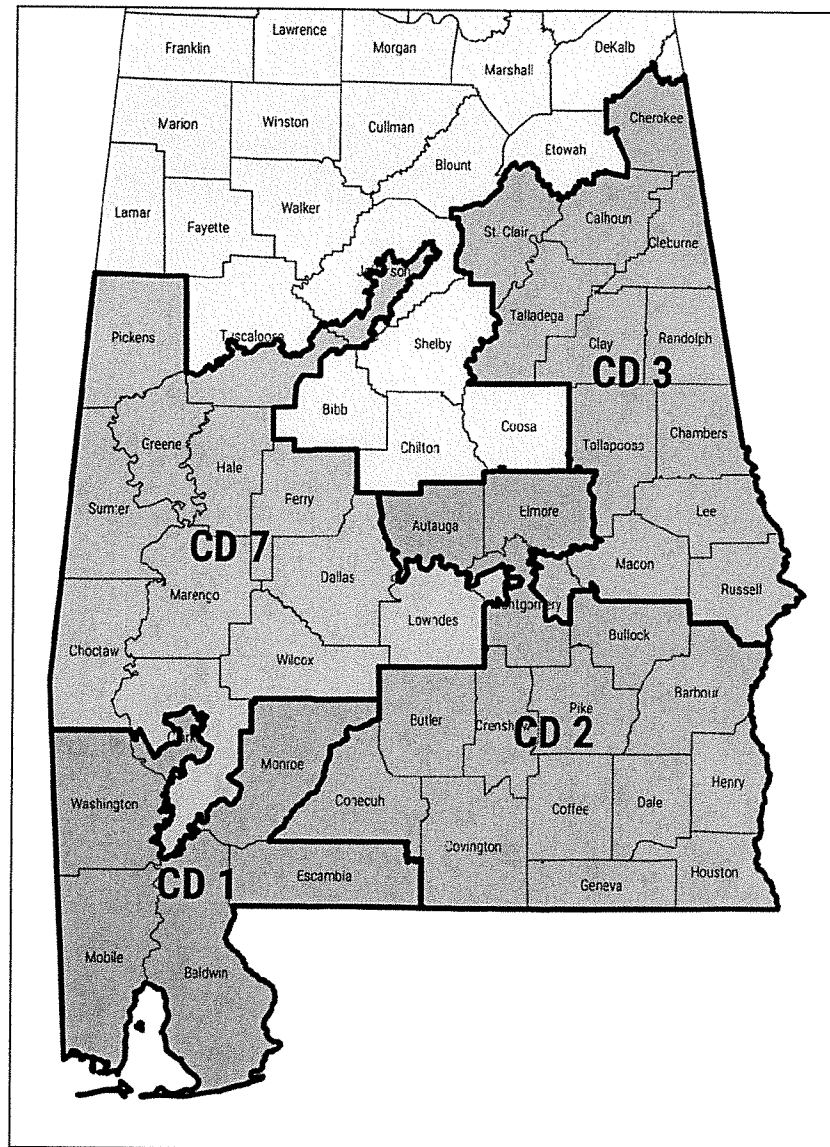
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Figure 1: Map of Focus Area

Figure 2: County-Level Ecological Inference Results

* indicates African American candidates.

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Figure 3: 2018 Precinct-Level Ecological Inference Results - CD 1

indicates African American candidates.

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Figure 4: 2018 Precinct-Level Ecological Inference Results - CD 2

* indicates African American candidates.

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Figure 5: 2018 Precinct-Level Ecological Inference Results - CD 3

* indicates African American candidates.

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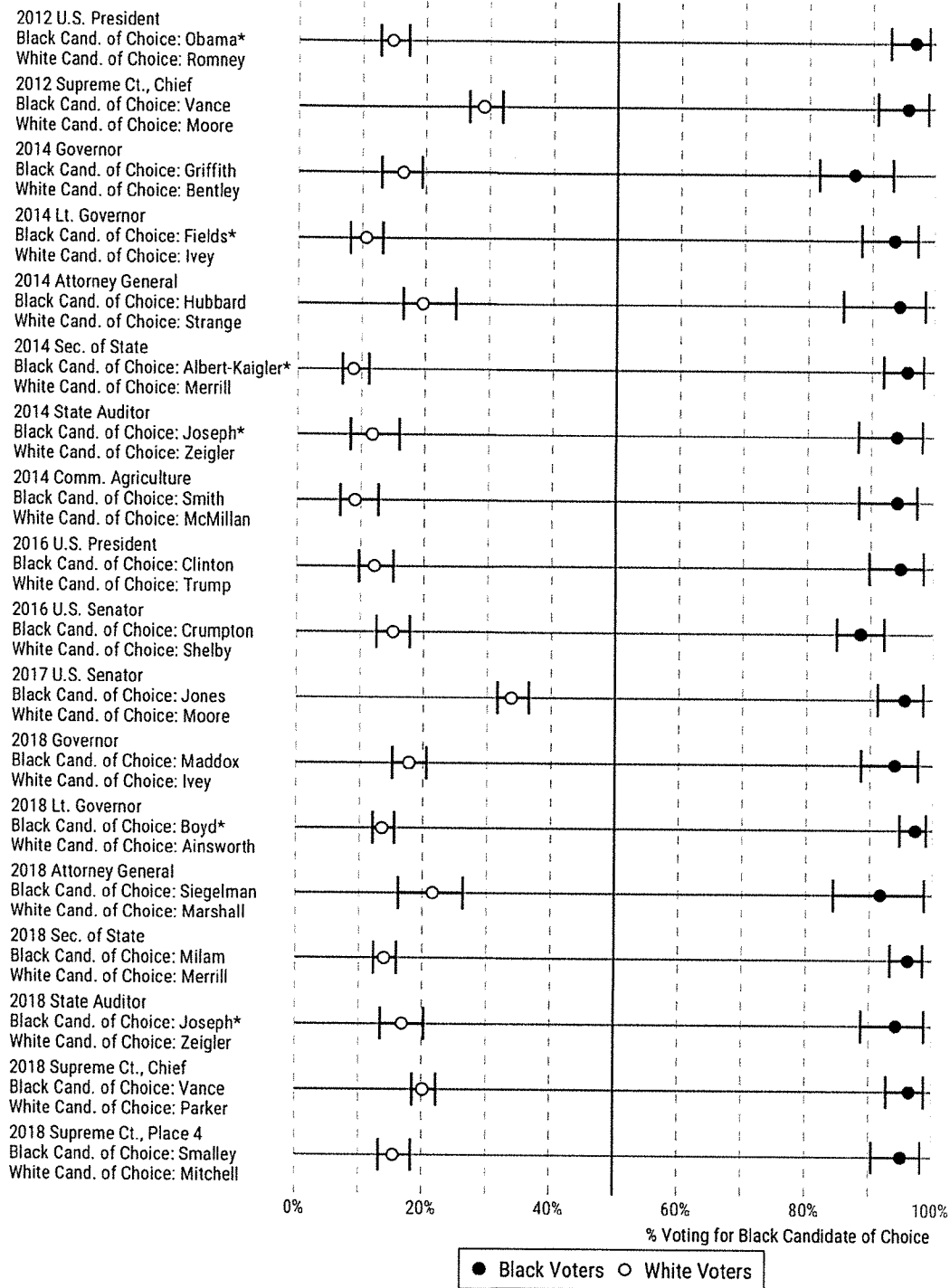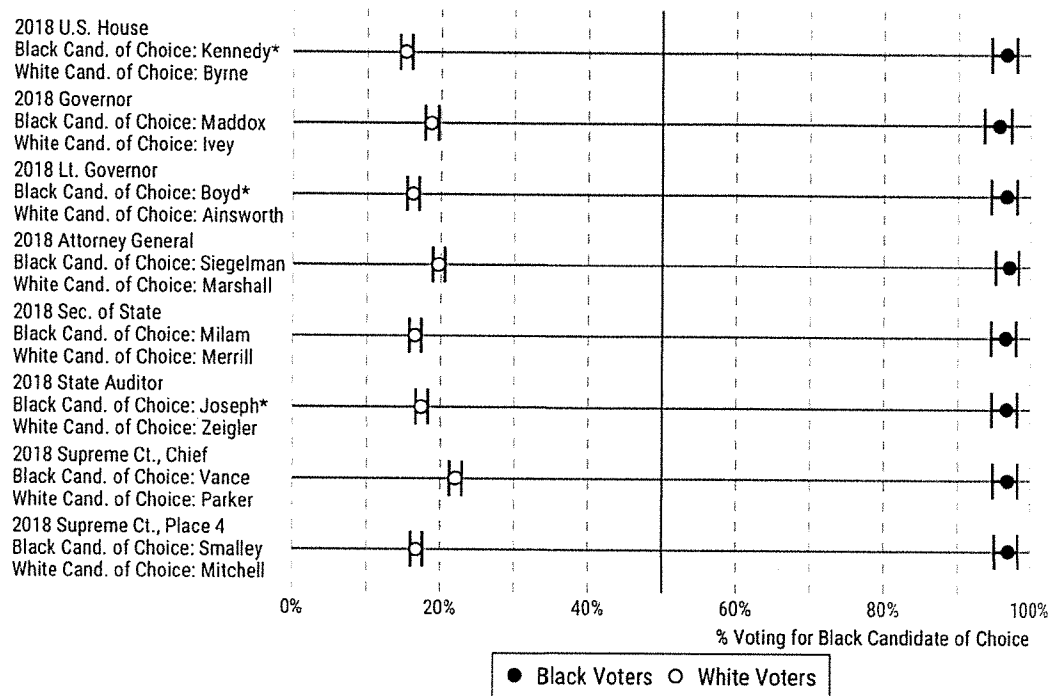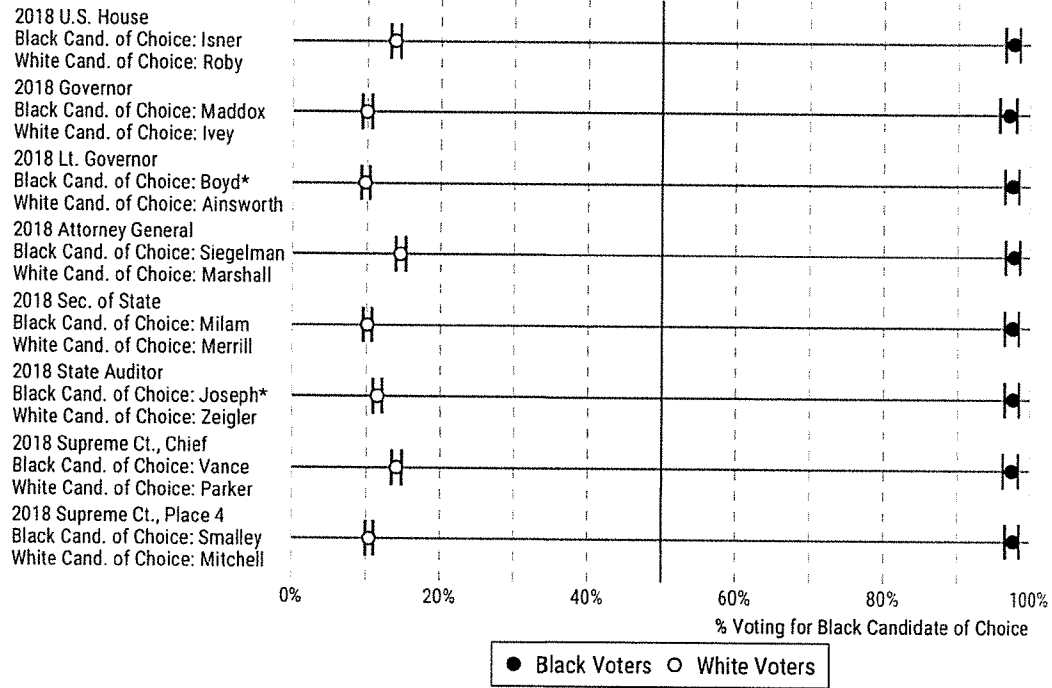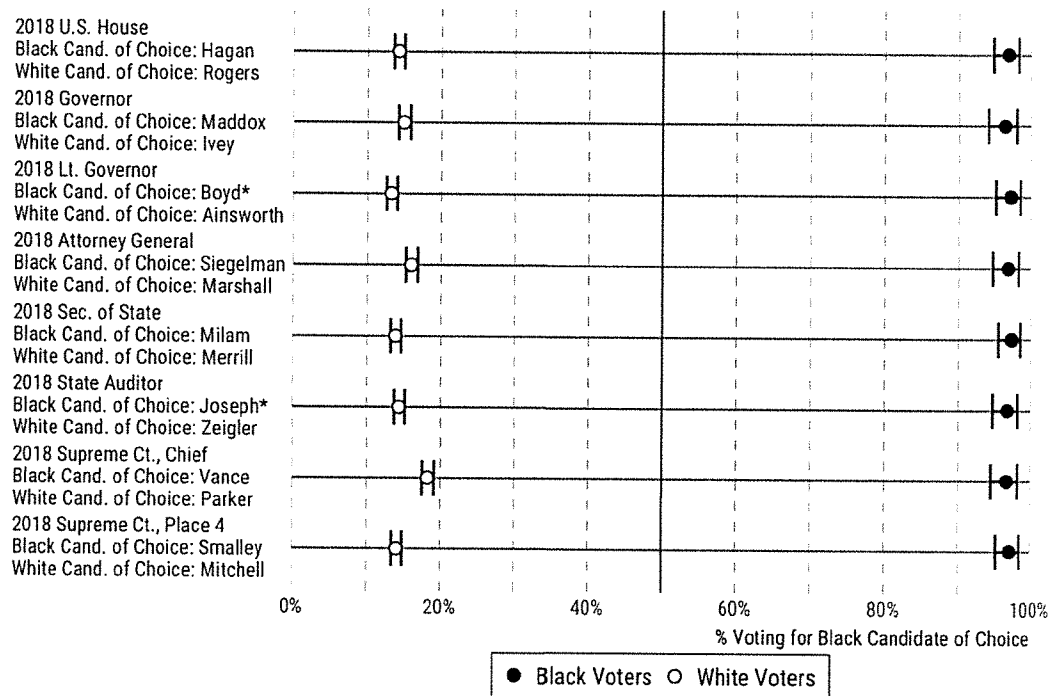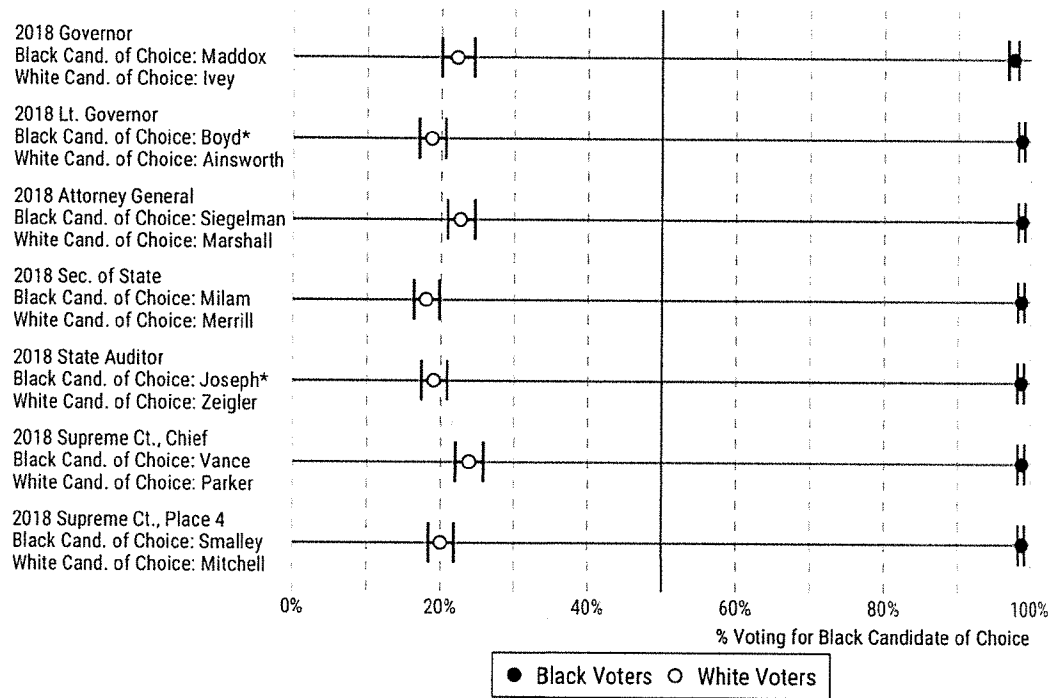*Figure 6: 2018 Precinct-Level Ecological Inference Results - CD 7*

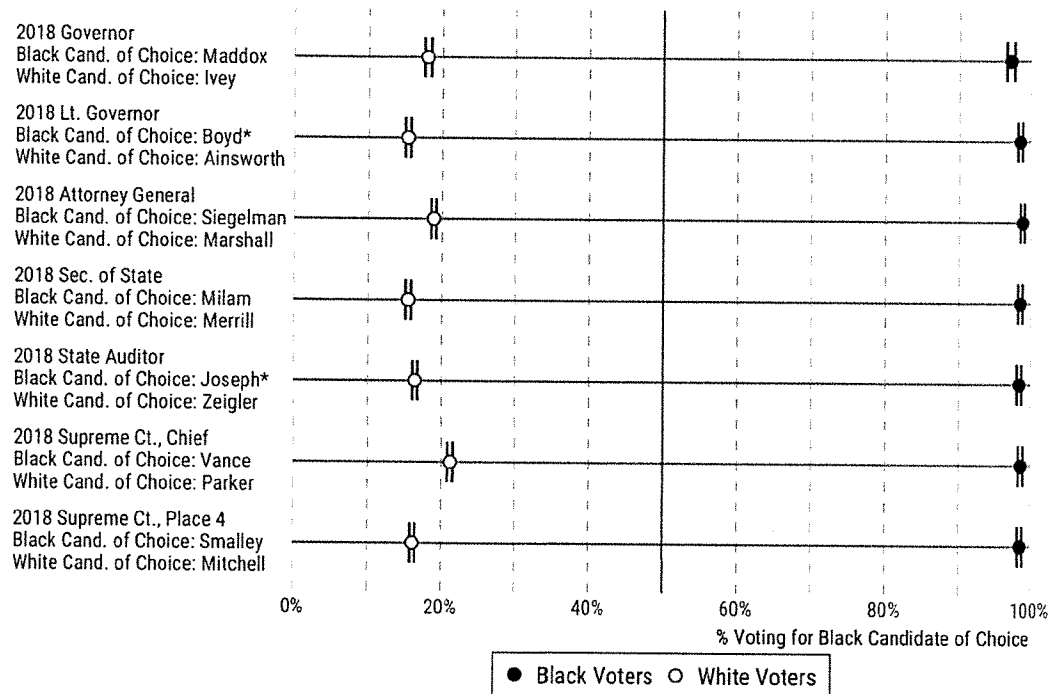** indicates African American candidates.*

Figure 7: 2018 Precinct-Level Ecological Inference Results - Focus Area

* indicates African American candidates.

Table 1: County-Level Ecological Inference Results

Year	Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
				Black	White	Other
2012	U.S. President	Obama*	Romney	96.7 (92.8, 99.0)	14.7 (12.8, 17.3)	62.7 (30.6, 91.8)
	Supreme Ct., Chief	Vance	Moore	95.5 (90.8, 98.9)	29.1 (26.8, 31.9)	55.6 (25.3, 85.1)
2014	Governor	Griffith	Bentley	87.1 (81.6, 93.1)	16.4 (13.1, 19.4)	53.4 (20.8, 84.4)
	Lt. Governor	Fields*	Ivey	93.5 (88.3, 97.1)	10.6 (8.2, 13.3)	55.8 (12.6, 87.1)
	Attorney General	Hubbard	Strange	94.3 (85.5, 98.4)	19.6 (16.5, 24.8)	52.8 (19.4, 85.4)
	Sec. of State	Albert-Kaigler*	Merrill	95.6 (91.8, 98.2)	8.8 (7.1, 11.2)	60.5 (24.6, 86.2)
	State Auditor	Joseph*	Zeigler	94.0 (88.0, 98.1)	11.8 (8.4, 16.0)	55.1 (22.6, 87.1)
	Comm. Agriculture	Smith	McMillan	94.1 (88.1, 97.3)	9.1 (6.8, 12.8)	57.9 (21.7, 85.6)
2016	U.S. President	Clinton	Trump	94.6 (89.7, 98.3)	12.2 (9.8, 15.2)	57.1 (25.8, 82.3)
	U.S. Senator	Crumpton	Shelby	88.4 (84.7, 92.2)	15.2 (12.6, 17.8)	68.8 (34.9, 90.5)
2017	U.S. Senator	Jones	Moore	95.4 (91.1, 98.4)	33.7 (31.5, 36.4)	57.4 (25.3, 86.9)
2018	Governor	Maddox	Ivey	93.9 (88.5, 97.5)	17.8 (15.2, 20.5)	65.1 (28.8, 93.7)
	Lt. Governor	Boyd*	Ainsworth	97.1 (94.7, 98.9)	13.6 (12.1, 15.5)	71.1 (35.7, 92.8)
	Attorney General	Siegelman	Marshall	91.7 (84.3, 98.7)	21.6 (16.2, 26.4)	63.0 (31.0, 88.2)
	Sec. of State	Milam	Merrill	96.0 (93.2, 98.4)	14.0 (12.3, 15.9)	74.4 (44.7, 93.2)
	State Auditor	Joseph*	Zeigler	94.2 (88.7, 98.8)	16.9 (13.5, 20.3)	65.3 (34.0, 90.4)
	Supreme Ct., Chief	Vance	Parker	96.3 (92.8, 98.8)	20.2 (18.5, 22.3)	67.8 (37.7, 90.2)
	Supreme Ct., Place 4	Smalley	Mitchell	95.1 (90.5, 98.2)	15.5 (13.2, 18.3)	71.4 (43.3, 91.7)

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Table 2: Actual Election Results
* indicates African American candidates

Contest	Black Preferred Cand.		White Preferred Cand.	
	Name	Vote Share	Name	Vote Share
2012 U.S. President	Obama*	43.9	Romney	56.1
2012 Supreme Ct., Chief	Vance	52.5	Moore	47.5
2014 Governor	Griffith	41.8	Bentley	58.2
2014 Lt. Governor	Fields*	40.9	Ivey	59.1
2014 Attorney General	Hubbard	46.8	Strange	53.2
2014 Sec. of State	Albert-Kaigler*	40.5	Merrill	59.5
2014 State Auditor	Joseph*	41.6	Zeigler	58.4
2014 Comm. Agriculture	Smith	40.1	McMillan	59.9
2016 U.S. President	Clinton	41.4	Trump	58.6
2016 U.S. Senator	Crumpton	41.0	Shelby	59.0
2017 U.S. Senator	Jones	56.0	Moore	44.0
2018 Governor	Maddox	45.4	Ivey	54.6
2018 Lt. Governor	Boyd*	44.0	Ainsworth	56.0
2018 Attorney General	Siegelman	46.4	Marshall	53.6
2018 Sec. of State	Milam	44.2	Merrill	55.8
2018 State Auditor	Joseph*	44.7	Zeigler	55.3
2018 Supreme Ct., Chief	Vance	47.8	Parker	52.2
2018 Supreme Ct., Place 4	Smalley	44.5	Mitchell	55.5

Table 3: 2018 Precinct-Level Ecological Inference Results - CD 1

* indicates African American candidates

Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
			Black	White	Other
U.S. House	Kennedy*	Byrne	96.5 (94.5, 97.9)	15.2 (14.4, 16.0)	70.8 (51.8, 86.6)
Governor	Maddox	Ivey	95.6 (93.5, 97.2)	18.7 (17.8, 19.7)	73.2 (50.3, 89.3)
Lt. Governor	Boyd*	Ainsworth	96.6 (94.5, 98.0)	16.2 (15.4, 17.1)	71.6 (49.3, 89.4)
Attorney General	Siegelman	Marshall	96.9 (95.1, 98.2)	19.7 (19.0, 20.5)	77.3 (59.5, 90.3)
Sec. of State	Milam	Merrill	96.4 (94.5, 97.9)	16.5 (15.8, 17.4)	74.8 (53.6, 89.2)
State Auditor	Joseph*	Zeigler	96.6 (94.6, 98.0)	17.4 (16.6, 18.3)	73.3 (52.9, 88.3)
Supreme Ct., Chief	Vance	Parker	96.7 (94.7, 98.1)	22.0 (21.3, 22.9)	77.1 (59.4, 91.6)
Supreme Ct., Place 4	Smalley	Mitchell	96.9 (95.0, 98.2)	16.7 (16.0, 17.6)	74.8 (53.0, 89.2)

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Table 4: 2018 Precinct-Level Ecological Inference Results - CD 2

* indicates African American candidates

Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
			Black	White	Other
U.S. House	Isner	Roby	97.5 (96.4, 98.4)	13.8 (13.2, 14.5)	79.2 (62.9, 90.4)
Governor	Maddox	Ivey	96.9 (95.6, 97.9)	10.0 (9.3, 10.7)	80.0 (62.1, 91.8)
Lt. Governor	Boyd*	Ainsworth	97.5 (96.4, 98.3)	9.8 (9.2, 10.4)	86.3 (71.0, 94.9)
Attorney General	Siegelman	Marshall	97.6 (96.5, 98.5)	14.6 (13.9, 15.3)	78.4 (60.3, 90.0)
Sec. of State	Milam	Merrill	97.5 (96.4, 98.3)	10.1 (9.6, 10.8)	83.3 (68.9, 92.7)
State Auditor	Joseph*	Zeigler	97.5 (96.4, 98.3)	11.5 (10.9, 12.1)	83.4 (70.6, 92.1)
Supreme Ct., Chief	Vance	Parker	97.4 (96.1, 98.3)	14.1 (13.5, 14.8)	81.8 (66.6, 92.2)
Supreme Ct., Place 4	Smalley	Mitchell	97.6 (96.5, 98.4)	10.4 (9.9, 11.0)	86.0 (73.4, 93.8)

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Table 5: 2018 Precinct-Level Ecological Inference Results - CD 3
* indicates African American candidates.

Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
			Black	White	Other
U.S. House	Hagan	Rogers	96.7 (94.7, 98.1)	14.2 (13.6, 15.0)	82.5 (64.4, 93.4)
Governor	Maddox	Ivey	96.3 (94.0, 97.9)	14.9 (14.2, 15.8)	76.8 (55.3, 91.0)
Lt. Governor	Boyd*	Ainsworth	97.1 (95.0, 98.4)	13.3 (12.7, 14.0)	83.2 (65.9, 93.7)
Attorney General	Siegelman	Marshall	96.7 (94.6, 98.2)	16.0 (15.3, 16.9)	79.0 (55.9, 92.8)
Sec. of State	Milam	Merrill	97.2 (95.4, 98.5)	13.9 (13.2, 14.6)	80.7 (62.1, 93.0)
State Auditor	Joseph*	Zeigler	96.6 (94.7, 98.1)	14.4 (13.7, 15.2)	80.1 (60.4, 92.2)
Supreme Ct., Chief	Vance	Parker	96.6 (94.4, 98.1)	18.3 (17.5, 19.2)	77.7 (54.9, 92.0)
Supreme Ct., Place 4	Smalley	Mitchell	97.1 (95.2, 98.4)	14.1 (13.4, 14.9)	81.4 (61.3, 93.6)

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Table 6: 2018 Precinct-Level Ecological Inference Results - CD 7
* indicates African American candidates.

Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
			Black	White	Other
Governor	Maddox	Ivey	97.5 (96.8, 98.2)	22.2 (20.0, 24.5)	49.5 (31.5, 70.7)
Lt. Governor	Boyd*	Ainsworth	98.7 (98.1, 99.1)	18.7 (17.0, 20.6)	70.4 (59.1, 82.0)
Attorney General	Siegelman	Marshall	98.7 (98.1, 99.1)	22.6 (20.9, 24.6)	74.7 (64.2, 85.0)
Sec. of State	Milam	Merrill	98.7 (98.1, 99.1)	18.0 (16.3, 19.8)	70.8 (58.9, 83.1)
State Auditor	Joseph*	Zeigler	98.6 (98.1, 99.0)	19.0 (17.4, 20.9)	69.0 (58.0, 80.0)
Supreme Ct., Chief	Vance	Parker	98.7 (98.2, 99.1)	23.8 (22.0, 25.8)	80.1 (69.9, 90.1)
Supreme Ct., Place 4	Smalley	Mitchell	98.7 (98.2, 99.1)	20.0 (18.4, 21.8)	75.9 (66.3, 85.0)

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Table 7: 2018 Precinct-Level Ecological Inference Results - Focus Area

* indicates African American candidates.

Election	Black Cand. of Choice	White Cand. of Choice	% Voting for Black Candidate of Choice		
			Black	White	Other
Governor	Maddox	Ivey	97.0 (96.4, 97.5)	18.0 (17.6, 18.4)	88.3 (80.3, 93.4)
Lt. Governor	Boyd*	Ainsworth	98.4 (98.0, 98.7)	15.4 (15.0, 15.7)	87.1 (80.1, 91.9)
Attorney General	Siegelman	Marshall	98.8 (98.4, 99.1)	18.9 (18.5, 19.2)	88.0 (81.7, 93.0)
Sec. of State	Milam	Merrill	98.4 (98.1, 98.8)	15.5 (15.1, 15.8)	86.9 (80.8, 92.1)
State Auditor	Joseph*	Zeigler	98.3 (97.9, 98.7)	16.4 (16.1, 16.8)	87.9 (82.3, 92.4)
Supreme Ct., Chief	Vance	Parker	98.5 (98.1, 98.9)	21.2 (20.8, 21.6)	89.5 (84.6, 93.3)
Supreme Ct., Place 4	Smalley	Mitchell	98.5 (98.1, 98.8)	16.1 (15.8, 16.5)	89.4 (84.5, 93.2)

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Table 8: 2018 Election Results by Congressional District

Contest	Black Pref. Cand.	White Pref. Cand.	CD 1 Black	CD 1 White	CD 2 Black	CD 2 White	CD 3 Black	CD 3 White	CD 7 Black	CD 7 White
U.S. House, Dist. 1	Kennedy*	Byrne	36.8	63.2						
U.S. House, Dist. 2	Isner	Roby			37.6	62.4				
U.S. House, Dist. 3	Hagan	Rogers					35.9	64.1		
Governor	Maddox	Ivey	39.3	60.7	34.9	65.1	36.2	63.8	71.8	28.2
Lt. Governor	Boyd*	Ainsworth	37.6	62.4	34.9	65.1	35.4	64.6	71.4	28.6
Attorney General	Siegelman	Marshall	40.2	59.8	38.1	61.9	37.2	62.8	72.7	27.3
Sec. of State	Milam	Merrill	37.8	62.2	35.1	64.9	35.6	64.4	71.2	28.8
State Auditor	Joseph*	Zeigler	38.5	61.5	35.9	64.1	35.9	64.1	71.5	28.5
Supreme Ct., Chief	Vance	Parker	41.8	58.2	37.5	62.5	38.7	61.3	73.3	26.7
Supreme Ct., Place 4	Smalley	Mitchell	38.0	62.0	35.3	64.7	35.8	64.2	71.9	28.1

This table lists the vote shares received by the Black- and white-preferred candidates in each 2018 election contest by congressional district. The second and third columns identify the preferred candidates of each group, which are the same in each congressional district. The following columns list the vote shares received by the black- and white-preferred candidates in each district. Precincts split between multiple congressional districts are excluded. All of Cherokee County is included in CD 3. * indicates African American candidates.

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APPOINTMENTS **Boston University**, Boston, Massachusetts

Assistant Professor, Department of Political Science, 2014–Present

Junior Faculty Fellow, Hariri Institute for Computing, 2017–Present

EDUCATION **Harvard University**, Cambridge, Massachusetts

Ph.D., Political Science, May 2014.

A.M., Political Science, May 2012.

Bowdoin College, Brunswick, Maine

A.B., Mathematics & Government and Legal Studies, May 2008.

REFEREED
PUBLICATIONS

Palmer, Maxwell and Benjamin Schneer. Forthcoming. "Post-Political Careers: How Politicians Capitalize on Public Office." *Journal of Politics.*

Einstein, Katherine Levine, Maxwell Palmer, and David M. Glick. 2019. "Who Participates in Local Government? Evidence from Meeting Minutes." *Perspectives on Politics* 17(1): 28–46.

Einstein, Katherine Levine, David M. Glick, and Maxwell Palmer. 2019. "City Learning: Evidence of Policy Information Diffusion From a Survey of U.S. Mayors." *Political Research Quarterly* 72(1): 243–258.

Einstein, Katherine Levine, David M. Glick, Maxwell Palmer, and Robert Pressel. Forthcoming. "Do Mayors Run for Higher Office? New Evidence on Progressive Ambition." *American Politics Research.*

Ansolabehere, Stephen, Maxwell Palmer and Benjamin Schneer. 2018. "Divided Government and Significant Legislation, A History of Congress from 1789-2010." *Social Science History* 42(1): 81–108.

Edwards, Barry, Michael Crespin, Ryan D. Williamson, and Maxwell Palmer. 2017. "Institutional Control of Redistricting and the Geography of Representation." *Journal of Politics* 79(2): 722–726.

Palmer, Maxwell. 2016. "Does the Chief Justice Make Partisan Appointments to Special Courts and Panels?" *Journal of Empirical Legal Studies* 13(1): 153–177.

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Palmer, Maxwell and Benjamin Schneer. 2016. "Capitol Gains: The Returns to Elected Office from Corporate Board Directorships." *Journal of Politics* 78(1): 181–196.

Gerring, John, Maxwell Palmer, Jan Teorell, and Dominic Zarecki. 2015. "Demography and Democracy: A Global, District-level Analysis of Electoral Contestation." *American Political Science Review* 109(3): 574–591.

BOOK MANUSCRIPT

Neighborhood Defenders: Participatory Politics and America's Housing Crisis (with Katherine Levine Einstein and David M. Glick). Under Contract, Cambridge University Press.

OTHER PUBLICATIONS

Ansolabehere, Stephen and Maxwell Palmer. 2016. "A Two Hundred-Year Statistical History of the Gerrymander." *Ohio State Law Journal* 77(4): 741–762.

Ansolabehere, Stephen, Maxwell Palmer, and Benjamin Schneer. 2016. "What Has Congress Done?" in *Governing in a Polarized Age: Elections, Parties, and Political Representation in America*, eds. Alan Gerber and Eric Schickler. New York, NY: Cambridge University Press.

POLICY REPORTS

Einstein, Katherine Levine, David Glick, and Maxwell Palmer. 2018. "2017 Menino Survey of Mayors." Research Report. Boston University Initiative on Cities.

WORKING PAPERS

"Rainmakers: Former Politicians as Lobbyists" (with Pamela Ban and Benjamin Schneer). Invited to Revise and Resubmit, *Legislative Studies Quarterly*.

"Racial Disparities in Housing Politics: Evidence from Administrative Data" (with Katherine Levine Einstein and David M. Glick). *Under Review*.

"The Gender Pay Gap in Congressional Offices" (with Joshua McCrain).

"Descended from Immigrants and Revolutionists: How Immigrant Experience Shapes Congressional Decision-making on Immigration Votes" (with James Feigenbaum and Benjamin Schneer).

"Reexamining the Gender Gap in Support of War" (with Katherine Krimmel and Douglas Kriner).

"Corporate Political Activity as a Bundle of Goods" (with Daniel Moskowitz and Benjamin Schneer).

GRANTS AND AWARDS

The Rockefeller Foundation, "Menino Survey of Mayors" (Co-principal investigator). 2017. $325,000.

Hariri Institute for Computing, Boston University. Junior Faculty Fellow. 2017.

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$10,000.

The Rockefeller Foundation, "2017 Menino Survey of Mayors" (Co-principal investigator). 2017. $100,000.

The Center for Finance, Law, and Policy, Boston University, Research Grant for "From the Capitol to the Boardroom: The Returns to Office from Corporate Board Directorships," 2015.

Senator Charles Sumner Prize, Dept. of Government, Harvard University. 2014.
> *Awarded to the best dissertation "from the legal, political, historical, economic, social or ethnic approach, dealing with means or measures tending toward the prevention of war and the establishment of universal peace."*

The Center for American Political Studies, Dissertation Research Fellowship on the Study of the American Republic, 2013–2014.

The Tobin Project, Democracy and Markets Graduate Student Fellowship, 2013–2014.

The Dirksen Congressional Center, Congressional Research Award, 2013.

The Institute for Quantitative Social Science, Conference Travel Grant, 2014.

The Center for American Political Studies, Graduate Seed Grant for "Capitol Gains: The Returns to Elected Office from Corporate Board Directorships," 2014.

The Institute for Quantitative Social Science, Research Grant, 2013.

Bowdoin College: High Honors in Government and Legal Studies; Philo Sherman Bennett Prize for Best Honors Thesis in the Department of Government, 2008.

SELECTED PRESENTATIONS

"The Participatory Politics of Housing," Government Accountability Office Seminar, 2018.

"Descended from Immigrants and Revolutionists: How Immigrant Experience Shapes Immigration Votes in Congress," Congress and History Conference, Princeton University, 2018.

"Identifying Gerrymanders at the Micro- and Macro-Level." Hariri Institute for Computing, Boston University, 2018.

"Descended from Immigrants and Revolutionists: How Immigrant Experience Shapes Immigration Votes in Congress," Annual Meeting of the Southern Political Science Association, New Orleans, LA, 2018.

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"How Institutions Enable NIMBYism and Obstruct Development," Boston Area Research Initiative Spring Conference, Northeastern University, 2017.

"Corporate Political Activity as a Bundle of Goods," Annual Meeting of the American Political Science Association, Philadelphia, PA, 2016.

"Congressional Gridlock," American Studies Summer Institute, John F. Kennedy Presidential Library and Museum, 2016.

"Capitol Gains: The Returns to Elected Office from Corporate Board Director-ships," Microeconomics Seminar, Department of Economics, Boston University, 2015.

"The Corporate Boardroom's Revolving Door," Annual Meeting of the American Political Science Association, San Francisco, CA, 2015.

"The Corporate Boardroom's Revolving Door," Annual Meeting of the European Political Science Association, Vienna, Austria, 2015.

"A Two Hundred-Year Statistical History of the Gerrymander," Congress and History Conference, Vanderbilt University, 2015.

"A New (Old) Standard for Geographic Gerrymandering," Harvard Ash Center Workshop: How Data is Helping Us Understand Voting Rights After Shelby County, 2015.

"Capitol Gains: The Returns to Elected Office from Corporate Board Director-ships," Boston University Center for Finance, Law, and Policy, 2015.

"Does the Chief Justice Make Partisan Appointments to Special Courts and Panels?" Annual Meeting of the American Political Science Association, Wash-ington, DC, 2014.

"Capitol Gains: The Returns to Elected Office from Corporate Board Director-ships," Annual Meeting of the Midwest Political Science Association, Chicago, IL, 2014.

"Capitol Gains: The Returns to Elected Office from Corporate Board Director-ships," Bowdoin College, 2014.

"Corporate Boards as Legislatures," Annual Meeting of the Southern Political Science Association, New Orleans, LA, 2014.

"Presidential Legacies and Partisan Balance on the Federal Courts," Annual Meeting of the Southern Political Science Association, New Orleans, LA, 2014.

"Time and Political Power: Setting the Calendar in a Busy Legislature," Annual Meeting of the Midwest Political Science Association, Chicago, IL, 2013.

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"Using Multiple Elections to Evaluate Districting Maps," Annual Meeting of the Midwest Political Science Association, Chicago, IL, 2012.

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TEACHING

Boston Univeristy
- *Introduction to American Politics* (Fall 2014, Fall 2015, Fall 2016, Fall 2017)
- *Congress and Its Critics* (Fall 2014, Spring 2015, Spring 2017)
- *Formal Political Theory* (Spring 2015, Spring 2017)
- *Prohibition, Regulation, and Bureaucracy* (Fall 2015)
- *Political Analysis* (Fall 2016, Fall 2017)

Harvard University
- *American Government* (Head Teaching Fellow, Fall 2012 and Fall 2013)
- *The Politics of Congress* (Head Teaching Fellow, Spring 2013).
- *Introduction to Congress* (Teaching Fellow, Spring 2012).

SERVICE

Boston University
- College of Arts and Sciences

  - General Education Curriculum Committee, 2017–2018.

- Department of Political Science

  - Co-organizer, Research in American Politics Workshop, 2016–2018.
  - American Politics Search Committee, 2017.
  - American Politics Search Committee, 2016.
  - Graduate Program Committee, 2014–2015.

Co-organizer, *Boston University Local Political Economy Conference*, August 29, 2018.

Reviewer: *American Journal of Political Science*; *American Political Science Review*; *Journal of Politics*; *Quarterly Journal of Political Science*; *Political Analysis*; *Public Choice*; *Political Science Research and Methods*; *Journal of Law, Economics and Organization*; *Election Law Journal*; *Applied Geography*; Cambridge University Press; Oxford University Press.

Coordinator, Harvard Election Data Archive, 2011–2014.

OTHER EXPERIENCE

Charles River Associates, Boston, Massachusetts   2008–2010

Associate, Energy & Environment Practice
Economic consulting in the energy sector for electric and gas utilities, private equity, and electric generation owners. Specialized in Financial Modeling, Resource Planning, Regulatory Support, Price Forecasting, and Policy Analysis.

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