

# Racial Disparities in Local Elections

Katherine Levine Einstein\*      Maxwell Palmer†

## Abstract

A wide body of political science research has documented a persistent racial turnout gap, with white people turning out at greater rates than racial and ethnic minorities. We know less about how this turnout gap varies by geographic and electoral consequence—especially at the local level. This paper compares the electoral behavior of registered voters across presidential, midterm, and local elections. We compare white turnout to that of blacks, Latinos, and Asians, and explore whether racial disparities in turnout grow in different contexts. Using a novel dataset of millions of registered voters in Atlanta, Charlotte, New York City, and Boston, we find that racial disparities in turnout persist across multiple election types. There is considerable variation in the turnout gap, however, by cities. In some places, the racial turnout gap grows in local elections, while, in others, it actually shrinks. Future research should further unpack the drivers of variations in the racial turnout gap at the local level.

---

\*Assistant Professor, Department of Political Science, Boston University. [kleinst@bu.edu](mailto:kleinst@bu.edu).

†Assistant Professor, Department of Political Science, Boston University. [mbpalmer@bu.edu](mailto:mbpalmer@bu.edu).

## Introduction

Demographic change in the United States has the potential to profoundly reshape American politics. As the country—and its cities in particular—grow more racially diverse, local, state, and federal politics will evolve to reflect these changing political coalitions and constituencies (Hajnal 2010; Frasure-Yokley 2015; Benjamin 2015; Fraga 2018). Racial disparities in political participation, however, may lead these diverse interests to be underrepresented in key political outcomes.

A wide array of political science research has documented lower levels of political participation among racial minorities, especially Latino and Asian people (Hajnal 2010; Fraga 2018). At all levels of government, Latino and Asian people vote at lower rates than other racial and ethnic groups. These racial disparities extend to other forms of political participation, such as attending community meetings (Einstein, Glick and Palmer Forthcoming) and political donations (Grumbach and Sahn 2019). A large body of scholarship suggests that these turnout disparities affect the quality of political representation, shifting electoral and policy outcomes (Wolfinger and Rosenstone 1980; Hajnal and Trounstein 2005; Fraga 2018).

While we know generally that racial disparities in turnout are sizable and consequential, there is considerably less consensus on when and where they manifest. In particular, it is less obvious how electoral context and timing shape these racial disparities. We know that *overall* turnout is higher when state and local elections coincide with high-profile contests (Hajnal and Lewis 2003). The racial turnout gap also tends to diminish in places with higher concentrations of non-white voters (Fraga 2018). But, it is unclear how *within the same geographic area*, the composition of the electorate varies between local, midterm, federal, or off-cycle elections.

A large body of scholarship highlights the disproportionate influence of interest groups in off-cycle elections (Moe 2006; Berry 2009; Anzia 2018). Other research suggests demographic differences in the composition of these electorates. Bridges (1997) reveals that off-cycle elections discourage participation among young people, the economically disadvantaged, and racial minorities. Kogan, Lavertu and Peskowitz (2018) show an especially prominent effect of off-cycle elections on age.

We have little evidence, however, that compares the electorate across different election types.

Studies of off-cycle elections typically compare off-cycle and on-cycle elections *of the same type* (e.g., differently timed school district elections (Kogan, Lavertu and Peskowitz 2018) or general and midterm congressional elections. These studies do not allow us to see how the composition of the electorate changes—in the same geographic context—across different types of elections.

Moreover, we have scarce evidence about the *racial composition* of these different electorates—a critical quantity of interest given its implications for equitable political representation. Recent studies of national elections have used individual-level administrative data on voters from voter files or other commercial vendors (Hersh 2015; Fraga 2018). The availability of these data has revolutionized political campaigns (Hersh 2015) and radically improved the precision with which researchers can assess political participation (Fraga 2018).

Thus, far however, studies of local politics using these data remain relatively scarce. Indeed, local election data (especially historically) are challenging to assemble (Trounstine 2008). Many studies of local elections have relied on survey data (Kaufmann 2004; Hajnal and Trounstine 2005; Hajnal 2010; Arnold and Carnes 2012) or geographically aggregated election results (Trounstine 2008; Anzia 2018) to assess differences in turnout and preferences by group

More recent studies have used voter files and other individual-level administrative data, but their primary focus has not been on the racial composition of the electorate. Much of the research using these fine-grained data has centered on school board elections. Moe (2006) employs county voter files to measure turnout among school district employees; he shows that teachers who live in the districts in which they work are substantially more likely to vote in school board elections than the general public. Kogan, Lavertu and Peskowitz (2018) reveal that, while interest group participation is higher in off-cycle school board elections, it is likely not pivotal; but, senior overrepresentation is electorally critical. They also find that the electorate of off-cycle elections is slightly less white, though these disparities pale in comparison with the age differences. Holbein and Hassell (2018) perhaps most explicitly investigate race in local elections, though their research is limited to North Carolina. They find that local school performance shapes the racial composition of the electorate in school board contests; white voters mobilize to vote when performance standards indicate failure for either their in-group or out-group, while black voter turnout increases when performance standards

suggest their in-group is failing.

Other recent research uses individual-level administrative data to understand local turnout outside of school board contests. Hall and Yoder (2018) show that homeowner turnout is dramatically higher in local elections, especially when zoning issues are on the ballot. Einstein, Glick and Palmer (Forthcoming) find that white homeowners are substantially more likely to attend public meetings related to housing development, and that Latinos, in particular, are dramatically underrepresented. Using individual-level voter information from Catalist, Schaffner, Rhodes and La Raja (Forthcoming) illuminate stark racial and class inequalities in local political representation, with the ideological interests of people of color less likely to be reflected in their political representations.

In short, in recent years, an increasing number of studies in local politics have used extraordinarily detailed administrative data to learn more about voter turnout. But, none of these studies have made the racial composition of the electorate across a variety of geographic and electoral contexts the centerpieces of their analyses. There are reasons we should be especially attentive to the racial composition of the electorate. In order for differences in turnout to matter for political representation, groups need to have different political preferences (Citrin, Schickler and Sides 2003; Anzia 2018). If those who vote have similar political preferences to those who do not, then we should not expect low turnout to have a substantial effect on politician behavior or political outcomes. In contrast, if there are differences in preferences between voters and non-voters, political outcomes may differ starkly depending upon who turns out. Preferences differ markedly across different racial and ethnic groups—explaining why the racial turnout gap shapes electoral and policy outcomes (Wolfinger and Rosenstone 1980; Hajnal and Trounstine 2005; Hajnal 2010; Fraga 2018).

There are also, of course, good empirical reasons that previous research has eschewed race. Voter files contain information on length of registration, gender, address, age, vote history, and (sometimes) partisanship. But, many do not contain information on race. A limited number of states—like North Carolina and Georgia—provide information on (some) racial identities. For other places and racial and ethnic identities, we must rely on name-matching algorithms.

We analyze data on millions of voters across six years in four demographically and institutionally distinct cities. We explore the electoral behavior of registered voters across presidential, midterm,

and local elections. We ask, across these different electoral contests, how white turnout compares to that of blacks, Latinos, and Asians? Do racial disparities in turnout grow in different electoral contests?

## Data

To examine voter turnout by race in local elections, we begin with state voter files and voter histories. Ideally, we would be able to get a voter file following each election, identifying every eligible voter and whether or not they participated in the election. However, such voter snapshots are rarely available.<sup>1</sup> Consequently, we use a single recent voter file for each state that we study. However, voter files are fluid; new voters register, some move within or out of the city and state, some become ineligible to vote or die. The composition of the pool of eligible voters is always changing. In order to examine the voting behavior of the same voters across multiple types of elections, we subset our voter files to registered voters who meeting the following three criteria:

1. The voter was registered to vote prior to January 1, 2013.
2. The voter remained an active registered voter through the date of the voter file used.
3. The voter voted at least once in a general, midterm, or mayoral elections between 2013 and 2017 or 2018 (depending on the state).

Examining only this subset of voters allows us to make clearer comparisons of voting behavior across election types. Every voter in the sample in each city has the same opportunity to vote; new registrants, voter deaths or ineligibility, and other factors do not complicate the analysis.<sup>2</sup> Since voter history files generally only record when a person votes, and *not* when a person is eligible to vote but does not, this subsetting process creates the best possible comparison group of non-voters in each election.

However, this sample also distorts our analysis of turnout compared to other work. First, we are looking only at active voters in recent elections. This excludes registered voters who have not

---

<sup>1</sup>North Carolina has voter file snapshots available following many recent general and midterm elections, but does not have them following most off-cycle elections.

<sup>2</sup>One issue we cannot fully address is voters who move into the city of interest from somewhere else in the state midway through the time period we study. In this case we cannot identify when they became eligible to vote in the city.

voted in several years, as well as eligible people who could vote, but are not registered to do so. We also exclude people who have registered to vote more recently than 2013, and people who were registered to vote earlier in this period but are not currently eligible. In contrast, much of the work on turnout looks at rates of voting among either all registered voters or among all eligible potential voters. Second, by using this sample, we are looking at the people who are already the most likely to vote. This is not a representative sample of the general population, because they are self-selecting into the group of active voters. While these factors limit our ability to generalize about turnout beyond this population of active voters, the tradeoff helps us make valid comparisons across groups and cities.

Our data set consists of voters from four major cities: Atlanta, Boston, Charlotte, and New York.<sup>3</sup> Each observation is a voter-election, which links voter information (race, gender, age, and length of voter registration) with an election in their city, and whether or not they voted in the election. For example, we look at three elections in Boston: the 2013 mayoral, the 2014 midterm, and the 2016 presidential elections.<sup>4</sup> Each of the 245,265 voters in Boston who fit our above criteria are included in the data set three times, one for each election. Table 1 lists the elections we examine in each city.

City	Presidential	Midterm	Mayoral
Atlanta	2016	2014; 2018	2013; 2017
Boston	2016	2014	2013
Charlotte	2016	2014; 2018	2013; 2015; 2017
New York	2016	2014	2013; 2017

Table 1: List of Elections Analyzed

The variation in elections is important. We have turnout for the 2016 presidential elections in each city; but, the midterm elections in our data set vary. Due to the dates of the voter file, we do not have 2018 midterm election turnout for New York City and Boston. Given that turnout in 2018 was substantially higher than in 2014 (especially in Georgia), we cannot make direct comparisons of midterm election turnout *between* the four cities. However, we can make comparisons *within* each

<sup>3</sup>Future versions of this paper will include additional cities.

<sup>4</sup>Our Massachusetts voter file, which we purchased from L2, is from July 2017, such that we do not have more recent elections for Boston.

city, with the caveat that the 2018 midterms may represent an outlier compared to the “typical” midterm election. There is also variation in the mayoral elections available. In New York and Atlanta we have both the 2013 and 2018 mayoral elections; for Boston we only have 2013. Mayors are elected to two-year terms in Charlotte; accordingly we have three mayoral elections there.

Analyzing turnout by race is further complicated by the lack of racial data in many state voter files. Our sample includes two states that record race on the voter file (Georgia and North Carolina), and two that do not (Massachusetts and New York). In Georgia and North Carolina, we use voter-identified race. For Massachusetts and New York, we estimate race using the `wru` package in R (Imai and Khanna 2016).<sup>5,6</sup> For consistency across states, we examine four racial groups: Whites, Blacks, Hispanics, and Other, which includes Asians, Native Americans, any other groups identified on state voter files, and anyone whose race is unknown.

## Results

Figure 1 plots the share of voters by race in each election. The share of voters who are white drops in the presidential elections, as more minority voters turnout. In contrast, the drop in minority participation in mayoral elections is especially evident in Charlotte, where the share of white voters peaks in each off-cycle election.

In Figure 2, we plot the percentage of voters in each racial group who votes in the most recent election of each type.<sup>7</sup> Among our sample of active, registered voters, almost all voters of all racial groups voted in the 2016 presidential election. Turnout dropped slightly for voters of all races in 2018 in Atlanta and Charlotte, and dropped more substantially in 2014 in Boston and New York. Turnout among all groups dropped substantially in the mayoral elections.<sup>8</sup> While all groups vote at similarly high rates for presidential elections, there is substantially more variation in turnout rates in midterm and mayoral elections.

---

<sup>5</sup>To estimate race, we first geocode each address to identify its census tract. We then estimate race using the `wru` algorithm, using the voter’s census tract, age, and gender. Where age or gender are missing we use census tract along. For the small X% of voters where we could not geocode the address, we use county, age and gender.

<sup>6</sup>For more information on our approach to race estimation, see (Einstein, Glick and Palmer Forthcoming).

<sup>7</sup>For presidential elections, this is 2016 in all cities. For midterms, it is 2018 for Atlanta and Charlotte, and 2014 for Boston and New York. For Off-Cycle elections, it is 2013 for Boston and 2017 for the other cities.

<sup>8</sup>The drop is not as large in Boston as in the other cities, potentially due to the nature of the election. The 2013 election was the first open-seat election for Mayor of Boston since 1993.

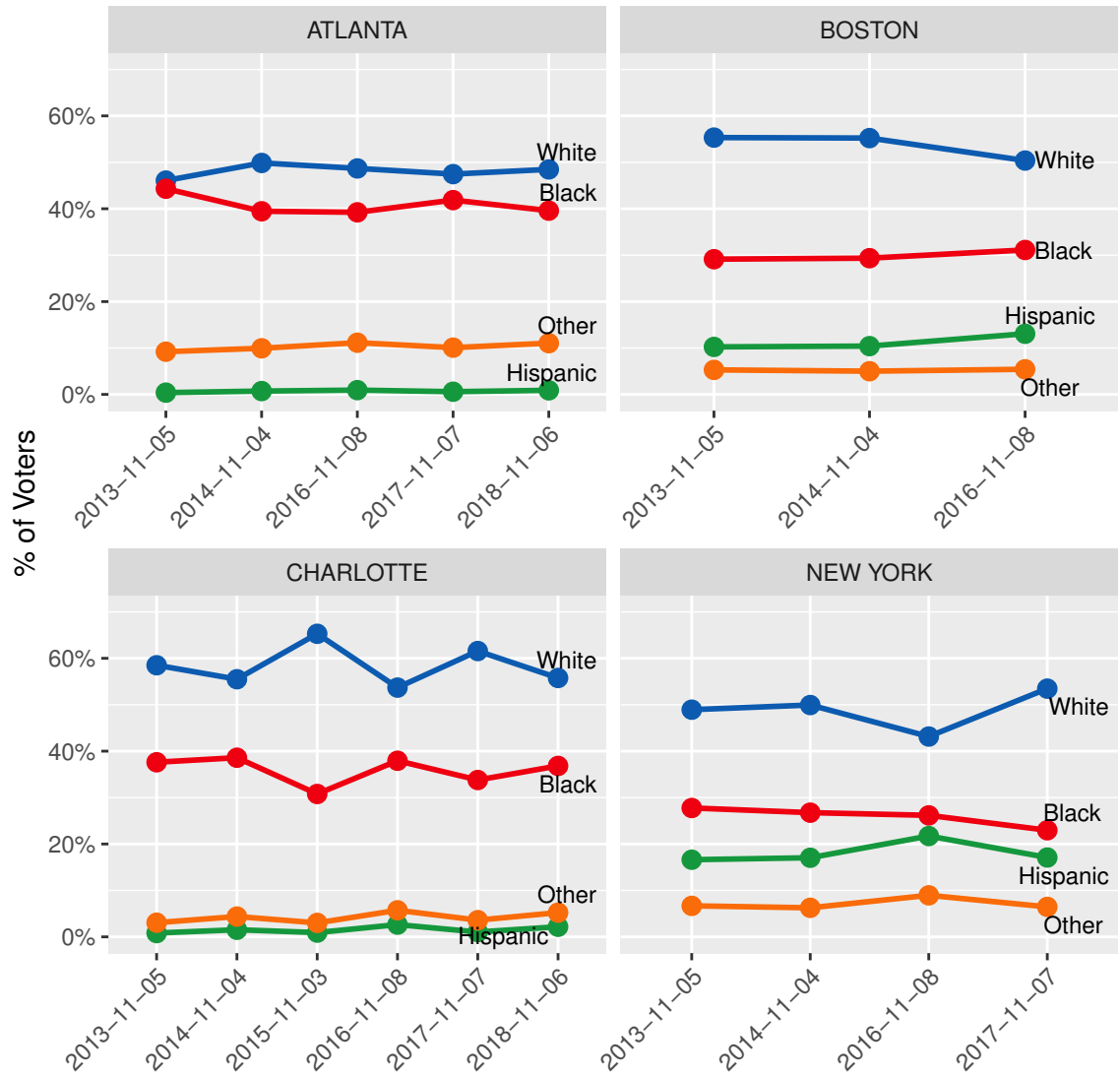


Figure 1: Percent of Voters by Race and Election Type



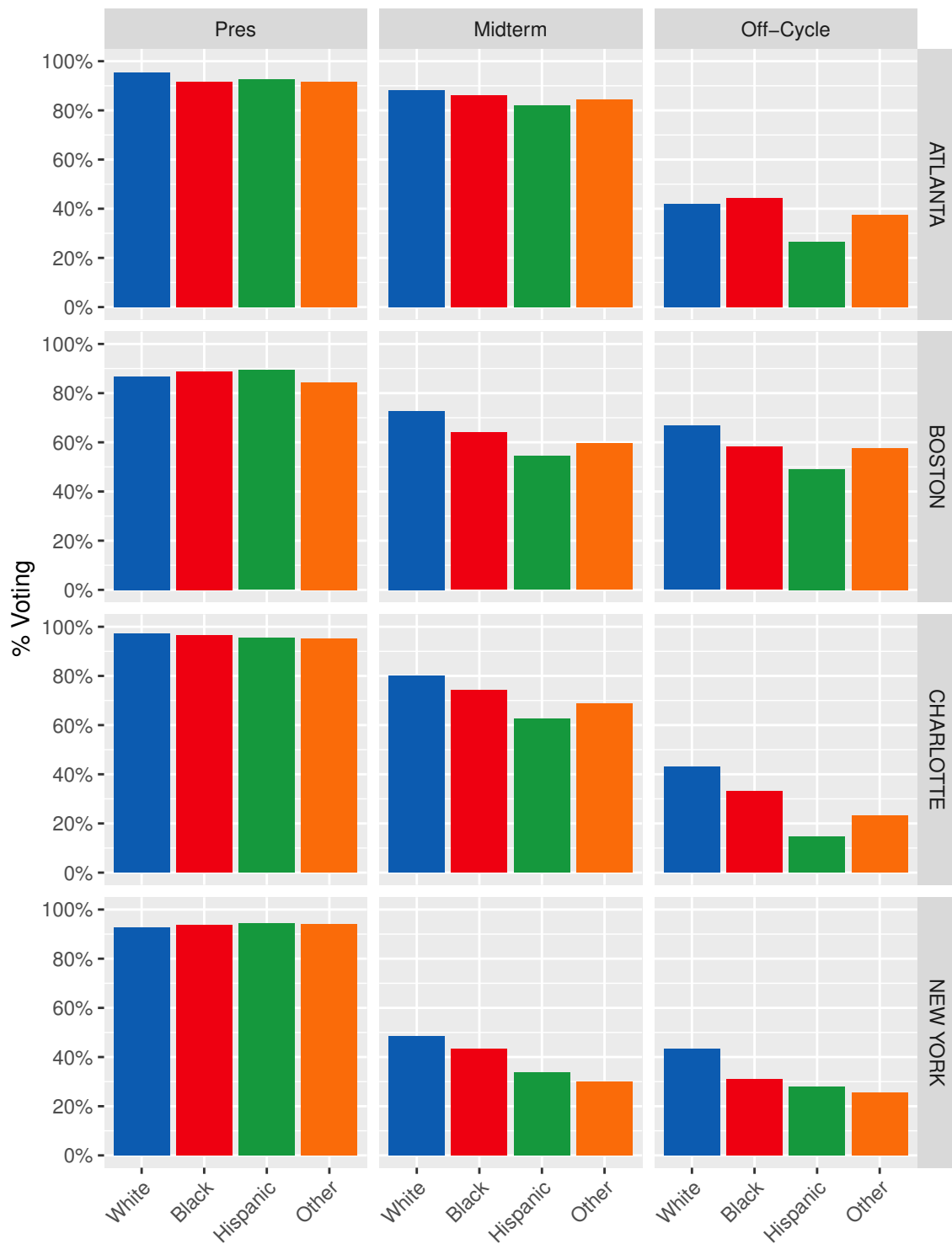


Figure 2: Percent Voting by Race and Election Type

To estimate differences in turnout by race, we estimate a simple OLS regression, interacting race with election type. We estimate the following model for each city in separate regressions:

$$Y_{it} \sim \beta_1 ElectionType_t + \beta_2 Race_i + \beta_3 ElectionType_t x Race_i + Age_i + RegistrationLength_i + Gender_i \quad (1)$$

where  $Y_{it}$  indicates if voter  $i$  voted in election  $t$ . Our primary coefficient of interest is the interaction term  $\beta_3$ , which estimates turnout differences by race across types of elections. The reference group is Whites, such that the coefficients on race and the interaction term are relative to white turnout. The results are presented in Table 2, with separate regressions for each city. Figure 3 plots the coefficients of the interaction term, showing turnout relative to whites for each group and election type.

In *all* of the cities we studied—Atlanta, Boston, Charlotte, and New York—white turnout significantly exceeded that of other racial and ethnic groups in most non-presidential elections. Black turnout was substantially higher than that of Latinos. These results are consistent with the wide body of scholarship on racial gaps in voter turnout. However, there is considerable variation in changes in turnout by race and election type. For example, in Atlanta, blacks are slightly less likely than whites to vote in presidential elections, but more likely than whites to vote in mayoral elections. In the other three cities, we see the opposite pattern. Blacks are slightly more likely than whites to vote in presidential elections, but their turnout drops substantially in midterm and mayoral elections. Hispanics and voters of other races generally vote at rates comparable or higher than whites in presidential elections, but substantially lower in the other elections. Looking across groups, Hispanic voters in particular show a larger drop in turnout relative to whites in midterm and mayoral elections than black voters.<sup>9</sup>

In all cities, turnout across all groups was also substantially lower during off-cycle local and midterm elections. Again, this finding comports with previous research. Interestingly, turnout in local elections was quite similar to midterms. Canonical urban politics research laments low local

---

<sup>9</sup>Much of the literature on turnout finds that Hispanic voters turnout at lower rates than black and white voters. Here, because we are only analyzing *registered, active voters*, we are looking at the subset of people who are mostly likely to vote. Among these people, then, we do not see lower turnout by Hispanics in presidential elections.

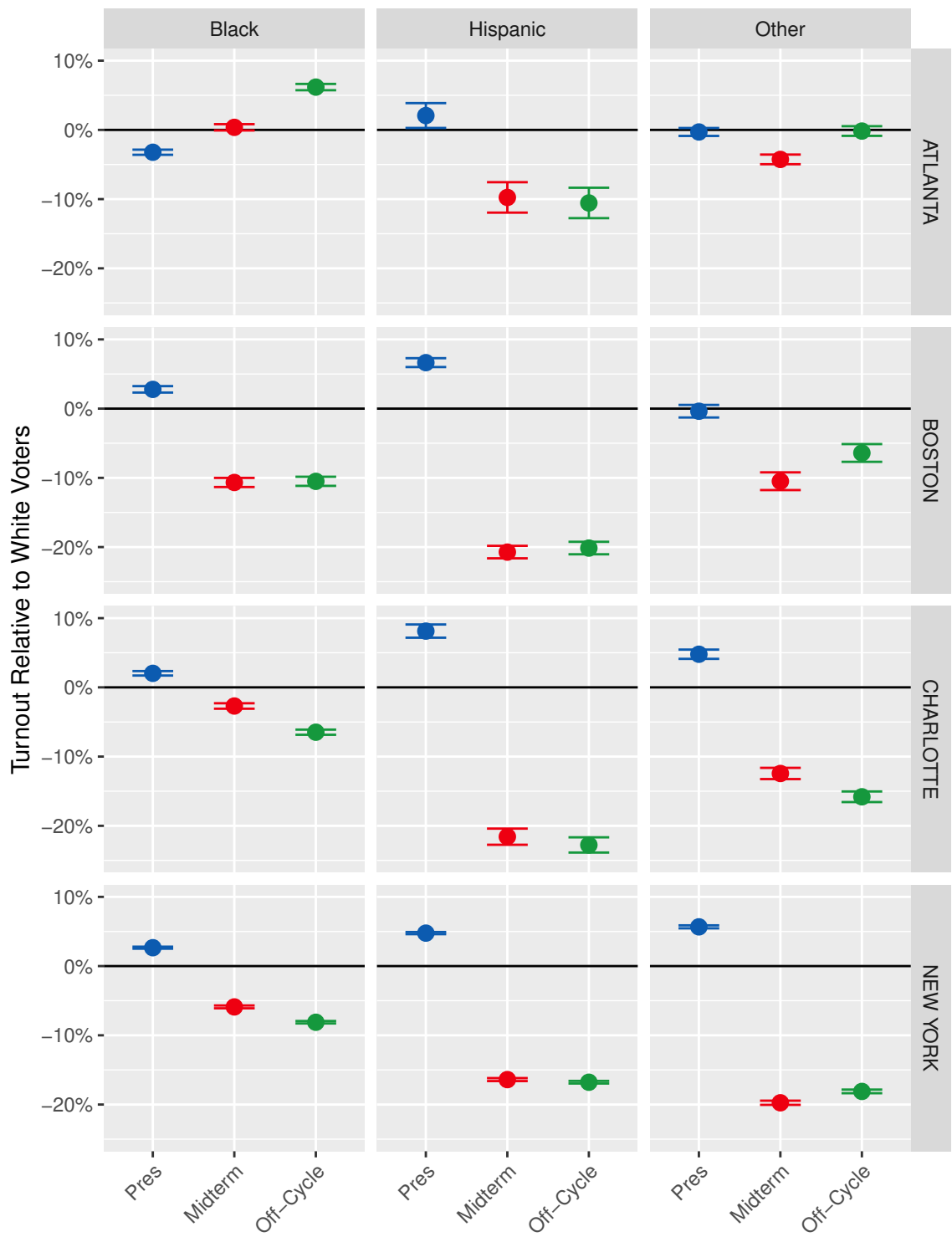


Figure 3: Turnout relative to white voters.

	ATLANTA	BOSTON	CHARLOTTE	NEW YORK
Midterm	-0.120*** (0.002)	-0.140*** (0.002)	-0.227*** (0.001)	-0.429*** (0.001)
Off-Cycle	-0.604*** (0.002)	-0.200*** (0.002)	-0.594*** (0.001)	-0.449*** (0.001)
Black	-0.032*** (0.002)	0.028*** (0.002)	0.020*** (0.002)	0.027*** (0.001)
Black x Midterm	0.004 (0.002)	-0.107*** (0.003)	-0.027*** (0.002)	-0.059*** (0.001)
Black x Off-Cycle	0.062*** (0.002)	-0.105*** (0.003)	-0.065*** (0.002)	-0.081*** (0.001)
Hispanic	0.021** (0.009)	0.066*** (0.003)	0.081*** (0.005)	0.048*** (0.001)
Hispanic x Midterm	-0.098*** (0.011)	-0.207*** (0.005)	-0.216*** (0.006)	-0.164*** (0.001)
Hispanic x Off-Cycle	-0.106*** (0.011)	-0.201*** (0.005)	-0.228*** (0.006)	-0.168*** (0.001)
Other	-0.003 (0.003)	-0.004 (0.005)	0.048*** (0.003)	0.057*** (0.001)
Other x Midterm	-0.043*** (0.004)	-0.105*** (0.007)	-0.124*** (0.004)	-0.197*** (0.002)
Other x Off-Cycle	-0.002 (0.004)	-0.064*** (0.007)	-0.158*** (0.004)	-0.181*** (0.001)
Age	0.002*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)
Registration Length	0.005*** (0.000)	0.007*** (0.000)	0.006*** (0.000)	0.005*** (0.000)
Men	-0.003*** (0.001)	0.006*** (0.001)	0.004*** (0.001)	0.017*** (0.000)
Intercept	0.698*** (0.002)	0.587*** (0.002)	0.639*** (0.002)	0.638*** (0.001)
Num.Obs.	1084125	490530	1732494	8648744

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table 2: OLS Models of Turnout by City

election turnout—and it is indeed low. But, it is not worse, on average, than the similarly abysmal turnout American cities show during midterm state and federal contests.

Table 3 presents models of turnout, but includes only midterm and off-cycle elections only. This allows us to compare the racial turnout gaps between these two election types. Among black voters, the racial turnout gap is significantly larger in off-cycle local elections, relative to midterm elections, in Charlotte and New York. The turnout gap is not significantly different in Boston, and it is significantly smaller in Atlanta. Similarly, the Latino-white turnout gap is significantly larger in off-cycle local elections, relative to midterms, in Charlotte and New York, but is not statistically significant in Atlanta and Boston. For voters in the Other group, the turnout gap is smaller in Atlanta, Boston, and New York, and larger in Charlotte, relative to midterm elections.

Atlanta proves to be an intriguing outlier. Strikingly, the turnout gap between black and white voters in Atlanta was smaller in off-cycle elections *than in the federal presidential election year contests*. The black-white turnout gap was similarly smaller in off-cycle local elections relative to midterms. Rather than increasing in lower turnout contests, the black-white turnout gap in Atlanta *shrank* in midterm and off-cycle elections. Importantly, this pattern does not extend to the Latino-white turnout gap.

While there are some consistent patterns across all four institutionally and demographically disparate cities, these results preliminarily point to some intriguing variations. All four cities we studied exhibit sizable racial turnout gaps, and decreased turnout during off-cycle local and midterm elections. But, in some places the racial turnout gap grew substantially during midterm contests, and became even more sizable during off-cycle local elections. Other places, in contrast, saw smaller gaps in turnout between black and white voters during midterm and local contests.

## Directions for Future Research

These results present a number of different directions for future research. First and foremost, we plan to add more cities to our data set so we can start to more systematically understand variations in the racial turnout gap in several different ways. First, with more cities, we can compare the racial turnout gap between cities *across all election types*. Second, we can understand how the racial

	ATLANTA	BOSTON	CHARLOTTE	NEW YORK
Off-Cycle	-0.484*** (0.001)	-0.060*** (0.002)	-0.366*** (0.001)	-0.020*** (0.001)
Black	-0.028*** (0.001)	-0.074*** (0.003)	-0.001 (0.001)	-0.024*** (0.001)
Black x Off-Cycle	0.058*** (0.002)	0.002 (0.004)	-0.038*** (0.002)	-0.022*** (0.001)
Hispanic	-0.068*** (0.007)	-0.121*** (0.004)	-0.118*** (0.004)	-0.105*** (0.001)
Hispanic x Off-Cycle	-0.008 (0.010)	0.006 (0.005)	-0.012** (0.005)	-0.004*** (0.001)
Other	-0.039*** (0.002)	-0.104*** (0.005)	-0.065*** (0.003)	-0.126*** (0.001)
Other x Off-Cycle	0.041*** (0.003)	0.041*** (0.007)	-0.034*** (0.003)	0.016*** (0.001)
Age	0.003*** (0.000)	0.005*** (0.000)	0.004*** (0.000)	0.004*** (0.000)
Registration Length	0.005*** (0.000)	0.009*** (0.000)	0.007*** (0.000)	0.006*** (0.000)
Men	0.001 (0.001)	0.016*** (0.002)	0.008*** (0.001)	0.028*** (0.000)
Intercept	0.541*** (0.002)	0.287*** (0.003)	0.358*** (0.002)	0.098*** (0.001)
Num.Obs.	867300	327020	1443745	6486558

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01

Table 3: OLS Models of Turnout by City, Midterm and Off-Cycle Elections Only

turnout gap differs both between cities and between election types. Indeed, the distinctiveness of Atlanta, in particular, illuminates important political differences between places.

There are a number of different city-level variables that might shape the racial turnout gap. Cities with larger minority population shares might exhibit lower turnout gaps; these minority voices, rather than being ignored by political campaigns, become pivotal in local electoral contests (Fraga 2018). Local institutional configurations may also shape differences in turnout by racial group. Neighborhood-level city councils, for example, may prove empowering to minority voices relative to their at-large counterparts, especially in contexts where this is a large minority population (Meier et al. 2005; Trounstine and Valdini 2008; Mullin 2009). Finally the campaign context is likely influential. Competitive elections may induce higher turnout (Fraga and Hersh 2018). Explicit campaign efforts to recruit underrepresented voices may reduce disparities (Enos, Fowler and Vavreck 2014).

In short, minority voices are still underrepresented in many electoral contexts. But, the extent of that underrepresentation varies widely. The functioning of local democracy is not equal in the United States; future research should continue to unpack how and when local election turnout best reflects that of the broader city's population.

## References

- Anzia, Sarah F. 2018. "When Does a Group of Citizens Influence Policy? Evidence from Senior Citizen Participation in City Politics." *Journal of Politics* 81(1):1–314.
- Arnold, R Douglas and Nicholas Carnes. 2012. "Holding Mayors Accountable: New York's Executives from Koch to Bloomberg." *American Journal of Political Science* 56(4):949–963.
- Bejamin, Andrea. 2015. *Racial Coalition Building in Local Elections: Elite Cues and Cross-Ethnic Voting*. New York: Cambridge University Press.
- Berry, Christopher R. 2009. *Imperfect Union: Representation and Taxation in Multilevel Governments*. New York: Cambridge University Press.
- Bridges, Amy. 1997. "Textbook Municipal Reform." *Urban Affairs Review* 33(1):97–119.
- Citrin, Jack, Eric Schickler and John Sides. 2003. "What if Everyone Vote? Simulating the Impact of Increased Turnout in Senate Election." *American Journal of Political Science* 47(1):75–909.
- Einstein, Katherine Levine, David Glick and Maxwell Palmer. Forthcoming. *Neighborhood Defenders: Participatory Politics and America's Housing Crisis*. New York: Cambridge University Press.
- Enos, Ryan D., Anthony Fowler and Lynn Vavreck. 2014. "Increasing Inequality: The Effect of GOTV Mobilization on the Composition of the Electorate." *Journal of Politics* 76(1):273–288.  
**URL:** <https://scholar.harvard.edu/files/renos/files/enosfowlervavreck.pdf>
- Fraga, Bernard and Eitan Hersh. 2018. "Are Americans Stuck in Uncompetitive Enclaves? An Appraisal of U.S. Electoral Competition." *Quarterly Journal of Political Science* 13(3):291–311.
- Fraga, Bernard L. 2018. *The Turnout Gap: Race, Ethnicity, and Political Inequality in Diversifying America*. New York: Cambridge University Press.
- Frasure-Yokley, Lorrie. 2015. *Racial and Ethnic Politics in America's Suburbs*. New York: Cambridge University Press.
- Grumbach, Jacob M. and Alexander Sahn. 2019. "Race and Representation in Campaign Finance." *Journal of Politics* . Working Paper.
- Hajnal, Zoltan and Jessica Trounstine. 2005. "Where Turnout Matters: The Consequences of Uneven Turnout in City Politics." *Journal of Politics* 67(2):515–535.
- Hajnal, Zoltan L. 2010. *America's Uneven Democracy: Race, Turnout, and Representation in City Politics*. New York: Cambridge University Press.
- Hajnal, Zoltan L. and Paul G. Lewis. 2003. "Municipal Institutions and Voter Turnout in Local Elections." *Urban Affairs Review* 38(5):645–668.
- Hall, Andrew B. and Jesse Yoder. 2018. "Does Homeownership Influence Political Behavior? Evidence from Administrative Data." Available at <http://www.andrewbenjaminhall.com/homeowner.pdf>. Accessed on August 22, 2018.



- Hersh, Eitan. 2015. *Hacking the Electorate: How Campaigns Perceive Voters*. New York: Cambridge University Press.
- Holbein, John B. and Hans JG Hassell. 2018. "When Your Group Fails: The Effect of Race-Based Performance Signals on Citizen Voice and Exit." *Journal of Public Administration, Research, and Theory* 29(2):268–286.
- Imai, Kosuke and Kabir Khanna. 2016. "Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Records." *Political Analysis* 24:263–272.
- Kaufmann, Karen M. 2004. *The Urban Voter: Group Conflict and Mayoral Voting Behavior in American Cities*. University of Michigan Press.
- Kogan, Vladimir, Stephane Lavertu and Zachary Peskowitz. 2018. "Election Timing, Electorate Composition, and Policy Outcomes: Evidence from School Districts." *American Journal of Political Science* 62(3):1–29.
- Meier, Kenneth J., Eric Gonzales Juenke, Robert D. Wrinkle and J.L. Polinard. 2005. "Structural Choices and Representational Biases: The Post-election Color of Representation." *American Journal of Political Science* 49(4):758–768.  
**URL:** <https://www.jstor.org/stable/3647695>
- Moe, Terry. 2006. "Political Control and the Power of the Agent." *Journal of Law, Economics, and Organization* 22(1):1–29.
- Mullin, Megan. 2009. *Governing the Tap: Special District Governance and the New Local Politics of Water*. Cambridge, MA: MIT Press.
- Schaffner, Brian F., Jesse H. Rhodes and Raymond J. La Raja. Forthcoming. *Inequality Across American Communities: Race, Class, and Representation in Local Politics*. New York: Cambridge University Press.
- Trounstine, Jessica. 2008. *Political Monopolies in American Cities: The Rise and Fall of Bosses and Reformers*. Chicago: University of Chicago Press.
- Trounstine, Jessica and Melodie Valdini. 2008. "The Context Matters: The Effects of SingleMember versus AtLarge Districts on City Council Diversity." *American Journal of Political Science* 52(3):554–569.  
**URL:** <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-5907.2008.00329.x>
- Wolfinger, Raymond E. and Steven J. Rosenstone. 1980. *Who Votes?* New Haven, CT: Yale University Press.