# The New Racial Calculus: Electoral Institutions and Black Representation in Local Legislatures

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*In this study we revisit the question of black representation on city councils and school boards using a novel substantive and methodological approach and longitudinal data for a sample of over 300 boards and councils. Conceptualizing black representation as a two-stage process, we fit Mullahy's hurdle Poisson models to explain whether and to what extent blacks achieve representation in local legislatures. We find that while the size of the black population and electoral arrangements matter more than ever, especially for overcoming the representational hurdle, the extent to which the black population is concentrated is also strongly associated with black council representation. Further, whereas black resources and opportunities to build "rainbow" coalitions with Latinos or liberal whites are marginally if at all related to black legislative representation, we find that legislative size is an underappreciated mechanism by which to increase representation, particularly in at-large systems, and is perhaps the best predictor of moving towards additional representation.*

Over the past several decades, social scientists interested in questions of race and representation in American politics have paid considerable attention to black representation on city councils and local school boards. These investigations have focused almost exclusively on two explanatory factors: the voting strength of the black population and local electoral institutions. This focus is predicated on conventional assumptions that given a choice, black voters prefer electing black candidates and that blacks come closer to achieving proportional representation as their share of the electorate increases. Electoral institutions are believed to condition the "seats/population" relationship with at-large election (AL) systems impeding the election of minorities, particularly in the South where racial voting has been most pervasive.

Extant research espouses this relatively simple model of representation despite mixed empirical results. Specifically, although many studies find that the likelihood of attaining proportionality increases as the share of the black population increases and that blacks are less proportionally represented on city councils and school boards when elected at large rather than from single-member districts (SMD), important exceptions exist (Alozie and Manganaro 1993; Welch 1990; Welch and Karnig 1978). Further, despite similarities in the models and methods employed to study black council and board representation, results suggest that blacks are more proportionally represented on boards (Meier and England 1984; Welch and Karnig 1978).

More generally, the literature reflects two enduring puzzles. First, given the higher incidence of AL arrangements in municipalities and school districts and the fact that blacks are a minority in most jurisdictions in America, what accounts for blacks' representational gains over the past several decades? Second, if electoral structure and voting strength play identical roles in council and board contests, why do empirical studies find more "equitable" representation on boards than councils? Do mechanisms other than the size of the black population and SMD arrangements matter for black representation in local governing bodies?

We address these puzzles by systematically examining all available studies, incorporating theoretical insights

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**TABLE 1 Empirical Studies of Black Proportional Representation in Local Legislatures**

| Study | Year | Cases | Threshold/Ceiling |
|---|---|---|---|
| **Period 1: Proportional Representation as Ratio/Difference Variable-Bivariate Tests** | | | |
| Karnig (1976) | 1972 | 139 cities (Population > 25,000) | City black ≥ 15% |
| Welch/Karnig (1978) | 1975 | 43/50 largest districts | City black ≥ 5% |
| Robinson/Dye (1978) | 1976 | 105/243 SMSA cities | City black ≥ 15% |
| MacManus (1978) | 1976 | 243 SMSA cities | None |
| Taebel (1978) | 1976 | 166/243 SMSA cities | ** |
| Latimer (1979) | 1977 | 80 southern cities (Population > 10,000) | None |
| Robinson/England (1981) | 1978 | 75 central city districts | City black ≥ 15% |
| Karnig/Welch (1982) | 1978 | 265 cities (Population > 25,000) | City black ≥ 10% |
| **Period 2: Proportional Representation as a Swing Ratio/Marginal Effect—OLS** | | | |
| Engstrom/McDonald (1981) | 1976 | 243 SMSA cities | City black < 50% |
| Vedlitz/Johnson (1982) | 1976 | 218/243 SMSA cities | City black ≥ 15% |
| Meier/England (1984) | 1978 | 82 largest districts | None |
| Robinson et al. (1985) | 1978 | 168/243 districts of SMSA cities | None |
| Stewart et al. (1989) | 1986 | 174 districts (Population > 15,000) | District black 1–34% |
| Arrington/Watts (1991) | 1987 | 132/140 NC districts | None |
| Welch (1990) | 1988 | 314/356 cities (Population > 50,000) | City black 5–50% |
| Zax (1990) | 1981 | 602/1420 cities(Population > 10,000) | City black ≥ 5% |
| Alozie/Manganaro (1993) | 1986 | 391/572 cities (Population > 25,000) | City black 5–50% |
| Bullock/McManus (1993) | 1985 | 946 cities (Population > 25,000) | City black < 50% |
| Meier et al. (2005) | 1999 | 1009/1041 TX districts | District black 5–50% |
| Sass/Mehay (1995) | 1981, 1991 | 2394 cities (Population > 2,500) | |
| Sass/Pittman (2000) | 1981–1996 | 352–1,067 southern cities (Population > 2,500) | None |

**Selection rule considered the number of council members (excluding mayor) and eliminated cities where the minority population would not constitute at least 50% of one district's population, assuming SMD. For example, if the city had a seven-member council, then one district would represent roughly 14% of the population, requiring the black population to be at least 7% for the city to be included in the sample.

from the broader literature on minority incorporation, school and municipal politics, and local legislatures, and developing an alternative conceptualization that treats black representation not as a linear process of attaining "proportionality" but rather as a two-part process that considers the factors that predict whether any black serves in the legislature and how many black representatives are in office. This conceptualization more accurately reflects not only the dynamics of electoral politics and theories of minority incorporation (see, e.g., Browning, Marshall, and Tabb 1984), but also provides a more nuanced analysis of how and when electoral institutions, population size, and other factors shape black council and board representation. The almost complete reliance on the narrower concept of proportional representation has rendered extant studies ill equipped to address important aspects of representation, such as access to political power or symbolic representation, that are of interest to scholars studying minority political incorporation.

We also address several methodological limitations common to most empirical work on this topic. First, because the proportionality measure obscures substantive differences in representation based on the number of legislative seats available, we employ an alternative estimator that overcomes this limitation.[1] Second, unlike nearly all studies that couple static cross-sectional designs with samples drawn on the basis of one of the key independent variables, the size of the black population (see Table 1), we rely on panel data and do not employ a black population threshold or ceiling requirement when sampling. Thus, our study is the first to derive empirical estimates of the black population threshold needed to overcome the representational hurdle and also provides a rare opportunity to evaluate black office holding across legislative context and time based on rigorous analytic methods and a large and consistent sample of overlapping city councils and school boards.

[1]The OLS approach assumes the probability of winning a seat is invariant to legislature size. However, the odds of securing a seat in a body with three vacancies are vastly different from those with seven contested seats.

The result is a set of findings that attest to the value added from theoretically and methodologically reconceptualizing the question of black legislative representation. First, our analysis concludes that the descriptive differences between councils and school boards may be illusory, generated by differences in sampling and measurement rather than meaningful shifts in representation, and that despite dramatic gains over the last 30 years, attaining descriptive representation in either body remains a formidable challenge for blacks. Second, our findings shed new light on the relationship between institutional structures and the likelihood of representation. In contrast to recent work suggesting a waning influence of electoral structures over time, our findings suggest that SMDs are more influential now than in the past, and especially so in school board elections. Further, neither the potential for coalitional politics nor black economic resources is associated with overcoming the representational hurdle. Once blacks do cross the barrier, however, the number of legislative seats may be the best predictor of moving towards additional representation.

## What Do We Know about Black Representation in Local Legislatures?

Since the passage of the Voting Rights Act in 1965, urban politics scholars have focused extensively on the question of how electoral arrangements condition the relationship between black population size and black proportional representation in local legislatures. Studies from the 1970s and early 1980s (see Table 1) found that in large jurisdictions blacks were more proportionally represented under both SMD and mixed arrangements compared to AL systems and that the degree of proportional representation achieved varied much more across city councils than school boards. Further, black proportional representation was higher for school boards, suggesting that representation was more equitable on school boards than city councils.

A second wave of studies using data from the 1980s and 1990s revealed that blacks made gains in proportional representation in all but one type of jurisdiction: councils with SMD systems. Although black population size again had stronger effects on proportional representation for boards than councils, unlike the earlier wave of findings, effects of electoral methods were greater for school boards than for city councils.

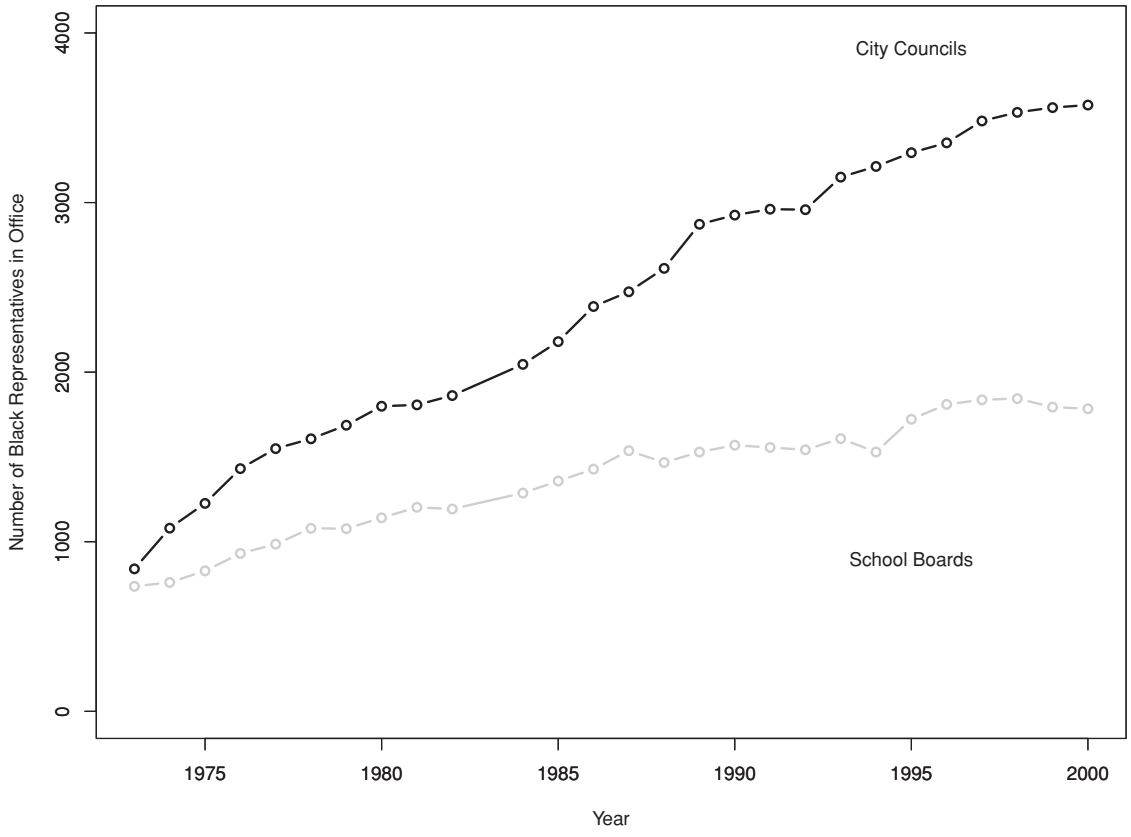
Given these findings we would expect a descriptive analysis of black representation to illustrate a pattern of greater gains in school board members than councilors after 1980. Survey data from the International City/County Management Association and from the National School Board Association (Hess 2002; International City/County Management Association 1981, 1986, 1991, 1996, 2001) support this pattern, revealing that blacks are more underrepresented on city councils than school boards and that the gap in representation across the two bodies has grown in recent decades. However, underlying differences in samples, especially in 2001, may explain the greater proportion of blacks found on school boards. Aggregate data paint an altogether different picture, revealing significantly more black elected councilors than school board members and much stronger gains in council than school board representation (see Figure 1). For example, there were 3,500 black elected councilors in 2000 compared to only 1,600 black elected school board members (Bositis 2002). In addition, estimates of the proportion of black board and council members indicate that blacks were only slightly better represented on councils in 2000 (2.9% versus 2.2%) but were almost identically represented in the two legislative arenas in 1973.

Discrepancies in empirical evidence and survey data raise questions about where blacks have achieved the greatest gains in representation and the conditions under which these achievements have been made. To date, scholars have not examined these two legislative contexts simultaneously, nor employed longitudinal data to do so. Further, most studies include few, if any, additional explanatory variables and thus explicitly assume that virtually all variation in black representation comes from black population size and electoral arrangements. Given the higher incidence of AL arrangements in school districts and municipalities and the fact that in the majority of local jurisdictions blacks continue to comprise a small portion of the population, the omission of other routes to representation represents an important deficiency in the literature. Finally, the exclusive focus on proportional representation has distorted important facts about representation and limited our knowledge of the process of representation.

# A New Approach to the Study of Black Representation in Local Legislatures

We break from previous research in our approach to the question of black representation in local legislatures. First, we develop a unified model of black representation that can be tested across different legislative contexts. Specifically, we examine the institutional and contextual features of city councils and local school boards to identify if and where we might expect differences in the extent and nature of black legislative representation. Second, we move beyond the traditional proportionality measure

**FIGURE 1 Black Representation on City Councils and School Boards (1973–2000)**




and instead conceptualize representation as a process that involves distinctive stages. This approach allows us to distinguish between places that have never elected a minority representative, those that have elected a single (or token) black, and those where blacks represent a "critical mass" in the legislative body. In the next section, we elaborate on each of these two features as we develop the theoretical approach we employ to explain black representation in local legislatures.

## Representation in Boards versus Councils

Since governing arrangements and other features of the local context shape not only the costs and benefits of running for office, but also the constraints and incentives of participating in the political process, we consider whether the institutional and contextual features of school boards and city councils vary in ways that account for the observed differences in black representation across them. On one hand, city and school district governments share commonalities due to the fact that both were targeted by Progressive Era reforms (Banfield and Wilson 1963; Karnig and Welch 1980). For example, more than 80% of school district and municipal elections are nonpartisan and held "off-cycle." These structural features contribute to the low levels of voter turnout that have come to characterize board and council elections (Hajnal, Gerber, and Louch 2002).

On the other hand, while AL arrangements are the most prevalent electoral institution across city councils and school boards, they are more commonly used in board elections.[2] In addition, council members are much more likely to be salaried than are school board members (80% versus 33%), and councilors spend considerably more time on job-related matters (on average 25 hours per week) than do school board members (25 hours per month; Svara 2003; Hess 2002). These variations, as well as differences in levels of professionalization, suggest that municipal politics may attract more ambitious candidates. Indeed, evidence cited by Bositis (2002) suggests that the new generation of black candidates, who are

[2]The most recent data suggest AL systems are used in 77% of school board elections (Shah 2006) and between 45 and 66% of council elections (International City/County Management Association 2006; Svara 2003).

younger and more educated, views the school board as the lowest rung of the political ladder.

To be sure, over the past few decades opportunities to chase political ambitions have exploded in municipalities even as doors in school board politics were closing. Between 1952 and 2002 the number of school districts decreased from 67,355 to 13,506 due to the school consolidation movement, while the number of municipalities increased from 16,807 to 19,429 (U.S. Census Bureau 2002). In light of these trends, the data in Figure 1 are more understandable since the fewer school districts now in existence should render it relatively more difficult to turn black votes into legislative seats, particularly in AL board elections.

Another important contextual development of recent decades has been the growth in the size of the Latino population, particularly the K–12 student population, which increased from 6% to 20% between 1972 and 2005 (U.S. Department of Education 2007). Compared to municipalities, school districts tend to be more racially/ethnically diverse. This disparity is amplified in central cities due to the age structure of minority versus white populations, the higher incidence of private school attendance among white students (Broughman and Pugh 2004), and the fact that Latinos and blacks are more than twice as likely to live in central cities than non-Latino whites (McKinnon 2003; Therrien and Rameriz 2001).

Together we believe that these institutional and contextual differences have three important implications for understanding black representation in local legislatures. First, the lower incidence of SMDs and larger, more heterogeneous populations in school districts versus councils suggest that blacks should be *more*, not less, represented on councils than boards. Second, higher levels of compensation and professionalization in councils suggest that council seats are more attractive than board seats, especially among blacks with more qualifications, resources, and ambition. Finally, because school districts serve a narrower constituency (parents), the greater concentration and rate of public school attendance (particularly in central cities) of Latinos compared to non-Latino whites suggest that they comprise a larger and potentially more attentive constituency in school board than council elections. This implies that black board candidates may need to rely more heavily on Latino voters than black council candidates.

## Representation as a Two-Stage Process

While the literature has often ignored the ways in which institutional and contextual features of boards and councils influence black representation, studies that have considered these factors assume they operate on representation in a linear manner. However, representation involves distinctive stages that necessitate a more nuanced understanding of how and when these factors influence the electoral fate of black candidates in local contests. For example, although proportional representation is important in assessing the impact of incorporation on policy change, as a measure of representation it does not account for the fact that representation depends on the number of seats available or that candidates are elected one by one.

Our approach conceptualizes representation as a process that can be apportioned into two phases. In the first stage, the key challenge is to overcome the so-called seats/population hurdle and elect at least a single black representative to legislative office. Having crossed the representational hurdle, the second stage involves the election of additional black legislators and what we argue is an altered representation calculus. Viewing legislative representation as a process composed of two related phases more accurately reflects the dynamics of electoral politics and existing theories of minority incorporation. Browning, Marshall, and Tabb (1984), for example, emphasize mobilization and coalition building as distinctive stages of political incorporation, whereas theories of racial polarization suggest that varying levels of representation may be influenced by different factors (Swain 1993).

Armed with this new theoretical framework, our study is able to address previously unexplored questions. For one, why is it that despite the gains blacks have made in council and board representation over the last several decades, only 18% of cities had one or more black councilor in 2001 (International City/County Management Association 1981, 1986, 1991, 1996, 2001)? What factors determine the likelihood of crossing this hurdle, and what explains why some places elect multiple black legislators? Second, which segments of the electorate do minority candidates seek to mobilize, with whom do they seek to build electoral coalitions, and does this coalition building change once blacks have overcome the representational hurdle? We now turn our attention to testing this theory of black representation across city councils and school boards.

## Modeling Black Representation

In our framework, electoral structures condition the effects of jurisdictional characteristics and are hypothesized to have varying effects across the two stages of descriptive representation. How they vary across stages and legislative bodies is an empirical question we seek to answer, but in particular we believe five factors are crucial to black legislative representation: (1) the black population

threshold, (2) concentration of the black population, (3) legislature size, (4) cross-over voters and rainbow coalitions, and (5) black resources.

Given the prevalence of racial bloc voting in municipal elections (Bullock and Campbell 1984; Murray and Vedlitz 1978), the size of the black population is by far the most powerful predictor of black legislative representation. However, as most empirical studies have acknowledged, the effects of population size are conditioned by local electoral arrangements. Specifically, SMDs reduce the population threshold needed to overcome the representational hurdle by concentrating groups into smaller voting blocs and presumably reducing reliance upon other groups in the electorate. On the other hand, since all candidates face a jurisdiction-wide electorate in AL systems, concentration is of little consequence under this arrangement. Interestingly, because no study of black representation in local legislatures has ever treated the issue of population threshold as one of substantive significance, virtually nothing is known about it. Instead, the common strategy has been to use a population threshold only for sampling purposes: arbitrarily assuming a minimum black population for obtaining a nonzero latent probability of black representation and using this threshold to select cases for study (see Table 1).

Our model of representation breaks with this line of inquiry in several ways. First, because we consider the population threshold to be of fundamental importance in understanding how and where blacks overcome the representational hurdle, we employ an analytic method that provides a valid and reliable, empirical estimate of the black population threshold needed to observe black representation. Second, by estimating this threshold for varying electoral arrangements and legislative contexts, our model precisely measures how SMDs increase the probability of representation and allows us to meaningfully compare these effects across city councils and school boards. Third, unlike extant research, which assumes electoral arrangements condition only the effects of the black population, in our model they condition the effects of other factors, thereby playing a more central role.

Beyond the black population threshold, the efficacy of SMDs to concentrate blacks into voting blocs depends importantly on both racially segregated residential patterns and the manner in which district boundaries are actually drawn. Although Vedlitz and Johnson (1982) acknowledged early on that by omitting measures of racial segregation, studies may seriously underestimate the impact of electoral structures on minority representation in segregated communities and overestimate their effects in less segregated communities, most studies nevertheless continue to exclude such measures. A recent exception is Trounstine and Valdini (2008); however, their reliance on an isolation index measured for metropolitan areas rather than municipalities introduces considerable measurement error. Employing a more appropriate city/district measure of segregation, we hypothesize that the probability that black representation is conditioned not only on the presence (and nature) of SMD arrangements, but also on the degree of racial segregation.

There is an additional and largely overlooked factor that influences concentration and that is the number of seats in the legislative body. While the importance of legislature size has not gone completely unnoticed (Karnig and Welch 1980; Trounstine and Valdini 2008), its inclusion as the denominator of the dependent variable has precluded it from inclusion as an independent covariate in most analyses. However, there is reason to believe that size matters in terms of both the likelihood and extent of legislative representation. In SMD systems, more seats imply more districts and thus a greater opportunity to concentrate the black population. In AL systems, the greater the number of seats, the lower the plurality threshold needed to win. Thus, under both electoral arrangements, legislature size should be positively related to the probability of overcoming the representational hurdle. Once a single black has been elected, the effect of legislature size may be less pronounced in SMD systems simply because the minority population is confined to one or two district seats. On the other hand, in AL systems, larger legislatures should increase the number of seats blacks hold.

Narratives of black candidates courting nonblack or "cross-over" voters feature prominently in the urban politics literature (Bullock and Campbell 1984; Liu 2001). And, while the literature tends to assume that black candidates will attempt to form "rainbow" coalitions with Latinos or seek primarily white "cross-over" voters (Browning, Marshall, and Tabb 1984), the question of which cross-over voters matter (and the conditions under which they matter) remains relatively unexplored empirically. We hypothesize that the incentive to build coalitions is a function of both electoral structures and salient features of the local context. With AL elections, a biracial or multiracial coalition may be necessary to overcome high thresholds needed to cross the representational barrier. SMD structures, on the other hand, require constituency relationships within the district, and thus we expect coalition building to be less prominent here. Moreover, given the larger Latino population within school districts, we expect coalition politics to occur more often in school board (as opposed to council) contests.

Several studies have identified the resources available to the black population as an important factor in helping minorities develop strategies to achieve their political

goals (Engstrom and McDonald 1981), mobilize more minority voters (Browning, Marshall, and Tabb 1984), develop the leadership potential to sustain interest group activities (Giles and Evans 1985), and increase the supply of qualified minority candidates (Meier and Stewart 1991). At-large systems require black candidates to mobilize more voters across a larger geographic space, and given findings suggesting that AL systems impede the conversion of black resources to black school board seats (Robinson, England, and Meier 1985), we expect resources to be particularly salient in AL structures. In addition, the impact of resources across boards and councils may be driven in part by the competitiveness of these elections. Given differences in levels of compensation and professionalization across boards and councils, as well as the more ambitious attitude of the new generation of black candidates, one line of reasoning suggests that resources should matter more in council elections. On the other hand, the larger size of school districts and potentially more interracially competitive context of board elections would suggest that resources might matter more for black board candidates.

While we expect all five factors to be important in predicting both stages of black legislative representation, given that blacks have not overcome the representational hurdle in most local jurisdictions we focus more directly on this first stage of the process. We hypothesize that the most direct path to black legislative representation includes SMD arrangements and either a concentrated or large black population. Though the absence of these conditions reduces the likelihood of observing black representation, forging coalitions with cross-over voters or living in jurisdictions where the black population has more resources may provide alternative pathways to representation. For example, Hajnal (2007) finds evidence that the election of blacks to local office reduces uncertainty regarding black leadership, leads to less negative views of black leadership, and increases whites' willingness to support black candidates. This suggests relying on cross-over voters may be more efficacious when it comes to securing additional legislative seats. Similarly, given the high correlation between regular voting and socioeconomic resources, jurisdictions with larger shares of higher-status blacks may produce a larger pool of quality candidates and maintain the high levels of turnout needed to elect multiple black legislators.

## Data and Methods

To avoid the methodological limitations of extant research, we pay careful attention to both sampling schemes and modeling strategies. We draw upon a universe of 309 cities and 345 independent school districts (located in 42 states) that had a population of at least 30,000 as recorded by the 1930 census.[3] Not only have some or all of these cities been the focus of significant urban politics research on linkages between city demographics, political structure, and policy (see Lineberry and Fowler 1967), but because these are established jurisdictions, we are able to track the political history with a higher degree of reliability than would otherwise be possible. We also employ Mullahy's hurdle Poisson model of event counts (see King 1989), which takes the realized, two-stage nature of our dependent variable into account and provides an appropriate analytic framework with which to test our hypotheses.[4] The model we estimate is

$$g(y \mid \theta) = \begin{cases} f_1(0) & \text{if } y = 0 \\ \dfrac{1 - f_1(0)}{1 - f_2(0)} f_2(y \mid \theta) & \text{if } y \geq 1 \end{cases}$$

where $y = 0, 1, 2, 3, \ldots$ is the realized count of black legislators, and $\theta$ is the parameter vector conditioned on a set of city/district- and year-specific covariates. The zero counts—instances of no black representation on the council (or board)—are determined by the density function $f_1(0)$, and the positive counts—instances of at least one black representative on the council (or board)—are determined by $\frac{1-f_1(0)}{1-f_2(0)} f_2(y \mid \theta)$. From an estimation standpoint, therefore, we model (a) the probability of crossing the representation hurdle, $Pr(y > 0)$ by fitting a logit specification; and (b) the expected count of black representatives by way of a zero-truncated Poisson regression.

To construct our binary (Any Black Representation) and count (Extent of Black Representation) dependent variables, we utilize rosters of black council and school board representation compiled by the Joint Center for Political and Economic Studies (JCPES). Since reliable information on the election cycles governing each seat listed in the JCPES rosters is unavailable, constructing an estimation sample of election-year panels for each city and school district is impossible. Therefore, we select for analysis observations at five-year intervals (from 1980 to

[3]Municipal and district samples cover the same geographical area. Where they are not coterminous, we include all districts within the municipality or the district that incorporates the biggest portion of the municipal boundary.

[4]Convergence problems with zero-inflated negative binomial and hurdle negative binomial estimators restricted us to the hurdle Poisson and the zero-inflated Poisson, and our substantive interest in distinguishing between the two stages of representation and generating post-estimation quantities of interest led us to select the hurdle Poisson (see also McDowell 2003).

2000). This temporal spacing ensures that no representative is counted twice without actually having been elected twice. Data on district and municipal electoral arrangements were culled from an exhaustive search of available city charters, all ICMA form of government surveys, city clerk surveys, school district and municipal websites, and phone calls to city halls, school districts, and school board associations.[5] These data are dynamic and take into account all changes made to electoral systems between 1980 and 2000.

Given the conditional relationship between electoral arrangements and other covariates in the model, we estimate separate models for jurisdictions employing SMD and AL systems, as well as jurisdictions relying on some combination of SMD and AL arrangements (i.e., "Mixed" systems). We focus here only on the "pure" systems, since these allow us to test the core components of our two-stage model of representation most directly and accurately.[6] Specifically, whereas in pure SMD and AL systems all constituencies compete for representation on a uniform basis, in Mixed systems this clarity is lost because data do not permit us to observe whether black legislators represent SMD or AL seats. Thus, it is unclear what lessons can be drawn from aggregate analyses of Mixed systems (see also Welch 1990).[7]

The specific city/district covariates include four sets of variables that tap (1) the black population threshold and concentration, (2) cross-over voters and rainbow coalitions, (3) black resources, and (4) additional controls.[8]

*Black Population Threshold and Concentration.* We include a measure of the black voting age population (Percent Black VAP) to empirically estimate the black population threshold under SMD and AL arrangements. To investigate the efficacy of SMDs in concentrating the black population into smaller, more homogeneous voting blocs we use the dissimilarity index to measure Black-White Segregation in the city/district[9] and the total number of seats in the legislature (Council/School Board Size). We expect each of these measures to operate directly on increasing the probability of black representation under SMD systems, and when considered jointly, to reduce the black population threshold needed to overcome the representational hurdle. Legislature size is also expected to positively affect the extent of black representation in SMD and AL systems and increase the probability of any representation in AL systems.

*Local Coalition Building Context.* This vector of variables includes measures of the Latino voting age population (Percent Latino VAP)[10] as well as the percentage of whites with at least a bachelor's degree (Percent White BA), which serves as a proxy for the potential voting strength of liberal whites. The relative size of each of these groups shapes whether blacks seek cross-over voters, and if so, which group(s) they would potentially attempt to mobilize.

*Black Resources.* We include percent black employment as a proxy for black socioeconomic status and success[11] and expect black resources to matter most in predicting the extent of representation (stage 2). Given findings suggesting that AL systems impede the conversion of black resources into black school board seats, we test for this effect as well.

*Controls.* We include variables that control for the size of the jurisdiction (Log Size), regional differences (South = 1 if located in Confederate South, 0 otherwise), and time as a series of dummy variables indexing the panel-years (1980 is the excluded category). We also include a measure of previous black political incorporation (Previous Black Representation), which is a lagged dependent variable that captures the incumbency

[5]Districts with appointed boards are excluded since these are not independent governing bodies.

[6]Because Mixed systems represent a relatively small proportion of districts and municipalities nationally, 2.2% and 19% (International City/County Management Association 1981, 1986, 1991, 1996, 2001; Shah 2006) and in our sample (9% and 37% respectively), excluding them does not significantly limit the inferences we make.

[7]Despite these substantive and methodological limitations, we present estimates for models fit to Mixed jurisdictions (see Supplemental Materials at www.ruf.rice.edu/∼marschal). Unsurprisingly, these results show a lack of any consistent pattern of covariate effects. This pattern echoes a recent finding that "mixed systems [were] no more or less likely to produce minority representation than district or at-large cities" (Hajnal and Trounstine 2007, 90).

[8]Summary statistics for all variables are reported in Table 4.

[9]The index ranges from 0 to 100, with higher values indicating greater dissimilarity. Data for 1980, 1990, and 2000 are from the Lewis Mumford Center for Comparative Urban and Regional Research, http://www.albany.edu/mumford. Intervening panel-years were interpolated.

[10]Because the noncitizen population may be large in some jurisdictions, the preferred measure is Latino citizen VAP. Unfortunately, this measure is only available for cities in 2000. We estimated a cross-sectional model with a control for the percentage of Latino noncitizens (see supplementary materials available online) and found no change in the pattern of results.

[11]Educational attainment, income, homeownership, and employment have been used to capture blacks' educational and monetary resources. Our longitudinal data and need to use comparable variables for boards and councils limited us to black employment and the percentage of the black population with a high school degree. The extremely high correlation between the latter measure (high school degree) and black VAP ($r = 0.88$) led us to choose percent black employment. Our cross-sectional model, which includes additional measures of black resources, did not yield significantly different results (see supplementary materials on our website).

advantage associated with previous black officeholders. In the first stage of the model it is a binary variable (1 = at least one black seat at $T_1$; 0 = otherwise), whereas in the second stage it is a count (number of black seats at $T_1$).[12] We expect past successes in crossing the representational hurdle and more extensive representation in the preceding panel-year to increase the probability and extent of representation, respectively, in the following panel-year.[13]

## Analysis and Findings

We begin with an examination of the descriptive evidence on black representation in school districts and cities to evaluate the extent and nature of potential differences in representation across legislative contexts. On the one hand, empirical studies have suggested that blacks achieve more proportional representation on school boards than on city councils, irrespective of electoral structure. On the other hand, aggregate data from the universe of black elected local legislators (see Figure 1) show a much larger number of black elected councilors than school board members.

By focusing on a consistent panel of cities and school districts and investigating multiple measures of representation, our data provide greater leverage in addressing whether black representation is truly greater in one legislative arena than the other, while also providing more detailed insights about the nature of black representation in local legislatures than has been possible thus far. Looking first at the percentage of school boards and city councils with no black representation, our data reveal that a larger share of school boards than city councils has consistently had no black elected members. Indeed, the majority of boards in our sample had no representation for every time point in our panel (from 67% in 1980 to 58% in 2000), whereas the majority of councils has had at least one black representative since 1990.

We next investigate proportionality, the most common measure of black representation. Consistent with aggregate data, our sample data reveal that the percentage of blacks elected to councils has exceeded the percentage elected to boards by 2 to 3 percentage points from 1980 to 2000. However, the rate of change in black representation has been nearly identical for both legislative arenas. This finding suggests that the increasing gap in black representation on boards and councils found in Figure 1 may be largely attributed to changes in the number of boards and councils over time rather than to changes in the underlying level of proportional representation.

Overall, our descriptive analysis reveals that the level of black representation on boards and councils has been roughly equivalent over the past 20 years, with one caveat: electing at least one black representative. For the jurisdictions in our sample, the representational hurdle appears to be more difficult to overcome in the context of school boards than city councils. The next question we consider is whether the process by which blacks gain representation on school boards and councils is similar. We begin by examining the first stage of representation.

### Overcoming the Representational Hurdle

How do black population size and concentration explain whether councils and school districts successfully overcome the representational hurdle? Do mechanisms other than the size of the black population and SMD arrangements account for black representation in local governing bodies? To address these questions, we estimate Mullahy's (1986) hurdle Poisson models by jurisdiction (board versus council) and type of electoral structure (SMD versus AL).[14]

Results from the first stage (logit estimation) indicate that the primary mechanism by which blacks overcome the representational hurdle in local legislatures is the relative size of the black population (see Table 2). This finding holds regardless of electoral methods or legislative context. The coefficients for black VAP are uniformly positive and significant across each of the four models.

[12] Although our measure of past representation at $t - 1$ does not indicate whether the position is filled by the same black official, an examination of the data suggests that this is often the case.

[13] Note that both indicators of past representation are constructed regardless of the electoral structure under which such representation occurred. Thus these indicators are not reset to zero if past representation occurred under SMD (AL) systems but the jurisdiction now employs AL (SMD).

[14] Although we also used propensity-score matching to engage these questions, two issues led us to treat these results with caution. First, the sparseness of the pool of jurisdictions using Mixed systems worked against optimal balancing using covariates from the count models. The problem was especially severe for the school district sample. Second, the inability to simultaneously and optimally balance SMD, AL, and Mixed jurisdictions forced us to generate pair-wise matches of (a) SMD and AL; (b) SMD and Mixed; and (c) AL and Mixed systems. Although these pair-wise comparisons are not equivalent to simultaneous comparisons across the three subsets of jurisdictions, the overall results for SMDs and AL systems mimic the general pattern of our findings enumerated in Tables 2 and 3. See also supplementary materials and footnote 6.

**TABLE 2 Logit Estimates of Black Representation in Local Legislatures**

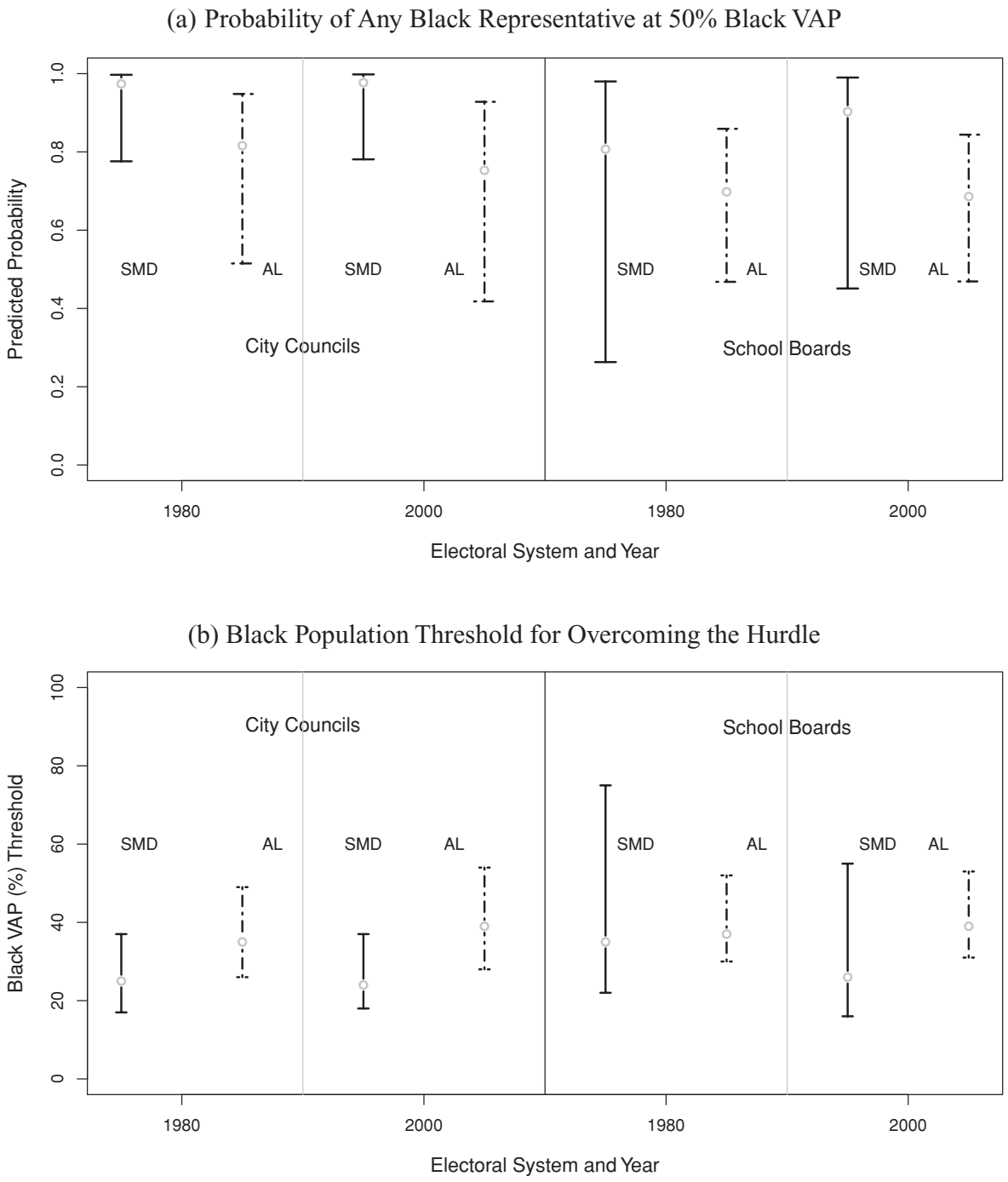
| | School Board | | City Council | |
|---|---|---|---|---|
| | SMD | AL | SMD | AL |
| Legislative Size | 0.188 | −0.128 | 0.179*** | 0.269*** |
| | (0.114) | (0.079) | (0.041) | (0.071) |
| % Black VAP | 0.094** | 0.072*** | 0.145*** | 0.100*** |
| | (0.029) | (0.012) | (0.030) | (0.016) |
| % Latino VAP | −0.003 | 0.014 | −0.009 | −0.018 |
| | (0.014) | (0.009) | (0.014) | (0.022) |
| % White BA | 0.004 | −0.037** | −0.029 | 0.025* |
| | (0.028) | (0.011) | (0.021) | (0.011) |
| Black-White Segregation | −0.038** | 0.003 | 0.055** | 0.007 |
| | (0.015) | (0.006) | (0.018) | (0.014) |
| Past Representation | 2.270*** | 2.994*** | 2.463*** | 3.031*** |
| | (0.390) | (0.235) | (0.424) | (0.383) |
| % Black Employment | −0.110*** | −0.011 | 0.004 | −0.051 |
| | (0.029) | (0.020) | (0.027) | (0.030) |
| Log of Population | 0.596* | 0.440** | 0.268 | 0.288 |
| | (0.282) | (0.153) | (0.267) | (0.233) |
| South | 0.747 | −0.056 | 0.046 | 0.329 |
| | (0.430) | (0.531) | (0.594) | (0.607) |
| 1985 | −0.286 | 0.119 | 0.588 | 0.243 |
| | (0.675) | (0.378) | (0.548) | (0.510) |
| 1990 | −0.128 | −0.417 | 1.813** | 0.812 |
| | (0.635) | (0.349) | (0.574) | (0.492) |
| 1995 | 0.094 | −0.438 | 0.425 | −0.110 |
| | (0.586) | (0.347) | (0.644) | (0.582) |
| 2000 | 0.273 | 0.243 | 0.370 | 0.090 |
| | (0.672) | (0.323) | (0.639) | (0.571) |
| Constant | 0.090 | −5.717* | −10.790** | −4.747 |
| | (2.397) | (2.435) | (3.344) | (3.027) |
| N | 307 | 824 | 452 | 470 |
| $\chi^2$ | 99.790 | 249.924 | 133.680 | 169.236 |
| AIC | 221.513 | 600.501 | 256.485 | 282.318 |
| BIC | 273.689 | 666.499 | 314.076 | 340.456 |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, two-tailed tests.

Further, Figure 2(a), which reports point estimates and 95% confidence intervals, shows that when the black population is the majority (50% or more of the total district/municipal population), blacks have very good odds of electing at least one representative. In 2000, for example, the probability of crossing the representational hurdle ranges from 0.686 (with a 95% confidence interval of 0.469, 0.844) in school districts with AL arrangements to 0.977 (with a 95% confidence interval of 0.781, 0.998) in municipalities with SMDs.

These estimates also reveal that the extent to which black VAP is associated with the likelihood of any black representation differs across electoral structure and legislative context. For example, ceteris paribus, blacks are more likely to overcome the representational hurdle in city council elections and when SMD arrangements are in effect. Further, the efficacy of SMDs has increased over time, particularly in school board races, where the probability of observing any black representation has increased by 10 percentage points (from 0.807 to 0.903). Note that while the confidence intervals attached to these estimates are not inconsequential, they are considerably smaller for boards in 2000 than in 1980. On the other hand, the estimates in Figure 2(a) show the opposite trend for the

**FIGURE 2 Impact of (a) Black VAP and (b) Population Threshold on Crossing the Representational Hurdle**




efficacy of AL arrangements, with lower probabilities of overcoming the representational hurdle over time. Although the diminished effect of AL arrangements has been relatively small for school boards, the likelihood of observing any black legislators on city councils with AL systems decreased from 0.816 to 0.753 from 1980 to 2000.[15]

[15]The confidence bands suggest that true point estimates are anywhere from 0.418 to 0.948.

In addition to considering how electoral arrangements condition black VAP in affecting the probability of any black legislative representation, our analytic model allows us to derive empirical estimates of the black population threshold needed to overcome the representational hurdle. We hypothesized that this threshold would be lower in jurisdictions employing SMDs, and this is indeed the case. As Figure 2(b) illustrates, the point estimates for percent black VAP at the point where the probability of any black representation is 0.51 or greater are lower under SMD arrangements in each of the panels.[16] In the case of councils, the threshold has remained unchanged over time, at roughly 25%, whereas for school boards the threshold has dropped from 35% in 1980 to 26% in 2000. Our estimates suggest that the black population threshold is now essentially the same for councils and districts employing SMDs; however, the smaller confidence intervals around the council estimates (0.17, 0.37) give us more assurance that the true threshold is close to 25% than do the larger confidence intervals for threshold estimates of SMD boards.

When it comes to AL systems, the black population threshold for any black representation is identical for councils and boards in 2000 (39%), relatively unchanged across legislative contexts since 1980 (35% for councils and 37% for boards), and consistently at least 10 percentage points greater than the threshold in SMD jurisdiction. In addition, the confidence intervals are fairly narrow and very consistent across time and legislative context. These findings are consistent with the expectation that black representation is more arduous under AL systems precisely because a larger black population is required to achieve an effective voting bloc. However, they are contrary to several early studies (Meier and England 1984; Welch and Karnig 1978) that found differences across boards and councils most striking under AL systems and to more recent work by Sass and Mehay (1995), who cite the "waning" effect of SMD arrangements in recent decades. Indeed, our data suggest that SMD arrangements matter more than ever, at least when it comes to overcoming the representational hurdle.

As we discussed previously, the efficacy of SMDs hinges largely on their ability to concentrate voting blocs into smaller and more compact units. We therefore expect the number of seats (and thus districts) and the degree of residential (black-white) segregation to be important predictors of whether jurisdictions observe any black legislative representation. The results in Table 2 confirm this expectation for city councils, revealing a significant and positive effect of both legislature size and segregation under SMDs. In councils with seven seats (the modal size in our sample), the probability of any black representation is 0.874 (0.745, 0.943), and increases to 0.922 (0.832, 0.966) in councils with 11 seats. Similarly, black-white segregation is significantly related to the likelihood of representation; moving from 20 to 50 on the dissimilarity index yields a 55% increase in the probability of any representation.

On the other hand, board size appears to be unrelated to representation in school districts with SMD structures, whereas the degree of black-white segregation is negatively related to the probability of at least one black board member. The null result of board size may stem from the fact that the size of these bodies does not vary much across school districts in the United States (see Table 4). Unlike city councils in our sample, where the mean legislative size varies substantially across SMDs and AL jurisdictions (11 versus 6.5), the mean board size is nearly identical across electoral systems (7.5). Combined with the fact that school districts are on average bigger than municipalities, the smaller number of seats for board versus council SMDs suggests that concentrating black voters into smaller voting blocs is relatively more difficult in the context of school districts.

This empirical reality has implications for the effect of black-white residential segregation. Specifically, under these conditions, the population may need to be both hyper-segregated in order to concentrate the black population into a single legislative district and sufficiently large to overcome the population threshold in what is, on average, a larger geographic unit. Though we attempted to test this possibility by estimating models with interaction terms (legislative size $*$ black VAP and legislative size $*$ black-white segregation), these were insignificant.[17] Ultimately, further investigation is needed to better understand this issue, and as we discuss in more detail later, we believe future inquiry must consider black VAP of SMDs rather than the district or municipality as a whole in order to more accurately measure concentration.

We hypothesized that factors other than electoral arrangement and black voting strength should play a prominent role in jurisdictions with AL systems and as blacks represent smaller shares of the local population. Indeed, given that the majority of cities and school districts in our sample have black VAPs between 15% and 20% and that only 32% of councils and 22% of districts have SMD arrangements, overcoming the representational hurdle remains a formidable challenge for a large portion of

[16] Predicted probabilities are computed with all other covariates at their 1980 and 2000 means.

[17] For results and information on this approach, see supplemental materials on our website.

jurisdictions. To date, almost no systematic empirical evidence has been amassed to address this question (but see Welch 1990).

The results in Table 2 suggest that alternative paths to black representation are not well established, particularly in the context of school boards. Contrary to expectations embodied in one of the most popular theories of minority incorporation (Browning, Marshall, and Tabb 1984), the potential for building electoral coalitions with other racial/ethnic groups, particularly liberal whites and Latinos, does not appear to increase the probability of having at least one black representative in school boards.[18] Instead, Table 2 reveals that when the size of the educated white population matters, it is negatively related to the probability that blacks overcome the representation hurdle on school boards. This is true for black resources as well. On the other hand, in the context of city councils with AL structures, it appears that building coalitions with liberal whites is positively related to black legislative representation. As the percentage of the white liberal population increases, we find a modest, though significant, increase in the likelihood of any black council representation.

Beyond the size and concentration of the black population the only factor significantly related to the likelihood of overcoming the representational hurdle is having previously elected at least a single black legislator to office. Jurisdictions that had a black legislator in office in the prior panel-year (as measured by Past Representation) are much more likely to overcome the hurdle. This advantage is more pronounced in AL systems, where the effect of past representation translates into a 0.63 increase in the likelihood of at least one black councilor and a 0.62 increase in the likelihood of at least one school board member. In SMD systems these effects are 0.51 and 0.48 for councils and school boards.

## What Explains the Extent of Black Representation in Local Legislatures?

As is evident in the preceding discussion, overcoming the representational hurdle is a rare accomplishment for most jurisdictions, and when they make the transition it is mainly the result of a comfortable population threshold and a particular electoral arrangement. We now turn our attention to the next step in the process—namely, adding additional black representation onto the same elected body. Our two-step theory hypothesizes that the representational calculus shifts at this point. That is, although we expect the size of the electorate and electoral structure to matter, additional factors may be equally salient in determining the extent of black office holding on local legislatures.

First, we hypothesized that the size of the legislative body would be strongly associated with the likelihood of more than one black elected official, and the uniformly positive coefficients reported in Table 3 support this claim. Indeed, the number of seats available is the most consistent correlate of the extent of black representation. There are, however, differences in the substantive impact of legislature size across SMD and AL arrangements, and these differences are more pronounced in the context of city councils. Specifically, whereas the expected number of black elected officials on a seven-person school board is approximately 1.5 in both SMD and AL jurisdictions, for the same size council the expected count is roughly 2 and 1.5, respectively.[19] The additional leverage offered by SMD suggests that the further concentration of black voters into smaller districts may lead to more black representation in city councils. Further, given the higher incidence of SMD arrangements among city councils in our sample, the finding that legislative size impacts councils more than school boards may explain the slightly higher levels of black representation on councils than school boards (see Figure 1).

In addition to the size of the legislative body, we hypothesized that black resources should be especially important in the second stage of representation since the ability of blacks to develop leadership strategies, mobilize voters, and become viable candidates depends on their ability to garner political and socioeconomic resources. However, the estimates in Table 3 indicate that black resources do not play an important role in the number of seats held by black legislators. Rather, we find the ability to add more seats hinges on the size of the black population and the need and ability to court cross-over voters.

Indeed, investigating whether the coalitional decision calculus varies across the two stages of representation is an important objective of our analysis. Since jurisdictions that have successfully overcome the representational hurdle are likely to have larger black populations, we suspected that the electoral dynamics of the second stage of representation (attaining additional seats) should differ at least somewhat from the first stage. Based on aggregate-level differences in electoral,

[18] Given the possibility that Latino-black coalitions are more likely when the Latino population is smaller than the black population, we estimated another model to test for this possibility. This model reveals some support for this claim in the context of school boards (with SMD arrangements), but no support for council representation.

[19] Unless noted, predictions are generated with continuous (binary) variables at the mean (mode).

**TABLE 3 Zero-Truncated Poisson Estimates of Black Representation in Local Legislatures**

| | School Board | | City Council | |
|---|---|---|---|---|
| | SMD | AL | SMD | AL |
| Legislative Size | 0.086*** | 0.088** | 0.024** | 0.102*** |
| | (0.021) | (0.029) | (0.007) | (0.021) |
| % Black VAP | 0.025*** | 0.026*** | 0.010** | 0.017*** |
| | (0.006) | (0.004) | (0.004) | (0.004) |
| % Latino VAP | 0.011* | 0.011* | −0.017** | −0.009 |
| | (0.005) | (0.005) | (0.007) | (0.008) |
| % White BA | −0.010 | −0.006* | −0.014* | −0.025* |
| | (0.009) | (0.003) | (0.006) | (0.013) |
| Black-White Segregation | −0.003 | 0.002 | 0.001 | 0.010* |
| | (0.004) | (0.002) | (0.004) | (0.005) |
| Past Representation | 0.226*** | 0.098*** | 0.098*** | 0.069 |
| | (0.027) | (0.026) | (0.017) | (0.045) |
| % Black Employment | 0.006 | 0.002 | 0.003 | 0.008 |
| | (0.013) | (0.008) | (0.010) | (0.014) |
| Log of Population | 0.034 | 0.075 | 0.013 | −0.019 |
| | (0.067) | (0.056) | (0.066) | (0.046) |
| South | −0.229 | 0.415** | 0.122 | −0.356** |
| | (0.121) | (0.131) | (0.101) | (0.133) |
| 1985 | 0.458 | 0.118 | 0.136 | 0.283* |
| | (0.241) | (0.182) | (0.150) | (0.141) |
| 1990 | 0.248 | 0.033 | 0.244 | 0.270 |
| | (0.254) | (0.178) | (0.136) | (0.140) |
| 1995 | 0.514* | 0.315 | 0.304* | −0.047 |
| | (0.250) | (0.181) | (0.134) | (0.157) |
| 2000 | 0.496* | 0.294 | 0.151 | 0.313* |
| | (0.247) | (0.195) | (0.142) | (0.148) |
| Constant | −2.259 | −2.569** | −0.301 | −1.779 |
| | (1.275) | (0.942) | (1.026) | (1.338) |
| N | 159 | 290 | 221 | 135 |
| $\chi^2$ | 217.019 | 478.150 | 629.555 | 295.445 |
| AIC | 422.046 | 737.793 | 734.975 | 348.283 |
| BIC | 465.011 | 789.171 | 782.549 | 388.957 |

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, two-tailed tests.

sociodemographic, and other features of boards and councils, we specified two general hypotheses regarding which racial/ethnic group blacks turn to if and when they seek to build electoral coalitions. First, given evidence suggesting that Latinos not only tend to make up a larger share of school district electorates, but have also achieved a substantially higher degree of political incorporation on school boards than councils, we conjectured that black candidates might court Latino voters more in school board than council elections. Second, because black candidates in AL jurisdictions are less able to rely exclusively on their own constituents in order to be successful, they should depend more heavily on other cross-over voters, namely liberal whites, to increase their chances of representation.

As Table 3 reveals, once blacks manage to cross the representational hurdle in school board contests, a greater Latino population helps blacks secure more seats than would otherwise be possible.[20] Specifically, the effect is associated with roughly two additional seats across the

[20]Black school board members also continue to rely heavily on their own constituents: A one standard deviation increase in black VAP is associated with a 20% increase in the expected number of black elected school board members.

**TABLE 4 Descriptive Statistics of Sample Cities and School Districts**

| Council | SMD | | | | AL | | | |
|---|---|---|---|---|---|---|---|---|
| **Variable** | **Mean** | **Std. Dev.** | **Min** | **Max** | **Mean** | **Std. Dev.** | **Min** | **Max** |
| Black Councilor (0/1) | 0.578 | 0.494 | 0.000 | 1.000 | 0.382 | 0.486 | 0.000 | 1.000 |
| No. of Black Councilors | 3.371 | 3.339 | 1.000 | 17.000 | 2.274 | 1.748 | 1.000 | 10.000 |
| Size of Council | 10.971 | 8.108 | 4.000 | 51.000 | 6.637 | 2.321 | 3.000 | 16.000 |
| Percent Black VAP | 17.280 | 16.712 | 0.000 | 97.460 | 16.157 | 19.963 | 0.100 | 92.320 |
| Percent Hispanic VAP | 9.425 | 14.838 | 0.260 | 93.470 | 9.029 | 15.252 | 0.270 | 91.530 |
| Percent Whites with BA | 17.113 | 9.472 | 0.060 | 67.470 | 16.767 | 12.735 | 0.260 | 85.280 |
| Black-White Dissimilarity Index | 52.050 | 15.830 | 14.030 | 90.610 | 48.470 | 16.830 | 11.590 | 83.520 |
| Percent Black Employment | 85.550 | 6.000 | 49.120 | 100.000 | 86.440 | 5.740 | 63.620 | 100.000 |
| Past Representation (1/0) | 0.511 | 0.500 | 0.000 | 1.000 | 0.333 | 0.472 | 0.000 | 1.000 |
| Past Representation (Lagged DV) | 3.123 | 3.120 | 1.000 | 18.000 | 2.160 | 1.649 | 1.000 | 10.000 |
| Log of Population | 11.780 | 1.145 | 9.818 | 15.896 | 11.346 | 0.839 | 9.726 | 14.001 |
| South | 0.197 | 0.399 | 0.000 | 1.000 | 0.115 | 0.319 | 0.000 | 1.000 |
| N | 476 | | | | 487 | | | |
| **School Board** | **SMD** | | | | **AL** | | | |
| **Variable** | **Mean** | **Std. Dev.** | **Min** | **Max** | **Mean** | **Std. Dev.** | **Min** | **Max** |
| Black SBM (0/1) | 0.526 | 0.500 | 0.000 | 1.000 | 0.375 | 0.484 | 0.000 | 1.000 |
| No. Black School Board Members | 1.183 | 1.517 | 0.000 | 9.000 | 1.055 | 1.940 | 0.000 | 12.000 |
| Size of School Board | 7.416 | 1.835 | 5.000 | 13.000 | 7.531 | 1.472 | 5.000 | 12.000 |
| Percent Black VAP | 17.387 | 15.587 | 0.000 | 70.455 | 16.748 | 20.052 | 0.000 | 100.000 |
| Percent Hispanic VAP | 11.240 | 15.452 | 0.000 | 80.481 | 11.666 | 14.028 | 0.000 | 86.336 |
| Percent Whites with BA | 14.024 | 10.464 | 1.000 | 58.014 | 14.775 | 17.004 | 1.000 | 97.942 |
| Black-White Dissimilarity Index | 50.010 | 16.620 | 11.590 | 88.080 | 44.940 | 18.790 | 8.480 | 90.610 |
| Percent Black Employment | 86.760 | 6.770 | 0.000 | 100.000 | 85.410 | 7.120 | 6.690 | 100.000 |
| Past Representation (1/0) | 0.485 | 0.501 | 0.000 | 1.000 | 0.346 | 0.476 | 0.000 | 1.000 |
| Past Representation (Lagged DV) | 0.971 | 1.339 | 0.000 | 11.000 | 0.893 | 1.696 | 0.000 | 9.000 |
| Log of Population | 11.991 | 1.041 | 5.142 | 14.628 | 11.365 | 0.915 | 8.359 | 15.896 |
| South | 0.384 | 0.487 | 0.000 | 1.000 | 0.030 | 0.170 | 0.000 | 1.000 |
| N | 344 | | | | 1,003 | | | |

range of Latino VAP observed in our sample (0–86%). Contrary to the school board results, our findings also suggest that candidates for council positions are slightly hindered by a large Latino electorate. Ceteris paribus, the expected number of black council seats ranges from two in cities with no Latino voters to one in cities where the Latino VAP is 94% (the maximum value in our sample). Thus council elections appear to be more contentious, at least in terms of racial divides, and the divide persists even in cities that have managed to cross the representational hurdle.

With respect to the electoral coalitions that bring together blacks and liberal whites, particularly in AL jurisdictions, our results actually suggest the opposite to be true. Indeed, the negative coefficients reported in Table 3 call into question previous research that suggests favorable white attitudes toward black representation (Hajnal 2007) and instead support more traditional explanations that focus on prejudice and racial threat (Hurwitz and Peffley 1998). For both school board and council elections with AL structures, our results indicate that as the size of the liberal white population (as measured by Percent White BA) increases, the likelihood of observing additional black representatives decreases. Moreover, the negative marginal effects of a liberal white population are most acute in locations with both a history of past black political incorporation and large black populations. In sum, our findings regarding the coalition-building context and its impact on representation in jurisdictions with AL structures are mixed at best. Specifically, while we find some evidence that blacks seeking school board seats may benefit from larger Latino populations,

we find no such benefits for black candidates in council elections.

## Conclusions

This study was motivated by two puzzles in the literature regarding the causes of black gains in representation in recent decades and implications from empirical studies that suggest black representation on school boards is more "equitable" than city councils. We tackled these puzzles by employing a panel dataset that spanned the same jurisdictions over 30 years and a novel methodological/theoretical framework. First, on this issue of "equity" our study finds that descriptive differences between councils and school boards are more illusory than real and are generated largely by differences in sampling and measurement rather than meaningful shifts in representation. Where we do find discrepancies, they tend to favor councils and therefore suggest that if one legislative context is associated with more equitable representation for blacks, it is city councils, not local school boards. Perhaps what our descriptive analysis demonstrates most convincingly, however, is that despite the steady increase in the number of black elected board and council members over the past several decades, the majority of local jurisdictions continue to have no black representation at all. Instead, the representational hurdle remains formidable and the typical local legislature in the United States has not yet witnessed black electoral success. A question for future research is whether this is due primarily to the lack of black candidates in these electoral contests. To be sure, the topic of candidate emergence remains relatively uninvestigated, particularly in the arena of local politics.

Second, reorienting our analysis around the multiple stages of legislative representation, our study focuses on aspects of representation that have heretofore been ignored or avoided and thus makes several important contributions to our understanding of how voting strength and electoral structure are related to black representation. For example, our study finds that black gains in local legislatures result from the increased capacity of electoral structures, SMDs in particular, to translate votes into seats. In the context of city councils, the increased reliance on SMDs over time (roughly 15% of cities in our sample abandoned AL systems in favor of SMD or Mixed systems between 1980 and 2000) contributes as well. In addition, the strong effects of past representation indicate that as more districts and councils have overcome the representational hurdle, the likelihood and extent of black legislative representation increases significantly.

In addition, our analysis not only provides the first empirical estimate of the population threshold needed to overcome the representational hurdle, but also gives more weight to the question of how the black population is concentrated than previous studies. Whereas existing studies have assumed identical thresholds under different electoral structures, we find that the threshold is significantly larger under AL systems. In 2000, the threshold for representation was roughly 25% black for councils and boards with SMDs, and nearly 40% for jurisdictions with AL systems. This finding has implications for jurisdictions that are considering adopting SMD or Mixed systems, particularly with regard to how legislative districts would need to be constructed in order to effectively concentrate the black population.

However, as we have emphasized throughout this article, while population size matters, it is only part of the story. Particularly in the context of city councils, the extent to which the black population is concentrated matters considerably. Further, it is not simply patterns of residential segregation in municipalities that, in conjunction with SMDs, determine how concentrated black voters are, but the size of the city council as well. On the other hand, neither black-white segregation nor legislature size is associated with overcoming the representational hurdle in local school boards. This finding suggests that school districts may be inherently more dilutive than municipalities and helps explain why achieving any black representation is more onerous on boards than councils.

We also examined the hypothesis that smaller black voting blocs and AL electoral structures would force black candidates to attract cross-over voters. While we uncover some evidence that coalitions may make a marginal difference in overcoming the representational hurdle, specifically in municipalities with larger populations of educated whites, overall our findings paint a rather pessimistic picture regarding the efficacy of this strategy in the first stage of representation. Instead, our findings suggest that black legislative representation might be better served by continuing to enforce the probative elements of the Voting Rights Act because in the absence of SMDs, we may see retrogression in black representation as the Latino population continues to expand in size and geographical reach.

Examining representation as a two-stage process additionally allowed us to investigate jurisdictions that had made it over the initial hurdle and answer the previously unaddressed question of what moves jurisdictions past a single (token) black elected representative towards more substantial (in numbers) representation. Contrary to our expectations, we found that resources were not the key. Indeed, even the value of rainbow coalitions appears to be highly variable. For example, while Latino voters are positively related to black candidates' odds of success in school district races, no such benefits are evident in the case

of council elections. Most importantly, perhaps, we find that legislative size may be an underappreciated mechanism by which to increase representation, particularly in AL systems. Similar to others who have investigated this relationship with women (Trounstine and Valdini 2008, 560), we speculate that council or board size matters in these situations because people are less fearful of sharing when there is more to distribute.[21] In other words, voters may feel more comfortable with diversity in an AL election with a large number of open seats, especially when contrasted with the zero-sum proposition of an SMD.

In sum, our research has provided new answers to old questions while at the same time laying the groundwork for future scholarship on additional and previously unexplored aspects of minority representation in local legislatures. A critical next step for researchers in this area involves large-scale data collection on local elections, particularly of measures that capture competitiveness of local elections, voter participation, challenger race/ethnicity, and candidate quality. Ideally, this would be a collective enterprise and would lead to the creation of a comprehensive, public-use database for scholars and practitioners interested in not only race and representation in urban America, but local politics and elections as well.

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[21]We thank an anonymous reviewer for bringing this point to our attention.


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