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# DRAWING EFFECTIVE MINORITY DISTRICTS: A CONCEPTUAL FRAMEWORK AND SOME EMPIRICAL EVIDENCE 

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When applying the Voting Rights Act, courts and commentators alike have too often fixated on the distinction between "majority-minority" districts and "majority-white" districts, while paying relatively little attention to the likely electoral outcomes that any given districting plan will actually generate. In this Article, three political scientists provide a conceptual framework for predicting minority electoral success, taking into account the participation rates and voting patterns of minority and white voters, as well as incorporating the multi-stage election process (primaries plus general elections, and sometimes runoff elections). The Authors also analyze empirical election data to demonstrate how the model can be applied to address voting rights disputes.
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## INTRODUCTION

Labels can be misleading. In the last decade, federal and state judges applying the Voting Rights Act ${ }^{1}$ have analyzed election districts by using labels such as "majority-black," "majorityHispanic," and "majority-minority" in nearly three hundred cases. ${ }^{2}$ Those labels never appear in the Act itself, and some jurists and commentators have argued that they rest on a misreading of congressional intent. ${ }^{3}$ Perhaps the greatest problem with these labels is that they confuse more than they illuminate because their definitions are inconsistent from case to case. Absent swift guidance from the Supreme Court, this confusion could generate an enormous amount of needless litigation in the coming months, as states attempt to redraw district lines in response to the newly released data from the 2000 census.

Some courts and commentators have used labels such as "majority-black" quite literally, to refer to a simple arithmetic concept: If African Americans outnumber everyone else in a given district, or if African-American adults outnumber other adults, or if African-American adult citizens outnumber other adult citizens, then a district is "majority-black." At other times, the labels have been used in a functional sense, to refer to districts that are effectively controlled (or have at least a fifty-fifty chance of being effectively controlled) by African Americans or, to put it differently, where African-American voters have a realistic chance of electing their

[^1]preferred candidates. Each of these definitions overlaps to some significant degree, but many of the most difficult cases in voting rights jurisprudence arise precisely where it may be possible to draw a district that is "majority-black" under one definition, but not under another.

This Article will make a two-fold argument. First, the Voting Rights Act, properly interpreted, should focus on actual election outcomes, not on rigid demographic "cutoff lines" such as $50 \%$ black population. Second, a proper analysis of likely election outcomes depends on several factors: the relative rate at which minorities and whites participate in the electoral process, the degree to which minority and white voters support minority-preferred candidates, and the fact that, in the United States, we have a two-stage electoral process. The last point, in particular, has been neglected by political scientists, election law experts and the courts. Many public offices, however, including most congressional and state legislative seats, require a candidate first to win her party's nomination in the primary and then to prevail against the other parties' nominees in the general election. In fact, in some instances (as in many southern states), there is even an intermediate stage, a runoff election. ${ }^{4}$ This Article offers a conceptual framework that takes into account all stages of the election process in predicting minority electoral success or failure. The Article concludes by emphasizing the need for case-specific analyses to determine the percentage minority necessary to provide minority voters with an equal opportunity to elect their candidates of choice.

Part I of this Article describes how the Voting Rights Act may be interpreted functionally, to focus on the effectiveness of minority districts in actually electing minority candidates, rather than fixating on arbitrary demographic cutoffs. Part II reviews the political science literature on the link between a district's minority population percentage and its effectiveness in electing minority-preferred candidates. Finally, part III examines empirical data from congressional elections in the South, and from state legislative elections in South Carolina, to show how the framework can be

[^2]applied, and to demonstrate the need for case-specific analyses in determining the percent minority population needed to give minority candidates an equal opportunity to be elected to legislative office.

## I. The Voting Rights Act and Effective Minority Districts

Two sections of the Voting Rights Act deal most directly with redistricting. Section 2 of the Act applies nationwide, ${ }^{5}$ while section 5 applies only to certain "covered jurisdictions."6 Although the procedural requirements of each section are entirely different, this Article focuses on the substantive standards.

As originally enacted by Congress in 1965, both section 2 and section 5 echoed the words of the Fifteenth Amendment to the U.S. Constitution ${ }^{7}$ and prohibited the "den[ial] or abridg[ement of] the right to vote on account of race or color." ${ }^{8}$ Over time, federal courts held that the Act applied to redistricting, ${ }^{9}$ and Congress expanded it to protect members of language-minority groups as well as racial groups. ${ }^{10}$

In 1982, Congress amended section 2 of the Voting Rights Act ${ }^{11}$ and added language explaining that one's right to vote is illegally

[^3]abridged "if, based on the totality of circumstances, it is shown that... [members of a protected class of minority-group citizens] have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice. ${ }^{12}$ As the Senate report accompanying the 1982 amendments explained, Congress sought to eradicate voting practices that "minimize or cancel out the voting strength and political effectiveness of minority groups. ${ }^{113}$

As for section 5, the Supreme Court announced a "nonretrogression" standard: A new voting practice (such as a redistricting plan) must not have the purpose or the effect of "worsening" the position, or lessening the voting strength, of minority voters. ${ }^{14}$ Thus, a new redistricting plan under the Voting Rights Act-under either section 2 or section 5-must estimate the future voting strength of minority citizens under the new plan. Under section 5, that level of future voting strength is then compared with the level of minority voting strength under the previous plan, to see whether the new plan is "retrogressive." ${ }^{15}$ Under section 2, the level of future voting strength under the challenged plan is compared with some hypothetical "illustrative plan" presented by the plaintiffs, to see whether the new plan is "dilutive." In either inquiry, the key is estimating future minority voting strength.

As the plain text of section 2 makes clear, the central focus of a minority voting rights challenge to a redistricting plan is its effect on minority voters" opportunities "to elect representatives of their choice." ${ }^{" 16}$ Thus, under section 2, the central question when analyzing a new plan or a hypothetical alternative proposed by the plaintiffs is, how many representatives preferred by minority voters are likely to be elected under each competing plan, and with what degree of certainty. Defining which candidates should qualify as "minoritypreferred" is a question the courts are still grappling with, but for the purposes of this Article, we have assumed that minority voters cannot be said to have a truly equal opportunity to elect if only their favorite white candidates can be elected to office. ${ }^{17}$ Hence, we will refer

[^4]interchangeably to "minority candidates" and "minority-preferred candidates."

The essential task under section 5 is very similar to that under section 2: to quantify minority voters' opportunity to elect their preferred candidates under either of two competing plans. The main difference is that the new plan is compared not to the plaintiffs' hypothetical map, but rather to the status quo plan in effect at the last election. For simplicity's sake, we will focus then on section 2 for the remainder of this Article. We will also focus, for conceptual clarity, on biracial jurisdictions, where the vast majority of the population is either black or white, with few Latinos, Asians, Native Americans, or multiracial individuals.

The two leading cases interpreting section 2-the Supreme Court's 1986 decision in Thornburg $v$. Gingles, ${ }^{18}$ and its 1994 decision in Johnson v. DeGrandy ${ }^{19}$-contained language that has proven confusing to the lower courts. On the one hand, the decisions seemed to place dispositive weight on the number of districts that were literally "majority-minority," apparently on the assumption that only districts where blacks (or Hispanics) outnumber whites provided minority voters with the potential to elect their preferred candidates. ${ }^{20}$ On the other hand, while the evidence in Gingles clearly showed racial polarization, i.e., most blacks preferred black candidates while most whites preferred their opponents, the evidence also suggested that blacks did not necessarily have to be a majority in a given district in order to elect their preferred candidates. In her concurrence, Justice O'Connor expanded on this theme, noting that a minority group that could count on some white support did indeed have the potential to elect its preferred candidates, even if the district fell

[^5]somewhat shy of being literally "majority-minority." ${ }^{21}$
Furthermore, the Gingles Court's repeated admonition to federal judges to perform a "functional" analysis of minority vote dilution, ${ }^{22}$ and to use their "familiarity with the indigenous political reality" to conduct "an intensely local appraisal" of the likely impact of the challenged plan, suggested a rejection of simple formulae or rules of thumb. ${ }^{23}$

Eight years later, Justice Souter, writing for the seven-Justice majority in DeGrandy, reiterated the Gingles Court's admonition to perform a functional analysis and went out of his way to use the terminology of "effective" or "functional" voting majorities, rather than relying entirely upon strict demographic tallies. ${ }^{24}$

Although some courts have been attracted to the simplicity and clarity of a strict mathematical cutoff line, ${ }^{25}$ others have opted to focus on whether a minority group has an "effective" voting majority, meaning that the minority group members are actually capable of electing their preferred candidates over the opposition of most, though not necessarily all, of the white voters in the district. ${ }^{26}$ The U.S. Department of Justice, which Congress has charged with the responsibility of enforcing the Voting Rights Act, recently has taken the latter position, arguing strongly against the "flat $50 \%$ rule." ${ }^{27}$ Under the Justice Department's view, Voting Rights Act plaintiffs

[^6]can make out a claim of vote dilution by showing that the minority voters have the potential to elect a representative of their choice with the assistance of limited crossover voting from the white majority (or from other racial or language minorities)-regardless of whether members of the plaintiffs' minority group constitute an arithmetic majority in the proposed district. ${ }^{28}$

If the Justice Department's interpretation prevails in the courts, the ability to differentiate an "effective" minority district from an "ineffective" one will become central to every redistricting dispute under the Voting Rights Act. That the Supreme Court will not resolve this question before states have to redraw their congressional and state legislative district lines now appears nearly certain. ${ }^{29}$ Given the position taken by the Justice Department (as well as by a substantial number of courts), all participants in redistricting litigation will have to be prepared to debate the "effectiveness" of various proposed minority districts, with minority populations both above and below the $50 \%$ threshold. The remainder of this Article will address how best to do that.

## II. The Political Science Debate on Effective Minority DISTRICTS

Questions regarding the minority population percentage needed to provide minority voters with an equal opportunity to elect candidates of choice are not new-social scientists and the courts have been grappling with this issue for decades. In the South during the 1970s and 1980s, data presented by social science experts in trials challenging at-large electoral systems provided compelling evidence of racially polarized voting in numerous jurisdictions. ${ }^{30}$ Further,

[^7]because a higher proportion of blacks than whites were not of voting age, and because black levels of political participation were less than those of whites, instituting a remedy meant creating a single-member district with a black electoral majority with more than a bare $50 \%+$ black population percentage. These conditions led some civil-rights advocates to argue that, in the South, districts with $65 \%$ black population were needed before African-American candidates could win. ${ }^{31}$

This claim was challenged by various scholars, including two of the co-authors of this Article (Grofman and Handley), who suggested that a district-specific and election-specific sensitivity to black voting age population, registration, and turnout percentages relative to that of whites was appropriate. These scholars also claimed that, by and large, over the course of the 1980s, districts with a $50 \%$ or more black population base (both in the South and elsewhere) displayed a high probability of electing black candidates to office, ${ }^{32}$ subject to two provisos. First, black population percentages of even less than $50 \%$ might be adequate to elect black Democratic candidates if there was also a substantial Hispanic component to the district. Second, due primarily to lower citizen voting age eligibility rates among Hispanics, Hispanic population percentages well above $50 \%$ may be needed to provide Hispanic voters with an equal opportunity to elect candidates of choice. ${ }^{33}$

SOUTH, supra note 6, at 301-11.
31. See, e.g., Frank Parker, Black Votes Count: Political Empowerment IN MISSISSIPPI AFTER 1965, at 199-205 (1990).
32. In the last election prior to the 1990 round of redistricting, every majority black congressional district in the South (there were four such districts) elected an African American to office; conversely, only one non-majority black district in the South (out of a total of 112 non-majority black districts) elected an African American to office. See Bernard Grofman \& Lisa Handley, Voting Rights in the 1990s: An Overview, in RACE And Redistricting In The 1990s, at 69, 74-75 (Bernard Grofman ed., 1998) [hereinafter Race And Redistricting]; Lisa Handley et al., Electing Minority-Preferred Candidates to Legislative Office: The Relationship between Minority Percentages in Districts and the Election of Minority-Preferred Candidates, in RACE AND Redistricting, supra, at 13, 14-23; see also David Lublin, The Election of African Americans and Latinos to the U.S. House of Representatives, 1972-1994, 25 AM. PoL. Q. 269, 270 (1997) (arguing that race continues to play a role in congressional elections).
33. See Kimball Brace et al., Minority Voting Equality: The 65 Percent Rule in Theory and Practice, 10 Law \& Pol'Y 43, 47-48 (1988); Grofman \& Davidson, supra note 30, at 301, 319-321; Bernard Grofman \& Lisa Handley, Black Representation: Making Sense of Electoral Geography at Different Levels of Government, 14 Leg. STUD. Q., 265, 265-66 (1989); Bernard Grofman \& Lisa Handley, The Impact of the Voting Rights Act on Black Representation in Southern State Legislatures, 16 LEG. STUD. Q. 111, 112 (1991); Bernard Grofman \& Lisa Handley, Minority Population Proportion and Black and Hispanic Congressional Success in the 1970s and 1980s, 17 AM. POL. Q. 436, 443-44 (1989); Bernard

The issue of the minority population percentage needed to provide minority voters with an equal opportunity to elect candidates of choice was revisited using 1990s redistricting data by these and other authors. ${ }^{34}$ A number of authors posited that an increase in the willingness of whites to support black candidates in the 1990s made it possible for black candidates to win even in districts with black percentages well below $50 \%$, at least if black candidates did not confine themselves to narrowly tailored appeals to members of their own race, but pursued instead a "deracialized" strategy. ${ }^{35}$ While Swain's conclusions were challenged as being fatally flawed on methodological grounds, ${ }^{36}$ other scholars-most notably Charles Cameron, David Epstein and Sharyn O'Halloran, suggested that even black population percentages as low as $41 \%$ were likely to result in victorious black candidacies-continued to offer similar conclusions. ${ }^{37}$

Like Swain, however, Cameron, Epstein, and O'Halloran failed to take into account the composition of the non-black electorate of these districts. As Lublin argued, if a district has a combined black-plus-Hispanic majority, as long as there are more black voters than either Hispanic or non-Hispanic white voters in the Democratic primary, the high Democratic loyalties of (non-Cuban) Hispanics will enable the (almost certainly) black winner of the Democratic primary

Grofman \& Lisa Handley, Preconditions for Black and Hispanic Congressional Success, in United States Electoral Systems: Their Impact On Women And Minorities 31, 38-39 (Wilma Rule \& Joseph F. Zimmerman eds., 1992); Handley \& Grofman, supra note 6, at 343-44.
34. See David Lublin, The Paradox of Representation: Racial GERRYMANDERING AND MINORITY INTERESTS IN CONGRESS 39-48 (1997); CAROL M. Swain, Black Faces, Black Interests: The Representation of Black Americans in Congress 209 (1993); Charles S. Bullock, III \& Richard E. Dunn, The Demise of Racial Districting and the Future of Black Representation, 48 EMORY L.J. 1209, 1213-1253 (1999); Charles S. Bullock, III, Winners and Losers in the Latest Round of Redistricting, 44 EmORY L.J. 943, 950-960 (1995); Charles Cameron et al., Do MajorityMinority Districts Maximize Substantive Black Representation in Congress?, 90 AM. POL. SCI. REV. 794, 794-805 (1996); Handley et al., supra note 32, at 13; David Epstein \& Sharyn O'Halloran, A Social Science Approach to Race, Redistricting, and Representation, 93 AM. PoL. SCI. REV. 187-191 (1999); Bernard Grofman \& Lisa Handley, 1990s Issues in Voting Rights, 65 Miss. L.J. 205, 249-253 (1995); David Lublin, Racial Redistricting and African-American Representation: A Critique of "Do Majority-Minority Districts Maximize Substantive Black Representation in Congress?," 93 Am. POL. SCI. REV. 183-84 (1999) [hereinafter Lublin, Racial Redistricting]; Lublin, supra note 32, at 269-79.
35. See SWAIN, supra note 34, at 209.
36. See Chandler Davidson \& Bernard Grofman, Minority Representation in Congress, CHRON. HIGHER EDUC., Nov. 8, 1996, at B10; Grofman \& Handley, supra note 34, at 246-53; Randall Kennedy, Blacks in Congress: Carol Swain's Critique, in 2 RECONSTRUCTION 34 (1993).
37. See Cameron et al., supra note 34, at 804-05; Epstein \& O'Halloran, supra note 34, at 188.
to go on to win the general election. ${ }^{38}$ Failing to take Hispanic percentages into account will lead to regression estimates that understate the proportion of black population needed to provide black voters with an opportunity to elect black-preferred candidates in districts where the non-black voters are largely or entirely nonHispanic. ${ }^{39}$

The debates between Swain and Grofman/Handley and between Epstein/O'Halloran and Lublin still leave many issues unresolved. In particular, none of the works by the above authors offer a clear model of how to integrate the results of both primary and general elections into an assessment of the chances of success for black (or Hispanic) candidates. ${ }^{40}$ To understand U.S. elections, however, it is critical to view them as a two-stage process, in which a candidate must win both the primary election and the general election. Moreover, some factors which might militate against minority candidate success in a general election-such as an increase in the proportion of whites who identify (and vote) as Republicans-may actually make it more likely that a minority candidate wins the Democratic primary.

We propose a conceptual framework for determining the percentage minority needed to create an effective minority district that incorporates not only the rate at which minorities and whites participate in the electoral process and the degree to which minority and white voters support minority-preferred candidates, but the likely impact of the primary (and runoff) election on the ultimate electoral outcome. We do this in the context of examining congressional elections in majority black districts in the South and, for illustrative

[^8]purposes, state legislative districts in one southern state-South Carolina.

## III. An Analysis of Minority Districts in the South in the 1990s

## A. Black Congressional Districts in the South

A dramatic increase in the number of majority-minority districts during the 1990s round of redistricting led to more minority candidates being elected to legislative office in 1992 than ever before. Most striking, perhaps, was the threefold increase in the number of African-American congressional representatives in the South. Prior to the 1990 s round of redistricting, five African Americans were elected to Congress from the South; by 1992, seventeen African Americans represented the South in Congress. Four of the five black congressmen serving in Congress prior to the 1990s redistricting represented majority black districts: John Lewis from the Georgia 5th (Atlanta), William Jefferson from the Louisiana 2nd (New Orleans), Mike Espy from the Mississippi 2nd (Mississippi Delta region) and Harold Ford from the Tennessee 9th (Memphis). A fifth black representative, Craig Washington, was elected from a $39 \%$ black district (Texas 18th). ${ }^{41}$

A total of thirteen new majority black congressional districts were drawn during the 1990s round of redistricting. ${ }^{42}$ All of these districts, as well as the four majority black districts that carried over from the 1980s, elected an African American to Congress in 1992. Furthermore, every African American serving in Congress from the South was elected from one of these majority black districts. Table 1 lists the election results for all majority black congressional districts in the South. ${ }^{43}$

[^9]Table 1: Congressional Election Results in Majority Black Districts in the South, 1992-1998

| Congressional District | Year | \% Black <br> Total <br> Population | Open or Incumbent | \% Total Vote For Winner |  |  | Race of Winner |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Democratic Primary | Democratic <br> Runoff | General <br> Election |  |
| AL 7 (Hilliard) | 1992 | 67 | open seat | 31 | 50 | 70 | B |
| FL 3 (Brown) | 1992 | 55 | new seat | 43 | 64 | 59 | B |
| FL 17 (Meek) | 1992 | 59 | new seat | 83 | no runoff | unopposed | B |
| FL 23 (Hastings) | 1992 | 52 | new seat | 28 | 58 | 59 | B |
| GA 2 (Bishop) | 1992 | 57 | WI | 21 | 53 | 64 | B |
| GA 5 (Lewis) | 1992 | 62 | BI | 76 | no runoff | 72 | B |
| GA 11 (McKinney) | 1992 | 64 | new seat | 31 | 56 | 73 | B |
| LA 2 (Jefferson) | 1992 | 61 | BI | 73 | no runoff | no GE | B |
| LA 4 (Fields) | 1992 | 67 | new seat | 48 | 74 | no GE | B |
| MS 2 (Espy) | 1992 | 63 | BI | unopposed | no runoff | 76 | B |
| NC 1 (Clayton) | 1992 | 57 | new seat | 31 | 55 | 67 | B |
| NC 12 (Watt) | 1992 | 57 | new seat | 47 | no runoff | 70 | B |
| SC 6 (Clybum) | 1992 | 62 | open seat | 56 | no runoff | 65 | B |
| TN 9 (Ford, Sr.) | 1992 | 59 | BI | 65 | no runoff | 58 | B |
| TX 18 (Washington) | 1992 | 51 | BI | unopposed | no runoff | 65 | B |
| TX 30 (Johnson) | 1992 | 50 | new seat | 92 | no runoff | 72 | B |
| VA 3 (Scott) | 1992 | 64 | new seat | 67 | no runoff | 79 | B |
| MS 2 (Thompson)* | 1993 | 63 | open seat | 28 | 55 | no GE | B |
| AL 7 (Hilliard) | 1994 | 67 | BI | unopposed | no runoff | 77 | B |
| FL3 (Brown) | 1994 | 55 | BI | 67 | no runoff | 58 | B |
| FL 17 (Meek) | 1994 | 59 | BI | unopposed | no runoff | unopposed | B |
| FL 23 (Hastings) | 1994 | 52 | BI | unopposed | no runoff | unopposed | B |
| GA 2 (Bishop) | 1994 | 57 | BI | 67 | no runoff | 66 | B |
| GA 5 (Lewis) | 1994 | 62 | BI | unopposed | no runoff | 69 | B |
| GA 11 (McKinney) | 1994 | 64 | BI | unopposed | no runoff | 66 | B |
| LA 2 (Jefferson) | 1994 | 61 | BI | 75 | no runoff | no GE | B |
| LA 4 (Fields) | 1994 | 67 | BI | 70 | no runoff | no GE | B |
| MS 2 (Thompson) | 1994 | 63 | BI | unopposed | no runoff | 54 | B |
| NC 1 (Clayton) | 1994 | 57 | BI | unopposed | no runoff | 61 | B |
| NC 12 (Watt) | 1994 | 57 | BI | unopposed | no runoff | 66 | B |
| SC 6 (Clybum) | 1994 | 62 | BI | 86 | no runoff | 64 | B |
| TN 9 (Ford, Sr.) | 1994 | 59 | BI | 79 | no runoff | 58 | B |
| * Special Election to fill vacancy when Epsy was appointed to Cabinet |  |  |  |  |  |  |  |


| Congressional District | Year | \% Black <br> Total <br> Population | Open or Incumbent | \% Total Vote For Winner |  |  | Race Of Winner |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{\|c} \text { Democratic } \\ \text { Primary } \end{array}$ | Democratic <br> Runoff | General <br> Election |  |
| TX 18 (Lee)** | 1994 | 51 | BI | 63 | no runoff | 73 | B |
| TX 30 (Johnson) | 1994 | 50 | BI | unopposed | no runoff | 73 | B |
| VA 3 (Scott) | 1994 | 64 | BI | convention | no runoff | 79 | B |
| AL 7 (Hilliard) | 1996 | 67 | BI | unopposed | no runoff | 71 | B |
| FL 17 (Meek) | 1996 | 59 | BI | unopposed | no runoff | 89 | B |
| FL 23 (Hastings) | 1996 | 52 | BI | unopposed | no runoff | 73 | B |
| GA 5 (Lewis) | 1996 | 62 | BI | unopposed | no runoff | unopposed | B |
| LA 2 (Jefferson) | 1996 | 61 | BI | unopposed | no runoff | no GE | B |
| MS 2 (Thompson) | 1996 | 63 | BI | unopposed | no runoff | 60 | B |
| SC 6 (Clyburn) | 1996 | 62 | BI | 38 | no runoff | 69 | B |
| TN 9 (Ford, Jr.) | 1996 | 59 | BI | 60 | no runoff | 61 | B |
| VA 3 (Scott) | 1996 | 64 | BI | convention | no runoff | 82 | B |
| AL 7 (Hilliard) | 1998 | 67 | BI | unopposed | no runaff | unopposed | B |
| FL 17 (Meek) | 1998 | 59 | BI | unopposed | no runoff | unopposed | B |
| FL 23 (Hastings) | 1998 | 52 | BI | unopposed | no runoff | unopposed | B |
| GA 5 (Lewis) | 1998 | 62 | BI | unopposed | no runoff | 79 | B |
| LA 2 (Jefferson) | 1998 | 61 | BI | 86 | no runoff | no GE | B |
| MS 2 (Thompson) | 1998 | 63 | BI | unopposed | no runoff | 71 | B |
| SC 6 (Clyburn) | 1998 | 62 | BI | 83 | no runoff | 73 | B |
| TN 9 (Ford, Jr.) | 1998 | 59 | BI | unopposed | no runoff | 79 | B |
| VA 3 (Scott) | 1998 | 54 | BI | convention | no runoff | 76 | B |
| ** Black challenger, Sheila Jackson Lee, defeated black incumbent, Craig Washington, in Democratic primary |  |  |  |  |  |  |  |

The five black incumbents easily won re-election in 1992-most with more than $70 \%$ of the vote. Only three of the five incumbents had primary opposition, and none of the incumbents had to compete in a runoff. On the other hand, there were primaries in all of the newly created majority black districts with the exception of the Texas 18th, which had a black incumbent, Craig Washington, representing it in 1992. The Democratic primaries in seven of the newly created black districts (the Alabama 7th, the Florida 3rd and 23rd, the Georgia 2nd and 11th, the Louisiana 4th, and the North Carolina 1st) produced runoffs. In all seven of these districts, black candidates defeated their opponents in the runoff and then proceeded to win the general election as well-often with vote percentages well in excess of $60 \%$. In the other five newly created districts (the Florida 17th, North Carolina 12th, the South Carolina 6th, the Texas 30th and the Virginia 3rd), black candidates won the Democratic primary outright,
and then defeated their Republican challengers in the general election, again with a substantial percentage of the vote.

In only one of the thirteen newly created black districts listed in table 1 did a white incumbent seek re-election in 1992-all of the other districts were drawn with no incumbents in them, or with incumbents who had indicated (in most cases prior to redistricting) that they did not plan to run again in 1992. The one white incumbent who did run for re-election, Charles Hatcher in the Georgia 2nd congressional district, forced a runoff in the Democratic primary, but was subsequently defeated in that runoff by a black candidate. ${ }^{44}$

In 1994, all of these black incumbents, with the exception of Washington (Texas 18th), easily won re-election in their districts. A black challenger, Sheila Jackson Lee, defeated Washington in the Democratic primary; Lee then went on to win the general election. Only five of these seventeen black incumbents had primary opposition-Brown (Florida 3rd), Bishop (Georgia 2nd), Clyburn (South Carolina 6th), Ford, Sr. (Tennessee 9th) and Washington (Texas 18th). This pattern was repeated in 1996 and 1998 in the majority black districts; all the black incumbents running in majority black districts were re-elected in 1996 and 1998, most without any primary opposition.

A number of the majority-minority districts that elected African Americans to Congress in 1992 and 1994 were later dismantled when the U.S. Supreme Court held, in a series of cases beginning in 1993 with Shaw v. Reno, ${ }^{45}$ that districts drawn predominantly on the basis of race violated the Equal Protection Clause. In fact, over the course of the decade, courts ordered the redrawing of nine majority-black congressional districts in six southern states: Florida, Georgia, Louisiana, North Carolina, Texas, and Virginia. ${ }^{46}$

Majority black districts were redrawn in Florida, Georgia, Louisiana, and Texas for the 1996 elections and in North Carolina

[^10]and Virginia for the 1998 elections. ${ }^{47}$ The black population concentrations in eight of these districts fell below $50 \%$ black. ${ }^{48}$ Despite the substantial decrease in the number of black voters, African-American incumbents in all of these districts other than the Louisiana 4th sought re-election in the newly configured districts. Contrary to the expectations of many observers, all proved successful in their bids for re-election.

Table 2 lists the election results for seven of the eight districts that were redrawn as less than majority black as a result of successful court challenges-the Louisiana 4th is not included in the table because the black incumbent did not seek re-election, and no other black candidate ran in the redrawn district. Despite the decrease in black population, ${ }^{49}$ the black incumbents in all five of the other districts redrawn for the 1996 elections were re-elected. ${ }^{50}$ In the Florida 3rd, Brown was unopposed in the primary and won the general election with $61 \%$ of the vote-more than she had received in her two previous bids for office in the district. In Georgia, both Bishop and McKinney faced white candidates in their respective Democratic primaries, and both received a sufficient percentage of the vote to avoid a runoff. Bishop and McKinney both went on to win the general election against white Republicans-Bishop with $54 \%$ of the vote and McKinney with $58 \%$ of the vote. In Texas, both African Americans won re-election with over $50 \%$ of the vote in allparty primaries. ${ }^{51}$

[^11]| Table 2: Congressional Election Results in Redrawn Districts, 1996 \& 1998 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Prim |  | Gene |  |
| Congressional District | Year | $\begin{aligned} & \text { \% Black } \\ & \text { Pop } \end{aligned}$ | Or <br> Incumbent (Race) | \% Total Votes For Winner | Race Of <br> Winner | \% Total Votes For Black Cand. | Race Of Winner |
| FL 3 (Brown) | 1996 | 47 | BI | unopposed | B | 61 | B |
| GA 2 (Bishop) | 1996 | 39 | BI | 59 | B | 54 | B |
| GA 4 (McKinney) | 1996 | 37 | BI | 67 | B | 58 | B |
| NC 1 (Clayton) | 1996 | 57 | BI | unopposed | B | 66 | B |
| NC 12 (Watt) | 1996 | 62 | BI | unopposed | B | 71 | B |
| TX 18 (Lee)* | 1996 | 45 | BI | 77 | B | no GE | B |
| TX 30 (Johnson)* | 1996 | 45 | BI | 55 | B | no GE | B |
| FL 3 (Brown) | 1998 | 47 | BI | unopposed | B | 55 | B |
| GA 2 (Bishop) | 1998 | 39 | BI | unopposed | B | 57 | B |
| GA 4 (McKinney) | 1998 | 37 | BI | unopposed | B | 61 | B |
| NC 1 (Clayton) | 1998 | 50 | BI | 67 | B | 62 | B |
| NC 12 (Watt) | 1998 | 36 | BI | 84 | B | 56 | B |
| TX 18 (Lee) | 1998 | 45 | BI | unopposed | B | 90 | B |
| TX 30 (Johnson) | 1998 | 45 | BI | unopposed | B | 72 | B |
| * All-party primary in Texas in 1996 |  |  |  |  |  |  |  |

When the two majority black districts in North Carolina were redrawn for the 1998 elections, the North Carolina 1st went from $57 \%$ to $50 \%$ black and the North Carolina 12th went from $62 \%$ to $36 \%$ black. Both black incumbents faced Democratic primary opposition, and won handily. Moreover, both also won the general election against white Republicans-Clayton with $62 \%$ of the vote and Watt with $56 \%$ of the vote. ${ }^{52}$

1341, 1341 (S.D. Tex. 1996). Because both incumbents received over $50 \%$ of the vote, no runoff (or general election) was required.
52. In 1998, despite a district with substantially fewer black voters (the black percentage in the Virginia 3rd fell from $64 \%$ to $54 \%$ black when it was redrawn as a result of a court challenge), Scott again won the general election with ease-this time with $76 \%$ of the vote (compared to $79 \%$ of the vote in 1994 and $82 \%$ in 1996). MICHAEL BARONE \& GRANT UJIFUSA, ALMANAC OF AMERICAN POLITICS 1451 (1998) (providing the preredrawing statistics for Virginia 3rd); Michael barone \& Grant Ujifusa, Almanac OF AMERICAN POLITICS 1644 (2000) (providing the post-redrawing statistics for Virginia 3rd). Black incumbents also won re-election (without primary opposition) in the five districts redrawn in 1996 -Brown with $55 \%$ of the vote in the Florida 3rd; Bishop with $57 \%$ of the vote in the Georgia 2nd and McKinney with $61 \%$ of the vote in the Georgia 4 th; and Lee with $90 \%$ of the vote in Texas 18th and Johnson with $72 \%$ of the vote in the Texas 30th. Id. at $1644,400,465,1561,470,1592$ (providing the statistics presented in order by page number).

Why did these black incumbents continue to win despite having to run from districts that were no longer majority black? Did the level of racially polarized voting decrease over the course of the decade-that is, were whites more likely to vote for black candidates in 1996 and 1998 than they were in 1992 or 1994? Or was it because, as suggested by Representative McKinney herself, ${ }^{53}$ these AfricanAmerican candidates had the benefit of being the incumbents in these districts? In fact, little evidence supports either of these contentions.

Studies of several of these congressional contests by a number of different researchers have yielded similar conclusions: voting in these congressional contests was racially polarized and the levels of racial bloc voting did not decrease over the course of the decade. ${ }^{54}$ Using estimates produced by Professor Charles Bullock and Richard Dunn, we examined voting patterns in these congressional elections. ${ }^{55}$

As is evident in table 3-which simply summarizes estimates derived by Bullock and Dunn of the percentage of black and white voters casting ballots for the black candidate ${ }^{56}$-a clear pattern of

[^12]racial bloc voting exists in these elections. Almost all black voters cast a ballot for the African-American candidate, while only about a third of the white voters voted for the African-American candidate. This pattern appears stable over the course of the decade-the average percentage of white voters casting their vote for black candidates in the general election only varied one percentage point (between 34.1 and 35.1) between 1992 and $1998 .{ }^{57}$ Also, the proportion of whites estimated to be voting for black candidates in the Democratic primary was about the same as the proportion of whites voting for the black Democrat in the general election. ${ }^{58}$

The estimated percentage of the white vote received by each of the black candidates individually varied, but it was very unusual for a black candidate to receive majority support from whites. The only black congressional candidate in our data-set to receive a majority of the white vote appeared to be Scott (3rd congressional district in Virginia), in 1992 and possibly 1994. ${ }^{59}$ White voters in the South Carolina 6th appeared most reluctant to vote for the black incumbent, Clyburn, although his support among white voters gradually increased over the course of the decade. Clyburn, however, appears to be the only black candidate who clearly benefited from his incumbency status among white voters. Brown and Watt show sporadic increases in white support, but Clayton and McKinney appear to have actually
57. This finding is supported by others-mostly news reporters-writing on the subject. Reporters appear to have based their conclusions primarily on two sources: homogeneous precinct analysis estimates reported by the Associated Press and ecological regression estimates produced by David Bositis, a senior political analyst at the Joint Center for Political and Economic Studies. See, e.g., Baxter, supra note 54; Fletcher, supra note 54; Helton, supra note 54; Voss \& Lublin, supra note 54 (reaching similar conclusions regarding voting patterns in the Georgia congressional contests using ecological inference to derive their estimates).
58. The fact that the same percentage of whites vote for the black candidate in the Democratic primary as in the general election is somewhat counter-intuitive, at least if a large proportion of whites are Republican. For instance, if only $20 \%$ of the white voters are Democrats, then we would expect, at most, $20 \%$ of the white vote to be cast for the black Democrat in the general election. Equal white crossover percentages in both the primary and the general election make sense if, say, one-third of the white voters are Democrats-and all of these white voters are willing to vote for the black Democrat rather than cross party lines to vote for a white Republican but only one-third of these voters were willing to vote for a black candidate in the Democratic primary. Similarly, for white crossover rates in the primary and the general election to be equal, for example, if more than one-third of the white voters are Democrats, some white voters must be crossing party lines in the general election rather than voting for a black Democratic candidate.
59. We do not know if Scott continued to enjoy this level of support among white voters throughout the decade, (ie., no estimates of white and black votes for Scott are reported for 1996 or 1998 by Bullock \& Dunn, supra note 34) but his high vote totals in 1996 and 1998 suggest that he did.
lost white support since their first election in 1992. The conclusion that some of these African-American incumbents did not reap the usual benefits of being incumbents is reached by Bullock and Dunn, ${ }^{60}$ as well as by Voss and Lublin. ${ }^{61}$

| Table 3: Voting Patterns by Race in Selected 1992 Majority Black Congressional Districts, 1992-1998* |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Congressional District | Year | Democratic Primary |  |  | Democratic Rusoff |  |  | General Election |  |  |
|  |  | \% Black Votes For Blk Cands* (Cohesion) | \% White Votes For Blk Cands* (Crossover) | Race Of Cands | \% Black Votes For Blk Cands* (Cohesion) | \% White Votes For Blk Cands* (Crossover) | Race Ot Cands | \% Black Votes For Blk Cands* (Cohesion) | \% White Votes For Blk Cands* (Crossover) | Race Of Cands |
| FL 3 (Brown) | 1992 | 93.5 | 34.4 | 3B/IW | 92 | 15.8 | BW | 97.1 | 25.6 | BW |
| GA 2 (Bishop) | 1992 | 84.4 | 31.2 | 4B/2W | 79 | 25.5 | B/W | 98.3 | 32.4 | BW |
| GA 11 (McKinney) | 1992 | 89.7 | 60.4 | 4B/1W | 90.8 | 26.5 | B/W | 96.7 | 36.0 | B/W |
| NC. 1 (Clayton) | 1992 | 89.7 | 7.1 | 4B/3W | 94.9 | 2.2 | B/W | 96.6 | 34.3 | 2B/1w |
| SC 6 (Clybum) | 1992 | M | M | M |  | Nornoff |  | 97.7 | 24.2 | B/W |
| VA 3 (Scoti) | 1992 | M | M | M |  | Noruanf |  | 97.2 | 55.4 | B/W |
| GA 2 (Bishop) | 1994 | M | M | M |  | Norunoff |  | 96.7 | 404 | B/W |
| GA 11 (McKinney) | 1994 |  | no primary |  |  | No runff |  | 96.4 | 29.3 | B/W |
| NC 1 (Claston) | 1994 |  | no primary |  |  | Normoff |  | 97.1 | 30.6 | B/W |
| NC 12 (Watu) | 1994 |  | no primary |  |  | No runoff |  | 98.7 | 32.9 | B/w |
| SC 6 (Clybum) | 1994 | M | M | 28 |  | Norunoff |  | 97.3 | 27.7 | BW |
| VA 3 (Scolt) | 1994 |  | noprimary |  |  | No runoff |  | 98.9 | 49.6 | BW |
| FL 3 (Brown) | 1996 |  | no primary |  |  | No runoff |  | 98.2 | 36.9 | B/W |
| GA 2 (Bishop) | 1996 | M | M | M |  | No ramoff |  | 98.4 | 37.2 | B/W |
| GA 4 (McKinney) | 1996 | 93.3 | 24.6 | IB/3W |  | No runoff |  | 98.1 | 31.2 | B/W |
| NC 1 (Clayton) | 1996 |  | no primary |  |  | Norunff |  | 98.9 | 30.3 | BW |
| NC 12 (Watt) | 1996 |  | no primary |  |  | Norunoff |  | 99.1 | 37.1 | B/W |
| SC 6 (Clybum) | 1996 | M | M | 28 |  | Norunoff |  | 97.3 | 31.9 | B/W |
| GA 2 (Bishop) | 1998 |  | no primary |  |  | Norunoff |  | 97.9 | 39.5 | B/W |
| GA 4 (McKinney) | 1998 |  | no primary |  |  | Normiof |  | 95.1 | 36.0 | 2B |
| NC 1 (Clayton) | 1998 | M | M | M |  | No rumoft |  | 98.3 | 30.2 | B/W |
| NC 12 (Wan) | 1998 | M | M | M |  | No rumofi |  | 98.9 | 340 | B/W |
| SC 6 (Cly bum) | 1998 | M | M | 2 B |  | Norunoff |  | 98.9 | 33.3 | B/W |
| * Estimates of racial block voting taken from Bullock \& Dumn (1999); estimates of $\%$ white and black vole for black candidates, the $\mathfrak{F}$ of white \& black soting for any of the black candidates; M-missing data |  |  |  |  |  |  |  |  |  |  |

60. Bullock and Dunn conclude that "the white vote share increased with the tenure of some black members, but in other cases white support fell." Bullock \& Dunn, supra note 34, at 1235.
61. McKinney actually garnered more support from whites who were new to her district (whites that were not in the old 11th District), than from whites she had previously served: McKinney "won $30.5 \%$ of the white vote in the new precincts . . . compared to $28.9 \%$ in her old ones." Voss \& Lublin, supra note 54, at 21.

The level of district support for these black Democratic incumbents was on par with the support given to incumbent Democratic President Bill Clinton-in most of these districts, in fact, the black congressional candidate actually received a higher percentage of the votes cast in the 1996 general election than did Clinton. ${ }^{62}$ Can we assume from this statistic that black Democratic candidates are likely to receive as high a percentage of the white vote as white Democratic candidates? No. Bullock and Dunn conclude that the answer is "No." On the basis of two separate analyses, they found that white Democrats running for Congress had a "roughly ten point advantage" in attracting white votes in general elections than a comparable black Democrat. ${ }^{63}$

Despite an unmistakable pattern of racially polarized voting and little evidence of an incumbency advantage for these black candidates, these African-American incumbents continued to win election to Congress even after their districts were no longer majority black. If they did not succeed because whites had become more willing to vote for them-either because they were simply more willing to vote for black candidates in general, or because these black candidates were incumbents-how is it they have continued to win? The simple answer is that these black candidates probably did not need super-majority black districts to win in the first place, at least so long as they ran in districts without a white incumbent. ${ }^{64}$

## B. Factors that Affect the Opportunity to Elect Minority-Preferred Candidates: Data from the U.S. House of Representatives

The likelihood of electing a minority-preferred candidate to office depends on several factors: the relative rate at which minorities

[^13]and whites participate in the electoral process, the degree to which minority and white voters support minority-preferred candidates, and the fact that the United States has a multi-stage electoral process that includes a primary election, a general election, and sometimes a runoff election as well. In order to determine the percentage minority necessary to provide minorities with an equal opportunity to elect minority candidates, all of these factors must be considered. Our conceptual framework incorporates each of these factors: We begin by calculating the percentage black needed to equalize turnout for minority and white voters; we then incorporate cohesion and crossover voting into the model, and finally we take into account the multi-stage election process (by incorporating primaries, runoffs and general elections into the model).

While we can estimate participation rates and cohesion and crossover levels from previous elections, a number of factors not taken into account by this framework can also affect the ability of blacks to elect minority-preferred candidates. This requires us to be sensitive to context. Perhaps the most important of these factors is the presence of a white incumbent in the district. Other factors include the availability of experienced minority candidates and campaign organizers and minority access to campaign funding. Other potential complications with calculating the percentage black required to provide black voters with an opportunity to elect include the presence of military bases, universities, and colleges-because military personnel and students are often registered to vote elsewhere-as well as prisons in the district. ${ }^{65}$

## 1. Equalizing Black and White Turnout

Blacks usually require more than a simple majority in a district if they are to comprise $50 \%$ of the voters on election day. Several reasons explain this fact: (1) the voting age population is typically a lower proportion of the total population among blacks than whites, (2) registration rates are often lower for blacks than whites, and (3) turnout rates are often lower for blacks than whites. ${ }^{66}$ Thus, even if blacks constitute $50 \%$ of the overall population in a district, they often do not make up $50 \%$ of the voters casting ballots on election

[^14]day. ${ }^{67}$
If black and white participation rates are known, calculating the percent black population needed in a district to equalize black and white turnout is a simple matter. ${ }^{68}$ We rarely have this data, however, and must usually estimate levels of black and white participation. ${ }^{69}$

[^15]We want to find out what value of $M$ is needed for (1) and (2) to be equal. Algebraically, we set them equal and solve for $M$ :

$$
\begin{aligned}
& M(A)=(1-M) B \\
& M(A)=B-M(B) \\
& M(A)+M(B)=B \\
& M(A+B)=B \\
& M=B /(A+B)
\end{aligned}
$$

Thus, for example, if $57.8 \%$ of the black population turned out and $68.6 \%$ of the white population turned out,
$M=0.686 /(0.686+0.578)=0.5427$
Or $54.3 \%$--thus, if $54.3 \%$ of the population in the district is black, blacks will make up $50 \%$ of the turnout on election day. See Brace et al., supra note 33, at 48.
69. Very few states collect this data (only a handful of southern states collect registration data by race, and only South Carolina collect turnout by race), therefore it is usually necessary to produce estimates of registration and turnout by race. This procedure begins with the creation of a precinct level database containing both voting age population by race (or registration by race, if available) and election returns (including total registration and total turnout). Precinct election returns can usually be obtained from the county election commission (or sometimes from the Secretary of State's office). Precinct demographic data (voting age population by race), however, has traditionally been much harder to obtain (although this will change with the release of the Census Bureau's P.L. 94-171 redistricting data for the 2000 round of redistricting) because the Census Bureau reports racial data at the census block level-and not at the precinct level. Maps depicting precinct boundaries must be compared with census maps to compile a list of the census blocks that compose each precinct. Once this list is complete, it is possible to aggregate these census blocks up to the precinct level and compute voting age population figures by race for each precinct. And once the voting age population by race for each precinct has

For the congressional races we are interested in examining, we will make use of the estimates of the percentage of black and white registered voters who turned out to vote calculated by Bullock and Dunn. ${ }^{70}$ Utilizing these estimates, we calculated the percent black registered voters needed to equalize black and white turnout in each of the districts. These estimates are listed in table 4.

Table 4: Percent Black Registration Needed to Equalize Black \& White Turnout: Southern Congressional Districts, General Elections, 1992-1998

| Congressional <br> District | Year | \% Black <br> Participation | \% White <br> Participation | \% Black <br> Needed To <br> Equalize <br> Turnout |
| :--- | :---: | :---: | :---: | :---: |
| FL 3 (Brown) | 1992 | 57.8 | 68.6 | 54.3 |
| GA 2 (Bishop) | 1992 | 55.9 | 62.6 | 52.8 |
| GA 11 (McKinney) | 1992 | 60.3 | 57.8 | 48.9 |
| SC 6 (Clyburn) | 1992 | 63.2 | 78.3 | 55.3 |
| GA 2 (Bishop) | 1994 | 38.7 | 47.3 | 55.0 |
| GA 11 (McKinney) | 1994 | 39.0 | 49.1 | 55.7 |
| NC 1 (Clayton) | 1994 | 36.0 | 44.8 | 55.4 |
| NC 12 (Watt) | 1994 | 32.0 | 38.4 | 54.5 |
| SC 6 (Clyburn) | 1994 | 48.4 | 64.6 | 57.2 |
| FL 3 (Brown) | 1996 | 49.4 | 59.1 | 54.5 |
| GA 2 (Bishop) | 1996 | 42.3 | 58.3 | 58.0 |
| GA 4 (McKinney) | 1996 | 58.3 | 66.4 | 53.2 |
| NC 1 (Clayton) | 1996 | 45.4 | 56.2 | 55.3 |
| NC 12 (Watt) | 1996 | 49.0 | 55.3 | 53.0 |
| SC 6 (Clyburn) | 1996 | 54.3 | 63.7 | 54.0 |
| GA 2 (Bishop) | 1998 | 37.8 | 42.9 | 53.2 |
| GA 4 (McKinney) | 1998 | 45.6 | 50.5 | 52.5 |
| NC 1 (Clayton) | 1998 | 38.1 | 41.6 | 52.2 |
| NC 12 (Watt) | 1998 | 35.7 | 42.4 | 54.3 |
| SC 6 (Clyburn) | 1998 | 46.4 | 51.2 | 52.5 |

In almost all the districts listed, whites turned out at higher rates than blacks in the general elections examined, hence the percent

[^16]black needed to equalize black and white turnout is greater than $50 \%$ in most of these districts. The only exception to this rule was the 1992 general election for the 11th Congressional District in Georgiawhere over $60 \%$ of the blacks registered to vote cast a ballot compared to a little less than $58 \%$ of the whites. As a result, the equalization percent for this particular contest is slightly less than 50\% (48.9\%).

## 2. Incorporating Cohesion and Crossover Voting into the Model

The phrase "effective voting equality" has been used in the past to mean the percentage black population needed to yield an expected equality of black and white turnout on election day. ${ }^{71}$ Equalizing black and white turnout, however, is not the best indicator of whether minority voters will have an equal opportunity to elect minority candidates. We also need to incorporate the level of minority cohesion and the degree of white crossover voting that can be expected when a minority-preferred candidate competes for office. If, for example, white voters regularly cross over to vote for black candidates, the percentage black necessary to create an effective black district decreases.

Table 5 lists our calculations of the percent black registered voters needed for a black candidate to have an equal opportunity to win (that is, receive $50 \%$ of the vote) in the general election in each of the districts based on the Bullock and Dunn estimates of black and white participation rates and black and white votes for AfricanAmerican candidates in that district. ${ }^{72}$ The estimates of percent black necessary for black-preferred candidates to win the general election, given the levels of black and white participation and given the degree of black cohesion and white crossover for black candidates, is less

[^17]than $50 \%$ in every instance, and in most cases is in the range of $33 \%$ $39 \%$ black. ${ }^{73}$ This is because, even though blacks are typically turning out to vote at lower rates than whites, blacks are voting very cohesively-over $95 \%$ of the black voters consistently voted for the black Democrat in a general election-and approximately one-third of the white voters supported the black Democrat in the general election.

| Table 5: Percent Black Needed for Black Candidate to Win, Incorporating |
| :---: |
| Cohesion \& Crossover: Selected Southern Congressional Districts with a |
| Black Candidate, General Elections, 1992-1998* |


| Congressional <br> District | Year | \% Black <br> Participation | \% White <br> Participation | \% Black <br> Votes For <br> Black Cand <br> (Cohesion) | \% White <br> Votes For <br> Black Cand <br> (Crossover) | \% Black <br> Needed <br> Given Both <br>  <br> Crossover |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| FL3 (Brown) | 1992 | 57.8 | 68.6 | 97.1 | 25.6 | 41.7 |
| GA 2 (Bishop) | 1992 | 55.9 | 62.6 | 98.3 | 32.4 | 36.5 |
| GA 11 (McKinney) | 1992 | 60.3 | 57.8 | 96.7 | 36.0 | 33.0 |
| SC 6 (Clyburn) | 1992 | 63.2 | 78.3 | 97.7 | 24.2 | 43.0 |
| GA 2 (Bishop) | 1994 | 38.7 | 47.3 | 96.7 | 40.4 | 34.3 |
| GA 11 (McKinney) | 1994 | 39.0 | 49.1 | 96.4 | 29.3 | 41.0 |
| NC 1 (Clayton) | 1994 | 36.0 | 44.8 | 97.1 | 30.6 | 39.8 |
| NC 12 (Watt) | 1994 | 32.0 | 38.4 | 98.7 | 32.9 | 37.2 |
| SC 6 (Clyburn) | 1994 | 48.4 | 64.6 | 97.3 | 27.7 | 42.5 |
| FL 3 (Brown) | 1996 | 49.4 | 59.1 | 98.2 | 36.9 | 35.2 |
| GA 2 (Bishop) | 1996 | 42.3 | 58.3 | 98.4 | 37.2 | 37.1 |
| GA 4 (McKinney) | 1996 | 58.3 | 66.4 | 98.1 | 31.2 | 37.5 |
| NC 1 (Clayton) | 1996 | 45.4 | 56.2 | 98.9 | 30.3 | 39.0 |
| NC 12 (Watt) | 1996 | 49.0 | 55.3 | 99.1 | 37.1 | 33.8 |
| SC 6 (Clyburn) | 1996 | 54.3 | 63.7 | 97.3 | 31.9 | 38.0 |
| GA 2 (Bishop) | 1998 | 37.8 | 42.9 | 97.9 | 39.5 | 33.1 |
| GA 4 (McKinney) | 1998 | 45.6 | 50.5 | 95.1 | 36.0 | 36.0 |
| NC 1 (Clayton) | 1998 | 38.1 | 41.6 | 98.3 | 30.2 | 37.2 |
| NC 12 (Watt) | 1998 | 35.7 | 42.4 | 98.9 | 34.0 | 36.3 |
| SC 6 (Clyburn) | 1998 | 46.4 | 51.2 | 98.9 | 33.3 | 35.5 |
| * Participation racial bloc voting estimates derived from Bullock \& Dunn |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

73. An examination of table 5 indicates that McKinney got $58 \%$ of the vote in 1996 in a district that is $36.6 \%$ black in total population, despite a percent needed to win prediction of $37.5 \%$ black registration. The reason for this is that in the Georgia 4th blacks are registered at a higher rate than whites and this district is actually $42.2 \%$ black in total registration. See Bullock \& Dunn, supra note 34, at 1215. (Presumably a similar explanation holds for the North Carolina 12th, in which Watt received $56 \%$ of the vote in 1998 in a district that is $35.6 \%$ black, despite a percent needed to win prediction of $36.3 \%$ black registration-but we do not have the registration data necessary to confirm this.).

In the 1990s in the southern congressional districts examined here, the cohesive black support offered to black candidates and the consistent white crossover vote of about $33 \%$ for these candidates appears to have been sufficient to provide black voters with an opportunity to elect minority candidates to office from districts that were less than majority black. We must be careful, however, in what conclusions we draw from the above analyses because we have only been looking at the percent needed to win a general election.
3. Incorporating the Primary and Runoff Elections into the Model

In the United States, a candidate often must compete in and win a primary election-and sometimes a runoff election as well-before she can proceed to the general election. Our calculation of the percent black needed to create an effective minority district should not ignore this multi-stage election process.

This Article offers a simple formal model of the multi-stage election process. Using this model, we show that the growing Republicanism of white voters in the South has a double-edged effect on the likelihood of black electoral success: for a given black population proportion in the district, ceteris paribus, as the Republican share among white voters goes up, black candidates are more likely to win the primary, but less likely to win the general election. In this model, the overall probability of black electoral success is the product of these two probabilities. We outline this model in the Appendix. Below we apply this model to those primary and runoff elections for which Bullock and Dunn provide estimates of voting patterns by race.

Table 6 displays the percent black population needed to win the Democratic primary and the Democratic runoff, again based on estimates of black and white voting behavior reported by Bullock and Dunn.

Table 6 lists far fewer elections for two reasons. First, in many instances black incumbents did not face a primary challenge or, with the exception of 1992, a runoff election. Second, Bullock and Dunn did not report estimates on black and white participation and voting patterns in a number of instances when the black incumbent had an opponent in the Democratic primary. As table 6 demonstrates, the percent black needed to win the Democratic primary is usually considerably lower than the percent needed to win the runoff or the
general election ${ }^{74}$-and sometimes the highest percentage is in the runoff, sometimes in the general election. Both Bishop and McKinney, for example, needed a higher percentage black to win the Democratic runoff than to win the general election in their districts in 1992.

| Table 6: Percent Black Needed for Black Candidate to Win, Incorporating Cohesion \& Crossover: Selected Southern Congressional Primary, Runoff \& General Elections with Black Candidates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Congressional District | Year | \% Black Participation | \% White Participation | \% Black Needed To Equalize Turnout | \% Black <br> Votes for Black Candidate* (Cohesion) | \% White Votes For Black Candidate* (Crossover) | \% Black Needed Given Both Cohesion \& Crossoyer |
| DEMOCRATIC PRIMARY |  |  |  |  |  |  |  |
| FL 3 (Brown) | 1992 Primary | 28.7 | 21.6 | 42.9 | 93.5 | 34.4 | 31.9 |
| GA 2 (Bishop) | 1992 Primary | 39.8 | 44.4 | 52.7 | 84.4 | 31.2 | 43.7 |
| $\begin{array}{\|l\|} \hline \text { GA } 11 \\ \text { (McKinney) } \\ \hline \end{array}$ | 1992 Primary | 27.3 | 38.2 | 58.3 | 89.7 | 60.4 | 27.4 |
| $\begin{aligned} & \text { GA4 } \\ & \text { (McKinney) } \\ & \hline \end{aligned}$ | 1996 Primary | 30.5 | 12.8 | 29.6 | 93.3 | 24.6 | 27.0 |
| DEMOCRATIC RUNOFF |  |  |  |  |  |  |  |
| FL. 3 (Brown) | 1992 Runoff | 24.0 | 14.5 | 37.7 | 92.0 | 15.8 | 36.7 |
| GA 2 (Bishop) | 1992 Runoff | 35.3 | 30.3 | 46.2 | 79.0 | 25.5 | 45.7 |
| $\begin{array}{\|l} \hline \text { GA } 11 \\ \text { (McKinney) } \\ \hline \end{array}$ | 1992 Runoff | 20.9 | 34.6 | 62.3 | 90.8 | 26.5 | 49.3 |
| GENERAL ELECTION |  |  |  |  |  |  |  |
| Fl. 3 (Brown) | 1992 General | 57.8 | 68.6 | 54.3 | 97.1 | 25.6 | 41.7 |
| GA 2 (Bishop) | 1992 General | 55.9 | 62.6 | 52.8 | 98.3 | 32.4 | 36.5 |
| $\begin{aligned} & \text { GA 11 } \\ & \text { (McKinney) } \end{aligned}$ | 1992 General | 60.3 | 57.8 | 48.9 | 96.7 | 36.0 | 33.0 |
| $\begin{aligned} & \text { GA 4 } \\ & \text { (McKinney) } \\ & \hline \end{aligned}$ | 1996 General | 58.3 | 66.4 | 53.2 | 98.1 | 31.2 | 37.5 |
| * The estimates of $\%$ white \& black votes for black candidates is the $\%$ of whites \& blacks voting for any of the black candidates, not simply the sinning black candidate. |  |  |  |  |  |  |  |

The highest of the three percentages necessarily interests us most because it is the percentage needed for the black-preferred candidate to win all three elections-the Democratic primary, the Democratic runoff and the general election-and attain a seat in the legislature. The fact that the highest percentage black needed to win is not always found in the general election illustrates the importance of examining

[^18]all stages of the election process, and not simply relying on an analysis of the general election.

Before we conclude that black Democratic candidates can win in congressional districts that are not majority black, several cautionary notes must be added. First, black candidates may not have been persuaded to compete for congressional office in the South if majority black districts had not been created-and black candidates cannot win if they cannot be convinced to run. Second, black voters may not have turned out to vote in such high numbers if they did not think black-preferred candidates had a chance to win. Third, a district that was less than majority black may have attracted more experienced and well-funded white candidates, and that in turn could lower the level of white crossover voting and result in the defeat of black candidates. Fourth, white incumbents can play a major role in retarding the prospects for black electoral success. Only one of the congressional contests examined included a white incumbent; if white incumbents had run in more of these districts, the black electoral success rate almost certainly would have been much lower. For example, in the Georgia 10th, which is $38 \%$ black, a black Democratic candidate was easily defeated by the white Republican incumbent in the 1998 general election. Finally, and perhaps most importantly, we must not over-generalize from the congressional data to other offices. As the data from state legislative districts in South Carolina demonstrate, sometimes legislative districts well in excess of $50 \%$ black are necessary to provide black voters with an equal opportunity to elect black candidates to office-a district-specific analysis is essential to make this determination.

## C. Factors that Affect the Opportunity to Elect Minority-Preferred Candidates: Data from South Carolina State Legislative Elections

Our examination of the outcome of elections in black majority districts for the South Carolina House of Representatives during the 1990s reinforces the importance of a jurisdiction-specific analysis of the factors that affect the opportunity to elect minority-preferred candidates to office. Table 7 lists the election results for all majority black state house districts in South Carolina for the 1992, 1994, 1996 and 1998 elections. ${ }^{75}$
75. Table 7 does not include results from special elections, including the round of special elections held in 1997 due to court-ordered redistricting.

Table 7: State House Election Results in Majority Black Districts in South Carolina, 1992-1998

| District | Year | $\left\lvert\, \begin{gathered} \text { \% Black } \\ \text { Total } \\ \text { Pop } \end{gathered}\right.$ | $\left\lvert\, \begin{gathered} \text { Open Or } \\ \text { Incumbent } \end{gathered}\right.$ | Race Of Incumbent | Primary |  | Rumoff |  | General |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | \% Total Votes For Winner | Race of Vinner | \% Tous <br> Votes For <br> Winner | Race of Winner | So Total Votes For Winner | Race or Winmer |
| 23 | 1992 | 63 | 0 |  | unopposed | B | norunoff | B | unopposed | B |
| 25 | 1992 | 58 | 1 | W | 68 | B | norunoff | B | ucopposed | B |
| 31 | 1992 | 68 | 1 | B | unopposed | B | norunoff | B | uropposed | B |
| 41 | 1992 | 56 | I | w | 70 | W | norumoff | w | 66 | w |
| 49 | 1992 | 57 | 0 |  | 51 | B | norunoff | B | unopposed | B |
| 50 | 1992 | 60 | I | W | 59 | w | norunsff | w | unopposed | W |
| 51 | 1992 | 65 | 0 |  | unopposed | B | norunsf | B | unopposed | B |
| 57 | 1992 | 58 | 1 | W | unopposed | W | norunoff | W | unopposed | W |
| 59 | 1992 | 57 | I | W | unopposed | w | norum 5 ff | w | unopposed | W |
| 62 | 1992 | 63 | 0 |  | 55 | B | norungf | B | 69 | B |
| 64 | 1992 | 56 | I | w | unopposed | w | norumoff | W | uoopposed | W |
| 66 | 1992 | 65 | 0 |  | unopposed | B | norumoff | B | unopposed | B |
| 70 | 1992 | 61 | 0 |  | 52 | B | norumoff | B | unopposed | B |
| 73 | 1992 | 71 | I | B | unopposed | B | norumoff | B | unopposed | B |
| 74 | 1992 | 72 | 0 |  | unopposed | B | norumoff | B | unceposed | B |
| 77 | 1992 | 66 | 0 |  | unopposed | B | norunoff | B | unopposed | B |
| 90 | 1992 | 53 | 1 | W | unopposed | W | norunoff | w | uncpposed | W |
| 93 | 1992 | 53 | I | W | 72 | W | norunofit | w | unopposed | W |
| 95 | 1992 | 64 | 0 |  | 55 | B | norunoff | B | 54 | B |
| 101 | 1992 | 65 | 0 |  | 51 | B | norunoff | B | unopposed | B |
| 102 | 1992 | 57 | I | B | unopposed | B | normoff | B | unopposed | B |
| 103 | 1992 | 55 | I | w | unopposed | w | norunoff | w | unopposed | w |
| 109 | 1992 | 52 | I | B | unopposed | B | norunoff | B | 58 | B |
| 110 | 1992 | 51 | I | W | unopposed | W | no runoff | W | 61 | W |
| 111 | 1992 | 66 | 0 |  | 47 | B | 80 | B | unopposed | B |
| 116 | 1992 | 59 | 0 |  | unopposed | B | norunoff | B | uncprosed | B |
| 120 | 1992 | 55 | 1 | W | unopposed | w | norunoft | w | unceposed | W |
| 122 | 1992 | 53 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 12 | 1994 | 61 | 1 | w | 63 | B | no rumofr | B | 52 | W |
| 23 | 1994 | 65 | 1 | B | unopposed | B | no runoff | B | uncpposed | B |
| 25 | 1994 | 59 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 31 | 1994 | 68 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 41 | 1994 | 61 | I | w | 61 | w | norunoff | w | 77 | w |


| District | Year | \% Black Total Pop | Open Or Incumbent | Race of Incumbent | Primary |  | Runoff |  | General |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | \% Total <br> Votes For <br> Winner | Race Of Winner | \% Total Votes For Winser | Race Of Wianer | \% Total Votes For Winner | Race Of Winner |
| 49 | 1994 | 57 | 1 | B | unopposed | B | no runoff | B | 83 | B |
| 50 | 1994 | 60 | 1 | W | 55 | w | norunoff | W | 72 | W |
| 51 | 1994 | 65 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 54 | 1994 | 58 | I | W | unopposed | w | norunoff | W | unopposed | W |
| 57 | 1994 | 58 | I | w | unopposed | w | no nmoff | W | unopposed | W |
| 59 | 1994 | 56 | I | w | unopposed | w | norunoff | W | unopposed | W |
| 62 | 1994 | 63 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 64 | 1994 | 56 | I | W | 72 | W | norunoff | w | unopposed | W |
| 66 | 1994 | 65 | I | B | unopposed | B | norumoff | B | unopposed | B |
| 70 | 1994 | 68 | I | B | unopposed | B | normoff | B | unopposed | B |
| 73 | 1994 | 71 | 1 | B | unopposed | B | norumoff | B | unopposed | B |
| 74 | 1994 | 67 | I | B | 58 | B | normoff | B | unopposed | B |
| 76 | 1994 | 62 | 0 |  | 76 | B | norunoff | B | unopposed | B |
| 77 | 1994 | 60 | I | B | unopposed | B | normoff | B | unopposed | B |
| 82 | 1984 | 59 | 0 |  | unopposed | B | normoff | B | 51 | B |
| 91 | 1994 | 66 | 0 |  | 49.7 | B | 68 | B | 72 | B |
| 93 | 1994 | 53 | 1 | W | unopposod | W | noranoft | W | unopposed | W |
| 95 | 1994 | 64 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 101 | 1994 | 68 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 102 | 1994 | 57 | I | B | uncpposed | B | norunoff | B | unopposed | B |
| 103 | 1994 | 64 | 1 | W | 52 | B | norunoff | B | unopposed | B |
| 109 | 1994 | 63 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 111 | 1994 | 65 | 1 | B | unopposed | B | no runoff | B | 73 | B |
| 116 | 1994 | 59 | I | B | unopposed | B | notunoff | B | 59 | B |
| 118 | 1994 | 61 | I | W | unopposed | B | nommoff | B | 78 | B |
| 121 | 1994 | 61 | 0 |  | 49 | B | 59 | B | 57 | B |
| 122 | 1994 | 59 | I | B | unopposed | B | norunoff | B | 61 | B |
| 12 | 1996 | 61 | I | W | 56 | B | normoff | B | 51 | B |
| 23 | 1996 | 65 | 0 |  | 63 | B | normoff | B | 72 | B |
| 25 | 1996 | 59 | I | B | unopposed | B | norunoff | B | 78 | B |
| 31 | 1996 | 68 | 0 |  | unopposed | B | no munoft | B | unopposed | B |
| 41 | 1996 | 61 | I | w | 53 | W | norunoft | w | unopposed | W |
| 49 | 1996 | 57 | 1 | B | unopposed | B | normofr | B | unopposed | B |
| 50 | 1996 | 60 | I | W | 65 | W | normoft | W | unopposed | W |
| 51 | 1996 | 65 | I | B | unopposed | B | nerunofi | B | unopposed | B |
| 54 | 1996 | 58 | I | W | 79 | W | normoft | W | 85 | w |
| 57 | 1996 | 58 | 0 |  | 42 | W | 54 | W | 79 | w |
| 59 | 1996 | 56 | 0 |  | unopposed | B | normoft | B | unopposed | B |


| District | Year | $\begin{aligned} & \text { Fo Black } \\ & \text { Total } \\ & \text { Pop } \end{aligned}$ | Open Or Incumbent | Race Or Incumbent | Primary |  | Rumofr |  | General |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | \% Total Votes For Wianer | Race or Winner | $\%$ Total Votes For Winner | Race Ot Winner | \% Total Yotes For Winner | Race Of Winner |
| 62 | 1996 | 63 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 64 | 1996 | 56 | I | W | unopposed | W | norunoff | w | 75 | W |
| 66 | 1996 | 65 | I | B | unopposed | B | norunoff | B | 70 | B |
| 70 | 1996 | 68 | 1 | B | 67 | B | norunoff | B | 77 | B |
| 73 | 1996 | 71 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 74 | 1996 | 67 | I | B | 55 | B | norunoff | B | 88 | B |
| 76 | 1996 | 62 | I | B | unopposed | B | norunoff | B | 73 | B |
| 77 | 1996 | 60 | I | B | uncpposed | B | no nmoff | B | 68 | B |
| 82 | 1996 | 59 | I | B | uncopposed | B | no nmoff | B | 64 | B |
| 91 | 1996 | 66 | I | B | unopposed | B | norunoff | B | 74 | B |
| 93 | 1996 | 53 | I | W | unopposed | W | no runoff | W | 50 | w |
| 95 | 1996 | 64 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 101 | 1996 | 68 | 1 | B | unopposed | B | norumofir | B | uncpposed | B |
| 102 | 1996 | 57 | 0 |  | 37 | B | 53 | B | unoppoced | B |
| 103 | 1996 | 64 | 1 | B | unopposed | B | norunoff | B | unopposed | B |
| 109 | 1996 | 63 | 0 |  | 49 | B | 59 | B | unopposed | B |
| 111 | 1996 | 65 | 1 | B | unopposed | B | nerunoff | B | 76 | B |
| 116 | 1996 | 59 | 1 | B | unopposed | B | noruneff | B | 61 | B |
| 118 | 1996 | 61 | I | B | unopposed | B | noruncif | B | unopposed | B |
| 121 | 1996 | 61 | I | B | 70 | B | nomacff | B | 63 | B |
| 122 | 1996 | 59 | 0 |  | 66 | B | norancff | B | 57 | B |
| 12 | 1998 | 51 | I | w | unopposed | B | noruncff | B | 53 | B |
| 23 | 1998 | 65 | I | B | unopposed | B | noruncif | B | unopposed | B |
| 25 | 1998 | 59 | I | B | unopposed | B | noraneff | B | unopposed | B |
| 31 | 1998 | 68 | I | B | unopposed | B | norunofi | B | unopposed | B |
| 41 | 1998 | 61 | I | w | unopposed | W | norunoff | W | unopposed | W |
| 49 | 1998 | 57 | I | B | unopposed | B | normoff | B | unopposed | B |
| 50 | 1998 | 60 | 1 | W | 76 | W | norunoff | W | 81 | w |
| 51 | 1998 | 65 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 54 | 1998 | 50 | I | W | 77 | W | no ranoff | W | unopposed | W |
| 57 | 1998 | 58 | I | w | 88 | W | no runoff | w | uncoposed | w |
| 59 | 1998 | 56 | 1 | B | unopposed | B | no runoff | B | uncpposed | B |
| 62 | 1998 | 63 | I | B | unopposed | B | norunoff | B | 74 | B |
| 64 | 1998 | 56 | I | W | unopposed | W | norunoff | W | uncpposed | W |
| 66 | 1998 | 65 | 1 | B | unopposed | B | normoff | B | unopposed | B |
| 70 | 1998 | 68 | 1 | B | unopposed | B | norunori | B | unopposed | B |
| 73 | 1998 | 71 | I | B | unopposed | B | norunot | B | unopposed | B |
| 74 | 1998 | 67 | I | B | 59 | B | norunof | B | unopposed | B |


| District | Year | \% Black Total Pop | Open Or Incumbent | Race OI <br> Incumbent | Primary |  | Rumofr |  | General |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\%$ Total Votes For Winner | Race Of Winner | \% Total Yotes For Winner | Race Of Winner | \% Total Votes For Winner | Race or Winner |
| 76 | 1998 | 62 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 77 | 1998 | 60 | I | B | unopposed | B | norunoff | B | 71 | B |
| 82 | 1998 | 54 | I | B | unopposed | B | norunoff | B | 60 | B |
| 91 | 1998 | 57 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 93 | 1998 | 53 | I | W | unopposed | W | nornoff | W | 56 | W |
| 95 | 1998 | 64 | I | B | unopposed | B | noruneff | B | unopposed | B |
| 101 | 1998 | 66 | I | B | unopposed | B | norunoff | B | unopposed | B |
| 102 | 1998 | 57 | I | B | unopposed | B | normoff | B | 69 | B |
| 103 | 1998 | 57 | I | B | 60 | B | normoff | B | unopposed | B |
| 109 | 1998 | 63 | I | B | unopposed | B | norunoff | B | 77 | B |
| 111 | 1998 | 65 | 1 | B | unopposed | B | norunofi | B | unopposed | B |
| 116 | 1998 | 59 | 1 | B | unopposed | B | norunoff | B | 66 | B |
| 118 | 1998 | 61 | I | B | uncpposed | B | norunoff | B | unopposed | B |
| 121 | 1998 | 52 | I | B | unopposed | B | normoff | B | unopposed | B |
| 122 | 1998 | 54 | I | B | unopposed | B | norunoff | B | 64 | B |

As an examination of table 7 shows, a number of majority black districts failed to elect African Americans to the state legislature. In fact, whites won thirty of the 124 elections listed. In twenty-nine of these thirty cases, the whites who won these majority black seats were incumbents-only one of these thirty white victories occurred in an election for an open seat. Sixteen of the successful white incumbents faced no challenger in the Democratic primary, and nineteen had no opposition in the general election. Over this same time period, only four white incumbents were defeated by a black challenger in either the Democratic primary or general election in these majority-black districts. ${ }^{76}$

As discussed in sections B. 1 and B. 2 above, both participation rates and the degree of cohesion and crossover voting influence the percent black required for a black candidate to win an election. South Carolina is a particularly useful state in which to examine participation rates by race as the state actually collects this datathere is no need to estimate black and white registration or turnout

[^19]rates. Table 8 lists the percent black total population, voting age population and voters for all state house elections in majority-black districts in South Carolina during the 1990s.

| Table 8: Percent Needed to Equalize Black \& White Voter Turnout: South Carolina Majority Black State House Districts, General Elections, 1994-1998 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| District | Year | \% Black <br> Total Pop | VAP | Voters | \% Black Participation | \% White Participation | \% Black Needed To Equalize Turnout |
| 12 | 1994 | 61 | 57 | 47 | 50.8 | 65.6 | 56.3 |
| 23 | 1994 | 65 | 61 | 50 | 48.9 | 59.4 | 54.8 |
| 25 | 1994 | 59 | 55 | 57 | 58.4 | 64.7 | 52.6 |
| 31 | 1994 | 68 | 62 | 65 | 48.5 | 57.0 | 54.0 |
| 41 | 1994 | 61 | 57 | 48 | 52.7 | 71.1 | 57.4 |
| 49 | 1994 | 57 | 54 | 45 | 51.3 | 62.2 | 54.8 |
| 50 | 1994 | 60 | 56 | 46 | 50.8 | 71.2 | 58.4 |
| 51 | 1994 | 65 | 62 | 56 | 50.1 | 65.4 | 56.6 |
| 54 | 1994 | 58 | 54 | 46 | 48.3 | 54.7 | 53.1 |
| 57 | 1994 | 58 | 53 | 46 | 42.0 | 60.3 | 58.9 |
| 59 | 1994 | 56 | 52 | 49 | 55.3 | 64.3 | 53.8 |
| 62 | 1994 | 63 | 60 | 55 | 56.5 | 69.6 | 55.2 |
| 64 | 1994 | 56 | 51 | 44 | 53.9 | 69.9 | 56.4 |
| 66 | 1994 | 65 | 61 | 59 | 58.0 | 68.6 | 54.2 |
| 70 | 1994 | 68 | 65 | 69 | 59.9 | 63.3 | 51.4 |
| 73 | 1994 | 71 | 68 | 76 | 65.9 | 61.6 | 48.3 |
| 74 | 1994 | 67 | 61 | 59 | 52.1 | 60.2 | 53.6 |
| 76 | 1994 | 62 | 57 | 58 | 63.3 | 67.5 | 51.6 |
| 77 | 1994 | 60 | 57 | 56 | 61.7 | 60.9 | 49.7 |
| 82 | 1994 | 59 | 55 | 46 | 54.3 | 70.6 | 56.5 |
| 91 | 1994 | 66 | 62 | 53 | 51.9 | 65.3 | 55.7 |
| 93 | 1994 | 53 | 49 | 40 | 52.4 | 69.3 | 56.9 |
| 95 | 1994 | 64 | 63 | 52 | 53.2 | 65.2 | 55.1 |
| 101 | 1994 | 68 | 64 | 55 | 52.5 | 71.9 | 57.8 |
| 102 | 1994 | 57 | 53 | 49 | 59.3 | 70.1 | 54.2 |
| 103 | 1994 | 64 | 59 | 53 | 50.0 | 62.2 | 55.4 |
| 109 | 1994 | 63 | 59 | 58 | 48.8 | 57.5 | 54.1 |
| 111 | 1994 | 65 | 59 | 62 | 56.6 | 62.4 | 52.4 |
| 116 | 1994 | 59 | 55 | 50 | 54.4 | 64.9 | 54.4 |
| 118 | 1994 | 61 | 53 | 62 | 44.1 | 56.0 | 56.0 |
| 121 | 1994 | 61 | 57 | 50 | 60.0 | 68.9 | 53.5 |
| 122 | 1994 | 59 | 57 | 62 | 62.2 | 59.4 | 48.9 |
| 12 | 1996 | 61 | 57 | 50 | 57.2 | 69.1 | 54.7 |


| District | Year | \% Black Total Pop | VAP | Voters | \% Black Participation | \% White Participation | \% Black Needed To Equalize Turnout |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 1996 | 65 | 61 | 57 | 55.6 | 66.0 | 54.3 |
| 25 | 1996 | 59 | 55 | 64 | 68.5 | 68.0 | 49.8 |
| 31 | 1996 | 68 | 62 | 71 | 56.8 | 59.4 | 51.1 |
| 41 | 1996 | 61 | 57 | 52 | 55.7 | 70.1 | 55.7 |
| 49 | 1996 | 57 | 54 | 48 | 60.5 | 67.8 | 52.9 |
| 50 | 1996 | 60 | 56 | 53 | 57.0 | 66.2 | 53.7 |
| 51 | 1996 | 65 | 62 | 61 | 54.5 | 64.6 | 54.2 |
| 54 | 1996 | 58 | 54 | 52 | 50.4 | 54.9 | 52.1 |
| 57 | 1996 | 58 | 53 | 51 | 49.5 | 64.0 | 56.4 |
| 59 | 1996 | 56 | 52 | 55 | 64.2 | 64.8 | 50.2 |
| 62 | 1996 | 63 | 60 | 61 | 60.9 | 63.2 | 50.9 |
| 64 | 1996 | 56 | 51 | 48 | 61.5 | 71.0 | 53.6 |
| 66 | 1996 | 65 | 61 | 62 | 64.3 | 71.2 | 52.5 |
| 70 | 1996 | 68 | 65 | 70 | 64.0 | 62.1 | 49.2 |
| 73 | 1996 | 71 | 68 | 79 | 69.0 | 60.0 | 46.5 |
| 74 | 1996 | 67 | 61 | 62 | 52.3 | 59.3 | 53.1 |
| 76 | 1996 | 62 | 57 | 63 | 64.0 | 62.3 | 49.3 |
| 77 | 1996 | 60 | 57 | 56 | 64.9 | 62.9 | 49.2 |
| 82 | 1996 | 59 | 55 | 52 | 60.3 | 71.4 | 54.2 |
| 91 | 1996 | 66 | 62 | 56 | 59.2 | 73.1 | 55.3 |
| 93 | 1996 | 53 | 49 | 43 | 62.7 | 76.8 | 55.0 |
| 95 | 1996 | 64 | 63 | 57 | 64.1 | 73.8 | 53.5 |
| 101 | 1996 | 68 | 64 | 62 | 59.5 | 69.8 | 54.0 |
| 102 | 1996 | 57 | 53 | 54 | 65.6 | 65.3 | 49.9 |
| 103 | 1996 | 64 | 59 | 58 | 59.3 | 67.5 | 53.2 |
| 109 | 1996 | 63 | 59 | 63 | 57.0 | 60.3 | 51.4 |
| 111 | 1996 | 65 | 59 | 66 | 64.4 | 64.7 | 50.1 |
| 116 | 1996 | 59 | 55 | 53 | 64.1 | 69.2 | 51.9 |
| 118 | 1996 | 61 | 53 | 70 | 48.2 | 53.8 | 52.8 |
| 121 | 1996 | 61 | 57 | 52 | 65.5 | 70.0 | 51.7 |
| 122 | 1996 | 59 | 57 | 56 | 64.5 | 67.9 | 51.3 |
| 12 | 1998 | 51 | 48 | 44 | 49.9 | 57.1 | 53.4 |
| 23 | 1998 | 65 | 61 | 58 | 43.7 | 46.0 | 51.3 |
| 25 | 1998 | 59 | 55 | 66 | 57.4 | 50.8 | 47.0 |
| 31 | 1998 | 68 | 62 | 73 | 44.7 | 45.8 | 50.6 |
| 41 | 1998 | 61 | 57 | 54 | 49.8 | 57.6 | 53.6 |
| 49 | 1998 | 57 | 54 | 50 | 45.3 | 47.5 | 51.2 |
| 50 | 1998 | 60 | 56 | 55 | 51.0 | 56.8 | 52.7 |
| 51 | 1998 | 65 | 62 | 65 | 49.3 | 49.3 | 50.0 |


| District | Year | \% Black <br> Total <br> Pop | VAP | Voters | \% Black <br> Participation | \% White <br> Participation | \% Black <br> Needed To <br> Equalize <br> Turnout |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 1998 | 50 | 47 | 46 | 40.4 | 42.5 | 51.3 |
| 57 | 1998 | 58 | 53 | 56 | 42.3 | 47.3 | 52.8 |
| 59 | 1998 | 56 | 52 | 58 | 54.2 | 50.0 | 48.0 |
| 62 | 1998 | 63 | 60 | 63 | 51.5 | 52.2 | 50.4 |
| 64 | 1998 | 56 | 51 | 51 | 57.1 | 59.4 | 51.0 |
| 66 | 1998 | 65 | 61 | 66 | 58.8 | 58.1 | 49.7 |
| 70 | 1998 | 68 | 65 | 72 | 58.4 | 49.0 | 45.6 |
| 73 | 1998 | 71 | 68 | 82 | 61.0 | 45.7 | 42.8 |
| 74 | 1998 | 67 | 61 | 63 | 43.3 | 48.5 | 52.8 |
| 76 | 1998 | 62 | 57 | 66 | 56.0 | 53.9 | 49.0 |
| 77 | 1998 | 60 | 57 | 60 | 59.0 | 49.7 | 45.7 |
| 82 | 1998 | 54 | 51 | 45 | 48.1 | 55.5 | 53.5 |
| 91 | 1998 | 57 | 53 | 48 | 48.0 | 60.8 | 55.9 |
| 93 | 1998 | 53 | 49 | 46 | 58.3 | 65.6 | 52.9 |
| 95 | 1998 | 64 | 63 | 60 | 54.0 | 58.3 | 51.9 |
| 101 | 1998 | 66 | 62 | 63 | 50.4 | 54.7 | 52.0 |
| 102 | 1998 | 57 | 53 | 57 | 59.8 | 52.3 | 46.7 |
| 103 | 1998 | 57 | 53 | 61 | 54.8 | 53.4 | 49.4 |
| 109 | 1998 | 63 | 59 | 65 | 52.3 | 49.9 | 48.9 |
| 111 | 1998 | 65 | 59 | 69 | 55.5 | 48.9 | 46.8 |
| 116 | 1998 | 59 | 55 | 54 | 59.2 | 56.7 | 48.9 |
| 118 | 1998 | 61 | 53 | 73 | 40.4 | 41.0 | 50.4 |
| 121 | 1998 | 52 | 50 | 54 | 53.1 | 50.6 | 48.8 |
| 122 | 1998 | 54 | 49 | 47 | 54.4 | 60.1 | 52.5 |
|  |  |  |  |  |  |  |  |

Table 8 demonstrates that the black majority was illusory in many of these districts-blacks comprised over $50 \%$ of the total population, but not over $50 \%$ of the voting age population or among voters on general election day. Not coincidentally, these "illusory" districts were the districts most likely to be won by whites. ${ }^{77}$ The black percent needed to equalize black and white turnout is usually over $50 \%$ as a result of the lower percentage of blacks turning out to vote on election day.
77. Blacks composed a majority of general election voters in only fourteen of the twenty-nine elections won by whites. Also, although the average percent black population of the house districts won by a white candidate was $56 \%$, blacks comprised, on average, only $52 \%$ of the voting age population and $49 \%$ of the voters in these districts. See generally KING, supra note 56 (providing detailed information about his method of ecological inference).

Incorporating the level of black cohesion and white crossover voting required an estimation of the percentage of black and white voters voting for black candidates. Table 9 provides estimates of voting patterns by race in South Carolina state house contests in which at least one black and one white candidate competed for office between 1992 and 1998.

Table 9: Voting Patterns by Race in Selected South Carolina State House Elections that Included at Least One Black \& One White Candidate, 1992-1998

| Body | District | Year | $\begin{gathered} \boldsymbol{6} \\ \text { Black } \\ \text { VAP } \end{gathered}$ | Open Or Incumb | Primary |  |  | Runorr |  |  | General |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | \% Black Votes For Black Candidate (Cohesion) | $\begin{aligned} & \text { \% White } \\ & \text { Votes For } \\ & \text { Black } \\ & \text { Candidate } \\ & \text { (Crossort) } \end{aligned}$ | $\begin{gathered} \text { Race } \\ \text { of } \\ \text { Cands } \end{gathered}$ | \% Black Votes For Black Candidate (Cohesion) | $\begin{aligned} & \text { \% White } \\ & \text { Votes For } \\ & \text { Black } \\ & \text { Candidate } \\ & \text { (Crossorr) } \end{aligned}$ | $\begin{gathered} \text { Race } \\ \text { of } \\ \text { Cands } \end{gathered}$ | \% Black <br> Votes For Black Candidate (Cohesion) | \% White <br> Votes For Black Candidate (Crossove) | Party of Winner | Race of Winner |
| House | 50 | 1992 | 56 | wI | 65.6 | 12.9 | 1W/1B | norunoff |  |  | unopposed |  | D | w |
| House | 93 | 1992 | 49 | WI | 57.2 | 9.0 | 1W/18 | normoff |  |  | unopposed |  | D | w |
| Hcase | 95 | 1992 | 63 | 0 | no uthte cand |  |  | no unoff |  |  | 96.0 | 5.9 | D | B |
| House | 101 | 1992 | 60 | 0 | 90.3 | 12.6 | 1W/18 | no unoff |  |  | unopposed |  | D | B |
| House | 108 | 1992 | 31 | 0 | 92.2 | 18.7 | 2W/1B | 91.8 | 15.9 | 1W/1B | no black cand |  | R | w |
| House | 109 | 1992 | 47 | BI | unopposed |  |  | norunoff |  |  | 94.9 | 26.6 | D | B |
| House | 16 | 1994 | 29 | WI | 84.6 | 29.2 | 1W/1B | norunoft |  |  | unopposed |  | D | w |
| House | 41 | 1994 | 57 | WI | 69.1 | 13.3 | 1W/18 | no minoff |  |  | no black cand |  | D | w |
| Housc | 50 | 1994 | 56 | WI | 69.5 | 12.7 | 1W/1B | norunoff |  |  | no black cand |  | D | w |
| House | 64 | 1994 | 51 | WI | 45.9 | 7.0 | 1W/18 | norunoff |  |  | unopposed |  | D | w |
| House | 76 | 1994 | 57 | 0 | 86.8 | 388 | 1W/18 | norunoff |  |  | unopposed |  | D | B |
| House | 91 | 1994 | 62 | 0 | 87.4 | 35.1 | 1W/28 | 90.9 | 37.5 | 1W/1B | no black cand |  | D | w |
| House | 103 | 1994 | 59 | W1 | 727 | 19.0 | 1W/18 | norumoff |  |  | unopposod |  | D | B |
| House | 116 | 1994 | 55 | BI | unopposad |  |  | norumoff |  |  | 78.8 | 36.7 | D | B |
| House | 121 | 1994 | 57 | 0 | 95.4 | 80.9 | 1W/2B | norunoff |  |  | 97.0 | 17.2 | D | B |
| House | 50 | 1996 | 56 | w | 45.3 | 11.7 | 2W/18 | norunoff |  |  | unopposed |  | D | w |
| House | 54 | 1996 | 54 | W1 | 38.8 | 1.1 | 1W/LB | norumoff |  |  | no black cand |  | D | w |
| House | 66 | 1996 | 61 | BI | uncpposad |  |  | nommoff |  |  | 95.5 | 24.3 | D | B |
| House | 70 | 1996 | 65 | BI | no white cand |  |  | norunoff |  |  | 94.7 | 32.6 | D | B |
| House | 76 | 1996 | 57 | BI | unopposed |  |  | norunoff |  |  | 97.1 | 34.5 | D | B |
| House | 77 | 1996 | 57 | BI | unopposed |  |  | norunoff |  |  | 97.1 | 32.2 | D | B |
| House | 82 | 1996 | 55 | BI | uncpposed |  |  | normoft |  |  | 85.1 | 39.3 | D | B |
| House | 91 | 1996 | 62 | BI | uncpposed |  |  | norunoff |  |  | 92.2 | 49.4 | D | B |
| House | 116 | 1996 | 55 | BI | unopposed |  |  | norunoff |  |  | 928 | 25.6 | D | B |
| House | 121 | 1996 | 57 | BI | no white cand |  |  | norumoff |  |  | 96.9 | 28.8 | D | B |
| House | 12 | 1998 | 48 | w | unopposed |  |  | norunoff |  |  | 89.0 | 26.0 | D | B |
| House | 50 | 1998 | 56 | WI | 35.2 | 14.2 | IW/IB | norunoff |  |  | no black cand |  | D | w |


|  |  |  |  |  | Primary |  |  | Rumoli |  |  | General |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body | District | Year |  | Open Or Incumb | \% Black Votes For Black Candidate (Cohesion) | \% White Votes For Black Candidate (Crussort) | Race of Cands | \% Black Votes For Black Candidate (Cohesion) | \% White Votes For Black Candidate (Crossovr) | Race of Cands | \% Black Votes For Black Candidate (Cobesion) | \% White Votes For Black Candidate (Crossove) | Party of Whaner | Race of Winner |
| House | 62 | 1998 | 60 | BI |  | nopposed |  |  | norunoff |  | 94.2 | 33.9 | D | B |
| House | 77 | 1998 | 57 | BI |  | nopposed |  |  | no runoff |  | 94.3 | 37.6 | D | B |
| House | 80 | 1998 | 27 | 0 | 49.1 | 16.3 | 1W/1B |  | norunoff |  | noblac | cand | D | W |
| House | 82 | 1998 | 51 | BI |  | opposed |  |  | normoff |  | 95.5 | 30.9 | D | B |
| House | 109 | 1998 | 59 | BI |  | acpposed |  |  | normonit |  | 99.5 | 33.6 | D | B |
| House | 116 | 1998 | 55 | BI |  | copposed |  |  | normoff |  | 91.6 | 37.6 | D | B |
| House | 122 | 1998 | 49 | BI |  | mopposed |  |  | no runoff |  | 91.0 | 40.1 | D | B |

Table 9 provides marked evidence of racially polarized voting in South Carolina state house primary elections. We estimate that, on average, the black candidates received $68 \%$ of the black vote but only $19 \%$ of the white vote in Democratic primaries. ${ }^{78}$ Of course, these averages mask significant variation between elections. Support for black candidates was lowest among both black and white voters in primary contests that included a white incumbent-an estimated $83 \%$ of black voters supported black candidates in open seat races, while only $60 \%$ of blacks cast ballots for black challengers running against white incumbents. Only $12 \%$ of whites supported black challengers running against white incumbents ${ }^{79}$-and an estimated $32 \%$ of white voters voted for black candidates for open seats.

The nineteen general elections in which a black Democrat competed against a white Republican provide further evidence of racial polarization. Our estimates indicate that the average black candidate received $93 \%$ of the black vote but only $31 \%$ of the white vote. Again, incumbency greatly influenced support for black candidates: the sixteen incumbent black candidates received an average of $34 \%$ of white votes, but the three non-incumbent black candidates won an average of only $16 \%$ of the white vote. On the other hand, black support for black Democrats did not vary by incumbency.

Table 10 incorporates the level of black cohesion and white crossover voting into the functional analysis. Based on the levels of

[^20]black and white participation, including roll-off, and the amount of black and white support for black candidates, we estimated the percent black required for a district to nominate a black in the Democratic primary or elect a black Democrat to the state legislature. The average state legislative district in South Carolina needs to be around $56 \%$ black in order to provide black-preferred candidates with an equal opportunity for victory in the Democratic primary. However, the percent black required for a black Democrat to have an even shot of winning the nomination is closely related to incumbency. The average percent black required was $64 \%$ black for the twelve districts held by incumbents, but only $44 \%$ black for the six open seats.

Table 10: Percent Black Needed for Black Candidate to Win, Incorporating Cohesion \& Crossover: Selected South Carolina State House Contests, 1992-1998

| Year | Body | District |  | Open or Incumb | Estimated Percent Voted of |  | Estimated Percent Voted For State Legislature of |  | Estimated Percent Voted For State Legislature of |  | Estimated Percent Voting For Black Candidate of |  | Shlack Needed Given Both Cohesion \& Crossover |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Black VAP | White VAP | Black <br> Voters | White <br> Voters | Black VAP | Whate VAP | Black <br> Voters | White <br> Voters |  |
| PRIMARY ELECIIONS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | Housc | 50 | 56 | WI | 33.8 | 30.2 | 57.5 | 59.0 | 19.4 | 17.8 | 65.6 | 129 | 59.6 |
| 1992 | House | 93 | 49 | WI | 37.1 | 29.0 | 44.5 | 53.9 | 16.5 | 15.6 | 57.2 | 9.0 | 66.3 |
| 1992 | House | 101 | 60 | 0 | 45.1 | 36.1 | 61.4 | 71.7 | 27.7 | 25.9 | 90.3 | 12.6 | 47.3 |
| 1992 | House | 108 | 31 | 0 | 33.1 | 25.7 | 59.2 | 41.4 | 19.6 | 10.6 | 92.2 | 18.7 | 33.7 |
| 1994 | House | 16 | 29 | WI | 15.9 | 13.7 | 78.0 | 81.2 | 12.4 | 11.1 | 84.6 | 29.2 | 41.6 |
| 1994 | House | 41 | 57 | WI | 165 | 19.5 | 92.8 | 90.4 | 15.3 | 17.7 | 69.1 | 13.3 | 60.8 |
| 1994 | House | 50 | 56 | WI | 24.1 | 27.4 | 928 | 90.4 | 22.4 | 24.8 | 69.5 | 127 | 60.3 |
| 1994 | House | 64 | 51 | WI | 26.3 | 33.4 | 85.1 | 92.6 | 22.4 | 31.0 | 45.9 | 7.0 | 766 |
| 1994 | House | 76 | 57 | 0 | 8.4 | 43.4 | 78.1 | 646 | 6.6 | 28.0 | 86.8 | 38.8 | 520 |
| 1994 | House | 91 | 62 | 0 | 23.2 | 24.6 | 76.1 | 79.5 | 17.6 | 19.6 | 87.4 | 35.1 | 40.1 |
| 1994 | House | 103 | 59 | WI | 23.0 | 26.6 | 82.4 | 95.0 | 19.0 | 25.3 | 72.7 | 19.0 | 58.0 |
| 1994 | House | 121 | 57 | 0 | 9.6 | 26.6 | 62.7 | 81.0 | 6.0 | 21.6 | 95.4 | 80.9 | 15.9 |
| $19 \% 6$ | House | 50 | 56 | WI | 24.0 | 20.6 | 95.4 | 93.7 | 22.9 | 19.3 | 45.3 | 11.7 | 70.1 |
| $19 \% 6$ | House | 54 | 54 | WI | 33.0 | 29.1 | 94.3 | 94.1 | 31.1 | 27.4 | 38.8 | 1.1 | 78.9 |
| 1998 | House | so | 56 | WI | 22.1 | 23.0 | 80.8 | 93.2 | 17.9 | 21.4 | 35.2 | 14.2 | 76.3 |
| 1998 | House | 80 | 27 | 0 | 2.1 | 7.5 | 90.6 | 87.6 | 1.9 | 6.5 | 49.1 | 16.3 | 76.4 |
| GENERAL ELECTIONS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | House | 95 | 63 | 0 | 43.5 | 63.8 | 92.2 | 93.7 | 40.1 | 59.8 | 96.0 | 5.9 | 57.9 |
| 1992 | House | 109 | 47 | BI | 39.3 | 408 | 85.7 | 88.1 | 33.7 | 36.0 | 94.9 | 26.6 | 40.4 |
| 1994 | House | 116 | 55 | BI | 33.1 | 41.6 | 81.7 | 78.7 | 27.1 | 32.7 | 78.8 | 36.7 | 44.2 |
| 1994 | House | 121 | 57 | 0 | 35.6 | 47.5 | 91.2 | 92.1 | 325 | 43.8 | 97.0 | 17.2 | 48.8 |


| Year | Body | District | $\begin{gathered} \% \\ \text { Black } \\ \text { VAP } \end{gathered}$ | Open or Incumb | Estimated Percent Voted of |  | Estimated Percent Voted For State Legislature of |  | Estimated Percent Voted For State Legislature of |  | Estimated Percent Voting For Black Candidate of |  | \% Black Needed Given Both Cohesion \& Crossover |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Black VAP | White VAP | Black <br> Voters | White <br> Voters | Black <br> VAP | White VAP | Black <br> Voters | White <br> Voters |  |
| GENERAL ELECTIONS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 | House | 66 | 61 | BI | 55.4 | 51.6 | 90.6 | 88.5 | 50.2 | 45.6 | 95.5 | 24.3 | 384 |
| 1996 | House | 70 | 65 | BI | 47.0 | 37.6 | 94.6 | 84.6 | 44.5 | 31.8 | 94.7 | 32.6 | 31.2 |
| 1996 | House | 76 | 57 | BI | 43.8 | 33.3 | 86.9 | 88.7 | 38.1 | 29.6 | 97.1 | 34.5 | 30.3 |
| 1996 | House | 77 | 57 | BI | 460 | 47.4 | 882 | 87.2 | 40.6 | 41.3 | 97.1 | 32.2 | 35.6 |
| 1996 | House | 82 | 55 | BI | 44.0 | 49.0 | 86.1 | 88.1 | 37.9 | 43.2 | 85.1 | 39.3 | 39.3 |
| 1996 | House | 91 | 62 | BI | 41.8 | 52.3 | 88.2 | 87.7 | 36.9 | 45.9 | 92.2 | 49.4 | 31.5 |
| 1996 | House | 116 | 55 | BI | 46.4 | 51.2 | 89.5 | 88.3 | 41.5 | 45.2 | 92.8 | 25.6 | 42.2 |
| 1996 | House | 121 | 57 | BI | 454 | 55.1 | 89.7 | 87.5 | 40.7 | 48.2 | 96.9 | 28.8 | 400 |
| 1998 | House | 12 | 48 | WI | 35.8 | 41.5 | 82.4 | 88.9 | 29.5 | 36.9 | 89.0 | 26.0 | 46.0 |
| 1998 | House | 62 | 60 | BI | 38.1 | 33.4 | 84.1 | 77.1 | 32.1 | 25.7 | 942 | 33.9 | 32.6 |
| 1998 | House | 77 | 57 | BI | 46.2 | 41.3 | 80.9 | 88.9 | 37.4 | 36.7 | 94.3 | 37.6 | 33.8 |
| 1998 | House | 82 | 51 | BI | . 38.5 | 48.9 | 88.7 | 93.8 | 34.1 | 45.8 | 95.5 | 30.9 | 41.5 |
| 1998 | House | 109 | 59 | BI | 38.7 | 30.0 | 86.7 | 85.9 | 33.6 | 25.8 | 99.5 | 336 | 29.1 |
| 1998 | House | 116 | 55 | BI | 448 | 46.7 | 92.9 | 846 | 41.6 | 39.5 | 91.6 | 37.6 | 34.7 |
| 1998 | House | 122 | 49 | BI | 47.7 | 52.4 | 64.3 | 85.8 | 30.7 | 45.0 | 91.0 | 40.1 | 39.3 |

Despite the lower threshold for open seats, a majority black district was still required in a number of instances in order to provide black voters with an opportunity to nominate a black Democratic candidate.

Table 10 indicates that districts needed to be an average of only $39 \%$ black in voting age population for African-American candidates to have a $50 \%$ probability of winning the general election. The percent black required is much higher for seats not already held by black incumbents. The sixteen black incumbents required districts only $37 \%$ black, on average, to have an equal opportunity of victory in the general election. The three non-incumbents, however, needed $51 \%$ black districts, on average, to have the same opportunity.

We need to be very careful to evaluate the results of our functional analysis not only in terms of context, but also in terms of common sense. For example, an examination of the results of our analysis for South Carolina House District 121 in 1994 (the only district election for which we have both primary and general election results) yields the misguided conclusion that had the district been only $15.9 \%$ black, an African American might still have won the Democratic primary (although not the general election). In fact, this
estimate was a product of a $57 \%$ black district with very few nonRepublican whites, making it unlikely that viable white Democratic candidates would contest the primary even for an open seat. Obviously, if this district was in actuality only $15.9 \%$ black, voters would have a very different set of expectations, and a very different set of candidates would be competing for office. Both the racial and party balance of a district must be considered when conducting a functional analysis-changing this balance affects both the expectations of the voters and the character of the candidates that choose to run for legislative office.

The data from state legislative districts in South Carolina indicate the percent black needed to provide blacks with an equal opportunity to elect their candidates of choice varies substantially from district to district. African Americans may now win office in some $45 \%$ black districts (although this is usually true only when black incumbents are running for office), but blacks may fail to win election in many areas unless a majority black district is created. Indeed, $65 \%$ black districts are likely still required in some areas to assure the election of candidates of choice of the black community. In addition, if there is a white incumbent seeking re-election in the district, $65 \%$ black may not suffice.

## CONCLUSION

As our analysis of recent congressional elections in the Southand state legislative contests in South Carolina-clearly demonstrates, no simple cutoff point of $50 \%$ minority-or any other percent minority-guarantees minority voters an equal opportunity to elect candidates of choice. A case-specific functional analysis, which takes into account such factors as the relative participation rates of whites and minorities, and the degree of cohesion and crossover voting that can be expected, as well as the type of election (i.e., congressional, state legislative, etc.) and the multi-stage election process, must be conducted to determine the percentage minority necessary to create an effective minority district.

Factors other than those incorporated in our conceptual framework must also be considered because they can also affect the opportunity to elect black candidates to office-the presence of white incumbents is especially significant in this regard. Other factors to consider include the presence of black incumbents-we must be particularly careful in projecting white crossover rates and black cohesion rates from contests in which there is a black incumbent onto open seat contests in the same district-and the racial and partisan
balance of the district.
We end on a further cautionary note: our conceptual framework produces only a de minimis estimate-one that offers black voters only a $50 \%$ probability of electing black candidates to office. It by no means guarantees black electoral success. Clearly the percentage black would need to be higher than our conceptual framework predicts if we wish to offer black voters more than a coin flip's chance of electing their preferred candidates. The overall impact of the plan, including not only how many representatives preferred by minority voters are likely to be elected but also with what degree of certainty, must be examined in order to determine if the plan satisfies the Voting Rights Act. If a legislature in a $10 \%$ black state drew one hundred districts, ten of which barely met this de minimis percentage, and the remainder of which gave African Americans essentially no chance of electing their chosen candidate, the result would be ninety districts in which minority candidates had virtually no chance of getting elected and ten districts in which minority candidates had no better than a fifty-fifty chance of getting elected-and in a bad year, an all-white legislature might be elected. Such a plan is unlikely to satisfy the Voting Rights Act, as properly interpreted. Ultimately, a case-specific analysis that considers not only each district individually, but the plan's overall impact is essential to give minority voters an equal opportunity to participate in the political process and to elect their candidates of choice.

## APPENDIX

## The Impact of Party Registration Choices of Whites on Black Electoral Success

The two-stage election process model provides a method of incorporating the primary (and runoff) election along with the general election when determining the percent minority population necessary to provide minorities with an equal opportunity to elect minority-preferred candidates to office.

In this model, the overall probability of black electoral success is the product of two probabilities: the probability that a black candidate can be nominated in the Democratic primary, and the probability that the black candidate can then win the general election. By partitioning voters into three classes-black Democrats, white Democrats, and white Republicans ${ }^{80}$-we show how the combination of primary and general election effects can, in principle, give rise to a non-linear relationship between the degree of Republicanization of white voters and the likelihood that an African-American candidate will win both the primary and the general election.

Let:
$B=$ the black population proportion.
$W=1-B=$ the proportion of whites (i.e., non-blacks).
$D=$ the proportion of registered Democrats (necessarily greater than or equal to $B$ ).
$R=1-D=$ the proportion of registered Republicans.
$d=D-B=$ the proportion of white Democrats.
$c=$ the proportion of white Democratic voters who vote Democratic in the general election when the Democratic nominee is African-American.
Assume, for simplicity, that, in general elections, all blacks are registered and vote Democratic, and all white Republicans vote for the Republican candidate. Similarly, let us posit that white and black registration and turnout levels are (nearly) the same so that we can use voting age population proportion as a direct proxy for

[^21]composition of the voting electorate. None of these assumptions are critical in what follows, but they allow us to simplify the exposition so as to make the argument clear.

Under the above assumptions, in a general election, the vote share of a black candidate who wins the primary equals:

$$
B+c(D-B) .
$$

For this value to exceed the share of the Republican opponent we must have:

$$
\begin{equation*}
(1-c) B+c D>R+(1-c)(D-B) . \tag{1}
\end{equation*}
$$

If $c$ is low, this can occur if $B$ is large enough; if $c$ is high, this inequality can be satisfied if $D$ is large. Equation (1) can also be satisfied if both $c D$ and $B$ are "moderately" high (e.g., $B=0.25$, $D=0.6$ and $c>0.42$ ).

Now, let us consider what it takes for a black candidate to win the Democratic primary with certainty. In the primary, to find the worst case scenario, we will assume voting is perfectly polarized along racial lines; and to simplify the model, we will also assume a head-tohead contest between a single white and a single black candidate. For the black candidate to win the primary, we must have $B>(D-B)$, i.e.,

$$
\begin{equation*}
2 B>D \tag{2}
\end{equation*}
$$

We can re-express these results in terms of white Democrats, $d$. For the black candidate to win the primary, we must have:

$$
\begin{equation*}
B>d \tag{2}
\end{equation*}
$$

In like manner, we may rewrite equation (1) as:

$$
\begin{equation*}
B+c d>R+(1-c) D \tag{1}
\end{equation*}
$$

For a minority candidate to win both the primary and general elections, we must satisfy both equations (1)' and (2)'. Of course, if $R$ is greater than 0.5 , then no matter how large the white Democratic "loyalty" rate may happen to be, the Republican candidate will still win the general election.

We can make these ideas clearer by portraying them in graphic terms. In the figures that follow (figures 1-4), the right triangle represents all possible district compositions. Along the hypotenuse of the triangle, there are no white Democrats; black Democrats plus Republicans comprise $100 \%$ of the electorate. At the origin ( 0,0 ), there are no black Democrats and no Republicans; white Democrats comprise $100 \%$ of the electorate.

## Figure 1: Primary Lines Given Select Levels of Black and White Voter Turnout and Cohesion



Figure 1 graphs several different primary election scenarios. Line A represents the primary line for $B>d$. Lines B and C illustrate two alternative assumptions. If, in a Democratic primary election, black Democrats are less likely to turn out or are less cohesive than white Democrats, then more black Democrats will be needed to assure control of the primary and therefore the slope of the line must increase; line B represents that scenario. Conversely, if, in the Democratic primary, black Democrats are more likely to turn out or more cohesive than white Democrats, then fewer black Democrats will be needed to assure control of the primary and therefore the slope of the line will decrease; line C represents that scenario.

Figure 2 demonstrates several different general election scenarios, each one representing a different level of white Democratic "loyalty"-that is, a different value for $c$. Line D is based on the assumption that all white Democrats are "disloyal" to their party when faced with a black-preferred Democratic nominee ( $c=0.0$ ). If that assumption were true, black Democrats would need to comprise at least $50 \%$ of the electorate to ensure that their preferred candidates would win the general election. Line D therefore is a

Figure 2: General Election Lines Given Select Levels of White Democratic
"Loyalty"

horizontal line segment running from $(0.0,0.5)$ to $(0.5,0.5)$; only districts falling above that line are winnable for a candidate preferred by black Democrats.

Line E is based on the opposite assumption: that all white Democrats are "loyal" to their party ( $c=1.00$ ) and will vote for a black-preferred Democratic nominee even if they opposed that candidate in the primary. If that assumption were true, blackpreferred Democratic candidates would prevail in the general election so long as Democrats comprised at least half of the electorate. Therefore, line E is a vertical line segment running from $(0.5,0.0)$ to $(0.5,0.5)$; any district to the left of line E is winnable for a black-preferred Democratic nominee.

Reality, of course, usually lies between these two extremes; thus $0<c<1.0$. For illustrative purposes, figure 2 shows lines $\mathrm{F}, \mathrm{G}$, and H , representing $c=0.33, c=0.50$, and $c=0.80$, respectively. As white Democratic "loyalty" increases, black-preferred candidates can win general elections in more districts, so the General Election Line swings downward.

In the final two figures, figures 3 and 4, the Primary Lines and the General Lines have been combined. For simplicity's sake, the assumption that $B>D$ defines the Primary Line is made in both
figures, but two different white Democratic "loyalty" rates are depicted: figure 3 uses $c=0.50$, and figure 4 uses $c=0.80$.

Figure 3: Combination of Primary Line A and General Line G Assuming Moderate White Democratic "Loyalty" ( $\mathrm{C}=0.50$ )


Figure 4: Combination of Primary Line A and General Line H Assuming Moderate White Democratic "Loyalty" ( $\mathrm{C}=0.80$ )


In both figures, the shaded area represents those districts in which the black-preferred candidate is likely to succeed at both stages of the two-stage election process. The shaded portion is larger in figure 4 than in figure 3 because black-preferred candidates can win more districts if white Democrats are more loyal. Figure 3 demonstrates that, if half the white Democrats are "loyal," a district that is at least one-third black Democratic will elect a black-preferred candidate so long as the white Democrats and the Republicans are evenly balanced. In figure 4, with a higher level of white Democratic "loyalty," black-preferred candidates can prevail in an even larger set of districts, including some that are less than $28 \%$ black Democraticso long as the proper balance is struck between white Democrats (also less than $28 \%$ of the total electorate) and Republicans (44.4\% of the total electorate).


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[^1]:    1. 42 U.S.C. § 1973 (1994).
    2. This figure is derived from a search of Westlaw's ALLCASES database, covering reported decisions from January 1, 1991 to November 1, 2000. A similar search, covering the same period, reveals more than six hundred law review articles using this terminology.
    3. See, e.g., Holder v. Hall, 512 U.S. 874, 891-946 (1994) (Thomas, J., concurring). But see id. at 956-57 (Ginsburg, J., dissenting); Id. at 957-66 (Stevens, J., dissenting).
[^2]:    4. Runoff elections are generally held when no candidate receives a majority of the vote in a primary election. The top two primary candidates are required to compete in another round of balloting, and in this second (or "runoff") election, the candidate that receives the majority of the vote wins the election-and usually proceeds to a general election. The runoff is currently used in twelve states-ten of which are in the South. See generally, Charles Bullock III \& LOch K. Johnson, Runoff Elections In The UNITED STATES (1992) (providing data on runoffs and their racial implications).
[^3]:    5. Procedures for the Administration of Section 5 of the Voting Rights Act of 1965, as amended, 28 C.F.R. § 51.4 App. (2000).
    6. Id. Section 5 applies to nine States in their entirety (Alabama, Alaska, Arizona, Georgia, Louisiana, Mississippi, South Carolina, Texas, and Virginia) and to parts of seven others (California, Florida, Michigan, New Hampshire, New York, North Carolina, and South Dakota). These jurisdictions are covered by section 5 by virtue of the formula contained in section 4(b) of the Act: (1) the jurisdiction maintained a test or device as a precondition for registering or voting as of November 1, 1964 and (2) less than 50 percent of the voting age population was registered to vote on November 1, 1968 or November 1, 1972, or less than 50 percent of the voting age population voted in the November 1968 or the November 1972 election. Lisa Handley \& Bernard Grofman, The Impact of the Voting Rights Act on Minority Representation: Black Officeholding in Southern State Legislatures and Congressional Delegations, in Quite Revolution in the South: The Impact of the Voting Rights Act 1965-1990, at 335, 342-43 (Chandler Davidson \& Bernard Grofman, eds. 1994) [hereinafter QuIEt REVOLUTION IN THE SOUTH].
    7. Section 1 of the Fifteenth Amendment provides: "The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude." U.S. CONST., amend. XV, § 1.
    8. Voting Rights Act of 1965, Pub. L. No. 89-110, §5,79 Stat. 437, 439 (1965); id. § 2, 79 Stat. 437, 437 (1965).
    9. E.g., Georgia v. United States, 411 U.S. 526, 531-35 (1973).
    10. 89 Stat. 400,401 (1975) (codified at 42 U.S.C. § 1973b(f)(2) (1994)).
    11. Section 2 of the Voting Rights Act was amended to make it clear that plaintiffs alleging unlawful vote dilution need not prove purposeful discrimination, but rather that the voting standard, practice or procedure "results in a denial or abridgement of the right of any citizen of the United States to vote on the account of race or color." 42 U.S.C. § 1973 (1994).
[^4]:    12. Id.
    13. S. REP. No. 97-417, at 28 (1982), reprinted in 1982 U.S.C.C.A.N. 177, 205.
    14. Beer v. United States, 425 U.S. 130, 141 (1976).
    15. Id.
    16. 42 U.S.C. $\S 1973$.
    17. Barnett v. City of Chicago, 141 F.3d 699, 703 (7th Cir. 1998) ("It may be highly regrettable that a candidate's race should matter to the electorate; but it does; and the cases interpreting the Voting Rights Act do not allow the courts to ignore that preference."); Clarke v. City of Cincinnati, 40 F.3d 807, 812 (6th Cir. 1994) ("[T]he Act's
[^5]:    guarantee of equal opportunity is not met when . . . candidates favored by minorities can win, but only if the candidates are white.") (citations, internal quotation marks, and brackets omitted).
    18. 478 U.S. 30 (1986).
    19. 512 U.S. 997 (1994).
    20. The Gingles Court established a three-prong test, with the second and third prongs relating to the extent of racially polarized voting. Gingles, 478 U.S. at $50-52$. The first prong required section 2 plaintiffs "to demonstrate that [their minority group] is sufficiently large and geographically compact to constitute a majority in a single-member district." Id. at 50 (emphasis added). The Court explained that if "the minority group is so small in relation to the surrounding white population that it could not constitute a majority in a single-member district, these minority voters cannot maintain that they would have been able to elect representatives of their choice in the absence of the [challenged plan]." Id. at 50 n.17; see also DeGrandy, 512 U.S. at 1016 n .12 (implying that $51 \%$ non-Hispanic districts would leave Hispanic voters with no power to affect election results).

[^6]:    21. Gingles, 478 U.S. at 90 n. 12 (O’Connor, J., concurring).
    22. Gingles, 478 U.S. at 45, $62,66-67,73,78-79$.
    23. Id. at 78-79.
    24. See, e.g., DeGrandy, 512 U.S. at 1000 ("effective voting majorities"); id. at 1004 ("a functional majority of Hispanic voters"); id. at 1014, 1021, 1023 n. 19 ("an effective voting majority"); id. at 1017 ("districts in which minority voters form an effective majority"); id. at 1024 ("an effective majority").
    25. The supposed advantages of a bright-line $50 \%$ rule, however, may prove chimerical. Creating a strict cutoff line generates several thorny issues: What is the relevant population base-total population, adult (or voting age) population (known as VAP), adult citizen population (known as CVAP), the population of registered voters, the population of voters who actually turn out on election day, the population of voters who turn out and do not "roll off" before getting far enough down the ballot to select a candidate for the office in question? If the answer is not total population or VAP, how does one estimate these figures, because they are not part of the Census Bureau's P.L. 94171 redistricting database and therefore are not available when states have to draw new district lines? Even if total population or VAP is the relevant base, how does one count people who check off more than one racial category-for example, individuals who are both African-American and white?
    26. If a majority of white voters prefers the same candidate that most minority voters prefer, then voting is not racially polarized and the Voting Rights Act would not apply. See Gingles, 478 U.S. at 51.
    27. Brief of Amicus Curiae United States at 11, Valdespino v. Alamo Heights Indep. Sch. Dist., 120 S. Ct. 931 (2000) (No. 98-1987).
[^7]:    28 Id at 6-14.
    29. The most recent Supreme Court redistricting case, Hunt v. Cromartie, 120 S. Ct. 2715 (2000), involving a challenge to the congressional plan that the North Carolina General Assembly in 1997, did not directly address the issues pursued in this article. It should be noted, however, that even if one believes that the $50 \%$ cutoff line is irrelevant under the Voting Rights Act, the fact that a district was drawn with the motive of pushing the black (or Hispanic) percentage above some artificial threshold such as $50 \%$ could significantly increase its chance of being struck down as an unconstitutional racial gerrymander under the Shaw doctrine. See, e.g., Bush v. Vera, 517 U.S. 952, 969-72 (1996) (plurality opinion) (invalidating Texas's Thirtieth Congressional District in part because the state legislature specifically sought to push its black percentage above $50 \%$ and ended up drawing a dramatically irregular district with a black population percentage between $50.0 \%$ and $50.1 \%$ ). In Page v. Bartels, 248 F.3d 175, $193-94$ (3rd Cir. 2001), the court finds that districts with less than a black majority may, sometimes, nonetheless, provide black voters a realistic opportunity to elect candidates of choice.
    30. See Bernard Grofman \& Chandler Davidson, The Effect of Municipal Election Structure on Black Representation in Eight Southern States, in Quiet Revolution in the

[^8]:    38. See Lublin, Racial Redistricting, supra note 34, at 183-84.
    39. See id.; Lublin, supra note 32, at 276-79.
    40. While it has long been argued that we cannot understand black electoral success in partisan elections without looking at both primaries and general elections, see, e.g., Thornburg v. Gingles, 478 U.S. 30, 58-61, 80-82 (1986) (summarizing Grofman's expert testimony), most authors who consider primary elections tend to do so separately from their analysis of general elections. Two notable exceptions are DAVID T. CANON, RACE, Redistricting, and Representation: The Unintended Consequences of Black Majority Districts (1999) and J. Morgan Kousser, Beyond Gingles: Influence Districts and the Pragmatic Tradition in Voting Rights Law, 27 U.S.F. L. Rev. 551, 578 (1993). Professor Kousser wrote:

    In partisan contests, the proportion of the dominant minority group necessary to have a high probability of effectively controlling the district might well be lower than in nonpartisan elections, because a percentage well below $50 \%$ of the voters could comprise a majority of the dominant political party. In such an instance, the crucial question would be the likely extent of white or other group defection from minority-endorsed party nominees in the general election.

[^9]:    41. The Texas 18 th was not a majority-white district; however, it was $39 \%$ black, $27 \%$ Hispanic and 1\% Asian. See Michael Barone \& Grant Ujifusa, The Almanac Of AMERICAN POLITICS 1990, at 1201 (1989).
    42. This total includes the Texas 18th, which was redrawn in 1992 to be $51 \%$ black.
    43. See generally Orville Vernon Burton, Legislative and Congressional Districting in South Carolina, in Race And Redistricting, supra note 32, at 290; Richard L. Engstrom \& Jason F. Kirksey, Race and Representational Districting in Louisiana; in Race and Redistricting, supra note 32, at 229; Winnett W. Hagens, The Politics of Race: The Virginia Redistricting Experience, 1991-97, in Race AND REDISTRICTING, supra note 32, at 315; Robert A. Holmes, Reapportionment Strategies in the 1990s: The Case of Georgia; in Race And Redistricting, supra note 32, at 191; Patrick Sellers, et al., Congressional Redistricting in North Carolina; in Race AND REDISTRICTING, supra note 32, at 269 (providing a detailed description of the redistricting process in several of these southern states).
[^10]:    44. Despite the revelation that Hatcher had accumulated 819 overdrafts on the House bank, he received $40 \%$ of the vote in the Democratic primary, and $47 \%$ of the vote in the runoff. The African-American candidate, Sanford Bishop, however, received 53\% of the vote in the Democratic runoff, and went on to win the general election against a white Republican with $64 \%$ of the vote. See Michael Barone \& Grant Ujifusa, The Almanac Of American Politics 1994, at 338 (1994).
    45. 509 U.S. 630 (1993).
    46. Bush v. Vera, 517 U.S. 952, 985-86 (1996) (Texas); Miller v. Johnson, 515 U.S. 900, 927-28 (1995) (Georgia); Shaw v. Reno, 509 U.S. 630, 657-658 (1993) (North Carolina); Moon v. Meadows, 952 F. Supp. 1141, 1150 (E.D. Va. 1997) (Virginia); Johnson v. Mortham, 915 F. Supp. 1529, 1552 (N.D. Fla. 1995) (Florida); Hays v. Louisiana, 839 F. Supp. 1188, 1209 (W.D. La. 1993) (Louisiana).
[^11]:    47. Although the South Carolina 6th was also challenged, the case was settled in 1997 with an agreement that the South Carolina General Assembly would redraw the districts by the end of the session in 2000. See Burton, supra note 43, at 290.
    48. The black populations in the Florida 3rd, the Georgia 2nd and 11th, the Louisiana 4 th, the North Carolina 1st and 12th, and the Texas 18 th and 30 th fell below $50 \%$. The Virginia 3 rd went from $64 \%$ to $54 \%$ black when it was redrawn.
    49. The Florida 3rd congressional district went from $55 \%$ black to $47 \%$ black; the Texas 18th, which was $51 \%$ black, and the Texas 30 th, which was $50 \%$ black, both went to $45 \%$ black; the Georgia 2nd went from $57 \%$ black to $39 \%$ black, and McKinney, who had run for office in the Georgia 11th, which was $64 \%$ black in 1992 and 1994, ran as an incumbent in 1996 in the Georgia 4th, which was $37 \%$ black.
    50. The black incumbents won re-election in the remaining majority-minority districts as well. In North Carolina, the 1996 elections were held under the old district configurations. Neither Clayton nor Watt faced primary opposition, and both won the general election against white Republican challengers with large percentages of the vote (Clayton won with $66 \%$ of the vote and Watt with $71 \%$ of the vote). Scott won the general election in the Virginia 3rd with $82 \%$ of the vote. CONGRESSIONALQUARTERLY, POLITICS in AMERICA 1998: THE 105TH CONGRESS 1067, 1092, 1487 (Philip D. Duncan \& Christine C. Lawrence eds., 1997).
    51. A federal three-judge panel redrew both the 18 th and 30 th Congressional Districts after the regular 1996 primary and required these two districts to have all-party (or "open") primaries on the same day as the general election. Vera v. Bush, 933 F. Supp.
[^12]:    53. Cynthia McKinney, A Product of the Voting Rights Act, Wash. POST, Nov. 26, 1996, at A15.
    54. See, e.g., T. Baxter, Georgia Campaign '96: Primaries Offer Some Indications State Voting Patterns Changing, Atlanta J. Const., Aug. 1, 1996, at 2C; M.A. Fletcher, New Tolerance In The South Or Old Power Of Incumbency? Blacks Won In Five Redrawn Mostly White Districts, WASH. POST, Nov. 23, 1996, at A1; C. Helton, Georgia Analysis: McKinney, Bishop Show Blacks Can Win In Majority-White Districts, Atlanta J. Const., Nov. 6, 1996, at 3C; D. Stephen Voss \& David Lublin, Black Incumbents, White Districts: An Appraisal of the 1996 Congressional Elections, AM. POL. RES., Mar. 2001, at 141-82. Each of these authorities reach similar conclusions regarding voting patterns in the Georgia congressional contests using ecological inference to derive their estimates.
    55. Bullock \& Dunn, supra note 34, at 1226, 1232-35 (1999).
    56. Bullock and Dunn produced estimates of voting patterns by race for each election contest using three standard statistical methods: homogeneous precinct analysis, ecological regression and ecological inference. Id. at 1223-24. Homogeneous precinct analysis involves comparing the voting behavior of precincts that are racially homogeneous (in this case, racially homogeneous is defined as $90 \%$ or more of the registered voters are either black or white). Ecological regression involves applying ordinary least squared regression to data that has been aggregated, in this case to the precinct level. For further explanation of these two statistical techniques, see, for example, Bernard Grofman et al., Minority Representation and The Quest FOR Voting Equality 84-88 (1992). Ecological inference, as developed by Gary King, incorporates maximum likelihood statistics to produce estimates of voting patterns by race. See generally Gary King, A Solution To The Ecological Inference PROBLEM (1997) (describing this statistical procedure); Bernard Grofman, A Primer on Racial Bloc Voting, in The Real Y2K Problem: Census 2000 Data And REDISTRICTING TECHNOLOGY (Nathaniel Persily ed., 2000) (providing a less technical overview intended for the lay audience). In most instances, Bullock and Dunn produced similar estimates for each election contest utilizing these three methods, and rather than choosing to report one estimate over the other two, we averaged the three estimates and report the average of these estimates in tables 3 and 4.
[^13]:    62. The exception to this rule was McKinney, who received $58 \%$ of the vote in the Georgia 4th in 1996, compared to the $64 \%$ received by Clinton in this district.
    63. Bullock \& Dunn, supra note 34 , at 1250 . Bullock and Dunn first compared the average share of white votes in general elections for all black and white candidates, and for black and white candidates who competed as incumbents, as challengers and in open seats and found that "[a]mong incumbents, African Americans drew nine to thirteen percentage points less of the white vote than did white members of Congress. Whites also had an advantage in open seats, taking three to eight more percentage points of white support than did black candidates." Id. at 1249. These authors also used a regression model to determine that, controlling for the electoral status of the contest, the "race variable" was positive and indicated that "whites drew about ten percentage points more of the white vote than did a comparable black." Id. at 1250.
    64. Evidence for this contention can be found in the large margin of victories by which these black candidates won office when their districts were still majority black. In Georgia, for example, Bishop won $64 \%$ of the vote in 1992 and $66 \%$ of the vote in 1994, and McKinney won 73\% of the vote in 1992 and $66 \%$ of the vote in 1994.
[^14]:    65. The presence of a prison, and the prohibition on felon voting, complicates the calculation because minorities are disproportionately represented in prisons, making it more difficult to estimate participation rates and voting patterns by race.
    66. See generally Brace et al., supra note 33 (referencing data on registration and turnout by rate).
[^15]:    67. Another factor that can be taken into account in calculating equalizing percentages is roll-off. "Roll-off" occurs when voters fail to cast a vote for offices below that at the top of the ballot. Roll-off often disproportionately affects minority voters. Although we do not have this data for the congressional elections we examine, we are able to include roll-off in our calculations for state legislative office in South Carolina. An additional factor is the differential rate of ballot spoilage-a controversial topic in the Florida recount. See, e.g., John Mintz \& Dan Keating, Florida Ballot Spoilage Likelier for Blacks; Voting Machines, Confusion Cited, WASH. Post, Dec. 3, 2000, at A1.
    68. We calculate the equalizing percentage mathematically by solving the following equation:

    Let:
    $M=$ the proportion of the district's total population that is black.
    $W=1-M=$ the proportion of the district's total population that is white.
    $A=$ the proportion of the black population that turned out to vote.
    $B=$ the proportion of the white population that turned out to vote.
    Therefore,
    $M(A)=$ the proportion of total population that is black and turned out to vote
    $(1-M) B=$ the proportion of total population that is white and turned out to vote

[^16]:    been calculated, we have the information we need to conduct a statistical analysis that allows us to estimate the percentage of blacks and whites who registered, turned out and voted for specific candidates. The statistical procedures used to produce these estimates are briefly described above. See supra note 56 . For a more detailed description of data availability and the problems associating with building a precinct level database, see Grofman et al., supra note 56, at 93-94 and Brace et al., supra note 33, at 57-58.
    70. Bullock \& Dunn, supra note 34, at 1226, 1232-35.

[^17]:    71. See, e.g., GROFMAN ET AL., supra note 56, at 118-120.
    72. Once these estimates have been derived statistically, incorporating black cohesion and white crossover into the equation is straightforward. For an explanation of how these estimates, as well as estimates of registration and turnout by race, are produced, see supra note 53. Using the mathematical formula outlined supra note 68 and substituting " $A$ " with "vote for the black candidate" and "B" with "vote for the white candidate (rather than the proportions of the black and white population that turned out to vote), the percentage black needed to produce $50 \%$ of the vote for the black candidate can be calculated. The vote for the black candidate is a product of the percent black participation and the proportion of black votes for the black candidate (black cohesion) plus the product of the percent white participation and the proportion of white votes for the black candidate (white crossover). The vote for the white candidate is, of course, a product of the percent black participation and the proportion of black votes for the white candidate plus the product of the percent white participation and the proportion of white votes for the white candidate (white bloc vote).
[^18]:    74. The percent black needed to win the Democratic primary is somewhat misleading if more than one black candidate ran in the primary-the estimates for the percentage of whites crossing over and the percentage of blacks voting cohesively are a reflection of the percentage of whites and blacks voting for any of the black candidates, not simply the winning black candidate. For example, in the 1992 Democratic primary in the Georgia 11th, $60.4 \%$ of the whites voted for one of the four black candidates running, but not necessarily the black candidate (McKinney) who won.
[^19]:    76. Two of these four victories occurred in District 12. In 1996, black Democrat Anne Parks defeated white incumbent Jennings McAbee (Petition, but formerly a Democrat) in the general election. McAbee, running as a Republican, narrowly defeated Adams in the 1997 special election. Adams unseated McAbee for the second time in the 1998 regular general election.
[^20]:    78. Support for candidates by race was calculated utilizing Gary King's ecological inference program. See generally King, supra note 56 (discussing uses of ecological inference methods).
    79. Not surprisingly, only one of the twelve black challengers actually won the Democratic primary.
[^21]:    80. This model effectively treats blacks who vote for Republicans as indistinguishable from white Republicans because neither group votes in Democratic primaries and both groups prefer Republican candidates in the general elections.
