

# EXHIBIT V

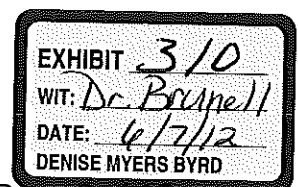
Report on Racially Polarized Voting in North Carolina

June 5, 2011

Thomas L. Brunell, Ph.D.  
Professor of Political Science  
Senior Associate Dean of Graduate Education  
University of Texas at Dallas<sup>1</sup>

---

<sup>1</sup> The opinions expressed in this report are solely my own and do not necessarily represent those of the University of Texas at Dallas or the state of Texas.



North Carolina has 40 districts covered by Section 5 of the Voting Rights Act and Section 2 of the VRA requires states, given certain conditions, to draw majority minority districts for both congressional and state legislative electoral boundaries. One of these conditions, from the *Thornburg v. Gingles* (478 US 30 – 1986) case, is that voting in the state is racially polarized, which means a majority of white voters prefer a different candidate than a majority of voters from the protected minority. In this report examine the 40 counties covered by Section 5 of the VRA, along with four other counties: Durham, Forsyth, Mecklenburg, and Wake.

#### 2010 U.S. Senate Democratic Primary

This election had six candidates, three of whom are African American (Ann Worthy, Ken Lewis, and Marcus Williams) and three of whom are White (Cal Cunningham, Elaine Marshal, and Susan Harris). I collapsed votes into two groups – vote for a Black candidate or a White candidate.

#### Homogenous Precincts

There are 98 precincts with 90 percent or greater Black votes in the dataset. On average the districts cast 58.1 percent of their votes for one of the Black candidates. For the 1,003 precincts with 90 percent or greater non-Black voters, the average percent for one of the Black candidates was 19.6 percent. A difference of means test for these two percentages indicates very strong statistical significance ( $p < .001$ ). We can conclude that voting was racially polarized for this election.

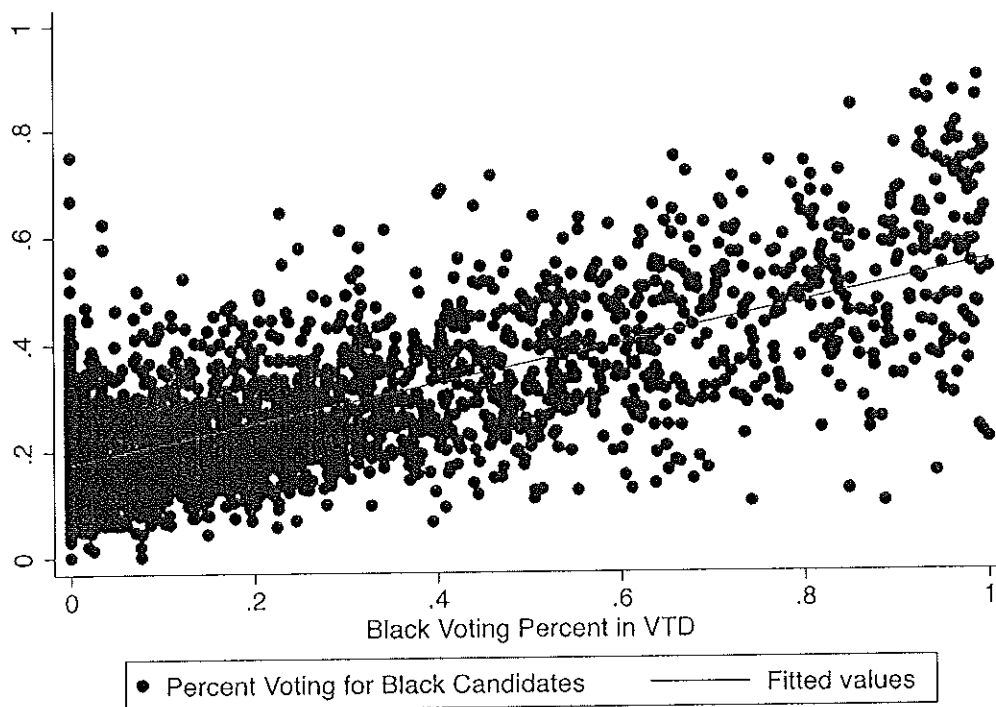
#### Bivariate Regression

The equation describing the linear relationship between percent whites voting in a precinct and the percent of votes for White Candidates is

$$\text{Percent votes for Black candidates} = .376(\text{Percent Black in Precinct}) + 18.1$$

The coefficients for both the constant (18.1) and the percent whites in precinct are statistically significant (respective t-values of 57.3 and 49.5). There are 2,588 observations in the analysis and the R-squared is .49. So for every ten-percentage point increase in the Black population in a district, we expect the percentage of votes in a district for Black candidates to increase by 3.75 points. The scatter-plot below is a graphical representation of this relationship. As we move from left to right on the x-axis (horizontal axis) the precincts have heavier percentage of Black voters. There is a strong linear relationship with the percentage of votes cast for Black candidate as well. We can conclude that voting is clearly racially polarized in this election.

Figure 1. 2010 US Senate Democratic Primary – Racial Bloc Voting



### 2008 Presidential election

The most recent presidential election is a good data point to investigate whether racially polarized voting exists in North Carolina. The candidates were Barack Obama and John McCain. Elections that have an African American running against a White candidate are the best elections to look for bloc voting.

First we can examine homogeneous precincts in the 44 counties in question. There are 64 VTD's in which the proportion of votes casted by African Americans exceeds .90. In those precincts the average vote for President Obama was 97.8 percent. It ranged from a low of 92.8 percent to a high of 99.8 percent. The standard deviation of the Obama vote in these precincts was 1.6 percent. In the 342 VTD's in which the African American vote proportion was less than .10, the average vote for President Obama was 40.5 percent, with a high of 87.1 and a low of 8.7. The standard deviation of the vote was 13.2 percent. A t-test to see whether these averages are different indicates they are different and the statistical significance is very high (p-value is less than .001). We can conclude that there is statistical significant racially polarized voting in these counties in North Carolina.

Next, we conducted bivariate regression analysis to look the linear relationship between percent black voters in a VTD and percent of the vote for the African American candidate. We use the data for all matched VTD's in the

dataset, not just homogeneous precincts. Since we are interested in the presence of racial bloc voting in specific counties, these analyses were running separately for each of the 44 counties in question. The dependent variable is the percent of the two-party vote received in each VTD by President Obama. The independent variable is the percentage of voters in each VTD who are black. The table lists the coefficient for the Black Voter percentage for each county and the constant. I also list the number of observations for each county (the number of matched VTD's in the dataset) and the R-squared which is a measure of how well the black voting percentage explains the variance in the percentage of votes for President Obama. This number can range from 0 to 1.0, with numbers closer to 1.0 indicating a excellent linear relationship between these two variables. A positive sign on the coefficient for the Black Voter percentage indicates that as the proportion of voters who are black in a precinct increases, so does the percentage of the votes for President Obama. All of the coefficients below are positive. The constant can be interpreted as the percent of the vote that President Obama receives when the percentage of voters in that county that are African American is zero. So for Anson County, for instance, President Obama would receive, on average, 22.6 percent of the vote from a precinct that had zero black voters. For every 10 percentage point increase in the black voters in a precinct, we expect President Obama to receive 7.92 percent votes. These results are typically of statistically significant racially polarized voting.

There are some counties, like Wake, Durham, Jackson, Mecklenburg, in which there is a considerable amount of white cross-over voting for President Obama. All four of these have a constant of at least 40, and Durham's constant is 59.4. There are five homogeneous precincts in Durham that have less than 10 percent African American voters. In these districts the average vote percent for Obama is 69.6 percent. Thus at least for the 2008 presidential election, it appears that in Durham County a majority of both White and Blacks supported President Obama.

In Mecklenburg County, the homogenous precincts that are less than 10 percent Black, a majority of voters supported McCain (roughly 56 percent), so voting is racially polarized in Mecklenburg County. In Wake County, voting is also polarized, though it is quite close inasmuch as in the homogeneous precincts, there was a bare majority of support for McCain (51.3). In Jackson County, the homogeneous precincts also indicate majority non-black support for President Obama (52.7 percent).

#### 2008 Presidential Election Racial Bloc Voting Analysis

County	Black Voter %	Constant	Number of Observations	R-sq
Anson	.792***	22.6***	11	.97
Beaufort	.453***	5.4***	21	.89
Bertie	.94***	10.3***	12	.99
Bladen	.910***	14.8***	17	.99

Camden	.427	27.1*	3	.86
Caswell	.801***	20.9***	10	.98
Chowan	.883***	22.6***	6	.94
Cleveland	.877***	20.1***	28	.96
Craven	.749***	26.1***	27	.85
Cumberland	.823***	24.0***	37	.97
Durham	.413***	59.4***	53	.49
Edgecombe	.879***	14.5***	21	.99
Forsyth	.689***	36.1***	101	.85
Franklin	.723***	28.4***	18	.93
Gaston	.825***	24.3***	46	.91
Gates	.843***	21.9***	6	.99
Granville	.755***	26.5***	15	.95
Greene	.906***	12.8**	9	.92
Guilford	.667***	37.3***	152	.82
Halifax	.815***	21.0***	30	.86
Harnett	.784***	23.2***	13	.90
Hertford	.859***	18.0***	13	.93
Hoke	.795***	25.1***	12	.86
Jackson	2.24*	48.0***	10	.43
Lee	N/A			
Lenoir	.869***	14.5***	22	.99
Martin	.861***	15.4***	13	.98
Mecklenburg	.639***	41.9***	195	.89
Nash	.924***	15.8***	26	.98
Northampton	.813***	18.6***	18	.98
Onslow	.830***	22.1***	22	.91
Pasquotank	.822***	24.4***	13	.96
Perquimans	.677**	26.9***	7	.86
Person	.876***	20.5***	14	.97
Pitt	.704***	30.9***	38	.76
Robeson	.599***	37.8***	41	.63
Rockingham	.816***	24.8***	16	.96
Scotland	.768***	26.7***	10	.98
Union	.903***	25.1***	48	.88
Vance	.831***	19.9***	16	.99
Wake	.569***	45.8***	188	.68
Washington	.979***	10.0**	6	.99
Wayne	.902***	14.6***	30	.99
Wilson	.821***	19.6***	24	.98

2004 State Auditor Election Racial Bloc Voting Analysis

County	Black Voter %	Constant	Number of Observations	R-sq
Anson	.619***	43.0***	8	.89
Beaufort	.869***	29.1***	20	.92
Bertie	.688***	34.8***	11	.97
Bladen	.613***	45.1***	15	.92
Camden	N/A		2	
Caswell	.728***	37.8***	11	.82
Chowan	.702***	34.5***	4	.90
Cleveland	.877***	20.1***	28	.78
Craven	.785***	27.8***	18	.94
Cumberland	.629***	33.5***	64	.93
Durham	.514***	50.0***	32	.76
Edgecombe	.633***	37.4***	21	.96
Forsyth	.654***	34.1***	101	.84
Franklin	.833***	33.5***	17	.89
Gaston	.754***	26.8***	46	.85
Gates	.259	54.3***	5	.25
Granville	.819***	34.2***	14	.89
Greene	1.00***	23.8***	10	.76
Guilford	.674***	34.8***	115	.85
Halifax	.616***	40.6***	30	.88
Harnett	.666***	35.3***	22	.69
Hertford	.598***	39.2***	13	.94
Hoke	.784**	30.5**	11	.66
Jackson	3.40*	48.4***	18	.19
Lee	.636***	39.2***	13	.80
Lenoir	.733***	28.2***	21	.97
Martin	.609***	40.8***	13	.88
Mecklenburg	.711***	31.6***	180	.90
Nash	.821***	28.8***	24	.94
Northampton	.537***	46.9***	18	.87
Onslow	.608***	27.9***	23	.75
Pasquotank	.600***	42.1***	6	.89
Perquimans	1.08*	27.1*	6	.64
Person	.728***	36.6***	6	.98
Pitt	.627***	36.2***	38	.80
Robeson	.322***	61.7***	41	.26
Rockingham	.637***	37.0***	30	.90
Scotland	.646***	43.0***	7	.93
Union	.858***	22.1***	35	.85
Vance	.613***	41.2***	13	.96

Wake	.595***	40.3***	181	.71
Washington	.812***	33.8**	6	.95
Wayne	.784*	29.3*	3	.99
Wilson	.696***	32.4***	24	.97

### Mecklenburg County

To further probe for the presence of racial bloc voting in Mecklenburg County I analyzed a Democratic state primary from 2010 that had two White candidates (Becky Carney and Ken Davies) and one African American candidate (Kim Ratliff). For the purposes of this analysis I grouped votes for the two white candidates into one variable.

### Homogeneous Precincts

There are 3 VTD's in the data in which black voters make up 90 percent of the voters or better, in these districts the African American candidate received an average of 59.1 percent of the vote. There are 4 precincts with less than 10 percent black voters and in these districts the black candidate received an average of 5.8 percent of the vote. This indicates significant racially polarized voting.

### Bivariate Regression Analysis

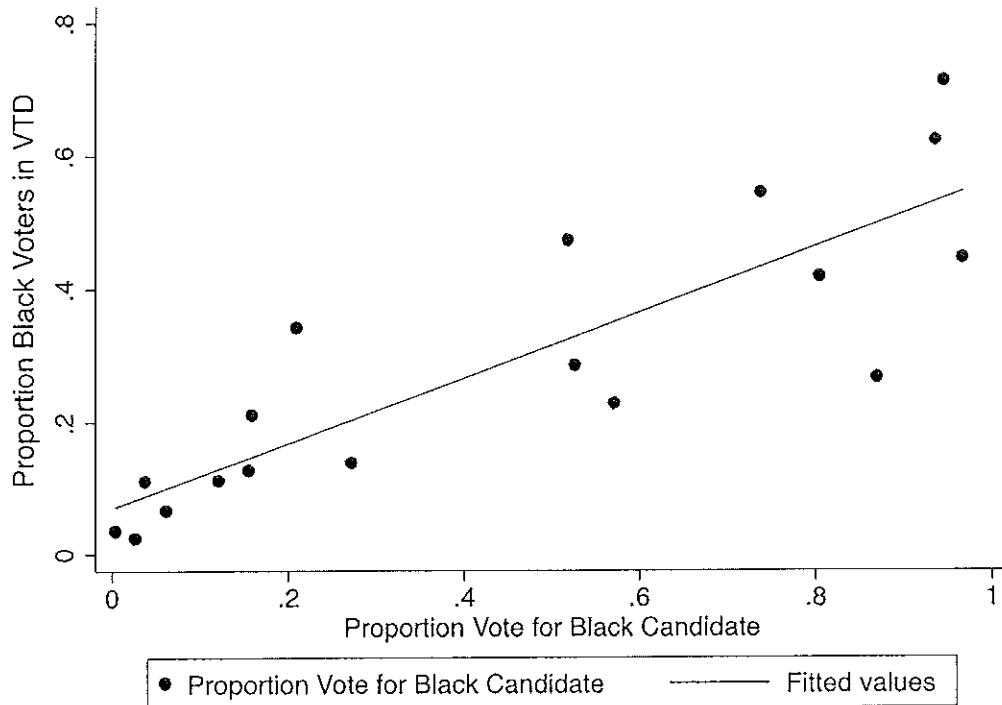
The equation for this relationship is:

Percentage vote for Black candidate = 7.5 percent + .493(Black voter percentage).

The number of observations is 18, and the R-squared is .74. The analysis weighted each observation by the total number of votes in each VTD. The results are statistically significant and indicate racial bloc voting.

Figure 2. State House 2010 Democratic Primary LD 106





**Durham County**

The general election in Senate District 20 in 2010 pitted a Black Democrat (Floyd B. McKissick, Jr.) versus a White Republican (John Tarantino). This provides another opportunity to see if racial bloc voting exists in Durham County.

**Homogeneous Precincts**

There are 6 VTD's in the data in which black voters make up 90 percent of the voters or better, in these districts the African American candidate received an average of 97.8 percent of the vote. There are 2 precincts with less than 10 percent black voters and in these districts the black candidate received an average of 40.1 percent of the vote. This indicates significant racially polarized voting with statistical significance at the  $p < .001$  level.

**Bivariate Regression Analysis**

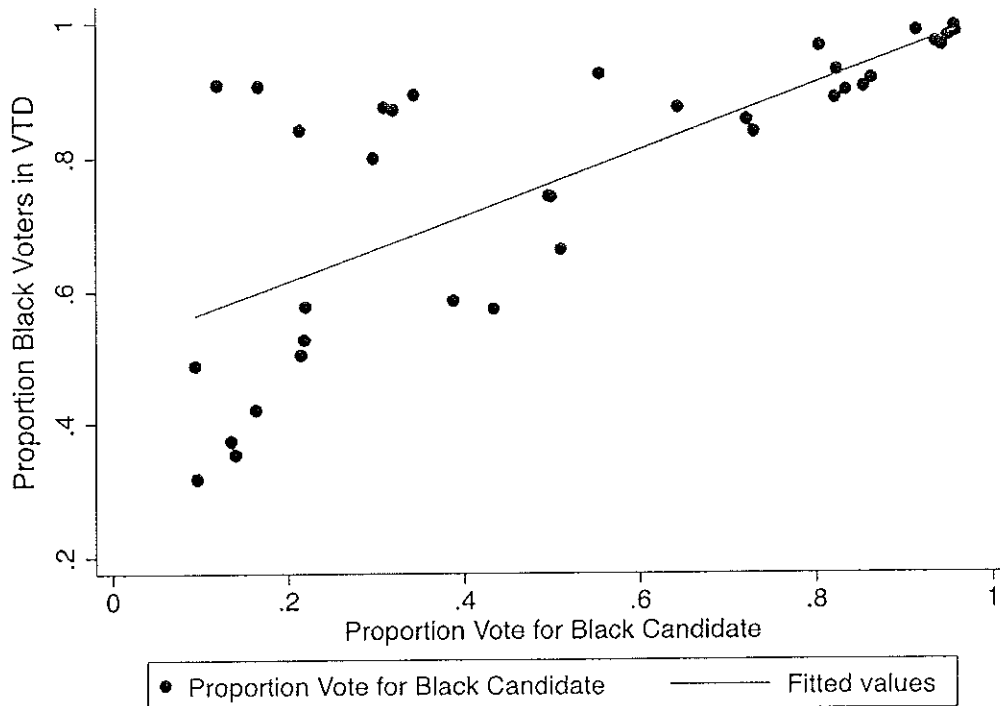
The equation for this relationship is:

$$\text{Percentage vote for Black candidate} = 45.3 \text{ percent} + .561(\text{Black voter percentage}).$$

The number of observations is 36, and the R-squared is .61. The analysis weighted each observation by the total number of votes in each VTD. The results are statistically significant and indicate racial bloc voting.

The graph below depicts the linear relationship between proportion black in a precinct and the proportion of vote the black candidate received in this election. There is clearly a linear relationship and it is statistically significant. Voting is racially polarized in Durham County for this election.

Figure X. Senate 20 General Election 2010



## Wake County

### Board of Commissioners District 1

In 2010 an election for the Board of Commissions in Wake County pitted a Black Democrat (Don Mial) versus a White Republican (Joe Bryan).

### Homogeneous Precincts

In the 81 VTD's that had less than 10 percentage of the votes cast by Blacks, the Black candidate averaged 39.5 percent of the vote. In the 5 VTD's that had over 90 percent of the votes cast by Blacks, the Black candidate averaged 96.5

percent of the vote. The difference in the averages is statistically significant at  $p < .001$ , indicating statistically significant racially polarized voting.

### Bivariate Regression Analysis

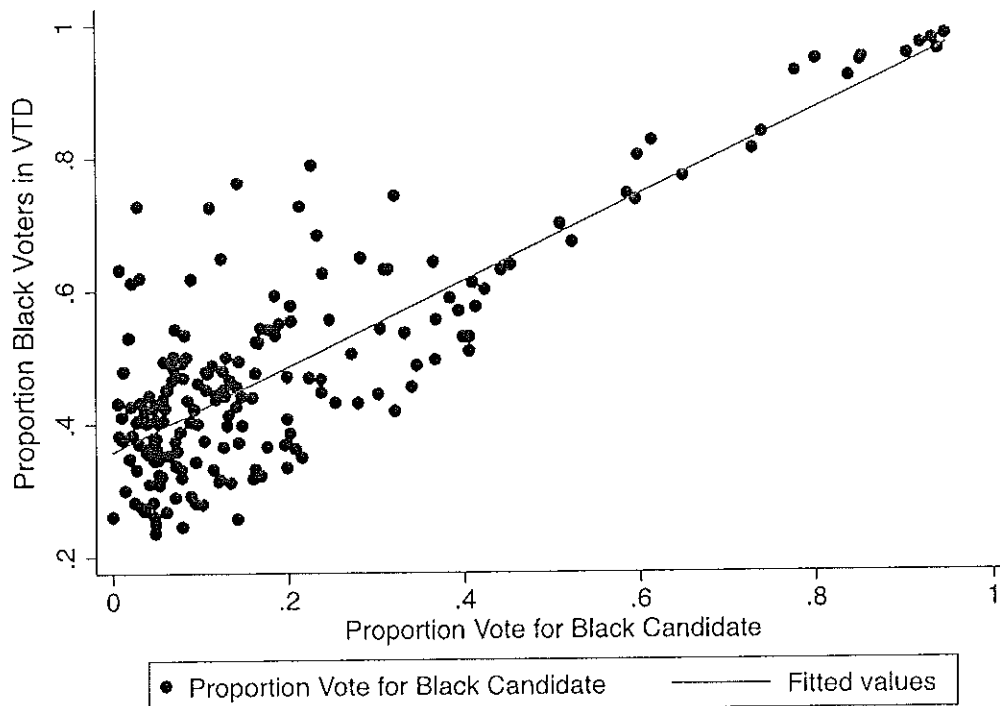
The equation for this relationship is:

Percentage vote for Black candidate = 34.0 percent + .657(Black voter percentage).

The number of observations is 188, and the R-squared is .70. The analysis weighted each observation by the total number of votes in each VTD. The results are statistically significant and indicate racial bloc voting.

The graph below depicts the linear relationship between proportion black in a precinct and the proportion of vote the black candidate received in this election. There is clearly a linear relationship and it is statistically significant. Voting is racially polarized in Wake County for this election.

Figure X. 2010 Board of Commissions Election District 1, Wake County



### Board of Commissioners District 2

In 2010 an election for the Board of Commissioners in Wake County pitted a Black Democrat (Lindy Brown) versus a White Republican (Phil Matthews).

### Homogeneous Precincts

In the 81 VTD's that had less than 10 percentage of the votes cast by Blacks, the Black candidate averaged 43.0 percent of the vote. In the 5 VTD's that had over 90 percent of the votes cast by Blacks, the Black candidate averaged 97.0 percent of the vote. The difference in the averages is statistically significant at  $p < .001$ , indicating statistically significant racially polarized voting.

### Bivariate Regression Analysis

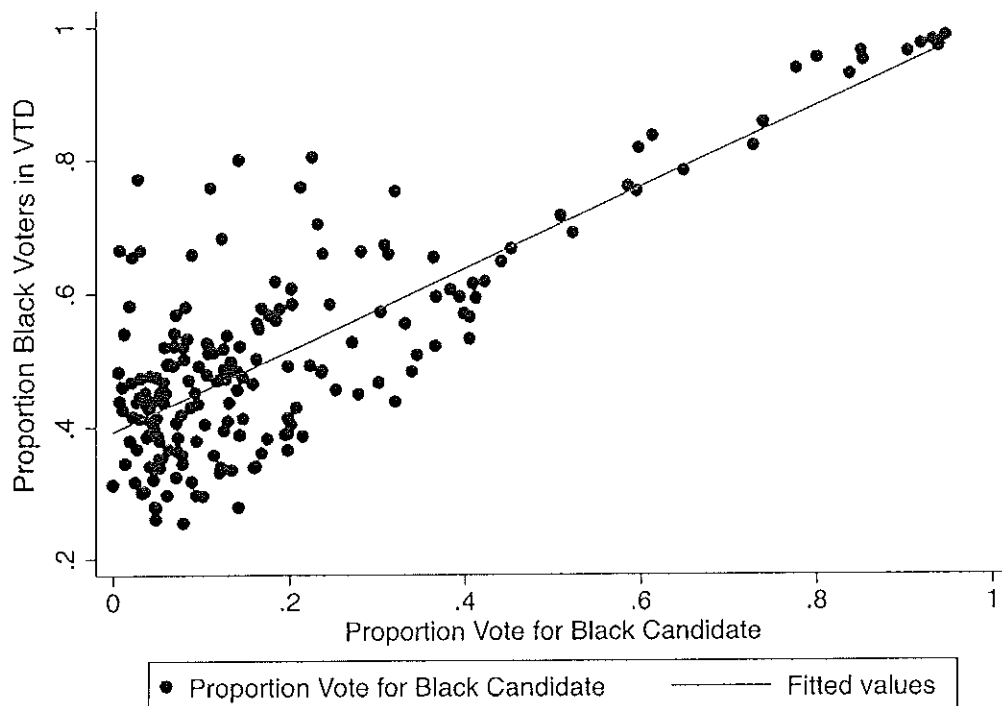
The equation for this relationship is:

Percentage vote for Black candidate = 37.3 percent + .625(Black voter percentage).

The number of observations is 188, and the R-squared is .67. The analysis weighted each observation by the total number of votes in each VTD. The results are statistically significant and indicate racial bloc voting.

The graph below depicts the linear relationship between proportion black in a precinct and the proportion of vote the black candidate received in this election. There is clearly a linear relationship and it is statistically significant. Voting is racially polarized in Wake County for this election.

Figure X. 2010 Board of Commissions Election District 2, Wake County



### Senate District 5 - 2010 General Election

Don Davis, a Black Democrat ran against Louis M. Pate, a White Republican in this election. The data demonstrate statistically significant racially polarized voting was present in this election.

### **Homogeneous Precincts**

In the 3 VTD's that had less than 10 percentage of the votes cast by Blacks, the Black candidate averaged 40.7 percent of the vote. In the 2 VTD's that had over 90 percent of the votes cast by Blacks, the Black candidate averaged 93.9 percent of the vote. The difference in the averages is statistically significant at  $p < .01$ , indicating statistically significant racially polarized voting.

### **Bivariate Regression Analysis**

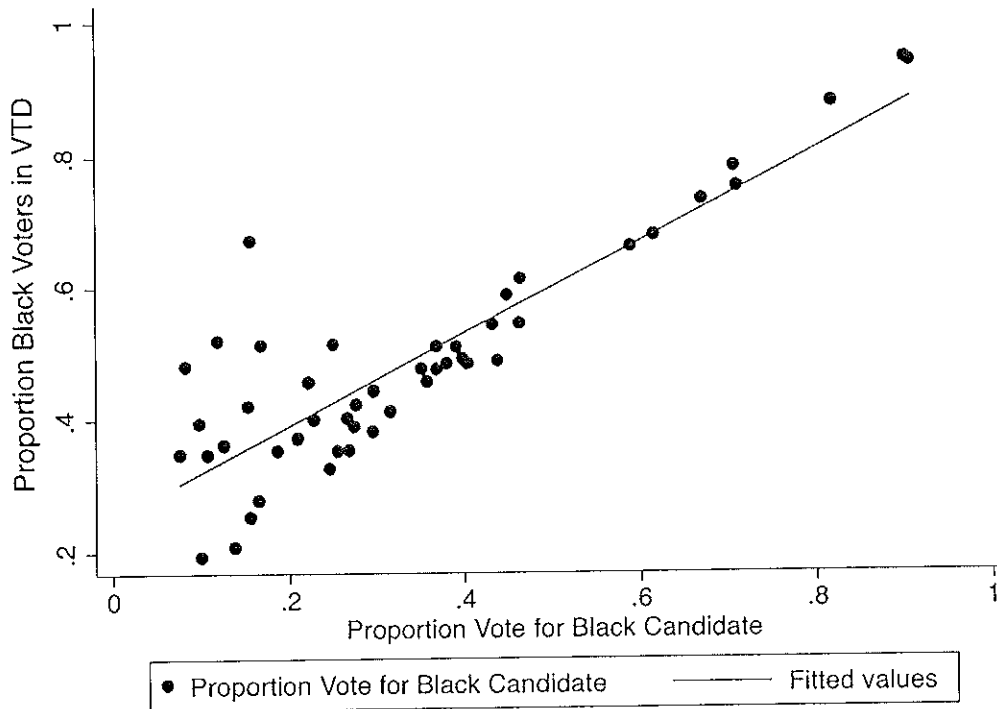
The equation for this relationship is:

Percentage vote for Black candidate = 22.7 percent + .727(Black voter percentage).

The number of observations is 49, and the R-squared is .79. The analysis weighted each observation by the total number of votes in each VTD. The results are statistically significant and indicate racial bloc voting.

The graph below depicts the linear relationship between proportion black in a precinct and the proportion of vote the black candidate received in this election. There is clearly a linear relationship and it is statistically significant. Voting is racially polarized in this election and the results are statistically significant.

Figure X. 2010 Senate District 5 General Election



### 2006 General Election in State House District 60

This is a Guilford County example of racially polarized voting. This election pitted a Black Democrat, Earl Jones against a White Republican, Bill Wright.

#### Homogeneous precincts

There are three precincts in the data that have an African American voter population of 90 percent or greater. In each of these VTD's the percentages of votes for the Black Democratic candidate were greater than 90 percent (92.5, 93.7, and 96.3). There are four VTD's with non-Black population of 90 percent or greater and the vote percentages for the Democratic candidate were: 20.9, 15.9, 19.1, and 12.2.

#### Bivariate Regression

The equation describing the linear relationship between percent whites voting in a precinct and the percent of votes for White Candidates is

$$\text{Percent votes for Black candidate} = .870(\text{Percent Blacks in Precinct}) + 15.8.$$

The coefficients for both the constant and the percent Blacks in precinct are statistically significant (respective t-values of 5.12 and 16.8). There are 24 observations in the analysis and the R-squared is .92. So for every ten-percentage point increase in the Black population in a district, we expect the

percentage of votes in a district for Black candidate to increase by 8.70 points. The scatter-plot below is a graphical representation of this relationship. There is a strong linear relationship between the percent African American in a precinct and the percentage of votes received by the Black Democratic candidate. Voting is clearly racially polarized in Guilford County.

Figure 1. 2006 General Election State House District 60

