IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

STATE OF TEXAS, Plaintiff, v. UNITED STATES OF AMERICA; ERIC H. HOLDER, JR., in his official capacity as Attorney General of the United States, Defendant, and WENDY DAVIS *et al.* Defendant-Intervenors.	Civil Action No. 1:11-cv-01303 (RMC-TBG-BAH)

GONZALES INTERVENORS' SUBMISSION OF EXPERT WITNESS REPORTS OF DR. STEPHEN ANSOLABEHERE

The Gonzales Intervenors respectfully submit two expert reports prepared by Dr. Stephen Ansolabehere. These reports include an analysis of the State of Texas's proposed congressional map (Plan C185) in comparison to the benchmark congressional map (Plan C100) and constitute Dr. Ansolabehere's pre-filed testimony. The first report was originally filed as Exhibit 1 to the Declaration of John Devaney in support of the Gonzales Intervenors' Opposition to Plaintiff's Motion for Summary Judgment. *See* Dkt. #77. The second report was circulated to all counsel on January 16, 2011. Also included is a written oath signed by Dr. Ansolabehere attesting to the truth of the information contained in his reports. Dr. Ansolabehere will testify the week of January 23, 2012.

RESPECTFULLY SUBMITTED: January 17, 2011

/s/ John M. Devaney___________

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CERTIFICATE OF SERVICE

I hereby certify that on January 17, 2012, I electronically filed the foregoing Opposition to Motion for Summary Judgment with the Clerk of the United States District Court for the District of Columbia by using the CM/ECF system. Participants in the case who are registered CM/ECF users will be served by the CM/ECF system.

DATED: January 17, 2012

Respectfully submitted,

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EXHIBIT 1

I declare under penalty of perjury that the information set forth in the attached reports is true and correct to the best of my knowledge and belief.

DATED: January 17, 2012

Stephen Ansolabehere

Stephen Ansolabehere
Professor of Government
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EXHIBIT 2

Report on Minority and White Representation Under the Texas Congressional District Plans C185 and C100

Stephen Ansolabehere
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October 21, 2011

I. Statement of Inquiry

I have been asked to examine representation of Whites, Hispanics, and Blacks in the Congressional District plans adopted and considered by the Texas State Legislature following the 2010 Census and 2011 apportionment. I have also been asked to examine demographics, voting patterns, and district boundaries in specific counties and their surrounding areas, especially Bexar County, Dallas County, Harris County, Nueces County, Tarrant County, Travis County, and the area encompassed in South and Southwest Texas.

The primary purpose of this analysis is to assess whether the Congressional District map adopted by the Texas state legislature reduced the opportunities of minority voters to elect their candidates of choice. I am asked to compare specific districts within Plan C100 and Plan C185 to determine if any districts that were minority opportunity districts under Plan C100 are no longer so under Plan C185, and I have been asked to determine whether Hispanics and Blacks have on net lost representation in the state. Finally, I have been asked to determine whether Plan C185 provides minority voters reasonable opportunities to elect candidates of their choice to the U. S. House of Representatives and whether Plan C185 is in line with general principles of democratic representation, such as majority rule.

II. Background and Qualifications

I am a professor of Government in the Department of Government at Harvard University in Cambridge, MA. Formerly, I was an Assistant Professor at the University of California, Los Angeles, and I was Professor of Political Science at the Massachusetts Institute of Technology, where I held the Elting R. Morison Chair and served as Associate Head of the Department of Political Science. At UCLA and MIT, I taught PhD level courses on applied Statistics in the Social Sciences. I directed the Caltech/MIT Voting Technology Project from its inception in 2000 through 2004, am the Principal Investigator of the Cooperative Congressional Election Study, a survey research consortium of over 250 faculty and student researchers at more than 50 universities, and serve on the Board of Overseers of the American National Election Study. I am a consultant to CBS News' Election Night Decision Desk. I am a member of the American Academy of Arts and Sciences (inducted in 2007).

My areas of expertise include American electoral politics and public opinion, as well as statistical methods in social sciences. I am author of numerous scholarly works on voting behavior and elections, with particular focus on the application of statistical methods. This scholarship includes articles in such academic journals as the Journal of the Royal Statistical Society, the American Political Science Review, the American Economic Review, the American Journal of Political Science, Legislative Studies Quarterly, the Quarterly Journal of Political Science, Electoral Studies, and Political Analysis. I have published articles on issues of election law in the Harvard Law Review, Texas Law Review, Columbia Law Review, New York

University Annual Survey of Law, and the Election Law Journal, for which I am a member of the editorial board. I have coauthored three scholarly books on electoral politics in the United States, The End of Inequality: Baker v. Carr and the Transformation of American Politics, Going Negative: How Political Advertising Shrinks and Polarizes the Electorate, and The Media Game: American Politics in the Media Age. I am coauthor with Ted Lowi, Ben Ginsberg, and Ken Shepsle of American Government: Power and Purpose, a college textbook on American government. My curriculum vita with publications list is attached to this report.

I have worked as a consultant to the Brennan Center in the case *McConnell v. FEC*, 540 US 93 (2003). I have testified before the U. S. Senate Committee on Rules, the U. S. Senate Committee on Commerce, the U. S. House Committee on Science, Space, and Technology, the U. S. House Committee on House Administration, and the Congressional Black Caucus. I filed an amicus brief with Professors Nathaniel Persily and Charles Stewart on behalf of neither party to the U. S. Supreme Court in the case of *Northwest Austin Municipal Utility District Number One v. Holder*, 557 US (2009). I am consultant for the Rodriguez plaintiffs in *Perez v. Perry*, currently before the District Court in San Antonio, Texas, and I am consultant for the Guy plaintiffs in *Guy v. Miller* in Nevada state court. I am compensated at the rate of $400 per hour.

III. Sources of Information

All of the data and information used in this report come from the U. S. Census Bureau and the Texas Legislative Council. The Texas Legislative Council provides geographic information, demographic information, and election results at the level of the Voting Tabulation District (VTD), and it produces reports that aggregate that information to the level of the Congressional District for each plan. The information available that was used in this report includes maps, reports, and spreadsheets. We obtained data from their main website http://www.tlc.state.tx.us/redist/redist.html and ftp site ftp://ftpgis1.tlc.state.tx.us/DistrictViewer/Congress/. The Texas Legislative Council is the primary source of the information used in this report.

The Texas Legislative Council produced an analysis of Citizens of Voting Age Population in each district in Plan C185 on June 15, 2011 and for Plan C100 on August 2, 2011. In addition, I contacted the American Community Survey from the U. S. Bureau of the Census and obtained information provided on the website of the U. S. Bureau of the Census (www.census.gov). The data consist of the 2010 Census enumeration for Texas and the average of the American Community Survey for the years 2005-2009.

The Texas Legislative Council also provides information on Spanish Surname Voter Registration (SSVR). I do not use these data in my assessment, as I am unsure of their quality. We can measure potential errors in SSVR using VTDs where the Census 2010 Enumeration indicates No Hispanics of Voting Age and where Census 2010 indicates that all people are Hispanics of Voting Age. There are 74 Precincts in which Census 2010 counted no Hispanic persons of Voting Age. Three percent of all registered people in these areas are identified as having Spanish Surnames. These must be False Positives – people identified as Hispanics who clearly cannot be according to Census 2010. There are six precincts where the only persons who could be registered are Hispanics. Forty-four (44) percent of all registered persons in these precincts have Spanish Surnames, but according to Census all must be Hispanic. These are False Negatives, and in these all-Hispanic precincts the errors occur at a very high rate. Consequently, I only use the Census data in measuring racial composition of the electorate.

IV. Analysis

The State of Texas experienced profound demographic changes between the 2000 and 2010 Census. The State added 4.3 million people from 2000 to 2010; two thirds of them were Hispanics. Only about 10 percent of the additional persons in the state were White, and roughly 10 percent were Black. In 2000, the State was majority White; it is now plurality White. And Hispanics are the plurality and Whites the minority in the five most populous counties, which contain half of the population of the State of Texas.

The State's new Congressional District map does not reflect those changes. In fact, Hispanics are worse off than under the prior plan (C100). That conclusion is borne out in the following factual findings.

First, compared with the existing Congressional District plan (C100), the new district plan (C185) reduces the number of seats in which Hispanics have an opportunity to elect their candidates of choice. Under Plan C100, eleven (11) Congressional Districts are configured in such a way that Hispanics and Blacks have an opportunity to elect their candidates of choice. These were CDs 9, 15, 16, 18, 20, 23, 25, 27, 28, 29, and 30. Under Plan C185, ten (10) Congressional Districts are configured in such a way that Hispanics and Blacks have an opportunity to elect their candidates of choice. These are CDs 9, 15, 16, 18, 20, 28, 29, 30, 34 and 35. See Section C.1, pages 30-34.

Second, Plan C185 sufficiently altered three existing Hispanic opportunity districts so that minorities can no longer elect their preferred candidates in those districts. Districts 23 and 27 were majority Hispanic and Hispanic performing districts under C100. District 27 was transformed into a majority White district. District 23 was reconfigured so that it is no longer an effective district of Hispanic preferred candidates. District 25 was a cross-over district in which Whites split their votes evenly, and Hispanics and Blacks were pivotal in choosing the winner. It was dismantled entirely to construct a new Hispanic majority district (CD 35). The net effect of these changes was a loss of 1 Hispanic opportunity district statewide. See sections C.3 and C.4, pages 34-43.

Third, the dramatic changes in Whites' and Hispanics' shares of the population are not reflected in the composition of districts. Even though Whites' share of the population declined from 52 percent to 45 percent, they remain the majority in 70 percent of Congressional Districts in the State. Even though Hispanics' share of the population grew from 32 to 38 percent, they remain the majority in just 22 percent of Congressional Districts in Texas. See B.1.

Fourth, Hispanics account for most of the growth in the Citizen Voting Age Population in the state, the eligible electorate. From 2000 to 2010, the number of Hispanics citizens of voting age increased by 1.1 million persons. The number of White citizens of voting age increased by only 470,000. But, the new district Plan created a net of three additional district in which Whites are a majority of the eligible electorate and only one additional district in which Hispanics are a majority of the eligible electorate. See B.1 and B.2, pages 19-24.

Fifth, Plan C185 creates minority rule in the five most populous counties in the state. The five most populous counties in the state (Harris, Dallas, Tarrant, Bexar, and Travis) contain over 11 million people, almost half the state. In 2000, whites were the plurality of the people in these five counties combined. Today, Hispanics are the plurality, and Whites are the minority. Plan C185 configures the districts in these counties in such a way that Whites increase the number of districts in these areas in which they are a majority. In the 19 districts that have a plurality or majority of persons in one of these counties, 12 are majority White districts. In Dallas and Harris Counties, Hispanics are the plurality of the population but a majority in only 1 of 12 districts. Whites retain their majorities in these districts even though they became a minority of the population between 2000 and 2010. Plan C185 violates the most basic notion of majority rule. See Sections B.2 and B.3.2, esp. pages 24-33.

Sixth, the effect of these lines is to treat White and Minority voters differently. Eighty-eight percent of Whites end up in majority White districts. Only 40 percent of Hispanics and Blacks end up in Hispanic Majority or Black Plurality districts, respectively. This is not a natural consequence of plurality rule. Even in the Harris and Dallas counties, where Whites are the minority of the population, 90 percent of Whites end up in majority White districts. In Dallas, there are no Hispanic districts, so the plurality Hispanic population effectively has no opportunity to elect their candidates of choice, and the plurality group is completely diluted electorally. See section B.3, pages 24-29.

A. Population Size, Trends, and Characteristics

A.1. Statewide Total Population Trends

Today, no single racial or ethnic group is a majority in Texas. According to figures from the U. S. Census Bureau, 45 percent of persons in the state identify as White Non-Hispanics, 38 percent identify as Hispanics, and 12 percent identify as Black.[1] That is a marked change from 2000, when whites comprised 52 percent of the state's population, Hispanics were 32 percent, and Blacks 11 percent. The Census' counts of population overall and for each racial or ethnic group in the State are shown in Table A.1.

Prior to the drawing of new district plans, one might have expected increases in the number and share of Texas' Congressional districts that contain majorities or pluralities of Hispanics, and declines in the share of districts that have majorities or pluralities of Whites. The total population of the State of Texas increased by 4.3 million people from 2010 to 2011. White non-Hispanics, the largest racial or ethnic group, grew by only 457,000 people from 2000 to 2010. This is the smallest growth of all three major groups and it is far less than the 698,488 persons required for an additional district. The number of Blacks, the smallest of the three major racial or

[1] Black may be either Hispanic or Non-Hispanic. Approximately 2 percent of Black persons in Texas (approximately 60,000 persons) identify as Hispanic and Black. This is a very small amount of overlap between the groups, so we use just the figure for Black overall. Source: U. S. Bureau of the Census, http://quickfacts.census.gov/qfd/states/48000.html.

ethnic groups, increased 526,000, a 23 percent rate of growth since 2000. The number of Hispanics in the state grew from 6.7 million people to 9.5 million people, a 42 percent increase in this group's population and an increase that accounts for the large majority of the state's growth. Indeed, if Hispanics had grown at the same rate as White Non-Hispanics (4.1 percent growth over the entire decade) the state would have lost seats in the Congress, rather than gained them, because the nation's population grew by 9.7 percent over the decade.

A.2. Citizenship and the Eligible Electorate

These population figures are tempered somewhat by the lower citizenship rates of Hispanics compared with Whites. It is sometimes argued that the Hispanic share of the eligible electorate is sufficiently low that it is impossible to increase the number of districts where minorities have a reasonable opportunity to elect their candidates of choice. But even by that metric, Hispanics' presence in the electorate grew substantially more than Whites. Hispanics citizens of voting age, the best gauge of the eligible electorate, increased by 1.1 million persons from 2000 to 2010. This increase represents approximately half of the total increase in eligible voters in the state. White citizens of voting age, on the other hand, increased only 470,000 persons over the same time span, and Black citizens of voting age increased by nearly as much. The additional White citizens of voting age are less than one-fifth of the total increase in the eligible electorate statewide from 2000 to 2010. Hispanics increased their share of the Citizen Voting Age Population, and Whites' share of the eligible electorate shrank between 2000 and 2010. The problem is that Whites gain three additional seats, Blacks none, and Hispanics only one.

A.2.1 Measurement of CVAP

Before assessing the Hispanic, Black, and White shares of the eligible electorate, an aside about measurement is in order. Prior Court decisions use the Citizen Voting Age Population (CVAP) to gauge the number of eligible voters overall and in each group. The Census Bureau measures Citizen Voting Age Population using a separate survey from the Census Enumeration of total persons and voting age persons. Between 2000 and 2010 the Census Bureau changed its methodology for conducting this survey. In 2000 and early redistricting cycles, the Bureau conducted a large survey, called the Long Form, at the same time as the decennial enumeration to measure citizenship, education, income, and other population characteristics. In 2005, the Bureau switched to a smaller annual survey of 3 million persons, called the American Community Survey (or ACS). The annual ACS does not have sufficient precision to measure population characteristics at the level of Census Blocks, which are the building blocks for Congressional and legislative districts. To gain sufficient precision, the Bureau constructs and releases a 5-year average of the annual ACS, and the most recent such data available are the 2005-2009 ACS average.

There is a problem using the 2005-2009 ACS. The population estimates generated by that study systematically fall short of the population counts from the

Census Enumeration. The 2010 Census Enumeration count of the population of the State of Texas is 25.1 million persons. The 2005-2009 ACS estimate of the population of the State of Texas is 23.8 million persons, 1.3 million persons too few. The ACS understates the Voting Age Population by 1.1 million persons. And most alarmingly, the discrepancy between the ACS population estimates and the Census Enumeration counts varies by population groups. Nearly all of the error in the population and voting age population is in the Hispanic population figures.

A.2.2. Projected 2010 CVAP

The Appendix to this report discusses in greater length the reasons why the 2005-2009 ACS average under estimates the 2010 population, and how to correct the problem. Simply put, the time frames of the studies differ. The mid-point of the 2005-2009 ACS is 2007, and the degree of understatement is exactly what one would expect from a simply linear trend in the population from 2000 to 2010. The 5-year ACS average looks like the population circa 2007, not 2010. There is a simple correction for this problem, discussed in the Appendix. The simple idea is to estimate the percent of each population group (White, Hispanic, Black) that are Citizens of Voting Age using the ACS, and then multiply that times the number of persons in each group according to the Census Enumeration. That adjustment predicts accurately the voting age populations for each group for 2010. Here I apply that correction to the CVAP to make the best projection of the CVAP in 2010. Without doing that the CVAP data are not consistent with the Enumeration of total persons.

One may then calculate the population for each group's CVAP as their total population in the enumeration times the appropriate percentage of a group that are citizens of voting age. According to the ACS figures, 77.0 percent of Whites are citizens of voting age, 68.9 percent of Blacks are citizens of voting age, and 42.9 percent of Hispanics are citizens of voting age. Those percentages appear constant from 2005 to 2009. That calculation implies a total CVAP for the state of 15,725,999, which is 829,604 more persons that the 2005-2009 ACS reports. See Table A.2.

The calculations reveal that the 2005-2009 ACS slightly over estimates the White 2010 (projected) CVAP, and substantially underestimates the Black and Hispanic CVAP. Rescaling the 2005-2009 ACS to be in line with the population counts from the Enumeration implies that there are 8,774,942 White citizens of voting age; 1,997,202 Black citizens of voting age; and 4,063,891 Hispanic citizens of voting age. The figure for whites is almost 18,000 persons less than the ACS estimate of 8,793,200. The figure for Blacks is 132,000 (or about 8%) above the ACS estimate of 1,864,530. And, the figure for Hispanics is 390,000 (10%) above the ACS estimate of 3,674,800.

The American Community Survey estimates matter to the assessment of the racial composition of districts and the electoral performance of districts because Citizen Voting Age Population is a critical component in such analyses. It is also essential to understand that the Hispanic population was the fastest growing segment not only of all persons in the state but of the eligible electorate over the past decade.

A.3. Hispanic Growth

The Census Enumeration and the ACS show the growing importance of Hispanics in the total population and the eligible electorate in Texas. The number of Hispanic adult citizens—those eligible to vote—increased by 1.1 million persons over the past decade. In the 2000 Census, there were 2,973,000 Hispanic adult citizens in the State; by 2010, I project, there were 4,063,000. By comparison, the number of White Non-Hispanic adult citizens increased by just 470,000. In other words, from 2000 to 2010, the number of additional Hispanics who are eligible to vote is the equivalent of over one and a half Congressional districts, while the number of additional Whites who are eligible to vote equaled slightly over one half of one Congressional District. These figures are shown in Table A.2.

Hispanics' share of the eligible electorate rose, while White Non-Hispanics' share decreased substantially. White Non-Hispanics declined from 62.5 percent in 2000 to 55.8 percent in 2010. Hispanics, on the other hand, rose from 22.3 percent of the Citizen Voting Age Population in 2000 to 25.8 percent of the Citizen Voting Age Population in 2010. That trend will continue.

The Citizen Voting Age Population is driven by citizenship rates and by age distributions. There is a significant discrepancy between Whites and Hispanics in the percent of those populations who are Citizens of Voting Age: 77 percent of Whites in Texas are adult citizens; 43 percent of Hispanics are. Half of that discrepancy arises from the very large fraction of Texas' Hispanic citizens who are not yet of age to vote. Seventy-eight percent of White Citizens are of Voting Age in

Texas. Only 57 percent of Hispanic Citizens are adults. In other words, there are 2.8 million Hispanic citizens under 18 years of age in Texas, and over the coming decade half of those people will become adults. That fact alone will increase the share of the eligible electorate who are Hispanic in the State of Texas over the course of the coming decade. The districts proposed in Plan C185 will be in place from 2012 to 2020, and they will dramatically affect the ability of the rising Hispanic voters to elect their candidates of choice.

B. Representation of Racial Groups Under Plans C100 and C185

Multiple metrics and criteria are used to determine whether there has been retrogression. The two metrics examined here are (1) the racial composition of districts and (2) the electoral performance of districts. Statistics on racial composition of districts are used to ascertain the number of districts in which minorities comprise a majority of the population or of the eligible electorate. This may be interesting in its own right, but it is usually introduced as evidence of the latter metric. Electoral performance statistics, including past vote, turnout, and racial composition of eligible voters, are used to assess whether and where Hispanics and Blacks have opportunities to elect their candidates of choice. I examine racial composition of districts here, and turn to electoral performance in the next section.

I reach three overarching conclusions about the racial composition of districts.

First, all of the White majority districts under Plan C100 remain White majority districts under Plan C185, but Plan C185 dismantles one of the existing eight Hispanic districts, Congressional District 27. Plan C185 moves almost 300,000 Hispanics in Nueces and San Patricio Counties from old CD 27, which was majority Hispanic, into new CD 27, which is majority White. This sizable Hispanic population no longer has a meaningful opportunity to elect their candidates of choice. As discussed in Section D, this change has far reaching effects on districts from El Paso to Houston.

Second, the substantial gains in population by Hispanics and Blacks have not translated into increases in the share of seats in which minorities are a majority or plurality. The number of Hispanics increased by 2.8 million persons from 2000 to 2010 – the equivalent to four entire Congressional Districts. The number of Blacks increased by approximately 500,000 persons. The number of White Non-Hispanics increased by about 500,000 persons, slightly more than one half of one Congressional District. Plan C185 creates a net of one additional majority Hispanic district; it creates no additional Black majority or plurality districts; it creates three additional majority White districts.

Third, in the largest urban areas in the State of Texas, district lines are drawn so that the White minority dominates the majority of districts. In the most populous counties, Whites were the plurality of the population in 2000. Today, Whites are the minority and Hispanics are the plurality. Despite this shift, the minority White population retains its status as the majority of most of the districts; indeed, two additional White majority districts are created in these areas. Hispanics and Blacks, however, gain no seats in the most populous counties even though they account for nearly all of the population growth. In Dallas and Harris, the problem is particularly acute. There Whites declined in absolute numbers, but gained seats. Hispanics are the pluralities in these counties, but Hispanics are majorities in no Dallas districts and just one Harris district, while the minority White population has the majority in 8 of the 12 Dallas and Harris Districts.

B.1. Classification of Majority Minority and White Districts in Plans C100 and C185

The Texas Legislative Council provides Census data that can be mapped into each plan and used to calculate the racial and ethnic group composition of the districts. For each district in Plans C100 and C185, I determined which racial or ethnic group had a majority and a plurality of the Total Population or of the Voting Age Population. A plurality means that the group has the largest share of the relevant population of all racial or ethnic groups.

Table B.1 presents counts of the number of districts under the existing plan (C100) and the new plan (C185) that are Majority or Plurality White Non-Hispanic, Hispanic, or Black. The Census enumeration offers two ways to count population of districts, total number of persons and voting age persons. Total population is relevant because districts represent persons, and the Voting Age Population provides the best available gauge of the eligible electorate using the Enumeration. Additionally, the table presents the classification of districts based on the Citizen Voting Age Population using the 2005-2009 ACS average.[2]

It is also possible to classify districts based on registration and turnout. The redistricting process itself can affect turnout and registration, as recent research on

[2] Using the projection of the 2005-2009 ACS to 2010 does not change the classification of any of the districts as majority White, Hispanic or Black CVAP or plurality Black CVAP.

the mobilizing effect of Majority-Minority districts suggests.[3] As discussed in the section on Sources of Information in this report, I have concerns about data quality in the SSVR reports. Hence, I focus on the classification of districts according to Census figures on racial composition of total, voting age, and citizen voting age populations.

B.2. Number of Majority Minority and Majority White Districts

Plan C185 creates disproportionate numbers of districts in which Whites comprise the majority. White Non-Hispanics are a plurality of the population (45.3 percent), and Hispanics and Blacks combined account for almost half of the state's population (49.4 percent). Yet, White Non-Hispanics are an outright majority of the population of 20 of Texas' 36 Congressional Districts under Plan C185, and a plurality of all persons in three more. Hispanics are a majority of total population in 8 districts and a plurality in three others, while Blacks are a plurality of all persons in 2 districts. In other words, although Hispanics and Blacks combined out number Whites, Whites are the majority or plurality of the total population in 64 percent of Texas' Congressional Districts.

The opportunity for whites to elect a majority of the Congressional delegation is magnified further upon considering the voting age population. White Non-Hispanics comprise 49.6 percent of persons over 18 years old in the State of

[3] M. Barretto, Gary Segura, and N. Woods, "The Mobilizing Effect of Majority Minority Districts on Latino Turnout," *American Political Science Review* 98 (2004) 65-75.

Texas, and they are a majority or plurality of the VAP in 69.4 percent of U. S. House seats under Plan C185. By comparison, Hispanics are 33.6 percent of the voting age population, but they are a majority of the VAP in only 22.2 percent of seats. Blacks comprise 12.0 percent of the voting age population. They have majorities of the VAP in no seats and are pluralities of the voting age population in 8.3 percent of seats. Blacks and Hispanics, then, are 45.8 percent of the Voting Age Population, but majorities or pluralities in just 30.5 percent of the seats.

Using the eligible electorate as the standard changes the classification of several districts. Three Congressional Districts in which Whites are a plurality of the population are, in fact, districts where they are the majority of the eligible electorate. Three districts also appear to be Hispanic districts using total population, but they are not majority Hispanic in terms of VAP or CVAP. Two are in fact White majority districts (6 and 27) and one is Black Plurality (9).

Plan C185 also does not reflect the growing presence of Hispanics in the eligible electorate measured using CVAP. Nor does it reflect the shrinking presence of White Non-Hispanics among eligible voters. In 2000, Hispanics were 22.3 percent of the Citizen Voting Age Population, and under plan C100, Hispanics are a majority of adult citizens in 21.9 percent of districts. By 2010, Hispanics had increased to 25.8 percent of the CVAP, but plan C185 keeps their share of seats constant at 22.2 percent.

The number of districts in which White Non-Hispanics comprise the majority of the eligible electorate increased, even though White Non-Hispanics decreased as a share of the eligible electorate. In 2000, White Non-Hispanics were 62.5 percent of adult citizens in the State of Texas. The 2005-2009 ACS put their share of the CVAP at 59.0 percent, and the projection of the ACS to 2010 suggests that White Non-Hispanics are 55.8 percent of the eligible electorate – a 7 percentage point drop since 2000. Even still that group gained three districts in which it comprises a majority of the eligible electorate. The number of districts in which White Non-Hispanics are a majority of the CVAP increased from 22 to 25, and that increase kept the share of districts in which they are a majority at 69 percent.

Comparison of Blacks with White Non-Hispanics is similarly revealing. Blacks and White Non-Hispanics gained approximately 500,000 persons each. Blacks comprise 3 million people in the state and roughly 2.5 million people of Voting Age Population. Each group also saw similar increases in the number of eligible voters. Since each group accounts for less than one district, it makes sense that the group with more geographically concentrated growth would stand a better chance of gaining seats. Black population growth is concentrated in 3 counties: 60 percent of the Black population growth occurred in Dallas, Harris, and Tarrant Counties. White population growth was distributed across the state, and their populations declined in Harris and Dallas Counties. In spite of these factors, Plan C185 added 3 additional White districts and no additional Black districts. Plans C100 and C185 both had 1 majority Black CVAP district (CD 30) and 2 plurality Black CVAP districts (CDs 9 and 18). Plan C100 had 22 majority White CVAP districts, and Plan C185 has 25 majority White CVAP districts. It is somewhat surprising that Whites gain three seats and Hispanics 1 seat even though their population growth was much smaller than Hispanics, and it is surprising that Blacks gain no seats while Whites gain 3 seats because Blacks gained at least as much population and their population growth was much more highly concentrated geographically.

The five most populous counties account for 11 million people, almost half of the population of the state of Texas. Hispanics are the plurality of the population of these 5 counties combined. Of the 19 Congressional Districts that contain a majority or plurality of these counties' populations, just 4 have majority or plurality Hispanic populations. Twelve of these districts are majority White Non-Hispanic. Three are majority or plurality Black. Even though Whites comprise the second largest racial or ethnic group in the five largest counties, they have majorities or pluralities in three times as many seats as the largest group, Hispanics.

The Census Bureau projects that by 2020 Hispanics will be a plurality of all persons in Texas. The trends in citizenship suggest further that White Non-Hispanics will not be a majority of the eligible electorate by the end of the coming decade. Yet the districts set in place in Plan C185 create solid majorities of White Non-Hispanics in two out of every three Congressional Districts. This will make it exceedingly difficult for Hispanic voters to increase their ability to elect candidates to Congress over the coming decade, a decade in which that group will see its numbers in the electorate continue to grow overall and relative to White Non-Hispanics.

B.3. Stranded Voters

B.3.1. Statewide

Texas' new Congressional Districts treat minority and White voters quite differently. The most dramatic evidence is the incidence of minority voters in White districts and the incidence of White voters in minority districts. Table B.2 shows the numbers of Whites, Hispanics, and Blacks of voting age in districts where a majority or plurality of the eligible electorate are White, Hispanic, or Black. The striking fact born out in the table is that White Non-Hispanics are overwhelmingly represented by Congressional Districts in which the majority are White Non-Hispanics, while a minority of the Hispanic and Black population lives in districts that are Majority Hispanic or Majority Black.

First, consider the situation of Whites. Of the 9.1 million White non-Hispanics of voting age in Texas, 8 million live in White Majority districts and 1.1 million live in districts in which minorities are the majority or plurality of the eligible electorate. In other words, 88 percent of White adults live in districts where most people are of the same racial group as they are, and just 12 percent live in districts where they are the minority.

Blacks and Hispanics, on the other hand, are disproportionately in districts where they are the minorities. Of the 6.1 million Hispanics of voting age, 2.7 million live in districts in which Hispanics are the majority and 3.4 million live in districts where they are not the majority. Of the 2.3 million Blacks of voting age, 623,195 reside in districts that are Plurality or Majority Black, while 1.6 million live in districts where they are the minority. Blacks and Hispanics of voting age are nearly as numerous as Whites – 8.4 million versus 9.1 million. However, only 40 percent of Blacks and Hispanics live in districts where each of these groups is the majority or plurality, and 51 percent live in districts where Whites are the majority.

The stranding of minority voters becomes a problem precisely because Whites tend to vote cohesively and as a bloc opposed to Hispanic and Black voters.[4] Almost 90 percent of Whites in the State of Texas end up in districts where they are the majority and, therefore, where the large majority of Whites have the opportunity to elect candidates of their choosing. A majority of Black and Hispanic voters, however, end up in districts where Whites are the majority and, thus, where they likely will not be able to elect their candidates of choice. Plan C185 clearly treats Blacks and Hispanics differently from Whites. The difference is a stark one – just 1.1 million White voters are stranded compared with 4.2 million Black and Hispanic voters.

B.3.2. Harris and Dallas Counties

One might think that Whites enjoy an advantage in the creation of seats in the State simply as a function of plurality rule, with Whites being the plurality group. However, whites are also the majority in the two largest counties in the State

[4] See the ecological regression results in Table 4 in Stephen Ansolabehere, "Report on Minority and White Representation and Voting Patterns Under Congressional District Plan C185," in the case of *Perez v. Perry*, No. 5:11-CV-00360-OLGJES-XR (N.D. TEX.), Docket Number 123, Exhibit 1. The exception, as discussed below, is Travis County.

-- Harris and Dallas Counties, where Hispanics are the plurality and Whites are the minority.

Harris County, home to Houston, TX, is the largest county in the state. Its population grew 20 percent, rising from 3.4 million persons in 2000 to 4.1 million persons in 2010. All of that population growth came from minorities. Harris' Hispanic population grew from 1.1 million to 1.7 million, an increase of 550,000 persons. Harris' Black population grew from 645,000 to 807,000, an increase of 160,000 persons, while the County's White Non-Hispanic population declined by 70,000 persons.

Whites were the plurality group in 2000. Forty-two percent of all persons in Harris County identified themselves as White Non-Hispanics in 2000; 33 percent, as Hispanic, and 19 percent as Black. Today, Hispanics are the plurality group. The county's population is 41 percent Hispanic, 33 percent White Non-Hispanic, and 19 percent Black.

Harris County has sufficient population for 6 Congressional Districts. Under Plan C185, Harris County's population was spread across 7 CDs, six of which drew a majority or plurality of their populations from Harris County. These were districts 2, 7, 9, 10, 18, 29, and 36.

The County's Hispanic population is distributed across districts in such a way that only 31 percent of Hispanics are in districts that are majority or plurality Hispanic. This is striking because Hispanics are the single largest racial or ethnic group in the county. By comparison, over 80 percent of White Non-Hispanics in Harris County are in districts that are Majority White. Two-thirds of the Black population of Harris is in the two Black Plurality districts. The district lines in Harris County magnify White representation and shrink Hispanic representation.

Dallas County bears out similar patterns to Harris County. Dallas is the second largest county in the state with 2.4 million persons. In 2000, Whites were 44 percent of the Dallas County population; Hispanics were 30 percent; and Blacks were 12 percent. Between 2000 and 2010, the White population of Dallas County fell 200,000 persons, dropping from 983,317 to 784,693. The Hispanic population jumped 250,000 persons, rising from 662,729 to 905,940. And the Black population climbed from 462,609 to 548.141. By 2010, Hispanics accounted for 38 percent of people in Dallas County, Whites are 33 percent, and Blacks are 23 percent.

Plan C185 added a fifth Congressional District to Dallas County, even though the county's population grew at about the national average. Under Plan C100, CDs 24, 30, and 32 had a majority of their populations in Dallas County, and district 5 had a plurality of its population in the County. Under Plan C185, Dallas residents are the majority of the population in districts 6, 30, and 32, and they are the plurality of the population in districts 5 and 24.

Curiously enough, Whites, who already controlled most of the seats, gained another, even though they lost 200,000 persons. Under Plan C100, Whites held the majority in three of the four Dallas Districts (numbers 5, 24, and 32). The reshuffling of district lines in Dallas added another White district in the area, number 6. Under Plan C185, Whites – the minority group in the county – are now the majority in four of five Dallas Districts (numbers 5, 6, 24, and 32). Blacks are a majority in CD 30. And Hispanics are the majority in no districts in Dallas County, even though they are the plurality group.

Over 90 percent of White Non-Hispanics in Dallas County live in Congressional Districts in which Whites are the majority. Compare that with 58 percent of Blacks and 0 percent of Hispanics. None of the nearly 1 million Hispanics in Dallas County are in majority Hispanic districts.

The situation in Dallas and Harris Counties runs counter to majority rule and casts doubt on the notion that the statewide patterns are a simple consequence of plurality rule. First, one might argue that the single largest group in an area will naturally have disproportionately more representation than the smaller groups. If that line of argument characterizes the districting in Texas, then the Hispanics ought to be the majority of the population in most of the Harris and Dallas districts. Dallas and Harris are the largest counties in the state, with over 6 million people combined. There are 2.5 million Hispanics in these two counties combined, and Hispanics are the single largest group in these counties, with roughly 40 percent of the combined populations. Two and a half million persons are the equivalent of the entire population of three and a half Congressional Districts. However, only 1 of the 12 Harris or Dallas Districts is a majority or plurality of Hispanic.

Second, a minority of the population ought not to have a majority of the seats—that violates majority rule.[5] White Non-Hispanics are one-third of the populations of these counties, and the second largest ethnic group. They comprise the majority or plurality of 8 of the 12 districts in these two counties. Because there

[5] See for example, Robert Dahl, A Preface to Democratic Theory. New Haven, CT: Yale University Press, 1956, esp. pages 124-51.

is racial bloc voting in Dallas and Harris counties, the configuration of districts in these counties makes it exceedingly difficult for the large majority of Hispanics in these counties to elect the candidates of their choice.[6]

C. Electoral Performance

The Department of Justice and prior legal decisions instruct us to look not only at the racial composition of districts, but at electoral performance. In this section, I examine the composition of the eligible electorate, turnout, and past vote to establish where Hispanics and Blacks had opportunities to elect their candidates of choice under Plan C100 and under Plan C185. Comparison of electoral performance under Plans C100 and C185 shows clear evidence of retrogression statewide. It also reveals three districts of where Plan C185 eliminated minority opportunity districts: these were CD 23, CD 25, and CD 27 under Plan C100.

C.1 Overall

Plan C185 reduces the number of districts in which Hispanics have an opportunity to elect their preferred candidates. Under Plan C100 there were 3 Black opportunity districts and 8 Hispanic opportunity districts. These were 9, 15, 16, 18, 20, 23, 25, 27, 28, 29, and 30. Under Plan C185 there are 3 Black opportunity

[6] See Table 4 in Stephen Ansolabehere, op cit.

districts and 7 Hispanic opportunity districts. These are 9, 15, 16, 18, 20, 28, 29, 30, 34, and 35.

Four comments are in order about the observed retrogression.

First, this degree of retrogression is particularly striking because it is in absolute numbers, not percentages. The number of districts where Hispanics or Blacks have a reasonable opportunity to elect candidates of their choosing declines from 11 to 10. That decline comes in the face of substantial growth in Hispanic and Black populations that resulted in the State of Texas being allotted 4 additional U. S. House seats. And it comes in the face of substantial growth in the number Hispanics and Blacks eligible to vote, growth in Hispanics' share of the eligible electorate, and declines in the White share of the eligible electorate from 2000 to 2010.

Second, racial composition is not determinative of opportunities to elect candidates. Not all of the districts in the above classification are majority Hispanic or majority Black. Under Plan C100, two of the three Black opportunity districts were plurality Black (numbers 9 and 18), and one of the 8 Hispanic opportunity districts (number 25) was plurality White, but where Hispanics were a large and pivotal share of the electorate.

Third, with the exception of benchmark CD 25, all parties are in agreement about this classification of districts under Plan C100. CD 25 is what Justice Kennedy termed a cross-over district in his opinion in *Bartlett v. Strickland.* As I will show below, CD 25 under Plan C100 regularly elected the minority preferred candidates to the U. S. House of Representatives. CD 25 was substantially reconfigured so that it will no longer function as a cross-over district. The district was dismantled in part to create a majority Hispanic district, CD 35, but that represents no net gain in districts where minority votes could elect their preferred candidates, and it did not offset losses of minority opportunity districts elsewhere.

Fourth, even setting aside CD 25, Hispanics and Blacks lost ground in the districting process. Texas gained 4 additional seats because of minority population growth but saw no gain in the number of minority opportunity districts, and the percent of districts in which such opportunities exist declined significantly. That pattern is most striking in Harris and Dallas Counties, the two most populous areas, where Whites actually declined in number and in share of the eligible electorate and they are now a minority of the population. Even still in these two counties, Whites—already the majority of most of these counties' districts—gained two additional seats.

C.2. Minority Opportunity Districts

The method for determining which districts are Hispanic or Black opportunity districts proceeds in three steps. First, I conduct ecological regressions and homogeneous precinct analysis for all statewide (state and federal) elections in 2008 and 2010 to determine which candidate in each is the minority-preferred candidate. I also calculated the average vote of minority-preferred statewide (state and federal) candidates, as an additional measure of electoral performance. Second, I calculate the percent of the vote in each district for the minority-preferred candidate. Third, I determine, based on vote shares and based on recent U. S. House election results in the districts, in which Congressional districts minorities have at least a 50 percent chance of electing their candidates of choice.

Table C.1 summarizes the statistical analysis of the electoral performance of the 32 districts under Plan C100 and the 36 districts under Plan C185. The rows correspond to the district numbers, and the districts on the whole line up, with a few exceptions where districts were substantially restructured, as in 25 and 27. Even in these cases, the numbers denote analogous districts. The same elections are analyzed under each set of districts. The first column under each Plan is the average of the 2008 and 2010 statewide and federal elections, the second column is the 2008 Presidential Vote, and the third column is the 2010 Governor vote.

The number of White (or non-minority) districts increases under Plan C185 by 5. Under Plan C100, there were 21 districts where minority-preferred candidates do not have a significant chance of winning. These were Districts 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 19, 21, 22, 24, 26, 31, and 32. The parties in this suit agree that these districts were not minority opportunity districts. The electoral performance of minority-preferred candidates in these districts ranges from 22.9 percent in district 13 (2008 Presidential vote) to 46.6 percent in district 32 (2008 Presidential Vote). Under Plan C185, there are 26 districts where minority-preferred candidates do not have a significant chance of winning. These are Districts 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 17, 19, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, and 36. The parties in this suit agree that these districts were not minority opportunity districts.

The number of Hispanic or Black opportunity districts decreases under Plan C185. Under Plan C100 the minority opportunity districts were 9, 15, 16, 18, 20, 23, 25, 27, 28, 29, and 30. The electoral vote for the minority-preferred candidate in statewide and federal elections in these districts ranges from a low of 48.7 percent in District 23 (2010 Governor) to a high of 82 percent in District 30 (2008 Presidential Vote and 2010 Governor Vote). Under Plan C185 the minority opportunity districts are 9, 15, 16, 18, 20, 28, 29, 30, 34, and 35. Districts 34 and 35 are new Hispanic majority districts, and, in these, minority-preferred candidates won 57 to 64 percent of the vote.

Minorities had the opportunity to elect candidates of their choice in the general elections in Districts 23, 25, and 27 under Plan C100. None of these are minority opportunity districts under Plan C185.

C.3. Minority Districts Lost

Districts 25 and 27 clearly switch from minority opportunity districts to White districts.

Plan C185 simply dismantled an Hispanic district and made it into a White district, both in racial composition and electoral performance. CD 27 ran from Nueces County down to Cameron County, at the southern tip of Texas. It was a majority Hispanic District under Plan C100, and it became a majority White CVAP district under Plan C185, as indicated in Table B.3. Ecological regressions reveal that the degree of Hispanic cohesion and of white cohesion are high, and whites vote as a bloc opposed to Hispanic preferred candidates in the new CD 27. The ecological regression of Vote for the Minority Preferred Candidate on White Percent of the Voting Age Population has an intercept of .728 and a slope of -.681.[7] This implies that 73 percent of Hispanics and Blacks voted for the minority preferred candidates in statewide elections in the areas encompassed in the new District 27, but only 5 percent of Whites in that area did. Racial polarization, then, is 68 percentage points.

The racialized voting in this area translates directly into election outcomes. CD 27 was 64 percent Hispanic CVAP; it is now 51 percent White CVAP. In the CD 27 defined by Plan C100, Obama won 54 percent of the vote. The minority-preferred Congressional candidate in the general election won handily in 2006 and 2008, but not in 2010. In the CD 27 defined by Plan C185, Obama won 41 percent of the vote. This is no longer a district in which minority preferred candidates have a good shot of winning the congressional seat.

Plan C185 also eliminated a minority opportunity in the Travis County area. District 25 presents a somewhat different case than District 27. Under Plan C100, District 25 drew most of its population from Travis County, and it covers seven less populous counties to the south and southeast of Travis. Under Plan C185, the district is reoriented; it takes a smaller population from Travis County and extends to the north all the way to Tarrant County.

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[7] The dependent variable in this ecological regression is the Average Percent of Vote won by Minority Preferred candidates in Statewide elections in 2010. The regression has an R-square of .762, a Root MSE of .08505, and 314 observations (VTDs). The Standard Error on the intercept of .728 is .013 and the Standard Error on the slope of -.681 is .022.

As it was configured District 25 under Plan C100 was a minority opportunity district because of high levels of White cross-over voting. Whites were the majority of the electorate under Plan C100, but Hispanics were the decisive voting group in the elections. Ecological regressions and homogeneous precinct analyses show that Hispanics and Blacks in Travis County voted cohesively. Also, Whites in Travis County split their votes approximately in half, with half choosing the minority-preferred candidates and half choosing their opponents.[8] The voting behavior of Whites in Austin is fairly unusual within the state. All other major counties show White cohesion. Keeping the Austin vote together in CD 25 created unique opportunities for minorities to elect their preferred candidates with the support of White voters. The minority-preferred Congressional candidate in the general elections won handily in 2006, 2008, and 2010. Obama, the minority preferred candidate for President in 2008, won 60 percent of the vote in the area defined by CD 25 under Plan C100.

Plan C185 completely restructures the district, taking out large numbers of minorities and putting in large numbers of whites from counties to the north. The voting behavior of the whites in these counties differs substantially from the voting behavior of Whites in Austin, the seat of Travis County. Unlike the White population encompassed in CD 25 under Plan C100, the White vote in the new CD 25 shows high levels of racial cohesion and polarization. Ecological regression analysis of the relationship race and vote among the Voting Tabulation Districts in

[8] See Table 4 in Stephen Ansolabehere, "Report on Minority and White Representation and Voting Patterns Under Congressional District Plan C185," in the case of *Perez v. Perry*, No. 5:11-CV-00360-OLGJES-XR (N.D. TEX.), Docket Number 123, Exhibit 1.

the new CD 25 yields an estimate of White cohesion of .85 --- 85 percent of Whites in this new district vote for the same candidate. And that candidate is not the minority-preferred candidate. The electoral performance of the new CD 25 clearly favors the White preferred candidates in this area. In CD 25 defined by Plan C185, Obama won 43 percent of the vote, and this is no longer a district in which minority-preferred Congressional candidates will prevail.

Finally, consider District 23. The federal courts created this district in 2006 to be a minority-performing district. This is the most recently created district in the Texas Congressional map. Immediately before that redistricting minority preferred candidates did not succeed in their attempts to win District 23. In 2004, Bonilla, who was not preferred by a majority of Hispanics and Blacks, defeated Sullivan 69 to 30. Immediately after the 2006 redistricting of CD 23, Hispanic preferred candidates prevailed. Rodriguez, the minority-preferred candidate, beat Bonilla 54 to 46 in the 2006 Congressional elections, and Rodriguez, again minority-preferred, beat Larson 56 to 42 in the 2008 Congressional elections.

CD 23 under Plan C100 was a minority opportunity district, but it was not a sure thing. In 2010, Rodriguez was yet again the minority-preferred candidate, but he lost to Canseco, 49 percent to 44 percent. As it was configured under Plan C100, the minority-preferred candidates in statewide and federal offices won half the votes. Obama, the minority-preferred candidate in this District, won 51 percent here; Perry, who was opposed by a majority of minorities in the District, won 51 percent here. CD 23, then, was a highly competitive district, but one where minorities had a reasonable opportunity of winning, and they won the district more often than not.

Rather than shore up the minority vote in CD 23, the State weakened this district when it passed the new Congressional district map. Plan C185 lowers the electoral performance of minority-preferred candidates in the District to the point that it is likely no longer a minority opportunity seat. As displayed in Table C.1, the vote for minority preferred candidates under Plan C185 drops 3 to 4 percentage points from the electoral performance under the baseline Plan C100. That may sound like a small change, but in a competitive district such as this one, it made a huge difference. The electoral performance of CD 23 now lies in the range 45.0 percent (2010 Governor Vote) to 47.9 percent (2008 Presidential Vote), which is below the lowest performance of any of the minority opportunity seats under Plan C100. The electoral performance of CD 23 is now clearly at the level of districts that all agree are not minority opportunity districts, such as CD 32. All parties agree that benchmark CD 32 is not a minority opportunity district, and in that district minority-preferred candidates won 46.6 percent for President 2008 and 45.2 percent for Governor in 2010. The performance of minority-preferred candidates for Governor in 2010 is lower in new CD 23 than it is in benchmark CD 32.

The courts created CD 23 just 5 years ago to be a minority opportunity district. If there were questions about CD 23 under Plan C100, they were resolved under Plan C185.

C.4. Elements of Change

The changes in the electoral performance of CD 23, 25, and 27, as well as other districts, came about by moving areas in and out of districts. In some districts, such as 25 and 27, the changes in the areas covered are dramatic. In other districts, such as 23, they are more subtle.

C.4.1. Components of Change

There are three components of change: size of the electorate, racial composition of population, and electoral performance of each area. Table C.2 shows the Voting Age Population and Turnout of areas kept in each district (Same), removed from each district (Out), and added to each district (In). VAP and Turnout are two measures of size of the electorate, and the ratio of Turnout to VAP reveals the rate at which people participate in an area. Table C.3 presents the racial composition of areas kept the same, moved out, and brought in each district. Table C.4 shows the electoral performance of each of the areas. Performance times size is the magnitude of change in the electoral performance of minority preferred candidates. Moving a small number of minority voters in and a small number of majority voters out may not be as consequential as moving large blocs of these voters in and out of districts.

The redistricting cycle produced considerable churning. Most districts in the state show substantial shifts in VAP and Turnout. District 31 is the only district that lost precincts, and added no precincts. Districts 1 and 16 experienced only small changes. All other districts experienced changes in population of at least 50,000 persons, and most saw changes of at least 100,000 persons. This was even true for districts that did not have populations far in excess of the required number under the 2010 apportionment.

C.4.2. Reconfigured Districts

The most dramatically changed district is 25. It kept only 126,000, lost 489,000, and added 392,000 voting age persons. See Table C.2. Only 28 percent of the voters (2008 Turnout) were in the old district. Looking at Table C.4 it becomes obvious what the redistricting process did. The small area kept in CD 25 votes 60 percent for the minority preferred candidates. Plan C185 removed a large number of voters (roughly 225,000) who voted 60 percent for the minority preferred candidates. The Plan, then, added back into the district an almost equally large number of voters (about 200,000) who voted roughly 40 percent for the minority preferred candidates. As a result of these shifts, CD 25 moves from minority opportunity to not.

District 27 shows a variation on the same theme. As with CD 25, Plan C185 removed a large number of eligible voters who voted for the minority preferred candidates, and replaced them with an equally large number of eligible voters who voted against minority preferred candidates.

There is an additional component to the change in CD 27. The area removed had a much lower rate of turnout than the area added. In the area taken out, only 28 percent of the VAP voted in 2008. In the area added in, 48 percent of the VAP voted in 2008. The difference reflects, in part, lower citizenship rates in the area taken out. This shift means that the area added in ends up being a much larger component of the vote and of electoral performance in the district than the area taken out, even though they are about the same number of persons. Here is an example where the districting process uses the turnout to shape the political performance of the district.

District 6, in the Dallas-Fort Worth area and counties to the south, shows the opposite pattern. In this district, a large, relatively high turnout area was moved out of the district, and a somewhat smaller, relatively low turnout area was moved into the district. The area moved in was majority Hispanic; the area moved out was majority White. The area kept the same in this district, although less populous than the area moved in, has very high turnout and votes overwhelmingly against minority preferred candidates. In short, Plan C185 appends a low turnout minority area to a high turnout, but smaller White area to form District 6. The resulting district votes somewhat more favorably to minority preferred candidates than it did before, but that came off of a low base, and the district remains one where minority preferred candidates are highly unlikely to win. This is an example of a change in district lines that results in stranding of minority voters.

District 26, also in the Dallas-Fort Worth area, reveals a somewhat different pattern. Here there is a straight-up swap of a White area in the Fort Worth area (moved out) for an Hispanic area (moved in). The White area moved out of the district voted approximately 50-50 for the minority preferred candidates and had relatively high turnout; 50 percent of the VAP voted in 2008. The Hispanic area that is added to the district has extremely low turnout, less than 30 percent of the VAP votes, but it votes overwhelmingly for the minority preferred areas. One might have created a cross-over district in this area along the lines of the old district 25. Instead, the White urban area that splits its vote is added to a White suburban area in CD 12, and the Hispanic area in east and central Fort Worth is added to the more rural Denton County to the North. Like District 6, this is an example of the stranding of minority voters. Also, Districts 6 and 26 are examples of decisions under Plan C185 to divide the Dallas-Fort Worth area in ways that ultimately preclude the creation of a minority district in these counties.

CDs 6, 25, 26, and 27 exhibit some of the patterns of large shifts in population exhibited in Plan C185. Turnout, race, and electoral performance all factored into the changes in the electoral performance in some districts, such as 25 and 27. In other cases, such as 6 and 26, these very large changes in population were used to keep the districts performing about the way they had been, and they split off significant Hispanic vote from their immediate communities, in these examples, central Fort Worth and central Dallas.

District 23 represents some of the most subtle changes in district demography. As mentioned earlier, Plan C185 shaves 3 to 4 percentage points off the electoral performance of minority preferred candidates in this district, converting the district from a competitive seat where minority-preferred more often than not won to a district where minorities likely will not elect their preferred candidates.

The change in district 23 is driven by turnout of the areas kept, added, and removed, and to some extent by the racial composition as well. The area kept by the redistricting plan has the highest percent White (34 percent) of the three types of areas (same, out, and in), the highest turnout (42 percent), and the lowest support for minority-preferred candidates (46 to 49 percent). The area removed has the lowest percent White and the highest combined percent Hispanic and Black; it has somewhat lower turnout (39 percent), and the highest support for minority preferred candidates (58 to 60 percent). The areas added to the districts have the highest percent Hispanic (67 percent) but very low percent Black; it has the lowest turnout rate (33 percent), and somewhat lower support for minority preferred candidates than the areas taken out (51 to 56 percent). The combination of very low turnout and lower support for minority-preferred candidates in the areas added compared with the areas subtracted, due in part to the lower percent Black, reduced the electoral performance of minority preferred candidates in CD 23 by 3 to 4 percent and rendered the district no longer a minority opportunity seat.

D. Regional Concerns

So far, I have considered individual districts and counties in isolation, but some of the specific decisions made about the inclusion of a county in one district or another have consequences far beyond that county or that district. Minority representation in the State of Texas is determined by decisions about district boundaries in three areas of the State. The first area is South and Southwest Texas. This is a large triangle that extends from the farthest western point in El Paso due east to Bexar County and San Antonio and then due South to the southern tip of Texas in Cameron County. The second area is Harris County and the City of Houston and neighboring Counties, especially Fort Bend and Galveston. The third area is Dallas-Fort Worth, which is contained in Dallas and Tarrant Counties. Even these areas can affect one another. As we will see below the decision to move Nueces County out of the South and Southwest triangle districts had far reaching effects on Harris County's districts.

D.1. The Southwest Texas Triangle

The Southwest Texas Triangle is the area enveloped by the triangle with vertices at El Paso, San Antonio, and Cameron County. Under Plan C100 there were six districts in this area: 15, 16, 20, 23, 27, and 28. All were majority Hispanic districts and all were Hispanic opportunity districts. The 2010 Census revealed that these districts combined population was 4,697,636. This exceeded the total population for 6 districts by 506,708.

A simple adjustment to the envelope of these districts could have easily added the needed 191,780 persons so as to have sufficient population in the area for a seventh district in the triangle. Indeed, if one includes all of Bexar County, not just the part that is encompassed in CDs 20, 23, and 28, there would have been more than enough population for 7 congressional districts. Also one could have easily gained the additional population by adding in nearby counties such as Crane and Ector in Southwest Texas or Gonzales, Lavaca, and Victoria in South Central Texas.

The State argued in its filing in this case that since there was not sufficient population in the 6 Hispanic Districts in Southwest Texas that a 7th district need not be formed from their numbers. But, the path of least resistance would be to add the 191,780 persons from neighboring areas. The alterations in the existing districts reveal that would not have been difficult to do. For example Plan C185 expands District 23 northward across the Pecos River, and the new areas added to CD 23 alone accounted for an additional 224,964. Instead, the State Legislature chose to weaken CD 23. It did this by adding large numbers of voters to the district from outside the area previously enveloped by the Southwest Texas districts, and it removed key Hispanic communities from the old CD 23, such as the southern half of Maverick County and high turnout Hispanic areas in Bexar County. All told, 375,155 people were taken out of this district. And these changes, as we have seen, markedly weakened the electoral performance of minority-preferred candidates in this district and rendered this district no longer a minority opportunity district.

More dramatic still was the dismantling of CD 27 on the Southern vertex of the triangle. Nueces County, with 340,222 persons, was one of two population centers in the old CD 27, with Cameron County being the other. The district had an excess of 43,505 people for an ideal Congressional District according to the 2010 Census. The path of least resistance would have been to take some of the population from this county to help construct a seventh district somewhere in the Rio Grande Valley. Many of the alternative plans, such as PlanC202, did just that.

Plan C185, instead, removes Nueces County from the triangle districts altogether. This county, which anchored a majority Hispanic district, is put into a district that extends north and northwest, along the Gulf Coast. The new CD 27 is now a majority White district. The 240,000 Hispanics in Nueces previously were in a district where Hispanics could elect their candidates of choice; now they are not.

To adjust for the dismantling of a Hispanic seat in CD 27, Plan C185 creates a new Hispanic district from the remnants of CD27. New CD 34 snakes from Cameron County, past Bexar County, to Caldwell County. District 34 is an Hispanic majority seat and one where minority-preferred candidates will likely succeed. This may seem like a straight up exchange of a newly formed Hispanic seat (34) for a refurbished White seat (27). It is not.

D.2. Ripple Effects of Nueces County

The decision to wrench Nueces County out of its old district 27 had ripple effects on the construction of districts throughout southern and central Texas. It affected the configuration of districts throughout the Rio Grande Valley and the triangle and precluded the creation of a seventh district there. It affected the crafting of districts in the San Antonio and Austin area, including the construction of 35 and the destruction of 25. And it constrained the ability to craft a new Hispanic district in the Houston area, as many alternative plans were able to achieve (such as Plans C166 and C202).

The most immediate and direct effect of this decision was on the creation of a seventh Hispanic district in Southwest Texas. The populations of CDs 15, 16, 20, 23, 27, and 28 as configured under Plan C100 plus the additional 200,000 persons brought in by expanding the boundaries of 23 under Plan C185 contained more than enough population to create 7 Hispanic majority districts in this area. Moving Nueces County into a white district in the Southeast removed 340,000 persons – 206,000 whom are Hispanic – from the envelope of the Southwest Texas districts. This was too great a deficit to overcome with marginal changes in the area above CD 23. In essence, then, moving Nueces County into a White district guaranteed that there would not be a seventh Hispanic district in Southwest Texas, even though there was sufficient population to support such a district.

A second effect of this decision was to constrain the set of possible Hispanic districts in Bexar County in particular. Given the population growth around San Antonio, this was the likely location of the seventh Hispanic district in the area. Plan C202, for example, places a new Hispanic district, numbered 33, immediately to the south of Bexar County. Plan C166 squeezes another Hispanic district in, running south and west of Bexar. Other plans provide other examples. Most put a district in this area. Plan C185 cuts into the area where most other plans would have put a seventh Hispanic district in the Valley in order to have enough population for new CD 34. It is the Hispanic district sewn together from the scraps of old district 27.

The State then proceeded to create an Hispanic district by taking Hispanic population in northern Bexar County and connecting it with Hispanic population in southern Travis County. These two clusters are connected by a strip along Interstate 35 that is three miles wide and 50 miles long. Fittingly, this is CD 35.

The creation of CD 35 took a large Hispanic population of 161,254 out of CD 25. CD 25 was a cross-over district anchored in Austin. Plan C185 took one-fourth of its population to make a majority Hispanic district, and rendered the district no longer functioning as a minority opportunity district. Again, an attempt to correct the error of moving Nueces County led to loss of yet another opportunity district.

The out waves of the ripple effect reach all the way to Harris County. If one overlays the Plan C100 and Plan C185 maps, there is an evident shift in the location of all of the districts in the Harris area to the Southwest. The reason for this is that moving Nueces into the new District 27 pulled all of the districts along the Gulf to the Southwest. Nueces County alone is half of the population of a Congressional District. Adding that population to counties to the north and northeast meant that the CD in that area (old District 14, now numbered 27) had to shift its geographic location. Next comes District 22, which is pulled out of Galveston County to the east and into Fort Bend County the West. And all of the Harris County districts are pulled further in this direction.

The shift in these districts left no flexibility for the creation of an additional Hispanic seat in Harris County. Other maps, such as 166 and 202, place a new minority opportunity district there. In stead, Plan C185 creates a new White Majority District (number 36) to the East of Harris County and it pulls CD Number 2 out of this area and entirely into Harris. In doing so, CD 2 adds a sizable minority population from Houston to White suburban communities to reconfigure this Majority White district.

The decision to take Nueces County out of 27, then, had far reaching affects on what could be accomplished elsewhere. It prevented the creation of a seventh Hispanic district in Southwest Texas. It led to the dismantling of CD 25, and it greatly constrained the ability to make a new Hispanic district in Harris County.

D.3. Dallas-Fort Worth

I have discussed the effects of districting in Dallas earlier. The districts in Plan C185 extend arms into the county that grab urban minority populations and attach them to rural and suburban areas and counties. This is especially true for CDs 5, 6, 12, and 33. The effect of such encroachments is to break up the Hispanic and Black populations that run through the middle of these Counties horizontally, much as Mississippi's district boundaries used to divide the Black Belt Counties. Several plans offer a minority opportunity district that follows the contours of the Hispanic and Black population in Dallas and Tarrant Counties, rather than fracturing those populations and appending those segments to rural and suburban White districts.

Travis County presents a further variation on the extent of minority under representation under Plan C185. Although Travis has enough population to be a majority of 2 districts, the county is sufficiently divided that it is a majority of no districts. Travis residents are a plurality in one district, CD 25. In many ways, the division of Travis resembles Tarrant County. Most of the population of both of these counties is pulled off to other counties to accommodate districts that are based elsewhere. The one district that does remain in the county somewhat (CD 25) is White Majority, and the county is a bare majority White, but the story of Travis, like that of Tarrant, emerges upon considering the other districts that carve up the county.

Dallas County saw rapid growth in its Hispanic population and decline in its White population. Tarrant County saw its Hispanic population growth faster than its White population. Rather than create an additional Hispanic district in these Counties, Plan C185 created additional White Majority districts.

Across the state are ample examples of violations of majority rule, where the minority Whites are the majority of Congressional Districts, and missed opportunities, where Hispanics accounted for most of the growth in population and eligible voters, but did not receive any increase in representation. Most troubling, though, is the actual retrogression in the number of Congressional Districts in which minorities have an opportunity to elect their preferred candidates. This group accounts for 2.8 million additional people in the state – the equivalent of 4 entire districts. Yet, they witnessed the dismantling of three long-standing minority opportunity seats and ended up with fewer seats overall where Hispanics and Blacks can elect their preferred candidates.

Table A.1. Population Growth in Texas

Population Count	Census 2000	Census 2010	Growth
Total	20,851,820	25,145,561	4,293,741
Hispanic	6,669,666	9,454,731	2,785,065
White Non-Hispanic	10,933,313	11,390,939	457,626
Black	2,404,566	2,967,176	562,610

Source: U.S. Bureau of Census.

Table A.2. White, Hispanic and Black CVAP as a Percent of Total CVAP

	2000 Long Form		2005-2009 ACS		2010 Enumeration x ACS CVAP %	
	Number	%CVAP	Number	%CVAP	Number	%CVAP
White	8,305,993	62.5%	8,793,200	59.0%	8,774,942	55.8%
Hispanic	2,972,988	22.3%	3,674,800	24.6%	4,063,891	25.8%
Black	1,606,131	12.1%	1,864,530	12.5%	1,997,202	12.7%
Other	412,295	3.1%	412,295	3.9%	896,382	5.7%
Total	13,299,845	100.0%	14,896,395	100.0%	15,725,999	100.0%

Table B.1. Number of Majority and Plurality White, Hispanic and Black Congressional Districts, as a Percent of Total Population, Voting Age Population, and Citizen Voting Age Population, under New Districts (Plan C185) and under Current Districts (Plan C100)

		Plan C185		Plan C100	
		Majority N (%)	Plurality N (%)	Majority N (%)	Plurality N (%)
White	Total Pop	20 (56%)	3 (8%)	18 (56%)	4 (13%)
	VAP	23 (64%)	2 (6%)	20 (63%)	2 (6%)
	CVAP	25 (69%)	0	22 (69%)	0
Hispanic	Total Pop	8 (22%)	3 (8%)	7 (22%)	2 (6%)
	VAP	8 (22%)	0	7 (22%)	2 (6%)
	CVAP	8 (22%)	0	7 (22%)	0
Black	Total Pop	0	2 (6%)	0	1 (3%)
	VAP	0	3 (8%)	0	1 (3%)
	CVAP	1 (3%)	2 (6%)	1 (3%)	2 (6%)

Source: Computed by Author from Texas Legislative Council Reports R202 for Plans C185 and C100, and CVAP reports issued by the Texas Legislative Council using the average of the 2005-2009 American Community Surveys.

Table B.2. Numbers of Whites, Hispanics, and Blacks of Voting Age in Majority White, Majority Hispanic, and Plurality Black Districts Under Plans C185*

	Majority White Districts	Majority Hispanic Districts	Plurality Black Districts
White Non-Hispanic	7,959,894	853,812	260,978
Hispanic	2,872,874	2,752,804	517,466
Black	1,402,019	217,499	623,195
Number of Districts	25	8	3

Source: Calculated by author from data provided by Texas Legislative Council.
*Note: Majority or Plurality Status Determined as a Percent of CVAP.

Table B.3. White, Hispanic, and Black Share of CVAP in Congressional Districts under Plan C100 and Plan C185.

	Plan C100			Plan C185		
CD Number	White Percent	Hispanic Percent	Black Percent	White Percent	Hispanic Percent	Black Percent
1	75.1	5.1	18.3	74.8	5.2	18.5
2	64.5	11.1	21.5	66.0	16.7	11.9
3	68.7	10.8	11.1	76.4	7.9	7.6
4	81.5	5.5	10.5	81.8	4.9	11.2
5	74.3	9.5	13.6	72.9	10.7	14.2
6	68.1	11.7	16.0	57.7	25.3	13.5
7	69.6	13.9	9.2	68.3	14.5	10.1
8	82.5	6.6	8.9	79.4	8.8	9.5
9	21.9	19.1	48.4	22.6	18.3	47.6
10	68.3	15.6	11.1	72.6	13.5	10.3
11	68.7	25.4	4.2	71.2	23.1	4.0
12	74.5	15.5	6.7	68.2	12.7	15.6
13	76.6	14.4	6.4	77.2	14.3	5.8
14	66.8	20.5	9.9	63.0	13.0	21.2
15	24.5	71.9	2.5	25.4	71.0	2.4
16	20.0	74.5	3.4	21.5	72.7	3.7
17	76.8	11.1	9.9	69.8	13.6	13.4
18	27.4	22.3	46.7	29.4	17.4	48.9
19	67.9	24.8	5.6	66.7	25.4	6.1
20	26.2	63.8	7.7	29.2	62.9	5.4
21	68.9	21.3	6.3	74.4	19.7	3.0
22	58.4	17.8	13.8	61.3	16.2	11.2
23	35.9	58.4	3.5	37.3	58.5	2.4
24	65.0	15.1	13.1	72.0	12.2	9.1
25	63.1	25.3	9.1	78.2	10.3	8.3
26	72.4	9.9	14.3	74.1	14.7	7.5
27	32.1	63.8	2.8	51.4	41.1	5.8
28	28.7	68.3	1.9	26.2	65.9	6.4
29	28.3	56.0	13.5	24.6	56.3	16.3
30	27.7	19.8	50.1	24.1	20.6	53.5
31	68.9	14.3	13.0	69.2	15.0	11.7
32	66.2	20.7	8.8	70.1	11.8	11.5
33				69.4	11.6	14.4
34				25.2	71.7	2.3
35				34.5	51.9	11.3
36				75.4	12.9	9.7

Source: Reports Red 106 for Plan C100 and Plan C185 provided by Texas Legislative Council.

Table C.1. Electoral Performance of Districts: Vote Share of Minority Preferred Candidates for Statewide and Federal Office, 2008 and 2010

	Plan C100			Plan C185		
CD Number	Average '08, '10	2008 Pres.	2010 Gov.	Average '08, '10	2008 Pres.	2010 Gov.
1	32.0	30.7	32.5	31.6	30.6	32.2
2	38.6	39.9	39.2	33.2	36.1	37.0
3	37.4	42.1	39.2	32.9	37.8	34.6
4	32.8	30.4	33.3	33.6	29.6	33.9
5	36.2	36.3	38.1	37.8	37.6	39.4
6	38.4	39.9	40.0	41.9	42.9	43.2
7	37.6	41.2	43.6	35.2	39.5	42.2
8	27.7	25.7	28.1	25.9	26.5	28.0
9	75.6	77.3	78.4	75.4	77.0	77.7
10	41.2	44.6	42.5	40.5	42.9	42.1
11	24.9	23.9	25.0	24.6	23.4	24.7
12	35.2	36.6	36.2	41.9	44.4	42.8
13	25.3	22.9	26.2	24.6	22.4	25.6
14	34.4	33.3	35.5	43.4	42.2	42.6
15	60.0	60.1	58.0	56.7	58.0	55.1
16	63.5	66.2	62.3	62.4	65.1	61.3
17	34.7	32.3	35.9	41.5	41.3	42.4
18	75.8	77.6	77.6	77.8	80.1	80.6
19	27.6	27.6	28.3	28.5	28.2	29.2
20	64.0	64.1	64.4	58.8	59.7	58.6
21	36.6	41.0	37.9	39.1	43.1	40.4
22	39.7	41.4	42.1	35.3	38.0	38.0
23	49.8	51.4	48.7	46.7	47.9	45.0
24	40.2	44.7	41.7	36.0	41.0	37.4
25	57.5	59.9	57.3	41.8	43.0	42.8
26	38.0	41.6	38.9	35.1	39.1	35.8
27	53.5	53.6	50.3	42.2	40.6	41.1
28	56.4	56.2	55.0	60.8	60.5	60.3
29	65.6	62.0	67.1	68.6	65.1	70.3
30	80.0	82.0	82.0	80.0	82.1	82.0
31	38.2	41.9	38.5	38.5	43.2	38.5
32	41.7	46.6	45.2	39.9	44.5	43.2
33				39.7	42.0	40.8
34				60.2	60.7	57.0
35				62.7	64.2	62.3
36				34.2	29.8	33.5

Table C.2. VAP and Turnout in Parts of Districts that Remained, Were Removed, and Newly Incorporated Parts of Districts

	Voting Age Population			2008 Turnout		
CD Number	Same	Out	In	Same	Out	In
1	511,664	30,351	14,014	253,705	15,587	7,584
2	261,555	313,363	248,613	132,675	134,212	104,047
3	403,871	201,701	94,378	217,918	80,806	51,179
4	490,551	128,172	30,351	243,675	68,042	15,587
5	440,542	96,619	67,364	203,978	47,103	17,722
6	200,974	381,494	281,338	103,022	185,846	88,635
7	418,129	181,818	98,682	209,456	87,849	37,886
8	413,765	208,390	100,594	190,193	103,765	44,224
9	416,827	108,289	77,306	141,088	37,630	30,728
10	400,843	306,629	117,266	199,784	142,561	68,679
11	415,915	113,993	107,312	188,596	58,290	54,684
12	297,943	305,588	207,860	137,939	136,045	103,528
13	454,171	48,957	62,941	217,400	21,375	29,541
14	276,111	293,549	250,755	130,447	139,358	118,671
15	293,528	244,096	172,268	86,876	85,267	58,534
16	486,361	46,266	9,352	168,098	12,199	2,115
17	350,055	228,128	178,202	148,318	109,814	84,449
18	340,684	182,545	176,924	135,048	60,349	74,661
19	471,579	48,624	50,398	217,808	22,531	21,255
20	347,971	168,328	164,747	132,024	50,774	69,885
21	353,349	300,804	208,744	205,038	163,824	115,861
22	391,943	264,756	102,768	201,448	113,980	47,221
23	334,318	267,851	159,744	142,409	103,300	52,129
24	375,225	205,125	154,018	194,994	86,428	67,560
25	126,507	489,434	392,869	78,045	221,205	194,894
26	385,140	268,028	107,779	201,471	134,204	29,089
27	279,138	245,548	236,807	116,813	70,223	113,343
28	336,287	237,016	125,699	101,885	84,328	54,740
29	386,108	70,324	93,029	89,437	19,094	25,443
30	396,959	110,450	94,842	170,439	40,021	41,505
31	500,711	148,891	0	243,169	59,168	0
32	185,129	290,757	343,429	116,270	93,714	154,875
33			510,694			255,594
34			483,742			151,669
35			499,962			177,057
36			511,093			224,318

Table C.3. Hispanic and White Percent of VAP in Parts of Districts that Remained, Were Removed, and Newly Incorporated Parts of Districts

	Hispanic % of VAP			White % of VAP		
CD Number	Same	Out	In	Same	Out	In
1	12.5	4.1	4.8	67.8	82.3	86.8
2	20.3	18.9	35.6	59.3	51.5	45.7
3	12.9	32.5	12.5	63.7	39.4	42.0
4	10.1	13.1	4.1	76.8	70.6	82.3
5	17.0	21.6	47.1	67.7	56.6	27.1
6	17.8	20.3	55.0	69.1	54.0	26.8
7	22.9	21.6	36.2	56.2	56.7	41.2
8	16.7	5.7	17.0	73.3	82.8	64.1
9	38.0	42.3	23.0	12.0	14.8	19.1
10	24.2	26.6	16.6	59.8	52.5	69.9
11	33.2	25.4	11.5	60.6	70.5	85.4
12	19.7	29.3	22.6	68.3	60.8	47.9
13	19.6	20.4	25.1	71.2	72.2	71.0
14	22.5	28.5	14.9	63.1	58.9	51.3
15	84.1	72.3	65.9	13.2	24.6	29.7
16	77.5	96.6	92.6	17.1	2.3	6.5
17	19.6	14.1	20.0	63.8	79.3	59.2
18	32.2	51.7	31.3	15.0	27.4	35.4
19	29.6	26.1	28.2	62.0	70.8	63.3
20	70.2	63.5	55.9	21.3	22.7	33.8
21	22.9	27.3	26.6	69.7	56.0	64.8
22	20.8	28.6	22.3	48.7	47.5	59.9
23	62.2	63.4	66.6	33.6	27.2	28.3
24	18.3	32.9	25.5	59.7	36.0	52.0
25	18.9	37.7	13.9	66.0	52.0	75.6
26	15.9	21.2	56.0	70.3	52.9	31.8
27	54.8	85.6	33.9	38.9	12.5	56.9
28	85.0	62.4	44.5	13.6	32.7	34.7
29	47.8	58.9	59.0	13.0	30.6	17.3
30	33.5	39.3	45.8	14.3	45.7	27.2
31	19.5	15.9	--	63.6	65.1	--
32	13.2	51.7	24.8	73.1	31.6	50.9
33			19.7			59.9
34			79.1			18.4
35			57.6			29.6
36			21.9			66.8

Table C.4. Share of 2008 Vote for Minority Preferred Candidates for Statewide and Federal Office, in Parts of Districts that Remained, Were Removed, and Newly Incorporated Parts of Districts

	Average 2008 Vote Share			2008 Presidential Vote Share		
CD Number	Same	Out	In	Same	Out	In
1	34.4	35.0	27.0	30.8	28.5	23.6
2	33.8	50.7	40.0	33.3	46.4	39.7
3	36.8	50.0	31.2	39.0	50.1	32.5
4	34.7	32.2	35.0	29.7	33.1	28.5
5	38.5	41.8	66.1	35.2	41.1	65.5
6	33.3	45.9	58.0	31.1	44.7	56.6
7	38.0	46.4	42.1	39.0	46.7	42.3
8	26.5	34.8	35.3	25.5	26.0	30.5
9	77.6	79.2	77.5	76.9	79.1	77.4
10	42.8	47.0	45.8	42.5	47.6	44.1
11	26.9	27.6	26.4	23.7	24.7	22.1
12	36.8	37.7	53.9	37.2	36.0	54.0
13	25.2	34.2	26.2	22.4	22.4	22.6
14	39.6	34.6	54.4	35.5	31.3	49.6
15	68.7	60.9	51.4	64.2	55.9	48.7
16	67.0	84.9	76.2	65.0	82.9	74.6
17	40.4	32.0	50.9	36.8	26.0	49.1
18	85.7	61.6	69.9	85.6	59.8	70.1
19	29.9	25.7	34.3	28.3	20.9	27.4
20	66.1	70.7	55.0	62.8	67.4	53.7
21	33.0	49.0	58.7	34.0	49.8	59.1
22	40.9	47.5	30.0	40.0	43.9	29.3
23	49.4	59.9	56.2	46.5	58.0	51.5
24	37.5	58.1	45.1	39.0	57.4	46.5
25	58.9	62.1	38.3	60.0	59.8	36.2
26	34.4	49.8	60.0	36.2	49.6	59.1
27	51.0	70.5	40.3	46.0	66.3	35.0
28	70.1	50.7	57.0	63.5	47.3	54.7
29	71.5	54.7	70.3	64.9	48.6	66.0
30	86.5	61.5	66.1	86.3	63.6	65.2
31	42.1	39.6	--	43.2	36.6	--
32	36.2	54.9	47.2	39.8	55.0	48.0
33			42.7			42.0
34			65.3			60.7
35			66.1			64.2
36			36.3			29.8

APPENDIX

THE AMERICAN COMMUNITY SURVEY AND THE CITIZEN VOTING AGE POPULATION

Stephen Ansolabehere

In 2000, the Census gauged the Citizen Voting Age Population in the United States using the long-form of the Census. The long-form was a random sample survey administered at the same time as the Census Enumeration. The survey was sufficiently large to provide estimates of citizenship and other population characteristics at the Census block level, the lowest level of aggregation of Census data. Because it is a random sample survey rather than an enumeration there is always a margin of error or sampling error associated with the citizenship data.

In 2005, the Census Bureau began the American Community Survey (ACS), which is a random sample survey of 3 million Americans each year, with the aim of replacing the Census Long Form with the ACS. Census made this switch so as to measure changes in population characteristics over time, because many federal programs are tied to income and other indicators and the information from the Long-Form becomes quickly out of date. The annual ACS sample is sufficient to provide information such as citizenship down to the level of areas of 65,000 persons or more with a reasonable degree of precision (a small margin of error). To gain sufficient precision at the block level, Census constructs a 5-year average of the ACS.

The most current release of such data is the average of the surveys from 2005 to 2009. The Census Bureau has scheduled the release of the 5-year average of the 2006 to 2010 ACS in December, 2011.

1. Discrepancies between ACS and the Enumeration

The population figures produced using the ACS are systematically lower than the population counts from the Census Enumeration, which is the official source for population counts. The 2010 Census Enumeration records 25.1 million persons in the state of Texas in 2010. The 2005-2009 ACS estimate is 23.8 million persons. ACS underestimates the total population by 1.3 million persons. The 2005-2009 ACS estimates a Texas Voting Age Population of 17,185,930 persons. The actual enumeration figure is 18,279,737, which is 1.1 million persons larger than the ACS projection.

The discrepancy between the 2010 Enumeration and the 2005-2009 ACS estimates varies across racial groups. Most of the difference arises among Hispanics. The ACS and Census Enumeration provide counts of total population and voting age population of White Non-Hispanics, Blacks, and Hispanics. The 2005-2009 ACS estimates of the White Non-Hispanic population exceeds the Census enumeration count by 30,000 persons. The ACS under estimates Blacks by 200,000 persons. And the ACS under estimates Hispanics by 900,000 persons. Hence, Hispanics and Blacks account for 1.1 million persons of the 1.3 million persons in Texas under estimated by the ACS. The remaining 200,000 person discrepancy between the ACS and Enumeration consist of persons of another race, such as American Indians or Asian, or who identify as more than one race. Exact figures are provided in Table A.2.

Similar discrepancies arise with the Voting Age Population using the ACS. The 2005-2009 ACS under estimates the White Voting Age Population by 136,000 persons, which is 1.5% below the actual number. The ACS under estimates the Black Voting Age Population by 150,000, which is 7.8% below the actual number. And, the ACS under estimates Hispanic Voting Age Population by 590,000 persons, which is 10.6% below the actual number.

The differences between the ACS and Enumeration far exceed what might arise from sampling error. ACS reports a margin of error for each of its estimates. All of the observed differences between the survey and enumeration exceed the reported margins of error. In other words, these discrepancies are highly unlikely to have arrived by chance or as a result of sampling variation and reflect systematic bias. The difference appears to be due to the Census' new approach to measuring CVAP. The Census 2000 Long Form in 2000 estimated Texas' population within 30,000 of the Census Enumeration.

2. A Simple Explanation

The difference appears to be due to population trends and the different time frames of the Enumeration and of the 5-year average of the ACS 2005-2009 study. The Enumeration was conducted in April 2010. The ACS figures reported by

Census for analysis of Citizen Voting Age Population are constructed by averaging five years of data, from 2005 to 2009. The mid-point year is 2007. According to the 2000 and 2010 enumerations, the total population growth over the entire decade in the state of Texas was 4,293,473, or 429,374 per year. Over the 3-year period from 2007 to 2010, then, one would expect the population of Texas to grow 1,288,123 (3 times 429,374). Thus, from simple trends in the population one would expect a discrepancy between the Enumeration and the ACS of approximately 1.3 million persons, which is almost exactly the observed difference between the total counts from the two sources. Finally, the projection of Texas' population from the one-year 2010 ACS is 25.2 million, which differs only slightly from the Enumeration's count of 25.1 million.

Voting Age Population exhibits similar trending. According the Census enumerations, the VAP in Texas was 14,977,890 in 2000 and 18,279,736 in 2010, a growth of 3,301,846 total or 330,185 per year. The difference between the 2000 VAP and the 2005-2009 ACS estimate of the VAP is 2,208,040, or a growth rate of 315,434. The annual growth in VAP is quite similar using either the 2005-2009 ACS or the 2010 Enumeration to estimate the change since the 2000 Enumeration.

These findings suggest caution in using the ACS CVAP estimates for the State of Texas in 2010. The 2005-2009 ACS are not calibrated to match the 2010 Enumeration, and the 2005-2009 ACS understates the overall population and the populations within specific subgroups by the amount implied by a linear trend from 2007 to 2010.

3. A Possible Adjustment

One may use the ACS and the Enumeration to estimate the CVAP for the State and specific groups. The Enumeration provides counts of all persons with in a given ethnic or racial group. The ACS provides estimates of the percent of persons in each group who are Citizens of Voting Age. That percent is very stable year to year from 2005 to 2010 for the major ethnic and racial groups in Texas and for the State's overall population. One way to adjust the ACS to be consistent with the Enumeration, then, is to multiply the percent of each group who are adult citizens (from the ACS) times the Census enumeration of 2010 for each group to estimate the CVAP of each group in 2010.

According to the ACS figures, 77.0 percent of Whites are citizens of voting age, 68.9 percent of Blacks are citizens of voting age, and 42.9 percent of Hispanics are citizens of voting age. These percentages are stable year to year from 2005 to 2009. One may then calculate the population for each group's CVAP as their total population in the enumeration times the appropriate percentage. That calculation implies a total CVAP for the state of 15,725,999, which is 829,604 more persons than the ACS reports in their estimates.

The calculations reveal that the ACS slightly over estimates the White CVAP, and substantially underestimates of the Black and Hispanic CVAP. Rescaling the ACS to be in line with the population counts from the Enumeration implies that there are 8,774,942 White citizens of voting age; 1,997,202 Black citizens of voting age; and 4,063,891 Hispanic citizens of voting age. The figure for whites is almost

18,000 persons less than the ACS estimate of 8,793,200. The figure for Blacks is 133,000 (or about 8%) above the ACS estimate of 1,864,530. And, the figure for Hispanics is 390,000 (10%) above the ACS estimate of 3,674,800.

In the past, courts have relied on the citizen voting age population from the Census Long-Form to determine whether the majority in a district are Hispanic Citizens of Voting Age. Considering the discrepancies between the ACS and the enumeration, care needs to be taken in applying the 2005-2009 ACS Citizenship estimates to redistricting questions. Uncritical use of the 2005-2009 ACS counts will not produce an accounting of the electorate that is consistent with the Enumeration. In fact, ACS would provide a count too low by 1.3 million people.

This does not mean that the ACS Citizenship data are not useful. Rather, they need to be treated in a way that is consistent with the official population counts from the Enumeration. One can use the Enumeration and the ACS 2005 to 2009 together to project the likely CVAP for different racial groups. The Census Bureau is scheduled to release the 2006-2010 ACS average in December, 2011, and these data are to be calibrated to the 2010 Enumeration. Until such data are available, though the best we can rely on are projections using ACS and the Enumeration.

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EDUCATION

Harvard University	Ph.D., Political Science	1989
University of Minnesota	B.A., Political Science	1984
	B.S., Economics	

PROFESSIONAL EXPERIENCE

ACADEMIC POSITIONS

2010	Visiting Professor, New York University Law School
2008-present	Professor, Department of Government, Harvard University
1998-2009	Elting Morison Professor, Department of Political Science, MIT (Associate Head, 2002-2005)
1995-1998	Associate Professor, Department of Political Science, MIT
1993-1994	National Fellow, The Hoover Institution
1989-1993	Assistant Professor, Department of Political Science, University of California, Los Angeles

FELLOWSHIPS AND HONORS

American Academy of Arts and Sciences	2007
Carnegie Scholar	2000-02
Goldsmith Book Prize for *Going Negative*	1996
National Fellow, The Hoover Institution	1993-94
Harry S. Truman Fellowship	1982-86

PUBLICATIONS

Books

2009 American Government, 11th edition, W.W. Norton. With Benjamin Ginsberg and Kenneth Shepsle

2008 *The End of Inequality: One Person, One Vote and the Transformation of American Politics*. W. W. Norton.

1996 *Going Negative: How Political Advertising Divides and Shrinks the American Electorate* (with Shanto Iyengar). The Free Press.

1993 *Media Game: American Politics in the Television Age* (with Roy Behr and Shanto Iyengar). Macmillan.

Articles in Refereed Journals

2010 "Profiling Originalism" Columbia Law Review (with Jamal Greene and Nathaniel Persily) forthcoming.

2010 "Partisanship, Public Opinion, and Redistricting" *Election Law Journal* (with Joshua Fougere and Nathaniel Persily).

2010 "Primary Elections and Party Polarization" *Quarterly Journal of Political Science* (with Shigeo Hirano, James Snyder, and Mark Hansen)

2010 "Constituents' Responses to Congressional Roll Call Voting," *American Journal of Political Science* (with Phil Jones)

2010 "Race, Region, and Stephen Ansolabehere, Nathaniel Persily, and Charles H. Stewart III, "Race, Region, and Vote Choice in the 2008 Election: Implications for the Future of the Voting Rights Act" *Harvard Law Review* April, 2010.

2010 "Residential Mobility and the Cell Only Population," *Public Opinion Quarterly* (with Brian Schaffner)

2009 "Explaining Attitudes Toward Power Plant Location," *Public Opinion Quarterly* (with David Konisky)

2009 "Public risk perspectives on the geologic storage of carbon dioxide," *International Journal of Greenhouse Gas Control* (with Gregory Singleton and Howard Herzog) 3(1): 100-107.

2008 "A Spatial Model of the Relationship Between Seats and Votes" (with William Leblanc) *Mathematical and Computer Modeling* (November).

2008 "The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting" (with Jonathan Rodden and James M. Snyder, Jr.) *American Political Science Review* (May).

2008 "Access versus Integrity in Voter Identification Requirements." *New York University Annual Survey of American Law,* vol 63.

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2007 "Incumbency Advantages in U. S. Primary Elections," (with John Mark Hansen, Shigeo Hirano, and James M. Snyder, Jr.) *Electoral Studies* (September)

2007 "Television and the Incumbency Advantage" (with Erik C. Snowberg and James M. Snyder, Jr). *Legislative Studies Quarterly.*

2006 "The Political Orientation of Newspaper Endorsements" (with Rebecca Lessem and James M. Snyder, Jr.). *Quarterly Journal of Political Science* vol. 1, issue 3.

2006 "Voting Cues and the Incumbency Advantage: A Critical Test" (with Shigeo Hirano, James M. Snyder, Jr., and Michiko Ueda) *Quarterly Journal of Political Science* vol. 1, issue 2.

2006 "American Exceptionalism? Similarities and Differences in National Attitudes Toward Energy Policies and Global Warming" (with David Reiner, Howard Herzog, K. Itaoka, M. Odenberger, and Fillip Johanssen) *Environmental Science and Technology* (February 22, 2006), http://pubs3.acs.org/acs/journals/doilookup?in_doi=10.1021/es052010b

2006 "Purple America" (with Jonathan Rodden and James M. Snyder, Jr.) *Journal of Economic Perspectives* (Winter).

2005 "Did the Introduction of Voter Registration Decrease Turnout?" (with David Konisky). *Political Analysis.*

2005 "Statistical Bias in Newspaper Reporting: The Case of Campaign Finance" *Public Opinion Quarterly* (with James M. Snyder, Jr., and Erik Snowberg).

2005 "Studying Elections" *Policy Studies Journal* (with Charles H. Stewart III and R. Michael Alvarez).

2005	"Legislative Bargaining under Weighted Voting" *American Economic Review* (with James M. Snyder, Jr., and Michael Ting)
2005	"Voting Weights and Formateur Advantages in Coalition Formation: Evidence from Parliamentary Coalitions, 1946 to 2002" (with James M. Snyder, Jr., Aaron B. Strauss, and Michael M. Ting) *American Journal of Political Science*.
2005	"Reapportionment and Party Realignment in the American States" *Pennsylvania Law Review* (with James M. Snyder, Jr.)
2004	"Residual Votes Attributable to Voting Technologies" (with Charles Stewart) *Journal of Politics*
2004	"Using Term Limits to Estimate Incumbency Advantages When Office Holders Retire Strategically" (with James M. Snyder, Jr.). *Legislative Studies Quarterly* vol. 29, November 2004, pages 487-516.
2004	"Did Firms Profit From Soft Money?" (with James M. Snyder, Jr., and Michiko Ueda) *Election Law Journal* vol. 3, April 2004.
2003	"Bargaining in Bicameral Legislatures" (with James M. Snyder, Jr. and Mike Ting) *American Political Science Review*, August, 2003.
2003	"Why Is There So Little Money in U.S. Politics?" (with James M. Snyder, Jr.) *Journal of Economic Perspectives*, Winter, 2003.
2002	"Equal Votes, Equal Money: Court-Ordered Redistricting and the Public Spending in the American States" (with Alan Gerber and James M. Snyder, Jr.) *American Political Science Review*, December, 2002. Paper awarded the Heinz Eulau award for the best paper in the American Political Science Review.
2002	"Are PAC Contributions and Lobbying Linked?" (with James M. Snyder, Jr. and Micky Tripathi) *Business and Politics* 4, no. 2.
2002	"The Incumbency Advantage in U.S. Elections: An Analysis of State and Federal Offices, 1942-2000" (with James Snyder) *Election Law Journal*, 1, no. 3.
2001	"Voting Machines, Race, and Equal Protection." *Election Law Journal*, vol. 1, no. 1
2001	"Models, assumptions, and model checking in ecological regressions" (with Andrew Gelman, David Park, Phillip Price, and Larraine Minnite) *Journal of the Royal Statistical Society*, series A, 164: 101-118.
2001	"The Effects of Party and Preferences on Congressional Roll Call Voting."

(with James Snyder and Charles Stewart) *Legislative Studies Quarterly* (forthcoming).
Paper awarded the *Jewell-Lowenberg Award* for the best paper published on legislative politics in 2001. Paper awarded the *Jack Walker Award* for the best paper published on party politics in 2001.

2001 "Candidate Positions in Congressional Elections," (with James Snyder and Charles Stewart). *American Journal of Political Science* 45 (November).

2000 "Old Voters, New Voters, and the Personal Vote," (with James Snyder and Charles Stewart) *American Journal of Political Science* 44 (February).

2000 "Soft Money, Hard Money, Strong Parties," (with James Snyder) *Columbia Law Review* 100 (April):598 - 619.

2000 "Campaign War Chests and Congressional Elections," (with James Snyder) *Business and Politics*. 2 (April): 9-34.

1999 "Replicating Experiments Using Surveys and Aggregate Data: The Case of Negative Advertising." (with Shanto Iyengar and Adam Simon) *American Political Science Review* 93 (December).

1999 "Valence Politics and Equilibrium in Spatial Models," (with James Snyder), *Public Choice.*

1999 "Money and Institutional Power," (with James Snyder), *Texas Law Review* 77 (June, 1999): 1673-1704.

1997 "Incumbency Advantage and the Persistence of Legislative Majorities," (with Alan Gerber), *Legislative Studies Quarterly* 22 (May 1997).

1996 "The Effects of Ballot Access Rules on U.S. House Elections," (with Alan Gerber), *Legislative Studies Quarterly* 21 (May 1996).

1994 "Riding the Wave and Issue Ownership: The Importance of Issues in Political Advertising and News," (with Shanto Iyengar) *Public Opinion Quarterly* 58: 335-357.

1994 "Horseshoes and Horseraces: Experimental Evidence of the Effects of Polls on Campaigns," (with Shanto Iyengar) *Political Communications* 11/4 (October-December): 413-429.

1994 "Does Attack Advertising Demobilize the Electorate?" (with Shanto Iyengar), *American Political Science Review* 89 (December).

1994 "The Mismeasure of Campaign Spending: Evidence from the 1990 U.S. House

Elections," (with Alan Gerber) *Journal of Politics* 56 (September).

1993 "Poll Faulting," (with Thomas R. Belin) *Chance* 6 (Winter): 22-28.

1991 "The Vanishing Marginals and Electoral Responsiveness," (with David Brady and Morris Fiorina) *British Journal of Political Science* 22 (November): 21-38.

1991 "Mass Media and Elections: An Overview," (with Roy Behr and Shanto Iyengar) *American Politics Quarterly* 19/1 (January): 109-139.

1990 "The Limits of Unraveling in Interest Groups," *Rationality and Society* 2: 394-400.

1990 "Measuring the Consequences of Delegate Selection Rules in Presidential Nominations," (with Gary King) *Journal of Politics* 52: 609-621.

1989 "The Nature of Utility Functions in Mass Publics," (with Henry Brady) *American Political Science Review* 83: 143-164.

Special Reports and Policy Studies

2010 The Future of Nuclear Power, Revised.

2006 *The Future of Coal*. MIT Press. Continued reliance on coal as a primary power source will lead to very high concentrations of carbon dioxide in the atmosphere, resulting in global warming. This cross-disciplinary study – drawing on faculty from Physics, Economics, Chemistry, Nuclear Engineering, and Political Science – develop a road map for technology research and development policy in order to address the challenges of carbon emissions from expanding use of coal for electricity and heating throughout the world.

2003 *The Future of Nuclear Power*. MIT Press. This cross-disciplinary study – drawing on faculty from Physics, Economics, Chemistry, Nuclear Engineering, and Political Science – examines the what contribution nuclear power can make to meet growing electricity demand, especially in a world with increasing carbon dioxide emissions from fossil fuel power plants.

2002 "Election Day Registration." A report prepared for DEMOS. This report analyzes the possible effects of Proposition 52 in California based on the experiences of 6 states with election day registration.

2001 *Voting: What Is, What Could Be*. A report of the Caltech/MIT Voting Technology Project. This report examines the voting system, especially technologies for casting and counting votes, registration systems, and polling place operations, in the United States. It was widely used by state and national governments in formulating election reforms following the 2000 election.

2001 "An Assessment of the Reliability of Voting Technologies." A report of the Caltech/MIT Voting Technology Project. This report provided the first nationwide assessment of voting equipment performance in the United States. It was prepared for the Governor's Select Task Force on Election Reform in Florida.

Chapters in Edited Volumes

2010 "Dyadic Representation" in Oxford Handbook on Congress, Eric Schickler, ed., Oxford University Press.

2008 "Voting Technology and Election Law" in *America Votes!*, Benjamin Griffith, editor, Washington, DC: American Bar Association.

2007 What Did the Direct Primary Do to Party Loyalty in Congress" (with Shigeo Hirano and James M. Snyder Jr.) in *Process, Party and Policy Making: Further New Perspectives on the History of Congress*, David Brady and Matthew D. McCubbins (eds.), Stanford University Press, 2007.

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2006 "The Decline of Competition in Primary Elections," (with John Mark Hansen, Shigeo Hirano, and James M. Snyder, Jr.) The Marketplace of Democracy, Michael P. McDonald and John Samples, eds. Washington, DC: Brookings.

2005 "Voters, Candidates and Parties" in *Handbook of Political Economy*, Barry Weingast and Donald Wittman, eds. New York: Oxford University Press.

2003 "Baker v. Carr in Context, 1946 – 1964" (with Samuel Isaacharoff) in *Constitutional Cases in Context*, Michael Dorf, editor. New York: Foundation Press.

2002 "Corruption and the Growth of Campaign Spending"(with Alan Gerber and James Snyder). *A User's Guide to Campaign Finance*, Jerry Lubenow, editor. Rowman and Littlefield.

2001 "The Paradox of Minimal Effects," in Henry Brady and Richard Johnston, eds., *Do Campaigns Matter?* University of Michigan Press.

2001 "Campaigns as Experiments," in Henry Brady and Richard Johnson, eds., Do *Campaigns Matter?* University of Michigan Press.

2000 "Money and Office," (with James Snyder) in David Brady and John Cogan, eds., *Congressional Elections: Continuity and Change.* Stanford University Press.

1996 "The Science of Political Advertising," (with Shanto Iyengar) in *Political Persuasion and Attitude Change*, Richard Brody, Diana Mutz, and Paul Sniderman, eds. Ann Arbor, MI: University of Michigan Press.

1995 "Evolving Perspectives on the Effects of Campaign Communication," in Philo Warburn, ed., *Research in Political Sociology*, vol. 7, JAI.

1995 "The Effectiveness of Campaign Advertising: It's All in the Context," (with Shanto Iyengar) in *Campaigns and Elections American Style*, Candice Nelson and James A. Thurber, eds. Westview Press.

1993 "Information and Electoral Attitudes: A Case of Judgment Under Uncertainty," (with Shanto Iyengar), in *Explorations in Political Psychology*, Shanto Iyengar and William McGuire, eds. Durham: Duke University Press.

Working Papers

2009 "Sociotropic Voting and the Media" (with Marc Meredith and Erik Snowberg), American National Election Study Pilot Study Reports, John Aldrich editor.

2007 "Public Attitudes Toward America's Energy Options: Report of the 2007 MIT Energy Survey" CEEPR Working Paper 07-002 and CANES working paper.

2006 "Constituents' Policy Perceptions and Approval of Members' of Congress" CCES Working Paper 06-01 (with Phil Jones).

2004 "Using Recounts to Measure the Accuracy of Vote Tabulations: Evidence from New Hampshire Elections, 1946 to 2002" (with Andrew Reeves).

2002 "Evidence of Virtual Representation: Reapportionment in California," (with Ruimin He and James M. Snyder).

1999 "Why did a majority of Californians vote to lower their own power?" (with James Snyder and Jonathan Woon). Paper presented at the annual meeting of the American Political Science Association, Atlanta, GA, September, 1999. Paper received the award for the best paper on Representation at the 1999 Annual Meeting of the APSA.

1999 "Has Television Increased the Cost of Campaigns?" (with Alan Gerber and James Snyder).

1996 "Money, Elections, and Candidate Quality," (with James Snyder).

1996 "Party Platform Choice - Single- Member District and Party-List Systems,"(with James Snyder).

1995 "Messages Forgotten" (with Shanto Iyengar).

1994 "Consumer Contributors and the Returns to Fundraising: A Microeconomic Analysis," (with Alan Gerber), presented at the Annual Meeting of the American Political Science Association, September.

1992 "Biases in Ecological Regression," (with R. Douglas Rivers) August, (revised February 1994). Presented at the Midwest Political Science Association Meetings, April 1994, Chicago, IL.

1992 "Using Aggregate Data to Correct Nonresponse and Misreporting in Surveys" (with R. Douglas Rivers). Presented at the annual meeting of the Political Methodology Group, Cambridge, Massachusetts, July.

1991 "The Electoral Effects of Issues and Attacks in Campaign Advertising" (with Shanto Iyengar). Presented at the Annual Meeting of the American Political Science Association, Washington, DC.

1991 "Television Advertising as Campaign Strategy: Some Experimental Evidence" (with Shanto Iyengar). Presented at the Annual Meeting of the American Association for Public Opinion Research, Phoenix.

1991 "Why Candidates Attack: Effects of Televised Advertising in the 1990 California Gubernatorial Campaign," (with Shanto Iyengar). Presented at the Annual Meeting of the Western Political Science Association, Seattle, March.

1990 "Winning is Easy, But It Sure Ain't Cheap." Working Paper #90-4, Center for the American Politics and Public Policy, UCLA. Presented at the Political Science Departments at Rochester University and the University of Chicago.

Research Grants

1989-1990 Markle Foundation. "A Study of the Effects of Advertising in the 1990 California Gubernatorial Campaign." Amount: $50,000

1991-1993 Markle Foundation. "An Experimental Study of the Effects of Campaign Advertising." Amount: $150,000

1991-1993 NSF. "An Experimental Study of the Effects of Advertising in the 1992 California Senate Electoral." Amount: $100,000

1994-1995 MIT Provost Fund. "Money in Elections: A Study of the Effects of Money on

	Electoral Competition." Amount: $40,000
1996-1997	National Science Foundation. "Campaign Finance and Political Representation." Amount: $50,000
1997	National Science Foundation. "Party Platforms: A Theoretical Investigation of Party Competition Through Platform Choice." Amount: $40,000
1997-1998	National Science Foundation. "The Legislative Connection in Congressional Campaign Finance. Amount: $150,000
1999-2000	MIT Provost Fund. "Districting and Representation." Amount: $20,000.
1999-2002	Sloan Foundation. "Congressional Staff Seminar." Amount: $156,000.
2000-2001	Carnegie Corporation. "The Caltech/MIT Voting Technology Project." Amount: $253,000.
2001-2002	Carnegie Corporation. "Dissemination of Voting Technology Information." Amount: $200,000.
2003-2005	National Science Foundation. "State Elections Data Project." Amount: $256,000.
2003-2004	Carnegie Corporation. "Internet Voting." Amount: $279,000.
2003-2005	Knight Foundation. "Accessibility and Security of Voting Systems." Amount: $450,000.
2006-2008	National Science Foundation, "Primary Election Data Project"
2008-2009	Pew/JEHT. "Measuring Voting Problems in Primary Elections, A National Survey." Amount: $300,000
2008-2009	Pew/JEHT. "Comprehensive Assessment of the Quality of Voter Registration Lists in the United States: A pilot study proposal" (with Alan Gerber). Amount: $100,000.
2010-2011	National Science Foundation, "Cooperative Congressional Election Study," $360,000
2010-2012	Sloan Foundation, "Precinct-Level U. S. Election Data," $240,000.

Professional Boards

Editor, Cambridge University Press Book Series, Political Economy of Institutions and Decisions.

Member, Board of Overseers, American National Election Studies, 1999 to present.

Member, Board of the Reuters International School of Journalism, Oxford University, 2007 to present.

Contributing Editor, *Boston Review*, The State of the Nation.

Editorial Board of American Journal of Political Science, 2005 to present.
Editorial Board of Legislative Studies Quarterly, 2005 to present.
Editorial Board of Public Opinion Quarterly, 2006 to present.
Editorial Board of the Election Law Journal, 2002 to present.
Editorial Board of the Harvard International Journal of Press/Politics, 1996 to 2008.
Editorial Board of Business and Politics, 2002 to Present.
Scientific Advisory Board, Polimetrix, 2004 to 2006.

Special Projects and Task Forces

Principal Investigator, Cooperative Congressional Election Study, 2005 – present.

MIT Energy Innovation Study, 2009-2010.
MIT Energy Initiative, Steering Council, 2007-2008
Co-Director, Caltech/MIT Voting Technology Project, 2000-2004.
Co-Organizer, MIT Seminar for Senior Congressional and Executive Staff, 1996-2007.
MIT Coal Study, 2004-2006.
MIT Energy Research Council, 2005-2006.
MIT Nuclear Study, 2002-2004.
Voting Technology Task Force Leader, Election Reform Initiative of the Constitution Project, 2001 to 2002.

EXHIBIT 3

Rebuttal Report to the Supplemental Expert Report of Doctor John Alford

Stephen Ansolabehere
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January 16, 2012

I. Statement of Inquiry

I have been asked to assess the methodology Dr. John Alford uses in his supplemental report and to evaluate his analysis of retrogression as it relates to the congressional districts in the benchmark and proposed plans for the State of Texas. My analysis includes a comparison of Dr. Alford's assessment of retrogression with my own assessment.

II. Background and Qualifications

My background and qualifications are discussed in my initial report, submitted on October 21, 2011.

III. Sources of Information

All of the data and information used in this report come from the U. S. Census Bureau, the Texas Legislative Council ("TLC"), and the Elections Division of the Travis County Clerk. The TLC provides geographic information, demographic information, and election results at the level of the Voting Tabulation District ("VTD"), and it produces reports that aggregate that information to the level of the Congressional District for each plan. A VTD is a collection of Census Blocks that map as closely as possible into Voting Precincts. The information available that I used in this report includes maps, reports, and spreadsheets. I obtained data from the TLC's main website http://www.tlc.state.tx.us/redist/redist.html and ftp site ftp://ftpgis1.tlc.state.tx.us/DistrictViewer/Congress/. Most of the data for this report come from the TLC. Additional data on election returns for Travis County offices are available at the following website: http://www.co.travis.tx.us/county_clerk/election/results.asp.

IV. Analysis

A. Summary of Findings

1. Dr. Alford proposes a novel but flawed statewide functional analysis for assessing retrogression that differs from the standard approach endorsed by courts and by the Department of Justice. Dr. Handley, I, and other experts in this case follow the standard approach, which is to determine the districts in which minorities have the ability to elect their preferred candidates and then to determine whether there has been a reduction in the overall number of such districts or specific areas.

2. The standard approach proceeds in three steps. (1) Determine which candidates are preferred by Black and Hispanic voters in each district and area of the state. (2) Determine which districts are those in which minorities have the ability to elect their preferred candidate. Specifically, where have minority-preferred candidates won most of their legislative elections? Where do minority-preferred candidates have a high likelihood of winning a majority of the time? (3) Compute the number of elections in which minority-preferred candidates have the ability to win under the benchmark plan and under a proposed plan.

3. Dr. Alford's approach is to count the number of times minority-preferred candidates won a majority of the vote in any contests across all districts. This creates an exchangeability of minority votes across districts. That approach allows the state legislature to draw districts in such a way that small gains in one part of the state for minority-preferred candidates can be used to offset large losses for minorities in a given area. This possibility leads to situations in which Dr. Alford's

methodology yields results that contradict the standard, court-endorsed approach, which is to measure retrogression by counting the number of minority-ability districts in a benchmark plan and comparing to the number of minority-ability districts in a proposed plan.

4. Dr. Alford's new methodology is not an adequate substitute for the standard approach to measuring retrogression. Dr. Alford departs from the standard approach without offering a legal or statistical rationale for rejecting it. At most, Dr. Alford's approach might be used in addition to the standard formulation if the standard formula does not show numerical retrogression.

5. Dr. Alford proposes this approach as a statewide methodology, but he only applies it to a selected subset of districts, not to the entire state. He offers no evidence, then, that there has or has not been retrogression statewide according to his formula.

6. Dr. Alford offers no rationale for the selection of the subset of districts considered in his analysis. The subset studied is not the subset of all districts in which minorities are a plurality of the population, as one would then also include CDs 6, 9, 18, and 30.

7. Dr. Alford advocates for a bright-line rule of 60 percent Hispanic Citizens of Voting Age Population ("HCVAP") to automatically classify a district as one in which minorities have the ability to elect their preferred candidates. This reading of the case law misconstrues the cases referenced in the District Court's Memorandum and

Opinion of December 23, 2011. Dr. Alford uses this standard to critique Dr. Handley's classification, but does not in turn apply it to his own functional analysis. As a result, his bright-line rule is inconsistent with his functional rule in this case, and there is no guidance offered as to which rule is preferred or how the inconsistencies are to be resolved.

8. Dr. Alford's analysis is not an analysis of all districts at stake in this case. It is not an analysis of all districts in which minorities have the ability to elect their preferred candidates. Omitted from his analysis, by that standard, are CDs 9, 18, 30, and 25. It is suggested in the report that Alford's are all the districts in which Hispanics have the opportunity to elect their preferred candidates, but if that is the case, then CD 25 must be included in the analysis.

9. Under Plan C100, CD 25 is a district in which minorities have the ability to elect their preferred candidates. My original report in this case shows that is clearly the case. I offer further evidence here: the candidate preferred by Blacks and Hispanics has won every Congressional election this decade.

10. Primary elections are not an obstacle for minority-preferred candidates in CD 25 and Travis County. The evidence set forth in my original report and in my supplemental report in the Section 2 trial establishes that Congressman Doggett is the preferred candidate of Hispanics and Blacks in CD 25 in the Democratic primary. Also, candidates preferred by Black and Hispanic voters win the primary election as often as – or more often than –the candidates preferred by White voters in the Democratic primaries in the Travis area. Primaries are not typically used as a

standard for determining the ability to elect, but here they offer further evidence that CD 25 is the unusual district that is neither majority Black nor majority Hispanic but in which the minority-preferred candidates regularly win with support from sufficient numbers of White voters.

11. Plan C185 dismantles CD 25. The result of this dismantling and changes in other district boundaries is to reduce of the number of Congressional Districts in which Blacks and Hispanics have the ability to elect their preferred candidates from 11 to 10.

12. Plan C185 also reduces by 781,000 the number of Blacks and Hispanics living in districts where they have the ability to elect their preferred candidates. This is a massive dilution of minority voting rights that Dr. Alford's new methodology does not capture.

B. Criteria

B.1. Alternative Approaches to Retrogression

Section 5 of the Voting Rights Act protects, among other things, against reduction in the representation of Blacks and Hispanics in areas and districts where those racial groups have already realized gains. Accordingly, a retrogression analysis under Section 5 must determine in which legislative districts Blacks and Hispanics have the ability to elect their preferred candidates. This analysis requires comparing (1) the districts in which racial minorities have the ability to elect candidates of their choice under an existing plan; and (2) the districts in which they have that ability under a proposed plan.

Dr. Handley and I take the standard approach for determining retrogression used in past legal decisions and described by the District Court in this case. Dr. Handley and I each provide an enumeration of the number of districts in which minority-preferred candidates have the ability to win under Plan C100 and under Plan C185. We use slightly different measures of performance, but we take fundamentally the same approach to this problem. In each district, we first assess the preferences of minority voters in past elections. We then gauge the ability of minority-preferred candidates to win in each district based on election results other than for the particular legislative race (what Handley terms "exogenous performance measures") and based on the frequency with which the minority-preferred candidate won in past legislative races (Handley's "endogenous performance measure"). The standard for determining these minority-ability districts is that minority-preferred candidates win most of the time, not that they win every race or that they won only once. Finally, we tally the number of districts in which minority-preferred candidates have a substantial chance of winning under each plan, and we identify particular districts in which minorities have the ability to elect their preferred candidates and where they do not. Assessing retrogression depends on both the overall tally of seats and also on the particular districts and areas where minority voters realized gains and losses in representation.

This approach follows the case law in this area, as was characterized in the memorandum opinion of the District Court in this case on December 22, 2011:

> The question of retrogressive effect under Section 5 looks at gains that have already been *realized* by minority voters and protects them from future loss. A Section 5 claim requires a determination of how and where minority citizens' ability to elect is currently present in a covered jurisdiction and how it will

> manifest itself in a proposed plan. This requires identifying districts in which minority citizens enjoy an existing ability to elect and comparing the number of such districts in the benchmark to the number of such districts in a proposed plan to measure the proposed plan's effect on minority citizens' voting ability. Memorandum Opinion at 27-28.

Dr. Alford purports to embrace the same general approach as discussed above, but rather than enumerating districts, he performs what he terms a "Statewide Functional Analysis." His analysis begins with a common set of contests from past elections that are analyzed for every district. For each existing and proposed district, Dr. Alford determines how many were won by the minority-preferred candidate in each election. Up to that point, the approach is similar to that of Dr. Handley. However, rather than determine those districts where minority-preferred candidates have the ability to win based on those past contests, Dr. Alford sums across all districts to measure *the proportion* of all contests in districts in which minority-preferred candidates won a majority of the vote.

The following example highlights the difference between Dr. Alford's approach and the standard approach to retrogression. Suppose there are 10 contests analyzed and 10 districts. Consider two plans. Plan A creates nine districts in which minority-preferred candidates won none of the contests analyzed, and one district in which minority-preferred candidates won all 10 of the contests analyzed. Plan B creates 10 districts in which the minority-preferred candidates won one of the 10 contests and lost nine of the 10. Dr. Handley and I would consider one of the districts in Plan A to be a district in which minorities have the ability to elect their preferred candidates, while none of the districts in Plan B would be a minority-ability district. Dr. Alford's method, however, gives the same "score" to both plans.

Dr. Alford's statewide retrogression formula is not a calculation of the number of districts in which minority-preferred candidates have the ability to win. It is a calculation of the number of election contests across all districts in which minority-preferred candidates won a majority of the vote. This approach results in trading off gains in some areas against losses in other areas. Consider a variant on the example above. Suppose that under Plan A there are four districts in which minority-preferred candidates have a score of 100%, five districts in which they win 90% of the contests, and one district in which they win 70% of the contests. Suppose that under proposed Plan B, the five districts with scores of 90 would be increased to 100 and the one district where minority-preferred candidates won 70% of the contests would be reduced to 20%. Dr. Alford's approach to retrogression would assign proposed Plan B the same overall score as proposed Plan A. Under the traditional approach to retrogression and that established by case law, this situation would clearly amount to a reduction of the number of districts in which minorities have the ability to win, but Dr. Alford would find no retrogression.

There is extensive case law concerning Section 5 that relies on comparison of individual districts and tallies of the number of districts in which minorities have the ability to elect their preferred candidates. To my knowledge, Dr. Alford's alternative approach to retrogression has never been acknowledged or accepted in any past legal proceedings involving Section 5 of the Voting Rights Act, while the standard approach that Dr. Handley and I follow have a long lineage in case law. I see no basis offered to replace a court-endorsed and long-standing approach to the question of retrogression with a new, clearly flawed methodology.

At most, Dr. Alford's newly created approach might supplement the court-endorsed methodology, but it is not a proper substitute. The standard approach is tailored to specific questions central to Section 5: "in how many districts and in which districts did minorities see a reduction or gain in their ability to elect their preferred candidates?" Dr. Alford's method cannot address the questions of (1) the number of districts in which minorities have the ability to elect their preferred candidates, (2) where such districts are located, and (3) where reductions in ability districts have occurred and the remedies needed to address those reductions. Dr. Alford's approach simply produces a statewide score; it offers no guidance as to where a remedy may be sought if his approach shows evidence of retrogression.

The only potential utility of Dr. Alford's methodology could be to use it as a secondary indicator after there has been a determination about numerical retrogression. It could be used only as an additional check to see whether there is evidence of retrogression, as measured by both numbers of voters statewide and numbers of seats. That is, if there has not been a reduction in the number of districts in which Blacks and Hispanics have the ability to elect their preferred candidates, a court might look at Dr. Alford's additional measure as evidence of actions taken by the legislature to weaken or strengthen the abilities of minorities to elect their preferred candidates.

Finally, Dr. Alford criticizes Dr. Handley's analysis of endogenous and exogenous performance measures. As explained below, my original report and my analysis preserve the difference, as there is no need when assessing all of the available evidence to reduce the analysis to just a single score or measure. Taking a more holistic approach is of particular importance in the treatment of CD 23. Under Plan C100, CD 23 is clearly a minority-ability district because the minority preferred candidate won two of the three Congressional elections from 2006 to 2010.

B.2. Implementation of Dr. Alford's Retrogression Analysis

Dr. Alford describes his new method as a statewide formulation. That is, it purportedly reflects all gains and losses that minorities experienced in their ability to elect their preferred candidates across all contests or terms and across all districts in the entire state. He distinguishes the methodology from the standard approach, which he terms the "counting approach," in which every district in the state is considered and a determination is made as to whether it is a district where minorities have the ability to elect their preferred candidates.

But Dr. Alford does not apply his analysis statewide. The analysis in Congressional Table 2 in his supplemental report is restricted to Congressional Districts 15, 16, 20, 23, 27, 28, 29 under Plan C100 and Congressional Districts 34 and 35 under Plan C185. Clearly, Dr. Alford first applied undisclosed criteria in restricting his analysis to this subset and does not provide a statewide analysis at all.

The subset of districts Dr. Alford chose does not consist of all districts in which minorities have the ability to elect their preferred candidates. Specifically, it excludes CDs 9, 18, 25, and 30. CDs 9, 18, and 30 are districts in which Blacks have the ability to elect their preferred candidates. CD 25 is a district in which Blacks and Hispanics have the ability to elect their preferred candidates. In addition, Dr. Alford's subset does not include all districts in which Hispanics are the plurality of the total population of the district. If that were the standard for inclusion, Congressional Districts 6 and 9 would have also been included in the analysis, as those districts have a plurality of Hispanic total population under Plan C185. Dr. Alford provides no explanation for excluding all of these districts.

Dr. Alford's functional analysis is incomplete because it does not cover the entire state or the subset of districts at issue in this case. Absent an analysis of all congressional districts in the state, there are no sound conclusions to draw from the evidence he presents regarding the reduction or gain in the total number of terms that might have been gained or lost by minorities statewide as a result of redistricting.

B.3. Census Data and Bright-Line Criteria for Minority Ability Districts

Dr. Alford further argues that there must be a bright-line drawn at 60% Hispanic CVAP in determining the districts in which Hispanics have the ability to elect their preferred candidates. He interprets the District Court as saying that a district is automatically considered a district in which minorities have the ability to elect their preferred candidates if 60% of district's citizen voting age population is Hispanic – regardless of the electoral performance of that district. He argues, for instance, against Dr. Handley's classification of State House District 117 ("H117") as retrogressive because the benchmark plan's version of the district is 58% Hispanic Citizens of Voting Age ("HCVAP") and the proposed plan's version of that district is 64 percent HCVAP. Dr. Handley's analysis shows that District H117 had a much lower index of electoral performance under the proposed plan than under the benchmark plan and would no longer be a functioning minority-ability district. Dr. Alford bases this approach to classifying districts on his reading on footnote 22 of the District Court's memorandum of December 22, 2011.

I disagree with this reading of the court's memorandum. First, the references in footnote 22 are not immediately relevant to the classification in question. The cases concern Blacks, not Hispanics, and the question of whether 65 or 60 percent is the relevant threshold in those cases concerns Voting Age Population, not Citizenship. One reason for requiring a 60 percent threshold in those cases is because the voting age population includes some non-citizens. A 60 percent threshold for Citizen Voting Age Population is far too high for determining minority-ability districts.

Dr. Alford criticizes Dr. Handley's classification and counting of minority ability districts, but he engages in the same procedure in his use of his bright-line test. Specifically, Dr. Alford does not use the bright-line in his own statewide retrogression formula, as that would lead to quite a different calculation and it would contradict the basic idea behind his proposed alternative approach to retrogression. It is not clear from the report how to resolve the obvious discrepancies that arise between his bright-line test and his statewide retrogression formula.

Finally, such a bright-line test using citizenship data is ill-advised. As my supplemental report on the American Community Survey ("ACS") and population data in the Section 2 report discusses, the 2005-2007 ACS grossly understates the population, the voting age population, and the citizen voting age population of the State of Texas. Specifically, it underestimates the population by 1.3 million people. The degree of understatement varies across the population. There is very little understatement of the White population but enormous understatement of the Hispanic and Black populations.

Since that report, the Census Bureau has released the 2006-2010 ACS. The Census Bureau released the PUMS files on January 12, 2012. I reproduce Tables 1 and 4 from my original report here with the inclusion of the 2006-2010 ACS figures. These are labeled Attachments 1 and 2 here. Attachment 1 shows the difference between the 2005-

2009 ACS, 2006-2010 ACS, and 2010 Enumeration (official) counts of Total Persons and of Voting Age Population. The table displays the different counts statewide and for each racial group. Attachment 2 presents the percent of White, Hispanic, and Black CVAP as a percent of CVAP statewide.

It is worth noting that the ACS 2006 – 2010 amounts to an update of the 2005-2009 data of just one year. The Census dropped the 2005 ACS from the 5-year average and included the 2010 data. The mid-point of these data are 2008.

The new data only underscore the main results of my original report. (1) The ACS estimates of the population and voting age population of Texas are not consistent with the 2010 Census enumeration figures. This was true for the 2005-2009 data, and it remains true for the 2006-2008 data. (2) The ACS 2005-2009 data lag the Census Enumeration counts of population. The ACS data correspond roughly to the State's population in 2007. (3) The ACS 2005-2009 data significantly underestimate Hispanic and Black populations. (4) The ACS 2005-2009 data underestimate the number of Hispanics who are citizens of voting age and their share statewide. Even with the addition of one year of ACS data to their 5-year moving average (whose mid-point still lags behind the enumeration year of 2010), the Hispanic percent of CVAP statewide grew a full point, and the White percent of CVAP dropped a point and a half.

Clearly, the Census citizenship numbers involve sufficient uncertainty that some flexibility in their application is required. Use of a bright-line test is unreasonable given the state of the data, and the evidence clearly shows that application of such a test would harm minorities more than Whites. Using the 2005-2009 ACS or the 2006-2010 ACS figures substantially understates the number of Hispanics and Blacks, their share of the

Voting Age Population, and their share of the Citizen Voting Age Population. Those figures do not underestimate the White population significantly. Because these data disproportionately understate the Hispanic and Black populations, any calculations using them underestimate the size of those groups in a reference population. If one were to use these data to reach a specific threshold, such as a 50 percent HCVAP or 60 percent HCVAP, then one would end up putting many more Hispanics into a given district than required by the threshold, simply because ACS underestimates the number of Hispanics, voting age Hispanics, and Hispanic citizens of voting age. Hence, any use of these figures to reach a bright line, such as the 60 percent threshold advocated by Dr. Alford, would penalize Hispanics and Blacks.

C. Congressional District 25

Dr. Alford's failure to analyze Congressional District 25, as it exists under Plan C100, is a critical omission from his report. CD 25 is a minority-ability district under Plan C100 and thus must be included in an analysis of retrogression. I apply the methodology described in my earlier reports in the Section 2 case and in this case in order to identify all districts in the State of Texas where minorities have the ability to elect their preferred candidates. That analysis reveals CDs 9, 15, 16, 18, 20, 23, 25, 27, 28, 29, and 30 are districts where Blacks and Hispanics have the ability to elect their preferred candidates. The key difference from the districts analyzed by Dr. Alford and Dr. Handley and my analysis is CD 25. Here, I discuss that method for assessment and present further evidence from general and primary elections that minorities elect their preferred candidates in CD 25 under Plan C100. In the next section, I discuss the implications of that classification for any assessment of retrogression.

C.1. Methods for Assessing Performance of Minority-Preferred Candidates

I use the same methodology as discussed in my earlier report in this case. The first step in the analysis is to establish which candidates Black and Hispanic voters prefer. This is done using ecological regression analysis, which correlates the percent Black and percent Hispanic in an area with the percent of the vote received by each candidate in that area.

The second step in the analysis is to gauge the success rate of those in an existing area, such as a county or existing district. I differ in my application of the methodology from Dr. Alford and Dr. Handley. They attempt to reduce the problem to a single score. I look across a variety of indicators to assess past performance in a district and likely future performance in that district. For existing districts, I begin by counting the number of races in which the minority-preferred candidates won a plurality of the vote in the given area. If a minority-preferred candidate won most of the time, I classify the district as one in which minorities currently have the ability to elect their preferred candidate. I also calculate the average vote share in the district for minority-preferred candidates and the number of key races for statewide office in which minority-preferred candidates won a plurality of the vote. For any proposed districts – as distinct from existing districts – we must assess the likely success of candidates preferred by minority voters. Because no races have been conducted under a map that has only been proposed and not actually used for any elections, predicting the likely success of minority-preferred candidates under such a map requires relying on historical voting data from past elections for the geographic areas covered by individual districts.

In addition, I gauge the likely success of minority-preferred candidates in a proposed district by combining the results of an ecological regression analysis with measures of the size of the various groups in a district. Minorities are highly unlikely to elect their preferred candidates in a district that is majority White and where Whites vote overwhelmingly against minority-preferred candidates. However, a given minority group may be able to elect a candidate of its choice even if the group is not a majority if there are sufficient numbers of other ethnic or racial groups (not necessarily majorities) that vote the same way as the minority group in the general election. That situation arises, for example, in CD 9 and CD 18 under Plan C100. Blacks are the plurality in these districts. Combined with the votes of other racial groups (Hispanics and Whites), Black-preferred candidates win handily in these districts. Similarly, CD 33 under Plan C220, the interim plan drawn by the District Court for the Western District of Texas, is majority Black and Hispanic combined, and the vote for minority-preferred candidates in past general elections is in the neighborhood of 55 to 65 percent. Further, Blacks and Hispanics in Tarrant County prefer the same candidates in past general elections in this county. This is a district where Blacks and Hispanics will have the ability to elect their preferred candidates.

The analysis in my original report in this case and in the Section 2 case revealed the distinctiveness of Travis County and of Congressional District 25 under Plan C100. I offer further evidence below. As shown below and in my reports in the Section 2 case, Whites in the Travis County area do not show high levels of cohesion and do not vote as a block against candidates preferred by Hispanics and Blacks. The analysis here goes a step further. Not only are the preconditions for Section 2 discrimination not met in Travis County, but the area and the existing CD 25 are such that Blacks and Hispanics have the ability to elect their preferred candidates precisely because Whites in the area vote at sufficiently high rates (though not always a majority) for the candidates preferred by Blacks and Hispanics.

As a voting rights matter, the situation in CD 25 is of particular concern. There are sufficient numbers of Whites who cross over and vote for minority-preferred candidates so that minorities regularly elect their preferred candidates to Congress in this district. Preserving such a minority-ability district avoids the prohibited practice of "packing" minorities into districts and thereby diluting their overall voting strength and representation.

The types of evidence normally used to address matters arising under Section 2 of the Voting Rights, especially the three preconditions established in *Thornburgh v. Gingles*, provide useful guidance in answering the questions that arise under Section 5 of the Voting Rights Act. But, there are subtle differences.

First, the ability to create majority-minority districts (a Section 2 concern) is not necessary in determining where minorities have the ability to elect their candidates of choice (a Section 5 concern). Historically, Black-preferred candidates regularly win in districts that are as low as 35 percent Black.[1]

Second, under Section 5, identifying the districts in which minorities currently have the ability to elect their preferred candidates does not depend on White bloc voting against minority-preferred candidates. White block voting against minority-preferred candidates is one of the preconditions (the third) under *Thornburgh v. Gingles*, a Section 2 case. Weak or little cohesion among White voters can actually help in preventing

[1] B. Grofman, L. Handley, and D. Lublin, *Drawing Effective Minority Districts: A Conceptual Framework and Empirical Evidence*, 79 North Carolina Law Review 1383, 1430 (2001).

retrogression under Section 5. If, say, 45 to 50 percent of Whites vote for minority-preferred candidates in an area, then it will be relatively easy to maintain or even construct districts in which minorities can elect their preferred candidates. Of course, higher voting cohesion of Whites against minority-preferred candidates makes it more difficult to create districts that are not majority-minority and in which minority-preferred candidates have the ability to win.

The analysis and criteria described so far apply to the general election, as the general election determines who represents a given district. I have also analyzed primary elections in CD 25 and the Travis County area to consider the possibility that minority-preferred candidates may have been eliminated in the primaries. Analysis of primaries may provide – and indeed does provide in this case – further evidence that minorities in CD 25 and the Travis County area are able to elect their preferred candidates because of the high levels of support for those candidates among White voters.

In addressing this possibility, I begin in the same way as with the analysis of the general electorate. First, I determine which candidates in a given primary election are most preferred by each group – Blacks, Hispanics and Whites. I do this by conducting ecological regressions in which the share of the primary vote of a given candidate is related to the shares of the population that are Whites, Blacks, or Hispanics. I performed this analysis for all candidates in order to determine which candidate received the highest support from a given group.

Second, for each winner in the primary, I determined which groups preferred them. Some winning candidates are the preferred candidate of all three groups, as occurs with very popular candidates. Some winning primary candidates are preferred by two of three groups. And some winning candidates are preferred by just one group, as occurs when there are many candidates running or when one group votes overwhelmingly for a candidate and there is sufficient support from other groups.

Finally, I tally the number of candidates elected by a coalition that included a given group in order to determine how often the preferred candidate of a given racial group prevailed in the primary elections. I am then able to determine the percentages of winners of primary elections who are Hispanic-preferred, Black-preferred, and White-preferred, and whether minority-preferred candidates win primary elections in a given area at unusually low rates.

I performed this analysis only for the Democratic primaries in Travis County, as there are relatively few Hispanics and very few Blacks who identify with the Republican Party in the state. The results described below demonstrate that Hispanic-preferred and Black-preferred candidates win the majority of votes in the primary elections in CD 25 and Travis County as often as White-preferred candidates. Further, there is no evidence of racial divisions within the Democratic primaries. In 84 percent of the primaries studied, Whites prefer the same candidates as Hispanics, Blacks or both minority groups in the Democratic primaries.

C.2. General Election Results in CD 25 and Travis County

In June 2006, the Supreme Court of the United States invalidated the district map enacted by the State of Texas in 2003. In response to that ruling, a three-judge panel in the Texas federal district court redrew five districts. As part of that reconfiguration (termed Plan C100 in the 2011 redistricting), the panel created CD 25. That district derives most of its population from Travis County and is majority White. Congressman

Lloyd Doggett had represented part of the district (in Travis County) in 2004. He won the special election for the new CD 25 in December 2006. He subsequently won the general election for CD 25 in 2008 with 68 percent of the two-party vote and also in 2010 with 54 percent of the two-party vote.

Based on the application of the criteria and approach described above, it is evident that CD 25 under Plan C100 provides minorities the opportunity to elect their preferred candidate. I performed ecological regression analyses and computed the fraction of the vote received by Congressman Doggett from each of the racial groups in the district in 2008 and 2010. *See* Attachment 3. Attachment 4 presents the estimated coefficients of the ecological regressions. In the 2008 and 2010 elections, Congressman Doggett was the candidate preferred overwhelmingly by Black and Hispanic voters, and he won both elections. CD 25, then, fits the definition of a district in which minorities can elect their preferred candidate in the general election.

Professor Richard Engstrom's Rebuttal Report in the Section 2 case provides extensive evidence consistent with this result.[2] Table 8 (beginning on page 56) of his report presents results of ecological regressions for candidates with Spanish Surnames. Professor Engstrom's analysis shows very high levels of cohesion among Hispanic and Black voters in the Travis County area and divisions among the Whites (and Others), with typically 40 to 50 percent supporting the minority-preferred candidates. In the context of the Section 2 trial, those facts are used to assess the *Gingles* preconditions. In the context of Section 5, they allow us to assess the ability of Hispanics and Blacks in the Travis County area to elect their preferred candidates.

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[2] Case 5:11-cv-00360-OLG-JES-XR, Document 284-1, Filed 09/02/11.

Attachment 5 of this report reproduces his estimates of the percent vote in Travis County among the racial groups for each of the candidates analyzed. I have added to that analysis an indicator of whether the candidate listed won a majority of the vote in Travis County. Note, I indicate only how the candidate did in Travis, not statewide.

In all cases, the minority-preferred candidate is immediately evident. In all nine Travis County general elections examined by Professor Engstrom, Hispanics and Blacks expressed a clear preference, with over 70 percent of each of these groups voting for their preferred candidates. In all cases, Hispanics and Blacks preferred the same candidate. Whites (and Others) divided their votes quite evenly. The lowest vote among Whites (and Others) for a minority-preferred candidate was 38 percent; the highest vote was 51 percent. The average vote across the nine elections among Whites (and Others) for the candidates preferred by Hispanics and Blacks was 48 percent.

Blacks and Hispanics succeeded in electing their preferred candidates in eight of the nine elections examined by Professor Engstrom. Only in the case of the 2006 Supreme Court vote did the majority of Travis County vote run counter to the preference expressed by Hispanic and Black voters.

In short, Blacks and Hispanics routinely elect their preferred candidates in CD 25 in Plan C100 and in the Travis County area generally. Minorities express clear preferences in general election voting, and they prevail in those elections, even when White support for their preferred candidates is as low as 37 percent. Application of the methodologies for assessing whether minorities can elect their preferred candidates to every district must lead to the conclusion that CD 25 is such a district.

Based on general election results, Dr. Alford should have included this district in his Congressional Table 2, and inclusion of this analysis in any truly statewide analysis would have altered his calculations significantly.

C.3. Primary Elections in CD 25 and Travis County

In an earlier report filed in the Section 2 case, I analyzed the Democratic Congressional primary elections for CD 25 in Travis County.[3] That analysis revealed that Lloyd Doggett was the preferred candidate of Hispanic and Black voters, as well as White voters, in the Democratic primaries in Travis County. Since Doggett eventually won with a majority of the Hispanic and Black vote in the general election, then, it is clear that the primary election process facilitated, rather than interfered with, the ultimate election of the candidate preferred by Hispanic and Black voters.

To determine whether the primary election process prevented minority-preferred candidates from emerging and participating in general elections, I used the approach discussed earlier. The results are displayed in Attachment 6, which shows a very high success rate of minority-preferred candidates inside the Democratic primary. Black and Hispanic preferred candidates succeed as often, or more often, than White-preferred candidates in the Democratic primaries in Travis County.

Looking across the different patterns of group coalitions reveals that no one group dominates the primary process. Power is shared very equally and in such a way that the racial groups succeed in nominating their preferred candidates 75 percent of the time. Of the 43 winners, Whites backed 31; Hispanics backed 32; and Blacks backed 31. Using

[3] Stephen Ansolabehere, "Analysis of Racial Voting Patters in the 2004 Democratic Primary in Congressional District 25, Lloyd Doggett v. Leticia Hinojosa," October 27, 2011.

the standards normally applied for general elections, it is clear that this is an area where minority-preferred candidates have the ability to win the Democratic primaries.

Overall, evidence from the general elections reveals that CD 25 is clearly a district in which Blacks and Hispanics elect their preferred candidates to Congress. Evidence from the Democratic primary elections further supports that conclusion, and it underscores the unique nature of racial politics in Travis County within the State of Texas. CD 25 under Plan C100 does not divide the Travis County area along racial lines because the congressional district that represents this area is already a district where minorities can elect their preferred candidates to Congress.

D. The Consequences of Dismantling CD 25 under Plan C185

At issue is not just the reduction in the number of districts, but also whether there is evidence of intentional discrimination. As stated in the District Court's memorandum and opinion of December 22, 2011, one purpose of the Voting Rights Act is to protect minority voters in areas where they have already made gains. I have shown that Travis County and CD 25 is just such an area.

Plan C185 dismantles those gains, and it does so in a way that affects calculations of retrogression, such as those offered by Dr. Alford. The reason for focusing on specific districts and not just on a statewide formula is that it is at the district level that one can see more clearly exactly how the State reduced the ability of minorities to elect their preferred candidates. That determination speaks directly to the question of intentionality, because it reveals how it was that there could be more than 3 million more Hispanics and Blacks in the State of Texas but only one new CD created to accommodate those rapidly growing populations.

The limits of Dr. Alford's approach for assessing reductions in the ability of minorities to elect their preferred candidates are sharply revealed when we examine specific areas and populations and assess how they are treated in Plan C100 and carved up by Plan C185. CD 25 and Travis County highlight what is lost by relying on Dr. Alford's statewide functional measure. Consideration of specific districts and the populations and areas they represent reveals to what extent district lines respected the political gains that minorities had already realized and whether the new district lines reduced such gains and by how much.

D.1. How Plan C185 reconfigures the Travis County Area

Plan C185 dismantles CD 25 in the Plan C100. Attachments 7, 8, and 9 to this report are maps prepared by the Texas Legislative Council showing the division of Travis County into congressional districts under Plan C185 and the density of Black residents (first map), Hispanic residents (second map), and of Black plus Hispanic residents (third map).

Under Plan C100, Travis County was divided into three Congressional Districts, CD 10, CD 21, and CD25. These districts corresponded to the western and northwestern part of the County (CD 21), the northeastern part of the County (CD 10), and the central and southern part of the County (CD 25). The majority of the population of CD25 under C100 resided in Travis County.

Plan C185 divides the County across five Congressional Districts. Travis County residents are not a majority of the population in any of the districts, even though the County has sufficient population to encompass one entire congressional district and much of a second.

The reconfiguration is perhaps the most dramatic change in the entire map of the state of Texas. The part of proposed CD 25 under Plan C185 in Travis County follows most of the footprint of the part of the old CD 21 under Plan C100 in Travis County, and not the footprint of the old CD 25. The proposed Plan C185 locates CD 25 in western and northwestern Travis County, the part of Travis County where CD 21 was. The new CD 25 picks up two parts of the old CD 25. One part is in the south and central part of the county and is roughly 25 percent Hispanic and Black. A second part is in the center of Austin. Under Plan C100, CD 21 in Travis County (which overlaps with most of CD 25 in Travis County under Plan C185) did not cross Interstate 35 into the center of the City of Austin. Under Plan C185, CD 25 crosses Interstate 35 and encompasses an area with the highest concentration of Blacks in the County.

To reach this area, Plan C185's version of CD 25 must pass through a narrow isthmus defined by other districts. The result is to place much of the Black population in the center of the City of Austin into a district that extends northward all the way to the Tarrant County border and encompasses nine predominantly White rural counties. Under Plan C100, that population resided in CD 25 as well, but the configuration of the district was very different, and the Black population in the center of Austin under Plan C100 resided in a district where it was able to elect its preferred candidate to Congress.

Under Plan C185, CD 21 now reaches into Travis County from the south and takes a portion of the County that used to be in CD 25 under Plan C100. The rest of CD 21 remains largely unchanged from Plan C100 to Plan C185. Outside of Travis County, CD 21 under both plans encompasses Bandera, Blanco, Comal, Gillespie, Kendall, Kerr, and Real Counties in their entirety and part of Bexar County. CD 21 under plan C185 now reaches through Hays County so it can extend into Travis County. The part of Travis County encompassed by the proposed CD 21 under Plan C185 has much higher density of Hispanics and Blacks than the part of CD 21 under Plan C100. According to TLC Report Red 100, under Plan C100, the part of Travis County in CD 21 had 24,397 Blacks and Hispanics; that district was 13 percent Black or Hispanic. The proposed CD 21 under Plan C185 has 62,014 Travis County Blacks and Hispanics. Fully a third (33%) of the population that CD 21 under Plan C185 takes from Travis County is Black or Hispanic (compared with 13 percent under Plan C100). Nearly all of the area in the proposed CD 21 used to be in CD 25 under Plan C185. Hence, nearly all of the Hispanic and Black population from Travis County that was added to CD 21 in Plan C185 had the ability to elect their preferred candidate under Plan C100. If Plan C185 is approved, those populations will experience a reduction in their ability to elect their preferred candidates.

CD 10 and CD 17 under Plan C185 divide the northeastern and north-central part of Travis County. Proposed CDs 10 and 17 follow the footprint of old CD 10 in Travis County, and they split that area in half. The proposed CD 10 also extends further into Travis County, across the northern boundary of the County, and captures some area that used to be in CD 21. CD 17 contains a cluster of nine counties in the central part of the state to the north and east of Travis. These are Brazos, Burleson, Falls, Freestone, Leon, Limestone, McLennan, Milam, and Robertson Counties. An arm extends due west from the southern tip of that cluster of counties across the northern part of Lee County and into the northern part of Travis County. That arm captures an area of Travis County that has significant Black and Hispanic populations. The part of Travis County that Plan C185 puts into CD 17 is 41 percent Black or Hispanic. By comparison, CD 17 under Plan C100 was 31 percent Black or Hispanic.

Proposed CD 35 under Plan C185 takes a substantial minority population out of the old CD 25 under Plan C100. Under plan C185, CD 35 would have 215,626 people from Travis County. Of these people, 140,885 are Hispanic and 25,883 are Black. In other words, CD 35 takes an area out of Travis County that is 76 percent Black or Hispanic (and 65 percent Hispanic) in order to create a majority Hispanic district. It takes those minority voters out of a district in which they already have the ability to elect (and nominate) and doing so renders that district (CD 25) no longer a district in which minorities have the ability to elect their preferred candidates.

D. 2. Effects on Black and Hispanic Voters in the Travis County Area

If the reconfiguration of congressional districts under Plan C185 is permitted, it will have serious adverse consequences for Black voters in Travis County. Currently, most Travis County Blacks reside in a district in which they routinely elect their preferred candidate to Congress in the general election, and their preferred candidate wins in the primaries. Neither CD 21 nor CD 25 under Plan C 185 offers Blacks the ability elect their preferred candidates. The majority of the Black population of 96,235 in Travis County would then see their opportunity to elect their candidates of choice eliminated nearly completely. There are 49,717 Blacks in CD 25 under Plan C100; over half of the Black population of Travis County resides in that district. Under Plan C185, 25,883 Blacks will reside in CD 35, which is majority Hispanic and draws a majority of its population from Bexar County, not Travis County. The remaining 70,352 Blacks in

Travis County will be divided across districts where they do not have the ability to elect their preferred candidates.

Plan C185 will also decrease the ability of Hispanics in Travis County to elect their preferred candidates. Under Plan C100, 205,200 of Travis County's 342,766 Hispanics reside in CD 25, where they routinely elect their preferred candidate to Congress, and 137,566 Travis County Hispanics reside in other districts (10 and 21), where they do not have the opportunity to elect their preferred candidates. Under Plan C185, 140,885 Travis County Hispanics will reside in CD 35, where they will have the opportunity to elect their preferred candidates. However, roughly 201,881 Travis County Hispanics will reside in congressional districts where they will not have an opportunity to elect their preferred candidates. The net effect of Plan C185 compared with Plan C100, then, is to reduce the number of Travis County Hispanics residing in districts where they can elect their preferred candidates by 63,000.

In addition to reducing the representation of Blacks and Hispanics, Plan C185 divides the population of Travis County and the surrounding area along racial lines to an extent that it previously had not been. Congressional District 25 contained half of the population of Travis County. That district had a more even mix of the groups than does any of the Travis-area districts proposed in Plan C185. Under Plan C100, CD 25 is 50 percent White, 39 percent Hispanic, and 9 percent Black; minorities and Whites are approximately equal in number. That district reflects the population composition of the County as a whole, which is 51 percent White Non-Hispanic, 34 percent Hispanic, and 9 percent Black. Under Plan C185, new CD 25 is 70 percent White and 25 percent Black and Hispanic. New CD 35 is 73 percent Black and Hispanic (and most of that Hispanic) and 25 percent White. Plan C185 in the Travis County area divides the population more along racial lines than it had previously been. At the same time, it reduces the number of Travis County Hispanics and Blacks who are able to elect their preferred candidates.

E. Summary of the Effects of Plan C185 on Minorities

E.1. Retrogression

The standard approach to assessing retrogression reveals clearly that Texas reduced the number of congressional districts in which Blacks and Hispanics can elect their preferred candidates with the adoption of Plan C185. I have examined an extensive amount of evidence here and in my earlier reports. From that evidence, I conclude that Plan C100 contains 11 Congressional Districts in which minorities have the ability to elect their preferred candidates. They are CDs 9, 15, 16, 18, 20, 23, 25, 27, 28, 29, and 30. I further conclude that Plan C185 contains 10 Congressional Districts in which minorities have the ability to elect their preferred candidates. They are CDs 9, 15, 16, 18, 20, 28, 29, 30, 34, and 35.

I have not attempted to implement the statewide functional analysis that Dr. Alford suggests. However, it is worth noting what happens to his analysis in Congressional Table 2 if one includes CD 25. My calculation is that CD 25 has a score of 100 under Plan C100 and 0 under Plan C185. Hence, even Alford's new approach shows evidence of retrogression when CD 25 is included, as it must be.

E.2. Statewide Reduction in Minority Representation

The effect of the retrogression in the number of districts can be further measured in terms of people. Table 5 shows the number of Black and Hispanic Persons according to the 2010 Census in each of the CDs in which minorities have the ability to elect their preferred candidate under Plan C100 and under Plan C185.

Plan C185 substantially reduces the number of Blacks and Hispanics in districts where they have the ability to elect their preferred candidates. Under Plan C100, there were 6,443,817 Blacks and Hispanics in congressional districts where they had the ability to elect their preferred candidates. Under Plan C185, that number was reduced to 5,662,409. Using the standard approach to retrogression, Plan C185 reduced the number of Blacks and Hispanics in minority districts by 781,408. This is more than the growth in the total number of White Non-Hispanics from 2000 to 2010.

This constellation of facts is particularly important in addressing the question of intentional discrimination. Minorities accounted for most of the population growth in the state but gained no additional congressional districts and even lost one seat. The District Court in this case declared that this fact may be taken as probative of evidence of intentional discrimination. Dr. Alford offers no analysis of the number of Blacks and Hispanics who witnessed a change in their ability to elect their preferred candidate.

The standard approach to retrogression maps readily into our understanding of representation under the Voting Rights Act. The VRA asserts rights of persons, and the standard method for assessing retrogression allows us to speak of the ability of people to elect their preferred candidates, to identify who those people are, and to analyze whether those people had their rights protected. Dr. Alford's approach to retrogression breaks that link between a person (a constituent) in a district. If accepted as a method for judging retrogression under the Voting Rights Act, courts would no longer be able to determine how people had their rights abridged or protected, and which people were affected.

Finally, Dr. Alford's method makes it much more difficult for courts to point to particular areas where there are problems and the state or lower courts need to find a remedy. Dr. Alford's method means that we can find remedies not just by altering district lines but by altering district lines such that the minority-preferred candidate in one contest has a higher rate in some part of the state – perhaps not even where minorities live. The standard approach allows us to determine whether reductions in the ability to elect minority-preferred candidates occurred throughout the state or in particular areas, and where we might seek remedies.

ATTACHMENT 1

Attachment 1. Census Enumeration and ACS Estimates of

Texas' Population and Voting Age Population

	Total Persons		
	ACS 2005-2009	ACS 2006-2010	2010 Census Enumeration
State	23,819,040	24,311,891	25,145,561
White	11,421,060	11,286,712	11,397,345
Hispanic	8,555,100	8,917,477	9,460,921
Black	2,704,210	2,864,666	2,886,825
Others	1,138,670	1,243,036	1,400,470

	Voting Age Persons		
	ACS 2005-2009	ACS 2006-2010	2010 Census Enumeration
State	17,185,930	17,639,656	18,279,737
White	8,938,930	8,938,816	9,074,684
Hispanic	5,552,880	5,789,447	6,143,144
Black	1,925,540	2,031,682	2,076,282
Others	768,580	879,711	985,627

ATTACHMENT 2

Attachment 2. White, Hispanic, and Black CVAP as a Percent of Total CVAP 2000 Census, 2005-2009 ACS, 2006-2010 ACS, and 2010 Projection

	2000 Census	2005-2009 ACS	2006-2010 ACS	2010 Enumeration X %CVAP in ACS
White CVAP	62.5%	59.0%	57.6%	55.8%
Hispanic CVAP	22.3%	24.6%	25.5%	25.8%
Black CVAP	12.1%	12.5%	12.8%	12.7%
Other CVAP	3.1%	3.9%	4.1%	5.7%
Total	100.0%	100.0%	100.0%	100.0%

ATTACHMENT 3

Attachment 3. Estimated Support for Lloyd Doggett in 2008 and 2010 General Elections Among Racial and Ethnic Groups, and Size of Groups in CD 25 Under Plan 100

	2008 % for Doggett	2010 % for Doggett	Group Size: Census 2010 VAP
White	53%	37%	55%
Black	100%	100%	8%
Hispanic	83%	86%	34%

ATTACHMENT 4

Attachment 4. Ecological Regression Estimates for Racial and Ethnic Voting Patterns in Congressional District 25 in 2008 and 2010.

	2008 Coeff. (St. Error)	2010 Coeff. (St. Error)
Constant	.53 (.02)	.37 (.03)
Black Share of VAP	.58 (.09)	.71 (.15)
Hispanic Share of VAP	.40 (.05)	.49 (.07)
R-Square	.37	.29

NOTES:

Dependent Variable: Vote Share of Lloyd Doggett in 2008 and 2010 General Elections.
Independent Variables: Black VAP as Share of Total VAP and Black VAP as Share of Total VAP in 2010 Census
Observations: Voting Tabulation Districts, N=242
Least Squares Regression, weighted by Turnout in 2008 and Turnout in 2010.

ATTACHMENT 5

Attachment 5. Estimated Support for Candidates with Spanish Surnames in Travis County in 2006, 2008 and 2010 General Elections as Reported by Professor Engstrom

Office	Candidate	% of Group Vote for Candidate	Won or Lost Vote in Travis?
2006 Lieutenant Governor	Alvarado	89% of Latino 90% of Black 45% of White	Won
2006 Supreme Court – Pos. 4	Medina	29% of Latino 29% of Black 62% of White	Won
2006 Criminal Court	Molina	94% of Latino 98% of Black 51% of White	Won
2008 U. S. Senate	Noriega	94% of Latino 98% of Black 47% of White	Won
2008 Supreme Court – Pos. 8	Yanez	96% of Latino 98% of Black 48% White	Won
2008 Supreme Court – Pos. 4	Molina	96% of Latino 97% of Black 46% of White	Won
2010 Lieutenant Governor	Chavez-Thompson	85% of Latino 96% of Black 41% of White	Won
2010 Commissioner of Lands	Uribe	90% of Latino 96% of Black 43% of White	Won
2008 Supreme Court – Pos. 9	Guzman	6% of Latino 2% of Black 50% of White	Lost

ATTACHMENT 6

Attachment 6. Racial or Ethnic Group Support for the Winning Candidates in 43 Travis County Primary Elections from 2006 to 2008

Which Groups Preferred Winning Candidate	Number of Elections
White, Black, Hispanic	14
White, Black	8
White, Hispanic	8
Black, Hispanic	7
White	1
Black	2
Hispanic	3

ATTACHMENT 7

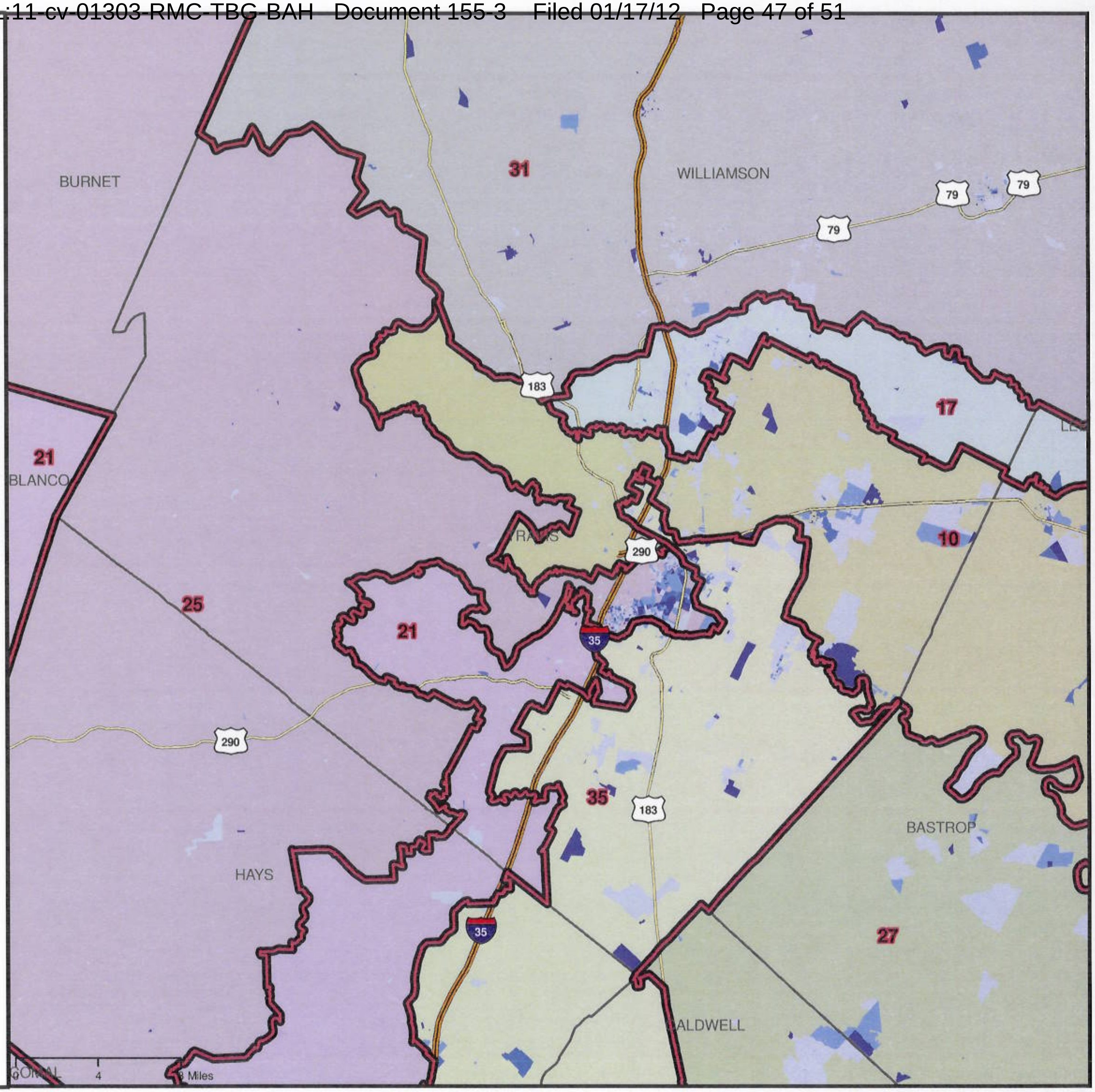
Travis County
African-American Percent of Total Population by Census Block

AA Population			
COUNTY	TOTAL	BLACK	%BPOP
District 10-Travis	244,317	22,192	9.08%
District 10 Total	698,487	77,995	11.17%
District 17-Travis	133,554	19,743	14.78%
District 17 Total	698,487	101,098	14.47%
District 21-Travis	189,294	9,252	4.89%
District 21 Total	698,488	28,579	4.09%
District 25-Travis	241,475	19,165	7.94%
District 25 Total	698,488	57,756	8.27%
District 35-Travis	215,626	25,883	12.00%
District 35 Total	698,488	75,336	10.79%
Travis Total	1,024,266	96,235	9.40%

Area of Detail

Plan C185
Interstate Hwy
US Hwy
Counties
% Afr.-Am. Pop.
0.0% - 19.9%
20.0% - 34.9%
35.0% - 49.9%
50.0% - 64.9%
65.0% - 100.0%

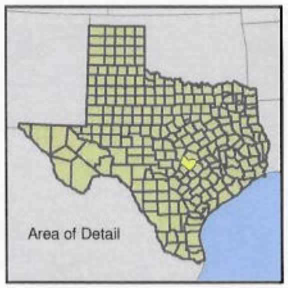
Source: US Census Bureau PL 94-171;
Texas Legislative Council 2011 Redistricting Data



ATTACHMENT 7

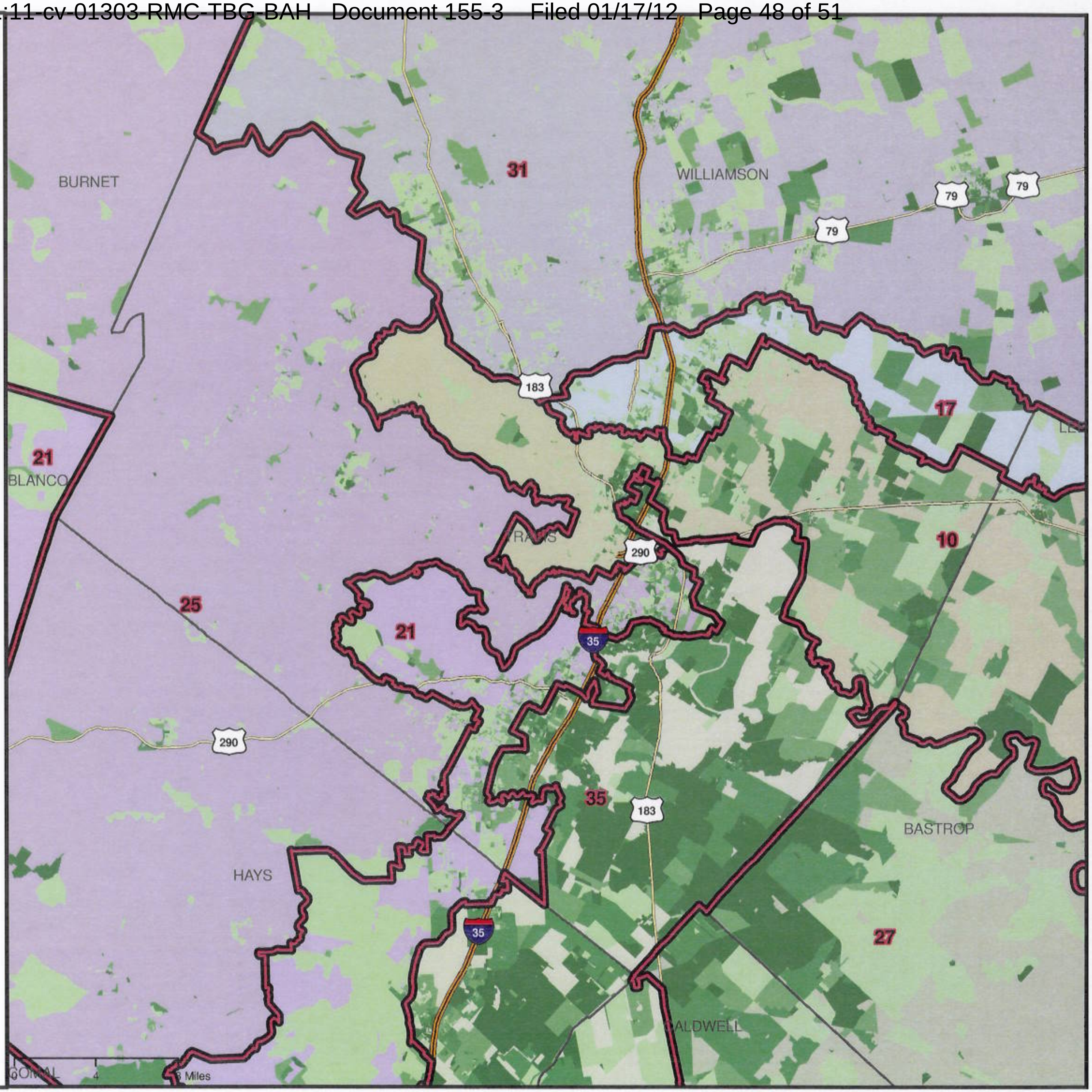
Travis County
Hispanic Percent of Total Population by Census Block

Hispanic Population			
COUNTY	TOTAL	HISPANIC	%HPOP
District 10-Travis	244,317	70,680	28.93%
District 10 Total	698,487	183,827	26.32%
District 17-Travis	133,554	36,409	27.26%
District 17 Total	698,487	162,552	23.27%
District 21-Travis	189,294	52,672	27.83%
District 21 Total	698,488	188,511	26.99%
District 25-Travis	241,475	42,120	17.44%
District 25 Total	698,488	121,176	17.35%
District 35-Travis	215,626	140,885	65.34%
District 35 Total	698,488	438,819	62.82%
Travis Total	1,024,266	342,766	31.71%



Plan C185
Interstate Hwy
US Hwy
Counties
% Hispanic Pop.
0.0% - 19.9%
20.0% - 34.9%
35.0% - 49.9%
50.0% - 64.9%
65.0% - 100.0%

Source: US Census Bureau PL 94-171;
Texas Legislative Council 2011 Redistricting Data



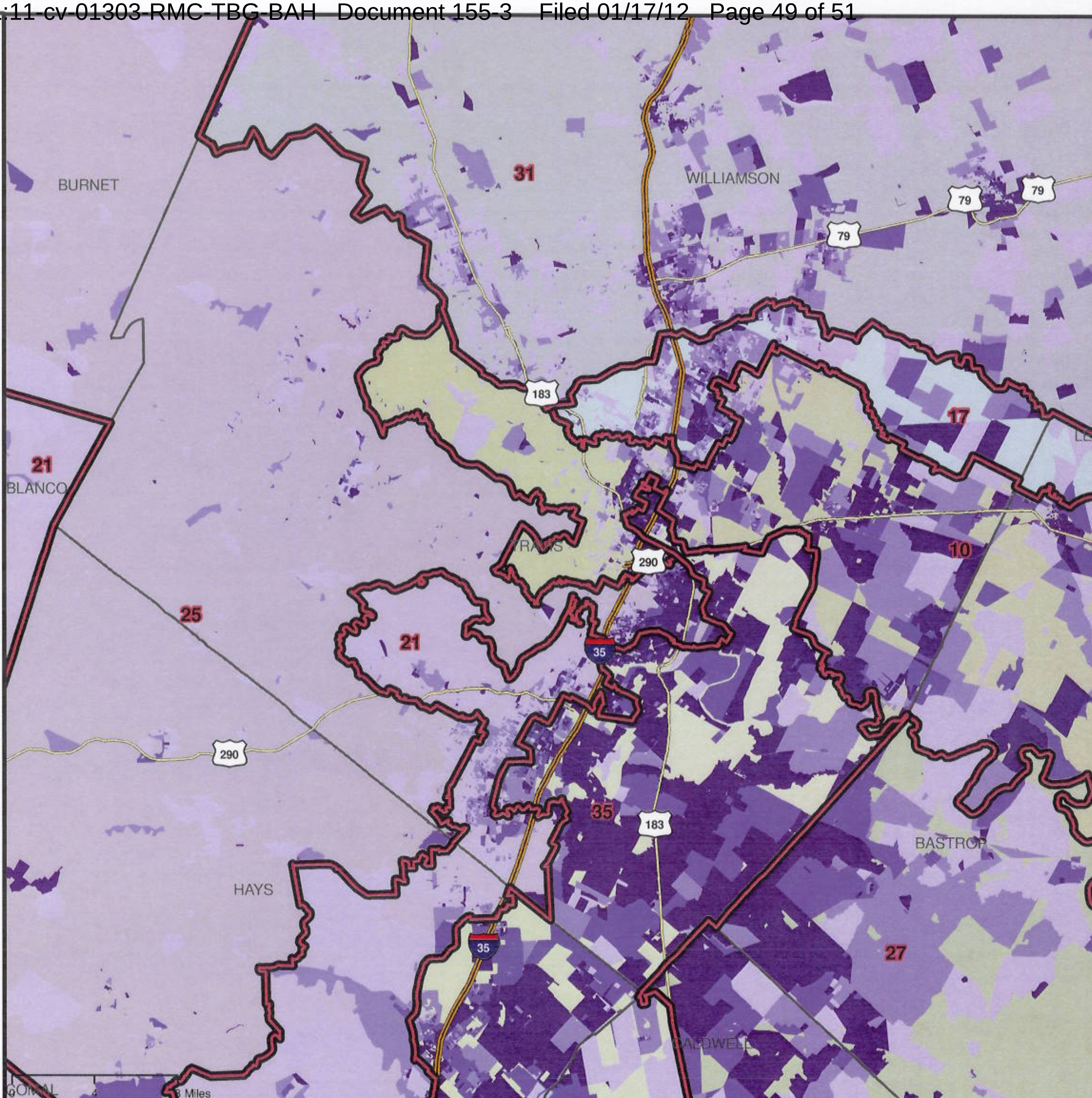
ATTACHMENT 7

Travis County
Combined African-American and Hispanic Percent of Total Population by Census Block

B+H Population			
COUNTY	TOTAL	BH	%BHPOP
District 10-Travis	244,317	91,253	37.35%
District 10 Total	698,487	257,684	36.89%
District 17-Travis	133,544	54,920	41.12%
District 17 Total	698,487	259,504	37.15%
District 21-Travis	189,294	60,892	30.03%
District 21 Total	698,488	213,799	30.61%
District 25-Travis	241,475	60,322	24.98%
District 25 Total	698,488	175,244	25.09%
District 35-Travis	215,626	164,172	76.14%
District 35 Total	698,488	506,138	72.46%
Travis Total	1,024,266	431,559	42.13%

Plan C185
Interstate Hwy
US Hwy
Counties
% B+H Pop.
0.0% - 19.9%
20.0% - 34.9%
35.0% - 49.9%
50.0% - 64.9%
65.0% - 100.0%

Source: US Census Bureau PL 94-171;
Texas Legislative Council 2011 Redistricting Data



ATTACHMENT 7

ATTACHMENT 8

Attachment 8. Statewide Reduction in the Representation of Hispanics and Blacks

	PLAN C100		PLAN C185	
District Number	Black	Hispanic	Black	Hispanic
9	269,443	310,931	267,466	271,030
15	13,748	649,297	14,063	562,999
16	29,102	617,465	28,848	559,725
18	271,104	313,533	284,314	253,915
20	58,233	509,144	42,792	483,902
23	34,566	562,913		
25	70,610	315,776		
27	20,112	543,306		
28	15,455	672,129	39,337	538,754
29	72,061	514,861	85,885	525,996
30	299,520	280,508	318,810	281,665
34			11,175	577,578
35			75,336	438,819
Subtotal (9, 18, 30)	840,067	904,972	870,590	806,610
Subtotal*	313,887	4,384,891	297,436	3,687,773
TOTAL (by group)	1,153,954	5,289,863	1,168,026	4,494,383
TOTAL (combined)	6,443,817		5,662,409	

*For Plan C100 Subtotal is of 15, 16, 20, 23, 25, 27, 28, 29. For Plan C185 Subtotal is of 15, 16, 20, 28, 29, 34, 35.