IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

MANUEL A. BENAVIDEZ,	§	
	§	
Plaintiff,	§	
	§	**No. 3:07-CV-01850-P**
v.	§	
	§	
THE CITY OF IRVING, TEXAS and	§	
HERBERT A. GEARS, THOMAS D.	§	
SPINK, ELIZABETH (BETH) VAN	§	
DUYNE, ALLAN E. MEAGHER, LEWIS	§	
PATRICK, ROSE CANNADY, RICK	§	
STOPPER, SAM SMITH, and JOE	§	
PHILLIP, in their official capacities,	§	
	§	
Defendants.	§	

MEMORANDUM OPINION AND ORDER

On November 6, 2007, Manuel A. Benavidez ("Plaintiff") brought this suit against the

City of Irving ("City" or "Irving"), its mayor, and its city council members (collectively,

"Defendants"), challenging the legality of Irving's at-large electoral system under Section 2 of

the Voting Rights Act, 42 U.S.C. § 1973. Plaintiff maintains that Irving's at-large electoral

system has the effect of diluting the voting power of Irving's Hispanic voters, and thus denies

them the opportunity to elect representatives of their choice. (Am. Compl. 8.) Plaintiff requests

that this Court enjoin Irving from holding elections under the present at-large system, and order

the implementation of a plan to remedy the alleged Section 2 violations. (*Id*. at 9.) After the

Court denied Defendants' Motion for Summary Judgment on Plaintiff's standing to bring this

action, the parties proceeded to a four day bench trial that concluded on February 20, 2009. This

Order sets forth the Court's findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52(a).[1]

I. BACKGROUND

A. <u>The Parties</u>

The 2000 Census reported that Irving had a population of 191,613, of whom 143,395 were of voting age. (Joint Pretrial Order 31.) Hispanics made up 31.2% of the City's population and 27.2% of the voting-age population. (*Id*.) The 2006 American Community Survey ("ACS") reflects an increase in the Hispanic population of Irving to 41.7% and 37.9% of the voting-age population. (Def.'s Ex. 1, at 8.) Highway 183 divides the northern and southern halves of Irving, and a majority of Irving's Hispanic population resides in the southern half of the City. (*See* Joint Pretrial Order 31-32.)

Manuel Benavidez, a Hispanic citizen, is a 37-year resident of Irving. He resides in Irving's District 4, and is part of the electorate for each of the members of City Council. (*Id*.)

B. <u>Electoral System</u>

Irving conducts an at-large election for each of its eight City Council members and its mayor, who also votes as a member of City Council. (*Id*. at 29.) This electoral system allows all Irving voters to vote for candidates running for each of the City Council positions and for mayor. Every City Council candidate must run for a particular numbered position, designated as Places 1 to 8. Irving is divided into five districts, and candidates for Places 1 to 5 must reside in their

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[1]Any finding of fact that is more properly construed as a conclusion of law shall be so construed. Likewise, any conclusion of law that is more properly construed as a finding of fact shall be so construed.

respective district. (*Id.*) Candidates for mayor and for Places 6 to 8 must reside in Irving, but they are not required to reside in any particular district. (*Id.*) Irving's electoral system requires run-off elections when no candidate receives a majority of the vote. None of Irving's eight current City Council members are Hispanic, and over the last twenty years only one Hispanic candidate has succeeded in a bid for Irving's City Council. (*Id.* at 30.)

In 2004, the City Council formed a Charter Review Committee comprised of appointed citizens to review the City Charter and recommend changes to, among other things, the at-large electoral scheme. (*Id.*) Irving's Hispanic Chamber of Commerce prepared and presented a report to the Charter Review Committee recommending that City Council Places 1-5 be converted from the at-large to single-member systems. (*Id.*; Pl.'s Ex. 46.) The Charter Review Committee, however, did not recommend this proposed change, and the City Council did not place this proposed change on the ballot. (Joint Pretrial Order 30.) Ultimately, no relevant conclusions or proposed amendments arose from the Charter Review Committee to address the City's demographic changes.

II. LEGAL FRAMEWORK

A. Section 2 of the Voting Rights Act

Section 2 of the Voting Rights Act of 1965, 42 U.S.C. § 1973, as amended, provides that:

> (a) No voting qualification or prerequisite to voting or standard, practice, or procedure shall be imposed or applied by any State or political subdivision in a manner which results in a denial or abridgement of the right of any citizen of the United States to vote on account of race or color, or in contravention of the guarantees set forth in section 1973b(f)(2) of this title, as provided in subsection (b) of this section.
> (b) A violation of subsection (a) of this section is established if, based on the totality of circumstances, it is shown that the political processes leading to

nomination or election in the State or political subdivision are not equally open to participation by members of a class of citizens protected by subsection (a) of this section in that its members have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice. The extent to which members of a protected class have been elected to office in the State or political subdivision is one circumstance which may be considered: *Provided*, That nothing in this section establishes a right to have members of a protected class elected in numbers equal to their proportion in the population.

B. *Gingles* Requirements

In *Thornburg v. Gingles*, the Supreme Court identified three threshold conditions for establishing a § 2 violation:

> (1) the minority group is sufficiently large and geographically compact to constitute a majority in a single member district;
>
> (2) the minority group is politically cohesive; and
>
> (3) the majority votes sufficiently as a bloc to enable it, in the absence of special circumstances, usually to defeat the minority group's preferred candidate.

Thornburg v. Gingles, 478 U.S. 30, 50-51 (1986). Failure to establish any one of the *Gingles* factors by a preponderance of the evidence precludes a finding of vote dilution, because "[t]hese circumstances are necessary preconditions for multimember districts to operate to impair minority voters' ability to elect representatives of their choice." *Id*. at 50.

C. Totality of the Circumstances

If all three *Gingles* requirements are established, a court must next consider the "totality of circumstances" to determine whether members of a racial group have less opportunity than other members of the electorate to participate in the political process and to elect representatives of their choice. *League of United Latin Am. Citizens v. Perry*, 548 U.S. 399, 425-26 (2006) ("*LULAC*"). The Senate Judiciary Committee Report accompanying the 1982 amendments to

Section 2 of the Voting Rights Act identifies factors relevant to this inquiry. *See* S. Rep. No.

97-417 (1982), *reprinted in* U.S.C.C.A.N. 177. This list of factors, however, is "neither

comprehensive nor exclusive." *Gingles*, 478 U.S. at 45. The "Senate factors" include:

> (1) the extent of any history of official discrimination in the state or political subdivision that touched the right of members of the minority group to register, vote, or otherwise to participate in the democratic process;
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> (2) the extent to which voting in the elections of the state or political subdivision is racially polarized;
>
> (3) the extent to which the state or political subdivision has used unusually large election districts, majority vote requirements, anti-single shot provisions, or other voting practices or procedures that may enhance the opportunity for discrimination against the minority group;
>
> (4) if there is a candidate slating process, whether the members of the minority group have been denied access to that process;
>
> (5) the extent to which members of the minority group in the state or political subdivision bear the effects of discrimination in such areas as education, employment and health, which hinder the ability to participate effectively in the political process;
>
> (6) whether political campaigns have been characterized by overt or subtle racial appeals; and
>
> (7) the extent to which members of the minority group have been elected to public office in the jurisdiction.

The Fifth Circuit has noted that "it will be only the very unusual case in which the Plaintiffs can

establish the existence of the three *Gingles* factors but still have failed to establish a violation of

§ 2 under the totality of the circumstances." *Clark v. Calhoun County, Miss.*, 88 F.3d 1393, 1396

(5th Cir. 1996.)

III. FINDINGS OF FACT

A. Expert Witnesses

This case essentially turns on expert opinions, and expert testimony predominated at trial. Plaintiff presented the testimony of Mr. David Ely[2] and Dr. Richard Engstrom.[3] Defendants offered testimony from Dr. John Alford[4] and Dr. Norfleet W. Rives.[5] The Court finds that the expert witnesses presented at trial are qualified, due to their education and experience, to give expert opinions regarding the *Gingles* factors and the factors considered by the Court in assessing the totality of circumstances.

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[2] Mr. Ely is the founder of Compass Demographics, a consulting and database management firm specializing in projects involving Census and election data. (Pl.'s Ex. 16.) He has a B.S. in Mechanical Engineering and Social Sciences. Mr. Ely has served as an expert witness in a number of voting rights cases, and since 1987 he has regularly acted as a consultant in the redistricting and reapportionment of major cities across the country.

[3] Dr. Engstrom is a Visiting Research Professor of Political Science and Visiting Research Fellow at the Center for the Study of Race, Ethnicity, and Gender in the Social Sciences at Duke University. (Pl.'s Ex. 25.) He formerly served as a consultant at the Center for Civil Rights at the University of North Carolina and as a Research Professor of Political Science at the University of New Orleans. He has researched and published extensively on election systems, and three of his articles were cited with approval in *Thornburg v. Gingles*.

[4] Dr. Alford is an Associate Professor of Political Science at Rice University, and holds B.S., M.P.A., M.A., and Ph.D. degrees in Political Science. Dr. Alford has worked as a consultant in numerous voting rights cases.

[5] Dr. Rives is a Senior Lecturer in the Department of Finance at the Fisher College of Business at Ohio State University. (Def's Ex. 4.) Dr. Rives holds A.B., M.A., and Ph.D. degrees in Economics, and studied demography and statistics as a research fellow with the Office of Population Research at The Woodrow Wilson School at Princeton University. Dr. Rives has worked as a research fellow with the U.S. Census Bureau and as a consultant in voting rights cases.

B. Gingles I

1. Establishing a Hispanic Citizen-Voting-Age-Population Majority

Mr. Ely created, presented, and defended six illustrative districts[6] to demonstrate the feasibility of complying with the Gingles I precondition—to show that a geographically compact district in which Hispanics will make up a majority of the eligible voters can be drawn in Irving.

a. *Criteria for Drawing Illustrative Districts*

Mr. Ely constructed the illustrative districts consistent with the traditional principles of drawing districts and well-established demographic considerations. (Trial Tr. vol. 1, 52-55, Feb. 17, 2009.) First, districts should generally have equal total population. For municipalities, the population size of each district should not deviate from the others by more than 10%. The illustrative districts created by Mr. Ely all contained within 1% of the ideal population based on the 2000 Census. (Pl.'s Pretrial Br. 11.) Second, districts must comply with legal requirements, such as the Equal Protection Clause. And third, districts should be drawn consistent with existing official political boundaries (along city or county lines) and informal geographic boundaries, such as neighborhoods or communities that share a common interest. Here, Mr. Ely constructed illustrative districts using undivided Census blocks and used recognizable boundaries such as streets. (Pl.'s Ex. 1, at 6.)

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[6] (1) The original (July 2008) Illustrative District had an estimated HCVAP in 2008 of 50.1 %. (Pl.'s Trial Ex. 1, at 8.)
(2) The alternative (CVAP based) Illustrative District had an estimated HCVAP in 2008 of 53.1 %. (*Id*. at Ex. 5, at 3.)
(3) The SSRV Illustrative District had an estimated HCVAP of 50.5% in 2008. (*Id*. at Ex. 5, at 2.)
(4) Illustrative District A had an estimated HCVAP in 2008 of 58.0%. (*Id*. at Ex. 5, at 4.)
(5) Illustrative District B had an estimated HCVAP in 2008 of 56.5%. (*Id*. at Ex. 8.)
(6) Illustrative District C had an estimated HCVAP in 2008 of 55.6%. (*Id*. at Exs. 15 and 17.)

Defendants' experts assert that Plaintiff's illustrative districts result in vote dilution by relying on total population for district size, rather than considering citizen-voting-age-population ("CVAP"). (Def.'s Ex. 4, at 12-13; *Id.* at Ex. 51, at 7-9.) They contend that Mr. Ely's illustrative districts contain an extremely high number of non-citizens, and this will result in the majority Hispanic district exercising voting power that is substantially magnified relative to Irving's other districts. (*See id.*; Trial Tr. vol 1, 108, Feb. 19.) Dr. Alford testified at trial that "the fact that the other districts will contain much larger eligible populations means that their individual votes will count less. So this will devalue the votes in those districts . . ." (Trial Tr. vol 1, 110, Feb. 19.) However, as Dr. Alford acknowledges, total population (not CVAP) is generally accepted as a proper measure for equalizing the size of districts. (*Id.* at 112.) The Fifth Circuit addressed this complex issue in great detail in *Chen v. City of Houston* and concluded that the decision whether to rely on total population or the eligible-to-vote population in creating districts is a decision best left to the political process. *Chen v. City of Houston*, 206 F.3d 502, 522-28 (5th Cir. 2000). Therefore, the Court concludes that applying the total population standard on the illustrative districts is entirely appropriate.

b. *Estimate Derived from Census and ACS Data*

In drawing the illustrative districts, Mr. Ely utilized data from the 2000 Census and from the 2006 ACS. (Trial Tr. vol. 1, 60-61, Feb. 17.) The 2000 Census was conducted by the Census Bureau and was composed of two parts: the one-hundred percent count and the sample count. The one-hundred percent count is collected using the short form, which is—in theory—filled out by every household in the United States. The short form data provides information on total population, voting age population, Hispanic origin, and non-Hispanic origin populations. A

sample survey component of the Census is collected through an additional long form, which is filled out by approximately one in eight households. The long form collects demographic information such as economic characteristics, primary language, and citizenship.

The ACS is another sample survey conducted by the Census Bureau. It is of relatively recent origin and is intended to replace the Census long form, but it is conducted annually with the results averaged over time periods to get the same level of statistical sampling as the long form. (*Id*. at 61.) Each year the ACS surveys approximately 1/1000 households. At the time that Mr. Ely performed his analysis for this case, the 2006 ACS data was the most current data that had been released by the Census Bureau.

Mr. Ely based his illustrative districts on his estimates of Irving's Hispanic CVAP ("HCVAP") in 2008. (*Id*.) He testified regarding why he chose to rely on those estimates and the method he used to calculate them. He initially used the ACS to ascertain whether the data from the 2000 Census long form remained generally accurate in 2006. Mr. Ely explained that in his opinion, the critical number is the ratio between the Hispanic and non-Hispanic share of CVAP, therefore he wanted to measure the change in that ratio between 2000 and 2006. Thus, his analysis focused on the changes in the composition of the population, not in the size of the population. (*Id*. at 62.) To evaluate changes in the composition of Irving's population between 2000 and 2006, he compared the Hispanic and non-Hispanic share of CVAP for Irving as reported in the 2000 Census and the 2006 ACS. He found that the data examined indicated major changes—with an increase in total Hispanic population in Irving from 31.2% in 2000 to 41.7% in 2006. He also determined that the annual growth rate for Irving's HCVAP between 2000 to 2006 was 4.4% and the average annual rate for non-Hispanic CVAP was -2.2%. He therefore

concluded that the 2000 Census data was no longer valid and determined that the 2006 ACS data far more accurately reflected current demographic conditions.

Mr. Ely then prepared estimates of the 2008 Hispanic and non-Hispanic percentages of CVAP for use in constructing his illustrative districts. (*Id*. at 62.) To do this, Mr. Ely computed growth rates for each of the component populations based on the 2000 Census and 2006 ACS city-wide data (4.4% for HCVAP and -2.2% for non-Hispanic CVAP). He used city-wide figures for ethnicity and age, and Census tract level information for citizenship status. (Pl.'s Ex. 1, at 7.) He then extrapolated that growth rate until 2008, which was applied to the illustrative districts to arrive at an estimated percentage of HCVAP in the illustrative district in 2008. (*Id*. at 8.)

Mr. Ely did not use 2006 ACS data to estimate the actual, current population in the illustrative districts. In his opinion that would not be possible because the ACS is a sample, similar to the long form, and a sample is not good at determining the scale of a population. (Trial Tr. vol. 1, 63-64, Feb. 17.) Rather, it is good for determining percentages or distributions within that population. In fact, in both the Census and the ACS, the total population numbers do not come from the survey; they come from a different method and the survey results are normalized or scaled to match those numbers. (*Id*. at 64.)

c. *Tract Level v. Block Group Level Citizenship Rates*

The Census Bureau employs a system of three geographic units to subdivide counties. The smallest unit in the hierarchy is the census block. Next is the block group ("BG"), which represents a collection of contiguous census blocks. Finally, the census tract represents a collection of contiguous BGs, and typically contains about 4,000 people. (Defs.' Ex. 7; Trial Tr. vol. 1, 66, Feb. 17.) Mr. Ely constructed the illustrative districts using undivided census blocks,

which allows for the straightforward application of the 2000 Census data. Citizenship status is reported only at the tract level or through a special tabulation at the BG level, which is computed by the Census Bureau and must be specifically requested by an outside entity. (*Id*. at 67.) Therefore, calculating the HCVAP for illustrative districts composed of census blocks necessarily requires some extrapolation and assumptions, because block level data on citizenship is not available. (Defs.' Ex. 4 at 3; Trial Tr. vol. 1, 70, Feb. 17.)

Mr. Ely endorsed the tract level method because, while there are advantages and disadvantages to both the tract level method and the BG level method, he believes that the tract level method has higher statistical reliability. (Pl.'s Ex. 1, at 7.) The tract level method estimates citizenship rates for the block level by applying data from the tract level to block level. (Trial Tr. vol. 1, 72-73, Feb. 17.) Dr. Rives, however, criticized the tract level method on the grounds that it relies on the assumption that the blocks within the tract are homogenous with respect to the rates of citizenship. In his opinion, heavily Hispanic areas of the City tend to have lower rates of citizenship. (Defs.' Ex. 4, at 12-13.)

Dr. Rives advocated the application of the BG level method. He asserted that because BGs are smaller than tracts, they are more likely to emulate the demographic features of the blocks they contain. Also, the BG level method may be more precise because BGs are smaller, and it is therefore easier to closely approximate the actual area included in the illustrative district. However, Mr. Ely critiqued the BG level method because in formulating a special tabulation for Hispanic citizenship rates at the BG level, the Census Bureau relies on two independently rounded numbers in order to preserve participant confidentiality, thus decreasing accuracy. (Pl.'s

Ex. 4, at 1.) Also, the smaller sampling size at the BG level increases the likelihood of sampling error. (*Id*. at 2.)

In his initial expert report, Mr. Ely constructed illustrative districts using citizenship information from the tract level. (Pl.'s Ex. 1, at 7.) Applying this methodology to 2006 ACS data, Mr. Ely drew the original Illustrative District (July 7, 2008). (Pl.'s Ex. 1 and 3.) As discussed above, Mr. Ely then extrapolated growth rates in order to estimate the 2008 Hispanic CVAP in the Illustrative District: 50.1%. (*Id*.; Pl.'s Pretrial Br. 12.) In his expert report, Dr. Rives criticized Mr. Ely's use of Census tract citizenship data rather than BG data from a special tabulation. He demonstrated that by utilizing the BG level method rather than the tract level method, the 2008 HCVAP in the original Illustrative District fell to 48.2%. In response to Dr. Rives' report, Mr. Ely used the special tabulation BG data to estimate HCVAP in three additional illustrative districts. Mr. Ely was able to create the alternative (CVAP based) Illustrative District and Illustrative Districts A and B, with estimated HCVAP in 2008 of 53.1%, 58.0%, and 56.5%, respectively. (Pl.'s Ex. 5, 8.)

d. *Spanish Surname Registered Voters*

Dr. Rives obtained voter registration data for Irving from the Dallas County Elections Department, based on individual voter registration records as of May 1, 2008. Using that data, Dr. Rives then "geocoded" Spanish surname registered voters ("SSRV") to their Census block. (Defs.' Ex. 4, at 14; Ex. 35; Ex. 47.) The Spanish surname may be used as a proxy for Hispanic ethnicity when self-identification is not practical.[7] (Joint Pretrial Order 32.) Dr. Rives treated this

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[7] The parties agree that experts commonly use Spanish surname databases as the foundation for analysis in voting rights litigations, as well as to provide guidance to jurisdictions in the redistricting process. (Joint Pretrial

geocoded SSRV information as an indicator of HCVAP, and observed that the SSRV share of total registered voters was 35.6% within Mr. Ely's illustrative district, "quite close to the Hispanic share of total CVAP for the proposed district in 2000, before plaintiff's expert extrapolated the 2000 CVAP to 2008 at citywide growth rates." (Defs.' Ex. 4, at 14.) Dr. Rives appears to suggest that the 2008 SSRV numbers indicate little to no growth in HCVAP in the illustrative district between 2000-2008.

Mr. Ely responded by creating an illustrative district based on Dr. Rives' geocoded SSRV data that included additional areas of high SSRV concentration. (Pl.'s Ex. 5, at 2.) He again used BG citizenship rates and projected forward to arrive at a 2008 estimate, as in his earlier illustrative districts. (*Id.*) The estimated HCVAP for the SSRV based district is 50.5%, and the SSRV share of total registered voters is 40.9%. (*Id.*) Mr. Ely also noted that SSRV in Irving had nearly doubled between the 2005 and 2008 elections (497 and 957, respectively), while total voters increased by a proportionately more moderate amount (9,014 and 9,823, respectively). (Pl.'s Ex 1, at 5.)

The Fifth Circuit has stated that without a strict showing of probativeness, Spanish surname data are disfavored, and Census data based upon self-identification provide the proper basis for analyzing claims that the votes of Hispanics have been diluted in violation of Section 2. *Rodriguez v. Bexar County, Tex.*, 385 F.3d 853, 867 n. 18 (5th Cir. 2004). Additionally, Dr. Rives' analysis neglects a number of critical factors that would tend to depress Hispanic voter

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Order 32.) The Census Bureau developed for use in the 1980 Census a Spanish surname list and rules for matching. (*Id.*). Mr. Ely testified that in his opinion, Spanish surname analysis tends to slightly underestimate Hispanic ethnicity, except in groups with significant Filipino populations. (Pl.'s Ex. 1, at 4.) Irving has a minimal Filipino population, therefore he considers Spanish surname results to be generally reliable.

registration rates. For example, Dr. Rives fails to consider that low registration rates may be the

result of non-representative or dilutive election systems, and that low registration rates are often

associated with low income populations. (Pl.'s Ex. 4, at 5; Trial Tr. vol 1, 4, Feb. 18.)

Additionally, low voter registration rates are frequently associated with younger populations—

especially relevant here, where 50% of Hispanic citizens in Irving were under age 18 in 2000.

(Pl.'s Ex. 4, at 5.) Finally, changes in registration may lag behind changes in the population, as

people often delay or fail to register when they become eligible upon moving into an area,

turning 18, or becoming a citizen. (*Id*.) Therefore, the Court finds the SSRV data unpersuasive.

e. *Housing Stock Analysis*

In his expert report and testimony at trial, Dr. Rives critiqued Mr. Ely's application of

city-wide growth rates to the illustrative districts. Dr. Rives claimed that "the growth of CVAP

necessarily entails the growth of total population." (Defs.' Ex. 5, at 3; *see also* Defs.' Ex. 4, at 8-

9 and Trial Tr. vol. 1, 84, Feb. 18.) He then questioned how the illustrative district could have

absorbed this net increase in population. (Defs.' Ex. 4, at 8.) Dr. Rives used data from the Irving

Planning Department to demonstrate that housing and land-use development in Irving for the

2000-2006 period largely occurred in the northern part of Irving, whereas the illustrative districts

are all situated in the southern part of Irving. (*Id*. at 8-10.) Dr. Rives argued that "the proposed

district appears to be an isolated pocket of little post-censal development," which leads him to

conclude that the illustrative districts did not grow at the average rate of the City with respect to

total population or HCVAP. (*Id.* at 10.)

Dr. Rives also applied Dallas County tax appraisal data to Mr. Ely's illustrative districts,

and argues that this data demonstrates that the illustrative districts do not have the "demographic

carrying capacity"—the ability of a district's housing stock to support projected growth—to support the level of growth projected by Mr. Ely. (Defs.' Ex. 5, at 2; *Id*. at Ex. 35.) Dr. Rives started with the housing stock in 2000 and then, based on the tax appraisal data, determined the changes in the housing stock from 2000 to 2008 within the illustrative districts. He concluded that growth in housing stock in the illustrative districts during that period was negligible. (Trial Tr. vol. 1, 6, Feb. 19.) Dr. Rives then projected the total population of each of the illustrative districts forward from 2000 to 2008 using Mr. Ely's methodology. Although Mr. Ely restricted his projections to Hispanic and non-Hispanic CVAP, Dr. Rives believes if that component of the population grows then so must the rest of the population. (Trial Tr. vol. 1, 3, Feb. 19.) Dividing the projected total population of the illustrative districts for 2008 by their estimated number of housing units,[8] Dr. Rives concludes that the 2008 average household size ("AHS") would be 3.40-3.55 in the illustrative districts, higher than the 2000 Census average of 2.5 for Irving. (Defs.' Ex. 49.) The estimated 2008 AHS of 4.07-4.11 for a Hispanic household in the illustrative districts was also higher than the 2000 Census Hispanic household AHS of 3.65.[9] (*Id*.) Dr. Rives surmises that the larger-than-expected AHS values for all households and Hispanic households imply that Mr. Ely's ACS derived HCVAP growth rates are inflated. (Defs.' Ex. 5, at 5.)

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[8] Dr. Rives applied a housing occupancy rate in the mid to high 90% range, which was the rate reported in the 2000 Census, and which he "assumed to approximate current occupancy levels reasonably well." (Defs.' Ex. 5, at 4.)

[9] Dr. Rives calculated Hispanic households based on households with a Hispanic head-of-household . A large percentage of Hispanic residents live with a Hispanic head-of-household. (Trial Tr. vol. 1, 14, Feb. 19; Defs.' Ex. 5, at 5.)

In response to Dr. Rives, Mr. Ely defended his estimates by differentiating HCVAP growth from general population growth. Mr. Ely emphasized that the critical issue is the composition of the population in the illustrative districts, not any changes in the size of the total population, and that the pertinent analysis must therefore focus on ratios rather than absolute numbers. (Trial Tr. vol. 1, 5, Feb. 20.) He explained that the ACS survey data (or Census long form data) only provides percentages and ratios; the Census Bureau does not count all of the people who fall into the different categories. The surveys count a subset of the population and state what percentage of that subset fall in within the various categories. (*Id*. at 19.) He further explained that his methodology was designed to measure the relative size between two populations, and cannot reliably produce estimates of total population. (*Id*. at 6-10.) He urged the Court that Dr. Rives' conclusions are therefore invalid, because carrying capacity is relevant only for the projection of total population, not subgroups such as CVAP. The Court finds Mr. Ely's explanations sound, and therefore rejects Dr. Rives' carrying-capacity criticisms of Mr. Ely's methodology.

Mr. Ely and Dr. Rives also fundamentally disagree on the premise (embraced by Dr. Rives, rejected by Mr. Ely) that the growth of HCVAP necessarily entails the growth of total population. Mr. Ely argues that the most direct source of HCVAP growth, which would result in no corresponding increase in total population, could plausibly come from the aging of Hispanic citizens between 10-17 years of age. (Pl.'s Ex. 4, at 4; Trial Tr. vol 1, 4, Feb. 20.) Data from the 2000 Census Public Use Microdata Sample ("PUMS")[10] for Irving reports that in 2000 the

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[10] PUMS data is a Census Bureau product. It is basically a 5% extract of the full sample detail file (the main Census database) for Irving from the 2000 Census, which includes both short and long form responses. (Trial Tr. vol. 1, 17, Feb. 19.)

population of Hispanic citizens between ages 10-17 was 4,912. (Defs.' Ex. 50.) And the numerical difference in HCVAP between the 2000 Census and the 2006 ACS is 4,860. (Trial Tr. vol. 1, 44, Feb. 19.) Mr. Ely posits that, based on the number of Hispanic citizens between ages 10-17 reported in the 2000 Census and HCVAP reported by the 2006 ACS, the normal aging process among Hispanic citizen children could theoretically explain all of the HCVAP growth in Irving over that period. (Pl.'s Ex. 4, at 4.) Mr. Ely also reiterates that comparing the 2000 Census data to the 2006 ACS data reveals that the Hispanic percentage of the population has increased while the non-Hispanic share of the population has decreased. (Trial Tr. vol. 1, 6, Feb. 20.)

Dr. Rives attempts to refute Mr. Ely's theory by arguing without support that the numbers are merely "fortuitous," and that considerations such as migration, naturalization, mortality, and immigration dictate that the aging of Hispanic children cannot be counted upon to raise the rate of citizenship among Hispanic adults. (Trial Tr. vol. 1, 45, Feb. 19; Defs.' Ex. 5, at 6.) While other demographic changes are undoubtedly at play, the Court finds Mr. Ely's explanations credible, and finds that the increase in HCVAP reflected in the estimates for Mr. Ely's various illustrative districts may plausibly be accounted for by factors other than significant growth in the total population—including the aging of Hispanic citizens under 18 years of age.

f. *City-wide Growth Rates*

Dr. Rives also argues on a more general level that applying city-wide growth rates to illustrative districts is not a reasonable assumption. (Defs.' Ex. 4, at 10.) Growth rates for local areas change over time. (*Id.*) Mr. Ely agrees that population growth across the City's districts has

probably not been uniform, but states that he relies on this assumption because there's no evidence available as to how growth in population has varied across districts. In his opinion, it is reasonable to believe that the city-wide demographic changes relating to the Hispanic and non-Hispanic population were probably shared in by the area that has the most significant Hispanic population. (Trial Tr. vol. 1, 25, Feb. 20.) The Court concludes that the assumptions made by Mr. Ely are reasonable, to the extent that growth in HCVAP is likely to be equal to (or greater than) the city-wide average in the districts that already have the heaviest concentrations of the Hispanic population.

2. Reliability of ACS Data

a. *Sampling Error*

Dr. Rives testified that the ACS data utilized by Mr. Ely cannot be considered highly accurate and should not be relied upon. (Trial Tr. vol. 1, 76-77, Feb. 18.) He first warns that ACS data can be subject to significant levels of sampling error because the sample sizes are small. (*Id.* at 78; Defs.' Ex. 4, at 11-12.) The one-year ACS survey samples approximately 1/1000 people, whereas the Census long form samples approximately 1/8 people. (Trial Tr. vol. 1, 129-130, Feb. 17.) Dr. Rives also contended that the Census Bureau cautions data users to consider ACS sampling errors when using ACS estimates by including a margin of error with each value in the ACS table. (Defs.' Ex. 4, at 11.)

Mr. Ely defends the ACS survey data, claiming that it is highly accurate. He argues that the ACS is conducted with a rigorously researched sampling frame and survey model, it is put together by an organization that knows the process, huge investment has been made in conducting it, everything is done according to normal statistical procedures, and it is ultimately

the best available information about current demographic characteristics. (Trial Tr. vol. 1, 132, Feb. 17.) Additionally, Mr. Ely suggests that the fact that all the ACS data is reported with sampling error actually makes the data more reliable, because the margin of error serves as a measure that can be applied to judge its statistical accuracy relative to other data sources. For the reasons enumerated by Mr. Ely as well as the Census Bureau's reliance on ACS data (as discussed *infra*, section III.B.2.d), the Court finds that ACS data is accurate and reliable.

b. *Discrepancy in 2006 and 2007 ACS Figures*

Dr. Rives also explained that the numbers provided in the ACS are "point estimates," which is the best single value provided by the Census Bureau for the characteristic in question (here, HCVAP). Every point estimate is subject to a margin of error that is always published by the Census Bureau along with the point estimate. (Trial Tr. vol. 1, 78, Feb. 18.) Adding and subtracting the margin of error from the point estimate provides a range. That range falls within a 90% confidence interval, *i.e.*, there is a 90% chance that the range surrounding the point estimate contains the truly accurate value. (*Id.*) The 2006 ACS lists the Hispanic population in Irving as 85,960 and the margin of error is 10,595. Thus, there is a 90% chance that the *actual* Hispanic population in Irving falls somewhere between 96,555 and 75,365. In 2007, the ACS point estimate for Irving's Hispanic population was 75,084 with a margin of error of 8,120. Comparing 2006 ACS data to 2007 ACS data, Dr. Rives argued, demonstrates that growth rates derived from ACS data should not be relied upon. Dr. Rives suggested that the 11,000 person change in the point estimate between 2006 and 2007 reflects significant sampling error in combination with a decline in the Hispanic population in Irving. (*Id.* at 79-80.)

Mr. Ely rejected Dr. Rives' position, claiming that the difference between the 2006 and 2007 ACS point estimates are not statistically significant because the difference in the point estimates falls within the range of the margin of error. (*Id*. at 12-14.) He claims that if he derived a growth rate using the 2007 ACS data, it would not be significantly different from the growth rate he got using the 2006 ACS data. (*Id*. at vol. 1, 137, Feb. 17.) Additionally, Mr. Ely points out that the 3-year averages of the 2005, 2006, and 2007 ACS data conform to his conclusions based on the 2006 data, confirming that the trend in HCVAP remains upward. (Trial Tr. vol. 1, 27, Feb. 20.) Defendants have presented no evidence to refute Mr. Ely's claim regarding the 3-year averages, and the Court finds that the 3-year averages disperse any doubts surrounding the significant change between 2006-2007.

c. *Point Estimates v. Confidence Intervals*

Next, Dr. Rives argued that instead of relying upon point estimates provided by the Census Bureau, an analysis of HCVAP levels should evaluate the probability that HCVAP numbers fall above 50% within the 90% confidence interval. (Defs.' Ex. 4, at 12.) In his expert report, he calculates that the 90% confidence interval for 2008 HCVAP in Plaintiff's original (July 2008) Illustrative District (calculated according to the BG level method) runs from 45.9% to 50.2%. The point estimate is 48.3%. Dr. Rives notes that almost all the confidence interval falls below the 50% mark. Therefore, the probability that the estimated HCVAP in the district exceeds 50% is relatively low. (*Id*.)

In his expert report, Mr. Ely interpreted Dr. Rives' report as suggesting that the 90% confidence level must lie entirely above 50% to justify concluding that there is a majority HCVAP in an illustrative district. (Pl.'s Ex. 4, at 2-3.) Mr. Ely countered that a point estimate

above 50% is the appropriate benchmark for current HCVAP in an illustrative district. (*Id*.) The Court agrees that the Census Bureau provides point estimates with the purpose that they may be relied upon and utilized, and finds it unnecessary to inject an additional level of probability calculations into the equation.

d. *Transition to ACS in 2010*

In the upcoming 2010 Census, the Census Bureau will no longer administer the long form. (Trial Tr. vol 1, 86, Feb. 19.) The Census Bureau will instead rely on multi-year ACS averages for demographic information. The Court takes judicial notice of the Census Bureau's February 2009 publication "A Compass for Understanding and Using American Community Survey Data - What State and Local Governments Need to Know."[11] The mere issuance of such a publication by the Census Bureau, which provides detailed guidance on how ACS data should be interpreted and utilized by state and local governments, suggests that the Census Bureau considers ACS data reliable and intends for it to be relied upon in decisions such as Voting Rights Act compliance.

3. Compactness

The *Gingles* compactness requirement "refers to the compactness of the minority population, not to the compactness of the contested district." *LULAC*, 548 U.S. 399, 433 (2006). In evaluating the compactness of the minority population, considerations of the dispersion of the territory of the district and the regularity or length of the perimeters of the district become subsidiary to considerations of the minority group's compactness. *See id*. ("In the equal

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[11]*Available at* www.Census.gov/acs/www/Downloads/ACSstateLocal.pdf.

protection context, compactness focuses on the contours of district lines . . . Under § 2, by

contrast, the injury is vote dilution, so the compactness inquiry embraces different

considerations.").[12] In *LULAC*, the Supreme Court emphasized that "the enormous geographical

distance" between the Austin-area and Mexican-border communities included in a Texas district,

"coupled with the disparate needs and interests of these populations—not either factor

alone—[rendered] District 25 noncompact for Section 2 purposes." *Id*. at 435.

As Dr. Rives pointed out in his expert report, there is no unique measure to assess

whether a plan definitely is or is not compact. (Defs.' Ex. 5, at 8.) He presented a number of

different statistical measurements based on perimeter distances and various ratios derived from

circumference, diameter, minimum spanning circle, etc. (Defs.' Ex. 31.) The different methods

provide different rankings of the levels of compactness of the geographic boundaries of the plans,

allegedly indicating a relatively low level of compactness. (Trial Tr. vol. 1, 63, Feb. 18.) The

majority of the statistical measurements suggest that the initial July 2008 plan is the most

compact and Illustrative District C is the least compact. (*Id.*)

However, *LULAC* requires addressing the illustrative districts in terms of the

compactness of the minority population rather than dispersion of a district's territory or the

regularity or length of a district's perimeters. *LULAC*, 548 U.S. at 433. As discussed in the

Court's January 29, 2009 Order denying Defendants' Motion for Summary Judgment, the

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[12] *See also* Richard H. Pildes and Richard G. Niemi, *Expressive Harms, "Bizarre Districts," and Voting Rights: Evaluating Election-District Appearances After Shaw v. Reno*, 92 Mich. L. Rev. 483, 549-557 (1993) (identifying dispersion of a district's territory, the regularity or length of a district's perimeters, and the regularity of the distribution of a district's population as the three quantitative measures of compactness), *cited in Vieth v. Jubelirer*, 541 U.S. 267, 348 (2004).

illustrative districts include concentrations of HCVAP just adjacent to the area of primary

HCVAP concentration. (Summ. J. Order 12.) While the illustrative districts undoubtedly "reach

out to grab" pockets of Hispanic population, these pockets cannot be characterized as "small and

apparently isolated minority communities." *See Bush v. Vera*, 517 U.S. 952, 977-79 (noting that,

in analyzing compactness in an Equal Protection claim, a "bizarrely shaped" district that "reaches

out to grab small and apparently isolated minority communities" is not reasonably compact).

Here the heavily Hispanic Census blocks are, in fact, geographically very close to the nucleus of

Hispanic concentration in south Irving. (*See e.g.*, Pl.'s Exs. 6 and 7.) Therefore, the Court finds

that the proposed districts are reasonably compact.

Dr. Rives argued that Illustrative District C in particular does not contain a geographically

compact area of Hispanic citizens because the neighborhood of Benavidez's home is

demographically different from the remainder the Hispanic areas included in the district. (Trial

Tr. vol. 1, 66, Feb. 18.) He based his arguments on the higher rates of citizenship, higher levels

of educational attainment, higher income levels, and the younger housing stock in Benavidez's

neighborhood. (*Id.*)

But the district's "projections away from the core," which encompass Benavidez's

residence for standing purposes, extend only approximately 1.5 miles from the edge of the

primary area of Hispanic CVAP concentration. (*Id*. at 62; Defs.' Summ. J. App. 9.) Further,

Illustrative District C includes a relatively large area of 30-40% Hispanic CVAP concentration

and a small pocket of 50-100% Hispanic CVAP concentration, as well as Benavidez's residence.

(*Id*. at 62; Pl.'s Summ. J. App. 65; Defs.' Summ. J. App. 12.) Thus, while Benavidez's

neighborhood is not part of the core of Hispanic concentration and although it may differ in some

demographic characteristics from the core area, it is geographically close to that core and it contains a substantial Hispanic population. Therefore, the Court nonetheless considers Illustrative District C compact.

C. Gingles II & III - Racial Polarization

In assessing whether racially polarized voting exists in a designated political subdivision, courts generally begin with a statistical analysis of voting behavior. *Campos v. City of Baytown*, 840 F.2d 1240, 1244 (5th Cir. 1988); *see also Monroe v. City of Woodville*, 897 F.2d 763, 764 (5th Cir. 1990) ("Statistical proof of political cohesion is likely to be the most persuasive form of evidence, although other evidence may also establish this phenomenon.").

1. Probative Elections

To evaluate whether voting trends are racially polarized in Irving, the parties' experts analyzed the 2005 and 2008 Irving elections, in which voters had a choice between Hispanic and non-Hispanic candidates. (Trial Tr. vol. 1, 196, Feb. 17.) *See League of United Latin Am. Citizens, Council No. 4434 v. Clements*, 999 F.2d 831, 864 (5th Cir. 1993) ("*Clements*") ("courts usually focus on those elections involving . . . Hispanic candidates in examining whether . . . Hispanic voters enjoy an equal opportunity to elect representatives of their choice"). The 2008 election involved the unsuccessful effort of Rigo Reza to win the office of mayor, and the likewise unsuccessful effort of Nancy Rivera to win the Place 3 seat on City Council. In 2005, Roland Medina unsuccessfully sought the Place 5 City Council position. (*Id*. at 196-97.) The experts were unable to analyze prior elections due to significant precinct reconfiguration. (*Id*. at 196.)

2. Gingles II: Political Cohesion of Hispanic Voters

a. *Methodologies: Homogeneous, Ecological Regression, and Ecological Inference*

Dr. Engstrom applied three accepted methods of statistical analysis to Irving's election data[13]—homogeneous precinct analysis ("HPA"), ecological regression ("ER"), and ecological inference ("EI")—to determine whether Hispanic voters vote cohesively. (Pl.'s Ex. 25, at 4.) HPA and ER were both approved in *Gingles* and have been utilized by numerous courts in Voting Rights Act cases. *Gingles*, 478 U.S. at 53 n. 20. Recently, EI has been used to supplement evidence derived from HPA and ER. *See e.g.*, *United States v. Village of Port Chester*, No. 06 Civ. 15173(SCR), 2008 WL 190502, at *11 (S.D.N.Y. Jan. 17, 2008); *United States v. City of Euclid*, 580 F.Supp.2d 584, 596 (N.D. Ohio 2008).

HPA simply reports the percentage of the votes received by a candidate withing the precincts in which a particular group constitutes over 90% of the people receiving ballots. (*Id.* at 5.) There are no homogenous Hispanic precincts in any of these elections in Irving, so this methodology cannot be applied to derive estimates of Hispanic voter's candidate preferences.

Unlike HPA, ER addresses mixed precincts—it takes into account the votes cast and the ethnic composition of all the precincts. (Trial Tr. vol. 1, 205, Feb. 17.) ER is essentially based on a scatter plot in which the horizontal axis reflects the Hispanic percentage of total voters (the percentage of voters that had Spanish surnames receiving ballots in each of the precincts) and the

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[13] Both Dr. Engstrom and Dr. Alford utilized SSRV data, prepared by Mr. Ely based on precinct level election returns and lists of people who received ballots provided by the Dallas County Department of Elections, to analyze the candidate preferences of Hispanic and non-Hispanic voters. (Trial Tr. vol. 1, 200, Feb. 17.) Spanish surname matching is the norm for this type of analysis, and in Dr. Engstrom's opinion it is the best measure of the Hispanic voters in each voting precinct. (*Id.* at 201-02; Pl.'s Ex. 25, at 4.)

vertical axis shows the percent of the vote received by the Hispanic candidate. (*Id*. at 206.) A

straight line, called the line of best fit, is plotted through the data points with the least possible

deviation from the points. (*Id*.) But Dr. Engstrom criticizes what he calls the linearity assumption

implicit in the line of best fit: ER in effect assumes that the behavior of Hispanic voters is the

same throughout precincts, regardless of the composition of the precincts. (*Id*. at 208-09.)

Additionally, this methodology in some cases may result in estimates that may go below zero or

above 100 for a given precinct. (*Id*. at 209.)

Although HPA and ER were both approved in *Gingles* and have been utilized by

numerous courts in Voting Rights Act cases, in Dr. Engstrom's opinion the EI method provides

the best available tool for analysis where only one minority group is being examined. (Trial Tr.

vol. 1, 212-14, Feb. 17.) This methodology was developed subsequent to the *Gingles* decision,

and was designed specifically for the purpose of arriving at estimates in this type of case. (*Id*. at

209.) EI is similar to ER, but abandons the assumption of linearity that ER relies upon. (*Id*.) EI

also applies a principle called the method of bounds to constrain estimates to real limits, in that it

does not allow estimates to go above 100 or below zero. (*Id*. at 210-11.)

Dr. Engstrom's application of ER and EI to SSRV data resulted in the following

outcomes:

Election	% of Hispanic Voters
2008 - Mayor	
Reza	
ER	87.6
EI	63.6
2008 - Place 3	
Rivera	
ER	70.6
EI	99.5

2005 - Place 5
 Medina
ER 130.2
EI 99.4

(Pl.'s Ex. 26.) Dr. Engstrom's estimates applying ER and EI both show that the Hispanic voters

preferred the Hispanic candidate, demonstrating Hispanic voter cohesion.

b. *Application of Confidence Intervals*

Dr. Alford agreed generally with Dr. Engstrom's figures, but also imposed 95%

confidence intervals on the ER results. (Defs.' Ex. 51, at 10-11.) He argued that the confidence

that can reasonably be placed in the ER estimates are low due to low levels of Hispanic

concentration in the precincts, which impairs the ER analysis. (Defs.' Ex. 51, at 10.) He showed

that there is a 95% chance that the actual proportion of Hispanic voters casting their votes for

Rivera in 2008 was somewhere between 38.7 and 100%, and for Medina is was between 27.3 and

100%. (*Id*. at 11.) Dr. Alford concluded that "clearly the confidence interval for both estimates

includes levels far too low to be considered cohesive minority voting." (*Id*.)

Dr. Engstrom also noted that the confidence intervals are wide, and stated that this result

should be expected given the data. He concurred with Dr. Alford that the wide confidence

intervals are due to application of ER to a set of data points that don't lend themselves to ER

analysis. (Trial Tr. vol. 1, 2, Feb. 18.) Dr. Engstrom pointed to the ER scatter plots, on which the

data points are all clustered in the lower left corner. (*See* Pl.'s Ex. 27.) According to Dr.

Engstrom, for a more precise ER analysis one would need data points that move further out

towards a 100% Hispanic voter precinct—unlike the precincts analyzed, which all have SSRV

rates of less than 35%. Dr. Engstrom also responded that the point estimate is the best single

estimate, and the numbers closest to the best estimate would be more likely than the numbers at the end of the confidence interval.

Dr. Engstrom also applied confidence intervals to his EI calculations. The confidence intervals produced by the EI analysis were tight around the point estimate, indicating that the analysis was efficient and there was not a lot of variation. (Trial Tr. vol 1, 2-3, Feb. 18.) While Dr. Alford does not dispute the EI numbers that Dr. Engstrom arrived at, he claims that EI is particularly unsuited to estimating values outside the data cluster on the scatter plot, as is the case here. (Trial Tr. vol. 1, 132, Feb. 19; *Id*. at vol. 2, 4.)

Despite the problematic application of ER and EI where there has been a history of low levels of minority voter registration, these mechanisms are the statistical tools available to assist the Court in its analysis. Here, the figures produced by an accurate calculation of ER and EI both suggest Hispanic political cohesion, and the Court finds that it is reasonable to follow the ER and EI data—despite the shortcomings that have been addressed—to the logical conclusion that Hispanics in Irving tend to vote as a bloc.

c. *Hispanic Voter Turnout*

Dr. Alford observed that, based on SSRV data, the two precincts with the highest levels of Hispanic concentration—both located almost entirely within Plaintiff's illustrative districts—contained only 33.3 and 20.6% SSRV. (Defs.' Ex. 51, at 5.) He noted that this is "a remarkably low concentration." (Trial Tr. vol 1, 104, Feb. 19.) Dr. Alford modeled what are essentially "reconstituted elections" as to how the 2005 and 2008 Hispanic candidates would have fared in Plaintiff's original Illustrative District and how they would have fared in the hypothetical event that Hispanic voter turnout were doubled in those elections. (*Id*. at vol. 2, 8-

10; Defs.' Ex. 51 at Table 4a.) According to Dr. Alford's hypothetical elections, in both cases the Hispanic candidates still would not have prevailed. (*Id*.) Essentially, Dr. Alford claims that low concentrations of Hispanic voters are the real cause of the failure to elect Hispanic candidates, and that these low concentrations would preclude the success of a Hispanic candidate even if the illustrative districts were actually created.

But low minority voter turnout does not militate against finding a Section 2 violation. *See Harvell v. Blytheville Sch. Dist. No. 5*, 71 F.3d 1382, 1388 (8th Cir.1995) ("low voter turnout has often been considered the result of the minority's inability to effectively participate in the political process."); *United States v. Blaine County*, 363 F.3d 897, 911 (9th Cir. 2004) (describing the situation where low voter turnout could defeat a Section 2 claim as a "vicious cycle"). As Dr. Engstrom testified, different patterns of past political participation under a diluted at-large electoral system are not a good indicator of future voting behavior in a nondiluted electoral system. (Trial Tr. vol 1, 3-4, Feb. 18.) He explained that by moving from a dilutive system to a system that is not dilutive, minority groups have improved opportunities to elect the candidates of choice, which in turn creates a stimulus to "organize and mobilize and bring more people to the polls." (*Id*.)

3. Gingles III: White Majority Bloc Voting

As discussed above, HPA analysis reports the percentage of the votes received by a candidate withing the precincts in which a particular group constitutes over 90% of the people receiving ballots. (Pl.'s Ex. 25, at 5.) There are numerous precincts in Irving in which more than 90% of those receiving ballots did not have a Spanish surname, so this methodology was employed to derive estimates of non-Hispanic voters' candidate preferences. (*Id*.) Dr. Engstrom

additionally applied ER and EI analysis to the non-Hispanic vote, and the parties don't dispute

that non-Hispanic voters tend to vote as a significant bloc. (Pl.'s Ex. 26, at Table 1; Defs.' Ex.

51, at Table 4a; Trial Tr. vol. 1, 129, Feb. 19.)

Election	% of Non-Hispanic Voters
2008 - Mayor	
Reza	
HPA	4.7
ER	-0.6
EI	2.0
2008 - Place 3	
Rivera	
HPA	30.0
ER	19.7
EI	14.6
2005 - Place 5	
Medina	
HPA	14.6
ER	10.3
EI	9.9

D. Totality of the Circumstances - Senate Report Factors

The Senate Report's "list of typical factors is neither comprehensive nor exclusive" and

"there is no requirement that a particular number of factors be proved, or that a majority of them

point one way or the other." *Gingles*, 478 U.S. at 45. Rather, the ultimate "question whether the

political processes are equally open depends upon a searching practical evaluation of the past and

present reality, and on a functional view of the political process." *Id*. (internal citations omitted).

1. Senate Factor 2: Racial Polarization

The second Senate factor evaluates the extent to which voting in the elections of the state

or political subdivision is racially polarized. *Gingles*, 478 U.S. at 37. In the three elections

evaluated in which a Hispanic candidate was on the ballot, the Hispanic candidate always

received more than 63% of the Hispanic vote and less than 31% of the non-Hispanic vote. (Pl.'s Tr. Ex. 26, at Table 1.) In the most extreme of the three elections, City Council candidate Reza received 100% of the Hispanic vote and only 10% of the non-Hispanic vote, according to Dr. Engstrom's ER estimates. (*Id.*) The Court finds that the statistical evidence shows that racially polarized voting occurred and the degree of polarization was significant in the last three elections involving Hispanic candidates.

2. Senate Factor 3: Mechanisms that Enhance Minority Vote Dilution

The third Senate factor assesses whether there is evidence of voting procedures in place that may enhance vote dilution. *Gingles*, 478 U.S. at 37. First, the parties do not dispute that Irving's electoral system requires that a successful candidate receive the majority vote. If one candidate does not win a majority in an Irving election, a run-off election is held between the top two candidates. (Trial Tr. vol. 1, 38-39, Feb. 20; Joint Pretrial Order 29.) The majority vote requirement is a textbook enhancing factor in at-large elections because it deprives minority voters of the opportunity to elect a candidate by "single-shot" voting—*i.e.*, of concentrating all of its votes on a single candidate. *Gingles,* 478 U.S. at 56; *see also City of Rome v. United States*, 446 U.S. 156, 184 n. 19 (1980) (describing the implications of a majority vote requirement and the operation of single shot voting).

Second, a numbered place system such as Irving's slotted at-large system also prevents single-shot voting. (Joint Pretrial Order 29.) *See Salas v. Southwest Texas Jr. College Dist.*, 964 F.2d 1542, 1544 n. 1 (5th Cir. 1992) ("[a] numbered-post system requires a candidate to declare for a particular seat on a governmental body . . . The system prevents the use of bullet, or single shot, voting.") (quoting *Campos v. City of Baytown*, 840 F.2d 1240, 1242 n. 1 (5th Cir.1988)).

The place system functions by separating every seat on the City Council into an election that is a single-vote single-seat election. (Trial Tr. vol. 1, 37-38, Feb. 20.) The Court concludes that the place requirement for Irving elections has an enhancing discriminatory effect with respect to Hispanic success in Irving elections.

Third, Irving conducts staggered term elections: only three of the eight districts and the mayoral seat are on the ballot in each election. (Pl.'s Pretrial Order. 29.) "The use of staggered terms also may have a discriminatory effect under some circumstances, since it, too, might reduce the opportunity for single-shot voting or tend to highlight individual races." *City of Lockhart v. United States*, 460 U.S. 125, 135 (1983). In a city such as Irving, where there's an at-large electoral system, a majority non-Hispanic population, and racial bloc voting predominates, staggered terms function to dilute Hispanic voting strength. *See City of Rome*, 446 U.S. at 183-85 (affirming finding that staggered terms, together with other voting procedures, acted to dilute minority voting strength when combined with the presence of racial bloc voting, majority white population, and at-large electoral system).

3. Senate Factor 5: Socio-Economic Disparity

The fifth Senate Factor questions whether the minority group bears the effects of discrimination, in areas such as education, employment, and health, which hinders its ability to participate effectively in the political process. *Gingles*, 478 U.S. at 37. Where disproportionate educational, employment, income level, and living conditions can be shown and where the level of minority participation in politics is depressed, "plaintiffs need not prove any further causal nexus between their disparate socio-economic status and the depressed level of

political participation." *Teague v. Attala County, Miss.*, 92 F.3d 283, 294 (5th Cir. 1996) (internal citations and quotation omitted).

In Irving, there are significant disparities in the educational levels of Hispanic and white residents, as reflected in data from the 2000 Census. (Pl's Pretrial Br. 20-21.) Specifically, only 6.4% of Hispanics have Bachelor's degrees, while 23.8% of white non-Hispanics do. (Pl.'s Pretrial App. 173-174.) Similarly, 57% of Hispanics do not have high school diplomas, while the comparable figure for white non-Hispanics is only 11.1%. (*Id.*) Other socio-economic indicators also display disparities between Hispanic and non-Hispanics in Irving. According to the 2000 Census, median household income for the Hispanic population was $34,799, but $50,604 for white non-Hispanics. (*Id.*) Per capita income was $12,109 for Hispanics and $31,574 for white non-Hispanics. (*Id.*)

4. Senate Factor 7: Extent of Hispanic Electoral Success

The seventh Senate factor, the extent to which members of the minority group have been elected to public office in the jurisdiction, is the only Senate factor expressly referenced by Congress in the statutory language of Section 2. *Gingles*, 478 U.S. at 37. In Irving, despite several attempts, only one Hispanic candidate has ever been elected to Irving's City Council. None of the current City Council members or mayor is Hispanic.

Notably, James Dickens, the only Hispanic candidate to be elected in Irving, did not have a Spanish surname and did not publicly acknowledge his Hispanic background until after the election; the non-Hispanic incumbent whom Dickens defeated had a Spanish surname. (Trial Tr. vol 1, 18-19, Feb. 17; Joint Pretrial Order 30.) In 1999, Mr. Dickens won the City Council election for Place 1 after a run-off election against Fran Bonilla, a non-Hispanic candidate. (Trial

Tr. vol 1, 18-19, Feb. 17; Pl.'s Ex. 35.) In 2001, Mr. Dickens ran unopposed for the City Council

election for Place 1 again and won. (Trial Tr. vol 1, 20-21, Feb. 17; Pl.'s Ex. 36.) In 2004, Mr.

Dickens again won the City Council election as the incumbent, this time against two challengers

who were not serious candidates. (Trial Tr. vol 1, 21-22, Feb. 17.) In 2007, Mr. Dickens was

defeated by Thomas Spinks, a non-Hispanic candidate who took a strong anti-illegal-immigrant

position during his campaign. (*Id*. at 23-24.)

Minority electoral success in a polarized electorate may be explained by special

circumstances, such as the absence of an opponent, incumbency, or the utilization of bullet

voting. *See Gingles*, 478 U.S. at 57 (cautioning that "the success of a minority candidate in a

particular election does not necessarily prove that the district did not experience polarized voting

in that election"). The special circumstances test set forth by the *Gingles* court "was designed to

prevent defendant jurisdictions from arguing that a minority candidate's occasional victory in an

otherwise racially polarized electorate defeats a vote dilution." *Rodriguez v. Bexar County*, 385

F.3d 853, 864 (5th Cir. 2004) (citing *Gingles*, 478 U.S. at 57). In the case of Mr. Dickens, such

special circumstances existed—the absence of an opponent, incumbency, and Mr. Dickens'

Anglo name. As stated in the Senate Report, here the Court concludes that the election of one

minority candidate does not "necessarily foreclose the possibility of dilution of the [minority]

vote, in violation of this section . . ." S. Rep. No. 97-417, at 29 n.115 (1982), *reprinted in* 1982

U.S.C.C.A.N. 177, 207.

V. CONCLUSIONS OF LAW

A. <u>Gingles I</u>

The first *Gingles* precondition requires that a plaintiff challenging an at-large election scheme demonstrate that the minority group is "sufficiently large and geographically compact to constitute a majority in a single member district." *Gingles*, 478 U.S. at 50. Here, Plaintiff has shown that Hispanics are sufficiently geographically compact and numerous in Irving that an illustrative district can be drawn that has a Hispanic majority of eligible voters and, therefore, Plaintiff has satisfied part one of the *Gingles* threshold test.

1. HCVAP Majority Illustrative Districts

To satisfy Gingles I, a plaintiff must show that it is possible to draw an election district of an appropriate size and shape where the CVAP of the minority group exceeds 50% of the relevant population in the illustrative district. *Bartlett v. Strickland,* 129 S.Ct. 1231, 1245-46 (2009); *Perez v. Pasadena Indep. Sch. Dist.*, 165 F.3d 368, 372 (5th Cir.1999). This requirement ensures that the minority group will possess the potential to elect representatives of its choice in the absence of the at-large voting scheme. *Gingles*, 478 U.S. at 50 n. 17. Unless minority voters possess such electoral potential, they cannot claim to have been injured by the at-large voting scheme. *Id*. Here, Plaintiff has demonstrated that in 2008, HCVAP will comprise 53.1 % of the total CVAP in the alternative (CVAP based) Illustrative District, 58.0% in Illustrative District A, 56.5% in Illustrative District B, and 55.6% in Illustrative District C. (*Se*e Pl's Ex. 5, at 3; Ex. 5, at 4; Ex. 8; Exs. 15 and 17.)

a. *Criteria for Drawing Illustrative Districts*

Plaintiff's alternative (CVAP based) Illustrative District and Illustrative Districts A , B, and C comport with traditional districting principles of population equality and respect for existing official geographic boundaries. *See Miller v. Johnson*, 515 U.S. 900, 919 (1995); *Shaw v. Reno*, 509 U.S. 630, 651 (1993). Mr. Ely has created illustrative districts with populations that are within 1% of 1/8 of the total population of Irving, and he has drawn district boundaries along existing Census block lines.

b. *Defendants' Objections to the Illustrative Districts*

Defendants raised objections to Plaintiff's illustrative districts based on (1) citizenship estimates based on data from census tracts, rather than census blocks; (2) low levels of Hispanic voter registration in the illustrative districts, according to SSRV data; and (3) the inability of the housing stock in the illustrative districts to accommodate the population growth implied by the HCVAP growth.

In response, Plaintiff drew districts with Hispanic majorities of eligible voters by using citizenship estimates based on data from census blocks, rather than census tracts. (*See e.g.*, Pl's Ex. 5, at 3.) Plaintiff also created an illustrative district incorporating SSRV data to show that Plaintiff could create a district with a Hispanic majority of eligible voters. (*See id.* at 2.) But contrary to Defendants' arguments regarding low levels of Hispanic voter registration in the illustrative districts, it is the overall population of eligible Hispanic voters that is relevant. *See Campos v. City of Houston*, 113 F.3d 544, 548 (5th Cir. 1997) (holding that in voter dilution challenges, courts must consider the minority CVAP, not the number of minority voters that are actually registered to vote). Further, Plaintiff has demonstrated that the increase in HCVAP rates

may be accounted for by the aging of Hispanic children and the decline in non-Hispanic CVAP, resulting in little or no total population growth in the illustrative districts. Finally, the 2008 CVAP majorities in illustrative districts A, B, and C are sufficiently large that they can absorb some degree of variability. (Trial Tr. Vol. 1, 46-47, Feb. 18.) Thus, Plaintiff has proposed viable illustrative districts.

2. Proof of Changed Demographic Characteristics

The Fifth Circuit has established that in Section 2 cases, Census figures are presumptively accurate until proven otherwise. *Valdespino v. Alamo Heights Indep. Sch. Dist.*, 168 F.3d 848, 853-54 (5th Cir. 1999). The Fifth Circuit requires that "[p]roof of changed figures must be thoroughly documented, have a high degree of accuracy, and be clear, cogent and convincing to override the presumptive correctness of the prior Census." *Id*. at 854. The reliability of the 2008 estimates based on growth rates derived from ACS data constitutes the pivotal issue in this case, and the Court finds that Plaintiff's ACS based numbers for 2008 are thoroughly documented, have a high degree of accuracy, and are clear, cogent and convincing .

a. *Reliability of ACS Figures*

ACS data *is* Census data. It is produced and promulgated by the Census Bureau, and it is intended to replace the long form in the decennial Census. (Trial Tr. vol 1, 86, Feb. 19.) Unlike data proffered to overcome Census figures in other cases, here the Census Bureau produced the data employed by Plaintiff. *See, e.g.*, *Valdespino*, 168 F.3d at 854 (affirming decision that housing stock data could overcome Census data); *Reyes v. Farmers Branch*, No. 3:07-CV-900, 2008 WL 4791498, at *16 (N.D. Tex. Nov. 4, 2008) (declining to rely on plaintiff's "actual count" of SSRV to overcome the *Valdespino* presumption). ACS data can be—and eventually

must be—relied upon; the Census Bureau will be utilizing ACS data in lieu of long form survey data beginning in 2010. (*Id.*)

To the extent that ACS data may be regarded as distinguishable from presumptively accurate Census figures, ACS data meets the standard to overcome the prior decennial Census. ACS sampling errors are transparent; they may be accounted for using the margins of error published by the ACS and the use of confidence intervals. The Court concludes that ACS data is thoroughly documented, has a high degree of accuracy, and is clear, cogent and convincing enough to overcome the *Valdespino* threshold.

b. *Estimate Derived from Census and ACS Data*

Defendants have clearly established, and Plaintiff essentially does not dispute, that according to the 2000 Census and the 2006 ACS, Plaintiff cannot meet his burden of showing a majority HCVAP illustrative district. (Trial Tr. vol. 1, 117, Feb. 17.) Therefore, Plaintiff used Census and ACS figures to extrapolate HCVAP percentages for 2008. The Court has found Mr. Ely's methodology for estimating 2008 numbers to be reliable: he thoroughly documented and explained his process, he comported with accepted statistical principles, and his estimates have been corroborated by the 2007 ACS numbers and the 2005-2007 ACS 3-year averages. The ACS figures demonstrate a clear, persistent trend in the growth of HCVAP percentages in Irving that is unlikely to change in the 2008 ACS data. The 2008 estimates have been further corroborated by the PUMS data regarding the number of Hispanic children ages 10-17 and by the SSRV analysis.

Plaintiff has not employed an *ad hoc* procedure to construct the illustrative districts. *See Kirkpatrick v. Preisler*, 394 U.S. 526, 535 (1969) (post-Census population shifts may be considered if they are "thoroughly documented and applied through the state in a systematic, not

an ad hoc, manner"). Rather, Plaintiff determined that the 2000 Census figures no longer apply, according to 2006 ACS data that showed rapid growth in Hispanic CVAP and a concurrent fall in non-Hispanic CVAP. Plaintiff then implemented a clear and direct way of estimating Hispanic CVAP and non-Hispanic CVAP in illustrative districts—applying city-wide growth rates reflected in the ACS to the districts. Thus, the Court concludes that Plaintiff's methodology was not ad hoc, and the estimated HCVAP numbers for 2008 are clear, cogent, and convincing to override the presumptive correctness of the prior Census.

3. Compactness

Gingles requires that the proposed district advanced by the plaintiffs be geographically compact. *See Shaw v. Hunt*, 517 U.S. 899, 916 (1996) (finding no Section 2 violation where "no one looking at [that district] could reasonably suggest that the district contains a 'geographically compact' population of any race"). The Supreme Court has "refused to consider a noncompact district as a possible remedy for a [Section 2] violation." *LULAC*, 548 U.S. at 431 (citing *Shaw*, 517 U.S. at 916). The inquiry into compactness should consider "traditional districting principles such as maintaining communities of interest and traditional boundaries." *Id.* (internal quotes omitted).

However, "[t]he first *Gingles* precondition does not require some aesthetic ideal of compactness, but simply that the [minority] population be sufficiently compact to constitute a majority in a single-member district." *Houston v. Lafayette County, Miss.*, 56 F.3d 606, 611 (5th Cir. 1995) (quoting *Clark v. Calhoun County, Miss.*, 21 F.3d 92, 95 (5th Cir. 1994)). "Moreover, the question is not whether the plaintiff residents' proposed district was oddly shaped, but whether the proposal demonstrated that a geographically compact district could be drawn." *Id.*;

see also Clark, 21 F.3d at 95 ("[P]laintiffs' proposed district is not cast in stone. It was simply presented to demonstrate that a majority-black district is feasible in [the] county. If a § 2 violation is found, the county will be given the first opportunity to develop a remedial plan." (citations omitted)). Here, the Court concludes that Plaintiff's illustrative districts satisfy the Gingles compactness requirement.

Thus, as to the first *Gingles* precondition, this Court concludes that Plaintiffs have demonstrated through the alternative (CVAP based) Illustrative District, Illustrative District A, Illustrative District B, and Illustrative District C that the Hispanic population in Irving is sufficiently large in number and geographically compact to constitute an effective majority in a single-member district in the southern part of the City. Accordingly, Plaintiff has satisfied the first *Gingles* factor.

B. Gingles II & III - Racial Polarization

Racially polarized voting exists "where there is a consistent relationship between [the] race of the voter and the way in which the voter votes." *Gingles*, 478 U.S. at 53 n. 21 (internal citations and quotations omitted). Legally significant racially polarized voting exists when the minority group is politically cohesive and the majority votes sufficiently as a bloc to enable it to usually defeat the minority-preferred choice. *Id*. at 56. The Court concludes that racially polarized voting is clear in Irving in the three elections analyzed, based on the pattern of Hispanic voters consistently preferring the Hispanic candidate, non-Hispanic voters preferring

the non-Hispanic candidate, and non-Hispanic voters vetoing Hispanic preferences.[14] (Trial Tr. vol. 1, 216-17, Feb. 17.)

1. Political Cohesion of Hispanic Voters

The second *Gingles* precondition requires that Plaintiff demonstrate that Hispanics in Irving are politically cohesive. *Gingles*, 478 U.S. at 51. According to *Gingles*, "if the minority group is not politically cohesive, it cannot be said that the selection of a multimember electoral structure thwarts distinctive minority group interests." *Id*. The Court concludes that Hispanic voters in Irving are politically cohesive, *i.e.*, they tend to vote as a bloc.

Dr. Engstrom considered the degree to which Hispanic voters support the same candidates, and looked to the gap between the percentage of votes for the minority-preferred candidate and the non-preferred candidate. He demonstrated that Hispanic voters in Irving voted cohesively in the three elections examined, in 2005 and 2008. The methods utilized by Dr. Engstrom, ER and EI analysis, have been accepted by numerous courts in voting rights cases. *See e.g., United States v. Village of Port Chester*, No. 06 Civ. 15173(SCR), 2008 WL 190502, at *25 (S.D.N.Y. Jan. 17, 2008). Plaintiff has therefore satisfied the second *Gingles* precondition.

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[14] Having established the three *Gingles* factors, Plaintiff has standing to bring this action: he is a minority voter who resides within a proposed district in which the minority group is sufficiently large and geographically compact to constitute a majority in a single-member district, and voting is racially polarized. Thus, he has been affected "in a personal and individual way," he has demonstrated "a causal connection between the injury and the conduct complained of," and it is likely "that the injury will be redressed by a favorable decision." *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (setting forth the required elements for standing); *see also Salas v. Sw. Texas Junior Coll. Dist*., 964 F.2d 1542, 1554 (5th Cir. 1992) (stating that the *Gingles* analysis "is an inquiry into causation—whether the given electoral practice is responsible for plaintiffs' inability to elect their preferred representatives").

2. White Majority Bloc Voting

To satisfy the third *Gingles* precondition, Plaintiff must demonstrate that "the white majority votes sufficiently as a bloc to enable it—in the absence of special circumstances, such as the minority candidate running unopposed—usually to defeat the minority's preferred candidate." *Gingles*, 478 U.S. at 51. Proving this third point enables the minority group to show that "submergence in a white multimember district impedes its ability to elect its chosen representatives." *Id*. Further, the requirement that the white majority be repeatedly successful "distinguishes structural dilution from the mere loss of an occasional election." *Id*.

Dr. Engstrom employed HPA, ER, and EI analysis, and the results of all three methods demonstrate that the white majority in Irving votes cohesively to defeat Hispanic preferred candidates. Therefore, Plaintiff has proven the third *Gingles* precondition.

C. Totality of the Circumstances - Senate Report Factors

As outlined above, although this Court has found that Plaintiffs have satisfied all three *Gingles* preconditions, it is also necessary to consider the totality of the circumstances before finding a Section 2 violation. *See Johnson v. DeGrandy*, 512 U.S. 997, 1011 (1994). The most important Senate factors in a Section 2 challenge are factors 2 and 7—the extent to which elections are racially polarized and the extent to which minorities have been elected. If these two Senate factors are present, "the other factors . . . are supportive of, but not essential to, a minority voter's claim." *Gingles*, 478 U.S. at 51 n. 15.

The two Senate factors most critical to establishing a Section 2 violation, racially polarized voting (Senate factor 2) and the failure to elect minority candidates have been established (Senate factor 7). Two additional Senate factors also support Plaintiff's claims.

Specifically, Irving's electoral system has in place a number mechanisms that enhance vote dilution, such as staggered elections, a majority vote requirement, and numbered places (Senate factor 3). Also, the Hispanic population of Irving has a lower socioeconomic status and lower political participation rate than the non-Hispanic, white majority (Senate Factor 5). The Court finds that these four Senate factors are present in Irving and weigh heavily against the ability of Hispanics to elect candidates of their own choosing; accordingly, the totality of the circumstances indicates that Defendants' method of electing the mayor and members of its City Council violates Section 2 of the Voting Rights Act.

VI. CONCLUSION

For the reasons articulated above, the Court holds that Plaintiff has proven, beyond a preponderance of the evidence, that Defendants are currently in violation of Section 2 of the Voting Rights Act.

IT IS SO ORDERED.

Signed this 15th day of July 2009.

JORGE A. SOLIS
UNITED STATES DISTRICT JUDGE