

The University of Oklahoma
Graduate College

Geographic Distribution of Political Attitudes and Urban Form In Tulsa County, Oklahoma

A Professional Project
Submitted to the Graduate Faculty
in partial fulfillment of the requirements for the
degree of
Master of Science in Architectural Urban Studies

By

Erik Enyart, AICP
Tulsa, Oklahoma
2010

A Professional Project approved for the
College of Architecture
Urban Design Studio

By

Shawn Michael Schaefer, Chair
Showa Omabegho, Ph.D
Marjorie Callahan

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INTRODUCTION:

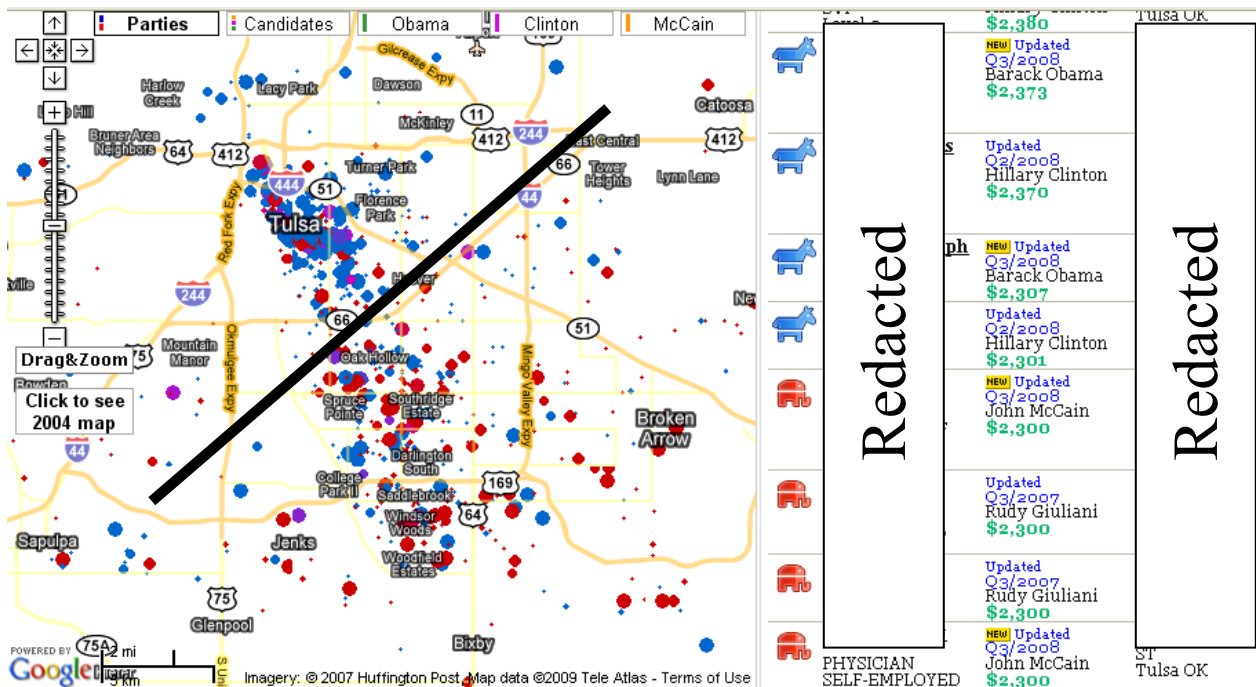
Polarization. With every passing day, it seems to become more apparent that our modern society is becoming more polarized.

Alternatively stated, more people are pulled into extreme right-wing and left-wing views, and become trapped in a vicious cycle of self-reinforcing feedback loops by selecting to listen to only those media sources (and engaging interpersonal relationships) which reaffirm their preconceived notions.

The motivation behind this project is to try to understand in a deeper, more meaningful way, the phenomenon of political/ideological self-segregation in today's increasingly polarized American society, by focusing on its geographic aspects.

Political Self-Segregation. Prior to deciding to do this project, I was exposed to a couple of maps, which combined previously disparate concepts and focused my attention on the result: The existence of geospatial manifestations of political/ideological self-segregation. In other words, certain neighborhoods, districts, or other such geographical divisions have disproportionately higher numbers of like-minded people than the population as a whole.

First, I discovered a map identifying the location of political contributors for the 2008 Presidential Election by political party:



Fundrace 2008: The Huffington Post (an interactive map showing political campaign donations)¹

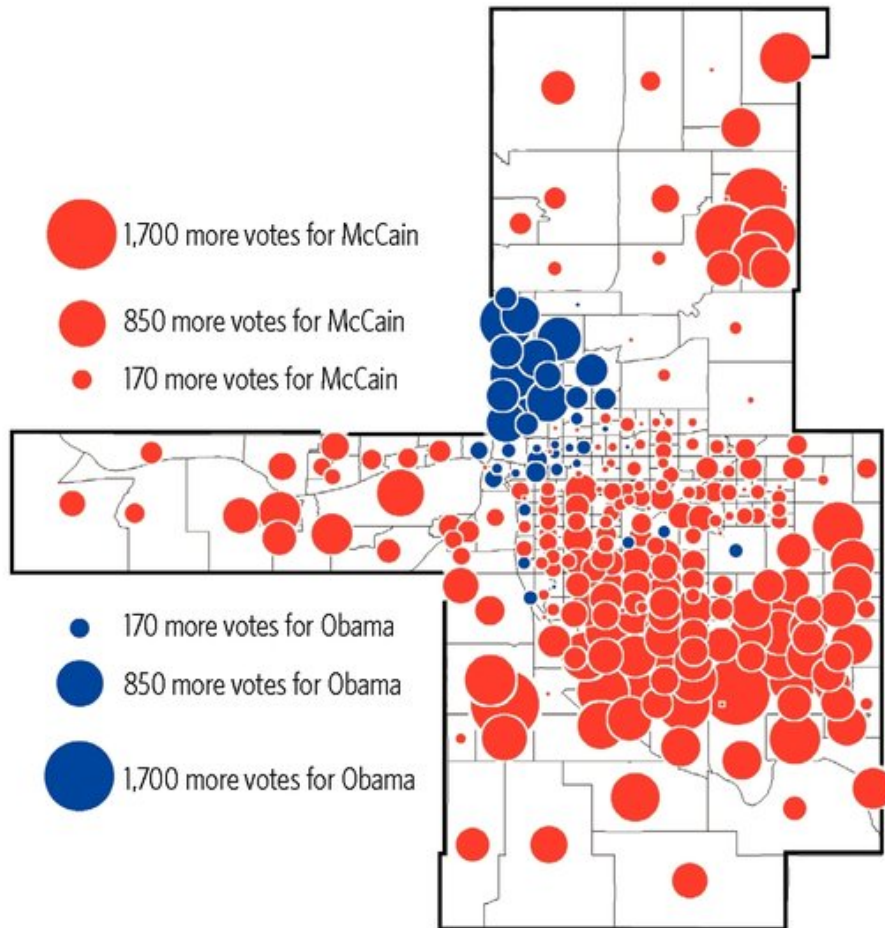
I have added the solid black line to demarcate what appears to be a clear division, paralleling I-44 through Tulsa, between areas where the preponderance of campaign donors favored Democratic

¹ http://fundrace.huffingtonpost.com/neighbors.php?g_lat=35.99578538642032&g_lon=-96.13037109375&width=22.5&height=19.036852536181947&btn=mix&zoom=8

candidates, and areas where the preponderance of campaign donors favored Republican candidates. I found it remarkable that the pattern would appear so consistent, with heavy Republican donations located toward southeast Tulsa County and heavy Democratic donations to the north and concentrated around “Midtown” Tulsa.

Secondly, the *Tulsa World* reported that, in the 2008 Presidential Election, the Tulsa County voting precinct with the highest percentage of votes for the Republican candidate John McCain was located in Bixby, the city where I work as City Planner. **86%** of voters in Precinct # 400,² polling at the Bixby North Elementary School, 7701 East 121st Street S., voted for McCain over Obama:

Vote difference in Tulsa County precincts



Source: Tulsa County Election Board

Tulsa World

Tulsa World Map Showing Tulsa County Precinct Results for the 2008 Presidential Election³

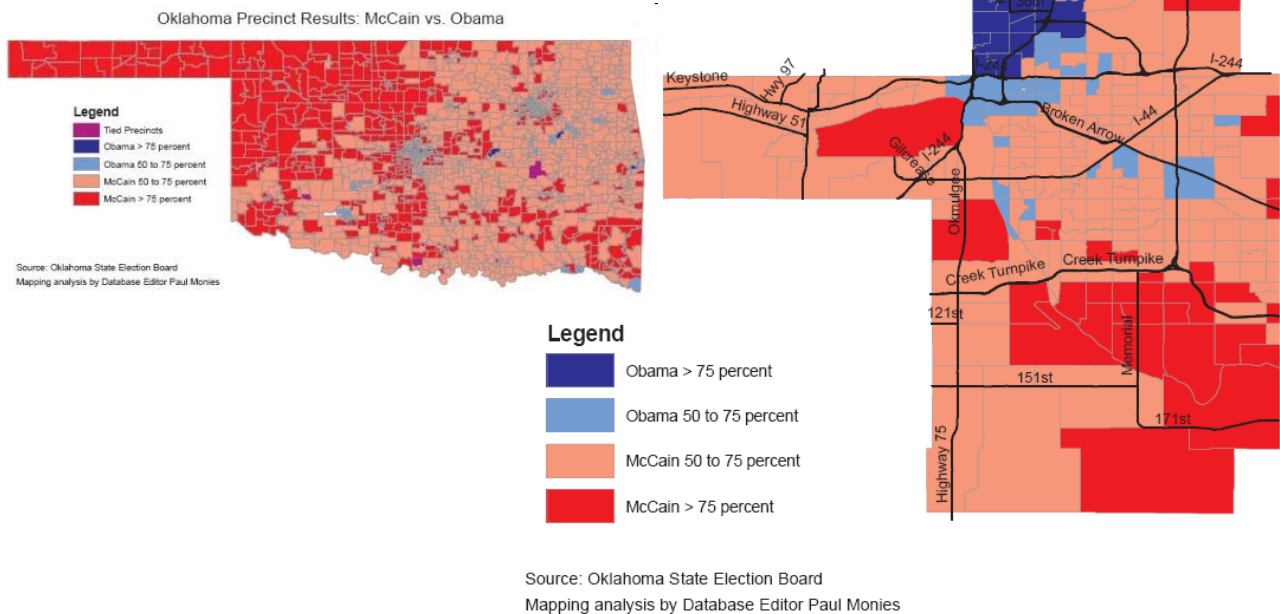
The following map shows another version of this data, as well as election results for the State of Oklahoma:

² Precinct 400 was tied with an east Tulsa precinct as the highest McCain-supporting precincts, on a percentage basis.

³ http://www.tulsaworld.com/news/article.aspx?articleID=20081109_11_A9_TonrhT676146&allcom=1&sortcom=r

NewsOK

Map Showing Tulsa County Precinct Results for the 2008 Presidential Election



NewsOK Map Showing Tulsa County Precinct Results for the 2008 Presidential Election⁴

This struck a chord with me because, having worked in Bixby for several years, it appeared to me that there is a lack of political and ideological balance, and I consider myself to be moderate on these dimensions.

I had previously presumed that the voting patterns would be more evenly distributed, with each precinct more or less reflecting the larger geography as a whole. I was surprised at the number and magnitude of “landslide” precincts in Tulsa County.

Problem Statement. Do people in Tulsa County self-segregate based on different political persuasions? In other words, do those towards the liberal and conservative ends of the political spectrum live/choose to reside in different areas with others of the same or similar persuasions?

I believe that people choose to live in metropolitan areas, and possibly smaller geographic divisions, where they feel their neighbors and friends hold opinions and values more similar to their own.

⁴ http://s3.amazonaws.com/content.newsok.com/documents/Tulsa_County_HwysAdded.pdf and <http://newsok.com/article/3324387>

Initially, I considered that Midtown Tulsa and North Tulsa were districts with a higher proportion of Democrats, and that South Tulsa and suburban areas in southeastern Tulsa County have a higher proportion of Republicans. The data appears to have validated this conceptualization, at least in part (see Elections Results maps elsewhere in this report).

My original plan for this project was an in-depth study and analysis of settlement patterns for persons/households of different political persuasions in Tulsa County, to determine if politics and ideology is a real factor in relocation decisions, and if so, to what extent. I have also initially sought to determine (1) if this political/ideological self-segregation phenomenon occurs in Tulsa County, does it occur at statistically significant levels as compared to other primary determining factors, (2) What other determining factors can be discovered, and how they can be measured, and (3) Where people of different political persuasions move from and to. After further refinement, these questions are partially incorporated in the hypotheses described later in this report.

American Mobility and Sorting. The American society, statistics bear, is quite mobile. People move residences 11.7 times in a lifetime, and much of that is from metropolitan area to metropolitan area in the same or different states. “Over 42 million Americans moved in the 1-year period between March 1992 and March 1993. This amounted to 16.8 percent of the population 1 year old and over. Most of these persons made local moves - 26 million moved from one residence to another within the same county. Nearly 8 million persons moved between counties within the same State and another nearly 7 million changed States... About two-thirds of the movers between March 1992 and March 1993 (10.5 percent of the total population 1 year old and over) moved locally (within the same county). Longer distance movers were somewhat more likely to move between counties in the same State (3.1 percent) than to move between States (2.7 percent). Most of the fluctuation in the annual moving rate reflects changes in the rate of local moving, while there is little change in the rates of longer distance moving.”⁵

Bill Bishop also offered, “Between 4 and 5 percent of the population moves each year from one county to another – 100 million Americans in the past decade.”⁶

Seizing on this mobility phenomenon, my research and hypotheses are based on the premise that, when moving, people will select dwellings, neighborhoods, and larger geographies based on their perception of the same being a “good fit,” and that part of that “fit” is related to the political orientation and/or ideological composition of the receiving communities and neighborhoods.

LITERATURE REVIEW:

The Big Sort. At the same time as I pondered conceptual intersection of political extremism and geography, I was informed of a book focused on this very topic: *The Big Sort* by Bill Bishop. In the first part of the Fall 2009 semester, I purchased the book and read it as the first source in my literature review.

The author’s primary premise is that, over the past few decades, Americans have been “sorting” themselves into communities and neighborhoods of like-minded people.

⁵ <http://www.census.gov/population/www/pop-profile/geomob.html>

⁶ The Big Sort, page 5.

I admit the irony of my own confirmation bias. In selecting this book, I sought to affirm my preconceived belief that this self-segregation phenomenon existed. I was, however, happy to see that Bishop supported his assertions with a wide range of facts and data from authoritative studies and sources.⁷

My understanding of this phenomenon, prior to reading the book, was primarily concerned with confirmation bias: People primarily seeking out sources of information which reinforce their preconceived notions.

Along this line, Bishop noted, “[L]ike-minded, homogeneous groups squelch dissent, grow more extreme in their thinking, and ignore evidence that their positions are wrong. As a result, we now live in a **giant feedback loop**, hearing our own thoughts about what’s right and wrong bounced back to us by the television shows we watch, the newspapers and books we read, the blogs we visit online, the sermons we hear, and the neighborhoods we live in... We have built a country where **everyone can choose the neighborhood** (and church and news shows) **more compatible with his or her lifestyle and beliefs**. And we are living with the consequences of this segregation by way of life: pockets of like-minded citizens that become so ideologically inbred that we don’t know, can’t understand, and can barely conceive of “those people” who live just a few miles away.”⁸ (emphasis added).

As an illustration of confirmation bias manifested in selecting media sources, Bishop referenced an experiment from Stanford University professor Shanto Iyengar and Washington Post reporter Richard Mortin, “When reading the same MSNBC news article labeled Fox News, CNN, NPR, and BBC, “**Having a Fox label on a story tripled the hits from Republican readers**. Meanwhile, the chances that a Republican would pick a story labeled NPR or CNN were **only one in ten**.”⁹ (emphasis added).

The unnumbered pages between pages viii and 1 of the book provided side-by-side maps showing “Competitive Counties” and “Landslide Counties” in the 1976 and 2004 Presidential Elections (the images are not reproduced here due to copyrights). Bishop defined “Competitive Counties” as those in which the victor won by a margin of less than 20%, and “Landslide Counties” as those with a margin over 20%. In 1976, just 26% of voters lived in landslide counties. In 2004, 48.3% of voters lived in landslide counties.

A modified version of the following graph, found on page 247 of the book, was the most salient image of the polarization in my memory:

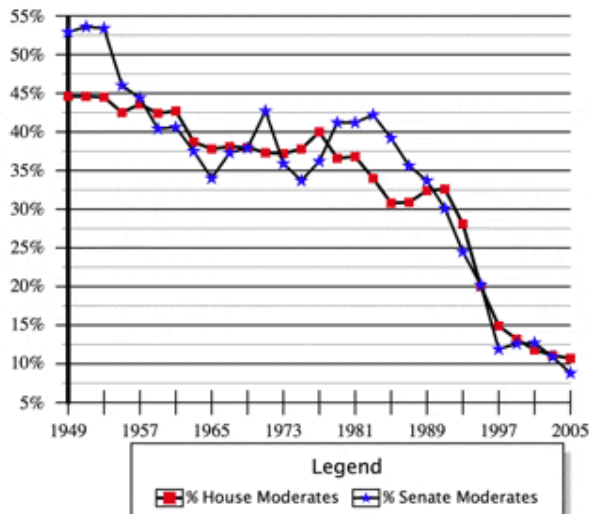
⁷ The Big Sort, pages 5 through 15.

⁸ The Big Sort, pages 39 and 40.

⁹ The Big Sort, page 74.

The Disappearing Middle

The Percentage of Moderates Has Been Dropping In House & Senate



(Chart by Keith Poole, University of California, San Diego)

Source: <http://www.nascio.org/events/2009annual/documents/NASCIO-Bishop.pdf>

It indicates that the trend in the electorate is reflected in the elected representatives.

Bishop allocated a substantial part of his book to advocating for the intentional mixing of diverse populations. He wrote, “Mixed company **moderates**; like-minded company **polarizes**. Heterogeneous communities restrain group excesses; homogeneous communities march toward the extremes,” and “[E]xposure to a wide array of views increases tolerance.”¹⁰ (emphasis added).

Bishop called for more communication between divergent ideologues, remarking, “[A]s communication between members of the parties diminishes, the two sides come to see each other as more extreme or radical.”¹¹

Further, Bishop appealed to higher authorities: (Paraphrasing Madison), “Insulation from different ideas was a danger to democracy. Isolated groups were seedbeds of extremism.” “The federalists believed that the best antidote to factions was to see that communities weren’t cut off from new and sometimes conflicting ideas. And the best hedge against extremism was the constant mixture of opposing opinion,” and also offered, “Prejudice resulted from ignorance and ignorance was the result of a lack of contact... It was a way of thinking so prevalent at the time that it became part of the reasoning used by the U.S. Supreme Court to desegregate public schools in 1954.”¹²

An interesting perspective was offered in viewing the polarization phenomenon through the lens of religion. Bishop related the history of the disappearing middle in American cultural life, and termed the dividing force **Private Protestantism vs. Public Protestantism**. Bishop related a quote from former University of Chicago Divinity School dean Martin Marty, who described the phenomenon

¹⁰ *The Big Sort*, pages 68 and 74, respectively.

¹¹ *The Big Sort*, page 73.

¹² *The Big Sort*, pages 71 and 282, respectively.

as a “collapse of the middle’ in American church life,” and stated “[S]urvivors... were polarized into right-wing churches...’ and ‘secular humanist culture.’”¹³ (emphasis added).

Most alarming, Bishop observed, “People are changing their minds to align with their parties’ positions.”¹⁴

Three Kinds of “Conservatism” and Measures of Ideology. My literature review included several social science related academic studies published in peer-reviewed journals.

The article which most thoroughly informed my understanding of “conservatism” was Karen Stenner’s “Three Kinds of Conservatism.” Stenner described the three (3) traditional elements of what Americans commonly refer to as “conservatism,” which she described as “political conservatism. The three (3) elements were:

- Authoritarianism
- Laissez-Faire [Economic] Conservatism
- Status Quo Conservatism

Stenner observed how somewhat incompatible some of the elements were with each other, and how “political conservatives,” as most commonly associated with the American Republican Party, could be parsed on various issues into different strands. For example, heavily-Authoritarian members of the electorate may advocate for changing laws to mandate certain things based on moral values, but the more status quo elements of the “conservative” electorate may resist change, preferring instead that things be left alone.

Also informing my understanding of ideology were “Dynamic Indicators of Self-Perceived Conservatism” by Alan S. Miller, “Evidence for the construct validity and heritability of the Wilson-Patterson conservatism scale: a reared-apart twins study of social attitudes” by Thomas J. Bouchard Jr. et al., “Are All Conservatives Alike? A Study of the Psychological Correlates of Cultural and Economic Conservatism” by Michael Crowson of the University of Oklahoma, “Personality and Emotional Response Strategic and Tactical Responses to Changing Political Circumstances” by Jennifer Wolak and George E. Marcus, and “Which Qualities Should Children Be Encouraged to Learn at Home?” by Milada Rabušicová and Ladislav Rabušic.

These sources, along with the other books and articles I incorporated into my literature review, are listed at the end of this report following Bibliography.

Through my literature review, I learned that “liberalism” is not necessarily the inverse of “conservatism,” and that “progressivism” may be a better counterpart. I also learned that “liberalism” may not adequately be defined as the absence of conservatism. However, adequate time was not available to launch into a separate study of “liberalism” or “progressivism,” or find adequate measures for them. Therefore, for purposes of this study, I have attempted to target “The conventional American conceptualization of ‘Political Conservatism,’” and will define “Political Liberalism” as the absence of “Political Conservatism.”

¹³ The Big Sort, page 169.

¹⁴ The Big Sort, page 231.

HYPOTHESES:

Empirical data suggests that political self-segregation, or “The Big Sort,” occurs at the national level and is evident at the county level.¹⁵ Pursuant to the questions and postulations described in the introduction, I have identified the following hypotheses for this project:

Hypothesis 1: Tulsa County is segregated based on different political and ideological persuasions.

Hypothesis 2: Those towards the liberal and conservative ends of the ideological spectrum live in areas different from each other, and with others of the same or similar persuasions.

Hypothesis 3: This choice is due, in measureable part, because of those distinctions.

Hypothesis 4: Urban density in Tulsa County, as measured by housing types and urban density patterns, correlate to political affiliations and ideological persuasions, and thus can be used to predict political affiliation and ideological persuasion.

VOTER REGISTRATION AND ELECTION DATA:

I began my study by collecting Tulsa County Election Board data, including various election results and political party registrations by precinct. Unfortunately, the Election Board reported that the data could not be obtained in any electronic format, and so provided the data on computer printouts. I retyped all of the precinct data into a spreadsheet, and summed the results to match with the Election Board’s total counts to ensure accuracy.

I obtained the following data:

- Party Registrations as of 10/03/2009
- 2002 National Election Straight Party Ticket election results
- 2002 US Senator Election
- 2002 US Representative Election
- 2004 Presidential Election
- 2006 US Representative Election
- 2008 Presidential Election

I later used this data as the basis for correlating with survey data and urban metrics.

SURVEY DEVELOPMENT AND METHODOLOGY:

Survey Development. I developed a survey asking questions which would help test the hypotheses. The questions were intended to collect data pertaining to ideological persuasion, political party affiliation, housing types, and attitudes toward relocation, and included socio-demographic questions.

¹⁵ The Big Sort, pages 5-15.

The first set of questions included asking how long the respondents have lived at the residence, and if 15 years or less, a series of followup questions asking why they selected this residence. Some of the responses are anecdotally informative to this project.

The second set of questions asked the respondent to self-identify their political affiliation (“Do you consider yourself to be” and “Are you registered [to vote] as”), ideological persuasion (fiscal and social ideology), and how they perceived the political composition of their neighborhood.

The third set of questions were a series of measures of political conservatism based on Stenner’s “Three Kinds of Conservatism”: (1) Authoritarianism, (2) Laissez-Faire [Economic] Conservatism, and (3) Status Quo Conservatism.

The fourth set of questions asked if the respondent planned to move within the next five (5) years. If they stated that they did or may, I asked further questions including, “Where do you plan to move to?” and whether they considered the people in that location to be “more similar to you than the people in your current neighborhood.”

The fifth set of questions asked for socio-demographic characteristics of the respondent and their household: age, gender, race, Hispanic/Latino ethnicity, education, religiosity, and household income.

The last question was an open-ended question allowing the respondents to share anything they wished regarding any of the topics covered in the survey. While the responses were not quantifiable, several of them did help explain the background and reasoning for their political affiliation and ideological persuasion and were helpful on an anecdotal level. A summary of some of the more relevant comments are listed in Appendix A.

Measures of Ideology. Although much of the data used in this study is based on political party affiliation, my true interest is in ideological persuasion. In order to maximize the use of available political data, I have attempted to establish that Republican Party affiliation is a good proxy for Conservatism and Democratic Party affiliation is a good proxy for Liberalism. If a strong enough correlation can be established, the precinct data showing Republican and Democratic party registration and voting from recent past elections could be used to identify levels of Conservatism and Liberalism in each precinct.

According to Professors Shawn Schaefer and Chan Hellman and some of the researched literature, including “Three Kinds of Conservatism” by Karen Stenner, self-identified ideological placement responses are not the most reliable data. Measures should be used to confirm that those who “consider themselves to be” conservative or liberal (or otherwise) are in fact such as per standard measures for the same ideologies, as used in academic and scientific studies, and to what degree they hold such properties.

Therefore, I developed and incorporated into the survey standard measures for the three (3) identified elements of “political conservatism,” as per Stenner, to support the survey respondents’ self-identified ideology responses. The results for the correlation between self-identified and measured responses, and between these and political party identification, are described later in this report.

For the Authoritarianism measures, four (4) questions were asked regarding which values were more important for children to have. Each of the four (4) questions paired an Authoritarian response (“respect for elders,” “good manners,” “obedience,” and “being well behaved”) with a non-Authoritarian response (“independence,” “curiosity,” “self-reliance,” and “being considerate,” respectively).¹⁶

Using the same scoring schedule as Stenner used, Authoritarian responses were attributed a value of 1, and the Non-Authoritarian responses were attributed a 0 value. Those who responded “both,” “neither,” or who refused the question were attributed a value of 0.5. All four (4) responses were summed to determine the respondent’s measure of Authoritarianism.

For the Laissez-Faire [Economic] Conservatism measure, respondents were asked to rate, on a 1 to 10 scale, how much they agreed with two (2) statements: “We need larger income differences as incentives,” and “Incomes should be made more equal.”¹⁷ The responses for the first statement (a conservative statement by this measure) were scored positively and the second (a more liberal statement by this measure) were scored negatively. The results were summed to create the respondent’s score on this measure.

For the Status Quo Conservatism measure, respondents were asked to rate how much they agreed with four (4) statements: “One should be cautious about making major changes,” “You will never achieve much in life unless you act boldly,” “Ideas that have stood the test of time are generally best,” and “New ideas are generally better than old ones.”¹⁸ The responses for the first and third statements (conservative statements by this measure) were scored positively and the second and fourth (more liberal statements by this measure) were scored negatively. The results were summed to create the respondent’s score on this measure.

For the Laissez-Faire and the Status Quo Conservatism measures, scores that were skipped were given a neutral (5.5 score) value.

Survey Sample and Administration Methodology. I randomly selected Tulsa County residents using the residential telephone listings in the latest published *Yellow Book*, a Tulsa Metropolitan Area phone book, which have physical addresses listed.

There are 572 pages of residential listings. Each column contains 108 lines, and so the maximum per page (4 columns total) is 432. Anticipating about a 10% response rate, I randomly selected two (2) entries per page. I used a plug-in, “Random Number Generator for Excel,” to generate random numbers, using as variables all integers between 1 and 432, and selected the phone number and address pair corresponding with the randomized integer. The total survey call list included 1,146 telephone number and address pairs.

Randomly selected telephone listings which do not have an address listed or are not located within Tulsa County were rejected, and the next randomized entry was selected instead.

¹⁶ Personality and Emotional Response Strategic and Tactical Responses to Changing Political Circumstances page 193

¹⁷ Does Electoral Democracy Boost Economic Equality? page 27

¹⁸ Three Kinds of “Conservatism” page 148

I conducted the survey over a month and a half period between February 07, 2010 and March 23, 2010. I generally placed calls between 6:00 PM to 8:00 PM weekdays, 9:00 AM to 8:30 PM on Saturdays, and 1:00 PM to 8:00 PM on Sundays.

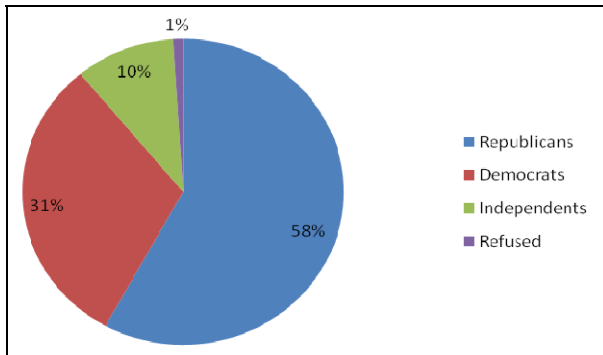
SURVEY RESULTS SUMMARY:

Survey Sample General Characteristics.

- Survey total survey call list size: 1,146
- Survey sample size:
 - 100 completed surveys
 - 103 partially-completed surveys

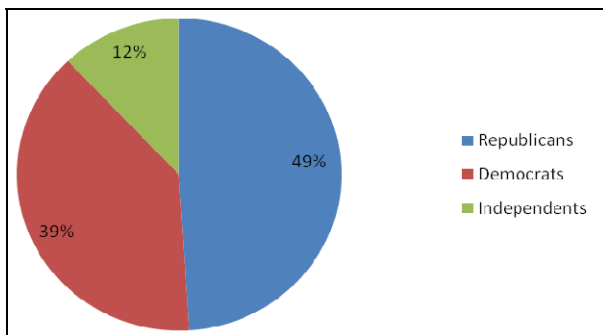
- 8.7% completed/partially completed the survey
- 100/103 (97%) of respondents are registered to vote

- 58% (58 respondents) are registered as a Republican
- 31% (31 respondents) are registered as a Democrat
- 10% (10 respondents) are registered as Independent
- 1% (1 respondent) refused

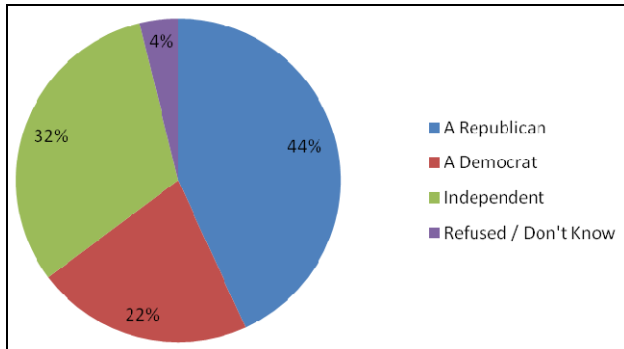


Compare to total registered voters per the Tulsa County Election Board data dated 10/03/2009:

- 335,777 Registered Voters:
 - 164,899 Registered Republicans (49%)
 - 131,886 Registered Democrats (39%)
 - 38,992 Registered Independents (12%)



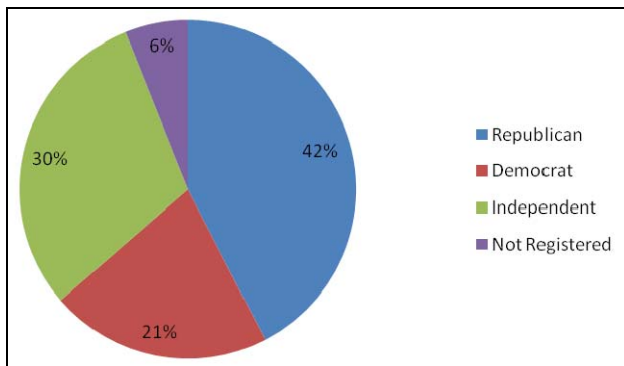
- 43% (44 respondents) consider themselves “a Republican”
- 21% (22 respondents) consider themselves “a Democrat”
- 32% (33 respondents) consider themselves “Independent”
- 3.9% (4 respondents) don’t know / refused



20/22 (91%) respondents considering themselves “a Democrat” are registered as a Democrat (1 registered as a Republican and one is no longer registered)

41/44 (93%) respondents considering themselves “a Republican” are registered as a Republican (3 registered as a Democrat)

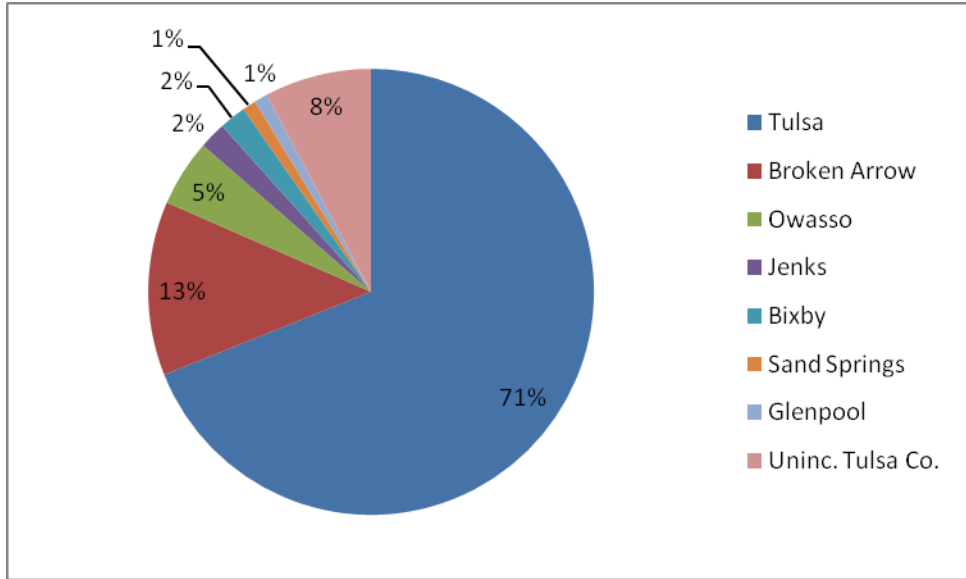
10/33 (30%) respondents considering themselves “Independent” are registered as an Independent
 7/33 (21%) respondents considering themselves “Independent” are registered as a Democrat
 14/33 (42%) respondents considering themselves “Independent” are registered as a Republican
 2/33 (6%) respondents considering themselves “Independent” are not registered to vote



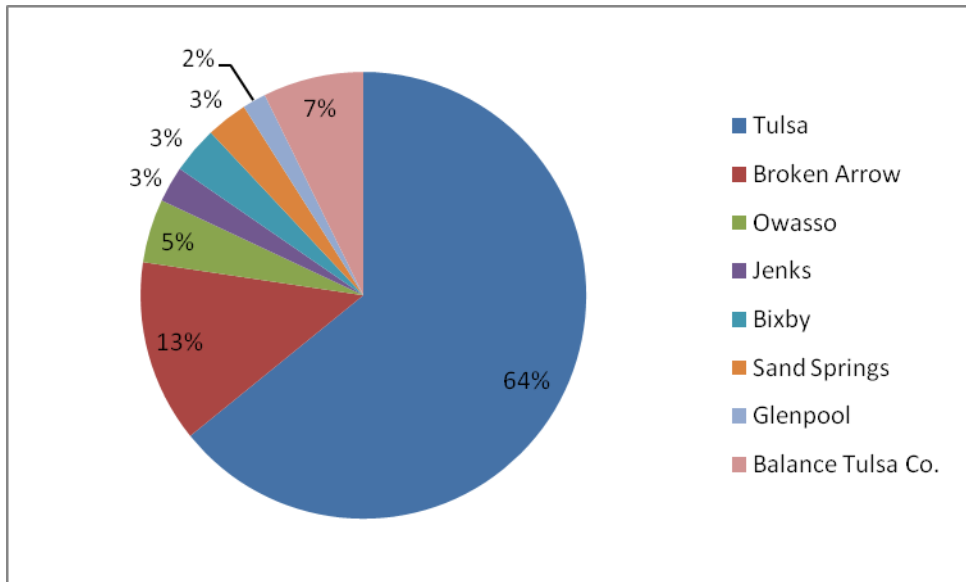
Of the 4 respondents that don’t know / refused the “do you consider yourself to be” question, 1 is registered as a Democrat, 2 as a Republican, and the 4th was registered to vote but didn’t know / refused to state how so.

- The respondents were from the following municipal jurisdictions within Tulsa County:
 - Tulsa 71
 - Broken Arrow: 13
 - Owasso: 5
 - Jenks: 2
 - Bixby: 2
 - Sand Springs: 1

- Glenpool 1
- Uninc. Tulsa County in Owasso Fenceline: 3
- Uninc. Tulsa County in Jenks Fenceline: 1
- Uninc. Tulsa County in Sand Springs Fenceline: 1
- Uninc. Tulsa County in Glenpool Fenceline (Mounds address): 1
- Uninc. Tulsa County not in any Fenceline (Sperry address): 1
- Uninc. Tulsa County not in any Fenceline (Tulsa address): 1



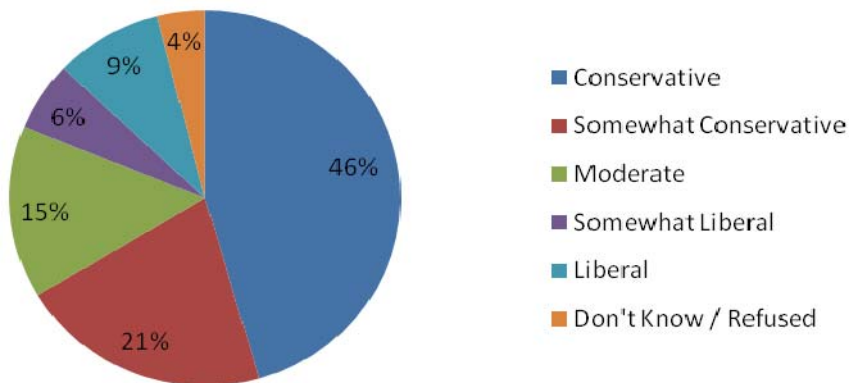
The survey respondents compared favorably to the composition of Tulsa County by municipal jurisdiction, resulting in a fairly representative sample by this measure. The respondent data are compared to the most current U.S. Census Bureau population estimates in the following table:



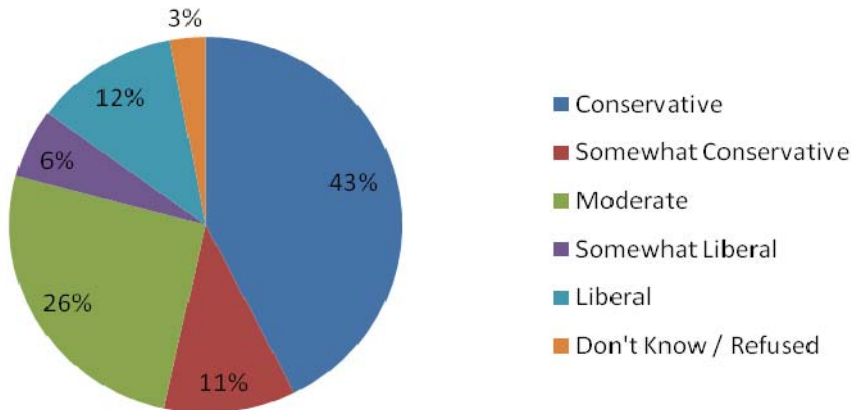
July 1, 2008 US Census Bureau estimates:	Number:	Percent:	Survey Percent:
■ Tulsa County total population:	591,982	100%	N/A
• Tulsa (part):	379,486	64.1%	71%
• Broken Arrow (part):	78,195	13.2%	13%
• Owasso (part):	27,213	4.6%	5%
• Jenks:	15,590	2.6%	2%
• Bixby (part):	19,915	3.4%	2%
• Sand Springs (part):	18,051	3.0%	1%
• Glenpool:	9,915	1.7%	1%
• Collinsville (part):	5,018	0.8%	0%
• Skiatook (part):	2,333	0.4%	0%
• Sperry (part):	1,032	0.2%	0%
• Liberty (part):	93	0.0%	0%
• Sapulpa (part):	69	0.0%	0%
• Mannford (part):	31	0.0%	0%
• Lotsee:	11	0.0%	0%
• Balance of Tulsa County:	35,031	5.9%	8%

For purposes of this analysis, I sometimes use the term “Tulsans” to describe respondents with addresses within the City Limits of Tulsa, and “Suburbanites” for all other Tulsa County respondents.

- Self-Identified Fiscal Ideology:
 - 46% (47 respondents) conservative
 - 21% (22 respondents) somewhat conservative
 - 15% (15 respondents) Moderate
 - 6% (6 respondents) somewhat liberal
 - 9% (9 respondents) liberal
 - 4% (4 respondents) Don’t know / refused

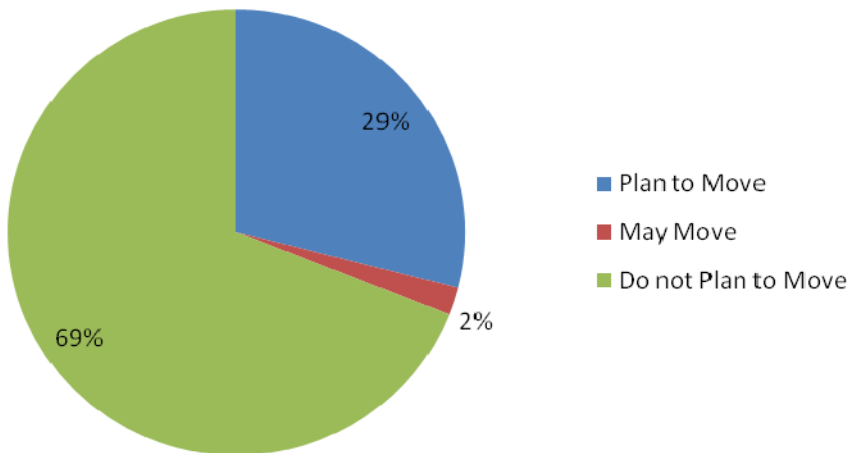


- Self-Identified Social Ideology:
 - 43% (44 respondents) conservative
 - 11% (11 respondents) somewhat conservative
 - 26% (27 respondents) Moderate
 - 6% (6 respondents) somewhat liberal
 - 12% (12 respondents) liberal
 - 3% (3 respondents) Don't know / refused



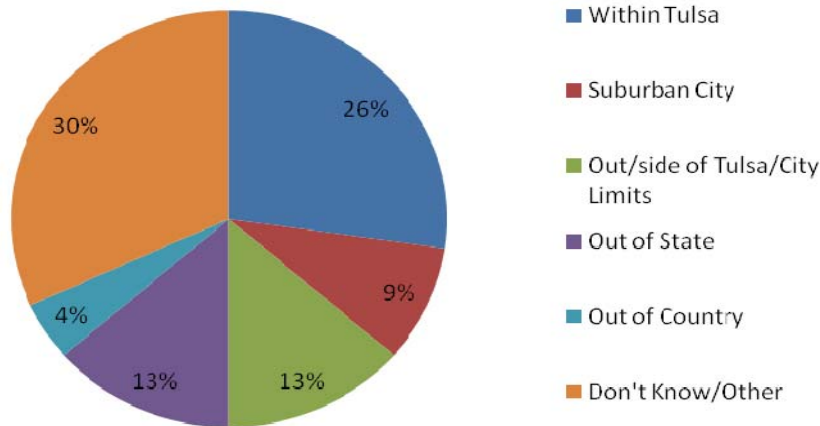
Plans to Move in 5 Years:

- 31/100 (31%) of respondents plan to or may move in 5 years.
- 29/100 (29%) of respondents plan to move within 5 years
- 2/100 (2%) of respondents may move within 5 years
- 69/100 (69%) of respondents do not plan to move within 5 years

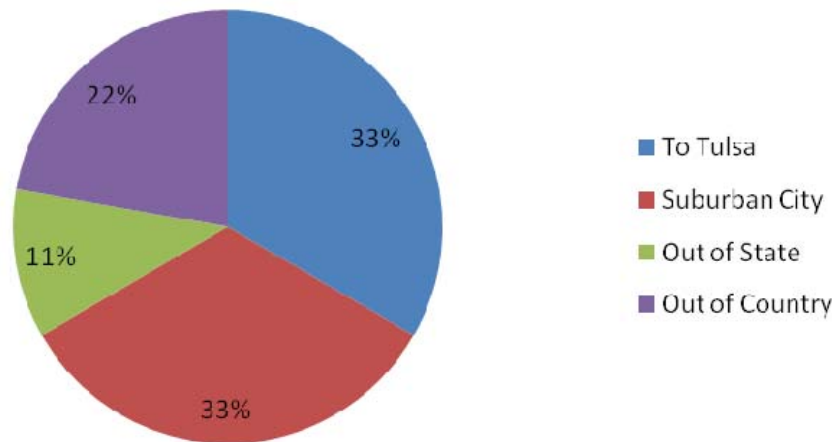


- 23/68 (34%) of Tulsans plan to (or may) move within 5 years
 - 9/23 (39%) of those believe that the people in [that location] are more similar to them than the people in their current neighborhood
 - 9/23 (39%) of those do not believe that
 - 5/23 (22%) had no answer or were N/A

- Of those 23, they stated they planned to move to: (More Similar than current neigh.?)
 - 6 plan to move to another location within Tulsa (3 yes 3 no)
 - 2 plan to move to a suburban city (Broken Arrow) (1 yes 1 no)
 - 3 plan to move “out/side of Tulsa” or “out of city limits” (3 yes)
 - 3 plan to move out of state but within the U.S. [“Out of state” (1 yes 1 no) and Colorado (1 no)]
 - 1 plans to move out of the country (Mexico, 1 no)
 - 7 don’t know, declined to state, or gave answers which do not fit into one of the above categories (1 yes, 2 no, 4 no answer/NA)



- 9/32 (28%) of suburbanites plan to (or may) move within 5 years
 - 3/9 (33%) of those believe that the people in [that location] are more similar to them than the people in their current neighborhood
 - 5/9 (56%) of those do not believe that
 - 1/9 (11%) did not know
- Of those, they stated they planned to move to: (More Similar than current neigh.?)
 - 3 plan to move to Tulsa (1 yes, 1 no, 1 don’t know)
 - 3 plan to move to or within a suburban city [Bixby (1 yes 1 no) Broken Arrow (1 no)]
 - 1 plans to move out of state but within the U.S. (Houston, 1 no)
 - 2 plan to move out of the country (Costa Rica 1 yes 1 no)



- Of the 5 Tulsans who plan to move to a suburban city or out of the City of Tulsa:
 - 5 consider themselves both fiscally and socially conservative/somewhat conservative
 - 3 consider themselves a Republican and are registered as Republican
 - 1 considers themselves Independent and is registered as a Republican
 - 1 considers themselves a Democrat (not registered to vote)

- Of the 3 suburbanites who plan to move to Tulsa:
 - 1 considers themselves fiscally conservative/somewhat conservative
 - 1 considers themselves fiscally moderate
 - 1 considers themselves fiscally liberal/somewhat liberal

 - 1 considers themselves socially conservative/somewhat conservative
 - 2 consider themselves socially liberal/somewhat liberal

 - 1 considers themselves a Republican and is registered as a Republican
 - 2 consider themselves a Democrat and are registered as a Democrat

Although the numbers above, for the most part, are too small to infer characteristics attributable to their respective total populations, I did find it interesting that all five (5) Tulsans who planned to or may move to a suburban community considered themselves both fiscally and socially conservative/somewhat conservative, and four (4) of those were registered as a Republican.

The inverse also appeared to be true. Those Suburbanites who planned to move to Tulsa appeared to be somewhat more likely to describe themselves as liberal or somewhat liberal and to be registered as a Democrat.

I also found it interesting that two (2) Suburbanite respondents mentioned they would consider moving to Costa Rica. I suspect this could have had something to do with the fact that the survey was conducted during an intensive Federal “Health Care Reform Bill” debate, and political commentator Rush Limbaugh somewhat famously remarked that he would move to Costa Rica if the bill passed.¹⁹ I suspect the respondents stated Costa Rica facetiously, as a political statement in the context of a politically-oriented survey, and were not seriously considering moving there.

It did not appear that there was a strong relationship to where people planned to move and their belief that the people in that location would be more similar to them than the people in their current neighborhood.

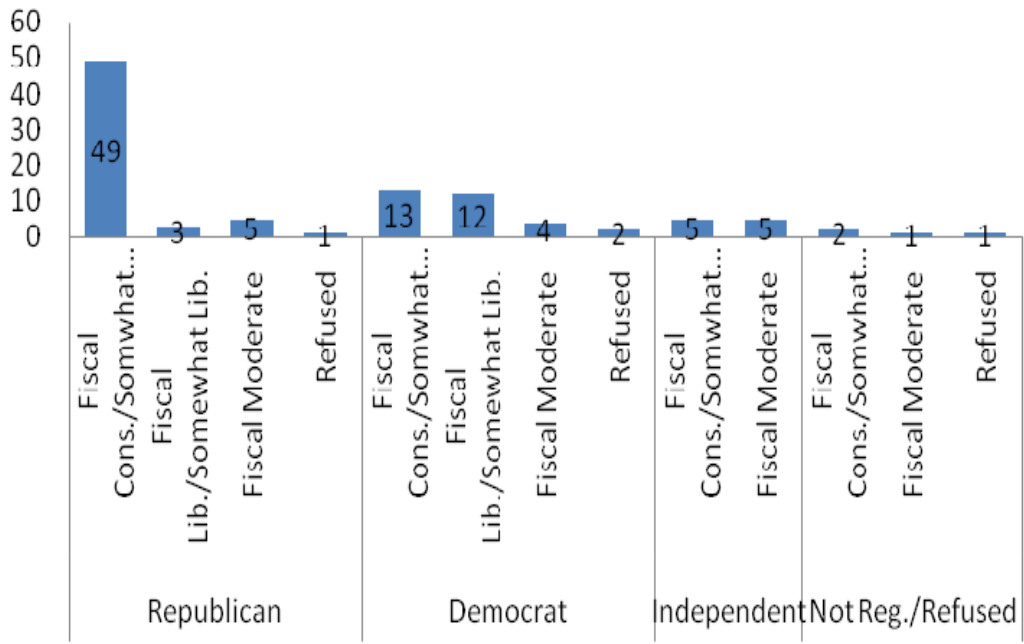
If the survey sample size were larger, it would be possible to measure for a correlation between political affiliation and ideological persuasion and moving patterns between the City of Tulsa and suburban communities.

Due to relative importance, some of the response summaries of more limited data sets have been moved to Appendix A.

¹⁹ http://www.rushlimbaugh.com/home/daily/site_030910/content/01125107.guest.html

Political Registration and Fiscal Ideology:

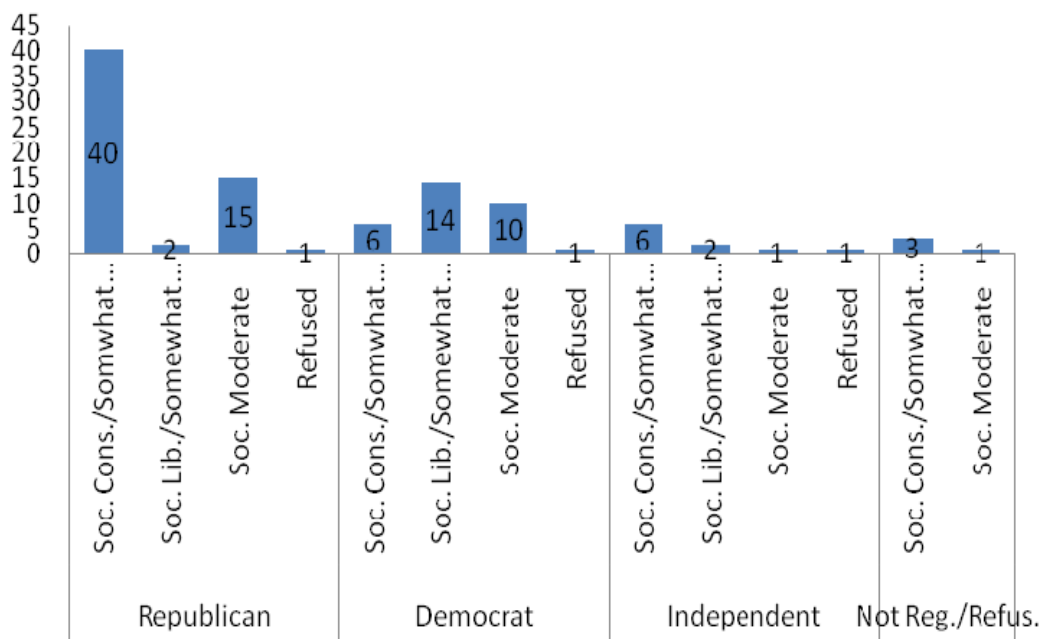
- 58 respondents are registered as a Republican
 - 49 (84%) are fiscally “conservative”/“somewhat conservative”
 - 3 (5%) are fiscally “liberal”/“somewhat liberal”
 - 5 (9%) are fiscally “moderate”
 - 1 (2%) refused
- 31 respondents are registered as a Democrat
 - 13 (42%) are fiscally “conservative”/“somewhat conservative”
 - 12 (39%) are fiscally “liberal”/“somewhat liberal”
 - 4 (13%) are fiscally “moderate”
 - 2 (6%) don’t know / refused
- 10 respondents are registered as Independent
 - 5 (50%) are fiscally “conservative”/“somewhat conservative”
 - 5 (50%) are fiscally “moderate”
- 1 respondent refused
 - 1 (100%) fiscally “moderate”
- 3 are not registered to vote
 - 2 (67%) are fiscally “conservative”/“somewhat conservative”
 - 1 (33%) refused



Political Registration and Social Ideology:

- 58 respondents are registered as a Republican
 - 40 (69%) are socially “conservative”/“somewhat conservative”
 - 2 (3%) are socially “liberal”/“somewhat liberal”
 - 15 (26%) are socially “moderate”
 - 1 (3%) refused

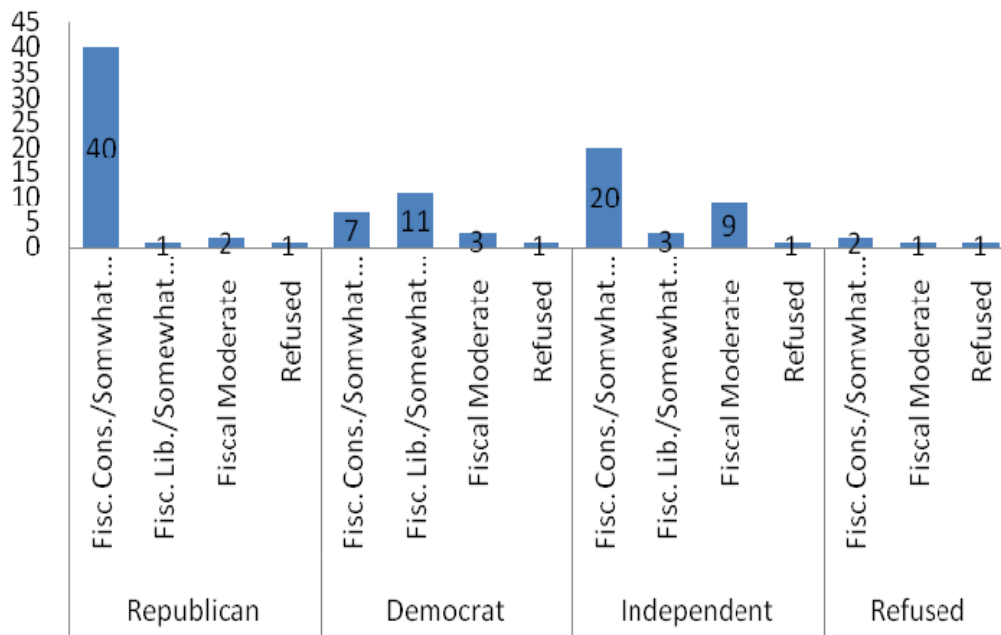
- 31 respondents are registered as a Democrat
 - 6 (19%) are socially “conservative”/“somewhat conservative”
 - 14 (45%) are socially “liberal”/“somewhat liberal”
 - 10 (32%) are socially “moderate”
 - 1 (3%) refused
- 10 respondents are registered as Independent
 - 6 (60%) are socially “conservative”/“somewhat conservative”
 - 2 (20%) are socially “liberal”/“somewhat liberal”
 - 1 (10%) are socially “moderate”
 - 1 (10%) refused
- 1 respondent refused
 - 1 (100%) socially “moderate”
- 3 are not registered to vote
 - 3 (100%) are socially “conservative”/“somewhat conservative”



Self-Identified Political Party and Fiscal Ideology:

- 44 respondents consider themselves “a Republican”
 - 40 (91%) are fiscally “conservative”/“somewhat conservative”
 - 1 (2%) are fiscally “liberal”
 - 2 (5%) are fiscally “moderate”
 - 1 (2%) refused
- 22 respondents consider themselves “a Democrat”
 - 11 (50%) are fiscally “liberal”/“somewhat liberal”
 - 7 (32%) are fiscally “conservative”/“somewhat conservative”
 - 3 (14%) are fiscally “moderate”
 - 1 (5%) don’t know / refused

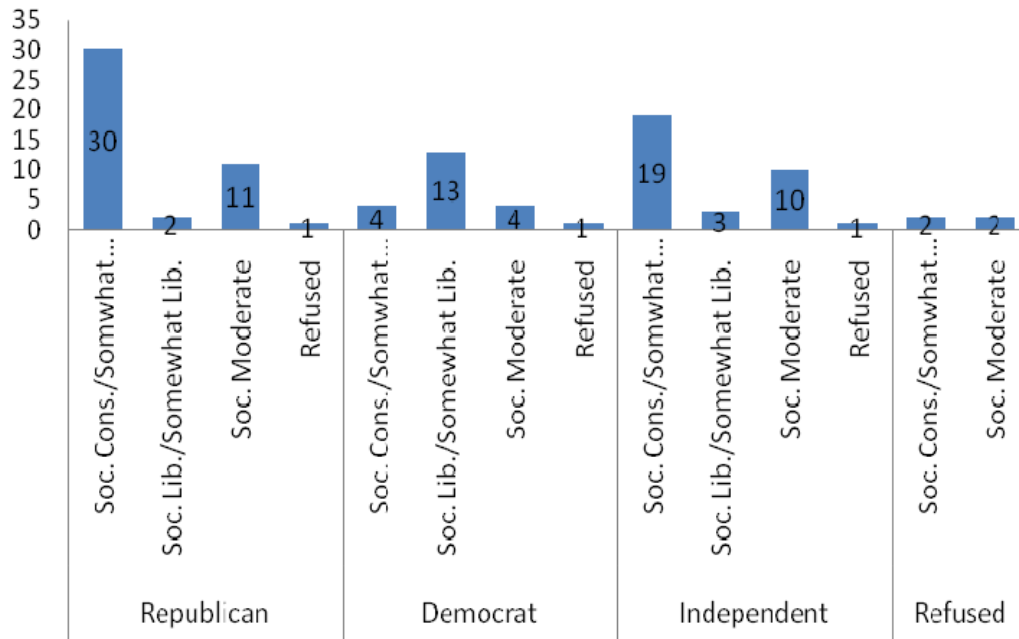
- 33 respondents consider themselves “Independent”
 - 20 (61%) are fiscally “conservative”/“somewhat conservative”
 - 3 (9%) are fiscally “somewhat liberal”
 - 9 (27%) are fiscally “moderate”
 - 1 (3%) refused
- 4 respondents don’t know / refused
 - 2 (50%) are fiscally conservative
 - 1 (25%) are fiscally moderate
 - 1 (25%) refused



Self-Identified Political Party and Social Ideology:

- 43% (44 respondents) consider themselves “a Republican”
 - 30 (68%) consider themselves socially “conservative”/“somewhat conservative”
 - 2 (5%) consider themselves socially “liberal”/“somewhat liberal”
 - 11 (25%) consider themselves socially “moderate”
 - 1 (2%) refused
- 21% (22 respondents) consider themselves “a Democrat”
 - 13 (59%) consider themselves socially “liberal”/“somewhat liberal”
 - 4 (18%) consider themselves socially “moderate”
 - 4 (18%) consider themselves socially “conservative”/“somewhat conservative”
 - 1 (5%) refused
- 32% (33 respondents) consider themselves “Independent”
 - 19 (58%) consider themselves socially “conservative”/“somewhat conservative”
 - 3 (9%) consider themselves socially “liberal”/“somewhat liberal”
 - 10 (30%) consider themselves socially “moderate”
 - 1 (3%) refused

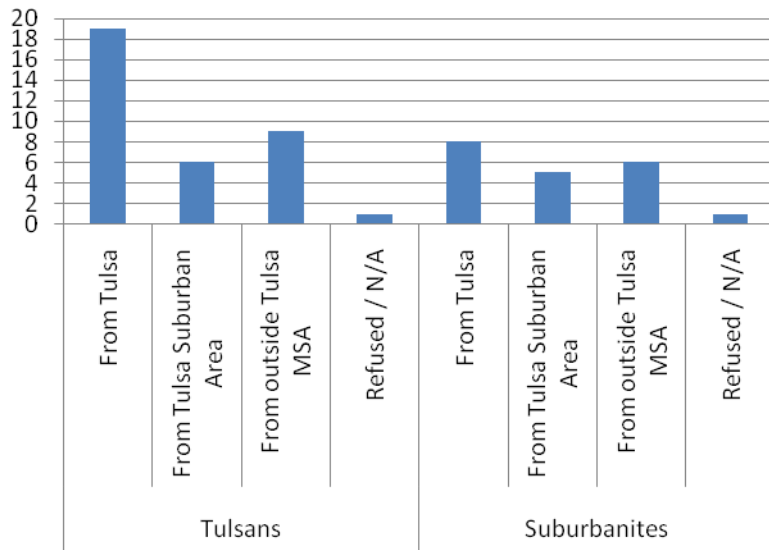
- 3.9% (4 respondents) don't know / refused
 - 2 (50%) are socially conservative
 - 2 (50%) are socially moderate



Move to This Residence:

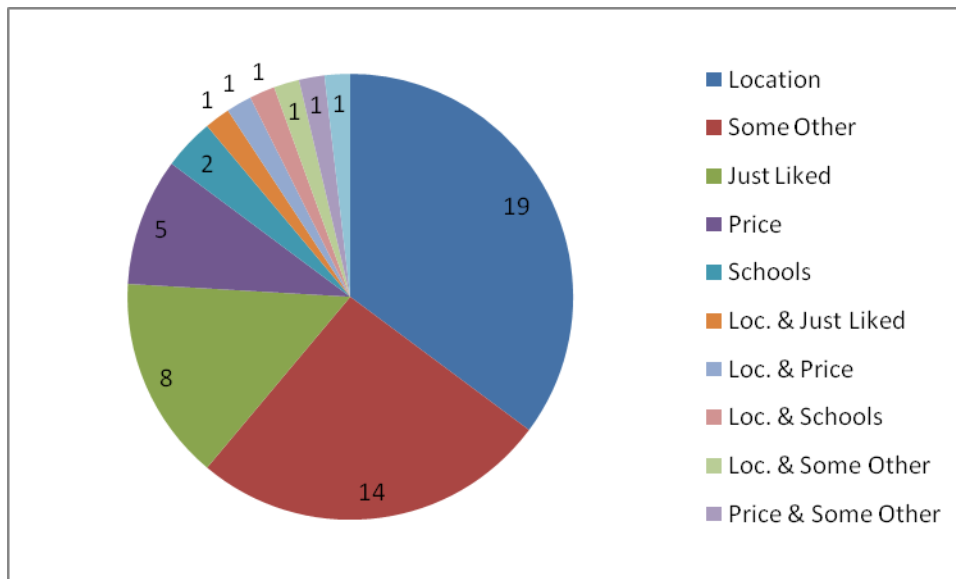
- 55/103 (53%) of respondents have lived at this residence 15 years or less
- Median Years lived at this residence: 12 years
- Mean Years lived at this residence: 16 years
- Mode Years lived at this residence: 5 (11 respondents)

- Respondents from Tulsa: 35
- Respondents from a Suburban city or outside of City Limits: 20
- Tulsans moved to this residence:
 - From another residence in Tulsa: 19
 - From a suburban area within Tulsa MSA: 6
 - From outside the Tulsa MSA: 9
 - No answer: 1
- Suburbanites moved to this residence:
 - From Tulsa: 8
 - From a suburban area within Tulsa MSA: 5
 - From outside the Tulsa MSA: 6
 - Refused: 1



■ Primary Reason for Selecting This Residence:

- Location: 19
- Some other reason: 14
- Just liked this house: 8
- Price: 5
- Schools: 2
- Location and Just Liked This House: 1
- Location and Price: 1
- Location, Price, and Schools: 1
- Location and Schools: 1
- Location and Some Other Reason: 1
- Price and Some Other Reason: 1
- Price and Schools: 1



Tulsans were more likely than Suburbanites to state or include “price” (8/1) and/or “schools” (5/0) in their response. The “price” response is consistent with my expectations, as I would expect people living in the City of Tulsa to disproportionately favor houses closer to major employment centers and focus on value (cost of dwelling and transportation), as compared to their suburbanite peers.

I was somewhat surprised to see that the “schools” response was selected by Tulsans as many times as it was. Upon closer inspection of the data, two (2) of those respondents lived in “suburban” school districts (Jenks and Union), which may help explain their responses.

Suburbanites were more likely than Tulsans to state or include “some other reason” in their response (9 suburbanites / 7 Tulsans). Those reasons specified are described later in this report.

Due to relative importance, some of the response summaries of more limited data sets have been moved to Appendix A. Also, due to the varied nature of the responses to the “moved from” and “moving to” questions, the responses are summarized in Appendix A.

Maps reflecting moving patterns, including where respondents moved from and where they plan to move to, are on the following pages.

Demographic Characteristics:

- Median Age: 58
- Average Age (approx.): 59.1
- Mode Age: 56 (7 respondents)
- Youngest respondent: 28
- Oldest respondent: “over 90”
- Next oldest respondent: 88

Compare to US Census Bureau 2006-2008 American Community Survey Estimates:

- Median Age: 35.9 years

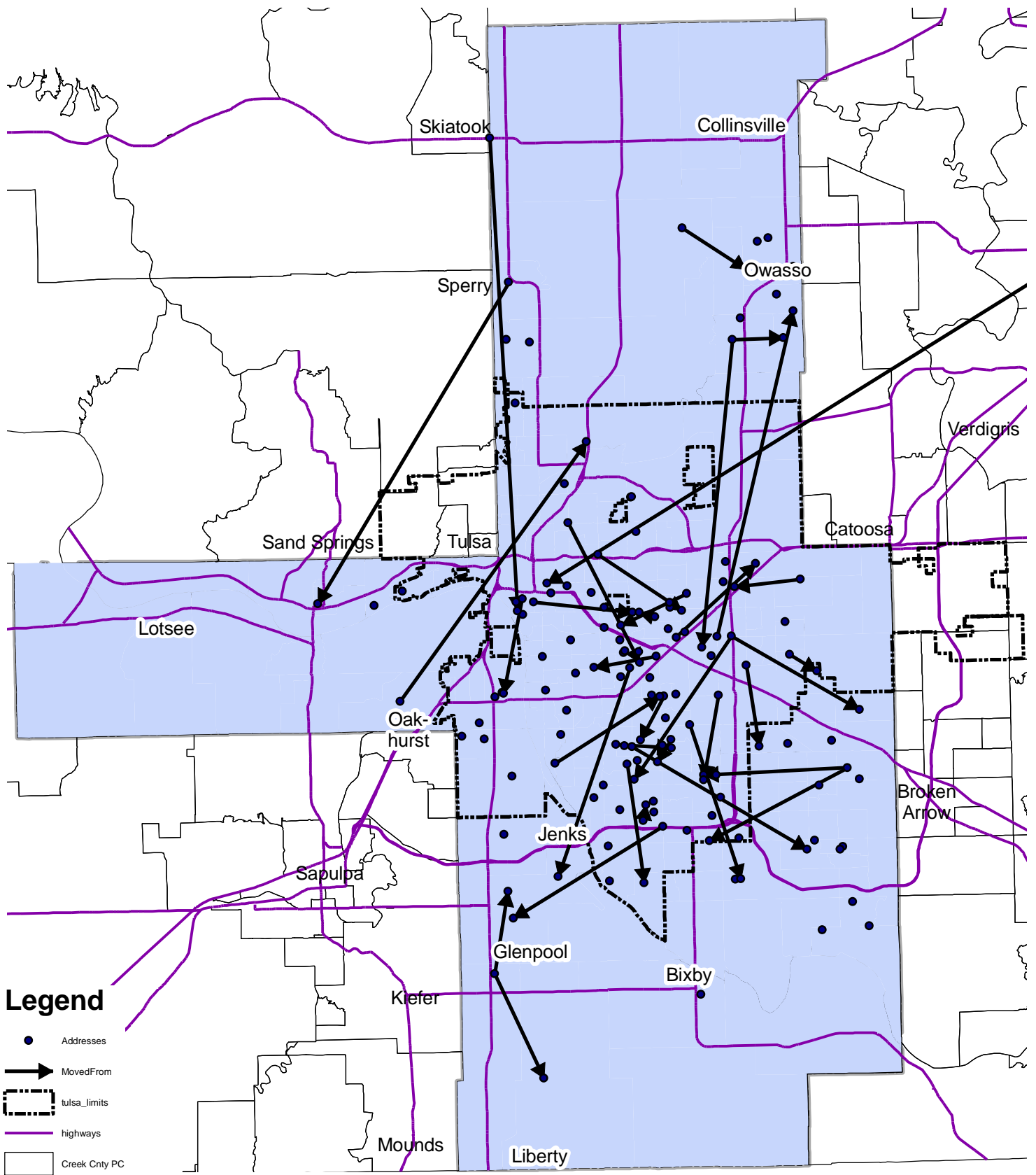
Although the median age of the sample is older than the median age for Tulsa County, this is to be expected with a landline-telephone survey. This is somewhat mitigated, considering that the survey targets, those who actively participate in political elections, are generally older than the median age of the total population at the national level. Regarding the 2008 U.S. Presidential Election, the U.S. Census Bureau stated, “In 2008, younger citizens (18-24) had the lowest voting rate (49 percent), while citizens who fell into older age groups (45-64 and 65-plus) had the highest voting rates (69 percent and 70 percent, respectively).”²⁰ (emphasis added)

- Sex:
 - 47 (47%) male
 - 53 (53%) female

Compare to US Census Bureau 2006-2008 American Community Survey Estimates:

- Males 48.9%
- Females 51.1%

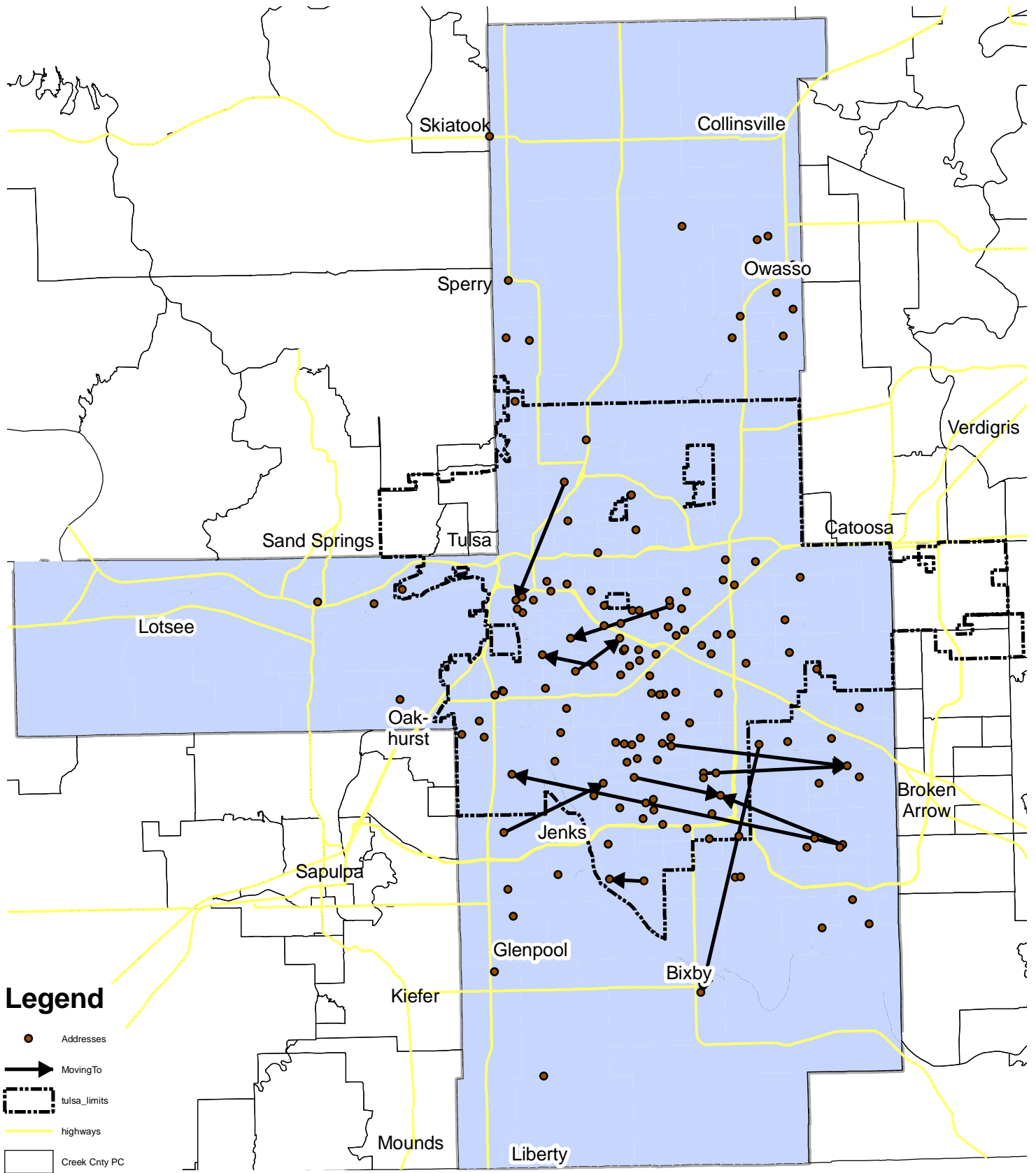
²⁰ <http://www.census.gov/Press-Release/www/releases/archives/voting/013995.html>



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Respondents Reported Moving From Other Areas in Tulsa County





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Respondents Reported Planning to Move To Other Areas in Tulsa County



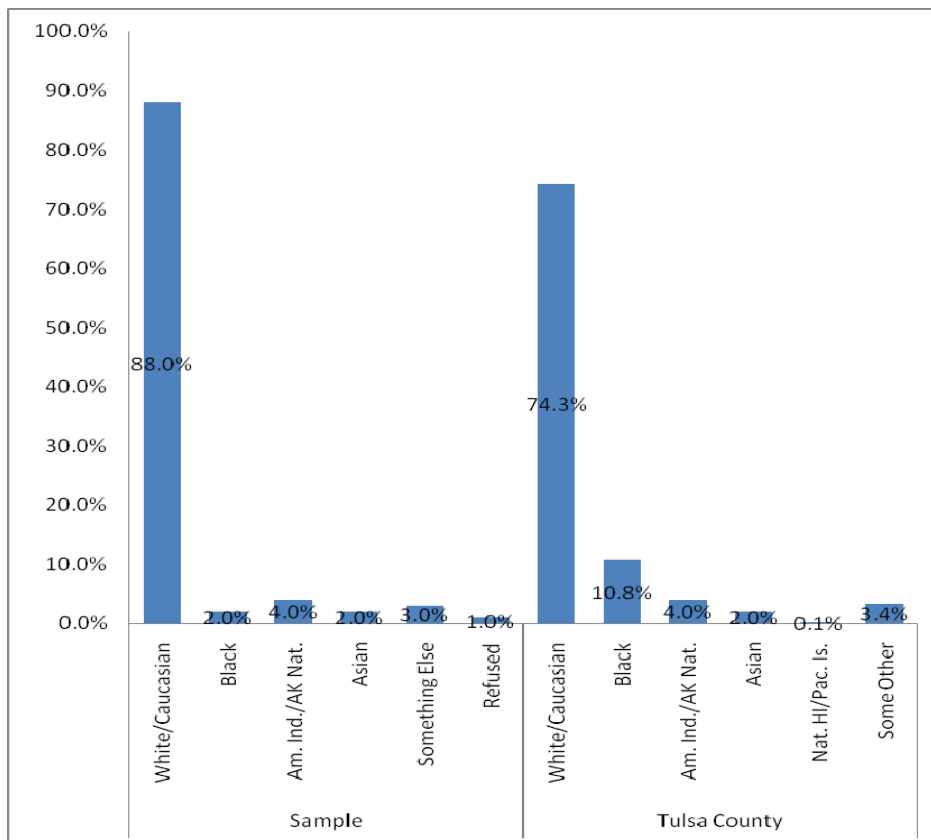
The sample is slightly biased in favor of females. However, this also is somewhat mitigated by the fact that the electorate has a slightly higher composition of females at the national level. “Female eligible voters participated in the 2008 election at a higher rate than male eligible voters—65.7% versus 61.5%.”²¹

■ Race:

- 88% (88) White/Caucasian
- 2% (2) Black
- 4% (4) American Indian/Native Alaskan
- 2% (2) Asian
- 3% (3) Something Else (2 Hispanic/Latino 1 Something Else)
- 1% (1) Refused

Compare to US Census Bureau 2006-2008 American Community Survey Estimates for Tulsa County:

- White 74.3%
- Black 10.8%
- Am. Ind./AK Nat. 4.0%
- Asian 2.0%
- Nat. HI/Pacific Is. 0.1%
- Some Other Race 3.4%
- Hisp./Lat. (any race) 9.5%



²¹ <http://pewresearch.org/assets/pdf/dissecting-2008-electorate.pdf> page 5

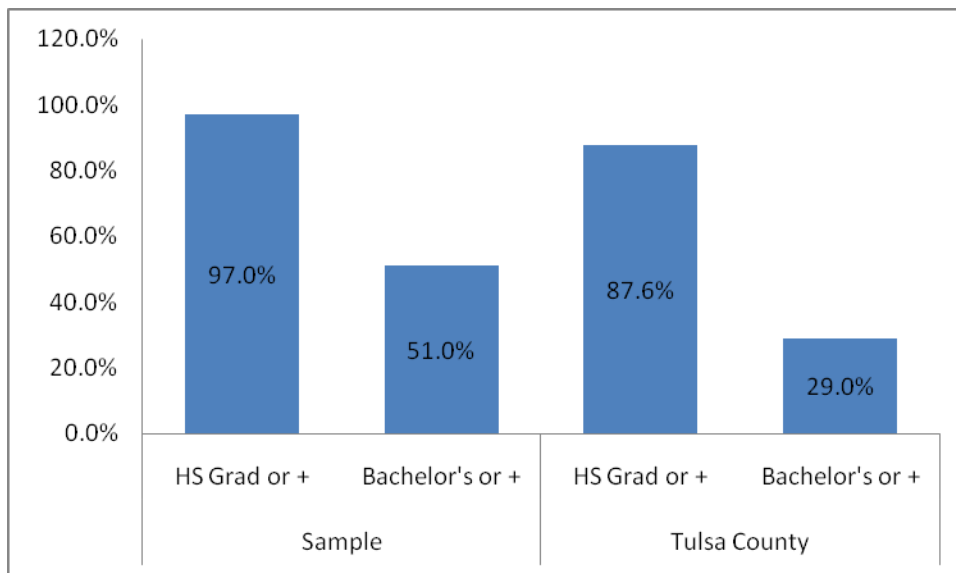
- Hispanic/Latino:
 - 98 (98%) Not Hispanic/Latino
 - 2 (2%) Hispanic/Latino

The survey sample was underrepresented by Blacks and Hispanics/Latinos, and overrepresented by Whites, but was otherwise fairly representative.

- Education:
 - 3 (3%) Some High School
 - 15 (15%) High School Graduate / GED
 - 31 (31%) Some College
 - 28 (28%) College Degree
 - 2 (2%) Some Graduate Classes
 - 21 (21%) Graduate Degree or Higher

Compare to US Census Bureau 2006-2008 American Community Survey Estimates for Tulsa County:

- Population 25 years and over 377,796
- High school graduate or higher 87.6%
- Bachelor's degree or higher 29.0%

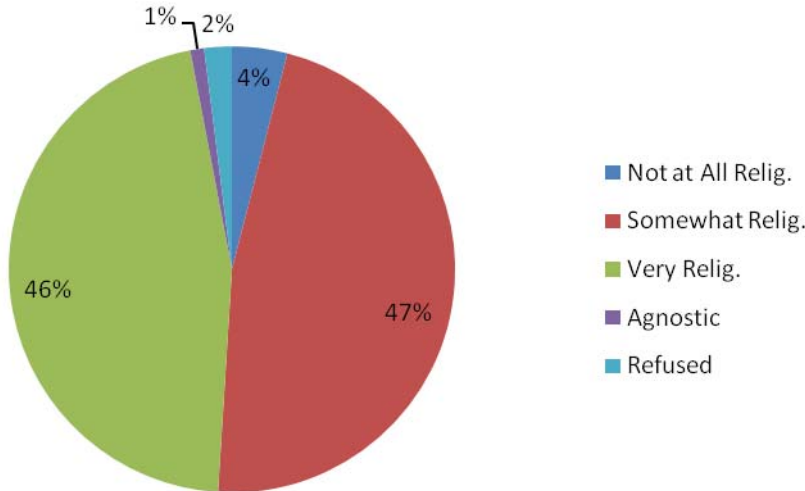


The respondents claimed higher levels of education than the population as a whole. This, also, may reflect the fact that active voters are generally more educated than the population as a whole,²² and the survey sample is fairly highly active in voting, as indicated by the 97% voter registration rate.

²² <http://elections.nytimes.com/2008/results/president/exit-polls.html> Education bars scaled according to share of the electorate.

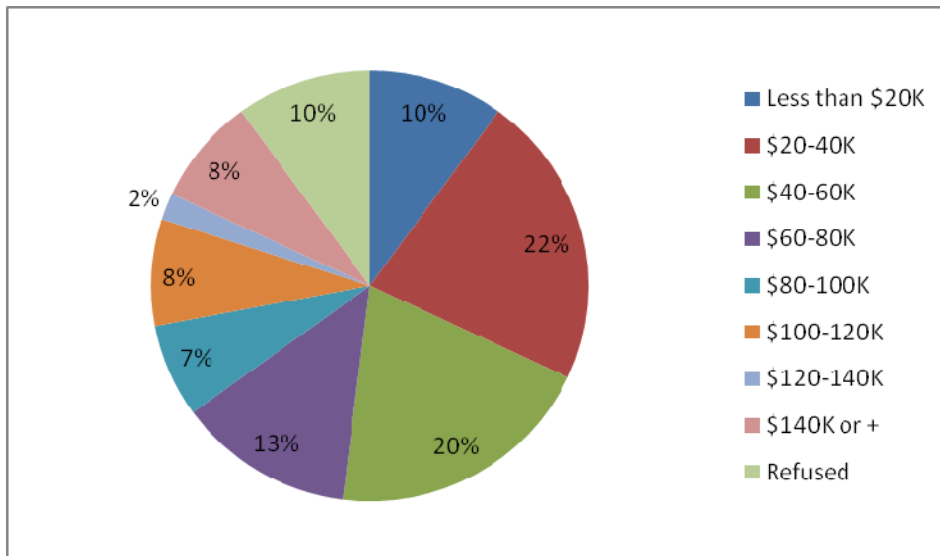
■ Religiosity:

- 4 (4%) Not at all religious
- 47 (47%) Somewhat religious
- 46 (46%) Very religious
- 1 (1%) “Agnostic”
- 2 (2%) Refused



■ Household Income:

- 10 (10%) less than \$20,000 per year
- 22 (22%) \$20,000 : \$40,000 per year
- 20 (20%) \$40,000 : \$60,000 per year
- 13 (13%) \$60,000 : \$80,000 per year
- 7 (7%) \$80,000 : \$100,000 per year
- 8 (8%) \$100,000 : \$120,000 per year
- 2 (2%) \$120,000 : \$140,000 per year
- 8 (8%) \$140,000 or more per year
- 10 (10%) refused



Compare to US Census Bureau 2006-2008 American Community Survey Estimates for Tulsa County:

- Median Household Income (in 2008 inflation-adjusted dollars): \$45,754

Accurate estimates of income level brackets for Tulsa County, as used in the survey, were not found. However, ignoring the refused values, the median household income response was \$40,000 to \$60,000. The median household income of the total population is within the sample's median income bracket. The survey question should have simply asked the total household income, rather than a range, so that a more accurate accounting of the data could be made.

SURVEY RESULTS ANALYSIS:

Republican Index (RI). In order to correlate precinct Election and Party Registration data with the various survey data and urban metrics, I decided to create a Republican Index (RI) using the Election and Party Registration data. It could just as easily have been a "Democratic Index," but Tulsa County as a whole is more Republican than Democratic, and so the measure using this ratio seemed more appropriate than the inverse. In addition, the term "Democratic Index" could have different connotations, whereas the term "Republican Index" is less susceptible to ulterior connotations.

Index input factors: Z-scores²³ of the Ratio of Republican to Democratic Votes and Registrations per Precinct using the following data:

- Party Registrations (PR)
- 2002 Straight Party Ticket (02SPT)
- 2002 US Senator Election (02Sen)
- 2002 US Representative Election (02Rep)
- 2004 Presidential Election (04Pres)
- 2006 US Representative Election (06Rep)
- 2008 Presidential Election (08Pres)

Republican Index (RI) formula:

$$RI = \frac{(PR \times 1) + (02SPT \times 1) + (02Sen \times 1) + (02Rep \times 1) + (04Pres \times 2) + (06Rep \times 1) + (08Pres \times 3)}{10}$$

Note: For those precincts which did not have values for certain elections, or which had certain 0 values, I removed those concerned ratio pairs and reduced the 10 denominator value accordingly, in order to not divide by 0.

I decided to give more weight to the 2004 and 2008 Presidential election voting data over the other data because (1) these National Presidential elections generally have higher turnouts, meaning

²³ Z-score: "Statistics . a measure that quantifies the distance a data point is from the mean of a data set": z-score. Dictionary.com. *Dictionary.com Unabridged*. Random House, Inc. <http://dictionary.reference.com/browse/z-score> (accessed: April 27, 2010).

higher accuracy, which is supported by the data,²⁴ and (2) they are more recent relative to the other sources, except current Party Registrations. I decided not to give current Party Registrations more weight because (1) Oklahoma's closed-party primary elections system tends to goad people into registering with a party, in order to be able to vote in the primary elections, (2) national reporting and the survey data suggest that Oklahoma, by and large, a historically Democratic state, is trending Republican,²⁵ and (3) the survey data suggest that there is a fair amount of crossover between how people identify themselves politically (and thus, how they vote) and how they are registered. See also the Party Registrations map on the following pages and compare to the Election Results maps located elsewhere in this report.

One (1) respondent's address could not be precisely located, as the respondent had moved from the address listed in the phone number, and the respondent only provided "51st and Sheridan." In order to include this response, I used the mean Republican Index for the four (4) precincts located within 2,000 feet of the intersection of 51st St. S. and Sheridan Rd., which would likely capture the precinct as best as possible under the circumstances. These precincts were 87, 91, 129, and 125, and the resultant Republican Index was 0.1964.

I decided not to create Z-scores for each of the individual columns of data (e.g. Z-scores of Republican values in precinct X_1, X_2, \dots, X_N and then Democratic values in precinct Y_1, Y_2, \dots, Y_N) and then create Z-scores for each ratio pair of Z-scores, as this would cause the Republican Index to be a less robust measure of the target: the precise ratio of Republicans to Democrats. Further, normalizing in this manner only normalizes for the population within the precinct, because the values are taken before they are compared to any reference data, which takes the form of the ratio in the RI as described above.

The resultant mosaic of RI strength is illustrated in the map on the following pages.²⁶

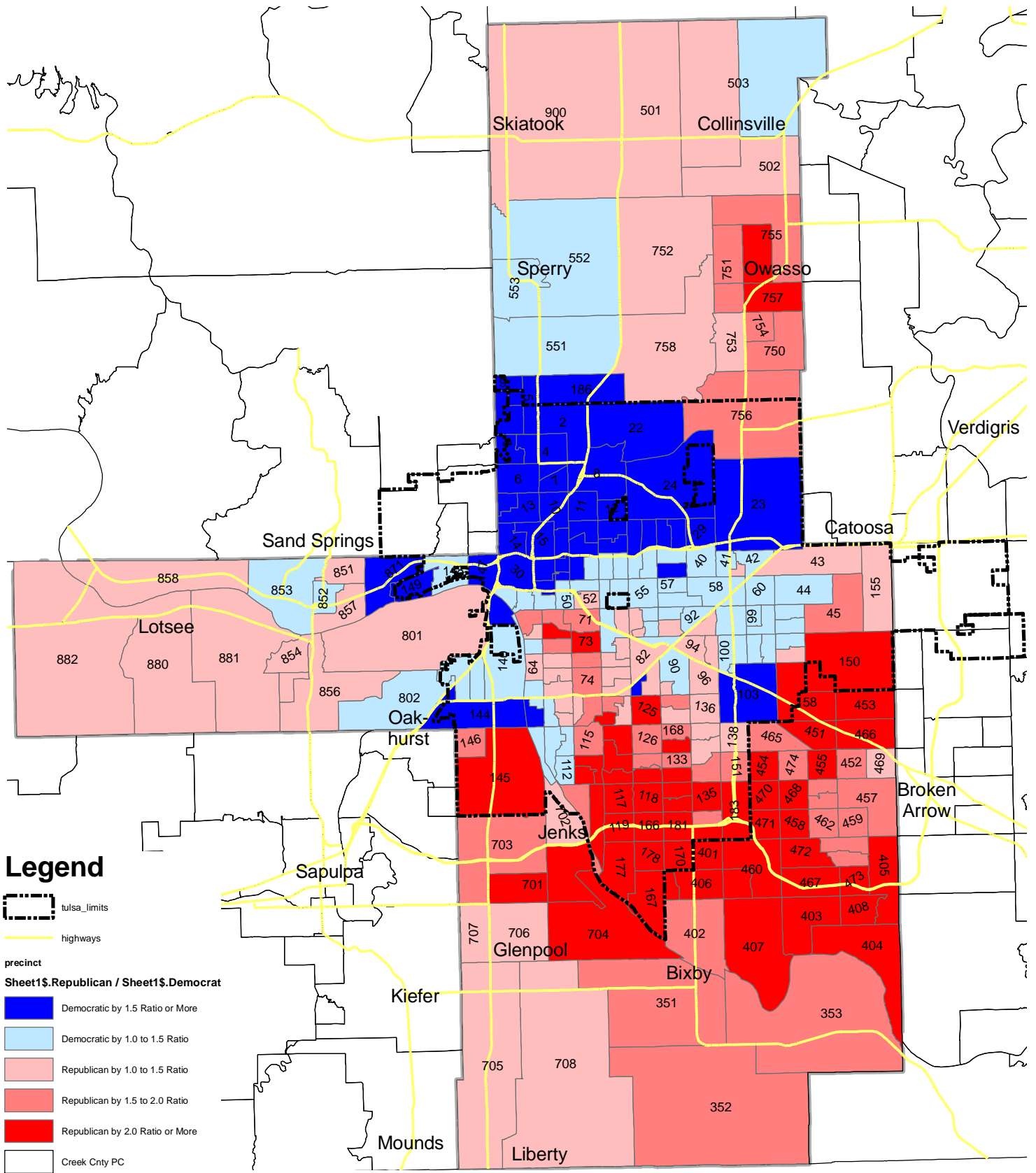
Landslide Precincts. To test the first hypothesis, "Tulsa County is segregated based on different political and ideological persuasions," I determined the number and magnitude of "landslide" precincts, defined for these purposes as those precincts voting for the Republican or Democratic candidate over the other by a ratio of 1.5 or more (150 votes for the first versus 100 votes for the second). Note that Bill Bishop considered voting margins over 20% to be "landslides" when it came to how counties across the U.S. voted. The following landslide precincts were counted for the following election events:

- 73% Landslide Precincts in the 2002 Senate Race
- 71% Landslide Precincts in the 2004 Presidential Race
- 78% Landslide Precincts in the 2006 U.S. Representative Race
- 67% Landslide Precincts in the 2008 Presidential Race

²⁴ 254,496 in 2008, 253,672 in 2004, 145,263 in 2006, and 172,762 in 2002.

²⁵ http://graphics8.nytimes.com/packages/flash/politics/20081104_ELECTION_RECAP/electionChange2.swf?scp=8&sq=elections%20demographic%20map&st=cse

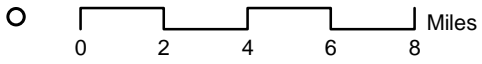
²⁶ The RI uses Z-scores from the ratio data, which results in Republican-leaning districts having negative RI values. Therefore, for map clarity purposes, I did not use Z-scores. Rather, for those districts which were more Democratic than Republican, I used the formula above and reversed the ratio (i.e. to Ratio of Democrats to Republicans) and divided by a -10. I normalized the Index to range between -1 and 1, and used the highest generated result (11.057) and divided each score with that number. Therefore, the highest-scoring Precinct, 11.057, has a normalized Index of (11.057 / 11.057 =) 1.0. Similarly, using the Democratic to Republican ratio, the highest generated result (-30.967) has a normalized Index value of -1.0, and each other score is also divided by 30.967.



Legend

- tulsa_limits
- highways

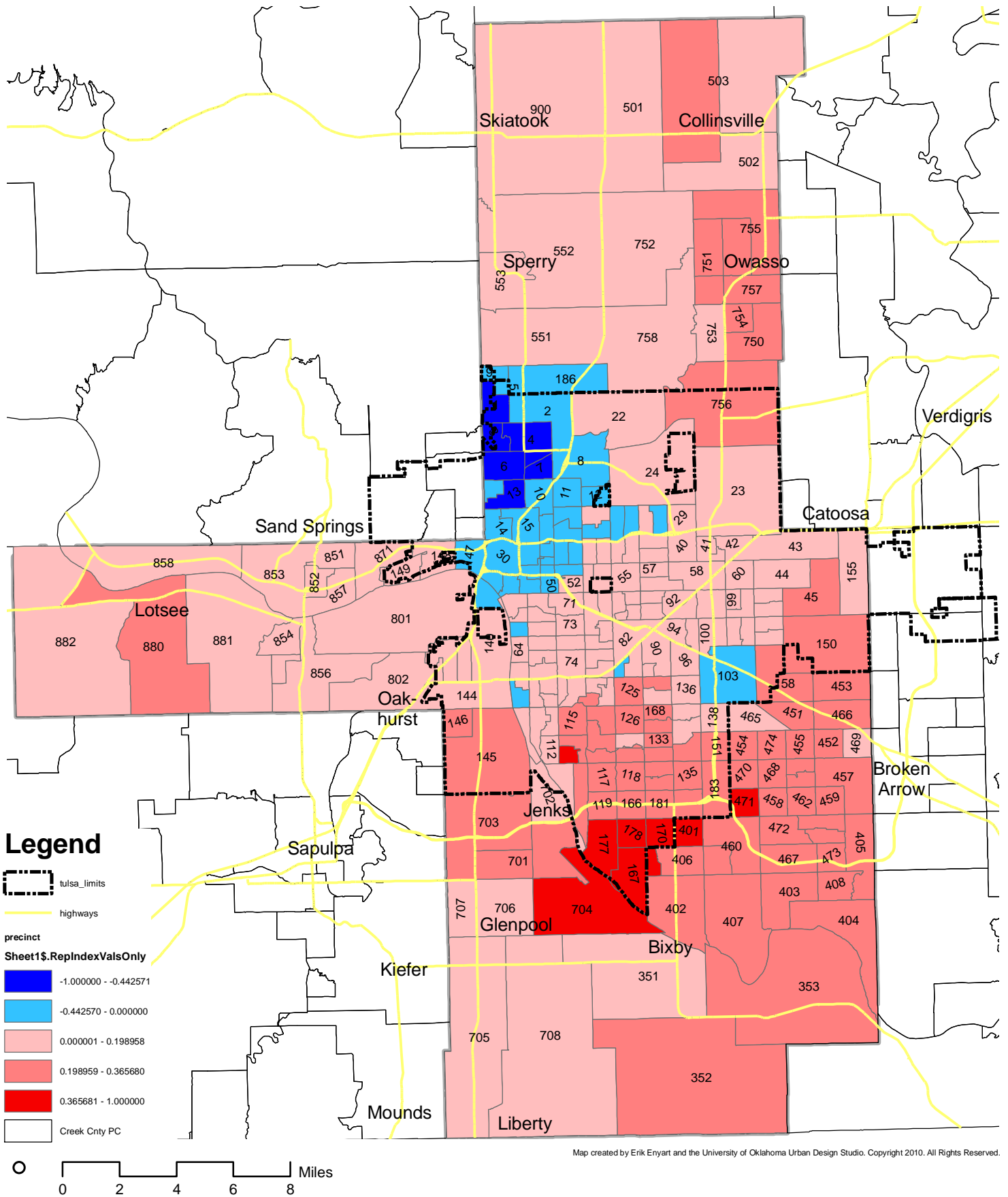
- precinct
- Sheet1\$.Republican / Sheet1\$.Democrat
- Democratic by 1.5 Ratio or More
 - Democratic by 1.0 to 1.5 Ratio
 - Republican by 1.0 to 1.5 Ratio
 - Republican by 1.5 to 2.0 Ratio
 - Republican by 2.0 Ratio or More
 - Creek Cnty PC



Map created by Erik Enyart and the University of Oklahoma Urban Design Studio. Copyright 2009. All Rights Reserved.

Tulsa County Precincts: Party Registrations





Note: For map clarity purposes, map uses raw ratio data scaled between -1 and 1 and before Z-scores were generated. See report for details.

Tulsa County Precincts: Republican Precinct Index

The following “Super Landslide” precincts voted for the Republican candidate over the Democratic candidate by a ratio of 2.0 or more:

- 44% Precincts voted for Republican candidate by 2.0 ratio or more in the 2002 Senate Race
- 42% Precincts voted for Republican candidate by 2.0 ratio or more in the 2004 Presidential Race
- 52% Precincts voted for Republican candidate by 2.0 ratio or more in the 2006 U.S. Representative Race
- 43% Precincts voted for Republican candidate by 2.0 ratio or more in the 2008 Presidential Race

These Landslide Precincts, including the 2.0 ratio Republican Precincts, are illustrated on the maps on the following pages.

Pearson Product Moment Correlation Coefficient. To correlate the Republican Index (RI) with the various survey data and urban metrics, I used the Pearson Product Moment Correlation Coefficient, defined as follows:²⁷

$$r = \frac{\sum(X - \mu_X)(Y - \mu_Y)}{N \sigma_X \sigma_Y}$$

Where:

r = correlation coefficient

Σ = sum

μ_X = the mean for all X scores

σ_X = the standard deviation for all X scores

μ_Y = the mean for all Y scores

σ_Y = the standard deviation for all Y scores

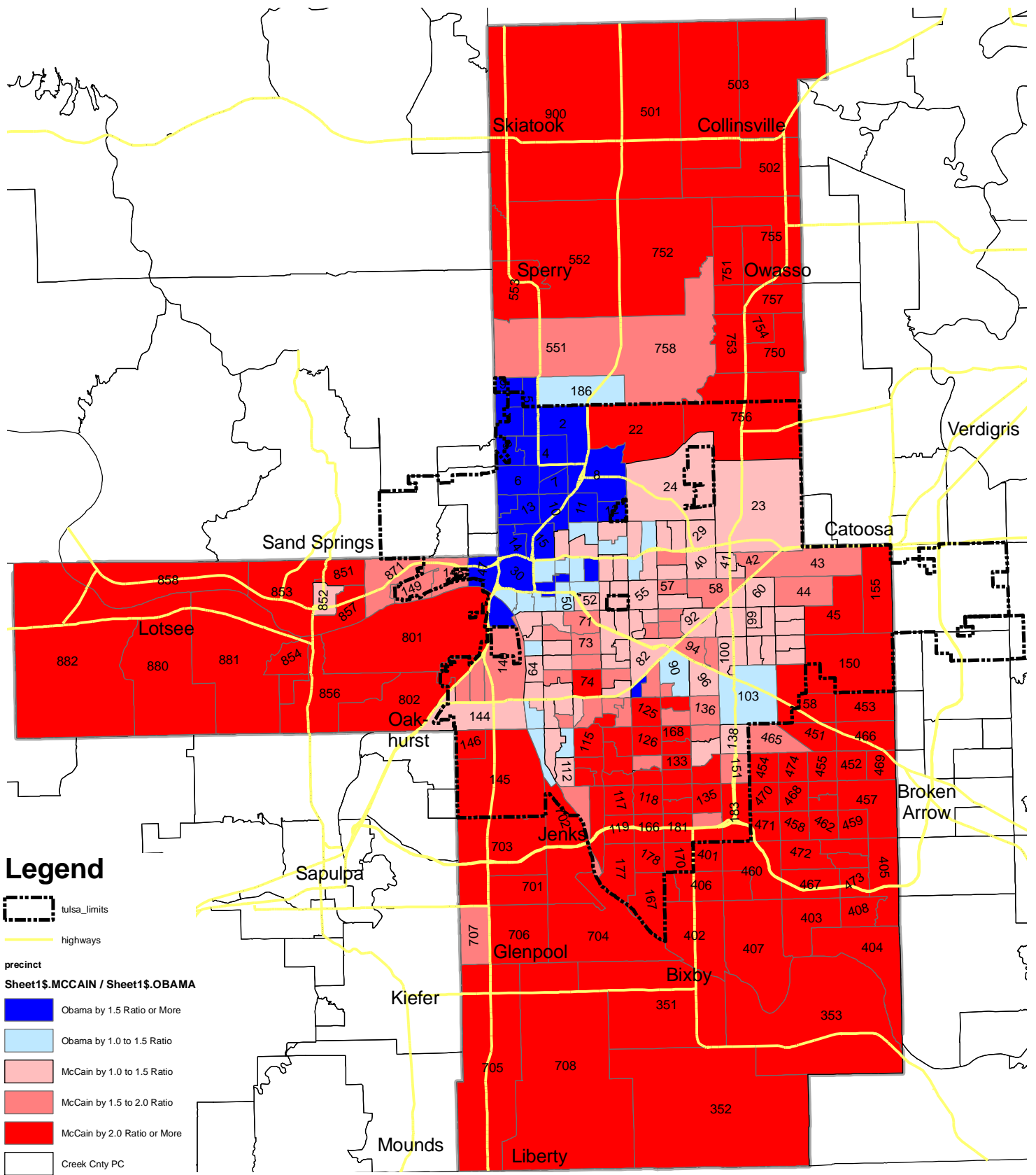
N = the number of subjects (X and Y pairs)

All correlation coefficients cited in this analysis use the Pearson Product Moment Correlation Coefficient method, and the null hypothesis (H_0) is that $r = 0.0$. I used the statistics program SPSS to verify correlation coefficients and determine statistical significance.

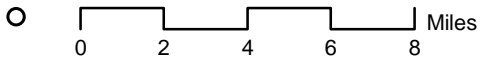
RI Correlation to Self-Identified Republican Index. I created a Self-Identified Republican Index (SIRI) using the self-identification survey response data.

Index: -1 to 1, with -1 being the least and 1 being the most Republican response.

²⁷ Found at <http://www.mnstate.edu/wasson/ed602pearsoncorr.htm>

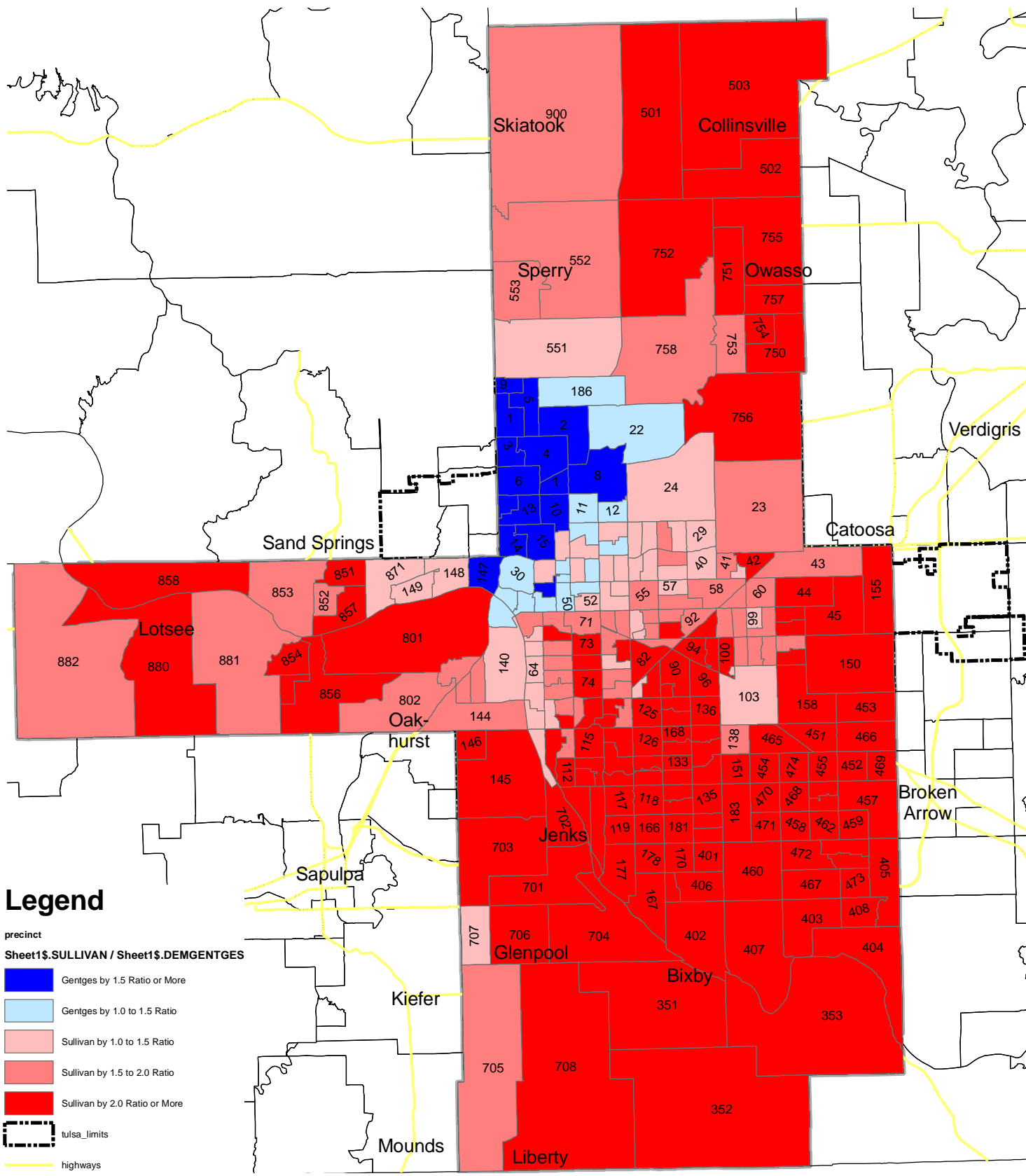


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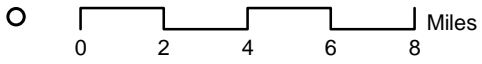
Tulsa County Precinct Results 2008 Presidential Election





Legend

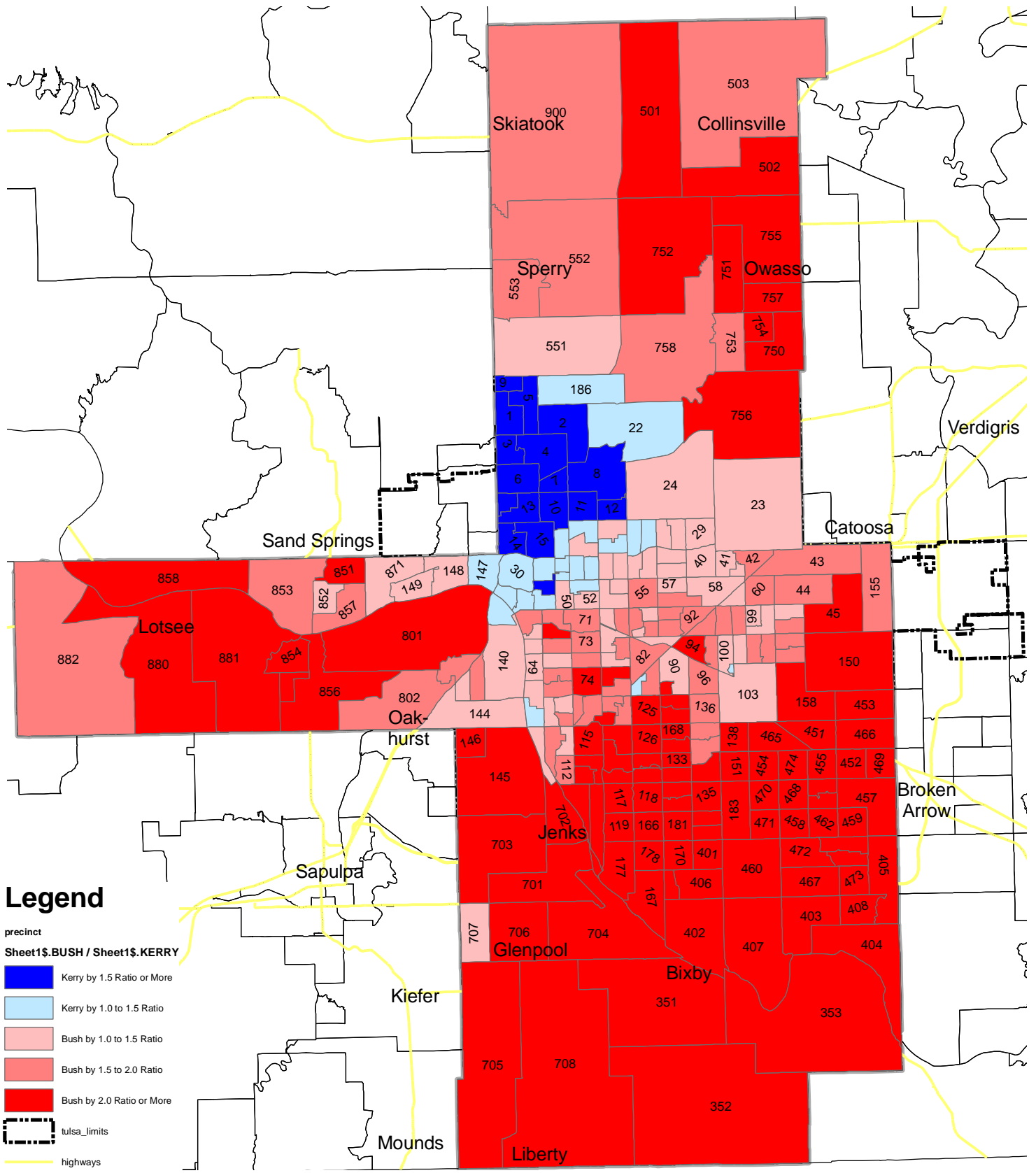
- precinct
 Sheet1\$.SULLIVAN / Sheet1\$.DEMGENGES
- Gentges by 1.5 Ratio or More
 - Gentges by 1.0 to 1.5 Ratio
 - Sullivan by 1.0 to 1.5 Ratio
 - Sullivan by 1.5 to 2.0 Ratio
 - Sullivan by 2.0 Ratio or More
 - tulsa_limits
 - highways



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Tulsa County Precinct Results 2006 US Representative Sullivan vs. Gentges





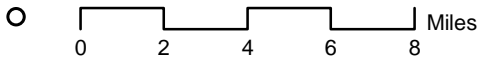
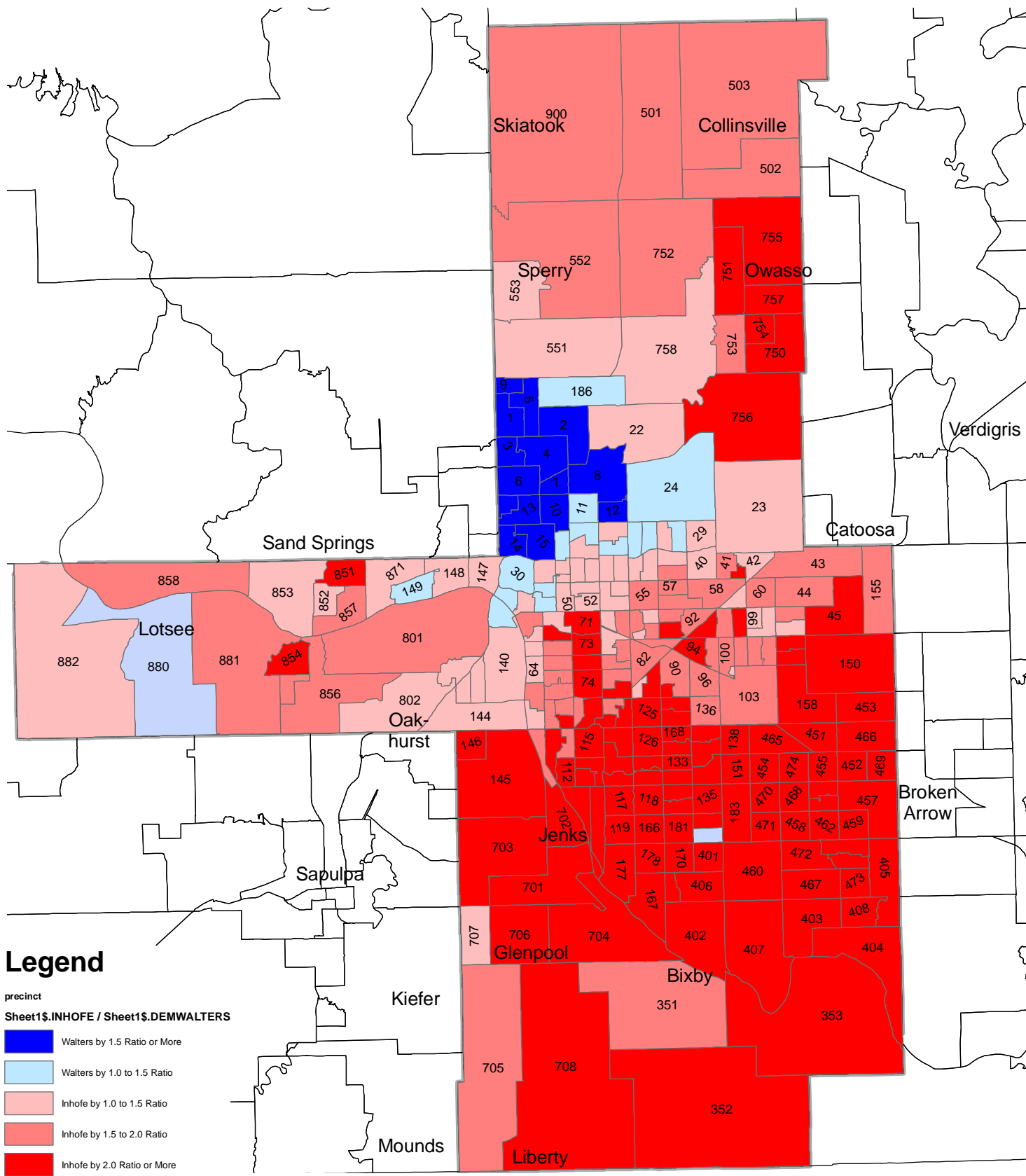
Map created by Erik Enyart and the University of Oklahoma Urban Design Studio. Copyright 2009. All Rights Reserved.

Tulsa County Precinct Results

2004 Presidential Election

Bush vs. Kerry

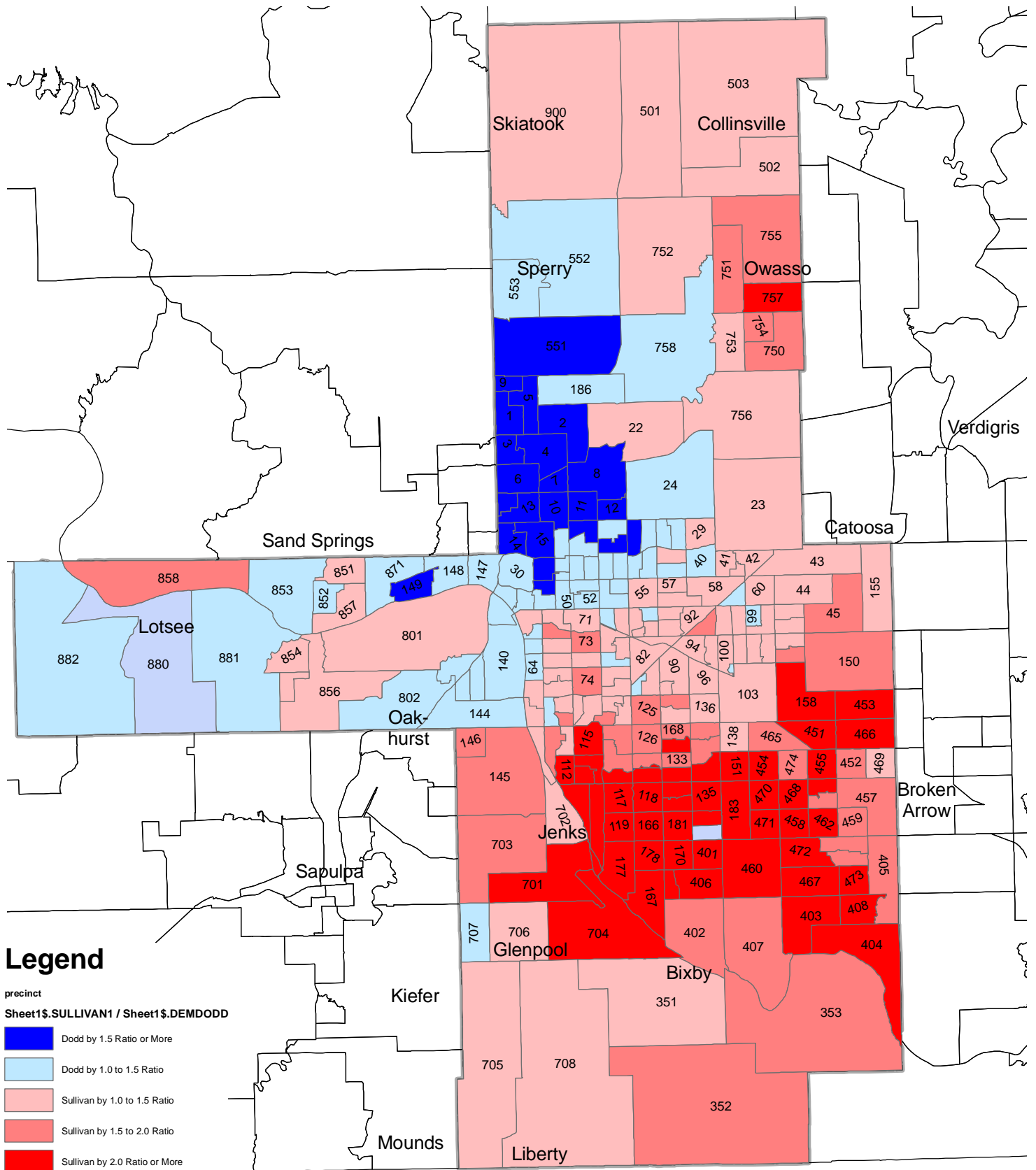




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Tulsa County Precinct Results 2002 National Election Inhofe vs. Walters

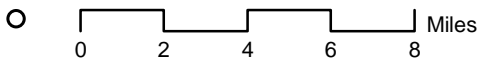




Legend

precinct
Sheet1\$.SULLIVAN1 / Sheet1\$.DEMDODD

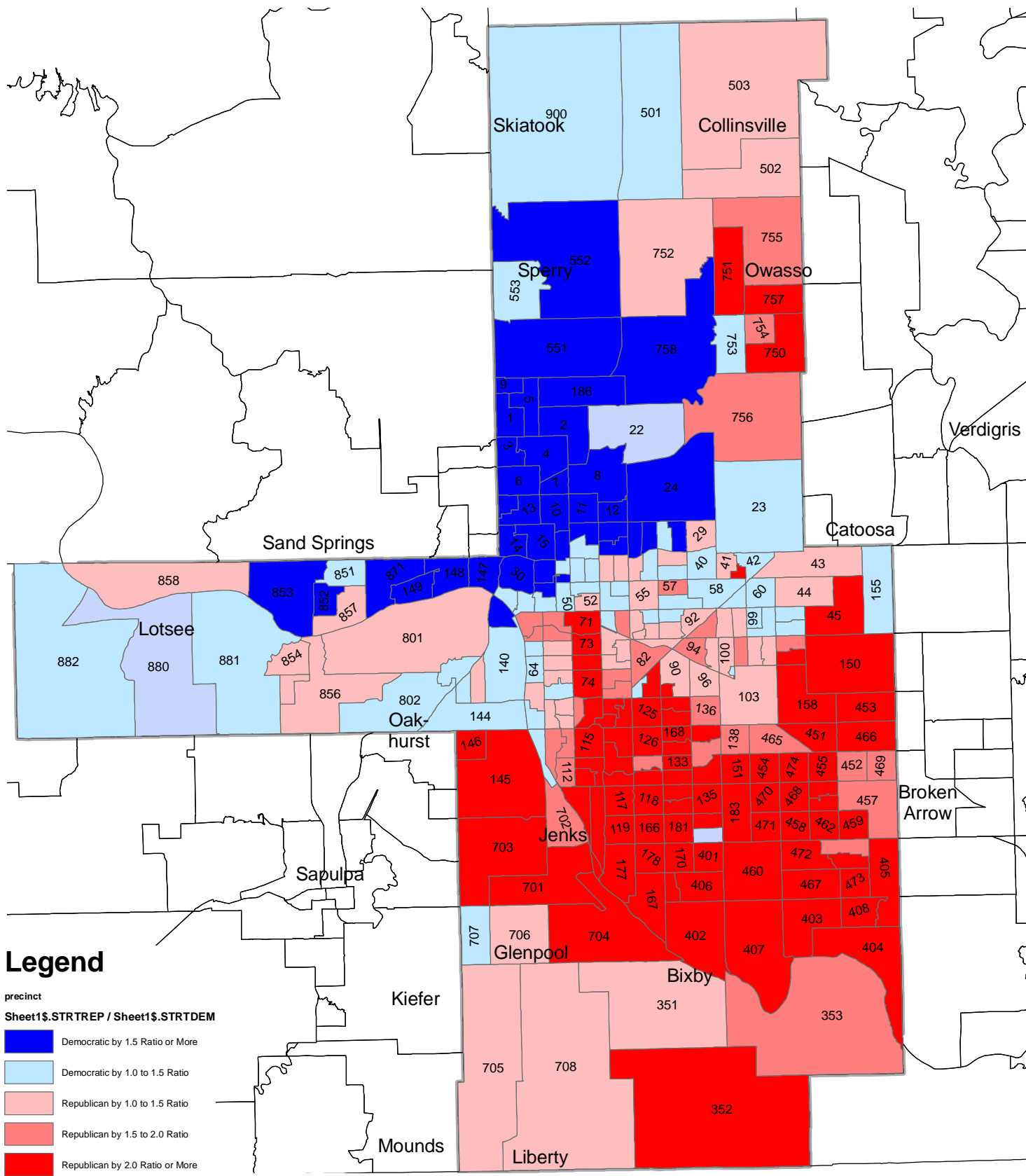
- Dodd by 1.5 Ratio or More
- Dodd by 1.0 to 1.5 Ratio
- Sullivan by 1.0 to 1.5 Ratio
- Sullivan by 1.5 to 2.0 Ratio
- Sullivan by 2.0 Ratio or More



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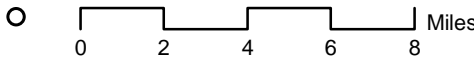
Tulsa County Precinct Results 2002 US Representative Sullivan vs. Dodd





Legend

- precinct
Sheet1\$.STRTREP / Sheet1\$.STRDEM
- Democratic by 1.5 Ratio or More
 - Democratic by 1.0 to 1.5 Ratio
 - Republican by 1.0 to 1.5 Ratio
 - Republican by 1.5 to 2.0 Ratio
 - Republican by 2.0 Ratio or More



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Tulsa County Precinct Results 2002 National Election Straight Party Ticket Votes



Self-Identified Republican Index (SIRI) input factors:

- Response to the “Do you consider yourself” question (SIC),
 - Scored as follows: “A Republican” = 1, “A Democrat” = -1, and “Independent,” “don’t know,” and refused = 0
- Response to the “Are you registered as” question (SIR)
 - Scored as follows: “Republican” = 1, “Democrat” = -1, “Independent,” “don’t know,” refused, and those not registered to vote = 0

Self-Identified Republican Index (SIRI) formula:

$$\text{SIRI} = \frac{(\text{SIC} \times 3) + (\text{SIR} \times 1)}{4}$$

As was done in the Republican Index (RI), I decided to give current Party Registrations less weight for the same reasons as identified in the RI introduction paragraph.

I found that the simple correlation between RI and SIRI was 0.342 (significant at the 0.01 level, 2-tailed) which is a relatively moderate, positive correlation.

For purposes of this study, a small correlation (r) is recognized at 0.10 to 0.29 coefficients, a moderate $r = 0.30$ to 0.49, and a large $r = 0.50$ or more.²⁸

I also attempted to correlate the SIRI with the RI for the precincts in which the respondents moved from and planned to move to. However, likely due to the small amount of data available,²⁹ I only found correlation coefficients of 0.036 and 0.007, respectively. These coefficients essentially indicate no correlation.

RI Correlation to Self-Identified Ideology Index. Next, to correlate political affiliation responses to self-identified ideological questions, I created a Self-Identified Ideology Index (SIII) using the self-identification survey response data.

Self-Identified Ideology Index (SIII) input factors:

- Response to the Fiscal Ideology question (SIFI), scored as follows:
 - “Conservative” = 2
 - “Somewhat Conservative” = 1
 - “Independent,” “don’t know,” and refused = 0
 - “Somewhat Liberal” = -1
 - “Liberal” = -2
- Response to the Social Ideology question (SISI), scored as follows:
 - “Conservative” = 2
 - “Somewhat Conservative” = 1
 - “Independent,” “don’t know,” and refused = 0
 - “Somewhat Liberal” = -1
 - “Liberal” = -2

Index: -1 to 1, with -1 being the least and 1 being the most Conservative response.

²⁸ A Power Primer, page 157

²⁹ N = 17 and N = 3, respectively.

Self-Identified Ideology Index (SIII) formula:

$$\text{SIII} = \frac{\text{SIFI} + \text{SISI}}{4}$$

I found that the simple correlation between RI and SIII was 0.128, which is a relatively small, positive correlation, but is not significant at the 0.05 level (2-tailed).³⁰

This suggests that conservative respondents are positively correlated with their residence within precincts with a higher RI score, and vice-versa.

Self-Identified Republican Index Correlation to Self-Identified Ideology Index. I found that the simple correlation between SRI and SIII was 0.596 (significant at the 0.01 level, 2-tailed), which is a relatively large, positive correlation.

This suggests that conservative respondents are positively correlated with Republican affiliation, and vice-versa.

Self-Identified Ideology Index Correlation to Measures of Conservatism. I found that the respondents Self-Identified Ideology Index correlated with the Authoritarian measure by a 0.218 correlation coefficient (significant at the 0.05 level, 2-tailed), which is a relatively small, positive correlation.

I found that the respondents Self-Identified Ideology Index correlated with the Laissez-Faire [Economic] Conservatism measure by a 0.357 correlation coefficient (significant at the 0.01 level, 2-tailed), which is a relatively moderate, positive correlation.

I found that the respondents Self-Identified Ideology Index correlated with the Status Quo Conservatism measure by a 0.265 correlation coefficient (significant at the 0.01 level, 2-tailed), which is a relatively small, positive correlation.

Accordingly, these three (3) standard measures of Conservatism support respondents' self-identified ideology.

URBAN METRICS ANALYSIS:

To correlate political affiliation responses with urban metrics, I compared the RI to responses to the "What kind of residence is this" question and to certain quantifiable Tulsa County-wide data which may be used to measure urban density. These "urban metrics" data included parcel density, street block density measured by number of blocks and block sizes, and population according to the US Census Bureau's census blocks.

Dwelling Unit Type Index. To correlate political affiliation dwelling unit types, I created a Dwelling Unit Type Index (DUTI) using the survey response data.

³⁰ Required for significance at this level: $r = +/- 0.195$ (df = 100 because critical values tables providing p for df = 101 could not be found).

Dwelling Unit Type Index (DUTI) input factors:

- Single Family Detached Dwelling = -1
- Mobile/Manufactured Home,³¹ “don’t know,” and refused = 0
- Duplex, Apartment, or Condominium = 1

Index: -1 to 1, with 1 being the most urban and -1 being the least urban type of dwelling unit.

This yields a simple RI to DUTI correlation of -0.124 which is a relatively small, inverse correlation, but is not significant at the 0.05 level (2-tailed).³² Using this measure, assuming all other things being equal, this suggests that the residents of higher-density dwelling structure types are slightly less likely to be Republican.

Precinct Parcel Density Index. Next, I sought to find correlation between parcel density and the RI.

I found a correlation coefficient of -0.055 between the RI and the number of parcels within each precinct, which is essentially no correlation. This follows, as the data has not been normalized by the precinct’s spatial size.

In order to get a more accurate measure of parcel density, I created a Precinct Parcel Density Index (PPDI) to normalize each precinct’s raw number of parcels with precinct spatial size (PSS).

To measure the parcel density by precinct, I divided the number of parcels within a precinct by PSS to get the Precinct Parcel Density Index. I used GIS to calculate the area of each precinct in units of square miles. I used GIS to calculate the number of parcels within the precinct using a union function, which essentially fused all of the parcels with each precinct. I then exported a frequency report, which included the total number of parcels by precinct.

Precinct Parcel Density Index (PPDI) formula:

$$\text{PPDI} = \frac{N_P}{\text{PSS}}$$

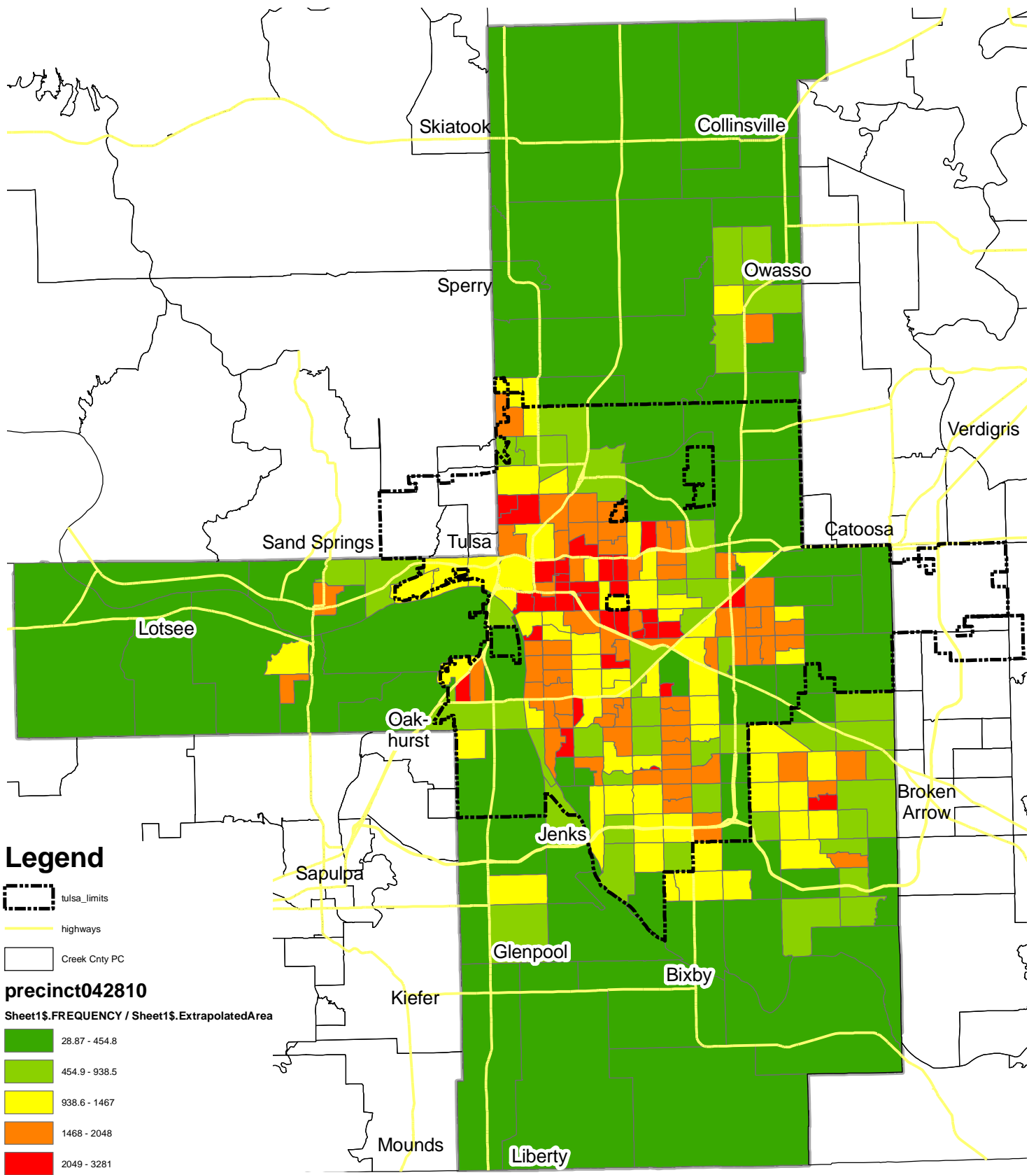
Where N_P = The total number of parcels within the precinct.

This yields a simple RI to PPDI correlation of -0.334 (significant at the 0.01 level, 2-tailed), which is a relatively moderate, negative correlation. Using this measure, assuming all other things being equal, this suggests that the higher the number of parcels (thus, higher density using this measure thereof), the lower the Republican Index.

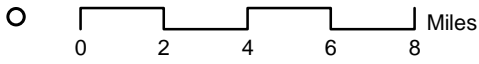
A map reflecting the parcel density by precinct is located on the following page.

³¹ Mobile/Manufactured Home is scored as 0 as such a dwelling unit may be equally likely to be found in a mobile home park, a relatively dense, urban neighborhood type, as a rural acreage.

³² Required for significance at this level: $r = +/- 0.195$ (df = 100 because critical values tables providing p for df = 101 could not be found).



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Note: The number of parcels per Precinct is normalized by the Precinct Spatial Size.

Data ranges use Natural Breaks (Jenks) method.

Parcels: A Measure of Urban Density



Precinct Block Number Density Index. To measure the precinct's block density, measured by the number of blocks, I divided the number of blocks within a precinct by PSS to get the Precinct Block Number Density Index (PBNDI). I used GIS to create blocks by using the latest INCOG E-911 street centerline data (more up-to-date and accurate than Census TIGER line data) to divide Tulsa County into street blocks. I then used a GIS union function, previously described, to calculate the block numbers per precinct.

Precinct Block Number Density Index (PBNDI) formula:

$$\text{PBNDI} = \frac{N_{\text{BN}}}{\text{PSS}}$$

Where N_{BN} = The total number of street blocks within the precinct.

This yields a simple RI to PBNDI correlation of -0.224 (significant at the 0.01 level, 2-tailed), which is a relatively small, negative correlation. Using this measure, assuming all other things being equal, this suggests that the higher the number of blocks (thus, higher density using this measure thereof), the lower the Republican Index.

A map reflecting street block number density is located on the following page.

Precinct Block Size Density Index. To measure the precinct block density, measured by the size of blocks, I created a Precinct Block Size Density Index. I used the same GIS data used for the PBNDI for this calculation.

Note that the size of the blocks, as measured by their median and mean, are independent of the spatial size and population of the precinct, so it is not necessary to normalize by such variables.

Precinct Block Size Density Index (PBSDI) formula:

$$\text{PBSDI} = \frac{(N_{\text{BSMed}} + N_{\text{BSMean}})}{2}$$

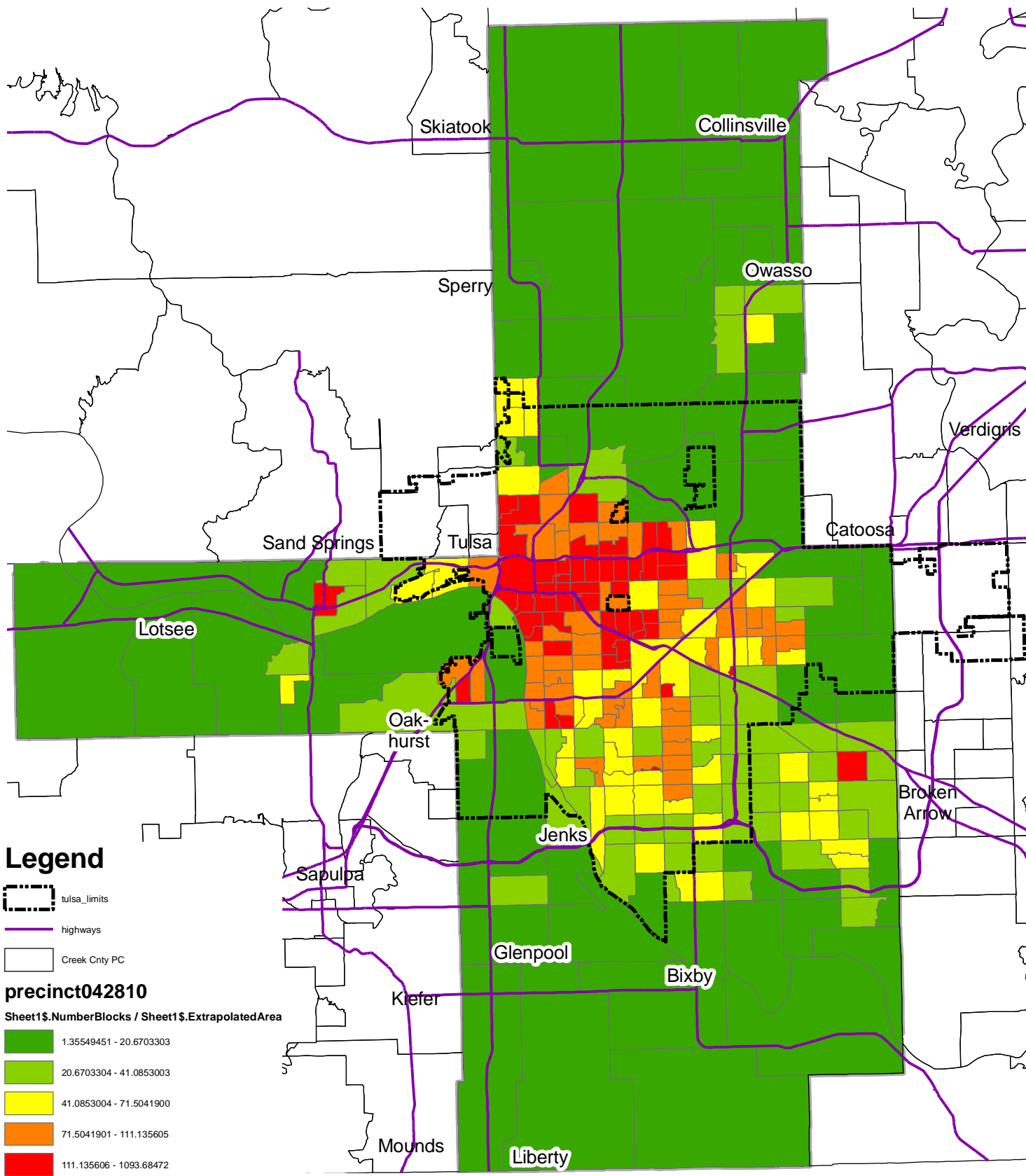
Where

- N_{BSMed} = The median size of blocks within the precinct, and
- N_{BSMean} = The mean size of blocks within the precinct.




This yields a simple RI to PBSDI correlation of 0.185 (significant at the 0.01 level, 2-tailed), which is a relatively small, positive correlation. Using this measure, assuming all other things being equal, this suggests that the larger the block size (thus, lower density using this measure thereof), the higher the Republican Index.

A map showing the PBSDI is on the following page.

Precinct Population Density Index. To measure population density by precinct, I created a Precinct Population Density Index, using US Census Bureau's census block GIS data, which contains population data. I divided the population within a precinct by PSS to get the Precinct Population








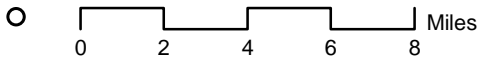
Legend

-  tulsa_limits
-  highways
-  Creek Cnty PC

precinct042810

Sheet1\$.NumberBlocks / Sheet1\$.ExtrapolatedArea

-  1.35549451 - 20.6703303
-  20.6703304 - 41.0853003
-  41.0853004 - 71.5041900
-  71.5041901 - 111.135605
-  111.135606 - 1093.68472



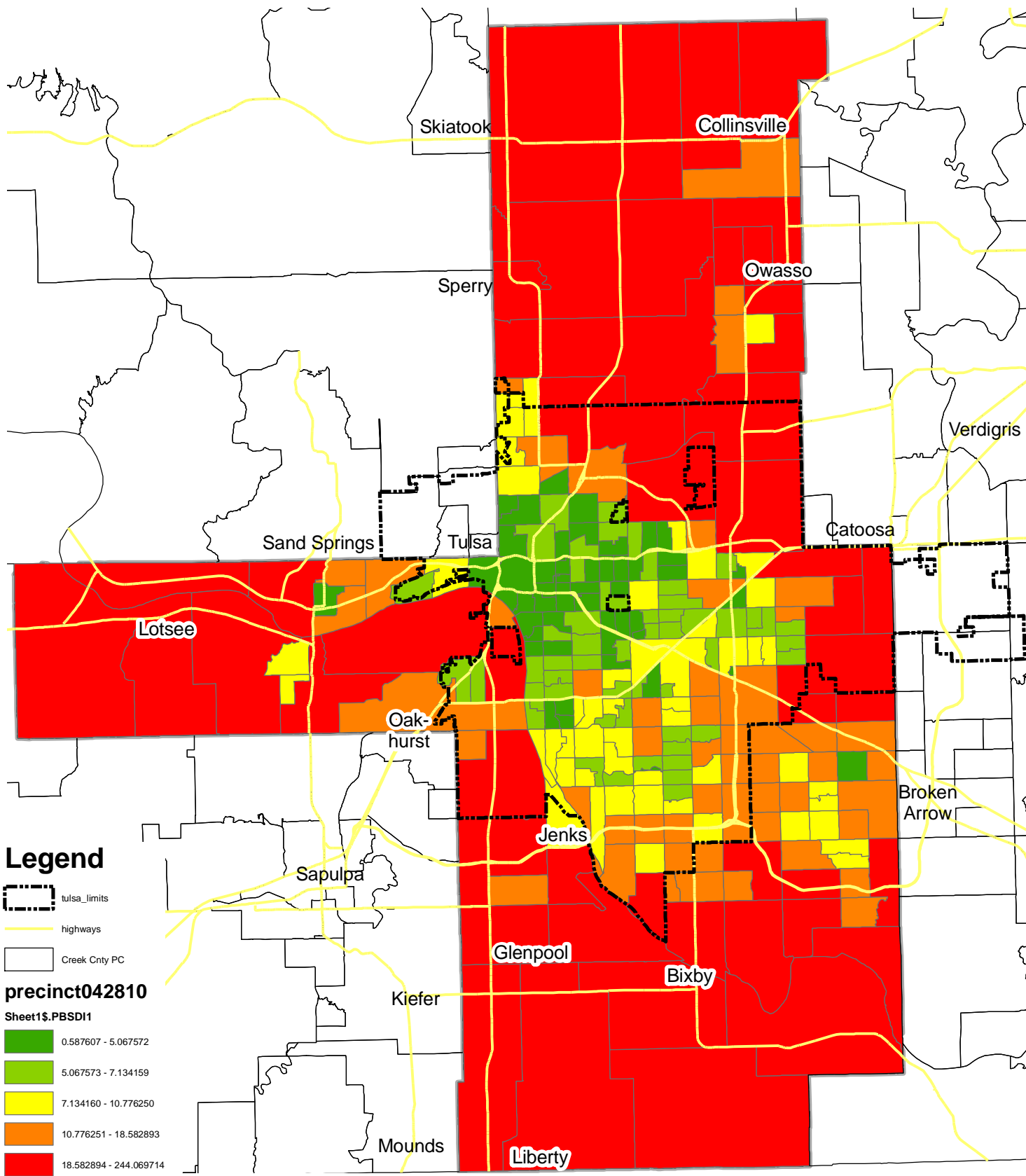
Map created by Erik Enyart and the University of Oklahoma Urban Design Studio. Copyright 2010. All Rights Reserved.

Note: The number of street blocks per Precinct is normalized by the Precinct Spatial Size.

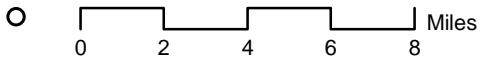
Number of Blocks: A Measure of Urban Density

Data ranges use Quantile method.





Map created by Erik Enyart and the University of Oklahoma Urban Design Studio. Copyright 2010. All Rights Reserved.



Note: The PBSDI is based on the median and mean block sizes per precinct. The formula is described in the report.

Data ranges use Quantile method.

Precinct Block Size Density Index (PBSDI)



Density Index (PPDI). I used GIS to calculate the population within the precinct using a union and frequency report functions, previously described, to calculate the total persons by block by precinct.

Precinct Population Density Index (PPDI) formula:

$$\text{PPDI} = \frac{N_p}{\text{PSS}}$$

Where N_p = The total number of persons within the precinct.

This yields a simple RI to PPDI correlation of -0.173 (significant at the 0.01 level, 2-tailed), which is a relatively small, negative correlation. Using this measure, assuming all other things being equal, this suggests that the higher the population density within the precinct, the lower the Republican Index.

A map reflecting the population density by precinct is located on the following page.

ANALYSIS OF RESULTS TO TEST HYPOTHESES:

Taken together, the available data indicates that there is a relationship between political affiliation and ideological persuasion, between political affiliation and housing type and urban density, and between survey respondents political attitudes and the political leanings of the precincts in which they live.

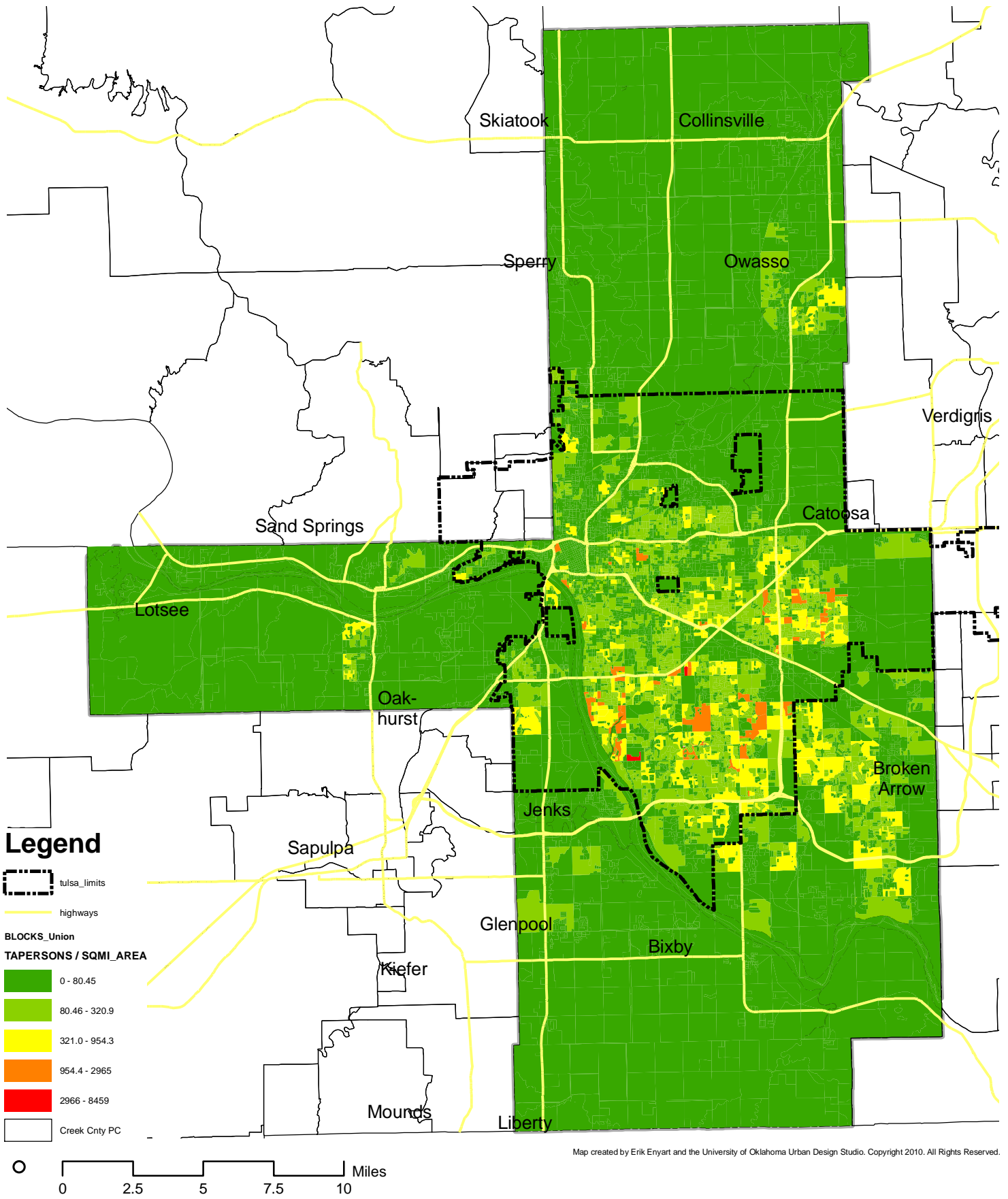
The following is a summary of each hypotheses and how the data supports, or fails to support, each:

Hypothesis 1: Tulsa County is segregated based on different political and ideological persuasions.

As measured by the number and magnitude of “landslide” precincts, described more fully in the “Landslide Precincts” section of this report, together with the maps clearly reflecting geographic divides between precincts in Tulsa County, fairly adequately establish that Tulsa County is in fact segregated based on different political persuasions, at least among politically-engaged actors. The ideological persuasions part of the hypotheses is established in the following section.

Hypothesis 2: Those towards the liberal and conservative ends of the ideological spectrum live in areas different from each other, and with others of the same or similar persuasions.

Building on the number of landslide precincts established to test the first hypothesis, it is evident that the 0.342 correlation between the survey respondents’ SIRI and the RI for their respective precincts, together with the 0.596 correlation between their SIII and SIRI, the former as supported by the measures for the three (3) elements of conservatism (SIII correlation coefficients to: Authoritarianism = 0.218, Laissez-Faire [Economic] Conservatism = 0.357, and Status Quo Conservatism = 0.265), that those towards the liberal and conservative ends of the ideological spectrum now live in different areas and with others of the same or similar persuasions.



Map created by Erik Enyart and the University of Oklahoma Urban Design Studio. Copyright 2010. All Rights Reserved.

Note: Data ranges count total persons per block extrapolated to a people per square mile scale. Data ranges use Natural Breaks (Jenks) method.

Tulsa County Precincts: Population by Census Blocks



Hypothesis 3: This choice is due, in measureable part, because of those distinctions.

This study was limited by the amount of survey response data and survey questions that were somewhat inadequate for further statistical analysis. It does not appear that there is enough data to support this hypothesis.

In fact, the responses to why the respondents moved from the areas they did point to a multitude of reasons almost as varied as the number of responses to each question.

Further, the responses to whether or not they consider the people in the locations they would move to be more similar to them than their current neighborhood, were mixed at best.

I believed that the most promising source of data to support this hypothesis would be the “moved from” and “planning to move to” data. However, those responses were very limited and resulted in insignificant statistical correlations. A larger sample may have been able to find a relationship between politics and ideology and moving patterns.

Hypothesis 4: Urban density in Tulsa County, as measured by housing types and urban density patterns, correlate to political affiliations and ideological persuasions, and thus can be used to predict political affiliation and ideological persuasion.

The data supports the first part of this hypothesis, recognizing the following correlations:

- RI to DUTI correlation of -0.124,
- RI to PPDI correlation of -0.334,
- RI to PBNDI correlation of -0.224,
- RI to PBSDI correlation of 0.185,
- RI to PPDI correlation of -0.173

In each case, it appears that more heavily Republican Precincts have lower urban densities, as measured by the number of parcels, block numbers, block areas, and population, and are less likely to have higher density dwelling types (duplexes, apartments, and condominiums).

Further, the correlations between ideology and political affiliation have been established hereinabove.

However, correlation does not prove causation, and further study would be required to use the data to predict either political affiliation or ideological persuasion using dwelling unit type and urban metrics data.

CONCLUSIONS:

This study was limited by the amount of survey response data and survey questions that were somewhat inadequate for further statistical analysis. If a larger sample were attained, and certain questions were refined and some additional questions were asked, it would likely be possible to hold potentially confounding variables (e.g. race, income, gender, religiosity, etc.) constant and arrive at a more accurate correlation coefficient.

This study could be extended using other approaches and data sources. Al Soltow, renown Oklahoma polling consultant and University of Tulsa professor and Vice President of Research in the Research & Sponsored Programs Department, recommended using Claritas data, which combines geography and demographic and socio-economic data. The multitude of uses of Claritas's "clustering" data method and software are described in detail in *The Clustered World : How We Live, What We Buy, and What It All Means About Who We Are* by Michael J. Weiss.

If more time were permitted, I would like to learn how to, and perform a multiple regression model. Using this, I believe I could not only determine correlation but predict political affiliation and ideological persuasion based on housing type and urban metrics, while testing the influence of multiple factors and correcting for biases.

If a good fit could be established, it could be postulated that a community (of a given size or range of sizes) may be able to influence or, "engineer," their political and/or ideological composition by encouraging different forms of dwelling types and/or allowing differing degrees of urban density. In other words, a community wanting a larger share of Democratic or liberally-persuaded individuals may employ development policies or zoning regulations to encourage multifamily and condominium construction, and/or other policies which operate to result in higher urban densities, and vice-versa.

This should not be seen as advocacy for using housing types and urban density to effect social change, but rather as a new lens with which to view the interrelated dynamic between urban form and politics and ideology.

If interest in sustainability and social equity as it relates to housing opportunity were not reasons enough, this study should be seen as further support for finding and removing those governmental regulations which prevent a balanced distribution of housing types and urban densities. If free market forces were allowed to result in a more equitable balance, people of diverse backgrounds and values would have opportunity to live within each community, and as Bishop observes, a more diverse community has a better chance of stopping or reversing the political divisiveness in modern American society.

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Appendix A:

Additional Survey Response Information

The following information included responses which were so small in number to be significant, were unquantifiable, and/or were too varied to be classifiable into larger groups which would be meaningful within the body of this report. They are reported here for those who would find them interesting or helpful for further study planning.

Plans to Move in 5 Years:

- Of the 6 Tulsans who plan to move to another location within Tulsa:
 - 3 consider themselves fiscally conservative/somewhat conservative
 - 2 consider themselves fiscally moderate
 - 1 considers themselves fiscally liberal

 - 2 consider themselves socially conservative
 - 1 considers themselves socially moderate
 - 2 considers themselves socially liberal
 - 1 refused

 - 1 considers themselves a Republican and is registered as a Republican
 - 2 consider themselves a Democrat and are registered as a Democrat
 - 3 consider themselves Independent and 2 are registered as Independent (1 as a Republican)

- Of the 3 suburbanites who plan to move to or within a suburban city:
 - 2 consider themselves fiscally conservative/somewhat conservative
 - 1 considers themselves fiscally liberal/somewhat liberal

 - 2 consider themselves socially conservative/somewhat conservative
 - 1 considers themselves socially liberal/somewhat liberal

 - 1 considers themselves a Republican and is registered as a Republican
 - 1 considers themselves Independent and are registered as a Republican
 - 1 considers themselves a Democrat and are registered as a Democrat

Move to This Residence:

- Respondents moved from:
 - Tulsa: 27
 - Bartlesville: 3
 - Owasso: 3
 - Broken Arrow: 2
 - Glenpool: 2

- Texas: 3
- Houston: 2
- Dallas: 1
- Claremore: 1
- Skiatook: 1
- Sperry: 1
- Beggs: 1
- Duncan: 1
- Oklahoma City: 1
- Mississippi: 1
- California: 1
- Utah: 1
- Wisconsin: 1
- Refused: 2

■ Of those who stated or included “Location” in their response to why they selected this residence, they made the following paraphrased statements:

- Not a bad part of town – not the ghetto (moved from Mid-South Tulsa to Mid-Central Tulsa)
- It’s near 11th and Utica – close to services, and I’m disabled (moved from Claremore to Tulsa)
- Access to Hwy 169 and shopping; [family reasons], so moved to Tulsa (moved from Texas to Tulsa)
- We bought a couple of acres but it’s close to stores (moved from Owasso to unincorporated Tulsa County within the Owasso Fenceline)
- It’s in Broken Arrow, on a high ridge, and has a great view (moved from East Tulsa to Broken Arrow)
- We built this house; privacy (moved from/to Tulsa)
- It’s convenient to shopping and schools (moved from East Tulsa to Broken Arrow)
- It’s “deep south Tulsa;” has large streets, ¾ acre lots (moved from Mid-South to “Deep South” Tulsa)
- Grandma owned the house, sold it to me, carried the note (moved from North Tulsa to the house across street in North Tulsa)
- It’s Midtown, and close to work (moved from East Tulsa to Mid-Central Tulsa)
- It’s Midtown; I like the area, can get around (moved from Owasso to Mid-Central Tulsa)
- To be near daughter [family reasons] (moved from Sperry to Sand Springs)
- It’s near everything (moved from Broken Arrow to Southeast Tulsa)
- It’s not in Tulsa (moved from East Tulsa to Owasso)
- Proximity to office where I work (moved from South Tulsa to South Tulsa)
- It’s quiet (moved from California to a mobile home park in North Tulsa)
- It’s a rural area (moved from Utah to Owasso)
- To be near my place of employment (church) (moved from Miss. to East Tulsa)
- It’s close to my business (moved from Bartlesville to Broken Arrow)
- It’s quiet (refused)
- It’s on the south side of Tulsa, and it’s nicer (moved from East Tulsa to South Tulsa)

- Easy access to the interstate (moved from Bartlesville to Mid-Central Tulsa)
 - It's close to schools (moved from Mid-Central Tulsa to Mid-Central Tulsa)
- Of those who stated or included “Some Other Reason” in their response to why they selected this residence, they made the following paraphrased statements (grouped into categories of similar response type):
- Family/Aging:
 - [Family reasons] (moved from south of Downtown to West Tulsa)
 - Family (moved from Mid-Central Tulsa to Jenks)
 - Moved to be with family (refused)
 - Married my wife with this house (moved from North Tulsa to Mid-Central Tulsa)
 - We lived on an acreage, but bought a lot in town [family reasons] (moved from rural Owasso area to Owasso)
 - To downsize from 2 story to 1 story house (moved from Mid-South Tulsa to Mid-South Tulsa)
 - To be close to family (moved from Duncan to Owasso)
 - Family ties (moved from Houston to Southeast Tulsa)
 - Relocation from Out of State:
 - Cost of living (moved from Wisconsin to unincorporated Tulsa County in Owasso Fenceline)
 - This was the only one available (moved from Texas to Bixby)
 - Small town setting but medium size town (moved from Texas to Broken Arrow)
 - Build a House:
 - To build a house (moved from Glenpool to unincorporated Tulsa County in Glenpool Fenceline with Mounds mailing address)
 - Had the house built – had to be handicapped-accessible (moved from East Tulsa to Broken Arrow)
 - The house burned and we built this one (moved from Skiatook to Midtown Tulsa)
 - Other:
 - I didn't like that area – too many shootings (moved from unincorporated Tulsa County near Oakhurst/West Tulsa to North Tulsa)
 - We have horses so bought some land (moved from South Tulsa to a Glenpool acreage)

Open-Ended Question Responses. Anecdotally interesting responses to the final, open-ended question, asking respondents to share anything they wished regarding any of the topics covered in the survey, are paraphrased as follows:

- Originally from Michigan... happy to be in the Bible Belt... concerned about Muslims and evil and crime - feels like she is among more Christians here
- It's healthy for our country to have democrats and republicans in the same family, as long as they can agree
- Zip Code 74137 “is very homogenous.”
- We live in this neighborhood because of the of school district... most of the people in this school district are very close to my political belief.

- We don't tax wealth, we tax income and prosperity... concerned about the disparity in wealth... in history, such disparity has led to revolution.
- Used to be a democrat, went towards republican, now sees both parties as the same... now involved in the tea party movement.
- Described him/herself as the "textbook liberal as child of 60s." It is very important that people try to understand each other... don't read Tulsa World or watch some local TV news stations, like CBS, as they are too slanted. Their one wish is for the area to be better balanced, in terms of spoken and written words, and that there be a better understanding between liberals and conservatives... using labels like "Marxist" do not help.
- Described him/herself as a lifelong republican from a republican family until 8 years ago, when they decided the democratic party was more in line with their views, after seeing Bush administration.
- Described him/herself as a "Rockefeller Republican."
- "Lots of neighborhoods in Tulsa are mostly republican."
- "People in Oklahoma should be more open minded with cultural differences... people here misunderstand people from other areas..." skeptical... change is good... others can help them if they would be more open.

ARCH 6690
Rough Draft Survey Questions
Professional Project:
“Geographic Distribution of Political Attitudes and Urban Form”
Drafted Monday, November 16, 2009
Erik Enyart, AICP, Masters Degree Candidate

The following is a rough draft of the questions I believe will help me test my hypotheses, and otherwise to collect data to inform the project. I will conduct this survey via the telephone. I plan to randomly select Tulsa County residents using the residential telephone listings in the latest published *Yellow Book*, Tulsa Metro phone book, which have addresses listed. Randomly selected telephone listings which do not have an address listed or are not located within Tulsa County will be rejected, and the next randomized entry will be selected instead.

When calling, I will ask to speak to “the oldest adult male who is 18 years old or older,” or otherwise, “the oldest adult female who is 18 years old or older.”

Introduction:

“Hello. My name is Erik Enyart, and I am conducting a survey as a part of my Masters Degree program at the University of Oklahoma in Tulsa. This survey covers questions relating to political attitudes and housing choices. The survey should take 10 to 25 minutes. Would you like to participate?”

If they consent, I will advise them “You can discontinue the survey at any time, and you may also skip questions that you do not wish to answer.”

Section A: Tenure at / Rationale for Moving to This Residence

A.1. How many years have you lived at this residence? _____

A.2.1. If you have moved to this residence in the last 15 years, where was your last residence?

(The answer would preferably be another city, another county, another state, or another country. If within the Tulsa County, I would prompt further as needed for a specific neighborhood or general area).

A.2.2. What was the address or general area where your previous residence was located?

A.3.1. Considering only your last move, which of the following would you rate as the primary reason you selected this residence:

1. The price,
2. The schools,
3. The location,
4. I/We just liked this house, or
5. Some other reason.

(If they say, “the location,” ask the following question)

A.3.2. What about the location did you like most? _____

(If they say, “Some other reason,” ask the following question)

A.3.3. What reason? _____

Section B: Type of Residence

B.1. What kind of residence is this?

1. A single-family detached house,
2. A duplex,
3. A condominium,
4. An apartment, or
5. A mobile or manufactured home.

Section C: Ideological / Political Self-Identification

C.1. Thinking about economics and tax policy, do you consider yourself:

1. Conservative,
2. Somewhat Conservative,
3. Moderate,
4. Somewhat Liberal,
5. Liberal?

C.2. When it comes to social issues, do you consider yourself:

1. Conservative,
2. Somewhat Conservative,
3. Moderate,
4. Somewhat Liberal,
5. Liberal?

- C.3. Do you consider yourself:
1. A Republican,
 2. A Democrat,
 3. Independent?
- C.4. Are you registered to vote? (Yes or No)
- (If Yes, proceed to next question)

- C.5.1. Are you registered as:
1. A Republican,
 2. A Democrat,
 3. Independent, or
 4. Something else?
- (If “Something else,” ask to specify)

C.5.2. What is your party identification? _____

Section D: Conservative Ideological Measures

(Authoritarianism)

- D.1. For the next few questions ask what kinds of values children should have, and each question has two (2) values. Please choose one (1) of the following two (2) values as *more important* for children to have:
1. Independence or respect for elders? _____
 2. Curiosity or good manners? _____
 3. Obedience or self-reliance? _____
 4. Being considerate, or being well behaved? _____

(Those who choose the authoritarian response are coded 1, those who choose the other option are coded 0, and those who volunteer answers of “both” or “neither” are coded 0.5. Responses are summed to create our authoritarianism measure).

(Laissez-Faire Conservatism)

- D.2. On a scale of 1 to 10, with 1 being “not at all” and 10 being “very much,” please rate the following statements by how much you agree with them:
1. “We need larger income differences as incentives” _____
 2. “Incomes should be made more equal” _____

(Status Quo Conservatism)

D.3. On a scale of 1 to 10, with 1 being “not at all” and 10 being “very much,” please rate the following statements by how much you agree with them:

1. “One should be cautious about making major changes” _____
2. “You will never achieve much in life unless you act boldly” _____
3. “Ideas that have stood the test of time are generally best” _____
4. “New ideas are generally better than old ones” _____

Section E: Neighborhood Identification

E.1. Do you consider your neighborhood to be:

1. Mostly Republican,
2. Mostly Democratic,
3. Independent,
4. Fairly mixed?

Section F: Moving Plans

F.1.1. Do you plan to move within the next five (5) years? (Yes or No)

(If Yes, proceed to next questions)

F.2.1 Where do you plan to move to?

(The answer would preferably be another city, another county, another state, or another country. If within the City of Tulsa, prompt further as needed for a specific neighborhood or general area).

F.2.2. What neighborhood or general area of Tulsa? _____

F.3.1. Do you think the people in [that location] are more similar to you than the people in your current neighborhood? (Yes or No)

Section F: Demographic Information

G.1.1. Are you male or female? _____

G.1.2. What is your age? _____

G.1.3. From the following options, please select the one which most closely represents your race:

1. White or Caucasian,
2. Black,
3. American Indian or Alaska Native,
4. Asian,
5. Something else?

(If “Something else,” ask to specify)

G.1.4. What is your race? _____

G.1.5 Are you Hispanic or Latino? (Yes or No)

G.1.6. I will read the following levels of educational attainment. Please state which is the highest level of education you have attained after I read it.

1. Some high school,
2. High school graduate or GED,
3. Some College,
4. College graduate,
5. Some graduate classes,
6. Graduate degree or higher.

G.1.7. On a scale of 1 to 3, one being “not at all” and 3 being “very,” please rate how religious you consider yourself to be.

1. Not at all religious,
2. Somewhat religious, or
3. Very religious.

G.1.8. I will read the following levels of household income. Please state which income group your household falls into after I read it.

1. Less than \$20,000 per year,
2. \$20,000 to less than \$40,000 per year,
3. \$40,000 to less than \$60,000 per year,
4. \$60,000 to less than \$80,000 per year,
5. \$80,000 to less than \$100,000 per year,
6. \$100,000 to less than \$120,000 per year,
7. \$120,000 to less than \$140,000 per year,
8. \$140,000 or more per year.

Thank you for taking the time to participate in this survey. Is there anything else you would like to share regarding the topics covered in this survey?
