THE ELECTORAL COLLEGE AND "BATTLEGROUND" STATES

by

Jeffrey Bryan Cole

(Under the direction of Paul-Henri Gurian)

ABSTRACT

The 2000 presidential election renewed calls to abolish the Electoral College and elect the President by popular vote. However, the Electoral College also affects how campaigns allocate resources like money and time. Previous research has revealed that candidates allocate more resources to "battleground states" with unpredictable outcomes. My research goes beyond Shaw (1999, 2004 and 2006) by adding several control variables and testing for "super battleground states." Such battleground states have many electoral votes. Consequently, these models more effectively include size and competitiveness. Likewise, the control variables mean that the model is specified more accurately. This research uses negative binomial count models and pooled OLS regression for the last five elections. These relationships remain even with control variables. Tests also suggest the existence of super battleground states. However, the findings are inconclusive due to apparent multicollinearity. This research has significant normative implications concerning voter turnout and states having equal roles.

INDEX WORDS: Presidential elections, Campaigns, Electoral College, Resource allocations, Strategy, Battleground states

THE ELECTORAL COLLEGE AND "BATTLEGROUND" STATES

by

Jeffrey Bryan Cole

B.A., Millsaps College, 2004

A Thesis Submitted to the Graduate School Faculty of The University of Georgia in

Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2007

THE ELECTORAL COLLEGE AND "BATTLEGROUND" STATES

by

Jeffrey Bryan Cole

Major Professor:	Paul-Henri Gurian
Committee:	Damon Cann
	Jamie Carson

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2007

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

<u>General Overview</u>

The Electoral College is an unusual institution in the political world. No other nation

selects any of its leaders using this method or anything that even resembles it. Because the

Electoral College determines who the President will be, this institution merits much careful study

with respect to its effectiveness and influence. One important component of the Electoral College

is that it affects resource allocations for presidential candidates. These candidates select certain

states in which they will campaign and other states (a much larger group) that they mostly ignore.

The goal of this research is to determine which states they target and why.

<u>The Importance of this Project</u>

Shaw (1999, 2006) is the latest scholar to explore this issue. In a study of the 1988, 1992,

and 1996 elections, he finds evidence that the candidates developed and adhered to strategies

based upon the Electoral College and where they believed the competition would be the greatest.

The candidates purchased the most advertisements and scheduled the most rallies in battleground

states, followed by states believed to "lean" in one direction. Those states thought to support one

candidate overwhelmingly received the least attention from the candidates and their campaign

officials. This research explores the effect of the Electoral College upon candidates.

The present study goes further through two distinct methods. The first change is the

introduction of "super battleground states." In the 2004 election, New Hampshire, New Mexico,

and Iowa were among the battleground states. They had four, five, and seven electoral votes,

respectively. However, Ohio, Pennsylvania, and Florida were also battlegrounds, with twenty, twenty-one, and twenty-seven electoral votes, respectively. After all, candidates must win a majority of the Electoral College votes. Because states allocate their electoral votes by a winner-take-all rule, candidates earn far more votes by winning Ohio than by winning New Hampshire, New Mexico, and Iowa. Therefore, one key issue to address will be whether the larger states receive television commercials and candidate visits above and beyond the smaller ones.

Secondly, a selection of control variables will be introduced in an attempt to rule out alternative explanations including previous voter turnout, state partisanship, and state ideology among others. Shaw (1999) did not include any controls, so the possibility that his findings are spurious cannot be ruled out. In creating a list of controls, this paper considers two hypothetical battleground states, i.e. "two Floridas," with the same number of electoral votes. Differences between these hypothetical states that influence campaign resource allocations are included as control variables. The candidates' home states, voter turnout in the previous election, the average cost per voter for commercials, and the number of media markets will all be included in the model as controls.

The Implications of this Study

Although the present study is not intended to address the normative concerns that will likely arise, these questions are an important motivation for undertaking this research in the first place. Following the 2000 election, many pundits have called for a reexamination of the effects of the Electoral College. Some observers have even advocated its abolition and replacement with a direct election. Of course, the main reason for this reaction was that Bush won only the Electoral College and not the popular vote. This result has generated much concern that many Americans will become disenchanted with politics and refuse to believe that they can create

change in the government through elections. If so, voter turnout could also decline in some states, depending upon the circumstances surrounding elections.

However, the Electoral College raises other normative questions as well. If presidential candidates limit the focus of their campaigns to only a handful of states, then people living in ignored states could believe that the candidates are not interested in their concerns or the issues they deem important. Likewise, following inauguration, the winner may be more likely to listen to the citizens in close states. For example, during President Bush's first term, he routinely visited Florida because he knew that it had potential for being a battleground again in the 2004 election.

CHAPTER 2

LITERATURE REVIEW

Since the 1970s, two different streams of research have emerged on the Electoral College. The first involves the extent to which the Electoral College results in different degrees of power among states and citizens residing within them. This research explores which states have the greatest probability of deciding the election (due to the number of electoral votes) and whether a single vote in one state is more influential than a single vote cast in another state. The second stream explores candidates' resource allocations within the Electoral College system.

Rabinowitz and Macdonald (1986) argue that the manner in which an election is decided determines which state is pivotal in a given election. *Manner* refers to partisanship, ideology, or a combination of the two. *Pivotal* states are those with a number of electoral votes that can enable one candidate to exceed 270 electoral votes. These states lie at the center of the distribution. States with the most electoral votes have the greatest chance of being at the center. Using a Monte Carlo simulation with nearly one million scenarios, the researchers found that regardless of the election type, states with large numbers of electoral votes have a greater probability of being in a pivotal position. The results reveal that in modern elections (those decided by ideology or both ideology and partisanship) like 1980, large states had a greater probability of being pivotal. California had a 12 percent chance of being pivotal, while Rhode Island only had a 0.12 percent chance. If these probabilities are multiplied by the number of electoral votes allotted to that state (if Electoral College votes were given according to power), California would have sixty-four votes, and Rhode Island would receive only 0.64 electoral votes.

In a different study, Brams and Davis (1974) developed a model that assumes that in a general election campaign, each candidate tries to maximize the number of electoral votes they receive, while accounting for his or her opponent's strategy. Thus, the model assumes that both candidates spend about the same amount of money in each state. The researchers noted that ordinarily, a single undecided voter in a smaller state has more power to influence the election than in a larger state. However, the presence of the winner-take-all rules reduces this impact because one voter who decides the election in a larger state would enable a candidate to win far more electoral votes than one voter in a small state. Consequently, they spent more money in larger states than in smaller states. These and other assumptions led the researchers to establish the 3/2 rule which states that candidate expenditures are proportional to the number of electoral votes to the 3/2 power. The tests of the model revealed that in the 1960, 1964, 1968, and 1972 elections, the 3/2 rule explained these differences in campaign visits more effectively than a simple allocation based upon proportions.

However, Colantoni, Levesque, and Ordeshook (1975) argued that this model is ineffective because it failed to account for the competitiveness of each state in the presidential election. Thus, their research introduced the concept of "competitiveness," which refers to how close the election returns are likely to be in a state. In addition, their model assumes that candidates are willing to take risks, and that they will alter their strategies as new and additional information becomes available. The researchers develop a new model that accounts for these considerations. When applied to the same elections as Bram and Davis (1974), the 3/2 allocation rule is applicable in only about half of the elections. In other elections, the discrepancies were smaller.

Bartels (1985) revisited the work of Brams and Davis (1974). He studied Carter's campaign spending in the 1976 election and found that this campaign's allocations matched the 3/2 rule (It should be noted that Colantoni, Levesque, and Ordeshook (1975) observed that the 3/2 rule worked in at least some elections). In addition, he introduced the distinction between *instrumental* and *ornamental* expenditures. Instrumental allocations are used directly on activities that gain votes, while ornamental spending is intended for other purposes, such as rewarding loyal supporters. For example, George W. Bush might have returned to Texas occasionally for an appearance even though he had always been expected to win there in both elections.

Although the above research has demonstrated that under the Electoral College system larger states are more influential than smaller states, Shaw (1999, 2004) has focused even more specifically upon on resource allocations in each state. His work places more emphasis on strategy than any other Electoral College research to date. Based upon personal interviews of numerous strategists and his experience serving on both Bush/Cheney campaigns, he put forth three classifications of states in each election based solely upon expected outcomes: solid, leaning, and battleground. Solid states are those that campaigns believe are guaranteed to vote in favor of one candidate or the other. Their results are a foregone conclusion. The campaigns classify states as leaning if they think that those states appear *likely* to be carried by one of the candidates. However, these states could still swing to the other candidate. In battleground states, polling and recent trends suggest that either candidate has a realistic chance of earning its electoral votes. A 2SLS analysis demonstrates that these Electoral College strategies and the opponent's resource allocations were both instrumental in influencing a candidate's resource

allocation concerning the purchase of television advertisements and appearances in each state for both parties in the 1988, 1992, and 1996 general election campaigns.[1]

Hill and McKee (2005) conducted a similar study of the 2000 presidential election in an effort to study its effects on turnout. However, they also introduced a variable that interacts battleground status and spending on television advertisements. It produced a strong, statistically significant correlation. An interaction between the number of electoral votes in a state and its battleground status attained statistical significance when the number of campaign appearances was the dependent variable. For each additional electoral vote in a battleground state, the number of visits increased somewhat. Nevertheless, they do not discuss this finding in detail, and they never explore its implications.

Shaw (2006) expands upon his previous work by examining the 2000 and 2004 elections with the media market as the unit of analysis. He hypothesizes that campaigns make decisions concerning resource allocations based upon their classification of states, the opponent's strategy, and the cost of advertising. As in the previous research, Shaw operationalizes television advertisements by using Gross Ratings Points (GRPs) which provide estimates of how large an audience is exposed to a particular advertisement and control for differences across media markets. Both campaigns spent millions of dollars in each election. Expenditure levels in battleground states exceeded those of non-battleground states and varied from one battleground state to the next, particularly in the 2000 campaign. The same was true for candidate appearances, although Bush and Cheney appeared more frequently than Gore, Lieberman, Kerry, and Edwards. At the media market level, both campaigns focused on the same states, though sometimes (especially the Republicans), they purchased more GRPs in rural areas of these states. They

---

[1] It should be noted that in a replication project at Harvard University, Reeves, Chen, and Nagano (2004) found that the tables contained in Shaw (1999) lacked any substantive findings. Shaw (2004), citing a separate retest of his dataset, maintains that his findings, discussed above, are substantively and statistically significant.

apparently did so either in an effort to appeal to their base or because advertisements there were less expensive. Especially for appearances, all campaigns largely adhered to their initial allocation plans. They generally ignored base states, spent more time and money in leaning states, and focused primarily on battleground states.

CHAPTER 3

RESEARCH QUESTION AND THEORY

<u>Research Question</u>

In this thesis, the research question to be addressed is:

To what extent does the Electoral College cause presidential campaigns to allocate resources of time and money to battleground states (where the election is considered "too close to call")?

<u>Overview</u>

As the general election campaign season approaches, each candidate and his or her team must design a campaign strategy. This plan resembles the marketing approach companies must use to sell the products they develop. Just as a company must determine what types of people will be most interested in their product, campaigns, in line with theories from Downs (1957), must successfully target the most voters. To do so, they must create effective messages and make good decisions about where to broadcast them. They are forced to choose who receives the message because they work with limited time and money.

To aid in these important decisions, the campaigns will collect as much information as possible with regard to likely outcomes within each state, both in various regions of the state and the state as a whole. This information includes opinion research, past election returns, and the status of state politics. For example, they might want to know whether one party dominates the state legislature or both parties wield similar degrees of power. With this knowledge, the campaigns classify states into categories based upon the election's likely outcome and the influence of time and money.

<u>The Messages</u>

As in all campaigns for any office, the candidates must create a message around which they will center their campaign. The messages' development is complicated. They are the result of numerous sources including the political party's platform, candidates' previous voting record and personal views, and public opinion concerning issues that are important to the electorate.

Public opinion is always a key factor in deciding what issues are the most important in an election. If the economy is sluggish, then citizens will not support any candidate without a plan to improve matters. Likewise, the War on Terror has been one of the most salient political issues following the September 11th attacks. In the 2004 election, both President Bush and Senator Kerry had to present strategies to prevent further attacks.

The candidates' policy positions concerning these conspicuous topics come largely from their previous views and handling of the issues. Deviation from this record, whether real or perceived by observers, will be met with skepticism and is often grounds for criticism. Candidates with shorter voter records have greater freedom to adapt their stands to public opinion (Downs 1957). By the general election, candidates move closer to the center. They follow the mistaken conventional wisdom that primary voters are those who more strongly identify as Democrats or Republicans. Meanwhile, general election voters, collectively, are more moderate and plentiful (Norrander 1989).

In addition, candidates often determine their personal attributes and include them as part of their appeal to voters. For example, the Bush campaign played up their candidate's leadership abilities and faith. Meanwhile, some Kerry advisors said that because he was seen windsurfing (while President Bush worked on his ranch), Kerry had failed to identify with voters (Bumiller 2004b).

The Messages' Recipients

As stated above, once candidates develop issue positions and other messages, they must select the audiences they believe will be most receptive to their messages. Generally speaking, presidential campaigns employ two general approaches to spread their messages. The first approach involves targeting members of their political party and people identifying with their core groups of supporters. For example, President Bush courted evangelical Christians and opponents of gun control. Democratic candidates woo labor unions and African Americans. Strategies often involve maximizing voter turnout among core supporters. In recent years, campaigners have begun *micro targeting*, a practice that involves tailoring a specific message to individual voters. These messages are often based upon factors like what kind of car a person drives or the magazines to which they subscribe (Hillygus and Shields 2007). Another approach involves winning over swing or undecided voters. In this way, candidates will try to reach such citizens and win them over.

Classification of States

Everything discussed above in this chapter can be applied to campaigns for many elected offices. The scale of the campaign, of course, depends upon the office in question. However, the introduction of the Electoral College dramatically alters the situation for the presidential elections. Because electoral, not popular votes, win elections, candidates must obtain pluralities within entire states.

Even the wealthiest campaigns cannot afford to run television commercials, send direct mailings, and hold rallies in every county in the United States. Therefore, they must select certain states and areas within these states where their message will turn out the largest number of voters in their favor. Once again, all office seekers share this goal, but achieving it is far more

complex in presidential elections. Candidates must zero in on the specific areas with large constituencies of either their core supporters, undecided voters, or both. In addition, they need to target these groups within the states whose electoral votes are needed for victory.

In many states, the election returns are never questioned. For example, in the 2004 election, most pundits and both campaigns predicted that Bush would carry every Southern state, except Florida. The situation was the same for Kerry and the New England states, except New Hampshire. Campaign appearances and advertisements will not change these outcomes, so it is not in the best interest of either candidate to campaign there. Consequently, these states receive scant attention from the campaigns. Other states, like Florida, lie at the opposite end of the spectrum. No one knows what will happen, so a hard campaign can enable candidates to be successful in winning over undecided voters and mobilizing one's base in these states. Finally, some states appear to be leaning in one candidate's favor. Victory for him or her is likely, though by no means guaranteed. All is not lost for the other candidate. Therefore, these states cannot be ignored, especially in a close election (Shaw 1999, 2006).

CHAPTER 4

RESEARCH DESIGN

Hypotheses

1.) In general presidential election campaigns, the candidates will purchase the most television exposure in states that have high numbers of electoral votes and that their campaign officials classify as battleground.

2.) In general presidential election campaigns, the candidates will make the most appearances in states that have high numbers of electoral votes and that their campaign officials classify as battleground (meaning that either candidate has a reasonable chance of carrying that state).

Estimation Techniques

This study employs two different estimation techniques. I test Hypothesis 1 with OLS regression. The number of GRPs is a ratio level variable, so OLS can be used effectively. Hypothesis 2 is tested with negative binomial count models. This count model allows for overdispersion, rather than requiring the mean and variance to equal each other. Count models almost always contain overdispersion, so the Poisson model, which assumes equidispersion, would not be appropriate (Long 1997). All models will be pooled.

Temporal and Spatial Parameters

This study covers the five general presidential elections ranging from 1988 to 2004. The general election period runs from the end of the second convention to the day before Election Day. Advertising and campaign rallies that occurred prior to this period are excluded from study (Shaw 1999, 2006). Shaw (2006, pp. 77-78) acknowledged that much campaign activity takes place before this time period, but he lacked sufficient data to extend his work to include previous activity. In reality, such an extension could easily become problematic, as the parties determine

whom they will nominate at different times. For example, in 2004, President Bush never had

opposition, while Kerry secured the nomination in March. Therefore, if the period of study was

extended, one could not discern differences in the two parties' behavior.

Dependent Variables

This thesis contains two dependent variables, both of which measure resource allocations.

The data for the 1988, 1992, and 1996 elections come from the replication study performed by

Reeves, Chen, and Nagano (2004). For the two most recent elections, the data comes from Shaw

(2006).

The first dependent variable is the number of campaign appearances the presidential and

vice presidential candidates of each party made to a state during the general election period

described above. A visit occurs when either the presidential or vice presidential candidate

appears in a given state on a particular day. No distinction is made between visits by presidential

and vice presidential candidates. Doing so would be problematic because sitting presidents and

sitting vice presidents generate far more publicity than those who are merely candidates. Finally,

if a candidate appears in two cities within the same state and on the same day, then the candidate

made two visits (Shaw 2006).[2]

The second dependent variable involves television advertising during the general election

period. Rather than using raw amounts of money spent, Shaw (1999, 2004, and 2006) converted

these figures into Gross Ratings Points (GRPs), which measure the amount of exposure that the

campaigns purchased in each state. One hundred GRPs bought in a given media market are

enough to insure that everyone residing in that market sees an ad once. This decision has

---

[2] For the first three elections, Shaw (1999) operationalized this variable as the number of days a candidate spent in a particular state. While this difference may appear problematic, candidates most likely could have also traveled from one state to another on the same day. Note, for instance, the proximity between Ohio and Pennsylvania, two battleground states in recent elections.

important implications. Had Shaw used raw exposure, there would not have been a way to know whether a candidate bought a small number of expensive ads in one state or many inexpensive ads someplace else. For example, a campaign might have bought a few ads in New York. Because that media market is the nation's most expensive, those few ads might cost the same as a much larger number of ads in Albuquerque. Therefore, the GRPs more accurately reveal differences in exposure than raw dollar amounts, which would have been misleading. In other words, GRPs control for the ads' cost (Shaw 2006, p.76). Thus, voters residing in states with a larger value for GRPs were more likely to have seen these commercials than citizens living in other states. Both dependent variables come from Shaw, who collected them from his interviews with high-ranking members of all candidates' campaign staffs.

Main Independent Variables

Electoral Votes

Electoral votes are the first independent variable. This number is different for the 1988 and 2004 elections, while the 1992, 1996, and 2000 election figures are all based upon the 1990 census. In the 2004 election, their distribution changed somewhat following the 2000 Census. Many conservative states in the South and West gained votes, while Northeastern states lost votes.

Classification of States

The states are classified based upon whether they are considered battleground, leaning, or solidly in favor of a particular candidate. Shaw (1999, 2004, and 2006) based this classification system upon his interviews with strategists and campaign activists and attendance at conference presentations in which key officials reviewed campaigns in the months following elections. Each state has one of five classifications. For non-battleground states, Shaw makes a distinction with

respect to who is likely to win the state or which candidate it is leaning toward. This distinction includes whether the state is leaning toward or away from a particular candidate. Of course, the most important distinctions are whether a state is safe or leaning, rather than the campaign in whose favor it is safe or leaning. However, the inclusion of this information helps to determine what strategies the campaigns employed. Shaw (2006) describes several strategies that involve either retaining perceived leads or "stealing" leaning states from one's opponent.

Electoral Votes*Classification of States

This variable is an interactive variable comprised of the two variables discussed immediately above. It tests for the presence of "super battleground" states, meaning battleground states that have numerous electoral votes. In this way, it is possible to test whether states like Florida (a large battleground state) received more visits than New Mexico (a small battleground state) and whether New Mexico received more visits than Utah (a safe state with the same number of electoral votes).

Control Variables

Home State Advantage

Much research has explored the advantage that a ticket in a presidential election has in the presidential and vice presidential candidates' home states. For presidential candidates, the only conflict in the literature is how great this advantage is. Lewis-Beck and Rice (1983) reported that it averages to about four percentage points for elections from 1884 to 1980. Studying elections from 1972 to 2000, Mixon and Tyrone (2004) found that the advantage in the home state ranges from 5 to 15 percentage points, depending largely upon the state's size. However, Dudley and Rapoport (1989) report a negligible edge in the vice presidential candidate's home state, even though the conventional wisdom is that an appreciable increase

does exist. Assuming that a candidate has an edge in his or her home state (and that they are undoubtedly aware of it), candidates might decrease the number of appearances and spending in their home states. After all, people there already know who they are. In an election with two battleground states and the same number of electoral votes, we should expect reduced campaign activities if one state is where one of the candidates resides. Therefore, this research includes variables that control for the home states of both the presidential and vice presidential candidates.

Voter Turnout in the Previous Presidential Election

Another important control addresses voter turnout. In recent years, many campaigns for all offices have emphasized grassroots efforts to "get out the vote." In 2004, for example, the Republicans received much publicity concerning their efforts to turn out evangelicals (Bumiller 2004b).

Historically, some states have experienced greater voter turnout than others (McDonald and Popkin 2001). For states predisposed to high turnout, the campaigns might adjust their spending and appearances. The reason to do so is that, controlling for population, such states have fewer citizens who would benefit from mobilization efforts. If they believe that a large turnout will occur, then they would be wasting their money. Conversely, in a battleground state, they may think that their efforts in such a state would be even more effective than in other states. In a battleground state, of course, every single vote counts. Therefore, the campaigns would behave differently in these states. Consequently, a two-tailed measure of voter turnout in the previous presidential election will be included as a control variable.

McDonald and Popkin (2001) published a key study concerning voter turnout. They demonstrate that the much-lamented decline in voter turnout is merely the result of how scholars have operationalized voter turnout. Most such studies compare the number of voters with the

voting age population (VAP). This figure, of course, represents all citizens eighteen years of age and older. However, the *voting eligible population* (VEP) excludes disenfranchised groups and non-citizens. When researchers base turnout levels on this figure, they find that turnout rates are considerably higher.

State Partisanship

Two other controls are needed to determine whether partisanship and ideology play a role in resource allocations. In other words, if a campaign has two battleground states with the same number of electoral votes, do differences in state partisanship and ideology cause the candidates to behave differently?

To measure state partisanship, the best option is to use the percentage of the state legislature in each election year that belongs to each party as a control variable. The data comes from the appropriate editions of *The Book of the States*, which is published by the Council of State Governments. In the Republican model, I operationalize this factor as the percentage of each state legislature that is Republican. For the Democratic model, the measure is the percentage of the state legislature comprised of Democrats.[3]

This measure is preferable to others because it most directly reflects the degree of partisanship in each state electorate. Candidates whose strategy is to mobilize their base should devote more resources to states that they perceive to be friendly to their political party *ceteris paribus*. For example, if a state legislature is 80 percent Republican, then the Republican candidate would be predisposed to spending more money in that state.

---

[3] For the District of Columbia, this measure is for the City Council. All states have these measures, expect for Nebraska. Its unicameral legislature is nonpartisan.

State Ideology

Closely related to partisanship is ideology. Candidates should focus more on states to which they are ideologically closer than to other states. The ideal operationalization would capture the ideological distance between the candidates and the state electorate. It would likewise determine which candidate was closer to the state electorate. Creating such a variable would require one measure of mass ideology and another measure of candidate ideology relative to each state's mass ideology. Next, the two measures would then be "bridged" so that they were on the same scale.[4] Common Space scores would appear to be a good candidate for this task. Taking the average of each state's senators would produce liberal ideologies for states like Massachusetts, conservative ideologies for Southern states, and moderate ideologies for states like California. However, Common Space scores are measured relative to other members of Congress (Poole and Rosenthal 1997). In other words, Barbara Boxer is liberal compared to Trent Lott, but California is not necessarily more liberal than Mississippi.

Alternatively, Erikson, Wright, and McIver (1993) measure state ideology with an aggregation of CBS News/New York Time surveys measured from 1976 to 1988. These surveys include the question, "'Generally, do you think of yourself as a liberal, moderate, or conservative?'" (14). The researchers aggregated the responses by coding 100 for liberals, 0 for moderates, and negative 100 for conservatives.

Unlike using Common Space scores to operationalize ideology, this particular measurement of ideology is especially effective since it is at the individual level. Candidates will know where they stand ideologically, relative to each state. In this way, they can plan accordingly. Therefore, they reflect state ideology. Once again, assuming that the campaigns try to raise turnout, they will expend more resources in ideologically close states.

---

[4] For example, see Epstein et al. (2006).

Undecided Voters

Closely related to voter turnout is the number of undecided voters. From the campaign's

perspective, information on voter turnout is important if their strategy involves grassroots efforts

to mobilize their bases. However, another approach in a close election is to try to win over

undecided voters. Using this method, a campaign would concentrate its resources in states with

many undecided voters. Bumiller (2004a) and Shaw (2006) mention that the campaigns also

conduct their own internal polling in battleground states, so they clearly keep themselves abreast

of these trends.

During the general election campaign season, polling organizations routinely ask

prospective voters questions like, "If the election were today, for whom would you cast your

vote?" The respondent is then asked to choose either candidate or say that he or she is not sure.

Unfortunately, these polls generally do not break down the results by state residency, which is

necessary for this project since states are the unit of analysis. The only available source to break

down results in this way is the Voter News Service General Election Exit Poll, which is available

for the 1988, 1992, 1996, 2000, and 2004 elections from ICPSR.[5]

This survey contains a question concerning when the respondent actually decided for

whom to vote. The respondent had four choices: within three days of the election, within a week,

within a month, or "before that."[6] The researcher has collapsed this variable so that respondents

selecting one of the first three choices are considered "late deciders." Anyone selecting "before

that" is an "early decider." Therefore, I am making the assumption that states with a higher

---

[5] The poll used in 1988 was the CBS News/New York Times General Election Exit Poll. The 1992 polls were called Voter Research and Surveys General Election Exit Polls.

[6] In 1992, the choices included "in the last two weeks, after the debates," "after the conventions" and "before that." Here, those selecting "before that" and "after the conventions" were classified as early deciders. This situation is not ideal, as the 1992 measure is somewhat inconsistent compared to the other years. However, there is only a two week difference between late deciders in 1992 and late deciders in other years. Thus, the effect on the model should be negligible.

percentage of late deciders also had more undecided voters at the outset of the general election season. If they were undecided a week before the election, then they would also have been (most likely) undecided just after the second convention.

Clearly, the timing of this survey is not ideal given the research question. A measure taken at the end of the second convention would be better. However, because this strategy is commonly used, the absence of this control could lead to omitted variable bias. The models would be incomplete without some attempt to control for it, even if this particular operationalization is somewhat indirect.

Number of Media Markets in Each State (Visits Models Only)

When candidates travel the country appearing at rallies, they hope to broadcast their message to as many people as possible. Of course, they spread it directly to prospective voters who attend the rallies. However, the local news media also provides coverage, so that thousands of additional voters may hear about the event too. Generally, these appearances include a speech, possibly with questions, and the obligatory shaking hands and kissing babies.

Therefore, reporters may not provide as much coverage of a campaign appearance if it is not the candidate's first to the area in question. In general, subsequent visits will not receive the same quality and quantity of publicity that characterizes a first visit. "Reporter fatigue" sets in. Candidates want as much publicity as possible, so they might avoid going to the same place in an effort to carry their message to different audiences. A state with ten media markets would have ten different audiences. If the campaign wants everyone to learn of a visit to their area, then it would need to make ten appearances. Time restricts the number of visits that candidates are able to make. Thus, it is absolutely essential for candidates to obtain the maximum benefit (publicity)

from each visit. Consequently, the visits model will include a control for the number of media markets located within each state.

This information comes from Nielsen Media Research. That organization recognizes 210 different media markets that do not overlap. To be included in a state, the media market need not be based there. I expect that candidates will make more appearances in states with larger numbers of media markets, holding all else constant. In these states, their message has the greatest potential to receive maximum coverage as it will be broadcast to more audiences than in states with fewer media markets.

Cost per Voter (TV Ads Models Only)

As mentioned earlier in this chapter, Daron Shaw's gross ratings points (GRPs) measure the amount of exposure that campaigns purchased in each state. This measure is preferred as the dependent variable because of differences in advertising costs. Nevertheless, the variable does not provide a means of knowing whether advertising costs affected where candidates campaigned. Researchers cannot afford to overlook this factor. If two battleground states are alike in every way except for the cost of advertising, then campaigns will purchase more GRPs in the state where the costs are lower.[7]

To obtain cost estimates, I am using the 2002 edition of the *Marketer's Guide to Media.*[8] This annual publication lists the cost per TV household rating point for thirty-second commercials in the nation's one hundred largest media markets. Specifically, the figures used here are all averages with respect to time of day. Approximately 86 percent of Americans live

---

[7] In this regard, Shaw's findings could easily be spurious. Perhaps differences in advertising costs explain why candidates purchased more exposure in one state over other.

[8] I was unable to obtain editions of this publication for each election year included in this study. Therefore, I will assume that advertising costs remained constant throughout the period. This assumption is not ideal, but given that I am most interested in relative cost differences, it is a reasonable assumption nonetheless.

within one of these media markets. However, several states lie entirely within the 110 smaller media markets. Therefore, I have averaged the cost for markets 91-100. That cost will be used as a proxy for the actual cost estimates in these locations.

With this information, I next calculated the voting age population of each county, once in 1996 and again in 2002. Dividing the advertisement costs by the voting age population leads to the cost of reaching a single voter in that county. The last step was to add the cost per voter in all counties within each state. The cost per prospective voter ranged from $.0005 in some states to over $1.50 in others.

This method clearly is not ideal, as the population distribution among media markets has changed during the course of the study. However, for the purposes of this study, *relative* costs are more important than actual costs. The real question concerns how much more expensive ads are in New York City than in Atlanta, for example.

CHAPTER 5

RESULTS AND DISCUSSION

<u>Democratic and Republican GRP Models (Without Interaction Terms)</u>

Tables 1 and 2 present the models for the Democrats and Republicans respectively,

without the interaction terms. As Shaw (1999, 2006) observed, both campaigns heavily increased

the number of GRPs that they purchased in leaning and battleground states, relative to states that

they projected their opponents would easily win (the excluded category in all models). For

example, holding all else constant, the Democrats increased the average number of GRPs

purchased in battleground states by 6,734, relative to safe Republican states. Republicans bought

an average of 9,165 additional GRPs in battleground states compared to safe Democratic states.

In addition, the candidates campaigned harder in leaning states than in safe states. Both

parties purchased more television advertisements in leaning states, especially if those states

appeared to favor them. For the Republicans, switching from strong Democratic states to leaning

Democratic states resulted in an additional 3,242 GRPs; with respect to states leaning Republican,

the difference was 4,581 GRPs. Democrats had similar results, although the trends were not as

strong for them. This particular finding suggests that both campaigns were more interested in

maintaining and improving upon perceived leads than trying to "steal" states from the other party.

Each of the relationships described above is statistically significant.

Interestingly, the number of electoral votes in a state failed to attain statistical

significance. In fact, both coefficients were actually *negative*. This finding suggests that the

number of electoral votes did not matter to candidates compared to their chances of winning a

given state. In other words, New Mexico, a battleground state, in the 2000 and 2004 elections, with five electoral votes was more valuable than California and its 55 electoral votes. In the 2000 and 2004 elections, both parties expected the Democrats to win California handily. Indeed, in many elections, large states like California, New York, Texas, and Illinois were not battleground states. Even though this finding might initially seem unexpected, it is actually quite plausible.

Finally, the control variables lack statistical significance. The only exception was for the Republicans and late deciders. Holding all else constant, the Republicans purchased about 6,746 more GRPs in states a higher percentage of undecided voters. This result suggests that they did not completely write off undecided voters and still courted them.

Overall, the models' R-squared value is a healthy 0.48 for the Democrats and 0.55 for the Republicans. The F test result is 0.00 for both models. It should be noted that in all models discussed in this chapter, missing data from a few states resulted in an n of 224, rather than n=255 (fifty states plus the District of Columbia times five elections). These observations were always Western states with populations too small for a valid measurement of ideology and when citizens decided for whom to vote. Such states were considered safe Republican in each election. Since they were not battleground states and did not contain many electoral votes, their omission is unlikely to bias the findings.

Democratic and Republican Visits Models (Without Interaction Terms)

Tables 3a and 4a show the results of the visits models for Democrats and Republicans, respectively. Again, these models do not include the interactive terms. As with GRPs, the findings reveal similar relationships for both parties. In each model, the variables for leaning, battleground states, late deciders, and ideology all attain statistical significance. However, for late deciders, both parties actually made *fewer* visits in these states, perhaps because they were

primarily interested in mobilizing their core supporters. This finding conflicts with those of the GRP models. In addition, electoral votes for the Democrats and the number of media markets for the Republicans are also statistically significant. Likewise, in the Republican model, the electoral votes variable was almost statistically significant, with a p value of 0.08.

For the purposes of interpretation, predicted probabilities for states receiving between zero and five visits are also included following each of the main models. Tables 3b-3d and 4b-4d show these expected counts for each level of competition in states with three, ten, and twenty-five electoral votes. Examining these tables, several facts stand out. First, the probability of a state not receiving a single visit is highest for safe states and lowest for battleground states. In other words as with advertisements, presidential and vice presidential candidates are far more likely to visit battleground states than safe states. Second, the rates for visits to leaning states were higher for states leaning Republican rather than states leaning Democratic. This trend was true for both parties and suggests that the Democrats were trying to win over Republican states, while the Republicans were making efforts to keep states that appeared to lean in their favor. However, the differences in these rates were generally marginal. Third, the rates for states with more electoral votes are always higher than those for states that contain fewer electoral votes. Finally, the Republicans appear to concentrate more resources in battleground states than Democrats do. Otherwise, the trends observed are generally the same for both parties.

Democratic and Republican GRP Models (With Interaction Terms)

Tables 5 and 6 present the results of the OLS regressions for the Democrats and Republicans with four interactive dummy variables included. Even a cursory glance at these tables reveals considerable differences with the previous models. In either table, few variables attain statistical significance. Only the base dummy variables of Democratic leaning, Republican

leaning, and battleground states are statistically significant. These tables reveal the same trends as Tables 1 and 2. The number of GRPs purchased is highest for battleground states, followed by states leaning in the party's favor and then states leaning in the opponent's direction. However, for both the Democrats and Republicans, the interaction of electoral votes with battleground status was again negative, suggesting that they bought fewer GRPs in large, battleground states. The other interacted variables reveal only negligible increases in the number of GRPs purchased.

Democratic and Republican Visits Models (With Interaction Terms)

Tables 7 and 8 show the campaign visits models for the Democrats and Republicans, respectively. The results reveal patterns similar to the models in Tables 5 and 6. The constituent variables for leaning states (in both directions) and battleground states are statistically significant, while electoral votes, safe states, and all of the interacted terms are not. Among controls, there was a statistically significant decline in the number of visits to states with many undecided voters. Ideology was also statistically significant. Finally, the Republicans also made a statistically significant increase in visits to states with more media markets.

Because these results are not statistically significant, they should not be interpreted. They are consequently inconclusive. Therefore, no predicted probabilities or factor and percent changes are included.

The lack of statistical significance in Tables 5 through 8 poses a key problem for the results discussed above. Given that the models employ nine variables to explain two phenomena (electoral votes and classification), multicollinearity is likely causing the absence of statistical significance, negative coefficients, and results that are drastically different from Tables 1 through 4. Generally, one can test for multicollinearity by using the variance inflation factor or the VIF. However, this test is not valid in models with dummy variables and interactive terms (Fox 1997).

At this point, the problem is quite serious, because the findings are inconclusive and merely suggestive.

Collecting more data is generally considered to be the best way to reduce or eliminate multicollinearity (Fox 1997), but for this particular research question, the necessary data is not available. Consequently, the researcher cannot determine whether the hypothesized relationships would be observed in the absence of multicollinearity. Therefore, the best course of action is to eliminate some of the variables, producing simpler models.

Reduced Democratic and Republican GRP Models

Tables 9 and 10 display these reduced models for Democrats and Republicans.[9] They include only the number of electoral votes separately and interacted with states leaning in favor of the party, leaning against each party, and battleground states. The controls were also included. These models show the same relationships that appear in Tables 1 and 2; the coefficient for electoral votes is negative for both parties, while the interactions of electoral votes and leaning states are positive. Both parties paid more attention to states leaning in their direction, but spending in states leaning toward their opponents increased too, particularly for the Republican campaigns (The Democratic increases for states leaning Republican did not attain statistical significance). The GRP increases were even higher for battleground states with a change from states safe for the opponent. In addition, the Republican model also showed statistically significant increases in states with late deciders.

---

[9] The researcher first attempted to collapse some variables by combining (rather than eliminating) categories of safe and leaning states. In other words, I created variables that contained *all* safe states and *all* leaning states. This action lowered the number of variables from nine to seven and then to five. With each additional model, the p values dropped, approaching the 0.10 level of significance. However, they did not reach this level.

<u>Reduced Democratic and Republican Visits Models</u>

Tables 11 and 12 display the reduced visit models for the Democrats and Republicans, respectively. These models include all of the same variables as the reduced GRP models in Tables 9 and 10. Overall, they resemble the reduced GRP models presented in Tables 9 and 10.[10]

In these tables, the coefficients for leaning and battleground states are statistically significant for both parties. The same is true for ideology. The number of media markets is also significant, but only for the Republicans. For these reduced models, the pseudo r-squared estimates fell to 0.14 for both parties. As with Tables 7 and 8, there are no predicted probabilities, since these models cannot be predicted reliably.

Because the variables are now statistically significant, the likelihood that the models in Tables 5 through 8 had high levels of multicollinearity is great. If Tables 9 through 12 also lacked statistical significance, I would believe that the models contained some other problem or that the hypotheses were simply wrong. Thus, the results in the last two tables must be interpreted with great caution. In these models, numerous variables have been *eliminated*, not simply collapsed. Likewise, the constituent variables in the interaction terms were also excluded. Numerous methodologists (see for example Brambor, Clark, and Golder 2006) warn against this practice, citing concerns that it imposes unrealistic restrictions on the slopes and intercepts for each of the interacted variables. It causes each term to have the same slope or the same y intercepts, which defeats the purpose of having a model that allows for the effects of one independent variable on y to be conditional upon another independent variable. However, in this research, I expect *only the slopes* to vary. The y intercepts for all variables should be at the origin. For example, Puerto Rico has zero electoral votes. Therefore, no candidate would spend a penny

---

[10] As in the GRP models, I collapsed some of the dummy variables so that their number decreased from nine to five. Those results, not presented in the paper, came closer to statistical significance, though without actually obtaining it.

there, regardless of whether it was a battleground, leaning or safe state. Nevertheless, these results should be interpreted as suggestive.[11]

Another approach intended to determine whether the lack of statistical significance is due to multicollinearity or the hypothesis being incorrect involves the partial F tests for joint significance. Whereas p values tell whether one particular independent variable has a statistically significant effect on the dependent variable, the F test demonstrates whether the entire model (or selected variables) jointly affects the dependent variable. Therefore, I performed an F test on the two entire GRP models, the interacted variables as a group, and each set of constituent variables with their interacted term.

Overall, the results suggest that the models are jointly significant, though some sets of interacted terms do not improve the models' effectiveness. When tested as a whole with all independent variables together, Democratic and Republican, both models attain joint significance. Conversely, tests of only the interaction terms reveal that they alone do not enhance the models in any way. The next step involved breaking down the test by applying it only to one set of three variables at a time. In both models, the sets for safe states fail to attain joint significance. The same is true for the Democrats with respect to states they believed leaned Republican. All other sets attained joint significance at either the 0.01 or 0.05 levels.

Taken together, these tests indicate that the safe state variables do not contribute anything to the overall models. While this news is not particularly welcome, the fact that all other sets were jointly significant provides further evidence that the hypotheses are correct. Had the other sets failed, I would have been forced to conclude that the hypotheses were simply wrong. The reduced models and F tests do suggest that the hypotheses presented above are correct. Still,

---

[11] In this scenario, Braumoeller (2004) argues that such a finding is only valid when the second constituent variable (in this case, electoral votes) equals zero. Setting it equal to anything else would drastically alter the beta values for the dummy variables.

future research, perhaps with interval or ratio level data, will be needed in order to examine these

relationships more fully.[12]

---

[12] In addition to the tests described above, I also removed the "late deciders" variable from the models to see if the missing data would help reduce the multicollinearity. It increased the n value from 224 to 240, but the results did not change drastically.

CHAPTER 6

CONCLUSIONS AND IDEAS FOR FUTURE RESEARCH

Recap

In summary, the findings presented above provide evidence (even in the presence of statistical problems) that presidential campaigns allocate time and money based upon how they classify each state's competitiveness. Put simply, observers should expect to see large battleground states receive the most interest from the campaigns. This interest, of course, comes as television commercials and campaign rallies. Safe states, regardless of size, seldom pique the candidates' interest, as they know that the odds of changing the elections' outcomes in these states are diminished considerably.

For the elections included in this study, both parties had similar strategies. After battleground states, states leaning in each party's direction were hard fought. This observation suggests that the both campaigns followed what Shaw (2006) describes as a *mixed strategy* of "shoring up the most vulnerable lean Bush states, while focusing on the most promising battleground states and perhaps targeting the one or two most susceptible lean Gore states" (53).[13] The campaigns seemed more concerned about maintaining their leads in states leaning in their favor than trying to move ahead in states favoring their opponents.

Implications of This Study

As stated in Chapter 1, this study is unprecedented in two key respects. First, unlike Shaw (1999, 2006), I included several control variables in an effort to eliminate alternative explanations for Shaw's conclusions. Based upon his work alone, these findings were suggestive

---

[13] Here, Shaw is describing his experiences working with both Bush/Cheney campaigns.

at best. However, the observed relationships persist even in the presence of these controls.

Therefore, they accurately reflect what presidential campaigns actually do. Students of campaign

politics now have greater assurances of this phenomenon.

With respect to the idea of super battleground states, my conclusions are somewhat

nebulous. This qualification comes from the multicollinearity present in the models. Still, after

eliminating some of the variables, which is never a good idea, the remaining independent

variables attain statistical significance. Nevertheless, these findings are merely suggestive.

Future Research

To begin, one additional control variable should be included in future research. That

variable concerns the presence of other contests on the ballot. In such a case, the presidential

candidate can work with the other campaign to coordinate their efforts in a frugal, mutually

beneficial manner (Shaw 2006).

Concerning future research, several options exist for overcoming the problems that

multicollinearity has caused. The most promising approach involves changing the

operationalization of battleground status. To this end, interval level data should replace nominal

data. Possibilities for interval level data include that of forecasting models and previous election

returns. Closely related to these options is the use of polling data. If available to researchers, the

advantage to using polling data is that it (along with previous election returns) is one of the

sources for the campaigns' classifications of states (Shaw 2006).

Normative Concerns

These findings also point out that many scholars' normative concerns regarding the

Electoral College are justified. Edwards (2004) is the most prominent example in recent years,

providing several different reasons favoring the Electoral College's abolition. He points out that

some pundits favor its retention because they believe that its presence forces candidates to amass support from citizens nationwide and protects groups' interests. However, Edwards shows that in the 1976 campaign, the candidates actually visited only a handful of states that they thought were competitive (108-9). He concludes, "States – including states with small populations – do not embody coherent, unified interests and communities, and they have little need for protection" (121).

This rhetoric means that campaigns only include a small percentage of the population. Many citizens live in states where no candidate will ever visit or purchase air time. Given that our government is to be "of the people, by the people, and for the people," this revelation is unsettling. In a democracy, everyone is supposed to have an equal say in outcomes. Elections in which one person receives one vote are one of the most rudimentary components of democracies. However, these findings could mean that the Electoral College depresses voter turnout. If so, then the problem could be worse than Edwards seems to think. In that case, the victor would have few incentives to address the concerns of citizens in areas of the country that will solidly support or oppose him or her in a reelection campaign.

Building upon Edwards' concerns, the location of the campaign could also determine salient issues. For example, most Western states were projected as safe Republican states in all elections included in this research. Citizens in these overwhelmingly rural states face environmental and land use challenges as well as questions about the extent to which the federal government should be allowed to decide what lands are reserved for particular purposes (O'Connor and Sabato 1998). For citizens in other states, these matters are not serious, if anyone at all even cares. In the absence of battleground status, campaigns have minimal incentive to address such issues and provide citizens with the opportunity to evaluate solutions.

Such normative concerns are often cited as reasons to abolish the Electoral College. For example, Edwards (2004) advocates replacing the Electoral College with direct election. Of course, it is not entirely clear what campaign resource allocations would look like under this system. Even if allocations were largely confined to urban areas, conditions might not change drastically. Edwards notes that they often focus on urban areas within battleground states under the Electoral College. Direct election could overcome problems like a decline in turnout or the possibility of election fraud. Inevitably, as discussed in Chapter 3, candidates are rational actors. They will work within and exploit whatever system is in place. Persons on both sides of this debate must remember that no system is perfect.

Table 1

Democratic GRPs (Without Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	-23.04	22.32	-1.03	0.30
Safe Democratic States	-22.70	843.84	-0.03	0.98
Leaning Democratic States	2799.98	824.20	3.40	0.001
Leaning Republican States	1544.10	630.50	2.45	0.02
Battleground States	6734.17	619.11	10.88	0.00
Turnout	-1242.23	3547.45	-0.35	0.73
Cost per voter	-65.85	539.70	-0.12	0.90
Late deciders	465.20	1955.58	0.24	0.81
Presidential Home state	-624.83	1107.99	-0.56	0.57
VP home state	12.31	1010.25	0.01	0.99
% legislature Democratic	248.56	1543.95	0.16	0.87
Ideology	31.96	33.93	0.94	0.35
Constant	1968.97	2511.71	0.78	0.43

N=224
Prob > F = 0.00
R-squared=0.4780
Adj R-squared=0.4483
Root MSE=2943.2

Table 2

Republican GRPs (Without Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	-18.63	26.00	-0.72	0.48
Safe Republican States	-258.29	968.59	-0.27	0.79
Leaning Democratic States	3242.06	858.05	3.78	0.00
Leaning Republican States	4581.96	1048.04	4.37	0.00
Battleground States	9164.54	788.73	11.62	0.00
Turnout	-6616.38	4250.13	-1.56	0.12
Cost per voter	213.54	654.65	0.33	0.75
Late deciders	6746.98	2282.82	2.96	0.003
Presidential Home state	-1430.40	1301.48	-1.10	0.27
VP home state	-382.68	1174.78	-0.33	0.75
% legislature Republican	-727.98	1834.95	-0.40	0.69
Ideology	9.48	40.28	0.24	0.81
Constant	3407.50	2371.91	1.44	0.15

N=224
Prob > F=0.00
R-squared=0.55
Adj R-squared=0.53
Root MSE=3423.2

Table 3a

Democratic Visits (Without Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	0.03	0.01	2.85	0.004
Safe Democratic States	0.43	0.34	1.27	0.20
Leaning Democratic States	1.32	0.29	4.48	0.00
Leaning Republican States	1.34	0.26	5.10	0.00
Battleground States	2.37	0.24	9.97	0.00
Turnout	0.13	1.24	0.11	0.92
Media markets	0.04	0.03	1.24	0.21
Late deciders	-2.45	0.75	-3.26	0.001
Presidential Home state	0.49	0.32	1.52	0.13
VP home state	-0.19	0.37	-0.53	0.60
% legislature Democratic	-0.12	0.61	-0.19	0.85
Ideology	0.06	0.01	4.65	0.00
Constant	0.49	0.92	0.54	0.59
Ln alpha	-0.85	0.21		
Alpha	0.43	0.87		

Likelihood-ratio test of alpha = 0: chibar2(01) = 119.03 Prob>=chibar2 = 0.00

N=224
LR chi2(12)=188.68
Prob > chi2=0.000
Pseudo R-squared=0.1904

Table 3b

Predicted Probabilities for Democratic Visits to States with 3 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	.84	1.67	1.73	4.95
Number of Visits				
0	.51	.31	.30	.10
1	.28	.26	.26	.12
2	.13	.18	.18	.13
3	.05	.11	.11	.12
4	.02	.06	.07	.10
5	.01	.04	.04	.09

Table 3c

Predicted Probabilities for Democratic Visits to States with 10 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	.97	1.94	2.01	5.76
Number of Visits				
0	.46	.27	.26	.08
1	.29	.25	.24	.11
2	.14	.18	.18	.11
3	.06	.12	.12	.11
4	.03	.07	.08	.10
5	.01	.04	.05	.08

Table 3d

Predicted Probabilities for Democratic Visits to States with 25 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	1.35	2.68	2.77	7.95
Number of Visits				
0	.37	.20	.19	.05
1	.28	.21	.20	.07
2	.17	.17	.17	.08
3	.09	.13	.13	.08
4	.05	.09	.10	.08
5	.02	.07	.07	.08

Table 4a

Republican Visits (Without Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	0.02	0.01	1.77	0.08
Safe Republican States	0.52	0.34	1.54	0.12
Leaning Democratic States	1.72	0.28	6.12	0.00
Leaning Republican States	1.82	0.33	5.57	0.00
Battleground States	2.42	0.27	8.84	0.00
Turnout	-0.49	1.33	-0.37	0.71
Media Markets	0.07	0.03	2.38	0.02
Late deciders	-1.99	0.78	-2.56	0.01
Presidential Home state	-0.12	0.35	-0.35	0.73
VP home state	0.38	0.35	1.09	0.27
% legislature Republican	0.26	0.63	0.41	0.68
Ideology	0.06	0.01	4.13	0.00
Constant	0.35	0.73	0.49	0.63
Ln alpha	-0.79	0.21		
Alpha	0.45	0.09		

Likelihood-ratio test of alpha = 0: chibar2(01) = 109.10 Prob>=chibar2 = 0.00

N=224
LR chi2(12)=188.60
Prob > chi2=0.000
Pseudo R-squared=0.1864

Table 4b

Predicted Probabilities for Republican Visits to States with 3 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	.87	2.47	3.04	5.69
Number of Visits				
0	.49	.20	.16	.07
1	.29	.22	.19	.10
2	.13	.18	.17	.11
3	.05	.13	.14	.11
4	.02	.09	.10	.10
5	.01	.06	.07	.09

Table 4c

Predicted Probabilities for Republican Visits to States with 10 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	1.00	2.83	3.48	6.51
Number of Visits				
0	.45	.18	.14	.06
1	.29	.20	.17	.09
2	.15	.17	.16	.10
3	.07	.14	.13	.10
4	.03	.10	.11	.09
5	.01	.07	.08	.09

Table 4d

Predicted Probabilities for Republican Visits to States with 25 Electoral Votes

	Safe	Leaning Democratic	Leaning Republican	Battleground
Rates	1.34	3.79	4.66	8.71
Number of Visits				
0	.36	.12	.09	.04
1	.29	.16	.13	.06
2	.17	.15	.13	.07
3	.09	.13	.12	.08
4	.05	.11	.11	.08
5	.02	.08	.09	.07

Table 5

Full Democratic GRP Model (With Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	7.86	48.05	0.16	0.87
Safe Democratic States	22.45	715.99	0.03	0.98
Leaning Democratic States	2403.01	1110.04	2.16	0.03
Leaning Republican States	1368.70	786.46	1.74	0.08
Battleground States	7816.28	1347.60	5.80	0.00
ECvotes* Safe Democratic	-23.16	49.38	-0.47	0.64
ECvotes* Leaning Democratic	8.60	59.61	0.14	0.89
ECvotes* Leaning Republican	10.35	66.15	0.16	0.88
ECvotes* Battleground	-94.58	80.77	-1.17	0.24
Turnout	-861.72	3075.18	-0.28	0.78
Cost per voter	-256.66	546.48	-0.47	0.64
Late deciders	555.31	1618.12	0.34	0.73
Presidential Home state	-569.65	572.97	-0.99	0.32
VP home state	99.91	593.09	0.17	0.87
% legislature Democratic	110.66	1493.19	0.07	0.94
% liberal	35.74	36.18	0.99	0.32
Constant	1703.33	2403.99	0.71	0.48

N=224
Prob > F = 0.00
R-squared=0.4854
Root MSE=2950.4

Table 6

Full Republican GRP Model (With Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	-5.74	42.27	-0.14	0.89
Safe Republican States	-203.81	1238.08	-0.16	0.87
Leaning Democratic States	3450.74	1350.72	2.55	0.01
Leaning Republican States	4159.50	1549.11	2.69	0.008
Battleground	9847.23	1168.42	8.43	0.00
ECvotes* Safe Republican	5.97	88.02	0.07	0.95
ECvotes* Leaning Democratic	-16.93	73.18	-0.23	0.82
ECvotes* Leaning Republican	46.58	105.38	0.44	0.66
ECvotes* Battlegrounds	-49.47	64.39	-0.77	0.44
Turnout	-6168.24	4323.14	-1.43	0.16
Cost per Voter	137.46	716.24	0.19	0.85
Late deciders	6795.32	2353.92	2.89	0.004
Presidential Home state	-1497.08	1326.91	-1.13	0.26
VP home state	-345.77	1185.94	-0.29	0.77
% legislature Republican	-664.59	1873.68	-0.35	0.72
Ideology	11.94	40.79	0.29	0.77
Constant	2986.71	2444.95	1.22	0.22

N=224
Prob > F = 0.000
R-squared=0.5546
Adj R-squared=0.5202
Root MSE=3447

Table 7

Full Democratic Visits Model (With Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	0.05	0.03	1.60	0.11
Safe Democratic States	0.73	0.51	1.45	0.15
Leaning Democratic States	1.58	0.51	3.09	0.002
Leaning Republican States	1.41	0.49	2.90	0.004
Battleground	2.56	0.44	5.81	0.00
ECvotes* Safe Democratic	-0.03	0.03	-0.81	0.42
ECvotes* Leaning Democratic	-0.03	0.04	-0.70	0.49
ECvotes* Leaning Republican	-0.01	0.04	-0.22	0.83
ECvotes* Battleground	-0.02	0.03	-0.59	0.56
Turnout	0.19	1.24	0.16	0.88
Media Markets	0.03	0.03	1.02	0.31
Late deciders	-2.44	0.76	-3.21	0.001
Presidential Home state	0.39	0.34	1.17	0.24
VP home state	-0.16	0.37	-0.44	0.66
% legislature Democratic	-0.11	0.62	-0.18	0.86
Ideology	0.06	0.01	4.54	0.00
Constant	0.25	1.00	0.25	0.80
Ln alpha	-0.86	0.21		
Alpha	0.42	0.09		

Likelihood-ratio test of alpha = 0: chibar2(01) = 118.40 Prob>=chibar2 = 0.00

N=224
LR chi2(12)=189.80

Prob > chi2=0.000
Pseudo R-squared=0.1915

Table 8

Full Republican Visits Model (With Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	0.01	0.02	0.45	0.66
Safe Republican States	0.23	0.45	0.51	0.61
Leaning Democratic States	1.53	0.44	3.49	0.00
Leaning Republican States	1.22	0.48	2.56	0.01
Battlegrounds	2.20	0.37	5.88	0.00
ECvotes* Safe Republican	0.02	0.03	0.84	0.40
ECvotes* Democratic Leaning	0.01	0.02	0.61	0.54
ECvotes* Republican Leaning	0.05	0.03	1.67	0.10
ECvotes* Battleground	0.01	0.02	0.82	0.41
Turnout	-0.45	1.30	-0.34	0.73
Media Markets	0.06	0.03	2.16	0.03
Late deciders	-1.92	0.78	-2.45	0.01
Presidential Home state	-0.27	0.36	-0.75	0.46
VP home state	0.41	0.34	1.22	0.22
% legislature Republican	0.35	0.63	0.56	0.58
Ideology	0.06	0.01	4.08	0.00
Constant	0.48	0.72	0.67	0.50
Ln alpha	-0.84	0.21		
Alpha	0.43	0.09		

Likelihood-ratio test of alpha = 0: chibar2(01) = 101.62 Prob>=chibar2 = 0.00

N=224
LR chi2(12)=191.54

Prob > chi2=0.000
Pseudo R-squared=0.1893

Table 9

Reduced Democratic GRP Model (With Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	-103.15	30.59	-3.37	0.001
ECvotes* Leaning Democratic	144.45	47.03	3.07	0.002
ECvotes* Leaning Republican	79.09	52.94	1.49	0.14
ECvotes* Battleground	313.51	37.25	8.42	0.000
Turnout	-483.02	3881.33	-0.12	0.90
Cost Per Voter	149.74	630.74	0.24	0.81
Late deciders	2252.31	2266.12	0.99	0.32
Presidential Home state	-884.57	1278.61	-0.69	0.49
VP home state	-221.81	1184.09	-0.19	0.85
% legislature Democratic	125.33	1724.63	0.07	0.94
Ideology	48.14	33.06	1.46	0.15
Constant	2922.61	2889.49	1.01	0.31

N=224
Prob > F = 0.00
R-squared=0.3279
Adj R-squared=0.2930
Root MSE=4184.3

Table 10

Reduced Republican GRP Model (With Interactions)

Variable	Coefficients	Standard Errors	t values	P>|t|
Electoral Votes	-151.73	39.21	-3.87	0.00
ECvotes* Leaning Democratic	159.20	53.22	2.99	0.003
ECvotes* Leaning Republican	303.19	71.30	4.25	0.00
ECvotes* Battleground	421.32	46.76	9.01	0.00
Turnout	-6052.07	4705.78	-1.29	0.20
Cost per Voter	348.07	760.91	0.46	0.65
Late deciders	6178.99	2743.56	2.25	0.03
Presidential Home state	-1723.65	1547.68	-1.11	0.27
VP home state	-844.93	1436.25	-0.59	0.56
% legislature Republican	-106.38	2098.43	-0.05	0.96
Ideology	64.08	40.12	1.60	0.11
Constant	6088.23	2635.12	2.31	0.02

N=224
Prob > F = 0.00
R-squared=0.3279
Adj R-squared=0.2930
Root MSE=4184.3

Table 11

Reduced Democratic Visits Model (With Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	-0.002	0.01	-0.13	0.89
ECvotes* Leaning Democratic	0.04	0.01	2.81	0.005
ECvotes* Leaning Republican	0.05	0.02	3.16	0.002
ECvotes* Battleground	0.10	0.01	8.18	0.00
Turnout	1.31	1.30	1.01	0.31
Media Markets	0.04	0.03	1.29	0.20
Late deciders	-1.35	0.82	-1.65	0.10
Presidential Home state	0.28	0.36	0.77	0.44
VP home state	-0.23	0.40	-0.57	0.57
% legislature Democratic	-0.12	0.63	-0.19	0.85
Ideology	0.07	0.01	5.11	0.00
Constant	0.62	1.01	0.61	0.54
Ln alpha	-0.34	0.17		
Alpha	0.71	0.12		

Likelihood-ratio test of alpha = 0: chibar2(01) = 246.06 Prob>=chibar2 = 0.00

N=224
LR chi2(10)=134.44
Prob > chi2=0.000
Pseudo R-squared=0.1356

Table 12

Reduced Republican Visits Model (With Interactions)

Variable	Coefficients	Standard Errors	z values	P>|z|
Electoral Votes	-0.04	0.01	-2.97	0.003
ECvotes* Leaning Democratic	0.07	0.01	5.21	0.00
ECvotes* Leaning Republican	0.09	0.02	5.16	0.00
ECvotes* Battleground	0.11	0.01	8.62	0.00
Turnout	-0.33	1.31	-0.25	0.80
Media Markets	0.10	0.03	3.27	0.001
Late deciders	-1.41	0.82	-1.72	0.09
Presidential Home state	-0.28	0.38	-0.73	0.47
VP home state	-0.22	0.38	0.59	0.56
% legislature Republican	0.67	0.61	1.10	0.27
Ideology	0.06	0.01	4.27	0.00
Constant	1.01	0.73	1.38	0.17
Ln alpha	-0.37	0.18		
Alpha	0.69	0.12		

Likelihood-ratio test of alpha = 0: chibar2(01) = 200.66 Prob>=chibar2 = 0.00

N=224
LR chi2(12)=141.42
Prob > chi2=0.000
Pseudo R-squared=0.1398

References

Bartels, Larry M. 1985. "Resource Allocation In a Presidential Campaign." *Journal of Politics* 47(3):928-936.

Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1): 63-82.

Brams, Steven J., and Morton D. Davis. 1974. "The 3/2's Rule in Presidential Campaigning." *American Political Science Review* 68(1):113-134.

Braumoeller, Bear. 2004. "Hypothesis Testing and Multiplicative Interaction Terms." *International Organizations* 58(Winter): 807-820.

Bumiller, Elisabeth. 2004a. "THE REPUBLICANS: THE CONVENTION IN NEW YORK – THE STRATEGIST; A Bush Backer Mixes Caution With Confidence." *New York Times*, August 30, Late Edition - Final, Section P, Page 12.

-----. 2004b. "THE 2004 ELECTIONS: A LOOK BACK -- THE CAMPAIGN; Turnout Effort and Kerry, Too, Were G.O.P.'s Keys to Victory." *New York Times*, November 4, A1.

CBS News/The New York Times. CBS NEWS/NEW YORK TIMES GENERAL ELECTION EXIT POLL: NATIONAL FILE, 1988 [Computer file]. New York, NY: CBS News [producer], 1988. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1989.

Chi, Keon S., ed. 2004. *The Book of the States*. 2004 ed. Lexington: Council of State Governments.

Colantoni, Claude S., Terrence J. Levesque, and Peter C. Ordeshook. 1975. "Campaign Resource Allocations Under the Electoral College." *American Political Science Review* 69(1):141-154.

Currens, William Carlton, ed. 1988. *The Book of the States*. 1988-89 ed. Lexington: Council of State Governments.

Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper & Row.

Dudley, Robert L. and Ronald B. Rapoport. 1989. "Vice-Presidential Candidates and the Home State Advantage: Playing Second Banana at Home and on the Road." *American Journal of Political Science* 33(2):537-540.

Epstein, Lee et al. 2006. "The Changing Dynamics of Senate Voting on Supreme Court Nominees." *Journal of Politics* 68(May):296-307.

Erikson, Robert S., Gerald C. Wright, and John P. McIver. 1993. *Statehouse Democracy: Public opinion and policy in the American states.* New York: Cambridge University Press.

Edwards, George C. III. 2004. *Why the Electoral College Is Bad for America.* New Haven: Yale University Press.

Fox, John. 1997. *Applied Regression Analysis, Linear Models, and Related Methods.* Sage: Thousand Oaks.

Gona, Deborah A., ed. 1992. *The Book of the States*. 1992-93 ed. Lexington: Council of State Governments.

Hill, David, and Seth C. McKee. 2005. "The Electoral College, Mobilization, and Turnout in the 2000 Presidential Election." *American Politics Research* 33(3):700-725.

Hillygus, D. Sunshine, and Todd Shields. 2007. "The Persuadable Voter: Strategic Candidates and Wedge Issues." Presented at the Annual Meeting of the Southern Political Science Association, New Orleans.

Lewis-Beck, Michael S., and Tom W. Rice. 1983. "Localism in Presidential Elections: The Home State Advantage." *American Journal of Political Science* 27(3):548-556.

Long, J. Scott. 1997. *Regression Models for Categorical and Limited Dependent Variables.* Thousand Oaks, CA: Sage Publications.

McDonald, Michael P., and Samuel L. Popkin. 2001. "The Myth of the Vanishing Voter." *American Political Science Review* 95(4):963-974.

Mixon, Franklin Jr., and J. Matthew Tyrone. 2004. "The 'Home Grown' Presidency: Empirical Evidence on Localism in Presidential Voting, 1972-2000." *Applied Economics* 36(4): 1745-1749.

National Election Pool, Edison Media Research, and Mitosky International. NATIONAL ELECTION POOL GENERAL ELECTION EXIT POLLS, 2004 [Computer file]. ICPSR version. Somerville, NJ: Edison Media Research/New York, NY: Mitofsky International [producers], 2004. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2005.

Norrander, Barbara. 1989. "Ideological Representativeness of Presidential Primary Voters." *American Journal of Political Science* 33(August):570-587.

O'Connor, Karen, and Larry J. Sabato. 1998. *The Essentials of American Government: Continuity and Change*. 3rd ed. Needham Heights, MA: Allyn & Bacon.

Poole, Keith, and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting.* New York: Oxford University Press.

Rabinowitz, George, and Stuart Elaine Macdonald. 1986. "The Power of the States in U.S. Presidential Elections." *American Political Science Review* 80(1):65-87.

Reeves, Andrew, Lanhee Chen, and Tiffany Nagano. 2004. "A Reassessment of 'The Methods behind the Madness: Presidential Electoral College Strategies, 1988-1996.'" *Journal of Politics* 66(2):616-620.

Reeves, Andrew, Lanhee Chen, and Tiffany Nagano. 2004. "A Reassessment of 'The Methods behind the Madness: Presidential Electoral College Strategies, 1988-1996.'" *Journal of Politics* 66(2):616-620. http://www.people.fas.harvard.edu/~reeves/research.htm. "replication data." (March 26, 2007).

Shaw, Daron R. 1999. "The Methods behind the Madness: Presidential Electoral College Strategies, 1988-1996." *Journal of Politics* 61(4):893-913.

-----. 2004. "Erratum for '*The Methods behind the Madness: Presidential Electoral College Strategies, 1988-1996*' The Journal of Politics 61:4 (November 1999), 893-913." *Journal of Politics* 66(2):611-615.

-----. 2006. *The Race to 270*. Chicago: University of Chicago Press.

Sprague, Daniel M., ed. 1996. *The Book of the States*. 1996-97 ed. Lexington: Council of State Governments.

Tebo, Mitch, ed. 2002. *Marketer's Guide to Media*. New York: VNU Business Publications USA.

Vickers, Fred J., ed. 2000. *The Book of the States*. 2000-01 ed. Lexington: Council of State Governments.

Voter News Service. VOTER NEWS SERVICE GENERAL ELECTION EXIT POLLS, 1996 [Computer file]. ICPSR version. New York, NY: Voter News Service [producer], 1996. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1997.

Voter News Service. VOTER NEWS SERVICE GENERAL ELECTION EXIT POLLS, 2000 [Computer file]. ICPSR03527-v2. New York, NY: Voter News Service [producer], 2000. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2004.

Voter Research and Surveys. VOTER RESEARCH AND SURVEYS GENERAL ELECTION EXIT POLLS, 1992 [Computer file]. New York City, NY: Voter Research and Surveys [producer], 1992. 2nd ICPSR release. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 1993.