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## Legislative Voting: Influences on Environmental Voting in the House of Representatives

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## Legislative Voting: Influences on Environmental Voting in the House of Representatives

### Abstract

The question of what prompts legislators to vote as they do has long been the subject of much empirical political research. This research project contributes to this body of literature by addressing the question of what factors influence how members of Congress vote on environmental issues. More specifically, I examine how a combination of personal and constituency characteristics influence the level of environmental support of members of the House of Representatives in the years 2003 through 2006. The personal characteristics of the representatives examined are gender, party, and seniority; the constituency characteristics are region, urbanicity, occupation, education, and district ideology.

**LEGISLATIVE VOTING:  
INFLUENCES ON ENVIRONMENTAL VOTING IN THE HOUSE OF  
REPRESENTATIVES**

Krystyna Zwolinski

**Abstract**

*The question of what prompts legislators to vote as they do has long been the subject of much empirical political research. This research project contributes to this body of literature by addressing the question of what factors influence how members of Congress vote on environmental issues. More specifically, I examine how a combination of personal and constituency characteristics influence the level of environmental support of members of the House of Representatives in the years 2003 through 2006. The personal characteristics of the representatives examined are gender, party, and seniority; the constituency characteristics are region, urbanicity, occupation, education, and district ideology.*

*“Coming into existence around 1960 along with a number of other movements for social and political change, the U.S. environmental movement has arguably been one of the most successful movements of the 20<sup>th</sup> century – effecting mass cultural and political change” (Agnone 2007).*

## **Introduction**

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It is unlikely that someone today is unaware of the debates on different environmental issues; the movement to “Go Green” has recently captured the attention of many prominent news stations and programs. Though it may be hard to imagine, such discussion was not always so prominent. It took several events in the 1960s to truly draw the nation’s attention to the condition of the environment. Since then, however, environmental issues “have been the subject of regular congressional attention” (Shipan & Lowry 2001).

President Richard Nixon played a significant role in the environmental movement. On January 1, 1970, he signed the National Environmental Policy Act and stated that “The 1970s absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its water, and our living environment. It is literally now or never” (Smith 2000). A few months later, on April 22, millions in the United States celebrated the first Earth Day (Smith 2000). More importantly, in the following years, membership in many environmental organizations began to increase: “From 1968 to 1972 the membership in many organizations, including the Sierra Club, the National Audubon Society, the Wilderness Society, and the National Wildlife Federation, increased dramatically, doubling and in some cases tripling” (Smith 2000). Such organizations also became more professional, a change reflected in their larger and more specialized staffs (Coglianese 2001). In addition, the environmental movement, which had originally relied on “protest tactics,” turned to “traditional insider political strategies” (Coglianese 2001); as the public became more concerned about environmental protection, so did politicians.

Congress’ “historical role in the formation of environmental policy has been both highly influential and unquestionably responsive to the American public’s concern over environmental degradation” (Kraft 1995). In his study, Michael S. Pulia found that in general, “the government, as elected representatives of the people, is actually attentive to changing public opinion” (Pulia 1998). Jon Agnone found that this holds true with environmental legislation. An examination of congressional representation, of what Agnone refers to as “policy responsiveness,” provides insight as to why this is the case (2007).

## **Previous Research**

For years, the complex workings of Congress have fascinated political scientists. Designed to be the more representative of the two chambers, the House of Representatives has especially attracted attention, as scholars have sought to determine just how responsive members are to their constituents.

According to John Kingdon, one of the most recognized among Congressional scholars, Congressional “decisions are affected primarily by the legislators’ own policy attitudes and by their constituencies” (Kingdon 1989). Similarly, Greg Crowe and Elizabeth Ann Eberspacher found that two of the strongest influences on congressional votes are “party ties and constituency interests” (Crowe & Eberspacher 1998). Erikson and Wright (1992) reported that House members will vote according to the ideology of their constituencies, even if this requires deviating from their party (Crowe & Eberspacher 1998).

Although constituency does not provide a complete explanation for legislators' votes, it certainly plays an important role. This is not surprising, for constituency is "the only actor in the political system to which the congressman is ultimately accountable" (Kingdon 1989).

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### *Mechanisms of Constituent Influence*

Kingdon defined four main mechanisms by which constituents exert influence over their legislators: recruitment, explaining, direct communication, and electoral consequences.

Recruitment, the simplest of the four mechanisms, is the initial election of an individual to office. Perhaps the easiest way to ensure that one's opinions are represented in Congress is to elect someone who has the same values. Although this is not just the responsibility of the mass public (elites such as "party activists, campaign contributors, interest group leaders" and others also play a significant role), this mechanism probably explains the most variance in legislative voting (Kingdon 1989).

While not all constituents closely monitor the activities of their representatives, those who do often expect an explanation of why a legislator voted the way he did on a particular issue. Representatives must be prepared to justify their votes. If a legislator feels he will be unable to provide a sufficient explanation, he may find it easier just to vote according to his constituents. However, the intensity with which the legislator holds his own opinion on the issue is also a factor in deciding how he casts his vote. He may prefer to use his best judgment and rely on being able to justify his decision to his constituents later. This is certainly a more subtle and indirect mechanism than recruitment, yet it is nonetheless important.

The most direct mechanism of influence is communication with a legislator. It can be a very effective "attention-focusing agent" (Kingdon 1989). There are three roles such communication can play: alerting a representative to an issue of which he was previously unaware, indicating to him that an issue is more important to his constituents than he had thought, or simply indicating on which side of the issue most of his constituents' preferences lie. Such communication can be through mail, email, responses to questionnaires sent out by congressmen, or conversations in person or over the telephone.

The fourth mechanism, the "classic enforcement of constituency control," is electoral consequences (Kingdon 1989). This mechanism is enacted by constituents through retribution, through casting fewer votes for a particular congressman, sometimes even by removing him from office. To see the influence of this mechanism, one needs only simply observe which issues a congressman chooses to focus on when campaigning (and thus pays more attention to). One of the precautions legislators take against the uncertainties of elections is to "take some account of the district as the vote, especially on more salient issues" (Kingdon 1989).

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### *Congressmen and Elections*

Much of the literature on Congress discusses legislators' desire for reelection. Zachary A. Smith reported that "most analysts have concluded reelection is a primary motive for legislative behavior" (Smith 2000). For this reason, and because legislators who respond to any of these mechanisms presumably do so in order to keep their seat, one logical approach to the discussion of Congress is from the electoral angle. Thus, legislators are expected to behave in such a manner as to portray themselves favorably to voters.

Stimson, MacKuen, and Erikson (1995) provided this analogy: “politicians are keen to pick up on the faintest signals in their political environment. Like antelope in an open field, they cock their ears and focus their full attention on the slightest sign of danger” (Maravall 1999).

The House was designed “to be the popular branch of government” and “elections for the House were expected to reflect the ebb and flow of public preferences” (Erikson & Wright 1997). Representatives are elected by popular vote in their districts, thus they are directly responsible to their constituents. The preoccupation of many legislators with the biennial elections provides great incentive to vote according to their constituents’ wishes. Because constituents tend to “reward faithful representation...[those] generally desirous of attaining and staying in office, heed their electorate’s wishes and work to give them what they want” (Erikson & Wright 1997). Albeit a bit dated, in his study Kingdon found that “if a congressman perceives a constituency position on any given issue, the probability that he will vote according to that position is .76,” and the “correlation between the perceived constituency position and the congressman’s vote is .49” (1989).

How well candidates (especially incumbents) do at the polls is partially determined by the stances they take on issues (Erikson & Wright 1997). Thus it is not surprising that, as Arnold (1990) explained, “legislators choose among policy proposals by estimating citizens’ preferences weighted for the possibility that constituents will use these decisions as voting cues in the next election” (Bishin 2000). More importantly, Evan J. Ringquist and Carl Dasse reported that “contrary to public perceptions, candidates for Congress routinely act to keep their campaign promises once elected, at least in the area of environmental protection policy” (Ringquist & Dasse 2004). Kingdon found no significant difference between legislators in competitive versus safe districts in terms of their likelihood to cater to their constituents’ wishes. Perhaps the reason safe districts are safe and that the incumbency advantage exists is because the incumbent has consistently voted according to his constituents’ preferences (Kingdon 1989). Clearly, legislators value their constituents’ opinions.

#### *Constituency Elites*

Although not the focus of this project, it is important to note that “the presence of elites in the congressman’s perceptual map of his constituency...considerably enhances the importance of the constituency in his decision” (Kingdon 1989). Kingdon identified two types: policy and process elites. Policy elites are individuals with “a direct expertise or interest in the government policy at issue,” while process elites, though they do not have a direct interest in a particular policy, play an important role in “the more general political process” (Kingdon 1989). These include newspaper editors or party activists, among others. Policy elites typically draw more congressional attention than process elites, but both can be influential.

Due to their special status among the masses, in addition to attracting the attention of the legislators, elites also help draw the public’s focus to certain issues. In 1999, Jun Yin conducted a study on the specific relationship between elite and public environmental attitudes and found that the attitudes of elites had a great influence on the attitudes of the public (Yin 1999). Kara Lindaman and Donald P. Haider-Markel reported similar findings in their study (Lindaman & Haider-Markel 2002). Elite participation is often a determining factor in the salience of an issue – issues are not generally regarded as highly salient without elite involvement. This is important because even though legislators do generally vote according to their constituents’ wishes, they are much more likely to do so with high-salience issues (Kingdon 1989).

#### *Legislative Voting: Two Main Themes*

The majority of existing literature on legislative voting examines one of two themes. The first, traditionally the focus of political economists, is “the role of a legislator’s personal ideology as an influence on his or her decisions,” in which scholars examine “the relative effects of legislator ideology and constituent economic interests” (Bishin 2000). The second, more traditional, focus of political science research is “the relative influence of personal and constituent preferences” on the decisions of legislators (Bishin 2000). This project contributes to traditional research, for it investigates the combined role that personal and constituent characteristics play in determining a legislator’s vote on environmental issues.

### **Goals of this Study**

While this study specifically seeks to explore environmental issues in Congress, the general goal is to explore characteristics that correlate with higher environmental support among citizens. Armed with the results, it is hoped that environmentalists can better focus their efforts, especially when trying to recruit individuals to join their movement. If it is found that individuals with certain characteristics are already more likely to show greater support, time and resources can be invested in those who may not be as environmentally literate.

While environmental issues catapulted to the forefront of most Americans’ minds in the 1970s, the salience of the issue has undeniably waned since then. Coglianesse discussed this phenomenon, noting that “in the absence of crises, environmentalism does not motivate the political behavior of any large segment of the public” (Coglianese 2001). Moreover, while Americans generally remain highly supportive of environmental protection, they do not typically cast their votes based on environmental issues (Coglianese 2001). As congressmen enter office well aware of this, it will be interesting to determine the implications for the democratic process of representation.

### **Inspiration for this Project**

In 2001, Charles R. Shipan and William R. Lowry published a study in which they examined whether the two parties had diverged or converged on environmental policy over a period of thirty years and the factors contributing to this movement. They examined the effects of region (the influence of southern democrats), factions (interest group activity, issue salience, and economic conditions), individuals (the number of freshmen each year), and ideology (as a control variable). At the end of their study one of the questions posed for future research, and consequently the foundation of this project, was: What kinds of characteristics of different congressional districts are consistent with higher or lower League of Conservation Voters (LCV) scores?

Thus, Shipan and Lowry’s work was the model for the structuring of this research project.

### **Research Question**

In examining what influences congressmen to vote as they do on environmental issues, the specific question this project seeks to answer is: *What characteristics of representatives and their constituencies influence their voting on environmental issues, as measured by the League of Conservation Voters scores in the House of Representatives from 2003 through 2006?*

The literature on legislative voting shows overwhelmingly that members of Congress do respond to their constituents. For this reason, in this study it is assumed that, with respect to environmental issues, legislators’ votes will correspond to their constituents’ preferences.

Data for all variables with the exception of two will be collected from the *Almanac of American Politics, 2004* and *2006*. The district education statistics will be gathered from *Politics in America, 2006*, and the LCV scores will be collected from the LCV's website.

### **League of Conservation Voters**

The League of Conservation Voters is a nonprofit organization and very powerful interest group. Founded in 1970, in conjunction with the first Earth Day, its mission is to “advocate for sound environmental policies and to elect pro-environmental candidates who will adopt and implement such policies” (“League of Conservation Voters” 2007). It is “the political voice for over nine million members of environmental and conservation organizations and the only organization working full-time to educate citizens about the environmental voting records of Members of Congress” (“League of Conservation Voters” 2007). One of the means the LCV uses to present information about congressmen's environmental support is the National Environmental Scorecard, which it creates after each session of Congress.

To create the Scorecard, experts from different environmental organizations select “the key votes on which Members of Congress should be graded” (“League of Conservation Voters” 2007). In the years included in this study, the number of key votes each year ranged from 19 to more than 20.<sup>1</sup> For each key vote, it is recorded whether or not each legislator's vote was “pro-environmental” as defined by the experts. The total number of pro-environmental votes is then converted to a percentage, which is the environmental score of each representative. Scores range from 0 to 100, with higher scores corresponding to higher environmentalist attitudes.

### **Operationalization of the Dependent Variable**

In order to measure congressional support for environmental policy, Shipan and Lowry used League of Conservation Voters (LCV) scores. With only a slight difference, the same method will be employed for this study. Shipan and Lowry had to use adjusted LCV scores in their study to make them comparable between the two chambers over the thirty years they examined. Because this project only focuses on the House and a three-year period, the raw scores will be used; no adjustments are necessary.

It is not uncommon for researchers to measure environmental voting using LCV scores. As is the case with scorecards from any organization, however, “they may conceal several issue dimensions and may not differentiate as much as desirable between qualitatively different votes (e.g., their policy significance)” (Kraft 1995). Shipan and Lowry also acknowledged that the “reliability of using voting scores to measure congressional preferences has been the subject of considerable discussion” (Shipan & Lowry 2001); however, “at least at first glance, the LCV scores have some validity,” and consistently match what would be expected from certain representatives (Shipan & Lowry 2001). More importantly, LCV scores “are widely cited and recognized as providing useful measures of congressional behavior” (Shipan & Lowry 2001). Thus, although not perfect, the National Environmental Scorecard provides a satisfactory and sufficient measure of legislators' pro-environmental behavior.

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<sup>1</sup> The number of key votes in each year was as follows: 20 (2003), 19 (2004), 20 (2005), more than 20 (2006). For more information, including discussions on the key issues for each year, refer to the organization's website: <http://www.lcv.org>.



## Theoretical Expectations

Once again, this project seeks to examine the influence of both personal and constituency characteristics on legislative voting behavior. The representatives' personal characteristics examined are gender, party, and seniority, while those of the constituency are region, urbanicity, occupation, education, and district ideology. A study by Gene L. Theodori and A. E. Luloff found that individuals with different views on the environment also had different sociodemographic characteristics (Theodori & Luloff 2002). This study examines some of those same characteristics as well as a few others.

Among the existing literature on the correlation between each of these variables and environmental support, one frequently cited study is that published by Kent D. Van Liere and Riley E. Dunlap in 1980. The authors conducted "an evaluation of existing knowledge regarding the social bases of public concern with environmental quality" (Van Liere & Dunlap 1980). Although a bit dated, their well-renowned publication contains very useful information on several of the independent variables in this study. A review of the work of other political scientists provides supplementary and additional support for the following theoretical expectations.

### *Gender*

At the time of Van Liere and Dunlap's study, there existed only a limited amount of research on the correlation between gender and environmental attitudes. Moreover, the studies the authors reviewed offered conflicting results, leaving the authors unable to make any conclusive statements about gender and the environment.

To begin, Van Liere and Dunlap (1978) found a modest correlation between being female and being more environmentally-supportive, while both McEvoy (1972) and Arbuthnot and Lings (1975) found the exact opposite (Van Liere & Dunlap 1980). Other studies found correlations that were not statistically significant. Based on this evidence, Van Liere and Dunlap, albeit tentatively, concluded that "sex is not substantially associated with environmental concern" (Van Liere & Dunlap 1980).

This has been the overall trend in research conducted since. In her 2001 study, Bernadette C. Hayes found that if at all, women are only modestly more concerned than men. Any recorded gender differences were "highly contingent on the particular type of environmental risk concern examined," and moreover, "in the vast majority of cases an additional qualifying factor" was required (Hayes 2001). Similarly, while Theodori and Luloff found gender to have a statistically significant correlation with environmentalist attitudes, they concluded that the relationship was not clear-cut (Theodori & Luloff 2002). Although women are stereotypically seen as more compassionate and nurturing than men and thus often expected to have higher environmentalist attitudes, previous research finds data on the relationship between gender and environmental support inconclusive.

Operationalization: Each representative will be coded according to gender, males as 1 and females as 0.

Hypothesis 1: Despite stereotypes to the contrary, gender will not have a statistically significant effect upon environmental voting.

### *Political Party*

Aage Clausen, well-known for his research on political parties, found party to be the most significant factor in congressional voting (Clausen 1978). Many political scientists since have also reported that party is "the most important factor in explaining congressional voting

behavior” (Ringquist 2004). Clausen insisted that party can only be used to successfully predict votes relating to certain policy areas. However, the area in which it can most be relied on is government management, an area under which environmental regulation falls (Clausen 1978). As Shipan and Lowry found, however, the role that party has played in environmental voting in Congress has changed over time (Shipan & Lowry 2001).

At first, “politicians from every political persuasion claimed to be in favor of protecting the environment” (Smith 2000). Sheldon Kamieniecki found that early studies “maintain that, like ‘motherhood and apple pie,’ environmental issues are ‘consensus issues’” (Kamieniecki 1995). Citing Ogden (1971), Van Liere and Dunlap explained that many thought this issue transcended the partisan divide because of the “rapid rise of widespread public support for environmental reform in the late sixties and early seventies” (Van Liere & Dunlap 1980). Sean M. Theriault found, however, that in general, the parties “are, indeed, more polarized now than they were in the early 1970s” (Theriault 2006). Their support of environmental policies has followed this trend.

This partisan polarization over the environment was the focus of Shipan and Lowry’s study. As expected, they found that “the two parties clearly differ on environmental support scores,” and, more interestingly, that the scores have become more polarized with the passage of time (Shipan & Lowry 2001). Since the 1970s, not only have Democrats become more environmentally pro-active, but Republicans have actually become less so.

Democrats are generally expected to be more supportive of the environment than Republicans; there are several possible explanations for this. As Dunlap (1975) pointed out, “(1) environmental reforms generally are opposed by business and industry because of the costs involved, (2) environmental reforms entail an extension of government activities and regulations, and (3) environmental reforms often require innovative action” (Van Liere & Dunlap 1980). Republicans are traditionally known to favor business, oppose big government, and be wary of drastic change; thus, it is reasonable to expect them to be less supportive of environmental policies than Democrats (Van Liere & Dunlap 1980). In addition, financial support always influences votes and Kamieniecki found that Republicans often are supported by “large corporations and polluting firms,” while Democrats receive their support from environmental groups (Kamieniecki 1995).

Shipan and Lowry turned to the influence of interest groups as another possible explanation. “Interest groups can supply resources, information, and electoral support;” they can be very influential (Shipan & Lowry 2001). Therefore, since “environmental groups have become more explicitly aligned with Democrats,” while “members of the Republican party have received growing support from private property groups,” it is logical to expect Democrats’ votes to be more environmentally-friendly (Shipan & Lowry 2001).

Operationalization: Democrats will be coded as 1 and Republicans as 0.

Hypothesis 2: Democrats are more likely to support environmental activism than Republicans.

### *Seniority*

An interesting factor in congressional voting is seniority – the number of years’ experience a legislator has in office. Traditionally, referring to the member replacement theory, researchers have suggested that “incumbents are more risk-averse and thus hesitant to pursue new policy positions over time,” while challengers, on the other hand, “are free to choose more extreme positions” (Shipan & Lowry 2001).

In his study, Theriault examined the roles of both member replacement and member adaptation in the general polarization of the parties. Theriault found evidence that the polarization can be at least partially attributed to members being replaced by more ideologically extreme individuals; however, he also drew attention to the role played by member adaptation. Adaptation, which “occurs when particular legislators become more conservative or liberal over the course of their career,” he found, “accounts for one-third of the polarization between the parties since 1973” (Theriault 2006). However, the evidence on member adaptation has not always been consistent, and “more recent studies of polarization downplay [its] role” (Theriault 2006).

After reviewing the work of other scholars, Theriault noted that some, such as Poole and Rosenthal, suggested that “members of Congress vote consistently throughout their careers” (2006). Theriault, in contrast, found support for member adaptation; he found it to be “responsible for 35 percent of the polarization in the House” since 1973 (2006). He noted, however, that “actual individual member adaptations are miniscule” and that some members actually become more moderate with time (Theriault 2006). Moreover, member adaptation explains less of the party divergence than does member replacement.

Shipan and Lowry also examined this issue and found a positive correlation between freshmen and partisan divergence. Specifically in reference to the House, they observed that “higher numbers of freshmen lead to wider divergence on environmental voting, a strong indicator of the effect of replacement and consistent with our earlier finding that new members, particularly in the Democratic party, do tend to take more extreme positions on these issues” (Shipan & Lowry 2001).

Operationalization: This variable will be measured by the total number of terms that each member has served in Congress, including the present.

Hypothesis 3: It is expected that newer representatives will be more polarized by party than those who have served for a greater length of time. The newest Democratic members will be the most supportive of environmental legislation, while the newest Republican members will be the least supportive.

### *Region*

Kraft, in reviewing previous literature, reported that studies consistently found southerners to show the least amount of environmental support (Kraft 1995). Conrad L. Kanagy and Hart M. Nelsen noted that despite being “less likely than nonsoutherners to support additional federal spending for the environment,” those in the South “are no more likely...to argue that environmental regulations should be weakened” (Kanagy & Nelsen 1995). Regardless of this interesting stipulation, however, Shipan and Lowry found that in general, “the region least sympathetic to environmental causes is the south” (Shipan & Lowry 2001).

Previous research overwhelmingly indicates that the South is least supportive of environmental reform. Kamieniecki, however, dug deeper. The results of his study indicate that those in the South and intermountain West show less support than those along the Pacific coast and in the Northeast (Ringquist 2004). His findings are consistent with and more specific than those of other researchers.

Operationalization: For this variable, the country will be divided into the intermountain West (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming), South (Alabama, Arkansas, Florida, Georgia,

Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia), and everything else. Districts in the South and intermountain West will be coded as 1 and all others will be coded as 0. Therefore, there will be two dummy variables for region.

Hypothesis 4: Representatives from districts in the intermountain West and South will have significantly lower environmental scores than representatives from districts throughout the rest of the country.

### *Urbanicity*

Researchers have generally found that urban residents are more likely to be environmentally supportive than rural residents. William R. Freudenburg and Barbara McGinn suggested that the apparent relationship between urban residence and greater environmental concern may actually exist only at the local, rather than the state or national level (Freudenburg & McGinn 1987). They also discussed the possibility that lower levels of environmental concern among rural residents may actually be attributable to the presence of farmers, rather than to the rural population as a whole (Freudenburg & McGinn 1987). Without any qualifications though, Frederick H. Buttel found that urban residence consistently, albeit not strongly, predicted greater environmental support (Buttel 1987). Van Liere and Dunlap (1980) and Kraft (1995), among others, also found that the evidence generally indicates that urban residents show greater environmental concern than rural residents.

There are several different theories as to why urban residents show more environmental support. The first of these, offered by Tremblay and Dunlap (1978), is based upon surroundings. Because urban residents “generally are exposed to higher levels of pollution and other types of environmental deterioration,” it is reasonable to expect them to have higher pro-environmental attitudes (Van Liere & Dunlap 1980). The authors also offered a utilitarian theory, explaining that because rural residents tend to have “‘extractive’ occupations such as farming, logging, and mining,” their priority is more likely to be the exploitation, rather than the protection, of the environment (Van Liere & Dunlap 1980). Acknowledging that not all rural residents have “extractive occupations,” due to a “shared rural culture,” the authors still maintained this group as a whole is less concerned with environmental protection (Van Liere & Dunlap 1980). Murdock and Schriener (1977) presented a third theory, one based on the growth orientation of rural residents. According to this theory, rural and small-town residents “value [economic] growth over protection of environmental quality,” because “small towns need to maintain economic growth to survive” (Van Liere & Dunlap 1980). Despite the various explanations offered, the research trend indicates that urban residents are more environmentally conscientious than their rural neighbors.

Operationalization: The percentage of the district classified as urban will be used as the measure of this variable.

Hypothesis 5: The greater the level of urbanicity in a district, the higher the environmental score the representative will have.

### *Occupation*

In 1979, Jerry W. Calvert found greater environmental support among individuals with white-collar occupations than others (Calvert 1979). One year later, Van Liere and Dunlap

reported that while “a majority of the associations between occupational prestige and environmental concern...are positive,” most are only slight associations (1980).

Although there is not a great wealth of research on the specific correlation between occupation and environmentalism, it is often assumed that individuals with blue-collar jobs are less concerned about the environment than those with more “prestigious” jobs. Van Liere and Dunlap, assuming occupational prestige to correlate with social class, reviewed a few explanations for this. One explanation, presented by Dunlap et. al. (1975), is based on Maslow’s (1970) hierarchy of needs theory. This explanation suggests that “the upper and middle classes have solved their basic material needs and thus are free to focus on the more aesthetic aspects of human existence,” such as the environment (Van Liere & Dunlap 1980). Another possible explanation, offered by Morrison et. al. (1972) is that of relative deprivation. According to this explanation, “members of the lower class typically have experienced only poor physical conditions, and thus are less aware that they live, work, and play in polluted, overcrowded conditions” (Van Liere & Dunlap 1980); they are not expected to push for what they have not experienced. A third explanation, presented by Martinson and Wilkening (1975) and Althoff and Greig (1977), is that those in the middle and upper classes are more “politically and socially active” than those in the lower and working classes; therefore, “their concern over environmental problems is only an extension of a generalized concern with social problems” (Van Liere & Dunlap 1980).

Interestingly, Buttel and Flinn (1978) predicted the exact opposite. The authors expected the lower and working classes to be more concerned about environmental issues because they “typically reside in highly polluted areas, work in poor physical environments, and have access to poor recreational facilities” (Van Liere & Dunlap 1980).

The fact that uncertainty surrounds this variable could stem from the fact that the relationship between labor unions/members of the working class and environmentalists has changed over time. Scott Dewey thoroughly investigated this relationship. He found that labor unions originally played a very important role in the environmentalist movement. In fact, many union members “preceded most of the rest of the environmental movement in conceptually linking environmental problems with wider social and economic issues” (Dewey 1998). Labor unions retained their environmentalist attitudes until the 1970s, which saw the “growing energy crisis...the onset of chronic stagflation, the pressure of foreign competition, and other economic and social stresses” (Dewey 1998). Once believing that jobs and economic growth could be preserved at the same time the environment was cleaned up, as economic conditions worsened, workers “grew increasingly receptive to the industry-promoted argument that the nation could not afford the luxury of environmentalism” (Dewey 1998). Thus developed the popular “myth that organized labor and the environmental movement were inevitably opposed to one another” (Dewey 1998).

On the other hand, Cary Coglianese found that as “the values of environmentalism began to diffuse throughout society,” among those who captured them were unions (2001). “Business even began to espouse green values” (Coglianese 2001). Despite these findings and the fact that many businesses today are making visible efforts to be more sustainable, the myth that labor unions and environmentalists are fundamentally at odds still persists.

Although only supported by stereotypes and a minimal collection of empirical data, evidence tends to indicate that a more prestigious job correlates with a higher pro-environmental attitude.

Operationalization: As a measure of occupation, the percentage of constituents classified as blue-collar workers will be used.

Hypothesis 6: The greater the percentage of blue-collar workers in a district, the less supportive of environmental policy the representative will be.

### *Education*

Citing Dillman and Christenson (1972), Calvert found that those with better educations are more likely to support environmental policies (Calvert 1979). Van Liere and Dunlap also found previous research to show an association, albeit only a moderate one, between higher education and greater environmental concern (1980). Similarly, Buttel found higher education consistently and moderately associated with a positive environmental attitude (Buttel 1987). His results are consistent with both earlier and later research.

Kanagy and Nelsen gauged environmental support through both individuals' feelings towards increased federal spending as well as towards relaxed environmental controls. Their results show that while the better-educated are no more likely to support increased spending, they are significantly more likely to oppose relaxation of controls, indicating that they have higher pro-environmental attitudes than those with less education (Kanagy & Nelsen 1995). Similarly, in their study, Theodori and Luloff found a linear and statistically significant relationship between education and environmental attitude. They concluded that individuals who are "more highly educated...are more likely than their opposites to maintain proactive positions on environmental issues" (Theodori & Luloff 2002). Julian Keniry provided interesting insight as to why this may be.

According to Keniry, "one of the more astounding phenomena in higher education today is the number of environmental organizations that have sprung up in recent years" (1993). In addition, "the environment consistently ranks high among today's student concerns" (Keniry 1993). In 1990, "college environmental outreach programs" were organized by the groups National Wildlife Federation (NWF), Earth Day 1990, and the Student Environmental Action Coalition (SEAC) (Keniry 1993). Since then, other groups have begun to design college environmental programs as part of an effort to institutionalize the environmental movement on college campuses. Colleges are making their own efforts as well, through a combination of student organizations, incorporation of environmental themes into the curriculum, and environmental planning done either by a task force or a liaison between students, faculty, and members of the administration (Keniry 1993). Therefore, as an increasing number of college students are exposed to these issues, it is reasonable to expect college graduates to exhibit higher environmentally-friendly attitudes.

Operationalization: Education will be measured by the percentage of constituents with a college education.

Hypothesis 7: The more educated the constituents, the higher the LCV score the representative will have.

### *Constituent Ideology*

Ideology is an important variable to examine because a significant portion of the literature on legislative voting focuses specifically on congressmen's representation of their constituents' ideologies. Moreover, although party and ideology seem to be equally influential on congressmen's environmental attitudes, among citizens ideology appears to be a more important determinant than party (Kamieniecki 1995). In fact, Buttel reported that among constituents,

“indicators of political ideology have frequently been better predictors” of environmental concern than other measures (Buttel 1987).

Researchers have consistently found liberals to demonstrate higher pro-environmental attitudes than conservatives. Although in this study the effect of each independent variable is examined individually, this should come as no surprise; Democrats, who also tend to be liberals, show greater environmental concern than do Republicans, who of course tend to be conservatives. As Kamieniecki (1995) pointed out, this is not always the case; however, this association is seen more often than not. Actually, the explanations for ideological voting offered by Van Liere and Dunlap are the same as those for party, which have already been discussed.

The majority of pre-existing literature reports an association between ideology and environmentalist attitudes (Kamieniecki 1995). Kenski and Kenski (1981) found ideology to have a stronger relationship than partisanship with environmentalism, while Calvert (1979) found them equally influential; however, these authors, along with Dunlap and Allen (1976), all found a positive association between liberalism and environmental support (Kamieniecki 1995). Kraft (1995), Knuffman (1998), Shipan and Lowry (2001), and Theodori and Luloff (2002) also reported the same.

Operationalization: The percentage of constituents that voted for George Bush in the 2000 presidential election will be the measure of this variable. This measure has been chosen because, as Crowe and Eberspacher explained, Leogrande and Jeydel (1997) found “district presidential election results to be the best proxy for constituent ideology” (Crowe & Eberspacher 1998).

Hypothesis 8: The more Democratic the district Presidential vote, the more supportive of the environment the Representative will be.

## Data Analysis

### *Model*

In the study of legislative decision-making, there is a traditional methodology that researchers use. It is, explains Bishin, a regression that “characterizes models of legislator decision making with a dependent variable that represents a vote (or index of votes) and a series of independent variables for the factors held to influence these votes” (Bishin 2000). This “traditional model” was used in the current research project. As previously discussed, the measure of the dependent variable in this study is the LCV score. These scores are reported annually; therefore, separate regression models were run for each year.

With the exception of seat changes, the only difference in the values of the independent variables for each of the regressions was seniority, which increased by one for all members who served in both the 108<sup>th</sup> and 109<sup>th</sup> Congresses. While in most cases regressions to examine the effects of different relationships were run, in some, data from only one year were used. The results proved to vary only slightly from year to year; thus, in cases where only one regression was run, the most recent data (2006) were used.

In addition to the regression models, correlation diagnostics were run in order to check for collinearity between any of the independent variables. These results and a few noteworthy points regarding the dataset appear in the Appendix.

### *Multiple Regressions*

The results of the regressions run with all independent variables are displayed in Table 2. The high and robust *R* squares of .827 (2003), .856 (2004), .847 (2005), and .833 (2006), indicate

that between approximately 83 and 86 percent of the variance in environmental support can be explained knowing the nine independent variables. There is clearly a very strong relationship between this combination of characteristics and environmental voting; however, only four show a statistically significant effect on the LCV scores. Party, district ideology, education level, and region (South) are all consistently significant at the .001 level.

An additional regression model was run for each year using only these four variables, the results of which are displayed in Table 3. The *R* squares for these models - .824 (2003), .854 (2004), .845 (2005), and .830 (2006), - differ only slightly from those in which all independent variables were included. While all nine variables together explain between 83 and 86 percent of the variance in LCV scores, the combination of party, district ideology, education level, and region (South) explains between approximately 82 and 85 percent of the variance. Just as every year the same four variables are statistically significant, they consistently appear in the same order of degree of influence (determined by the beta values): political party, district ideology, education, and region (South).

Table 2 also reveals that while the results for the four significant variables are consistent, the results for the remaining five are not. Listed most to least influential, they appear as follows: occupation, intermountain West, seniority, urbanicity, and gender (2003); occupation, intermountain West, seniority, gender, and urbanicity (2004); gender, urbanicity, intermountain West, occupation, and seniority (2005); and intermountain West, gender, occupation, seniority, and urbanicity (2006). It is interesting to note that between the 108<sup>th</sup> and 109<sup>th</sup> Congresses, the sign for the beta value of urbanicity changes from positive to negative, while the sign for seniority does the opposite.

The most important point, however, is that the findings regarding the effects of party, district ideology, education, and South are consistent in both sessions of Congresses.

#### *Relative Influence of Characteristics*

Models were run each year to test the separate effects of personal and constituency characteristics on legislators' environmental support. This was done in order to compare the relative influence of these characteristics.

The results of the regressions for personal characteristics are displayed in Table 4. Taken together, these three – gender, party, and seniority – explain between about 75 and 80 percent of the variance in LCV scores. Interestingly, in the models for the 108<sup>th</sup> Congress, while party remains significant at the .001 level, gender is also significant, although only at the .01 level. This is also the case for the models for the 109<sup>th</sup> Congress, but in addition, seniority is found to be significant at the .05 level.

Table 5 contains the results pertaining to constituency characteristics. These six – South, intermountain West, urbanicity, occupation, education level, and district ideology – explain between approximately 58 and 62 percent of the variance in environmental support. There are several important points to note. In all four models, district ideology remains statistically significant at the .001 level. Education also maintains significance, though it is at the .001 level in the first two years, at the .05 level in 2005, and at the .01 level in 2006. In addition, occupation meets statistical significance in two of the models - at the .01 level in 2003 and the .05 level in 2004. Perhaps the most interesting difference, however, is that the South is not significant in any of these models. While one questions these changes in significance, such an analysis goes beyond the scope of this study.

According to the results presented in Tables 4 and 5, as one would reasonably expect, a legislator's personal characteristics exert the greatest influence over his environmental voting.



However, his or her constituents' characteristics, while not as influential, are clearly important as well. The data support the assumption that legislators vote according to their constituents' preferences, although they do not speak to whether this is for electoral or other reasons.

### *Hypotheses*

It was predicted in Hypothesis 1 that the data would not show any statistically significant relationship between gender and LCV score, and the results support this hypothesis. In each of the four years studied, gender fails to have a significant influence on legislators' environmental support. As an additional step, two more regressions were run, in order to determine whether gender has an interactive effect on legislators' scores. The results are based on the data from 2006 and are presented in Table 6. They reveal that the independent variables explain approximately 81 percent of the variance in the LCV scores of male representatives and about 93 percent of the variance in the scores of the women. Among males, party, district ideology, education, and the South all remain statistically significant at the .001 level. Interestingly, among females, only party remains significant at this level. Moreover, while South is still significant, it is only at the .05 level, while education and district ideology are not significant at all.

The results presented in Table 2 also support Hypothesis 2, which predicted that Democrats would be more environmentally supportive than Republicans. The relationship between party and LCV scores is positive and, as already stated, significant at the .001 level. With a beta value ranging from .669 and .734 over the four years, the results indicate that the political party of the legislator has the greatest impact on his environmental score.

Hypothesis 3 predicted that newer members in each party would have more extreme LCV scores than more senior members; thus, because the relationship predicted involves an interaction between party and seniority, two more regression models were run. The results, drawn from the 2006 data, are displayed in Table 7. For Democrats, although the relationship between seniority and LCV score is positive and strong (beta = .692), it is not statistically significant – the probability of chance occurrence is approximately 97 percent. Among Republicans, the relationship between seniority and LCV score is positive, weak (beta = .440), and has a probability of chance occurrence of about 15 percent. It is clear that the results do not support the hypothesis, for even when controlling for party, seniority remains an insignificant variable.

The results presented in Table 7 contain several noteworthy findings, including that Democrats (R square = .479) appear more responsive than Republicans (R square = .325) to their constituents. In addition, while district ideology, education, and South remain statistically significant at the .001 level among Democrats, the situation for Republicans is quite different. Among Republicans, only ideology remains significant at the .001 level, although education is significant at the .05 level. Two additional variables meet statistical significance: urbanicity, which according to the beta value is more powerful than education, and intermountain West, both at the .05 level.

The results in Table 2 only partially support Hypothesis 4, which predicted that representatives from the South and intermountain West would be the least supportive of environmental policies. The relationships between South and LCV score and between intermountain West and LCV score are both negative, which would appear to support the hypothesis; however, only the former is statistically significant. Region, therefore, does have an effect on the environmental support of legislators, but only when the South is compared with all other regions. With a beta value ranging from -.088 to -.100, the South is the fourth most influential factor on representatives' LCV scores.

There is neither a statistically significant relationship between LCV scores and urbanicity nor between LCV scores and occupation (refer to Table 2). Therefore, Hypothesis 5, which predicted greater urbanicity to lead to greater environmental support, and Hypothesis 6, which predicted a greater percentage of blue-collar workers to lead to a lower LCV score, are neither confirmed nor rejected – the results are inconclusive.

Table 2 also shows that district education level is the third most important characteristic in determining a legislator's environmental voting score (beta ranges from .137 to .181). The results show that the higher the percentage of a representative's constituents with college degrees, the higher his LCV score, indicating support for Hypothesis 7. There exists a positive and significant relationship between education level and environmental support.

Revealing a negative and statistically significant relationship between district ideology and LCV score, the results presented in Table 2 also support Hypothesis 8. It appears, as was expected, that representatives who come from districts with a greater democratic presidential vote are more supportive of the environment. In each of the four models run, district ideology is the second most influential characteristic on legislative voting (beta ranging from -.209 to -.257).

#### *Summary*

The results of this study indicate that the greatest environmental support can be expected from Democrats, liberals, and individuals with college educations, while the least support can be expected from southern residents. While legislators are influenced by their personal characteristics and consider their own opinions, the results show that constituents' characteristics are influential as well.

The findings presented in this study are largely consistent with previous research. The same four variables significant in this investigation have been found to be significant in the past and the role of gender, perhaps one of the most debated topics, remains uncertain. The importance of seniority, urbanicity, and occupation, which have also been topics of debate, also remain unclear.

#### *Discussion*

One of the goals of this study was to determine what characteristics are significantly correlated with environmental support. It was consistently found that Democrats, liberals, and college graduates have the highest pro-environmental attitudes, while southerners have the lowest. It would appear then that efforts to recruit members to the environmentalist movement would be best invested if directed at southerners. Such an investment has the greatest potential for converting unlikely supporters.

The more important goal of this study was to examine environmental issues in Congress. As previously mentioned, while most Americans do show support for environmental protection, this issue is not typically a significant factor in determining how they vote. This is especially true as the salience of environmental issues decreases, which it has since the 1970s. On September 10, 2007, Harris Interactive asked 1,000 adults in the country, "What do you think are the two most important issues for the government to address?" According to the results, only 2 percent named the environment as one of the two. In comparison, the War, with 29 percent of the vote, received the highest support (Harris Interactive 2007). In light of these circumstances, because individuals are not expected to express any strong opinions on the issue, there would be no reason for congressmen to be preoccupied with their constituents' preferences. This study found, however, that the democratic process of representation still works as it is expected to based upon the implications of traditional democratic theory.

One cannot deny that, together explaining between 83 and 85 percent of the variance in LCV scores, political party, district ideology, education level, and region (South) have a very strong influence over representatives' environmental support. In addition, constituency characteristics alone were found to explain between 58 and 62 percent of the variance in LCV scores. Clearly then, legislators do consider their constituents' environmental preferences. The fact that democracy continues to function even in the absence of an environmental crisis (which Coglianesse suggested was necessary for increased issue salience) is very reassuring, and raises some important questions.

As established by Shipan and Lowry (2001) as well as this study, the parties are obviously polarized over environmental policy, a trend which began after the 1970s. It is noteworthy that polarization has increased at the same time that issue salience has decreased. To what extent would an environmental crisis reverse this polarization? Immediately following the terrorist attacks on September 11, 2001, the majority of Americans, regardless of political party, rallied behind the President. This unification did not last long, however, as the parties quickly diverged over the Iraq war. Would the same happen over an environmental crisis? After how long and what event would the parties, if at all, again begin to polarize? Would the window of opportunity following an environmental crisis be larger or smaller than that which existed after the terrorist attacks?

It has been found by Clausen (1978) and others that the degree of polarization between Democrats and Republicans depends on the issue in question. What has also been found however, at least in the cases of the environment and terrorism, is that polarization also seems to be a factor of issue salience. It would be interesting to examine the relative influence on polarization of the actual issue itself as compared to its salience.

In addition, while in response to the terrorist attacks the parties at first unified, as they presumably would in response to an environmental crisis, one wonders if there is any crisis that would cause an immediate polarization. Would there ever be a catastrophe which would cause the parties to immediately develop opposing responses? While it seems highly unlikely, if one were discovered, this would certainly merit scholarly attention.

This discussion has focused on the effects of political party, as with a beta value ranging between .669 and .734 when run with all other variables - it is by far the most influential characteristic. Questions can be asked about the other three significant characteristics as well. How would a crisis influence the significance of these variables? Would less educated individuals and southern residents show increased environmental support? Political party and ideology are highly correlated, therefore presumably as the parties converged, so would liberals and conservatives. For what other issues do party, ideology, education, and being a resident of the South significantly influence congressional voting? Are there issues for which any or all the five variables deemed insignificant in this study *do* have a significant influence on a legislator's vote?

Hopefully, this study can help structure the investigation of these and other questions regarding legislative voting.

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## Appendix

### *Noteworthy Cases*

Again, values for the independent variables were collected from the *Almanac of American Politics, 2004*, and *CQ's Politics in America, 2006*, while LCV voter scores were collected from the organization's website. There are a few important points to note about the dataset.

First, Speaker of the House Dennis Hastert, representative for District 14 in Illinois, was excluded from all regressions. This is because, as the LCV states, "the Speaker of the House votes at his discretion" ("League of Conservation Voters," 2007).

Second, for District 48 in California, only data pertaining to Christopher Cox were used, although he was not given an LCV score in 2006. The LCV gave scores in 2005 and 2006 to John Campbell, but as this representative was not listed in either of the other two sources, he was excluded from the dataset. The same was also the case with District 50 in California, for which only data applicable to Randy 'Duke' Cunningham were entered. He was not given an LCV score in 2006, and although Brian Bilbray was, both almanacs listed Cunningham as the representative.

The three data sources provided somewhat conflicting information for District 2 in Ohio. Rob Portman is listed as the representative according to the *Almanac of American Politics*, and was given an LCV score each year except for 2006. The LCV gave a score in 2005 and 2006 to Jean Schmidt, but *CQ's Politics in America* listed that the seat was vacant in the 109<sup>th</sup> Congress. Because of this confusion and the fact that Portman was only missing the 2006 LCV score, only he was included in the dataset.

The last adjustment to the dataset was made to District 19 in Texas. Randy Neugebauer was listed in both almanacs and was given an LCV score each year. Interestingly, the LCV scorecard also provided an LCV score in 2005 to Larry Combest. The scorecard is the only of the three sources to list Combest, however, and thus only data pertaining to Neugebauer was included.

### *Correlations*

It is widely known that party and ideology are two highly correlated variables. In order to determine the degree of collinearity between these two as well as any other variables, a correlation matrix, using the data from 2006, was compiled and is displayed in Table 1.

While numerous statistically significant correlations were found, only four were both significant and strong. Listed strongest to weakest, they are education and occupation ( $r = -.814$ ), party and district ideology ( $r = -.675$ ), urbanicity and occupation ( $r = -.627$ ), and ideology and urbanicity ( $r = -.526$ ). Each of these relationships is statistically significant at the .001 level. These results show strong correlations between having a lower education and being a blue-collar worker, living in a more conservative district and having a Republican representative in Congress, living in a more urbanized area and being more likely to have a blue-collar job, and between being a liberal and living in a more urbanized area.

While at first it seemed surprising that party and ideology did not show the strongest correlation, this may be due to the fact that the measures reflect the party of the legislator but the ideology of his district. Moreover, while party is a dummy variable, ideology was measured as a percentage of a vote that was, as reported in *The Almanac of American Politics*, split three ways (Bush, Kerry, and Other).

**Table 1**  
**Pearson Correlation Values (r)**

	Seniority	South	West	Party	District Ideology	Urbanicity	Education	Occupation	Gender
<u>Seniority</u>									
r	1	-.159***	-.123**	.126**	-.156***	.045	.044	-.054	.131**
Sig.		.001	.010	.009	.001	.353	.361	.264	.006
N	435	435	435	435	435	435	435	435	435
<u>South</u>									
r	-.159***	1	-.187***	-.108*	.349***	-.226***	-.162***	.221***	.094*
Sig.	.001		.000	.019	.000	.000	.000	.000	.039
N	435	478	478	477	478	478	478	478	477
<u>West</u>									
r	-.123**	-.187***	1	-.100*	.113*	.041	.032	-.071	-.023
Sig.	.010	.000		.029	.014	.370	.480	.123	.616
N	435	478	479	477	478	478	478	478	477
<u>Party</u>									
r	.126**	-.108*	-.100*	1	-.675***	.269***	-.048	-.049	-.135**
Sig.	.009	.019	.029		.000	.000	.300	.281	.003
N	435	477	477	477	477	477	477	477	477
<u>District Ideology</u>									
r	-.156***	.349***	.113*	-.675***	1	-.526***	-.087	.249***	.218***
Sig.	.001	.000	.014	.000		.000	.056	.000	.000
N	435	478	478	477	478	478	478	478	477
<u>Urbanicity</u>									
r	.045	-.226***	.041	.269***	-.526***	1	.447***	-.627***	-.222***
Sig.	.353	.000	.370	.000	.000		.000	.000	.000
N	435	478	478	477	478	478	478	478	477
<u>Education</u>									
r	.044	-.162***	.032	-.048	-.087	.447***	1	-.814***	-.102*
Sig.	.361	.000	.480	.300	.056	.000		.000	.026
N	435	478	478	477	478	478	478	478	477
<u>Occupation</u>									
r	-.054	.221***	-.071	-.049	.249***	-.627***	-.814***	1	.099*
Sig.	.264	.000	.123	.281	.000	.000	.000		.031
N	435	478	478	477	478	478	478	478	477
<u>Gender</u>									
r	.131**	.094*	-.023	-.135**	.218***	-.222***	-.102*	.099*	1
Sig.	.006	.039	.616	.003	.000	.000	.026	.031	
N	435	477	477	477	477	477	477	477	477

\* Correlation is significant at the .05 level (2-tailed)

\*\* Correlation is significant at the .01 level (2-tailed)

\*\*\*Correlation is significant at the .001 level (2-tailed)



**Table 2**  
**The Effects of All Independent Variables\***

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>2003</b>						<b>.910</b>	<b>.827</b>	<b>.824</b>	<b>16.624</b>
Party**	53.589	2.284	.676	23.461	.000				
District Ideology**	-.718	.097	-.257	-7.378	.000				
Education**	.785	.160	.181	4.917	.000				
South**	-8.442	1.929	-.100	-4.377	.000				
Occupation	.443	.258	.072	1.716	.087				
Intermountain West	-6.753	3.456	-.042	-1.954	.051				
Seniority	-.210	.214	-.021	-.986	.325				
Urbanicity	.021	.059	.011	.354	.724				
Gender	-.951	2.432	-.008	-.391	.696				
<b>2004</b>						<b>.925</b>	<b>.856</b>	<b>.853</b>	<b>15.426</b>
Party**	56.794	2.115	.705	26.856	.000				
District Ideology**	-.710	.090	-.250	-7.863	.000				
Education**	.717	.148	.162	4.831	.000				
South**	-7.782	1.796	-.091	-4.334	.000				
Occupation	.392	.240	.062	1.634	.103				
Intermountain West	-5.960	3.210	-.036	-1.857	.064				
Seniority	-.155	.198	-.015	-.781	.435				
Gender	-1.112	2.256	-.010	-.493	.622				
Urbanicity	.018	.055	.009	.317	.752				
<b>2005</b>						<b>.920</b>	<b>.847</b>	<b>.843</b>	<b>15.677</b>
Party**	58.162	2.182	.734	26.651	.000				
District Ideology**	-.584	.092	-.209	-6.336	.000				
Education**	.594	.150	.137	3.955	.000				
South**	-7.413	1.817	-.088	-4.080	.000				
Gender	-3.031	2.177	-.028	-1.392	.165				
Urbanicity	-.050	.056	-.025	-.885	.377				
Intermountain West	-3.504	3.249	-.022	-1.078	.282				
Occupation	.131	.242	.021	.543	.587				
Seniority	.102	.197	.010	.519	.604				
<b>2006</b>						<b>.913</b>	<b>.833</b>	<b>.830</b>	<b>16.272</b>
Party**	52.755	2.266	.669	23.280	.000				
District Ideology**	-.709	.096	-.255	-7.385	.000				

Education**	.715	.156	.164	4.575	.000				
South**	-8.290	1.891	-.099	-4.384	.000				
Intermountain West	-6.569	3.378	-.041	-1.945	.052				
Gender	-4.051	2.264	-.038	-1.789	.074				
Occupation	.207	.252	.034	.824	.411				
Seniority	.155	.204	.016	.758	.449				
Urbanicity	-.025	.058	-.013	-.426	.670				

\*With a significance value of .000, all models are statistically significant at the .001 level

\*\* Variable is statistically significant at the .001 level

**Table 3**  
**Effects of the Four Significant Variables\***

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>2003</b>						<b>.908</b>	<b>.824</b>	<b>.822</b>	<b>16.690</b>
Party**	53.852	2.268	.680	23.745	.000				
District Ideology**	-.716	.085	-.256	-8.469	.000				
Education**	.556	.090	.128	6.180	.000				
South**	-7.314	1.864	-.087	-3.925	.000				
<b>2004</b>						<b>.924</b>	<b>.854</b>	<b>.852</b>	<b>15.467</b>
Party**	58.861	2.082	.706	27.307	.000				
District Ideology**	-.716	.078	-.252	-9.219	.000				
Education**	.514	.083	.116	6.165	.000				
South**	-6.714	1.727	-.078	-3.888	.000				
<b>2005</b>						<b>.919</b>	<b>.845</b>	<b>.844</b>	<b>15.668</b>
Party**	58.465	2.164	.738	27.013	.000				
District Ideology**	-.563	.080	-.201	-7.012	.000				
Education**	.487	.085	.112	5.761	.000				
South**	-7.108	1.738	-.084	-4.090	.000				
<b>2006</b>						<b>.911</b>	<b>.830</b>	<b>.828</b>	<b>16.347</b>
Party**	53.018	2.259	.672	23.469	.000				
District Ideology**	-.718	.084	-.258	-8.552	.000				
Education**	.590	.089	.135	6.615	.000				
South**	-7.608	1.817	-.091	-4.187	.000				

\*With a significance value of .000, all models are statistically significant at the .001 level

\*\*Variable is statistically significant at the .001 level

**Table 4**  
**Effects of Personal Characteristics\***

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>2003</b>						<b>.865</b>	<b>.748</b>	<b>.746</b>	<b>19.961</b>
Party**	67.399	1.952	.851	34.531	.000				
Gender***	-8.012	2.812	-.070	-2.849	.005				
Seniority	.190	.251	.019	.758	.449				
<b>2004</b>						<b>.886</b>	<b>.786</b>	<b>.784</b>	<b>18.722</b>
Party**	70.329	1.830	.873	38.433	.000				
Gender***	-7.962	2.637	-.069	-3.019	.003				
Seniority	.233	.235	.022	.990	.323				
<b>2005</b>						<b>.891</b>	<b>.795</b>	<b>.793</b>	<b>18.011</b>
Party**	69.098	1.768	.872	39.079	.000				
Gender***	-7.593	2.429	-.070	-3.126	.002				
Seniority****	.509	.220	.052	2.313	.021				
<b>2006</b>						<b>.870</b>	<b>.756</b>	<b>.755</b>	<b>19.523</b>
Party**	66.490	1.926	.843	34.531	.000				
Gender**	-9.830	2.634	-.091	-3.732	.000				
Seniority***	.640	.239	.065	2.678	.008				

\*With a significance value of .000, all models are statistically significant at the .001 level

\*\*Variable is statistically significant at the .001 level

\*\*\*Variable is statistically significant at the .01 level

\*\*\*\*Variable is statistically significant at the .05 level

**Table 5**  
**Effects of Constituency Characteristics\***

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>2003</b>						<b>.777</b>	<b>.603</b>	<b>.598</b>	<b>25.115</b>
District Ideology**	-2.217	.110	-.793	-20.223	.000				
Education**	.933	.239	.215	3.899	.000				
Occupation***	.996	.384	.161	2.591	.010				
Intermountain West	-4.516	5.155	-.028	-.876	.381				
Urbanicity	-.046	.089	-.023	-.514	.607				
South	-.678	2.849	-.008	-.238	.812				
<b>2004</b>						<b>.781</b>	<b>.609</b>	<b>.604</b>	<b>25.329</b>
District Ideology**	-2.295	.111	-.808	-20.765	.000				
Education**	.867	.241	.196	3.592	.000				
Occupation****	.944	.388	.150	2.434	.015				
Urbanicity	-.066	.089	-.033	-.734	.463				
Intermountain West	-3.996	5.199	-.024	-.769	.442				
South	.514	2.873	.006	.179	.858				
<b>2005</b>						<b>.766</b>	<b>.587</b>	<b>.582</b>	<b>25.623</b>
District Ideology**	-2.225	.112	-.796	-19.893	.000				
Education****	.609	.244	.140	2.494	.013				
Occupation	.503	.392	.081	1.282	.201				
Urbanicity	-.125	.091	-.063	-1.382	.168				
South	-1.366	2.907	-.016	-.470	.639				
Intermountain West	-.368	5.259	-.002	-.070	.944				
<b>2006</b>						<b>.784</b>	<b>.615</b>	<b>.610</b>	<b>24.635</b>
District Ideology**	-2.202	.108	-.790	-20.332	.000				
Education***	.744	.235	.171	3.163	.002				
Occupation	.565	.378	.091	1.494	.136				
Urbanicity	-.087	.087	-.044	-.998	.319				
South	-2.965	2.804	-.035	-1.058	.291				
Intermountain West	-3.875	5.065	-.024	-.765	.445				

\*With a significance value of .000, all models are statistically significant at the .001 level

\*\*Variable is statistically significant at the .001 level

\*\*\*Variable is statistically significant at the .01 level

\*\*\*\*Variable is statistically significant at the .05 level

**Table 6**  
**Effects of All Variables, Controlling for Gender\***  
 (Based on data from 2006)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>Males</b>						<b>.901</b>	<b>.812</b>	<b>.808</b>	<b>16.891</b>
Party**	50.885	2.547	.657	19.982	.000				
District Ideology**	-7.789	.109	-.283	-7.253	.000				
Education**	.802	.175	.183	4.574	.000				
South**	-7.675	2.127	-.095	-3.608	.000				
Urbanicity	-.087	.066	-.045	-1.312	.190				
Intermountain West	-6.817	3.879	-.043	-1.757	.080				
Occupation	.115	.282	.019	.407	.684				
Seniority	.133	.221	.014	.604	.546				
<b>Females</b>						<b>.965</b>	<b>.931</b>	<b>.921</b>	<b>11.001</b>
Party**	64.754	4.609	.802	14.051	.000				
District Ideology	-2.254	.168	-.093	-1.511	.136				
South***	-7.472	3.674	-.081	-2.034	.047				
Education	.264	.309	.069	.855	.396				
Urbanicity	.155	.127	.062	1.224	.226				
Seniority	.858	.550	.058	1.558	.125				
Intermountain West	-3.620	5.398	-.025	-.671	.505				
Occupation	.124	.509	.020	.244	.808				

\*With a significance value of .000, the model is statistically significant at the .001 level

\*\*Variable is statistically significant at the .001 level

\*\*\*Variable is statistically significant at the .05 level

**Table 7**  
**Effects of All Variables, Controlling for Party\***  
 (Based on data from 2006)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Model Summary			
	B	Std. Error	Beta			R	R Square	Adjusted R Square	Std. Error of the Estimate
<b>Democrats</b>						<b>.692</b>	<b>.479</b>	<b>.457</b>	<b>15.057</b>
Education**	.884	.209	.438	4.234	.000				
South**	-14.149	2.724	-.303	-5.194	.000				
District Ideology**	-.461	.121	-.280	-3.824	.000				
Occupation	.647	.346	.211	1.869	.063				
Urbanicity	.144	.079	.140	1.827	.069				
Gender	-3.842	2.776	-.078	-1.384	.168				
Intermountain West	6.129	5.615	.058	1.091	.276				
Seniority	.010	.261	.002	.039	.969				
<b>Republicans</b>						<b>.570</b>	<b>.325</b>	<b>.300</b>	<b>16.237</b>
District Ideology**	-1.181	.170	-.448	-6.953	.000				
Urbanicity***	-.207	.091	-.198	-2.265	.024				
Education***	.456	.227	.188	2.009	.046				
Occupation	-.461	.359	-.145	-1.285	.200				
Intermountain West***	-9.499	4.125	-.139	-2.303	.022				
Seniority	.440	.304	.083	1.445	.150				
South	-1.829	2.590	-.046	-.706	.481				
Gender	-.485	3.563	-.008	-.136	.892				

\*With a significance value of .000, the model is statistically significant at the .001 level

\*\*Variable is statistically significant at the .001 level

\*\*\*Variable is statistically significant at the .05 level