

# Running from Washington: Policy Collaboration as Symbolic Representation\*

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## Abstract

Congress is an inherently collaborative institution with members coauthoring legislation and policy initiatives on a daily basis. Yet we have very little understanding of how members benefit from these efforts. What is the electoral benefit of collaboration as a form of symbolic representation? With a dataset of 82,712 congressional Dear Colleague letters sent over a period of eight years, I identify the members of Congress who collaborate on policy and create measures for each member's propensity for collaboration, both overall and with members of the other party. A temporal network autocorrelation model allows me to account for the interdependence of members of Congress while estimating the relationship between propensity for collaboration and electoral returns. I find that for members of Congress who were elected by close margins, there is a significant benefit to collaborating more with members of the other party. While members representing safe districts may not be rewarded by their constituents for collaboration or bipartisanship, more vulnerable incumbents can use the relationships they make in Washington, DC to build a reputation for bipartisanship and distance themselves from the "dysfunctional" Congress to their constituency. Vulnerable members who engage in more bipartisan collaboration are then rewarded by their constituents at the ballot box.

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In March 2009, Congressman Jim Matheson (D-UT) introduced H.R. 1398, the Labeling Education and Nutrition (LEAN) Act of 2009, legislation requiring restaurants to provide nutritional information on their menus. Two days after introducing the bill, he sent a “Dear Colleague” letter to the other 434 members of the House of Representatives announcing its introduction and asking other members to sign on as cosponsors. While only Matheson was listed as the bill’s sponsor, the letter to his colleagues was signed by both Matheson and Congressman Fred Upton (R-MI) and described the bill as a joint effort by the two members.

There are thousands of collaborative relationships like the one between Matheson and Upton in each Congress. Members of Congress frequently work with each other to coauthor legislation, letters to agencies and congressional leaders, and other policy initiatives. Yet we have very little understanding of why members engage in these collaborative partnerships. In a Congress controlled by the Democratic Party, why would Congressman Matheson choose to share credit for what would otherwise appear to be his policy proposal with a Republican colleague? Previous scholars have argued that legislators introduce bills reflecting their own policy preferences and that sharing credit for an accomplishment dilutes its value. Certainly, members should have little incentive to work with colleagues in the opposing party. Yet Dear Colleagues reveal collaborations are frequently bipartisan, as with Congressmen Matheson and Upton, or in another example, Congressmen Frank Kratovil (D-MD) and Chris Lee (R-NY) working together to coauthor a bill to increase the start-up deduction for new businesses.

In this paper, I argue that one of the primary benefits of collaborative relationships such as these is that they provide a means for members seeking to differentiate themselves from their colleagues in Washington DC. Members have a long history of distancing themselves from Washington, DC, when interacting with their constituents (Fenno, 1978). When Congress is viewed as a dysfunctional environment where members do not work together, policy collaboration, particularly when it is bipartisan, serves as a form of symbolic representation that members use to promote an image of themselves as a collaborative team player when they are in their districts.

Using a new measure of policy collaboration constructed from a novel dataset of Dear Colleague letters sent by members of Congress between 2003 and 2011, I examine the relationship between policy collaboration and electoral margins. I find that members of Congress whose seats are considered safe are less likely to collaborate with their colleagues and gain little for doing so. However, for the most electorally vulnerable members, collaborating with more colleagues in the other party is associated with a significant increase in vote share. For members who have to fight for their seat every two years, engaging in more bipartisan collaboration in Washington, DC, allows them to cultivate a reputation among their constituency for being willing to “work across the aisle” with members of the other party and improves their electoral performance.

## Collaboration in Washington

Collaboration is a widespread yet understudied practice in Congress. Much of the research on policy collaboration in Congress has used the cosponsorship network as the measure of collaboration, which its proponents concede is a noisy measure that cannot distinguish between policy agreement and policy collaboration (Fowler, 2006; Kirkland and Gross, 2012). Cosponsorship is a valuable tool for members of Congress who wish to show their support for a particular policy. Members cosponsor legislation for a number of reasons, including position taking, signaling support to constituents and other outside interests who can help a member in their reelection efforts, and intra-legislative signaling to advance favored policy initiatives (Kessler and Krehbiel, 1996; Wawro, 2000; Koger, 2003; Highton and Rocca, 2005).

However, cosponsorship is not necessarily indicative of collaboration. While some cosponsors may be involved in the drafting and promotion of legislation, the majority have little engagement on the bill beyond reviewing the contents and agreeing to add their name. This is evidenced by both the number of cosponsors who sign onto legislation and the timing of their support. The average bill in the 111th Congress had 18 cosponsors, with the total

number of cosponsors on any bill ranging from one to 425.<sup>1</sup> And most of those cosponsors are added to the bill after it has been introduced. If they sit on the committee of jurisdiction they may have the opportunity to sign onto the bill during a committee mark up, but for the most part, cosponsors are accepting the underlying bill as-is.

I argue that policy collaboration involves members of Congress working together on legislation or other policy issues in a substantive and purposive manner. Collaborators work together to shape the substance of legislation and agree on the language they use to promote their policy initiatives. But collaboration is not cost-free. Members may have to compromise on the content of legislation in order to reach agreement with their collaborator and legislation takes longer to draft when more people are involved. Yet, they still choose to do so. In a series of interviews with more than twenty congressional staff, I asked how often their bosses collaborated with colleagues on policy initiatives and all but one staff member reported that it was a common occurrence. Responses to the open-ended question “How often does your boss coauthor legislation and policy letters with other members?” included “All the time,” “A lot of time,” “Frequently,” “Very often,” and “He doesn’t always work well with others.” When asked why their boss chose to collaborate, staff reported the perceived legislative benefits, particularly of bipartisan collaboration, the messaging benefits, and a belief that collaboration is a normative good. “He believes in a collaborative approach and the best way to enact public policy is to write policy that has broad support” (Interviews, 2016).

While it may not be apparent in the legislative record as it only allows for a single member to be listed as the sponsor of each bill, these sort of coauthoring relationships are a frequent occurrence in the modern Congress. In the 111th Congress, 98% of members collaborated with at least one colleague and the average member collaborated with 20 of her colleagues. Members of Congress choose their collaborative partners on the basis of strategic considerations, personal relationships, and shared policy goals and a plurality of

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<sup>1</sup>Data are from the Congressional Bills Project (Adler and Wilkerson, 2003-2012).

these relationships are bipartisan (Craig, 2016). Members who adhere to the chamber norm in their collaborative patterns and those who collaborate with other effective members of Congress are more likely to be effective themselves (Craig, 2015). But collaboration also allows members of Congress to return to their districts and declare that they are working *with* their colleagues, particularly those on the other side of the aisle to distinguish themselves from a legislature bound by gridlock and acrimony.<sup>2</sup>

## Collaboration at Home

Much of the research on Congress considers the legislative and electoral work that members of Congress engage in to exist in two separate arenas, or is focused on policy congruence between a legislator and her constituents. In one of the seminal works linking the policy preferences of a member's constituency to their voting behavior, Miller and Stokes (1963) find that a representative's voting behavior is influenced by both their own preferences and their perception of their constituents' policy preferences, but neither the member or constituents have a clear understanding of the other's policy preferences. Other works connecting voting behavior to constituency preferences have argued that members' behavior in either the legislative or electoral arena is influenced by their expected outcomes in the other (Denzau, Riker and Shepsle, 1985), members are more likely to represent the position of the district's median voter in ideologically homogenous districts (Gerber and Lewis, 2004), and members compensate for poor information on constituency opinion by using previous vote margins to guide their voting (Henderson and Brooks, 2016).

Eulau and Karps (1977) argue that policy congruence is merely one form of responsiveness and we should consider representation as consisting of four different mechanisms by which a member represents their district: policy responsiveness, service responsiveness, allocation

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<sup>2</sup>In theory, a member of Congress could return to their district and claim that they are collaborating with colleagues without actually doing so. However, if they are making the claim frequently enough for it to be a prominent messaging point, there is a significant risk of being exposed through opposition research if they do not have evidence to support their claim.

responsiveness, and symbolic responsiveness.<sup>3</sup> In the Eulau and Karps framework, symbolic responsiveness is distinct from the other three forms in that it does not necessarily require a particular behavior from members of Congress, but rather “involves public gestures of a sort that create a sense of trust and support in the relationship between representative and represented” [p.241]. Studies of the relationship between symbolic representation and electoral performance have found that members with a larger legislative portfolio are viewed more favorably by their constituents, as are senior members who have had time to build a relationship with their voters. Electoral support increased for members who introduced more bills as well as more local interest bills, while members who gave more floor speeches were punished for their showmanship (Box-Steffensmeier et al., 2003). Senators who are electorally vulnerable are more likely to give floor speeches expressing identification with or empathy for their constituents, particularly if they are up for reelection (Hill and Hurley, 2002) and evidence shows that members of Congress take positions in their direct communications to voters that are more in line with constituency preferences while voting behavior is more likely to reflect the position of the party (Grose and Middlemass, 2010).

I argue that while collaboration in Washington, DC, has clear policy implications, it is also a form of symbolic representation that members use to differentiate themselves from their colleagues in Congress. Members, particularly those from electorally vulnerable districts, like to present themselves to their constituents as being “above the fray” when it comes to congressional in-fighting. One example is the 2013 creation of the “Problem Solvers Caucus,” a bipartisan legislative member organization that meets regularly “to build a sense of trust in the spirit of bipartisanship” (Tam, 2013). The caucus has legislative goals and are working to establish their influence within the House, but there is a clear electoral interest as well. The six members who lead the caucus in the 115th Congress all represent competitive districts and frequently tout their involvement in press releases and social media.<sup>4</sup>

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<sup>3</sup>Subsequent scholars have expanded the concept of representation to include descriptive representation and collective national representation (e.g. Mansbridge, 1999; Weissberg, 1978).

<sup>4</sup>The six caucus leaders are Rep. Josh Gottheimer (D-NJ), Rep. Tom Reed (R-NY), Rep. Carlos Curbelo (R-FL), Rep. Kurt Schrader (D-OR), Rep. Mike Gallagher (R-WI), and Rep. Tom Suozzi (D-NY).

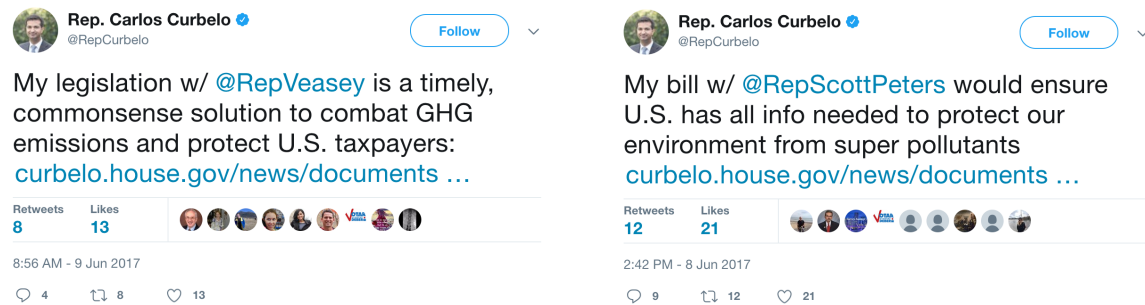
Similarly, members of Congress promote their collaborative relationships to their constituents. In an editorial printed in *The Record* and promoted on Facebook and Twitter, Congressman Josh Gottheimer (D-NJ) shared a report on his first hundred days in Congress with his voters, repeatedly emphasizing the collaborative nature of the legislation he introduced. “I [...] introduced the Regulatory Improvement Act with a group of colleagues on both sides of the aisle to cut out-of-date red tape and help our businesses grow.” He also described how he was “working to pass bipartisan legislation with Republican Brian Fitzpatrick to keep lead out of the drinking water in our children’s schools” and “helped introduce bipartisan legislation to create a comprehensive plan to destroy ISIS” (Gottheimer, 2017). Members of the majority party engage in this sort of promotion as well, as seen in figure 1 which provides two examples of how Congressman Carlos Curbelo (R-FL) used Twitter to promote his collaborations with Congressman Marc Veasey (D-TX) and Congressman Scott Peters (D-CA). Notably these congressional communications were sent a year and a half prior to the next election, suggesting that rather than using collaboration as a campaign messaging strategy, Congressman Curbelo is trying to build a reputation for himself as someone who works with other members of Congress on both sides of the aisle. Of course, these collaborative relationships can play into campaign messaging as well, as evidenced by Congressman Tim Walberg’s (R-MI) 2016 campaign ad in which a community leader said, “He’s out there fighting for us. The legislation that’s out there you’ll see it’s all bipartisan. You’ll see that Tim’s leading that charge. Tim is able to work with the other side. He’s out there doing this because it’s the right thing to do. And we need more of that in this country.”<sup>5</sup> Members of Congress are engaging in collaboration, frequently with members of the other party, and then highlighting those collaborative relationships in their communications with their constituents.

For many members of Congress, using collaboration as a form of symbolic representation makes sense. We know that there is electoral value in position-taking, even if members are

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<sup>5</sup>Advertisement script retrieved from [www.walbergforcongress.com](http://www.walbergforcongress.com).

Figure 1: Promotion of Policy Collaboration via Twitter



not successful in advancing their legislation (Mayhew, 1974). We also know that while members generally do not position themselves at the ideological median of their district, they are punished at the ballot box if they are seen as being too out of step with their district or too partisan (Clinton, 2006; Canes-Wrone, Brady and Cogan, 2002; Carson et al., 2010). And the media tend to reward these collaborative relationships with positive coverage. Congressman Scott Rigell (R-VA) received positive coverage in Virginia’s largest daily newspaper when he collaborated with three other members to form the “Fix Congress Now” caucus, a bipartisan predecessor to the “Problem Solvers Caucus” (Bartel, 2012). In June 2017, at least three different local newspapers ran articles touting the bipartisanship of their local members of Congress. The *Milwaukee Journal Sentinel* praised Representatives Ron Kind (D-WI) and James Sensenbrenner (R-WI) for earning positive scores on the Lugar Center’s “Bipartisan Index,” Louisiana’s largest daily newspaper printed a feature on the friendship and collaborations between Representatives Steve Scalise (R-LA) and Cedric Richmond (D-LA), and the newspaper of State College, PA highlighted the multiple collaborations between Representatives Glenn Thompson (R-PA) and Jim Langevin (D-RI) (Gilbert, 2017; Grace, 2017; Falce, 2017).

At the same time, collaboration, particularly with members of the other party, may not always be in the member’s best interest. While voters want Congress as an institution to be bipartisan, partisan voters want partisan representatives and people prefer partisan



legislation over the ideal of bipartisan compromise, which is seen as “losing” (Harbridge and Malhotra, 2011; Harbridge, Malhotra and Harrison, 2014). Furthermore, members of the majority party benefit electorally from a strong, homogenous party and a positive approval of both their party and Congress as a whole (Hall and Shepsle, 2014; Jones, 2010, 2015). For members representing safe districts and those in the majority party, this suggests that they would be best served by representing the partisan interests of their constituents and promoting their party’s leadership rather than running away from Congress. Electorally vulnerable members, however, would be better off distancing themselves from their party and an unpopular legislature, instead using symbolic representation to promote an image of themselves as a bipartisan, independent representative. This theory yields four hypotheses on the frequency and electoral consequences of collaboration:

*H1:* Electorally safe members of Congress will engage in less collaboration with their colleagues.

*H2:* For electorally vulnerable members, engaging in more collaboration will be associated with an increase in electoral performance.

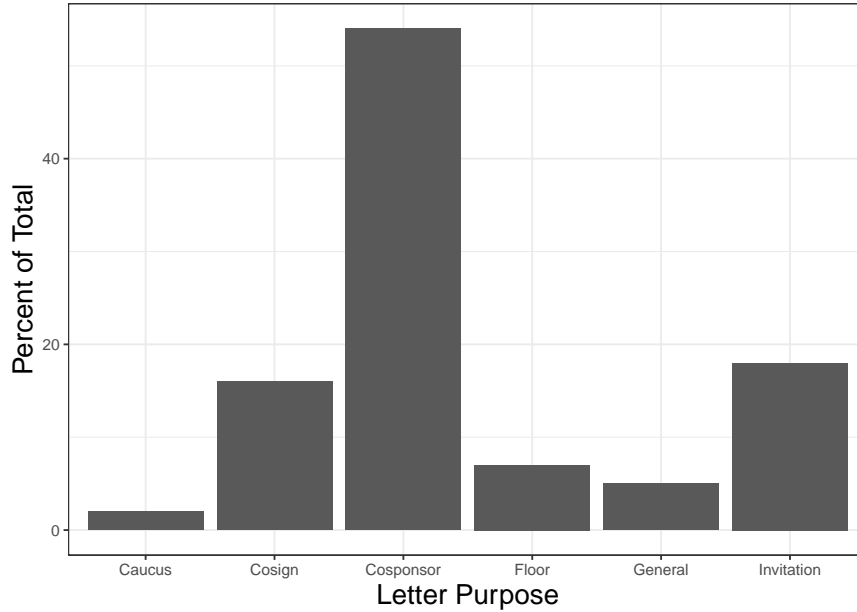
*H3:* Electorally vulnerable members who engage in more bipartisan collaboration will see a greater increase in their electoral performance.

*H4:* For members of the majority party, engaging in more bipartisan collaboration will be associated with a decrease in electoral performance.

## **Dear Colleague Letters**

To test these hypotheses and better understand the relationship between policy collaboration and electoral performance, we first must find a meaningful measure of collaboration between members of Congress. As detailed above, the dominant measure of collaboration in the literature is cosponsorship, which cannot distinguish between members who coauthor legislation together and those who cosponsor legislation to demonstrate their support for a

Figure 2: Distribution of Dear Colleague Letters by Purpose



policy. In some instances, such as Congressman Gottheimer’s legislation on lead in drinking water with Congressman Fitzpatrick, the role that Congressman Fitzpatrick played can be inferred from the legislative record because he is the sole original cosponsor of the bill.<sup>6</sup> In other instances, such as the SUPER Act introduced by Congressman Peters and referenced by Congressman Curbelo in figure 1, the legislative record does not distinguish between Congressman Curbelo, who is clearly claiming ownership of the legislation, and the other six members who were original cosponsors.<sup>7</sup> With Dear Colleague letters, we can identify the members who collaborate on legislation and other policy initiatives in the formative stage of the legislative process.

Dear Colleague letters are authored by members of Congress and distributed via electronic listserv to all House member and committee offices (Peterson, 2005).<sup>8</sup> The letters have received little systematic study in the legislative politics literature due to previous unavail-

<sup>6</sup>H.R. 2094 in the 115th Congress.

<sup>7</sup>H.R. 2858 in the 115th Congress.

<sup>8</sup>The U.S. Senate has their own Dear Colleague system, which is beyond the scope of this study. Bicameral Dear Colleague letters constitute less than one percent of letters sent in the House during the 111th Congress.

ability of the data, though they are frequently mentioned as a tool that members use to build support for their policy proposals (Campbell, 1982; Koger, 2003; Krutz, 2005). The letters are most commonly used to build support for legislation in the form of cosponsorship before or shortly after it is introduced, but they are also used to solicit cosigners for policy letters to administrative agencies or committees within Congress, as well as urge members to support or oppose a bill on the floor, recruit members for congressional caucuses, disseminate news articles and reports a member finds interesting, and invite members and staff to events. Figure 2 provides the distribution of letters by purpose for the 111th Congress.<sup>9</sup> Dear Colleague letters are a valuable tool for members of Congress as they provide an efficient means for members to quickly disseminate information about their policy initiatives and preferences across Capitol Hill. As described by Congressman David Price (D-NC) in his account of the process involved in passing the Home Equity Loan Consumer Protection Act, “Having discovered a promising policy gap and feeling anxious lest other members might be getting similar ideas, I hurried to draft a bill and to circulate a ‘Dear Colleague’ letter inviting other members to join me as cosponsors” (Price, 2004, p.97-98).<sup>10</sup>

While a slight majority of Dear Colleague letters are signed by a single member of Congress, 46% of the letters sent between 2003 and 2011 were signed by two or more members. When members sign a Dear Colleague letter together, I argue that it is the internal messaging equivalent of Congressman Curbelo’s tweets about the legislation he introduced with Representatives Veasey and Peters. Members are jointly claiming ownership over the legislation or policy initiative in question and signaling to their colleagues that it is a collaborative effort. A sample letter is presented in figure 3. In this letter, Congressman Daniel Maffei (D-NY) and Congressman Frank Kratovil (D-MD) are promoting the legislation they authored to protect automobile dealers who were harmed by the bankruptcies of General Motors and Chrysler. The bill was introduced by Congressman Maffei in June 2009 and

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<sup>9</sup>Based on a sample of 1600 letters.

<sup>10</sup>A more detailed discussion of the history and usage of Dear Colleague letters in Congress can be found in Craig (2015).

Figure 3: Sample Dear Colleague Letter from 111th Congress

## **Cosponsor H.R. 2743, The Automobile Dealer Economic Restoration Act**

Deadline to become an original cosponsor: 6pm today

Current Cosponsors: Maffei, Kratovil, Van Hollen, Hoyer, McMahon, Bartlett, Sutton, Hall, Posey

Dear Colleague:

Please join us in protecting our nation's autodealers by cosponsoring H.R. 2743, the Automobile Dealer Economic Restoration Act, which would require Chrysler and General Motors to continue to honor their commitments to auto dealers.

Automobile dealers are one of the largest private sector employers in the United States, providing tens of thousands of local jobs and contributing millions of dollars in tax revenues to states. Forcing the closure of automobile dealers would have an especially devastating economic impact in rural communities, where dealers play an integral role in the community, provide essential services and serve as a critical economic engine. This legislation requires that auto manufacturers in which the Federal Government has an ownership interest, or to which the federal government is a lender, continue to honor this commitment and not deprive economic rights to the dealers.

Previously GM and Chrysler seemingly arbitrarily notified dealers that their relationship was ending, essentially immediately, leaving dealers with millions of dollars invested in car stock, no options for consolidation and little leverage for liquidation. There was no transparency to the system that would shutdown many profitable dealerships that have been local institutions for decades. Furthermore, the decisions lacked any proof from the automakers that these closing would actually benefit them financially. This legislation builds on the efforts of Congress in a letter sent to the Treasury Department Auto Task Force on May 19, and a letter sent to President Obama today.

Specifically, H.R. 2743 accomplishes these goals:

- Restores the economic rights of General Motors and Chrysler car dealers as they existed prior to each company's bankruptcies.
- Preserves General Motors and Chrysler car dealers' rights to recourse under state law
- At the request of an automobile dealer, requires General Motors and Chrysler to reinstate franchise agreements in effect prior to each company's bankruptcies.
- Makes clear that the legislation is not intended to make null and void the court-ordered transfer of assets from Chrysler LLC to New CarCo Acquisition LLC or the transfer of General Motors assets that could be approved by a court after the introduction of the Act.

If you have any questions or would like to become a cosponsor please contact Hasan Sarsour of Rep. Maffei's staff at [hasan.sarsour@mail.house.gov](mailto:hasan.sarsour@mail.house.gov) or Ben Abrams of Rep. Kratovil's staff at [ben.abrams@mail.house.gov](mailto:ben.abrams@mail.house.gov).

Daniel B. Maffei  
Member of Congress

Frank M. Kratovil  
Member of Congress

by the end of the 111th Congress was supported by 286 cosponsors, of which Congressman Kratovil was one. However, even in the earliest stage of the legislative process, on the day that the bill was introduced, the letter distinguishes Congressman Kratovil from the other eight members who had signed on as cosponsors and are listed at the top. The Automobile Dealer Economic Restoration Act was coauthored by Representatives Maffei and Kratovil and the associated Dear Colleague letter sends a clear signal to other members that the bill is a collaborative effort.

Dear Colleagues are internal communications within the House so an argument could be made that they are not an appropriate measure of symbolic representation as they are intended for other members of Congress rather than constituents. It is certainly unlikely that the average voter has ever seen a Dear Colleague letter. However, Dear Colleague letters allow for the systematic measurement of each measure's overall propensity for collaboration and bipartisanship and are currently the only available tool for doing so. Furthermore, while members of Congress do not write Dear Colleague letters for their constituents, they are a part of the public record and are often provided to outside interests so members are conscious that the contents of any letter may reach their constituents (Straus, 2012). Even if some of the relationships in Dear Colleague letters were not entered into with the intent that they be broadcast to the public, it is unlikely that any member would sign a letter with a collaborator they wanted to keep secret from their constituents.

## Data and Methods

The policy collaboration network is drawn from the 82,712 Dear Colleague letters sent via electronic listserv in the House of Representatives between 2003 and 2011.<sup>11</sup> In order to capture the collaborative relationships between members of Congress, I first must identify the signatures on each letter, which I accomplish with a python script. Each email is read by

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<sup>11</sup>Corresponding Congresses are the 108th, 109th, 110th, and 111th.

the script and the content that follows the valediction “Sincerely,” is identified.<sup>12</sup> In addition to the members who signed each letter, I identify the date and Congress that the letter was sent, the subject line of the email, the relevant issue areas as designated by congressional staff, and the body of the letter itself. The result is an affiliation matrix for each Congress consisting of all the letters sent and the names of the members who signed each one.

Each Congress is its own network as the membership of the House changes with each election as do the relationships within it. Some collaborative relationships persist from one Congress to the next as members reintroduce legislation and policy initiatives that were unsuccessful in the previous Congress and members in certain institutional positions will continue to collaborate on different issues, such as the chairman and ranking member of a committee. However, many of the relationships change from one Congress to the next as issues rise and fall in prominence and political dynamics both inside and outside of the House shift. I use the 108th, 109th, 110th, and 111th Congresses in this study for two reasons. First, three different political dynamics are represented: unified Republican control (108th, 109th), divided government with a Democratic House and Senate and Republican President (110th), and unified Democratic control (111th). Second, I am confident I have the complete policy collaboration network for each of these four Congresses which allows me to ensure the robustness of my network measures (Borgatti, Carley and Krackhardt, 2006).

The affiliation matrix for each Congress yields a two-mode network in which members are connected to the letters they signed. However, for the purposes of this study, what I am interested in is not which members signed each letter but which members signed letters with each other at any point during a given Congress which reflects the collaborative tendencies of members rather than how collaborative each letter is. I therefore create one-mode projections of each two-mode network of letters and members so that each member of Congress is represented in the network by a node and the ties between them are a binary indicator of whether two members signed a Dear Colleague letter together at any point during that

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<sup>12</sup>About ten percent of letters use alternate valedictions such as “Yours Truly” or lack formal signature blocks. These letters were flagged by the script and hand-coded.

Congress (Breiger, 1974; Wasserman and Faust, 1994).<sup>13</sup> Ties in the network are undirected as it is unclear in many of the letters which member initiated the collaborative relationship. As members claim credit for the bills they coauthor regardless if they were the one who introduced it in the House this should not affect my measure of propensity for collaboration. Again, see figure 1 for an illustration of how members message their collaborations. Congressman Curbelo is not the lead sponsor of either of the bills he is promoting on Twitter, but a voter reading those tweets would not know that unless they looked up the legislation.

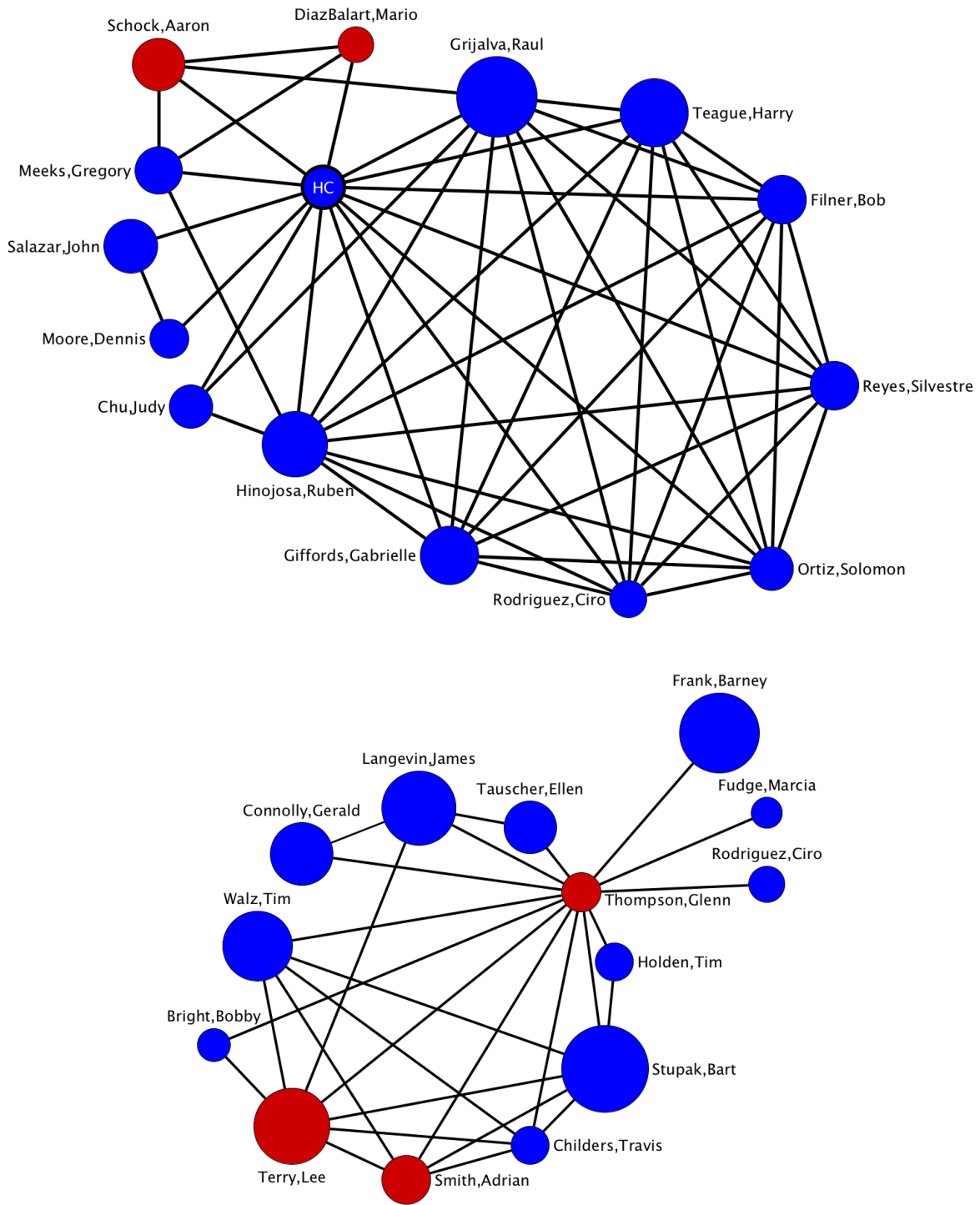
Figure 4 shows the ego networks for Congressman Henry Cuellar (D-TX) and Congressman Glenn Thompson (R-PA) in the 111th Congress to illustrate what the collaborative relationships for each member look like. The ego networks show all of the colleagues that each member collaborated with during that Congress with the nodes sized to represent the number of collaborations for each member in the larger network. Congressman Cuellar, denoted as “HC” in the first network, signed Dear Colleague letters with fourteen of his colleagues, only two of whom were Republicans. He represents a relatively safe district and was elected in 2008 with 69% of the vote and again in 2010 with 56% of the vote. Congressman Thompson is shown in the second graph as collaborating with thirteen of his colleagues in the 111th Congress, eleven of whom were Democrats. He was elected in 2008 with 57% of the vote and again in 2010 with 69% of the vote. Both members were close to the median number of total collaborations for the 111th Congress, which was sixteen. Regarding the partisanship of their ties, Congressman Cuellar was less bipartisan than the median Democrat who collaborated with seven Republicans, while Congressman Thompson was more bipartisan than the median Republican who collaborated with nine Democrats.

From the policy collaboration networks I create two measures of propensity for collaboration for each member in a given Congress. The first, *Total Collaboration* is the degree

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<sup>13</sup>In some instances members, particularly those who co-chair caucuses together or are the chair and ranking member of a committee or subcommittee, have multiple collaborations in a single Congress. This is something I intend to explore in future work examining the strength of ties in the policy collaboration network. However, first I must distinguish unique collaborations in the data from repeated messages on the same bill to properly weight the edges.

Figure 4: Ego Networks for Congressman Henry Cuellar (D-TX) and Congressman Glenn Thompson (R-PA) in the 111th Congress (2009-2010)





centrality score for each member in the network, which is simply a count of the other members that each member collaborates with (Freeman, 1979). So for Congressman Cuellar in the 111th Congress, his degree centrality, or *Total Collaboration* is 14, while Congressman Thompson's is 13. The expectation given by *H1* is that an increase in a member's electoral margin will be associated with a decrease in *Total Collaboration* as electorally secure members collaborate with fewer of their colleagues. The second collaboration measure is *Bipartisan Collaboration*, which is a count of the number of collaborations each member has with colleagues in the other party. For Congressman Cuellar in the 111th Congress, his *Bipartisan Collaboration* score is two, while Congressman Thompson's is 11. The expectation for this measure is that its effects will be conditioned on whether a member is electorally vulnerable or a member of the majority party, as discussed in further detail below. For both of these measures I use the count of total collaborations rather than a normalized or proportional measure because even a highly informed voter following a member on social media is likely to notice the number of times a member mentions their collaborations with colleagues rather than the proportion of all messages that feature collaboration.<sup>14</sup>

My expectation, based on the varying voter perceptions of compromise and bipartisanship depending on partisan strength and alignment, is that the electoral benefits of collaboration and bipartisanship will be concentrated among more vulnerable incumbents. To test hypotheses two and three, I first create a dichotomous measure of whether a member is *Vulnerable* based on their performance in the previous election. All members who were elected with less than 60% of the vote at  $t - 1$  are coded as one, while those who received 60% more of the vote in their previous election are coded as zero. I use 60% as the cut off rather than the more traditional 55% because my data cover a somewhat volatile period in congressional elections in which three of the four elections saw one party gain twenty or more seats in the House. Of the 31 Democratic members in the 111th Congress who were elected with between 55 and 59% of the vote in 2008, only fifteen of them were reelected in 2010. With

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<sup>14</sup>In a separate analysis I examine the relationship between bipartisanship and electoral margin using the percentage of a member's collaborations that are bipartisan and find no result.

the electoral vulnerability measure, I create two interaction terms: *Vulnerable\*Total*, which is the dichotomous vulnerability variable interacted with each member's *Total Collaboration*, and *Vulnerable\*Bipartisan*, which is *Vulnerable* interacted with *Bipartisan Collaboration* for each member.

The congressional elections literature also suggests that members of the majority party benefit from a strong party and therefore should be less inclined to collaborate with minority party members, instead collaborating more with members of their own party. If majority party members working with colleagues in the other party hurts majority party approval or improves minority party approval, we may see a negative electoral effect for bipartisanship conditional on whether a member is in the majority party. To test this hypothesis, I create an indicator variable, *Majority* which is one if a member is in the majority party in a given Congress and zero otherwise and interact it with *Bipartisan Collaboration* to create the interaction term *Majority\*Bipartisan*.

The dependent variables in the first two models testing the relationship between past electoral performance and propensity for collaboration are *Total Collaboration* and *Bipartisan Collaboration*. *Electoral Margin* is the dependent variable in the models testing hypotheses two through four. *Electoral Margin* is drawn from Federal Election Commission records and represents the percentage of the vote each member received in the election following a given Congress. So for the 111th Congress which ran from 2009-2010, the electoral margin recorded for each member is the percentage of the vote they received in 2010. Members who did not run for reelection or ran unopposed are excluded from the analysis.<sup>15</sup> As an independent variable in the first model, I use *Electoral Margin<sub>t-1</sub>*, or the percentage of the vote each member received in the election prior to a given Congress. Table 1 provides the summary statistics for the dependent and key independent variables for each of the four Congresses.

Because I am working with network data and my key independent variables all reflect the degree to which members of Congress work with their colleagues in various forms, I use

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<sup>15</sup>Members were defined as unopposed if they had no challenger from the other major party and any third party candidates in the race did not receive more than 2% of the vote.

Table 1: Summary Statistics for Dependent and Key Independent Variables

Congress	Variable	Min	Median	Mean	Max	N
108	Total Collaboration	0.00	18.00	21.64	97.00	439
	Bipartisan Collaboration	0.00	7.00	8.24	44.00	439
	Vulnerable	0.00	0.00	0.20	1.00	439
	Vulnerable*Total	0.00	0.00	3.39	61.00	439
	Vulnerable*Bipartisan	0.00	0.00	1.30	35.00	439
	Majority	0.00	1.00	0.53	1.00	439
	Majority*Bipartisan	0.00	0.00	4.12	44.00	439
	Electoral Margin	38.00	67.00	70.02	100.00	402
	Electoral Margin (t-1)	44.00	68.00	70.21	100.00	439
Congress	Variable	Min	Median	Mean	Max	N
109	Total Collaboration	0.00	22.00	26.14	97.00	438
	Bipartisan Collaboration	0.00	8.00	10.20	66.00	438
	Vulnerable	0.00	0.00	0.20	1.00	438
	Vulnerable*Total	0.00	0.00	4.30	97.00	438
	Vulnerable*Bipartisan	0.00	0.00	1.93	66.00	438
	Majority	0.00	1.00	0.54	1.00	438
	Majority*Bipartisan	0.00	0.00	5.10	66.00	438
	Electoral Margin	39.00	65.00	67.51	100.00	404
	Electoral Margin (t-1)	44.00	67.00	69.47	100.00	438
Congress	Variable	Min	Median	Mean	Max	N
110	Total Collaboration	0.00	18.00	21.52	93.00	447
	Bipartisan Collaboration	0.00	9.00	10.56	70.00	447
	Vulnerable	0.00	0.00	0.30	1.00	447
	Vulnerable*Total	0.00	0.00	5.48	93.00	447
	Vulnerable*Bipartisan	0.00	0.00	3.16	70.00	447
	Majority	0.00	1.00	0.54	1.00	447
	Majority*Bipartisan	0.00	1.00	5.28	35.00	447
	Electoral Margin	40.00	66.00	68.55	100.00	397
	Electoral Margin (t-1)	46.00	64.00	67.12	100.00	447
Congress	Variable	Min	Median	Mean	Max	N
111	Total Collaboration	0.00	16.00	20.28	90.00	443
	Bipartisan Collaboration	0.00	7.00	9.30	55.00	443
	Vulnerable	0.00	0.00	0.30	1.00	443
	Vulnerable*Total	0.00	0.00	4.52	66.00	443
	Vulnerable*Bipartisan	0.00	0.00	2.45	48.00	443
	Majority	0.00	1.00	0.59	1.00	443
	Majority*Bipartisan	0.00	2.00	4.65	31.00	443
	Electoral Margin	33.44	63.09	63.31	100.00	395
	Electoral Margin (t-1)	39.00	65.00	67.62	100.00	443

a temporal network autocorrelation model (TNAM) to account for the relational dynamics in each model. The TNAM provides a way around the assumption in standard regression models that the observations are independent from one another and allows me to account for the possibility that the electoral margin of member  $i$  at time  $t$  is influenced in some way by the electoral margin of member  $j$  at time  $t - 1$ . The model builds on the spatial autocorrelation model, which accounts for non-independence of observations at a single time point by incorporating a spatial weight matrix  $W$  multiplied by the dependent variable  $Y$  so it captures the outcome values of an observation's neighbors. In the network context, we use the adjacency matrix  $A$  as the spatial weight matrix (White, Burton and Dow, 1981). The adjacency matrix is the  $N \times N$  representation of the connections in each network. In the case of the policy collaboration network, each Congress is its own adjacency matrix in which a one indicates that two members signed a Dear Colleague letter together in that congress and zero indicates that they did not. The result is that  $AY$  reflects the sum of the electoral margins for all of member  $i$ 's collaborators.

$$Y = \alpha + \rho AY + X\beta + \epsilon$$

My interest is not limited to a single Congress and so I use the temporal network autocorrelation model developed by Leifeld, Cranmer and Desmarais (2014) and implemented in the `xergm` package. The TNAM is a flexible structure that can account for various network and temporal dependencies. In this case, I make use of two key features. First, the temporal component allows me to include all four Congresses in the model rather than estimating a separate spatial autocorrelation model for each one. Second, it allows for various operationalizations of the adjacency matrix. In the models testing hypotheses two through four, my expectation is that it is not the sum of the electoral margins for all of member  $i$ 's collaborators that will be correlated with their own performance, but rather the average electoral return of their collaborators. Therefore, I normalize the adjacency matrix by row

so that every outgoing tie for member  $i$  is weighted equally. The weight for the degree to which member  $i$  is influenced by member  $j$  is then:

$$w_{ij} = \frac{a_{ij}}{a_i}$$

in which  $w_{ij}$  represents the observation in the weight matrix corresponding to member  $j$ 's influence on member  $i$ . Using the adjacency matrix,  $a_{ij} = 1$  if member  $i$  and member  $j$  collaborate and  $a_i$  is the sum of the  $i$ th row of the adjacency matrix (Leenders, 2002). The resulting weight matrix  $W$  is multiplied by the outcome variable, in this case *Electoral Margin*, and  $WY$  then captures the average electoral margin for all of member  $i$ 's collaborators in the election, *Collaborator Margin*. I expect that members of Congress will collaborate with colleagues who see similar electoral returns. A homophily effect will be present as safe members will collaborate with other safe members, while vulnerable members will work with others whose seats are less secure.<sup>16</sup>

I also incorporate eight control variables that are commonly used in the congressional elections literature, following Canes-Wrone, Brady and Cogan (2002) and Carson et al. (2010). *Ideological Extremism* is calculated using each member's first-dimension DW-NOMINATE score provided by Poole and Rosenthal (2011). The extremity score tests whether members who are far from the ideological center of Congress are punished at the ballot box and is calculated by taking the absolute value of the difference between each member's DW-NOMINATE score and the chamber median for that Congress. I expect that there will be a negative relationship between ideological extremity and electoral margin, consistent with Canes-Wrone, Brady and Cogan (2002).<sup>17</sup> I also control for *District Partisanship* as the share of the two-party vote that the presidential candidate from a member's party received

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<sup>16</sup>The model does not distinguish between homophily and influence, however as I lack a theoretical explanation for why the electoral margin of member  $i$  would be influenced by the average electoral margin of her collaborators in the same election, I assume if an effect is present, it is the result of homophily.

<sup>17</sup>Carson et al. (2010) make a compelling case that this is not the result of ideologically extreme members being punished, but rather members who are seen as being too loyal to their party particularly as the parties move further apart in ideology. This may be the case, but teasing out the different effects of ideological extremity and party unity are beyond the scope of this study.

in the district in the most recent election. This is a commonly used measure of district preferences and I expect that members representing districts where the presidential candidate from their party performed well will see a corresponding increase in their own electoral returns (Jacobson, 2009).

*Spending Gap* is the difference between the campaign spending of the challenger and the incumbent as recorded by the Federal Elections Commission, calculated so that higher values of *Spending Gap* reflect races where the challenger matched or outspent the incumbent. This also serves as an indicator of the competitiveness of the race and I expect higher challenger spending relative to incumbent spending will be associated with a decrease in electoral margin. *Freshman* is incorporated as a dummy variable indicating whether a member is serving their first term in Congress with the expectation that first term members will have less of an incumbency advantage than more senior members (Canes-Wrone, Brady and Cogan, 2002).

I also include four controls that reflect the political conditions likely to affect a member's electoral performance following Carson et al. (2010). *In Party* is a dichotomous variable reflecting whether a member of Congress is in the same party as the President. *Midterm* is a categorical variable that captures whether the election following a given Congress is a midterm election, and if so, whether the member is in the president's party to account for the widely documented phenomenon that members of the president's party are more likely to perform poorly in midterm elections. This variable is coded as -1 for members of the president's party when the election following a given Congress is a midterm election, 1 for members of the out party in midterm election years, and 0 for presidential election years. *Presidential Approval* is measured using the national level responses to the Gallup poll question, "Do you approve or disapprove of the way [president] is handling his job as president?" taken from the most recent poll completed before the election. I subtract 50% from the approval rating and multiply it by -1 for members who are not in the president's party so that popular presidents benefit members of their party while unpopular presidents

help members of the other party. Finally, *Change in Personal Income* is the national level percent change in real personal income measured by the Bureau of Economic Analysis from the beginning of the election year to its end. Again, this is multiplied by -1 for members of Congress who are not in the president's party to account for the assumption that a growing economy will benefit in-party members, while a sluggish economy will benefit out-party members.

## Analysis

The results for the models testing the relationships between *Electoral Margin*<sub>*t*-1</sub> and *Total Collaboration* and *Bipartisan Collaboration* are provided in table 2.<sup>18</sup> As predicted in my first hypothesis, electorally secure members are less likely to engage in collaboration in general and bipartisan collaboration. A one percentage point increase in a member's vote share in the previous election is associated with a -0.036 decrease in the total number of collaborators a member has in the next Congress and a -0.086 decrease in the number of collaborators in the other party. This is particularly noteworthy as Straus (2012) finds that electorally secure members are more likely to send Dear Colleague letters, suggesting that when members who were elected with close margins do send Dear Colleagues, they are much more likely to be collaborative letters.

The remainder of the findings are largely as expected. Members of Congress who are further from the ideological median in a given Congress are less likely to collaborate with colleagues, as are first term members. As collaboration necessitates a certain amount of compromise as members work together to craft a bill or policy initiative, it is understandable that more ideologically extreme members are less likely to find collaborative partners, particularly collaborative partners in the other party. Members in their first term are not as established in Congress and have fewer personal connections in the chamber which may

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<sup>18</sup>A more complete analysis of the determinants of collaboration can be found in Craig (2016). This is intended merely as a test of the relationship between electoral performance and collaboration.

Table 2: Relationship Between Past Electoral Performance and Collaboration

	Total	Bipartisan
Electoral Margin <sub>t-1</sub>	-0.036*** (0.008)	-0.086*** (0.009)
Ideological Extremism	-1.971** (0.742)	-6.156*** (0.819)
Freshman	-1.178*** (0.336)	-2.796*** (0.374)
Majority	0.723 (0.491)	-3.368*** (0.543)
Midterm Election	0.194 (0.211)	-0.466* (0.234)
Collaborator Total	0.023*** (0.000)	
Collaborator Bipartisan		0.024*** (0.000)
Constant	6.704*** (0.769)	12.804*** (0.854)
AIC	10238.733	10589.909
BIC	10282.550	10633.726
Log Likelihood	-5111.367	-5286.955
Deviance	33675.391	41079.481
Num. obs.	1767	1767

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ 

make it difficult for them to find collaborative partners. Members of the majority party are less likely to collaborate with the other party than minority party members, but there is no apparent relationship between being a majority party member and total collaboration. This fits with the findings in Craig (2016) that there is little benefit to minority party members collaborating with each other. I include *Midterm Election* in this model to examine whether members of the president's party are more likely to collaborate when they are going into a midterm election and the results suggest they may, at least when it comes to bipartisan collaboration. Members of the president's party going into a midterm election have, on average 0.466 more bipartisan collaborations than all members going into a presidential election.<sup>19</sup>

<sup>19</sup>The remainder of the election-specific variables that are included in the next set of models are excluded in table 2 because while members of Congress know when they are going into a midterm election, they do not know what the president's approval rating or economic conditions will be going into the election so there



*Collaborator Total* and *Collaborator Bipartisan* represent the  $AY$  term in each model, in this case neither weighted nor lagged. The results show that both are positive and significant, suggesting a homophily effect: high collaborators work with other high collaborators.

Next, I look at the relationship between collaboration and vote share, conditioned on electoral vulnerability. Models 1 and 2 in table 3 show the results. From model 1 we see no apparent relationship between *Total Collaboration* and *Electoral Margin* for vulnerable members of Congress. Despite the findings in table 2 that members of Congress who were elected with a smaller percentage of the vote engage in more collaborative relationships, there is no evidence of a benefit to that collaboration when considered over all relationships. However, as model 2 shows, there is a distinct benefit to bipartisan collaboration for vulnerable members. As *Vulnerable* is a dichotomous variable, the interpretation of the interaction is relatively straightforward. For members who received less than 60% of the vote in the previous election, each additional bipartisan collaborator that they work with is associated with a 0.069 percentage point increase in their electoral margin in the subsequent election. The effect is small in magnitude when considered in terms of adding a single collaborative relationship, but consider the effect in terms of the difference between a member with a high number of bipartisan collaborations who has built a reputation among their constituents as someone who is willing to work across the aisle versus a member who works predominately within their own party. In the 111th Congress, vulnerable members collaborated with anywhere between zero and 48 members of the other party. A one standard deviation increase in the number of bipartisan collaborators a member works with is associated with a 0.57 percentage point increase in vote share. When dealing with members who may win reelection by margins of one percent or less, this is a significant benefit. The results of model 3 in table 3 show no evidence in support of my fourth hypothesis. An increase in the number of bipartisan collaborators a member works with has no effect for members of either party.

The model results also show evidence of a homophily effect as collaborating with other

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is no reason to expect those terms to influence collaboration. *District Partisanship* is excluded due to high collinearity with  $Electoral\ Margin_{t-1}$

Table 3: Relationship Between Collaboration and Electoral Performance

	Model 1	Model 2	Model 3
Total Collaboration	-0.023 (0.012)		
Bipartisan Collaboration		-0.044 (0.027)	-0.013 (0.034)
Vulnerable	-7.585*** (0.710)	-7.691*** (0.666)	
Vulnerable*Total	0.050 (0.027)		
Vulnerable*Bipartisan		0.113* (0.046)	
Majority			-4.144*** (1.135)
Majority*Bipartisan			0.018 (0.046)
Collaborator Margin	0.031* (0.015)	0.030* (0.015)	0.032* (0.016)
Ideological Extremism	-3.204* (1.476)	-3.531* (1.471)	-3.484* (1.560)
District Partisanship	0.557*** (0.021)	0.556*** (0.021)	0.640*** (0.021)
Spending Gap	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Freshman	-0.539 (0.601)	-0.362 (0.612)	-3.860*** (0.588)
In-Party	-5.110*** (1.155)	-5.098*** (1.153)	
Midterm Election	-4.333*** (0.539)	-4.506*** (0.530)	-3.216*** (0.593)
Presidential Approval	0.021 (0.031)	0.014 (0.031)	0.167*** (0.019)
$\Delta$ Personal Income	0.261 (0.136)	0.276* (0.135)	0.775*** (0.120)
Constant	36.904*** (1.592)	37.114*** (1.631)	29.729*** (1.619)
AIC	10067.105	10066.028	10240.202
BIC	10141.453	10140.376	10309.239
Log Likelihood	-5019.552	-5019.014	-5107.101
Deviance	71919.645	71867.905	80849.770
Num. obs.	1496	1496	1496

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

members who receive a higher percentage of the vote is associated with an increase in a member's electoral margin.<sup>20</sup> More important than the size of any homophily effect, this demonstrates the value in accounting for the non-independence of members in electoral models as the electoral margin for a member of Congress is clearly related to the average electoral margin of her collaborators. Most of the other model controls yield results as expected. *Ideological Extremism* has a strong negative effect on electoral margin, while *District Partisanship* has a clear positive effect. The stronger the district-level support is for the presidential candidate from the member's party in the most recent presidential election, the better off a member is in their reelection campaign, while members whose voting records place them far from the chamber median ideologically are penalized. Members of the president's party do poorly, particularly in midterm elections.<sup>21</sup>

There are a few surprising findings among the controls which warrant further study. First, *Spending Gap* has no apparent effect on electoral margin in any model where it typically has a negative effect. It is unclear if this is a peculiarity unique to the 2004-2010 congressional elections possibly due to the wave elections in 2006 and 2010 or the result of accounting for the interdependence of observations.<sup>22</sup> Models 1 and 2 also yield insignificant coefficients on *Freshman* and *Presidential Approval* and model 1 shows no effect for *Change in Personal Income*. This is somewhat surprising, as these are generally reliable predictors of electoral margin, however as they yield the expected results in model 3, I assume the null results are the byproduct of including the *Vulnerable* variable which includes the observations most likely to be impacted by their lack of incumbency advantage or the larger political and economic circumstances.

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<sup>20</sup>In an alternate specification, I use *Electoral Margin* at t-1 to test the possibility that collaborating with members who did well in the previous election has some benefit, however I found no support for that theory.

<sup>21</sup>It should be noted that the midterm election years represented in the data are 2006 and 2010, both of which resulted in the president's party losing control of the House.

<sup>22</sup>Excluding the collaboration measures does not alter this result. It may also be the result of measurement error, which is another reason further investigation is needed.

## Discussion and Conclusion

Bipartisanship is frequently seen as a normative good. Political dysfunction of all stripes including a gridlocked Congress is attributed to excessive partisanship by the public and in the media. And as Harbridge and Malhotra (2011) show, the public generally wants Congress as an institution to be bipartisan. However, recent scholarship has increasingly suggested that voters favor partisanship in their representation and compromise of any sort is viewed as losing (Harbridge and Malhotra, 2011; Harbridge, Malhotra and Harrison, 2014). One might infer from recent scholarship that reelection minded members of Congress would be best served by becoming partisan bomb-throwers with little interest in compromise or collaboration. However, as I demonstrate here, the world may not be quite so bleak.

By providing the first measure of substantive collaboration among members of Congress, I demonstrate that there is value in collaboration as a form of symbolic representation. When presented with specific issues, voters may prefer their position over any sort of compromise but they still reward members who engage in more bipartisan collaboration and are able to build a history of being someone willing to work across the aisle. The results presented here show that electorally safe members engage in less collaboration, which is a rational decision on their part as they receive no apparent benefit for collaboration with members of either party. However, for electorally vulnerable members, collaborating with members from the other party and creating a reputation for bipartisanship can have significant electoral returns. Voters in marginal districts reward their representatives for distinguishing themselves from their more partisan colleagues through the symbolic act of cross-partisan collaboration.

If there is a normative good to bipartisanship, it is all the more reason for concern regarding the increasing efforts to create electorally safe congressional districts. Although there is evidence that the incumbency advantage may be on the decline (Jacobson, 2015), members representing districts crafted to ensure representation by a particular party are more likely to win by significant margins and therefore have no electoral incentive to work with members in the other party, which is detrimental to Congress as an institution. As described

by one congressional staff member, “The benefit of continuing to work with members on different issues is you just build a better relationship with those people. I have a better relationship with the staff on [the member’s committee] and the [member’s state] delegation and they’ll think of [the member] when they’re introducing a bill that they’re trying to get support for” (Interviews, 2016). A Congress where fewer members collaborate with each other or only collaborate within their own party is one where there are fewer relationships between members and greater discord.

This paper represents a first attempt at examining the relationship between collaboration and electoral returns, accounting for the symbolic representation and position taking that members engage in in addition to their voting behavior. Uncovering the relationship between bipartisanship and electoral performance provides important insights for our understanding of symbolic representation and congressional elections, but there is still more work to be done. Future work will examine the impact of collaboration across different types of policy efforts to determine whether members are benefitting from collaboration on substantive policy issues or merely symbolic initiatives. One of the key assumptions made in this paper is that members of Congress explicitly promote their collaborative relationships to their constituencies in the district and thereby develop a reputation for bipartisanship. While that assumption is strongly supported by anecdotal evidence in the form of op-eds, social media postings, and press releases issued by members, work to more explicitly connect collaboration to these communications should also be explored now that this study has shown it to be a fruitful area of research. The result will be a greater understanding of how members of Congress use their activities in Washington to promote their desired image of themselves at home.

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