Working Both Sides of the Aisle?  
Senate Delegations and the Distribution of Federal Funds*

James M. Curry  
Department of Political Science  
University of Utah  
james.curry@utah.edu

Christopher P. Donnelly  
Department of Government & Politics  
University of Maryland  
cpd@umd.edu

August 23, 2017

While most research on the U.S. Senate’s dual representational design (that there are two senators for each state) focuses on how same-state senators work to differentiate themselves, one area in which senate delegations have incentives to work collaboratively is to direct federal dollars to their states. We ask: Does the partisan composition of U.S. Senate delegations affect the amount of federal aid states receive? Drawing on Federal Assistance Award Data System (FAADS) data from fiscal years 1984-2010, we find that state delegations with two senators in the president’s party perform best at securing federal funds, but that split party delegations—with one senator from each party—are becoming more influential over time. We also uncover some evidence about the means of senate delegation influence. Specifically, that a state’s senators primarily influence the distribution of federal funds through the legislative process, rather than by affecting the decisions of the executive branch.

Prepared for presentation at the 2017 APSA Annual Meeting, San Francisco, CA, August 30 – September 3, 2017

*We thank Adam Dynes and Gregory Huber for sharing their Federal Assistance Award Data System (FAADS) data.
“He [Reid] works his side of the aisle and I work mine. Because of that working relationship and trust, we are able to get things done that frankly, members of the same party in some states can’t get done.”
-- Sen. John Ensign (R-NV) discussing his relationship with Sen. Harry Reid (D-NV)

“If Sen. Casey and I can agree on policy, and it’s good for Pennsylvania, he can work that issue on his side in a way that I can’t, and I can work it on my side in a way he can’t.”
-- Sen. Pat Toomey (R-PA) discussing his relationship with Sen. Bob Casey (D-PA)

Within American government the U.S. Senate’s dual-representational design—with each state represented by two senators—is a relatively unique institutional feature. Scholars have found important consequences of this design feature for Senate politics and the relationships among senators. Despite representing the same constituents, same-state senators often work to differentiate themselves, frequently emphasizing different issues and developing different reputations (Schiller 2000), voting differently from one another (Jenkins and Gailmard 2009; Poole and Rosenthal 1984), and adopting different home styles (Parker and Goodman 2013). However, one area in which all same-state senators have incentives to work in tandem is to influence the flow of federal dollars to their states, and previous research finds that senate delegations typically vote in lock step on distributive legislation (see, Lee 2000).

Nonetheless, scholars have not closely investigated differences among senate delegation types and their abilities to bring home federal dollars. As the epigraphs suggest, the prevailing wisdom in Washington is that split delegations—states represented by one Democrat and one Republican—may have a leg up in advocating for their state, as each senator can work each side

1 Quoted in Barone and Cohen (2007).
2 Quoted in Zito (2015).
3 While a great deal of scholarship has sought to understand the determinants of federal funds received by legislative constituencies (e.g, Atlas et. al. 1995; Hoover and Pecorino 2005; Lazarus 2009a, 2009b; Levitt and Snyder 1995), most studies overlook the role of the Senate’s unique dual-representational design. Those that have considered the Senate have primarily analyzed earmarks (e.g., Crespin and Finocchiaro 2009; Lazarus and Steigerwalt 2009).
of the aisle in ways two majority or minority party senators cannot. However, there are also reasons to suspect having two senators in the majority party might benefit a state the most (e.g., Balla et al 2002; Carsey and Rundquist 1999; Engstrom and Vanberg 2010; Lazarus and Steigerwalt 2009; Levitt and Snyder 1995), or that having two senators in the president’s party may provide a state’s senate delegation with the most influence (Berry, Burden, and Howell 2010; Dynes and Huber 2015; Kriner and Reeves 2012). In this paper, we ask: How does the partisan composition of U.S. Senate delegations affect the amount of federal aid states receive?

We seek to answer this question in two steps. First, we seek to understand which types of senate delegations are more and less effective at securing federal aid dollars for their states. Second, we seek to understand how and why certain types of delegations are more effective. Specifically, we seek to uncover whether delegations exercise more political influence over the distribution of federal dollars through internal legislative processes or by influencing spending decisions made in the executive branch.

Drawing on Federal Assistance Award Data System (FAADS) data, which catalogs federal aid to recipients in each state from fiscal year 1984-2010, we uncover intriguing results. Over the full period studied, our analyses suggest delegations with two senators in the president’s party are typically best able to secure federal aid dollars for their states, reflecting recent findings by others about the importance of the president to the distribution of federal funds (Berry, Burden, and Howell 2010; Dynes and Huber 2015; Kriner and Reeves 2012). However, we also find that split party delegations are becoming more valuable over time. Increasingly rare split party delegations may be more valuable than ever before due to their abilities work both parties in a contemporary political environment of strong partisanship and party power. Finally, our analyses uncover preliminary evidence that senate delegations
primarily exercise influence over the distribution of federal dollars through legislative processes, rather than influencing the decisions of executive branch officials. These findings have implications for how scholars think about senate representation, bipartisanship, and majority party power in contemporary national politics.

**Senate Delegations and Distributive Politics**

States can be represented in the U.S. Senate by one of three types of delegations: (1) *Split delegations*, with one senator from each party; (2) *Majority-only delegations*, with two senators in the Senate’s majority party; and (3) *Minority-only delegations*, with two senators in the Senate’s minority party. Additionally, delegations can be characterized by their relationship to the president. Majority- or minority-only delegations can have two senators sharing their party affiliation with the president, depending on whether there is unified or divided control of government. Split delegations always have one senator in the president’s party and one out.

Existing scholarship provides competing expectations about which types of delegations may be most effective at securing federal dollars for their states. Specifically, scholars and observers have suggested reasons split delegations, majority-only delegations, and president’s party delegations may fare better than other delegation types.

**Split Party Delegations**

The most common explanation for why split party delegations may be particularly effective in Washington is that they allow a state’s pair of senators to bring members of both parties together to support funding for the state. This is an oft-repeated reasoning among those in Washington. The epigraphs at the start of this paper reflect this line of thinking, but senators Ensign and Toomey are far from the only politicians or political observers to suggest such an
advantage. Bipartisan senatorial pairs like Tom Harkin (D-IA) and Chuck Grassley (R-IA), Pete Domenici (R-NM) and Jeff Bingaman (D-NM), and Joe Biden (D-DE) and William Roth (R-DE), and Strom Thurmond (R-SC) and Ernest Hollings (D-SC) have been often viewed as exemplars of the abilities of split delegation to work across the aisle.

The separation of powers and bicameral features of the constitutional lawmaking process lend credence to these expectations about bipartisanship and split party delegations, as well. The various veto points in the legislative process ensure that most successful lawmaking actions require bipartisan compromise (Curry and Lee 2016, 2017; Krehbiel 1998; Mayhew 2005). This may be especially true in the Senate. While the House majority has substantial procedural and agenda-setting powers at its disposal, allowing it to bring partisan legislation to the floor as it wishes (see, Cox and McCubbins 2005; Aldrich and Rohde 2000; Monroe and Robinson 2008; Young and Wilkins 2007), the contemporary Senate frequently only advances legislation via super-majoritarian and bipartisan consent (see, Sinclair 2017; Smith 2014). Further, the various filibuster points in the Senate’s legislative process ensure that nearly all legislation passing the Senate will have at least some bipartisan support.

States represented by split-party delegations have senators who can lobby party leaders and committee leaders on their respective sides of the aisle. Moreover, when a state is represented by one Democrat and one Republican, leaders in both parties have a stake in seeing to it that the state receives federal funds for their senator to claim credit. After all, scholarship finds a link between federal funds, the credit claiming actions of lawmakers, and reelection advantages (Bickers and Stein 1996; Grimmer, Westwood, and Messing 2015; Lazarus 2009b; Levitt and Snyder 1997; Stein and Bickers 1994). Split-party senate delegations might be especially effective when the Senate and the White House are controlled by different parties—a
common feature of contemporary U.S. politics. In such instances, states enjoy one senator in the majority party and another senator in the president’s party, allowing the state’s delegation to work powerful leaders on both sides of the aisle.

**Majority-Only Delegations**

There are different reasons to suspect majority-only senate delegations are better situated to drive federal funds to their states than split party delegations. After all, there is no shortage of scholarship identifying the advantages of majority party status in the House and Senate (e.g., Aldrich and Rohde 2000; Cox and Magar 1999; Cox and McCubbins 2005), including over the distribution of federal funds (e.g., Balla et al 2002; Carsey and Rundquist 1999; Engstrom and Vanberg 2010; Lazarus 2009a; Levitt and Snyder 1995).

In a contemporary Senate driven by partisanship and party conflict, majority-only delegations may be especially advantaged. Indeed, Senate majority party power has increased substantially in recent years. Today, the majority has impressive abilities to set the agenda and move legislation (see, Den Hartog and Monroe 2011; Hanson 2014; Wallner 2013). Efforts to advance party goals via party power may advantage majority-only delegations over split-party and minority-only delegations. Further, similar to House majorities, Senate majorities may see the distribution of federal funds as a way to provide their senators with ways to credit claim and bolster their reelection hopes (see, Grimmer 2013; Grimmer, Westwood, and Messing 2015).

Further, there are strong incentives for senate parties to disagree rather than work together. As Lee (2009) argues, senators have collective electoral and power incentives to act as partisan teams to bolster their party’s image and denigrate the reputation of the other side. Doing so helps the party’s standing for the next election and can help it obtain or keep majority party status (see, also, Cox and McCubbins 2005). Working across the aisle makes it more difficult for
parties to differentiate themselves, as cooperation takes an issue off the table for the next election (Gilmour 1995).

**Presidential Party Delegations**

Just as there are reasons to suspect split or majority-only delegations to be best able to secure federal aid for their states, there are reasons to suspect affiliation with the president’s party is key. Recent scholarship has emphasized the role the president plays in the distribution of federal dollars. Berry, Burden and Howell (2010) find that the president is able to employ ex-post and ex-ante influence over federal spending decisions to direct spending to areas represented by lawmakers in the president’s party. Kriner and Reeves (2012) and Dynes and Huber (2015) find that presidents direct dollars to politically important and like-minded constituents. Bertelli and Grose (2009) find that executive branch agencies direct money towards states represented by ideologically aligned senators.

None of these studies focuses on the decision making of senators, or the efforts of senators to influence executive branch decisions, but the lessons may apply. Senate delegations with two senators in the president’s party may be best able to actively secure more federal funds for a number of reasons. These include stronger personal relationships with the president,\(^\text{4}\) an improved ability to lobby officials in the executive branch and the president’s cabinet,\(^\text{5}\) or the ability of the president’s party in the Senate to leverage the president’s veto during the legislative process.

---

\(^\text{4}\) Indeed Caro (1990) notes that Lyndon Johnson was able to secure considerable amounts of federal funds for his central Texas congressional district in the 1930s and 1940s due in part to his strong relationship with President Roosevelt.

\(^\text{5}\) See, Ritchie (forthcoming) for an overview of how members of Congress work to influence executive branch decisions through back channels.
Change Over Time

Not only are there competing expectations about which types of senate delegations fare better at securing federal dollars, there are reasons to suspect that the most influential delegation types have changed over time. However, there are again competing consideration about how political change in Washington may affect the relative value of different delegation types.

On one hand, majority party power in Congress has grown considerably in recent decades. Aldrich and Rohde (2000, 33), for instance, find that increased party polarization in Congress has led congressional majority parties to provide their “legislative party institutions and party leadership stronger powers and greater resources” and to “use those powers and resources more often” to influence the legislative process. Den Hartog and Monroe (2011, 82) find that today’s more cohesive legislative parties have made it easier for Senate majority party leaders to set the agenda and advance legislation, as well. Other scholars likewise find that Senate majority party leaders have been able to exercise more procedural power in recent years. For instance, Hanson (2014) finds that Senate majorities can now manipulate the appropriations process to better advance their party’s goals, and Wallner (2013) highlights how Senate majorities make use of flexible procedures to advance legislation.

Additionally, Lee (2016) finds that Senate party conflict has increased as partisan control over majority status has become increasingly competitive since the 1980s. With more incentives to benefit their own partisans, and fewer incentives to help anyone on the other side win reelection, Senate majority party leaders may be increasingly reluctant to help minority party senators secure federal funds. Under these partisan conditions, majority-only delegations may be better able than ever before in accruing federal dollars for their states.
On the other hand, other types of delegations may have seen their influence increase. Presidential power has grown considerably over the past several decades (Rudalevige 2005), and arguably so has bureaucratic power (Dodd and Schott 1979, Eskridge and Ferejohn 1992; Fox and Jordan 2011). Increased power in the executive branch, coupled with rising congressional stalemate (Binder 2003; 2011) may be giving the executive branch more discretion over the spending of federal dollars (e.g., Balla 1998). Consequently, we may find that president’s party delegations have seen their influence over federal expenditures increase over time.

Of course, there is a case to be made that split delegations may have become more influential, as well. As noted above, most successful legislative action requires the cultivation of bipartisanship in Congress, and this remains true even as party conflict and party power have increased (Curry and Lee 2016, 2017). And as party conflict has increased, split-party delegations have become less common in the Senate. As shown in Figure 1, in the 1980s split delegations were by far the most common type but by the early 2000s most delegations consisted of two senators from the same party. With fewer bipartisan delegations, and with rampant partisanship in the halls of Congress, the scarce resource of split bipartisan delegations may actually be more valuable than ever before.

Means of Delegation Influence

Clearly, there are competing expectations in the scholarly literature about which types of delegations are better able to secure federal dollars to their states. There are also competing expectations about the means by which senate delegations exercise influence.

Senators can influence federal aid distributions in two ways. One is through the legislative process. Through the budget and appropriations process senators can influence how
much money is appropriated for discretionary spending programs. Additionally, senators can influence mandatory spending across states through authorizing legislation that sets congressionally-mandated formulas for the distribution of these dollars. Scholars and observers suggest majority-only and split delegations have heightened influence over the distribution of federal dollars generally focus on legislators’ influence over these internal processes (Balla et al 2002; Carsey and Rundquist 1999; Engstrom and Vanberg 2010; Lazarus 2009a; Lazarus and Steigerwalt 2009; Lee 2000; Levitt and Snyder 1995). With majority-only delegations, the emphasis is typically on the majority party’s power within the legislature. With split delegations,

---

6 Discretionary spending is federal spending that needs to be re-appropriated every year through annual appropriations bills. Non-discretionary spending, or mandatory spending, includes entitlement programs and other forms of spending in which individuals receive federal money based on eligibility requirements.
the emphasis is on the ability of senators to “work” or persuade their colleagues on each side of the partisan aisle.

However, senators can also affect the distribution of federal dollars by influencing the decisions of the executive branch. Recent scholarship emphasizes the power of the president and the executive branch over federal spending decisions (e.g., Berry, Burden, and Howell 2010; Dynes and Huber 2015; Kriner and Reeves 2012), suggesting that senatorial influence over at least some federal spending might have to occur through back-channel influence. As Ritchie (forthcoming) shows, members of Congress frequently work to affect policy change by influencing the decisions of bureaucrats. Indeed, some federal spending decisions—like merit-based grant program awards—are insulated from direct and formal legislative influence (see, Grimmer, Westwood and Messing 2015, 121-47), and only through lobbying and persuasion can senators affect those decisions.

Ultimately, how senators and senate delegations influence federal spending decisions has not received close empirical scrutiny. In our analyses below, we seek to assess not only which delegation types perform better, but the means by which that influence occurs.

Assessing the Effectiveness of Senate Delegations

To assess these varying expectations about U.S. senate delegations and their effectiveness at securing federal dollars, we look at federal aid going to each state from fiscal years (FY) 1984-2010. As with prior research, we rely the FAADS data as originally collected by Bickers and Stein (1991). These data report nearly all federal transfers to domestic recipients, with the exception of some defense and federal procurement expenditures, and tax expenditures. For our analyses, we also exclude loans and insurance expenditures (following Dynes and Huber 2015).
Recorded by expenditure, we collapse these data to reflect total federal aid to each state during each FY 1984-2010. We convert these totals into 2010 constant dollars, and then convert them again into per capita constant dollars.

The FAADS data allow us to test in several ways the competing expectations identified above about the influence of different U.S. Senate delegation types:

First, they allow us to assess which types of senate delegations have performed better and worse at accruing federal aid to their states over the entire period, FY 1984-2010. In our tests, we distinguish between Split delegations, Majority-only delegations, and Minority-only delegations in each year. Our analyses also separate the data into years of unified and divided government, measured as whether or not the Senate majority party was the same party as the president. These distinctions allow us to assess the influence of president’s party delegations as well.

Second, these data allow us to assess whether the relative influence of different delegation types has changed over time. With 26 years of federal aid data, we conduct analyses with interaction terms between each delegation type variable and a continuous measure Year. These analyses assess expectations about how political change in Washington since the early 1980s may have affected the relative influence of different delegation types.

Third, these data also allow to us to gather preliminary evidence regarding why and how some delegation types outperform others—their means of influence. Within each set of analyses we distinguish between two subsets of federal aid expenditures—formula grants and project grants. These two forms of federal aid, allocated by different processes, allow us to assess if delegation influence the distribution of federal aid dollars more through internal legislative processes or through influencing the decisions of the executive branch.
Formula grants, which are also sometimes referred to as non-discretionary funds (see, Stein and Bickers 1995, 22-23; Lee and Oppenheimer 1999, 166-67), are grant expenditures set by congressionally-mandated formulas that “define the areas eligible to receive benefits and to establish the criteria that determine the level of benefits for each eligible area” (Lee and Oppenheimer 1999, 166). Senators work hard to influence legislation setting the formulas for these grants in ways that will benefit their states (see, Lee 2000). As such, the distribution of formula grant dollars primarily reflects the influence of different delegations within internal legislative processes. Formula grants include many well-known federal programs, including the Community Development Block Grant, the State Children’s Insurance Program (SCHIP), Trade Adjustment Assistance (TAA), and Temporary Assistance to Needy Families (TANF), among others.

Project grants, which can be understood as discretionary funds, are primarily competitive, merit-based grants that citizens, groups, and state and local governmental entities can apply for and receive from the federal government. Project grant award decisions are made by bureaucrats via bureaucratic processes, and do not reflect internal legislative processes and senate coalition building as much as formula grant determinations (see, Lee and Oppenheimer 1999, 166-67; Grimmer, Westwood, and Messing 2015, 121-47). Nonetheless, members of Congress devote time and energy towards influencing bureaucrats on these awards and other bureaucratic decisions through backchannel lobbying, and bureaucrats are responsive to such congressional pressure (see, Arnold 1979; Stein and Bickers 1995; Ritchie forthcoming). As such, the distribution of project grant dollars primarily reflects senators’ abilities to influence executive

---

7 To be sure, bureaucrats play some role in the distribution of formula grant dollars, but their role is less influential than it is with project grants.
branch decisions. Project grants include various merit-based and competitive grant programs including National Institutes of Health (NIH) and National Science Foundation (NSF) grants, Pell grants, Fire Administration grants, and Department of Education grants for schools and school districts, among others.

Assessing the influence of delegation types separately for formula and project grants allows us to gather initial evidence regarding the means of delegation influence. If differences are driven primarily by the abilities of different delegation types to influence decision-making during the legislative process, we will observe stronger findings for formula grants. However, if differences are driven primarily by the abilities of different delegation types to influence executive branch decisions, we will observe stronger findings for project grants.\(^8\)

Finally, we collected various data on senators, senate delegations, and each state during each year to include in our analyses. Because federal spending during a fiscal year is determined by political action in the prior year, we collect data on senators and senate delegations for the year preceding each fiscal year (for instance, for FY 1984 spending, we collect data on senate delegations in 1983). Some previous research indicates senators’ institutional positions can affect their influence over federal spending decisions, including holding leadership posts or sitting on relevant committees (e.g., Alvarez and Saving 1997; Evans 2004), though the record is mixed (e.g., Lee 2000). In each analysis, we include Party leader, which indicates if a state’s delegation included a senator serving as his or her party’s leader or chief whip during each year. We also recorded senators’ memberships on the three Senate committees with the most influence over federal spending decisions: the Appropriations Committee, Budget Committee, and Finance Committee.

---

\(^8\) This is an admittedly rough way to distinguish between influence exercised during the legislative process and influence over executive branch decisions. For the moment, we consider these analyses and their findings preliminary and in need of deeper scrutiny.
Committee. In each analysis, these measures are indicators for whether at least one senator within a state’s delegation served on that committee during each year.

A senator’s seniority also affects their influence, and senators with greater years of service may be able to secure more federal dollars compared to senators elected more recently (Roberts 1990). We measure each state delegation’s Total seniority, recording the sum of chamber seniority (in years) of each state’s two senators during each year. Gender plays a role in Senate influence, as well, with previous work indicating that female senators work more effectively and collaboratively (Barnes 2016; Swers 2013). As such, we measure Female senator as a dichotomous indicator of whether or not each state delegation included at least one female senator.

Finally, we collected data assessing each state’s general need for federal aid. Specifically, we measured each state’s median income (in 2015 constant dollars) and unemployment rate in each year. Additionally, we calculated a State representation index for each state. This index measures how over- or under-represented states are in the equal representation Senate, measured as the ratio of a state’s population in a given year to one-fiftieth of the U.S. population in that year. States that are over-represented have smaller values, and states that are under-represented have larger values in this index. As Lee and Oppenheimer (1999) show, over-represented states generally accrue more federal funds than under-represented states.

**Results**

We split the presentation of our results into two sections. First, we assess the influence of the different delegation types over the entire period in the data (FY 1984-2010). Second, we assess change over time in the relative influence of different delegation types. In each section, we
compare the results for formula and project grants to gather some initial evidence about the means of delegation influence.

**Overall influence of delegation types**

Table 1 presents linear regression results predicting per capita federal aid to each state in each year. For each analysis, we calculated the natural log of the dependent variable, as these measures are strongly right-skewed. For each dependent variable (all aid, just formula grant aid, and just project grant aid), we also split the analyses between years of unified and divided government. Doing so allows us to easily identify which delegation types—including those affiliated and not-affiliated with the president—accrue more or less federal dollars per capita. Each analysis includes dummies for *Majority-only delegations* and *Minority-only delegations*, with *Split delegation* as the excluded category. If majority party status drives delegation success, we will find the *Majority-only* coefficients to be positive and significant in each analysis. If affiliation with the president’s party drives delegation success, we will find *Majority-only* coefficients to be positive and significant during years of unified government, and *Minority-only* coefficients to be positive and significant during years of divided government. If *Split delegations* are the strongest performers, we will find the coefficients for both *Majority-only* and *Minority-only* delegations to be negative and significant across the analyses. Each analysis includes fixed effects for each state and each year.⁹

The analyses find that under both unified and divided government, *president’s party delegations* perform better overall than other delegation types. Looking first at the analyses for

---

⁹ We also conducted analyses that combined years of unified and divided government and included interaction terms. The results are the same as those shown here. We also ran analyses excluding delegations with senators who retired or died mid-year or changed parties. The results were the same.
TABLE 1
Predicting Per Capita Federal Aid to States, FY 1984-2010

<table>
<thead>
<tr>
<th>(1) All federal aid per capita (log)</th>
<th>(2) Formula grant aid per capita (log)</th>
<th>(3) Project grant aid per capita (log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority-only delegations</td>
<td>0.011</td>
<td>0.088**</td>
</tr>
<tr>
<td>Minority-only delegations</td>
<td>0.030*</td>
<td>0.019</td>
</tr>
<tr>
<td>State representation index</td>
<td>-0.254**</td>
<td>-0.203**</td>
</tr>
<tr>
<td>State median income (in thousands)</td>
<td>-0.007**</td>
<td>-0.002</td>
</tr>
<tr>
<td>State unemployment rate</td>
<td>0.032**</td>
<td>0.040**</td>
</tr>
<tr>
<td>Party leader</td>
<td>-0.065*</td>
<td>0.035</td>
</tr>
<tr>
<td>Female senator</td>
<td>0.031</td>
<td>0.127**</td>
</tr>
<tr>
<td>Total seniority</td>
<td>0.001*</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Appropriations Committee</td>
<td>-0.028</td>
<td>-0.031</td>
</tr>
<tr>
<td>Finance Committee</td>
<td>-0.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Budget Committee</td>
<td>0.002</td>
<td>0.011</td>
</tr>
<tr>
<td>State fixed effects</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Year fixed effects</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Constant</td>
<td>7.246**</td>
<td>6.708**</td>
</tr>
<tr>
<td>(Adj. $R^2$ for (3))</td>
<td>0.967</td>
<td>0.977</td>
</tr>
</tbody>
</table>

*p<.05; **p<.01

Notes: Each dependent variable is the natural log of the measure. Robust standard errors calculated for regressions in columns (1) and (2) due to the presence of heteroskedasticity.

all federal aid per capita, the results show that for periods of unified government Majority-only delegations has a positive and significant effect, but Minority-only delegations does not.

However, for periods of divided government, the effects are reversed: Minority-only delegations has a positive and significant effect, while the effect for Majority-only delegations is
insignificant. Figure 2 shows the predicted effects from these models. As shown, the effect is larger for majority-only delegations during periods of unified government than it is for minority-only delegations during periods of divided government. During unified government, majority-only delegations, benefitting from both majority party status and affiliation with the president, accrue significantly more aid for their states compared to both minority-only and split delegations. Specifically, during unified government, president’s party delegations (majority-only delegations) are predicted to secure roughly 1% more in the logged all federal aid per capita measure than split delegations and 0.8% more than minority-only delegations. This may sound like a small change, but a 1% increase in a non-logged version of our dependent variable translates into an additional $108 per capita, or more than half a billion dollars in additional federal funds going to a state. The positive and significant effect for president’s party delegations is much smaller during divided government. While these minority-only delegations are predicted to secure 0.4% more in logged per capita federal aid than split delegations (p=.046), the difference between minority- and majority-only delegations is not statistically significant at a conventionally-accepted level (p=.12).

These findings reinforce those of other recent studies about the importance of the president to the distribution of federal dollars (Berry, Burden, and Howell 2010; Dynes and Huber 2015; Kriner and Reeves 2015). To some degree, they also reinforce findings about the value of majority party status (e.g., Balla et al 2002; Engstrom and Vanberg 2010; Lazarus 2009a) as presidentially affiliated senators do even better during years of unified government compared to years of divided government. However, expectations about split-party senate delegations are not borne out, as these delegations do not appear able to translate their bipartisan
FIGURE 2
Predicted Federal Aid to States by Delegation Type

ALL PER CAPITA AID

<table>
<thead>
<tr>
<th></th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Divided government</td>
<td></td>
<td>Unified government</td>
</tr>
</tbody>
</table>

FORMULA GRANT PER CAPITA AID

<table>
<thead>
<tr>
<th></th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Divided government</td>
<td></td>
<td>Unified government</td>
</tr>
</tbody>
</table>

PROJECT GRANT PER CAPITA AID

<table>
<thead>
<tr>
<th></th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
<th>Split Majority-</th>
<th>Minority-delegation only</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Divided government</td>
<td></td>
<td>Unified government</td>
</tr>
</tbody>
</table>
reach into more aid for their states. In fact, the analyses for all federal aid indicate split delegations typically perform the worst at securing federal dollars.

The next two columns of results replicate the same tests separately for formula grant and project grant aid to each state. As noted above, these analyses allow us to gather preliminary evidence about why and how some delegation types secure more federal funds than others. The results indicate that delegation types only have significant effects on the distribution of formula grant dollars, with the same patterns found above for all aid per capita: Majority-only delegations has a positive and significant effect on formula grant aid to states during unified government, and Minority-only delegations has a positive and significant effect on formula grant aid to states during divided government. In contrast, the coefficients for the delegation type indicators are all insignificant for the analyses of project grant aid.

The predictions shown in Figure 2 reinforce these findings. With formula grants, majority-only delegations are predicted to secure 1% more in logged per capita federal aid dollars than minority-only delegations and 1.1% more than split delegations during years of unified government. Again, these small percentage increases translate into substantial dollar increases for a state—$47 per capita and $52 per capita, respectively, or hundreds of millions of formula grant dollars. During years of divided government, minority-only delegations perform best, though the effects are again less dramatic—0.2% more than majority-only delegations and 0.4% more than split delegations. With project grants, differences exist among the different delegation types during both unified and divided government, but the effects generally are not statistically significant. The only significant difference exists between majority- and minority-only delegations during unified government (p<0.01), though neither secure significantly more or less than split delegations.
That stronger results are found with formula grant aid suggests that president’s party delegations exercise their influence over the distribution of federal funds primarily through the legislative process, rather than through influencing executive branch decision-making. As noted above, formula grant distributions are primarily set via congressionally-mandated formulas, while project grants are primarily distributed via bureaucratic discretion. This suggests that delegations affiliated with the president do not secure more funds because of their same-party relationships with executive branch officials or the president, but instead because they can leverage their relationship with the president—and the president’s veto—during legislative negotiations. With presidential backing, minority party senate delegations have an advantage during periods of divided government, and majority party delegations are further advantaged during unified government. The evidence on this point is preliminary and suggestive. However, it hints at the notion that the importance of lawmaker’s relationships to the president is less about the strategic electoral incentives facing presidents, and more about the president’s veto and the president’s party in Congress.

Across the analyses in Table 1, a handful of control variable have consistent effects. The State representation index confirms the findings of Lee and Oppenheimer (1999) that over-represented states secure more federal funds per capita than over-represented states. For all aid and formula grant aid, but not for project grant aid, states with higher unemployment rates receive more federal funds as well. Across all models, delegations with female senators are proven better adept at getting money for their states, providing further evidence that female senators are harder working and more effective in office. Notably, the institutional positions held by a delegation’s senators appears to matter little. In most tests, committee assignments, leadership posts, and seniority do not significantly affect the distribution of federal aid dollars.
**Delegation influence over Time**

Table 2 presents analyses assessing the relative influence of different delegation types over time. The analyses are similar to those in Table 1, except the fixed effects for each year are replaced by a continuous measure *Year*, and that measure is interacted with *Majority-only* and *Minority-only* delegations. The results of model 1, for all aid per capita, indicate that over time the relative influence of *Majority-only* and *Minority-only* delegations has been shrinking. While the coefficients for *Year* and the delegation-type dummies are positive in each test, the coefficients on the interaction terms are all negative. This indicates that relative to split delegations, majority-only and minority-only delegations are securing less federal aid later in our time series compared to earlier in our time series, providing evidence in favor of the idea that split delegations are becoming more valuable for states over time.

Because significance tests are difficult to interpret with interaction terms (Brambor, Clark, and Golder 2006), the predicted effects of these analyses are shown in Figure 3. Specifically, Figure 3 shows the linear prediction of the logged per capita federal aid to states represented by each delegation type over time. For both unified and divided government, the pattern is similar—while split delegation states are predicted to receive the fewest federal dollars early in the time series, by the end of the time series (in the late 2000s), split delegations out-perform same-party delegations. Importantly, at the end of each time series, split delegations are predicted to secure significantly more federal aid than the delegations types predicted in Table 1 to be most adept at accruing federal dollars under unified and divided government, respectively. For instance, under divided government, in the last couple years of the time series, split delegations are predicted to secure significantly more than minority-only delegations. And under unified government, split delegations are predicted to secure significantly more than majority-
only delegations. These results suggest that split delegations have become more valuable as political change occurred in Washington between the early 1980s and the late 2000s.

**TABLE 2**

Predicting Per Capita Federal Aid to States Over Time, FY 1984-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>0.107**</td>
<td>0.094**</td>
<td>0.070**</td>
<td>0.060**</td>
<td>0.048**</td>
<td>0.057**</td>
</tr>
<tr>
<td>Majority-only delegations</td>
<td>14.490</td>
<td>28.17**</td>
<td>12.240</td>
<td>25.63**</td>
<td>8.167</td>
<td>11.61*</td>
</tr>
<tr>
<td>Majority-only × fiscal year</td>
<td>-0.007</td>
<td>-0.014**</td>
<td>-0.006</td>
<td>-0.013**</td>
<td>-0.004</td>
<td>-0.006*</td>
</tr>
<tr>
<td>Minority-only × fiscal year</td>
<td>0.013*</td>
<td>-0.008*</td>
<td>-0.011*</td>
<td>-0.007**</td>
<td>-0.006</td>
<td>0.002</td>
</tr>
<tr>
<td>State representation index</td>
<td>-0.070</td>
<td>-0.109</td>
<td>-0.284</td>
<td>-0.220**</td>
<td>-0.405**</td>
<td>-0.232*</td>
</tr>
<tr>
<td>State median income (in thousands)</td>
<td>-0.012*</td>
<td>-0.018**</td>
<td>-0.008*</td>
<td>-0.010**</td>
<td>-0.003</td>
<td>-0.007*</td>
</tr>
<tr>
<td>State unemployment rate</td>
<td>-0.054**</td>
<td>-0.031**</td>
<td>0.021**</td>
<td>-0.012*</td>
<td>0.043**</td>
<td>0.031**</td>
</tr>
<tr>
<td>Party leader</td>
<td>-0.006</td>
<td>0.146</td>
<td>-0.085</td>
<td>0.113</td>
<td>-0.143*</td>
<td>0.023</td>
</tr>
<tr>
<td>Female senator</td>
<td>-0.015</td>
<td>0.105</td>
<td>0.013</td>
<td>0.116**</td>
<td>0.065</td>
<td>0.162**</td>
</tr>
<tr>
<td>Total seniority</td>
<td>0.002</td>
<td>0.003</td>
<td>0.000</td>
<td>0.001</td>
<td>0.000</td>
<td>-0.001</td>
</tr>
<tr>
<td>Appropriations Committee</td>
<td>-0.048</td>
<td>-0.025</td>
<td>-0.001</td>
<td>-0.010</td>
<td>0.013</td>
<td>0.042</td>
</tr>
<tr>
<td>Finance Committee</td>
<td>-0.063</td>
<td>-0.032</td>
<td>-0.010</td>
<td>0.009</td>
<td>0.053*</td>
<td>0.015</td>
</tr>
<tr>
<td>Budget Committee</td>
<td>-0.036</td>
<td>-0.010</td>
<td>-0.038</td>
<td>-0.080**</td>
<td>-0.002</td>
<td>-0.033</td>
</tr>
<tr>
<td>State fixed effects constant</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Constant</td>
<td>-203.9**</td>
<td>-178.1**</td>
<td>-132.8**</td>
<td>-112.8**</td>
<td>-88.88**</td>
<td>-106.5**</td>
</tr>
<tr>
<td>N</td>
<td>799</td>
<td>550</td>
<td>798</td>
<td>550</td>
<td>799</td>
<td>550</td>
</tr>
<tr>
<td>R²</td>
<td>0.780</td>
<td>0.892</td>
<td>0.811</td>
<td>0.916</td>
<td>0.790</td>
<td>0.907</td>
</tr>
</tbody>
</table>

(Adj. R² for (3))

*p<.05; **p<.01

Notes: Each dependent variable is the natural log of the measure. Robust standard errors calculated for regressions in columns (1) and (2) due to the presence of heteroskedasticity.
As with the analyses in Table 1, we replicate the analyses in column 1 of Table 2 separately for formula grant and project grant aid to gather some initial evidence regarding the means of delegation influence. As in Table 1, the results show that over-time changes have primarily occurred with formula grants. Figures 4 and 5 compare predicted effects over time for different delegation types for formula grants and project grants, respectively. For formula grants
(Figure 4) the results reflect those for all aid per capita: Under divided government, in the last couple years of the time series, split delegations are predicted to secure significantly more than minority-only delegations and, under unified government, split delegations are predicted to secure significantly more than majority-only delegations. However, for project grant aid (Figure 5), significant differences do not emerge at the back end of the time series.
As above, these findings suggest that delegations are exercising their influence over federal aid expenditures primarily through legislative processes. That split delegations are becoming more influential and valuable in these regards suggests that split-party senate pairs are indeed able to work both sides of the aisle effectively. In the later years of our time series, when
partisanship is rampant and bipartisan delegations are harder to come by (see Figure 1), the few states with split party senators may benefit from bipartisan influence supporting their states.

As with the results in Table 1, only a handful of control variables have consistent effects across the analyses in Table 2. A state’s need, measured by its median income and unemployment rate, appears to predict how much a state will receive in federal dollars. But, as before, senator’s institutional positions appear to matter little. Interestingly, delegations with female senators do not consistently perform better in these models.

**Conclusions**

In this paper, we assessed the influence of different U.S. Senate delegation types on the distribution of federal aid dollars to the states. In particular, we assessed which types of delegations secure the most federal funds, and gather preliminary evidence about the means by which these delegations exercise influence over federal spending. As to which delegation types fare best, the results cut in two directions. On the one hand, delegations with two senators in the president’s party secure the most funds, both during periods of unified and divided government. On the other hand, we find the value of increasingly rare split-party delegations for states has increased over time. As to the means of influence, our evidence suggests that delegations primarily influence federal spending through the legislative processes, suggesting that affiliation with the president gives these senators a leg up in negotiations in Congress, and that split delegations are increasingly able to “work both sides of the aisle” effectively.

These results have important implications that are worth unpacking. On one hand, they suggest that majority party status is not terribly important for influencing federal funds in the Senate. Over the decades analyzed, affiliation with the president trumps majority status, when
the two differ from one another. But in recent years, bipartisan advocacy for a state is most effective. While this does not suggest majority party status is at all unimportant in the contemporary Senate, it does suggest that more is needed to affect policy decisions in a governmental system characterized by a separation of powers and, ultimately, a need to cultivate broad inter-branch support for policy action (see, Krehbiel 1998; Mayhew 2005; Curry and Lee 2016, 2017). To affect the spending decisions of the federal government, senators need to either be able to work both sides of the aisle in the legislative process, have the president’s support, or both. When it comes to federal spending, at least, the majority cannot go it alone, and senators cannot effectively bring home the bacon just by working within the majority.

The results also have implications for how we think about senate representation and the chamber’s dual representational design. Lee and Oppenheimer (1999) highlight the unequal consequences of the Senate’s equal representation—that smaller population states are better able to secure federal dollars. We believe we have uncovered another consequence of the Senate’s institutional design—namely, of its dual representation structure. States represented by different partisan combinations of senators will help or hinder their states financially. States with the particular combinations of senators—either two aligned with the president, or one in each party—can better serve their states by working their advantages to secure federal dollars. And while many states fluctuate over time in the partisan nature of their delegations, other states maintain fairly consistent one-party delegations. Yet, these differences appear to be important, and can have a real-world impact on citizens of different states.

Altogether, we find that the Senate’s dual representational design has important impacts for how federal dollars are distributed. Going forward, more needs to be done to investigate the means of senate delegation influence, and more data on federal aid expenditures would help us
uncover if split delegations have continued to become more influential in recent years. Nonetheless, variations in delegation types appears to be important for understanding representational effectiveness in the U.S. Senate.
References


(https://jamesmcurry.files.wordpress.com/2016/10/currylee-nonpartygov-final.pdf)


