

Congressional bipartisanship scores by member and issue area, 1983 – 2024

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ABSTRACT

Although bipartisanship is central to the study of legislative behavior and often necessary for policymaking success, scholars lack a centralized, publicly accessible, and consistently updated dataset measuring legislators' propensity to offer and attract cross-party support over time and across issue areas. As a result, researchers often construct different measures of bipartisanship, making it harder for scholars to build on existing work and engage in cumulative conversations about whether bipartisanship is declining, who engages in it, and which issues facilitate cross-party collaboration. We introduce a dataset of Congressional Bipartisanship Scores (CBS) for all members of the U.S. House and Senate from 1983 to 2024. Built from more than 2.4 million cosponsorship decisions on 147,669 bills, the dataset provides two member-term measures: attracting original out-party cosponsors to one's own bills and offering original cosponsorship to out-party-sponsored bills. The dataset includes aggregate and issue-specific scores across 34 policy areas for 2,056 legislators and 11,549 legislator-term observations. To facilitate broad reuse, we make the data publicly available through Harvard Dataverse and the R package `biparty`.

Background & Summary

Bipartisan collaboration plays a central role in congressional lawmaking. In a system structured by bicameralism, separation of powers, and multiple veto points, the capacity of legislators to work across party lines is not only a normative ideal (1; 2), but also often an important and necessary pathway for building coalitions and advancing legislation (3; 4). Legislators who work across party lines produce more durable legislation (5), are more effective lawmakers (6; 7), and broaden the representational scope of governing coalitions (8). At the same time, partisan polarization has risen steadily over the past four decades (9; 10), reshaping the conditions under which bipartisan collaboration occurs in Congress. As party leaders increasingly benchmark success by what they deny the out-party rather than what they enact (11), legislators face stronger partisan incentives to withhold cross-party support, making bipartisan coalition-building more difficult and contributing to declining legislative productivity (12). Although bipartisanship remains a defining feature of legislative politics (13), rising polarization makes it essential to understand when, why, and how legislators continue to work across party lines. Therefore, measuring bipartisanship is central not only to the study of congressional behavior, but also to broader efforts to evaluate the health of democratic institutions.

A substantial body of research examines the conditions under which bipartisan collaboration occurs. In an era when congressional majorities are often held by only a few seats, minority-party votes can be pivotal, making cross-party coalition-building a practical requirement for effective lawmaking (3; 14). Candidates who campaign on bipartisan appeals tend to follow through once in office (15), and competitive environments can make cross-party cooperation more attractive when neither party can reliably govern alone (16). At the same time, collaboration carries political risks. Primary voters may punish legislators perceived as too willing to compromise, leading some lawmakers to reject agreements that would otherwise move policy outcomes closer to their preferences (17). Legislative experience further conditions cross-party cooperation: political amateurs, who may resist or undervalue the compromises required for lawmaking, can intensify partisan divisions and reduce bipartisan collaboration (18). Bipartisanship also has important legislative consequences. Broad coalitions can reduce resistance from pivotal actors, facilitate committee progress (19), predict floor consideration (20), and help legislators advance a greater share of their sponsored bills into law (6; 7).

Despite this important body of work, critical data gaps limit scholars' ability to study bipartisanship in Congress. Some datasets provide sponsorship and cosponsorship data across earlier Congresses (21), while others use these data to distinguish between legislators' ability to attract bipartisan support and their willingness to offer it (7). The Lugar Center provides an influential bipartisanship index for the U.S. Senate, beginning with the 103rd Congress, and for the U.S. House of Repre-

sentatives, beginning with the 113th Congress (22). This index, however, is limited in its temporal and chamber coverage, does not distinguish between attracting and offering out-party support, relies on all cosponsorship decisions rather than only original cosponsorship, and excludes legislative leaders. Recent work addresses some of these limitations by constructing original-cosponsorship-based attract-and-offer measures across the 97th through 118th Congresses, but only for the House (18). No single publicly available dataset combines long-term coverage of both chambers and transparent attract-and-offer measures based on original cosponsorship. In particular, no existing dataset provides member-level attract-and-offer measures of bipartisanship across policy issue areas. Therefore, scholars often rely on different variants of bipartisanship measures, making it difficult to compare findings across studies, build on prior work, and engage in shared conversations about when, where, and among whom bipartisanship occurs.

We introduce Congressional Bipartisanship Scores (CBS), a publicly available dataset of member-level aggregate and issue-specific bipartisanship scores, developed with support from the Portman Center for Policy Solutions at the University of Cincinnati. The dataset combines five features that are not jointly available in existing resources. First, scores are constructed from more than 2.4 million cosponsorship decisions on 147,669 bills, providing broad coverage of both chambers of the modern Congress across 21 congressional terms from 1983 to 2024. Second, we measure bipartisanship using original cosponsorship, defined as out-party cosponsorship that occurs on the bill's date of introduction. Third, we provide two conceptually distinct member-term measures of bipartisanship: one capturing the out-party support legislators receive on the bills they sponsor and another capturing the out-party support they extend to bills sponsored by others. This distinction allows researchers to study different forms of bipartisan behavior. Fourth, the datasets include issue-specific scores across 34 Congressional Research Service (CRS) policy areas, enabling researchers to examine whether bipartisanship varies across domains such as health, taxation, education, immigration, transportation, and national security. Finally, the datasets cover 2,056 unique legislators and 11,549 legislator-term observations and include multiple member-level identifier crosswalks to facilitate merging with other congressional datasets.

We validate the underlying data by hand-coding 5,000 randomly sampled cosponsor-bill pairs and assess external validity by comparing our scores to the Lugar Center's Bipartisan Index (22). We make the data, replication code, and documentation publicly available through Harvard Dataverse and an R package, `biparty`. Together, these resources provide standardized, open, and replicable measures of aggregate and issue-specific bipartisanship. The article proceeds by detailing the data collection, processing, score construction, technical validation, data structure, and visualization tools included in the `biparty` R package.

Methods

We construct a dataset with measures of bipartisanship for all members of the House and Senate from 1983 through 2024, spanning 21 congressional terms from the 98th through the 118th Congress. For each legislator in a congressional term, the dataset includes both aggregate bipartisanship scores and issue-specific bipartisanship scores. In total, the dataset contains 2,056 unique legislators and 11,549 legislator-term observations. We detail the four steps involved in constructing the scores below: 1) collecting bill, sponsor, cosponsor, and policy issue area data; 2) calculating aggregate bipartisanship measures; 3) calculating issue-specific bipartisanship measures; and 4) weighting the measures.

Collecting Bill, Sponsor, Cosponsor, and Policy Issue Area Data

First, we scraped bill, sponsor, cosponsor, and policy issue area data from the `congress.gov` Application Programming Interface (API), the official public congressional record maintained by the Library of Congress, for the 98th through the 118th Congress (1983–2024). We collected these data between December 2025 and February 2026 using the following `congress.gov` API endpoints: `/bill/congress/billType/billNumber/text`, `/member/bioguideId/sponsored-legislation`, `/member/bioguideId/cosponsored-legislation`, and `/bill/congress/billType/billNumber/policy area`. We organize these data into four preliminary data frames that allow us to then construct aggregate and policy issue area bipartisanship scores: `bills`, `sponsors`, `cosponsors`, and `policy issue areas`.

The first data frame, `bills`, is organized at the bill-term level. We collect only House and Senate bills—that is, bills with the H. R. and S. designations—and exclude resolutions, joint resolutions, and concurrent resolutions. We exclude these measures because the content of resolutions are not substantive. In line with other work that constructs measures of bipartisanship (7), we exclude bills with no cosponsors because bipartisanship cannot be measured for bills that attract no cosponsorship activity. In these cases, there is no observable cosponsor relationship from which to determine whether a

bill attracted same-party or out-party support. This restriction means that our scores should be interpreted as measuring bipartisanship among cosponsored bills. To help users implement and interpret our measures, the final dataset includes two additional variables: `total_n_bills_sponsored`, which reports the total number of bills each legislator sponsored in a term (including bills with no cosponsors), and `prop_bills_with_cosponsor`, which reports the proportion of those sponsored bills that attracted at least one cosponsor. These variables allow users to descriptively analyze, model, or control for both total sponsorship activity and the proportion of sponsored bills with at least one cosponsor. For each bill, we retain the bill number, title, URL, and total number of cosponsors. The resulting *bills* data frame contains 147,669 observations.

The second data frame, *sponsors*, is organized at the bill-sponsor-term level. It includes sponsor-level attributes for the legislator who introduced each bill, most notably the sponsor's unique identifier, demographic characteristics, party identification, and the date the legislator introduced the bill. Because each bill has a single sponsor, the *sponsors* data frame also contains 147,669 observations.

The third data frame, *cosponsors*, is organized at the cosponsor-bill-term level. It includes information on every cosponsor attached to every bill, including each cosponsor's unique identifier, demographic characteristics, party identification, and the date the bill was cosponsored. This data frame is substantially larger because bills often attract multiple cosponsors. In total, the *cosponsors* data frame contains 2,486,089 observations.

The fourth data frame, *policy issue areas*, is organized at the bill-term level. The Congressional Research Service (CRS) classifies each bill into one of 34 policy areas, and `congress.gov` links these classifications to individual bills. The *policy issue areas* data frame contains 147,669 observations, matching the number of observations in the *bills* and *sponsors* data frames. When scraping the `congress.gov` API, 63 bills lacked an assigned policy area. We manually searched each of these bills on `congress.gov` to determine whether a policy area was listed on the website itself. For 41 bills, we identified a policy area and updated the data accordingly. For the remaining 22 bills, no policy area was available on `congress.gov`, so we code their policy areas as NA and retain them in the data. Over our time series, the number of available policy issue areas decreased from 34 to 32, as the CRS no longer assigns bills to the categories “Commemorations” (ended after the 110th Congress) or “Private Legislation” (ended after the 113th Congress). We retain these bills in our dataset.

We then merge these data frames in two stages. First, we merge the three data frames that share the same number of observations: *bills*, *sponsors*, and *policy issue areas*. We merge *sponsors* into *bills* using term, bill number, and sponsor as unique identifiers, producing a bill-sponsor-term dataset with 147,669 observations. We then merge *policy issue areas* into this data frame using bill number and term as unique identifiers. As expected, the number of observations remains 147,669 after this merge. Next, we merge in cosponsor information. Specifically, we merge the bill-sponsor-policy issue area data frame into *cosponsors* using a one-to-many join, so the unit of analysis becomes the cosponsor-bill-term. In this structure, each row represents a unique pairing of a cosponsor and a bill, so a bill with five cosponsors generates five rows, each containing that bill's sponsor, policy area, and other bill-level attributes alongside a unique cosponsor's information. This long-format structure is the intermediate dataset from which we compute member-level scores: we aggregate across rows within each legislator-term (and, for issue-specific scores, within each legislator-term-policy area) to produce the final scores. The resulting merged dataset contains 2,486,089 observations.

Lastly, we recode legislators who are not formally identified as Democrats or Republicans—such as Independents or Libertarians—to the major party with which they caucus. For example, Bernie Sanders (VT-I) and Angus King (ME-I), both of whom are formally Independents but caucus with Democrats, are recoded as Democrats. In total, we recode the party identification of 10 legislators. This step ensures that party-based measures of bipartisanship reflect legislators' functional partisan alignment within Congress rather than only their formal ballot label. There are also 13 unique legislators who switched parties during a congressional term. We retain these legislators and create two observations for each: one for each party identification. Put differently, for the 13 legislators who switched parties during a term, the dataset includes separate scores corresponding to each of their party identifications.

Calculating Aggregate Bipartisanship Measures

From this preliminary dataset, we calculate aggregate bipartisanship measures at the member-term level in three steps. First, we create an indicator of an out-party relationship, coded 1 when a bill sponsor and cosponsor do not share the same party identification and 0 otherwise. This indicator allows us to distinguish cross-party from same-party cosponsorship ties.

Second, we define bipartisanship using *original* out-party cosponsorship. Specifically, we code a cosponsorship as original

if the cosponsorship date matches the bill introduction date. We create a dichotomous variable coded 1 when the cosponsor date matches the sponsor date and 0 otherwise. This approach captures whether a legislator joined a bill at the moment it entered the chamber, which we treat as the clearest signal of initial bipartisan support (18; 23).

Third, we construct two aggregate member-term measures of bipartisanship: *attracting* out-party cosponsorship to a legislator’s own bills and *offering* cosponsorship to bills sponsored by out-party members. The first measure, *attract*, captures the extent to which a legislator’s sponsored bills attract cross-party support at introduction. For each bill, we divide the number of original out-party cosponsors by the total number of original cosponsors. We then average this bill-level proportion across all bills sponsored by a legislator in a given term. Formally,

$$A_{it} = \frac{1}{N_{it}} \sum_{b \in \mathcal{B}_{it}} \left(\frac{\text{number of original out-party cosponsors on bill}}{\text{total number of original cosponsors on bill}} \right) \quad (1)$$

where:

- A_{it} = proportion of out-party original cosponsors attracted by legislator i in term t
- \mathcal{B}_{it} = set of bills sponsored by legislator i in term t
- N_{it} = number of bills sponsored by legislator i in term t
- b = bill

The second measure, *offer*, captures the extent to which a legislator directs their own original cosponsorship activity toward out-party-sponsored bills. For each legislator-term, we divide the total number of original out-party cosponsorships by the total number of original cosponsorships for bills sponsored by legislators of either party. Formally,

$$O_{it} = \frac{\text{out-party original cosponsorships offered}_{it}}{\text{total original cosponsorships offered}_{it}} \quad (2)$$

where:

- O_{it} = proportion of original cosponsorships offered by legislator i in term t that are offered to out-party-sponsored bills
- $\text{Out-Party Original Cosponsorships Offered}_{it}$ = number of original cosponsorships legislator i offers to out-party-sponsored bills in term t
- $\text{Total Original Cosponsorships Offered}_{it}$ = total number of original cosponsorships legislator i offers in term t

Together, these measures capture two distinct dimensions of aggregate bipartisanship at the member-term level: the extent to which legislators *attract* cross-party support for their own sponsored legislation and the extent to which they *offer* cross-party support for bills sponsored by others. Legislators who did not introduce a bill in a term, or whose sponsored bills did not attract at least one original cosponsor, receive an NA *attract* score (656 legislator-term observations, 5.7%). Likewise, legislators receive an NA *offer* score if they did not offer any original cosponsorship in a term (31 legislator-term observations, 0.27%). Therefore, the resulting dataset includes an *attract* score for 10,893 legislator-term observations and an *offer* score for 11,518 legislator-term observations.

Calculating Issue-Specific Bipartisanship Measures

Given that users may be interested not only in aggregate bipartisanship, but also in whether legislators work across the aisle in specific issue areas (e.g., education, health, or transportation), we also construct *attract* and *offer* bipartisanship scores for each legislator-term across 34 policy issue areas. Table 1 reports the name of each policy issue area, the number of bills in that issue area, the percentage of all bills in that issue area, and an example bill. The CRS assigns each introduced bill a single policy topic based on the legislation’s substantive content. This policy issue area captures the primary focus or predominant subject matter of each measure. To calculate within-issue-area *attract* and *offer* scores, we use the same formulas described above, but limit the cosponsorship and sponsorship decisions to bills within a given policy issue area. For example, health-specific *attract* scores measure out-party original cosponsorship on a legislator’s health bills, while health-specific *offer* scores measure a legislator’s original cosponsorship of out-party health bills. As with the aggregate scores, if a legislator did not sponsor or

cosponsor bills within a particular policy issue area in a term, they receive an NA value. The dataset includes broader policy issue area coverage for bipartisanship offered because legislators are more likely to cosponsor other legislators' bills than to sponsor bills themselves. The average legislator in the dataset has an offer score for more than half of the policy issue areas, but an attraction score for approximately 15% of policy issue areas.

Precision Weighting of Aggregate and Issue-Specific Bipartisanship Measures

One concern with our member-level bipartisanship measures is that they may be disproportionately influenced by very small numbers of bills or cosponsorship decisions. For example, a legislator who sponsors only one bill in a term and attracts bipartisan support on that bill would appear highly bipartisan under the raw measure, even though that score is based on only one bill. In contrast, a legislator who sponsors 100 bills and attracts bipartisan support on 40 is more bipartisan, despite receiving a lower raw proportion. The same concern applies to issue-specific scores, where the number of relevant bills or cosponsorships within a given policy area may be especially small. In short, raw bipartisanship scores are noisier when estimated from fewer observations and more precise when estimated from more observations.

To address this concern, we use a Bayesian shrinkage estimator to compute and apply weights to both the aggregate and issue-specific bipartisanship measures. This approach balances estimating parameters for groups (legislators) against a global population mean (all legislator scores in a given chamber-term) (24). The intuition is straightforward: if a legislator's score is based on only a few bills or cosponsorships, that score is less reliable and should be adjusted more heavily toward the average bipartisanship score for legislators in the same congressional term and chamber. If the score is based on many observations, it is more precise and should receive little to no adjustment.

For the aggregate attraction and offer scores, we define the prior target, μ , as the mean bipartisanship level within the same term and chamber. We then compute a precision weight, $w = n/(n+k)$, where n is the number of bills sponsored (cosponsored) by the legislator in that term and chamber and k is a fixed hyperparameter that determines how strongly the score is pulled toward the prior mean. The shrunk estimate $\hat{\theta}$ is:

$$\hat{\theta} = w \cdot \theta_{\text{obs}} + (1 - w) \cdot \mu \quad (3)$$

where θ_{obs} is the legislator's observed score and μ is the Congress \times chamber prior mean. We set $k = 10$, treating the prior as equivalent to 10 bills' worth of information. This decision reflects a substantive judgment that a legislator requires approximately 10 sponsored bills before their observed score is considered more informative than the chamber-term mean. This choice is consistent with the broader empirical literature; the hyperparameter is fixed at a value that reflects the minimum number of observations needed to trust a raw proportion over a prior (25; 26). In the U.S. Congress, 10 bills represent a modest threshold: most legislators sponsor well in excess of this number in a given term, meaning the prior exerts meaningful influence only for the least active members, which aligns with our primary measurement concern. Moreover, our results are not driven by our assigned hyperparameter value ($k = 10$); measures are consistent when we recalculate weighted scores with the hyperparameter set to $k = 5$ and $k = 15$. As a result, legislators with many sponsored or cosponsored bills receive weights close to 1 and retain scores close to their observed values. In contrast, legislators with fewer bills receive smaller weights and are pulled more strongly toward the Congress- and chamber-specific baseline.

We extend this same procedure to the issue-specific bipartisanship measures. In this case, the prior target, (μ), is defined more narrowly as the mean bipartisanship score within the same Congress, chamber, and policy topic. For topic-specific attraction scores, the precision term (n) is the number of bills the legislator sponsored within that topic; for topic-specific offer scores, (n) is the number of bills the legislator cosponsored within that topic. Because the number of observations is naturally smaller within individual policy areas, we set $k = 2$, treating the issue-specific prior as equivalent to two bills' worth of information. Empirically, this threshold reflects the sparsity of within-issue legislative activity: two observations falls at approximately the 80th percentile of the issue-specific sponsorship distribution and the 53rd percentile of the issue-specific original-cosponsorship distribution. Thus, the issue-specific prior is most consequential for low-activity legislator-policy-area observations, where raw proportions are least reliable, while scores based on larger numbers of sponsored or cosponsored bills are weighted more heavily toward the observed value.

Table 1. Policy Issue Area Coverage, Frequency, and Examples

Policy Issue Area	# of Bills	% of Total Bills	Example Bill (Congress)
Agriculture and Food	4,430	3.00%	H. R. 6413 (98th): A bill to direct the Secretary of Agriculture to carry out an acreage limitation program and a land diversion program for the 1985 crop of feed grains.
Animals	826	0.56%	S. 1368 (99th): A bill to end shipment of padded-jaw or steel-jaw leghold traps.
Armed Forces and National Security	10,926	7.40%	H. R. 4654 (100th): A bill to authorize the establishment of a National Guard in and for American Samoa.
Arts, Culture, Religion	429	0.29%	S. 2636 (101st): A bill to authorize the Board of Regents of the Smithsonian Institution to plan and design an extension of the National Air and Space Museum at Washington Dulles International Airport, and for other purposes.
Civil Rights and Liberties, Minority Issues	1,024	0.69%	H. R. 3583 (102nd): To extend the statute of limitation applicable to the filing of administrative complaints by Federal employees who allege employment discrimination in violation of title VII of the Civil Rights Act of 1964.
Commemorations	1,670	1.13%	S. 2200 (100th): A bill to amend Public Law 90-498 to provide for the designation of National Hispanic Heritage Month.
Commerce	4,328	2.93%	H. R. 4173 (103rd): To amend the Small Business Act to provide for expanded participation in the microloan demonstration program.
Congress	1,448	0.98%	S. 1039 (104th): A bill to require Congress to specify the source of authority under the United States Constitution for the enactment of laws, and for other purposes.
Crime and Law Enforcement	8,074	5.47%	H. R. 4443 (105th): To provide for the automatic revocation of the license of any licensed firearms dealer who willfully sells a firearm to a minor.
Economics and Public Finance	2,240	1.52%	S. 1097 (106th): A bill to offset the spending contained in the fiscal year 1999 emergency supplemental appropriations bill in order to protect the surpluses of the social security trust funds.
Education	6,225	4.21%	H. R. 2982 (106th): To provide grants to States and local educational agencies to recruit, train, and hire 100,000 school-based resource staff to help students deal with personal state of mind problems.
Emergency Management	1,657	1.12%	S. 1631 (107th): A bill to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to direct the Director of the Federal Emergency Management Agency to conduct a study to determine the resources that are needed for development of an effective nationwide communications system for emergency response personnel.
Energy	4,046	2.74%	H. R. 1874 (107th): To allow any business or individual in any State experiencing a power emergency to operate any type of power generation available to ensure their economic stability, and for other purposes.
Environmental Protection	4,621	3.13%	S. 1716 (108th): A bill to amend the Federal Water Pollution Control Act to authorize the use of funds made available for nonpoint source management programs for projects and activities relating to the development and implementation of phase II of the storm water program of the Environmental Protection Agency.
Families	1,101	0.75%	H. R. 4347 (108th): International Assistance to Missing and Exploited Children Act of 2004.
Finance and Financial Sector	5,011	3.39%	S. 4116 (109th): A bill to amend the Federal Deposit Insurance Act, to clarify the scope of provisions relating to applicable rates of interest and other charge limitations.
Foreign Trade and International Finance	4,116	2.79%	H. R. 4666 (109th): To amend the Trade Act of 1974 to delegate to the Under Secretary of Commerce for International Trade the functions relating to trade adjustment assistance for firms, and for other purposes.
Government Operations and Politics	10,610	7.18%	S. 3665 (110th): A bill to amend chapter 63 of title 5, United States Code, to modify the rate of accrual of annual leave for administrative law judges, contract appeals board members, and immigration judges.
Health	16,767	11.35%	H. R. 7139 (110th): To amend titles XVIII and XIX of the Social Security Act with respect to the qualification of the director of food services of a Medicare skilled nursing facility or a Medicaid nursing facility.
Housing and Community Development	2,035	1.38%	S. 3700 (111th): A bill to increase the maximum mortgage amount limitations under the Federal Housing Administration mortgage insurance programs for multi-family housing projects with elevators and for extremely high-cost areas.
Immigration	3,683	2.49%	H. R. 6080 (111th): Making emergency supplemental appropriations for border security for the fiscal year ending September 30, 2010, and for other purposes.
International Affairs	6,096	4.13%	S. 3366 (112th): A bill to designate the Haqqani network as a foreign terrorist organization.
Labor and Employment	4,396	2.98%	H. R. 5981 (112th): To amend title IV of the Employee Retirement Income Security Act of 1974 to provide for a guarantee by the Pension Benefit Guaranty Corporation for qualified preretirement survivor annuities under insolvent or terminated multiemployer pension plans.
Law	1,997	1.35%	S. 1207 (113th): Cameras in the Courtroom Act.
Native Americans	1,993	1.35%	H. R. 4694 (113th): To amend the Claims Resolution Act of 2010 to authorize the Secretary of the Interior to contract with eligible Indian tribes to manage land buy-back programs, to require that certain amounts be deposited into interest bearing accounts, and for other purposes.
Private Legislation	288	0.19%	S. 2474 (113th): A bill for the relief of Meriam Yahya Ibrahim, Martin Wani, and Maya Wani.
Public Lands and Natural Resources	7,950	5.38%	H. R. 5771 (114th): Conserving Our Reefs and Livelihoods Act of 2016.
Science, Technology, Communications	3,168	2.14%	S. 572 (115th): A bill to require the Secretary of Commerce to study the coverage gaps of the Next Generation Weather Radar of the National Weather Service and to develop a plan for improving radar coverage and hazardous weather detection and forecasting, and for other purposes.
Social Sciences and History	68	0.05%	H. R. 1088 (115th): African Burial Ground International Memorial Museum and Educational Center Act.
Social Welfare	3,203	2.17%	S. 4091 (116th): Emergency Aid for Returning Americans Affected by Coronavirus Act.
Sports and Recreation	297	0.20%	H. R. 6931 (116th): Professional Boxing Safety Enhancement Act of 2020.
Taxation	15,082	10.21%	S. 5262 (117th): A bill to amend the Internal Revenue Code of 1986 to extend the time during which a qualified disaster may have occurred for purposes of the special rules for personal casualty losses.
Transportation and Public Works	6,048	4.10%	H. R. 9648 (117th): Light Rail Transit Act.
Water Resources Development	1,794	1.21%	S. 1233 (118th): A bill to amend the Consolidated Farm and Rural Development Act to modify provisions relating to rural decentralized water systems grants.
NA	22	0.01%	H. R. 9547 (117th): To designate the facility of the United States Postal Service located at 120 Doty Street in Kaukauna, Wisconsin, as the "Sgt. Nickolas Mueller Post Office Building".
Total	147,669	100%	

We include both raw and precision-weighted attract and offer scores for all legislator-term observations. The correlation between the raw and weighted scores is quite high (Attract Correlation Coefficient = 0.90, Offer Correlation Coefficient = 0.99). This suggests that most legislators in the dataset sponsor and cosponsor close to the average number of bills. Therefore, the precision weighting addresses an important but relatively limited source of measurement error. We include both versions in the dataset because users may prefer one over the other depending on their research goals. Users may prefer the unweighted scores when they want the closest possible measure of observed bipartisan behavior in a given legislator-term, without any adjustment toward a chamber-specific prior mean. This may be especially useful when researchers want to apply their own weighting scheme, impose a different prior information threshold, or directly model the consequences of sparse legislative activity. In contrast, users may prefer weighted scores when they want measures that are less sensitive to instability arising from very small numbers of sponsored or cosponsored bills, especially when using our issue-specific scores, which are often based on fewer sponsor and cosponsorship decisions.

Data Record

The data are accessible through two platforms: Harvard Dataverse and the R package `biparty`. Each platform includes two datasets: an aggregate bipartisanship scores data frame and a policy issue-area bipartisanship scores data frame. We provide these datasets separately because users may prefer to work with them independently, though they can be merged using shared legislator identifiers. Each dataset includes several unique legislator identifiers to facilitate merging with relevant covariates. The data are available as comma-separated values (`.csv`) files and in R Data Serialization (`.rds`) format to facilitate broad reuse across statistical software, including but not limited to Stata, R, and Python.

Aggregate Bipartisanship Scores: Each observation in this dataset is a legislator-term. Legislators appear multiple times if they served across multiple Congresses. The main variables of interest are `attract_aggregate_(weighted OR nonweighted)` and `offer_aggregate_(weighted OR nonweighted)`. The dataset includes both raw and precision-weighted versions of each bipartisanship measure, as well as legislator names, chamber, Congress, and party identification. Because users may also be interested in legislators’ overall sponsorship activity, especially since our bipartisanship measures are calculated only from bills with cosponsors, we include two additional variables: one measuring the total number of bills each legislator sponsored in a term and another capturing the proportion of those bills that attracted at least one cosponsor (regardless of party). We also include legislator-specific crosswalks with multiple unique identifiers (e.g., `govtrack_id`) to facilitate merging with other congressional data sources. Table 2 displays variable names, descriptions, and a sample observation from the aggregate bipartisanship scores dataset.

Table 2. Variables from Aggregate Dataset

Variable	Description	Example
<code>congress</code>	Congressional term in which the legislator served	117
<code>chamber</code>	Chamber in which the legislator served	SENATE
<code>name</code>	Legislator’s name	ROBERT PORTMAN
<code>party</code>	Legislator’s party identification	R
<code>state</code>	State represented by the legislator	OH
<code>district</code>	Congressional district represented by the legislator (voting lower house members only)	No Congressional District (Senate)
<code>bioguide_id</code>	Unique legislator identifier from the Biographical Directory of the U.S. Congress	P000449
<code>govtrack_id</code>	Unique legislator identifier from GovTrack	403325
<code>thomas_id</code>	Legacy legislator identifier from the Library of Congress THOMAS system	Unavailable
<code>icpsr_id</code>	Standardized legislator identifier from ICPSR	29386
<code>wikipedia</code>	Unique identifier for the legislator’s Wikipedia page	Rob Portman
<code>wikidata</code>	Unique identifier for the legislator in Wikidata	Q59676310
<code>attract_aggregate_weighted</code>	Precision-weighted aggregate bipartisanship attract score	0.779
<code>offer_aggregate_weighted</code>	Precision-weighted aggregate bipartisanship offer score	0.676
<code>attract_aggregate_unweighted</code>	Raw aggregate bipartisanship attract score	0.829
<code>offer_aggregate_unweighted</code>	Raw aggregate bipartisanship offer score	0.695
<code>total_n_bills_sponsored</code>	Total number of bills introduced	83
<code>prop_bills_with_cosponsor</code>	Proportion of bills introduced with at least one cosponsor (regardless of party)	0.903

Policy Issue Area Bipartisanship Scores: Each row is a legislator-term. Legislators therefore appear multiple times if they served in more than one congressional term. The main variables are issue-area scores measuring the extent to which legislators attract and offer original out-party cosponsorships within each of the 34 policy issue areas. Issue-area scores are stored in separate issue-specific columns. The dataset includes raw and precision-weighted versions of each issue-specific measure. In total, the dataset includes 140 score variables: 35 policy-area categories (34 substantive issue areas and one NA category) × two measures (attract and offer) × two versions (weighted and unweighted). Like the aggregate bipartisanship scores dataset,

this dataset also includes unique legislator identifiers, chamber, Congress, and party identification. Table 3 displays variable names, descriptions, and a sample observation from the policy issue area bipartisanship scores dataset.

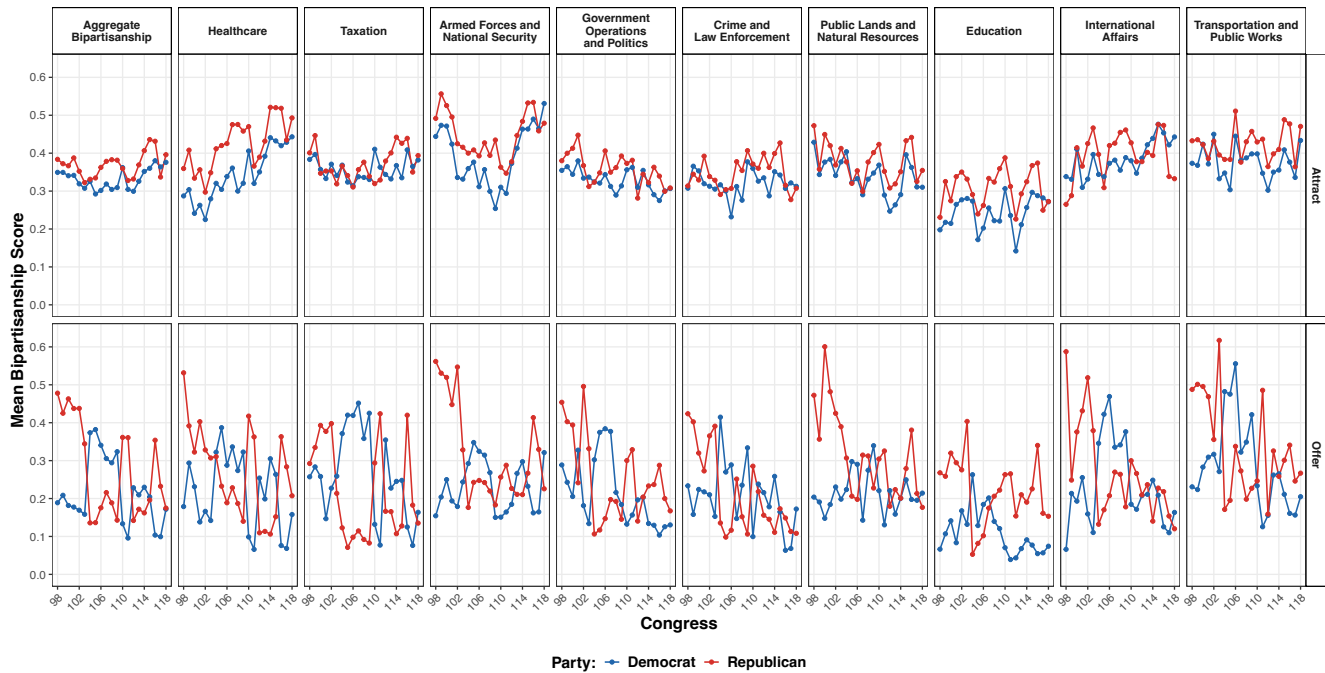
Table 3. Variables from Policy Issue Area Dataset

Variable	Description	Example
<code>congress</code>	Congressional term in which the legislator served	117
<code>chamber</code>	Chamber in which the legislator served	HOUSE
<code>name</code>	Legislator's name	ELISSA SLOTKIN
<code>party</code>	Legislator's party identification	D
<code>state</code>	State represented by the legislator	MI
<code>district</code>	Congressional district represented by the legislator	8
<code>bioguide_id</code>	Unique legislator identifier from the Biographical Directory of the U.S. Congress	S001208
<code>govtrack_id</code>	Unique legislator identifier from GovTrack	412784
<code>thomas_id</code>	Legacy legislator identifier from the Library of Congress THOMAS system	11082
<code>icpsr_id</code>	Standardized legislator identifier from ICPSR	21965
<code>wikipedia</code>	Unique identifier for the legislator's Wikipedia page	Elissa Slotkin
<code>wikidata</code>	Unique identifier for the legislator in Wikidata	Q30323721
<code>attract_issuearea_weighted (n = 34)</code>	Precision-weighted issue area bipartisanship attract score	0.399
<code>offer_issuearea_weighted (n = 34)</code>	Precision-weighted issue area bipartisanship offer score	0.0342
<code>attract_issuearea_unweighted (n = 34)</code>	Raw issue area bipartisanship attract score	0.6
<code>offer_issuearea_unweighted (n = 34)</code>	Raw issue area bipartisanship offer score	0

Data Overview

To illustrate how these scores can be used, Figure 1 plots average bipartisanship scores for both attract (top) and offer (bottom) measures, by party (line color and type), across the full time series (1983 – 2024). Across all panels, the y-axis represents the mean bipartisanship score and the x-axis denotes the congressional term. The figure includes aggregate scores and scores for nine selected policy issue areas, demonstrating how users can compare patterns of bipartisanship across time, parties, measures, and policy domains. Figure 1 highlights several features of the dataset that may be useful for future research. First, because the attract and offer measures capture distinct forms of cross-party collaboration, users can examine whether legislators' ability to attract out-party support follows patterns similar to their willingness to offer it. For example, Figure 1 demonstrates that aggregate bipartisanship attraction is relatively stable across the time series, while bipartisanship offered is more volatile. Second, users can compare aggregate scores with issue-specific scores to evaluate whether cross-party collaboration varies across policy domains. Figure 1 illustrates that some issue areas have consistently higher average bipartisanship scores across both dimensions, such as International Affairs, whereas others, such as Education, have lower average scores. Third, users can summarize trends by party across congressional terms, allowing them to assess whether changes in bipartisan activity are concentrated in particular parties, time periods, or issue areas. The purpose of Figure 1 is illustrative rather than inferential. It provides a descriptive overview of the data's structure and scope and shows how researchers can use the aggregate and issue-specific scores to generate comparisons across multiple dimensions of congressional bipartisanship. Future users may extend this approach by examining additional policy areas, comparing chambers, studying individual legislators, merging the scores with external covariates, or using the data to study the causes and consequences of bipartisan collaboration in Congress.

Figure 1. Attract and Offer Bipartisanship Scores by Party and Issue Area



Technical Validation

Internal Validation

To validate the accuracy of the data scraped from `congress.gov`'s API, we employed a team of research assistants to hand-code 5,000 randomly sampled cosponsor-bill pairs. We expected to find few, if any, errors because the data were scraped from `congress.gov` rather than manually labeled or entered. However, we viewed this validation step as necessary because incorrect information across these variables would affect our final scores.

Each row in the validation set includes the bill sponsor's name and the name of a single cosponsor, drawn from the full list of cosponsors for that bill. As a result, each research assistant validated one cosponsor-bill pairing rather than the complete set of cosponsors for a given bill. The validation protocol required research assistants to verify five variables: (1) total cosponsor volume, (2) bill sponsorship date, (3) cosponsorship date, (4) sponsor party, and (5) cosponsor party. These are the five variables integral to the creation of the scores. For each observation, research assistants independently navigated to the corresponding bill page on `congress.gov`, recorded the values they observed, and submitted their responses for evaluation against the scraped data. Research assistants were trained to code the validation set during a one-hour meeting. They then completed a training set of 50 observations, which the project PIs reviewed before providing feedback. Upon successful completion of the training set, research assistants received the full validation set.

Overall, as expected, the validation process shows that information scraped from the `congress.gov` API is highly consistent with information available locally on `congress.gov`. We report five validation statistics assessing alignment between the scraped API data and the local `congress.gov` records: Cohen's kappa correlation coefficient, average error rate, precision, recall, and F1 score. For all five variables, Cohen's kappa is at or above 0.998, indicating a high level of agreement between the two data sources. Precision, recall, and F1 scores are similarly high. The highest average error rate is 0.002, indicating that very few observations were misaligned across the two sources. Collectively, these results suggest that the `congress.gov` API is a reliable and accurate source for collecting bill-level and cosponsor-level data from `congress.gov`.

One important exception, however, was an inconsistency between `congress.gov`'s original cosponsor designation—a logical indicator returned by the congressional API (e.g., TRUE/FALSE)—and the underlying sponsorship and cosponsorship dates returned by the same API. The original cosponsor designation from `congress.gov` should be coded as TRUE only when the cosponsorship date matches the sponsorship date. In several cases, however, the original cosponsorship designation

was coded as TRUE even when the cosponsorship and sponsorship dates did not match. This discrepancy is consequential for score creation because the original cosponsor designation provided by `congress.gov` is commonly used to identify original cosponsorship. To address this issue, we construct our own date-based original cosponsorship indicator directly from the sponsorship and cosponsorship date fields, coded as 1 when the dates match and 0 otherwise.

The `congress.gov` original-cosponsor designation identifies 920,281 cosponsorship decisions as original, compared to 891,521 identified by our date-based measure. Across 2,486,089 total cosponsorship decisions, `congress.gov` incorrectly classifies 28,760 cosponsorships as original even though the underlying date fields indicate that they occurred after the bill's sponsorship date. Although modest in percentage terms (1.16%), this error is systematic: because our dataset spans decades and hundreds of thousands of bills, even small misclassification rates compound into meaningful measurement error at scale. We also identified a small number of anomalous cases in which the cosponsorship date preceded the sponsorship date: 18 bills and 389 cosponsorship decisions, or 0.0156% of all cosponsorship decisions. Because a cosponsor cannot join a bill before it has been introduced, we drop these cosponsorship decisions from the data.

Table 4. Variables and Validation Statistics from Cosponsorship Dataset

Measure	Description	# Cosponsors	Sponsor Party	Sponsorship Date	Cosponsor Party	Cosponsorship Date
Cohen's Kappa Coefficient	Measures agreement between human coders and the <code>congress.gov</code> API after adjusting for chance agreement.	0.999	0.999	0.999	0.999	0.998
Average Error Rate	Measures the share of compared observations that were miscoded by human coders relative to the <code>congress.gov</code> API.	0.001	0.000	0.001	0.000	0.002
Precision	Measures the average one-vs-rest precision across observed values, indicating how often human-coded values matched the corresponding <code>congress.gov</code> API values (i.e., minimizing false positive).	0.992	1.000	0.998	1.000	0.997
Recall	Measures the average one-vs-rest recall across observed values, indicating how completely human coders recovered the corresponding <code>congress.gov</code> API values (i.e., minimizing false negative).	1.000	1.000	0.998	1.000	0.998
F1 Score	Measures the average one-vs-rest harmonic mean of precision and recall, summarizing agreement between human coders and the <code>congress.gov</code> API.	0.998	1.000	0.999	1.000	0.999

External Validation

To assess the construct validity of our bipartisanship scores, we validate them against the Lugar Center's Bipartisan Index (22). The Lugar Center's index is among the most widely cited measures of bipartisanship in Congress, making it a natural benchmark against which to evaluate our scores. Because the Lugar Center publishes its scores as PDFs rather than in a machine-readable format, we manually collected the scores. Lugar Center scores are available for the Senate beginning with the 103rd Congress (1993–1995) and for the House beginning with the 113th Congress (2013–2015). We normalize these scores before comparison to place both measures on a common scale (0–1). Importantly, the Lugar Center excludes members who served fewer than 10 months in a given Congress as well as chamber leaders.

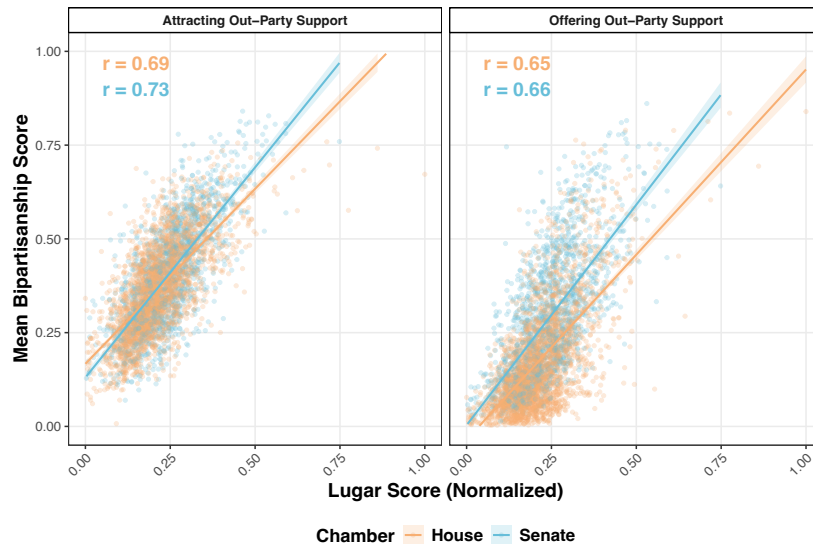
The Lugar Center's Bipartisan Index differs from our scores in four important ways: it has more limited time-series coverage, does not distinguish between attracting and offering out-party support, is not sensitive to cosponsorship timing, and does not weight scores by a member's overall sponsorship and cosponsorship activity within a congressional term. In contrast, our scores cover the 98th through 118th Congresses and provide two distinct measures of bipartisanship—*attract* and *offer*—based only on original out-party cosponsorship. Because the Lugar Center's Bipartisan Index is not calculated by policy issue area, we compare only our aggregate measures to their index. We expect our measures to be correlated with the Lugar Center's scores because both capture bipartisan behavior. However, given the measurement differences described above, we do not expect the correlations to be perfect. Table 5 reports the term-level correlations between the Lugar Center scores and our aggregate *attract* and *offer* measures.

Table 5. Correlation Between Offer and Attract Bipartisanship Scores and Lugar Score by Congress

Congress	Lugar & Attracting Out-Party Support	Lugar & Offering Out-Party Support
103	0.475	0.566
104	0.657	0.723
105	0.677	0.721
106	0.455	0.675
107	0.539	0.351
108	0.727	0.591
109	0.679	0.549
110	0.808	0.657
111	0.746	0.721
112	0.828	0.773
113	0.687	0.686
114	0.666	0.730
115	0.729	0.780
116	0.705	0.522
117	0.762	0.647
118	0.768	0.818

The average correlation across terms is 0.711 for attraction and 0.656 for offer. The highest correlation occurs between the Lugar scores and our attraction measure in the 112th Congress (0.828), while the lowest correlation occurs between the Lugar scores and our offer measure in the 107th Congress (0.351). Figure 2 plots the correlations between the Lugar scores and our attraction and offer measures separately by chamber. Our measures are slightly more highly correlated with the Lugar Center’s Senate scores, though the cross-chamber differences are modest. Collectively, these results suggest that our measures capture the same latent concept as the Lugar Center’s index, bipartisanship, while also reflecting meaningful differences in measurement strategy.

Figure 2. Correlation Between Offer and Attract Bipartisanship Measures and the Lugar Center Bipartisanship Measure by Chamber



Usage Notes

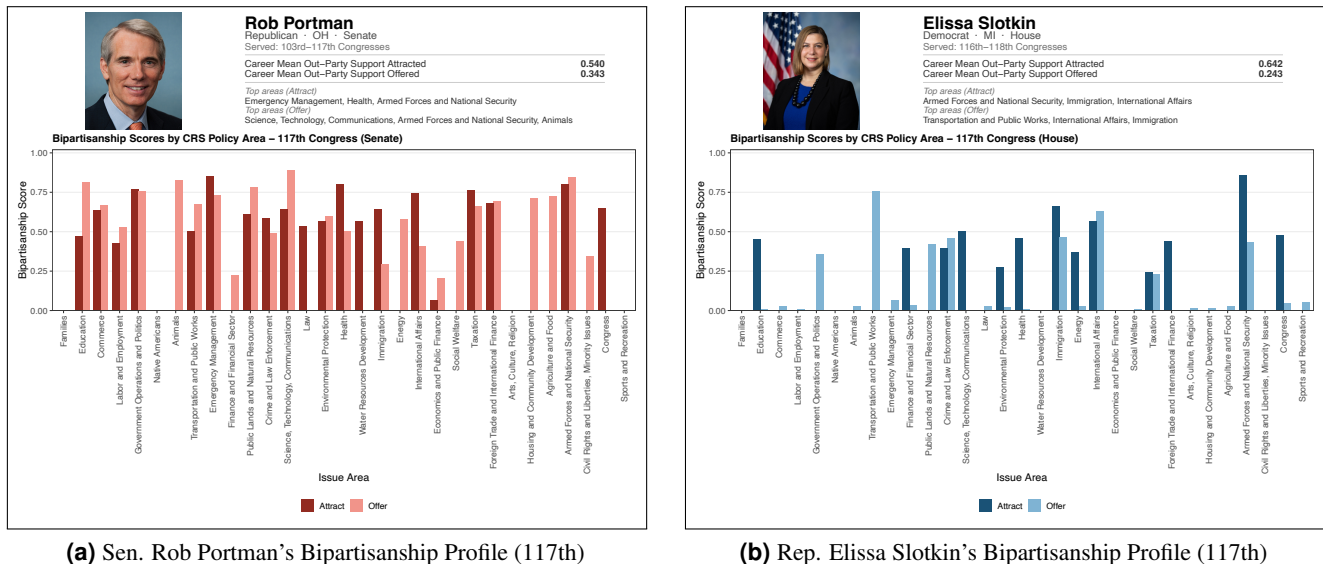
The unit of analysis in both the aggregate and policy issue area datasets is the legislator-term. We do not merge these datasets because users may prefer to use them independently. However, because both datasets share the same unit of analysis, users can merge them if desired. To facilitate merging the two datasets, as well as linking our data to other congressional covari-

ates, we include a crosswalk with several unique legislator identifiers: `bioguide`, `govtrack`, `THOMAS`, and `ICPSR`. We encourage users to rely primarily on `bioguide` and `govtrack` when possible. Other identifiers have important limitations. `ICPSR` excludes legislators who served only a partial term and non-voting delegates. The `THOMAS` identifier is available only for House members. We include all of these identifiers because few datasets aggregate them into a single crosswalk, and users may need to rely on a specific identifier depending on the structure of the data they are merging with ours.

To facilitate broad use among researchers, journalists, legislators, and the public, we host the data on both Harvard Dataverse and also through an R package, `biparty`. Scores will be updated in both locations at the end of each congressional term. The R package is designed for users who regularly work with large datasets. The package loads both datasets and includes functions that allow users to retrieve and compare member scores, analyze bipartisanship by legislator, issue area, state, term, and chamber, and merge the data with other relevant covariates. Individual member data can be accessed through several lookup functions: users can retrieve a single legislator’s attract and offer scores (`get_member_scores()`), return scores across all Congresses in which they served (`get_member_trend()`), produce side-by-side comparisons for a user-specified set of members (`compare_members()`), or retrieve scores for all members from a given state (`get_state_delegation()`). Aggregate summaries are available at the congressional level via `get_congress_summary()`, with optional breakdowns by party, chamber, and issue area.

Issue-area analyses are supported by functions that return all legislators’ scores for a given policy area in a specified Congress (`get_issue_scores()`), track how mean bipartisanship across the attract and offer dimensions has changed over time (`get_issue_trend()`), and enumerate all 34 CRS policy area labels with their corresponding full-length names as a crosswalk for use across package functions (`list_issues()`). The package also includes a suite of visualization tools: users can generate a violin plot of score distributions across issue areas (`plot_bipartisanship()`), render a time-series line chart for one or more members or parties (`plot_trend()`), and generate a member profile card combining a legislator photograph with career-level scores, top issue areas, and an issue-area bar chart for a specified Congress (`plot_member_profile()`). Figure 3 provides two example profile cards from the 117th Congress (2021 - 2023): Senator Rob Portman (R - OH) and Representative Elissa Slotkin (D - MI). The supplemental appendix includes additional guidance about downloading and using `biparty`.

Figure 3. Example Member Profile Cards from `biparty`



Data & Code Availability

The replication code used to scrape, clean, and construct the bipartisanship scores, along with the two datasets, is publicly available through Harvard Dataverse. The datasets are also available through the R package, `biparty`. The scraping, cleaning, and data transformation were performed using R (v4.5.1) (27) on a Mac Studio with an Apple M4 Max chip (14-core CPU: 10

performance and 4 efficiency cores) and 36 GB of memory, running macOS Tahoe 26.2 (aarch64-apple-darwin20). Issue area labels were scraped using Python (v3.12.11) (28) in the Spyder IDE (v6.1.2) (29).

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Author Contributions Statement

MRD and JML scraped the data, created the measures, validated the scores, developed the R package, and wrote the manuscript.

Competing Interest

This work was partially supported by the Portman Center for Policy Solutions at the University of Cincinnati. MRD and JML received compensation and research support for this work. The authors are responsible for the data collection, measurement decisions, validation, manuscript preparation, and decision to publish.

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Additional information

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References

1. Gutmann, A. & Thompson, D. F. *The Spirit of Compromise: Why Governing Demands it and Campaigning Undermines it* (Princeton University Press, 2014).
2. Mann, T. E. & Ornstein, N. J. *It's Even Worse Than It Looks: How the American Constitutional System Collided with the New Politics of Extremism* (Basic Books, New York, 2016).
3. Krehbiel, K. *Pivotal Politics: A Theory of US Lawmaking* (University of Chicago Press, 1998).
4. Tsebelis, G. *Veto Players: How Political Institutions Work* (Princeton University Press, 2002).
5. Maltzman, F. & Shipan, C. R. Continuity, change, and the evolution of law. *Am. J. Polit. Sci.* **52**, 252–267 (2008).
6. Volden, C. & Wiseman, A. E. *Legislative Effectiveness in the United States Congress: The Lawmakers* (Cambridge University Press, 2014).
7. Harbridge-Yong, L., Volden, C. & Wiseman, A. E. The bipartisan path to effective lawmaking. *The J. Polit.* **85**, 1048–1063 (2023).
8. Mayhew, D. R. *Divided We Govern* (Yale University New Haven, 1991).
9. Pierson, P. & Schickler, E. Partisan nation: The dangerous new logic of american politics in a nationalized era. In *Partisan Nation* (University of Chicago Press, 2024).
10. Theriault, S. M. *Party polarization in congress* (Cambridge University Press, 2008).
11. Lee, F. E. *Insecure majorities: Congress and the perpetual campaign* (University of Chicago Press, 2016).
12. Binder, S. The dysfunctional congress. *Annu. Rev. Polit. Sci.* **18**, 85–101 (2015).
13. Harbridge, L. *Is Bipartisanship Dead?: Policy Agreement and Agenda-setting in the House of Representatives* (Cambridge University Press, 2015).
14. Curry, J. M. & Lee, F. E. *The Limits of Party: Congress and Lawmaking in a Polarized Era* (University of Chicago Press, 2020).
15. Dobson, M. R., Volden, C. & Wiseman, A. E. Bipartisan campaigners become bipartisan legislators and effective lawmakers (2026). Center for Effective Lawmaking Working Paper Series.
16. Dobson, M. R. Selective reciprocity in bipartisan collaboration: How majority security shapes legislative success. *State Polit. & Policy Q.* 1–26 (2026).
17. Anderson, S. E., Butler, D. M. & Harbridge-Yong, L. *Rejecting Compromise: Legislators' Fear of Primary Voters* (Cambridge University Press, 2020).
18. Porter, R., Harden, J. J. & Dobson, M. R. Electing amateur politicians reduces cross-party collaboration. *Proc. Natl. Acad. Sci.* **122**, e2519787122 (2025).
19. Ryan, J. M. Bicameralism and minority-party influence on legislative development: Evidence from house standing committee votes. *Legislative Stud. Q.* **45**, 365–396 (2020).
20. Ballard, A. M. O. & Curry, J. M. Minority party capacity in congress. *Am. Polit. Sci. Rev.* **115**, 1388–1405 (2021).
21. Fowler, J. H. Connecting the congress: A study of cosponsorship networks. *Polit. Analysis* **14**, 456–487 (2006).
22. The Lugar Center & McCourt School of Public Policy. Bipartisan index. <https://www.thelugarcenter.org/ourwork-Bipartisan-Index.html> (2024).
23. Curry, J. M. & Roberts, J. M. Interpersonal relationships, bipartisanship, and january 6th. *Am. Polit. Sci. Rev.* **119**, 1542–1548 (2025).
24. Park, J. H. & Shin, S. Bayesian methods in political science. *Res. Methods Polit. Sci. Int. Relations*, eds Curini, Luigi Robert Franzese. Sage 895–909 (2020).

25. Efron, B. & Morris, C. Data analysis using stein's estimator and its generalizations. *J. Am. Stat. Assoc.* **70**, 311–319 (1975).
26. Brown, L. D. In-season prediction of batting averages: A field test of empirical bayes and bayes methodologies. (2008).
27. R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria (2025).
28. Python Software Foundation. Python (2025).
29. Spyder Project Contributors. Spyder: The scientific python development environment (2025).