

Expertise Acquisition in Congress

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Abstract

According to many, the U.S. Congress desperately needs reform because its capacity to govern has declined. Congressional capacity cannot be understood without examining how the expertise available to members is fostered or discouraged. We present a theory of expertise acquisition and apply it to the problem of overseeing the Executive. We use this theory to organize a dataset of congressional staff employment merged with new records of invitations, applications, and attendance at training sessions produced by three non-profit organizations in Washington. We find staffers are more likely to acquire expertise when their jobs are more secure and there are more opportunities to use their expertise in careers outside of Congress—most notably, when their party takes control of the presidency. Our analysis suggests that oversight expertise is generally not valuable outside of Congress, which implies that staffers will not acquire it without subsidies from Congress.

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Dissatisfaction with Congress is a national pastime. Approval of the institution rarely commands a significant minority of the public, and occasionally touches single digits.¹ Journalists report a regular stream of anecdotes highlighting partisan combat, legislative inertia, or outright incompetence.² The consensus diagnosis among recent scholarship is that there has been a dramatic decline in the Congress' capacity to govern, best summarized on the first page of a recent volume from LaPira, Drutman and Kosar (2020a): "Congress is overwhelmed [...] it has allowed its own capacity to atrophy [...] the Congress of today is grossly underperforming."

Congress requires expertise to perform well. Because of the incredibly breadth and complexity of problems that Congress must solve and the intense demands on members' time, most of that expertise resides in congressional staff. According to recent scholarship, one root of Congress's underachievement is the thousands of the staff who support congressional functions, but who are young, inexperienced, underpaid, and unrepresentative of the nation as a whole (e.g., McCrain 2018; Furnas et al. 2020; Crosson et al. 2021; Ritchie and You 2021). Calls for internal reform have followed, the most visible of which come from the Select Committee on the Modernization of Congress.

But spending taxpayer dollars on Congress' internal functions is unpopular, and may even conflict with the political interests of party leaders. This means most efforts to increase congressional capacity are designed and executed by non-profit organizations. The same organizations who advocate rules changes and legislation to build Congress' capacity also attempt to fill perceived gaps by providing seminars, training, and other services. Almost nothing is known about how these efforts work, whether they are effective, and what prospects this decentralized, private-side remedy has for addressing Congress' contemporary weaknesses.

We provide a theoretical framework for thinking about these questions, and leverage new data on staff training to evaluate it. Expertise development among unelected personnel has been central to understanding presidential and executive politics (Gailmard and Patty 2007; Callander 2008; Gailmard and Patty 2013), but is largely absent from the analogous legislative context. Following models in labor economics, we view expertise as a form of human capital that makes staffers more productive, and therefore more valuable to members of Congress. However, becoming an expert takes hard work. The

¹About 9% approved of the job Congress was doing in a Gallup survey from November 7-10, 2013. <https://news.gallup.com/poll/1600/congress-public.aspx>

²See, for example, Karni (2022), who describes an effort by one party to prevent a bill for renaming a courthouse, in which some voting in favor professed ignorance about what they were voting on.

key question, then, is: under what conditions will staffers be willing to put in the hard work necessary to become experts? That depends on the kind of human capital. Is expertise *firm-specific* human capital that makes congressional staffers better at their job, but does less to make them better at jobs outside of Congress, or is it a *general* human capital that makes congressional staffers more productive in many jobs outside of Congress? The answer determines whether staffers will happily acquire expertise on their own, without any prodding from their members.³

Thus, to understand the causes of low congressional capacity and to design effective interventions to improve it, we must first identify whether expertise is firm-specific or general. If it is firm-specific, then the shortage of expertise in Congress stems from members' unwillingness to pay their staffers to acquire it, and reformers should focus on making it cheaper and more rewarding for members to train their staffs. If it is general, then the shortage stems either from staffers' inability to pay for training or Congress's inability to compensate experts enough to convince them to stay, and reformers should focus on making it cheaper for staffers to get training and helping legislators retain their experts.

We take up this question by studying staffers' decisions to acquire one particular kind of expertise: knowledge about how to conduct effective oversight of the Executive Branch. Since staff perform numerous functions, this is not the only form of expertise. But it is a crucially important one that attracts substantial attention.⁴ Most notably, as legislative productivity has declined, congressional oversight becomes a more substantial proportion of Congress' workload. In addition, as we describe later, this examining this kind of expertise allows us to evaluate additional implications of our theory.

We leverage new data, combining records of staff employment with applications and attendance at training and seminars from 2011 and 2021. These bipartisan, voluntary events are meant to build capacity by teaching staff practical skills in overseeing the executive branch. They are funded and organized by the Project on Government Oversight (POGO), the Levin Center, and the Lugar Center, and taught by current and former congressional staffers with decades of experience. There is no formal training required of congressional staff. Research on congressional capacity typically studies staff tenure, turnover, and pay. To our knowledge, this is the first attempt to observe and analyze skill acquisition within-career.

³Throughout, by "firm-specific," we mean specific to Congress as a whole. We expect that most forms of human capital are transferable across congressional offices.

⁴In our view, some expertise in Congress is firm-specific while others are general. But it is important to establish which one better describes expertise in oversight, and our study of it provides a blueprint for studying other forms of expertise.

As a preliminary, we establish that the departure of a member from Congress induces significant career uncertainty for their staff. In offices where the member wins reelection, 68% of the staff still work in Congress by the end of the year after the election. In offices where the member loses or retires, only 30% still work in Congress by the end of the next year. We exploit this variation in career prospects to test whether oversight is firm-specific or general. If it is firm-specific, the potential departure of legislators ought to make their staffs less likely to attend training, because it has a good chance of becoming irrelevant to their work. If it is general, the prospect of members' departure ought to make their staffs more likely to attend training, because it will help them get better jobs after their bosses leave.

This data provides consistent evidence that oversight expertise is firm-specific human capital. Staffers are far less likely to attend training or seminars during their member's final term in office. We present a more sophisticated design later, but a rough calculation highlights the magnitude of the difference: offices where the member will stay in office into the next congress send 36% more staffers to oversight training than offices where the member is in his or her final term. Training sessions scheduled for times when it is inexpensive for members to release staffers for training—when the chamber is on break—attract more attendees, at least from the perpetually busy House. Staffers who receive training stay in the institution substantially longer than those who do not, which is consistent with the notion that the training increases their value to Congress more than it does to prospective employers outside of Congress. Finally, we find that in circumstances where expertise is more general, staffers are less sensitive to career uncertainty. That is, when a staffer's party controls the presidency—and therefore offers attractive executive branch positions that value oversight expertise—the effect of career uncertainty on expertise acquisition is diminished.

Our findings have important implications, both for the study and development of capacity in Congress. If expertise were general, non-profit organizations could improve congressional capacity by appealing directly to staffers. Our analysis, however, suggests that this is not the case for oversight. Many staffers will hesitate to put in the hard work to become experts in oversight, because they will not be the ones who benefit. Their members will, so legislators must absorb the costs their staffers incur to become experts. This implies that those who want to enhance congressional capacity must either focus on increasing the value of oversight expertise to legislators or find ways to make it more general so that staffers become more likely to pursue it on their own. More generally, these insights point the scientific value of examining the work of organizations building congressional capacity. By

partnering with these organizations and conducting independent evaluations, our study may serve as a model for future research designed to shed light on congressional capacity.

Congressional Capacity and Expertise

LaPira, Drutman and Kosar (2020*b*) define “congressional capacity” as the “organizational resources, knowledge, expertise, time, space, and technology that are necessary for Congress to perform its Constitutional role.” This definition is simple and intuitive but also makes clear that congressional capacity is complicated, multi-dimensional, and difficult to measure. Scholars have worked to identify the nature of congressional capacity and the factors that affect it. To that end, a long line of research has noted that Congressional offices are complicated enterprises and have the difficult task of making policy on a huge range of subjects, building on foundational work by Salisbury and Shepsle (1981). Additionally, the capacity of a congressional office is subject to many different competing interests, influences, and constraints (Hall and Deardorff 2006; Lee 2016; LaPira, Drutman and Kosar 2020*a*; Hirsch et al. 2021). For instance, offices must balance policy and re-election concerns and supplement their constrained capacity with support from interest groups or lobbyists, which has potentially troubling implications.

In practice, much of the work on Congressional capacity has focused on the role of Congressional staffers and the amount of funding they are allocated. This is for good reason, as staffers are a critical aspect of Congressional capacity, having important roles creating and passing policy, providing information, and influencing the behavior of legislators (DeGregorio 1994; Fox and Hammond 1977; Malbin 1980; Montgomery and Nyhan 2017). The network of Congressional staffers, their experience, and the resources they are allocated affect the productivity of the institution (McCrain 2018; Howard and Owens 2021; Burgat 2020).

Recent work has specifically focused on the decline of Congressional capacity by investigating trends related to funding and personnel in legislator’s offices, committees, and non-partisan Congressional agencies. Patterns are similar across all three areas of employment. Since the 1990’s, funding levels for personal offices have remained fairly stagnant and member salaries have decreased, despite increasing workloads and responsibilities (Reynolds 2020; CQ Magazine 2017; Petersen and Caucosow 2016). The relative amount of money allocated for substantive legislative and key administrative staff has declined, with legislators instead prioritizing communications and media staff (Crosson et al. 2021; Lee 2016). Similarly, the relative salaries for important committee staffer positions and overall num-

ber of staffers for committees have decreased since the 1980's (Mills and Selin 2017; Drutman and Teles 2015; Jensen 2011). Non-partisan agencies which offer expert information to legislators like the Congressional Budget Office, the Government Accountability Office, and the Congressional Research Service have all been subjected to budget reductions and declines in numbers of personnel to varying degrees (Reynolds 2020; Fagan and McGee 2022). In short, much of the recent literature about Congressional capacity has focused on studying the empirical trends of "correlates of capacity," like the number of experienced, substantive, or policy-focused staffers, along with their salaries (Reynolds 2020).

Despite the large empirical focus on experience and pay, most research does see congressional capacity as a function of the expertise of members, staff, and support organizations (e.g., Clarke 2020). Lewallen, Theriault and Jones (2016), for example, argue that staff expertise (especially as manifested in committees) is critical to explaining the decline in problem solving. Fagan and McGee (2022) show that members of Congress value and utilize expert information from organizations like the Congressional Research Service in order to address salient problems in their constituencies. LaPira, Drutman and Kosar (2020a) see "the level of specialized knowledge and the ability of Congress to tackle complex problems" as the critical resource that contributes to Congress' ability to be representative, responsive, deliberative, and to serve as a watchdog on the executive branch (19). Not surprisingly, there is also evidence that this kind of expertise matters for policymaking outputs. In addition to their work demonstrating correlations between experience and legislative productivity for members (see Volden and Wiseman 2014), Crosson et al. (2020) find staff tenure may be one underlying explanation. Most pertinent for our purposes, their findings highlight the importance of the quality, not the quantity, of staff—again, suggesting expertise as an underlying mechanism for capacity.

But, to date, studies of the development of expertise have mostly concentrated on executives. Gailmard and Patty (2007, 2013) who demonstrate that job protections are essential for encouraging expert policymaking. This suggests, more broadly, that public administration might be supplied with "zealots," or those most interested in exercising discretion over policy. Andersen and Moynihan (2016) find evidence in favor of this perspective in a field experiment conducted on Danish school principals, while Richardson (2019) finds complementary evidence in a survey of federal bureaucrats. Specifically, administrators who think their discretion is constrained were more likely to report intentions to leave government and forgo training opportunities.

Despite the focus on different institutions, this research has apparent implications for congressional

reform. Each adopts a principal-agent framework applicable to staff hired by members of Congress. But there are also notable differences. Most obviously, congressional staff serve at the pleasure of their member, and even staff in good standing might lose their job after the next election cycle. The disparity in both compensation and lifestyle between working in Congress and outside options is stark—likely even greater than the disparity between executive offices and private employers. In light of these stylized facts, the appropriate question might be why congressional staffers develop expertise at all. A naive application of models developed for the executive branch might indicate that, given the lack of informational and distributive benefits, amateurism and labor-force churn will be the norm. This is a starting point, then, both for those interested in reform and further investigation.

What Motivates Expertise Acquisition

We follow labor economists in defining expertise as a form of human capital—that is, as an attribute that makes a worker more valuable to their employer. Expertise includes the ability to craft more appealing policy proposals, which is how formal theorists have traditionally modeled expertise (Gilligan and Krehbiel 1987; Hirsch and Shotts 2012), but it also encompasses a broader set of attributes that could help the staffer’s member of Congress, such as the ability to extract valuable information from the executive branch, skill in attracting favorable attention from the media, and an extensive professional network that can be leveraged to advance the member’s interests.

However, staffers must incur costs to acquire expertise. The more time they spend researching policy, acquiring skills, and making professional connections, the less time they have left to complete their short-term work, spend time with family and friends, pursue their hobbies, perform household labor, and earn outside income.

Given the costs, there are two reasons why a staffer might nevertheless acquire expertise. First, the expertise might allow them to demand better compensation. Money is one kind of compensation that staffers might value, but they could also be compensated greater influence over policy, just like the bureaucrats in Gailmard and Patty (2013), greater access to their member, more flexibility in their work hours, or more interesting responsibilities. If the long-run value of that extra compensation exceeds the short-term cost of the training, the staffer will attend the training and bear the cost on their own. Second, their employer might cover the cost of the training directly, perhaps by scheduling it during work hours in lieu of the staffer’s regular responsibilities or perhaps by giving the staffer a one-time,

up-front bonus for the training. This shifts the cost of the training from the staffer to their employer.

Under what conditions does the staffer bear the cost of acquiring expertise, and under what conditions does their employer cover the cost? Becker (1962) shows that it depends on how the human capital affects the staffer's outside options. If the training makes her more attractive to many prospective employers, then her current employer must increase her compensation to prevent her from leaving. Since the training will increase her compensation over the long run (either in the form of a raise from her current employer or access to a better job with a different employer), the staffer will incur the cost of the training on her own without any further inducements from her employer. Becker calls this general human capital, because it generalizes to many prospective employers.

If expertise makes the staffer more valuable to her current employer but not to anyone else, then her employer doesn't need to compensate her more to prevent her from leaving and can expropriate all of the productivity gains associated with her expertise. This deters the staffer from acquiring expertise in the first place, so the employer must cover the costs of the training. Becker calls this firm-specific human capital, because its value is specific to the a particular firm (in this case, Congress). Typing proficiency is general, because it makes the staffer more valuable to virtually every firm, while knowledge of congressional ethics rules is firm-specific and may not be particularly valuable to other employers. Many kinds of human capital do not adhere neatly to one pole or the other; they are more valuable to the worker's current employer, but they are at least a little valuable to some other employers. Nevertheless, as a general principle, the more outside firms value a particular kind of human capital, the more workers themselves will bear the cost of acquiring it.⁵

Which expertise is more general, and which is specific to Congress? Besides its intrinsic scientific value, the answer to this question has important practical implications for reformers. When it is general, then interventions that appeal to the members will not work well. Even if the members appreciate the benefits of having experts on staff, they will correctly anticipate that they must compensate those

⁵This is a deliberate simplification of the logic of human capital acquisition that provides the necessary intuition for the empirical tests. A more complete argument yields similar substantive conclusions. As Becker (1962) and Hashimoto (1981) show, if there is some probability the worker will quit and this probability of quitting is decreasing in wages (perhaps due to an exogenous shock to her productivity in other industries), the worker and employer share the cost of specific human capital. The firm offers a slightly higher wage to ensure its valuable worker does not suddenly quit, which entices the worker to bear some of the cost of training. However, if the worker gets laid off, the training will be worthless, so the firm must still bear some of the cost. The proportion the firm bears is increasing in the probability of a layoff and decreasing in the probability the worker quits.

experts more generously to keep them from leaving. The cost of that extra compensation counterbalances the gains from expertise. On the other hand, the more firm-specific expertise is, the less effective interventions that target staffers will be. They will correctly anticipate that their employers will appropriate much of the productivity gains from additional expertise, which reduces their willingness to incur costs for the training.

To address this question, we exploit the fact that the effect of career uncertainty on expertise acquisition depends on whether expertise is general or firm-specific human capital. The more likely a staffer is to lose their job in the near future, the more likely they are to acquire general human capital, because general human capital makes them more likely to get an attractive job if they must enter the labor market. The more likely a staffer is to lose their job in the near future, the less likely they are to acquire firm-specific human capital (Hashimoto 1981). From the staffer's perspective, there is a good chance they will have to leave congressional employment whether they want to or not, and their firm-specific human capital will not help them if they have to find a job outside of Congress. This makes them less inclined to incur costs to become experts than they would otherwise be. From their employer's perspective, the firm will have little time to reap productivity gains from the firm-specific human capital, which makes it less willing to pay the worker to acquire that human capital in the first place. Therefore, if expertise is general, then career uncertainty ought to be positively associated with the acquisition of expertise, and if it is specific, then it ought to be negatively associated with the acquisition of expertise.

However, the labor market changes over time, and expertise may move from firm-specific to general as job opportunities come and go. As more job opportunities that leverage expertise arise outside of Congress, it becomes more general, and staffers' decisions about whether to acquire expertise will become less sensitive to career uncertainty.

Furthermore, if expertise is firm-specific, then staffers will not acquire it unless their employer defrays some of the cost. The employer will be more inclined to bear that cost when they reap greater rewards from having experts on their staffs and the cost the employer incurs to release the worker for training is low. However, if expertise is general, then staffers will bear the entire cost of the training and pursue it on their own time. They may be more willing to bear that cost when the value of the expertise to their current employer is high, but the employer would incur to release the worker for training will be irrelevant.

Finally, staffers who acquire firm-specific human capital will tend to stay in Congress longer than

staffers who do not (Parsons 1972). Since they are more productive, their members will be less likely to lay them off. If, for some reason exogenous to their training, they do get an attractive outside offer, their employers will also be willing to pay more to retain them. Staffers who acquire general human capital, on the other hand, are less likely to stay in Congress, because it gives them more attractive outside options. At best, Congress will match those outside options; otherwise, they will leave Congress. Accordingly, if expertise is specific, acquiring it decreases staffers' attrition, and if it is general, acquiring it increases staffers' attrition.

Alternative Implications for Congress:

- (1) **General Expertise.** *Career uncertainty increases the likelihood congressional staff acquire expertise, and the effect of career uncertainty strengthens as there are more jobs outside of Congress that use expertise. Staff are neither more nor less likely to attend training as the cost their employer would incur to send them decreases. Staff who acquire expertise leave congressional employment at a higher rate.*

 - (2) **Firm-Specific Expertise.** *Career uncertainty decreases the likelihood congressional staff acquire expertise, and the effect of career uncertainty attenuates as there are more jobs outside of Congress that use expertise. Staff are more likely to acquire expertise as the cost their employer incurs to send them to training decreases. Staff who acquire expertise stay leave congressional employment at a lower rate.*
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Members of Congress and their staff perform numerous tasks that require different kinds of expertise.⁶ Writing bills requires policy expertise, but meeting with constituents requires strong interpersonal skills. Our theory and research design generalize to any form of expertise, but, for our empirical tests, we focus on one particular kind of expertise: knowledge of how to conduct oversight of the executive branch.

First and foremost, whether this kind of expertise is a form of general or firm-specific human capital is up for debate. Oversight expertise might be relevant only for Congress itself, interest groups that

⁶Some research in labor economics argues that human capital is task-specific, and that human capital is general insofar as many organizations demand workers who can perform that task (Lazaer 2009). This distinction has been useful for understanding the division of tasks into distinct jobs and promotion dynamics within firms (Gibbons and Waldman 2004), but for our application it would produce similar predictions as the older, simpler distinction between general and firm-specific human capital.

play an auxiliary role in oversight as government watchdogs, investigative journalism, and the executive branch. Perhaps the non-congressional demanders of oversight expertise are numerous enough to form a strong outside option for well-trained congressional staffers, or perhaps they are so few as to be negligible. Even if they are too few to matter, expertise in oversight might also provide a foundation that readily generalizes to private sector jobs in law and auditing.

Second, there is an extensive literature on congressional oversight that demonstrates partisan patterns in oversight, which provide measurement leverage we later use to examine our theory. With few exceptions, study after study demonstrates that divided government leads to more and more vigorous public oversight (e.g., Kriner and Schwartz 2008; McGrath 2013; Kriner and Schickler 2014).⁷ When the opposition controls the presidency, there is greater demand for oversight. In contrast, when staff share a political affiliation with the presidency, they may have opportunities to leave Congress to work in the Executive branch. We discuss the potential implications for whether this expertise is general and firm-specific in a subsequent section.

Data and Approach

We acquired original data from non-profit organizations that provide remarkably fine-grained measurement of offices' investments in oversight expertise. Our outcome measures are application and attendance records of two types of training events which took place in 2011-2021. The first events are monthly seminars that typically last 1-1.5 hours. Each features a different lecturer who typically speaks while lunch is served, and then answers questions. They are similar in format and time-commitment to research seminar presentations in higher education, but the material is more practically oriented. Example seminar topics include "Working with Whistleblowers" (June 2017), "How to Hold an Oversight Hearing" (March 2018), and "How To Write a Request Letter" (April 2021). Overall attendance at each seminar is fairly wide-ranging, from a few dozen to over one-hundred. Role is taken, but attendance is not capped.

The second events are biannual bootcamps that typically amount to twelve hours over a two-day period. These bootcamps are accurately described by organizers as "an intensive two-day, bipartisan

⁷The notable exceptions are Kriner and Schickler (2014), who find no such difference in the Senate. Lowande and Peck (2017) also find no difference in the Senate prior to the popular election of Senators, and Lowande (2018) finds no difference for private, informal oversight.

training on Capitol Hill for Congressional staff on the art and practice of oversight and investigations.” The curriculum for these events consists of hundreds of pages of information on conducting investigations, planning hearings, constructing witness lists, interviewing witnesses, along with writing questions, press releases, and committee reports. Their pedagogical approach involves a mixture of lecturing, open discussion, group projects, and role-playing. Attendance at bootcamps is typically capped to maintain the benefits of a smaller cohort. This means attendance ranged between 18 and 32, while applications might be over 100.

For this reason, we expect bootcamp applications to be the best indicator of interest in training, with attendance at seminars second. Our basic justification is the difference in time commitment. In addition, attendance at the events themselves is likely to be complicated by considerations less relevant to expertise acquisition. In the records we obtained, there were at least two documented cases of staffers applying but being prevented from attending by their Chief of Staff. The organizers work hard to maintain a reputation for bipartisanship. Of POGO, the Levin Center, and the Lugar Center, the latter two are legacy projects from members of both parties. However, it is possible that bipartisanship may be less appealing for some staff leadership. Note also that all events are free and voluntary. By chamber rules, staff cannot be given any form of compensation for the training. Even the food and drink provided at these events must be sufficiently sparse to avoid being deemed a gift “meal.”⁸ For this reason, we do not expect participation to be driven by considerations that are unrelated to the desire to learn about oversight.

Another important question is whether the events suggest whether oversight expertise is general or firm-specific. The answer, in brief, is that there are indications of both. Each event might involve networking benefits. Attendees at the bootcamps, for example, are placed in small, bipartisan groups of other staff they have never met, and who may even work in a different chamber. At a bootcamp one author attended, these small groups exchanged business cards. In addition, the instructors occasionally include people who have been the *target* of oversight, and many participants have law degrees. This might make the training valuable for employers who specialize in defending targets of congressional inquiry.⁹ This suggests the benefits of the training are somewhat general, in that they may increase connections to others and make staffers more valuable to outside employers.

⁸See, for example, House Rule XXV, Clause 5.

⁹Some law firms have designated lawyers that defend congressional inquiry targets (e.g., K&L Gates, Kirkland & Ellis LLP, WilmerHale, Venable LLP, and Squire Patton Boggs).

On the other hand, the course materials and content also point to “institutional” (i.e., firm-specific) knowledge. Course evaluations taken by participants are overwhelmingly positive, and glow with comments about the value of the training and the knowledge of the instructors. They almost exclusively mention the practical advice regarding oversight, and almost never mention the people they met. For one bootcamp, we surveyed the participants before and after, along with another sample of untrained staff who had expressed interest in the training. We found some evidence that the training increased their knowledge of basic oversight procedures. We describe this evidence in more detail in Appendix B of the Supporting Information (SI). This amounted to getting a few additional questions correct on a brief quiz. The effectiveness of the training is a separate question outside the scope of the present study, however, we take this as evidence that the training events are meant to develop expertise valuable *within Congress*.

We supplement this data with employment records for the population of Congressional staffers over the same period. Both the Senate and House of Representatives are required to regularly publish reports with detailed, time-stamped, itemized lists of expenditures by 2 U.S.C. 104(a).¹⁰ Critically, these reports include all payments to employees made by Congressional offices, allowing us to construct detailed employment records for staffers.

We built a data set containing the names of staffers, the offices for which they worked and the dates for which they worked there, and the amounts they were paid, formatted cleanly and complete with universal office, legislator, and staffer identifiers from 2011 to 2022. Constructing this data set involved considerable challenges. Most importantly, names of staffers and offices are not standardized or consistent, so there are no ways to universally identify employees or employers over time. The frequency and format of time stamps are also different across chambers. Additionally, while ProPublica generously shares partially cleaned and machine-readable versions of these records for the House of Representatives, Senate expenditure data is only publicly available in the form of PDF files.¹¹

We developed a series of algorithms and procedures to solve these problems. First, we developed an automated method of consistently parsing and formatting Senate expenditure reports. Then, after cleaning and standardizing staffer and office names, we apply a series of aggregation procedures to assign unique identifiers to staffers and offices, allowing us to reconstruct the full employment and

¹⁰See <https://www.house.gov/the-house-explained/open-government/statement-of-disbursements/frequently-asked-questions> and https://www.senate.gov/legislative/common/generic/report_secсен.htm

¹¹<https://projects.propublica.org/represent/expenditures>

payment history of individuals working in Congress over the available period and easily merge our data with other standard data sets related to legislators, like the committee leadership data discussed in Stewart and Woon (2011). These procedures were based on a variety of string matching and string similarity measures, as well as substantive information like the frequency of names found throughout the data set. We detail our approach in Appendix A.

Similar data sets have historically been available through services like *LegiStorm*. However, our approach offers a few distinct advantages. First and foremost, our data is largely constructed using automated scripts and procedures. This means that our cleaning and aggregation procedures are transparent, reproducible, and easily modifiable. Our method gives researchers the ability to modify various aspects of the cleaning and aggregation procedures to suit their needs. While manual interventions and procedures were required to construct the data, the vast majority of processes are automated. This also facilitates future updates to the data, making it relatively easy to integrate new data as it is released.

Most importantly, our data is free and publicly available. Our data lacks some of the additional variables available from vendors, like staffer background information, contact details, and other information from LinkedIn. However, much of the research in political science has focused on studying the relationships between staffer employment histories and compensation and legislative behavior and organization. We believe that for many such applications, our data is a valuable, easy-to-use resource for future research, which we see as an additional contribution of this study.

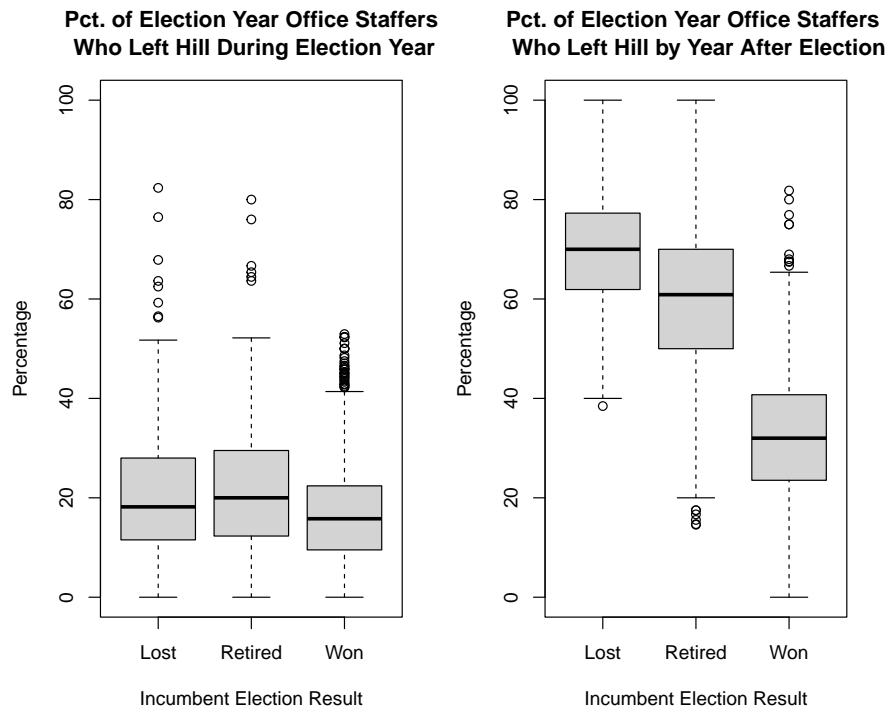
Findings

To investigate alternative implications of expertise type, we conduct four sets of analyses. We examine the effect of member departure on staff turnover, the effect of career uncertainty on expertise acquisition, conditional on party control of the presidency, and finally, the effect of expertise seeking on career longevity.

Member's Turnover and Staffer's Career Uncertainty

We first develop and justify a way of measuring variation in job security among congressional staffers. We focus on one important and readily observable determinant of the staffer's job security: whether the member they work for stays in office. When a staffer's member leaves office, the staffer has to find

Figure 1 – Descriptive evidence that elections introduce career uncertainty. Plots turnover rates across different electoral outcomes. For every Congressional election from 2010 to 2018, we identified the set of staffers employed by each member’s office during the year of the election using Congressional pay records. Then, we identify the last year each of these staffers was employed anywhere in Congress. For each incumbent-election level set of employees, we calculate the cumulative percentage of staffers who left Congress by the end of the year of the election and the year after the election and examine how this varies across different electoral results.



a new job. They might be able to find a job elsewhere in Congress, but there is no guarantee.

In fact, Figure 1 shows that staffers working for legislators who lost re-election or retire leave Congress at higher rates than staffers working for legislators who stay in office. It is not that staffers who worked for continuing members had less satisfying jobs and were therefore less inclined to leave Congress. Legislators who won, lost, or retired experienced similar levels of staff retention during the election year: the median office in each group retained 84.2%, 81.8% and 80.0% of their staff, respectively. Instead, staffers were often unable to find new employment in Congress after their members left office. For the median office of a successfully re-elected legislator, 68.0% of election year staffers were still working in Congress by the end of the year after the election. In contrast, staffers who worked for losing and retiring legislators were less successful. Just 30.0% of election year staffers who worked for defeated legislators and 39.1% of election year staffers for legislators who retired were still working in Congress by the end of the year after the election.

While this descriptive analysis shows a relationship between the careers of elected members and their staffers, we adopt a widely utilized regression discontinuity design (RDD) based on the results of close elections to show that member turnover actually causes staff turnover (Lee 2008; Butler 2009; Eggers and Hainmueller 2009; Gerber and Hopkins 2011). Although these results are limited to the context of close elections, later analyses rely on having established a causal connection between the fate of legislators and staff turnover. To that end, these RDD specifications represent a conservative estimate of such effects. Staffers working for members who retire or are unlikely to win re-election will generally know this information well in advance of the general election. This enables staffers to secure jobs outside of Congress and thus raise turnover rates via mechanisms in addition to the actual election loss itself.

We specify two regression discontinuity models utilizing narrowly decided election results from the 2014, 2016, and 2018 elections. We focus on the offices of incumbents who received between 45% and 55% of votes cast for the top 2 vote receiving candidates in their respective elections. Both analyses are at the staffer level. One model is designed to test for anticipation effects in close elections and uses an indicator for whether or not staffers left Congress in the year of the election as the outcome variable. The other model uses an indicator for whether or not staffers left Congress the year **after** the election. The analysis is performed at the staffer level. The outcome is 1 if the staffer left Congress by the end of the relevant year and 0 if they did not. We use a binary treatment variable indicated whether the staffer worked for a legislator who lost their reelection campaign.

To adjust for the possibility that some offices always have higher turnover than others, we control the relevant office's turnover rate two years before the election. Some literature suggests that a staffer's gender influences their opportunities and role in the Congressional workforce (Ritchie and You 2021). Gender may also play a role in an staffer's decision and/or ability to leave Congress. Congressional staffers face difficult working conditions with long hours and low pay. Women are generally expected to bear the primary load of familial, childcare, and household responsibilities and are less likely to have certain political or career ambitions as a result (Lawless and Fox 2010; Ritchie and You 2021). Accordingly, we include the gender of staffers in our models. We also account for the party affiliation of staffers.

Key results are shown in Table 1. Our results suggests that, in close elections, there are minimal anticipation effects by staffers. Staffers working for a member who ultimately lost re-election do not leave Congress during election years at statistically significantly higher rates than those that do not.

Critically, however, find that member turnover causes staffer turnover. Specifically, staffers working for members involved in narrow election losses have about 56% higher odds of leaving Congress the following year, relative to staffers who work for successfully re-elected members. This stylized fact alone, in our view, justifies using elections as a proxy for career uncertainty, as we do in the next section to assess our theory.

Table 1 – Member turnover results in staff turnover, with no evidence of anticipation effects. Reports coefficients from a regression discontinuity design predicting the likelihood staff left during or after the election. Forcing variable window is 45-55% voteshare.

	<i>Dependent variable:</i>	
	Leaves in election year (1)	Leaves year after election (2)
Member lost re-election	0.136 (0.194)	0.444** (0.192)
Lagged Turnover	2.135*** (0.442)	0.770* (0.445)
Republican	0.234** (0.094)	-0.319*** (0.085)
Male	0.081 (0.080)	-0.002 (0.076)
Election Year FE	✓	✓
Observations	4,566	3,855

Note:

*p<0.1; **p<0.05; ***p<0.01

Career Uncertainty and Training

Since member turnover makes that member’s staffers less likely to stay in the congressional workforce, we can use it to test whether expertise is a general or firm-specific form of human capital. If expertise is firm-specific, then member turnover decreases the staffer’s incentive to attend training and the member’s incentive to bear the cost of the training. Oversight expertise would only be useful to the staffer for as long as they work in Congress; the shorter their expected tenure, the less their incentive to acquire the expertise. Additionally, the staffer’s member would not have much time left to enjoy the benefits of having this expert staffer, so they would not be willing to suffer much inconvenience for the staffer to attend the training.

To test for this possibility, we analyze attendance at bootcamps and seminars. The unit of analysis is a legislator-training session dyad. The outcome is how many staffers that legislator’s office sent to that

particular seminar or bootcamp. We regress this outcome on whether that particular training session took place during the legislator’s final term in office, and we include legislator and training session fixed effects. The legislator fixed effects make the analysis a within-legislator comparison. Holding the number of staffers a member sends to trainings over the span of the data constant, do fewer staffers attend trainings held during that member’s last term in office? The training fixed effects account for the fact that bootcamps have fewer attendees than seminars, that the popularity of the program may fluctuate over time, and that some sessions might be held at more convenient times of the year than others. We cluster standard errors at the legislator level.

This analysis assumes that staffers anticipate that their member might leave office at the end of the term. There are many reasons a member might leave office, such as electoral defeat, poor health, electoral ambition, or dissatisfaction with the job. Because these contingencies affect whether the staffer needs to look for other work, staffers have strong incentives to figure out if their member faces a threatening primary or a difficult general election, suffers from health issues, or otherwise does not wish to remain in office. Their environment puts them in a reasonable position to find the answers to these questions, so the assumption is defensible.

Table 2 – Career uncertainty reduces expertise acquisition. Reports regression coefficients and standard errors clustered by legislator. Outcomes are indicators of participation in training sessions. All models include member-fixed effects, so all comparisons are within legislators, over time.

	House and Senate		Only Senate	
	Staffers Attending	Hours of Training	Staffers Attending	Hours of Training
Final Term in Chamber	-0.015*** (0.005)	-0.020** (0.008)		
Seat Up for Reelection			-0.017 (0.013)	-0.024 (0.030)
Senator	0.064*** (0.021)	0.124** (0.049)		
Training FE	✓	✓	✓	✓
Member FE	✓	✓	✓	✓
Observations	43,940	43,940	8,503	8,503
R ²	0.099	0.050	0.103	0.062

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2 shows that staffers are less likely to attend trainings during their member’s last term in office. The first column looks at the number of staffers from that office attend each training and the

second column looks at the number of hours staffers from that office spend at that training, which reflects that bootcamps take twelve times as long as seminars. The average office sends 0.025 staffers to each event and log an average of 0.036 hours of training per event, so the final term effects of 0.015 fewer staffers and 0.020 fewer hours of training per event is a substantively significant, relative effect.

The third and fourth columns offer a robustness check that does not depend on the assumption that staffers can anticipate if their member is about to leave. It restricts the analysis to the Senate and makes the main independent variable whether senators who are up for reelection that cycle. Members who are up for reelection could lose in either the general or the primary, but that cycle is also a particularly attractive time to retire because it maximizes the amount of time the legislator is in office while avoiding a costly reelection campaign. 27.7% of senators who are up for reelection leave by the beginning of the next congress, compared to only 4.1% who are not up for reelection that cycle. Moreover, this is readily observable to all staffers.

The third and fourth columns of Table 2 finds similar results to the baseline analysis, albeit with much less precision. The point estimates are about the same, but the standard errors are much wider, which is also understandable because being up for reelection is a noisy proxy for whether the senator will actually leave office and because restricting the analysis to senators discards over 80% of the data. Nevertheless, the fact that an analysis which discards so much data and uses a coarser but conceptually related version of our main independent variable yields such similar results ought to increase our confidence in our main results.

Expertise Acquisition and the Separation of Powers

We next examine how the separation of powers moderates the impact of career uncertainty. If staffers hesitate to acquire expertise on their own because it is a form of firm-specific human capital that they cannot readily leverage it in other careers, then staffers ought to be more likely to acquire expertise when there are more job opportunities where that particular form of human capital would be valuable. We test this additional implication of the theory using a major shock to the congressional labor market: changing the party of the President.

The President and his administration control a massive number of appointed positions in the Executive Branch, and they give virtually all of these positions to members of their own party. The Executive Branch is one of the few places outside of Congress where expertise in oversight would be

useful, because the Executive Branch is the target of congressional oversight. The ability to anticipate how members of Congress and their staff would monitor and respond to different courses of action is an important form of human capital in many positions in the Executive Branch. There is anecdotal evidence that indicates as much, since numerous “alumni” of the oversight training we examine go on to work in federal agencies.

Accordingly, congressional staffers should be less responsive to career uncertainty in Congress if their party controls the presidency. Even if their member leaves office and they cannot find a job in another congressional office, they might still be able to secure an appointment to an attractive position in the Executive Branch. To test this hypothesis, we replicate the main analysis in Table 2 with an interaction for whether the staffer’s member of Congress is from the opposite party as the President. It includes the same member and training-level fixed effects, so the effects are estimated using within-legislator variation and within-training variation. The theory predicts that the interaction of the Final Term in Chamber and Seat Up for Reelection variables with Opposite Party of the President should be negative.

Table 3 – Presidential Co-partisanship moderates the effect of career uncertainty on expertise acquisition. Replicates the analysis reported in Table 2 with an interaction for opposite party of the president.

	House and Senate		Only Senate	
	Staffers Attending	Hours of Training	Staffers Attending	Hours of Training
Opposite Party of President	0.007 (0.004)	0.012** (0.008)	0.028* (0.016)	0.055* (0.033)
Final Term in Chamber	-0.007 (0.007)	-0.006 (0.010)		
Final Term in Chamber × Opposite Party of President	-0.015 (0.010)	-0.028* (0.014)		
Senator	0.064*** (0.021)	0.124** (0.049)		
Seat Up for Reelection			-0.007 (0.025)	-0.024 (0.030)
Seat Up for Reelection × Opposite Party of President			-0.025 (0.026)	-0.059 (0.047)
Training FE	✓	✓	✓	✓
Member FE	✓	✓	✓	✓
Observations	43,940	43,940	8,503	8,503
R ²	0.099	0.050	0.103	0.062

Note:

*p<0.1; **p<0.05; ***p<0.01

This is what Table 3 finds. The first-order effect of being from the opposite party of the president is positive. This is not surprising; members from the opposite party of the President have more to gain from aggressive oversight, so members might encourage their staff to attend these trainings when opposite party holds the presidency. More importantly for our theory, the interaction between being from the opposite party of the president and both measures of career uncertainty is negative. Staffers are more sensitive to career uncertainty in Congress when their party does not control the presidency. The coefficient is only statistically significant in conventional levels in one of the models, but it nearly attains statistical significance in the other specification that uses both House and Senate data ($p = 0.14$). As Table 2 showed, the baseline analysis suggests that the Senate-only specifications are underpowered even without the interaction term, so it is not surprising that the interaction terms are not precisely estimated.

Taken together, this analysis suggests that the expertise provided by the training, namely technical knowledge about how to conduct oversight, is firm-specific human capital. If a staffer works for a member who is about to leave office (and hence their continued participation in the congressional labor force is in doubt), then they are less likely to attend, unless their party controls the presidency gives them an attractive outside option.

Cost to the Employer and Training

If expertise in oversight is a form of specific human capital, then the employer (the legislator's office) must bear at least part of the cost of training. This implies that the lower the cost to the legislator's office, the more likely the offices' staffers are more likely to acquire training. Even though there is no tuition for the bootcamps or seminars, attendance still requires a sacrifice from the staffers' offices: staffers' time. All of the seminars were held on Fridays and 84.6% of the bootcamps (all but four) were held entirely on weekdays. Any time staffers spend at these events is time they did not spend preparing vote recommendations, drafting legislation, researching policy, meeting with constituents, networking with other offices, or performing any of the other tasks they routinely perform to advance their employer's interests.

While staffers' time is always valuable to their members, sometimes it is slightly less valuable. The House and Senate occasionally take extended breaks from legislative session, such as for major holidays, district work periods (weeks legislators are encouraged to spend with their constituents and

state or district staffs), and the August recess. Staffers in Washington are still expected to work during these breaks, but they have fewer responsibilities. They do not need to advise their member on upcoming floor votes or brief the member for upcoming committee hearings, for example. Consequently, offices give up less by sending staffers to training when their chamber is on a break and ought to be more inclined to send staffers during break than while the chamber is in session.

Table 4 – In the House, reducing the cost of attendance to employer increases cohort size. Reports coefficients and standard errors for models that predict the number of staff attendees at 82 unique training sessions.

	<i>Dependent variable:</i>		
	Number of Attendees		
	House and Senate	House	Senate
	(1)	(2)	(3)
Chamber On Break	0.570 (0.710)	2.026* (1.067)	-0.865 (0.889)
Seminar	6.553*** (0.969)	9.106*** (1.460)	4.034*** (1.211)
Senate	-3.051*** (0.680)		
Constant	2.718** (1.093)	-0.176 (1.568)	2.435* (1.268)
Observations	164	82	82
R ²	0.298	0.330	0.160

Note: *p<0.1; **p<0.05; ***p<0.01

Accordingly, Table 4 conducts a training-level analysis of how many staffers from each chamber attended as a function of whether the relevant chamber was on a break. A chamber is on a break if, on the day the training was held, it has not held a roll call vote in the previous five days or if it will not hold a roll call vote in the next five days.

Table 4 shows that, at least in the House of Representatives, more staffers attend the training if it is held during a break. This stronger effect in the House, compared to the Senate and the pooled sample, likely reflects the greater demands on the House’s time. House offices have smaller staffs than Senate offices and the House generally considers more legislation than the Senate does. These compounding pressures make staffers’ time more valuable in the House than it is in the Senate, so House offices are particularly sensitive to opportunities to train their staffers that do not take them away from their most important work.

Expertise and Career Longevity

Finally, we examine the downstream implications of expertise acquisition of time spent working in Congress. If expertise is firm-specific, then staffers interested who acquire expertise will stay in Congress for longer than those who do not. First, staffers who have firm-specific expertise are more valuable to their employers, so they are less likely to be laid off. Second, although firm-specific expertise does not give a staffer access to better-compensated outside options, if a staffer does get an attractive outside offer, the legislator they work for will be willing to spend more to retain the staffer. This makes staffers with oversight expertise less likely to quit. To provide a concrete example, suppose the staffer has a law degree with a focus in securities law. If a bull market creates a sudden demand for lawyers who know securities law, the staffer might want to quit Congress to return to the legal profession. However, if she has expertise in oversight, her employer might be willing to increase her compensation by enough to prevent her from leaving.

Unfortunately, our data does not tell us which staffers have expertise in oversight. Instead, it tells us which staffers attended a particular set of trainings that increase expertise in oversight. This rules out what would otherwise be an attractive research design: comparing staffers who attended oversight training to those who applied for oversight training but did not attend. Those staffers who did not get to attend might get oversight training elsewhere, which would attenuate the effect of attending one of the trainings we observe. Consistent with this possibility, our analysis in the Appendix (see Table D2) finds no evidence that attending training increases how long staffers stay in Congress, compared to those who express interest in the training.

Instead, we test whether staffers who express interest in the training stay in Congress longer than those who do not. To show this, we utilize a number of staffer-level statistical tests conducted with Cox proportional hazards models with fixed and time dependent covariates. This class of models is used to estimate effects on the survival time of units. For all tests in our studies, the survival time is the number of days a staffer remained in Congress after the first training session that he or she could have attended.¹² Thus, the outcome variable in all tests is the number of days between the date of this training session and either the last date the staffer was employed by Congress or the latest date available in our Congressional staff data (March 31, 2022). Since the training records contain an

¹²This is defined as the first bootcamp or seminar that occurred after the staffer began working for Congress (or after they first appear in available Congressional disbursement records).

entry for any staffer who either applied, registered, or opted to learn more information about sessions via email, as well as actual attendance numbers, a staffer is considered to have expressed interest in training if they appear anywhere in the records.

Interest in the training sessions is an expression of some general, inherent motivation to acquire expertise. Staffers with this predisposition may pursue expertise acquisition in a variety of ways aside from bootcamp or seminar attendance, make decisions to actively improve their performance, and be generally incentivized by the development of specialized skills and knowledge. If expertise in Congress is firm-specific, as our previous analyses suggest, then we predict staffers interested in training will have longer careers on the Hill. Conversely, if expertise is general, then we would expect interested staffers to have shorter Congressional careers – taking advantage of opportunities to learn and then leaving Congress for more appealing or higher paying outside offers.

Table 5 – Staff who express interest in or acquire expertise have longer subsequent careers in Congress. Reports coefficients and standard errors from Cox proportional hazard models predicting departure from Congress.

	<i>Dependent variable:</i>	
	Career Length After First Possible Session	
	<i>Bootcamps</i>	<i>Seminars</i>
	(1)	(2)
Interested in/ Acquired Training	-0.350*** (0.059)	-0.376*** (0.030)
Senate	0.165*** (0.017)	0.150*** (0.013)
Earnings	-0.0001*** (0.00000)	-0.0001*** (0.00000)
Senior	0.776*** (0.027)	0.788*** (0.022)
Policy	-0.097*** (0.018)	-0.043*** (0.014)
Committee	0.787*** (0.022)	0.773*** (0.017)
Observations	153,167	253,294

Note:

*p<0.1; **p<0.05; ***p<0.01

This analysis also controls for a number of important time-varying covariates that may affect career length: staffer’s biannual earnings, dummy variables for whether or not they worked in the Senate, held a policy-focused position, held a senior staff position, or worked for a committee over that time period. The SI describes these job categorizations in greater detail.

The negative coefficient for expressing interest in Table 5 demonstrates a negative relationship with the hazard ratio, or, in more substantive terms, the speed with which they leave Congress. More intuitively, these results suggest that staffers interested in acquiring expertise have longer Congressional careers. We do not interpret these results to mean that expressing interest in attending a bootcamp or seminar is *causing* staffers to have longer careers. Instead, we claim that, given the firm-specific nature of oversight expertise, staffers expressing an interest in training will ultimately make decisions and behave in a manner leading them to longer careers on the Hill.

However, the analysis in Table 2 has already shown that legislators are less likely to attend training during their member's final term in office. Perhaps the effect in Table 4 is mechanical: some staffers do not express interest because they anticipate their member will soon leave office and that member's staff will then be forced out of the congressional workforce whether they like it or not. To account for this possibility, Table D3 in the SI replicates our analysis using only staffers who either left Congress before their member did, committee staffers, and staffers who were still working in Congress at the end of the study period. This restricted sample excludes all staffers who left Congress because their member was not reelected. The results in Table D3 are consistent with the results in Table 4, which shows that the effect cannot be attributed to forced exit due to member turnover.

Discussion

Congress needs expertise to perform its constitutional duties, but it has struggled to attract, train, and retain a large workforce of expert staffers. In response to broad beliefs that Congresses performance has declined, non-profits have stepped in to assist Congress in training its workforce, but very little is known about these efforts. Moreover, their interventions rely on the voluntary participation of either staffers or the offices those staffers work for. This means their effectiveness is, in part, a function of the individual incentives of congressional staffers. This study investigated these incentives using novel records of training conducted in Congress.

On balance, our evidence suggests that expertise in oversight is a form of job-specific human capital. One immediate implication relevant for contemporary debates about congressional capacity is that staffers' compensation does not increase in proportion to the value of their expertise, which makes them less inclined to acquire it. There are immediate and practical implications for this insight. Non-profits may be able train more staffers by making participation cheaper for employers. For example,

they can schedule bootcamps and seminars at times when the staffers' labor is least valuable, such as during recesses and the lame duck session. That so many of the training events in our study were scheduled on Fridays, during which Congress rarely takes up legislative business many members are not even in Washington, suggests that many non-profits are already aware of this imperative. They could also focus their marketing efforts on legislators and senior staff that have the ability to command junior staff to attend the training. However, non-profits should avoid shifting the costs from employers to staffers.

Our analysis also yields important insights for the study of Congressional capacity. High turnover among legislators impedes the acquisition of expertise, from two directions. First, it makes legislators less inclined to send their legislators to training, since legislators who will soon leave office gain less from investments in expertise. Second, it makes staffers less inclined to acquire expertise, since there is a better than even chance that they will leave Congress if their boss does, and expertise in oversight does not make them more productive in most jobs outside of Congress. As a result, anything that induces legislators to stay in office for longer, from more input into the legislative agenda to higher salaries to fewer fundraising obligations, would also increase the staff's expertise in oversight.

In addition, our analysis suggests under-recognized ways in which congressional capacity may be influenced by the separation of powers. We found the effect of career uncertainty may be moderated by turnover in the presidency. This highlights a novel implication, namely, that expertise in Congress is, in part, a function of available career opportunities in the Executive Branch.

Ultimately, whether expertise is job-specific or general human capital can change with changes to the labor market. In Congress, jobs at interest groups and lobbying firms play a major role in the attractiveness of staffers' outside options. If these external actors increased their demand for lobbyists with expertise in oversight, more congressional staffers would seek out training in oversight without prompting from their employers. However, Congress would have to compete with the private sector for these expert employees, and it may find itself unable to muster enough resources to compete effectively. Whether higher demand for expertise at lobbying firms leads, on balance, to more experts working inside of Congress is an open question. Our study offers one source of leverage for answering this question. Lobbyists may demand some forms of expertise but not others, which implies that some kinds of expertise are more general than others. Future research could exploit differences in the demand for different kinds of expertise to estimate the net effect of generality on the reservoir of that kind of expertise in Congress.

Finally, our analysis treats Congress as one giant firm because it is a useful starting point for understanding human capital in the legislative process. In fact, Congress is more like a cartel composed of many semi-autonomous offices and committees. Within the budgetary boundaries set by the cartel, these offices and committees compete with one another for staff, which means that staffers who acquire expertise that is useful throughout Congress get at least some additional compensation. However, this competition also dampens members' incentives to invest in their staff, because newly minted experts might get poached by other offices. This suggests a role for a Congress-wide human capital policy. Congress can avoid prisoner's dilemma implied by some offices attempting to free ride off of the training investments of other offices by having the institution as a whole absorb the cost of training. Despite this opportunity to overcome the free riding problem, Congress mostly leaves training and development to the individual offices. This raises a question for future research: what are the countervailing advantages that entrench Congress's highly decentralized approach to human capital development?

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Supporting Information (Online)
Expertise Acquisition in Congress
Christian Fong, Kenneth Lowande, and Adam Rauh

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A Staff Employment from Disbursement Records

Using a variety of sources and techniques, we create a standardized data set of payment records with unique identifiers for Congressional staffers. In addition to cleaning and formatting the data, the primary task of this process is determining how to aggregate observations in our data, based on the available staffer level characteristics. After some pre-processing and cleaning, the raw records are staffer-payment level, meaning each observation corresponds to an instance of a staffer getting paid. We must utilize the available information about each observation in order to aggregate appropriately and assign unique staffer identifiers to each observation.

A.1 Data Collection and Availability

A.1.1 House of Representatives

The House of Representatives publishes statements of disbursement every quarter, covering the periods January–March, April–June, July–September and October–December. These reports detail all expenditures made by House offices during those periods. This includes the personal offices of legislators, committees, and party and administrative offices. While containing details about all expenditures (e.g., costs associated with travel or office supplies), we focus on those classified as “personnel compensation”, which are salary payments made to staffers.

These expenditure reports are published originally in PDF format and publicly available for download from the House of Representatives here. ProPublica processes these files to create machine-readable versions in CSV format. A description of ProPublica’s procedures, as well as links to the processed data are available here. This data is available from the third quarter of 2009 through the first quarter of 2022. These files contain the raw data related to House expenses and staffers that we will process in following stages. After filtering down these files to just include staff payment records, each observation has the the following characteristics: staffer name, a pay period start and end date, the amount paid to the staffer over that period, the staffer’s office of employment, the staffer’s job title.

A.1.2 Senate

As far as we know, Senate disbursement records are only publicly available in PDF format from the Report of the Secretary of the Senate, available here. In contrast to the reports published by the House of Representatives, these Senate reports are published only twice a year, covering the periods April to September and October to March. These reports cover the period from April 1, 2011 to March 31, 2022. After downloading these files, we employ a series of R scripts in order to extract data relevant to the employment and payment records of staffers.

We use the R package `pdftools`¹³ to extract the text from each PDF and load it into R. The package has functions that enable users to parse the PDF files into lists, with each PDF being mapped to a list. Each element in the lists is a parsed PDF page containing the text and formatting characters of the original pages. It is worth noting some of the challenges introduced by this step. While the PDFs and pages are often consistently formatted, there are sometimes inconsistencies due to unpredictable reasons. For instance, the introduction of extra spaces, tabs, or even invisible characters within the PDFs may generate errors or anomalies that must be accounted for as best as possible.

We then use our own code to extract and format all data relevant to employee’s work and payment records. First, the code identifies pages containing information about staffers working in either personal offices or for committees by searching for a number of different text and formatting patterns. This step largely involves looking for office identifying keywords, like “Senator” or “Small Business,”

¹³<https://cran.r-project.org/package=pdfutils>

in particular locations of each page. Once the appropriate pages are identified, the process of extracting the relevant data from the parsed results proceeds similarly. Information about a staffer's name, position, and salary payments are organized in consistent ways on the relevant pages: we take advantage of this structure to parse out the staffer information. For instance, the data is generally formatted as 3 columns, separated by spaces.

In contrast to the House reports, which have relatively granular pay periods, Senate data can often only be mapped to the 6 month periods corresponding to the start and end date of the reports. Sometimes, information about job start or end dates is present, next to the string of text describing the staffer's position. The code extracts and formats this information as a proper date. Finally, there are some cleaning procedures to remove rows that were inappropriately included as a result of the relatively noisy PDF parsing procedures. After all of these procedures, the code produces CSV files that contain the same information as the House files: staffer names, job titles, offices, salaries, and a date range of employment.

A.1.3 Integrating Raw Senate and House Data

After downloading and/or processing the necessary files as described previously, data about both House and Senate staffers is formatted to be consistent across chambers. At this stage, staffer identities are still not standardized across observations. The same staffer's name may appear in slightly different variations across the data. To solve this problem, we apply a series of cleaning and aggregation algorithms to assign unique staffer identifiers to the observations in our data.

A.2 Aggregation and Unique Identifiers

Once the raw data is assembled, we use another set of procedures to assign unique identifiers to the staffers in our data. Substantively, this process largely about aggregation: it involves examining our data and making determinations about whether or not observations associated with slightly different first, middle, and last staffer names in the data actually correspond to the same individuals. For instance, do the observations associated with a "Kenneth Acuna," "Kenneth S. Acuna," or "Kenneth Acuna, Jr." actually refer to the same person? Once these decisions have been made, we assign unique identifiers corresponding to all aggregated observations. After some additional pre-processing and cleaning of the raw data, there is a three stage pipeline for aggregating staffer data and assigning identifiers.

The first stage handles the most straightforward cases for aggregation and identifier assignment. First, for each observation in the data, a string containing standardized and cleaned staffer name data is created: punctuation marks, spaces, and suffixes are removed from names, then staffers' last, first, and middle names/initials (if they exist) are concatenated together. We call this the "nameid" for short. The first stage aggregates observations that 1) have exactly matching nameids and 2) have nameids not similar to any other nameid in the data. Specifically, the nameid in question does not have a similarity score less than 1 and higher than .8 to any other nameid in the data, based on the Optimal String Alignment distance, calculated by the `stringsim()` function in the `stringdist` R package.¹⁴ If both requirements are met, unique identifiers are assigned to the aggregated observations. If this second requirement is not met, we tag the observations as ambiguous and deal with them in later stages. The similarity threshold in the second condition is a parameter that could be adjusted. For example, lowering the similarity threshold would result in even more conservative aggregation.

The second stage calculates additional information to make more automatically-handled aggregations. For a given observation associated with a staffer, the code identifies possible aliases by finding

¹⁴<https://cran.r-project.org/package=stringdist>

Figure A1 – Parsing Senate Data Example. Parsing Senate data requires extracting information from PDF files formatted like the one shown below. Note that the information indicating the office, highlighted in red, is not present on all pages containing staff data. Text highlighted by the blue box contains information about staffers' names, their jobs, and the amount paid to them. This is extracted and formatted by our algorithms. Note also the occasional inclusion of dates in the text describing staffers' jobs.

DETAILED AND SUMMARY STATEMENT OF EXPENDITURES						
DESCRIPTION		NET FUNDS AVAILABLE AS OF 10/01/2018 (\$)	NET EXPENDITURES FOR THE PERIOD OF 10/01/2018 THRU 03/31/2019 (\$)	TOTAL FUNDING YTD (\$)		
Authorization		\$3,425,329.00				
Supplementals		0.00				
Transfers		0.00				
Resc / Withdrawals		0.00				
Net Payroll Expenses			-1,295,677.50	-1,295,677.50		
Travel and Transportation of Persons			-73,437.83	-73,437.83		
Rent, Communications and Utilities			-10,820.60	-10,820.60		
Other Contractual Services			-182.60	-182.60		
Supplies and Materials			-24,166.45	-24,166.45		
Acquisition of Assets			-1,528.14	-1,528.14		
ORGANIZATION TOTALS		\$3,425,329.00	-1,405,813.12	-1,405,813.12		
UNEXPENDED BALANCE AS OF 03/31/2019				\$2,019,515.88		

DOCUMENT NO.	DATE POSTED	PAYEE NAME	OBLIGATION/SERVICE DATES		DESCRIPTION	AMOUNT (\$)
			START	END		
		WESTBROOK, SCOTT LAURA V BAIG, WENDY E KNECHT, DEBRA A MANAK, VALERIE E COX, HOLLY O'NEIL, JACLYNE TAVI, CR RAMONA I CORLEY, PAULA A RURNER, FAMIYA A YATER, MICHAEL C JENNINGS, MEGAN N F ALTMAN, MICHAEL F F FARRIS, ADAM F TRFAT, MARFUSA K ATKINS, KRISTINA I CARSON, JAMIE R OGG, F AIWIT A FERGUSON, KELLY E SPITZ, SARAH E OSBORN, DERRICK R MAHAN, JEFFREY A REIFEY, ALYSON M WRIGHT, AILEEN R JR UNDERWOOD, JEFFREY Z COCHRAN, SARAH DANF, SHARON G OLIVE, HEATHER R			DIRECTOR OF OPERATIONS EXECUTIVE DIRECTOR SENATE STEERING COMMITTEE SENIOR POLICY ADVISOR ENERGY POLICY ADVISOR ASSISTANT ADMINISTRATIVE MANAGER EXECUTIVE ASSISTANT STATE DIRECTOR CONSTITUENT SERVICES REPRESENTATIVE CONSTITUENT SERVICES DIRECTOR CONSTITUENT SERVICES REPRESENTATIVE TO OCT 31 SPECIAL ASSISTANT CHIEF OF STAFF FOREIGN POLICY ADVISOR STATE OUTREACH DIRECTOR OKLAHOMA EXECUTIVE ASSISTANT FIELD REPRESENTATIVE/DIRECTOR OF SECURITY CONSTITUENT SERVICES REPRESENTATIVE/LATINO COMMUNITY LIAISON DEPUTY COMMUNICATIONS DIRECTOR LEGISLATIVE DIRECTOR AND GENERAL COUNSEL TULSA FIELD OFFICE DIRECTOR LEGISLATIVE ASSISTANT COMMUNICATIONS DIRECTOR NW FIELD REPRESENTATIVE NE OKLAHOMA FIELD REPRESENTATIVE LEGISLATIVE ASSISTANT STAFF ASSISTANT STAFF ASSISTANT	64,143.93 7,500.00 47,785.07 43,526.87 29,099.83 34,895.93 63,141.96 28,308.53 32,823.45 4,297.74 19,620.00 76,717.45 41,387.32 43,873.41 37,087.48 31,670.93 29,488.96 34,886.93 58,362.89 38,168.48 31,140.74 47,488.96 26,783.45 31,670.93 28,697.45 19,989.83 19,989.83
		COCHRAN, CAI FR M MIRAN, PAUL I P J JEFFREY, THERESA A WHITE, CHRISTOPHER J NEAL, CAMERON R ROBERTS, TANNER M RUSHOR, FAMIY SARAH MOMI, IAN MARSON R AIR MCFAN, KPI FV I OGAN SERVING, HANF T BARDON, KPI SPV A ROYD, STEPHEN I PEARCE, REBECCA I COCHRAN, SARAH MARGARET			FIELD REPRESENTATIVE LEGISLATIVE AIDE LEGISLATIVE AIDE LEGISLATIVE COUNSEL TO FEB 25 LEGISLATIVE AIDE NW FIELD REPRESENTATIVE PRESS ASSISTANT STAFF ASSISTANT TO MAR 29 LEGISLATIVE ASSISTANT DIGITAL MEDIA ASSISTANT MILITARY AND VETERANS LEGISLATIVE ASSISTANT LEGISLATIVE CORRESPONDENT LEGISLATIVE CORRESPONDENT CONSTITUENT SERVICES REPRESENTATIVE FROM NOV. 1	24,267.00 29,874.06 20,828.58 30,858.88 20,828.08 21,906.96 19,989.83 19,275.00 36,486.93 24,808.96 38,888.96 19,989.83 18,987.33 16,666.61
DLNK2190004	03/16/2019	CITIBANK - TRAVEL CRA CARD	09/04/2018	09/04/2018	SENATOR'S TRANSPORTATION	177.30
DLNK2190005	03/16/2019	CITIBANK - TRAVEL CRA CARD	09/03/2018	09/03/2018	AIRFARE FOR SEN LANKFORD OKLAHOMA CITY TO WASHINGTON DC	168.50
DLNK2190006	03/16/2019	CITIBANK - TRAVEL CRA CARD	09/11/2018	09/11/2018	AIRFARE FOR L WESTBROOK-SCOTT TULSA TO WASHINGTON DC	179.50
DLNK2190007	03/14/2019	CITIBANK - TRAVEL CRA CARD	09/14/2018	09/14/2018	SENATOR'S TRANSPORTATION	177.30
DLNK2190008	03/14/2019	CITIBANK - TRAVEL CRA CARD	09/04/2018	09/04/2018	AIRFARE FOR SEN LANKFORD OKLAHOMA CITY TO WASHINGTON DC	177.30
DLNK2190009	03/15/2019	CITIBANK - TRAVEL CRA CARD	09/12/2018	09/12/2018	AIRFARE FOR K FERGUSON OKLAHOMA CITY TO WASHINGTON DC AND RETURN	1,067.30
DLNK2190010	03/15/2019	CITIBANK - TRAVEL CRA CARD	09/22/2018	09/22/2018	STAFF TRANSPORTATION	181.00
DLNK2190011	03/15/2019	CITIBANK - TRAVEL CRA CARD	09/22/2018	09/22/2018	AIRFARE FOR M ALTMAN OKLAHOMA CITY TO WASHINGTON DC	234.00
DLNK2190012	03/15/2019	CITIBANK - TRAVEL CRA CARD	02/28/2019	02/28/2019	AIRFARE FOR M ALTMAN OKLAHOMA CITY TO WASHINGTON DC	172.30
DLNK2190013	03/15/2019	CITIBANK - TRAVEL CRA CARD	03/04/2019	03/04/2019	SENATOR'S TRANSPORTATION	172.30
DLNK2190014	03/15/2019	CITIBANK - TRAVEL CRA CARD	03/07/2019	03/07/2019	AIRFARE FOR SEN LANKFORD OKLAHOMA CITY TO WASHINGTON DC	172.30
DLNK2190015	03/20/2019	CITIBANK - TRAVEL CRA CARD	03/11/2019	03/11/2019	SENATOR'S TRANSPORTATION	177.30
DLNK2190016	03/20/2019	CITIBANK - TRAVEL CRA CARD	03/14/2019	03/14/2019	AIRFARE FOR SEN LANKFORD WASHINGTON DC TO OKLAHOMA CITY	177.30
DLNK2190017	03/20/2019	CITIBANK - TRAVEL CRA CARD	03/14/2019	03/14/2019	AIRFARE FOR SEN LANKFORD OKLAHOMA CITY TO WASHINGTON DC	177.30
DLNK2190018	10/29/2018	COCHRAN, CAI FR M	10/09/2018	10/09/2018	AIRFARE FOR SEN LANKFORD WASHINGTON DC TO OKLAHOMA CITY	177.30
DLNK2190019	10/29/2018	COCHRAN, CAI FR M	10/03/2018	10/06/2018	STAFF PER DIEM	16.13
DLNK2190020	10/29/2018	COCHRAN, CAI FR M	10/03/2018	10/06/2018	STAFF TRANSPORTATION	103.55
DLNK2190021	10/29/2018	COCHRAN, CAI FR M	10/03/2018	10/06/2018	ATOKA TO SHAWNEE AND RETURN	181.30
DLNK2190022	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	STAFF TRANSPORTATION	40.83
DLNK2190023	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	ATOKA TO THE FOLLOWING AND RETURN: 103 ADA; 105 SPIRO	181.30
DLNK2190024	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	TULSA TO THE FOLLOWING AND RETURN: 102, 4, 5 INTERDEPARTMENTAL TRANSPORTATION:	100.28
DLNK2190025	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	PORTER TO GROVE AND RETURN	56.35
DLNK2190026	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	STAFF TRANSPORTATION	16.35
DLNK2190027	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	PORTER TO MUSKOGEE AND RETURN	56.35
DLNK2190028	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	SENATOR'S TRANSPORTATION	180.80
DLNK2190029	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	AIRFARE FOR SEN LANKFORD WASHINGTON DC TO OKLAHOMA CITY	180.80
DLNK2190030	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	SENATOR'S TRANSPORTATION	180.80
DLNK2190031	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	AIRFARE FOR SEN LANKFORD OKLAHOMA CITY TO WASHINGTON DC	180.80
DLNK2190032	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	STAFF TRANSPORTATION	65.66
DLNK2190033	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	WASHINGTON DC OFFICE: INTERDEPARTMENTAL TRANSPORTATION	88.12
DLNK2190034	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	STAFF TRANSPORTATION	88.12
DLNK2190035	10/29/2018	OSBORN, DERRICK R	10/02/2018	10/06/2018	RENTAL AUTO FOR M TREAT OKLAHOMA CITY TO TULSA AND RETURN	88.12

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Figure A2 – Example of Simple Aggregation. In this abbreviated example, there are minor differences in the staffer’s name across two observations. Our aggregation procedures can catch this automatically and assign a common unique identifier, as indicated by the uid column.

staffer.name	office	start.date	end.date	position	amount	uid
DYKEMA, RICHARD T	HON. DANA ROHRABACHER	2016-07-01	2016-09-30	CHIEF OF STAFF	42102.75	18385
DYKEMA RICHARD T.	HON. DANA ROHRABACHER	2016-10-01	2016-12-31	CHIEF OF STAFF	42102.75	18385

all observations with matching first and last names. In other words, for a given staffer, the code identifies many possible pairs of staffer names to be aggregated together under the same unique identifier by finding a pool of candidates with matching first and last names. Then, the following logic is applied for each candidate in consideration:

- If the current staffer has middle name information that can be extracted, remove any candidates that have middle name information and explicitly do not match.
- Remove any candidates that would imply the staffer received a job demotion.
- If there is no explicit mismatch of middle name information and both observations under consideration have an uncommon last name, aggregate them together and assign a common unique identifier.
 - The classification of “uncommon” and “common” last names is based on a frequency calculation using the pool of staffer last names extracted from the data. Raw counts are used to calculate a standardized measure of last name frequency. The threshold under which to merge entries together can be controlled by a user-specified parameter. The current parameter choice was determined by us, based on the quality of our manual checks, desire for conservative automated aggregation, and ability /time to do manual aggregation at later stages.

This process further aggregates observations together, assigning additional unique identifiers. As this logic proceeds, when observations can be confidently classified as corresponding to different staffers, we assign unique identifiers accordingly.

After these first two automated stages, we are left with a pool of observations that are challenging to aggregate. At this point, staffer names in this set of observations have high similarity to other potential staffer names or a common last name. In practice, most of the observations in this category are staffers with common first and last names that may be aggregated with other observations that differing by missing middle name/initial information. For instance, the observation under consideration may be for a staffer named John Smith, and we must determine if the observations corresponding to the staffer John J. Smith should be aggregated to the same staffer.

Our code generates candidates for aggregation that could not be automatically handled. We then manually determined whether or not observations should be aggregated based on job titles, employment duration and timing, and the names of the offices associated with each observation. The results of this process were integrated into the rest of our data, and we assign unique identifiers to them. After these aggregation procedures, the result is a large, rectangular data set at the staffer-payment level with unique staffer identifiers assigned to every observation in our data. At the time of writing, our data has 976,525 such observations, with payments made to 82,426 unique staffers across a variety of offices and positions. Note that this includes many staffers who are never used in our analyses, such as janitorial, operational, or IT employees.

A.2.1 Aggregation Notes and Possible Objections

Given these procedures, one may raise concerns about aggregating entries with exactly matching nameid variables, as this may lead to overaggregation for observations involving common names. However, we are able to extract middle name data for 79.5% of observations. This means that aggregation is largely only occurring on instances with exactly matching first, middle, and last name information, which is less likely to lead to over-aggregation. Additionally, this also implies that nearly all decisions about possible aggregations between such observations will be made in the third, manual stage. Additionally, the described processes will be unable to catch instances of a staffer’s name transforming substantially. For instance, if a staffer is named Rosalind McDonald when she starts working for Congress but gets married and changes her name to Rosalind Johnson, our algorithm is unable to aggregate information about this staffer appropriately. Given the high rate of staff turnover and age of most staffers, we believe the error induced by this potential problem is minimal. We are excited about the potential for future refinements to this data creation pipeline and welcome additional suggestions.

B Staff Training Records

Staff training records were provided an author as part of a data use agreement between the University of Michigan and the Project on Government Oversight. These were “invitation, application, and attendance records for oversight-related events” which contain “names, employer, and contact information” for staff. Use of these records for the purpose of the present study was deemed exempt from IRB review.

As part of this agreement, we were provided data on two kinds of events. The first are referred to by the provider as “bootcamps.” These were 13 separate events beginning Fall 2015 and ending Fall 2021. The table below provides basic descriptives. In general, several dozen attend, while many more apply. Also, the program tended to be more popular among Democratic staffs.

Table B1 – Oversight Training Programs in the U.S. Congress

Session	Applicants	Accepted	Attended	% Democrat
August 2015	33	30	18	66%
February 2016	83	40	25	56%
July 2016	–	29	26	–
February 2017	52	35	20	60%
May 2017	44	30	19	52%
August 2017	42	30	19	52%
February 2018	43	32	20	60%
August 2018	103	45	23	52%
February 2019	76	30	26	50%
October 2019	102	40	24	63%
February 2020	93	39	29	55%
February 2021 (online)	115	22	18	66%
August 2021 (online)	127	43	27	48%

Note: Compiled by the authors based on records from the Project on Government Oversight. “–” indicates records not kept or lost. Democrat percentage refers to those who attended.

We were also provided data on weekly seminars. These were 73 separate, hour long events which took place around lunch time, on a monthly basis while Congress was in session. Initially, their appear to have been either light refreshments or lunch served. Eventually, rules changes may have prevented even this expense. A complete list of seminar topics is available upon request.

C Evidence on the Effectiveness of Staff Training Bootcamps

In February 2020, we surveyed a sample of 195 staffers who either did not apply, applied, and would attend this training. The authors invited the 56 staffers who completed the first survey to complete a similar, follow up survey. Staffers were asked about their opinions of legislative oversight and how they spend their time. They were also quizzed about rules and strategies for performing legislative oversight, which the bootcamps themselves cover.

One author attended the February 2020 bootcamp. The training itself is intensive and involves two full days of lectures, open discussion, group work, and role-playing. Bootcamp descriptions and materials can be found on the Levin Center webpage.¹⁵ The vast majority of participants do not know each other before the training. Very few participants leave early (1-3) either day, while more than half arrived late on the second day. The participants leave with over 100 pages of reference material.

Almost all staffers surveyed at least somewhat agreed that oversight was an essential function of Congress and that it was better to conduct it in a bipartisan fashion, including those that did not attend the training.¹⁶ Fewer staffers, however, said that bipartisan oversight was feasible—in both waves, only about 68% at least somewhat agreed that bipartisan oversight was “feasible in the contemporary Congress.”

There is some evidence of opinion change about the feasibility of bipartisanship after attending the training. Those who did and did not attend had somewhat different baseline opinion in the first survey, with those who attended agreeing bipartisanship was feasible somewhat more often. However, this gap was larger in the second wave. The simple difference across those who did and did not attend was about one point on the 6-point agreement scale ($p = 0.11$, one-tailed test). When both surveys were leveraged in a difference-in-differences (DiD) design estimated by an ordered probit, the estimated difference was also about one point on the agreement scale ($p = 0.01$, two-tailed test).¹⁷ Caution is warranted, however, as it is possible that this underlying opinion is associated with the likelihood of responding to the second survey. However, this can be taken as preliminary evidence that those who attended thought bipartisanship was more feasible after attending.

Most staffers reported spending between 50-60% of their own time on oversight, with similar figures for the office or committee they work in. There were no differences across time and between those who did and did not attend the bootcamp. There was however, some evidence that self-reported time on oversight changing from the first to second wave across staffers that worked for Democrats or Republicans, as well as across chambers. In the first wave, Republicans and Democrats each reported an average of 58% of their time on oversight. By July, Democrats’ average was 63%, while Republicans’ average was 52%. In the first wave, Senate staffers reported spending 53% of their time on oversight, whereas House staffers reported 64%. By July, this difference was reversed.

Overall, 62% of staffers said they had participated in a long term oversight investigation lasting 6-8 weeks that included a written report or a hearing. The number of staffers who indicated they had participated in a long term investigation was higher in the second survey, but the differences across the surveys were not statistically distinguishable from zero by convention. Staffers were also asked how often they involved the other side when conducting oversight and given the choices “Never”, “Sometimes”, “About half the time”, “Most of the time”, and “Always.” The most common response was “Sometimes”, and it is notable that the only “Never” responses (4) were received in July.

Staffers who attended the training tended to get more oversight knowledge questions correct in the

¹⁵<https://law.wayne.edu/levin-center/oversightbootcamps>

¹⁶A smaller proportion of those who did not attend the bootcamp strongly agreed with the statement about the effectiveness of bipartisan oversight, but this numerical difference is too small to be considered reliable.

¹⁷The linear model for this regression was $feasibility_{t+1} = \beta_0 + \beta_1 attended + \beta_2 feasibility_t$, with β_1 as the DiD estimate.

second survey. Four questions relating to oversight were asked—three with one correct answer, and one with two correct answers and 4 incorrect ones. If these are placed on a simple additive scale that penalizes incorrect answers, there is some evidence attendees got about one additional correct answer after the bootcamp, relative to those who did not receive the training ($p = 0.11$). The evidence of these differences are stronger if the least discriminating questions (which related to FOIA exemptions and whistleblower confidentiality) are excluded.

The COVID-19 pandemic began shortly after the completion of the training, around the time the original six week follow-up survey was planned. The author was advised to terminate plans for this follow up for ethical and practical reasons. (An ill-timed follow-up survey might damage the reputation of the nonprofit partners and risk a high attrition rate.) For this reason, the follow-up survey was delayed until the end of July 2020.

For these reasons, we regard the survey data as descriptive and preliminary. The small number of staffers who completed both surveys ($n = 34$), the attrition between surveys, and the intervening COVID-19 pandemic all limit the conclusions that one can draw from these data. However, we regard it as more informative than evidence-free claims about the effectiveness of the training. Further surveys of future bootcamp cohorts and comparable untrained staffers are needed. Nonetheless, there is also no pattern present in these data that—if present in subsequent surveys—would limit the reliability of the evidence. A final important methodological note is that the attendee surveys were administered in person for the first wave, but online for the second—while those who did not attend only took the surveys online. Survey medium has sometimes been shown to impact responses, but in this case, there is no reason to suspect this was the case.

D The Effect of Attending Training versus Expressing Interest

Table D2 uses the same statistical model as the analysis of Table B1, but with different treatment and control groups. The treatment group consists of legislators who attended one of the training events in our sample. The control group consists of legislators who applied for one of the training events in our sample but did not actually attend any of the events. This analysis isolates the effect of attending training on the population of staffers who expressed interest in them. Table D2 shows that staffers who actually attended did not stay in Congress longer than those who merely expressed interest. In fact, those who attended bootcamps left Congress faster than those who merely expressed interest. We suspect these anomalous results are attributable to staffers in the control group pursuing other routes of expertise acquisition in lieu of the trainings, such as seminars hosted by the Congressional Research Service or partisan interest groups.

Table D2 – Attendance and Career Longevity

	<i>Dependent variable:</i>	
	Career Length After First Possible Session	
	Bootcamps	Seminars
	(1)	(2)
Attended Session	0.214* (0.120)	-0.069 (0.058)
Senate	0.139 (0.126)	0.291*** (0.060)
Earnings	-0.0001*** (0.00000)	-0.0001*** (0.00000)
Senior	0.351* (0.187)	0.415*** (0.078)
Policy	-0.130 (0.131)	-0.241*** (0.060)
Committee	0.737*** (0.125)	0.736*** (0.061)
Observations	4,211	18,040

Note: *p<0.1; **p<0.05; ***p<0.01

Table D3 – Interest and Career Longevity Robustness Check

	<i>Dependent variable:</i>	
	Career Length After First Possible Session	
	Bootcamps	Seminars
	(1)	(2)
Interested in/Acquired Training	-0.348*** (0.062)	-0.377*** (0.032)
Senate	0.185*** (0.018)	0.130*** (0.014)
Earnings	-0.0001*** (0.00000)	-0.0001*** (0.00000)
Senior	0.784*** (0.031)	0.791*** (0.025)
Policy	-0.070*** (0.020)	-0.032** (0.016)
Committee	0.927*** (0.023)	0.890*** (0.018)
Observations	138,431	217,762

Note: *p<0.1; **p<0.05; ***p<0.01

E List of Policy and Senior Positions

E.0.1 Policy Relevant Positions

Observations with the following job titles were marked as “policy relevant jobs”: LEGISLATIVE ASSISTANT, LEGISLATIVE CORRESPONDENT, LEGISLATIVE DIRECTOR, PROFESSIONAL STAFF MEMBER, COUNSEL, LEGISLATIVE AIDE, SENIOR LEGISLATIVE ASSISTANT, SENIOR POLICY ADVISOR, PROFESSIONAL STAFF, CONGRESSIONAL AIDE, SENIOR COUNSEL, LEGISLATIVE COUNSEL, SENIOR ADVISOR, POLICY ADVISOR, LEGISLATIVE ASSISTANT (OTHER COMPENSATION), CHIEF COUNSEL, ASSISTANT COUNSEL, RESEARCH ASSISTANT, POLICY DIRECTOR, MILITARY LEGISLATIVE ASSISTANT, GENERAL COUNSEL, LEGISLATIVE DIRECTOR (OTHER COMPENSATION), PROFESSIONAL STAFF MBR, SENIOR PROFESSIONAL STAFF, SENIOR PROFESSIONAL STAFF MEMBER, LEGISLATIVE CORRESPONDENT (OTHER COMPENSATION), SR LEGISLATIVE ASSISTANT, TAX COUNSEL, BUDGET ANALYST, ECONOMIST, INVESTIGATIVE COUNSEL, POLICY ANALYST, HEALTH POLICY ADVISOR, STAFF ASSISTANT/LEG CORRES, COUNSEL (OTHER COMPENSATION), SENIOR ECONOMIST, SENIOR LEGISLATIVE ASSISTANT (OTHER COMPENSATION), DEMOCRATIC COUNSEL, SR PROFESSIONAL STAFF MEMBER, PROFESSIONAL STAFF MEMBER (OTHER COMPENSATION), POLICY COORDINATOR, DEPUTY LEGISLATIVE DIRECTOR, INVESTIGATOR, NATIONAL SECURITY ADVISOR, SENIOR PROFESSIONAL STAFF MEM, TRADE COUNSEL, SENIOR HEALTH POLICY ADVISOR, LEGIS CORRESPONDENT, MINORITY PROFESSIONAL STAFF ME, CHIEF ECONOMIST, MINORITY PROFESSIONAL STAFF, LEGISLATION COUNSEL, MINORITY COUNSEL, REPUBLICAN COUNSEL, SPECIAL COUNSEL, POLICY ASSISTANT, ASSOCIATE COUNSEL, SENIOR POLICY ADVISOR (OTHER COMPENSATION), MILITARY LEGISLATIVE ASST, STAFF ASSISTANT/LEGISLATIVE CO, LEGISLATIVE DIRECTOR & COUNSEL, LEGISLATIVE AIDE (OTHER COMPENSATION), LEGAL COUNSEL, LEGISLATIVE STAFF ASSISTANT, OVERSIGHT COUNSEL, PROFESSIONAL STAFF (OTHER COMPENSATION), STAFF DIRECTOR & CHIEF COUNSEL, REPUBLICAN PROFESSIONAL STAFF, DEMOCRATIC PROF STAFF MEMBER, ECONOMIC POLICY ADVISOR, HEALTH POLICY DIRECTOR, SENIOR LEGISLATIVE COUNSEL, POLICY AIDE, SUBCOMMITTEE PROF STAFF MEMBER, CHIEF INVESTIGATIVE COUNSEL, LEGISLATIVE COUNSEL (OTHER COMPENSATION), DEPUTY CHIEF OF STAFF/LEGISLAT, DEMOCRATIC PROFESSIONAL STAFF MEMBER, DEPUTY POLICY DIRECTOR, ECONOMIC DEVELOPMENT DIRECTOR, SENIOR LEGISLATIVE AIDE, LEGISLATIVE DIRECTOR/COUNSEL, MINORITY PROFESSIONAL STAFF MEMBER, LEGIS CORRES/LEGIS ASST, FOREIGN POLICY ADVISOR, SENIOR ASSOCIATE COUNSEL, LEGISLATIVE STAFF (REP), CHIEF OVERSIGHT COUNSEL, JUNIOR LEGISLATIVE ASSISTANT, SENIOR COUNSEL (OTHER COMPENSATION), MINORITY CHIEF COUNSEL, CHIEF TAX COUNSEL, SR LEGIS ASST, SENIOR PROF STAFF MEMBER, DEPUTY COUNSEL, SCHEDULER/LEGISLATIVE AIDE, HEALTH COUNSEL, SENIOR LEGISLATION COUNSEL, ADA AIDE, LEGISLATIVE CORRESPONDENT (OVERTIME), STAFF ASSIST/LEG CORRESPONDENT, SUBCOMMITTEE CHIEF COUNSEL, REPUBLICAN PROF STAFF MEMBER, DEP. CHIEF OF STAFF/LEGIS. DIR, SPECIAL ADVISOR, STAFF ASST/LEG CORRESPONDENT, LEGISLATIVE ANALYST, SENIOR INVESTIGATOR, NE/MW COALITION LEGISLATION DIRECTOR, LEGISLATIVE ASSISTANT/COUNSEL, DIGITAL DIR & POLICY ADV, LEGISLATIVE CORRESPONDENT/ASST, STAFF DIRECTOR AND CHIEF COUNSEL, CHIEF OF STAFF/COUNSEL, INTERNATIONAL TRADE COUNSEL, JR LEGISLATIVE ASSISTANT, LEGISLATIVE CORRESPONDENT/PRES, LEGISLATIVE ASSISTANT/LEG. COR, SENIOR INVESTIGATIVE COUNSEL, SR LEGISLATIVE ASST, DEPUTY CHIEF OF STAFF/LD, PROFESSIONAL POLICY STAFF, SPECIAL ASSISTANT FOR POLICY AND PROJECTS, LEGISLATIVE CORRESPONDENT/AIDE, PROFESSIONAL STAFF MBR (OTHER COMPENSATION), STAFF ASST/LEGIS CORRESPONDENT, DEMOCRATIC CHIEF COUNSEL, LEGIS ASST/LEGIS CORRESPONDENT, MINORITY GENERAL COUNSEL, TAX POLICY ADVISOR, MAJORITY COUNSEL, LEGISLATIVE ASSISTANT/CORRES, SCHEDULER/LEGISLATIVE

CORRES, SENIOR BUDGET ANALYST, LA, LEGISLATIVE STAFF, LEGIS CORRESPONDENT /PRESS ASST, COUNSEL/SENIOR POLICY ADVISOR, SENIOR POLICY DIRECTOR, LEG CORRESPONDENT/LEG ASST, RESEARCHER, DEPUTY LEGISLATIVE ASSISTANT, ASST CHIEF CLERK (DEBATES), DEPUTY CHIEF OF STAFF/COUNSEL, REFUND COUNSEL, SENIOR HEALTH COUNSEL, LEGISLATION TAX ACCOUNTANT, LEGISLATIVE CORR/STAFF ASST, SR EDUCATION POLICY ADVISOR, LEGIS CORRESPONDENT/STAFF ASST, LEGISLATIVE COORDINATOR, LEGISLATIVE CORRESPONDENT/STAF, SENIOR ECONOMIC ADVISOR, SENIOR TAX COUNSEL, CHIEF OF STAFF/LEG DIRECTOR, LEGIS ASST/LEGISLATIVE CORRES, POLICY ADVISOR (OTHER COMPENSATION), CHIEF TRADE COUNSEL, LEGIS CORR/PRESS ASST, LEGISLATIVE ASSOCIATE, STAFF ASSISTANT / LEGISLATIVE CORRESPONDENT, CHIEF COUNSEL (OTHER COMPENSATION), LEG CORRESPONDENT/STAFF ASSIST, PROFESSIONAL STF MBR, STAFF ASST/LEGISLATIVE CORRES, CHIEF HEALTH COUNSEL, SR POLICY ADVISOR, BUDGET DIRECTOR, DEFENSE POLICY ADVISOR, DEMOCRATIC SR PROF. STAFF MEM, LEGISLATIVE CORRES/LEGIS ASST, SCHEDULER/LEGISLATIVE ASST, SR. LEGISLATION COUNSEL, SENIOR EDUCATION POLICY ADVISOR, DEMOCRATIC GENERAL COUNSEL, LABOR COUNSEL, REPUBLICAN CHIEF COUNSEL, DIRECTOR OF INVESTIGATIONS, LEGISLATIVE RESEARCH ASSISTANT, MILITARY LEGISLATIVE ASSISTANT (OTHER COMPENSATION), ASSISTANT COUNSEL (OTHER COMPENSATION), DEMOCRATIC SENIOR COUNSEL, COUNSELOR, DEPUTY LEGISLATIVE COUNSEL, DIR. OF LEGISLATIVE OPERATIONS, NATIONAL SECURITY POLICY ADVISOR, PROFESSIONAL STAFF MEMBER - S&, SENIOR LEGISLATIVE ASSOCIATE, MAJORITY SUBCOMMITTEE STAFF, REPUBLICAN SENIOR COUNSEL, RESEARCH STAFF ASSISTANT, SENIOR PROFESSIONAL STAFF (OTHER COMPENSATION), CHIEF COUNSEL/LEGIS DIRECTOR, DEP CHIEF OF STAFF & LEGIS DIR, HEALTH LEGISLATIVE ASSISTANT, LABOR POLICY ADVISOR, LABOR POLICY DIRECTOR, LEGISLATIVE CORR/SYSTEMS ADMIN, STAFF DIRECTOR/CHIEF COUNSEL, ASSOCIATE ADMIN. COUNSEL, CHIEF INVESTIGATOR, PRESS SECRETARY/LEGIS ASST, SUBCOMMITTEE PROFESSIONAL STAF, LA/LC, LEGISLATIVE ASSISTANT / COUNSEL, LEGISLATIVE DIR/DEPUTY COS, DIRECTOR OF OVERSIGHT, DEPUTY COS/LEG DIRECTOR, ELECTIONS COUNSEL, HEALTH PROFESSIONAL STAFF, LEGISLATIVE COORESPONDENT, MINORITY SENIOR PROFESSIONAL STAFF MEMBER, SENIOR CONGRESSIONAL AIDE, DEMOCRATIC SENIOR PROFESSIONAL STAFF MEMBER, DIR OF LEGISLATIVE OPERATIONS, DIRECTOR OF ECONOMIC DEVELOPMENT, STAFF ASSIST/LEGISLATIVE CORRE, BUDGET REVIEW DIRECTOR, DEMOCRATIC PROF STAFF MEMBER, DIR OF EDU & HUMAN SERV POLICY, LEG ASST/LEG CORRESPONDENT, OVERSIGHT STAFF DIRECTOR, SR LABOR POLICY ADVISOR, SR LEGISLATIVE ASSISTANT (OTHER COMPENSATION), SUBCOM PROF STAFF MEMBER, LEGISLATIVE AIDE/CORRESPONDENT, LEGISLATIVE CORR/PRESS ASSIST, SENIOR HEALTH ADVISOR, STAFF ASSISTANT/LC, DEPUTY COS/LEGISLATIVE DIR, LABOR POLICY COUNSEL, POLICY COUNSEL, REPUBLICAN LEGISLATIVE ASSISTANT, PROF STAFF MEMBER (DEM), PROFESSIONAL STAFF/COUNSEL, CHIEF INTERNATIONAL TRADE COUNSEL, CHIEF OF STAFF-WASHINGTON DC, DEMOCRATIC POLICY ADVISOR, BANKING COUNSEL, MAJORITY LEGISLATIVE ASSISTANT, SUBCOMMITTEE PROF STAFF MEMBER (OTHER COMPENSATION), SUBCOMMITTEE STAFF DIR-HEALTH, APPROPRIATIONS ASSOCIATE, ASSOCIATE GENERAL COUNSEL, ASSOCIATE LEGISLATIVE ASSISTANT, DEMOCRATIC POLICY DIRECTOR, DEPUTY CHIEF OF STAFF FOR POLICY, SUBCOMMITTEE STAFF ASSOCIATE (OTHER COMPENSATION), EDUCATION POLICY DIRECTOR, LEG DIR/DEPUTY CHIEF OF STAFF, LEGISLATIVE AIDE/LEGIS CORRESP, LEGISLATIVE CORR/STAFF ASST., POLICY ANALYST (OTHER COMPENSATION), EXECUTIVE ASSISTANT/LEGISLATIV, POLICY DIRECTOR (OTHER COMPENSATION), PROFESSIONAL STAFF (DEM), SENIOR POLICY ADVISOR, DEMOCRATIC STAFF, BUDGET ANALYST (OTHER COMPENSATION), IMMIGRATION COUNSEL, SR LEGISLATIVE CORRESPONDENT, DEMOCRATIC RESEARCH ASSISTANT, DIRECTOR OF EDUCATION POLICY, SENIOR PROFESSIONAL STAFF MBR, GENERAL COUNSEL (OTHER COMPENSATION), HEALTH

RESEARCH ASSISTANT, MINORITY RESEARCH ASSISTANT, REPRESENTATIVE PROFESSIONAL STAFF MEMBER, SENIOR ECONOMIC POLICY ADVISOR, SENIOR POLICY AIDE, SENIOR POLICY ANALYST, SENIOR REPUBLICAN COUNSEL, DEPUTY CHIEF AND LEGIS DIRECTO, DEPUTY LAW REVISION COUNSEL, SENIOR FOREIGN POLICY ADVISOR, SR POLICY ADVISOR & COUNSEL, STATISTICAL ANALYST, CHIEF STATISTICAL ANALYST, DEPUTY STAFF DIR/CHIEF COUNSEL, SR LEGISLATIVE DATA SPECIALIST, MAJORITY RESEARCH ASSISTANT, REPUBLICAN SENIOR PROFESSIONAL, SENIOR EDUCATION POLICY ADVISO, SENIOR POLICY COUNSEL, STAFF DIRECTOR / CHIEF COUNSEL, CHIEF CLERK (COMMITTEES), DEMOCRATIC CHIEF CLERK, DEPUTY CHIEF OVERSIGHT COUNSEL, DIRECTOR OF MILITARY AFFAIRS, GENERAL COUNSEL & PARLIAMENTAR, MINORITY CHIEF CLERK, POLICY ASSOCIATE, REPUBLICAN GENERAL COUNSEL, SENIOR PROFESSIONAL STAFF MEM (OTHER COMPENSATION)

E.0.2 Senior Positions

Similarly, the following job titles were marked as “senior positions”: LEGISLATIVE DIRECTOR, CHIEF OF STAFF, DEPUTY CHIEF OF STAFF, CHIEF COUNSEL, POLICY DIRECTOR, GENERAL COUNSEL, LEGISLATIVE DIRECTOR (OTHER COMPENSATION), SUBCOMMITTEE STAFF DIRECTOR, STAFF DIRECTOR, CHIEF CLERK, DEPUTY CHIEF COUNSEL, MINORITY STAFF DIRECTOR, DEPUTY CHIEF OF STAFF (OTHER COMPENSATION), DEPUTY LEGISLATIVE DIRECTOR, DEPUTY CHIEF OF STAFF/LEG DIR, REPUBLICAN STAFF DIRECTOR, DEPUTY CHEIF OF STAFF, CHIEF ECONOMIST, DEPUTY CHIEF, CHIEF, LEGISLATIVE DIRECTOR & COUNSEL, STAFF DIRECTOR & CHIEF COUNSEL, HEALTH POLICY DIRECTOR, DC CHIEF OF STAFF, CHIEF INVESTIGATIVE COUNSEL, SUBCOMMITTEE DIRECTOR, DEPUTY CHIEF OF STAFF/LEGISLAT, DEPUTY POLICY DIRECTOR, ECONOMIC DEVELOPMENT DIRECTOR, LEGISLATIVE DIRECTOR/COUNSEL, EXECUTIVE DIRECTOR SENATE STEERING COMMITTEE, DEPUTY CHIEF OF STAFF/COMM DIR, CHIEF OVERSIGHT COUNSEL, MINORITY CHIEF COUNSEL, CHIEF TAX COUNSEL, MAJORITY STAFF DIRECTOR, SUBCOMMITTEE CHIEF COUNSEL, DEP. CHIEF OF STAFF/LEGIS. DIR, NE/MW COALITION LEGISLATION DIRECTOR, STAFF DIRECTOR AND CHIEF COUNSEL, CHIEF OF STAFF/COUNSEL, WASHINGTON DIRECTOR, DIRECTOR OF ECONOMIC DEVELOPME, DEPUTY CHIEF OF STAFF/LD, DEMOCRATIC CHIEF COUNSEL, MINORITY GENERAL COUNSEL, SENIOR POLICY DIRECTOR, DEPUTY CHIEF OF STAFF/COUNSEL, CHIEF OF STAFF/LEG DIRECTOR, MINORITY DEPUTY STAFF DIRECTOR, CHIEF TRADE COUNSEL, CHIEF COUNSEL (OTHER COMPENSATION), REPUBLICAN DEPUTY STAFF DIRECTOR, CHIEF HEALTH COUNSEL, BUDGET DIRECTOR, REPUBLICAN SUB-COMMITTEE STAFF DIRECTOR, DEMOCRATIC GENERAL COUNSEL, REPUBLICAN CHIEF COUNSEL, DIRECTOR OF INVESTIGATIONS, DEMOCRATIC DEPUTY STAFF DIRECTOR, DIR. OF LEGISLATIVE OPERATIONS, CHIEF COUNSEL/LEGIS DIRECTOR, DEP CHIEF OF STAFF & LEGIS DIR, LABOR POLICY DIRECTOR, STAFF DIRECTOR/CHIEF COUNSEL, CHIEF INVESTIGATOR, CHIEF OF STAFF/COMM DIRECTOR, LEGISLATIVE DIR/DEPUTY COS, DIRECTOR OF OVERSIGHT, DEPUTY COS/LEG DIRECTOR, STAFF DIRECTOR (OTHER COMPENSATION), DIR OF LEGISLATIVE OPERATIONS, DIRECTOR OF ECONOMIC DEVELOPMENT, BUDGET REVIEW DIRECTOR, DEPUTY COS/COMMUNICATIONS DIR., DIR OF EDU & HUMAN SERV POLICY, OVERSIGHT STAFF DIRECTOR, DEPUTY COS/LEGISLATIVE DIR, CHIEF INTERNATIONAL TRADE COUNSEL, CHIEF OF STAFF-WASHINGTON DC, MINORITY SUBCOMMITTEE STAFF DIRECTOR, SUBCOMM STAFF DIRECTOR, DEPUTY CHIEF OF STF/EXEC ASST, SUBCOMMITTEE STAFF DIR-HEALTH, DEMOCRATIC POLICY DIRECTOR, DEPUTY CHIEF OF STAFF FOR POLICY, DEPUTY STAFF DIRECTOR (OTHER COMPENSATION), LEG DIR/DEPUTY CHIEF OF STAFF, MAJORITY SUBCOMMITTEE STAFF DIRECTOR, POLICY DIRECTOR (OTHER COMPENSATION), DIRECTOR OF EDUCATION POLICY, GENERAL COUNSEL (OTHER COMPENSATION), DEPUTY CHIEF AND LEGIS DIRECTO, CHIEF STATISTICAL ANALYST, DEPUTY STAFF DIR/CHIEF COUN-

SEL, STAFF DIRECTOR / CHIEF COUNSEL, CHIEF CLERK (COMMITTEES), DEMOCRATIC CHIEF CLERK, DEPUTY CHIEF OVERSIGHT COUNSEL, DIRECTOR OF MILITARY AFFAIRS, GENERAL COUNSEL & PARLIAMENTAR, MINORITY CHIEF CLERK, REPUBLICAN GENERAL COUNSEL