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Professional Backgrounds in State Legislatures, 1993–2012

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Abstract

In this paper, I introduce a new dataset of individual-level professional background data for state legislators in 98 chambers from 1993 to 2012. Using this data, I examine trends in the professional backgrounds of state legislators over the period of the study, with attention to institutional factors such as professionalism and legislative turnover and individual-level factors such as political party and gender. In addition, I briefly illustrate three applications of the data. First, I analyze the extent to which district-level demographic and political factors affect the probability that a district will elect a legislator from certain backgrounds. Second, I examine the relationship between occupational background and ideology, identifying the backgrounds that identify moderate and extreme members in each party. Third, I contrast the occupational backgrounds of legislators who hold leadership positions with the membership at large. Taken together, these examples speak to some of the ways in which the composition of state legislatures can reveal interesting and relevant information underlying legislative behavior and institutions.

Keywords

legislative politics, state politics, professional background, ideology, legislative leadership

In this paper, I introduce a new dataset of professional background data for state legislators in 98 chambers from 1993 to 2012. While several recent studies have examined professional backgrounds across a reasonably large number of states (e.g., Battista 2012; Maddox 2004) or years (e.g., Hamm, Hedlund, and Post 2011), state politics scholars lack an individual-level dataset that spans many states and years. And while some studies (e.g., Squire 1992) rely on proprietary data sources (e.g., the National

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Conference of State Legislatures (NCSL) that provide either individual-level or aggregate-level information about the distribution of occupations, most publicly available data sources pose challenges in terms of comprehensiveness and consistency across states. The dataset introduced here covers all state legislatures over a 20-year period encompassing two full redistricting cycles and has a missing data rate below 0.5%.

Studying the professional background of legislators can be valuable for a variety of reasons. The first of these, which is the motivation behind the development of this dataset, is that identifying professional and occupation experiences can shed light on the types of expertise that legislators bring with them prior to their legislative service. Given the overwhelming importance of specialization in the function of legislatures and legislative committees (Cooper 1970), understanding this input source of expertise is of self-apparent value in understanding outputs ranging from agenda setting to legislative productivity. Studies of both Congress and state legislatures (Battista 2012; Francis and Bramlett 2017; Hamm, Hedlund, and Post 2011; Hansen, Carnes, and Gray 2019) have found linkages between professional backgrounds and various aspects of specialization, including both committee assignments and concrete legislative action.

However, expertise is hardly the only reason to study professional backgrounds. The very decision to seek out a new career, such as a political career, can be influenced by features of occupations such as autonomy and specialization (Hout 1984). Backgrounds can help shape nascent political ambition (Fox and Lawless 2005) and determine whether candidates are considered quality challengers (Krasno and Green 1988). The decision to run as a Democrat or a Republican can be shaped by shifting patterns in society that link specific occupations with each of the major parties (Hout, Brooks, and Manza 1995). During campaigns and a legislator's subsequent time in office, one's background can be the basis for developing a credible home style (Fenno 1978), and one's actions as a representative can be influenced by one's background (Burden 2007). Finally, as Carnes (2013) notes, occupation can also serve as the best indicator of social class, which in turn may influence legislative behavior in other ways.

The paper proceeds as follows. First, I examine trends in the professional backgrounds of state legislators over the period of the study, with attention to institutional factors such as professionalism and turnover and individual-level factors such as political party and gender. Next, I briefly illustrate three applications of the data. First, I analyze which district-level demographic and political factors affect the probability that a district will elect a legislator from certain backgrounds. Second, I examine the relationship between occupational background and ideology, identifying the backgrounds that identify moderate and extreme members in each party. Third, I describe the occupational backgrounds of legislators who hold leadership positions. I conclude by describing future directions and potential applications of these data.

Measuring Professional Background

Developing a dataset on professional backgrounds requires several decisions regarding the collection and coding of data. Official legislative sources of biographical data (e.g., legislative manuals, state blue books, and online directories) typically provide

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occupational data by way of self-identification. That is, legislators describe their own occupation either as a stand-alone trait or as a summative line in a longer narrative biography. The information provided by legislators can name a broadly recognizable profession, but it can also be very vague (e.g., "self- employed"), very specific (e.g., a title and name of a firm or business), or anywhere in between.

Ultimately, each legislator in this dataset is classified in one of 44 categories. These categories were not modeled on any single specific classification scheme, but I draw on academic works (e.g., Carnes 2012; 2013), nonacademic studies (e.g., Kurtz 2015), and government classifications (e.g., the Equal Employment Opportunity Commission's EEO-1 categories). By erring on the side of many categories, users can combine adjacent categories as befits their research question.

In an effort to standardize both the nature and availability of data across states, I made several important decisions during the data collection process. First, while I was able to identify occupations for approximately three-quarters of legislators through sources such as state blue books and legislative manuals, the *State Yellow Book*, and official legislative websites, this still resulted in a large amount of missing data. Some individual legislators provided no information, while some states lacked a publicly available source with this type of biographical information. Thus, compiling information for the remainder of legislators required additional sourcing. Specifically, I used information from *Project Vote Smart*, campaign website biographies, newspaper profiles, Linkedin profiles, obituaries, and commendatory legislative resolutions. Moreover, these supplemental sources are also used in cases where sources from the first set of sources produces ambiguity. It must be acknowledged, however, that these secondary sources are typically not self-identifications and may lead to a classification different from how the legislators would describe themselves.

A second set of considerations arises from the use of these secondary data sources. In their self-identifications, exceedingly few legislators offer different descriptions of their occupation at different points in time. But when assigning an occupation to a legislator who did not offer a self-identification, I had to decide at which point in time to identify their occupation. In this dataset, the decision rule is to identify legislators' professions at the time they were first elected to the legislature.[1]

A related question is how to deal with individuals who have multiple professions during their lifetime. In this dataset, I assign exactly one profession to each legislator—again, based on the profession at the time of first election. There are individuals who havemultiple professions prior to their legislative service, or who change professions during the period of their legislative service, and this dataset cannot account for these multiple occupations.[2]

Perhaps most importantly, since one primary purpose of this dataset is to study expertise stemming from a legislator's professional background, I disallow certain classifications that are common in other datasets and analyses regarding legislative occupational backgrounds. Primary among these categories are "full time legislator" and "retired."

Unlike with studies of Congress, an issue that must be grappled with is the heterogeneity in state legislatures with respect to whether their members treat legislative

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service as a full-time occupation (Squire and Moncrief 2015). In highly professional legislatures, many legislators self-identify as full-time legislators; in fact, Maddox (2004) argues that the number of legislators who serve as full-time legislators can serve fruitfully as a measure of professionalism. However, this label provides little information about aspects of the individual's background that may contribute to specialized knowledge. Similarly, the category "retired" provides no information about a person's professional background, although many self-reportedly retired legislators also report the profession from which they retired.[3]

Yet in recent NCSL data on legislative occupations (Kurtz 2015), 12% of legislators list "legislator" as their occupation, and another 8% list "retired." That constitutes one in five legislators for whom we have no information that speaks to professional background or expertise. To gauge the information loss associated with these classifications, I compared the occupations given in official sources (e.g., legislative biographies and blue books) to the information gathered in the more extensive searches that produced this dataset (in which "legislator" and "retired" were not accepted as classifications) for the 2011–2012 biennium.

Many individuals (39%) who call themselves full-time legislators are individuals with a background in politics. Some held prior elected office, while many were legislative staffers, lobbyists, interest group staffers, and community organizers. However, while these individuals comprise the plurality of full-time legislators, a clear majority have nonpolitical professional backgrounds. Among self-described retirees, the information loss is even more substantial, since the very word "retired" implies a prior profession. Retirees come disproportionately from one specific sector of professions: education. More than one-third of retirees (37%) are retired teachers, professors, and school administrators, meaning that the inclusion of "retired" as an occupational category results in a drastic understatement of the prevalence of educators in legislatures. Indeed, the 2015 NCSL data indicates that 6% of legislators have a background in education, while this dataset classifies 12% as either educators or educational administrators and staff.

Overview of the Data

Professional backgrounds were ultimately identified for all but 97 of the nearly 19,000 legislators in the dataset (99.5%), with every state having a missing data rate below 1% and every legislative session in every state having a missing data rate below 10%.[4]

Given the previous discussion of this dataset's treatment of "full-time legislators," it is worth commenting specifically on the classification "politics and advocacy," which is the fourth-most prevalent classification. (For ease of exposition, I use the phrase "politicos" as shorthand for this category.) Legislators are placed in this category only if their professional background is in lobbying, community organizing, serving as a legislative staffer, or if their prior (or first) full-time employment was as an elected official. This category does not speak to whether the individual is a "full-time" politician or whether they are in politics as a "career," but only to what the individual did prior to state legislative service.

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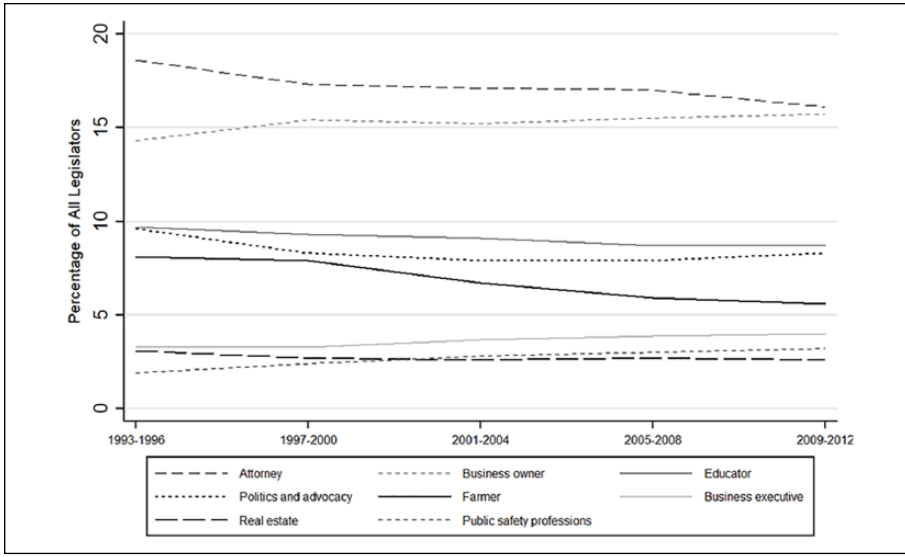

Figure 1. Prevalence of most common occupations, 1993–2012.

In addition to the 44 occupational categories, I also create two additional dummy variables that speak to important concepts in the literature. First, I create a variable, *pipeline professions*, based on Lawless and Fox's (2005) *Citizen Political Ambition Study*, which identifies four professions that are the most common sources of political candidacies. This dummy variable takes on a value of "1" for individuals coming from politics and advocacy, law (attorneys and judges), education (teachers, professors, and administrators), and business (business owners and executives). These individuals comprise 55% of the dataset.

Second, I create a dummy variable, *working class*, comprising individuals who are in the following categories: contractors and construction professions, public safety professions, office workers and clerical, retail and service professions, skilled trades, semiskilled operatives, unskilled laborers, and transportation professions. These individuals make up 7.5% of observations in the dataset.

The most common occupations are attorneys, business owners, politicos, teachers, and farmers. The prevalence of these backgrounds is entirely expected and matches aggregate data from other sources such as the NCSL data (Kurtz 2015). However, one of the trends noted by NCSL and elsewhere is a shift away from some professions (e.g., attorneys and farmers) and toward professions from the business world. To examine whether certain occupations have become more, or less, common in state legislatures over the prior two decades, I compare the percentage of legislators in different occupational categories at the endpoints of the dataset. Figure 1 shows trends in the data for the most common professions throughout the period between 1993 and 2012. Figure 2 provides the percentage change from the beginning to the end of this period for the remaining occupations.

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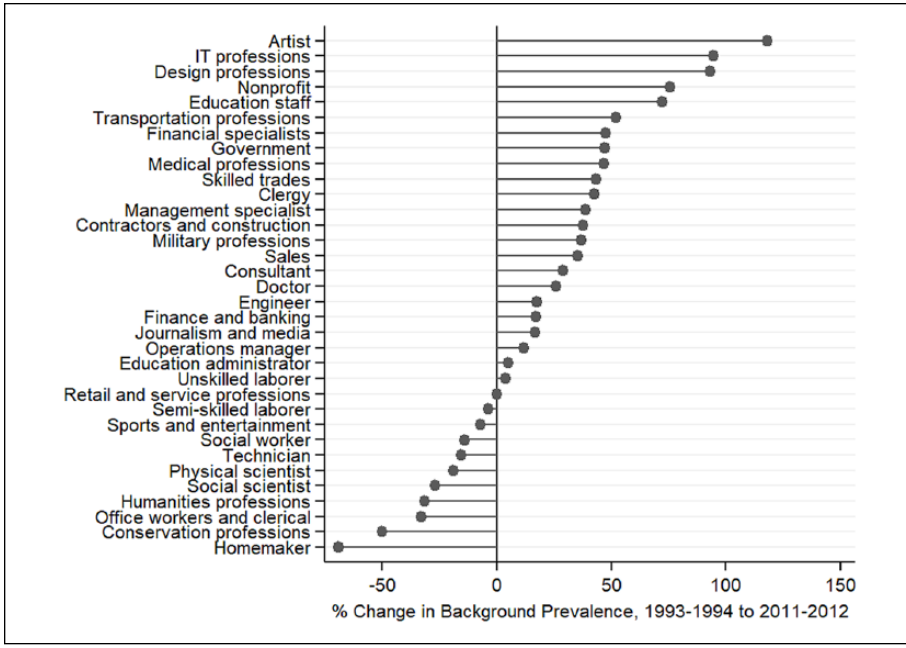

Figure 2. Percentage change in less common occupations, 1993–1994 to 2011–2012.

Immediately, we can see some substantial changes over time in the composition of the state legislatures. There are many more business owners, executives, and managers in 2012, as well as other business-related professions (e.g., management specialists, financial specialists); the proportion of individuals in public safety, medical, and construction professions also increased. Conversely, the number of attorneys, politicos, teachers, farmers, and insurance agents decreased. The proportion of individuals in working-class professions increased from 6% to 8%, while the share of individuals from the four pipeline professions decreased from 58% to 54%. Some of these changes may be attributable to change in the partisan composition of legislatures. During this period, the composition of state legislatures has shifted dramatically in favor of the Republican Party (Bullock, Hoffman, and Gaddie 2006), especially in the South (Hood, Kidd, and Morris 2004), and many of these professions have an uneven partisan breakdown.

With this in mind, I begin by examining the relationship between party affiliation and occupational background. While others have examined the relationship between *ideology* and occupation, either at the individual level (Carnes 2012) or at the state level (Squire 1992), little scholarship looks directly at occupational differences across *parties.* Given Hout, Brooks, and Manza's (1995) findings regarding occupation and party in the electorate, however, it stands to reasons that the distribution of professional backgrounds will vary by party.

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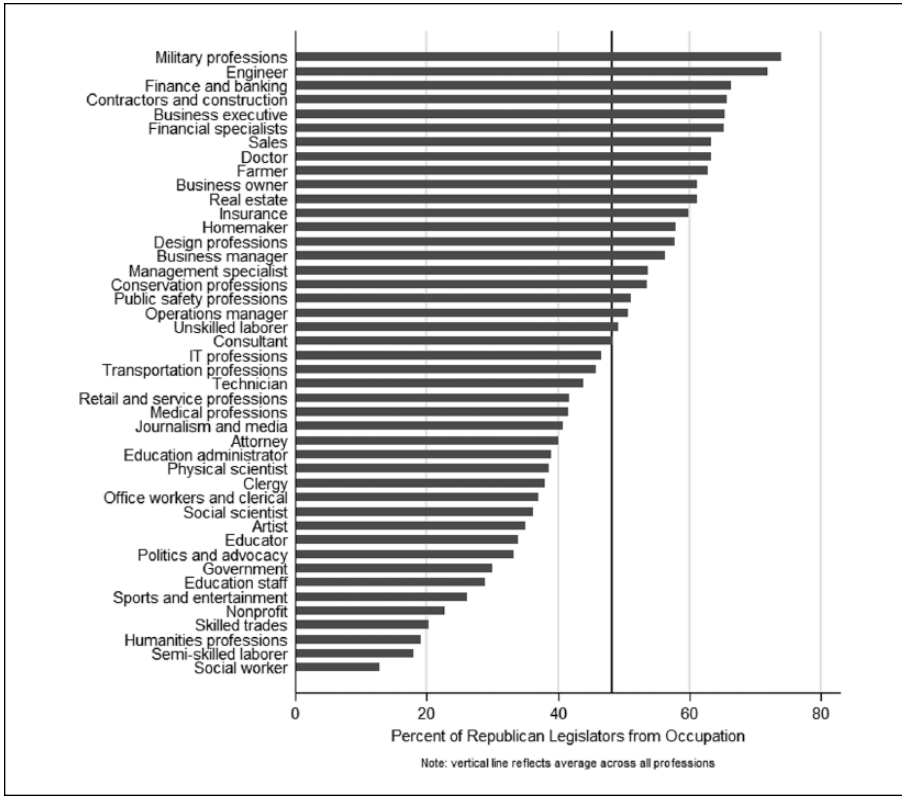

Figure 3. Proportion of legislators who are republicans, by occupation.

Some of the patterns observed in the data can be seen in Figure 3. (In this and the sections that follow, the figures illustrate patterns in the ten most common professional backgrounds. Information on the largest disparities among the remaining professions is listed in the footnotes.) Among the most common professions, Democrats are more likely to come from backgrounds as politicos and teachers, while more Republicans have backgrounds as business executives and owners, farmers, insurance agents, and real-estate agents.[5] Of course, most of these patterns would not be in the least bit surprising to even the most casual observer of American politics, but the magnitude of some of the differences is striking. Two-thirds of politicos and teachers are Democrats while 63% of farmers and 61% of business owners are Republicans. Overall, 28 of the 44 categories have 60% or more of its legislators from one party. In addition, Democrats are more likely to come from both the four pipeline professions (58% vs. 52%) and from working-class professions (8% vs. 7%).

There are also substantial differences in professional backgrounds across legislature types.[6] In particular, I focus on two important aspects of legislative institutions:

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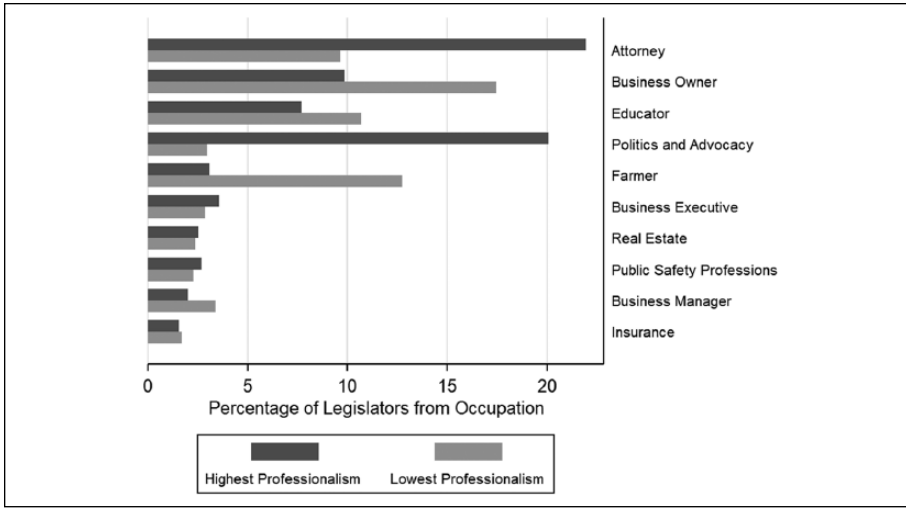

Figure 4. Prevalence of most common occupations, by legislative professionalism.

professionalism and turnover. Squire (1992) has previously found that businesspersons are less numerous in more professional legislatures and that more professional legislatures are less diverse in terms of occupational background. Turnover also influences career paths into and out of legislatures, as scholars have further distinguished between springboard, career, and dead-end legislatures, each of which stokes distinct forms of political ambition (Squire 1988).[7]

The impact of legislative professionalism can be seen in Figure 4, in which I examine differences between the 10 most professionalized and the 10 least professionalized legislatures, using the Squire index averaged across the 1996 and 2003 rankings (Squire 2007). Among the most common occupations, the most professionalized legislatures are more likely to attract politicos and attorneys, while the least professionalized legislatures are more likely to attract business owners, business managers, and farmers. The size of the difference regarding politicos is especially large: more than six times more persons from this background serve in the 10 most professionalized legislatures (and recall that this is even after disallowing "full time legislator" as a classification). There are also fewer legislators from working-class backgrounds (7% vs. 9%) in the most professionalized legislatures, a result consistent with Carnes's (2016) assertion that "demand-side" institutional factors limit the presence of the working class in state legislatures.[8] In addition, the four pipeline professions are much more prevalent (65% vs. 46%) in highly professional legislatures.

In Figure 5, I examine differences across the legislatures with the 10 highest and lowest average levels of turnover, as calculated from *The Book of the States* over the entirety of the 1993–2012 period. High and low turnover legislatures do not exhibit many differences across the most common occupations, except that high turnover legislatures have fewer attorneys. They also attract fewer individuals from the pipeline

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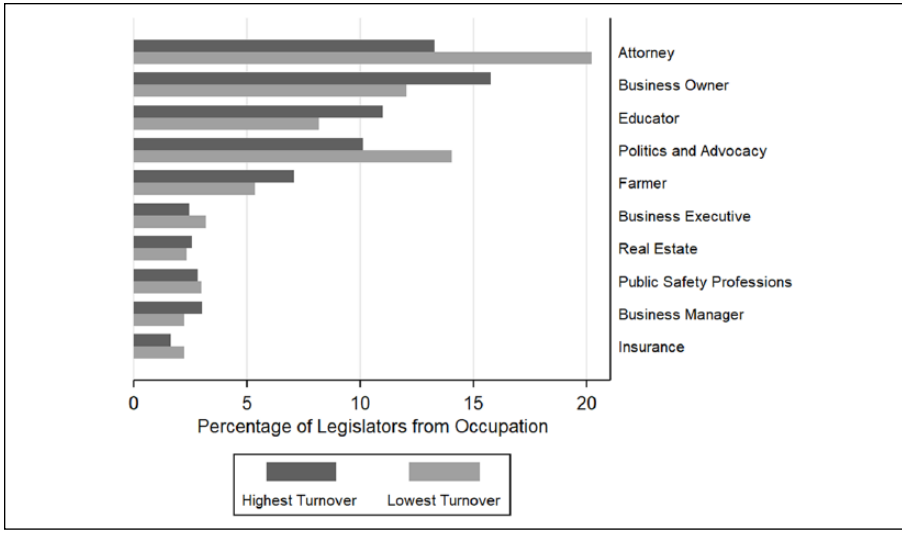

Figure 5. Prevalence of most common occupations, by legislative turnover.

professions (54% vs. 59%) and more working-class individuals (9% vs. 7%), patterns that are the mirror image of the effects of professionalism.[9] One might suspect that some of these differences are attributable to term limits, which are one major determinant of the level of turnover in legislatures; however, there are very few observable differences across term-limited and nonlimited states.

Last, I examine the relationship between gender, race, and the distribution of professional backgrounds. Squire (1992) finds that many of the same factors that influence occupational diversity also influence the presence of women and minority legislators. More directly, Bratton, Haynie, and Reingold (2008) find differences in the distribution of occupational backgrounds by both gender and race, although such patterns decline in the timeframe of this dataset relative to earlier periods.

Figure 6 illustrates the professions that men and women, respectively, are more likely to come from. Men are more likely to be attorneys, business executives, farmers, insurance agents, and public safety professionals. Conversely, women are more likely to have been teachers and politicos.[10] Looking more broadly, men are more than twice as likely to come from working-class professions (9% vs. 4%), but there is no difference in the percentage of men and women (55%) who come from the pipeline professions.

In the absence of comprehensive data about the race and ethnicity of state legislators, I examine the legislators elected by majority-minority districts (MMDs; specifically, majority-black or majority-Hispanic districts). While this is not the same thing as describing the backgrounds of minority legislators,[11] majority-minority districts are an important subject in their own right, given both the attention they have received in the literatures on descriptive representation (e.g., Tate 2003) and

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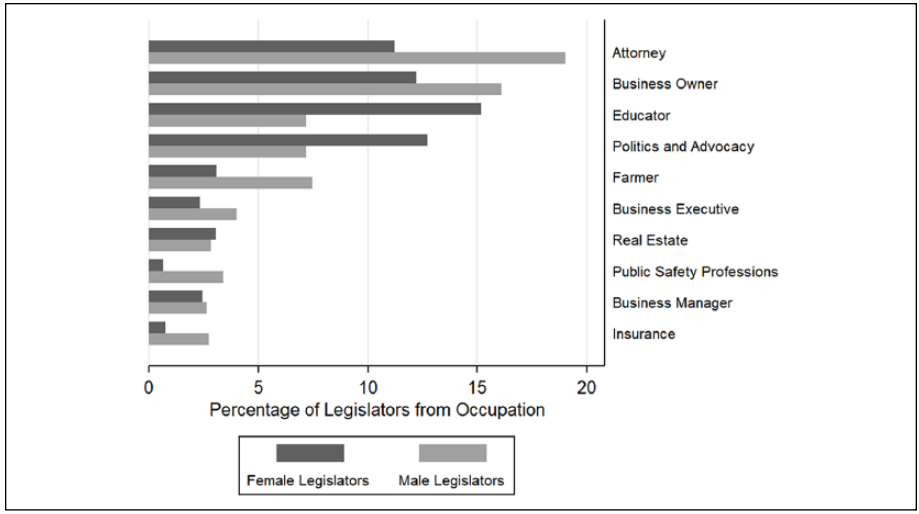

Figure 6. Prevalence of most common occupations, by gender.

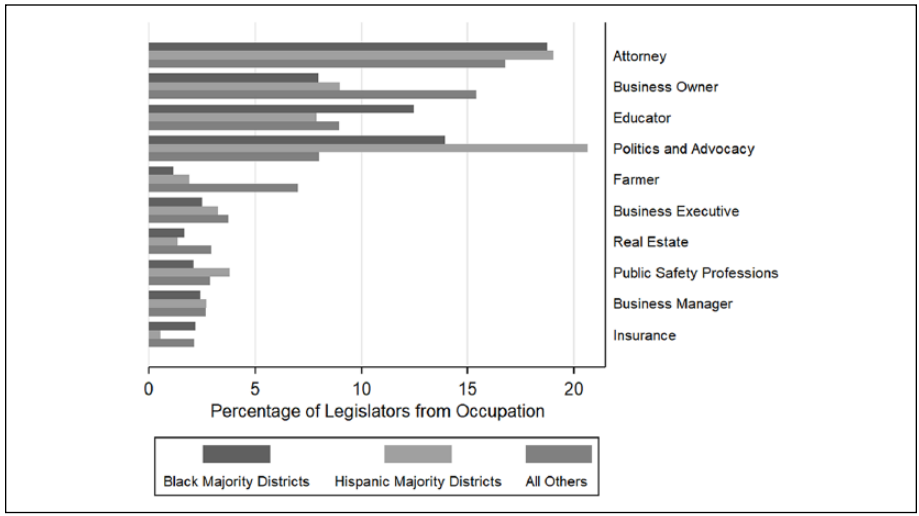

Figure 7. Prevalence of most common occupations, by district demographics.

redistricting (e.g., Cameron, Epstein, and O'Halloran 1996; Lublin and Voss 2000) and the litigation that has reached the Supreme Court several times.

Figure 7 illustrates the distribution of professional backgrounds for legislators from majority-black and majority-Hispanic districts. Many of the differences mirror differences across Republicans and Democrats: more politicos and fewer

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business owners, farmers, insurance agents (only in majority-Hispanic districts) and real-estate agents.[12]

Finally, legislators in both majority-black (58%) and majority-Hispanic districts (63%) are more likely to come from the four pipeline professions than other districts (54%). With respect to working-class professions, majority-black (7%) and majority-Hispanic districts (6%) are slightly less likely to elect persons from such backgrounds compared with other districts (8%).

District Traits and Professional Background

In the prior section, I examined some of the factors associated with the prevalence of certain professional backgrounds, including demographic traits, traits of the legislature, and political factors. However, district traits may also influence the types of individuals elected to the legislature. For example, the general premise from the descriptive representation literature—that voters may wish to elect in-group legislators—has rarely been examined with respect to social class and occupational background (Carnes 2012).

In this section, I examine whether districts differ in their propensity to elect legislators from different backgrounds. Rather than present models for each of the 44 occupations, I focus on the three distinctions addressed earlier in the paper: (a) whether legislators are politicos, (b) whether they come from one of the four pipeline occupations, and (c) whether they come from a working-class profession.

With respect to each of these three dependent variables, I conduct a logistic regression model that predicts whether an individual seat in an individual term will be held by a person with that specific occupational background. The models are multilevel models with seats nested within state-sessions. I first account for the factors identified in the previous section: professionalism, turnover,[13] legislative chamber, and whether a state has term limits.[14] I also include a random slope for legislative chamber to allow lower-upper chamber differences to vary by state (except in the models for working-class professions, where this term's inclusion does not improve model fit). I next use data from the 2000 Census (specifically, the 2006 state legislative districts update) to measure several district traits for each state legislative district. Doing so limits these analyses to the 2003–2012 period,[15] but most results for the non-Census variables are similar when analyzing the entire 1993–2012 period.[16] The district traits I examine are the normal vote—the Republican share of the 2000 presidential vote (Wright 2004), the district's racial composition (whether the district is a majority-black or majority-Hispanic district), the percentage of the district that is urban, the percentage of married individuals, the percentage of commuters, the percentage of residents working in government, and the percentage of district residents with a college degree.[17] Results can be found in Table 1.

Table 2 provides the substantive effects of each of these variables on the three dependent variables. First, with respect to the presence of legislators from a background in politics and advocacy, professionalism is the most important explanation, although its effect is somewhat larger in states with low turnover. Legislators from majority-Hispanic districts are also more likely to have this background, but majority-black districts are less likely to elect politicos, after accounting for other factors. Among other district traits,

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Table 1. District Traits and Professional Background.

Covariate	Professional background outcome		
	Politics	Pipeline	Working class
Professionalism	9.67 (1.05)*	1.41 (0.17)*	−0.85 (0.30)*
Turnover	4.28 (1.28)*	−0.22 (0.38)	0.71 (0.63)
Professionalism × Turnover	−16.93 (3.65)*	—	—
Term limits	0.08 (0.13)	−0.02 (0.06)	−0.07 (0.10)
Upper chamber	0.04 (0.07)	0.23 (0.04)*	−0.28 (0.06)*
Normal vote	−1.09 (0.27)*	−0.18 (0.14)	−1.54 (0.25)*
Black majority district	−0.37 (0.12)*	−0.18 (0.07)*	−0.43 (0.12)*
Hispanic majority district	0.25 (0.12)*	0.07 (0.08)	−0.63 (0.16)*
College educated (%)	−0.003 (0.002)	0.011 (0.001)*	−0.034 (0.003)*
Urban (%)	0.72 (0.12)*	0.15 (0.06)*	0.17 (0.10)
Married (%)	−0.015 (0.004)*	−0.006 (0.002)*	0.014 (0.005)*
Commute (%)	0.012 (0.005)*	0.012 (0.003)*	0.003 (0.006)
Work in government (%)	0.010 (0.005)	0.010 (0.003)*	−0.005 (0.005)
Constant	−4.55 (0.43)*	−0.44 (0.17)*	−1.74 (0.32)*
σ (Random slope: Upper chamber)	0.11 (0.06)	0.07 (0.03)	—
σ (Intercept)	0.20 (0.04)	0.04 (0.01)	0.10 (0.02)
Log likelihood	−6,924.96	−18,848.57	−7,501.63
N		27,886	

*$p < .05$.

Table 2. Substantive Effects of District Traits on Professional Background.

Covariate	[From, to]	Politics	Pipeline	Working class
Professionalism	[0.08, 0.32]	+8.8%*/6.2%*	+7.8%*	−1.4%*
Term limits	[0, 1]	—	—	—
Upper chamber	[0, 1]	—	+5.2%*	−1.9%*
Normal vote	[0.35, 0.67]	−2.2%*	—	−3.5%*
Black majority district	[0, 1]	−1.8%*	−4.4%*	−2.7%*
Hispanic majority district	[0, 1]	+1.8%*	—	−3.5%*
College educated (%)	[11.4, 36.2]	—	+6.4%*	−6.0%*
Urban (%)	[0, 1]	+2.7%*	+1.8%*	—
Married (%)	[46.4, 64.0]	−1.7%*	−2.7%*	+1.8%*
Commute (%)	[18.5, 29.6]	+0.8%*	+3.2%*	—
Work in government (%)	[9.7, 20.6]	—	+2.7%*	—

Note. M-Dashed lines indicate no statistically significant difference. Cell values are changes in predicted probability of having that background based on changes in the values specified in the [From, To] column. Effect sizes of professionalism on probability of electing a politico are for low turnover (8.8%) and high turnover (6.2%) legislatures, respectively, as estimated from the interaction effect.
*$p < .05$.

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more urban districts, more Democratic districts, districts with fewer married persons, and districts with more commuters are more likely to elect politicos.

The second column examines the "pipeline" professions collectively (which includes politicos). Once again, professionalism is a powerful predictor of coming from a pipeline profession, and upper chamber legislators are also more likely to come from these occupations. Majority-black districts are less likely to elect such legislators. Among other constituency factors, more urban districts, districts with higher levels of education, districts with fewer married persons, district with more commuters, and districts with more government workers are more likely to elect members from these professions.

The final column examines the factors associated with electing a working-class legislator. Lower chamber legislators and legislators in less professional legislatures are more likely to have this professional background. Both types of MMDs are less likely to have working-class legislators. Turning to the district-level factors, more Democratic districts, less educated districts, and districts with more married persons are more likely to elect working-class legislators.

Ideology and Professional Background

Another useful application of these data is to consider whether legislators from different backgrounds tend to be more conservative or more liberal. If legislators primarily adopt a "delegate" perspective and respond to district preferences, the effects of professional background may be limited. However, if legislators' ideologies—or at least their roll call voting—are also affected by their experiences and values (e.g., Burden 2007), professional background may be one important influence. One's perspective on the proper role of government may be different depending on whether one comes from a government or service- oriented profession or a private sector profession.

To examine whether individuals from certain professional backgrounds are more conservative or liberal, I use Shor and McCarty's (2011) data, which are available for 91% of the legislators (and 97% of the observations) in the dataset. A first glance at the data indicates support for the linkage between ideology and professional background: the intra-class correlation coefficient from a random-effects model shows that 13% of the variance can be explained by professional background.

Table 3 presents the results from these models, which are linear models estimated separately for each party, with standard errors clustered by district.[18] In each model, I include a dummy variable for all but one of the occupational categories (farmers are treated as the baseline group). Next, I include several control variables: the district normal vote, the natural log of the district's median income, the percentage of black and Hispanic voters in the district, whether the district is urban,[19] and whether the district is in the South.

Finally, I estimate the predicted Shor-McCarty score (and its 95% confidence interval) for a legislator from each occupational category, holding other variables constant. Those predicted values and confidence intervals are then compared with the mean Shor-McCarty score in each party (−0.73 for Democrats and 0.71 for Republicans).

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Table 3. Professional Background and Legislator Ideology.

Covariate	Democrats	Republicans
Normal vote	1.23 (0.05)*	1.65 (0.05)*
District median income (ln)	−0.36 (0.02)*	−0.12 (0.02)*
% Black	0.01 (0.03)	−0.23 (0.08)*
% Hispanic	−0.55 (0.03)*	0.35 (0.08)*
Urban district	−0.08 (0.01)*	−0.00 (0.01)
South	0.32 (0.01)*	0.13 (0.01)*
Constant	3.42 (0.21)*	1.19 (0.20)*
R^2	.49	.24
N	28,372	26,080

Standard errors are clustered by district (separately for each redistricting cycle). Dummy variables for occupational categories included but not reported.
*$p < .05$.

Occupations for whom the party mean is not included in the 95% confidence interval are plotted in Figure 8.

Specifically, Figure 8 provides a list of professions that produce significantly more liberal or conservative members. Among both Democrats and Republicans, social workers, teachers, attorneys, medical professions, government workers, and politicos are more liberal than would be expected, while contractors, engineers, farmers, and business owners are more conservative than expected. Notably, there are no professions that produce more conservative Republicans and more liberal Democrats (at least to a statistically significant degree), nor are there any where members of the profession are more moderate in each party.

Professional Background and Leadership Selection

Studies of leadership selection in Congress have traditionally focused on the importance of ideology (e.g., Cox and McCubbins 1993), while more recent work has emphasized the importance of fundraising ability and the redistribution of campaign funds (Heberlig, Hetherington, and Larson 2006). We know relatively little about how leaders are chosen in state legislatures. We do know, however, that social background is often, albeit perhaps unjustifiably, used as a heuristic for leadership suitability (Carnes and Lupu 2015). In state legislatures, where many members lack any resume of political leadership that might be more common in a body such as Congress, it is reasonable to think that social background cues, which may include one's professional background, may help determine which individuals serve in leadership positions.

To assess this possibility, I examine the predictors of obtaining a leadership position during one decade of the overall dataset (1995–2004). I follow Heberlig, Hetherington, and Larson (2006) in defining leadership positions quite broadly, to include the "extended leadership." At the same time, some states have mimicked Congress by developing such a plethora of leadership positions that the term is

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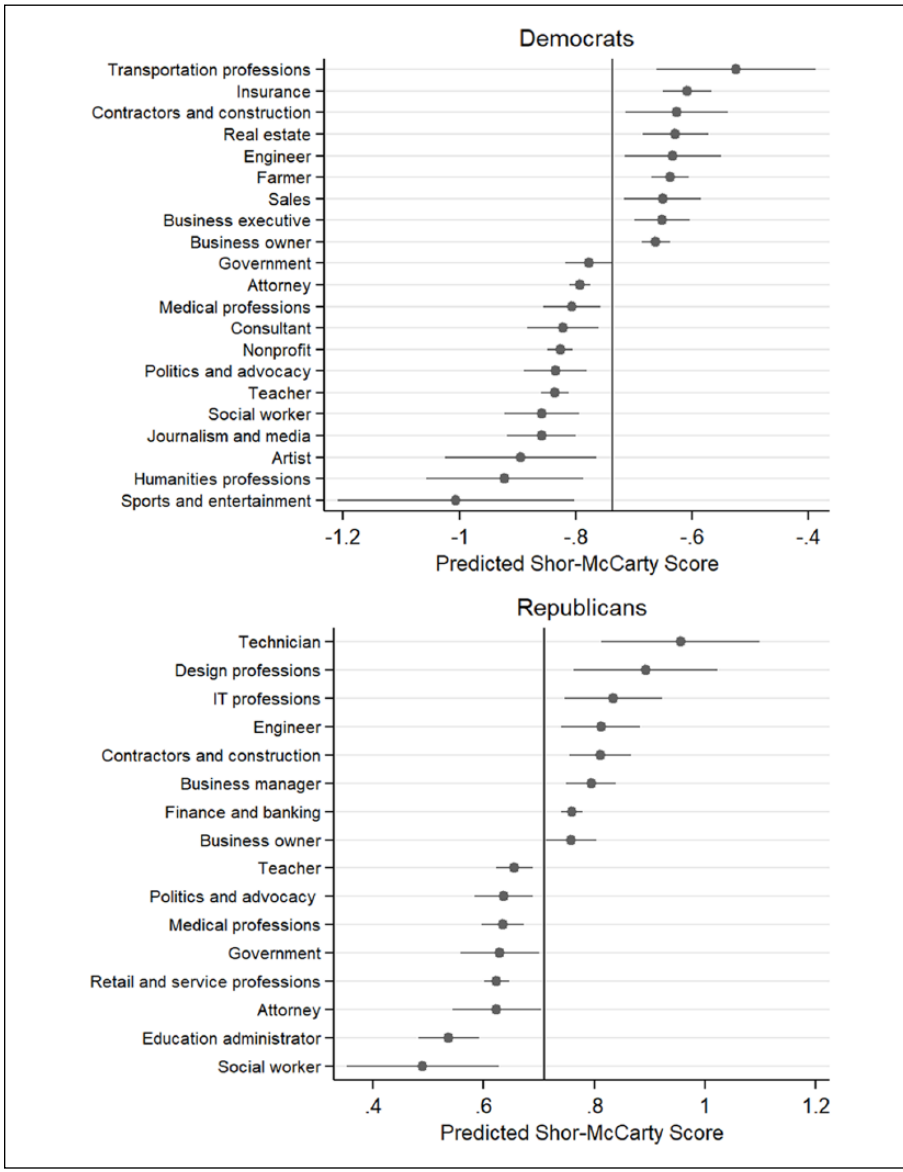

Figure 8. Professional background and ideology.
Note. Vertical lines represent party means, holding other variables constant. Only professions significantly higher or lower than mean depicted; 95% confidence intervals provided.

rendered meaningless. To avoid excessive variance across states and the incongruence of referring to over half of a legislative body as leaders, I classify legislators as leaders if they hold positions such as speaker, Senate president, majority or minority party

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Table 4. Professional Background and the Probability of Holding a Leadership Position.

Covariate	Model 1	Model 2
Pipeline professions	—	0.20 (0.06)*
Working-class professions	—	0.02 (0.12)
Normal vote	3.37 (0.92)*	3.41 (0.91)*
Normal vote squared	−3.65 (0.95)*	−3.72 (0.94)*
Member conservatism	−0.01 (0.05)	−0.01 (0.05)
Member conservatism squared	0.16 (0.03)*	0.16 (0.03)*
Upper chamber member	0.82 (0.06)*	0.84 (0.06)*
Female legislator	−0.03 (0.08)	−0.09 (0.07)
Seniority	0.11 (0.01)*	0.11 (0.01)*
Turnover	3.99 (0.48)*	3.82 (0.48)*
Seniority × Turnover	−0.15 (0.05)*	−0.15 (0.05)*
Constant	−4.86 (0.30)*	−4.96 (0.27)*
Log Pseudo-Likelihood	−8,466.80	−8,515.79
N	29,737	29,737

Note. Standard errors are clustered by member. Dummy variables for occupational categories included in Model 1 but not reported.
*$p < .05$.

leader, majority or minority party whip, and their immediate subordinates. In states with extended leadership structures (e.g., large numbers of deputy whips), these individuals are not categorized as leaders. Overall, 9% of legislators in the dataset served as leaders.

The models presented in Table 4 are logistic regression models. Since individuals elected as leaders often serve multiple terms, standard errors are clustered by legislator, with service in each chamber treated separately. In Model 1, I include dummy variables for each occupation (again, treating farmers as the excluded category). In Model 2, by contrast, I include dummy variables for two variables I have examined throughout this paper (whether somebody is from a pipeline profession or a working-class occupation).

As control variables, I include terms for both ideology and the normal vote in the district, as well as polynomial terms for both variables, since there may be nonlinear relationships between ideological or district extremity and the likelihood of becoming a leader. I also control for two individual factors (gender and seniority) and one institutional factor (legislative turnover). In addition, I include an interaction between seniority and legislative turnover since the effect of seniority is likely to differ in states where values of seniority are condensed due to term limits or otherwise high legislative turnover.

The results indicate a somewhat limited role for professional background in predicting who will serve as a leader. Following the same procedure as in the previous section, I estimate the probability of a legislator from each profession serving as a leader in a given session, holding other factors constant. I then compare the 95%

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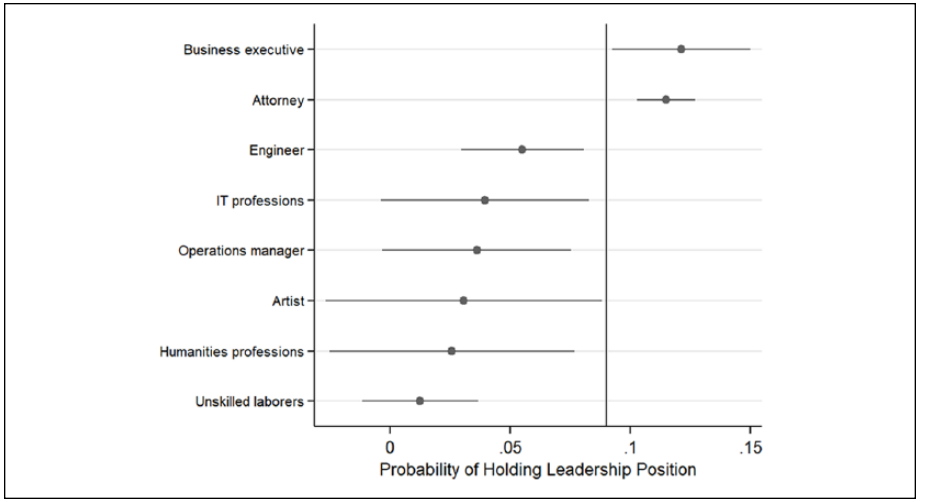

Figure 9. Professional background and the probability of serving in leadership.
Note. Vertical lines represents average probability across all individuals, holding other variables constant. Only professions significantly higher or lower than mean probability depicted; 95% confidence intervals provided.

confidence intervals associated with these estimates to the mean probability across all legislators (9.0%).

As indicated in Figure 9, only eight of the 44 professions are significant predictors of service in leadership. Attorneys and business executives are significantly more likely to become legislative leaders. However, in the remaining eight most prevalent professional background categories, there is no statistically significant impact of one's background. Perhaps most notably, individuals with a background in politics and advocacy are no more likely to become leaders. Among the less common professions, engineers, IT professionals, operations managers, artists, humanities professionals, and unskilled laborers are less likely to become leaders. Model 2 indicates that individuals from the pipeline professions are more likely to become leaders, but working-class individuals are neither more nor less likely to be leaders.

Conclusion

Knowing the professional backgrounds of legislators opens many avenues for study above and beyond those explored in this paper. Because state legislatures are diverse in terms of institutions, incentives, and ambitions, further insights may come from studying the conditional effect of professional background under different legislative settings. As emphasized at the outset, this dataset is especially motivated by the study of expertise and specialization, but data on professional backgrounds can provide insights in several other ways.

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First, professional background can shape a legislator's perspective and behaviors in a variety of ways, including their perceptions of the constituency, the way they campaign, the way they communicate with voters, and the way they perceive their role as a legislator. In short, most of the classic questions of representation may be enhanced by treating professional background as a key input in legislative careers.

Second, in an era of "anti-establishment" politics, understanding why electorates gravitate toward candidates from nontraditional backgrounds is an especially relevant topic. Many of the patterns in this paper show a clear dichotomy between "business" and the other traditional sources of political candidacies (politics, law, and education), but other professions are even rarer. Understanding how voters respond to candidate biographies is a multifaceted literature, but the trait of professional background is especially apropos when dealing with voters who are hostile to the political establishment and "career politicians."

Third, having individuals from disparate professional backgrounds contributes not only to the collective expertise in a legislature but also to its diversity of perspectives. Squire (1992) noted a negative relationship between professionalism and the diversity of occupational backgrounds. Future work should explore more thoroughly whether and how this diversity matters in terms of setting the legislative agenda and successfully addressing social problems.

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Notes

1. This rule is only operant in states where I code the legislator's occupation based on biographical information. In states where the legislators self-identify an occupation, I use the self-identification for the earliest available term of their service in the legislature.
2. The absence of comprehensive biographical information in many states and years means that attempting to account for multiple professions per person would produce massive inconsistencies, even before considering questions such as "for how many years must one be in a profession?" or "how long ago can one have been in a profession?"
3. For similar reasons, I also avoid accepting the following classifications: "student," part-time or volunteer positions, military reserve positions, and nonsalaried organizational positions. Individuals who hold an organizational position (e.g., Chamber of Commerce

director, pipefitter's union president) are classified by their underlying position (i.e., business owner, pipefitter), absent evidence the organizational position is salaried. For individuals whose given profession was simply "business," "businessman/businesswoman," or some variant, I did additional research to assess whether this person was a business owner, executive, or manager.

4. The number of missing cases per state are as follows: Vermont (22), New Mexico (18), Arkansas (13), West Virginia (12), North Dakota (10), Montana (8), Alabama (5), Maine (5), New Hampshire (3), and Kentucky (1). This does not include the New Hampshire House, which is excluded from the dataset entirely due to pervasive difficulty in finding biographical information. Specifically, the primary sources for the data collection yielded usable data for only a small fraction of cases, and even the secondary data sources offered little information.
5. Democrats are more than three times more likely to have been social workers, semiskilled workers, humanities professionals, skilled tradespersons, and to work for nonprofits, and twice as likely to come from backgrounds as sports and entertainment professions, educational staffers, and government employees. Republicans are three times more likely to come from military professions and twice as likely to come from backgrounds as engineers, finance and banking professionals, contractors and construction workers, and financial specialists.
6. There are few dramatic differences between the lower and upper chambers of legislatures. Salespersons and semiskilled laborers are twice as prevalent in lower chambers, while those in conservation professions are twice as prevalent in upper chambers.
7. I also examined the presence or absence of term limits. There are few differences between term-limited legislatures and those without term limits. The one exception is that unskilled laborers serve twice as often in term-limited states.
8. Legislators in the most highly professional legislatures are also two times more likely to have been social scientists, while those in the least professional legislatures are three times more likely to have been homemakers, humanities professionals, transportation professionals, and unskilled laborers, and twice as likely to have been military professionals, conservation professionals, artists, and IT professionals.
9. There are no other professions that are unusually common in low turnover legislatures, but high turnover legislatures are at least three times more likely to attract conservation professionals, artists, humanities professionals, and unskilled laborers, and twice as likely to attract sports and entertainment professionals, military professionals, IT professionals, technicians, and design professionals.
10. Men are at least three times more likely to have been semiskilled laborers, conservation professionals, operations managers, contractors and construction workers, technicians, skilled tradespersons, engineers, doctors, and transportation professionals. They are also twice as likely to be clergy and unskilled laborers. Women are more than three times more likely to be homemakers, humanities professionals, office workers, medical professionals, social workers, nonprofit workers, and artists, and twice as likely to be education staffers and journalists.
11. Congress can offer some sense of the extent to which this is an accurate proxy for race or ethnicity: in the 114th Congress, 95% of white majority districts elected white legislators and 83% of minority legislators hail from majority-minority districts (MMDs).
12. Majority-black districts are also much more likely (compared with non-MMDs) to elect individuals who are clergy, humanities professionals, social workers, retail and service workers, government workers, and education staffers. They are less likely to elect individuals who are IT professionals, unskilled laborers, engineers, transportation professionals,

artists, and homemakers. Majority-Hispanic districts are much more likely to elect individuals who are design professionals, social scientists, IT professionals, government workers, and sports and entertainment professionals. They are less likely to elect individuals who are educational staffers, journalists, transportation professionals, medical professionals, and contractors and construction workers.

13. Although low turnover legislatures may not be a cohesive group (insofar as they are a mix of "career" and "dead end" legislatures), multivariate analyses suggest that the interaction between professionalism and turnover is only meaningful when looking at the prevalence of politics and advocacy as a professional background. Therefore, I include an interaction between professionalism and turnover in the first model of Table 1 but not in the remaining models.
14. I do not, however, control for political party and gender, since these are characteristics of the representative, not the district, and therefore not causally prior to the election.
15. Additional years are excluded for states that redistricted later in the decade or states whose lines were redrawn due to litigation.
16. That is, I re-produced the models, excluding the Census variables, for the entire dataset. The only differences observed are in the effects of term limits and the normal vote on the probability of electing someone from a pipeline profession (both have null results in Table 1 but negative effects when excluding the Census variables).
17. Alternative measures of socioeconomic status, such as median income (linear or natural logged versions), the percentage of residents with a high school degree and the percentage of individuals in professional class occupations, perform similarly, but model fit is consistently highest with the percentage of bachelor's degrees.
18. To be more precise, a district is treated as having a separate identity in each redistricting cycle for the purposes of clustering. In addition, for upper-chamber legislators who serve staggered four-year terms, they are only included in the session after their election, and not as a separate observation in the biennium in which their third year starts.
19. The construction of the urbanity measure differs from the previous section due to data availability. Although I do not have Census data on urbanity for the 1990s, I obtained a measure of urbanity from Barone, Lilley, and DeFranco (1998). However, these measures are not directly comparable. Thus, I create a dummy variable in which districts are classified as urban if they are in the 73rd percentile or greater of urbanity in each distribution (scores of 100% for the Census data and scores of 0.50 or greater for the Barone measure). Alternatively, excluding the urbanity measure entirely changes very few inferences with respect to professional background, and only in small categories (government workers, humanities professionals, and retail and service workers).

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