One Size Fits All? A Study on State Professionalism and Election Security Grant Expenditures

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Currently, the United States pursues a "one size fits all" policy for federal grants to states by conflating their legislative capacity. This may not be effective: many states have differing levels of professionalization measured by frequency of sessions, staffing resources for legislatures, and pay. This study examines state expenditures of grant funding made available through the Help America Vote Act (HAVA). Variations in state expenditures potentially illustrate how professionalism affects state spending on election security. The study finds that more professional state legislatures tend to spend more on election security regardless of political affiliation. The effect of professionalism on election expenditure is more pronounced when the Federal Government increases requirements on state legislatures during the application process. While this study is focused on grants geared towards election expenditures, it could have broad applications for how the Federal Government incentivizes states to spend money on national initiatives.

The benefit of federalism is best summed up in Supreme Court Justice Louis Brandeis' oft-cited opinion that recognized states as laboratories of democracy.[1] The ability to experiment with policies across fifty different states is a significant advantage to the United States. However, there are instances where one state's policy decisions have a broader effect on the rest of the country. A salient example is election security. The closeness of recent elections and their polarization in recent years shows that election security is an issue that bleeds across state lines. Additionally, security upgrades are expensive. The 2020 election was the costliest in United States history with a price tag of over $10 billion.[2] Grants are one way that the Federal Government can incentivize states to act in the best interest of the country while leveling the playing field for states that may not have the funds to pursue these initiatives.

The main source of election security grants is the Help America Vote Act (HAVA). Enacted in 2002, HAVA enables states to apply for federal funding to upgrade election infrastructure. Ahead of the 2018 midterm elections, Congress used this act to make $380 million available for states to spend on election security.[3] While this was a positive step towards securing the 2018

[1] "New State Ice Co. v. Liebmann," 1932, United States Supreme Court.

[2] Charles Stewart, *The Cost of Conducting Elections* (Boston, MA: MIT Election Data and Science, 2022).

[3] Before the pandemic, Congress made $425 million in HAVA funds available for 2020 as well; Miles Parks, "Congress Allocates $425 Million For Election Security In New Legislation", *National Public Radio,* December 16, 2019, https://www.npr.org/2019/12/16/788490509/congress-allocates-425-million-for-election-security-in-new-legislation. While this may seem like a lot, this is short of the $600 million that Democrats hoped for and even shorter of the nearly $2.2 billion that the Brennan Center estimated would be necessary to shore up our elections over the next five years; Lawrence Norden and Edgardo Cortes, "What Does Election Security Cost?", (Washington, DC: Brennan Center for Justice, 2019), https://www.brennancenter.org/our-work/analysis-opinion/what-does-election-security-cost.

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elections, a report released by the Election Assistance Commission (EAC) stated that most states had only spent a fraction of the funds.[4] These leftover funds pose an interesting question: what factors make some states more effective at spending federal grant money than others?

Leftover funds indicate that state legislatures are either unwilling or unable to spend all the funds they are allocated. This study leverages past expenditures from the HAVA to evaluate how professionalism and partisanship shape state expenditures on election administration. As the Federal Government attempts to provide additional resources to the states for election security in the future, the differences in state legislatures and their political motivations could lead to different outcomes across the United States. Professionalism in this context is defined by the time and resources available to members of the state legislature as measured by the Squire index (discussed below). While some states only have part-time legislators with meager staffs, other states have full-time legislators whose staffs rival those in the House of Representatives. Despite this variation, the Federal Government treats each of the states as equals when creating requirements for expending grant money.

This paper will examine historical expenditure data to observe the effect that legislative professionalism has on grant expenditures. First, it gives an overview of election security issues posed after the 2000 Presidential Election. Next, it outlines the HAVA with emphasis on the differences in funding from Sections 101 and 251. Following this section, it introduces the public demand and partisanship models of election expenditures and discuss relevant research supporting each model. It then surveys the current literature on state capacity and legislative professionalism before discussing the data and findings. This study finds that professionalism has a positive relationship with expenditures, especially when federal restrictions on funding require cooperation between election officials and state legislatures. The paper concludes with a recommendation that Congress account for the large differences in state legislative capacity when structuring future federal grants.

The Help America Vote Act

HAVA was born out of the controversial 2000 Presidential Election. HAVA set basic guidelines for election practices, made new funding available to states, and created the EAC to help oversee these reforms following the election controversies in 2000. The Federal Government provides grants in two formats: categorical grants and block grants. Categorical grants provide funding for specific purposes or projects. Examples of these are the Special Supplemental Nutrition Program for Women, Infants, and Children or highway construction projects.[5] Block grants are more general and provide states with more options on how to spend the funds. HAVA funding falls under the latter category.

Federal grants have increased over the last two decades to account for over a third of a state's government funding.[6] Many of these grants supported initiatives created by the Bush

[4] J. Marks, "Analysis | The Cybersecurity 202: States spent just a fraction of $380 million in election security money before midterms." *The Washington Post*, April 5, 2019, https://www.washingtonpost.com/news/powerpost/paloma/the-cybersecurity-202/2019/04/05/the-cybersecurity-202-states-spent-just-a-fraction-of-380-million-in-election-security-money-before-midterms/5ca697b81b326b0f7f38f32b/.

[5] Tax Policy Center, *The Tax Policy Center's Briefing Book: A Citizen's Guide to the Fascinating (Though Often Complex) Elements of the Federal Tax System* (Washington, DC: Brookings Institution, 2020).

[6] Julie Lawthorn, *Federal Grants to State and Local Governments: A Historical Perspective on Contemporary Issues* (Washington, DC: Congressional Research Service, 2019).

Administration and Obama Administration such as the No Child Left Behind or the Energy Efficiency and Conservation Block Grant.[7] Federal aid programs stagnated under the Trump administration until the pandemic forced an injection of money into the states to deal with the economic fallout of lockdowns. Funds can be awarded differently under both categories. Formula grants allocate federal dollars to states based on rules set in law. Competitive grants can tie funding to performance criteria. All of these may require states to match federal funding to a certain extent.[8] Despite these different options, there are not currently any grant awards that consider a state's ability to comply with the regulations put forth by law.

Variation in the distribution of HAVA funds over the last 16 years presents an opportunity to study how different regulations affect state legislatures' ability to spend federal grant money. Sections 101 and 251 of HAVA made election technology funding available to all fifty states.[9] Yet nearly two decades later, many states have not spent all their original funding. As of 2018, 11 states still had over 10% of their original funds remaining from 2002.[10]

Section 101 sets aside funding to improve their election processes and imposes very few restrictions on how states can spend this money. For this reason, Congress authorized $380 million in new funding under Section 101. These funds are updated as formula, non-competitive grants. Section 101 calculates payments to each state by setting a minimum amount for each state, and then dividing the rest of the money by the proportion of the voting-age population. This section placed these funds under the control of the governor or chief executive officer of the state.

States use Section 251 funds to purchase voting systems and are more restrictive than Section 101 funds. States must make a state plan for the use of the funds which sometimes requires public input. The largest restriction, however, is that states must appropriate funds to match 5% of the total grant money allocated under Section 251. This requires coordination between the executive and legislative branches which can lead to a delay in receiving funds. In 2008, many states missed the deadline for requesting state-appropriated funds and were thus not able to match the HAVA funds given to them.[11] In this way, Section 251 funds impose greater barriers to states whose legislatures meet infrequently.

States must also make a state plan for use of the funds, which sometimes requires public input. Getting public input can cause states to be unable to update their state plans in time to use the funding. The procurement process in many states also causes issues as some states have extensive approval processes that make it difficult to purchase equipment.[12] These factors offer challenges to states that do not have the professional capacity to perform the duties mandated under Section 251.

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[7] Lawthorn, *Federal Grants.*

[8] Tax Policy Center, *Briefing Book.*

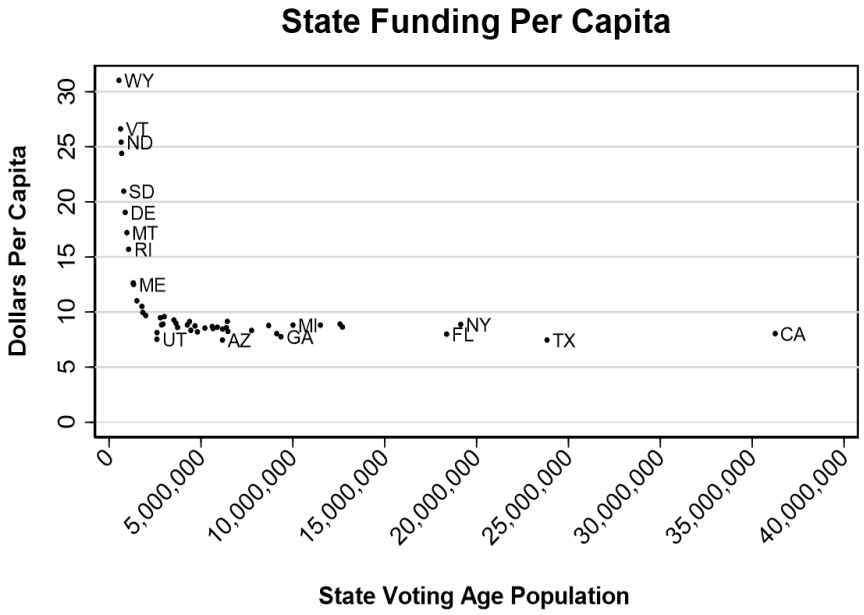
[9] HAVA also includes additional funding under Section 102, but these funds are limited as they are solely for the replacement of punch card and lever voting machines. For this reason, I do not include them in this analysis.

[10] U.S. Election Assistance Commission, *Reports on State Expenditures – Payment & Grants* (Washington, DC: U.S. Election Assistance Commission, 2019), 9.

[11] U.S. Election Assistance Commission, *Reports on State Expenditures – Payment & Grants* (Washington, DC: U.S. Election Assistance Commission, 2009), 6.

[12] U.S. Election Assistance Commission, *Strengthening the Electoral System One Grant at a Time: A Retrospective of Grants Awarded by EAC April 2003 – December 2010* (Washington, DC: U.S. Election Assistance Commission, 2011).

Figure 1: Scatter Plot of State Funding by State Population[13]



States with smaller populations receive more funding per capita which may pose a problem as state professionalism is highly correlated with population. Figure 1 shows that states with less than five million people see a dramatic increase in dollars per capita. Wyoming, the state with the smallest population, can spend over three times the amount that California, the largest state, can spend per person on election security. While this may seem to give Wyoming an advantage, their state officials do not have the same capacity as their counterparts in California, which may hinder the ability to spend this money.

Issues with Election Security

Technical issues have stood in the way of achieving accurate and fair election processes. After the recount in Florida during the 2000 Presidential Election, states sought to switch to electronic ballot systems in hopes of increasing the ease of voting for citizens. This switch made states dependent on electronic systems to administer their elections which has created a new set of problems. Electronic ballot systems may be more efficient, but many of these systems have not been upgraded to keep up with modern cybersecurity risks.[14]

Moreover, ballot verifiability is important to ballot integrity and requires a system of accountability that will ensure elections are free of interference. A Senate Intelligence Committee's report on Russian interference in the 2016 election found that the Russian Government-directed activity against state and local election infrastructure threatened these aspects of verifiability.[15] The Committee stated that state and local election infrastructure was vulnerable to cyber-attacks due to aging voting equipment that did not have paper backups of ballots.[16]

Because of these failures, there has been increased interest in election security. Yet despite this

[13] U.S. Election Assistance Commission, *Reports on State Expenditures – Payment & Grants* (Washington, DC: U.S. Election Assistance Commission, November 26, 2019), 9.

[14] Danielle Root et al., *Election Security in All 50 States: Defending America's Elections* (Washington, DC: Center for American Progress, 2018).

[15] Select Committee on Intelligence, "Russian Efforts Against Election Infrastructure" in *Russian Active Measures Campaigns and Interference in the 2016 U.S. Election*, (Washington, DC: United States Senate, 2019), 3, https://www.intelligence.senate.gov/sites/default/files/documents/Report_Volume1.pdf.

[16] Select Committee, "Russian Efforts", 4.

new focus, many of the vulnerabilities that plagued elections in 2016 remain.[17] In 2018, Congress authorized new HAVA grants for the first time since 2010 with EAC Chairman Thomas Hicks emphasizing their importance for securing election systems.[18] The continuation of HAVA funding is a crucial step in addressing these problems. Understanding how and why states spend this funding will allow decision-makers to better structure it in the future.

Models of Public Sector Demand and Partisanship

State election officials have a common goal: to secure their elections. Despite having similar access to funding, there is a large variation in state spending on election infrastructure upgrades. Researchers have attempted to explain differences in state election administration using models for supply and demand, partisanship, and state professionalism. While these models provide important insights into state behavior regarding election administration, they do not account for the different professional capacities of state governments.

In a rational system of supply and demand, states would upgrade their equipment and processes until they reached an optimum level of security. Research into election expenditures in California finds that there is a significant relationship between election infrastructure cost and election spending.[19] Sarah Hill's model assumes that states have different levels of demand for new voter technology systems that are tied to their level of vulnerability. Ahead of the 2018 midterm election, a report from the Center for American Progress (CAP) outlined election security vulnerabilities for each state to include the security of the systems used and the procedures for auditing ballots.[20] This model would propose that states with more election vulnerabilities would spend more on election security.

The second model proposes that partisanship is the key factor in election spending. Zachary Mohr and his colleagues study county-level spending in North Carolina to determine if partisan factors contributed to election spending.[21] In studying these mechanisms, they found that Republican County commissioners tended to spend less than their non-Republican counterparts once their county achieved a Republican majority.[22] Based on this model, partisanship affects spending as officials attempt to solidify party control through deliberate election technology upgrades.

The idea that election administration can lend itself to partisan influence is not new. In 2006, researchers examined the impact that partisanship had on provisional ballots in the 2004 election and found that each state's ruling party set rules favorable to themselves.[23] In the case

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[17] Select Committee, "Russian Efforts", 4.

[18] U.S. Election Assistance Commission, "Grants Frequently Asked Questions (FAQs)—Payment & Grants", (Washington, DC: U.S. Election Assistance Commission, March 30, 2018), https://www.eac.gov/payments-and-grants/frequently-asked-questions-for-grants/.

[19] Sarah Hill, "Election Administration Finance in California Counties", *The American Review of Public Administration* 42, no. 5 (2012): 618.

[20] Root et al., *Election Security.*

[21] Zachary Mohr et al., "Strategic Spending: Does Politics Influence Election Administration Expenditure?", *American Journal of Political Science* 63, no. 2 (2019): 429.

[22] Mohr et al., "Strategic Spending", 434.

[23] David Kimball et al., "Helping America Vote? Election Administration, Partisanship, and Provisional Voting in the 2004 Election", *Election Law Journal: Rules, Politics, and Policy* 5, no. 4 (2006): 460. A provisional ballot records the vote of a citizen if there are questions about the eligibility of the voter. Election officials can later decide to accept or reject this ballot

of the 2004 election, state authorities governed by Democrats were more likely to accept provisional ballots for Senator John Kerry, while those governed by Republicans were more likely to count provisional votes cast for President George W. Bush.[24] These results show that political bias can affect non-partisan institutions.

A recent field experiment testing bureaucratic responsiveness supports this theory of partisan influence on local election bureaucrats. Using a methodology established for studying racial bias in bureaucratic responsiveness, Ethan Porter and Jon Rogowski emailed local election officials using both partisan and nonpartisan language.[25] They found that there is evidence of partisan bias among election administrators, with much of this bias concentrated among Republicans.[26] These studies support the idea that bias can affect local-level decisions on election administration. The mechanisms that allow political bias to affect election expenditures, partisan political advantage, and partisan policy preferences also exist at the state level.[27]

Theories of State Professionalism

State professionalism may be a more salient factor than partisanship in determining how states operate. In the past, studies on professionalism within the government have focused on the rise of expert bureaucrats. While bureaucrats are often blamed for ballooning expenditures, research has shown the internal organization of legislatures plays a larger role in government expansion.[28] Graeme Boushey and Robert McGrath argue that as the pay gap between professionalized executives and amateur legislatures increases, bureaucracies take on more policy-making responsibility.[29] Conversely, a more professional state legislature is more likely to make active policy decisions. Based on this research, legislative professionalism may drive state expenditures more than expert bureaucrats.

Legislative professionalism may also be a more important factor than partisanship in-state expenditures as well. David Kimball and his fellow researchers theorized that state professionalism could overcome the effects of partisanship in their experiment.[30] Research by Christopher Daniel and Bruce Rose supports this claim as they find a weak but positive relationship between public managers and political acuity, showing that professionalism and political acuity can coexist.[31] Findings from Daniel Carpenter and George Krause also state that public administrators tend to check their own political biases to maintain their professional

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based on their election procedures. This process was mandated by HAVA to increase voter turnout among voters who may have a difficult time proving their eligibility.

[24] Kimball et al., "Helping America Vote?", 457.

[25] Ethan Porter and Jon Rogowski, "Partisanship, Bureaucratic Responsiveness, and Election Administration: Evidence from a Field Experiment." *Journal of Public Administration Research and Theory* 28, no. 4 (2018): 603.

[26] Porter and Rogowski, "Partisanship, Bureaucratic Responsiveness, and Election Administration", 41.

[27] Mohr et al., "Strategic Spending", 430-431.

[28] Gary Miller and Terry Moe, "Bureaucrats, legislators, and the size of government", *The American Political Science Review* 77, no. 2 (1983).

[29] Graeme Boushey and Robert McGrath, "Experts, Amateurs, and Bureaucratic Influence in the American States", *Journal of Public Administration Research and Theory* 27, no. 1 (2015): 23, https://doi.org/10.1093/jopart/muw038.

[30] Kimball et al., "Helping America Vote?", 457.

[31] Christopher Daniel and Bruce Rose, "Blending Professionalism and Political Acuity: Empirical Support for an Emerging Ideal", *Public Administration Review* 51, no. 5 (1991): 438, https://doi.org/10.2307/976413.

reputations.[32] A recent study by Martha Kropf and her colleagues finds that high-quality management has a strong impact on positive election administration, more so than financial resources available.[33] The evidence that these researchers found on the effects of professionalism on election outcomes did not make its way into the studies on election expenditures in the models proposed by Hill and Mohr et al.

State capacity is an important aspect of professionalism. Robert Dilger and his colleagues found that professionalism within legislatures tended to increase the effectiveness of the executive government.[34] Their research found that more professional state legislatures took an active role in the policy-making process which allowed governors to achieve their policy aims. In a study on professionalism and diversity in state legislatures, Peverill Squire measures the professionalism of a state legislature by adopting the standards of the United States Congress as the benchmark for professionalism.[35] These standards include member pay, staff members per legislature, and total days in session.[36] In looking at the HAVA requirements imposed by Congress, more professional state legislatures will have an easier time processing funds.

Data

This study uses public data provided by the Election Assistance Commission for state expenditures from 2002 to 2018. In 2002, a total of $349,182,267 was disbursed to states under Sections 101 and 251 of HAVA.[37] Since then, the EAC has released reports to Congress detailing state expenditures of HAVA funds. The report for the fiscal year 2015 offers a snapshot of how states spent before the 2016 election and the report for the fiscal year 2018 shows how states reacted to allegations of election hacking ahead of the 2018 midterm election. Both reports outline state expenditures up until September of their respective fiscal years, which generates the outcome variable of state expenditures. It is then possible to break down the outcome variable into total spending, Section 101 spending, and Section 251 spending, as shown in Table 1, below. Colorado did not report Section 251 spending in 2010 which accounts for the dropped observation. US Census Data is available to measure the voting-age population. Louisiana, Mississippi, New Jersey, and Virginia did not have data on the voting-age population for 2015 or 2018 which accounts for the missing observations.

[32] Daniel Carpenter and George Krause, "Reputation and Public Administration", *Public Administration Review* 72, no. 1 (2015): 16, https://doi.org/10.1111/j.1540-6210.2011.02506.x.

[33] Martha Kropf et al., "Making every vote count: The important role of managerial capacity in achieving better election administration outcomes", *Public Administration Review* 80, no. 5 (2020): 5.

[34] Robert Dilger et al., "State legislative professionalism and gubernatorial effectiveness, 1978-1991." *Legislative Studies Quarterly* 20, no. 1 (1995): 564.

[35] Peverill Squire, "Legislative Professionalization and Membership Diversity in State Legislatures", *Legislative Studies Quarterly* 17, no. 1 (1992): 70, https://www.jstor.org/stable/440081.

[36] Squire, "Legislative Professionalization and Membership Diversity", 70.

[37] U.S. Election Assistance Commission, *Annual Grant Expenditure Report: Fiscal Year 2015 (p. 2),* (Washington, DC: U.S. Election Assistance Commission, 2016), https://www.eac.gov/sites/default/files/eac_assets/1/28/Final%20FY%202015%20Grants%20Report.pdf.

Table 1: Summary Statistics of Key Variables

Summary Statistics

	Mean	Standard Deviation	Minimum	Maximum	Median	N
Total Spending (Hundred Thousand)	447.44	520.39	0	3307.05	277.07	341
Section 101 Spending (Hundred Thousand)	52.15	43.78	0	272.8227	48.02	342
Section 251 Spending (Hundred Thousand)	395.23	482.21	0	3034.228	223.44	341
Squire Score	.20	.12	.027	.63	.17	342
Population (Millions)	4.79	5.35	.397465	30.57	3.34	342
Partisan	2.81	10.04	-19.74	26.82	1.52	342
Grade	2.80	.91	1	4	3	46
Appointed	.36					46
Board	.37					46
Head Official	.74					46

This study measures professionalism using data from the 2003, 2009, and 2015 Squire Indices.[38] This index measures the professionalism of state legislatures by accounting for legislator pay, average days in session, and average staff per legislator.[39] Due to the need for coordination between state executive and legislative branches throughout the HAVA process, this index is an appropriate way to measure professionalism in this context. Furthermore, the variability in the professionalism between states makes it possible to study the differences in HAVA expenditures. In theory, professionalism would increase state expenditures, as more professional governments would be able to act on election infrastructure issues quicker because they meet more often and have more staffing resources to devote to the issue.

For partisanship, each stated is coded as Democratic or Republican based on the Cook Partisan Voting Index.[40] This report measures the partisanship of each state by comparing the average Democratic or Republican vote share in the last two presidential elections to the national average of those elections.[41] In this data set, negative values indicate Democratic-leaning states and positive values indicate Republican-leaning states. Efforts to map the ideologies of state legislatures support the use of the Cook score to estimate government partisanship as researchers found that legislatures are highly responsive to voter ideology[42] and national

[38] Peverill Squire, "A Squire Index Update", *State Politics and Policy Quarterly* 17, no. 4 (2017): 361.

[39] Peverill Squire, "Measuring state legislative professionalism: The Squire index revisited." *State Politics & Policy Quarterly* 7, no. 2 (2007): 212.

[40] "Partisan Voter Index", *The Cook Political Report*, 2018, https://cookpolitical.com/pvi-0.

[41] "Partisan Voter Index."

[42] Boris Shor and Nolan McCarty, "The ideological mapping of American legislatures", *American Political Science Review* 105, no. 3 (2011): 549.

politics.[43]

Due to the polarized nature of elections, both parties have different interests when it comes to election security. In their research into party differences, Matt Grossmann and David Hopkins state that Republicans tend to pursue ideological goals while Democrats tend to advocate for specific domestic policy changes.[44] These findings, combined with the research from Porter and Rogowski on party behavior, lead me to expect that states that are more Republican will spend less on election security than their Democratic counterparts.[45]

A report on election security by CAP makes it possible to account for the varying levels of demand. CAP evaluated each state's election policies to create a grading scheme for election security posture.[46] These letter grades correlate to the level of need for each state. There are two ways to interpret the expected effect of these grades on security spending. One could expect states with lower grades to spend at a higher rate in the 2018 election to address security gaps that became apparent in the 2016 election. On the contrary, lower grades may indicate that states care less about election security, and thus, will continue to spend less in the future.

Elected and unelected officials play a key role in expending funds for election security. Because there is significant variability in who oversees elections in each state, this study includes an indicator if the Secretary of State is the head election official. It also includes indicators showing if the head election official was appointed, elected, or held by a board. Research on the Bush Administration's Program Assessment Rating Tool indicates that politically appointed bureaucrats perform worse than those drawn from civil service.[47]

Controls

Because HAVA funds include formulas for population size, this study includes a control for the population. This includes the interaction between population and Squire score because larger states tend to be more professional than smaller states and the relationship might be conditional upon the levels of the other. Taking of both expenditures and Squire score (due to the nonlinear nature of both terms) results in more interpretable coefficients as it accounts for the large difference in magnitude within each variable. To test the robustness of this model, the author ran a second set of regressions with additional variables related to professionalism and election security. This regression includes more aspects of state governance and demand to better understand the findings in the main model.

Findings

All three tests show that state professionalism has a significant effect on a state's ability to spend HAVA funds. Starting with the pairwise tests, I show that both professionalism and partisanship have some correlation with expenditures. Table 2 displays the results of these tests:

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[43] Steven Rogers, "Electoral Accountability for State Legislative Roll Calls and Ideological Representation", *American Political Science Review* 111, no. 3 (2017).

[44] Matt Grossmann and David Hopkins, *Asymmetric politics: Ideological Republicans and group interest Democrats* (Oxford, UK: Oxford University Press, 2016), 11.

[45] Porter and Rogowski, "Partisanship, Bureaucratic Responsiveness, and Election Administration", 41.

[46] Root et al., *Election Security,* 28.

[47] David Lewis, "Testing Pendleton's Premise: Do Political Appointees Make Worse Bureaucrats?", *The Journal of Politics* 69, no. 4 (2007): 1073, https://doi.org/10.1111/j.1468-2508.2007.00608.x.

Table 2: Correlation Matrix of Expenditures and Key Independent Variables

Correlation Matrix			
	Total Expenditures	Section 101 Expenditures	Section 251 Expenditures
Squire Score	0.6435***	.5503***	.6442***
Cook Score	-0.217***	-.2337***	-0.2126***

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

The positive correlation on Squire score indicates that more professional states tend to spend more on election security. The negative correlation on Cook score indicates that states with strong support for Democrats tend to spend more on elections, although this effect is smaller in magnitude than professionalism. These correlations are consistent no matter how expenditures are broken down.

This pairwise correlation does not control for any other rival explanation that might explain variation in expenditures. To explore this relationship further, the author added a control for population and an interaction variable between the Squire score and population. Table 3 presents the results of six regressions. It changes the dependent variable in each to estimate models for total spending, Section 101 spending, and Section 251 spending. The first set of regressions (columns one through three) does not include state effects. Here, professionalism has a significant effect on total expenditures, likely due to Section 251 expenditures. For total expenditures, a one percent increase in the effect of professionalism results in a 0.87 percent increase while Section 251 expenditures increase by 0.97. Partisanship has a small significant effect on Section 101 expenditures but does not affect overall expenditures.

Table 3: OLS Estimations of Log of HAVA Expenditures by State, 2006 – 2018 with State Effects

	(1) Log Total Expenditures	(2) Log Section 101 Expenditures	(3) Log Section 251 Expenditures	(4) Log Total Expenditures	(5) Log Section 101 Expenditures	(6) Log Section 251 Expenditures
Log of Squire Score	0.867***	0.219	0.969***	2.253***	1.690***	2.463***
	(0.133)	(0.131)	(0.143)	(0.451)	(0.422)	(0.478)
Cook Score	0.0394	0.0653**	0.0371	0.674***	0.640***	0.666***
	(0.0212)	(0.0204)	(0.0228)	(0.182)	(0.170)	(0.193)
Population (Millions)	-0.0593***	0.000968	-0.0722***	-0.260*	-0.193	-0.285*
	(0.0175)	(0.0167)	(0.0187)	(0.110)	(0.103)	(0.116)
Interaction Squire and Population	0.0155*	0.00162	0.0189**	0.0134	0.0384	0.00502
	(0.00606)	(0.00582)	(0.00655)	(0.0253)	(0.0236)	(0.0268)
State Effects	No	No	No	Yes	Yes	Yes
_Constant	17.91***	15.16***	17.79***	15.98***	13.59***	16.02***
	(0.268)	(0.261)	(0.288)	(1.108)	(1.035)	(1.175)
N	340	340	339	340	340	339

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The second set of regressions (columns four through six) takes state effects into account. In

these models, professionalism and partisanship have a significant effect on expenditures of all types; however, the magnitude of the effect is smaller for partisanship. Population is significant for all three regressions, but this effect diminishes when it interacts with professionalism. As in the first set of regressions, professionalism has the largest effect on Section 251 expenditures where a one percent increase in state professionalism increases expenditures by 2.5 percent. This translates to an increase of $869,506 for Section 251 expenditures for every percent increase in professionalism.

Using data from the 2018 Midterm election, Table 4 includes four more models that account for more specific attributes of professionalism and election security postures. Column 1 provides a baseline that includes the same four variables from the previous models. In the subsequent models, the table adds variables measuring security scores and professionalism. These findings show that a state's security grade did not have a significant effect on expenditures. Adding an indicator for the type of head election official—appointed or controlled by a board—did not yield significant results either. This remains true of the final indicator which measures whether the Secretary of State is the head election official.

Table 4: OLS Estimations of Log of HAVA Expenditures with Additional Controls

	Log of Total Expenditures for the 2018 Midterm			
	(1)	(2)	(3)	(4)
Log of Squire Score	0.619***	0.620***	0.642***	0.654***
	(4.75)	(4.76)	(4.93)	(4.84)
Cook Score	0.00802	0.00944	0.00945	0.00952
	(1.73)	(1.95)	(1.91)	(1.91)
Population (Millions)	0.0519**	0.0503**	0.0496**	0.0489**
	(3.18)	(3.07)	(3.00)	(2.90)
Interaction Squire and Population	-0.0576***	-0.0618***	-0.0664***	-0.0665***
	(-4.08)	(-4.20)	(-4.18)	(-4.13)
Security Grade		0.0550	0.0419	0.0463
		(1.02)	(0.73)	(0.79)
Appointed			-0.223	-0.206
			(-1.11)	(-1.00)
Board			0.0676	0.0923
			(0.68)	(0.78)
Secretary of State is Head Official				0.0472
				(0.40)
Constant	17.85***	17.67***	17.71***	17.68***
	(79.74)	(62.37)	(61.22)	(57.77)
N	46	46	46	46

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion

These findings show that professionalism within states is correlated with increased election security spending. HAVA has many reporting requirements and less professional states may have a difficult time adhering to these with their more limited staff and resources. HAVA also requires coordination between members of a state's executive branch and the state legislature. Less professional states tend to have less staff, fewer resources, and less time to spend on issues.

This can make it difficult for them to spend funding from the Federal Government, even if everyone agrees that the money would address an important issue.

The correlation between professionalism and expenditures is stronger for Section 251 expenditures than for Section 101 expenditures. Section 251 funds are set up to be more restrictive than Section 101 funds and are meant to be spent on upgrades to election administration. Officials must comply with non-discrimination laws and must match 5% of their request to use these funds. The matching program ensures that states share a portion of the cost of their election security. These requirements put added strain on the limited time and resources of officials in the executive branch and lawmakers in the state legislature. The study attempted to analyze the components of professionalism by using data from Daniel Bowen and Zachary Greene, however; the results were inconclusive.[48]

In 2018, Congress appropriated $380 million in new funding for election security under Section 101.[49] Appropriating this funding under Section 101 rather than Section 251 decreases the difficulty that some state governments may have in spending these funds. While this reduced the effect that disparities in professionalism have on future election security expenditures, Congress should still expect to see more professional states spend these funds at a higher rate. For example, Kansas and Missouri border each other and share many similar characteristics. However, Kansas has a Squire score of 0.181 while Missouri has a Squire score of .243. Based on my findings, if Kansas can spend $1 million ahead of the 2020 election, then Missouri will be able to spend over $1.5 million.

In contrast to Mohr's findings that partisanship affected expenditures at the county level in North Carolina, this study does not find a significant relationship between partisanship and election expenditures. In every model, professionalism, and population were significant while partisanship was not. While this model does not address the production model of election expenditure in full, finding that a state's election security grade did not affect total expenditures in 2018 provides further evidence that demand is not a factor in state expenditures on election security. Further research into this topic is necessary to confirm this finding.

Policy Relevance

This study indicates that a "one-size fits all" approach to grant funding is not an effective way to ensure states spend funds on nationally important initiatives. Based on these findings, Congress should account for differing levels of professionalism when writing grant requirements, or simply lower the requirements overall. While Congress has taken important steps to ensure that all states have access to funding to improve their election security infrastructure, this funding is useless if some states cannot spend it. The Brennan Center estimated that it would cost $2.2 billion to fix our elections over the next five years.[50] This is a significant amount, but even if Congress could produce the funding, many states would be unable to spend it all. Creating future guidelines or programs to assist states in spending this funding may be necessary. Additionally, decreasing the number of restrictions on this funding

[48] Daniel Bowen and Zachary Greene, "Legislative professionalism component scores, v1.1", *Harvard Dataverse v3,* https://doi.org/10.7910/DVN/27595.

[49] U.S. Election Assistance Commission, "HAVA Funds State Chart View", (Washington, DC: U.S. Election Assistance Commission, March 30. 2018), https://www.eac.gov/sites/default/files/eac_assets/1/6/HAVA_Election_Security_Final_Award_Packet_041718.pdf.

[50] Norden and Cortes, "What Does Election Security Cost?"

may make it easier for states to spend it on election upgrades.

Conclusion

While HAVA provides a vehicle for the Federal Government to support states in mitigating threats to their elections, funding is not spent uniformly among the states. More professional states tend to spend more on elections than less professional states. These states have full-time legislatures, larger staffs, and greater access to resources which makes it easier for them to comply with federal requirements.

Each state faces a different set of problems in designing an efficient and secure election security plan. Federal grants give states the funding to pay for this plan, but smaller states may struggle to spend this money due to the restrictions placed on them by HAVA. When designing grant systems in the future, Congress must consider how the restrictions they place on these grants affect the state's ability to use these funds toward their intended purpose. Considering the various levels of professionalism within states may allow Congress to better design a grant program that ensures each state can address its unique election security issues.