

Understanding the Adoption of Voter Identification Laws in the American States

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Abstract

Recently, many states have reversed the decades-long trend of facilitating ballot access by enacting a wave of laws requesting or requiring identification from registrants before they vote. Identification laws, however, are not an entirely new phenomenon. We offer new theoretical insights regarding how changes in political power influence the adoption of identification laws. In the most extensive analysis to date, we use event history analysis to examine why states adopted a range of identification laws over the past several decades. We consistently find that the propensity to adopt is greatest when control of the governor's office and legislature switches to Republicans (relationships not previously identified), and that this likelihood increases further as the size of black and Latino populations in the state expands. We also find that federal legislation in the form of the Help America Vote Act seems to enhance the effects of switches in partisan control.

Keywords: voter identification, state policy adoption, election reform, event history analysis, election policy

Since the sweeping changes brought about by the Voting Rights Act of 1965 and the Twenty-Sixth Amendment to the U.S. Constitution, attention has largely focused on election reforms at the state and federal levels aimed at making voting easier. States' adoption of election day registration, early voting procedures, and no-excuse absentee voting, along with other policies designed to facilitate ballot access, charted a move toward expanding the franchise (e.g., Burden et al. 2014; Cain et al. 2008; Gronke et al. 2008; Hanmer 2009; Stein 1998). After decades during which most activity concentrated on loosening voting restrictions, however, a counter-reform movement has emerged. Since 2000, the number of states passing voter identification laws for the first time more than doubled (from 14 to 35). Despite being the minority of such statutes, the most significant change (and that which garners the most attention) is the push to require that voters show photographic identification (photo ID) at the polls. In 2005, Georgia and Indiana became the first states to adopt laws requiring registrants to show such ID in order for their vote to be counted,¹ with 11 states subsequently following suit.²

Though some describe the recent identification laws as the new "Jim Crow," voter identification laws are not new (Texas and South Carolina started to request or require ID before the Voting Rights Act). The recent explosion in their adoption, however, raises questions about the potential consequences for electoral politics (e.g., Alvarez et al. 2010; Citrin et al. 2014). Though it is too early to say what impact, if any, identification statutes have on turnout (Erikson and Minnite 2009; see Highton 2016 for a review), even a small effect could influence a close election, especially if the effects are concentrated among certain groups or implementation at the polls varies (Atkeson et al. 2010; Cobb et al. 2012). In addition, the laws have changed campaign efforts and provided both parties with a new issue around which to rally their respective bases and raise money (Hasen 2012). Moreover, one cannot escape the considerable controversy they

generate. Proponents claim that the laws improve electoral integrity by reducing fraud, and argue that showing ID imposes a minimal burden (as it is routinely used for a variety of purposes). Opponents, in contrast, assert that these laws are part of a voter suppression effort targeted particularly at the poor and minorities.

In general, political scientists primarily focus on the consequences of election reforms for turnout, the composition of the electorate, and election outcomes (e.g., Wolfinger and Rosentstone 1980 and the large literature that follows). These questions are of crucial importance, but explaining variation in adoption patterns is equally significant. Moreover, the motivations behind enactment could raise concerns with endogeneity, and thus require scholars to adopt different research designs when studying the effect of the laws on turnout (Hanmer 2009). Surprisingly, researchers have only rarely studied both the adoption and the failure to adopt the major electoral reforms implemented across the U.S. states (e.g., Bali and Silver 2006; Bentele and O'Brien 2013; Biggers and Hanmer 2015; Hicks et al. 2015; Lawrence et al. 2009; Rocha and Matsubayashi 2014; Smith and Fridkin 2008). A number of these recent studies examine voter identification laws directly or indirectly, but we contend they have not considered a crucial factor that influences the adoption of voter ID laws—the change in who controls state government. To test our expectations we have assembled an extensive data set that spans more than four decades. This provides us with several advantages. First, it allows us sufficient leverage to test our expectations regarding switches in partisan control. Second, it provides us with the opportunity to study the diversity of identification laws the states have enacted. Relatedly, we cover the time period before and after the Help American Vote Act of 2002 (HAVA), which allows us to examine how this federal legislation might increase the influence of partisan control on ID law adoption.

In the most comprehensive investigation to date of the adoption of voter identification laws, we provide new theoretical insights regarding the factors that influence enactment, cover a longer time span, leverage changes in national policy, use statistical methods that lead to easy to understand results, and investigate a wider range of statutes. Employing event history analysis from 1972 to 2013 and examining three categories of identification laws (any statute on the books, requiring ID, and photo ID), we determine that political variables consistently exert the greatest impact on adoption. Specifically, a change to Republican control of the legislature or governorship dramatically increases the likelihood a state will pass an ID law, relationships not identified by the existing literature that speak to the potential motivations behind enactment. We also observe that the effects of these shifts in political power are larger in states with large minority populations. In contrast to many other state and local policies, however (e.g., Berry and Berry 1990; Boehmke and Witmer 2004; Makse and Volden 2011), we do not find that geographic diffusion explains the passage of voter ID laws. Moreover, we conclude that federal legislation in the form of HAVA altered the strength of the relationships between political variables and adoption. We discuss the implications of these findings in the conclusion.

Explaining Identification Adoption via Partisan Advantage

We argue that the dominant influence on the adoption of voter identification laws relates to the partisan control of the state legislature and governorship. Both parties say they favor fair elections, but this goal requires trade-offs that may place additional burdens on specific societal groups. Partisanship substantially influences how officials view this proper balance; Republican concerns about voter fraud and electoral integrity make them willing to mandate additional requirements to ensure only those legally entitled to vote can do so, while Democrats fear that ID

laws create unnecessary hurdles that disenfranchise legitimate voters (Keyssar 2009; Minnite 2010).

The heart of this division derives, at least in part, from the calculus of partisan advantage and electoral success. Partisan politics frequently play a role in election administration, with the parties often seeking to leverage the system in their favor. Given the belief (some caveats aside) that Democratic prospects improve as turnout increases (Citrin et al. 2003; DeNardo 1980; Hansford and Gomez 2010; Piven and Cloward 2000),³ the fact that Democratic-leaning groups such as African Americans and Latinos are less likely to possess identification (Barreto et al. 2007, 2009; Hood and Bullock 2008) presents an opportunity for Republicans to potentially boost their electoral chances. It thus appears reasonable to suspect that Republicans favor (and Democrats oppose) ID laws at least in part because they are expected to reduce the Democrats' percentage of the vote (Hasen 2012). That is, this goes beyond mere support for certain types of policies and into the realm of using the system to increase one's chances for re-election. Even though evidence of a partisan effect of these laws on turnout is mixed (Alvarez et al. 2010; Burden et al. 2014; Erikson and Minnite 2009), a small impact may prove meaningful in close races, and the laws might forestall the future activation of greater numbers of those predisposed to vote Democratic.⁴

This potential to influence electoral outcomes means that holding both legislative chambers is crucial to enacting any identification policy, given the extreme difficulty of cross-party compromise. At the national level, some of the most partisan conflicts take place over good government matters (which include election administration). Internal party division is rare, and such issues frequently divide almost perfectly along party lines; for example, the average difference between the Republican and Democratic yeas on the eleven Senate votes relating

to HAVA, a good government policy, was 91 percentage points (Lee 2009). Such divisions similarly prevail at the state level (Erikson and Minnite 2009). This low internal party division heightens the importance of legislative control to the adoption of ID statutes, as Republicans will find it difficult to attract Democratic support for such proposals.

Similarly, control of the executive branch should also play a substantial role in adoption. Once both legislative chambers pass any statute, the governor must approve it. The governor's status as veto player (Tsebelis 2002) provides him/her with significant influence over the fate of any identification measure. As demonstrated via the relationship between the President and Congress (e.g., Kiewiet and McCubbins 1988; McCarty 2000), such power shapes, to some degree, the policy that arrives on the executive's desk, as it must at least minimally accord with the governor's preferences. Even with majorities in both chambers, Republicans will face difficulty in enacting the policy if they encounter (expected) opposition from a Democratic governor.

These expected partisan effects are consistent with previous work that demonstrates the frequent role of political context in policy innovation (e.g., Berry and Berry 1990; Mooney and Lee 1995; Volden 2006). In our context, scholars report associations between Republican control of state government, the governorship, and/or the legislature and changes in voter identification laws (Bentele and O'Brien 2013; Hicks et al. 2015; Rocha and Matsubayashi 2014).⁵ As the summaries of these studies in Table 1 reveal, however, this relationship is mixed across ID statutes, especially when one expands the focus beyond photo identification. For example, Hicks et al. (2015) and Rocha and Matsubayashi (2014) argue that photo ID laws are more likely to be enacted with Republicans in power, regardless of whether they measure that power as unified control of government, holding the governorship, or the number of seats across legislative

chambers (Hicks et al. 2015 conclude that this last measure is conditioned by electoral competitiveness). In contrast, Rocha and Matsubayashi (2014) find that none of these indicators of Republican strength influence the passage of non-photo ID statutes, and Hicks et al. (2015) conclude that Republican governors do not enhance the likelihood of passing any ID law in general. These differing conclusions may derive in part from the time periods examined; only Rocha and Matsubayashi (2014) investigate voter identification laws prior to the 21st century, but their analysis only traces state action back to 1980. These latter results notwithstanding, it appears sensible to hypothesize that Republican legislature control and/or a GOP governor heighten the propensity to enact all variants of ID laws.

[Insert Table 1 about Here]

The motivation for change and the ability to overcome obstacles is at the core of Mohr's (1969) theory of policy innovation. This is often operationalized in studies of policy adoption via measures of which party is in control. Berry and Berry's (1990) work is an instructive case as it provides the foundation for much of the subsequent work on policy innovation in the American states. As noted above, we agree with Berry and Berry (1990) that partisan control can provide both motivation and the ability to overcome obstacles to passage. But we contend there is more to the story that scholars have not previously explored.

We argue that the probability of ID law adoption is amplified when the respective branch of government switches to Republican control. That is, we believe that the motivation for innovation is stronger when a party newly comes into power, as it reflects a new level of competition that spurs greater interest in maintaining power as well as apprehension about future electoral prospects. Losing control could increase motivation and apprehension too, but winning control not only increases motivation, it removes obstacles to following through by enacting

policy. In other words, when Republicans initially take power, they will feel a greater impetus to push identification statutes due to an immediate interest in seizing their new opportunity to potentially obtain an electoral advantage and rectify (what they perceive as) flawed election policies they previously could not shape.⁶ Rosenthal (1990, 58) offers a simple but powerful claim when he states: “Opposing parties have, as a prime objective, defeating each other in elections.” While this motivation is ever-present it is logical that it is stronger in the case of parties seeking to maintain newly found power. By way of contrast, having already had sufficient ability to modify election laws, a steady state of Republicans in power over time (which likely translates into a reduced concern with losing power) may decrease the initial fervor to enact voter ID requirements. Thus, overall we expect the change in control to exert a much stronger influence on the adoption of identification laws than control itself. Given the implications for our understanding of electoral competition and the legislative process, it is surprising that other research in this area has not considered this argument.⁷

Other Explanations for Identification Adoption

In addition to the partisan composition of government, we control for a number of alternative factors that potentially influence the adoption of identification laws. Among these are multiple state demographic characteristics. For example, in states with large Latino communities, citizenship concerns may heighten Republicans’ fears about the potential for fraud and raise their interest in protecting the integrity of elections. The size of the African American population may also affect adoption, as blacks have long faced electoral rules and procedures systematically designed to deny their access to suffrage (e.g., poll taxes and literacy tests), particularly in states with high black concentrations (Keyssar 2009; Kousser 1974). Moreover, the lower propensity of Latinos and blacks to possess identification (Barreto et al. 2007, 2009; Hood and Bullock 2008)

may serve as an impetus for Republicans to introduce this reform in search of an electoral advantage (as both groups vote disproportionately Democratic). As reported in Table 1, the only prior examination of this conditional relationship (Rocha and Matsubayashi 2014) reaches contradictory findings, arguing that larger black populations increase the likelihood of non-photo ID adoption under Republicans, but that sizeable African American and Latino communities decrease the likelihood that Republicans enact a photo ID law. Moreover, this work does not take a position on which direction the relationships should go. Given the parties' extreme separation on this issue and perceived electoral benefits, we anticipate that an increase in the state's proportion of either of these groups does consistently raise the probability of adoption, but only when the governing institutions are under Republican control or shift to GOP control. This would be consistent with the fact that Republican state legislators are more likely to vote in favor of identification laws as the percentage of their district's black residents increases (McKee 2015).

A final demographic group that potentially affects enactment is senior citizens (those over the age of 65). Among the entire population, those registered to vote, and those who vote, the elderly are less likely to possess both photo and non-photo identification (Barreto et al. 2007, 2009; Hood and Bullock 2008; Overton 2006). Although the same is true of blacks and Latinos, the strong probability of voting by those over 65, combined with their weaker attachments to the Democratic Party, makes them an attractive group for Republicans to preserve in the electorate. If the story of ID adoption is largely a partisan one (as we hypothesize), then keeping the elderly from the polls could damage the electoral chances of those most likely to push such laws. These fears might counterbalance the desire to enact favored policies, leading us to suspect that states with a higher percentage of those over 65 will be less likely to adopt any identification statute.

Finally, we address two state- and federal-level factors that potentially explain the passage of identification laws. As Shipan and Volden (2012, 788) note, scholars “would be hard-pressed to find examples of policies that are selected entirely for internal reasons.” That is, there are a variety of ways that policies diffuse across jurisdictions. Often diffusion is geographically based, with policy makers looking to learn from, emulate, or compete with adjacent states (Berry and Berry 1990; Mooney and Lee 1995; Shipan and Volden 2008; Volden 2006), though the literature is increasingly cognizant that diffusion is not limited to geographic neighbors (see Boushey 2010; Karch 2007; Shipan and Volden 2012).

We do not anticipate, however, that geographic diffusion plays much of a role. First, while those in power may turn to adjacent states to identify which laws to implement, the electoral link in this debate suggests that this search will not terminate with their neighbors. Instead, the partisan division and potential electoral advantage to be gained likely compel states to investigate policies across the entire country. Additionally, the presence of a nationwide party organization dedicated to advancing a similar goal dictates less need to focus solely on the actions of adjacent states. Second, the lack of state competition related to such policies makes it less likely that states will look to their neighbors, as they might on revenue generation policies (Boehmke and Witmer 2004). As such, we expect that the proportion of a state’s neighbors that maintain the specified ID statute will have little influence on adoption.⁸

As noted above, our theory also anticipates variation in the factors that influence adoption over the entire period and after the signing of HAVA; passed by Congress on the heels of the contentious 2000 election that focused attention on the integrity of the electoral system, ID laws seem to have gotten their foot in the door through this legislation. In general we believe that federal legislation could spark state innovation by bringing issues into the general discourse or

via requirements that states enact new legislation to implement federal law. We contend that HAVA helped shift the landscape of voter ID laws because not only did states have to enact general enabling legislation they had to address procedures regarding voter identification for a subset of the population. The most pertinent part of the bill is Section 303, which requires first time voters who register via mail to present identification at the polls. This section provided a shock to the legislative system that likely facilitated the adoption of ID laws, as mandating state governments to require identification for certain types of voters brought the issue to the agenda and made it logical to consider expanding the laws to requests or requirements for all voters. That is, in the highly competitive political environment in which gaining even a small advantage might swing the election and with renewed concern for the integrity of elections, Republicans were awakened to the possibility of seizing on the need to address the HAVA requirements by extending ID laws to the entire electorate. Hale and McNeal (2010) support this contention, finding that by 2006 states with a Republican-controlled government were substantially more likely to maintain voter ID statutes of greater stringency than the federally mandated minimum by HAVA.⁹

Data: Tracing Voter Identification Laws

We begin in 1972 and conduct our analyses through 2013.¹⁰ To determine which states adopted voter identification laws over this period (and when), we conducted a historical analysis of each existing statute. In most cases, documentation addressing all previous amendments and section number modifications was available via mediums such as LexisNexis. In other circumstances where we could not trace the evolution of the relevant statute in this manner, we secured copies of it for the years immediately preceding and following any amendment from law libraries or the relevant state elections division. When we encountered ambiguous information

requiring additional interpretation, we contacted informed government officials in the state. Additionally, we confirmed that no previous law ever existed in states without a current policy. For every state, we successfully determined the genesis of its identification law and followed each evolutionary step to the current version.

We classify these statutes based on (1) whether identification is requested or required, and (2) whether the document must include a picture of the elector. Some states merely request ID, and permit an individual without it to vote after performing some other task (e.g., signing an affidavit attesting to their identity). In contrast, others require identification; prior to HAVA an elector who could not present it was turned away with an opportunity to return with it before the polls closed, but since HAVA she can cast a provisional ballot that the state only counts if she proves her identity before a prescribed deadline. This requirement represents a more onerous precondition than a request, as it mandates an additional step for those without ID (another trip to the polls, elections office, or post office to mail proof of identity) to ensure their vote is counted.

For states that request or require identification, their statutes vary as to whether the acceptable document need contain a photograph of the elector (such as a driver's license, passport, or military ID) or not (such as a social security card, voter registration card, or utility bill). The latter statutes exert less of a burden than the former, as some population groups are less likely to possess a form of picture identification (Barreto et al. 2007, 2009; Hood and Bullock 2008). Although states maintain procedures to provide photo ID for free to those who do not have and cannot afford it, acquiring it imposes an additional voting cost (as registration does), and some may not possess the documentation necessary to obtain the photo ID.

These distinctions provide four categories of statutes: request non-photo ID, require non-photo ID, request photo ID, and require photo ID. (A fifth category involves no identification

hurdle beyond stating one's name or address or providing a signature)¹¹ States may, of course, shift between categories over time, and our historical coding accounts for all such changes. With the exceptions of Hawaii and Tennessee, any revision over the past forty years strengthened the existing law.¹²

Based on these categories, we examine the adoption of any identification statute (either request or require) over the past forty years and since HAVA (2003-2013), the requirement of any identification (photo or non-photo) from 1972 to 2013, and the request or requirement of photo ID (from 1972 to 2013 and post-HAVA). The presence of any ID law sets a minimum threshold that voters must surpass and suggests a commonality that differentiates these states from those without such language in their statutes. In contrast, both requiring identification and asking for photo ID introduce a more stringent hurdle for voters. We thus have two important comparisons to analyze; whether the factors that explain the enactment of any identification law vary over the entire time period and post-HAVA, and whether these factors differ from those that influence states to require identification at the polls or mention photo ID in their statutes.¹³

Table 2 presents the results of our investigation, the most comprehensive examination to date (in terms of statute variation and temporal coverage).¹⁴ Column 1 details adoption dates for laws that mention any identification at the polls. Through 2013, 35 states enacted an initial statute requesting or requiring a document to vote, 15 of which did so before HAVA was signed into law. Column 2 reveals that 16 states have passed laws to mandate some document to vote, with initial adoptions split equally between photo and non-photo requirements (5 states in the latter group subsequently restricted acceptable ID to only that with a photo). Requiring identification is a relatively new phenomenon, with only three states (South Carolina, Tennessee, and Texas) adopting such statutes prior to 2002. Finally, Column 3 demonstrates that 22 states

have enacted photo ID laws, with 9 requesting and 13 requiring such a document to vote. As one might suspect, statutes requesting photo ID tend to predate those mandating it, with five of the nine requests for photo ID enacted before the first require photo ID laws of Georgia and Indiana in 2005. Almost all the action follows the passage of HAVA, with 18 states introducing such language into their statutes after 2002. We emphasize that our interest regards the date of adoption of these laws, not of implementation, which might differ.

[Insert Table 2 about Here]

Our goal is to explain the probability that a state adopts a statute regarding the specified form of voter identification at a particular point in time, conditional on it not having previously done so. As such, the unit of analysis is the state within a given year, meaning that for each year we have an observation for each state in the analysis. We recognize that some states have provisions calling for regular sessions every two years rather than every year. However, we include in the analyses all state years within our respective time periods. We do this for two primary reasons. First, if there exists the political will to pass legislation it is always possible for there to be a special session; as a result, we consider all states to be at risk of passing legislation each year. Second, using each year allows us to account for differences in when states begin sessions.¹⁵ We code states as 1 if they adopt the statute in question in the given year and 0 if they do not. Once a state adopts the ID law, it drops out of the dataset the following year.¹⁶

In explaining the decision to adopt, we incorporate variables into our model for the possibilities outlined above. As we anticipate that Republicans are more likely to push these laws, we include dichotomous indicators for whether the party controls both legislative chambers, or the governorship, in a given year (both based on data collected by Klarner (2003) and subsequent updates).¹⁷ To capture competitiveness, we account for whether these institutions

switched to GOP control in the current year.¹⁸ For the potential demographic influences on enactment, we control for the proportion of the state's population in each year that is African American, Latino, and elderly (over 65), respectively.¹⁹ We also test for any interactive effects between black and Latino population size and the partisan variables following the suggestions of Berry et al. (2010) (see the Supplemental Appendix for details).²⁰ Finally, we investigate geographic diffusion by measuring the percentage of a state's neighbors in a given year that maintain the ID policy in question.

Since the dependent variable, whether or not a state adopts an identification law in a given year, is realized as a 1 or a 0, respectively, our data are best described as binary time-series–cross-section (BTSCS) data or grouped duration data (Beck et al. 1998; Box-Steffensmeier and Jones 2004). As Beck et al. (1998) and Carter and Signorino (2010) show, BTSCS data can be analyzed using ordinary binary response models provided the models take into account temporal dependence and drop observations once the event in question occurs. We follow Carter and Signorino's (2010) approach and run logit models that include variables measuring the time to adoption, the time to adoption squared, and the time to adoption cubed.²¹ We prefer the binary response set up to a Cox proportional hazards model because the results are easier to present and understand (Beck et al. 1998). We estimate all models with clustered, robust standard errors that account for repeated observations for each state. To address our expectation of differing results after HAVA, we run models on both the entire forty year time span and the post-HAVA period (2003 to 2013).²²

Results

Prior to presenting our models, we report on a set of cross-tabulation results for our primary political variables across each of our voter ID law classifications (Table 3). The results

are consistent with our expectations. Across each classification, the percentage of adopters with a Republican legislature/governor is higher than the percentage of adopters under divided or Democratic control. Table 3 also shows that among the cases where an institution switches to Republican control, the percentage of adopters is substantially larger than the percentage of adopters when the GOP simply controls the branch of government. Additionally, for the two ID law classifications that allow us to examine adoption pre- and post-HAVA, we see that the strength of the effects of the partisan variables are larger in the post-HAVA period (see the Supplemental Appendix for additional descriptive results). Although these results support our hypotheses it is imperative to provide more stringent tests via an event history analysis.

[Insert Table 3 about Here]

With respect to our models, we turn first to explaining the adoption of any identification law (whether ID is simply requested, with on the spot options such as signing an affidavit swearing to their identity for those who do not have ID, or required). Because limited dependent variable models are inherently interactive in all of the variables (the predicted effects depend not just on the coefficient on the variable of interest but on all of the coefficients in the model and the values assigned to all of the independent variables), we focus on the relevant predictions from their coefficients to determine whether the effects are substantively and statistically significant (see the Supplemental Appendix for all model output). In keeping with Hanmer and Kalkan's (2013) recommendation, we calculate the predicted probabilities using the observed value approach and set the variables not being manipulated to their actual values in the sample. This approach, common in the turnout literature (see e.g., Wolfinger and Rosenstone 1980), allows for more direct tests of our hypotheses and uses the data more efficiently. Following Berry et al. (2010), we also estimate whether any partisan effect is conditioned by minority

population size. In doing so, we calculate the difference in these effects for states in the top and bottom quartiles of minority population to determine if Republicans are statistically more likely to adopt identification laws when these communities are larger in size.

As hypothesized, Table 4 demonstrates that across both time frames partisan factors have a substantial impact on the probability a state will adopt any ID law. The largest increase in the likelihood of enactment in both periods comes from a switch to a unified Republican legislature, with this newly elected majority seizing the opportunity to implement this policy. Across the entire time period, this switch is associated with a 6.4 percentage point increase in the probability of adoption; post-HAVA, the change to unified GOP control of the legislature results in a much larger increase of 31.5 percentage points (both $p < 0.05$, 2 tailed). These effects are striking given the low baseline propensity to enact (2.4% overall, 8.6% post-HAVA). The switch to a Republican governor also has substantively large effects, again with an impact several times larger post-HAVA, 4.0 points across the entire period and 15.1 points in the post-HAVA era ($p < 0.05$ and $p < .1$, respectively). When examined since 1972, surviving partisan control of the legislature exerts a smaller impact on adoption (1.8 points, $p < .1$). This relationship strengthens following HAVA, as it seems the federal law provides an impetus for those already in power to act. Over this period, states with Republican majorities in both chambers are 18.0 percentage points more likely to pass an ID law ($p < 0.05$). The effect of having a Republican governor post-HAVA is also large (7.2 points, $p < .1$).

[Insert Table 4 about Here]

Overall, the sizes of the state's black and Latino populations do not influence the adoption of ID laws in either time frame. Across the entire time period, however, the effects of a switch in control of the legislature or governorship to the GOP are conditioned by the size of the

Latino community (see the bottom of Table 4). The effect of a switch to Republican majorities in both legislative chambers is greater in states in the top quartile of Latino population, compared to those in the bottom quartile, by 6.8 points, while the impact of a switch to a GOP governor is 4.6 points larger in states in the top rather than bottom population quartile (both $p < .05$). There is also evidence of a conditioning effect on Republican control of the legislature, with adoption 2.0 points more likely when the party is in power in states with a large Latino community ($p < .1$). Minority population size does not condition the effects of any of the political factors when we limit the analysis to the post-HAVA period.

The other variables tend to exert little influence. Looking from 1972 to 2013, the effects of meaningful changes in these variables are substantively small and statistically insignificant, including, as anticipated, the presence of ID laws in neighboring states. In the period after HAVA, the effects are mostly somewhat larger but not statistically significant.

Turning our attention to the adoption of an ID *requirement*, photo or otherwise, the influence of political factors largely mirrors that for the adoption of any law over the past forty years. Column 1 of Table 5 demonstrates that the switches to a Republican unified legislature or governor once again have large positive effects on the decision to require identification at the polls (4.8 and 2.7 percentage points, respectively, both $p < 0.05$), especially when we consider the extremely small baseline probability of enactment of just 1.1 percent. As expected, the effects associated with on-going Republican control of the legislature (1.4 points, $p < .05$) or governorship (0.7 points) are smaller.

[Insert Table 5 about Here]

With regard to the racial and ethnic composition of the state, the impact of the size of the Latino population on the adoption of an ID requirement is neither substantively nor statistically

significant, but there is some evidence that larger black populations are associated with a greater propensity to adopt (0.7 points moving from the mean to one standard deviation above, $p < .1$). The presence of both groups, however, does condition the effect of changes in control of the legislature or governorship. The probability of adoption is 2.0 points larger in states in the highest quartile of black population relative to the lowest quartile that have a Republican legislature and increases substantially to 5.8 points following a shift in legislative power to the Republicans (both $p < .05$). Similarly, the effect of changing to a Republican controlled legislature or governor rises 5.6 and 3.1 points from the bottom to the top quartile of Latino population, while a similar movement in Latino population increases the effect of having a unified GOP legislature by 1.5 points (all $p < .1$).

Finally, we report the determinants of the adoption of any photo ID statute (request or require) from 1972 to 2013 and in the post-HAVA period in columns 2 and 3 of Table 5. Over the past 40 years, the largest effect on adoption corresponds to a switch of the legislature to GOP control (4.5 points), followed by existing control of the legislature (2.9 points) and a switch to a Republican governor (2.5 points, all $p < .05$). Control of the governorship exerts a smaller, 1.0 point effect on adoption. These effects are substantively impressive given the baseline adoption rate of 1.8 points. Following HAVA, a switch to unified Republican control of the legislative branch continues to have the largest increase in the propensity to enact photo ID legislation (16.9 points, $p < .05$), with the control of this institution exerting the next largest effect (10.2 points, $p < .05$). Both effects are more than double the average adoption probability of 4.9 points. The switch to a Republican in the governor's mansion also increases the probability of adoption by a large margin (7.2 points, $p < .1$).

Table 5 also reveals the substantial influence of a state's demographics on the adoption of photo ID laws. Across both time frames, overall, larger proportions of blacks but not Latinos raise the probability of enactment (1.3 points over the entire period and 2.1 points post-HAVA, both $p < .05$). Over the 1972 to 2013 period, the presence of both minority groups significantly increases the impact of the partisan variables. For example, moving from states in the bottom to top quartile of African American population raises the effect of a switch to a GOP-controlled legislature and surviving Republican unified control by 7.0 and 4.8 points, respectively (both $p < .05$). Similar changes in the racial composition of the state also enhance the likelihood of photo ID adoption when a Republican becomes governor (2.4 points, $p < .1$). For states with large Latino populations, GOP action is more likely when the party immediately takes over the legislature or governorship (by 5.5 and 3.1 points, $p < .05$ and $p < .1$, respectively) or simply controls the legislature (by 3.5 points, $p < .05$). Post-HAVA, race plays a reduced role in affecting whether Republicans successfully pass photo ID legislation, with this outcome only more likely when the legislature switches to or remains in Republican hands in high African American population states (16.5 and 11.9 points, both $p < .05$).

Consistent with results for adopting any ID law, a state's requirement of ID or passage of a photo ID statute rely little on the policies of its surrounding neighbors (the effect of moving from the mean to one standard deviation above the mean in the percentage of neighbors with a photo ID law does increase the propensity to adopt such a statute over the 1972 to 2013 time period, but this effect is miniscule (0.1 points, $p < .1$). The percentage of senior citizens also does not influence adoption of either type of ID law. In sum, across all distinct identification statutes, their enactment appears to be an overwhelmingly partisan decision with race also playing a role.²³

Together, the results reported in Tables 4 and 5 provide important insights into our understanding of the factors that lead states to adopt voter identification statutes. Specifically, we make three important contributions. First, across both time periods and each distinct ID classification, we show that the partisan story is not simply one of Republican control of the legislative and executive branches. Instead, what consistently matters most is the switch of these institutions to GOP control (relationships not previously documented). Second, we provide the strongest evidence to date that greater diversity in a state's racial and ethnic composition consistently increases the propensity of Republicans to act once in office. These results contrast sharply with the only other examination of a conditioning relationship (Rocha and Matsubayashi 2014), which concludes that large numbers of blacks or Latinos actually reduce the likelihood of Republicans adopting a photo ID law, and that only a bigger African American (but not Latino) community raises the probability of GOP-led non-photo ID enactment. Third, our analyses demonstrate that, regardless of the type of identification statute, the decision to adopt is always influenced by the partisan balance in both lawmaking institutions (their switch to control and/or control). This contrasts with previous findings of inconsistent evidence of the role of Republican power in these institutions in adoption when the concern is not limited to photo ID laws (see Table 1). As such, the analyses above paint a clearer, much more consistent picture of the circumstances under which states enact provisions requesting or requiring ID at the polls.

Conclusion

The recent explosion in the adoption of photo ID laws suggests a movement away from the trend toward easier access to the polls. Photo ID, however, represents only one manifestation of state identification statutes enacted in a variety of forms and at different times over the last several decades. Though multiple organizations post current ID laws on their websites to help

voters navigate the rules for the next election, we provide the first historical categorization of the type of statute and the timing of its enactment.

Using this newly collected data, we determined that the story behind the adoption of a variety of different voter ID laws is primarily a partisan one. The probability of enactment over the past forty years (of any ID, the requirement of ID, or photo ID) primarily relied not on the mere strength of Republicans in state government (as suggested by previous studies), but rather the switch to this party's control of the legislature and governorship. Adoption patterns changed in the post-HAVA period (both for any ID in general and photo ID) despite the limited applicability and force of its provisions, with this federal intervention not only increasing the likelihood of adoption but increasing the influence of political variables on the probability of enactment as well (with control and shifts in control of the legislative and executive branches playing a larger factor). These results provide substantial support for our hypotheses: the switch to pivot player status by the Republican Party creates the ability and impetus to modify existing voter ID laws, and the passage of HAVA at the federal level presented Republicans already in power with a smaller leap to adopt additional legislation to cover the entire electorate. Demographic factors condition many of these relationships, with Republicans more likely to enact a number of these laws in states with large black and Latino populations, particularly when they first come to power. While our analyses cannot detect the individual motivations of those voting to pass identification statutes, the link between shifts to Republican control and the racial and ethnic composition of the population raises normative concerns consistent with those made by opponents of voter ID laws. In other words, our evidence suggests that at best this link indicates a lack of effective representation for minorities in this area and at worst an attempt to diminish the influence minority members have on elections.

These findings should help guide future research on policy adoption in the states. In general, the results highlight the often highly partisan nature of election reform battles that have not been given sufficient attention in the literature. This is reflected in the twelve times that states have adopted the most stringent voter identification law, the requirement of photo identification, all of which occurred under Republican unified control of the legislature and all but one occurred under a Republican governor.²⁴ As stated in the introduction, we believe that the identification of the factors behind the adoption of any electoral reform is vital to understanding its true impact on both participation and the composition of the electorate. This extends to examining distinctions in the failure to adopt as well (e.g., legislation voted down/vetoed versus not coming up at all), a question that raises selection concerns and thus requires a different research design than we employed here (see Boehmke et al. (2006)). Given the constant debate about this effect, as well as some recent changes that restrict (at least to a certain degree) convenience voting, such an examination is especially timely. We also hope scholars consider further the potential for federal legislation to influence the adoption of state policies. Although the process of collecting such data can be time consuming (and frustrating when the laws are vague and practice varies), we hope others will help close the gaps in our knowledge regarding the factors that influence variation in the adoption of election reforms.

Policies related to election administration do not fit neatly into existing typologies. They come close to Boushey's (2010) governance policy typology, but the laws he considers exert influence on the government while many election administration procedures, such as registration laws, absentee ballot laws, and ID laws, exert influence on the governed. In addition to their clear focus on regulating citizen behavior, state-level ID laws have a number of interesting features: they are not complex; are straightforwardly placed on the left-right continuum; have

consequences for campaigns and perhaps elections; do not spark interstate competition; were influenced by federal legislation; and do not result in outcomes that are easily measured. As scholars continue to make advances in understanding the influence of policy characteristics on diffusion (e.g., Makse and Volden 2011), we believe ID laws and election reforms more generally hold great promise for additional breakthroughs in this area.

In addition to research on diffusion, there is much to learn about the potential consequences of voter ID laws. How effective are information campaigns regarding the necessary forms of ID (see, e.g., Citrin et al. 2014)? How effective are strategies seeking to mobilize citizens to vote as a protest against voter ID laws, particularly among minority populations? Do voter ID laws encourage coalition building across legislators from different minority groups? We hope scholars soon tackle these and other questions, and that our historical coding aids these investigations where possible.

¹ As we discuss below, those without photo ID at the polls can vote a provisional ballot that is only counted if they return with proper identification by the imposed deadline. In lieu of showing ID, a few states instead permit voters to sign an affidavit attesting that they are indigent.

² States currently requiring photo ID are Kansas, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and Wisconsin. State supreme courts struck down laws in Arkansas, Missouri, and Pennsylvania.

³ Such concerns arose around the push to pass the National Voter Registration Act, which required public service agencies to provide registration services. As a clear illustration of how the ideals of the Democratic Party and potential electoral advantage might collide, Senator Phil Gramm (R-Texas) remarked of the bill that “I do not think it is the objective of the U.S. Senate to, in perpetuity, keep Democrats in power” (cited in Calvert and Gilchrist 1993, 696).

⁴ We believe these considerations dominate voter fraud concerns for two reasons. First, there is essentially no evidence of the type of in-person impersonation voter fraud that current ID laws can prevent (Hasen 2012; Minnite 2010). Second, if Republicans were mostly concerned about fraud, the new laws would aggressively target absentee ballots, which lend themselves to vote buying and intimidation. Absentee ballot fraud is much easier and can be done on a wider scale than in-person impersonation fraud, yet for the most part states have not initiated new efforts to prevent the former (see Hasen 2012).

⁵ Two additional studies warrant mention. Bali and Silver (2006) consider minor changes to ID laws from 2001 to 2002 in addition to new statute adoption (which occurred only in Missouri). Hale and McNeal (2010) examine the presence of stringent laws in 2002, 2004, and 2006 but do not attempt to explain the initial adoption of those laws. Both articles find that Republicans are more likely to adopt or maintain more restrictive identification requirements.

⁶ Moreover, Hinchliffe and Lee (2015) argue that increased competition (measured in part by shifts in control) leads parties to distance themselves from one another as a means to increase their chances in the next election.

⁷ Our theory also predicts that a switch to Democratic control should have the opposite effect; namely, that the Party will seek to repeal voter identification laws, especially those that are more stringent (i.e., require photo or nonphoto ID). We suspect that Democrats have failed to do so up to this point because they have only rarely come to power in a state following its adoption of these types of ID laws.

⁸ Other diffusion mechanisms also probably do not play a role in adoption. For example, Grossback et al. (2004) make a compelling case that ideological diffusion might take place when it is unclear where the issue is on the liberal/conservative continuum. The clarity of the

arguments about voter ID laws, however, suggests that ideological learning does not explain adoption. Moreover, since program success (Shipan and Volden 2008; Volden 2006) is extremely difficult to judge for ID laws, we do not expect success in other places to play a role.

⁹ We note that the heightened partisanship after the 2000 election is an alternative potential catalyst for this legislative activity, and that Republicans may have pushed new ID laws even in the absence of HAVA. We, however, remain unconvinced by this explanation. In the two years it took the federal government to respond (via HAVA), only one state enacted a stricter ID law. In contrast, in the year immediately following HAVA's passage, six states strengthened their laws. This action could represent a delayed response by states, but it seems plausible that if the federal government passed major election reform within two years of the presidential contest, then state governments could have done the same. That said, we recognize HAVA is a product of the 2000 race and that we cannot provide a direct test to separate out the former's effect from the latter.

¹⁰ We believe 1972 is an appropriate starting point because it corresponds to the establishment of the current parameters of the electorate (following the adoption of the 26th Amendment), whose composition our theory predicts the parties will attempt to affect to gain an electoral advantage. Extending the analysis back to when states initially become at risk to adopt (e.g., 1950 for the enactment of any ID or a require ID statute) is not feasible due to data reliability concerns and the fact that the ways in which the parties sought to affect the electorate's composition were fundamentally different than they are today. As a robustness check, we used as the starting point the year before the first state adopts the type of ID law in question during the 1972-2013 period to confirm that our results are not due to an artificially increased sample size from the addition of years in which no adoption occurs. As another robustness check we also used 1970 as a start point as that is when Hawaii adopts an ID law. Doing so generates essentially identical results.

¹¹ This classification combines similar but not identical statutes (e.g., acceptable photo ID varies across states). That said, we capture the relevant distinctions while avoiding a specificity that prohibits meaningful analyses (see Alvarez et al. 2010 for discussion of these differences).

¹² In 2003, Hawaii shifted from requesting photo ID in practice (the statute makes no mention of acceptable identification) to requesting non-photo ID (via practice; no change occurred in the statute). Tennessee required non-photo ID for the entire state in 1989 (a 1984 law imposed this restriction on only two counties) but loosened this statute a year later to non-photo ID request. New Mexico made its 2005 non-photo ID request law more straightforward in 2008 but continues to request non-photo ID.

¹³ Our interest resides in the adoption, not implementation, of these policies (see Boushey 2010). As such, accounting for disparities between the law and its interpretation by poll workers (see Atkeson et al. 2010) is beyond the scope of this project.

¹⁴ The other long-term study of enactment (Rocha and Matsubayashi 2014) only examines photo and nonphoto ID adoption (regardless of whether it is requested or required) from 1980 to 2011. Some dates in Table 2 differ from those used in that article, with our analysis often identifying earlier dates. Documentation supporting our coding decisions is available upon request. See the Supplemental Appendix for adoption dates across all forms of identification.

¹⁵ As a robustness check we ran the analyses dropping state-years in which the legislature was not scheduled to meet and did not meet; the results were nearly identical to those we present below.

¹⁶ Nebraska, which does not have an ID law, is excluded from all analyses because of its nonpartisan legislature. In explaining the adoption of a specific type of identification law, we exclude from the analysis states that enacted such a statute prior to 1972: Hawaii, South

Carolina, and Texas for any form of ID, South Carolina for ID required, and Hawaii for photo ID. We do the same for ID laws adopted via the initiative process (any form of ID for Arizona and all three forms we examine for Mississippi). Results are substantively unchanged if we include Arizona and Mississippi in the models until the year prior to when they adopt.

¹⁷ Given the inconsistent findings related to the role played by these two branches in enactment (see Table 1), we prefer to model these influences separately to best isolate any partisan effect (as opposed to controlling simply for unified control of state government). Klarner (2003) addresses several difficult problems with common sources of information on the partisan control of state legislatures. His extensive research relied on multiple sources, and accounts for how ties were broken, changes in power between elections (e.g., due to legislators changing parties), and for certain anomalies, such as when there was a shift in the majority party but no reorganization of the leadership or committee chairmanships. He follows a similar approach in determining control of the governorship and accounts for instances in which a governor failed to finish their term and was succeeded by a member of the opposite party or switched party affiliation during her/his term.

¹⁸ We tested as alternative measurements of competitiveness the partisan split in federal and state elections (the difference in the state's two-party presidential or presidential and midterm vote and the Ranney index, respectively). None of these variables influence the propensity to adopt, nor do they condition the effect of any of the partisan indicators on the likelihood of enactment. As an additional robustness check, we modeled legislative strength as the percentage of GOP-seats held across both chambers and interacted this variable with electoral competitiveness (as do Hicks et al. 2015 (this requires dropping our indicator for unified legislature control)). This conditional relationship is significant in both post-HAVA models (which is consistent with the

findings of Hicks et al. 2015 over a similar time period), but in each model its inclusion does not alter the relationship between adoption and the other partisan indicators.

¹⁹ We lag these percentages by one year to reflect the information known to political actors (i.e., for most (if not all) of 2013 only 2012 information is available). Data come from Census Bureau intercensal estimates (see the Supplemental Appendix for all variable coding and source details).

²⁰ As many southern states maintain ID laws, it might be sensible to include an indicator for this region in the model. Given the large minority populations in these states, however, we prefer to directly measure the South's attributes (i.e., population sizes) that we expect explain the propensity to adopt these policies. Including a dichotomous variable for this region reduces the magnitude of some of the interactive effects discussed below, but they remain substantively meaningful and, in almost all cases, statistically significant.

²¹ Carter and Signorino (2010) note that separation often thwarts efforts to include time dummies meant to account for temporal dependence. That was the case in our data. Splines represent another option but we do not have sufficiently strong expectations to determine the appropriate specification. We prefer the flexibility and simplicity of the time, time squared, and time cubed variables but as a robustness check also ran our models with a lowess smoother to account for temporal dependence; doing so does not alter our substantive conclusions.

²² The nature of our models and data do not permit the use of an interaction term for HAVA.

²³ The relationships reported in Table 5 are robust to controlling for the enactment of a previous identification law, which does not increase the likelihood of adoption.

²⁴ Arkansas's GOP-controlled legislature overrode a veto by the state's Democratic governor. Mississippi, which passed its law through the initiative process, is excluded from this count.

References

- Alvarez, R., Bailey, D., & Katz, J. (2010). An empirical Bayes approach to estimating ordinal treatment effects. *Political Analysis*, 19(1), 20-31.
- Atkeson, L., Bryant, L., Hall, T., Saunders, K., & Alvarez, M. (2010). A new barrier to participation: Heterogeneous application of voter identification policies. *Election Studies*, 29(1), 66-73.
- Bali, V., & Silver, B. (2006). Politics, race, and American state electoral reforms after election 2000. *State Politics & Policy Quarterly*, 6(1), 21-48.
- Barreto, M., Nuño, S., & Sanchez, G. (2007). Voter ID requirements and the disenfranchisements of Latino, Black and Asian voters. Paper presented at the American Association of Political Science, Annual Conference, Chicago, IL.
- Barreto, M., Nuño, S., & Sanchez, G. (2009). The disproportionate impact of voter-ID requirements on the electorate—New evidence from Indiana. *PS: Political Science and Politics*, 42(1), 111-116.
- Beck, N., Katz, J., & Tucker, R. (1998). Taking time seriously: Time-series-cross-section analysis with a binary dependent variable. *American Journal of Political Science*, 42(4), 1260-1288.
- Bentele, K., & O'Brien, E.. (2013). Jim Crow 2.0? Why states consider and adopt restrictive voter access policies. *Perspectives on Politics*, 11(4), 1088-1116.
- Berry, F., & Berry, W. (1990). State lottery adoptions as policy innovations: An event history analysis. *American Political Science Review*, 84(2), 395-415.
- Berry, D., DeMeritt, J., & Esarey, J. (2010). Testing for interaction in binary logit and probit models: Is a product term essential? *American Journal of Political Science*, 54(1), 248-266.

- Biggers, D., & Hanmer, M. (2015). Who makes voting convenient? Explaining the adoption of early and no-excuse absentee voting in the American states. *State Politics & Policy Quarterly*, 15(2), 192-210.
- Boehmke, F., & Witmer, R. (2004). Disentangling diffusion: The effects of social learning and economic competition on state policy innovation and expansion. *Political Research Quarterly*, 57(1), 29-51.
- Boehmke, F., Morey, D., & Shannon, M. (2006). Selection bias and continuous-time duration models: Consequences and a potential solution. *American Journal of Political Science*, 50(1), 192-207.
- Box-Steffensmeier, J., & Jones, B. (2004). *Event history modeling*. New York: Cambridge University Press.
- Boushey, G. (2010). *Policy diffusion Dynamics in America*. New York: Cambridge University Press.
- Burden, B., Canon, D., Mayer, K., & Moynihan, D. (2014). Election laws, mobilization, and turnout: The unanticipated consequences of election reform. *American Journal of Political Science*, 58(1), 95-109.
- Cain, B., Donovan, T., & Tolbert, J. (Eds.). (2008). *Democracy in the states*. Washington D.C.: Brookings Institution Press.
- Calvert, J., & Gilchrist, J. (1993). Suppose they held an election and almost everyone came! *PS: Political Science and Politics*, 26(4) 695-700.
- Carter, D., & Signorino, C. (2010). Back to the future: Modeling time dependence in binary data. *Political Analysis*, 18(3), 271-292.
- Citrin, J., Green, D., & Levy, M. (2014). The effects of voter ID notification on voter turnout:

- Results from a large-scale field experiment. *Election Law Journal*, 13(2), 228-242.
- Citrin, J., Schickler, E., & Sides, J. (2003). What if everyone voted? Simulating the impact of increased turnout in senate elections. *American Journal of Political Science*, 47(1), 75-90.
- Cobb, R., Greiner, J., & Quinn, K. (2012). Can voter ID laws be administered in a race-neutral manner? Evidence from the city of Boston in 2008. *Quarterly Journal of Political Science*, 7(1), 1-33.
- DeNardo, J. (1980). Turnout and the vote: The joke's on the Democrats. *American Political Science Review*, 74(2), 406-420.
- Erikson, R., & Minnite, L. (2009). Modeling problems in the voter identification—voter turnout debate. *Election Law Journal*, 8(2), 85-101.
- Gronke, P., Galanes-Rosenbaum, E., & Miller, P. (2008). Early voting and turnout. In B. Cain, T. Donovan, & C. Tolbert (Eds.), *Democracy in the states* (pp. 68-82). Washington DC: Brookings Institution Press.
- Grossback, L., Nicholson-Crotty, S., & Peterson, D. (2004). Ideology and learning in policy diffusion. *American Politics Research*, 32(5), 521-545.
- Hanmer, M. (2009). *Discount voting*. New York: Cambridge University Press.
- Hanmer, M., & Kalkan, K. (2013). Behind the curve: Clarifying the best approach to calculating predicted probabilities and marginal effects from limited dependent variable models. *American Journal of Political Science*, 57(1), 263-277.
- Hansford, T., & Gomez, B. (2010). Estimating the electoral effects of voter turnout. *American Political Science Review*, 104(2), 268-288.
- Hale, K., & McNeal, R. (2010). Election administration reform and state choice: voter identification requirements and HAVA. *Policy Studies Journal*, 38(2), 281-302.

- Hasen, R. (2012). *The voting wars*. New Haven: Yale University Press.
- Herron, M. (1999). Post-estimation uncertainty in limited dependent variable models. *Political Analysis*, 8(1), 83-98.
- Hicks, W., McKee, S., Sellers, M., & Smith, D. (2015). A principle or a strategy: Voter identification laws and partisan competition in the American states. *Political Research Quarterly*, 68(1), 18-33.
- Highton, B. (2016). Voter identification laws and turnout in the United States. Paper presented at the Midwest Political Science Association Annual Conference, Chicago, IL.
- Hinchliffe, K., & Lee, F. (2016). Party Competition and Conflict in State Legislatures. *State Politics and Policy Quarterly*, 16(2), 172-197.
- Hood III, M., & Bullock III, C. (2008). Worth a thousand words? An analysis of Georgia's voter identification Statute. *American Politics Research*, 36(4), 555-579.
- Karch, A. (2007). Emerging issues and future directions in state policy diffusion research. *State Politics and Policy Quarterly*, 7(1), 54-80.
- Keyssar, A. (2009). *The right to vote*. Revised ed. New York: Basic Books.
- Kiewiet, D., & McCubbins, M. (1988). Presidential influence in the appropriations process. *American Journal of Political Science*, 32(3), 713-736.
- Klarner, C. (2003). Measurement of the partisan balance of state government. *State Politics and Policy Quarterly*, 3(3), 309-319.
- Kousser, M. (1974). *The shaping of southern politics*. New Haven: Yale University Press.
- Lawrence, E., Donovan, T., & Bowler, S. (2009). Adopting direct democracy: Tests of competing explanations of institutional change. *American Politics Research*, 37(6), 1024-1047.

- Lee, F. (2009). *Beyond ideology*. Chicago: University of Chicago Press.
- Makse, T., & Volden, C. (2011). The role of policy attributes in the diffusion of innovation. *Journal of Politics*, 73(1), 108-124.
- McCarty, N. (2000). Presidential pork: Executive veto power and distributive politics. *American Political Science Review*, 94(1), 117-129.
- McDonald, M. (2002). The turnout rate among eligible voters in the states, 1980-2000. *State Politics and Policy Quarterly*, 2(2), 199-212.
- McKee, S. (2015). Politics is local: State legislator voting on restrictive voter identification legislation. *Research and Politics*, July-September, 1-7.
- Minnite, L. (2010). *The myth of voter fraud*. Ithaca, NY: Cornell University Press.
- Mohr, L. (1969). Determinants of innovation in organizations. *American Political Science Review*, 63(1), 111-126.
- Mooney, C., & Lee, M. (1995). Legislative morality in the American states: The case of pre-Roe abortion regulation reform. *American Journal of Political Science*, 39(3), 599-627.
- Overton, P. (2006). Voter identification. *Michigan Law Review*, 105, 631-681.
- Piven, F., & Cloward, R. (2000). *Why Americans still don't vote*. Boston: Beacon Press.
- Rocha, R., & Matsubayashi, T. (2014). The politics of race and voter ID Laws in the states: The return of Jim Crow? *Political Research Quarterly*, 67(3), 666-679.
- Rosenthal, A. (1990). *Governors and legislatures: Contending powers*. Washington, DC: CQ Press.
- Shipan, C., & Volden, C. (2008). The mechanisms of policy diffusion. *American Journal of Political Science*, 52(4), 840-857.
- Shipan, C., & Volden, C. (2012). Policy diffusion: Seven lessons for scholars and practitioners.

Public Administration Review, 72(6), 788-796.

Smith, D., & Fridkin, D. (2008). Delegating direct democracy: Interparty legislative competition and the adoption of the initiative in the American states. *American Political Science Review*, 102(3), 333-350.

Stein, R. (1998). Early voting. *Public Opinion Quarterly*, 62(1), 57-69.

Tsebelis, G. (2002). *Veto players: How political institutions work*. Princeton, NJ: Princeton University Press.

Volden, C. (2006). States as policy laboratories: Emulating success in the children's health insurance program. *American Journal of Political Science*, 50(2), 294-312.

Wolfinger, R., & Rosenstone, S. (1980). *Who votes?* New Haven, CT: Yale University Press.

Table 1. Previous Findings of the Determinants of Voter Identification Law Adoption

Study	Years	Type of Law	Does Republican Control Increase Probability of Adoption?			Does Group's Presence Condition Republican Propensity to Adopt?	
			Governor	% Legislature	Unified Government	Blacks	Latinos
Bentele and O'Brien (2013)	2006-2011	# of Voter Restrictions	Yes	Yes	Not Tested	Not Tested	
	2011	# of Voter Restrictions	Yes	No	Yes	Not Tested	
Rocha and Matsubayashi (2014)	1980-2011	Photo ID	Yes	Yes	Yes	Decreases It	Decreases It
	1980-2011	Non-photo ID	No	No	No	Increases It	No Effect
Hicks et al. (2015)	2001-2012	Any ID	No	Yes	Not Tested	Not Tested	
	2001-2012	Photo ID	Yes	Yes	Not Tested	Not Tested	

Note: Bentele and O'Brien do not look at the adoption of voter identification laws in isolation, instead creating an additive scale of the enactment of this and other types of voter restrictions (requiring proof of citizenship and restrictions on registration, absentee voting, and early voting).

Table 2. State Voter Identification Law Adoption Year, By Statute Type

	Any ID Law	ID Require (Photo or Non-Photo)	Photo ID (Request or Require)
Alabama	2003	2006	2011
Alaska	1980		
Arizona	2004*		
Arkansas	1999	2013	2013
California			
Colorado	2003		
Connecticut	1993		
Delaware	1996		
Florida	1977		1998
Georgia	1997	2005	2005
Hawaii	1970		1970
Idaho	2010		2010
Illinois			
Indiana	2005	2005	2005
Iowa			
Kansas	2011	2011	2011
Kentucky	1988		
Louisiana	1997		1997
Maine			
Maryland			
Massachusetts			
Michigan	1997		1997
Minnesota			
Mississippi	2011*	2011*	2011*
Missouri	2002	2002	2006
Montana	2003		
Nebraska			
Nevada			
New Hampshire	2012		2012
New Jersey			
New Mexico	2005		
New York			
North Carolina	2013	2013	2013
North Dakota	2003	2013	
Ohio	2006		
Oklahoma	2009		
Oregon			
Pennsylvania	2012	2012	2012
Rhode Island	2011		2011
South Carolina	1950	1950	2011
South Dakota	2003		2003
Tennessee	1989	1989	2011
Texas	1966	1997	2011
Utah	2009	2009	
Vermont			
Virginia	2000	2012	2013
Washington	2005		
West Virginia			
Wisconsin	2011	2011	2011
Wyoming			

Note: Years reflect the adoption date (not implementation date) of specified voter identification law. Coding Hawaii proved particularly challenging (see Table SA1 of the Supplemental Appendix for details).

**Adopted via the Initiative process.*

Table 3. Cross-tabulation Results for the Probability of Adoption in a Given Year by Partisan Variables

	Any ID 1972-2013	Any ID Post-HAVA	Require ID 1972-2013	Photo ID 1972-2013	Photo ID Post-HAVA
Republican Unified Legislature	3.6%	19.7%	1.9%	3.3%	10.5%
Other	1.4%	2.2%	0.3%	0.2%	0.4%
<i>Difference</i>	<i>2.2%</i>	<i>17.5%</i>	<i>1.6%</i>	<i>3.1%</i>	<i>10.2%</i>
Republican Governor	2.8%	13.1%	1.3%	2.0%	7.3%
Other	1.4%	3.3%	0.3%	0.4%	1.3%
<i>Difference</i>	<i>1.4%</i>	<i>9.9%</i>	<i>1.1%</i>	<i>1.6%</i>	<i>6.0%</i>
Switch to Republican Unified Legislature	8.9%	40.0%	8.2%	7.9%	23.8%
Other	1.8%	5.8%	0.5%	0.8%	2.9%
<i>Difference</i>	<i>7.1%</i>	<i>34.2%</i>	<i>7.7%</i>	<i>7.1%</i>	<i>20.9%</i>
Switch to Republican Governor	6.9%	33.3%	4.4%	5.4%	19.2%
Other	1.7%	5.5%	0.6%	0.8%	3.0%
<i>Difference</i>	<i>5.2%</i>	<i>27.8%</i>	<i>3.8%</i>	<i>4.5%</i>	<i>16.3%</i>

Table 4. Change in the Predicted Probability of State Adoption of Any Voter Identification Law Based on Political and Social Determinants

	1972-2013	Post-HAVA
Republican Unified Legislature	0.018 [-.000, .040]	0.180 [.099, .265]
Republican Governor	0.013 [-.004, .031]	0.072 [-.010, .138]
Republican Unified Legislature Switch	0.064 [.007, .165]	0.315 [.092, .606]
Republican Governor Switch	0.040 [.006, .092]	0.151 [-.005, .369]
Percentage of Neighbors with ID Law	0.002 [-.008, .012]	0.016 [-.027, .066]
Percentage Over 65	-0.004 [-.022, .018]	0.025 [-.018, .077]
Percentage Latino	-0.004 [-.018, .016]	0.037 [-.017, .107]
Percentage Black	0.010 [-.002, .025]	0.008 [-.019, .047]
Rep Unified Leg x Percentage Black (Top-Bottom Quartile)	0.015 [-.002, .050]	0.071 [-.070, .227]
Rep Gov x Percentage Black (Top-Bottom Quartile)	0.007 [-.006, .026]	-0.014 [-.077, .060]
Rep Leg Switch x Percentage Black (Top-Bottom Quartile)	0.044 [-.005, .140]	0.097 [-.112, .322]
Rep Gov Switch x Percentage Black (Top-Bottom Quartile)	0.016 [-.018, .058]	-0.030 [-.156, .114]
Rep Unified Leg x Percentage Latino (Top-Bottom Quartile)	0.020 [-.002, .060]	0.108 [-.059, .312]
Rep Gov x Percentage Latino (Top-Bottom Quartile)	0.014 [-.007, .040]	-0.021 [-.097, .041]
Rep Leg Switch x Percentage Latino (Top-Bottom Quartile)	0.068 [.005, .200]	0.136 [-.071, .359]
Rep Gov Switch x Percentage Latino (Top-Bottom Quartile)	0.046 [.006, .118]	-0.011 [-.124, .121]
N	1,507	252

Note: Predicted probabilities estimated with all other variables set at their actual values. Diffusion and demographic variable effects calculated for moving from the mean to one standard deviation above the mean. 95% confidence intervals, generated via simulation (see Hanmer and Kalkan 2013; Herron 1999), are in brackets. Interactive effects are the difference in the effect of the partisan variable in the top and bottom quartile of the demographic distribution. See the Supplemental Appendix for details. Bolded probabilities signify statistical significance at $p < .1$

Table 5. Change in the Predicted Probability of State Adoption of A Strict Voter Identification Law Based on Political and Social Determinants

	Require Any ID 1972-2013	Any Photo ID 1972-2013	Any Photo ID Post-HAVA
Republican Unified Legislature	0.014 [.003, .034]	0.029 [.012, .073]	0.102 [.054, .167]
Republican Governor	0.007 [-.003, .023]	0.010 [-.003, .028]	0.030 [-.015, .086]
Republican Unified Legislature Switch	0.048 [.011, .122]	0.045 [.011, .119]	0.169 [.047, .384]
Republican Governor Switch	0.027 [.004, .071]	0.025 [.003, .065]	0.072 [-.007, .192]
Percentage of Neighbors with ID Law	0.000 [-.001, .002]	0.001 [-.000, .003]	0.008 [-.002, .025]
Percentage Over 65	-0.003 [-.008, .002]	0.005 [-.003, .016]	0.007 [-.012, .044]
Percentage Latino	0.000 [-.007, .007]	0.000 [-.007, .007]	-0.002 [-.034, .023]
Percentage Black	0.007 [-.000, .020]	0.013 [.004, .029]	0.021 [.001, .0671]
Rep Unified Leg × Percentage Black (Top-Bottom Quartile)	0.020 [.001, .064]	0.048 [.010, .109]	0.119 [.012, .249]
Rep Gov × Percentage Black (Top-Bottom Quartile)	0.008 [-.002, .032]	0.011 [-.003, .037]	0.014 [-.024, .055]
Rep Leg Switch × Percentage Black (Top-Bottom Quartile)	0.058 [.003, .166]	0.070 [.014, .171]	0.165 [.012, .386]
Rep Gov Switch × Percentage Black (Top-Bottom Quartile)	0.021 [-.013, .074]	0.024 [-.003, .076]	0.027 [-.039, .119]
Rep Unified Leg × Percentage Latino (Top-Bottom Quartile)	0.015 [-.005, .049]	0.035 [.003, .082]	0.008 [-.116, .147]
Rep Gov × Percentage Latino (Top-Bottom Quartile)	0.008 [-.004, .029]	0.011 [-.008, .027]	-0.019 [-.085, .010]
Rep Leg Switch × Percentage Latino (Top-Bottom Quartile)	0.056 [-.008, .177]	0.055 [.002, .139]	0.017 [-.171, .238]
Rep Gov Switch × Percentage Latino (Top-Bottom Quartile)	0.031 [-.005, .107]	0.031 [-.002, .079]	-0.023 [-.123, .059]
N	1,890	1,875	432

Note: Predicted probabilities estimated with all other variables set at their actual values. Diffusion and demographic variable effects calculated for moving from the mean to one standard deviation above the mean. 95% confidence intervals, generated via simulation (see Hanmer and Kalkan 2013; Herron 1999), are in brackets. Interactive effects are the difference in the effect of the partisan variable in the top and bottom quartile of the demographic distribution. See the Supplemental Appendix for details. Bolded probabilities signify statistical significance at $p < .1$

Supporting Information for:

Understanding the Adoption of Voter Identification Laws in the American States

This Supporting Information contains the following material:

Supplemental Appendix 1: Table SA1. State Voter Identification Law Adoption Year, By Statute Type (Expanded)

Supplemental Appendix 2: Variable Coding

Supplemental Appendix 3: Table SA2. The Political and Social Determinants of State Adoption of Voter Identification Laws (Logistic Regression Model Output)

Supplemental Appendix 4: Table SA3. Crosstabulation Results for the Probability of Adoption in a Given Year by Partisan Variables by Region and Race

Supplemental Appendix 5: Discussion of Conditional Effects Calculations

Table SA1. State Voter Identification Law Adoption Year, By Statute Type (Expanded)

	Any ID Law	Non-Photo ID Request	Non-Photo ID Require	Photo ID Request	Photo ID Require
Alabama	2003	2003	2006	2011	
Alaska	1980	1980			
Arizona	2004*	2004*			
Arkansas	1999	1999			2013
California					
Colorado	2003	2003			
Connecticut	1993	1993			
Delaware	1996	1996			
Florida	1977	1977		1998	
Georgia	1997	1997			2005
Hawaii	1970	2003		1970	
Idaho	2010			2010	
Illinois					
Indiana	2005				2005
Iowa					
Kansas	2011				2011
Kentucky	1988	1988			
Louisiana	1997			1997	
Maine					
Maryland					
Massachusetts					
Michigan	1997			1997	
Minnesota					
Mississippi	2011*				2011*
Missouri	2002		2002		2006
Montana	2003	2003			
Nebraska					
Nevada					
New Hampshire	2012			2012	
New Jersey					
New Mexico	2005	2005			
New York					
North Carolina	2013				2013
North Dakota	2003	2003	2013		
Ohio	2006	2006			
Oklahoma	2009	2009			
Oregon					
Pennsylvania	2012				2012
Rhode Island	2011			2011	
South Carolina	1950		1950		2011
South Dakota	2003			2003	
Tennessee	1989	1990	1989		2011
Texas	1966	1966	1997		2011
Utah	2009		2009		
Vermont					
Virginia	2000	2000	2012		2013
Washington	2005	2005			
West Virginia					
Wisconsin	2011				2011
Wyoming					

Note: Years reflect the adoption date (not implementation date) of specified voter identification law. Coding Hawaii proved particularly challenging. The law (§11-136) is vague, indicating that “every person shall provide identification if so requested by a precinct official” (Hawaii Revised Statutes, 2011). Acceptable ID is not delineated, nor are the circumstances under which an official might request it. In 1982, a new administrative rule states that “the voter shall present valid identification to the official

*in charge of the pollbook” (Hawaii Administrative Rules §2-51-80). We thank Lori Minnite for pointing us to this rule. Judy Gold, the state Precinct Supervisor, explained the current and historical interpretation of the law.
Adopted via the initiative process.

Supplemental Appendix 2: Variable Coding

Dependent Variables:

Any voter identification law: Coded (1) if the state adopts any voter identification law (request or require) for the first time in the corresponding year, (0) otherwise.

Voter identification requirement law: Coded (1) if the state adopts a law requiring voter identification (photo or non-photo) for the first time in the corresponding year, (0) otherwise.

Photo voter identification law: Coded (1) if the state adopts a photo voter identification law (request or require) for the first time in the corresponding year, (0) otherwise.

Independent Variables:

Republican unified legislature: Coded (1) if the Republican Party possesses unified control of the state legislature, (0) otherwise. Information taken from Klarner (2003) and subsequent updates available on the *State Politics and Policy* website.

Republican governor: Coded (1) if the Republican Party holds the governorship, (0) otherwise. Information taken from Klarner (2003) and subsequent updates available on the *State Politics and Policy* website.

Republican unified legislature switch: Coded (1) if the state switches to a unified, Republican controlled legislature, (0) otherwise.

Republican governor switch: Coded (1) if the state switches to a Republican governor, (0) otherwise.

Percentage of neighbors with ID law (geographic diffusion): The percentage of the state's neighbors that already maintain the identification statute in question.

Percentage over 65: The percentage of the state's population over the age of 65 (taken from Census Bureau intercensal estimates and lagged one year).

Percentage Latino: The percentage of the state's population that identifies as Latino (taken from Census Bureau intercensal estimates and lagged one year). As the Census Bureau did not generate these estimates from 1971 to 1979, we assume a constant change in Latino population across this decade (from 1970 to 1980) and interpolate data for each of the missing years.

Percentage black: The percentage of the state's population that identifies as African American (taken from Census Bureau intercensal estimates and lagged one year).

Time: The number of years between the start date of the analysis and the adoption date of the identification statute in question.

*Time*²: The number of years squared between the start date of the analysis and the adoption date of the identification statute in question.

*Time*³: The number of years cubed between the start date of the analysis and the adoption date of the identification statute in question.

Supplemental Appendix 3

Table SA2. The Political and Social Determinants of State Adoption of Voter Identification Laws (Logistic Regression Model Output)

	Any ID 1972-2013	Any ID Post-HAVA	Require ID 1972-2013	Photo ID 1972-2013	Photo ID Post-HAVA
Percentage Over 65	-0.129 [0.228]	0.245 [0.238]	-0.149 [0.133]	0.199 [0.178]	0.129 [0.175]
Percentage Latino	-0.032 [0.056]	0.067 [0.056]	0.000 [0.047]	-0.001 [0.039]	-0.008 [0.036]
Percentage African American	0.044 [0.031]	0.021 [0.044]	0.077* [0.042]	0.114*** [0.034]	0.090*** [0.033]
Republican Unified Legislature	0.681 [0.432]	2.598*** [0.772]	1.301* [0.718]	2.491*** [0.781]	3.353*** [1.022]
Republican Unified Legislature Switch	1.034 [0.760]	0.864 [0.880]	1.362 [0.830]	0.584 [0.778]	0.644 [0.875]
Republican Governor	0.557 [0.465]	1.235 [0.780]	0.824 [0.704]	0.913 [0.657]	0.840 [0.741]
Republican Governor Switch	0.784 [0.566]	0.805 [0.779]	1.193 [0.767]	0.949 [0.675]	0.913 [0.845]
Percentage of Neighbors with ID Law	0.534 [1.022]	1.011 [1.479]	-0.723 [1.436]	-1.881 [1.154]	-1.601 [1.162]
Time	0.005 [0.242]	-0.800 [0.693]	1.102 [0.940]	5.550* [3.366]	-0.158 [1.073]
Time ²	0.006 [0.012]	0.168 [0.187]	-0.041 [0.040]	-0.183* [0.110]	0.062 [0.246]
Time ³	0.000 [0.000]	-0.010 [0.013]	0.001 [0.001]	0.002* [0.001]	-0.002 [0.015]
Constant	-5.586*** [2.086]	-8.419** [4.242]	-15.854** [6.694]	-67.004** [33.791]	-9.545*** [2.428]
Log-likelihood	-120.50	-47.02	-54.82	-61.82	-44.68
N	1,507	252	1,890	1,875	432

Note: Coefficients are logistic regression estimates, presented with robust standard errors clustered by state. Dependent variable is whether or not a state adopts the specified voter ID law in the corresponding year (coded 1=yes and 0=no). Though somewhat informative, since these models are fully interactive in all of the variables it is best to examine both substantive and statistical significance using the predicted effects shown in Tables 4 and 5 (see Hanmer and Kalkan 2013).

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Supplemental Appendix 4

Table SA3. Crosstabulation Results for the Probability of Adoption in a Given Year by Partisan Variables by Region and Race

Panel a. Switch in Control in Non-south and South					
	Any ID 1972-2013	Any ID Post-HAVA	Require ID 1972-2013	Photo ID 1972-2013	Photo ID Post-HAVA
Non-South					
Switch to Republican Unified Legislature	9.1%	44.4%	3.7%	3.8%	14.3%
Other	1.4%	5.2%	0.3%	0.6%	2.0%
Switch to Republican Governor	5.1%	23.1%	4.3%	4.4%	15.0%
Other	1.5%	5.7%	0.3%	0.5%	1.8%
South					
Switch to Republican Unified Legislature	0.0%	0.0%	42.9%	30.0%	42.9%
Other	3.9%	18.2%	1.3%	1.9%	7.7%
Switch to Republican Governor	15.4%	100.0%	4.8%	8.3%	33.3%
Other	3.1%	0.0%	2.0%	2.3%	9.1%

Panel b. Partisan Variables and % Black

	Any ID 1972- 2013	Any ID Post- HAVA	Require ID 1972- 2013	Photo ID 1972- 2013	Photo ID Post- HAVA
% Black Below the Mean					
Republican Unified Legislature	3.0%	16.1%	1.0%	1.5%	6.1%
Other	0.8%	2.7%	0.0%	0.1%	0.6%
Republican Governor	2.1%	11.3%	0.8%	1.0%	4.1%
Other	1.1%	4.2%	0.0%	0.3%	1.4%
Switch to Republican Unified Legislature	8.8%	33.3%	2.4%	4.7%	18.2%
Other	1.3%	6.2%	0.3%	0.5%	2.0%
Switch to Republican Governor	4.7%	22.2%	4.0%	5.7%	20.0%
Other	1.4%	6.3%	0.2%	0.4%	1.6%
% Black Above the Mean					
Republican Unified Legislature	7.3%	33.3%	6.0%	11.3%	18.9%
Other	2.2%	1.4%	0.7%	0.3%	0.0%
Republican Governor	3.9%	17.9%	2.2%	3.4%	12.7%
Other	1.9%	1.8%	0.7%	0.5%	1.1%
Switch to Republican Unified Legislature	9.1%	50.0%	20.0%	15.0%	30.0%
Other	2.6%	4.9%	0.9%	1.4%	4.6%
Switch to Republican Governor	10.3%	50.0%	4.9%	5.0%	18.2%
Other	2.3%	3.8%	1.2%	1.6%	5.2%

Panel c. Partisan Variables and % Latino

% Latino Below the Mean	Any ID 1972-2013	Any ID Post-HAVA	Require ID 1972-2013	Photo ID 1972-2013	Photo ID Post-HAVA
Republican Unified Legislature	2.3%	17.0%	1.1%	2.6%	10.9%
Other	1.4%	1.9%	0.3%	0.2%	0.0%
Republican Governor	2.4%	16.7%	0.9%	1.8%	9.0%
Other	1.0%	2.7%	0.3%	0.1%	1.1%
Switch to Republican Unified Legislature	2.8%	33.3%	4.2%	6.1%	27.8%
Other	1.6%	5.8%	0.4%	0.6%	2.9%
Switch to Republican Governor	3.8%	33.3%	3.1%	4.4%	19.1%
Other	1.5%	5.3%	0.4%	0.6%	3.3%
% Latino Above the Mean					
Republican Unified Legislature	6.0%	33.3%	3.7%	5.0%	9.1%
Other	1.6%	2.6%	0.2%	0.3%	1.0%
Republican Governor	3.4%	8.9%	2.3%	2.4%	4.2%
Other	2.5%	4.7%	0.3%	1.0%	1.6%
Switch to Republican Unified Legislature	33.3%	100.0%	23.1%	14.3%	0.0%
Other	2.3%	5.8%	0.7%	1.3%	3.0%
Switch to Republican Governor	15.8%	33.3%	7.7%	8.3%	20.0%
Other	2.4%	5.9%	0.9%	1.4%	2.3%

Supplemental Appendix 5: Discussion of Conditional Effects Calculations

One of the advantages of using logit models for event history analysis is the ability to present results that are straightforward to interpret (Beck et al. 1998). A well-known feature of limited dependent variable models, such as the logit model, is that they are nonlinear and fully interactive in all of the variables. In other words, the effect of any independent variable depends on the values of all of the other independent variables (in addition to the degree of change in the variable of interest, the value of the coefficient on the variable of interest, the values of the coefficients on all of the other variables, and the cumulative distribution function one uses). As a result, most researchers focus their attention on the predicted effects and their degree of uncertainty from the models rather than the coefficients themselves and their respective degrees of uncertainty (Hanmer and Kalkan 2013). We follow this strategy here.

When researchers have hypotheses about interactive (i.e., conditional) effects in limited dependent variable models, attention to the model's predictions rather than raw output is even more important (Ai and Norton 2003). To estimate predicted effects for interactive hypotheses, researchers can leverage the inherently interactive nature of the models and summarize the effect of a given variable across values of another variable, or they can include explicit interaction terms and calculate predicted effects by carefully specifying values for the relevant variables (Berry et al. 2010). Berry et al. (2010) show that researchers can detect meaningful interactive effects using either approach. Although we would have preferred to utilize both approaches and compare the results, this was not possible. Identification issues, such as perfect prediction, can arise quickly with limited dependent variable models, especially in small samples (Long 1997). In some of our models we ran into these issues when specifying interactions between our political variables and demographic variables, as the models were simply too taxing for the data.

As a result, and in the interest of using the same approach for each model, we decided to leverage the fully interactive nature of the models and to calculate the predicted effects for the political variables and then to summarize them across meaningful values of the demographic variables. For example, when examining the effect of the change to Republican control of the legislature we did the following. First, we manipulated that variable while holding all other variables at their observed values (Hanmer and Kalkan 2013). We then averaged the difference in the predicted probability of adoption under each scenario across the entire sample to get the overall effect of changing to Republican control (as reported in Tables 3 and 4) and via simulation produced the relevant confidence interval. Second, using these results we then examined how this effect varied at the top and bottom quartile of black and Latino population, respectively, by averaging the effect across each of the two ranges (quartiles). Third, we computed confidence intervals both for these effects and the differences in the effects across the top and bottom quartiles (the latter are what we report in Tables 3 and 4). Note that the effect (which is the difference in the difference across quartiles) is statistically significant if the confidence interval does not include 0.

References

- Ai, C., & Norton, E. (2003). Interaction terms in logit and probit models. *Economics Letters*, 80(1), 123-129.
- Berry, D., DeMeritt, J., & Esarey, J. (2010). Testing for interaction in binary logit and probit models: Is a product term essential? *American Journal of Political Science*, 54(1), 248-266.
- Hanmer, M., Kalkan, K. (2013). Behind the curve: Clarifying the best approach to calculating predicted probabilities and marginal effects from limited dependent variable models. *American Journal of Political Science*, 57(1), 263-277.
- Long, S. (1997). *Regression models for categorical and limited dependent variables*. Thousand Oaks, CA: Sage Publications.