Uneven Hurdles:
The Effect of Voter Identification Requirements on Voter Turnout

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Draft
April, 2008

Prepared for presentation at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2007. I wish to thank A.J. Barghothi and Elisha Savchak, formerly of the University of South Carolina, and Daniel Milton of Florida State University for their excellent research assistance on this project. I also wish to thank Jason Barabas and Jennifer Jerit for their insights regarding multilevel modeling. Finally, I am grateful for the supportive environment and research leave time provided by the Department of Political Science at Florida State University. Research support for this paper was funded in part by the First Year Assistant Professor (FYAP) Award Program, sponsored by Florida State University's Council on Research and Creativity. All errors or omissions remain my own.

Access to the ballot box is a critical element of democratic legitimacy. For citizens truly to believe that they can govern themselves, all eligible voters must be granted equal access to the vote. Historically, however, election rules and procedures have been systematically used as a means to deny groups the right to vote. In the American South, for instance, suffrage restrictions, such as literacy tests, poll taxes, and "white primaries," denied African-Americans access to the ballot box for nearly a century after they were granted the voting rights in the Constitution (e.g., Kousser 1974; Keyssan 2001). While the most egregious forms of suffrage restrictions were eliminated by the Voting Rights Act of 1965, less pernicious obstacles to the voting booth still remain. Research has shown convincingly that electoral rules, such as early registration closing dates and limited poll hours, impose costs on prospective voters and thereby may reduce political participation (e.g., Wolfinger and Rosenstone 1980; Highton 1997, 2004). Simply put, when the costs of voting are set too high, some voters stay away from the polls (Downs 1957). Indeed, these costs appear to be borne disproportionately by voters at the lower end of the socioeconomic spectrum—effectively creating a bias in voter turnout (Leighley and Nagler 1992).

In January, 2008, the United States Supreme Court heard oral arguments in the combined case *Crawford v. Marion County Election Board* and *Indiana Democratic Party v. Rokita*. At issue is whether Indiana's recently implemented law requiring voters to present state-issued photo identification in order to cast a ballot unconstitutionally limits the voting rights of some citizens. Indiana's voter ID law is considered the most stringent of those currently in place. It requires voters without the necessary identification to vote provisionally at the polls, but the voter is then required to present the appropriate identification in person at a designated government office within ten days in order for their ballot to be counted. The purported aim of the Indiana voter ID law—like that of similar legislation enacted by 24 other states in recent years—is to minimize instances of voter fraud. Proponents argue that requiring the presentation of formal identification is simply due diligence—a reasonable means by which to restrict the capacity of charlatans who may wish to "vote early and often." Yet, critics argue that formal identification requirements unfairly discriminate against the poor, elderly, and racial minorities, since these citizens may be less likely to possess a state-issued driver's license or photo identification.[1]

Consequently, these registered voters may effectively be denied the right to vote, even though they are otherwise eligible. As Atkeson et al (2007, 1) put it, the case clearly demonstrates the "tension between maximizing ballot access and minimizing voter fraud."

It should not be surprising, of course, that the issue has also taken on a partisan dimension. Of the twenty-four states that have adopted voter identification requirements in the past eight years, twenty voted Republican in the 2004 presidential election. Democrats have argued that voter ID laws are a veiled attempt by Republicans to suppress turnout among core Democratic constituency groups, such African Americans, Latinos, and the lower-income working class. Republicans counter that their intentions are purely aimed at staving off voter fraud through voter impersonation at the polls.

In this paper, I examine the effect voter identification laws on both turnout and Republican Party vote share. There is a growing literature on the effects of voter ID requirements on voter participation; however, the evidence offered by these works is actually quite mixed. Some researchers, for instance, have shown that voter ID requirements of the strictest form, such as those in Indiana, decrease the likelihood of voter participation relative to weaker requirements, such as stating one's name (Alvarez, Bailey, and Katz 2008). Yet, other researchers—using aggregate data from Indiana—have found that the effect of voter ID requirements on turnout may actually be positive, not only increasing turnout in general but also within minority and less affluent communities specifically. Using county-level data from the 2000 and 2004 presidential elections, I reexamine the relationship between statewide adoptions of voter ID requirements on rates of turnout. I also examine the extent to which these laws disproportionately affect turnout in counties with sizeable African-American, Latino, and lower-income populations. I then examine the effect of voter identification laws on Republican Party vote share within these counties, providing what I believe to be the first test of the potential partisan bias brought about by these laws. In the end, the evidence presented here suggests that voter identification laws—both less exacting requirements to present some form of government-issued identification (hereafter, "Voter ID" requirements) and stricter mandates to present photographic identification (hereafter, "Photo ID" requirements)—are associated with lower levels of county turnout, though these effects are quite small.

Moreover, the evidence indicates that minority and poor communities are more disproportionately affected by these suffrage requirements. The evidence also indicates, as the partisan conjecture suggests, that identification requirements have little effect on the vote shares for the Republican Party—a finding that should allay the fears of many Democrats.

The paper proceeds in several parts. In the next section, I discuss the problem of voter identification requirements, as well as the current state of knowledge on the subject, in greater detail. I then consider the logic behind the partisan conjecture associated with identification requirements and voter turnout. This section briefly reviews existing theoretical arguments regarding the potential for partisan bias in high versus low turnout elections and provides the basis by which to adjudicate the claim that voter identification requirements disproportionately benefit Republicans. I then turn to a discussion of the aggregate data and multilevel modeling approach used here; and I present the results of the analysis. I conclude with a discussion of the implications of this work and offer suggestions for future research on this important subject.

Voter Identification and Voter Turnout

In the wake of the disputed presidential election of 2000, Americans' concerns over the legitimacy of the electoral process have been heightened. Indeed, in order to provide increased coordination and establish minimal standards over the administration of federal elections, the United States Congress passed the Help America Vote Act (HAVA) of 2002. The legislation was passed with the hope of accomplishing two goals: safeguarding the integrity of the election process and guaranteeing citizens' access to voting. Among HAVA's several provisions, Section 303 of the law requires that all new applicants for voter registration must provide proof of identification either with their application or the first time they appear at their polling place. Since its passage in 2002, however, several states have extended the voter identification requirements beyond HAVA's original registration provisions. Specifically, a number of states have enacted laws that require *all registered voters* to present some form

of identification when they wish to cast a ballot. By the 2004 presidential election, eighteen states required proof of identification, and today that number has reached to twenty-four of the fifty states.

The identification requirements enacted by these states vary in their stringency. Several states simply require that the voter present some form of identification, ranging from a driver's license to a student ID to a discount club (e.g., Costco or Sam's) membership card. Other states, such as Florida and Indiana, are more restrictive, requiring that voters present a state-issued photo identification card. In their recent work on voter identification and voter turnout, Alvarez, Bailey, and Katz (2008) offer an eight-point classification scheme of the different voter identification requirements that confront voters at the polls in the United States. In order of increasing stringency:

0. Voter must state his/her name.
1. Voter must sign his/her name in a poll-book.
2. Voter must sign his/her name in a poll-book and it must match a signature on file.
3. Voter is requested to present proof of identification or voter registration card.
4. Voter must present proof of identification or voter registration card.
5. Voter must present proof of identification and his/her signature must match the signature on the identification provided.
6. Voter is requested to present photo identification.
7. Voter is required to present photo identification.

For the purposes of this paper, I reclassify this scheme into two nested subsets: states requiring proof of identification (category ≥ 3), which I shall call "Voter ID" states, and states that require the more stringent standard of photographic identification (category ≥ 5), which I shall call "Photo ID" states.

Figure 1 presents the geographic distribution of Voter ID and Photo ID requirements across the states during at the time of the 2004 presidential election. Each of the states has been colored so as to indicate whether the state has Republican ("Red State") or Democratic ("Blue State") political leanings. As is evident by the figure, the vast majority of the states that have enacted Voter ID laws (15 of the 18 states) have a tendency to vote Republican in recent presidential elections. This is consistent with other accounts that have contended that Republican-majority state legislatures are most likely than Democratic-majority state legislators to enact these laws (Overton 2006). Figure 1 also indicates that, in 2004, the more stringent Photo ID requirements were enacted solely in Republican majority states.[2]

[Insert Figure 1 Here]

The distribution of voter identification laws across the states raises several important questions. First, do voter identification laws disproportionably affect minority groups, the poor, and the elderly? Second, has voter turnout decline in those states that have enacted voter identification laws? And, lastly, do these laws provide the Republican Party with electoral gains? Existing research has begun to answer the first of these two questions, while the third question remains largely unanswered. As we shall, the literature offers a mixed portrait of the effects of voter identification requirements on voter turnout, but theory is highly suggestive.

There are several reasons to believe that voter identification laws will reduce voter participation rates and disproportionately affect minorities, the poor, and the elderly in particular. As Leighley (1995) points out in her review essay on the state of knowledge on political participation, the three major theoretical perspectives that structure our understanding of voter turnout—the socioeconomic, rational choice, and mobilization models—all assert that the cost of participation serve as a major obstacle to civic involvement. The costs of voting in the United States can be divided roughly into registration and post-registration types. In their modern guise, registration costs are typically associated with registration closing dates and convenience registration (i.e., "motor voter") being most likely to impinge upon voter participation (Highton 2004). Indeed, in their classic study, Wolfinger and Rosenstone (1980) empirically demonstrated that registration laws significantly decreased voter turnout, and they argued that liberalizing these laws would serve to reduce the gap in turnout between the most and least educated by more than 30 percentage points. Post-registration costs are typically associated with the information costs associated with voter participation (Downs 1957), but they also include the physical costs of going to the polls (e.g., Gomez, Hansford, and Krause 2007). The voter identification laws at issue in this paper fall primarily within the post-registration costs category.[3] For the most part, voter identification requirements adopted by the states are likely to affect voters at the time of the vote. In some states, voters without proper identification may be asked to vote provisionally (putting their ballot "at risk" of being expunged). Voters in other states are asked to sign a sworn and witnessed affidavit attesting to their identity. For

voters without proper identification, the hurdles to voting established by voter identification laws simply may be too high to surmount. Moreover, as shown by Wolfinger and Rosenstone (1980) and Leighley and Nagler (1992) among others, individuals at the lower rungs of the socioeconomic status ladder find it particularly difficult to pay the costs of voting. Consequently, when the costs of voting are high, low socioeconomic groups, such as minorities, the low-education, the poor, and the elderly, tend to be disproportionately underrepresented in the voting population. Therefore, it is reasonable to assume that these groups will be unduly burdened by the institutionalization of voter identification requirements.

Who has Identification?

One way to gauge the effect of voter identification requirements on voter turnout is to ask whether certain registered voters are more likely to possess proper identification than others. Of course, registered voters without proper identification are the ones most directly affected by implementation of these laws. Hood and Bullock (2006) examine the question of who has identification in a rather direct manner. They match the State of Georgia's voter registration/vote history records to data from the state's Department of Motor Vehicles records in order to determine which voters actually possess state-issued identification.[4] The authors find that registered African-Americans, Hispanics, and the elderly are significantly less likely to have state-issued identification than White and younger counterparts. Moreover, the authors show that those without state-issued identification were also less likely to vote in the 2004 and 2006 federal elections.

Two recent studies by Barreto, Nuño, and Sanchez (2007a; 2007b) provide similar answers to the question of who has identification, though their evidence is based on survey data. In the first of these studies, the authors conducted a series of exit polls in California, New Mexico, and Washington.[5] They asked voters if they could provide any of one of six forms of identification. These forms provide "what-if" scenarios that voters might confront if their states were to make their identification requirements more stringent. Controlling for age, income, and education, the authors found that immigrant and minority voters were significantly less likely to possess the forms of identification requested. In the second study,

the authors surveyed residents of the State of Indiana and asked them whether they possessed a driver's license or state ID card with current name match. The results indicated that active voters were much more likely to have the proper identification, and those without identification were significantly less likely to self-report their voter turnout in the 2006 congressional elections. The authors also found significant and rather large racial and income gaps in holding proper identification, and they also found a parabolic relationship between age and possession of necessary identification (the young and elderly being significantly less likely than the middle aged to have ID).

Together, these three studies provide compelling evidence—and in the case of Hood and Bullock, rather direct evidence—for a socioeconomic bias in meeting the qualifications set forth by voter identification laws. Minority groups, the poor, and the elderly are significantly less likely to have the identification required to vote in their states.

Models of Turnout

An alternative approach for studying the effect of voter identification laws on turnout is to model voter turnout (at either the aggregate or individual level) and look for systematic differences across states (or across time within states) that vary in their voter identification laws. Several studies have utilized variations of this design approach. However, the evidence generated by these studies is strikingly mixed, with some studies demonstrating strong negative effects associated with voter identification laws and turnout, while others showing no or even positive effects.

One of the first studies to investigate the question of voter identification and turnout in a systematic way was conducted by Vercellotti and Anderson (2006)—a study sponsored by the U.S. Election Assistance Commission. The study utilizes both aggregate and individual-level data on voter turnout from the 2004 presidential election, and the authors find that state voter ID laws significantly decrease voter turnout. Moreover, the authors find that negative effects are amplified among non-whites. These findings from the study certainly lend credence to the claims of those who opposed voter identification laws. However, as noted by Alvarez, Bailey, and Katz (2008), the design used by

Vercellotti and Anderson is somewhat limited. First, by using only a single cross-section, the authors have minimal leverage by which distinguish system-level variation (a system level *N* of 50). We have no way of deciphering whether states that adopted voter identification laws experienced significantly lower turnout than their counterparts in the period preceding their implementation of these laws. Consequently, the effects demonstrated by Vercellotti and Anderson *may* be spurious. Second, in their individual-level study, the authors modeled did not systematically model the differences in individual-level and system-level variation. Statistical work on multilevel modeling asserts that failing to account for these alternative levels may artificially decrease the standard errors associated with the system-level factors (Steenbergen and Jones 2002), meaning that the evidence associated with system variation in voter ID laws may be prone to a Type-I error.

Vercellotti and Anderson's evidence of a negative relationship between voter ID laws and voter turnout is not substantiated by other studies. Utilizing a national study of over 36,000 voters, Ansolabehere asked self-reported voters whether they were not allowed to vote at their polling place because of voter identification requirements. He reports that in his entire sample, only 23 people reported that they were refused access to the ballot for failure to produce identification. As a result of this evidence, Ansolabehere argues that those who claim that voter identification measures will place a significant burden on voters and limit voter participation may be overstating their case. He further argues that the limited number of instances of being refused access to the ballot may is likely a result of the fact that most states allow voters without ID to vote provisionally. This, of course, is an important access point for voters without proper ID, however, it is not a "failsafe" as Ansolabahere claims. Voting provisionally does not guarantee that the voter ballot will actually be counted, since these ballots may be expunged by local election officials. Indeed, Kimball, Kropf, and Battles (2006) have shown that partisan election officials in the U.S. are significantly less likely than nonpartisan officials to accept provisional ballots. Thus, it is possible that in Ansolabahere's study the scant number of people reporting to be "refused access to the ballot" may underestimate the number of voters who effectively did not have their ballot counted.

Other studies also demonstrate no relationship between voter identification laws and voter turnout. Using National Election Study data from 2000, 2002, 2004, and 2006, as well as state-level aggregate data, Mycoff, Wagner, and Wilson (2007) show no significant relationship between voter ID laws and turnout. But perhaps the most intriguing findings within the existing literature is provide in Milyo's (2007) analysis of voter turnout in Indiana (the state at the heart of the U.S. Supreme Court's recent case). Milyo examines county-level turnout in Indiana from the election periods immediately before and after the state's adoption of their very stringent photo ID law. Milyo finds that in the election following implementation of the law, the average county-level turnout in Indiana actually *increased* by roughly two percentage points. Moreover, Milyo finds no consistent evidence that counties with a higher percentage of minorities, poor, elderly or less education were disproportionately affected by the new photo ID law. Milyo claims that his findings are consistent with recent work by Berinsky, who shows that reforms targeted at lower SES groups actually only serve to decrease the costs of voting for those who were likely to vote before the reforms.

Together with the work of Ansolabahere, the null (or positive) findings presented by the works of Mycoff, Wagner, and Wilson and Milyo strongly counterbalance the negative findings found by Vercellotti and Anderson. Yet, recent work by Alvarez, Bailey, and Katz (2008) may serve to resurrect the claim that voter identification laws lower turnout. The study by Alvarez, Bailey, and Katz begins with a somewhat limited state-level analysis of voter turnout in the 2000-2006 federal elections. This component of their study does not demonstrate a statistically significant relationship between voter identification laws and turnout. However, the second component of their analysis provides what may be the most compelling evidence on the question to date. In this later analysis, Alvarez, Bailey, and Katz construct a multilevel model of individual-level data from the U.S. Census Bureau's Current Population Surveys for the 2000-2006 federal elections. The multilevel design allows the authors to provide consistent estimates of the effect of voter identification laws (a state-level factor) on the probability of individuals' decisions to turnout. They find that strictest forms of voter identification (photo ID) significantly decrease the probability of participation among registered voters. The authors also find that

these laws appear to have a disproportionate effect on lower educated citizens, though no differential impact based on race is decipherable.

The findings from studies of the effect of voter identification laws on voter turnout so far provide a mixed bag. Several studies demonstrate no (or even a positive) effect of voter identification laws on turnout, while two studies show that these laws serve as obstacles to voter participation. Clearly, further investigation of this question is warranted. In the analysis that follows, I will offer a "new cut at the data" by estimating a multilevel model of county-level turnout in the U.S. using data from the 2000 and 2004 presidential elections. The aggregate test provided here uses cross-sectional and temporal leverage from a panel dataset to adjudicate whether voter ID and photo ID laws decrease voter turnout. I also test whether the effect of these laws on turnout varies with the distribution of socioeconomic factors within the counties. Perhaps most importantly, unlike previous analyses on this subject, I also test the relationship between voter identification laws and turnout against competing institutional explanations for turnout, such as registration closing dates and early voting laws that govern the state. This test of competing explanations is an important step since it is possible that states that implement voter identification laws may also be likely adopt other institutional barriers to participation. Consequently, if correlated with one another, the exclusion of these laws from the analysis may cause us to draw incorrect inferences about the role of voter identification laws on turnout. It is quite possible that these other institutional factors may be more effective at altering the costs of voting than voter identification laws.

The Partisan Conjecture

One question that remains completely open to investigation is whether voter identification laws disproportionately suppress voter turnout among Democrats and thereby give Republicans a greater vote share. The Republican bias conjecture is a consistent with the long held belief that higher turnout benefits Democrats and lower turnout benefits Republicans. Two alternative explanations for the hypothesized relationship between turnout level and GOP vote share exist. The first account, known as the "conventional turnout effect model," assumes that the electorate is divided into core and peripheral voters

(e.g., Tucker, Vedlitz, and DeNardo 1986). While core voters are very likely to turn out on a regular basis, peripheral voters are less habitual in their voting tendencies and are most likely to be the target of mobilization efforts. These mobilization efforts can sometimes help peripheral voter overcome the costs associated with participation and thereby bring them to the polls (Rosenstone and Hansen 1993). Importantly, the conventional model posits that peripheral voters are more likely to be Democrats. So, it is hypothesized that high turnout elections (i.e., elections in which peripheral voters turn out) are likely to increase Democratic vote share (see Citrin, Schickler, and Sides 2003).

An alternative theory about the partisan consequences of high turnout is espoused by James DeNardo (1980). DeNardo argues that peripheral voters are actually more likely to "defect" (i.e., vote for the party with which they do *not* identify) than core voters. As a result, peripheral voters tend to behave more like independents than partisans. According to DeNardo, when peripheral voters do go to the polls, the tendency is for them to push the vote share in the direction of a 50-50 split. It is important to note that DeNardo's theory is more appropriately understood as a revision of the conventional model rather than a rejection of it. DeNardo argues that high turnout produces "two effects"—it serves to increase the vote share *both* Democratic Party *and* the minority party. Thus, an interaction effect is hypothesized, whereby increased levels of turnout tend to help the Democrats, but especially so when they are the minority party. As the percentage of Democrats in the electorate grows larger, increases in turnout will have a diminishing marginal effect on Democratic vote share (see Nagel and McNulty 1996 for further evidence on this point.)

If voter identification laws do in fact decrease voter turnout, it is likely to effect peripheral voters more so than core voters, since the former are much more sensitive to changes in the cost of voting than the latter. If the conventional model is accurate, then reduced levels of turnout caused by voter identification requirements should result in direct increases in Republican vote share. Yet, if DeNardo's "two effects model" is a more accurate account of the effect of turnout levels on vote shares, then decreases in turnout due to voter identification requirements should also increase Republican vote share,

but the magnitude of this effect to increase as the partisan composition of the county (the unit of analysis used here) becomes increasingly Republican.

Data

The primary variable of interest is voter turnout. To test the effect voter identification laws on turnout, I chose to measure the dependent variable at the county level. In conducting a test of aggregate data, the utilization of county level observations maximizes my variability in both the dependent and independent variables.[6] Whereas previous studies using aggregated data have been focused mainly at the state level (with a maximum number of cross-sectional units equal to 50), choosing to investigate county-level turnout in the continental United States increases the number of cross-sectional units to over 3,000. I also add a temporal component to my design by utilizing information from both the 2000 and 2004 presidential elections. This is an important decision because the intervening period saw a rapid growth in the number of states adopting voter identification laws. By including both spatial and temporal units, I can draw comparisons both across and within states. I measure the estimated *Turnout* in each county based on the number of votes cast at the presidential level divided by the estimated voting age population.[7]

The data for the study were compiled from various sources. County-level vote returns for 2000 and 2004 were drawn primarily from Congressional Quarterly's *America Votes* series. County-level voting age population estimates were compiled from both the U.S. Census Bureau's *City and County Data Book* and from the Census Bureau's website (www.census.gov). The models of *Turnout* include a number of variables measuring county-level socioeconomic distributions that are routinely hypothesized to be related to voter turnout. These variables include the *% High School Graduates* in the county, the *% College Graduates*, median household *Income*, the *% Urban* residents in the county, as well as the *% Black* and *% Latino* populations. It is expected that increases in the first three of these variables will independently serve to increase the level of *Turnout* in the county, while increases in the latter three

variables will be related to decreases in *Turnout*. These data also were drawn from the Census Bureau sources listed above.

At the state level, I include a number of variables that associated with aggregate turnout rates. First, since southern states have long been known to have lower than average levels of turnout (e.g., Rosenstone and Wolfinger 1978), I include a dummy variable indicating whether the state historically was part of the confederate *South*, and I expect this variable to have a negative effect on turnout. I also control for the possibility that important state-wide elections might increase voter turnout by including dummy variables indicating whether the state also held a *Gubernatorial Election* or U.S. *Senate Election* during the years in question. Of course, I also wish to control for that possibility that state laws, such as registration closing dates and early voting laws, might affect turnout. My measure of *Registration Closing Date* records the number of days between the last day to register to vote in the state and Election Day. This variable was compiled from *The Book of the States*, and I expect that increases in closing date restrictiveness should decrease levels of voter turnout. I also control for the recent flurry in statewide adoptions of *Early Voting* laws. These laws, which are aimed at making voting more convenient for voters, have been shown to increase voter participation (Stein and Garcia-Monet 1997). I constructed a dummy variable indicated whether the state allowed early voting at the time of the election. These data were gathered by searching state statutes using the Legal Database on Lexis-Nexis Academic Universe. Finally, the main independent variable of interest is the voter identification requirements in each state. As mentioned above, using the Alvarez, Bailey, and Katz scale as guidance, I created dummy variables indicating whether the state require proof of identification or more (category ≥ 3)—*Voter ID*. And, I also created a dummy variable indicating whether the state required the more stringent standard of photographic identification (category ≥ 5)—*Photo ID*.[8] I utilize these variables in alternative models of voter turnout.[9]

A Multilevel Model of Turnout

The data used here combine information from counties nested within different state regimes. Because counties within the same state encounter similar legal restrictions and political environments, there is a significant amount of clustering in the data. As Steenbergen and Jones (2002, 219) point out, "ignoring the multilevel character of [the] data carries significant statistical costs in the form of possibly incorrect standard errors and inflated Type I error rates." Thus, a multilevel model is an appropriate solution to the data problem presented here (Raudenbush and Byrk 2002).

Given the nature of the argument linking voter identification laws to county-level turnout, the multilevel model can be written in the following equations:

$$Turnout_{ij} = \beta_{0j} + \beta_{1j}\%Black_{ij} + \beta_{2j}\%Latino_{ij} + \beta_{3j}\%HighSchool_{ij} + \beta_{4j}Income_{ij} + \beta_k x_{kij} + \varepsilon_{ij} \quad (1)$$

$$\beta_{0j} = \gamma_{00} + \gamma_{01}VoterID + \delta_{0j} \quad (2)$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}VoterID + \delta_{1j} \quad (3)$$

$$\beta_{2j} = \gamma_{20} + \gamma_{21}VoterID + \delta_{2j} \quad (4)$$

$$\beta_{3j} = \gamma_{30} + \gamma_{31}VoterID + \delta_{3j} \quad (5)$$

$$\beta_{4j} = \gamma_{40} + \gamma_{41}VoterID + \delta_{4j} \quad (6)$$

The equations combine to form a multilevel function where the effect of state-level *VoterID* (*PhotoID*, when it is modeled) conditions both the average county *Turnout* within a state and the effect of *%Black*, *%Latino*, *%HighSchool*, and *%Income* on *Turnout*. Equation (1) models the relationship between county-level factors on voter turnout. What makes this unusual is that the multilevel design allows the parameters of the first equation to vary across the state level units represented by *j*. Thus, equation (2) models the intercept (β_{0j}), where the variation in the average level of *Turnout* is a function of the *VoterID* law within the state and any unexplained state-level variation. The relationships specified in equations (3-6) are commonly referred to as "cross-level interactions" because they allow the coefficients associated with county-level factors to vary as a function of the *VoterID* law within the state and unexplained state-level variation. If the argument that claiming that *VoterID* laws decrease turnout holds, then we should

expect to see lower than average county-level *Turnout* in states where those laws have been enacted (i.e., $\gamma_{01} < 0$). If these laws also have disproportionate effect on *Turnout* in counties with high minority populations as many claim, the should expect to see negative coefficients assigned to the *%Black* and *%Latino* base terms and positive signs associated with their respective interactions with *VoterID*. This would suggest that the negative effects of these socioeconomic factors on turnout are magnified when voter identification laws are enacted. If these laws disproportionately affect *Turnout* in counties with lower educated populations and low income populations, then we should expect to see a positive coefficient assigned to the *%HighSchool* and *%Income* base terms and a positive signs associated with their respective interactions with *VoterID*. This would indicate that the education and income gap associated with voter turnout widens after a state adopts a voter identification law.

When modeling multilevel structures, a recommended starting point in the analysis is to estimate a random effects ANOVA model (Raudenbush and Bryk 2002, 24; Steenbergen and Jones 2002, 224). This takes the following form:

$$Y_{ij} = \gamma_{00} + \delta_{0j} + \varepsilon_{ij} \tag{7}$$

Here, $Turnout_{ij}$ (Y_{ij}) is modeled as a function of γ_{00}, the grand mean of dependent variable and includes two random parameters. The first of these, δ_{0j}, represents the state-level random effect, while the second, ε_{ij}, represents the county-level random effect. Because this model "decomposes the variance in the dependent variable across different levels of analysis" (Steenbergen and Jones 2002, 224), the research is in a good position to assess the importance of each level and how much would be lost by ignoring a particular level. In other words, we can determine how much between-state variation (τ_{00}) there is relative to within-state variation (σ^2). To do this we simply take the ratio of τ_{00} to the total variance ($\tau_{00} + \sigma^2$). According the model estimates (not shown here), approximately 41% of the total variance in our data can be attributed to state-level variance, with the remaining 59% deriving from the county-level. It, of course, is not surprising that county-level variation contributes greatly to *Turnout* at this level. What may be a

surprise, however, is how much state-level factors contribute to *Turnout*. The decision to use a multilevel model seems clearly justified.

Table 1 reports the results of two multilevel models, where the first uses *VoterID* as a predictor of *Turnout* and the second employs the more stringent *PhotoID* in the model. Both models are statistically significantly overall.

[Insert Table 1 Here]

I begin with a discussion of a few of the control variables, before turning the cross-level interactions and their constitutive terms. For the most part, the control variables work as expected. In both models, *Turnout* increased across election periods under investigation. The average county *Turnout* in the 2004 presidential election year was roughly 1.4 percentage points higher than in the previous election year. Counties in southern states, controlling for other factors, had significantly lower average turnout (by 6.5 percentage points) than their non-southern counterparts. *Gubernatorial Elections* had no significant effect on *Turnout*, but *Senate Elections* (statistically significant in the *Voter ID* model and just outside the 95% confidence interval in the *Photo ID* model) do serve to marginally stimulate voter turnout. Finally, both variables measuring the state's electoral rules governing registration closing date and early voting are statistically significant; however, the first of these is not in the hypothesized direction. Contrary to other studies, the data modeled here indicate that as *Closing Date* increases, voter turnout within counties increases slightly. The effect of *Early Voting* on *Turnout* is in the hypothesized direction and the substantive effects are relatively strong, increasing county-level *Turnout* between roughly 2.5 and 3.5 percentage points.

Of course, the main question of interest regards the effect of voter identification laws on voter turnout and whether these laws have a disproportionate effect on low socioeconomic status populations. To address this issue, I constructed a series of cross-level interactions. As interactions, the constitutive terms must be interpreted in conjuncture with their multiplicative partner. The fixed effects associated with the demographic items represent the value of that variable when *VoterID* (or *PhotoID*) is equal to zero. Aside from *%Black*, which is surprisingly insignificant in both models, each of the demographic

variables is significant and works in the hypothesized direction when the respective voter identification variables equal zero. The fixed effect associated with the *VoterID* (*PhotoID*) variable must also be interpreted in relation to its multiplicative partners. The model indicates that when *%Black*, *%Latino*, *%HighSchool*, and *%Income* are all equal to zero (since these variables have each been mean-centered, this condition sets the variables at their global means), the effect of the *VoterID* and *PhotoID* variables is not statistically significant. The variables *do*, in fact, have a conditioning role on other factors. The interaction terms indicate that *VoterID* laws have no significant conditioning effect on *%Black* or *%HighSchool*. Yet, the positive coefficient association with multiplicative term (*%Latino* × *Voter ID*) indicates that the negative slope associated with *%Latino* and *Turnout* becomes increasingly negative when *VoterID* laws are instituted. The positive coefficient associated with (*%Income* × *Voter ID*) tells a similar story: the positive slope associated with *%Income* and *Turnout* increases in magnitude in states with *VoterID* laws. Thus, the model present here lends credence to the claim that turnout within Latino and poorer populations may be disproportionably affected by voter identification laws. The presence of more stringent *PhotoID* laws within a state also conditions the influence of other factors on turnout, but the findings here are not consistent with the *VoterID* model. In the second model, *PhotoID* serves to amplify the slightly negative relationship between *%Black* and *Turnout*. Given the statistical insignificance of *%Black* when *PhotoID* equals 0, we can interpret the coefficients collectively as indicating that in states without photo identification requirements, African-American populations turn out at similar levels to white populations. However, when photo identification requirements are instituted, turnout in African-American populations appears to fall behind that found in white populations but a slight but significant margin. The conditioning effect of *PhotoID* on *%Latino* does not jibe with the results from the *VoterID* model. In this model, the presence of *PhotoID* requirements seems to minimize the negative effect of *%Latino* on *Turnout*. This is an unexpected and curious finding.

Testing the Partisan Conjecture

Democratic opponents of the voter identification laws frequently argue that Republican-majority state legislatures are enacting these laws as a way of suppressing the turnout of core Democratic constituencies. To date, however, this claim has not been investigated systematically. To do so, I estimate a multilevel model of the Republican Party's presidential vote share (*GOPVoteShare*) in each of the counties in the continental U.S. for the 2000 and 2004 presidential election cycles. The main independent variables are again *VoterID* and *PhotoID* (estimated as part of separate models). I also include the time dummy, *Year2004*, to control for any between election heterogeneity. I also control for the partisan tendencies of a county by including a moving average of the Republican vote share from the three previous elections in the model.

I estimate the effect of voter identification laws on Republican vote share using four alternative models. The main distinction between models is delineated by the "conventional turnout effect model" and the "two effects" model specification outlined above. From each of these theoretical perspectives, I then estimate two models, one using the independent variable *VoterID* and the other using the variable *PhotoID*. The estimates for each model can be found in Table 2.

[Insert Table 2 Here]

The conventional model suggests that reduced levels of turnout caused by voter identification requirements should result in direct increases in Republican vote share. The models estimated in Table 2, however, provide no support for this interpretation of the partisan conjecture. Within the structure of the conventional model, neither *VoterID* nor *PhotoID* has a statistically significant effect on *Turnout*. Thus, the county-level vote share received by the Republican Party's presidential candidate is not affected by the presence or absence of voter identification requirements within the state.

The two effects model suggests that decreases in turnout due to voter identification requirements should result in increases in Republican vote share, but the slope of this relationship should increase as the partisan composition of the county becomes increasingly Republican. This specification requires the inclusion of an interaction term—the product of *VoterID* (or *PhotoID*) times the moving average of the previous Republican Party vote share. Examination of the two effects model estimates indicates that the

constitutive terms, *VoterID* and *PhotoID*, are not statistically significant. This indicates that when *Previous Republican Vote Share* is equal to zero (again, because this variable is mean centered, zero equals the global mean) the effect of these laws is also effectively zero. Interestingly, the conditioning effect associated with the respective interaction terms is statistically different from zero. However, similar to the *Turnout* models, the form of identification requirement produces differently signed coefficients. When the *VoterID* variable is used, the conditioning effect is negative, meaning that the positive relationship between previous vote share and current vote share declines in magnitude under *VoterID* regimes. This is not the effect hypothesized by the two effects model. The conditioning effect associated with the *PhotoID* interaction, however, is consistent with the model. The positive relationship between previous vote share and current vote share increases in magnitude under *PhotoID* regimes. This suggests that in states with photographic identification requirements, the Republican Party does experience a slight (but significant) increase in vote share.

The effects demonstrated here offer little credence to claims that voter identification requirements disproportionately benefit the Republican Party. In the four models estimated here, support for this claim is found in only one instance. Most importantly, while this effect is statistically significant, it is substantively miniscule. According to these data, suspicious Democrats have little reason for their concern.

Discussion

The effect of voter identification reforms on voter turnout is an important and topical issue. Of course, the fact that the constitutionality of these laws is currently being debated by the United States Supreme Court adds to the relevance of scholarship on this topic. Proponents argue that these laws are necessary for securing the sanctity of the ballot box against voting fraud. Opponents argue that these laws impose undue costs on voters, particularly those low in socioeconomic status, and may be political advantageous to one party over another. Scholars have only recently begun to systematically examine this effect of voter identification laws on voter turnout, and the results have been mixed. Some

researchers find evidence that these laws decrease voter turnout and disproportionately effect minority groups and the poor, while other studies report no statistically significant relationship between these two phenomena. This study has attempted to add to the existing evidence on this important question. Moreover, this study marks the first attempt to examine the partisan consequences of these electoral reforms.

The evidence provided here suggests that voter identification laws (both *VoterID* and *PhotoID* laws) have relatively small effects on voter turnout. It does appear, however, that the route by which these voter identification laws affect turnout may go through minority groups and the poor. I find some evidence that *VoterID* laws may decrease the turnout of Latino populations, and *PhotoID* laws may affect African American populations similarly. The evidence also indicates that *VoterID* laws may also widen the income gap associated with voter turnout. However, it is important to repeat that, while these effects are statistically significant, they are very small in magnitude.

The results presented in this paper also suggest that the voter identification laws produce very little, if any, partisan bias. In the four models of GOP vote share estimated, three demonstrated no statistically significant increase associated vote share related to voter identification laws. Only one model of the four models produced results that were consistent with the claim that these laws provide electoral benefits to the Republican Party. However, again, these results were small in magnitude.

Endnotes

[1] A recent examination of voter registration and DMV records in Georgia by Hood and Bullock (2007) shows that, among those registered to vote, African-Americans, Hispanics, and the elderly were, in fact, less likely to have DMV-issued photo identification.

[2] The map presented in Figure 1 does not include those states that have changed their laws since 2004. Since that election year, seven states have enacted or amended their voter identification laws. Arizona, Florida, Indiana, New Mexico, Ohio, and Washington all increased the stringency of their voter identification requirements (Indiana when from being classified as two on the Alvarez, Bailey and Katz scale to an eight). Four of these states can be classified as being "Red States." South Carolina (a loyal Red State) actually decreased the stringency of its voter identification law (going from a six to a four on the Alvarez, Bailey and Katz scale).

[3] HAVA's Section 303 identification requirements, of course, would be considered as registration costs.

[4] Georgia's voter identification law requires that voters present (1) A Georgia driver's license; (2) A valid Georgia voter identification card or other valid identification card issued by the State of Georgia, any other state, or the United States, provided that such identification contains a photograph of the elector; (3) A valid U.S. passport; or, (4) A valid employee identification card containing a photograph of the voter. Because Georgia's voter identification cards do not contain a photograph, the state's law is scored a five on the Alvarez, Bailey and Katz scale.

[5] On the Alvarez, Bailey and Katz scale, California is coded as a two and New Mexico and Washington are coded as fives in 2006, the year in which the exit polls were conducted.

[6] In future iterations of this paper, I intend to add a complementary study using individual-level data from the Census Bureau's Current Population Surveys.

[7] Work by McDonald and Popkin (2001) suggests that the voting eligible population (VEP) may be a more appropriate denominator for measuring turnout. VEP differs from voting age population (VAP) in that it excludes individuals who are noncitizens and disenfranchised felons, while including citizens

temporarily living abroad. Unfortunately, the VEP data are only available at the national level and not the county level, which precludes me from using it here.

[8] I do not use the ordinal 8-point scale created by Alvarez, Bailey, and Katz due to concerns about intransitivity in the scale. I am more confident in the collapsed classification used here.

[9] Note that within the context of the multilevel model below, all continuous variables have been global mean centered (Raudenbush and Byrk 2002).

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TABLE 1. The Effect of Voter Identification Laws on County-Level Turnout.

Parameter	Voter Identification Requirements	Photo Identification Requirements
Fixed Effects		
Intercept	56.286**	56.837**
	(1.116)	(1.059)
% Black	.001	-.009
	(.013)	(.009)
% Latino	-.111**	-.037**
	(.018)	(.011)
% High School	.140**	.148**
	(.024)	(.018)
% College	.333**	.335**
	(.018)	(.018)
% Urban	-.114**	-.115**
	(.004)	(.004)
% Income	.00004**	.00007**
	(.000)	(.000)
Year 2004	1.446**	1.378**
	(.189)	(.182)
South	-6.561**	-6.436**
	(1.865)	(1.585)
Gubernatorial Election	-.489	-.912
	(1.706)	(1.574)
Senate Election	.651**	.393
	(.214)	(.203)
Early Voting	3.595**	2.363**
	(.465)	(.437)
Closing Date	.077*	.071*
	(.031)	(.030)
Voter ID	-.744	-----
	(1.138)	
Photo ID	-----	.409
		(1.376)
% Black × Voter ID [Photo ID]	.001	.095*
	(.017)	(.037)
% Latino × Voter ID [Photo ID]	.103**	-.288**
	(.021)	(.070)
% High School × Voter ID [Photo ID]	.00007	.102
	(.032)	(.086)
% Income × Voter ID [Photo ID]	.00008**	.0001
	(.000)	(.000)
Variance Components		
Intercept	21.534**	19.300**
	(5.111)	(4.460)
Voter ID [Photo ID]	12.129**	4.253
	(5.988)	(4.851)
-2 Log Likelihood	-20398.267**	-20428.344**

Note: Multilevel table entries are maximum likelihood (REML) estimates with estimated standard errors in parentheses. Continuous variables are grand mean centered.

* $p < .05$, ** $p < .01$

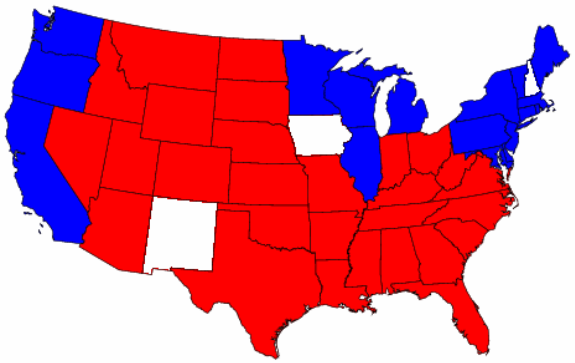
TABLE 2. The Effect of Voter Identification Law on County-Level Republican Party Vote Share in the 2000 and 2004 U.S. Presidential Elections.

Parameter	**Conventional Model**		**Two Effects Model**	
Fixed Effects				
Intercept	55.978**	55.647**	56.066**	55.940**
	(.594)	(.589)	(.663)	(.604)
Voter ID	-.155	-----	-.432	-----
	(.313)		(1.250)	
Photo ID	-----	-.373	-----	-.328
		(.436)		(2.756)
Moving Average of Previous Republican Vote Share	1.072**	1.072**	1.105**	1.069**
	(.007)	(.007)	(.009)	(.007)
Voter ID × Previous Republican Vote Share	-----	-----	-.058**	-----
			(.014)	
Photo ID × Previous Republican Vote Share	-----	-----	-----	.132**
				(.036)
Variance Components				
Intercept	16.165**	16.122**	17.473**	16.993**
	(3.438)	(3.429)	(3.947)	(3.608)
Voter ID [Photo ID]	-----	-----	19.003**	29.626
			(7.974)	(24.715)
-2 Log Likelihood	-18431.349**	-18430.78**	-18291.008**	-18368.47**

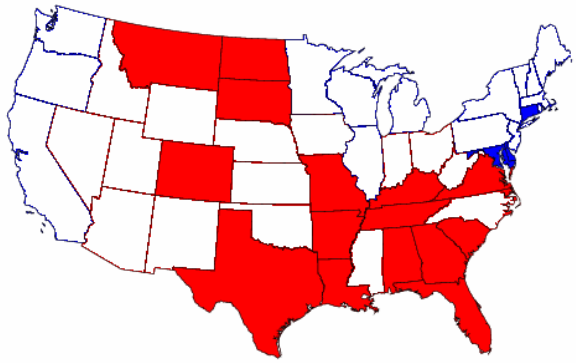
Note: Multilevel table entries are maximum likelihood (REML) estimates with estimated standard errors in parentheses. Continuous variables are grand mean centered.

* $p < .05$, ** $p < .01$

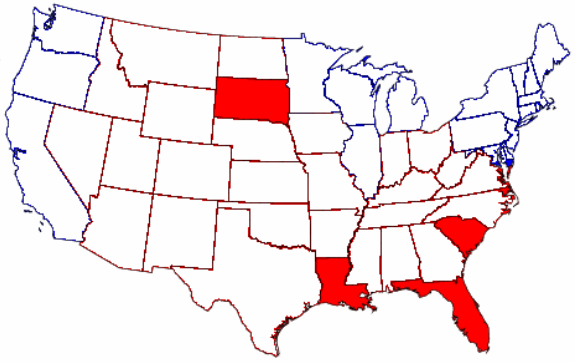
FIGURE 1. Distribution of State Voter Identification Laws, 2004.



Partisan Support in
2000 and 2004 Elections



States Requiring Proof of
Valid Identification (Voter ID)



States Requiring Valid Photo
Identification (Voter ID)

Note: The classification of "Red" (Republican) States and "Blue" (Democratic) States is based on the state voting for the same party in consecutive elections (2000 and 2004). Only three states (in White), New Hampshire, Iowa, and New Mexico switched their partisan support across the elections.