Restrict the Vote:
Disenfranchisement as a Political Strategy

Hayley Hopkins
Honors Thesis
Department of Political Science
Northwestern University
Advisor: Professor Traci Burch
May 3, 2017

Abstract

In the past decade, there has been a widespread resurgence in restrictive voting legislation at the state level, but what explains this trend? In this paper, I examine the introduction and passage of restrictive voting legislation between 2005 and 2016 using two categories of explanations: demographic behavior and political composition. Using multiple regression techniques, I analyze the conditions that contribute to both the proposal and the adoption of restrictive legislation. I find that the most significant predictor of the passage of restrictive legislation across all models is the percentage of the state legislature composed of the GOP, a measure of partisanship. However, particularly for the introduction of legislation, there is evidence that the voting behavior of minority groups contributes to the presence of restrictions. This analysis provides robust support to theories of strategic disenfranchisement, and indicates that current restrictions are a product of partisan calculations.

Contents

List of Figures and Tables

List of Figures

List of Tables

Acknowledgements

First, I would like to thank my advisor Professor Traci Burch for her endless guidance throughout the research design and writing process; this thesis would not have been possible without her patience and support. I also would like to thank Professor Andrew Roberts for his advice on how to undertake and structure this project. I'm also grateful to the Office of Undergraduate Research at Northwestern University for the initial grant funding that sparked my interest in this restrictive voting legislation. In addition, I would like to thank Professor Jacqueline Stevens for encouraging me to pursue this project, and for providing continuous advice and support for my research and academic pursuits during my time at Northwestern. Finally, I would not have been able to undertake such a project without the unconditional and unwavering support of my parents and my sisters, Maxine and Katie.

Introduction

"[This law represents] the suppression of the overwhelmingly Democratic votes of African–Americans and Latinos to provide an Anglo partisan advantage"- Judge Ramos, Veasey v Abbott

Recently, a federal court in Texas reversed the state's strict photo identification requirement for voters, citing discriminatory intent in violation of the Voting Rights Act. Specifically, the ruling highlighted the disparate effect that stringent identification requirements have on minority populations in Texas, and argued that these requirements were crafted as a strategic political tool to maintain Republican electoral advantages[1]. Widely considered one of the most restrictive identification laws, SB14 in Texas mandated photo identification at the polls, a requirement that experts estimated 1.2 million eligible voters lacked[2].

This voter identification law in Texas is just one example of the resurgence of restrictive voting laws in the past decade. Between 2005 and 2016, 49 states introduced some form of restrictive voting legislation, and 35 states passed restrictive laws[3]. Scholars highlight the discriminatory effect that these restrictions have on minority voters; specifically, requirements such as photo identification can function as costly and meaningful barriers for poor, black, or Hispanic state residents (Barreto et al 2009; Hood and Bullock 2008).

Restrictive voting policies are not new phenomena, and the 19th and 20th centuries were characterized by numerous, explicitly discriminatory barriers to voting access. In particular, voter suppression has empirically been employed as a tactic to gain partisan advantage, and to exclude minority populations from the ballot box (Keyssar 2000). However, the widespread

[1] Veasey v Abbott, 796 F.3d 487
[2] Analysis in the lawsuit indicates that 1.2 million current residents do not have, or do not have access to, mandatory identification. This analysis further clarifies that minority populations were most likely to lack the required identification. "Texas Photo ID Trial Begins: Groups Argue Law Violates Voting Rights Act, Constitution." *Brennan Center for Justice*. (2014).
[3] National Conference of State Legislatures, http://www.ncsl.org/

resurgence of restrictive voting legislation in the past decade represents a troubling trend for modern voting accessibility, and the conditions under which these suppressive efforts become possible are unclear.

Additionally, recent structural changes in the legislative process for voting legislation require additional investigation. Specifically, the recent Supreme Court decision, *Shelby v Holder*, removed oversight required by the Voting Rights Act in all or part of 15 states[4]. This "preclearance" requirement mandated that affected states had to submit all voting legislation changes to the Department of Justice for approval, as a tactic to limit discriminatory voting practices. The removal of this oversight represents a fairly significant change the process of implementing restrictive voting law, and may be responsible for some of the current legislative trends.

In this paper, I seek to understand what contributes to the presence of restrictive voting legislation. Specifically, I analyze the factors that explain the introduction and passage of restrictive voting legislation between 2005 and 2016. Leveraging the theory and work of previous scholars, I examine two general explanations: demographic behavior and political composition. The timeframe of my analysis is significant, both because it allows me to examine a more up to date and expansive data set, and because it includes the removal of preclearance and new directional trends. While previous authors have completed similar analyses, this study adds to the literature by expanding the timeframe of analysis, and by analyzing a comparatively broad definition of restrictive voting legislation.

In the following sections I will define restrictive voting legislation, and analyze previous studies in the field. Additionally, I will examine potential explanations for restrictive legislation, and describe my research design. Ultimately, I find that while introduction of restrictive voting

[4] Shelby County v. Holder, 570 US Supreme Court (2013)

legislation is the result of changing demographic voting behavior, the most important and significant predictor for restrictive legislation is partisan composition of the state legislature.

Restrictive Voting Legislation: A Theoretical Framework

Definition

This paper seeks to explain the introduction and passage of restrictive voting laws. For the purpose of this analysis, a "restrictive voting law" is defined as legislation that limits voting accessibility through identification requirements, registration restrictions, absentee and early voting restrictions, or felony restrictions.

Identification requirements are increased requirements to prove one's identity in order to vote at a polling location, and include a variety of methods, ranging from comparisons of signatures in a poll book to identification that includes a photograph of the elector[5]. These can be either "strict" (mandatory to present) or "non-strict" (requested; may vote or vote provisionally absent identification).

Registration restrictions can also take multiple forms, and this analysis focuses on three: identification requirements for registration, shortened time periods for registration, and restrictions on voter registration drives. Identification requirements in the context of registration include proof of citizenship requirements on registration applications, as well as stricter requirements for general proof of identity or address[6]. Shortened time periods for registration occur when the state requires completed registration applications to be turned in at an earlier date than previously established in the state. Restrictions on voter registration drives can include regulations on compensation, shortened deadlines for returning completed forms, increased

[5] Vercellotti, and Anderson (2006) classify identification requirements at the polls into 5 categories: state name, sign name, match signature to a signature on file, provide non-photo identification, and provide photo identification. For this analysis, I focus on the latter three categories, as they represent an additional step or required "check" to access the polls.

[6] For example, states have proposed legislation limiting the acceptable documents for proof of address, or requiring additional personal information such as a Social Security Number.

individual penalties for regulation violations, mandatory state-run training for volunteers, and mandatory reporting mechanisms (Mortellaro and Cohen 2014).

Absentee and early voting restrictions are relatively straightforward. Absentee restrictions are defined as actions that require increased identification for absentee ballots[7], create stricter policies for absentee ballot "excuses," or shorten the time period in which ballots can be returned. Early voting restrictions are defined as legislation that shortens or eliminates early voting periods, or reduces the number of early voting locations (Gronke et al 2007).

Felony voting restrictions are typically defined as legislation that restricts access to voting procedures for persons convicted of a felony, and include disenfranchisement through restricting the ability to vote while in prison, on parole or probation, or permanently (Brown-Dean 2003).

Restrictive Voting Laws	
Type	*Requirements*
Identification (Polls)	Prove identity to vote at polls (strict or non-strict)
Registration	Identification requirements for registration, shortened deadlines, restrictions on registration drives
Absentee/Early	Absentee: identification requirements, shortened time for ballot returns, stricter policies for excuses Early: shortens or eliminates early voting periods, reduces early voting locations
Felony	Restrictions on persons classified as felons while in prison, on parole/probation, or permanently

Table 1: Restrictive Voting Law Definitions

Previous studies frequently limit their analysis to a single manifestation of restrictive voting law, such as voter identification (Hicks et al 15; Rocha and Matsubayashi 2014, Biggers and Hanmer 2017), criminal disenfranchisement (Brown-Dean 2003), or actor behavior (Hicks et

[7] For example, requiring copies of identification either on the application for an absentee ballot, or in the envelope when returning the absentee ballot.

al 16). By analyzing restrictive voting legislation generally, I contribute a more comprehensive understanding of the variations of voter suppression and restriction as a potential tool for political disenfranchisement. In addition, analyzing the broader set of restrictions allows for a more detailed examination of the trends in restrictive legislation. Under my definition, I am able to examine the multiple strategies that states propose or implement to make voting harder, and analyze the conditions under which increasingly restrictive laws manifest.

Analysis

These laws represent additional barriers to voting. However, the impact of restrictive voting legislation on turnout is not clear, and there is disagreement within the literature as to whether these restrictions have meaningfully impacted electorate composition or turnout. Some scholars argue that the most studied restriction, voter identification, results in lower turnout among minority populations (Hajnal et al 2017; Alvarez et al 2008) or among all populations without valid identification (Hood and Bullock 2012), while others find no statistically significant effect on turnout (Grimmer et al 2017; Erikson and Minnite 2009; Rocha and Matsubayashi 2014; Mycoff et al 2009; Larocca and Klemanski 2011). In addition, scholars have attempted to describe the effect that other voting changes have on electoral turnout and have found similarly contrasting or inconclusive results. For example, whereas Fitzgerald (2005) finds that there is no statistically significant effect on turnout for absentee ballot, early voting, or same-day registration changes, scholars such as Burden et al (2014) find that legislation increasing accessibility to early voting actually results in lower turnout. On the same topic, Ansolabehere and Konisky (2006) find that registration requirements decrease overall voter

turnout, but argue that the effect is lower than other scholarly estimates, which may be overstated.

However, there is a distinction in the literature between realized and potential effects. For example, the studies described above focus exclusively on actual changes in electoral turnout or composition following the implementation of the law, or the realized effects of implemented restrictive voting laws. Other scholars examine the potential effects, or how restrictive voting laws may limit (or make disproportionately costly) access to the voting booth for different population segments. For example, Barreto et al (2009) find evidence that age, race, and income determine the ability to access the strict photo identification required to vote in Indiana, resulting in a law that makes voting relatively more difficult for certain groups. Similarly, Hood and Bullock (2008) find that within the set of registered voters in Georgia, black, Hispanic, and elderly residents were less likely than other residents to have forms of valid photo identification. Studies indicate the cost of acquiring photo identification, even with options for "free" voter identification cards, can be extremely high and represent a prohibitive barrier to the polls (Sobel, 2014). In addition to voter identification, analyses suggest that restrictions on registration, such as voter registration drives, heavily impact black and Hispanic voters, who are almost twice as likely to rely on private drives for registration (Kasdan 2012). Despite the lack of a clear consensus on the realized impact that restrictive voting laws have had on previous elections, there is evidence that these laws disproportionately target minority voters and voters of a lower socioeconomic status.

However, regardless of the effect, many scholars and analysts believe that the intent of restrictive laws is discriminatory, and that their implementation can be politically motivated (Hansen 2013; Schultz 2007). North Carolina’s voting restrictions passed in 2013 present a clear

example of this theory: when crafting the legislation, North Carolina state legislators sought out data on variations in voting patterns by race, and created legislation that explicitly and disproportionately targeted black residents[8]. The federal ruling in which the restrictions were overturned demonstrates this well, highlighting the stated intent behind limiting early voting periods:

> "The State then elaborated on its justification, explaining that '[c]ounties with Sunday voting in 2014 were disproportionately black' and 'disproportionately Democratic'…In response, SL 2013-381 did away with one of the two days of Sunday voting. Thus, in what comes as close to a smoking gun as we are likely to see in modern times, the State's very justification for a challenged statute hinges explicitly on race -- specifically its concern that African Americans, who had overwhelmingly voted for Democrats, had too much access to the franchise."[9]

Explicit in the state's justification is the intent to target a minority group for perceived political gain. Similarly, other Republican politicians have expressed perceived political gains from restrictive voting laws. In Pennsylvania, House Majority Leader Mike Turzai stated during a speech that one of the legislature's accomplishments was "voter ID, which is going to allow [Republican] Governor Romney to win the state of Pennsylvania."[10]Also in Pennsylvania, the state's GOP Chairman Robert Gleason stated in an interview that Obama's smaller margin of victory in the state in the 2012 election could be attributed, in part, to photo identification

[8] No. 16-1468(L), N.C. State Conference of the NAACP v. Patrick McCrory
[9] Ibid.
[10] Blake 2016: Republican leaders in Pennsylvania made these statements publically, on televised interviews as well as public speeches.

requirements.[11] It is important to clarify that the political motivations are divided on partisan lines: Stewart III et al (2016) indicate restrictive identification legislation is increasingly polarized, with increased support from the GOP and diminished support for the Democrats. These statements are significant, because they indicate a clear political motivation for restricting ballot access for certain populations. Regardless of the impact of the law, understanding intent may provide an explanation for the introduction or passage of restrictive actions.

Politicians use a variety of justifications for the introduction or passage of restrictive voting legislation. Perhaps the most popular is the presence of "electoral fraud." Numerous studies indicate that voter fraud, including voting more than once or voting as a noncitizen, is extremely rare and does not impact the results of elections (Harger 2016, Minnite 2010). However, voter fraud is often used as a justification for restrictive voting laws by politicians who argue that restrictions are a means to preserve the integrity of elections (Minnite 2007, Schultz 2007). In a revealing example, a series of leaked documents from a campaign finance investigation in Wisconsin provide evidence that Republican leaders had attempted to spread false reports of voter fraud and vote rigging in order to ensure the election of Republican Scott Walker as Governor, and later pass a series of restrictive voting laws (Wines 2016). Some analysts also argue that recent rhetoric on the national political stage, including the unwarranted claims made by Donald Trump that millions of people voted illegally in the 2016 presidential election[12], may function as precursor or incentive for future voter suppression efforts (Berman 2017).

---

[11] Ibid.

[12] Donald Trump tweeted: “In addition to winning the Electoral College in a landslide, I won the popular vote if you deduct the millions of people who voted illegally” following the 2016 presidential election. See: https://twitter.com/realDonaldTrump/status/802972944532209664

Given this context, what factors contribute to the introduction and passage of this type of restrictive legislation? While the results of this analysis will provide little insight into the potential or realized effects of restrictive legislation, I seek to describe the conditions under which these laws are made possible or likely. Given the evidence of potential exclusion and discriminatory political intent, an exploration of what contributes to the successful implementation of restrictive legislation is important.

Coding and Descriptive Statistics

To understand the factors that contribute to the introduction and passage of restrictive legislation, I first identified all instances of restrictive legislation in the recent era. For this analysis, I coded restrictive voting law introductions and passages between 2005 and 2016[13] using the National Conference of State Legislators (NCSL) Election Legislation Database. This database is comprised of all legislation related to the administration of elections at the state level, organized by year. Between 2005 and 2016, there were 25,785 bill introductions or passages identified in the database. After reviewing the bill summaries and bills contained in the database during the stated time period, I identified 1,077 restrictive bill introductions and 79 restrictive action passages, based on the definition of "restrictive voting legislation" defined previously. For the purposes of this analysis, "restrictive voting introductions" represent a count of all bills introduced, whether they failed or were enacted, that include at least one restrictive action. "Restrictive action passages," however, represent a count of all restrictive actions, not bills,

[13] This time period was selected in order to describe recent restrictive voting measure resurgence. Previous work indicates that the year 2006 represents a significant start in the resurgence of restrictive voting legislation, due to the passage of strict photo identification laws in Indiana and Georgia (Schulz 2007). For this analysis, the time period was extended to 2005 in order to capture the two-year period (2005-2006), and to 2016 in order to include the most recent legislative periods in the analysis.

passed in a given state during a given year. This modified definition is to account for the passage of bills with multiple restrictive actions, such as North Carolina's omnibus voting bill passed in 2013[14].

It is important to note that this definition of restrictive voting laws includes both entirely new restrictive actions as well as increasingly restrictive changes to current laws. For example, Alabama passed a bill in 2011 that changed its non-strict, non-photo identification requirement to a non-strict, photo identification requirement[15]. In this analysis, this action is considered a restrictive voting law that "passed." In addition, bills are coded based on the date in which they were introduced or passed, not the date in which they took effect. For example, in 2009 Georgia passed proof of citizenship requirements for voter registration, to be enacted in 2010[16]. Despite the delay in the action of the bill taking effect, the bill's coding was based on the date of its passage, 2009. In addition, bills that were passed but not implemented due to external factors such as court challenges were still considered "passed," as they completed the legislative process, the relevant dependent variable for this analysis.

Descriptive analysis of the completed dataset of restrictive voting laws reveals a number of interesting trends. Importantly, the introduction and passage of restrictive voting legislation is widespread, and the majority of state legislatures have participated in some form. As demonstrated in Figures 1 and 2, 98% of states introduced at least one piece of restrictive voting legislation during the time period[17], and 70% have passed at least one restrictive action since 2005. Figure 3 demonstrates that, between 2013 and 2016, there was a sharp decrease in the

[14] North Carolina HB589 contains multiple voting restrictions, including photo identification requirements, a shortened early voting period, the elimination of same-day voter registration, and restrictions on pre-registration.
[15] Alabama HB19
[16] Georgia SB 86
[17] The only state that did not introduce restrictive legislation during the time period was Vermont.

number of introductions and passages on a national level. However, as indicated in Table 1, the *rate* of restrictive action passage was actually higher between 2013 and 2016 than it was during some of the earlier periods. There are a number of possible explanations for this trend. First, it's possible that legislators got better at crafting or passing this type of legislation; fewer introductions are required if restrictive bills are successful in their first manifestation. In addition, these years represent the periods immediately following the decision in *Shelby v Holder*, and the increased rate of passage could be a consequence of the removal of preclearance requirements, as affected states no longer had to consider Department of Justice oversight when passing legislation. This explanation will be explored further in later sections.

In addition, there is evidence of variation between the rates of introduction and the rates of passage among states, as indicated in Tables 2, 3, and 4. Only one state, Tennessee, ranks in the top five for number of state introductions and number of state passages. The variation in "passage" and "introduction" trends at the state level indicates that there are potentially different explanations for why laws are introduced and why they are passed. For example, introductions could be largely symbolic based on electorate changes or political incentives, whereas passage may be a function of political factors in the state. This analysis will treat introduction and passage as separate dependent variables, and seeks to explain the difference between the two actions.

My analysis will contribute to the understanding of restrictive voting legislation by investigating a broader definition of restrictive voting legislation, including the most recent time periods (2013-2016).

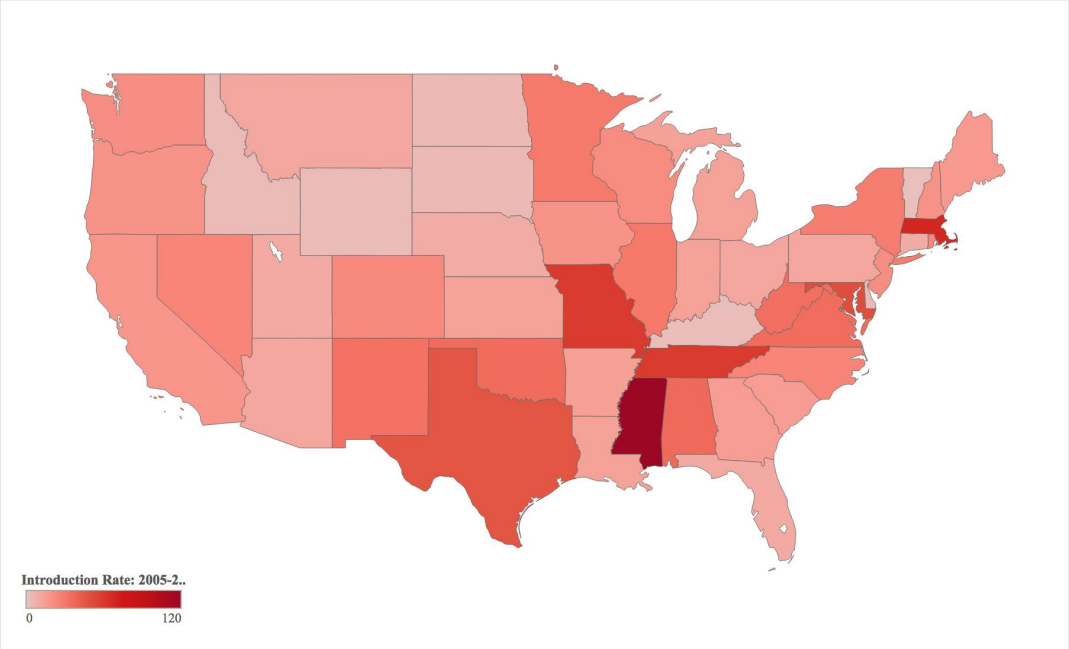

Figure 1: Introduction Rate by State, 2005-2016

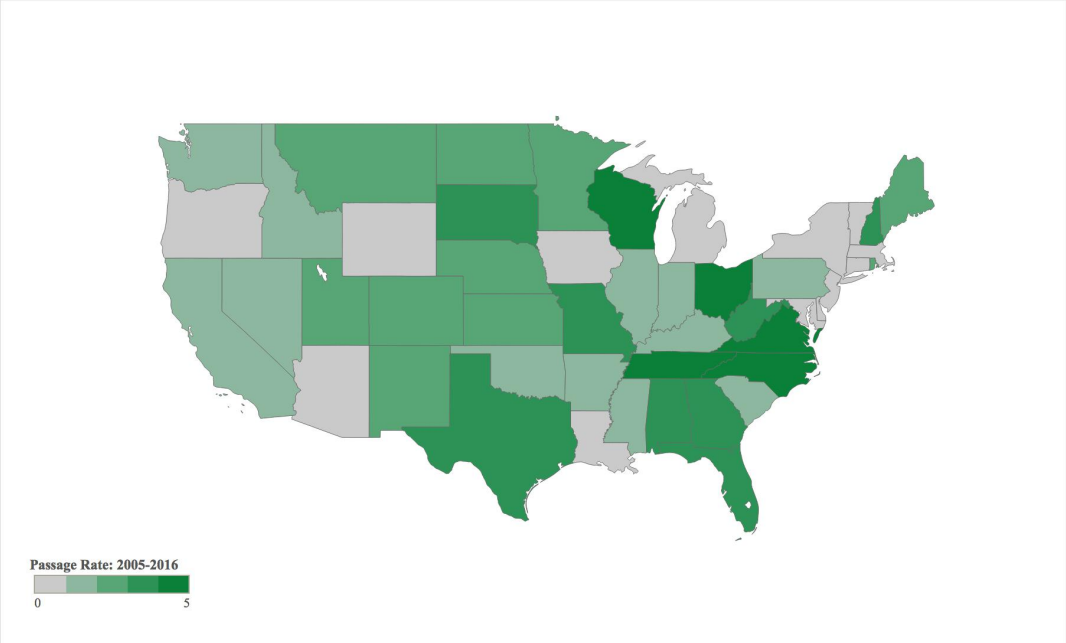

Figure 2: Passage Rate by State, 2005-2006

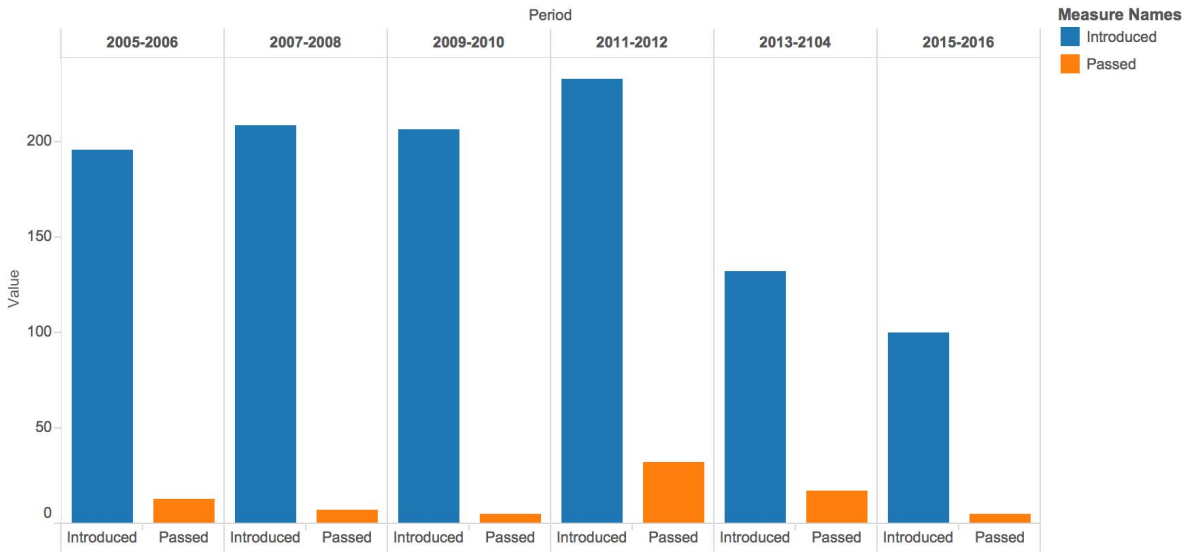

Figure 3: Introduction and Passage Rate by Period

Passage Rate by Period			
Period	*# Introduced*	*# Passed*	*Passage Rate*
1 (2005-2006)	196	13	7%
2 (2007-2008)	209	7	3%
3 (2009-2010)	207	5	2%
4 (2011-2012)	233	32	14%
5 (2013-2014)	132	17	13%
6 (2015-2016)	100	5	5%

Table 2: Passage Rate by Period, 2005-2016

Top 5: Introduction		
Rank	*State*	*# of Bills*
1	Mississippi	120
2	Massachusetts	68
3	Tennessee	59
4	Missouri	59
5	Maryland	50

Table 3: Top 5 States for Restrictive Bill Introductions, 2005-2016

Top 5: Passage		
Rank	*State*	*# of Actions*
1	North Carolina	5
2	Ohio	5
3	Virginia	5
4	Tennessee	4
5	Wisconsin	4

Table 4: Top 5 States for Restrictive Bill Passages, 2005-2016

Explanations for Restrictive Voting Laws

To analyze the introduction and passage of restrictive voting laws, I examine two distinct categories of explanations: demographic behavior and political composition. In addition, I include a series of control variables relevant to restrictive legislation. In defining these categories, I draw heavily from previous work on this topic, including the analysis from Bentele and O'Brien (2008), Hicks et al (2015), Brown-Dean (2004), and Rocha and Matsubayashi (2014).

Previous Analyses:

Previous analysis of restrictive voting legislation is limited. Bentele and O'Brien (2013) complete the only comprehensive analysis of restrictive voting legislation, focusing on the time period 2006-2011. Their analysis suggests that race and partisanship play a large role in the formulation of these policies. Specifically, they find that demographic composition and voting behavior in a state are the most significant predictors for the introduction of restrictive legislation. They also find evidence that, for passage, party competition and party control of the legislature are important predictors in addition to demographic composition.

Related studies frequently limit their analysis to specific manifestations of restrictive voting laws, such as voter identification (Hicks et al 15; Rocha and Matsubayashi 2014, Biggers and Hanmer 2017), criminal disenfranchisement (Brown-Dean 2003), or actor behavior (Hicks et al 16). There is consensus within these studies that, at least for highly restrictive legislation such as voter identification, partisan composition is the most important predictor. By analyzing restrictive voting legislation more generally, I hope to have a more comprehensive understanding of the variations of voter suppression and restriction as a potential tool for political disenfranchisement.

Previous related studies' time periods for analyses end before or with 2013 (Bentele and O'Brien 2008, Hicks et al 2015, Rocha and Matsubayashi 2014, Biggers and Hanmer 2017), and fail to include data about the potential effects of the removal of preclearance for certain states, a decision that represents a structural change in the passage of voting-related legislation for effected legislatures. Actions by different states are also included in my expanded data set as a result of my time period; for example, Nebraska, Montana, North Dakota, and Wisconsin first began adopting restrictive voting legislation in the periods immediately following Bentele and O'Brien's (2013) analysis. In addition, as described in Section 2, there seems to be a new, downward trend in the both the introduction and passage of restrictive legislation in the periods immediately following previous time periods of analyses. By analyzing a broader time period, I include the differing trends, and leverage a more expansive data set.

The findings of these studies will be analyzed and reviewed in more detail in the following sections, as I provide evidence and support for my variable selection and hypothesis formulation.

Demographics:

A popular explanation for restrictive voting legislation relates to demographic composition and voting behavior in the state. Specifically, some scholars argue that restrictive laws are constructed to target minority populations, implying that larger minority populations may incentivize higher quantities of restrictive legislation (Weiser and Opsal 2014; Alvarez et al 2008). Previous analyses support this explanation, and have found evidence that state demographic composition is a causal factor in the introduction of voting restrictions (Bentele and O'Brien, 2008). Empirically, studies also indicate that high racial diversity is associated with the

presence of more difficult voter registration requirements (Hill 1999), and that the voting behavior of demographics is predictive for the introduction of restrictive legislation (Bentele and O'Brien 2008, Hicks 2015). I also include a variable for residents over 65[18], as there is evidence that elderly residents are disproportionately affected by restrictive legislation[19], such as voter identification requirements (Barreto et al 2009). Employing the same logic as above, if laws target elderly residents, the size of demographic may explain the introduction or passage of restrictive legislation.

For my analysis, I include the composition and political behavior of three demographic groups as defined by the U.S. Census Bureau: black residents, Hispanic residents, and residents over the age of 65. *Black Population* is the percentage of the population defined as black[20] and *Hispanic Population* is the percent of the population defined as Hispanic[21], each at the state level. For *Age Population*, I calculated the percentage of the population over 65 years of age from U.S. Census Bureau age group data sets. Based on previous scholarly work and the preceding analysis, I anticipate that higher percentages of these demographic groups will result in higher rates of restrictive legislation introduction and passage.

In addition to demographic composition of the states, I also calculated variables for the change in turnout between presidential elections for black and Hispanic voters. These additional

[18] I use the age of 65 to represent the elderly population based on convention. For example, popular social science data bases and metrics such as the OECD typically define "elderly population" as persons 65 years of age and older. See: https://data.oecd.org/pop/elderly-population.htm

[19] For example, analysts argue that the elderly population is less likely to have unexpired or valid forms of identification, and may faces challenges in acquiring necessary documents due to cost, transportation challenges, and lack of original copies of items such as birth certificates (Horowitz 2016).

[20] Black is defined as "black alone, non-Hispanic" in U.S. Census datasets, and this analysis used this definition for demographic calculations.

[21] As a note, in the U.S. Census datasets, "Hispanic Origin" is distinct from racial categories; people of Hispanic origin may be of any race.

variables are important because they capture the effect of minority voting behavior[22]. Following the election in 2008, in which an unprecedented turnout of minority voters contributed to sweeping Democratic Party victories, some scholars theorized that the GOP perceived itself as unable to mobilize its base to sufficiently counter this new Democratic support (Berman 2015). This suggests that the increased turnout of minority voters creates a political incentive to introduce restrictive voting legislation. I predict that an increase in black and Hispanic voting, represented by a positive change in turnout, will result in higher rates of restrictive legislation introduction and passage.

Politics:

Restrictive voting legislation may be influenced by political conditions in a state; if restrictive voting laws are a product of partisan calculations, there may be evidence that political composition and behavior in a state contributes to their introduction or passage. Under the theoretical framework of "politics" I examine the presence of GOP politicians in the state legislature and governorship, the political competitiveness of state, popular beliefs about voter fraud, and the presence of preclearance requirements.

Partisanship is an important factor for the analysis of restrictive voting legislation, and I examine the presence of Republican officials in the legislative branch and the governor's office. For *Percent GOP*, I calculated the percentage of state legislators that identified with the Republican Party[23], per state and per period. As described in the previous section, there may be

[22] Despite concern that this variable would be highly correlated with demographic or population percentages, selecting the change in turnout (instead of percent of turnout of the demographic) avoided this issue.

[23] This variable represents the percent of legislators in both the upper and lower houses of the state legislatures. As a note, Nebraska contains a unicameral, nonpartisan state legislative body and is excluded from this analysis.

political or ideological incentives for GOP politicians to advocate for and attempt to pass restrictive legislation. Additionally, if Republicans are more likely to support restrictive legislation and Democrats do not, party control and composition of legislature is a relevant variable for understanding passage (Stewart III et al 2016). Previous studies have found that Republican control of state governance, particularly when combined with factors such as increased electoral competition or minority turnout, results in increased voter suppression efforts (Bentele and O'Brien 2013; Rocha and Matsubayashi 2014; Hicks 2015; Biggers and Hanmer 2017). I predict that a higher percentage of GOP politicians in the state legislature will result in increased introduction and passage of restrictive voting legislation.

In addition, I include a binary variable to indicate whether the state has a Republican governor. For the independent variable *Governor*, a "1" represents a state with a Republican governor, and a "0" represents a state without the presence of a Republican governor. The effect of this variable may vary between introduction and passage. Based on the partisan incentives described above, a Republican governor will likely support restrictive voting legislation at the state level. Some scholars theorize that the election of Republican governors in states such as North Carolina meaningfully contributed to the successful implementation of restrictive voting legislation (Hansen 2013). Specifically, Republican governors may be more likely to sign restrictive legislation into law than their Democratic counterparts. Because of this, I predict that the presence of a Republican governor will contribute to the passage of restrictive legislation.

Fraud is an important consideration in explaining restrictive voting legislation, particularly given the rhetorical justification used by many politicians. While previous analyses have attempted to account for fraud using documented allegations of fraud (Bentele and O'Brien 2013; Hicks et al 15), this independent variable may not be appropriate given the numerically

limited number of allegations or substantiated instances of voter fraud. Instead, I attempt to include “fraud” in my analyses through a measure of the perception of the frequency of voter fraud. This is likely a better means to explain the presence of restrictive voting legislation as it describes the opinion of the electorate, which may be more influential for political process than factual accounts of fraud (Stewart III et al 2016). Measuring perception of voter fraud at the state level is difficult, as most opinion polls don't access that level of granularity. For the independent variable *fraud*, I leverage survey results from the Survey of the Performance of American Elections, a survey conducted by Charles Stewart III at MIT that seeks to measure the experience voters have on Election Day. Beginning in 2008, this survey includes questions about individual perceptions of voter fraud, asking how frequently the respondent believes "illegal" voting behavior, including voting more than once, or voting as a non-citizen, occurs in their community[24]. For this analysis, I define the perception of voter fraud as the percent of respondents who believe illegal voting activity is "very common." I predict that a higher public perception that voter fraud is “very common” contribute to introduction and passage of restrictive legislation.

High levels of competition in elections may incentivize Republican lawmakers to introduce restrictive voting measures as a political strategy. Specifically, if elections are more competitive, Republican lawmakers may seek restrictive legislation as a means to ensure more politically favorable electorate composition in future elections. Previous studies have found evidence, albeit relatively limited, of electoral competitiveness as an explanation for the adoption of restrictive measures (Bentele and O'Brien 2008, Hicks et al 2015). However, given the theory

[24] As a note, in the first version of the survey (delivered in 2008), the question on fraud varied between versions of the survey delivered in following years. See the Variable Descriptions in the Appendix for a more detailed description of the calculation of this variable, as well as the information about period classification.

of restrictive voting laws as a component of "strategic demobilization," electoral competitiveness in the state is an important consideration. Traditional measures of electoral competiveness, including calculations of party vote share (the difference in vote share between the two major parties in the previous presidential election) are highly correlated with the variable for percent GOP in the state legislature in my dataset, and I constructed a different variable to capture this effect. To measure competitiveness of the state in presidential elections, I include the variable *Battleground State,* a binary variable that takes the value "1" if the state was considered a battleground state in the previous presidential election, and "0" if it was not. This variable represents competiveness in national elections, and I predict that states that were considered "battlegrounds" will be more likely to introduce or pass restrictive legislation.

The removal of preclearance requirements for certain states represents a structural change in the nature of restrictive law passage, and is not included in any previous studies on this topic. In 2013, the Supreme Court overturned Section 4 of the Voting Rights Act, making Section 5 unenforceable. This decision, *Shelby County v. Holder*, removed the "preclearance" condition that required certain states[25], largely Southern states, to submit all legislation changes to the Department of Justice for approval, as a tactic to limit discriminatory voting practices[26]. There is substantial evidence that preclearance requirements were successful in this goal (Archer 2015), and in the final years before *Shelby County v Holder*, the DOJ had struck down an increasing number of discriminatory voting laws[27].

[25] The states required to submit voting laws for preclearance included: Alabama, Alaska, Arizona, Georgia, Louisiana, Mississippi, South Carolina, Texas, and Virginia. States with counties or townships required to submit to preclearance included: California, Florida, New York, North Carolina, South Dakota, and Michigan.
[26] Shelby County v. Holder, 570 US Supreme Court (2013)
[27] Data Source: Department of Justice

Some scholars believe that this decision functioned as a catalyst for restrictive state action regarding voting rights, and argue that there has been a disproportionate increase in restrictive voting legislation in previously-covered states following the Supreme Court's decision (Daniels 2013; Weiser and Opsal 2014; Lopez 2014). For example, Alabama, North Carolina, Mississippi, and Texas all implemented restrictive voting measures shortly after the decision, a move that some perceive as directly related to the lack of DOJ oversight (Weiser and Opsal, 2014). In addition, a short-term implication of *Shelby County v. Holder* was to allow any pending legislation that previously required DOJ approval to go into effect.[28] However, it is unclear to what extent these restrictive laws can be attributed to the lifting of the preclearance requirement. Some scholars argue that preclearance was outdated and no longer influenced state behavior, particularly as voting rights restrictions were largely implemented in regions outside of the bounds of Section 5 in the years before *Shelby County v. Holder* (Issacharoff 2015; Tokaji 2014).

Previous analyses of the introduction of restrictive voting laws do not include the presence of preclearance as an independent variable, as their time period for analysis ends before the 2013 ruling (Bentele and O'Brien 2013; Rocha and Matsubayashi 2014; Hicks 2015). According to the Department of Justice, states subject to preclearance requirements were mandated to submit for review:

> "Any change affecting voting, even though it appears to be minor or indirect, returns to a prior practice or procedure, ostensibly expands voting

[28] For example, Georgia legislators failed to submit a law limiting early voting passed in 2011 to the DOJ for preclearance before *Shelby County v. Holder*, and the law went into effect in the next election absent oversight as a result of the decision.

> rights, or is designed to remove the elements that caused objection by the Attorney General to a prior submitted change."[29]

Given the broad requirements under preclearance, states that were subject to guaranteed review may not have had the incentive to pass legislation with restrictive components, particularly if there were concerns that the DOJ would overturn the legislation. Thus, I predict that the removal of preclearance may increase the frequency with which previously affected states introduced or passed restrictive legislation.

A brief analysis of restrictive legislative trends for states affected by preclearance is represented in Figures 4 and 5, in which the first period without preclearance is Period 5. Interestingly, it appears that states with preclearance requirements introduced and/or passed fewer restrictive laws following *Shelby v Holder*, a trend that seems to align with national passage rates. However, Table 5 indicates that in the period immediately following the ruling, states previously covered by preclearance requirements passed a larger percentage of all restrictive legislation, but introduced a smaller percentage of overall restrictive legislation. There are a number of possible explanations for this trend. Absent oversight requirements, and the corresponding concern that all passed legislation had the potential to be overturned, these states may be more likely to pass more legislation. In addition, the rate of passage may be higher if fewer introductions are required to pass the desired restrictive legislation, or if the legislature implements bills at a higher rate. Additional statistical analysis can better clarify the relationship between these variables. To represent *Preclearance*, I use a binary variable in which states

[29] The Department of Justice states on their website that, based on the ruling in Allen v. State Bd. of Elections 393 U.S. 544 (1969), states are subject to this broad form of review on all laws related to voting (https://www.justice.gov/crt/what-must-be-submitted-under-section-5).

subject to preclearance[30] are assigned a "1" for all years they are subject to the requirement, and states not subject to preclearance are assigned a "0".

[30] For this analysis, states subject to pre-clearance include states in which the entire state is subject to the requirement (Alabama, Alaska, Arizona, Georgia, Louisiana, Mississippi, South Carolina, Texas, and Virginia) as well as states in which a substantial number of counties or townships were subject to the requirement (North Carolina).

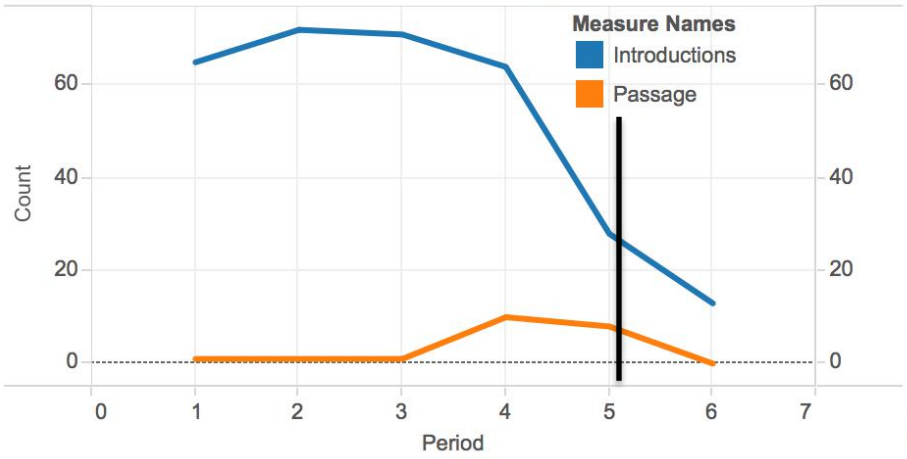

Figure 4: Introduction and Passage by Period, 2005-2016 for "Preclearance" States

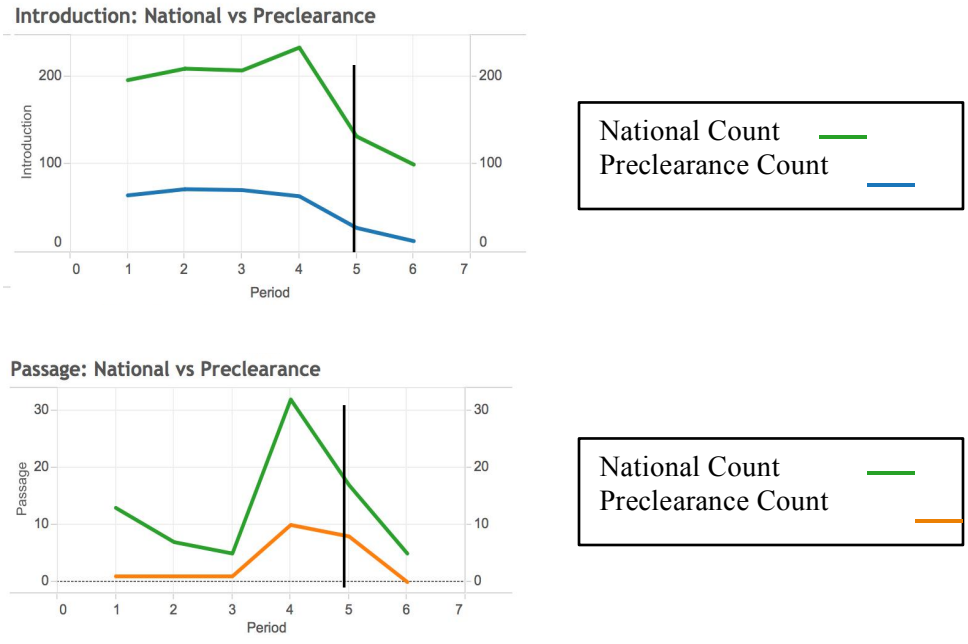

Figure 5: Introduction and Passage Trend: Preclearance vs. National

Percent of Introductions/Passage		
Period	*Percent of Introductions*	*Percent of Passed*
1	33%	8%
2	34%	14%
3	34%	20%
4	27%	31%
5	21%	47%
6	13%	0%

Overcontributed vs National (Index > 120)

Table 5: Percent of Introduction/Passage for States Previously covered by preclearance

Control Variables:

In addition to the independent variables discussed above, I include a series of control variables. First, I created a series of fixed-effect variables to control for state effects and variations in time periods. For state effects, this is represented by binary variables for each of the 50 states, excluding the first.[31] Similarly, time period is represented by binary variables for each of the time periods, excluding the first time period. Next, I created the variable *State GDP per Capita*, a measure of the real GDP per capita at the state level[32]. The implementation of many restrictive voting laws has the potential to result in high costs to the state, through the establishment of new administrative bodies, training programs for election workers, required publications and information for the electorate about new requirements, and potentially costly litigation challenging the law (Sobel 2014). Given the high costs to the state of restrictive legislation, I predict that states with a lower GDP will be less likely to introduce or pass restrictive legislation.

A final control variable seeks to control for the presence of highly restrictive laws in a state during each time period. If a state has already passed highly restrictive laws, including photo identification requirements or proof of citizenship requirements, it may be less likely to introduce or pass additional legislation in later periods. For example, the state may not perceive the need to pass additional restrictions after successfully implementing these highly restrictive actions. Models that focus solely on voter identification passage similarly assume that once a state passes an especially strict identification law (such a photo identification requirement), it will be unlikely to pass additional restrictive laws in future periods (Hicks et al 2015). Likewise, I assume that once a state passes these particularly restrictive requirements it may be less likely

[31] For this analysis, I exclude Alabama.
[32] In order to calculate real GDP, I used data from the Bureau of Economic Analysis in the U.S. Department of Commerce that was anchored or chained to 2009.

to adopt additional laws later[33]. The nature of this variable is consistent previous with analytic practices and modeling in this literature; past studies frequently attempt to represent current restrictive legislation through variables indicating the presence of voter identification in the state (Bentele and O'Brien 2013).

Restrictions is a variable that takes the form of 0-3, based on the presence of highly restrictive voting laws, including non-strict photo identification, strict photo identification, and proof of citizenship requirements[34]. The variable change is offset by one period; for example, if a state passed a qualifying restriction for this variable in Period 2, the change was included in the variable for Period 3[35]. I predict that states with high levels of restrictions will be less likely to introduce or pass further restrictive voting legislation.

Hypotheses:

As a result of this theoretical discussion, I generate three distinct hypotheses to explain the introduction or passage of restrictive voting laws. Due to the variation in trends for introduction and passage, I will examine each of my hypotheses for both actions using a series of distinct models.

[33] The variable *Previous Legislation* presents certain theoretical challenges to my analysis; the presence of previous legislation, while important for explaining the conditions under which additional legislation may be introduced or passed, is difficult because it represents an form of the dependent variable. As a note, I checked for correlation between this and all other variables, and I completed each of the models with and without this variable, yielding similar results. Ultimately, I included *Previous Legislation* to be consistent with previous work in the field and to account for the influence that current suppression efforts have on the incentives and ability for further passage.

[34] A more thorough description of the coding is available in the variable descriptions in Appendix A.

[35] As a note, when a qualifying restriction for this variable was overturned by a Court or State Legislator, the variable value was adjusted in the following period. This is consistent with the logic for this variable; if high levels of restrictive law are longer present in a state, the constraint may no longer exist.

H_1: *Preclearance*- States with preclearance requirements are less likely to introduce or pass restrictive voting laws.

For this hypothesis, "states with preclearance requirements" refer to states subject to this oversight, during the time periods in which they were covered. My analysis will explain whether the presence of preclearance resulted in fewer introductions or passages by including states before and after the removal or preclearance.

H_2: *Partisanship*- States with Republican control are more likely to introduce or pass restrictive voting laws.

For this hypothesis, two independent variables are relevant. I predict that Republic control of the state legislature as well as Republican control of the governorship is likely to result in increased restrictive legislation. In particular, I expect partisanship to be more relevant for the passage of restrictive legislation, as GOP control may be important for the ability of such legislation to pass.

H_{3a}: *Demographics*- States with larger minorities populations are more likely to introduce or pass restrictive voting laws.

H_{3b} : States with an increase in minority voting turnout are more likely to introduce or pass restrictive voting laws.

For this hypothesis, the independent variables described in the *Demographic* section are relevant. I divide this hypothesis into two components as I predict that change in voting behavior of minority groups may be a more significant predictor of restrictive legislation than presence of the demographic groups in the state.

Research Design

Analysis of patterns of restrictive voting legislation suggests that introduction may have separate explanations from passage. As a result, I treat these two actions differently and examine each action using distinct dependent variables.

In each model, the variables are measured at the state level during a set of six time periods. The time periods are each two years long, and are defined in Table 6. I chose to examine laws during a two-year period as a small set of states[36] only met biennially during part or all of the time period. In addition, for states with two-year legislative periods, a significantly larger number of bills were introduced during the first year of the session compared to the second[37]. These periods align with the overwhelming majority of state legislative sessions, and attempt to account for the effects of legislative passage patterns.

Period	*Years*
1	2005-2006
2	2007-2008
3	2009-2010
4	2011-2012
5	2013-2014
6	2015-2016

Table 6: Period Definitions

To test my hypotheses for both introduction and passage, I use a variety of regression techniques. As the dependent variables are "counts" of laws and a binary outcome variable, I use

[36] States with biennial legislature sessions during part or all of the defined time period include Arkansas, Montana, Nevada, North Dakota, Oregon and Texas.
[37] Source: National Conference of State Legislatures (NCSL) Election Legislation Database

forms of generalized linear models (GLM), including Poisson and Probit regression models (Liao, 1994). All calculations were completed using R version 3.23.

Analysis 1: Introductions

For my first analysis, I examine the factors that contribute to the introduction of restrictive voting laws, setting the count of restrictive laws introduced as the dependent variable. Traditionally, for a "count" dependent variable, a Poisson analysis is an appropriate method of modeling (Cameron and Trivedi, 2013). However, the dataset for this analysis shows evidence of over-dispersion, meaning that the conditional variance is larger than the conditional mean, violating an assumption of the Poisson model. Instead, I use negative binomial regression, a form of analysis that includes an additional parameter to model and account for over-dispersion in the data.

In order to robustly examine the various explanations, three different models are used, based on the distinct categories of demographic and political explanations. In addition to the control variables, Model 1 includes only demographic explanations, Model 2 includes only political explanations, and Model 3 includes both demographic and political explanations. Building the regressions in this manner is useful because of concerns of model overspecification, or the inclusion of redundant independent variables. Overspecification can result in inflated standard errors and higher variance for coefficients in the regression (Gunst and Mason 1980). Another problematic consequence of overspecification that this method can identify is multicollinearity, or the presence of highly correlated independent variables[38]. In addition,

[38] In addition to multiple regression tests, each of the independent variables included in the regression was tested for correlation. As a result of this process, multiple independent variables were excluded from the analysis due to high correlation with included, previously described variables. For example, the initial model included a demographic variable for percent of non-citizens in each state, but analysis revealed that this was highly correlated with percent of Hispanic residents in each state.

creating reduced models functions as a means to test the explanatory power of certain independent variables; if the reduced models (Model 1 and Model 2) explain less than the complete or combined model (Model 3), then the set of excluded variables can be considered important.

Analysis 2: Passage

To gain a comprehensive understanding of the factors that contribute to the passage of restrictive voting legislation, I create two distinct dependent variables. First, I examine the number of restrictive actions passed in each state per period, based on the definition provided in a previous section. This variable describes the factors that lead to the passage of *counts* of restrictive actions, providing information about explanations for increasing rates of restrictive legislation. My second dependent variable is a binary variable that represents whether at least one piece of restrictive legislation was able to pass in each state during each time period. This provides insight on what factors explain the passage of *any* restrictive legislation, a potential explanation for what conditions are necessary for legislation to pass generally. This differs from the dependent variable as it doesn't examine the "count" of laws, but instead analyzes passage as a dichotomous variable.

For the first dependent variable for passage, the "count" of restrictive actions, a Poisson analysis is an appropriate model. Unlike the analysis of legislative introductions, there is no evidence of over-dispersion for passage of restrictive voting laws, and a general Poisson model is used. For the second dependent variable, I create a binary variable in which a state is designated as "1" if any restrictive actions were passed during the period and a "0" if no restrictive actions were passed. Due to this specification, a Probit regression model is appropriate (Long and

Freese, 2006). For both passage dependent variables, I similarly employ the three models as described for Analysis 1, providing a similarly robust exploration of the independent variables.

Results

Analysis 1: Introduction

Table 7 displays the results of the three different models for the analysis of the introduction of restrictive legislation. In this analysis, the percentage of GOP in the legislature, the increase in the turnout of black and Hispanic voters, and the presence of previous restrictive requirements are significant predictors for the introduction of restrictive voting legislation. The three models provide robust support for these conclusions, as there is strong evidence in each reduced regression for the significance of these independent variables.

Consistent with H_2, a higher percentage of Republican legislators is positively correlated with a higher rate of introduction of restrictive legislation. While the governor's party is not significant in this model, this result still provides strong evidence that introductions are a product of ideological divides and may be a component of partisan strategizing. In addition, increases in the turnout of black and Hispanic voters are positively correlated with the introduction of restrictive legislation. This provides evidence for H_{3b}; changing political behavior of minority populations may provide incentives to propose restrictive legislation targeting these groups. Viewing the political and demographic results together suggests that introductions may be a partisan attempt at suppressing minority voters. Interestingly, neither perceptions of fraud nor electoral competitiveness (represented with the variable for battleground state) were significant predictors for restrictive legislation. This provides support to racial threat theories; popular rhetorical justifications of perceptions of fraud and claims of competitiveness were not significant predictors for introduction of legislation.

There is no evidence in this analysis for H_1, indicating that DOJ preclearance oversight was not a significant predictor for the introduction of restrictive legislation. This is not incredibly

surprising given the descriptive analysis in a previous section; states under preclearance typically followed national trends for introduction during the specified period. DOJ oversight only applied to laws that *passed*, and introductions (particularly if introduced symbolically, by a single politician, or without intent of passage) may not have been influenced by required legal examination. In addition, as predicted, the presence of previously passed identification requirements is negatively correlated with the rate of introductions. This provides evidence that the presence of particularly restrictive identification requirements is unlikely to motivate the introduction of further legislation.

Table 7: Regression Results- Introduction

	Introduction Analysis		
	Model		
	Demographics	Politics	Both
	(1)	(2)	(3)
Black Population	−0.045 (0.216)		0.114 (0.217)
Population Over 65	−0.035 (0.140)		0.057 (0.146)
Hispanic Population	−0.114 (0.122)		−0.093 (0.123)
State GDP	0.00002 (0.00003)	0.00001 (0.00002)	0.00002 (0.00003)
Change in Black Turnout	**8.158*** (2.181)**		**7.110*** (2.104)**
Change in Hispanic Turnout	**4.622* (2.406)**		**4.889** (2.261)**
Preclearance		0.346 (0.264)	0.329 (0.261)
Percent GOP: Legislature		**0.023*** (0.008)**	**0.025*** (0.008)**
Governor Party		−0.132 (0.111)	−0.123 (0.109)
Fraud		−0.028 (0.017)	−0.017 (0.017)
Previous Legislation	**−0.548*** (0.106)**	**−0.612*** (0.118)**	**−0.639*** (0.119)**
Battleground		0.144 (0.153)	0.107 (0.150)
Constant	3.079 (6.392)	0.524 (1.026)	−3.473 (6.563)
Observations	300	290	290
Log Likelihood	−557.773	−530.511	−522.478
θ	8.867*** (2.744)	10.768*** (3.709)	13.993** (5.625)
Akaike Inf. Crit.	1,239.547	1,183.021	1,176.957

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

Analysis 2: Passage

Analysis of the passage of restrictive legislation reveals a number of interesting findings. For both dependent variables, the count of restrictive actions and the binary passage variable, percent of GOP in the legislature was a significant predictor, providing strong evidence for H_2. In addition to the strategic partisan motivation for introduction of legislation, this result may also provide a structural explanation. Higher percentage of GOP in the legislature may make passage of introduced legislation more likely if legislators vote along party lines or maintain majorities within the legislature.

In addition, both analyses provide no evidence for the H_1, that preclearance affects the passage of restrictive legislation. This indicates that the requirements, at least during the time period of analysis, did not significantly impact the covered states' actions with regards to restrictive law passage. However, other relevant explanatory variables differ between the two analyses.

Dependent Variable 1: Count

Table 8 displays the results of the three different models for the analysis of the number of restrictive legislation actions passed per state, per period. In this analysis, the only significant independent variables in the reduced and combined regression (Model 2 and Model 3) are the percentage GOP in the legislature, the increase in black turnout, and the presence of previous restrictive requirements. Because percent GOP is a positive, significant predictor for the count of restrictive legislation, there is strong evidence that the passage of restrictive actions is a product of partisan calculations.

Dependent Variable 2: Binary

Table 9 displays the results of the three different models for the analysis of the dichotomous passage dependent variable for restrictive legislation. In this analysis, state GDP, the percentage GOP in the legislature, and change in the turnout of black voters are significant predictors for passage of restrictive legislation. Again, these conclusions are supported across all three models.

State GDP positively predicts whether a state passes restrictive legislation, consistent with analysis in previous sections. Specifically, the high cost of these laws supports the conclusion that wealthier states are more likely to pass restrictive legislation, given their ability to fund its implementation. As described above, a higher percentage of GOP in the legislature increases the likelihood that a state will pass restrictive voting legislation. Finally, this analysis provides evidence for H_{3B} and indicates that an increase in turnout amongst black voters increases the likelihood that a state will pass at least one piece of restrictive legislation.

Notably, this set of models was the only one that did not have the presence of previous restrictions as a significant predictor of restrictive legislation. This indicates that the presence of previous laws doesn't affect the likelihood that a state will pass *any* future restrictive legislation, meaning that states with highly restrictive legislation in place may still continue passing other forms of restrictive legislation.

Table 8: Regression Results- Passage Count

	Passage Count Analysis		
	Model		
	Demographics	Politics	Both
	(1)	(2)	(3)
Black Population	−1.001 (0.800)		0.241 (0.865)
Population Over 65	0.101 (0.317)		0.231 (0.374)
Hispanic Population	0.195 (0.377)		0.316 (0.428)
State GDP	**0.0002*** **(0.0001)**	0.0001 (0.0001)	**0.0002*** **(0.0001)**
Change in Black Turnout	**24.579***** **(8.826)**		**19.469*** **(10.463)**
Change in Hispanic Turnout	3.671 (7.913)		1.889 (7.968)
Preclearance		0.048 (0.794)	0.125 (0.868)
Percent GOP: Legislature		**0.074***** **(0.028)**	**0.075**** **(0.030)**
Governor Party		**0.949**** **(0.405)**	0.701 (0.426)
Fraud		−0.104 (0.075)	−0.088 (0.081)
Previous Legislation	−0.289 (0.263)	**−0.496*** **(0.291)**	**−0.672**** **(0.339)**
Battleground		0.238 (0.487)	0.095 (0.531)
Constant	17.605 (21.813)	−8.475***** (3.283)	−21.825 (24.557)
Observations	300	290	290
Log Likelihood	−139.128	−124.263	−120.949
Akaike Inf. Crit.	402.257	370.527	373.897

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

Table 9: Regression Results- Binary Passage

	Binary Passage Analysis		
	Model		
	Demographics	Politics	Both
	(1)	(2)	(3)
Black Population	−0.530 (0.576)		−0.039 (0.673)
Population Over 65	0.131 (0.276)		0.230 (0.290)
Hispanic Population	−0.111 (0.313)		0.016 (0.352)
State GDP	**0.0002**** **(0.0001)**	**0.0001*** **(0.0001)**	**0.0002**** **(0.0001)**
Change in Black Turnout	**19.713**** **(7.735)**		**17.640**** **(8.818)**
Change in Hispanic Turnout	2.672 (7.391)		−0.063 (7.538)
Preclearance		0.364 (0.734)	0.467 (0.796)
Percent GOP: Legislature		**0.076***** **(0.025)**	**0.079***** **(0.027)**
Governor Party		**0.730**** **(0.350)**	0.599 (0.368)
Fraud		−0.047 (0.059)	−0.018 (0.065)
Previous Legislation	−0.179 (0.243)	−0.433 (0.289)	−0.468 (0.306)
Battleground		−0.129 (0.445)	−0.262 (0.466)
Constant	3.670 (16.523)	−10.082***** (3.099)	−15.253 (19.057)
Observations	300	290	290
Log Likelihood	−93.683	−83.893	−81.573
Akaike Inf. Crit.	311.366	289.787	295.145

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

Additional Analysis

After completing the above analyses, I constructed additional regression models to function as robustness checks, and to examine whether the above conclusions are consistent in time periods or situations of particular interest. Based on this, I completed two additional analyses: a reduced analysis focusing on the two most active time periods (Periods 4 and 5[39]), and an analysis of states that didn't pass any restrictive legislation between 2005 and 2016[40]. These extra regression models for introduction allow me to determine whether my initial analysis explains what is driving my results in multiple circumstances. The results for Periods 4 and 5 are and the results for states with no passage are in Table 10[41].

For the regression analysis of the reduced time period, there are a few interesting findings. Consistent with the general introduction analysis, the percentage of GOP in the legislature, the increased turnout of Hispanic voters, and the presence of previous restrictive requirements are significant predictors in the introduction of legislation. In addition, there is evidence that competition, at least for national elections, is positively correlated with introduction; *Battleground State* is a positive predictor, indicating that legislation may have been proposed as a strategic political tool to maintain Republican control during this period. Finally, there is evidence that during this time period the percentage of black residents in a state is a negative predictor of introduction. This is an unexpected result, as it indicates that states with higher percentage of white residents are more likely to introduce legislation. This provides

[39] These periods represent the years 2011-2014.
[40] There were 15 states that didn't pass any restrictive legislation between 2005 and 2016: Alaska, Arizona, Connecticut, Delaware, Hawaii, Iowa, Louisiana, Maryland, Massachusetts, Michigan, New Jersey, New York, Oregon, Vermont, and Wyoming.
[41] For both new regression models for introduction, there was no evidence of over dispersion in the dataset, and a traditional Poisson regression was used, not a negative binomial regression as in the general model of introduction.

evidence against H_{3a}, as higher percentage of minority populations in this period did not correspond with increased introduction.

For states with no restrictive law passage, I examine that factors that contribute to the introduction of restriction legislation. The results are fairly surprising; while the presence of Republicans in the legislature and governorship are significant, the direction was the opposite of my general findings and does not support H_2. There are multiple possible explanations for these results; it could be that in states with strong Democratic control, GOP senators introduce multiple bills in attempt to pass any legislation, or as a symbolic action. In addition, some of these strongly democratic states may introduce a greater quantity of overall voting-related legislation, including bills with restrictive actions. For example, in 2013, Republican Alaska introduced ten bills relating to voting, with one bill containing restrictive actions. Democratic Massachusetts, however, introduced 111 bills, with ten bills containing restrictive actions. [42]

[42] National Conference of State Legislatures (NCSL) Election Legislation Database

Table 10: Regression Results- Reduced Models

	Reduced Models	
	Model	
	Time Periods 4-5	No Passage
	(1)	(2)
Black Population	**−2.628** ** **(1.310)**	0.386 (0.455)
Population Over 65	−0.844 (1.049)	−0.453 (0.390)
Hispanic Population	0.969 (0.859)	−0.462 (0.304)
State GDP	0.0001 (0.0001)	−0.0001 (0.0001)
Change in Black Turnout	3.527 (6.080)	−3.599 (3.863)
Change in Hispanic Turnout	**14.131** ** **(6.038)**	1.184 (5.521)
Preclearance	0.122 (0.409)	0.091 (0.768)
Percent GOP: Legislature	**0.040** * **(0.022)**	**−0.056** * **(0.030)**
Governor Party	−0.394 (0.832)	**−0.402** * **(0.216)**
Fraud	−0.057 (0.037)	−0.020 (0.029)
Previous Legislation	**−0**.598*** (0.218)	0.774 (0.956)
Battleground	**0.587** * **(0.333)**	0.053 (0.409)
Constant	74.391* (41.247)	11.776** (5.965)
Observations	97	88
Log Likelihood	−147.627	−116.709
Akaike Inf. Crit.	419.253	297.417
Note:		*p<0.1; **p<0.05; ***p<0.01

Discussion

H_1: No Evidence for Preclearance

Interestingly, there is no evidence to support H_1, that the presence of preclearance requirements impacted restrictive voting passage or introduction, in any of the models or analyses. This finding supports the conclusions of scholars who questioned the effectiveness of preclearance as a deterrent for restrictive legislation. Issacharoff (15) claims that the shift of voting restrictions from a legal to a partisan issue changed political decision calculus, and rendered the VRA ineffective in the 21st century. Similarly, Tokaji (2014) claims that, at the time of its repeal, the preclearance requirement was useful in combatting discriminatory "vote dilution," such as districting practices, but not "vote denial," such as restrictive voting laws.

H_2: Republicanism as a Positive Predictor

As described above, there is evidence for H_2 in all models and analyses. While presence of a Republican governor was not significant, percent of GOP state legislators was a positive predictor in every analysis. This finding is meaningful because it provides robust support for the theory that restrictive voting legislation is a partisan strategy, and that GOP control of state legislatures facilitates the passage of voter suppression.

H_3: Limited Evidence for Demographic Influence

There was no evidence for H_{3a}, that the demographic composition of a state incentivizes restrictive legislation, in any of the general analyses. However, in all three of the general analyses (introduction, passage count, and dichotomous passage dependent variable), there is evidence that voting behavior of demographic groups influences the proposal and passage of

restrictive legislation. Specifically, these analyses provide robust support for H_{3b}, that increased voter turnout of the black population in a state incentivizes legislation aimed at restricting access to the polls. This is consistent with theories of strategic disenfranchisement and the role of restrictive legislation in targeting minority populations.

Variations between Previous Studies:

Some components of my findings vary between past studies, and my analysis indicates that Republican control is a more important predictor than previous analyses would suggest. The substantive variation in my results is likely due to the inclusion of additional time periods, as well as meaningful changes to independent variables, as described previously. For example, in the only other comprehensive restrictive voting legislation analysis, Bentele and O'Brien (2013) find that demographic explanations, including percentage of the population that is black or non-citizen, the percentage of minority turnout, and the change in minority turnout, are the most significant predictors for the introduction of restriction legislation. While my analysis agrees that change in turnout is a positive predictor, I find no evidence that demographic composition of a state or voting population alone determine introduction. Hicks et al (2015) examine the introduction of one form of restrictive voting legislation, voter identification, and find that the presence of Republican legislators is an important predictor for introduction. My analysis for introduction argues that both political and demographic considerations are important predictors for restrictive legislation.

In terms of passage, my analysis also varies with previous work. This is likely a product of the additional time periods, as well as the creation of multiple dependent variables for regression analysis. For example, Bentele and O'Brien (2008) find that, in addition to GOP

presence in state governments, the proportion of minority voters and party competition at the state level are significant predictors for passage of restrictive voting legislation. Multiple scholars indicate that for photo identification, the explanation for passage is largely partisan, with increased GOP control at the state level as a significant and positive predictor of adaptation (Hicks et al 15; Rocha and Matsubayashi 2014, Biggers and Hanmer 2017). My analysis contributes evidence that this explanation for passage applies to all forms of restrictive legislation, not just identification. In addition, my analysis provides evidence that demographic voting behavior may also explain passage.

Model Limitations:

The most significant limitation in my analysis is the inability to account for "policy diffusion" or states' responses to other states' actions. While other authors have attempted to account for policy diffusion with a binary variable representing whether an adjacent state has passed restrictive legislation (Bentele and O'Brien 2008, Hicks et al 2015), this fails to capture the nuanced way in which states interact, and a solely geographic focus excludes party and national motivations (Biggers and Hanmer 2017). For example, Alabama officials discussed their decision to implement proof of citizenship requirements based on legal actions taken in Arizona and Kansas[43], two states that are neither adjacent nor in the same general region. In addition, my model doesn't account for state reactions to judicial decisions. For example, a federal decision overturning part or all of one state's restrictive voting law may impact whether that state, or a different state, introduces new restrictive legislation. This is a particularly relevant concern for the past few years, given the number of highly publicized court challenges to restrictive voting legislation.

[43] In 2014, Alabama Secretary of State at the time Jim Bennett quoted federal court decisions in Arizona and Kansas when describing his strategies to implement proof of citizenship requirements in Alabama (Kirby 2014).

Partisanship and Restrictive Voting Legislation: A Strategic Calculation

Disenfranchisement as a Political Tool

The results of this analysis provide robust support for the theory that restrictive voting legislation is increasingly perceived and employed as a tool for strategic disenfranchisement by the Republican Party. Because the percent of GOP is a significant predictor for restrictive legislation passage in both dependent variable models, there is strong evidence that the increased passage of restrictive actions is a product of partisan calculations. Previous literature describes the implications of this partisan bias, and argues that GOP motivations for such legislation are not neutral (Hansen 2013; Schultz 2007). Specifically, GOP politicians may perceive restrictive laws as a strategic political tool to selectively disenfranchise components of the electorate for political gain. This can be described as a form of "coalition maintenance," in which a party- in this case the GOP- leverages restrictive voting laws to maintain power by exclusion instead of expansion (Karol, 2009). Section 2 provides a number of examples in which individual Republican leaders have explicitly described these practices as a technique for voter suppression, and the results of this analysis provide significant support that these beliefs are widespread and pervasive. This analysis also provides no evidence for the stated justification for these types of laws; perception of fraud was not a significant predictor for passage.

It is important to discuss this finding in terms of both introduction and passage. For example, introduction to the legislature may be a symbolic gesture or response by politicians, who may be aware that it is unlikely to pass. This dataset also does not account for the number of introductions by an individual actor; a particularly enthusiastic state senator may be responsible for multiple introductions of a similar piece of legislation. Passage, however, represents a

broader acceptance of the restrictive legislation; unlike introduction, which can be driven by an individual, passage of legislation requires a majority of the legislature to approve the action. My results are consistent with this distinction; while factors such as the change in turnout of minority voters contribute to bill introductions, partisanship positively predicts the likelihood of restrictive action passage across all models.

However, it's not immediately clear why increasing the percentage of GOP in the state legislature is a positive predictor for both introduction and passage. States with high percentage of Republican lawmaker seem least likely to need to seek out strategies to boost electoral competitiveness. Given large, uncontested majorities in both houses of the state legislature, why do Republican lawmakers continue to support restrictive legislation? There are multiple potential explanations for this pattern. First, state-based legislative action may be influenced by national party goals; some scholars argue that state legislators align with national party directives due to desires to access party resources or build positive image of the party (Wright and Shaffner 2002; Jenkins 2008). Given support for restrictive legislation by Republicans at the national level, it may not be surprising for state legislators to similarly support this policy objective. An additional explanation relates to coalition building; following Karol's (2009) logic, restrictive legislation may represent a safe guard against potential future challenges.

The partisanship around restrictive voting legislation is a particularly troubling finding given the discriminatory nature of these practices. As described previously, multiple scholars highlight the disproportionate effect that these restrictions have on minority voters; specifically, requirements such as photo identification create a barrier to the polls for certain populations of state residents (Barreto et al 2009, Hood and Bullock 2008). Scholars have drawn parallels between current requirements and Jim Crow era restrictions; potential high costs to individual

voters of restrictive legislation function as modern-day poll taxes (Ellis 2008). The partisan nature of restrictive law passage also indicates an explicit intent to exclude or prevent citizens from accessing the polls. There is evidence in my analysis to support this theory; across all general models, an increase is turnout amongst black voters predicts higher levels of restrictive bill introductions and passage. In examples like North Carolina, the focus on race as a proxy for party affiliation led to the passage of legislation that targets black voting populations as a political strategy (Hansen 2013). While there is limited evidence of the success of these policies in changing electoral outcomes in the past decade, continued passage of policies aimed at specific minority voters is a troubling practice with the potential to cause mass suppression.

Future Implications

If the presence of GOP in the state legislature is a significant explanation for the adoption of restrictive voting measures, what does this mean for future voter suppression efforts? Based on my analysis, states with a higher percentage of GOP in the state legislature will likely adopt more restrictive actions. The growing partisanship of restrictive voting legislation, combined with recent GOP statements, indicates a renewed attempt to systematically exclude minority residents from the polls due to perceived political gain. A potentially concerning trend is the increased use of unfounded "voter fraud" rhetoric by the GOP on the national stage, which may signal an intent to pass or adopt additional or more forceful restrictive actions. This trend has material, legal implications for the future of voting rights. For example, current Attorney General Jeff Sessions, a controversial politician who has faced multiple charges of racism, opposes the

Voting Rights Act, calling it "intrusive."[44] Acting in accordance with this perspective, he has withdrawn the Justice Department's claim against Texas for discriminatory voting practices and stated a desire to limit DOJ oversight of state voting practices (Berman 2017). Limited judicial oversight, in combination with increasingly partisan motivations for suppression, may support the continued expansion of discriminatory restrictive voting actions.

It is important to note, however, that the restrictive voting legislation examined in this paper is not the only form of voter suppression; voter roll "purges" and verification procedures or technology are non-legislative strategies of suppression (Berman 2015; Lindeman 2017). In addition, there is evidence that current restrictions are not enforced evenly, and often minority populations face disproportionately high requirements at the polls (Atkeson et al 2010). Additional research is necessary to understand the expansive nature of voter suppression, and the conditions in which all forms of suppression manifest.

[44] During his confirmation hearing for Attorney General in January of 2017, Jeff Sessions stated that "[The Voting Rights Act] is intrusive. The Supreme Court on more than one occasion has described it legally as an intrusive act, because you're only focused on a certain number of states."

Conclusions

Since 2005, there has been a clear increase in restrictive voting legislation: what factors explain the passage and introduction of this restrictive legislation? In this paper, I examine the passage and introduction of restrictive voting legislation between 2005 and 2016 using two categories of explanations: demographic behavior and political composition. Ultimately, I find that the most significant predictor of the passage of restrictive legislation is the percentage of the state legislature composed of the GOP. Introduction of restrictive legislation, however, can also be explained by the demographic behavior, particularly the increased turnout of black and Hispanic voters.

These results are significant in a number of ways. First, despite my hypotheses, the removal of preclearance was not a significant predictor of the introduction or passage of restrictive legislation. Though the removal of preclearance resulted in a fundamental change in the process for passing restrictive laws, its removal was not correlated with significant changes in the behavior of the legislature. Similarly, though there is evidence to support a positive correlation between the demographic voting behavior and the introduction of legislation in the state, demographic factors do not explain the rate of passage of restrictive actions.

Perhaps the most significant finding relates to the relationship between restrictive voting legislation and partisanship. Specifically, this analysis provides evidence to support the theory that the GOP employs voter suppression as a political strategy intended to restrict access for Democratic voters using race as a proxy. Publicized cases in North Carolina and Pennsylvania highlight the central role race places in these restrictions; explicit in justifications for these laws is language targeting black residents and black voting practices. Given the renewed legislative

and rhetorical efforts to promote restrictive voting practices, understanding the conditions in which this restrictive legislation manifests is necessary to counter and oppose discriminatory actions.

References

Alvarez, R. Michael, Delia Bailey, and Jonathan N. Katz. "The effect of voter identification laws on turnout." (2008).

Ansolabehere, Stephen, and David M. Konisky. "The introduction of voter registration and its effect on turnout." *Political Analysis* (2006): 83-100.

Archer, Deborah N. "Still Fighting after All These Years: Minority Voting Rights 50 Years after the March on Washington." *Berkeley J. Afr.-Am. L. & Pol'y* 17 (2015): 69-377.

Atkeson, Lonna Rae, et al. "A new barrier to participation: Heterogeneous application of voter identification policies." *Electoral Studies* 29.1 (2010): 66-73.

Barreto, Matt A., Stephen A. Nuno, and Gabriel R. Sanchez. "The disproportionate impact of voter-ID requirements on the electorate—new evidence from Indiana." *PS: Political Science & Politics* 42.01 (2009): 111-116.

Bentele, Keith G., and Erin E. O'brien. "Jim Crow 2.0? Why states consider and adopt restrictive voter access policies." *Perspectives on Politics* 11.04 (2013): 1088-1116.

Berman, Ari. "THE VOTING-RIGHTS COUNTERREVOLUTION." *The Nation*. 301.7-8 (2015): 16-22.

Berman, Ari. “The Trump Administration’s Lies About Voter Fraud Will Lead to Massive Voter Suppression.” *The Nation*. (2017).

Berman, Ari. "Trump's Justice Department is No Longer Opposing Texas's Discriminatory Voter-ID Law." *The Nation*. (2017).

Biggers, Daniel R., and Michael J. Hanmer. "Understanding the Adoption of Voter Identification Laws in the American States." *American Politics Research* (2017): 1532673X16687266.

Blake, Aaron. "Republicans keep admitting that voter ID helps them win, for some reason." *The Washington Post*. (2016).

Blessett, Brandi. "Disenfranchisement: Historical underpinnings and contemporary manifestations." *Public Administration Quarterly* 39.1 (2015): 3.

Brennan Center for Justice. "Texas Photo ID Trial Begins: Groups Argue Law Violates Voting Rights Act, Constitution." *Brennan Center for Justice*. (2014).

Brown-Dean, Khalilah L. *One lens, multiple views: Felon disenfranchisement laws and American political inequality*. Diss. The Ohio State University, 2003.

Burden, Barry C., David T. Canon, Kenneth R. Mayer, and Donald P. Moynihan. "Election laws, mobilization, and turnout: The unanticipated consequences of election reform." *American Journal of Political Science* 58.1 (2014): 95-109.

Cameron, A. Colin, and Pravin K. Trivedi. *Regression Analysis of Count Data*. Vol. 53. Cambridge University Press, 2013.

Daniels, Gilda R. "Unfinished Business: Protecting Voting Rights in the Twenty-First Century." *Geo. Wash. L. Rev.* 81 (2013): 1928.

Editorial Board. "Jeff Sessions as Attorney General: An Insult to Justice." *The New York Times.* (2016). Web.

Ellis, Atiba R. "The Cost of the Vote: Poll Taxes, Voter Identification Laws, and the Price of Democracy." *Denv. UL Rev.* 86 (2008): 1023.

Erikson, Robert S., and Lorraine C. Minnite. "Modeling problems in the voter identification—voter turnout debate." *Election Law Journal* 8.2 (2009): 85-101.

Fitzgerald, Mary. "Greater Convenience But Not Greater Turnout The Impact of Alternative Voting Methods on Electoral Participation in the United States." *American Politics Research* 33.6 (2005): 842-867.

Grimmer, Justin, Eitan Hersh, Marc Meredith, Jonathan Mummolo, and Clayton Nall. "Comment on 'Voter Identification Laws and the Suppression of Minority Votes.'" Unpublished. (2017).

Gronke, Paul, Eva Galanes-Rosenbaum, and Peter A. Miller. "Early voting and turnout." *PS: Political Science & Politics* 40.04 (2007): 639-645.

Gunst, Richard F., and Robert L. Mason. *Regression analysis and its application: a data-oriented approach*. Vol. 34. CRC Press, 1980.

Hajnal, Zoltan, Nazita Lajevardi, and Lindsay Nielson. "Voter Identification Laws and the Suppression of Minority Votes." *The Journal of Politics* 79.2 (2017): 000-000.

Harger, Kaitlyn, and Mitchell Page. "Do non-citizens affect US Congressional elections?." *Applied Economics Letters* (2017): 1-4.

Hasen, Richard L. "Race or Party: How Courts Should Think about Republican Efforts to Make It Harder to Vote in North Carolina and Elsewhere." *Harv. L. Rev. F.* 127 (2013): 58.

Hicks, William D., Seth C. McKee, Mitchell D. Sellers, and Daniel A. Smith. "A principle or a strategy? Voter identification laws and partisan competition in the American States." *Political Research Quarterly* 68.1 (2015): 18-33.

Hicks, William D., Seth C. McKee, and Daniel A. Smith. "The determinants of state legislator support for restrictive voter ID laws." *State Politics & Policy Quarterly* 16.4 (2016): 411-431.

Hill, Kim Quaile, and Jan E. Leighley. "Racial diversity, voter turnout, and mobilizing institutions in the United States." *American Politics Quarterly* 27.3 (1999): 275-295.

Hood III, M. V., and Charles S. Bullock III. "Much ado about nothing? An empirical assessment of the Georgia voter identification statute." *State Politics & Policy Quarterly* 12.4 (2012): 394-414.

Hood, M. V., and Charles S. Bullock. "Worth a thousand words? an analysis of Georgia's voter identification statute." *American Politics Research* 36.4 (2008): 555-579.

Howitz, Sari. "Getting a photo ID so you can vote is easy. Unless you're poor, black, Latino or elderly." *The Washington Post*. (2016).

Hosmer, David W., and Stanley Lemeshow. "Multiple logistic regression." *Applied Logistic Regression, Second Edition* (2005): 31-46.

Issacharoff, Samuel. "VOTING RIGHTS AT 50." *Alabama Law Review* 67.2: 387.

Jenkins, Shannon. "Party influence on roll call voting: A view from the US states." *State Politics & Policy Quarterly* 8.3 (2008): 239-262.

Karol, David. *Party position change in American politics: Coalition management*. Cambridge University Press, 2009.

Kasdan, Diana. "State Restrictions on Voter Registration Drives." *Brennan Center for Justice, New York University.* (2012).

Kirby, Brendan. "One of last vestiges of gutted immigration law, Alabama pushes voters for citizenship proof." *AL*. (2014).

Larocca, Roger, and John S. Klemanski. "US State Election Reform and Turnout in Presidential Elections." *State Politics & Policy Quarterly* 11.1 (2011): 76-101.

Liao, Tim Futing. *Interpreting probability models: Logit, probit, and other generalized linear models*. No. 101. Sage, 1994.

Lindeman, Mark. "Evidence based elections: Beyond the "rigging" debate." *Significance* 14.1 (2017): 18-23.

Long, J. Scott, and Jeremy Freese. *Regression models for categorical dependent variables using Stata*. Stata press, 2006.

Lopez, Tomas. "Shelby County': One year later." *Brennan Center for Justice, New York University.* (2014).

Minnite, Lorraine C. *The myth of voter fraud*. Cornell University Press, 2010.

Minnite, Lorraine C. *The politics of voter fraud*. Washington, DC: Project Vote, 2007.

Mortellaro, Stephen, and Michelle Kanter Cohen. "Restricting Voter Registration Drives." *Project Vote* (2014).

Mycoff, Jason D., Michael W. Wagner, and David C. Wilson. "The Empirical Effects of Voter-ID Laws: Present or Absent?." *PS: Political Science & Politics* 42.01 (2009): 121-126.

Rocha, Rene R., and Tetsuya Matsubayashi. "The politics of race and voter ID laws in the states: The return of Jim Crow?." *Political Research Quarterly*67.3 (2014): 666-679.

Roth, Zachary. "GOP secretaries of state raise alarm about non-citizen voting." *MSNBC*. N.p., 12 Feb. 2015. Web. 03 Mar. 2017.

Schultz, David. "Less than fundamental: The myth of voter fraud and the coming of the second great disenfranchisement." *Wm. Mitchell L. Rev.* 34 (2007): 483.

Sobel, Richard. "The High Cost of 'Free' Photo Voter Identification Cards." *Charles Hamilton Houston Institute for Race and Justice, Harvard Law School*. (2014).

Stewart III, Charles, Stephen Ansolabehere, and Nathaniel Persily. "Revisiting public opinion on voter identification and voter fraud in an era of increasing partisan polarization." *Stan. L. Rev.* 68 (2016): 1455.

Tokaji, Daniel P. "Responding to Shelby County: A Grand Election Bargain." *Harv. L. & Pol'y Rev.* 8 (2014): 71-471.

Vercellotti, Timothy, and David Anderson. "Protecting the franchise, or restricting it? The effects of voter identification requirements on turnout." *2006 American Political Science Association, Philadelphia, Pennsylvania, August 31- September 3, 2006.*

Weiser, Wendy, and Erik Opsal. "The state of voting in 2014." *Brennan Center for Justice, New York University.* (2014).

Wines, Michael. "Some Republicans Acknowledge Leveraging Voter ID Laws for Political Gain." *The New York Times*. (2016).

Wright, Gerald C., and Brian F. Schaffner. "The influence of party: Evidence from the state legislatures." *American Political Science Review* 96.02 (2002): 367-379.

Appendix A: Variable Descriptions

General	Type	Description & Calculation Methods	Data Source	Data Name
State Fixed Effects		List of 50 states (49 fixed effect, binary variables)		State Code
Period (Time)		Time periods:1 (2005-2006), 2 (2007-2008), 3 (2009-2010), 4 (2011-2012), 5 (2013-2014), 6 (2015-2016) List of 6 periods (5 fixed effect, binary variables)		Period
Dependent Variable	**Type**	**Description & Calculation Methods**	**Data Source**	**Data Name**
Introductions	Count	Number of restrictive voting bills introduced (see appendix for definition of "restrictive")	National Conference of State Legislatures	dvIntro
Passage (Binary)	Binary	1: Restrictive Voting law passed by the state 0: No restrictive voting laws passed by the state	National Conference of State Legislatures	dvpassageB
Passage (Count)	Count	Count of restrictive actions passed by the state* *If a bill includes multiple restrictions, each is considered an individual restrictive action for the count	National Conference of State Legislatures	dvpassageC
Independent Variable	**Type**	**Description & Calculation Methods**	**Data Source**	**Data Name**
State Legislature				
Governor	Binary	1: Presence of a Republican Governor 0: Governor not Republican (Independent or Democratic)	National Conference of State Legislatures (2009-2015), National Governor's Association (2006-2008)	Governor
Percent GOP	Continuous	Percent of state legislators that are members of the GOP. (State Senate Republicans+State House Republicans)/(Total State Legislators)	National Conference of State Legislatures	PcntGOP
State Info/Demographics				
Black Population	Continuous	Percent of Population- Black. (#Black)/(State Population Total) : NOTE: "Black" defined as "Black Alone, non-hispanic"	United States Census Bureau	DemBlack
Hispanic population	Continuous	Percent of Population- Hispanic (#Hispanic)/(State Population Total)	United States Census Bureau	DemHispanic
65+ years Population	Continuous	Percent of Population- Over 65. (#Over 65)/(State Population Total)	United States Census Bureau	DemAge

Voting Demographics				
Battleground State	Binary	1: Battleground State in Previous Presidential Election 0: Not battleground state in previous election	Analysis from Politico for each of the Presidential Elections (for example: http://www.politico.com/2016-election/swing-states)	Battleground
Preclearance	Binary	1: States with total or significant preclearance requirements 0: States without or without significant preclearance requirements	Department of Justice	Preclearance
Turnout- Black	Continuous	Percent of Voters- black in most recent presidential election ((# of black voters/#of total voters)*100)	United States Census Bureau	TurnoutBlack
Turnout-Hispanic	Continuous	Percent of Voters- nonwhite in most recent presidential election ((# of nonwhite voters/#of total voters)*100)	United States Census Bureau	TurnoutHispanic
Change in Turnout-Black	Continuous	Turnout in 2004-2000, Turnout in 2008-2004, Turnout in 2012-2008 (Turnout as defined above)	United States Census Bureau	ChgTurnoutBlack
Change in Turnout-Hispanic	Continuous	Turnout in 2004-2000, Turnout in 2008-2004, Turnout in 2012-2008 (Turnout as defined above)	United States Census Bureau	ChgTurnoutHispanic
Voter Fraud	Continuous	% of residents who believe fraud is "very common"; fraud defined as "noncitizens voting" and "voting more than once"[45]	Survey of the Performance of American Elections	fraud

[45] For the year 2008, the question in the survey asked: "It is illegal to vote more than once in an election or to vote if not a U.S. citizen. How frequently do you think this occurs in your community?" but all following year asked: "The following is a list of activities that are usually against the law. Please indicate how often you think these activities occur in your county or city.
Q29A- People voting more than once in an election
Q29D- People voting who are not U.S. citizens
1. It is very common
2. It occurs occasionally
3. It occurs infrequently
4. It almost never occurs
5. I'm not sure"
For this years following 2008, the fraud variable was calculated by the percentage of respondents who answered that *either* people voting more than once of voting as a non-citizen were very common.

Control Variable	Type	Description	Data Source	Data Name
Current State Laws				
Current ID restrictions	Scale: 0-3	Presence of a photo ID requirements (strict or non strict) passed in the previous year. Presence of proof of citizenship required for registration. Note: this includes laws passed but not yet implemented due to legal questions. 0: no law 1: each restriction (i.e. a state with all 3=3, a state with 2 of 3= 2)* *This is lagged- variable changes the period AFTER the law is implemented	National Conference of State Legislatures	PhotoID
State Features				
GDP per Capita- State Level	Continuous	Real GDP per Capita in individual states- chained to 2009	Bureau of Economic Analysis- US Department of Commerce	StateGDP

Appendix B: Regression Output

Model: Introduction

```
                    ## Model 1: Introduction

##Basic- Demographic
> DemographicBasic1<-glm.nb(formula = dvIntro ~ DemBlack + DemAge +
 DemHispanic + StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic +
 PhotoID + AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
 IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE +
 NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD +
 TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 + Period3 +
 Period4 + Period5 + Period6, data = thesisdata16)
> summary(DemographicBasic1)

Call:
glm.nb(formula = dvIntro ~ DemBlack + DemAge + DemHispanic +
    StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic + PhotoID +
    AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
    IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO +
    MT + NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR +
    PA + RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI +
    WY + Period2 + Period3 + Period4 + Period5 + Period6, data =
 thesisdata16,
    init.theta = 8.866988198, link = log)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-3.0288  -0.9193  -0.2327   0.5462   2.7430

Coefficients:
                     Estimate Std. Error z value Pr(>|z|)
(Intercept)         3.079e+00  6.392e+00   0.482 0.630008
DemBlack           -4.467e-02  2.162e-01  -0.207 0.836301
DemAge             -3.513e-02  1.402e-01  -0.251 0.802055
DemHispanic        -1.139e-01  1.224e-01  -0.930 0.352359
StateGDP            2.232e-05  2.799e-05   0.797 0.425218
ChgTurnoutBlack     8.158e+00  2.181e+00   3.740 0.000184 ***
ChgTurnoutHispanic  4.622e+00  2.406e+00   1.921 0.054786 .
```

```
PhotoID          -5.483e-01  1.056e-01  -5.192 2.08e-07 ***
AK               -4.273e+00  5.062e+00  -0.844 0.398581
AZ                6.878e-01  6.025e+00   0.114 0.909114
AR               -1.161e+00  2.423e+00  -0.479 0.631806
CA                1.429e+00  6.265e+00   0.228 0.819553
CO               -9.278e-02  5.439e+00  -0.017 0.986390
CT               -1.858e+00  3.727e+00  -0.498 0.618160
DE               -3.419e+00  1.600e+00  -2.136 0.032654 *
FL                5.277e-01  3.369e+00   0.157 0.875524
GA                5.520e-01  1.170e+00   0.472 0.637145
HI               -3.821e+00  5.408e+00  -0.706 0.479883
ID               -3.211e+00  5.787e+00  -0.555 0.578997
IL                1.346e-01  3.071e+00   0.044 0.965028
IN               -1.238e+00  3.784e+00  -0.327 0.743581
IA               -1.910e+00  5.056e+00  -0.378 0.705568
KS               -1.380e+00  4.560e+00  -0.303 0.762178
KY               -4.621e+00  4.114e+00  -1.123 0.261306
LA               -7.519e-01  1.365e+00  -0.551 0.581695
ME               -2.349e+00  5.403e+00  -0.435 0.663722
MD                4.709e-01  1.062e+00   0.443 0.657602
MA               -2.505e-01  4.179e+00  -0.060 0.952197
MI               -1.278e+00  2.660e+00  -0.481 0.630827
MN               -1.655e+00  4.574e+00  -0.362 0.717520
MS                1.335e+00  2.323e+00   0.575 0.565614
MO               -4.238e-01  3.174e+00  -0.134 0.893774
MT               -2.618e+00  5.590e+00  -0.468 0.639573
NE               -2.279e+00  4.813e+00  -0.474 0.635783
NV                7.405e-01  4.996e+00   0.148 0.882181
NH               -2.296e+00  5.404e+00  -0.425 0.670845
NJ               -2.662e-01  3.256e+00  -0.082 0.934848
NM                3.284e+00  7.751e+00   0.424 0.671820
NY                2.349e-02  2.799e+00   0.008 0.993303
NC               -4.622e-01  1.215e+00  -0.380 0.703594
ND               -4.299e+00  5.363e+00  -0.802 0.422841
OH               -2.338e+00  3.032e+00  -0.771 0.440698
OK               -6.557e-01  4.174e+00  -0.157 0.875179
OR               -1.254e+00  5.471e+00  -0.229 0.818725
PA               -1.891e+00  3.323e+00  -0.569 0.569308
RI               -7.201e-01  4.415e+00  -0.163 0.870444
SC               -1.038e+00  5.609e-01  -1.851 0.064126 .
SD               -3.446e+00  5.419e+00  -0.636 0.524765
TN                2.986e-02  2.084e+00   0.014 0.988570
TX                3.004e+00  5.424e+00   0.554 0.579610
UT               -1.965e+00  5.754e+00  -0.341 0.732771
```

```
VT                -4.043e+01  2.740e+07   0.000 0.999999
VA                -2.061e-01  1.638e+00  -0.126 0.899890
WA                -1.374e+00  5.065e+00  -0.271 0.786131
WV                -1.383e+00  4.927e+00  -0.281 0.779005
WI                -1.337e+00  4.358e+00  -0.307 0.758959
WY                -4.181e+00  5.602e+00  -0.746 0.455434
Period2            1.495e-01  1.656e-01   0.903 0.366495
Period3            7.775e-02  2.095e-01   0.371 0.710523
Period4            3.161e-01  2.820e-01   1.121 0.262174
Period5            1.119e-01  4.166e-01   0.269 0.788297
Period6           -1.194e-01  5.479e-01  -0.218 0.827491
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for Negative Binomial(8.867) family taken to be
 1)

    Null deviance: 988.00  on 299  degrees of freedom
Residual deviance: 324.45  on 238  degrees of freedom
AIC: 1239.5

Number of Fisher Scoring iterations: 1


              Theta:  8.87
          Std. Err.:  2.74

 2 x log-likelihood:  -1113.547


##Basic- Politics
 > PoliticsBasic1<-glm.nb(formula = dvIntro ~ StateGDP + Preclearance
 + PcntGOP + Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
 CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS + KY + LA +
 ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ + NM + NY +
 NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT + VT + VA +
 WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 + Period6,
 data = thesisdata16)
> summary(PoliticsBasic1)

Call:
glm.nb(formula = dvIntro ~ StateGDP + Preclearance + PcntGOP +
    Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
    CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
```

```
    KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV +
    NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC +
    SD + TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 +
    Period3 + Period4 + Period5 + Period6, data = thesisdata16,
    init.theta = 10.76804867, link = log)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.9861  -0.9188  -0.1983   0.5427   2.3640

Coefficients: (1 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
(Intercept)   5.242e-01  1.026e+00   0.511 0.609228
StateGDP      7.419e-06  2.458e-05   0.302 0.762839
Preclearance  3.462e-01  2.639e-01   1.312 0.189528
PcntGOP       2.345e-02  8.307e-03   2.823 0.004757 **
Governor     -1.319e-01  1.107e-01  -1.192 0.233445
fraud        -2.769e-02  1.721e-02  -1.609 0.107569
PhotoID      -6.124e-01  1.179e-01  -5.193 2.07e-07 ***
Battleground  1.441e-01  1.526e-01   0.945 0.344879
AK           -3.086e+00  9.969e-01  -3.096 0.001962 **
AZ           -1.175e+00  4.498e-01  -2.612 0.008993 **
AR           -6.909e-01  4.425e-01  -1.561 0.118420
CA           -3.106e-01  6.288e-01  -0.494 0.621348
CO           -3.878e-01  5.673e-01  -0.683 0.494304
CT           -1.200e+00  8.851e-01  -1.356 0.175018
DE           -2.912e+00  1.066e+00  -2.732 0.006291 **
FL           -1.091e+00  5.030e-01  -2.170 0.030024 *
GA           -2.382e-01  4.563e-01  -0.522 0.601646
HI           -2.094e+00  9.144e-01  -2.290 0.022044 *
ID           -3.169e+00  8.123e-01  -3.901 9.57e-05 ***
IL           -8.248e-02  5.568e-01  -0.148 0.882242
IN           -3.640e-01  4.708e-01  -0.773 0.439383
IA           -7.864e-01  4.983e-01  -1.578 0.114525
KS           -1.394e+00  5.164e-01  -2.700 0.006934 **
KY           -3.486e+00  1.055e+00  -3.303 0.000956 ***
LA           -1.202e+00  5.771e-01  -2.083 0.037264 *
ME           -7.548e-01  4.285e-01  -1.762 0.078132 .
MD            8.247e-01  5.954e-01   1.385 0.166032
MA            1.331e+00  7.811e-01   1.704 0.088371 .
MI           -5.954e-01  4.463e-01  -1.334 0.182210
MN           -2.396e-01  5.506e-01  -0.435 0.663451
MS            1.446e+00  3.085e-01   4.687 2.77e-06 ***
MO            1.167e-01  4.064e-01   0.287 0.773940
```

```
MT           -1.451e+00  4.717e-01  -3.077 0.002092 **
NE                   NA         NA      NA       NA
NV           -1.074e-01  5.272e-01  -0.204 0.838608
NH           -1.094e+00  5.325e-01  -2.054 0.039987 *
NJ           -3.384e-01  6.516e-01  -0.519 0.603529
NM            3.217e-01  4.645e-01   0.693 0.488608
NY           -1.586e-01  7.381e-01  -0.215 0.829911
NC           -5.600e-01  4.077e-01  -1.374 0.169507
ND           -2.990e+00  8.174e-01  -3.658 0.000255 ***
OH           -1.484e+00  5.372e-01  -2.762 0.005750 **
OK           -2.653e-01  4.019e-01  -0.660 0.509177
OR           -4.895e-01  5.308e-01  -0.922 0.356455
PA           -1.258e+00  5.529e-01  -2.274 0.022938 *
RI            5.996e-01  5.684e-01   1.055 0.291463
SC           -1.204e+00  3.814e-01  -3.156 0.001599 **
SD           -2.370e+00  7.123e-01  -3.328 0.000875 ***
TN            6.270e-01  3.849e-01   1.629 0.103355
TX            2.343e-01  4.314e-01   0.543 0.586994
UT           -1.995e+00  5.299e-01  -3.764 0.000167 ***
VT           -3.851e+01  2.740e+07   0.000 0.999999
VA           -8.159e-01  5.439e-01  -1.500 0.133601
WA           -3.605e-01  6.147e-01  -0.587 0.557536
WV            2.537e-01  4.032e-01   0.629 0.529209
WI           -4.454e-01  4.691e-01  -0.949 0.342385
WY           -3.777e+00  1.047e+00  -3.606 0.000311 ***
Period2       1.139e-01  1.346e-01   0.847 0.397084
Period3       4.314e-01  2.108e-01   2.046 0.040719 *
Period4       4.391e-01  2.129e-01   2.062 0.039164 *
Period5      -1.883e-02  1.781e-01  -0.106 0.915820
Period6      -3.346e-01  2.003e-01  -1.671 0.094819 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for Negative Binomial(10.768) family taken to be
 1)

    Null deviance: 1006.88  on 289  degrees of freedom
Residual deviance:  307.86  on 229  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 1183

Number of Fisher Scoring iterations: 1
```

```
              Theta:  10.77
          Std. Err.:  3.71

 2 x log-likelihood:  -1059.021


###Basic- Both Political and Demographic
 > BothBasic1<-glm.nb(formula = dvIntro ~ DemBlack + DemAge +
 DemHispanic + StateGDP + Preclearance + PcntGOP + Governor + fraud +
 PhotoID + ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
 AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
 KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ +
 NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT +
 VT + VA + WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 +
 Period6, data = thesisdata16)
> summary(BothBasic1)

Call:
glm.nb(formula = dvIntro ~ DemBlack + DemAge + DemHispanic +
    StateGDP + Preclearance + PcntGOP + Governor + fraud + PhotoID +
    ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
    AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN +
    IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT +
    NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA +
    RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI + WY +
    Period2 + Period3 + Period4 + Period5 + Period6, data =
 thesisdata16,
    init.theta = 13.99270221, link = log)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-2.8580  -0.9036  -0.1699   0.4755   2.7020

Coefficients: (1 not defined because of singularities)
                    Estimate Std. Error z value Pr(>|z|)
(Intercept)       -3.473e+00  6.563e+00  -0.529 0.596692
DemBlack           1.138e-01  2.173e-01   0.523 0.600652
DemAge             5.690e-02  1.462e-01   0.389 0.697044
DemHispanic       -9.300e-02  1.227e-01  -0.758 0.448362
StateGDP           1.956e-05  2.766e-05   0.707 0.479438
Preclearance       3.289e-01  2.609e-01   1.261 0.207382
PcntGOP            2.549e-02  8.366e-03   3.046 0.002317 **
Governor          -1.226e-01  1.095e-01  -1.120 0.262818
```

```
fraud               -1.709e-02  1.748e-02  -0.978 0.328149
PhotoID             -6.390e-01  1.190e-01  -5.370 7.87e-08 ***
ChgTurnoutBlack      7.110e+00  2.104e+00   3.380 0.000724 ***
ChgTurnoutHispanic   4.889e+00  2.261e+00   2.162 0.030631 *
Battleground         1.067e-01  1.497e-01   0.713 0.476114
AK                  -3.298e-01  5.078e+00  -0.065 0.948211
AZ                   3.545e+00  6.072e+00   0.584 0.559328
AR                   8.273e-01  2.455e+00   0.337 0.736094
CA                   4.758e+00  6.281e+00   0.758 0.448745
CO                   3.655e+00  5.467e+00   0.668 0.503817
CT                   1.078e+00  3.736e+00   0.289 0.772954
DE                  -2.379e+00  1.635e+00  -1.454 0.145839
FL                   1.358e+00  3.414e+00   0.398 0.690746
GA                  -6.770e-02  1.166e+00  -0.058 0.953692
HI                   9.983e-01  5.433e+00   0.184 0.854207
ID                   3.606e-01  5.819e+00   0.062 0.950589
IL                   2.259e+00  3.090e+00   0.731 0.464671
IN                   1.631e+00  3.796e+00   0.430 0.667457
IA                   1.831e+00  5.067e+00   0.361 0.717798
KS                   1.393e+00  4.592e+00   0.303 0.761698
KY                  -1.392e+00  4.141e+00  -0.336 0.736814
LA                  -1.957e+00  1.431e+00  -1.367 0.171600
ME                   1.779e+00  5.428e+00   0.328 0.743171
MD                   7.211e-01  1.110e+00   0.649 0.516058
MA                   3.710e+00  4.197e+00   0.884 0.376740
MI                   7.789e-01  2.670e+00   0.292 0.770523
MN                   2.100e+00  4.586e+00   0.458 0.647093
MS                  -2.347e-02  2.326e+00  -0.010 0.991950
MO                   1.673e+00  3.186e+00   0.525 0.599424
MT                   1.368e+00  5.626e+00   0.243 0.807929
NE                          NA         NA      NA       NA
NV                   3.734e+00  5.001e+00   0.747 0.455258
NH                   1.591e+00  5.424e+00   0.293 0.769313
NJ                   1.929e+00  3.274e+00   0.589 0.555793
NM                   6.765e+00  7.775e+00   0.870 0.384209
NY                   1.749e+00  2.823e+00   0.619 0.535597
NC                   1.744e-01  1.231e+00   0.142 0.887264
ND                  -5.706e-01  5.366e+00  -0.106 0.915316
OH                  -1.623e-01  3.028e+00  -0.054 0.957261
OK                   2.142e+00  4.203e+00   0.510 0.610287
OR                   2.796e+00  5.500e+00   0.508 0.611146
PA                   3.723e-01  3.329e+00   0.112 0.910942
RI                   3.316e+00  4.435e+00   0.748 0.454710
SC                  -1.537e+00  5.860e-01  -2.624 0.008700 **
```

```
SD                   2.542e-01  5.431e+00   0.047 0.962670
TN                   1.653e+00  2.106e+00   0.785 0.432425
TX                   4.739e+00  5.445e+00   0.870 0.384172
UT                   1.830e+00  5.791e+00   0.316 0.752044
VT                  -3.588e+01  2.740e+07   0.000 0.999999
VA                   2.144e-01  1.650e+00   0.130 0.896581
WA                   2.662e+00  5.101e+00   0.522 0.601753
WV                   2.553e+00  4.966e+00   0.514 0.607120
WI                   1.820e+00  4.372e+00   0.416 0.677216
WY                  -7.091e-01  5.624e+00  -0.126 0.899670
Period2              1.341e-01  1.588e-01   0.845 0.398279
Period3              2.363e-01  2.593e-01   0.911 0.362165
Period4              1.894e-01  3.424e-01   0.553 0.580154
Period5             -2.010e-01  4.483e-01  -0.448 0.653838
Period6             -5.545e-01  5.953e-01  -0.932 0.351545
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for Negative Binomial(13.9927) family taken to
 be 1)

    Null deviance: 1067.50  on 289  degrees of freedom
Residual deviance:  305.87  on 224  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 1177

Number of Fisher Scoring iterations: 1


              Theta:  13.99
          Std. Err.:  5.63

 2 x log-likelihood:  -1042.957
```

Model: Passage Count

```
###Model 2: Passage Count

###Basic- Demographic
> DemographicBasicPC1<-glm(formula = dvpassageC ~ DemBlack + DemAge +
 DemHispanic + StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic +
 PhotoID + AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
 IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE +
 NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD +
 TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 + Period3 +
 Period4 + Period5 + Period6, family= poisson, data = thesisdata16)
> summary(DemographicBasicPC1)

Call:
glm(formula = dvpassageC ~ DemBlack + DemAge + DemHispanic +
    StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic + PhotoID +
    AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
    IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO +
    MT + NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR +
    PA + RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI +
    WY + Period2 + Period3 + Period4 + Period5 + Period6, family =
 poisson,
    data = thesisdata16)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-1.46227  -0.62647  -0.26083  -0.00004   2.69687

Coefficients:
                    Estimate Std. Error z value Pr(>|z|)
(Intercept)         1.761e+01  2.181e+01   0.807  0.41962
DemBlack           -1.001e+00  7.996e-01  -1.251  0.21080
DemAge              1.011e-01  3.175e-01   0.318  0.75024
DemHispanic         1.954e-01  3.770e-01   0.518  0.60431
StateGDP            1.680e-04  9.014e-05   1.864  0.06232 .
ChgTurnoutBlack     2.458e+01  8.826e+00   2.785  0.00535 **
ChgTurnoutHispanic  3.671e+00  7.913e+00   0.464  0.64267
PhotoID            -2.890e-01  2.631e-01  -1.099  0.27193
AK                 -4.738e+01  5.654e+03  -0.008  0.99331
AZ                 -4.712e+01  5.643e+03  -0.008  0.99334
AR                 -1.220e+01  8.941e+00  -1.365  0.17227
CA                 -3.020e+01  2.152e+01  -1.403  0.16047
CO                 -2.784e+01  1.950e+01  -1.428  0.15332
```

```
CT                -4.156e+01  5.970e+03  -0.007  0.99445
DE                -2.985e+01  5.310e+03  -0.006  0.99551
FL                -1.450e+01  1.121e+01  -1.294  0.19581
GA                 3.259e+00  4.023e+00   0.810  0.41778
HI                -4.733e+01  5.903e+03  -0.008  0.99360
ID                -2.775e+01  2.106e+01  -1.318  0.18755
IL                -1.763e+01  1.107e+01  -1.593  0.11105
IN                -1.955e+01  1.393e+01  -1.404  0.16042
IA                -4.490e+01  5.765e+03  -0.008  0.99379
KS                -2.318e+01  1.675e+01  -1.384  0.16631
KY                -1.951e+01  1.475e+01  -1.323  0.18595
LA                -1.501e+01  6.010e+03  -0.002  0.99801
ME                -2.557e+01  2.006e+01  -1.275  0.20242
MD                -1.962e+01  4.529e+03  -0.004  0.99654
MA                -4.347e+01  5.814e+03  -0.007  0.99403
MI                -3.218e+01  5.796e+03  -0.006  0.99557
MN                -2.432e+01  1.709e+01  -1.423  0.15468
MS                 9.722e+00  8.491e+00   1.145  0.25221
MO                -1.562e+01  1.177e+01  -1.328  0.18420
MT                -2.653e+01  2.070e+01  -1.282  0.19991
NE                -2.549e+01  1.774e+01  -1.437  0.15066
NV                -2.560e+01  1.749e+01  -1.464  0.14324
NH                -2.695e+01  2.007e+01  -1.343  0.17929
NJ                -3.753e+01  5.944e+03  -0.006  0.99496
NM                -3.348e+01  2.628e+01  -1.274  0.20261
NY                -3.567e+01  5.226e+03  -0.007  0.99455
NC                -6.375e+00  4.264e+00  -1.495  0.13488
ND                -2.904e+01  1.985e+01  -1.463  0.14350
OH                -1.496e+01  1.122e+01  -1.333  0.18249
OK                -2.177e+01  1.538e+01  -1.415  0.15710
OR                -4.753e+01  5.492e+03  -0.009  0.99310
PA                -1.851e+01  1.230e+01  -1.505  0.13235
RI                -2.336e+01  1.615e+01  -1.446  0.14805
SC                 2.599e-02  1.796e+00   0.014  0.98846
SD                -2.623e+01  2.001e+01  -1.311  0.18989
TN                -1.008e+01  7.696e+00  -1.309  0.19046
TX                -2.295e+01  1.812e+01  -1.266  0.20541
UT                -2.791e+01  2.086e+01  -1.338  0.18092
VT                -4.548e+01  5.672e+03  -0.008  0.99360
VA                -9.740e+00  6.043e+00  -1.612  0.10701
WA                -2.784e+01  1.864e+01  -1.494  0.13523
WV                -2.246e+01  1.829e+01  -1.228  0.21940
WI                -2.158e+01  1.612e+01  -1.338  0.18074
WY                -4.998e+01  5.741e+03  -0.009  0.99305
```

```
Period2            -6.778e-01  5.472e-01  -1.239  0.21547
Period3            -1.110e+00  6.769e-01  -1.640  0.10106
Period4             5.826e-01  7.048e-01   0.827  0.40851
Period5             4.461e-03  1.023e+00   0.004  0.99652
Period6            -1.393e+00  1.378e+00  -1.010  0.31231
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

    Null deviance: 286.05  on 299  degrees of freedom
Residual deviance: 156.20  on 238  degrees of freedom
AIC: 402.26

Number of Fisher Scoring iterations: 18



###Basic Politics
> PoliticsBasicPC1<-glm(formula = dvpassageC ~ StateGDP + Preclearance
 + PcntGOP + Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
 CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS + KY + LA +
 ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ + NM + NY +
 NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT + VT + VA +
 WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 + Period6,
 family = poisson, data = thesisdata16)
> summary(PoliticsBasicPC1)

Call:
glm(formula = dvpassageC ~ StateGDP + Preclearance + PcntGOP +
    Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
    CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
    KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV +
    NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC +
    SD + TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 +
    Period3 + Period4 + Period5 + Period6, family = poisson,
    data = thesisdata16)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-1.51511  -0.58309  -0.26710  -0.00004   2.48826

Coefficients: (1 not defined because of singularities)
              Estimate Std. Error z value Pr(>|z|)
```

```
(Intercept)  -8.475e+00  3.283e+00  -2.582  0.00983 **
StateGDP      9.859e-05  7.504e-05   1.314  0.18888
Preclearance  4.783e-02  7.943e-01   0.060  0.95198
PcntGOP       7.392e-02  2.840e-02   2.602  0.00926 **
Governor      9.492e-01  4.048e-01   2.345  0.01902 *
fraud        -1.045e-01  7.463e-02  -1.400  0.16152
PhotoID      -4.963e-01  2.915e-01  -1.703  0.08862 .
Battleground  2.380e-01  4.866e-01   0.489  0.62468
AK           -2.303e+01  5.568e+03  -0.004  0.99670
AZ           -1.885e+01  5.107e+03  -0.004  0.99706
AR            5.929e-01  1.382e+00   0.429  0.66799
CA           -5.997e-01  2.017e+00  -0.297  0.76622
CO           -1.719e-01  1.695e+00  -0.101  0.91921
CT           -2.018e+01  5.871e+03  -0.003  0.99726
DE           -2.038e+01  5.258e+03  -0.004  0.99691
FL           -7.637e-01  1.218e+00  -0.627  0.53061
GA           -2.851e-01  1.146e+00  -0.249  0.80360
HI           -1.747e+01  5.502e+03  -0.003  0.99747
ID           -2.576e+00  1.426e+00  -1.806  0.07091 .
IL           -8.105e-01  1.895e+00  -0.428  0.66888
IN           -1.480e+00  1.449e+00  -1.022  0.30700
IA           -2.012e+01  5.575e+03  -0.004  0.99712
KS           -2.594e+00  1.397e+00  -1.856  0.06341 .
KY           -1.978e-01  1.386e+00  -0.143  0.88650
LA           -1.894e+01  6.281e+03  -0.003  0.99759
ME           -8.081e-03  1.157e+00  -0.007  0.99443
MD           -1.835e+01  5.611e+03  -0.003  0.99739
MA           -1.830e+01  5.539e+03  -0.003  0.99736
MI           -1.891e+01  5.101e+03  -0.004  0.99704
MN           -9.011e-01  1.685e+00  -0.535  0.59273
MS            7.246e-01  1.288e+00   0.563  0.57376
MO           -9.009e-01  1.176e+00  -0.766  0.44370
MT            9.184e-03  1.207e+00   0.008  0.99393
NE                   NA         NA      NA       NA
NV           -8.414e-01  1.888e+00  -0.446  0.65579
NH           -1.650e+00  1.584e+00  -1.042  0.29742
NJ           -2.020e+01  6.408e+03  -0.003  0.99748
NM            1.482e+00  1.596e+00   0.929  0.35297
NY           -1.992e+01  5.521e+03  -0.004  0.99712
NC            6.579e-01  1.078e+00   0.610  0.54160
ND           -4.085e+00  2.188e+00  -1.866  0.06198 .
OH           -3.565e-01  1.289e+00  -0.277  0.78213
OK           -2.217e+00  1.372e+00  -1.616  0.10616
OR           -1.811e+01  5.275e+03  -0.003  0.99726
```

```
PA           -1.528e+00  1.635e+00  -0.935  0.34997
RI            2.285e+00  1.871e+00   1.221  0.22216
SC           -1.116e+00  1.188e+00  -0.940  0.34744
SD           -2.090e+00  1.355e+00  -1.542  0.12301
TN            5.300e-02  1.063e+00   0.050  0.96026
TX           -9.837e-01  1.283e+00  -0.767  0.44335
UT           -3.068e+00  1.287e+00  -2.383  0.01717 *
VT           -1.852e+01  5.632e+03  -0.003  0.99738
VA           -1.286e+00  1.529e+00  -0.841  0.40023
WA           -3.077e-01  2.017e+00  -0.153  0.87874
WV            2.392e+00  1.261e+00   1.897  0.05783 .
WI           -1.795e-01  1.244e+00  -0.144  0.88522
WY           -2.397e+01  5.232e+03  -0.005  0.99634
Period2      -1.895e-01  4.915e-01  -0.386  0.69981
Period3       9.382e-01  9.045e-01   1.037  0.29961
Period4       1.654e+00  8.087e-01   2.046  0.04078 *
Period5       9.946e-02  5.857e-01   0.170  0.86515
Period6      -1.150e+00  7.452e-01  -1.543  0.12275
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

    Null deviance: 268.00  on 289  degrees of freedom
Residual deviance: 132.07  on 229  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 370.53

Number of Fisher Scoring iterations: 18


###Basic- Both
> BothBasicPC1<-glm(formula = dvpassageC ~ DemBlack + DemAge +
 DemHispanic + StateGDP + Preclearance + PcntGOP + Governor + fraud +
 PhotoID + ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
 AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
 KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ +
 NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT +
 VT + VA + WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 +
 Period6, family = poisson, data = thesisdata16)
> summary(BothBasicPC1)

Call:
glm(formula = dvpassageC ~ DemBlack + DemAge + DemHispanic +
```

```
    StateGDP + Preclearance + PcntGOP + Governor + fraud + PhotoID +
    ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
    AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN +
    IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT +
    NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA +
    RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI + WY +
    Period2 + Period3 + Period4 + Period5 + Period6, family = poisson,
    data = thesisdata16)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-1.48134  -0.57090  -0.20340  -0.00004   2.40952

Coefficients: (1 not defined because of singularities)
                    Estimate Std. Error z value Pr(>|z|)
(Intercept)       -2.182e+01  2.456e+01  -0.889   0.3741
DemBlack           2.411e-01  8.645e-01   0.279   0.7804
DemAge             2.308e-01  3.742e-01   0.617   0.5374
DemHispanic        3.157e-01  4.284e-01   0.737   0.4611
StateGDP           1.927e-04  1.022e-04   1.885   0.0594 .
Preclearance       1.249e-01  8.679e-01   0.144   0.8855
PcntGOP            7.481e-02  2.971e-02   2.518   0.0118 *
Governor           7.014e-01  4.264e-01   1.645   0.1000
fraud             -8.775e-02  8.053e-02  -1.090   0.2759
PhotoID           -6.721e-01  3.389e-01  -1.983   0.0474 *
ChgTurnoutBlack    1.947e+01  1.046e+01   1.861   0.0628 .
ChgTurnoutHispanic 1.889e+00  7.968e+00   0.237   0.8126
Battleground       9.500e-02  5.305e-01   0.179   0.8579
AK                -1.980e+01  5.565e+03  -0.004   0.9972
AZ                -2.232e+01  5.277e+03  -0.004   0.9966
AR                 2.269e+00  9.768e+00   0.232   0.8163
CA                -7.630e+00  2.314e+01  -0.330   0.7416
CO                -8.974e-01  2.106e+01  -0.043   0.9660
CT                -2.225e+01  6.158e+03  -0.004   0.9971
DE                -2.360e+01  5.336e+03  -0.004   0.9965
FL                -5.034e+00  1.214e+01  -0.415   0.6784
GA                -2.269e+00  4.418e+00  -0.514   0.6075
HI                -1.483e+01  5.647e+03  -0.003   0.9979
ID                 1.732e+00  2.269e+01   0.076   0.9392
IL                -2.955e+00  1.187e+01  -0.249   0.8034
IN                 1.556e+00  1.504e+01   0.103   0.9176
IA                -1.602e+01  5.564e+03  -0.003   0.9977
KS                -4.200e-01  1.802e+01  -0.023   0.9814
KY                 4.403e+00  1.604e+01   0.274   0.7838
```

```
LA                -2.119e+01  6.681e+03  -0.003   0.9975
ME                 6.268e+00  2.169e+01   0.289   0.7726
MD                -2.200e+01  4.503e+03  -0.005   0.9961
MA                -1.822e+01  5.587e+03  -0.003   0.9974
MI                -1.650e+01  4.970e+03  -0.003   0.9974
MN                 2.517e+00  1.845e+01   0.136   0.8915
MS                -1.968e+00  9.088e+00  -0.217   0.8285
MO                 2.030e+00  1.263e+01   0.161   0.8724
MT                 5.925e+00  2.244e+01   0.264   0.7917
NE                        NA         NA      NA       NA
NV                -4.441e+00  1.886e+01  -0.235   0.8139
NH                 3.541e+00  2.167e+01   0.163   0.8702
NJ                -2.377e+01  6.604e+03  -0.004   0.9971
NM                -6.613e+00  2.864e+01  -0.231   0.8174
NY                -2.471e+01  5.812e+03  -0.004   0.9966
NC                -7.488e-01  4.623e+00  -0.162   0.8713
ND                 1.578e-02  2.128e+01   0.001   0.9994
OH                 2.316e+00  1.199e+01   0.193   0.8468
OK                 3.221e-01  1.664e+01   0.019   0.9846
OR                -1.621e+01  5.309e+03  -0.003   0.9976
PA                 1.505e-01  1.311e+01   0.011   0.9908
RI                 2.845e+00  1.754e+01   0.162   0.8712
SC                -2.531e+00  2.224e+00  -1.138   0.2550
SD                 3.418e+00  2.152e+01   0.159   0.8738
TN                 1.671e+00  8.374e+00   0.200   0.8418
TX                -9.044e+00  1.994e+01  -0.454   0.6501
UT                 8.016e-01  2.257e+01   0.036   0.9717
VT                -1.246e+01  5.633e+03  -0.002   0.9982
VA                -2.481e+00  6.410e+00  -0.387   0.6987
WA                 1.235e+00  2.023e+01   0.061   0.9513
WV                 8.170e+00  1.992e+01   0.410   0.6817
WI                 3.096e+00  1.735e+01   0.178   0.8584
WY                -2.167e+01  5.400e+03  -0.004   0.9968
Period2           -5.853e-01  5.722e-01  -1.023   0.3064
Period3           -1.665e-02  9.962e-01  -0.017   0.9867
Period4            4.724e-01  1.074e+00   0.440   0.6602
Period5           -1.317e+00  1.238e+00  -1.063   0.2876
Period6           -2.887e+00  1.646e+00  -1.754   0.0794 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

    Null deviance: 268.00  on 289  degrees of freedom
```

```
Residual deviance: 125.44  on 224  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 373.9

Number of Fisher Scoring iterations: 18
```

Model: Passage Binary

```
###Model 3: Passage Binary

###Basic- Demographic
> DemographicBasicPB1<-glm(formula = dvpassageB ~ DemBlack + DemAge +
 DemHispanic + StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic +
 PhotoID + AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
 IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE +
 NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD +
 TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 + Period3 +
 Period4 + Period5 + Period6, family = binomial(link=probit), data =
 thesisdata16)
Warning message:
glm.fit: fitted probabilities numerically 0 or 1 occurred
> summary(DemographicBasicPB1)

Call:
glm(formula = dvpassageB ~ DemBlack + DemAge + DemHispanic +
    StateGDP + ChgTurnoutBlack + ChgTurnoutHispanic + PhotoID +
    AK + AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL +
    IN + IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO +
    MT + NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR +
    PA + RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI +
    WY + Period2 + Period3 + Period4 + Period5 + Period6, family =
 binomial(link = probit),
    data = thesisdata16)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-1.4991  -0.5968  -0.1102   0.0000   2.4394

Coefficients:
                     Estimate Std. Error z value Pr(>|z|)
(Intercept)         3.670e+00  1.652e+01   0.222   0.8242
DemBlack           -5.296e-01  5.762e-01  -0.919   0.3580
DemAge              1.305e-01  2.758e-01   0.473   0.6360
DemHispanic        -1.114e-01  3.134e-01  -0.355   0.7223
StateGDP            2.327e-04  9.144e-05   2.545   0.0109 *
ChgTurnoutBlack     1.971e+01  7.735e+00   2.549   0.0108 *
ChgTurnoutHispanic  2.672e+00  7.391e+00   0.361   0.7177
PhotoID            -1.786e-01  2.432e-01  -0.734   0.4626
AK                 -2.497e+01  8.297e+02  -0.030   0.9760
AZ                 -1.576e+01  8.893e+02  -0.018   0.9859
```

```
AR          -5.735e+00  6.378e+00  -0.899   0.3685
CA          -1.102e+01  1.556e+01  -0.708   0.4788
CO          -1.271e+01  1.383e+01  -0.918   0.3584
CT          -1.953e+01  9.531e+02  -0.020   0.9836
DE          -1.511e+01  8.509e+02  -0.018   0.9858
FL          -4.535e+00  8.231e+00  -0.551   0.5817
GA           2.721e+00  3.185e+00   0.854   0.3930
HI          -2.133e+01  9.622e+02  -0.022   0.9823
ID          -1.279e+01  1.500e+01  -0.853   0.3937
IL          -8.836e+00  7.877e+00  -1.122   0.2620
IN          -1.088e+01  9.993e+00  -1.089   0.2764
IA          -2.092e+01  8.943e+02  -0.023   0.9813
KS          -1.235e+01  1.193e+01  -1.036   0.3003
KY          -1.066e+01  1.067e+01  -0.999   0.3176
LA          -4.575e+00  9.655e+02  -0.005   0.9962
ME          -1.421e+01  1.452e+01  -0.978   0.3280
MD          -8.490e+00  7.628e+02  -0.011   0.9911
MA          -2.114e+01  8.848e+02  -0.024   0.9809
MI          -1.321e+01  9.100e+02  -0.015   0.9884
MN          -1.451e+01  1.222e+01  -1.188   0.2350
MS           5.646e+00  6.152e+00   0.918   0.3587
MO          -9.104e+00  8.501e+00  -1.071   0.2842
MT          -1.484e+01  1.494e+01  -0.993   0.3206
NE          -1.464e+01  1.266e+01  -1.156   0.2477
NV          -1.063e+01  1.254e+01  -0.848   0.3964
NH          -1.610e+01  1.449e+01  -1.111   0.2665
NJ          -1.516e+01  9.631e+02  -0.016   0.9874
NM          -9.494e+00  1.912e+01  -0.497   0.6194
NY          -1.534e+01  8.748e+02  -0.018   0.9860
NC          -3.749e+00  3.109e+00  -1.206   0.2279
ND          -1.861e+01  1.433e+01  -1.299   0.1941
OH          -9.039e+00  8.129e+00  -1.112   0.2661
OK          -1.090e+01  1.096e+01  -0.995   0.3200
OR          -2.161e+01  7.964e+02  -0.027   0.9784
PA          -1.111e+01  8.823e+00  -1.259   0.2080
RI          -1.252e+01  1.149e+01  -1.090   0.2758
SC           1.066e-01  1.450e+00   0.074   0.9414
SD          -1.526e+01  1.443e+01  -1.057   0.2905
TN          -5.896e+00  5.555e+00  -1.061   0.2885
TX          -7.222e+00  1.346e+01  -0.537   0.5915
UT          -1.361e+01  1.487e+01  -0.915   0.3600
VT          -2.150e+01  8.543e+02  -0.025   0.9799
VA          -6.325e+00  4.330e+00  -1.461   0.1440
WA          -1.549e+01  1.328e+01  -1.167   0.2433
```

```
WV                  -1.234e+01  1.326e+01  -0.931   0.3521
WI                  -1.184e+01  1.159e+01  -1.021   0.3071
WY                  -2.506e+01  8.656e+02  -0.029   0.9769
Period2             -4.716e-01  4.462e-01  -1.057   0.2905
Period3             -4.434e-01  5.490e-01  -0.808   0.4193
Period4              8.709e-01  6.577e-01   1.324   0.1854
Period5              3.556e-03  9.307e-01   0.004   0.9970
Period6             -8.946e-01  1.217e+00  -0.735   0.4622
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 282.84  on 299  degrees of freedom
Residual deviance: 187.37  on 238  degrees of freedom
AIC: 311.37

Number of Fisher Scoring iterations: 18


###Basic- Political
> PoliticsBasicPB1<-glm(formula = dvpassageB ~ StateGDP + Preclearance
 + PcntGOP + Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
 CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS + KY + LA +
 ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ + NM + NY +
 NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT + VT + VA +
 WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 + Period6,
 family=binomial(link=probit), data = thesisdata16)
Warning message:
glm.fit: fitted probabilities numerically 0 or 1 occurred
> summary(PoliticsBasicPB1)

Call:
glm(formula = dvpassageB ~ StateGDP + Preclearance + PcntGOP +
    Governor + fraud + PhotoID + Battleground + AK + AZ + AR +
    CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
    KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV +
    NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA + RI + SC +
    SD + TN + TX + UT + VT + VA + WA + WV + WI + WY + Period2 +
    Period3 + Period4 + Period5 + Period6, family = binomial(link =
 probit),
    data = thesisdata16)

Deviance Residuals:
```

```
     Min        1Q    Median        3Q       Max
-1.53226  -0.54582  -0.07218   0.00000   2.71348

Coefficients: (1 not defined because of singularities)
               Estimate Std. Error z value Pr(>|z|)
(Intercept)  -1.008e+01  3.099e+00  -3.254  0.00114 **
StateGDP      1.439e-04  7.482e-05   1.923  0.05444 .
Preclearance  3.641e-01  7.338e-01   0.496  0.61981
PcntGOP       7.577e-02  2.519e-02   3.008  0.00263 **
Governor      7.298e-01  3.500e-01   2.085  0.03706 *
fraud        -4.653e-02  5.919e-02  -0.786  0.43179
PhotoID      -4.332e-01  2.887e-01  -1.500  0.13348
Battleground -1.292e-01  4.453e-01  -0.290  0.77179
AK           -1.147e+01  8.671e+02  -0.013  0.98944
AZ           -7.074e+00  8.247e+02  -0.009  0.99316
AR            8.118e-01  1.084e+00   0.749  0.45406
CA           -1.311e+00  1.807e+00  -0.725  0.46824
CO           -3.913e-01  1.599e+00  -0.245  0.80667
CT           -8.167e+00  9.123e+02  -0.009  0.99286
DE           -8.879e+00  8.397e+02  -0.011  0.99156
FL           -8.769e-01  1.144e+00  -0.766  0.44347
GA           -4.719e-01  1.183e+00  -0.399  0.68982
HI           -4.601e+00  9.034e+02  -0.005  0.99594
ID           -2.185e+00  1.192e+00  -1.832  0.06691 .
IL           -1.292e+00  1.645e+00  -0.786  0.43205
IN           -1.442e+00  1.177e+00  -1.225  0.22052
IA           -7.511e+00  8.053e+02  -0.009  0.99256
KS           -2.768e+00  1.403e+00  -1.972  0.04856 *
KY            9.241e-02  1.060e+00   0.087  0.93054
LA           -6.586e+00  9.694e+02  -0.007  0.99458
ME            7.701e-01  1.031e+00   0.747  0.45496
MD           -5.920e+00  9.233e+02  -0.006  0.99488
MA           -6.262e+00  8.940e+02  -0.007  0.99441
MI           -6.247e+00  8.374e+02  -0.007  0.99405
MN           -1.041e+00  1.569e+00  -0.663  0.50703
MS            8.132e-01  1.033e+00   0.788  0.43097
MO           -1.109e+00  1.100e+00  -1.008  0.31345
MT           -3.753e-01  1.111e+00  -0.338  0.73545
NE                   NA         NA      NA       NA
NV           -1.087e+00  1.659e+00  -0.655  0.51224
NH           -1.096e+00  1.472e+00  -0.745  0.45648
NJ           -7.588e+00  1.004e+03  -0.008  0.99397
NM            7.615e-01  1.351e+00   0.564  0.57309
NY           -7.685e+00  9.058e+02  -0.008  0.99323
```

```
NC           -2.601e-01  1.118e+00  -0.233  0.81604
ND           -4.513e+00  2.279e+00  -1.980  0.04767 *
OH           -6.198e-01  1.266e+00  -0.490  0.62435
OK           -1.713e+00  1.176e+00  -1.456  0.14536
OR           -6.379e+00  8.325e+02  -0.008  0.99389
PA           -1.422e+00  1.406e+00  -1.011  0.31196
RI            1.312e+00  1.677e+00   0.782  0.43421
SC           -1.215e+00  9.805e-01  -1.239  0.21540
SD           -2.410e+00  1.264e+00  -1.906  0.05660 .
TN           -4.294e-01  1.099e+00  -0.391  0.69606
TX           -2.834e+00  1.393e+00  -2.035  0.04189 *
UT           -3.320e+00  1.238e+00  -2.682  0.00733 **
VT           -5.006e+00  9.267e+02  -0.005  0.99569
VA           -2.608e+00  1.573e+00  -1.657  0.09746 .
WA           -1.170e+00  1.782e+00  -0.656  0.51156
WV            2.173e+00  1.100e+00   1.976  0.04812 *
WI            3.613e-02  1.233e+00   0.029  0.97663
WY           -1.232e+01  8.016e+02  -0.015  0.98774
Period2      -9.235e-02  3.952e-01  -0.234  0.81523
Period3       6.212e-01  6.923e-01   0.897  0.36959
Period4       1.119e+00  6.742e-01   1.660  0.09696 .
Period5      -1.402e-01  5.001e-01  -0.280  0.77924
Period6      -1.066e+00  5.716e-01  -1.864  0.06225 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 272.80  on 289  degrees of freedom
Residual deviance: 167.79  on 229  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 289.79

Number of Fisher Scoring iterations: 18

###Basic- Both
> BothBasicPB1<-glm(formula = dvpassageB ~ DemBlack + DemAge +
 DemHispanic + StateGDP + Preclearance + PcntGOP + Governor + fraud +
 PhotoID + ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
 AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS +
 KY + LA + ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ +
 NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT +
 VT + VA + WA + WV + WI + WY + Period2 + Period3 + Period4 + Period5 +
 Period6, family = binomial(link=probit), data = thesisdata16)
```

```
Warning message:
glm.fit: fitted probabilities numerically 0 or 1 occurred
> summary(BothBasicPB1)

Call:
glm(formula = dvpassageB ~ DemBlack + DemAge + DemHispanic +
    StateGDP + Preclearance + PcntGOP + Governor + fraud + PhotoID +
    ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK +
    AZ + AR + CA + CO + CT + DE + FL + GA + HI + ID + IL + IN +
    IA + KS + KY + LA + ME + MD + MA + MI + MN + MS + MO + MT +
    NE + NV + NH + NJ + NM + NY + NC + ND + OH + OK + OR + PA +
    RI + SC + SD + TN + TX + UT + VT + VA + WA + WV + WI + WY +
    Period2 + Period3 + Period4 + Period5 + Period6, family =
 binomial(link = probit),
    data = thesisdata16)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-1.63251  -0.52743  -0.03988   0.00000   2.63783

Coefficients: (1 not defined because of singularities)
                    Estimate Std. Error z value Pr(>|z|)
(Intercept)       -1.525e+01  1.906e+01  -0.800  0.42347
DemBlack          -3.877e-02  6.729e-01  -0.058  0.95406
DemAge             2.295e-01  2.898e-01   0.792  0.42833
DemHispanic        1.585e-02  3.524e-01   0.045  0.96413
StateGDP           2.240e-04  1.019e-04   2.198  0.02794 *
Preclearance       4.675e-01  7.961e-01   0.587  0.55711
PcntGOP            7.947e-02  2.709e-02   2.934  0.00335 **
Governor           5.990e-01  3.677e-01   1.629  0.10327
fraud             -1.769e-02  6.455e-02  -0.274  0.78398
PhotoID           -4.681e-01  3.060e-01  -1.530  0.12610
ChgTurnoutBlack    1.764e+01  8.818e+00   2.000  0.04546 *
ChgTurnoutHispanic -6.263e-02  7.538e+00  -0.008  0.99337
Battleground      -2.622e-01  4.662e-01  -0.562  0.57389
AK                -1.373e+01  8.438e+02  -0.016  0.98702
AZ                -9.070e+00  8.267e+02  -0.011  0.99125
AR                 1.604e-01  7.639e+00   0.021  0.98324
CA                -3.552e+00  1.812e+01  -0.196  0.84461
CO                -2.099e+00  1.639e+01  -0.128  0.89810
CT                -1.114e+01  9.403e+02  -0.012  0.99055
DE                -1.134e+01  8.973e+02  -0.013  0.98992
FL                -2.548e+00  9.669e+00  -0.264  0.79215
GA                -3.653e-02  3.633e+00  -0.010  0.99198
```

HI	-6.899e+00	8.923e+02	-0.008	0.99383
ID	-3.021e+00	1.762e+01	-0.171	0.86387
IL	-2.767e+00	9.310e+00	-0.297	0.76633
IN	-2.686e+00	1.176e+01	-0.228	0.81934
IA	-9.585e+00	7.891e+02	-0.012	0.99031
KS	-4.149e+00	1.409e+01	-0.294	0.76845
KY	-5.699e-01	1.254e+01	-0.045	0.96376
LA	-6.864e+00	1.005e+03	-0.007	0.99455
ME	-7.259e-01	1.704e+01	-0.043	0.96602
MD	-7.765e+00	7.992e+02	-0.010	0.99225
MA	-9.003e+00	8.848e+02	-0.010	0.99188
MI	-7.260e+00	7.976e+02	-0.009	0.99274
MN	-2.900e+00	1.439e+01	-0.202	0.84030
MS	1.128e+00	7.197e+00	0.157	0.87545
MO	-2.136e+00	9.999e+00	-0.214	0.83088
MT	-1.811e+00	1.758e+01	-0.103	0.91795
NE	NA	NA	NA	NA
NV	-3.002e+00	1.476e+01	-0.203	0.83879
NH	-2.846e+00	1.700e+01	-0.167	0.86702
NJ	-9.625e+00	1.060e+03	-0.009	0.99275
NM	-1.367e+00	2.241e+01	-0.061	0.95137
NY	-1.019e+01	9.329e+02	-0.011	0.99128
NC	-1.385e+00	3.747e+00	-0.370	0.71171
ND	-7.341e+00	1.680e+01	-0.437	0.66220
OH	-2.008e+00	9.526e+00	-0.211	0.83302
OK	-2.885e+00	1.297e+01	-0.222	0.82399
OR	-9.178e+00	7.769e+02	-0.012	0.99057
PA	-3.323e+00	1.041e+01	-0.319	0.74962
RI	-7.095e-01	1.366e+01	-0.052	0.95856
SC	-1.783e+00	1.819e+00	-0.980	0.32704
SD	-4.108e+00	1.691e+01	-0.243	0.80806
TN	-1.287e+00	6.665e+00	-0.193	0.84689
TX	-4.613e+00	1.564e+01	-0.295	0.76799
UT	-3.786e+00	1.745e+01	-0.217	0.82827
VT	-6.475e+00	9.212e+02	-0.007	0.99439
VA	-4.011e+00	5.103e+00	-0.786	0.43187
WA	-3.428e+00	1.580e+01	-0.217	0.82824
WV	8.894e-01	1.561e+01	0.057	0.95457
WI	-1.556e+00	1.365e+01	-0.114	0.90920
WY	-1.524e+01	8.023e+02	-0.019	0.98484
Period2	-2.277e-01	4.775e-01	-0.477	0.63352
Period3	1.356e-01	7.811e-01	0.174	0.86221
Period4	5.200e-01	9.065e-01	0.574	0.56622
Period5	-8.428e-01	1.046e+00	-0.806	0.42053

```
Period6            -2.063e+00  1.375e+00  -1.500  0.13355
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 272.80  on 289  degrees of freedom
Residual deviance: 163.15  on 224  degrees of freedom
  (10 observations deleted due to missingness)
AIC: 295.15

Number of Fisher Scoring iterations: 18
```

Models: Additional Analyses

```
###Time Periods 4-5; Politics and Demographics, Introduction

> TBasic1<-glm(formula = dvIntro ~ DemBlack + DemAge + DemHispanic +
 StateGDP + Preclearance + PcntGOP + Governor + fraud + PhotoID +
 ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AK + AZ + AR +
 CA + CO + CT + DE + FL + GA + HI + ID + IL + IN + IA + KS + KY + LA +
 ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ + NM + NY +
 NC + ND + OH + OK + OR + PA + RI + SC + SD + TN + TX + UT + VT + VA +
 WA + WV + WI + WY + Period5, family = poisson, data = thesisdata17)
> summary(TBasic1)

Call:
glm(formula = dvIntro ~ DemBlack + DemAge + DemHispanic + StateGDP +
    Preclearance + PcntGOP + Governor + fraud + PhotoID +
 ChgTurnoutBlack +
    ChgTurnoutHispanic + Battleground + AK + AZ + AR + CA + CO +
    CT + DE + FL + GA + HI + ID + IL + IN + IA + KS + KY + LA +
    ME + MD + MA + MI + MN + MS + MO + MT + NE + NV + NH + NJ +
    NM + NY + NC + ND + OH + OK + OR + PA + RI + SC + SD + TN +
    TX + UT + VT + VA + WA + WV + WI + WY + Period5, family = poisson,
    data = thesisdata17)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-2.61533  -0.60410  -0.00012   0.33980   1.46978

Coefficients: (1 not defined because of singularities)
                    Estimate Std. Error z value Pr(>|z|)
(Intercept)         7.439e+01  4.125e+01   1.804  0.07130 .
DemBlack           -2.628e+00  1.310e+00  -2.005  0.04494 *
DemAge             -8.436e-01  1.049e+00  -0.804  0.42135
DemHispanic         9.694e-01  8.587e-01   1.129  0.25895
StateGDP            1.168e-04  1.439e-04   0.812  0.41700
Preclearance        1.219e-01  4.092e-01   0.298  0.76575
PcntGOP             3.989e-02  2.175e-02   1.834  0.06661 .
Governor           -3.939e-01  8.316e-01  -0.474  0.63575
fraud              -5.730e-02  3.691e-02  -1.552  0.12057
PhotoID            -5.980e-01  2.184e-01  -2.738  0.00618 **
ChgTurnoutBlack     3.527e+00  6.080e+00   0.580  0.56178
ChgTurnoutHispanic  1.413e+01  6.038e+00   2.340  0.01927 *
Battleground        5.870e-01  3.333e-01   1.761  0.07823 .
AK                 -7.303e+01  3.140e+01  -2.326  0.02003 *
AZ                 -8.442e+01  4.351e+01  -1.940  0.05236 .
```

```
AR          -3.189e+01  1.549e+01  -2.058  0.03957 *
CA          -9.026e+01  4.716e+01  -1.914  0.05565 .
CO          -7.959e+01  3.788e+01  -2.101  0.03564 *
CT          -5.325e+01  2.568e+01  -2.074  0.03809 *
DE          -2.002e+01  9.842e+00  -2.034  0.04194 *
FL          -4.417e+01  2.623e+01  -1.684  0.09211 .
GA           3.654e+00  5.422e+00   0.674  0.50041
HI          -7.065e+01  3.432e+01  -2.058  0.03955 *
ID          -9.654e+01  3.811e+03  -0.025  0.97979
IL          -4.539e+01  2.233e+01  -2.032  0.04213 *
IN          -5.004e+01  2.341e+01  -2.137  0.03257 *
IA          -6.395e+01  3.095e+01  -2.066  0.03883 *
KS          -6.372e+01  2.985e+01  -2.135  0.03275 *
KY          -6.857e+01  4.022e+03  -0.017  0.98640
LA           1.093e+01  7.583e+00   1.441  0.14952
ME          -6.242e+01  3.176e+01  -1.965  0.04939 *
MD           2.387e+00  5.303e+00   0.450  0.65262
MA          -5.636e+01  2.726e+01  -2.068  0.03865 *
MI          -3.405e+01  1.625e+01  -2.096  0.03611 *
MN          -5.830e+01  2.779e+01  -2.097  0.03596 *
MS           3.036e+01  1.465e+01   2.073  0.03819 *
MO          -3.975e+01  1.923e+01  -2.067  0.03872 *
MT          -6.819e+01  3.354e+01  -2.033  0.04204 *
NE                  NA         NA      NA       NA
NV          -7.154e+01  3.673e+01  -1.948  0.05144 .
NH          -6.836e+01  3.253e+01  -2.102  0.03559 *
NJ          -4.869e+01  2.428e+01  -2.005  0.04492 *
NM          -1.056e+02  5.814e+01  -1.816  0.06940 .
NY          -4.087e+01  2.114e+01  -1.933  0.05318 .
NC          -1.864e+01  8.594e+00  -2.168  0.03012 *
ND          -7.017e+01  3.192e+01  -2.198  0.02793 *
OH          -3.845e+01  1.801e+01  -2.135  0.03274 *
OK          -5.744e+01  2.711e+01  -2.118  0.03414 *
OR          -7.388e+01  3.567e+01  -2.071  0.03833 *
PA          -4.362e+01  2.062e+01  -2.115  0.03440 *
RI          -5.967e+01  2.940e+01  -2.029  0.04242 *
SC           2.012e+00  1.942e+00   1.036  0.30003
SD          -6.856e+01  3.219e+01  -2.130  0.03320 *
TN          -2.642e+01  1.281e+01  -2.063  0.03909 *
TX          -7.512e+01  4.092e+01  -1.836  0.06639 .
UT          -8.415e+01  3.788e+01  -2.222  0.02630 *
VT          -8.398e+01  3.762e+03  -0.022  0.98219
VA          -2.542e+01  1.123e+01  -2.263  0.02362 *
WA          -7.130e+01  3.307e+01  -2.156  0.03112 *
```

```
WV                  -5.510e+01  2.889e+01  -1.907  0.05651 .
WI                  -5.622e+01  2.702e+01  -2.081  0.03745 *
WY                  -7.959e+01  3.556e+01  -2.238  0.02521 *
Period5              2.160e-01  1.147e+00   0.188  0.85063
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

    Null deviance: 393.539  on 96  degrees of freedom
Residual deviance:  61.312  on 35  degrees of freedom
  (3 observations deleted due to missingness)
AIC: 419.25

Number of Fisher Scoring iterations: 16


###States with No passage; Politics and Demographics, Introduction

NPBasic1<-glm(formula = dvIntro ~ DemBlack + DemAge + DemHispanic +
 StateGDP + Preclearance + PcntGOP + Governor + fraud + PhotoID +
 ChgTurnoutBlack + ChgTurnoutHispanic + Battleground + AZ + CT + DE +
 HI + IA + LA + MD + MA + MI + NJ + NY + OR + VT + WY + Period2 +
 Period3 + Period4 + Period5 + Period6, family = poisson, data =
 thesisdata20)
> summary(NPBasic1)

Call:
glm(formula = dvIntro ~ DemBlack + DemAge + DemHispanic + StateGDP +
    Preclearance + PcntGOP + Governor + fraud + PhotoID +
 ChgTurnoutBlack +
    ChgTurnoutHispanic + Battleground + AZ + CT + DE + HI + IA +
    LA + MD + MA + MI + NJ + NY + OR + VT + WY + Period2 + Period3 +
    Period4 + Period5 + Period6, family = poisson, data =
 thesisdata20)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
-1.73595  -0.80651  -0.06308   0.51339   1.46351

Coefficients:
                     Estimate Std. Error z value Pr(>|z|)
(Intercept)         1.178e+01  5.965e+00   1.974   0.0484 *
DemBlack            3.862e-01  4.546e-01   0.850   0.3955
```

```
DemAge             -4.527e-01  3.902e-01  -1.160   0.2460
DemHispanic        -4.615e-01  3.042e-01  -1.517   0.1293
StateGDP           -6.992e-05  5.085e-05  -1.375   0.1692
Preclearance        9.138e-02  7.679e-01   0.119   0.9053
PcntGOP            -5.640e-02  2.993e-02  -1.885   0.0595 .
Governor           -4.017e-01  2.156e-01  -1.863   0.0624 .
fraud              -1.967e-02  2.886e-02  -0.682   0.4955
PhotoID             7.744e-01  9.565e-01   0.810   0.4181
ChgTurnoutBlack    -3.599e+00  3.863e+00  -0.932   0.3514
ChgTurnoutHispanic  1.184e+00  5.521e+00   0.214   0.8302
Battleground        5.257e-02  4.086e-01   0.129   0.8976
AZ                  1.242e+01  7.390e+00   1.681   0.0928 .
CT                  2.793e+00  4.569e+00   0.611   0.5409
DE                 -4.977e+00  8.977e+00  -0.554   0.5793
HI                  8.205e-01  2.972e+00   0.276   0.7825
IA                  2.657e+00  2.839e+00   0.936   0.3494
LA                 -1.222e+01  1.411e+01  -0.866   0.3866
MD                 -7.130e+00  1.240e+01  -0.575   0.5654
MA                  2.862e+00  3.333e+00   0.859   0.3904
MI                 -3.796e+00  6.372e+00  -0.596   0.5514
NJ                  3.827e+00  5.914e+00   0.647   0.5175
NY                  2.868e+00  6.930e+00   0.414   0.6790
OR                  5.554e+00  3.024e+00   1.836   0.0663 .
VT                 -1.891e+01  2.181e+03  -0.009   0.9931
WY                  4.733e+00  2.774e+00   1.706   0.0880 .
Period2            -1.199e-01  3.472e-01  -0.345   0.7298
Period3             5.570e-01  5.094e-01   1.093   0.2742
Period4             1.679e+00  7.499e-01   2.239   0.0252 *
Period5             1.640e+00  1.045e+00   1.570   0.1164
Period6             2.445e+00  1.388e+00   1.761   0.0783 .
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for poisson family taken to be 1)

    Null deviance: 352.834  on 87  degrees of freedom
Residual deviance:  58.557  on 56  degrees of freedom
  (2 observations deleted due to missingness)
AIC: 297.42

Number of Fisher Scoring iterations: 16
```