Political Influences of Presidential Disaster Declarations

By

Andrea Saiz

Applied Research Project
acs126@txstate.edu

TEXAS
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UNIVERSITY

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Faculty:
Patricia M. Shields, PhD
Paul DeHart, PhD
James Harkins, MPA
Abstract

Mother nature waits for no one to be prepared and does not stop and turn around when it comes to populated areas. The damage that can happen from natural occurring weather events can be minimal or severe depending on the type of event. Weather happens everywhere on this planet and everyone has the potential to be harmed by extreme weather events. The purpose of this study is to examine the influence of political factors on presidential disaster declarations. The scholarly literature suggests three political factors which can influence a president to issue a disaster declaration (Presidential Disaster Declarations). The three political factors are: swing states, presidential re-election years, and political alignments (same party governors as the president). Existing data was compiled from the FEMA Disaster Declaration database, the Spatial Hazard Events and Losses Database for the United States database, the American Presidency Project, Thoughtco, The National Governors Association, and the U.S. Atlas Election database. The methodology used to determine if any of the three political factors had an impact on disaster declarations was analysis of the existing data using a logistic regression model. The results showed that swing state status and presidential re-election years had no impact on presidential disaster declarations and political alignments (governor’s political party) had a positive relationship with presidential disaster declarations. Political alliances has a statistically significant advantage to states who have a governor of the same party as the president in receiving disaster declarations and funds from the federal government by 18 percent. But actual need should play a larger role when it comes to natural disasters.
About the Author

Andrea Saiz is a graduate of The University of Texas at Austin. She earned a Bachelor of Arts in Government with a minor in Classical Civilizations in May 2012. Her interests in politics and weather stems from one of her favorite movies of all time Twister and an undergraduate course she took while at UT about American Presidents and their presidential terms. Weather has always fascinated her, so mixing politics and weather came natural to her. Andrea currently works for the City of Round Rock. She interned for their Finance Department through the Texas State intern graduate program and was able to secure a job with the City of Round Rock after her internship ended.
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Chapter I
Introduction

Mother nature waits for no one to be prepared and does not stop and turn around when it comes to populated areas. The damage that can happen from natural occurring weather events can be minimal or extremely detrimental depending on how severe the event. Movies like Twister showcase the magnitude of the damage that can occur from a natural weather event such as a Tornado and provide hope by showcasing new technologies. Natural weather events affect everyone and every region in the United States. Although weather has become more predictable through advanced technology, unpredictably still exists. Weather patterns shift, hurricanes change courses and become less or more intense depending on the conditions at the time, and tornadoes remain one of the least predictable and least understood of them all. None-the-less, everyone has the potential to be harmed by extreme weather events depicted in the pictures that follow.

Figure 1.1 Hundreds of cars seen stranded on Lake Shore Drive in Chicago. NBC Bay Area (2019)
Figure 1.2 A huge tornado swirling in the Colorado Sky captured on video. CNN (2016)
So, who picks up the damage tab? The state? The city? The county? The answer is yes, all the above. Local governments are responsible for their own entities but when the damage costs become too great and they do not have the capacity to handle the magnitude of the damage costs, the federal government steps in. Local governments may receive financial aid for disasters with an approval of a presidential disaster declaration also known as a major disaster declaration. A governor of a state puts in a request to have a disaster in their state declared by the president. If the disaster is approved, federal funds will be available for that state. There are no set guidelines or definitions on what constitutes as a disaster. The decision to declare a disaster is left solely to the president, therefore there is a potential personal bias when declaring disasters.

The lack of legal processes and definitions in the disaster declaration process opens the door for political motivations. Before the 1950s the United States Congress had to pass special legislation to help people deal with disasters, or the states would handle it themselves. After 1950 disaster policy was created and since then, especially with the passing of the 1988 Robert T. Stafford Act, it has become more centralized under the authority of the president of the United States. This has posed the question of whether disaster declarations may be influenced by political incentives. Politically motivated disaster declarations are problematic because a disaster declaration should be nonpartisan and focused on larger national interests. Partisanship could be
revealed as a pendulum that swings either way; not declaring a disaster in a state with actual need or declaring a disaster in a state when damage is less than a reasonable threshold. This is extremely important because presidential disaster declarations open the door to federal monies. Declaring a disaster in a state with a less than reasonable threshold would give that state “free” or extra federal funding when none is needed. Which furthers the idea that partisanship potentially disregards the need of a nation as a whole compared to the few.

The question is why some states would receive disaster declarations over others, if there seems to be no need for one or a major disaster hasn’t occurred at all. Was it done in pure ignorance, pressure to get disasters declared quickly, or do political factors influence presidential disaster declarations?
Figure 1.5 Former President George H.W. Bush, left, joins then President-elect Barack Obama, President George W. Bush, former President Bill Clinton and former President Jimmy Carter in the Oval Office in 2009. (AP Photo/J. Scott Applewhite, file)

Figure 1.6 President Trump giving thumbs up. AP Photo/Alex Brandon (2018)
I. Research Purpose

The purpose of this study is to examine the influence of political factors on presidential disaster declarations. The literature review discusses the history of disaster policy in the United States and the political factors which affect the likelihood of a state receiving a Presidential Disaster Declaration. Swing states, Presidential re-election years, and Political alignments (same party governors as the President), are the factors used in this study to establish their possible effects on Presidential Disaster Declarations. The literature review helped to develop the three hypotheses in this study and identify the possible political factors that could influence an issuance of a Presidential Disaster Declaration.

II. Chapter Summaries

This ARP is divided in five chapters, Chapter I, “Introduction”. Chapter II, “Literature Review,” which provides disaster policy history in the United States from Pre 1950 to current day and the role of the President in disaster policy. Chapter II also examines the scholarly literature that identifies the political factors which can influence presidential disaster declarations and helps to determine the three hypotheses in the study. Chapter III, “Methodology,” describes the methods used to analyze the data collected in the study and the method of collecting data, along with the operationalization of the conceptual framework. Chapter IV, “Results,” provides the results and findings of the analyzed data for the study. Lastly Chapter V, “Conclusions,” concludes the findings and last overall impression of the study.
Chapter II
Literature Review

I. Introduction

This chapter, first reviews, the literature on disaster policy with a focus on Presidential Disaster Declarations. Second, it develops three hypotheses, which examine factors that could influence Presidential Disaster Declarations.

II. Policy History


Pre-Presidential Disaster Declarations

Prior to 1950, the United States did not have a federal response to disasters that occurred. “For its first 160 years of nationhood, the United States had no general policy or program for responding to natural or human-caused disasters” (Platt 1999, 1). States and local governments coped with disasters without federal help or through occasional special legislation Congress passed to provide financial assistance (Downton & Pielke 2001, 158). Federal disaster legislation stems from the Cold War and the government’s response to prepare the civilian population for a disaster.

Federal Disaster Relief Act of 1950

The Federal Disaster Relief Act of 1950 (Public Law 81-875) was the first general disaster assistance law in the United States (Platt 1999, 12) and provided the foundation for future legislation. “Several landmark federal disaster laws and policies originate, for better or worse, from the Cold War and the related concerns for civil defense against a nuclear attack (Sylves
The 1950 Act also transferred the authority from Congress to the President to provide federal disaster assistance and the decision on which agency will oversee disaster policies and procedures. (Lindsay & McCarthy 2015, 2). The first declared disaster by a president was on May 2, 1953 by President Dwight Eisenhower for tornado damages in Georgia. For better or worse the Disaster Act of 1950 set up the framework and process for its predecessors which are still in place today (Sylves 2008, 49).

**Disaster Relief Act of 1974**

The Disaster Relief Act of 1974 (Public Law 93-288) was signed into law by President Richard Nixon. The purpose of the new law was to help remedy bureaucratic confusion created by administrations earlier reorganizations (Sylves 2008, 55). The Disaster Relief Act of 1974 implemented new provisions to disaster relief such as hazard mitigation and grants for individual and families affected by disasters.


The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 100-707), was signed into law November 23, 1988 by President Ronald Reagan and codified as amended, 42 U.S.C. §§ 5121-5207. The Stafford Act amended, supplemented, and rescinded portions of the Federal Disaster Relief Act of 1974 (Baldwin 2009, 3), expanded the disaster declaration powers of the President (Reeves 2011, 1142), and delegated FEMA to oversee the disaster declaration process. The Robert T. Stafford Act is the current law and disaster declaration process used today. It defines a major disaster, disaster declaration, and the process it takes to obtain a Presidential Disaster Declaration.
III. Definitions

This section defines a major disaster, presidential disaster declaration, the process of obtaining a presidential disaster declaration, what federal agency oversees the process, the electoral college and swing states.

Major Disaster

A major disaster is defined by 42 U.S.C. §§5122(2) as:

Any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this chapter to supplement the states and local governments and disaster relief organizations to alleviate the damage, loss, hardship, or suffering caused thereby.

The major disaster can be natural, manmade, and, as stated above, anything the President determines needs a presidential disaster declaration.¹

Presidential Disaster Declaration

42 U.S.C. §§5122(2) and §§5170(a) defines a Presidential Disaster Declaration, also known as a major disaster declaration. In short, a presidential disaster declaration is a declaration made by the president when a disaster occurs in a state and the magnitude and severity of the disaster goes beyond the state’s capabilities. The state is unable to handle the disaster and needs federal assistance. Presidential disaster declarations have become important and necessary because natural disasters of some type effect most of the United States, and the amount of

¹ For an explanation on this definition and its meaning see Lindsay (2017).
damage they cause is substantial (Healy & Malhorta 2009, 393). A presidential disaster declaration legitimizes the disaster declaration for affected areas and has become a major step in obtaining federal aid (Schnedier 1995, 35; Healy & Malhorta 2009, 393). Before a state can obtain a federal assistance, they must go through the process to receive a presidential disaster declaration.

**Presidential Disaster Declaration Process and FEMA**

The process of obtaining a presidential disaster declaration as defined in 42 U.S.C. §§5170(a) and codified by the Federal Emergency Management Agency (FEMA) in 44 C.F.R. Part § 206, Subpart B. In summary, when a catastrophe occurs in a state, the Governor or Acting Governor of that state may request a disaster declaration. The Governor must submit the request within 30 days of the disaster if determined the state cannot handle the severity of the situation and federal assistance is deemed necessary (44 C.F.R. 206.36). Once the President declares a disaster, FEMA oversees the duration of the process. FEMA was created by an executive order of President Carter in 1979 and responsible for allocating federal money to areas which receive a presidential disaster declaration (Garrett & Sobel, 497). Prior to FEMA, more than 100 federal agencies and organizations administered disaster relief and aid (Baldwin 2009, 2). Every state in the United States has received a presidential disaster declaration and has gone through the disaster declaration process.

**Electoral College**

The United States does not use a direct election system to elect the President. Instead the Electoral College elects the President. Article 2 Section 1 of the United States Constitution mandates the Electoral College and currently consists of 538 electors from all 50 states and Washington D.C (Smith 2006,12). The electoral college contains people appointed by their state
through different provisions each state legislature mandates. The number of electors is equal to
the number of Senators and Representatives in the U.S. legislature (U.S. Const. art II, § 1). A
presidential candidate needs a majority of 270 electoral votes of the 538 to win the presidency.
Every state except for Maine and Nebraska, awards on a winner-take-all basis, meaning the
winner of the popular vote in the state receives all the electoral votes from that state (Smith
2006,12). Each state has the number of electoral votes equal to the number of senators and
representatives that represent them in Congress. This means that each state has a different
number of electoral votes, which creates competition amongst candidates for each state’s
electoral votes.

IV. Policy & Other Key Issues of Presidential Disaster Declarations

Policy and other key issues have become evident with presidential disaster declarations.
The federal role in disasters has expanded since 1950 and grown through administrative actions
and public administration, but one constant remains: eligibility for most federal disaster relief
hinges on a presidential disaster declaration (Downton & Pielke 2001, 158). “The legislative and
administrative guidelines governing the president’s decision are virtually the same under the
Stafford Acts as they were in 1950, worded in general terms to assure presidential discretion in
responding quickly to catastrophe” (Downton & Pielke 2001, 158). The language of the Stafford
Act, the president’s role in the disaster declaration process, and bad weather have become issues
which surround the presidential disaster declaration.

Under the Stafford Act, the president has the sole authority to issue a disaster declaration.
Presidents have the unilateral power to issue a disaster declaration and by statute, this means his
decision does not require the approval of Congress (Reeves 2011, 1143; Garrett & Sobel
2003,497). The president also does not need to justify why he approved or turn down a disaster
declaration request. The president’s decision to grant or turn down a request is his alone with FEMA’s guidance (Gasper 2015, 3). This remains an unchecked power which has the potential for personal political biases to arise.

The Stafford Act does not provide a concrete set criterion on which to declare a disaster (Garett & Sobel 2003, 498). There are no clear guidelines on what constitutes as a disaster, or how much destruction is necessary to have a disaster declared by the president. The Stafford Act does list types of major disasters but also gives the discretion to the president on what type of disasters are eligible to receive a disaster declaration. For example, anything from thunderstorms to hurricanes have been declared as a disaster. The Stafford Act also does not name a threshold for damage sustained in an affected area or any specific mathematical formula in determining suitability for a disaster declaration (Gasper 2015, 3). In some disaster declaration requests, the actual extent of damage is unknown to the president and the decision must be made from initial damage estimates submitted by local, state, and federal officials (Downton & Pielke 2001, 160). A lack of clear guidelines has the potential for inconsistencies and influences from political factors.

Natural disasters are out of the scope of human control. Achen & Bartels (2004) and Gasper & Reeves (2011) found in their studies, voters punish politicians at the polls for bad weather which affects elections.2 Rewarding an area affected by a natural disaster, no matter the severity of the disaster, can be seen as a way to mitigate the impulse to punish politicians. Issuing a disaster declaration shows the voters the President is trying to remedy the disaster situation. Presidents are then rewarded by for disaster declarations by half a point and receive an electorate boost (Gasper & Reeves 2011, 350). There is an incentive to award Presidential

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2 For an additional explanation and study on disasters and election out comes for pre-disaster declarations, see Heersink et al (2017)
Disaster Declarations for bad weather even though the damage is not severe enough to warrant a presidential disaster declaration. The vague language in the Stafford Act allows for these types of situations to persist and for political influences to infiltrate the disaster declaration process.

Sobel & Leeson (2007) explains the layers of bureaucracy affecting the disaster declaration process from beginning to end. For example, a disaster relies on the state government to put in a request to the president, who then decides to declare a disaster or not, before the government agency FEMA, is allowed to allocate resources to affected areas (522). Sobel & Leeson (2007) claim, bureaucracy although necessary and essential to government agencies, can slow and hurt processes when it comes to natural disasters because a disaster doesn’t become “real” until the president issues a presidential disaster declaration (522). The policy of the disaster declaration is plagued by the issues of bureaucratic delay, as evident in the case of Hurricane Katrina.

V. Introduction to Hypotheses which set the Conceptual Framework

Presidential disaster declarations have the potential to be affected by political influence. According to Garrett & Sobel (2003), federal disaster declarations are open to political influences because there are no established criteria used when deciding to issue a disaster declaration and because the president has the unilateral authority to declare a disaster (499). Legislators and Presidents in their role as representatives of the people, should limit their political agenda in times of crisis (disasters). Natural disasters and severe weather serve as an opportunity to examine the political nature of politicians because of the political process and influence in this country (Gasper 2015, 2).

Based on the potential influence disaster declarations may have on politicians, the framework used this study develops three hypotheses to examine potential political influences.
One, for a president to win the presidency, certain states have more electoral importance and are key in winning the presidency. Therefore, showing more favor to those states with the use of disaster declarations might yield election results.\(^3\) Two, creating a positive image to win presidential re-elections means disaster declarations could help maintain that positive image and win favor in those states. And three, disaster declaration can be used as a tool to show partisan obligations and political alignments. The hypotheses will test for a positive correlation between presidential disaster declarations and political influences. The entirety of this study looks at disaster declarations and tests hypotheses to determine what influences a president’s decision to issue a disaster declaration.

VI. Swing States vs. Non-Swing States (H1)

Over the course of presidential elections states have either become swing states or non-swing. Non-swing states or safe states are states that consistently vote for the same political party and are considered safe to political candidates. Swing states or battleground states are states that do not consistently vote for the same political party in every presidential election. Swing states have become significant players in presidential elections due to the undecided voters who can be won over and mobilized (Johnson 2005, 343). Swing states also make up a small percentage of all states but potentially have the biggest impact in winning a presidential election. They represent less than half the U.S. electorate. For example, in 2004 seven swing states targeted by both political parties only contained 18% of the nation’s population and the other 24% were leaning but not quite safe (Gimple et al 2007, 786). The competition for winning a swing state’s electoral votes may have implications in other U.S. policies. Swing states are competitive states

\(^3\) For more information on the importance on states in winning the presidency see Brahms & Davis (1974).
are politically important to a president because they have become vital to winning presidential campaigns.

Garrett and Sobel’s (2003) study examines the number of presidential disaster declarations categorized by state and year. The FEMA disaster declaration database was used to gather data for years 1991 through 1999 and the Poisson regression model is used to estimate the disaster declaration model in this study (Garrett & Sobel 2003, 502).

The basis of this study surrounds the vague language of the Stafford Act of 1988. The vague language of what constitutes as a disaster means an official federal disaster occurs whenever the president says it does (Garrett & Sobel 2003, 498). Between 1983 and 1988 the average number of disasters was 25 per year. After the modification of the Stafford Act in 1988 the average number of disasters declared between 1989 and 1994 grew to 41 per year (Garrett & Sobel 2003, 498). Garrett & Sobel (2003) suggests the language in the Stafford Act has become open to interpretation and political influence. Their public choice model predicts those states, which are politically important to the president, have a greater chance of more disasters declared (500). For example, when the president is faced with certain political incentives that impacts the rate of disaster declarations. States with a higher electoral importance have a higher rate of presidential disaster declarations (Garrett & Sobel 2003, 504).

Similarly, Reeves (2011) tests the electoral influence of swing states and presidential disaster declarations in regard to the 1988 Stafford Act. Reeves (2011) examined nearly one thousand presidential disaster declarations in all 50 states for each year between 1981 and 2004, and also found a positive and statistical significance of electoral influence (1144,1147). The study finds post Stafford Act, a competitive state is expected to receive twice the number of presidential disaster declarations over non-competitive states (Reeves 2011,1148).
The Gasper (2015) study also uses the 1988 Stafford Act, specifically, the non-existent threshold for damage sustained by a disaster, to explain why competitive states receive less disaster declaration turndowns. His study analyzes disaster declaration turndowns in every county in every state except for Alaska, from 1992 through 2005, for those counties who sustained significant damage and gubernatorial requests (Gasper 2015, 2,5).

Gasper (2015) finds a positive effect of a state’s competitiveness and the likelihood of a disaster request turndown. He showed if a state is competitive to a president the state is less likely to have a disaster declaration denied but only in election years (Gasper 2015, 7). In non-election years competitive states have an increased chance of being denied but also finds in non-election years, “many disaster declarations turndowns are more of a function of administrative, rather than political concern” (Gasper 2015, 12). Gasper (2015) concludes, “the electoral pressures felt by the president influence the allocation of resources independent of needs” (13).

Kriner & Reeves (2015) examines presidential disaster declarations from 1984 to 2013 for electoral particularism. Their findings show a positive correlation between swing states and presidential disaster declarations. For years 1984 to 2008, the data indicates counties in core states and counties in swing states more likely to receive a disaster declaration (Kriner & Reeves 2015, 688). For years 2009 to 2013, they find electoral particularism active in election years and core constituencies were more likely rewarded with disaster declarations in reelection years (Kriner & Reeves 2015, 689-690).

Kriner & Reeves (2015) analyze President Obama’s 2012 reelection year and find that Obama participated in electoral particularism more than other election years. The data shows that counties in core states and swing states were approximately 3.7 and 4.5 more times likely to see
a disaster declaration than similar counties in noncore, non-swing states in election years versus non-election years (Kriner & Reeves 2015, 690). The study concludes, because “Obama was especially rewarding of swing states in 2012 suggests that electoral motivations and their influence on policy outcomes continue to strengthen” (Kriner & Reeves 2015, 690). Similar to Kriner & Reeves (2015) findings in President Obama’s 2012 re-election year, Krueger (2015) shows an increase in presidential disaster declarations during George W. Bush’s 2004 re-election year. In 2004, 12 battleground states, where the election was decided by 5 percent or less, had 17 major disasters declared compared to only 8 in 2003 (Krueger 2015). Both Kriner & Reeves (2015) and Krueger (2015) display examples from two different presidencies and their favoritism of swing states when it comes to presidential disaster declarations.

Swing states are one source of political influence. Swing states are necessary to win presidential elections. Presidential disaster declarations are used as a tool to gain political favor in swing states in order to win electoral votes in those states. Garrett & Sobel (2003), Reeves (2011), Gasper (2015), and Kriner & Reeves (2015) literature and research, all present evidence of a positive correlation between swing state status and presidential disaster declarations. Therefore, one would expect:

H1: Swing State status increase the likelihood of a presidential disaster declaration.

VII. Presidential Re-election Years (H2)

A second source of political influence is presidential re-election years. Every President since the enactment of the Stafford Act in 1988 has ran for a second presidential term. Clinton, Bush, and Obama are all presidents who won the presidency for a second term, Bush Sr. did not. Several studies find a positive correlation between re-election years and presidential disaster declarations.
Downton & Pielke (2001) specifically examines flood related disaster declarations for governmental fiscal years October through September and re-election campaigns of 1972, 1976, 1980, 1984, 1992, and 1996 (162-163). Their study uses a baseline model that adds in re-election years which shows a statistically significant difference between the number of declarations in re-election years and other years, indicating presidents tend to issue more disaster declarations in re-election years (Downton & Pielke 2001, 163).

Sylves & Buzas (2007), Garrett & Sobel (2003), and Salkowe & Chakraborty (2009) all find similar evidence when examining presidential disasters declarations and re-election years. They all use different time frames; Sylves & Buzas examines years 1953 to 2003, Garrett & Sobel (2003) examines years 1991 to 1999, and Salkowe & Chakraborty (2009) examines years 1989 to 2005, but present the same results, disasters are declared more in presidential re-election years.

Sylves & Buzas (2007) presents evidence indicating the odds of receiving a presidential disaster declaration are 97.7 percent higher in election years than non-election years and Garrett & Sobel (2003) find evidence that the mean rate of presidential disaster declarations is higher during election years compared to non-election years (504). Salkowe & Chakraborty’s (2009) study of approvals and denials of disaster declarations, find evidence that major disaster declarations requests in re-election years are positively associated with success in acquiring major disaster declarations (13).

Lindsay & McCarthy’s (2015) government report examines presidential disaster declaration approvals and denials from 1953-2014 (3), in reference to presidential re-election years. Lindsay & McCarthy (2015) data suggests,
There is a slight increase in the number of major disaster declarations and a slight decrease in the number of declaration turndowns during presidential election years. From 1990 to 2013 average number of disaster declarations was 53 and the average number of declared disasters in election years is 59 (22).

While Lindsay & McCarthy (2015) don’t deny the findings of their study, they do argue, because there are more non-election years than election years, they believe there is not enough data points to draw a conclusion (22).

Studies by Gasper & Reeves (2010), Healy & Malhorta (2009), and Sobel & Leeson (2006) examine presidential disaster declarations and the varying influences that affect presidential disaster declarations and re-election years. The evidence from these studies confirm the positive correlation between presidential disaster declarations and re-election years.

Gasper & Reeves (2010) examines presidential disaster declarations in every month in each state between 1972 and 2006 (3). The purpose of the study showcases how governors leverage their states to the President using disaster declarations. Their study finds that governors are aware of their state’s importance to a president and they do leverage the electoral importance of their state during presidential and gubernatorial re-election years (Gasper & Reeves 2010, 13,15). This study shows a possible influx of disaster declarations from states, which would then cause the number of disaster declarations to be greater in presidential re-election years.

Healy & Malhorts’s (2009) study examines voter rewards and natural disasters. They analyze 3,141 counties in the United States and presidential election years from 1988-2004 and combine voting, spending, and disaster damage in each county for which it is possible to do so (Healy & Malhorta 2009, 389-390,392). The results of this study indicate a correlation between disaster relief spending and voter decisions. The more spent on disaster relief the more likely the
The incumbent party will be re-elected (Healy & Malhorta 2009, 399). According to Sobel & Leeson (2006), the goal of politicians is to seek votes and be re-elected (60). Because government oversees disaster relief and politicians want to be re-elected, one way to accomplish that goal is to use federal disaster relief to their advantage (Sobel & Leeson 2006, 60). Healy & Malhorta (2009) and Sobel & Leeson (2006) both provide evidence that government disaster relief spending equates to being re-elected and explain why presidential disaster declarations occur more in re-election years.

Presidential re-election years are important to presidents for the purpose of becoming president for a second term. The literature provides ample direct and in-direct evidence showing a positive correlation between presidential re-election years and presidential disaster declarations. Presidents use presidential disaster declarations as a tool to gain political favor in individual states to win re-election. Therefore, one would expect:

H2: Presidential re-election years increase the likelihood of a presidential disaster declaration.

VIII. Political Alignments (H3)

Political alignments is the third source of political influence. It is natural for people on the same team to help leverage their fellow teammates. The literature is mixed in finding a positive correlation between presidential disaster declarations and helping same party governors to support and reinforce political alignments.

Garrett & Sobel (2003) states, the wording of the Stafford Act can be used as a political tool by the president to use at his discretion to award political alliances (498). In their study they hypothesize, the president may declare more disasters in states where the governor is of the same political party (Garrett & Sobel 2003, 501). Garrett & Sobel (2003) examine presidential
disaster declarations from 1991 to 1999 using a basic Poisson regression model to estimate the disaster declaration model. The data and model were able to confirm hypothesis one and two for this paper’s specific study and literature review but, “they find no evidence that those states having the same governor of the same political party as the president on average, have a higher rate of disaster declaration” (Garrett & Sobel 2003, 504).

Gasper & Reeves (2010) examine disaster declarations for every month in each state from 1972 to 2006 (3). The premise of their study is to see if governor’s leverage their states using disaster declarations. Garrett & Sobel (2010) expect governors of the same party as the president, would be eager to request disaster declarations, in order to invite the president to their state to woo voters and show support of the party (Gasper & Reeves 2011, 3). Although Gasper & Reeves (2010) find evidence that competitive states governors leverage their states to the president for a disaster declaration, there is no statistical evidence proving the same, for the same political party governors (15).

A third study, Salkowe & Chakraborty (2009), finds no evidence that presidents reward same party governors with disaster declarations. Their study examines the approvals and turndowns of disaster declarations from 1989 to 2005 (Salkowe & Chakraborty 2009, 2). Salkowe & Chakraborty (2009) partisanship hypothesis consists of “dichotomous variables that are indicative of party favoritism between the president and governors…” (8). Their study finds a positive relationship between same party governors but not a statistically significant one (Salkowe & Chakraborty 2009, 13). Salkowe & Chakraborty (2009) acknowledge the findings of their study conflicts with prior research that finds a statistically significant relationship between presidents and same party governors (15).
The Garrett & Sobel (2003), Gasper & Reeves (2010), and Salkowe & Chakraborty (2009) studies tested the effect between presidential disaster declarations and partisanship of a president and governor. All three provide no evidence of relationship between the two. They all use varying time frames and come to the same conclusion.

Gasper (2015) maintains that the Stafford Act is a potential reason a president would award same party governors with disaster declarations. Their study looks at disaster declarations turndowns from 1992 to 2005 in every county in every state except Alaska (Gasper 2015, 2). Gasper (2015) hypothesizes, presidents would be less likely to turndown counties requesting a disaster declaration by the same party governor, stating with tighter state budgets, the disaster declaration process is a mechanism president’s can use to award aid to his co-partisan governor (4). They find evidence that shows a lower probability of a turndown when the president is of the same party as the governor (Gasper 2015, 7). One example pertains to the town of West, Texas. Back in June of 2013 they had a fertilizer plant explosion that cost the state of Texas millions of dollars. The explosion damaged almost all the schools in the town and damaged half of the town’s homes among other things.4 Yet Texas’ request for a disaster declaration was denied but Minnesota who had a Democratic Governor at the time, received a disaster declaration approval for severe storms, straight line winds, and flooding.

Kriner & Reeves (2015) is another study which provides evidence of political alignment between president and governor. This study analyzes presidential disaster declarations from 1984-2013. They analyze and split their data into two different time sets. First from 1984-2008 and then from 2009-2013. For years 1984-2013, Kriner & Reeves (2015) find counties represented in Congress by a member of the president’s party were more likely to receive a

---

4 For more information on the damages and disaster declaration turndown in West, Texas see Fernandez (2013).
disaster declaration (688). For years 2009-2013, Kriner & Reeves (2015) find partisan particularism and coalition particularism is evident throughout election and non-election years but especially salient in election years (689).

Larcinese et al (2006) overall examines the potential for presidents to allocate funds to important states for re-election purposes and use data on federal outlays for all 48 US continental states from 1982-2002. This study provides indirect evidence of presidents rewarding same party governors to reinforce political alignments.

Larinese et al (2006) hypothesize, “party alignments of state governors and/or Congress representatives with the executive increases the receipt of federal funds (party alignment) (450). For this hypothesis, they study the effect of presidential electoral race on the budget allocation to see if the president shows favoritism towards same party governors (Larinese et al 2006, 448). Their study shows, presidents have an important impact on the allocation of budget to the states, in particular those that have a governor with the same party as the president because those states are rewarded more money. (Larinese et al 2006, 449). Larinese et al (2006) finds, “There is a positively significant impact of alignment between the president and governor that exchange favors and policies within the party boundaries” (452). Their analysis indicates that partisanship plays in important roles since governors will politically align themselves with the president to receive more resources for their state (Larinese et al, 2006, 550).

Gasper (2015) and Kriner & Reeves (2015) both directly examine presidential disaster declarations and political alignments between presidents and governors and find evidence of such relationship. Larince et al (2006) shows indirectly how a president uses federal resources to award same party governors which can translate to presidents awarding same party governors with presidential disaster declarations to help their political party.
The literature is split in providing evidence showing presidents use presidential disaster declarations to reinforce political alignments. Garrett & Sobel (2003), Gasper & Reeves (2010), and Salkowe & Chakraborty (2009) data analyses provides no evidence that presidents reward same party governors with presidential disaster declarations. Gasper (2015), Kriner & Reeves (2015), and Larcinese et al (2006) data analyses does provide evidence showing presidents do use presidential disaster declarations to reward same party governors. Thus showing, presidential disaster declarations support and reinforce political alignments in some cases. Presidents use presidential disaster declarations as a tool to reward same party governor states as an indirect way to help their party. Therefore, one would expect:

**H3:** Reinforcing political alignments increase the likelihood of a presidential disaster declaration.

**IX. Non-Political Factors**[^5]

There are non-political factors which influence an issuance of a disaster declaration. These factors can be defined by two categories, the type of event that occurred and the region the event occurred in.

The types of events to occur that would warrant a presidential disaster declaration for non-political reasons, would be a disaster that causes an enormous obvious amount of damage. Those types of disasters are hurricanes, fires, floods, tornadoes, volcanoes, and earthquakes. The FEMA disaster declaration database and SHELDUS database list every type of disaster that has occurred and show what disasters were declared. If those disasters are indeed non-political, every one of those disasters should have a presidential disaster declaration.

[^5]: The two non-political factors, disaster type and region, were identified as constant variables but were not viable in the logistic regression model.
Another non-political factor would be the region in which the disaster occurred. Different states are located in different climates and geographical regions. The US Census Bureau splits the United States into four regions; Northeast, South, Midwest, and West. Based on the region’s geographical locations, they will have different climates and natural disasters than other states. For this reasoning, those regions subject to natural disasters should have presidential disaster declaration issued for non-political reasons.

Schmidtlein et al (2008) examines the different geographic regions in the United States to find evidence if any geographical inequalities exist. They find that all regions who have major hazards have a higher rate of disaster declarations, proving that geographic regions subject to their region’s climate are receiving the disaster declarations (Schmidtlein et al 2008, 12-13). For example, states that have an ocean border have a higher chance flooding and hurricanes compared to other states in the middle of the United States.

This explanatory research study has three formal hypotheses summarized in Table 2.1. The conceptual framework table organizes and summarizes all three hypotheses individually and connects them to the literature discussed above.
X. Summary of the Conceptual Framework

The hypotheses tested in this study are summarized in Table 2.1.

Table 2.1 Conceptual Framework Table

<table>
<thead>
<tr>
<th>Formal Hypothesis</th>
<th>Sources Used to Support the Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Swing State status increase the likelihood of a presidential disaster declaration.</td>
<td>Garrett &amp; Sobel 2003; Gasper 2015; Kriner &amp; Reeves 2015; Reeves 2011</td>
</tr>
<tr>
<td>H3: Reinforcing political alignments increase the likelihood of a presidential disaster declaration.</td>
<td>Garrett &amp; Sobel 2003; Gasper 2015; Kriner &amp; Reeves 2015; Larinese et al 2006; Salkowe &amp; Chakraborty 2009</td>
</tr>
</tbody>
</table>
XI. Conclusion

The purpose of this study is to examine the political factors that influence a president’s decision when issuing a disaster declaration. The literature finds a positive correlation between the influence of political factors and presidential disaster declarations. It provides strong evidence for swing states and presidential re-election years as influential political factors but provides mixed results for political alignments as an influential political factor. However, half the literature suggests that political alignments are present as an influential political factor.

The next chapter focuses on the methodology used to test each of the three hypotheses. The literature suggests there is a positive correlation between presidential disaster declarations and political influences. The data comes from pre-existing data from various government agencies and educational databases.
Chapter III
Methodology

This chapter discusses the methods used to explain if political influence exists in Presidential Disaster Declarations. This study uses the explanatory research approach and tests three hypotheses. The study uses existing data available in multiple U.S. government databases and other educational databases and coded into numerical values.

Operationalization of the Conceptual Framework

The unit of analysis for this study is disasters. Disasters are classified into 7 categories: flood, tornado, snowstorm (which also included ice storms and winter weather), thunderstorm (which also included rainstorms and tropical storms), hurricane, fire, and earthquake and included them in the data of the study. Disasters are catalogued in the SHELDUS database, and the disasters that caused $500,000 or more in either crop damage and/or property damage were used in the study. Unfortunately, there isn’t a set threshold that would automatically get a disaster declared, so $500,000 or more in damage seemed like a reasonable amount that could place strain on state and local budgets. The data came from various government and educational databases to compile the already existing data for this study. They are represented in Table 3.1 below.

---

6 To see more about Explanatory Research, see (Shields & Rangarajan 2013, 43-69)
Table 3.1 Overview of Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMA Disaster Declarations</td>
<td>The FEMA Disaster database contains disasters which were declared as a presidential disaster declaration from 1950 to present day.</td>
<td><a href="https://www.fema.gov/disasters">https://www.fema.gov/disasters</a></td>
</tr>
<tr>
<td>SHELDUS (Spatial Hazard Events and Losses Database for the United States)</td>
<td>SHELDUS database houses weather events in the United States from 1950 to 2017.</td>
<td><a href="https://cemhs.asu.edu/SHELDUS/">https://cemhs.asu.edu/SHELDUS/</a></td>
</tr>
<tr>
<td>The American Presidency Project</td>
<td>The American Presidency Project list all Presidents and the terms they served along with the political party they are associated with. They also list all the election years and winners.</td>
<td><a href="https://www.presidency.ucsb.edu/">https://www.presidency.ucsb.edu/</a></td>
</tr>
<tr>
<td>(NGA) National Governors Association</td>
<td>The NGA database list all past and present governors of every state in the United States and the political party of each governor.</td>
<td><a href="https://www.nga.org/">https://www.nga.org/</a></td>
</tr>
</tbody>
</table>

This study has one dependent variables: presidential disaster declarations. The study also has three independent variables: swing state, presidential re-election year, and political alignments. The analysis of the data tests the effect of political influences on disaster declarations. The hypotheses, the data sources, databases, and coded variables are found in the Operationalization Table in Table 3.1 (Shields & Rangarajan 2013, 50-52).
Table 3.2 Operationalization Table

**Title:** Political Influence of Presidential Disaster Declarations  
**Purpose:** The purpose of this study is to examine the influence of political factors on presidential disaster declarations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Direction of Hypothesis</th>
<th>Variable measure</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Presidential Disaster Declaration | H1                     | Presidential Disaster Declarations  
1=Yes  
0=No  | FEMA Disaster Declaration Database; Sheldus Database |
| **Independent Variables**    |                         |                                                       |                                                                                                     |
| Swing State                  | H1 (+)                  | 1=Yes  
0=No  | FEMA Disaster Declaration Database; Thoughtco; US Election Atlas Database |
| Presidential Re-Election Year | H2 (+)                  | 1=Re-election year  
0=Other  | FEMA Disaster Declaration Database; The American Presidency Project |
| Political Alignments         | H3 (+)                  | 1=Party of the president  
0=Other  | NGA Database; The American Presidency Project |
| **Control Variables**        |                         |                                                       |                                                                                                     |
| Disaster Type                |                         | 1=Flood; 2=Tornado; 3=Snowstorm; 4=Thunderstorms; 5=Hurricane; 6=Fire; 7=Earthquake | Sheldus Database                                                                                   |
| Region                       |                         | 1=Northeast; 2=South; 3=Midwest; 4=West              | US Census Bureau                                                                                   |

* The two control variables, disaster type and region, were identified as constant variables but were not viable in the logistic regression model.
**Dependent Variables**

There is one dependent variable in this study. Presidential disaster declaration serves as the dependent variable and comes from the FEMA disaster database. Disasters in each of the 50 states from 1989 to 2017, are catalogued in the Spatial Hazard Events and Losses Database for the United States (SHELDUS). They either have a presidential disaster declared and receive a code of 1 or do not have a disaster declared by the president and receive a code of 0.

**Independent Variables**

There are three independent variables in this study: swing states, presidential re-election years, and political alignments. Each receives a code of either 1 or 0 in relation to what each variable is measuring to examine the political influence on presidential disaster declarations.

*Swing State Status*

All 50 states from 1989 to 2017 are given a code of 1 for yes, if it’s a swing state and 0 for no, not a swing state. Swing state data comes from a combination of Thoughtco and the U.S. Election Atlas database. For every presidential election year from 1988 to 2018, the databases indicate which states are swing states in that year. Table 3.2 provides collective data that shows the value of each variable for each state.
Table 3.2 Swing States

<table>
<thead>
<tr>
<th>State</th>
<th>1=Yes 0=No</th>
<th>State</th>
<th>1=Yes 0=No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>0</td>
<td>Montana</td>
<td>0</td>
</tr>
<tr>
<td>Alaska</td>
<td>0</td>
<td>Nebraska</td>
<td>0</td>
</tr>
<tr>
<td>Arizona</td>
<td>1</td>
<td>Nevada</td>
<td>1</td>
</tr>
<tr>
<td>Arkansas</td>
<td>0</td>
<td>New Hampshire</td>
<td>1</td>
</tr>
<tr>
<td>California</td>
<td>0</td>
<td>New Jersey</td>
<td>0</td>
</tr>
<tr>
<td>Colorado</td>
<td>1</td>
<td>New Mexico</td>
<td>0</td>
</tr>
<tr>
<td>Connecticut</td>
<td>0</td>
<td>New York</td>
<td>0</td>
</tr>
<tr>
<td>Delaware</td>
<td>0</td>
<td>North Carolina</td>
<td>1</td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>North Dakota</td>
<td>0</td>
</tr>
<tr>
<td>Georgia</td>
<td>1</td>
<td>Ohio</td>
<td>1</td>
</tr>
<tr>
<td>Hawaii</td>
<td>0</td>
<td>Oklahoma</td>
<td>0</td>
</tr>
<tr>
<td>Idaho</td>
<td>0</td>
<td>Oregon</td>
<td>0</td>
</tr>
<tr>
<td>Illinois</td>
<td>0</td>
<td>Pennsylvania</td>
<td>1</td>
</tr>
<tr>
<td>Indiana</td>
<td>0</td>
<td>Rhone Island</td>
<td>0</td>
</tr>
<tr>
<td>Iowa</td>
<td>1</td>
<td>South Carolina</td>
<td>0</td>
</tr>
<tr>
<td>Kansas</td>
<td>0</td>
<td>South Dakota</td>
<td>0</td>
</tr>
<tr>
<td>Kentucky</td>
<td>0</td>
<td>Tennessee</td>
<td>0</td>
</tr>
<tr>
<td>Louisiana</td>
<td>0</td>
<td>Texas</td>
<td>0</td>
</tr>
<tr>
<td>Maine</td>
<td>1</td>
<td>Utah</td>
<td>0</td>
</tr>
<tr>
<td>Maryland</td>
<td>0</td>
<td>Vermont</td>
<td>0</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>0</td>
<td>Virginia</td>
<td>1</td>
</tr>
<tr>
<td>Michigan</td>
<td>1</td>
<td>Washington</td>
<td>0</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1</td>
<td>West Virginia</td>
<td>0</td>
</tr>
<tr>
<td>Mississippi</td>
<td>0</td>
<td>Wisconsin</td>
<td>1</td>
</tr>
<tr>
<td>Missouri</td>
<td>1</td>
<td>Wyoming</td>
<td>0</td>
</tr>
</tbody>
</table>

Presidential Re-Election Years

The second independent variable in this study, is presidential re-election years. The study examines years from 1992 to 2017 and the data comes from the American Presidency Project database. These specific years examined consist of presidential re-election years after the enactment of the Robert T. Stafford Act of 1988. A presidential re-election year has a code of 1 and non-re-election years has a code of 0. This measures the political influence of presidential re-
election years in terms of presidential disaster declarations. Table 3.3 shows which years were presidential re-election years from 1992 to 2017.

Table 3.3 Presidential Re-Election Years

<table>
<thead>
<tr>
<th>Year</th>
<th>1=Re-election year 0=Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>0</td>
</tr>
<tr>
<td>1994</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>1</td>
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<td>1997</td>
<td>0</td>
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<td>1998</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
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<tr>
<td>2001</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
</tr>
</tbody>
</table>

Political Alignments

The third and final independent variable is political alignments and measures the political party of every governor in each state and year from 1988 to 2007. If the governor is of the same
party as the president, the state receives a code of 1. If the governor is the opposite party the state receives a code of 0. For example, in 2012, President Barack Obama was a democratic president. Peter Shumlin was the Governor of Vermont in 2012 and also a democrat, therefore that state has a code of 1. In 2012 Texas had a republican governor, Rick Perry, therefore Texas received a code of 0. The National Governors Association database provides the data for the party of the governors of each state and the American Presidency Project database provides the data for the party of the president.

Table 3.4 Example of Governor Party in Relation to the President for 1989

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>President</th>
<th>Governor Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>Alabama</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Alaska</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>California</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Connecticut</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Florida</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Kentucky</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Kentucky</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Louisiana</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Louisiana</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Maine</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Maryland</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Minnesota</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>North Carolina</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>North Carolina</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>North Dakota</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Ohio</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>South Carolina</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Texas</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Texas</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Texas</td>
<td>George H.W. Bush</td>
<td>1</td>
</tr>
<tr>
<td>1989</td>
<td>Vermont</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
<tr>
<td>1989</td>
<td>Virginia</td>
<td>George H.W. Bush</td>
<td>0</td>
</tr>
</tbody>
</table>
Control Variables

There are other factors outside of political influence that determine whether a state will receive a presidential disaster declaration. These factors consist of the type of disaster and the region where the disaster occurred. The type of disaster has a code of 1=Flood; 2=Tornado; 3=Snowstorm; 4=Thunderstorms; 5=Hurricane; 6=Fire; 7=Earthquake. The data comes from the SHELDUS database. The region consists of four regions based on the U.S. Census Bureau. The four regions are coded, 1=Northeast; 2=South; 3=Midwest; 4=West.

Table 3.5 Example of Control Variables for 1993

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Region</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>California</td>
<td>4</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Florida</td>
<td>2</td>
<td>1,2,3</td>
</tr>
<tr>
<td>1993</td>
<td>Georgia</td>
<td>2</td>
<td>2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Illinois</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Indiana</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Iowa</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Iowa</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Kansas</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Louisiana</td>
<td>2</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Maine</td>
<td>1</td>
<td>1,3,4</td>
</tr>
<tr>
<td>1993</td>
<td>Minnesota</td>
<td>3</td>
<td>1,2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Missouri</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Missouri</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Missouri</td>
<td>3</td>
<td>1,2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Nebraska</td>
<td>3</td>
<td>1,4,3</td>
</tr>
<tr>
<td>1993</td>
<td>Nebraska</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>New Mexico</td>
<td>4</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>North Carolina</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1993</td>
<td>North Dakota</td>
<td>3</td>
<td>1,4</td>
</tr>
<tr>
<td>1993</td>
<td>Oklahoma</td>
<td>2</td>
<td>2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Oklahoma</td>
<td>2</td>
<td>1,2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Oregon</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>1993</td>
<td>Oregon</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>1993</td>
<td>South Dakota</td>
<td>3</td>
<td>1,2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Vermont</td>
<td>1</td>
<td>1,3,4</td>
</tr>
<tr>
<td>1993</td>
<td>Virginia</td>
<td>2</td>
<td>2,4</td>
</tr>
<tr>
<td>1993</td>
<td>Washington</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1993</td>
<td>Wisconsin</td>
<td>3</td>
<td>1,2,4</td>
</tr>
</tbody>
</table>

The two control variables, disaster type and region, were identified as constant variables but were not viable in the logistic regression model.
I. Method

The method used in this study is analysis of aggregated data. The data comes from multiple databases (referenced in Table 3.1 above). All the states are represented in the data set. If a presidential disaster declaration was obtained it will receive a 1 if it was not it will receive a 0. There were also other factors that could affect disaster declarations, which are the controlled variables. One of the strengths using aggregated data is there will similar statistics relevant to the data or research interest. There can also be a revealing connection with the data from existing research to new research and can provide a historical or conceptual context within which to locate original research (Babbie 2001, 315). For example, the research in this study analyzes years from 1989 to 2017 over four different U.S. Presidencies. A weakness of using aggregated data would be relying on other databases that could potentially have errors. I address the potential weakness of aggregated data by gathering and comparing data from multiple databases to assure the most accuracy possible. The data in this study incorporates years 1989 to 2017 but does not include 2018 due to the lack of complete data for that year. Weather events with 500,000 dollars’ worth of damage and/or crop damage or more, were included in the data set from the SHELDUS database for those disaster that did not received a presidential disaster declaration.

II. Statistics

The statistical test this study uses is Logistic Regression Analysis, which is a form of multiple regression. Multiple Regression analysis provides a means of analyzing a dependent variable affected simultaneously by several independent variable (Babbie 2001, 444). “Regression methods have become an integral component of any data analysis concerned with describing the

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8 For more information of analysis of aggregated data see (Babbie 2001,315)
relationship between a response variable and one or more explanatory variables” (Hosmer et. al 2013, 1). The variable in the logistic regression model can either be binary or dichotomous. This study uses binary logistic regression because the dependent variable in this study is dichotomous and there is more than one independent variable.

III. Summary

This chapter outlines the methodology this study uses to test each of the three hypotheses. The hypotheses use a logistic regression analysis to determine if presidential disaster declarations are influenced by swing states, presidential re-election years, and/or political alignments. The next chapter reveals the findings of the analysis of the data.

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9 For more information on Logistic Regression Models see Hosmer et. all (2013).
Chapter IV
Results

This chapter reveals the results of the questions posed by the hypotheses that were developed in the literature review and introduction. Do political influences of swing state status, presidential re-election years, or political alignments, influence the issuance of a presidential disaster declaration? Table 4.2 shows the model with the three factors included and percentage of predicting when a disaster declaration will be declared. Table 4.3 shows the probability of a presidential disaster declaration based on the three factors.

I. Findings

Table 4.1 shows the three factors included and can correctly predict 87.8% of the outcome. In other words, the probability of guessing if a presidential declaration will be issued is 87.8%. With the independent variables included in the model, the probability of guessing correctly if a presidential disaster declaration is declared or increases 5.4% over not having any of the three independent variables included.

**Table 4.1 Model of Probability**

<table>
<thead>
<tr>
<th>Classification Table *&lt;br&gt;Observed</th>
<th>Predicted</th>
<th>Percentage Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaster Declaration No Disaster Declaration&lt;br&gt;Disaster Declaration&lt;br&gt;Yes Disaster Declaration&lt;br&gt;Overall Percentage</td>
<td>100.0&lt;br&gt;30.4&lt;br&gt;87.8</td>
<td></td>
</tr>
</tbody>
</table>

* a. The cut value is .500

Table 4.2 presents the Logistic Regression Results. For any of the individual variables to have a significant impact on the dependent variable p must be less than .10, p < .10. The model indicated only the political factor of Governor Party (Political Alignment) has a significant and
positive value. The odd ratio of a presidential disaster declaration being declared for a state with the same political party as the president is 1.18. When a Governor is the same Party as the president the chance is 18% higher to have a disaster declared. For swing states and presidential re-election years, the coefficients are not significant, and do not present evidence to support and conclude any effects on presidential disaster declarations.

The three formal hypotheses are as follows:

**H1:** Swing State status increase the likelihood of a presidential disaster declaration.

**H2:** Presidential re-election years increase the likelihood of a presidential disaster declaration.

**H3:** Reinforcing political alignments increase the likelihood of a presidential disaster declaration.

The logistic regression results show that H1 and H2 are not supported. H3 was the only hypothesis that was supported.

### Table 4.2 Variables and Outcome

<table>
<thead>
<tr>
<th>Variables in the Equation</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swing State</td>
<td>23.109</td>
<td>1939.495</td>
<td>.000</td>
<td>1</td>
<td>.990</td>
<td>1.087E + 10</td>
</tr>
<tr>
<td>Presidential Re-Election Year</td>
<td>.080</td>
<td>.097</td>
<td>.682</td>
<td>1</td>
<td>.409</td>
<td>1.083</td>
</tr>
<tr>
<td>Governor Party</td>
<td>.168</td>
<td>.068</td>
<td>6.030</td>
<td>1</td>
<td>.014</td>
<td>1.183</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.996</td>
<td>.050</td>
<td>1621.949</td>
<td>1</td>
<td>.000</td>
<td>.136</td>
</tr>
</tbody>
</table>

<sup>a</sup> Variable(s) entered on step 1: Swing State, Presidential Re-Election Year, Governor Party

II. **Summary**

This chapter analyzes the results of the logistic regression analysis for three political factors on presidential disaster declarations. The results show only one factor, Governor Party (Political Alignments), has a small significant impact on presidential disaster declarations. The next chapter discusses the conclusions and strengths and weaknesses from the study.
Chapter V
Conclusion

The purpose of this study was to examine and determine possible political influence on presidential disaster declarations. Chapter I “Introduction” introduced the research question and topic of discussion. Chapter 2, “Literature Review” gave an overview of the policy history and evolution of the presidential disaster declaration. It also discussed the scholarly literature which supported the three political factors that could influence presidential disaster declarations. The three political factors supported by the literature are swing states, presidential re-election years, and political alignments. Chapter II also provided the conceptual framework and the three formal hypotheses used in the study. The three formal hypotheses are as follows:

**H1:** Swing State status increase the likelihood of a presidential disaster declaration.

**H2:** Presidential re-election years increase the likelihood of a presidential disaster declaration.

**H3:** Reinforcing political alignments increase the likelihood of a presidential disaster declaration.

Chapter III “Methodology” discussed the method of analysis used to compute the existing data found in government and educational databases. A logistic regression model analyzed the data to determine if any of the three factors of political influence affected the issuance of a presidential disaster declaration.

Chapter IV “Results” presented the results of the logistic regression analysis. A logistic regression was conducted to determine whether swing state status, presidential re-election year, and governor party affiliation (political alignments), are predictors to obtain a presidential disaster declaration. Results indicated that the overall model is a good predictor of distinguishing
if a presidential disaster declaration will be declared. The model correctly classified 87.8% of the cases. Regression coefficients are presented in Table 4.2. Wald statistics indicate that governor party affiliation (political alignments) can significantly improve the predictability for obtaining a presidential disaster declaration. When a Governor is the same party as the President, there is an 18% more chance of getting a disaster declared by the President.

This study differed from the scholarly literature in that it did not present a significant relationship between swing states and presidential re-election years on presidential disaster declarations. It did however agree with half of the scholarly literature which as mixed, in determining if reinforcing political alignments exist when issuing a presidential disaster declaration.

I. Strengths and Weaknesses

The strengths of the study include analyzing a large amount of data from 1989 to 2017 with crop or property loss exceeding 500,000 dollars. Over 8,000 weather events are recorded in the data that was analyzed. Those years were selected because of the timing of the Robert T. Stafford Act of 1988 and the loose verbiage and lack of oversight on major disaster declarations in the Act. All the data is from credible existing databases from the government or educational research sites.

One weakness of the study is that 2018 was not included because the complete data was not available. President Donald Trump only had one year compared to the other presidents having four or more. Another weakness presents itself by not breaking down the data by presidency and comparing the Republican Presidents to Democratic Presidents to see if a difference exists between the two political parties. A third weakness of the study presents itself in the form of the constant variables. Constant variables were presented in the conceptual
framework and recorded in the initial data, but when performing the logistic regression analysis, the two constant variables of region and disaster event were not viable. All fifty states were represented in the data, but Washington D.C. and the U.S. Territories were not included. Also, natural weather events were considered, but the only ones included in the data were: tornados, hurricanes, tropical storms, rainstorms, thunderstorms, ice storms, winter weather storms, earthquakes, and flooding. One final limitation of this study is that it did not include the actual presidential disaster declaration denials because that information was unable to be found at the time of this study.

II. Final Thoughts

Many factors have an impact on the decision to issue a disaster declaration. Policy reform is needed with a set formula on what constitutes as a disaster and the amount of damage in monetary damage and property damage, to obtain a presidential disaster declaration. If the decision is left to the president alone, political biases will present itself as the data shows. Checks and balances would be a good way to make sure people are getting the help where it is needed without political agendas. For future research, it would be valuable to take the data and compare presidential disaster declarations between the different presidencies and between democratic presidents and republican presidents. It would also be beneficial to include all the presidential disaster declaration denials.
References


AP Photo/ Alex Brandon (2018, October 8). *President Donald Trump gives thumbs up as he steps off Air Force one as he arrives Monday, Oct. 8, 2018 at Andrews Air Force Base, Maryland.* Retrieved from [https://www.washingtontimes.com/multimedia/image/2_ap_18281761240269jpg/](https://www.washingtontimes.com/multimedia/image/2_ap_18281761240269jpg/)


U.S. Const. art. II, § 1