Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter know, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Gregory Robert Borys April 18, 2012

Hate Crimes: An Empirical Analysis on the Impact of Legislation

by

Gregory Borys

Hugo Mialon
Adviser

Economics

Andrew Francis

Committee Member

Allison Burdette

Committee Member

2012

Hate Crimes: An Empirical Analysis on the Impact of Legislation

By

Gregory Borys

Hugo Mialon

Adviser

An abstract of
a thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Economics

2012

Abstract

Hate Crimes: An Empirical Analysis on the Impact of Legislation
By Gregory Borys

This paper investigates the impact of hate crime legislation on both the number of hate crime groups and the number of hate crimes committed per state per year. Through an empirical analysis, it is shown that hate crime legislation is not associated with hate and hate crimes committed; therefore, contributing to the open debate on whether or not hate crime legislation is warranted.

Hate Crimes: An Empirical Analysis on the Impact of Legislation

By

Gregory Borys

Hugo Mialon

Adviser

A thesis submitted to the Faculty of Emory College of Arts and Sciences
of Emory University in partial fulfillment
of the requirements of the degree of
Bachelor of Arts with Honors

Economics

2012

Acknowledgements

I would like to thank my advisor, Hugo Mialon, for his invaluable contribution to my research. I am very grateful for his constant support and insight as I worked through collecting and statistically analyzing the data. I would also like to thank Andrew Francis and Allison Burdette for their guidance throughout the paper and their insight and recommendations on the various topics that this paper covers. Finally, I would like to thank Robert O'Reilly for his help accessing older FBI statistics on hate crimes.

Table of Contents

In the early hours of June 7, 1998, in Jasper, Texas, John William King and Lawrence Russell Brewer, well-known white supremacists, colluded with Shawn Allen Berry to attack and murder James Byrd with no motive other than the color of his skin. The three confronted Byrd and secured him to the bumper of a Ford pickup truck with a twenty-four and one-half foot logging chain. They proceeded to drag Byrd over a three mile stretch of road, leaving a trail of blood and his remains scattered over seventy-five separate locations; his head was discovered nearly a mile from his shredded torso.[1]

On March 21, 2012, in El Cajon, California, Shaima Alawadi was found lying on her dining room floor by one of her five daughters, having been repeatedly beaten about the head with a tire iron. Next to her body, her daughter found a note saying: “This is our country, not yours, you terrorist.” Shaima died in the hospital on March 24, 2012 after being taken off life support. Her murder is currently being investigated as a hate crime.[2]

These are two examples of high-profile hate crime cases; however, most are not covered by the media. In 2010, the FBI Uniform Crime Report (UCR) on Hate Crime Statistics details 6,628 bias-related incidents. In 1990, 24 states had hate crime statutes and 9 states had penalty enhancements.[3] Today, 45 states have passed hate crime statutes and 34 states now possess penalty enhancements. The efficacy of hate crime statutes in deterring hate crimes remains to be evaluated and people still debate whether or not these laws should be in place at all. Opponents

---

[1] "10 Years Later, Dragging Death Changes Town." and "Lawrence Brewer Executed: White Supremacist Executed For Texas Dragging Murder."

[2] "Iraqi Woman's Killing in California Sparks Hate-Crime Debate."

[3] A penalty enhancement is a hate crime statute which “enhances” the penalty for a crime because it was committed due to hate or bias. While a penalty enhancement is considered a hate crime statute, the converse is not true. The distinction is discussed in more depth in Section 1.

of these laws believe that punishing a hate crime differently from a comparable non-bias motivated crime is unconstitutional, as it resembles punishment based on one's personal thoughts and/or beliefs. On the other hand, proponents of hate crime statutes argue that these laws are in fact mandated by the constitution in order to provide everyone with equal protection under the law, citing both efficiency and equity.

In 1968, Gary Becker created the first framework to analyze crime through an economic lens. In this model, he assumes that criminals weigh the potential benefits of committing a crime against the expected costs. Through increasing the expected costs to criminals, Becker's model argues that it is possible to significantly reduce crime rates. While many have since employed this model and applied it to general crime, few have applied it to hate crimes.

Dharmapala and Garoupa (2002) assume "that the harm to an individual victim from a bias-motivated crime is identical to that from an equivalent non-hate crime." However, they do find that "a pattern of crimes disproportionately targeting an identifiable group leads to greater social harm." Based on this finding, they believe that "penalty enhancements can reduce the incentives for avoidance activity, and thereby protect the networks of profitable interactions that link members of different groups." Gan, Williams, and Wiseman (2004) present a model of the effects of hate crime legislation on hate crime. They make a similar assumption to that of Dharmapala and Garoupa that victims of hate crimes incur identical direct harm as victims of non-hate crimes, yet they assert that it remains optimal to exert an increased level of law-enforcement effort towards preventing and deterring hate crime. Dharamapala, Garoupa, and McAdams (2008) create a model that shows that without a penalty enhancement, the dominant group -composed of haters and non-haters of the disfavored group- will more readily commit

crimes against the latter, thus causing a disproportionate level of victimization. Klumpp and Mialon (2011) define hate as "reverse-altruism," meaning the more a person hates another individual, the more they care about hurting the other individual, and the less they care about themselves. Based on this definition, hate crimes are harder to deter and require larger penalties for an equivalent level of deterrence. Medoff (1999) and Gale, Heath, and Ressler (2002) perform empirical analyses to define the specific determinants of hate crimes across states using OLS, random-effects, and fixed effects methods.

Through empirical analysis, this paper evaluates the impact and efficacy of hate crime statutes. This evaluation is applicable to the debate over hate crime legislation in which proponents cite increased efficiency as a justification. A negative correlation between the laws in place and the number of hate crimes committed implies that the laws have been effective in deterring hate crime.

Other papers on this subject establish theoretical models illustrating the benefits of hate crime legislation. Unlike these previous works, this paper demonstrates the relationship between hate crime legislation and actual hate crime. This paper identifies and classifies hate crime statutes by state from 1992-2010. When classifying hate crime laws, two factors are analyzed: 1) whether or not a state has any statute currently in place, and 2) whether or not the state has enacted a penalty enhancement. These statutes are further analyzed to determine any correlation with the number of hate groups present and hate crimes committed. As the FBI UCR provides very detailed data, it is possible to observe any correlation between the laws and several offense types including murder, aggravated assault, rape, and others. One can also note any existing

relationship between laws and crimes committed due to a certain bias type such as race, sexual orientation, ethnicity, disability, and religion.

It was found that hate crime statutes display no correlation with reported hate crime or hate groups, suggesting that legislation may have no significant impact on hate as a criminal motivator. There exist three possible explanations for the observed lack of impact: 1) the general population is unaware of the laws in place, 2) people are aware of the laws, but the laws fail to impact behavior, or 3) the presence of measurement error obscures the association between laws and hate crimes. The legal code is very complicated; laws are constantly added, amended, and repealed. Even if one were to assume that the general population keeps themselves relatively well-informed about the legal code, it would not be difficult for a person to miss a single change to a specific statute. It would be very easy for a lay person to fail to notice that a hate crime statute was enacted or even already in place. Furthermore, despite being aware of the existence of a hate crime statute, if an individual were predisposed to committing a hate crime, it is likely that this predisposition would minimize the deterrence effect, and he may not even consider the existence of the statute before committing a crime. These findings add to the ongoing debate on hate crime legislation, and call into question government funding for hate crime prosecution.

The paper proceeds as follows: Section 1 provides a background on hate crimes. Section 2 discusses the data used as well as its limitations. Section 3 summarizes the results. Section 4 concludes.

1. A Background on Hate Crimes

This section provides background information on hate crimes: it defines a hate crime, explains the various types of hate crime statutes, and provides insight into the debate surrounding the legislation

1.1 Definition

Hate crimes are unusual in that they are not motivated by personal gain as are traditional crimes. Instead, those committing hate crimes are driven by a desire to decrease their victim's utility. The pleasure derived from committing a hate crime can be best described by the German word *schadenfreude*, meaning "enjoyment obtained from the troubles of others." This word is derived from *schaden*, meaning damage, and *freude*, meaning joy.

The F.B.I. UCR defines hate crimes as "criminal offenses that are motivated, in whole or in part, by the offender's bias against a race, religion, sexual orientation, ethnicity/national origin, or disability, and committed against persons, property, or society." There are an unlimited amount of biases that an individual can maintain; one could be anti-male, anti-female, anti-homosexual, anti-heterosexual, anti-Jewish, anti-Catholic, anti-Muslim, anti-atheism, anti-agnosticism, anti-multiple religions, anti-white, anti-black, anti-multiple races, and so on.

1.2 Legislation

1.2.1 A Background on Hate Crime Legislation

One can potentially feel an infinite number of biases; however, not all biases are (nor should be) protected by law. If every potential bias group was protected by law, there would be no difference between a hate crime and a regular crime. To be perceived as reasonable, bias crime laws should apply only to characteristics that clearly distinguish those who possess them as members of a group. For example, people associate themselves by race and would agree that they are part of a racial group. However, people can also be grouped by eye color, yet people would not consider this an important differentiation. Furthermore, these self-regarding groups

should possess "characteristics that implicate societal fissure lines, divisions that run deep in the social history of a culture."[4]

While all hate crime statutes are unique, they can be categorized in to two groups: "racial animus" and "discriminatory selection." Statutes that fall in to the "racial animus" model require that the defendant selected his victim out of hatred of the victim's protected group or hatred of the victim because of the victim's membership in that particular group. On the other hand, "discriminatory selection" only requires that the defendant selected his victim because of his membership in a protected group.[5]

Hate crime statutes may also have additional features such as a "because of" clause or a "penalty enhancement." A "because of" clause requires that the defendant committed the parallel crime, and that crime was committed because of the victim's membership in a protected group.[6] A "penalty enhancement" is a statute that increases the penalty from that of a comparable non-hate crime because it was motivated by bias.

For the purpose of this paper, no distinction is made between types of hate crime statutes. However, it is noted whether or not there is a penalty enhancement as one's existence directly increases the cost of committing a hate crime. See Appendix B for examples of such statutes.

1.2.2 Federal Hate Crime Statutes

In addition to state statutes, there have been various federal hate crime statutes enacted over time. In 1964, the Federal Civil Rights Law, 18 USC § 245, was passed, permitting the

[4] Punishing Hate. 12.

[5] Punishing Hate. 29.

[6] Punishing Hate. 36.

federal prosecution of anyone who “willfully injures, intimidates or interferes with, or attempts to injure, intimidate or interfere with… any person because of his race, color, religion or national origin and because he is or has been.” This law allows federal jurisdiction to include any defendant who was engaged in a federally protected activity, such as attending any public school or using any facility of interstate commerce.

In 1990, the US government passed the Hate Crime Statistics Act (HCSA), 28 USC § 534, which mandated that “the Attorney General shall acquire data, for each calendar year, about crimes that manifest evidence of prejudice based on race, religion, disability, sexual orientation, or ethnicity, including where appropriate the crimes of murder, non-negligent manslaughter; forcible rape; aggravated assault, simple assault, intimidation; arson; and destruction, damage or vandalism of property.”

In 1994, the Hate Crime Sentencing Enhancement Act, 28 USC 994, provided a penalty enhancement for crimes where the victim was selected "because of the actual or perceived race, color, religion, national origin, ethnicity, gender, disability, or sexual orientation of any person." This law applied only to attacks which occurred in national parks and on federal property.

In 1999, the Hate Crime Prevention Act, 18 USC § 245, set penalties for crimes committed “because of the actual or perceived: (1) race, color, religion, or national origin of any person; and (2) religion, gender, sexual orientation, or disability of any person, where in connection with the offense, the defendant or the victim travels in interstate or foreign commerce, uses a facility or instrumentality of interstate or foreign commerce, or engages in any activity affecting interstate or foreign commerce, or where the offense is in or affects interstate or foreign commerce.”

In 2009, the Matthew Shepard and James Byrd, Jr., Hate Crimes Prevention Act, 18 USC § 249, provided funding and assistance to help state, local, and tribal jurisdictions investigate and prosecute hate crimes. Violent crimes motivated by the actual or perceived race, color, religion, or national origin of any person are considered criminal offenses, and the government now does not need to prove a jurisdictional element (i.e., the victim was participating in one of six federally protected areas as in 18 U.S.C. § 245). This act was passed pursuant to the Thirteenth Amendment, which allows one to eradicate badges and incidents of slavery. Acts of violence motivated by gender, disability, sexual orientation, or gender identity are also considered criminal offenses; however, "the government must prove the crime was in or affected interstate of foreign commerce."

1.3 Debate

Throughout recent history there has been debate surrounding whether or not hate crimes should have a penalty enhancement. While both sides make valid arguments, the debate is still ongoing and there have been no definitive decisions. Opponents of penalty enhancements claim that they represent a violation of one's First Amendment rights. The idea behind this argument is that a penalty enhancement wrongfully punishes the defendant for his or her beliefs or thoughts. In 1993, in *Wisconsin v. Mitchell*, the Supreme Court of the United States found that regardless of how reprehensible a defendant's beliefs, they cannot, in and of themselves, be the grounds for an enhanced sentence. Additionally, there has been no empirical evidence that hate crimes lead to "greater harm." Furthermore, if one were to prove that hate-motivated crimes did lead to greater harm, one could return to the argument that the greater harm was directly caused by one's beliefs, which would again be a violation of one's constitutional rights.

On the other hand, in *Wisconsin v. Mitchell* (1993), the Court also decided that a penalty enhancement can be justified on the grounds that a hate crime produces a greater individual and/or societal harm than an equivalent non-hate crime. Hate crimes can have a larger societal harm because they can provoke a more violent retaliatory response if the social network of the victim (people belonging to the same societal group) also feels threatened by the crime.

Klumpp and Mialon (2011), argue that hate crimes are more difficult to deter and therefore justify a penalty enhancement to equalize the deterrent levels for hate and non-hate crimes. They argue that hate crimes are more difficult to deter, being motivated by the perpetrator's desire to decrease the utility of someone else as opposed to increasing the perpetrator's own utility. The deeper someone's hatred, the more he is concerned with hurting his victim and the less he cares about his own well-being. As a result of this apathy towards his personal welfare, a larger punishment is required to deter the perpetrator. This argument is supported by the Fourteenth Amendment which mandates "to any person within its jurisdiction the equal protection of the laws."

2 Data

This section discusses the origins and limitations of the data used in this paper.

2.1 Hate Crime Legislation

In collecting data it was first necessary to compile a list of every state's hate crime statutes.[7] It was then essential to determine when these laws were enacted; if they are still in

[7] This list was compiled using the following sources: Congressional Research Service, Religious Freedom Watch, Punishing Hate, Partners Against Hate, and the National Center for Hate Crime Prevention

place; if they covered race, religion, sexual orientation, and disability; when each of these protected groups were added to the law; and if the law also contained a penalty enhancement. This was completed using a combination of LexisNexis and HeinOnline to view current versions of laws, amendments, as well as view the session laws. This collected data is summarized in Table 1.

This paper looks solely at whether or not a state has a law in place at a certain period of time, an analysis which has its limitations. Just because a law is in place does not mean that the law will be enforced and ideally one would only want to analyze the impact of enforceable laws. To determine if a law is enforceable, one could examine the number of prosecutions under the law, how the law came about, and the number of votes by which the law was passed. This idea is discussed further in Section 4. There are issues of colinearity between whether or not a state has a penalty enhancement or a hate crime statute; colinearity is also present among the federal statutes.

2.2 Number of Hate Groups

The Southern Poverty Law Center (SPLC) tracks the activity of hate groups by state over time. This data includes the number of active hate groups; however, just because a group is included does not mean that the group "advocates or engages in violence or other criminal activity."

From 2000 to 2010, the overall number of documented hate groups in the United States increased from 602 to 1002. This increase in number of hate groups could be attributed to reporting error or due to an increasing trend. Over this same time period there was a decrease in total hate crimes committed from 9430 to 7699. These trends are shown in Chart 1 and Chart 2.

While this is the best data available, it would be ideal to analyze changes in membership in hate groups as opposed to total number of hate groups.

As this data is compiled by one organization, it is more comparable over time than the FBI UCR Hate Crime Statistics (Section 2.3.) This data does not significantly suffer from reporting bias, as it is compiled using a combination of "hate group publications and websites, citizen and law enforcement reports, field sources and news reports." Hate groups are easily identifiable and there remains little question about whether or not a group is in fact a hate group. However, it is possible that the SPLC is not aware of every hate group, leading to underreporting. There are also some concerns of structural endogeneity with this dataset; laws could be passed due to an increase in the number of hate groups.

Hate groups are very likely to follow and be aware of changes in the hate crime legislation. If hate crime legislation effectively functions as a deterrent to hate crimes, it should also impact the formation of hate groups. Therefore, the number of hate crime groups can be used as a proxy for total hate sentiment and total hate crimes committed.

2.3 Number of Hate Crimes Committed

In 1990, the HCSA mandated that the FBI UCR collect and compile data relating to hate crimes. Their data, compiled from 1992 through 2010, is publically available. The FBI presents several different statistics that are useful, such as data on offenses by state. Offenses are further broken down into the following categories: crimes against persons (murder and nonnegligent manslaughter, forcible rape, aggravated assault, simple assault, intimidation, other), crimes against property (robbery, burglary, larceny-theft, motor vehicle theft, arson, destruction/damage/vandalism, other), and crimes against society. Statistics are also provided,

per state, for the bias causing the crime (race, religion, sexual orientation, ethnicity, and disability.) Finally, the FBI offers data as to where the crimes occurred within the state (cities, universities and colleges, metropolitan counties, nonmetropolitan counties, state police agencies, other agencies [i.e., airport.])

These figures represent the best available information on hate crimes; however, they are still vulnerable to significant inaccuracies, for instance this data contains measurement error and endogeneity. This dataset more accurately reflects the popular perception of the bias crime problem than the actual problem itself.[8]

The first issue that arises when looking at the number of hate crimes committed is classification. Determining whether or not a given crime is a hate crime is a subjective process due to the lack of clear parameters. The FBI attempts to combat this issue of ambiguity by providing detailed guidelines on hate crime classification, answering any questions that a reporting agency has, and providing training free of charge.

A second issue is significant underreporting. Not every hate crime is reported to authorities, just as not every non-hate crime is reported. This underreporting may stem from a variety of reasons including shame, failure to recognize a crime has been committed, or the inability to report it. Once, and if, hate crimes are reported to authorities, they will not all be classified correctly as hate crimes. This error can be attributed to two reasons: 1) the authority may fail to recognize the act as a hate crime, or 2) the authority may believe it is a hate crime, but refuses to classify it as such in an effort to avoid the additional work involved. Underreporting may also stem from the disincentive of having one's city receive media attention

[8] Punishing Hate. 23.

relating to hate crimes. The FBI utilizes a "but, for" test in classifying crimes, which leads to a hate crime being classified as such if and only if the crime would not have been committed "but, for" the existence of the bias.

Participation under the HCSA is voluntary and therefore not all states report hate crimes, and furthermore, not all agencies within a state report. Therefore, the FBI provides the population covered of the reporting agencies. Over time there has been an increase in the population covered per state. Additionally, some states have data reporting statutes which mandate the collection and reporting of hate crime data. An example of a data collection statute is provided in Appendix B.

While analyzing this data against hate crime laws, structural endogeneity or reverse causality arises. A perceived increase in hate crime can lead to a legislative and/or administrative response, which could lead to increased reporting, which would indicate an increased understanding of the problem. In this instance, the increase in hate crime would be derived from an increased understanding of hate crime, as opposed to a true increase in hate crime.

The model proposed in Section 3 faces statistical endogeneity as the model could be misspecified. It is also possible that variables which impact the total number of hate crimes are missing from the model, preventing hate crime laws from being statistically significant.

3 Analysis

To determine the impact of hate crime legislation on hate crime, the following linear fixed effects model was used:

$$measure\ of\ hate_{i,t} = \beta_1 hcstat_{i,t} + \beta_2 penenh_{i,t} + \beta' X_{i,t} + \alpha_i + \mu_t + \beta_0 + \varepsilon_{i,t}.$$

Multiple dependent variables are employed to analyze the impact of hate crime laws. The dependent variable, "measure of $hate_{i,t,}$" functions in the above equation to include all of the evaluated outcome variables. This paper evaluates the association between hate crime laws and the number of hate groups per state per year, as well as the number of offenses committed both by offense type and bias type per state per year. The independent variable, $hcstat_{i,t}$ is a dummy variable for whether or not there is a hate crime statute present in state *i* and year *t*; $penenh_{i,t}$ is the dummy variable for whether or not a penalty enhancement exists in state *i* and year *t*; α_i and μ_t are state and year fixed effects, respectively; $X_{i,t}$ includes, but is not limited to, state-year controls consisting of federal hate crime statutes, ages of the population, prison and incarceration rates, percent black, percent urban, unemployment level, religious variables, and education rates; β_0 is a constant; and $\varepsilon_{i,t}$ is the error term. Summary statistics are available in Table 2, regression results are in Table 3.

It is unclear in what direction the hate crime statutes, β_1 and β_2, should impact the various explanatory variables. When looking at the impact of hate crime statutes on hate groups, it is very unlikely that hate crime statutes have a positive impact on the number of hate groups. However, it is possible that statutes were passed as a result of an increasing number of hate groups. The null hypotheses are: $\beta_1<0$, and $\beta_2<0$. With the number of hate crimes committed as the outcome variable (for either a specific offense type or bias type), the null hypotheses are: $\beta_1=0$, and $\beta_2=0$. The deterrence provided by hate crime legislation should make these coefficients negative; however, the passage of the hate crime statute can increase awareness, therefore increasing reporting and producing coefficients with a positive sign.

To begin the analysis, the relationship between hate crime legislation and the number of hate groups was analyzed because the hate group variable is less subject to errors and the direction of its relation is more certain than the FBI UCR data. No impact was found despite many different specifications. The number of hate crime groups was analyzed as a count, a rate (number of groups per 100,000 population in the state), and as the natural log of (the rate plus one.) Additionally, Poisson fixed effects regressions were analyzed. The regressions were also run both with and without an additional police variable, policetotcap. Finally, these regressions were also run with only the hate crime statute dummy variable, only the penalty enhancement dummy variable, and again with both laws.

The regressions described above were also used with the FBI UCR Hate Crime dependent variables. The following outcome variables were analyzed: hate crimes by offense type, hate crimes by bias type, and hate crimes by bias type which occurred in a city. Hate crimes by bias type within a city (as opposed to hate crimes by bias type within a state) was analyzed due to the belief that cities may have more accurate reporting of hate crimes.

When looking at hate crimes classified by bias type, hate crimes committed under each protected group were analyzed with regard to whether or not the state had a statute and a penalty enhancement covering the specific protected group. This paper does not monitor whether or not states include ethnicity as a protected group in their hate crime statutes. As a result, hate crimes motivated by ethnicity are compared to hate crime statutes covering race. Additionally, hate crimes committed due to race and ethnicity in aggregate are also compared to statutes covering race. When looking at hate crimes against homosexuals, additional controls which capture gay tolerance -such as the number of gay centers, and measures of gay tolerance per state per year-

were used. Sexual orientation and disability have large amounts of variation in legislation over the time period analyzed. Hate crime statutes, therefore, are most likely to have a relationship with these particular outcome variables. Given that there is no relationship with these outcome variables, it is likely that there will not be a relationship with other outcome variables.

These outcome variables were viewed as a count, a rate per 100,000 people in state population, a rate per 100,000 people of the population reporting to the FBI UCR, and the natural logarithms of the rates plus one. It was necessary to add one to the rate before taking the natural logarithm because the natural log of 0 is undefined, therefore allowing all of the data to be comparable. When analyzing the FBI UCR data, the number of agencies per 100,000 people was also used as a control. These variables were analyzed only for states which had a data collection law in place to reduce statistical problems related to underreporting. The regressions were also run inclusive of all states; however, when this was done, data collection was also used as a control. In the majority of the regressions, presence of a data collection law was found to be insignificant, implying that underreporting may not be that large of an issue. These regressions also showed hate crime legislation having no statistical significance in its relationship to hate crimes committed.

The hate crime statutes were then analyzed with and without a lag of one year. When a new law becomes effective, the general population may still be unaware of its existence. The new law is also potentially less-strictly enforced in the beginning, therefore not yet providing a large deterrent effect. By looking at these laws one year after they have become effective, one may reduce the impact of some of these issues. While lags were used with hate crime data, they

were not employed with regard to the number of hate groups based on the assumption that these hate groups closely follow the laws, and therefore a lag would not be needed.

Regressions were also run in which states with larger populations were weighted more heavily as they potentially report more accurately than states with smaller populations. This alteration also yielded no significant results.

Despite the fact that hate crime statutes were found to have no relation to number of hate groups and number of hate crimes, it is still interesting to look at the sign that these statutes displayed. Hate crime statutes largely showed a positive correlation, although statistically insignificant, to the number of hate groups and the number of hate crimes. This positive relationship might be due to an increase in reporting and overall awareness, achieved with the passing of the hate crime statute.

When looking at the relationship between hate crimes committed and hate crime laws, it is possible to find a statistically significant relation; however, said relation is not robust. Hate crime laws show a relationship with the total number of hate crimes per 100,000 population covered when looking at data from 2000 to 2010. These results are shown in table 3.6. In these regressions, hate crime statutes display a positive relationship to total hate crimes committed, while penalty enhancements have a negative relationship. One potential explanation for this is that possessing a hate crime statute increases awareness of hate crimes and therefore increases reporting. Furthermore, having a penalty enhancement seems effective in providing some deterrence, as its presence is associated with a decrease in total hate crimes committed. However, small alterations made to these regressions eliminate the statistical significance of the laws and imply that there may in fact be no relationship. Table 3.7 shows that, through the introduction of

a lag and through looking at the impact of legislation with only penalty enhancement and with only hate crime statute, the results are no longer statistically significant. Additionally, these results are not robust for different permutations of total hate crimes including total hate crimes as a count and total hate crimes per 100,000 people. These results also do not hold when other outcome variables are used; when a fixed effects poisson regression is used; when only states with data collection statutes are looked at; and when the entire dataset is used, data from 1992 to 2010.

4 Conclusion

It was found that no correlation exists between hate crime statutes and the number of hate groups present and/or hate crimes committed. While this conclusion seems indicative of hate crime legislation not impacting hate, this is not necessarily the case. It is possible that there is no correlation due to the following reasons: First, people committing hate crimes may be unaware of the laws in place. Second, people may be aware of the laws, but may not believe they are important - either due to the criminal not caring about his own utility or because the laws are unenforceable. Finally, the problems with the data (as discussed in Section 2) could be too large, resulting in no statistical association. It may be that there is not enough variation in the number of hate crimes committed, making it impossible to accurately determine the impact of the laws. However, the first reason (lack of awareness of legislation) is most likely invalid because even when looking at the number of hate groups (which are likely aware of legislation,) hate crime laws were found to be statistically insignificant. Additional work (discussed later) can be done to further analyze whether or not an impact does exist. The findings discussed in this paper

supplement the ongoing debate over hate crime legislation and cast doubt on the benefits of hate crime legislation from an efficiency standpoint.

Klumpp and Mialon (2011) argue that because hate crimes are motivated by decreasing the utility of one's victims, the criminal cares less about his or her own utility, and therefore, perpetrators of hate crimes are harder to deter. The findings discussed here seem to support this belief. This paper's findings also show that hate crime statutes have no association with hate crimes committed, implying that perhaps hate crime statutes are not harsh enough to be effective. Another possibility is that hate criminals are so strongly motivated by their prejudices that their crimes remain impossible to deter regardless of the threatened punishment. Given the current debate over hate crime statutes and the issues of their constitutionality, this evidence calls into question the existence of these statutes.

If hate crime statutes have no impact on hate crime, a significant portion of government spending could perhaps be eliminated. Federal statutes provide funding towards hate crime prosecution. If legislation has no impact on hate crimes, then this spending would not deter future hate crimes, thus the purpose of this spending would have to be reevaluated. On the other hand, if haters (those who commit hate crimes) are capable of being deterred via legislation, the implications of funding are the exact opposite. In this scenario, while there are hate crime statutes on the books, their enforcement level is too low. Therefore, it becomes necessary to increase enforcement and prosecutions under these hate crime statutes in order to get the desired deterrent effect. Policy makers should consider increased government spending on enforcement and prosecutions in order to make hate crime statutes effective. Then, if after a given period of time, hate crime statutes do not deter hate crime, it may be optimal to significantly reduce or

remove related government spending. Furthermore, legislators should consider repealing these laws based on constitutional concerns if they continue to fail deter hate crimes.

Future expansion of this topic could further analyze the relationship between hate crime legislation and frequency of hate groups and/or hate crimes. This analysis, if yielding similar results of no correlation, would increase the likelihood that legislation does not in fact impact hate groups and/or hate crimes.

The categorization of hate crime laws in this paper opens new avenues for future research. To further evaluate the impact of laws, one could determine the number of prosecutions under each law. If a law has zero prosecutions, or potentially even a few prosecutions, the deterrent effect would be negligible. A criminal has little reason to believe that he or she will be prosecuted for something for which no one has yet been punished. Consequently, the criminal is just as likely to commit the crime with or without the law. Additionally, it would be helpful to determine how and why each individual statute came about. For example, a statute resulting from a high profile case might have a different impact than one which developed more organically. By including any of this additional information regarding hate crime laws, one may be able to gauge a better understanding of what is truly occurring.

Public focus on hate crimes has increased significantly over the past several years. The FBI only began collecting data on hate crimes in 1990. From 1990 to present, there have been significant changes to hate crime legislation at the state level. Over time, reporting has also become more accurate through the introduction of mandatory reporting in some states, and through an increase in accuracy in classification of hate crimes. Therefore, in the future, when more data is present, performing similar regressions may yield different results.

The FBI UCR maintains incident level data from which its hate crime reports are generated. The incident level data contains more specific information about each crime, including the location within each state that the crime was committed. Perhaps, by summarizing the data in a different manner, or focusing on only hate crimes committed in major cities, one could obtain different results. By focusing on major cities, one could assume data accuracy could be improved.

Finally, perhaps a different measure of hate crimes could have an association with legislation. For example, one could potentially create a dataset containing the number of high profile hate crime cases by state per year and analyze if hate crime statutes are correlated.

References

"10 Years Later, Dragging Death Changes Town." *MSNBC.com*. 6 June 2008. Web. 11 Apr. 2012. <http://www.msnbc.msn.com/id/25008925/ns/us_news-life/t/years-later-dragging-death-changes-town/#.T3CIzjGPn8c>.

Becker, Gary, 1968. "Crime and Punishment: an Economic Approach." Journal of Political

"Bill of Rights Transcript Text." *National Archives and Records Administration*. Web. 11 Apr. 2012. <http://www.archives.gov/exhibits/charters/bill_of_rights_transcript.html>.

Dharamapala, Dhammika, Nuno Garoupa, and Richard H. McAdams. *Belief in a Just World, Blaming the Victim, and Hate Crime Statutes*. John M. Olin Program in Law and Economics Working Paper Series, Oct. 2008. Web.

Dharmapala, Dhammika, and Nuno Garoupa. *Penalty Enhancement for Hate Crimes: An Economic Analysis*. University of Connecticut, 1 Oct. 2002. Web. Economy 76:169-217.

Federal Civil Rights Law of 1964. 18 USC § 245. 1964. Web.

Gale, Lewis R., Will Carrington Heath, and Rand W. Ressler. "An Economic Analysis of Hate Crime." *Eastern Economic Journal* 28.2 (2002). Web.

Gan, Li, Robertson C. Williams, and Thomas Wiseman. "A Simple Model of Optimal Hate Crime Legislation." Apr. 2004. Web.

Graczyk, Michael. "Lawrence Brewer Executed: White Supremacist Executed For Texas Dragging Murder." *The Huffington Post*. 21 Sept. 2011. Web. 11 Apr. 2012. <http://www.huffingtonpost.com/2011/09/21/lawrence-russell-brewer-executed_n_974926.html>.

Hate Crime Prevention Act. 18 USC § 245. 1999. Web.

Hate Crime Sentencing Enhancement Act. 28 USC 994. 1994. Web.

Hate Crime Statistics Act. 28 USC § 534. 1990. Web.

"Hate Crime Statutes by State." Exposing Religious Intolerance. Religious Freedom Watch. Web. 11 Apr. 2012. <http://www.religiousfreedomwatch.org/intolerance-hate/hate-crimes-the-law/hate-crime-statutes-by-state/>.

HeinOnline. Web. 11 Apr. 2012. <http://www.heinonline.org/>.

Klumpp, Tilman, and Hugo M. Mialon. "On Hatred." Nov. 2011. Web.

Lawrence, Frederick M. *Punishing Hate: Bias Crimes under American Law*. Cambridge (Massachusetts): Harvard UP, 1999. Print.

LexisNexis. Web. 11 Apr. 2012. <http://www.lexisnexis.org/>.

"List of Hate Crime Laws." Partners Against Hate. Web. 11 Apr. 2012. <http://www.partnersagainsthate.org/laws/list-of-hate-crime-laws.html>.

McLaughlin, K. A., Malloy, S. M., Brilliant, K. J., & Lang, C. (2000). Responding to Hate Crime: A Multidisciplinary Curriculum for Law Enforcement and Victim Assistance Professionals. Newton, MA: National Center for Hate Crime Prevention, Education Development Center, Inc.

Medoff, Marshall H. "Allocation of Time and Hateful Behavior: A Theoretical and Positive Analysis Of Hate and Hate Crimes." *American Journal of Economics and Sociology* 4th ser. 58 (1999). *JSTOR*. American Journal of Economics and Sociology, Oct. 1999. Web. 11 Apr. 2012.

Schadenfreude - Definition and More from the Free Merriam-Webster Dictionary."*Dictionary and Thesaurus - Merriam-Webster Online*. Web. 09 Dec. 2011. <http://www.merriam-webster.com/dictionary/schadenfreude>.

Smith, Alison M., and Cassandra L. Foley. "State Statutes Governing Hate Crimes." Congressional Research Service, 28 Sept. 2010. Web. 11 Apr. 2012.

Southern Poverty Law Center. Web. 08 Dec. 2011. <http://www.splcenter.org/>.

Springer, Kate. "Iraqi Woman's Killing in California Sparks Hate-Crime Debate." *TIME.com*. 26 Mar. 2012. Web. 11 Apr. 2012. <http://newsfeed.time.com/2012/03/26/iraqi-womans-killing-in-california-sparks-hate-crime-debate/>.

The Matthew Shepard and James Byrd, Jr., Hate Crimes Prevention Act of 2009. 18 USC § 249. 2009. Web.

United States. Federal Bureau of Investigation. Department of Justice. Hate Crime Statistics. FBI. Web. 17 Apr. 2012.

WISCONSIN, PETITIONER v. TODD MITCHELL. 92-515. Supreme Court of the United States. 11 June 1993. Web.

Chart 1

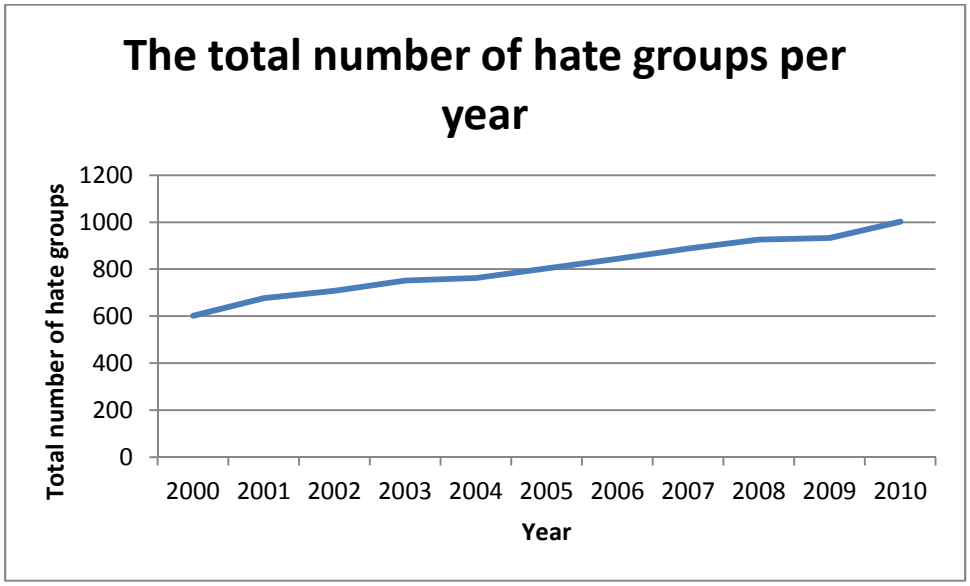

Chart 2

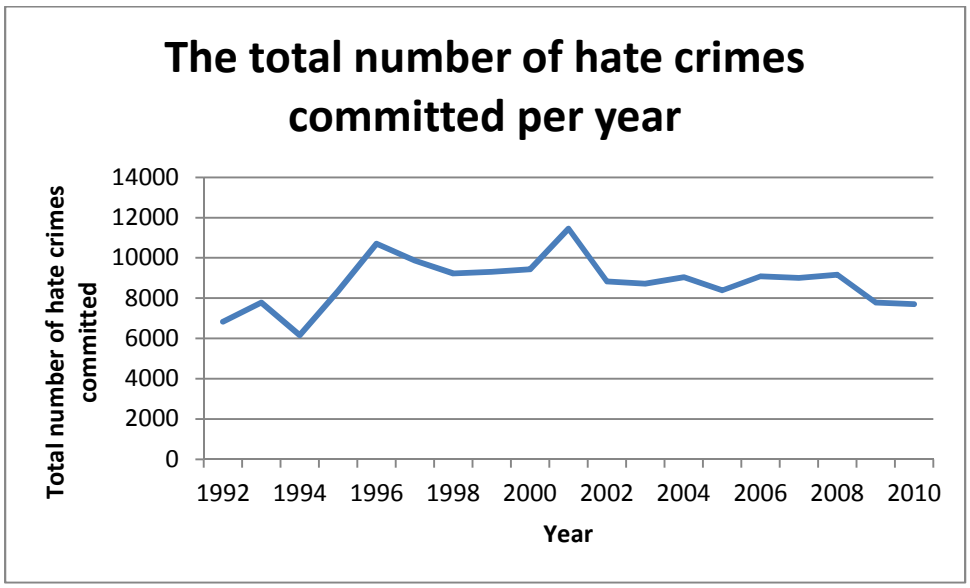

Table 1
State Laws on Hate Crime and Protected Groups

	Any Hate Crime Statute		Hate Crime Statute Covering:				Penalty Enhancement Covering:				Data Collection Laws
State	Hate Crime Statute	Penalty Enhancement	Race	Religion	Sexual Orientation	Disability	Race	Religion	Sexual Orientation	Disability	
Alabama	1994	1994	1994	1994		1994	1994	1994		1994	
Alaska	1982	1982	1982			1987	1982			1987	
Arizona	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1991-2013
Arkansas											
California	1984	1984	1984	1984	1984	1991	1984	1984	1984	1991	1989
Colorado	1988		1988	1988	2005	2005					
Connecticut	1990	1990	1990	1990	1990	2004	1990	1990	1990	2004	1988
Delaware	1995	1995	1995	1995	1997	1995	1995	1995		1995	
District of Columbia	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
Florida	1989	1989	1989	1989	1991	1998					1989
Georgia	2000-2004	2000-2004									
Hawaii	2001	2001	2001	2001	2001	1988	2001	2001	2001	1988	2001
Idaho	1983		1983	1983							1989
Illinois	1982	1991	1982	1982	1991	1991	1991	1991	1991	1991	1987
Indiana											2003
Iowa	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992	1992
Kansas	1993-2011	1993-2011	1993-2011	1993-2011			1993-2011	1993-2011	1993-2011		2000
Kentucky	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1992
Louisiana	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
Maine	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1992
Maryland	1992	2005	1992	1992	2005	2009	2005	2005	2005	2009	2003
Massachusetts	1991		1991	1991	1991	1991					1990
Michigan	1989		1989	1989							1991
Minnesota	1989	1993	1989	1989	1989	1989	1993	1993	1993	1993	1988
Mississippi	1994	1994	1994	1994			1994	1994			
Missouri	1988	1999	1988	1988	1999	1999	1999	1999	1999	1999	
Montana	1989	1989	1989	1989			1989	1989			
Nebraska	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
Nevada	1989	1995	1989	1989	1989	1995	1995	1995	1995	1995	
New Hampshire	1991	1991	1991	1991	1991	1991	1991	1991	1991	1991	
New Jersey	1990	1993	1993	1993	1993	1995	1993	1993	1993	1995	1997
New Mexico	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
New York	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
North Carolina	1991	1991	1991	1991			1991	1991			
North Dakota	1973		1973	1973							
Ohio	1987	1987	1987	1987			1987	1987			
Oklahoma	1987		1987	1987		1987					1987
Oregon	1981		1981	1981	1989						1989
Pennsylvania	1982	1982	1982	1982	2002-2007	2002-2007	1982	1982	2002-2007	2002-2007	1987
Rhode Island	1982	1998	1982	1982	1998	1998	1998	1998	1998	1998	1994
South Carolina											
South Dakota	1993		1993	1993							
Tennessee	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	
Texas	1993	1993	2001	2001	2001	2001	2001	2001	2001	2001	1991
Utah	1992	1992									1992
Vermont	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	
Virginia	1994	1994	1994	1994			1994	1994			1988
Washington	1981		1981	1981	1993	1984					1993
West Virginia	1987		1987	1987							
Wisconsin	1987	1987	1987	1987	1987	1987	1987	1987	1987	1987	
Wyoming	1982		1982								

* Note: While a Penalty Enhancement Statute constitutes a Hate Crime Statute, the converse is not true

Table 2.1
Summary Statistics: UCR Hate Crime Data, 1992-2010

Variable	*Description*	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
state	Participating State	0				
year	Year	923	2001.193	5.425463	1992	2010
numpartagen	Number Of Participating Agencies	923	235.2546	237.9747	1	1347
numagen100kpop	Agencies Per 100,000 People	923	5.316614	4.004353	0.0084531	23.77868
popcov	Population Covered	923	4465541	6017624	0	3.72E+07
agenciessubmit	Number Of Agencies Submitting Incident Reports	923	47.06826	84.28193	0	1127
totinc	Total Number Of Incidents Reported	923	160.6316	259.1424	0	2246
Racerate	Number Of Offenses Committed Due To Race Per 100,000 People	917	1.49336	1.359879	0	16.27586
Religionrate	Number Of Offenses Committed Due To Religion Per 100,000 People	917	0.4190932	0.5403739	0	4.403646
Sexualorientationrate	Number Of Offenses Committed Due To Sexual Orientation Per 100,000 People	917	0.4626593	0.6040459	0	6.190566
Ethnicityrate	Number Of Offenses Committed Due To Ethnicity Per 100,000 People	917	0.3006077	0.3476478	0	3.869303
Disabilityrate	Number Of Offenses Committed Due To Disability Per 100,000 People	688	0.0209408	0.0647198	0	0.8558557
raceethnicityrate	Number Of Offenses Committed Due To Race and Ethnicity Per 100,000 People	917	1.793967	1.58215	0	17.24138
cityRacerate	Number Of Offenses Committed Due To Race In A City Per 100,000 People	916	1.14581	1.118955	0	9.103448
cityReligionrate	Number Of Offenses Committed Due To Religion In A City Per 100,000 People	916	0.317985	0.4781929	0	4.313776
citySexualorientationrate	Number Of Offenses Committed Due To Sexual Orientation In A City Per 100,000 People	916	0.3790109	0.5694429	0	6.190566
cityEthnicityrate	Number Of Offenses Committed Due To Ethnicity In A City Per 100,000 People	916	0.2439161	0.3123953	0	3.439381
cityDisabilityrate	Number Of Offenses Committed Due To Disability In A City Per 100,000 People	687	0.014666	0.0416943	0	0.4315367
cityraceethnicityrate	Number Of Offenses Committed Due To Race and Ethnicity In A City Per 100,000 People	916	1.389726	1.337216	0	9.37931
hctot100kppl	Total Offenses Per 100,000 People	923	3.063585	2.421313	0	14.28938
hc100kppl1	Murder and Nonnegligent Manslaughter Per 100,000 People	923	0.0043307	0.0175231	0	0.2079002
hc100kppl2	Forcible Rape Per 100,000 People	923	0.0031824	0.0131587	0	0.1724138
hc100kppl3	Aggravated Assault Per 100,000 People	923	0.3778514	0.4029594	0	4.127044
hc100kppl4	Simple Assault Per 100,000 People	923	0.6431592	0.58805	0	4.062123
hc100kppl5	Intimidation Per 100,000 People	923	0.9533521	1.018498	0	6.333291
hc100kppl6	Other Crimes Against Persons Per 100,000 People	923	0.0063497	0.0244401	0	0.2737285
hc100kppl7	Robbery Per 100,000 People	923	0.0439418	0.0841365	0	1.329515
hc100kppl8	Burglary Per 100,000 People	923	0.0483988	0.0839263	0	1.134396
hc100kppl9	Larceny-Theft Per 100,000 People	923	0.0684386	0.1497059	0	1.918357
hc100kppl10	Motor Vehicle Theft Per 100,000 People	923	0.0061895	0.0251926	0	0.3781319
hc100kppl11	Arson Per 100,000 People	923	0.018379	0.0372642	0	0.4137931
hc100kppl12	Destruction/Damage/Vandalism Per 100,000 People	923	0.8613263	0.8813716	0	5.241782
hc100kppl13	Other Crimes Against Property Per 100,000 People	923	0.0132509	0.0438667	0	0.6141148
hcsoc100kppl	Crimes Against Society Per 100,000 People	923	0.0152236	0.0489876	0	0.5391869
hcper100kppl	Total Crimes Against Persons Per 100,000 People	923	1.988225	1.606658	0	9.942896
hcprop100kppl	Total Crimes Against Property Per 100,000 People	923	1.059989	1.001828	0	6.344828

Table 2.2
Summary Statistics: Dummy Variables, 1992-2010

Variable	*Description*	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
hcstat	Binary: 1 If Hate Crime Statute Is In Place, 0 If Not	923	0.8624052	0.344661	0	1
penenh	Binary: 1 If Penalty Enhancement Is In Place, 0 If Not	923	0.6013001	0.4898962	0	1
hcstatrace	Binary: 1 If Hate Crime Statute Is In Place That Covers Race, 0 If Not	923	0.8266522	0.3787529	0	1
hcstatrel	Binary: 1 If Hate Crime Statute Is In Place That Covers Religion, 0 If Not	923	0.787649	0.4091937	0	1
hcstatsexori	Binary: 1 If Hate Crime Statute Is In Place That Covers Sexual Orientation, 0 If Not	923	0.4810401	0.4999113	0	1
hcstatdis	Binary: 1 If Hate Crime Statute Is In Place That Covers Disability, 0 If Not	923	0.4864572	0.5000875	0	1
penenhrace	Binary: 1 If Penalty Enhancement Is In Place That Covers Race, 0 If Not	923	0.5460455	0.4981452	0	1
penenhrel	Binary: 1 If Penalty Enhancement Is In Place That Covers Religion, 0 If Not	923	0.5276273	0.4995068	0	1
penenhsexori	Binary: 1 If Penalty Enhancement Is In Place That Covers Sexual Orientation, 0 If Not	923	0.3856988	0.4870238	0	1
penenhdis	Binary: 1 If Penalty Enhancement Is In Place That Covers Disability, 0 If Not	923	0.4019502	0.4905578	0	1
datacollectionlaw	Binary: 1 If Data Collection Is In Place, 0 If Not	923	0.5211268	0.4998243	0	1
ShepByrdAct	Binary: 1 If The Matthew Shepard and James Byrd, Jr. Act Is In Place, 0 If Not	923	0.1083424	0.3109808	0	1
HCPrevAct	Binary: 1 If The Hate Crimes Prevention Act Is In Place, 0 If Not	923	0.6478873	0.4778878	0	1
HCSenEnhAct	Binary: 1 If The Hate Crimes Sentencing Enhancement Act Is In Place, 0 If Not	923	0.9035753	0.2953328	0	1
hcstatlag1	Binary: 1 If Hate Crime Statute Was In Place In Prior Year, 0 If Not	923	0.8450704	0.3620337	0	1
penenhlag1	Binary: 1 If Penalty Enhancement Was In Place In Prior Year, 0 If Not	923	0.5807151	0.4937096	0	1
ShepByrdActLag1	Binary: 1 If The Matthew Shepard and James Byrd, Jr. Act Was In Place In Prior Year, 0 If Not	923	0.0541712	0.2264779	0	1
HCPrevActLag1	Binary: 1 If The Hate Crimes Prevention Act Was In Place In Prior Year, 0 If Not	923	0.5947996	0.491197	0	1
HCSenEnhActLag1	Binary: 1 If The Hate Crimes Sentencing Enhancement Act Was In Place In Prior Year, 0 If Not	923	0.8559047	0.3513768	0	1
yr1	Dummy Variable: 1 If Year = 1992, 0 If Not	923	0.0455038	0.2085193	0	1
yr2	Dummy Variable: 1 If Year = 1993, 0 If Not	923	0.0509209	0.2199554	0	1
yr3	Dummy Variable: 1 If Year = 1994, 0 If Not	923	0.0476706	0.2131839	0	1
yr4	Dummy Variable: 1 If Year = 1995, 0 If Not	923	0.0498375	0.2177271	0	1
yr5	Dummy Variable: 1 If Year = 1996, 0 If Not	923	0.0541712	0.2264779	0	1
yr6	Dummy Variable: 1 If Year = 1997, 0 If Not	923	0.0530878	0.22433	0	1
yr7	Dummy Variable: 1 If Year = 1998, 0 If Not	923	0.0509209	0.2199554	0	1
yr8	Dummy Variable: 1 If Year = 1999, 0 If Not	923	0.0530878	0.22433	0	1
yr9	Dummy Variable: 1 If Year = 2000, 0 If Not	923	0.0530878	0.22433	0	1
yr10	Dummy Variable: 1 If Year = 2001, 0 If Not	923	0.0541712	0.2264779	0	1
yr11	Dummy Variable: 1 If Year = 2002, 0 If Not	923	0.0541712	0.2264779	0	1
yr12	Dummy Variable: 1 If Year = 2003, 0 If Not	923	0.0541712	0.2264779	0	1
yr13	Dummy Variable: 1 If Year = 2004, 0 If Not	923	0.0541712	0.2264779	0	1
yr14	Dummy Variable: 1 If Year = 2005, 0 If Not	923	0.0541712	0.2264779	0	1
yr15	Dummy Variable: 1 If Year = 2006, 0 If Not	923	0.0541712	0.2264779	0	1
yr16	Dummy Variable: 1 If Year = 2007, 0 If Not	923	0.0541712	0.2264779	0	1
yr17	Dummy Variable: 1 If Year = 2008, 0 If Not	923	0.0541712	0.2264779	0	1
yr18	Dummy Variable: 1 If Year = 2009, 0 If Not	923	0.0541712	0.2264779	0	1
yr19	Dummy Variable: 1 If Year = 2010, 0 If Not	923	0.0541712	0.2264779	0	1

Table 2.3
Summary Statistics: UCR Crime Data, 1992-2010

Variable	*Description*	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
population	State Population	923	5717598	6276022	466000	3.73E+07
popshare	The States Share of the Annual Population	873	2.023275	2.21161	0.1715973	12.20593

Table 2.4
Summary Statistics: Southern Poverty Law Center Hate Map, 2000-2010

Variable	*Description*	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
hategroup	The Number Of Hate Groups Per State Per Year	549	16.12204	14.94606	0	84
hategrouprate	The Number Of Hate Groups Per State Per Year Per 100,000 People	549	0.3254177	0.2626193	0	1.994273
ln1hategrouprate	The Natural Log of (hategrouprate+1)	549	0.2652484	0.1748919	0	1.096702

Table 2.5
Summary Statistics: Controls, 1992-2010

Variable	*Description*	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
fipscode	State Fips Code	923	29.28277	15.61443	1	56
edu_hs_2549	% Of Population With High School Education	873	34.06472	5.186746	17.2545	50.49687
edu_precol_2549	% Of Population With Some College Education	873	28.50217	4.725779	12.18297	41.64861
edu_col_2549	% Of Population With College Diploma	873	28.15557	6.315167	15.6498	59.01421
unemp	% Of Population Unemployed	873	0.0575319	0.0178805	0.0182582	0.1520146
income	Average Income	873	19521.4	2988.651	13073.85	30448.93
urban	% Of Population That Is Urban	823	72.27778	15.13611	33.91843	100
policetotcap	Number Of Police Per 100,000 People	673	328.9755	113.6158	204.9963	973.5588
pop15_29	% Of Population With Ages Between 15 And 29	823	21.09555	1.474579	17.78114	27.75298
pop30_44	% Of Population With Ages Between 30 And 44	823	22.63198	2.031198	17.02404	29.12982
black	% Of Population That Is Black	823	11.66539	11.84594	0.3311203	65.99336
prison	People In Prison Per 100,000	815	24419.25	31769.95	477	175512
incar_rate	People Incarcerated Per 100,000	815	410.496	217.6217	75.06763	1937.938
word	% Of People That Believe The Bible Is The Literal Word Of God	793	34.72476	21.14338	0	100
attend	% Of People That Consistently Attend Church Every Week	793	36.77105	20.5478	0	100
gcenters	Number of Gay Centers	723	1.753804	2.92382	0	22
cruisy_rate	Number of Cruisy Areas Per 100,000 People	823	0.3472492	0.2424843	0	1.393718
gaytolerance	A Measure of Gay Tolerance	793	33.80605	23.01491	0	100

Table 3.1
The Impact of Hate Crime Legislation on Number of Hate Groups

VARIABLES	(1) hategroup	(2) hategrouprate	(3) hategrouprate	(4) hategrouprate	(5) ln1hategrouprate	(6) hategrouprate	(7) hategrouprate
hcstat	2.018	-0.00707	0.0202		-0.00430	0.0293	0.0602
	(2.186)	(0.0738)	(0.0594)		(0.0572)	(0.0428)	(0.284)
penenh	-1.628	0.0272		0.0226	0.0145	-0.00979	0.0459
	(1.642)	(0.0483)		(0.0432)	(0.0351)	(0.0327)	(0.180)
pop15_29	0.887	-0.0715**	-0.0695**	-0.0713**	-0.0543**	0.00365	-0.217
	(1.502)	(0.0333)	(0.0312)	(0.0329)	(0.0263)	(0.0224)	(0.152)
pop30_44	2.090	-0.0376	-0.0375	-0.0377	-0.0289	0.0285	-0.183
	(1.286)	(0.0359)	(0.0358)	(0.0360)	(0.0251)	(0.0220)	(0.130)
prison	0.000745**	-6.40e-07	-6.69e-07	-6.26e-07	-5.17e-07	-7.96e-07	-3.23e-07
	(0.000311)	(3.12e-06)	(3.11e-06)	(3.12e-06)	(2.24e-06)	(2.27e-06)	(1.19e-05)
incar_rate	-0.0603***	0.000258	0.000233	0.000252	0.000127	0.000104	0.000725
	(0.0224)	(0.000466)	(0.000435)	(0.000438)	(0.000320)	(0.000273)	(0.00126)
black	-4.038**	-0.0392	-0.0378	-0.0390	-0.0211	-0.0179	-0.0314
	(1.940)	(0.0407)	(0.0390)	(0.0393)	(0.0271)	(0.0273)	(0.110)
urban	-0.0737	0.00491	0.00525	0.00502	0.00386	-0.000694	0.00970
	(0.369)	(0.0103)	(0.0103)	(0.0101)	(0.00750)	(0.00850)	(0.0300)
unemp	30.80	0.485	0.479	0.485	0.211	0.865	1.852
	(36.11)	(0.994)	(0.990)	(0.992)	(0.647)	(0.779)	(2.348)
income	-0.000232	-5.47e-06	-5.52e-06	-5.51e-06	-4.33e-06	-2.11e-06	-2.35e-05
	(0.000334)	(7.05e-06)	(7.05e-06)	(6.99e-06)	(5.00e-06)	(6.47e-06)	(2.24e-05)
word	0.00462	0.000369	0.000370	0.000369	0.000335	-8.55e-05	0.00157
	(0.0307)	(0.000955)	(0.000961)	(0.000955)	(0.000696)	(0.000853)	(0.00326)
attend	0.0282	0.000385	0.000414	0.000397	0.000351	0.000975	0.000872
	(0.0342)	(0.00106)	(0.00104)	(0.00100)	(0.000742)	(0.00107)	(0.00471)
edu_hs_2549	-0.00326	7.97e-05	8.93e-05	8.50e-05	0.000587	-0.000861	0.00557
	(0.210)	(0.00669)	(0.00669)	(0.00669)	(0.00489)	(0.00494)	(0.0207)
edu_precol_2549	-0.209	-0.00310	-0.00302	-0.00309	-0.00244	-0.00219	0.000293
	(0.221)	(0.00604)	(0.00601)	(0.00604)	(0.00426)	(0.00402)	(0.0190)
edu_col_2549	0.0711	3.06e-05	-8.71e-05	2.83e-05	-4.73e-05	0.000738	0.00772
	(0.179)	(0.00486)	(0.00486)	(0.00485)	(0.00348)	(0.00359)	(0.0161)
Observations	423	423	423	423	423	423	422
Adjusted R-squared	0.924	0.813	0.813	0.813	0.808	0.859	

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects.

Note: The differences in the above regressions are as follows: (1) looks at the count of hate groups and both hcstat and penenh (2) looks at the number of hate groups per 100,000 people and both hcstat and penenh (3) is the same as number two, however it only includes hcstat (4) is the same as number two, however it only includes penenh (5) looks at the natural log of hategrouprate and both hcstat and penenh (6) is the same as number two, however the regressions is weighted by population share (7) is the same as number two, however it uses a poisson fixed effects regression instead of a linear fixed effects regression. Many permutations were carried out for this table and the following tables and all yielded comparable results.

Table 3.2

The Impact of Hate Crime Legislation on Hate Crimes by Offense Type

VARIABLES	(1) hctot100kppl	(2) hc100kppl1	(3) hc100kppl2	(4) hc100kppl3	(5) hc100kppl4	(6) hc100kppl5	(7) hc100kppl6	(8) hc100kppl7
hcstat	0.130	0.00316	-0.0102	-0.0733	-0.0245	0.283	0.00194	-0.0101
	(0.994)	(0.00579)	(0.00704)	(0.152)	(0.212)	(0.565)	(0.00356)	(0.0162)
penenh	0.280	-0.00407	0.00775	0.0159	0.0784	0.141	-0.00229	-0.0110
	(0.970)	(0.00415)	(0.00669)	(0.118)	(0.225)	(0.504)	(0.00215)	(0.0140)
hcprevact	-1.805	-0.00834	0.00367	-0.0633	-0.786**	0.0975	-0.0178*	-0.00474
	(1.308)	(0.00793)	(0.00493)	(0.274)	(0.349)	(0.384)	(0.00979)	(0.0351)
hcsenenhact	-0.446	-0.00687	-0.00934**	-0.252	-0.148	0.331	-0.00328	-0.0172
	(0.815)	(0.0106)	(0.00388)	(0.162)	(0.199)	(0.293)	(0.00741)	(0.0212)
numagen100kpop	0.173***	0.000850**	0.000320	0.0224**	0.0381**	0.0595**	0.000169	0.00249*
	(0.0571)	(0.000367)	(0.000291)	(0.00827)	(0.0160)	(0.0235)	(0.000356)	(0.00132)
pop15_29	-0.761**	0.00199	-0.00129	-0.0748	-0.153**	-0.286**	-0.00362*	-0.0106
	(0.283)	(0.00132)	(0.000908)	(0.0511)	(0.0605)	(0.127)	(0.00196)	(0.00627)
pop30_44	-0.310	-0.00126	-0.000405	0.0440	-0.215**	0.134	-0.00620**	0.00296
	(0.336)	(0.00155)	(0.00109)	(0.0657)	(0.0831)	(0.106)	(0.00259)	(0.00991)
prison	3.02e-05	-1.01e-07	-5.63e-09	7.90e-06	8.83e-06*	5.56e-06	2.39e-08	3.30e-07
	(2.26e-05)	(1.26e-07)	(6.12e-08)	(4.87e-06)	(4.46e-06)	(7.47e-06)	(7.88e-08)	(4.88e-07)
incar_rate	-0.00516**	1.90e-05	1.98e-06	-0.000883	-0.00192***	-0.00150	-1.51e-05	-8.08e-05
	(0.00206)	(2.12e-05)	(1.55e-05)	(0.000556)	(0.000505)	(0.000996)	(1.88e-05)	(4.89e-05)
black	0.315	0.00524***	-0.00309	0.0907	0.0977	0.0694	0.00147	0.00292
	(0.284)	(0.00167)	(0.00246)	(0.0689)	(0.0666)	(0.116)	(0.00194)	(0.00448)
urban	-0.0715	-0.000278	0.000280	-0.0146	-0.0225*	-0.0327	-0.000280	-0.00216*
	(0.0452)	(0.000293)	(0.000356)	(0.00946)	(0.0119)	(0.0263)	(0.000268)	(0.00121)
unemp	18.41*	0.00277	-0.105	2.510	6.700**	4.472	0.138	0.678**
	(9.394)	(0.0823)	(0.0805)	(2.134)	(2.608)	(4.798)	(0.0973)	(0.330)
income	3.60e-05	-1.70e-07	-7.27e-07	1.52e-05	8.52e-06	-2.90e-05	2.24e-07	2.22e-06
	(0.000128)	(6.78e-07)	(9.50e-07)	(2.12e-05)	(3.08e-05)	(5.59e-05)	(9.71e-07)	(2.80e-06)
word	0.0153	0.000123	7.35e-07	-0.000263	0.00490**	0.00411	8.90e-05	0.000399*
	(0.00972)	(0.000163)	(8.57e-05)	(0.00236)	(0.00233)	(0.00417)	(7.20e-05)	(0.000231)
attend	-0.0119	-1.42e-05	-1.18e-05	0.00151	-0.00273	-0.00766	-0.000122	-0.000295
	(0.0154)	(9.15e-05)	(4.46e-05)	(0.00276)	(0.00376)	(0.00594)	(8.07e-05)	(0.000301)
edu_hs_2549	-0.0515	-0.000815	-0.000234	-0.0228	-0.00223	-0.0260	0.00116	0.000403
	(0.0831)	(0.000584)	(0.000488)	(0.0146)	(0.0184)	(0.0313)	(0.000720)	(0.00204)
edu_precol_2549	-0.0285	-0.000917	-0.000208	-5.68e-05	0.00230	-0.0102	0.000548	0.00200
	(0.0583)	(0.000848)	(0.000453)	(0.0125)	(0.0127)	(0.0251)	(0.000525)	(0.00169)
edu_col_2549	0.0326	-0.000733	-0.000633	0.00362	0.0112	0.000529	0.00111	0.00203
Observations	403	403	403	403	403	403	403	403
Adjusted R-squared	0.717	0.094	0.104	0.557	0.554	0.722	0.306	0.370

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.2 (Continued)
The Impact of Hate Crime Legislation on Hate Crimes by Offense Type

VARIABLES	(9) hc100kppl8	(10) hc100kppl9	(11) hc100kppl10	(12) hc100kppl11	(13) hc100kppl12	(14) hc100kppl13	(15) hcsoc100kppl	(16) hcper100kppl	(17) hcprop100kppl
hcstat	-0.0508	-0.0911	-0.0302	0.00381	0.120	-0.00766	0.0124	0.180	-0.0628
	(0.0518)	(0.0560)	(0.0188)	(0.0146)	(0.322)	(0.00651)	(0.0149)	(0.778)	(0.389)
penenh	0.0183	0.0881*	0.0327*	0.00886	-0.0853	0.00279	-0.0113	0.236	0.0547
	(0.0512)	(0.0506)	(0.0183)	(0.0104)	(0.310)	(0.00408)	(0.0139)	(0.734)	(0.381)
hcprevact	-0.0689*	-0.163**	-0.00572	-0.0102	-0.709**	-0.0106	-0.0548	-0.775	-0.975**
	(0.0375)	(0.0645)	(0.0110)	(0.0216)	(0.305)	(0.0209)	(0.0468)	(0.927)	(0.421)
hcsenenhact	0.00799	-0.0798	-0.00888	-0.0157	-0.255	0.00315	0.0117	-0.0891	-0.369
	(0.0272)	(0.0699)	(0.00935)	(0.0155)	(0.225)	(0.0105)	(0.0161)	(0.556)	(0.287)
numagen100kpop	0.00483***	0.00689	0.000533	0.00204*	0.0344	0.000305	0.000102	0.121***	0.0517**
	(0.00145)	(0.00448)	(0.000454)	(0.00106)	(0.0218)	(0.000377)	(0.00103)	(0.0378)	(0.0250)
pop15_29	-0.0131	-0.0236	0.00246	-0.00156	-0.187***	-0.00355	-0.00856	-0.516**	-0.236**
	(0.0105)	(0.0181)	(0.00394)	(0.00392)	(0.0575)	(0.00371)	(0.00778)	(0.210)	(0.0860)
pop30_44	-0.0155	-0.0484**	-0.00375	0.000123	-0.182**	-0.00444	-0.0127	-0.0451	-0.252**
	(0.00962)	(0.0187)	(0.00361)	(0.00478)	(0.0751)	(0.00536)	(0.00932)	(0.238)	(0.108)
prison	-3.17e-07	-2.68e-07	-1.07e-07	5.12e-07**	8.18e-06	-2.10e-07	-1.58e-07	2.22e-05	8.15e-06
	(4.41e-07)	(6.38e-07)	(2.09e-07)	(1.93e-07)	(6.77e-06)	(1.59e-07)	(2.12e-07)	(1.59e-05)	(7.31e-06)
incar_rate	0.000123	7.24e-05	3.90e-05	-4.94e-05*	-0.000892	1.68e-06	-6.99e-05	-0.00430**	-0.000794
	(0.000104)	(0.000164)	(5.60e-05)	(2.63e-05)	(0.000668)	(2.99e-05)	(7.91e-05)	(0.00167)	(0.000682)
black	-0.00731	-0.0134	-0.00168	0.00794*	0.0556	0.000776	0.00795	0.261	0.0453
	(0.00690)	(0.0131)	(0.00236)	(0.00442)	(0.0739)	(0.00298)	(0.00798)	(0.227)	(0.0753)
urban	0.00229	0.00829*	0.000687	0.00131	-0.0138	0.000756	0.000876	-0.0701*	-0.00227
	(0.00197)	(0.00476)	(0.000598)	(0.000934)	(0.0194)	(0.000840)	(0.00141)	(0.0380)	(0.0182)
unemp	0.331	0.583	0.182	0.00300	2.215	0.286	0.385	13.72*	4.308
	(0.511)	(1.037)	(0.144)	(0.202)	(2.011)	(0.194)	(0.356)	(7.417)	(3.114)
income	-4.97e-06	3.61e-06	8.26e-07	7.47e-07	3.38e-05	4.55e-07	4.40e-06	-6.02e-06	3.76e-05
	(4.58e-06)	(8.75e-06)	(1.17e-06)	(2.66e-06)	(3.33e-05)	(2.00e-06)	(3.10e-06)	(9.19e-05)	(4.52e-05)
word	-0.000164	0.000370	0.000110	0.000110	0.00469	0.000189	0.000591*	0.00896	0.00576*
	(0.000366)	(0.000618)	(0.000126)	(0.000177)	(0.00297)	(0.000116)	(0.000316)	(0.00728)	(0.00338)
attend	0.000118	0.000159	0.000104	4.62e-05	-0.00281	-3.58e-05	-0.000168	-0.00902	-0.00270
	(0.000548)	(0.000720)	(0.000191)	(0.000188)	(0.00411)	(0.000111)	(0.000177)	(0.0113)	(0.00514)
edu_hs_2549	0.00103	0.00409	0.000944	0.000776	-0.0112	0.00160	0.00212	-0.0509	-0.00271
	(0.00328)	(0.00614)	(0.000658)	(0.00163)	(0.0288)	(0.00142)	(0.00133)	(0.0534)	(0.0343)
edu_precol_2549	-0.00139	-0.000922	-5.41e-05	0.00204*	-0.0209	-0.000264	-0.000228	-0.00853	-0.0197
	(0.00339)	(0.00527)	(0.000858)	(0.00115)	(0.0245)	(0.00113)	(0.00112)	(0.0388)	(0.0265)
edu_col_2549	0.00350	0.00625	0.000960	0.000153	0.00234	0.00147	0.00160	0.0151	0.0158
Observations	403	403	403	403	403	403	403	403	403
Adjusted R-squared	0.119	0.405	0.094	0.101	0.784	0.363	0.372	0.682	0.728

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.3
The Impact of Hate Crime Legislation After One Year on Hate Crimes by Offense Type

VARIABLES	(1) hctot100kppl	(2) hc100kppl1	(3) hc100kppl2	(4) hc100kppl3	(5) hc100kppl4	(6) hc100kppl5	(7) hc100kppl6	(8) hc100kppl7
hcstatlag1	-0.318	0.00126	-0.00701	-0.0319	-0.0627	-0.103	0.00215	0.000502
	(0.907)	(0.00553)	(0.00610)	(0.143)	(0.199)	(0.457)	(0.00263)	(0.0160)
penenhlag1	0.618	-0.00344	0.00637	0.0585	0.114	0.234	-0.00231	-0.00968
	(0.876)	(0.00514)	(0.00568)	(0.107)	(0.201)	(0.430)	(0.00200)	(0.0156)
hcprevactlag1	-1.338	-0.00849	0.00555	-0.109	-0.679**	0.308	-0.0184*	0.00613
	(1.196)	(0.00709)	(0.00434)	(0.250)	(0.298)	(0.379)	(0.0102)	(0.0330)
hcsenenhactlag1	-0.192	0.00364	-0.00355	0.0525	-0.0736	0.319	-0.00188	-0.00499
	(0.729)	(0.00288)	(0.00398)	(0.129)	(0.184)	(0.274)	(0.00778)	(0.0188)
numagen100kpop	0.176***	0.000877**	0.000265	0.0208**	0.0381**	0.0655**	0.000169	0.00224
	(0.0524)	(0.000364)	(0.000295)	(0.00796)	(0.0152)	(0.0262)	(0.000351)	(0.00133)
pop15_29	-0.783***	0.00201	-0.00124	-0.0733	-0.156**	-0.304**	-0.00359*	-0.00992
	(0.277)	(0.00131)	(0.000934)	(0.0509)	(0.0607)	(0.123)	(0.00203)	(0.00636)
pop30_44	-0.312	-0.00128	-0.000373	0.0430	-0.215**	0.135	-0.00621**	0.00281
	(0.333)	(0.00154)	(0.00107)	(0.0662)	(0.0829)	(0.102)	(0.00259)	(0.00997)
prison	3.03e-05	-1.03e-07	-3.50e-09	7.93e-06	8.85e-06*	5.54e-06	2.34e-08	3.30e-07
	(2.29e-05)	(1.21e-07)	(6.15e-08)	(5.00e-06)	(4.51e-06)	(7.44e-06)	(7.84e-08)	(4.97e-07)
incar_rate	-0.00497**	2.06e-05	1.78e-07	-0.000931*	-0.00191***	-0.00125	-1.52e-05	-8.75e-05*
	(0.00197)	(2.11e-05)	(1.55e-05)	(0.000542)	(0.000492)	(0.000994)	(1.83e-05)	(4.92e-05)
black	0.285	0.00519***	-0.00304	0.0877	0.0943	0.0593	0.00150	0.00290
	(0.293)	(0.00169)	(0.00239)	(0.0678)	(0.0669)	(0.124)	(0.00192)	(0.00423)
urban	-0.0706	-0.000326	0.000296	-0.0131	-0.0220*	-0.0359	-0.000277	-0.00210
	(0.0448)	(0.000292)	(0.000366)	(0.00899)	(0.0119)	(0.0260)	(0.000266)	(0.00127)
unemp	18.90*	-0.000326	-0.101	2.620	6.791**	4.488	0.136	0.678*
	(9.290)	(0.0846)	(0.0780)	(2.123)	(2.585)	(4.949)	(0.0969)	(0.341)
income	4.19e-05	-2.28e-07	-6.12e-07	1.65e-05	9.87e-06	-2.89e-05	1.92e-07	2.20e-06
	(0.000127)	(6.93e-07)	(8.85e-07)	(2.14e-05)	(2.94e-05)	(5.61e-05)	(9.67e-07)	(2.83e-06)
word	0.0148	0.000120	1.46e-05	8.58e-05	0.00488*	0.00284	8.82e-05	0.000462*
	(0.0102)	(0.000155)	(7.73e-05)	(0.00245)	(0.00246)	(0.00420)	(6.63e-05)	(0.000230)
attend	-0.0121	-1.25e-05	-1.82e-05	0.00120	-0.00277	-0.00694	-0.000121	-0.000336
	(0.0151)	(9.08e-05)	(4.31e-05)	(0.00274)	(0.00368)	(0.00612)	(7.88e-05)	(0.000309)
edu_hs_2549	-0.0550	-0.000785	-0.000223	-0.0231	-0.00285	-0.0276	0.00117	0.000528
	(0.0860)	(0.000597)	(0.000525)	(0.0147)	(0.0188)	(0.0318)	(0.000729)	(0.00197)
edu_precol_2549	-0.0302	-0.000942	-0.000143	0.000176	0.00237	-0.0119	0.000536	0.00203
	(0.0596)	(0.000866)	(0.000460)	(0.0123)	(0.0123)	(0.0273)	(0.000514)	(0.00160)
edu_col_2549	0.0310	-0.000711	-0.000617	0.00318	0.0109	0.000555	0.00111	0.00208
	(0.103)	(0.000545)	(0.000588)	(0.0152)	(0.0192)	(0.0401)	(0.000776)	(0.00213)
Observations	403	403	403	403	403	403	403	403
Adjusted R-squared	0.717	0.095	0.101	0.557	0.555	0.720	0.306	0.366

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.3 (Continued)
The Impact of Hate Crime Legislation After One Year on Hate Crimes by Offense Type

VARIABLES	(9) hc100kppl8	(10) hc100kppl9	(11) hc100kppl10	(12) hc100kppl11	(13) hc100kppl12	(14) hc100kppl13	(15) hcsoc100kppl	(16) hcper100kppl	(17) hcprop100kppl
hcstatlag1	-0.0602	-0.0849	-0.0373*	-0.00290	0.0621	-0.00791	0.0101	-0.201	-0.127
	(0.0609)	(0.0589)	(0.0208)	(0.0142)	(0.298)	(0.00630)	(0.0159)	(0.671)	(0.379)
penenhlag1	0.0391	0.109**	0.0364*	0.0145	0.0217	0.00340	-0.00354	0.407	0.215
	(0.0582)	(0.0513)	(0.0199)	(0.00933)	(0.291)	(0.00449)	(0.0156)	(0.644)	(0.371)
hcprevactlag1	-0.0530	-0.155**	-0.00963	-0.0106	-0.542**	-0.0237	-0.0470	-0.501	-0.791**
	(0.0377)	(0.0640)	(0.0123)	(0.0180)	(0.250)	(0.0217)	(0.0397)	(0.858)	(0.365)
hcsenenhactlag1	-0.0178	-0.120	-0.00474	-0.0286**	-0.311	0.0134	-0.00886	0.296	-0.479
	(0.0320)	(0.102)	(0.0118)	(0.0131)	(0.252)	(0.0159)	(0.0180)	(0.488)	(0.325)
numagen100kpop	0.00450***	0.00624	0.000528	0.00208**	0.0339	0.000277	3.99e-05	0.126***	0.0500*
	(0.00143)	(0.00405)	(0.000423)	(0.00101)	(0.0219)	(0.000353)	(0.00107)	(0.0366)	(0.0252)
pop15_29	-0.0130	-0.0244	0.00194	-0.00206	-0.189***	-0.00349	-0.00857	-0.535**	-0.239***
	(0.0102)	(0.0176)	(0.00367)	(0.00393)	(0.0567)	(0.00378)	(0.00767)	(0.203)	(0.0853)
pop30_44	-0.0158	-0.0485**	-0.00367	0.000106	-0.184**	-0.00445	-0.0128	-0.0448	-0.254**
	(0.00960)	(0.0187)	(0.00339)	(0.00470)	(0.0750)	(0.00537)	(0.00926)	(0.234)	(0.108)
prison	-3.10e-07	-2.36e-07	-9.96e-08	5.15e-07**	8.19e-06	-2.10e-07	-1.58e-07	2.22e-05	8.21e-06
	(4.30e-07)	(6.26e-07)	(2.03e-07)	(2.04e-07)	(6.97e-06)	(1.62e-07)	(1.96e-07)	(1.60e-05)	(7.58e-06)
incar_rate	0.000129	5.86e-05	4.40e-05	-4.81e-05**	-0.000896	2.65e-06	-7.18e-05	-0.00409**	-0.000806
	(0.000112)	(0.000176)	(6.08e-05)	(2.33e-05)	(0.000652)	(2.95e-05)	(8.01e-05)	(0.00158)	(0.000700)
black	-0.00946	-0.0156	-0.00236	0.00747	0.0483	0.000649	0.00749	0.245	0.0323
	(0.00777)	(0.0142)	(0.00291)	(0.00454)	(0.0729)	(0.00304)	(0.00790)	(0.235)	(0.0757)
urban	0.00209	0.00887	0.000576	0.00143	-0.0122	0.000694	0.00104	-0.0714*	-0.000189
	(0.00185)	(0.00529)	(0.000574)	(0.000964)	(0.0195)	(0.000817)	(0.00143)	(0.0363)	(0.0186)
unemp	0.368	0.680	0.204	0.0154	2.312	0.288	0.391	13.93*	4.578
	(0.478)	(0.999)	(0.133)	(0.204)	(1.997)	(0.193)	(0.354)	(7.479)	(3.035)
income	-4.32e-06	5.28e-06	1.32e-06	8.97e-07	3.39e-05	5.18e-07	4.34e-06	-3.13e-06	4.07e-05
	(4.22e-06)	(8.89e-06)	(1.43e-06)	(2.70e-06)	(3.34e-05)	(1.99e-06)	(3.01e-06)	(9.04e-05)	(4.52e-05)
word	-2.36e-05	0.000526	0.000132	9.29e-05	0.00476	0.000205*	0.000598*	0.00803	0.00620*
	(0.000343)	(0.000594)	(0.000111)	(0.000171)	(0.00298)	(0.000114)	(0.000296)	(0.00753)	(0.00345)
attend	1.17e-05	2.72e-05	9.10e-05	4.59e-05	-0.00305	-4.41e-05	-0.000188	-0.00866	-0.00323
	(0.000496)	(0.000665)	(0.000175)	(0.000191)	(0.00395)	(0.000109)	(0.000177)	(0.0114)	(0.00484)
edu_hs_2549	0.00136	0.00383	0.000978	0.000626	-0.0123	0.00167	0.00204	-0.0534	-0.00369
	(0.00307)	(0.00649)	(0.000672)	(0.00166)	(0.0289)	(0.00146)	(0.00133)	(0.0559)	(0.0346)
edu_precol_2549	-0.00123	-0.000448	0.000110	0.00202*	-0.0220	-0.000230	-0.000329	-0.00987	-0.0200
	(0.00315)	(0.00497)	(0.000653)	(0.00116)	(0.0244)	(0.00113)	(0.00114)	(0.0402)	(0.0266)
edu_col_2549	0.00381	0.00614	0.00107	5.54e-05	0.00127	0.00153	0.00150	0.0144	0.0150
	(0.00379)	(0.00812)	(0.000913)	(0.00173)	(0.0355)	(0.00191)	(0.00187)	(0.0624)	(0.0452)
Observations	403	403	403	403	403	403	403	403	403
Adjusted R-squared	0.121	0.411	0.101	0.105	0.784	0.364	0.372	0.681	0.729

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.4
The Impact of Hate Crime Legislation on Hate Crimes by Bias Type

VARIABLES	(1) racerate	(2) cityracerate	(3) ethnicityrate	(4) cityethnicityrate	(5) raceethnicityrate	(6) cityraceethnicityrate
hcstatrace	-0.0990	-0.329	-0.0428	-0.0876	-0.142	-0.417
	(0.707)	(0.612)	(0.131)	(0.128)	(0.715)	(0.586)
penenhrace	0.187	0.464	0.0718	0.130	0.259	0.594
	(0.716)	(0.629)	(0.109)	(0.110)	(0.704)	(0.584)
hcprevact	-0.784	-0.870	-0.224	-0.257	-1.008	-1.127
	(0.694)	(0.693)	(0.180)	(0.169)	(0.840)	(0.828)
hcsenenhact	-0.941*	-0.658	-0.137	-0.126	-1.078*	-0.784
	(0.476)	(0.427)	(0.0899)	(0.0770)	(0.544)	(0.483)
numagen100kpop	0.0943***	0.0803***	0.0136	0.0103	0.108***	0.0906***
	(0.0262)	(0.0205)	(0.00908)	(0.00720)	(0.0316)	(0.0246)
pop15_29	-0.462**	-0.369**	-0.0465	-0.0411	-0.508**	-0.410**
	(0.167)	(0.148)	(0.0352)	(0.0291)	(0.192)	(0.167)
pop30_44	-0.138	-0.133	-0.0609	-0.0609	-0.199	-0.194
	(0.176)	(0.162)	(0.0491)	(0.0437)	(0.210)	(0.193)
prison	1.86e-05	1.73e-05*	7.17e-06*	5.72e-06	2.58e-05*	2.30e-05*
	(1.11e-05)	(9.91e-06)	(4.16e-06)	(3.48e-06)	(1.50e-05)	(1.31e-05)
incar_rate	-0.00284**	-0.00281**	-0.000940*	-0.000783*	-0.00378**	-0.00360**
	(0.00123)	(0.00129)	(0.000464)	(0.000431)	(0.00158)	(0.00162)
black	0.135	0.0966	0.0872	0.0752	0.222	0.172
	(0.170)	(0.157)	(0.0523)	(0.0449)	(0.189)	(0.171)
urban	-0.0337	-0.0168	-0.0295**	-0.0274**	-0.0632	-0.0442
	(0.0329)	(0.0351)	(0.0138)	(0.0118)	(0.0413)	(0.0423)
unemp	11.59*	12.17*	1.060	1.348	12.65*	13.52*
	(5.878)	(6.363)	(1.846)	(1.662)	(7.024)	(7.427)
income	-1.09e-05	-3.57e-05	1.94e-05	1.79e-05	8.50e-06	-1.78e-05
	(8.14e-05)	(7.81e-05)	(1.70e-05)	(1.48e-05)	(9.20e-05)	(8.67e-05)
word	0.00792	0.00796	-0.000304	0.000140	0.00762	0.00810
	(0.00613)	(0.00629)	(0.00192)	(0.00171)	(0.00747)	(0.00746)
attend	-0.00856	-0.00886	0.00214	0.00136	-0.00642	-0.00749
	(0.00870)	(0.00875)	(0.00327)	(0.00299)	(0.0110)	(0.0110)
edu_hs_2549	0.0344	0.0220	-0.00291	-0.00543	0.0314	0.0166
	(0.0513)	(0.0529)	(0.0160)	(0.0153)	(0.0606)	(0.0617)
edu_precol_2549	0.0637*	0.0466	0.000116	-0.00539	0.0638	0.0412
	(0.0351)	(0.0437)	(0.0118)	(0.0120)	(0.0421)	(0.0511)
edu_col_2549	0.0822	0.0895	0.00550	0.00780	0.0877	0.0973
	(0.0623)	(0.0608)	(0.0217)	(0.0199)	(0.0751)	(0.0729)
Observations	403	403	403	403	403	403
Adjusted R-squared	0.624	0.588	0.576	0.560	0.642	0.608

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.4 (Continued)
The Impact of Hate Crime Legislation on Hate Crimes by Bias Type

VARIABLES	(7) disabilityrate	(8) citydisabilityrate	(9) religionrate	(10) cityreligionrate	(11) sexualorientationrate	(12) citysexualorientationrate
hcstatdis	-0.0136	-0.0129				
	(0.0124)	(0.0108)				
penenhdis	-0.00200	0.00425				
	(0.0139)	(0.0105)				
hcstatrel			0.193	0.0632		
			(0.144)	(0.124)		
penenhrel			-0.209	-0.0667		
			(0.130)	(0.106)		
hcstatsexori					-0.560***	-0.526***
					(0.148)	(0.127)
penenhsexori					0.688***	0.663***
					(0.169)	(0.145)
hcprevact	-0.00298	-0.000467	-0.187	-0.215	0.166	0.182
	(0.0293)	(0.0202)	(0.162)	(0.194)	(0.258)	(0.241)
hcsenenhact			0.0866	0.0773	-0.00318	0.0213
			(0.116)	(0.108)	(0.176)	(0.160)
numagen100kpop	-0.00122	-0.00145	0.0127	0.0119*	0.0298***	0.0269***
	(0.00114)	(0.00109)	(0.00756)	(0.00647)	(0.00883)	(0.00833)
pop15_29	0.00270	0.00421	-0.0559*	-0.0380	-0.137**	-0.0994**
	(0.00930)	(0.00810)	(0.0302)	(0.0265)	(0.0502)	(0.0484)
pop30_44	0.000254	0.00294	-0.0431	-0.0408	0.0592	0.0818
	(0.0114)	(0.00838)	(0.0353)	(0.0345)	(0.0757)	(0.0700)
prison	4.42e-09	-1.29e-07	2.96e-06	2.20e-06	6.59e-06	5.39e-06
	(3.83e-07)	(3.01e-07)	(2.77e-06)	(2.25e-06)	(4.50e-06)	(4.16e-06)
incar_rate	-4.56e-05	-6.37e-05	-0.000458*	-0.000559*	-0.00135***	-0.000895*
	(6.47e-05)	(5.92e-05)	(0.000233)	(0.000323)	(0.000479)	(0.000481)
black	-0.00108	0.00433	0.0179	0.00282	0.139**	0.0957**
	(0.0103)	(0.00599)	(0.0169)	(0.0227)	(0.0522)	(0.0454)
urban	0.00303	0.00280	-0.0124**	-0.0126**	-0.0248	-0.0219
	(0.00245)	(0.00185)	(0.00604)	(0.00552)	(0.0181)	(0.0179)
unemp	0.236	0.297	3.972***	4.219***	-1.305	0.452
	(0.201)	(0.203)	(1.070)	(0.922)	(2.283)	(1.799)
income	1.11e-06	-1.25e-07	3.52e-06	5.63e-06	-1.81e-05	-9.25e-06
	(3.49e-06)	(2.52e-06)	(1.62e-05)	(1.60e-05)	(2.41e-05)	(1.88e-05)
word	-9.65e-05	0.000112	0.00162	0.00129	0.00350	0.00250
	(0.000376)	(0.000264)	(0.00141)	(0.00126)	(0.00241)	(0.00200)
attend	0.000122	-1.12e-05	-0.00227	-0.00161	-0.00232	-0.00238
	(0.000363)	(0.000232)	(0.00152)	(0.00159)	(0.00370)	(0.00350)
edu_hs_2549	-0.00163	-0.000600	0.00103	-0.000607	-0.00795	-0.00762
	(0.00129)	(0.00109)	(0.0119)	(0.0137)	(0.0162)	(0.0143)
edu_precol_2549	0.000311	0.000558	-0.00582	-0.0138	-0.0130	-0.0115
	(0.00159)	(0.00129)	(0.0103)	(0.0166)	(0.0120)	(0.0102)
edu_col_2549	-0.00270	-0.000895	0.00835	0.0179	-0.00434	0.00145
	(0.00265)	(0.00153)	(0.0135)	(0.0155)	(0.0130)	(0.0116)
gaytolerance					-0.00174	-0.00201
					(0.00201)	(0.00167)
cruisy_rate					-0.120	-0.0258
					(0.367)	(0.311)
gcenters					-0.0232	-0.0128
					(0.0330)	(0.0279)
Observations	304	304	403	403	349	349
Adjusted R-squared	0.110	0.142	0.866	0.736	0.631	0.633

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.5
The Impact of Hate Crime Legislation After One Year on Hate Crimes by Bias Type

VARIABLES	(1) racerate	(2) cityracerate	(3) ethnicityrate	(4) cityethnicityrate	(5) raceethnicityrate	(6) cityraceethnicityrate
hcstatracelag1	-0.341	-0.568	-0.0854	-0.111	-0.427	-0.679
	(0.641)	(0.535)	(0.0954)	(0.100)	(0.638)	(0.514)
penenhracelag1	0.359	0.638	0.102	0.135	0.462	0.774
	(0.648)	(0.542)	(0.0839)	(0.0921)	(0.636)	(0.511)
hcprevactlag1	-0.625	-0.485	-0.185	-0.165	-0.810	-0.649
	(0.631)	(0.601)	(0.130)	(0.127)	(0.742)	(0.707)
hcsenenhactlag1	-0.532	-0.677	-0.206	-0.213	-0.739	-0.890*
	(0.437)	(0.408)	(0.172)	(0.141)	(0.563)	(0.507)
numagen100kpop	0.0955***	0.0811***	0.0138	0.0106	0.109***	0.0917***
	(0.0253)	(0.0200)	(0.00867)	(0.00685)	(0.0302)	(0.0235)
pop15_29	-0.471**	-0.380**	-0.0484	-0.0430	-0.519**	-0.423**
	(0.170)	(0.151)	(0.0349)	(0.0289)	(0.195)	(0.169)
pop30_44	-0.137	-0.131	-0.0604	-0.0595	-0.197	-0.190
	(0.176)	(0.161)	(0.0486)	(0.0429)	(0.209)	(0.191)
prison	1.89e-05*	1.78e-05*	7.27e-06*	5.88e-06*	2.62e-05*	2.37e-05*
	(1.08e-05)	(9.66e-06)	(4.02e-06)	(3.32e-06)	(1.45e-05)	(1.27e-05)
incar_rate	-0.00274**	-0.00272**	-0.000923*	-0.000777*	-0.00366**	-0.00349**
	(0.00120)	(0.00125)	(0.000459)	(0.000427)	(0.00155)	(0.00158)
black	0.116	0.0747	0.0834	0.0729	0.199	0.148
	(0.175)	(0.164)	(0.0525)	(0.0450)	(0.196)	(0.179)
urban	-0.0353	-0.0180	-0.0296**	-0.0275**	-0.0650	-0.0455
	(0.0331)	(0.0346)	(0.0138)	(0.0118)	(0.0411)	(0.0416)
unemp	11.84**	12.65*	1.140	1.439	12.98*	14.08*
	(5.697)	(6.218)	(1.833)	(1.644)	(6.816)	(7.243)
income	-6.91e-06	-2.71e-05	2.08e-05	1.99e-05	1.39e-05	-7.20e-06
	(8.10e-05)	(7.77e-05)	(1.64e-05)	(1.41e-05)	(9.07e-05)	(8.53e-05)
word	0.00801	0.00826	-0.000268	0.000158	0.00774	0.00842
	(0.00631)	(0.00636)	(0.00199)	(0.00174)	(0.00768)	(0.00751)
attend	-0.00881	-0.00920	0.00209	0.00137	-0.00671	-0.00783
	(0.00861)	(0.00863)	(0.00326)	(0.00297)	(0.0109)	(0.0108)
edu_hs_2549	0.0334	0.0204	-0.00329	-0.00603	0.0302	0.0144
	(0.0524)	(0.0535)	(0.0162)	(0.0154)	(0.0619)	(0.0625)
edu_precol_2549	0.0629*	0.0473	0.000141	-0.00503	0.0630	0.0423
	(0.0360)	(0.0440)	(0.0119)	(0.0120)	(0.0432)	(0.0513)
edu_col_2549	0.0822	0.0892	0.00535	0.00754	0.0875	0.0968
	(0.0638)	(0.0619)	(0.0218)	(0.0200)	(0.0767)	(0.0740)
Observations	403	403	403	403	403	403
Adjusted R-squared	0.625	0.590	0.577	0.560	0.642	0.610

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.5 (Continued)
The Impact of Hate Crime Legislation After One Year on Hate Crimes by Bias Type

VARIABLES	(7) disabilityrate	(8) citydisabilityrate	(9) religionrate	(10) cityreligionrate	(11) sexualorientationrate	(12) citysexualorientationrate
hcstatdislag1	-0.00281	-0.00144				
	(0.00880)	(0.00719)				
penenhdislag1	0.000331	0.00179				
	(0.0107)	(0.00855)				
hcstatrellag1			0.119	-0.0292		
			(0.116)	(0.108)		
penenhrellag1			-0.187*	-0.0231		
			(0.103)	(0.0833)		
hcstatsexorilag1					-0.981***	-0.923***
					(0.241)	(0.232)
penenhsexorilag1					1.021***	0.970***
					(0.228)	(0.219)
hcprevactlag1	0.00314	0.00273	-0.0952	-0.0168	0.136	0.181
	(0.0278)	(0.0207)	(0.139)	(0.138)	(0.239)	(0.225)
hcsenenhactlag1			0.0401	-0.109	0.229	0.151
			(0.113)	(0.157)	(0.157)	(0.136)
numagen100kpop	-0.00117	-0.00143	0.0139*	0.0128**	0.0318***	0.0290***
	(0.00111)	(0.00106)	(0.00722)	(0.00604)	(0.00828)	(0.00872)
pop15_29	0.00308	0.00435	-0.0572*	-0.0409	-0.138***	-0.101**
	(0.00948)	(0.00825)	(0.0303)	(0.0261)	(0.0477)	(0.0462)
pop30_44	0.000457	0.00300	-0.0424	-0.0399	0.0464	0.0700
	(0.0117)	(0.00858)	(0.0359)	(0.0343)	(0.0782)	(0.0731)
prison	-1.86e-07	-2.69e-07	2.95e-06	2.24e-06	6.76e-06	5.65e-06
	(4.13e-07)	(3.28e-07)	(2.55e-06)	(2.03e-06)	(4.10e-06)	(3.80e-06)
incar_rate	-3.07e-05	-5.38e-05	-0.000429*	-0.000521	-0.00132***	-0.000868*
	(6.34e-05)	(5.65e-05)	(0.000246)	(0.000318)	(0.000471)	(0.000486)
black	-0.00232	0.00332	0.0171	-0.00134	0.132**	0.0898*
	(0.0107)	(0.00617)	(0.0174)	(0.0230)	(0.0569)	(0.0502)
urban	0.00247	0.00245	-0.0139**	-0.0140**	-0.0191	-0.0164
	(0.00246)	(0.00188)	(0.00643)	(0.00579)	(0.0188)	(0.0186)
unemp	0.204	0.282	3.778***	4.151***	-1.817	-0.0222
	(0.208)	(0.202)	(1.049)	(0.950)	(2.092)	(1.633)
income	7.65e-07	-2.68e-07	-4.83e-07	4.13e-06	-2.08e-05	-1.15e-05
	(3.38e-06)	(2.49e-06)	(1.59e-05)	(1.58e-05)	(2.37e-05)	(1.95e-05)
word	-5.26e-05	0.000138	0.00134	0.00115	0.00345	0.00242
	(0.000370)	(0.000267)	(0.00144)	(0.00128)	(0.00237)	(0.00196)
attend	0.000112	-1.14e-05	-0.00216	-0.00159	-0.00134	-0.00142
	(0.000356)	(0.000227)	(0.00153)	(0.00159)	(0.00386)	(0.00368)
edu_hs_2549	-0.00113	-0.000308	0.00146	-0.000301	-0.00968	-0.00960
	(0.00126)	(0.00111)	(0.0117)	(0.0134)	(0.0155)	(0.0139)
edu_precol_2549	0.000553	0.000712	-0.00752	-0.0148	-0.0143	-0.0127
	(0.00166)	(0.00135)	(0.0103)	(0.0164)	(0.0113)	(0.0101)
edu_col_2549	-0.00234	-0.000695	0.00862	0.0183	-0.0101	-0.00431
	(0.00255)	(0.00154)	(0.0133)	(0.0153)	(0.0121)	(0.0113)
gaytolerance					-0.00123	-0.00152
					(0.00179)	(0.00148)
cruisy_rate					-0.106	-0.0160
					(0.372)	(0.318)
gcenters					-0.0193	-0.00995
					(0.0236)	(0.0201)
Observations	304	304	403	403	349	349
Adjusted R-squared	0.104	0.138	0.866	0.736	0.647	0.650

Note: Numbers in parentheses are robust standard errors adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. Only states with data collection statutes are included.

Table 3.6
There are scenarios when hate crime laws impact hate crimes; however, they are not robus

VARIABLES	(1) hctot100kpopcov	(2) hctot100kpopcov	(3) hctot100kpopcov	(4) hctot100kpopcov	(5) hctot100kpopcovln1	(6) hctot100kpopcovln1	(7) hctot100kpopcovln1	(8) hctot100kpopcovln1
hcstat	2.589***	2.578***	1.822**	1.747**	0.489***	0.471***	0.397*	0.376**
	(0.00135)	(0.00119)	(0.0459)	(0.0376)	(0.000802)	(0.00202)	(0.0574)	(0.0421)
penenh	-1.648***	-1.630***	-1.344**	-1.026*	-0.227**	-0.197	-0.266**	-0.178
	(0.00652)	(0.00654)	(0.0258)	(0.0500)	(0.0232)	(0.103)	(0.0290)	(0.127)
datacollectionlaw		-0.0323		-0.543		-0.0539		-0.150
		(0.941)		(0.297)		(0.657)		(0.213)
numagen100kpop	-0.290*	-0.290*	-0.332**	-0.334**	-0.0361	-0.0365	-0.0453*	-0.0460*
	(0.0969)	(0.0992)	(0.0409)	(0.0402)	(0.154)	(0.153)	(0.0647)	(0.0618)
pop15_29	-0.508	-0.509	-0.890**	-0.902**	-0.178**	-0.179**	-0.178**	-0.181**
	(0.259)	(0.259)	(0.0205)	(0.0188)	(0.0443)	(0.0449)	(0.0246)	(0.0221)
pop30_44	-1.255**	-1.255**	-1.403***	-1.409***	-0.303***	-0.303***	-0.276***	-0.278***
	(0.0300)	(0.0303)	(0.00865)	(0.00855)	(0.00356)	(0.00363)	(0.00820)	(0.00815)
prison	-2.42e-05	-2.43e-05	-5.68e-05	-5.52e-05	-6.12e-06	-6.32e-06	-1.48e-05*	-1.44e-05*
	(0.543)	(0.540)	(0.277)	(0.280)	(0.300)	(0.279)	(0.0938)	(0.0909)
incar_rate	0.000152	0.000172	0.00296	0.00308	0.000676	0.000711	0.000788	0.000820
	(0.966)	(0.961)	(0.577)	(0.560)	(0.268)	(0.247)	(0.410)	(0.389)
black	-0.357	-0.354	-0.688	-0.642	-0.205**	-0.200**	-0.218*	-0.206*
	(0.485)	(0.497)	(0.211)	(0.259)	(0.0200)	(0.0246)	(0.0563)	(0.0801)
urban	0.0949	0.0952	0.0497	0.0528	0.0128	0.0133	0.00490	0.00573
	(0.360)	(0.360)	(0.585)	(0.566)	(0.481)	(0.466)	(0.794)	(0.761)
unemp	0.130	0.143	-10.05	-9.640	-0.777	-0.754	-2.131	-2.017
	(0.992)	(0.992)	(0.538)	(0.555)	(0.747)	(0.754)	(0.476)	(0.501)
income	9.31e-05	9.34e-05	0.000148	0.000153	3.27e-05	3.32e-05*	3.38e-05	3.53e-05
	(0.412)	(0.413)	(0.373)	(0.357)	(0.100)	(0.0960)	(0.298)	(0.278)
word	-0.00520	-0.00520	-0.00566	-0.00563	-0.00110	-0.00110	-0.00154	-0.00153
	(0.633)	(0.634)	(0.664)	(0.662)	(0.665)	(0.668)	(0.558)	(0.555)
attend	0.0139	0.0138	0.0123	0.0111	0.00212	0.00199	0.00280	0.00248
	(0.271)	(0.281)	(0.400)	(0.452)	(0.379)	(0.416)	(0.421)	(0.482)
edu_hs_2549	-0.0293	-0.0295	-0.182	-0.184	0.00294	0.00262	-0.0251	-0.0258
	(0.787)	(0.787)	(0.122)	(0.120)	(0.857)	(0.874)	(0.165)	(0.158)
edu_precol_2549	0.0790	0.0786	-0.0615	-0.0642	0.0235	0.0229	-0.00455	-0.00529
	(0.398)	(0.406)	(0.583)	(0.570)	(0.155)	(0.168)	(0.810)	(0.780)
edu_col_2549	-0.0703	-0.0706	-0.198	-0.201	0.00487	0.00439	-0.0203	-0.0210
	(0.566)	(0.568)	(0.133)	(0.132)	(0.780)	(0.804)	(0.334)	(0.323)
Observations	423	423	423	423	423	423	423	423
Adjusted R-squared	0.767	0.767	0.597	0.596	0.846	0.846	0.711	0.711
Weight by state pop	yes	yes	no	no	yes	yes	no	no

Note: Numbers in parentheses are p-values adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. These regressions are of a reduced sample size, only containing data from 2000 to 2010.

Table 3.7
Examples of when the regressions in Table 3.6 are no longer robust

VARIABLES	(1) hctot100kpopcov	(2) hctot100kpopcov	(3) hctot100kpopcov	(4) hctot100kpopcov	(5) hctot100kpopcov	(6) hctot100kpopcov	(7) hcper100kpopcov
hcstat	1.822**	0.477					0.800
	(0.0459)	(0.466)					(0.152)
penenh	-1.344**		-0.154				-0.214
	(0.0258)		(0.819)				(0.594)
hcstatlag1				1.901***	0.594		
				(0.00761)	(0.118)		
penenhlag1				-1.315**		0.118	
				(0.0158)		(0.812)	
numagen100kpop	-0.332**	-0.331**	-0.333**	-0.330**	-0.329**	-0.332**	-0.251*
	(0.0409)	(0.0407)	(0.0399)	(0.0412)	(0.0412)	(0.0403)	(0.0683)
pop15_29	-0.890**	-0.987**	-0.936**	-0.899**	-1.003**	-0.975**	-0.618**
	(0.0205)	(0.0148)	(0.0176)	(0.0175)	(0.0123)	(0.0139)	(0.0340)
pop30_44	-1.403***	-1.411***	-1.385***	-1.425***	-1.461***	-1.409***	-0.768*
	(0.00865)	(0.00953)	(0.00942)	(0.00826)	(0.00841)	(0.00964)	(0.0517)
prison	-5.68e-05	-5.54e-05	-6.04e-05	-5.55e-05	-5.31e-05	-5.77e-05	-3.30e-05
	(0.277)	(0.294)	(0.263)	(0.287)	(0.310)	(0.279)	(0.444)
incar_rate	0.00296	0.00420	0.00442	0.00336	0.00431	0.00452	0.00227
	(0.577)	(0.415)	(0.390)	(0.521)	(0.404)	(0.381)	(0.598)
black	-0.688	-0.761	-0.758	-0.738	-0.782	-0.772	-0.356
	(0.211)	(0.160)	(0.170)	(0.177)	(0.150)	(0.159)	(0.302)
urban	0.0497	0.0329	0.0228	0.0489	0.0346	0.0246	0.0242
	(0.585)	(0.711)	(0.797)	(0.585)	(0.695)	(0.782)	(0.717)
unemp	-10.05	-9.788	-9.987	-10.62	-10.12	-9.911	-5.644
	(0.538)	(0.546)	(0.536)	(0.512)	(0.530)	(0.538)	(0.560)
income	0.000148	0.000150	0.000157	0.000139	0.000149	0.000155	3.77e-05
	(0.373)	(0.368)	(0.347)	(0.402)	(0.368)	(0.351)	(0.695)
word	-0.00566	-0.00574	-0.00585	-0.00600	-0.00545	-0.00570	-0.00395
	(0.664)	(0.660)	(0.657)	(0.652)	(0.678)	(0.664)	(0.639)
attend	0.0123	0.0109	0.00939	0.0129	0.0115	0.00988	0.00744
	(0.400)	(0.460)	(0.519)	(0.378)	(0.435)	(0.498)	(0.354)
edu_hs_2549	-0.182	-0.182	-0.183	-0.184	-0.186	-0.184	-0.131
	(0.122)	(0.119)	(0.118)	(0.116)	(0.110)	(0.114)	(0.128)
edu_precol_2549	-0.0615	-0.0653	-0.0652	-0.0633	-0.0688	-0.0667	-0.0381
	(0.583)	(0.564)	(0.565)	(0.572)	(0.543)	(0.554)	(0.599)
edu_col_2549	-0.198	-0.192	-0.198	-0.199	-0.197	-0.196	-0.123
	(0.133)	(0.141)	(0.133)	(0.126)	(0.127)	(0.130)	(0.161)
Observations	423	423	423	423	423	423	423
Adjusted R-squared	0.597	0.596	0.596	0.597	0.597	0.596	0.567

Note: Numbers in parentheses are p-values adjusted for clustering on states. One, two, and three asterisks indicate significance at the 10%, 5%, and 1% levels respectively. All regressions include state and year fixed affects. These regressions are of a reduced sample size, only containing data from 2000 to 2010.

Hate Crimes: An Empirical Analysis on the Impact of Legislation

Appendix A: Legal References and Notes (current as of 2012)

ALABAMA
Ala. Code 1975 § 13A-5-13 (Penalty Enhancement)(1994)

ALASKA
Alaska Stat. § 12.55.155 (Penalty Enhancement)(1982)

ARIZONA
Ariz. Rev. Stat. Ann. § 13-702 (Penalty Enhancement)(1997)
Ariz. Rev. Stat. § 41-1750 (Data Collection)(1991-2013)

Note: Ariz. Rev. Stat. Ann. § 13-702 was vetoed in 1996 before being passed in 1997.

ARKANSAS
No Statute.

CALIFORNIA
Cal. Penal Code 422.6 (1987)
Cal. Penal Code 422.75 (Penalty Enhancement)(1991)
Cal. Penal Code 1170.75 (Penalty Enhancement)(1984)
Cal. Penal Code § 13023 (Data Collection)(1989)

Note: Cal. Penal Code 1170.75 has been renumbered and is now Cal. Penal Code 422.76. Cal. Penal Code § 666.7 also contains legislation relating to penalty enhancements.

COLORADO
Co. Rev. Stat. 18-19-121 (1988)

CONNECTICUT
Conn. Gen. Stat. § 53a-181b (1990)
Conn. Gen. Stat. § 53a-40a (Penalty Enhancement)(1990)
Conn. Gen. Stat. § 29-7m (Data Collection)(1988)

Note: Conn. Gen. Stat. § 53a-181b was repealed in 2000 and replaced by the following statutes: Conn. Gen. Stat. § 53a-181j, Conn. Gen. Stat. § 53a-181k, and Conn. Gen. Stat. § 53a-181l.

DELAWARE
De. Code Ann. Tit. 11 § 1304 (1995)
De. Code Ann. Tit. 11 § 4209 (Penalty Enhancement)(1995)

Note: De. Code Ann. Tit. 11 § 4209 allows the death penalty for bias crimes.

DISTRICT OF COLUMBIA
DC Code Ann. § 22-4003 (Penalty Enhancement)(1990)
D.C. Code § 22-4002 (Data Collection)(1990)

Note: DC Code Ann. § 22-4003 has been renumbered to DC Code Ann. § 22-3703 and D.C. Code § 22-4002 has been renumbered to D.C. Code § 22-3702.

FLORIDA
Fla. Stat. Ann. § 775.085 (Penalty Enhancement)(1989)
Fla. Stat. Ann. § 877.19 (Data Collection)(1989)

GEORGIA
O.C.G.A. §17-10-17 (Penalty Enhancement)(2000-2004)

HAWAII
Haw. Rev. Stat. Ann. § 706-662 (Penalty Enhancement)(1988)
Haw. Rev. Stat. Ann. § 846-51 (2001)
Haw. Rev. Stat. Ann. §§ 846-51, 52, 53, 54 (Data Collection)(2001)

Note: Haw. Rev. Stat. Ann. § 706-662, Hawaii's penalty enhancement statute, did not cover hate crimes until 2001; however, in 1988, the statute enhanced penalties for an "offender against elderly, handicapped, or minor under the age of eight."

IDAHO
Id. Code § 18-7902 (1983)
Idaho Code Ann. § 67-2915 (Data Collection)(1989)

ILLINOIS
720 Il. C.S. 5/12-7.1 (1982)
20 Ill. Comp. Laws Ann. 2605/55a, 2605/2605-390 (Data Collection)(1987)

INDIANA
Ind. Code Ann. § 10-13-3-38 (Data Collection)(2003)

IOWA
Iowa Code § 729A.2 (1992)
Iowa Code § 712.9 (Penalty Enhancement)(1992)
Iowa Code § 692.15 (Data Collection)(1992)

KANSAS
Kan. Stat. Ann. § 21-4716 (Penalty Enhancement)(1993-2011)
Kan. Stat. Ann. § 22-4604 (Data Collection)(2000)

KENTUCKY

Ky. Rev. Stat. Ann. § 532.031 (Penalty Enhancement)(1998)
Ky. Rev. Stat. Ann. § 17.1523 (Data Collection)(1992)

Note: Ky. Rev. Stat. Ann. § 532.031 is considered a penalty enhancement despite the non-traditional nature of the enhancement: "denial of probation, shock probation, conditional discharge, or other form of nonimposition of a sentence of incarceration."

LOUISIANA

La. Rev. Stat. Ann. § 14:107.2 (1997)
La. Rev. Stat. Ann. § 15:1204.2 (Data Collection)(1997)

MAINE

Me. Rev. Stat. Ann. 17-A § 1151 (Penalty Enhancement)(1995)
Me. Rev. Stat. tit. 25 § 1544 (Data Collection)(1992)

Note: In 1993, Maine had a weaker hate crime statute: Me. Rev. Stat. tit. 5 § 4684-A.

MARYLAND

Md. Code Ann. Art. 27 § 470A (1992-2002)
Md. Criminal Law Code Ann. § 10-304 (2002)
Md. Criminal Law Code Ann. § 10-307 (Penalty Enhancement)(2005)
Md. Code Ann. Pub. Safety § 2-307 (Data Collection)(2003)

Note: Md. Code Ann. Art. 27 § 470A was repealed in 2003 and replaced by Md. Criminal Law Code Ann. § 10-304. Additionally, Md. Code Ann. Art. 27 § 470A may have been enacted prior to 1992.

MASSACHUSETTS

Mass. Gen. Laws ch. 22C § 32 (1991)
Mass. Gen. Laws ch. 22C §§ 33, 34, 35 (Data Collection)(1990)

Note: Ma. Gen. Laws ch. 22C § 32 is not classified as a penalty enhancement despite the following text: "There shall be a surcharge of one hundred dollars on a fine assessed against a defendant convicted of a violation of this section." Additionally, Mass. Gen. Laws ch. 265 § 39 also provides penalties for bias crimes.

MICHIGAN

Mich. Comp. Laws Ann. § 750.147b (1989)
Mich. Comp. Laws Serv. § 28.257a (Data Collection)(1991)

MINNESOTA

Mn. Stat. Ann. § 609.2231 (1989)
Mn. Stat. Ann. § 609.749 (Penalty Enhancement)(1993)
Minn. Stat. § 626.5531 (Data Collection)(1988)

MISSISSIPPI

Ms. Code Ch. 19 § 99-19-305 (Penalty Enhancement)(1994)

MISSOURI
Mo. Stat. Ann. 574.090 (1988-1999)
Mo. Rev. Stat. § 557.035 (Penalty Enhancement)(1999)

Note: Mo. Stat. Ann. 574.090 repealed and replaced by Mo. Rev. Stat. § 557.035.

MONTANA
Mt. Code Ann. 45-5-222 (Penalty Enhancement)(1989)

NEBRASKA
Ne. Rev. Stat. § 28-111 (Penalty Enhancement)(1997)
Ne. Rev. Stat. Ann. § 28-114 (Data Collection)(1997)

NEVADA
Nv. Rev. Stat. 193.1675 (Penalty Enhancement)(1995)
Nv. Rev. Stat. 207.185 (1989)

Note: Nv. Rev. Stat. 207.185 is potentially a penalty enhancement as it provides a penalty for bias crimes which is applicable "unless a greater penalty is provided by law;" however, it is not classified as one in this study as it is not as straight forward as other penalty enhancements and in that it does not always act as an enhancement.

NEW HAMPSHIRE
N.H. Stat. Ann. § 651:6 (Penalty Enhancement)(1991)

Note: Crimes against the disabled were punished prior to 1991.

NEW JERSEY
N.J. Stat. Ann. 2C:44-3 (Penalty Enhancement)(1993)
N.J. Stat. Ann. 2C:33-4 (1990)
N. J. Rev. Stat. § 52:9DD-9 (Data Collection)(1997)

Note: N.J. Rev. Stat. § 2C:16-1 increased the penalty enhancement effective 2008.

NEW MEXICO
N.M. Stat. Ann. § 31-18B-3 (Penalty Enhancement)(2003)
N.M. Stat. Ann. § 31-18B-4 (Data Collection)(2003)

NEW YORK
N.Y. Penal Law § 240.31 (2000)
N.Y. Penal Law § 485.10 (Penalty Enhancement)(2000)
N. Y. Exec. Law § 837 (Data Collection)(2000)

NORTH CAROLINA
N.C. Gen. Stat. § 14-3 (Penalty Enhancement)(1991)
N.C. Gen. Stat. § 14-401.14 (1991)

NORTH DAKOTA
N.D. Crim. Code 12.1-14-04 (1973)

OHIO
Oh. Code Rev. § 2927.12 (Penalty Enhancement)(1987)

OKLAHOMA
Okla. Stat. tit. 21 § 850 (1987)
Okla. Stat. tit. 21 § 850 (Data Collection)(1987)

OREGON
Or. Rev. Stat § 166.155 (1981)
Or. Rev. Stat. § 181.550 (Data Collection)(1989)

PENNSYLVANIA
Pa. Stat. Ann. Tit. 18 § 2710 (Penalty Enhancement)(1982)
71 Pa. Cons. Stat. § 250 (Data Collection)(1987)

RHODE ISLAND
R.I. Gen. Laws § 11-42-3 (1982-1998)
R.I. Gen. Laws § 12-19-38 (Penalty Enhancement)(1998)
R.I. Gen. Laws § 42-28-46 (Data Collection)(1994)

Note: R.I. Gen. Laws 11-42-3 was repealed in 1998 and replaced by R.I. Gen. Laws § 12-19-38.

SOUTH CAROLINA
No Statute.

SOUTH DAKOTA
S.D. Cod. Laws Ann. 22-19B-1

TENNESSEE
Tenn. Code Ann. § 40-35-114 (Penalty Enhancement)(2000)

Note: Tenn. Code Ann. § 39-17-313 was enacted in 1989, repealed in 1990, and covered "race, color, ancestry, religion, or national origin;" however, focused mostly on property, had many caveats, and was not in effect during the time period of the analysis covered in this paper.

TEXAS
Tex. Code Ann. Art. 42.014 (1993)
Tex. Penal Code Ann. § 12.47 (Penalty Enhancement)(1993)
Tex. Penal Code Ann. § 411.046 (Data Collection)(1991)

Note: When Tex. Code Ann. Art. 42.014 and Tex. Penal Code Ann. § 12.47 were first enacted in 1993, they discussed bias crimes broadly, and did not mention specific protected groups. The language used was as follows: "because of the defendant's bias or prejudice." In 2001, specific protected groups were added with the following language: "because of the defendant's bias or prejudice against a group identified by race, color, disability, religion, national origin or ancestry, age, gender, or sexual preference."

UTAH
Utah Stat. Ann. § 76-3-203.3 (Penalty Enhancement)(1992)
Utah Code Ann. § 53-10-202 (Data Collection)(1992)

VERMONT
Vt. Stat. Ann. Tit. 13 § 1455 (Penalty Enhancement)(1990)

VIRGINIA
Va. Code Ann § 18.2-57 (Penalty Enhancement)(1994)
Va. Code Ann. § 52-8.5 (Data Collection)(1988)

WASHINGTON
Wa. Rev. Code Ann. 9A.36.080 (1981)
Wash. Rev. Code Ann. § 36.28A.030 (Data Collection)(1993)

WEST VIRGINIA
W.Va. Code § 61-6-21 (1987)

Note: W.Va. Code § 61-6-21 potentially contains a penalty enhancement.

WISCONSIN
Wis. Stat. Ann. 939.645 (Penalty Enhancement)(1987)

WYOMING
Wy. Stat. 1997 S6-9-102 (1982)

***Note: The years listed in the table represent the time period for which the laws are effective, if no end date is listed, the laws are still in effect.*

***Note: Appendix does not include hate crime statutes relating to institutional vandalism, cross-burning, mask wearing, and law enforcement training. Additionally, civil action statutes are not included. This appendix covers all key hate crime statutes as of April 2012; however, this appendix may not include every section of relevant legislation. For example, the District of Columbia's "Bias-Related Crime Act of 1989" included the following statutes: 22-4001, 22-4002, 22-4003, and 22-4004; however, only 22-4002 and 22-4003 are listed above.*

Hate Crimes: An Empirical Analysis on the Impact of Legislation

Appendix B: Examples of Hate Crime Legislation

Racial Animus

Conn. Gen. Stat. § 53a-181j (2010)—A person is guilty of intimidation based on bigotry or bias in the first degree when such person maliciously, and with specific intent to intimidate or harass another person because of the actual or perceived race, religion, ethnicity, disability, sexual orientation or gender identity or expression of such other person, causes serious physical injury to such other person or to a third person.

Discriminatory Selection

Del. Code Ann. tit. 11, § 1304 (2010)—Imposes additional penalties for hate crimes where it is shown that a perpetrator selected the victim because of the victim's race, religion, color, disability, sexual orientation, national origin or ancestry.

Note: This statute also contains a penalty enhancement

Because of

Alaska Stat. § 12.55.155 (2010)—The following factors shall be considered by the sentencing court if proven in accordance with this section, and may allow imposition of a sentence above the presumptive range set out in AS 12.55.125: the defendant knowingly directed the conduct constituting the offense at a victim because of that person's race, sex, color, creed, physical or mental disability, ancestry, or national origin.

Note: This statute also contains a penalty enhancement

Penalty Enhancement

D.C. Code § 22-3703 (2010)— A person charged with and found guilty of a bias related crime shall be fined not more than 1½ times the maximum fine authorized for the designed act and imprisoned for not more than 1 ½ times the maximum term authorized for the designed act.

Data Collection

Iowa Code § 692.15 (2010)—If it comes to the attention of a sheriff, police department, or other law enforcement agency that a public offense or delinquent act has been committed in its jurisdiction, the law enforcement agency shall report information concerning the public offense or delinquent act to the Department of Public Safety. The hate crimes listed in section 729A.2 are subject to the reporting requirements of this section.