THE IMPACT OF BAIL REFORM ON ARREST RATES FOR AGGRAVATED ASSAULT IN TWO CITIES

by

Brion Patrick Gilbride

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

With the recent push to implement bail reform in various U.S. cities and states, the impact of such reform was studied using aggravated assault arrest statistics for Philadelphia, a city that implemented bail reform via prosecutorial discretion, and for Pittsburgh, which had not implemented bail reform. Using the time period of January 2017 through December 2019, a quantitative analysis was completed on aggravated assault arrest counts in both cities to ascertain whether the removal of bail as a deterrent caused aggravated assault arrests to increase. Using a *t*-test, linear regression, and ANOVA, it was determined that bail reform had minimal (if any) influence on aggravated assault arrests in Philadelphia. While this analysis fills a gap in the literature, it also suggests that much more needs to be done if the implications and, where appropriate, consequences of bail reform are to be understood by the politicians and government officials who will make decisions regarding its implementation.

Keyword: deterrence, punishment, celerity, misdemeanor, felony, bail, bail reform, prosecutorial discretion

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Dedication

Neither the development of this study nor my doctoral journey itself would have been possible without the support of my family.

To my wife – thank you for supporting me (again!) in getting my schoolwork done. The dinners I skipped, the events I didn't go to, the weekends I spent tethered to the computer, all of it. I could never have done this without you. I am most especially grateful for the little nudge back at the beginning when you said, "You've been talking about this for years – go do it!".

To my sons – thank you both for being patient with Dad while I worked on all of this. I look forward to your educational journey and am immensely proud of both of you.

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I would like to also extend thanks to Liberty University – for embracing non-traditional education, for doing so at the doctoral level, and for preparing and deploying a robust criminal justice program that I have been privileged to be a part.

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List of Abbreviations

Akaike Information Criterion (AIC)

American Civil Liberties Union (ACLU)

Analysis of Variance (ANOVA)

Black, Indigenous, People of Color (BIPOC)

Community Oriented Policing Services (COPS)

Correctional Offender Management Profiling for Alternative Scenarios (COMPAS)

Cross-Industry Standard Process for Data Mining (CRISP-DM)

Deferred Retirement Option Plan (DROP)

District Attorney (DA)

District Attorney's Office (DAO)

District of Columbia (DC)

Driving While Intoxicated (DUI)

Failure to Appear (FTA)

Federal Bureau of Investigation (FBI)

Illinois Safety, Accountability, Fairness, and Equity-Today Act (SAFE-T)

Indiana Risk Assessment System Pretrial Assessment Tool (IRAS-PAT)

Local Anti-racist Pretrial Justice (LAPJ)

Magisterial District Justice (MDJ)

Manhattan Bail Project (MBP)

Metropolitan Transit Authority (MTA)

Minnesota Freedom Fund (MFF)

National Bail Funds Network (NBFN)

National Crime Victimization Survey (NCVS)

National Incident-Based Reporting System (NIBRS)

New York City Police Department (NYPD)

Office of Court Administration (OCA)

On Recognizance [Program] (OR)

Personally Identifiable Information (PII)

Philadelphia Bail Experiment (PBE)

Pretrial Assessment Release Supervision (PARS)

Pretrial Justice Institute (PJI)

Prison Policy Initiative (PPI)

Racketeer Influenced and Corrupt Organizations Act (RICO)

Release on Recognizance (ROR)

Research Questions (RQ)Uniform Crime Report (UCR)

United Kingdom (U.K.)

United States (U.S.)

United States Attorney (USA)

U.S. Sentencing Commission (USSC)

Virginia Pretrial Risk Assessment Instrument (VPRAI)

CHAPTER ONE: INTRODUCTION

Overview

In February 2018, the newly-elected Philadelphia District Attorney (DA) instituted a policy that the DA's office would not request bail for certain criminal offenses (District Attorney's Office, City of Philadelphia, 2018). At the time of this policy change, approximately 20% of persons incarcerated in Philadelphia's jails remained in custody simply because they could not pay the required bail (Sasko, 2018). Bail ensures that an arrestee will appear for court proceedings and is not intended to be a punishment (American Bar Association, 2019). The United States (U.S.) Constitution forbids the imposition of excessive bail via the *excessive bail clause* (Howe, 2014). Philadelphia's rationale for the policy change is that bail disproportionately hurts those in poverty (Allyn, 2018; Sasko, 2018), while critics of the policy believe that eliminating bail will cause crime in Philadelphia to increase (Allyn, 2018; Lybrand & Subramaniam, 2021). Would not the requirement to post bail deter that arrestee from committing a crime(s) while they are free awaiting court proceedings - knowing that an arrest would cost monies they or their families can ill afford to lose? Or, are some arrestees provided additional opportunities to commit criminal acts by virtue of not being required to post bail and thus avoiding incarceration until and unless their court proceedings are resolved? This study will examine the effect of Philadelphia's bail reform policy on crime rates in Philadelphia through the lens of deterrence theory, and will compare the crime rate for aggravated assault in Philadelphia during the bail reform transition to those of Pittsburgh; a Pennsylvania city which had not enacted bail reform during the study period being addressed here.

Background

Bail

As this study concerns Philadelphia's bail policy, it must first be understood how the bail process works in Pennsylvania. As previously mentioned, bail is used to ensure that an offender will appear for their court proceedings and is returned to them at the conclusion of those proceedings (American Bar Association, 2019). The Pennsylvania Office of Victim Services defines both bail and bail bond. Bail is the money or other surety given to a court to assure an arrestee will appear before that court, and should the arrestee fail to appear the money or other surety might be forfeited. A bail bond is a commitment by the accused that ensures he/she will appear before the court (Pennsylvania Office of Victim Services, 2022a). Upon arrest, an offender is brought before the magisterial district justice (MDJ), (Pennsylvania Office of Victim Services, 2022b.) who sets bail. The arrestee may pay the bail directly or use a bail/bond company (Pennsylvania Office of Victim Services, 2022c). A bail bondsman is defined as one whose business is providing bail as a surety (42 Pa. C.S.A. §5741). Should an arrestee fail to appear for a scheduled proceeding, their bail may be revoked (42 Pa. C.S.A. § 5747.1(a)) and the bondsman would be required to pay a forfeiture judgment *or* return the arrestee to court to resume proceedings within 90 days (42 Pa. C.S.A. § 5747.1(b)(1-2).

Pennsylvania has additional statutes that govern the bail system. In Article 238, Section 520 of the Pennsylvania code, bail is required to be set in any case in which the law permits bail to be set. If denied, the bail authority (i.e., magistrate) must state in writing or in the judicial record the reasoning behind the denial (234 Pa. Code § 520). If the bail authority does elect to set bail for a defendant, Section 523 governs the setting of such bail. Here, the law requires certain elements be considered such as the nature of the offense, aggravating/mitigating factors,

employment status and/or financial condition, ties to the community, character, mental condition, addiction status, and/or conduct during prior bail conditions (234 Pa. Code § 523(A)) Finally, Section 524 defines the types of bail release available. These include release on recognizance (ROR) with no conditions, release on non-monetary conditions, release on unsecured bail bond where no actual money is exchanged unless the defendant defaults, release on nominal bail (i.e., $1.00), and release on monetary condition (234 Pa. Code § 524(C)). The release on monetary condition, which is the focus of the bail reform movement as well as Philadelphia's policies, is itself governed by Section 528. This section notes that once the bail authority decides to impose monetary bail there are additional considerations, among which is the defendant's ability to pay bail (234 Pa. Code § 528(A)(1)), and that such bail imposition must be reasonable (234 Pa. Code § 528(B)). Defendants are expected not to commit criminal activity as part of the conditions of their bail bond (234 Pa. Code § 526(A)(5)).

Bail Reform

Prior to 2018, attempts were made to study and/or implement bail reform in different parts of the U.S. Cohen (1978) claimed that the cash bail system violates the *equal protection clause* of the 14th Amendment because it treats defendants on the basis of wealth rather than the necessity of ensuring their appearance at court (Cohen, 1978). In 1984, Congress passed the Bail Reform Act of 1984. This act allowed Federal judges to decide whether an offender could be released or detained pending trial, and explicitly permitted detention when it was not possible to assure an offender's appearance at court *and* when that offender presents a safety issue (Bail Reform Act of 1984; U.S. v. Salerno, 1987). This law was challenged in a case involving the Racketeer Influenced and Corrupt Organizations Act (RICO) that reached the U.S. Supreme Court as *U.S. v. Salerno* (1987). Here, the Court held that the Bail Reform Act of 1984 was valid

and violated neither the Excessive Bail Clause of the 8th Amendment or the Due Process Clause of the 5th Amendment because the Bail Reform Act of 1984 included safeguards (U. S. v. Salerno, 1987). *Salerno* was not the first case to address the *excessive bail clause*. In 1951, the U.S. Supreme Court decided in *Stack v. Boyle* that assignment of bail must be fixed properly, and that any bail set higher than that reasonably needed to guarantee presence at court proceedings is excessive per the 8th Amendment (Stack v. Boyle, 1951). Even so, determining what was 'reasonable' remained the purview of magistrates and judges. In 2015, the U.S. Department of Justice filed a statement of interest in an Alabama class-action case, asserting that bail procedures that do not account for an individual's capability to pay or finance bail are incongruent with the U.S. Constitution (Liu, Nunn, & Shambaugh, 2018; Sherman & Abrams, 2018; U.S. Department of Justice, 2015a).

During the 2017 election campaign for Philadelphia District Attorney, winning candidate Larry Krasner said that Philadelphia would no longer request bail for non-violent offenses (Ewing, 2017; Orso, 2017; Otterbein, 2017). This statement was consistent with the ongoing movement to address bail policies across the U.S. There was precedent for this as well: Washington, D. C. eliminated cash bail in 1992. During a 2018 interview, D.C. Superior Court Judge Morrison claimed that incarcerating people pre-trial, where incarceration is not necessary, increases recidivism and damages both families and economies (Block, 2018). Morrison noted that 94% of persons arrested in Washington, D. C. were released and 88% attended the required court hearings. Morrison acknowledged that 2% of arrested persons were rearrested for a crime of violence (Block, 2018). Washington, D. C. uses risk assessment to determine pre-trial incarceration. Risk assessments, intended to eliminate bias in pre-trial detention decisions, do not actually do so as bias is largely built into them (Block, 2018; Simon, 2018). One of the main

motivations behind bail reform is that the requirement for an arrestee to pay bail to secure their release pre-trial places significant burdens on the poor and/or members of disadvantaged groups (Baughman, 2020), and thus even the use of risk assessments to remove the human element from pre-trial detention decisions is insufficient.

Philadelphia is not alone in efforts to implement bail reform (District Attorney's Office, City of Philadelphia, 2018). New York passed bail reform in 2019 (Hoylman, 2022). During debates over this legislation, law enforcement expressed concern about the potential effects, asserting that bail reform would threaten public safety (Sanchez, 2020). Regardless, bail reform was enacted. The New York City Police Department (NYPD) found in 2020 that suspects released as a result of bail reform committed 299 major crimes, or 1.8% of the crime in all of New York City at that time. However, none of those 299 major crimes were shootings (Moore, 2020). This lack of shootings was significant because the NYPD opposed the bail reform based partly on the idea that bail reform would let violent offenders quickly return to the street to commit further crimes (Kimmel, 2022; Prater, 2022). Other concerns included the potential for witness intimidation or retaliation by those released under bail reform who before would have been incarcerated unless they could pay bail (Kriss, 2018). Shootings in New York City did ultimately increase and by August 2021, gun violence reached levels unseen in the previous ten years; enough that gun violence was declared a statewide disaster (Stocker, 2021). As a result, some New York lawmakers, with law enforcement support, sought to place firearms-related crimes back onto the list of crimes eligible for bail (Stocker, 2021). In April 2022, New York amended its bail reform law to give judges more discretion in setting bail and incorporated more firearms-related offenses into the list of offenses eligible for bail (Akinnibi & Nahmias, 2022; O'Brien, 2022; Spector & Gronewold, 2022).

Reactions to Philadelphia's Bail Reform

There have been different reactions to Philadelphia's bail reform policy. Some believe that cash bail discriminates against poor and minority offenders, particularly those charged with non-violent crimes. As such, the existing cash bail system is unjust (Allyn, 2018; Editorial Board, 2018; Sasko, 2018). By mid-2019, 18 months after bail reform was implemented, news reporting indicated that violence in Philadelphia was increasing (Schultz, 2019). Over the June 2019 Father's Day weekend, there were 30 shootings (Lozano & Mayk, 2019). U.S. Attorney (USA) William McSwain, whose office covers Philadelphia, blamed Philadelphia's policies for the shootings while the DA's Office disavowed responsibility (Lozano & Mayk, 2019; MacDonald, 2019). Both the DA and USA McSwain alluded to a working relationship with the Commissioner of the Philadelphia Police Department, who himself stated that there was too much emphasis on political correctness and not enough emphasis on crime. The Commissioner believed arrestees realize they have nothing to fear regarding consequences for firearms-related crimes (MacDonald, 2019). One reported anecdote that summer involved a man arrested for possession of a firearm. His firearms possession case was diverted into the Accelerated Rehabilitative Disposition program wherein he received probation. He was arrested a second time for possession of a firearm, and granted release on *unsecured bail* (Schultz, 2019), meaning he paid nothing unless he defaulted (234 Pa. Code § 524(C)). His third arrest led to a murder charge after he shot another man (Schultz, 2019). With the DA's Office insisting that bail reform was necessary to remedy inequities in the bail system, such as the impact of bail on those who lose wages or employment because they cannot afford it (Charles, 2021; Jackson, 2018), and components of Philadelphia's criminal justice system such as the Philadelphia Police Department (MacDonald, 2019) or the U.S. Attorney's Office (Lozano & Mayk, 2019; MacDonald, 2019)

implying that bail reform has complicated enforcement efforts, it remains difficult to determine who is right.

Deterrence Theory

The theoretical basis for this study of Philadelphia's bail policy is deterrence theory. In simple terms, deterrence is a person's response to the threat of a punishment as perceived by that person while deciding whether or not to commit a criminal act (Ladegaard, 2018; Nagin, 2013; Nagin & Pogarsky, 2003). What we know as deterrence theory began in 1764 with Beccaria, who reasoned that one way to deter people from committing crimes is to impose a punishment for doing so (Paternoster, 2010; White, 2016). Punishment, thought Beccaria, must be certain, swift, and severe - and of those three factors certainty was most important (Freilich, 2014; Jacobs, 2010; Jacques & Allen, 2014; Matthews & Agnew, 2008; Pogarsky, 2002; Nagin & Pogarsky, 2001, Nagin, 1998; Nagin, 2013). Bentham expanded on Beccaria's work; Bentham believed that the value of a punishment must be at least equal to the value of any profit that might be derived from the offense (Sverdlik, 2019; White, 2016), and that punishment should only be that which is necessary to restore compliance with the law (Sverdlik, 2019; White, 2016).

In recent years, deterrence theory has been extensively studied. For example, Nagin described how ecological deterrence studies examine crime rate(s) and punishment(s) to establish whether those punishment(s) have a deterrent effect (Jacobs, 2010; Nagin, 1998). The situation regarding Philadelphia's bail reform policy and that policy's relationship to Philadelphia's crime statistics appears to fit what Nagin described.

Problem Statement

In recent years, bail reform has become a contested topic as more jurisdictions enact or attempt to enact bail reform. As these jurisdictions include both cities and states, millions would be impacted by such reforms (Jorgensen & Smith, 2021). Bail reform has been examined but these studies focus on the costs and the inequities of bail itself (Duffy, 2021; Van Brunt & Bowman, 2018), or the discriminatory aspects of bail systems (Buntin, 2019; Van Brunt & Bowman, 2018). The reported increases in crime across the United States in recent years have been attributed by some to bail reform, even though crime rate increases also occurred in jurisdictions that have not enacted bail reform (Lybrand & Subramanian, 2021). Attributions aside, bail reform has not been studied from the perspective of how bail reform does or does not influence crime rates, nor has the removal of bail as a deterrent been studied.

Purpose Statement

The purpose of this study is to determine whether and how the implementation of bail reform affected arrest rates in Philadelphia, Pennsylvania before and after Philadelphia's bail reform policy shift. As bail reform itself encompasses a variety of policies, existing studies of bail reform policies also vary. An emphasis on discriminatory aspects of the existing bail system has created a gap in the literature where the real-world effects of bail reform policies have been insufficiently explored. Cassell and Folkes (2020) studied the consequences of bail reform in Cook County, Illinois (Chicago), however Chicago's reforms were less stringent than those in Philadelphia (District Attorney's Office, City of Philadelphia, 2018). Using the theoretical basis of deterrence theory for support, the emphasis of this study will be how Philadelphia's policy of not requesting bail for certain offenses has impacted arrest rates in that city.

It is essential to understand the impact of bail reform on arrest rates in terms of those offenders who prior to bail reform might have been deterred by incarceration until the adjudication of their case(s). Regardless of the outcome of this study, significant benefit will be derived from this work. Supporters of bail reform will be encouraged if arrest rates in Philadelphia remained stable or dropped as a result of the reforms, and opponents will be similarly encouraged if crime has risen as the result of such reforms. The results of this study can be used to inform other jurisdictions of the potential impacts of eliminating bail for certain offenses, further increasing the potential value of this work.

In this study, the independent variable is the presence of bail reform itself. The Philadelphia District Attorney's Office maintains a Public Data Dashboard, and within that Dashboard is the dataset essential to this study. There is a crime rate table available for download (Philadelphia District Attorney's Office, 2022b). Philadelphia's bail reform policy was implemented shortly after the DA's election in February, 2018 (District Attorney's Office, City of Philadelphia, 2018), meaning that there are arrest statistics available covering a year prior to the DA's election, the year that bail reform was implemented in Philadelphia, and the year following. Accordingly, the period of January 1, 2017 through December 31, 2019 will be used for this study.

This study will examine the effect of Philadelphia's bail reform policy on arrests for aggravated assault, a crime not covered by the Philadelphia DAO's memorandum on bail reform (District Attorney's Office, City of Philadelphia, 2018). Using data on aggravated assault arrests during the study period, the data will be analyzed to identify whether the number of aggravated assault charges changed as a result of bail reform efforts. In other words, when Philadelphia implemented bail reform, did that cause arrests for aggravated assault to increase or decrease?

This data will be compared with Pittsburgh, which had not implemented bail reform during the 2017-2019 study period (Petis, 2022). Using Pittsburgh as a control group – a city that did *not* have bail reform at the time Philadelphia instituted theirs – is expected to show that a city without reform should have arrest rates that behave differently.

Prior to these bail reform movements becoming energized, there were several officer-involved killings of African-American men between 2014 and 2016. These include Michael Brown in Ferguson, Missouri (U.S. Department of Justice, 2015b), Eric Garner in New York City (BBC, 2014), Laquan McDonald in Chicago, Illinois (Braun & Greenwood, 2015), Tamir Rice in Cleveland, Ohio (Office of Public Affairs, 2020), Freddie Gray in Baltimore, Maryland (BBC, 2016), Philando Castile in Minneapolis, Minnesota (BBC, 2017), and others. These incidents likely helped energize the various bail reform movements as a response to the incidents and the unrest that followed. Considering the political impact of those killings and the bail reform movements that followed, it should be noted that the African-American population in these cities ranges from 18.9% in Minneapolis to 47.6% in Cleveland to 62.3% in Baltimore (U.S. Census Bureau, n.d.b.).

Conversely, one of the primary concerns regarding bail reform is safety. The sense that people feel unsafe seems to be an unintended consequence of bail reform. Law enforcement in particular believes that bail reform has directly contributed to violence in U.S. cities because courts are not holding violent offenders as long as they once did (Hogan & Golding, 2021; Kaste, 2021; Tucker & Jimenez, 2021). In Cook County (Chicago), of 3,400 persons released on electronic monitoring, nearly three-quarters were accused of violence or firearm-related charges (Tucker & Jimenez, 2021). In Waukesha, Wisconsin in 2021, an individual drove a vehicle into a parade, killing six people. This individual had been released on $1,000 bail two weeks before the

parade for allegedly striking another woman with his car (Kaste, 2021). In Chicago in 2021, an individual that murdered a 7-year-old girl had three pending criminal cases for possession of a firearm with defaced serial number, robbery, and drug possession (Tucker & Jimenez, 2021). In Manchester, New Hampshire in 2022 a man was stabbed to death on a rail trail by another man who was out on bail for a previous stabbing at the time (Sexton, 2023).

People became concerned after incidents such as these that bail reform might be responsible for the increase in crime that made them feel unsafe (Mangual, 2020). In California a study was done on $0 bail that found that 70% of those released on that amount of bail subsequently committed additional offenses (Watts, 2023; Yolo County District Attorney, 2023). San Francisco evidently conducted a similar study in 2021 finding similar results – that 74% of violent offenders reoffended prior to trial and in almost 30% of cases the judge released the offender against the pretrial assessment recommendation (Grimes, 2021). Non-violent offenses are also at issue; stores continue to close in various cities due to shoplifting crimes. (deLeon, 2023; Downey, 2022; Hall, 2023; Hogan & Golding, 2023; Smith, 2022).

The minority demographics in Philadelphia are within similar ranges as the cities in which controversial officer-involved killings of African-Americans occurred. Philadelphia, per Census population estimates, is 41.4% African-American (U.S. Census Bureau, n.d.a.). If the reformers are correct and *people of color* are disproportionately harmed (American Civil Liberties Union, 2022), then Pittsburgh with its 22.9% African-American (U.S. Census Bureau, n.d.a.) population is not similarly representative of Philadelphia's population in terms of minority proportion. In terms of population generally, Pittsburgh has one-fifth the population of Philadelphia at 302,898 (U.S. Census Bureau, n.d.a.).

The use of Pittsburgh as a control city should provide ample data for comparison with Philadelphia. Pittsburgh has relevant commonalities with Philadelphia, such as its presence in the same U.S. state as Philadelphia, meaning the same state laws regarding bail rule both cities, and the influence of controversial police-involved killings of African-Americans energizing bail reform proponents. Conversely, Pittsburgh being situated on the opposite side of the state from Philadelphia should mute potential regional effects (or lack thereof) on arrest rate changes given Philadelphia's proximity to the cities of Boston, New York City, Baltimore, and Washington DC.

Significance of the Study

This study is significant for several reasons. An analysis of bail reform based on its deterrent value has not been conducted, thus leaving a significant gap in the research. The changes instituted by Philadelphia and being contemplated by other jurisdictions will have real-world effects that are not fully understood. To facilitate such understanding, sufficient data must be available for analysis. Philadelphia makes such data readily available. The Public Data Dashboard publicized by the DA's Office contains arrest data spanning the years 2014-2021 (Philadelphia District Attorney's Office, 2022b). The Allegheny County District Attorney's Office maintains similar data for the city of Pittsburgh (Western Pennsylvania Regional Data Center, 2023). To underscore the significance of studying bail reform, there were and still are intense passions generated on both sides of the U.S. political spectrum in jurisdictions where bail reform has been implemented or is being considered. It is imperative that the policymakers that pontificate for or against such reform have both reliable and unbiased information upon which to base their decisions.

Research Questions

For this study, arrest data from January 1, 2017 through December 1, 2019 was obtained for Philadelphia. Using the charge of aggravated assault, which is a Uniform Crime Report (UCR) Part 1 offense that most U.S. law enforcement agencies report to the Federal Bureau of Investigation (FBI) for statistical purposes (Federal Bureau of Investigation, 2011), this data will be analyzed for behavior both before and after Philadelphia's bail reform implementation. With bail reform implemented, it is anticipated that arrests for aggravated assault – an offense not included in Philadelphia's bail reform - will show a statistically significant increase after implementation. Such an increase in post-reform aggravated assault arrests would support the notion that bail reform caused an increase in crime. Arrest data from January 1, 2017 through December 31, 2019 was also obtained for Pittsburgh. Also using the offense of aggravated assault (Federal Bureau of Investigation, 2011), this data will be analyzed in comparison to Philadelphia's data to determine if a comparable city will show a similar increase in aggravated assault arrests. As Pittsburgh had not implemented bail reform during the 2017-2019 study period, it serves as a control location for this study.

The four research questions applicable to this study deal with arrest data from the cities of Philadelphia and Pittsburgh, with the focus on the charge of aggravated assault.

RQ_1: *How did Philadelphia's arrest rate for aggravated assault change in the year prior to bail reform implementation?*

RQ_2: *How did Philadelphia's arrest rate for aggravated assault change in the year following bail reform's implementation?*

RQ_3: *How did Pittsburgh's arrest rate for aggravated assault change in the year prior to bail reform implementation in Philadelphia?*

RQ$_4$: *How did Pittsburgh's arrest rate for aggravated assault change in the year after Philadelphia's bail reform implementation?*

Definitions

The following definitions are included in this study:

1. *Bail* – a payment held by a court to ensure an offender appears for all required hearings before the court. It is returned to the offender at the conclusion of proceedings (American Bar Association, 2019).
2. *Deterrence* - a person's response to the threat of punishment as perceived by that person when deciding whether or not to commit a criminal act (Ladegaard, 2018; Nagin, 2013; Nagin & Pogarsky, 2003).
3. *Risk Assessment* – a tool that uses actuarial data to predict the likelihood of an individual attending court proceedings based on various factors that include but are not limited to: age at arrest, charges, prior convictions, prior failure to appear, or age (Author Unknown, 2018).
4. *Felony* – Historically used as a term to distinguish serious offenses from less-serious ones; the punishment for a felony is usually a prison term in excess of one year (Legal Information Institute, 2021a; Shannon et. al, 2017). In the U.S., the determinant between what offense constitutes a felony is often but not exclusively the penalty imposed and can in some states be dependent on the facility in which the offender will be incarcerated (Boyce & Perkins, 1989).
5. *Misdemeanor* – Less-serious offense; most jurisdictions define misdemeanors as crimes for which the punishment is less than one year in prison (Kohler-Hausmann, 2013), or through community service, probation, or fines (Legal Information Institute, 2021b).

While offenses such as simple assault or petty theft are misdemeanor offenses in most U.S. states, other less-serious offenses may be classified as misdemeanors, civil ordinance violations, criminal ordinance violations, or summary offenses depending on the specific jurisdiction (Stevenson & Mayson, 2018).

6. *Prosecutorial Discretion* – The authority of a prosecutor to choose to pursue or not pursue a criminal case. As the representative of the executive before the judiciary, the prosecutor is empowered to decide not just whether a case could be successfully argued but whether a case should be brought at all (Loewenstein, 2001; Sarat & Clarke, 2008; Sheer, 1998). U.S. courts generally recognize this authority, and the only restrictions to the prosecutor's discretionary authority is that they cannot selectively enforce or fail to enforce the law if that selectivity is based in racism, religious animosity, or similar arbitrary notion (Loewenstein, 2001).

CHAPTER TWO: LITERATURE REVIEW

Overview

To understand the different aspects of this study, the literature review focuses on five integral concepts. First, the theoretical basis of this study, deterrence theory, is addressed from a perspective of over two hundred years of development leading into its modern applications. The concept of bail is covered, also from a historical perspective to show what bail is, how it works, and how it evolved into what it has become in modern U.S. jurisprudence. The different types of bail reform are discussed as these reform aspects touch on the heart of this study; how the modern bail reform movement has grown and what efforts have been made. Prosecutorial discretion, being the method used to reform Philadelphia's bail system, is the fourth concept. It discusses the role of inherent prosecutorial power and explains how bail reform might be accomplished via that discretionary power. A review of the bail reform efforts in six locations around the U.S. are provided. These locations were chosen to show the varied results of the bail reform movements in those locations to provide context to what Philadelphia has done. Finally, a brief examination of the evolution of "tough on crime" policies beginning in the 1960s up to the bail movements of today is presented.

Related Literature

Theoretical Framework: Deterrence Theory

We start with the theoretical basis for this study – deterrence theory. Beginning with Cesare Beccaria's work in the 18th century and its influence on philosopher Jeremy Bentham, the historical development of what becomes known as deterrence theory will be traced from its origins to the latter half of the 20th century. In the late 20th century, the dormant concepts of modern deterrence theory are resuscitated by Becker, and from here the formulation into a theory

of deterrence will be discussed. It took more than two hundred years for the concept of deterrence to coalesce into a criminological theory, and in addition to Beccaria, Bentham, and Becker, many others contributed or refined the ideas involved.

Historical – Cesare Beccaria

What we know today as deterrence theory was first conceived by Cesare Beccaria in his work *On Crime and Punishments*. Beccaria was born in 1738 in Milan, and was raised by Jesuits. Beccaria was educated first in mathematics and later graduated with a degree in law. At the time, Milan was part of the Hapsburg Empire, meaning that Beccaria was exposed to both Italian and German thought (Bruni & Porta, 2014; Bessler, 2018; Ramello & Marciano, 2018). Beccaria pioneered the consideration of punishment through an economic lens. His educational background made this possible – to change how people think about punishment (Ramello & Marciano, 2018). Modern law enforcement, where certainty of punishment is assured through investigation and apprehension, is itself derived from Beccaria's ideas (Freilich, 2014).

In 1764, *Dei delitti e delle pene*, which translates to *On Crimes and Punishments,* was first published (Beirne, 1994; Bruni & Porta, 2014; Bessler, 2018). Its first printing was in Livorno, Italy (Beirne, 1994; Bruni & Porta, 2014). The work, particularly for the 18th century, was wildly popular. *On Crimes and Punishments* was published twice more in Italy and once in France in 1765 (Beirne, 1994; Bessler, 2018), with Morellet's French translation coming in 1766 (Bruni & Porta, 2014). German translations were made available in Prague (1765), Hamburg (1766), Ulm (1767), and Breslau (1778), further spreading Beccaria's ideas (Bruni & Porta, 2014). By 1800 there were Italian, French, English, and United States editions (Beirne, 1994; Bessler, 2018). Those who followed Beccaria's work included William Blackstone, Jeremy Bentham, Voltaire, Thomas Jefferson, Catherine II of Russia, Maria Theresa of the Holy Roman

Empire, and John Adams, which speaks to the breadth of influence Beccaria had and would have (Beirne, 1994; Bessler, 2018).

While Beccaria influenced a great many people with *On Crimes and Punishments*, he was also himself influenced. French philosophy was significant to Beccaria, specifically Montesquieu. Beccaria himself noted Montesquieu's influence (Beirne, 1994; Bruni & Porta, 2014; Bessler, 2018). For example, Beccaria separated crime from sin in his writings (Beirne, 1994). Additional influence was derived from Francis Bacon, who Beccaria incorporated into the front material of the six Beccaria-authorized editions of *On Crimes and Punishments* (Beirne, 1994), with the following quote: "In all negociations of difficulty, a man may not look to sow and reap at once; but must prepare business, and so ripen it by degrees" (Beirne, 790, 1994). Francis Hutcheson was another influence on Beccaria, particularly Hutcheson's ideas on the social contract, simple laws, and the deterrence produced by punishment (Beirne, 1994).

Hutcheson's concept of the social contract was a considerable part of Beccaria's thinking (Beirne, 1994). Like Hutcheson, Beccaria thought the Hutcheson's social contract was the appropriate model for how a society should operate. Both thought it was natural that people could not maintain order and that the state was better suited to it; people exchanged some portion of their liberty to the state in return for a series of laws that people could adhere to (Beirne, 1994; Bruni & Porta, 2014; White, 2016). Beccaria thought the social contract to be essential because people generally seek pleasure based on their particular interests and at the same time seek to avoid anything unpleasant (Bruni & Porta, 2014; Freilich, 2014; White, 2016). Beccaria also believed that people had agency, meaning that they could control their behavior(s) long enough to evaluate a situation to identify the benefit (or lack thereof) to themselves before committing to a course of action. That agency meant that people could be held responsible for their decisions

(Freilich, 2014). These two ideas – the social contract and a person's agency – combine together to make punishment possible through the enforcement of the social contract against people whose ability to weigh the costs of a decision before making the decision.

Beccaria's work in *On Crimes and Punishments* devoted significant time to the idea of punishment. Beccaria wanted punishment to only be applicable to those who were adjudicated guilty, and that the punishment applied needed to be sufficient enough itself to be a deterrent to the rest of society; that the punishment of a criminal would provide a benefit to society beyond the mere incarceration of that criminal (Bessler, 2018; Freilich, 2014;). Crime itself, opined Beccaria, should be measured by the harm done to society; motive or intent are not relevant (Beirne, 1994; Bruni & Porta, 2014). Punishment is necessary when society is harmed by the acts of a criminal, and it is ultimately up to the state to implement said punishment (Bruni & Porta, 2014). Even so, Beccaria sought rational punishments that were implemented only when necessary and only to the extent required to gain compliance (Marwah & Joplin, 2020). In other words, Beccaria's preferred punishments were less onerous to the criminal and would be combined with education as a deterrent (Bessler, 2018; Marwah & Joplin, 2020).

All of this feeds into Beccaria's idea of deterrence; that the 'cost' to a person of committing a crime could be increased when the sanction for violating a law enacted as part of the social contract met three criteria. The punishment needed to be certain (likely to be implemented), swift (quickly implemented once guilt established), and severe. Punishments that leave the benefit of committing a criminal act greater than the cost of doing so tend to negate the idea of crime altogether (Freilich, 2014; White, 2016). Beccaria held that *certainty* was the most important deterrent aspect of punishment; severity can work against deterrence if a punishment is too severe relative to the offense (White, 2016; Bessler, 2018). Beccaria applied *lex talionis* to

his idea, which is the biblical concept of ‘an eye for an eye’ but used it to serve deterrence rather than retribution. Beccaria borrowed from Hume’s theory of association here, noting that people associate one idea with another and that association shapes their entire intellect. People would associate the idea of committing a criminal act with the sanction (cost) applied to doing so, and that would provide the deterrent effect (White, 2016). In other words, reminding society of the punishment for a criminal act is more important than the punishment itself (White, 2016).

An important aspect to punishment was the idea of proportionality. Beccaria claimed that punishment should be public, proportionate to the offense, swift, and necessary. The shorter the period between a crime and the sanction applied to the violator, the stronger the association in the offender’s mind (Beirne, 1994; Bruni & Porta, 2014; Freilich, 2014; Marwah & Joplin, 2020; White, 2016;). The benefit that would have accrued to the criminal and the harm done to society by the criminal had to be weighed in proportion to the punishment for the criminal (White, 2016; Bessler, 2018). This proportionality is essential as the obstacles that prevent people from committing a crime had to be sufficiently strong enough to make committing that crime offensive to public good. If a more-serious crime and a less-serious crime had the same punishment, criminals would choose the more-serious crime in most instances because the cost and the effect would be identical (Beirne, 1994; Bessler, 2018; Bruni & Porta, 2014; Marwah & Joplin, 2020; White, 2016;). Beccaria’s proportionality was designed to reduce severity through legislation; that the legal statutes enacted to designate something as a crime and to codify the appropriate punishment for that crime prevents judges from implementing overly harsh punishments. Beccaria viewed legislators and their legislation as that which made proportionality possible (Marwah & Joplin, 2020). In modern-day criminal justice the proportionality enters the equation long before the criminal stands before a judge; it comes from the police officer’s

decision to arrest or not, the prosecutor's decision to charge or not, or the prosecutor's decision to offer a plea bargain, or some other aspect of the criminal justice process (Marwah & Joplin, 2020).

Proportionality, even as Beccaria articulated it, was imperfect. Beccaria did not include resource costs as part of proportionality. These costs include apprehension, prosecution and punishment on one side, versus the harm to victim(s) or the harm punishment causes for the criminal (White, 2016). Beccaria's support for proportionality did not wholly exclude the idea of retribution, as the justification for a given punishment need not be the same as the justification for how that given punishment is implemented (White, 2016). Beccaria's idea here had aspects to it that could not be reconciled. Even when the same punishment is applied for a specific crime, that same punishment will afflict different criminals in different ways. For example, a stint in prison may hurt a wealthy family more than a destitute one, while fines hurt the destitute more than the wealthy (White, 2016). Beccaria did not agree with the use of fines as it enabled the rich to evade punishment that the poor could not simply by virtue of their available wealth (White, 2016).

The support for Beccaria's work is quite visible in current deterrence literature. While few scholars have written specifically regarding the validity of Beccaria's concept of deterrence, evidence can be found in those deterrence scholars that reference Beccaria in their own work. Ferrajoli, discussing the 250th anniversary of the publication of Beccaria's *On Crimes and Punishments*, laid out the basic elements of what Beccaria thought about deterrence. For example, Ferrajoli (2014) noted that Beccaria said that punishment should not be an act of violence against an offender, but rather must be proportionate to the crime and specified in the laws (Ferrajoli, 2014). Beccaria thought men must fear laws, not other men, and that such laws

need to be clear, simple, and understandable in order to make those same laws defensible. Beccaria quoted Montesquieu when he wrote that any punishment not absolutely necessary is a tyranny, and himself believed that certainty of a punishment was more important than the punishment itself (Ferrajoli, 2014).

Hensel and Kacprzak studied *cyberloafing* in 2019, where employees use company-provided internet access for personal, non-work use. The authors sought to determine whether the punishment for cyberloafing affects the employees punished, the employees not subject to the punishment, and on which of the two groups was the affect stronger. In the opening to this study, the authors describe the origin of deterrence theory; noting that sanctions tend to deter criminal activity. The citation for this opening was Beccaria (Hensel & Kacprzak, 2019). In 2020, Stringer studied drunk driving and deterrence. Stringer explored whether an increased perception of certainty or severity of punishment was related to fewer self-reported driving while intoxicated (DUI) charges, whether prior punishment related to an increased perception of certainty, or whether punishment avoidance related to a decreased perception of certainty. Stringer (2020) noted that his findings for the perception of certainty of a DUI punishment were consistent with Beccaria's classic deterrence theory. Also, Kilmer and Midgette (2020), in their study of the effectiveness of South Dakota's 24/7 Sobriety program, noted in the first sentence of their introduction that deterring rule violations relies upon celerity, severity, and certainty of punishments, citing Beccaria.

Continuing in this vein, Truelove et. al studied speeding by young drivers in Australia. They developed a structural equation model to include both legal and non-legal factors relating to the driver's decision to speed. This model was developed with Beccaria's classical deterrence theory in mind (Truelove et. al, 2021). Truelove et. al cited Beccaria, noting that while they did

leave swiftness of punishment out of their model, Beccaria said that such swiftness of punishment connects the criminal act to the consequences (Truelove et. al, 2021). Buckenmaier, Dimant, Posten, and Schmidt (2021) studied how the timing and uncertainty of a punishment deters crime, specifically noting that Beccaria and later Bentham developed the idea of celerity. Garner, Maxwell, and Lee conducted a meta-analysis of deterrence studies to understand whether prosecution, conviction, or punishment have any impact on domestic violence. The authors cited Beccaria noting that the relationship between punishment and behavior is as old as the study of criminology, and that Beccaria thought sanctions should be constrained to the extent feasible as the purpose of sanctions was to protect society (Garner, Maxwell, & Lee, 2021). Miceli, Segerson, and Earnhart studied experience's role in deterrence in 2022. They, too, cited Beccaria when noting that deterrence is the scaffolding that supports economic models of crime. Deterrence says that people are less apt to commit a criminal act if it becomes possible that they might be punished for it. In the context of economics, deterrence claims people will commit a crime if the benefit of doing so outweighs the cost and that cost depends on both the severity of punishment and likelihood of apprehension (Miceli, Segerson, & Earnhart, 2022).

Historical - Jeremy Bentham

In the 1780s, philosopher Jeremy Bentham built upon the idea of deterrence as one part of his extensive writing career. Born in 1748 (Armitage, 2011; Author Unknown, 2015a; Denis, 2021), Bentham attended and earned degrees from Oxford (Armitage, 2011; Author Unknown, 2015a; Vitali, 2021). He studied law and did well enough to be accepted to the bar but instead pursued a career analyzing law instead (Author Unknown, 2015a). Among other writings, Bentham wrote and published *An Introduction to the Principles of Morals and Legislation*

(Armitage, 2011; Bentham, 1781; Paternoster, 2010; Sverdlik, 2019; Tomlinson, 2016) in 1781 but it was held until finally being released in 1789.

Bentham's writing broke new ground regarding punishment and deterrence, and did so through Beccaria's economic perspective (Ramello & Marciano, 2018; White, 2016). In fact, Beccaria's work was a significant influence on Bentham's ideas (Beirne, 1994; Bessler, 2018; Paternoster, 2010). Bentham thought of deterrence in terms of punishment, that punishment should promote the general happiness (Bentham, 1781; Sverdlik, 2019). Bentham saw punishment's purpose is to deter rather than retribution (Engel, 2019). Following that concept, Bentham understood that if punishment's purpose is to deter, then then as the temptation to offend increases the punishment must also increase. Even if leniency is called for, it must not be allowed to undermine deterrence (Bentham, 1781; Miceli, 2018; Sverdlik, 2019). While the punishment might deter the offender, Bentham went further. Transparency – that the community could see the punishment and how it affects the offender – is how punishment promotes the general happiness (Bentham, 1781; Engel 2019).

Punishment, noted Bentham, deals in pleasure and pain. Bentham gave examples, such as one's senses, one's reputation, or wealth as pleasures, and physical pain, poverty, or one's bad reputation as pain (Bentham, 1781; Paternoster, 2010). To this, Bentham applied his concept of utility; that mankind has only two masters – pleasure and pain – and that those alone dictate a person's decision on any given action (Bentham, 1781). Through utility, Bentham described the balance between the benefit that is pleasure and the cost that is pain (Bentham, 1781; Paternoster, 2010). Sverdlik broke down Bentham's conception of pleasure and pain, noting that there is a quantity of pleasure/pain an individual believes he/she will experience in the commission of a criminal act. In addition, Bentham included the ideas of certainty, which speaks

to the extent to which the individual believes the pleasure/pain will occur, and proximity which refers to the timeliness of that experience (Sverdlik, 2019). Bentham maintained that punishments must be proportionate; magnitude must increase as certainty decreases because punishment is geared toward the potential profit an offender might have made and not the potential harm of the offense (Bentham, 1781; Miceli, 2018).

Bentham discussed the different types of punishments. There are four forms: political sanction, moral sanction, sympathetic sanction, and religious sanction. Political sanction derives from government, moral sanction derives from the community, sympathetic sanction derives from one's own conscience, and religious sanction derives from theology (Bentham, 1781; Jacques & Allen, 2014; Paternoster, 2010). The most dominant of these is the political sanction, followed by moral sanction (Jacques & Allen, 2014). Political sanction, simply put, is punishment administered by the state, while moral sanction is informal and includes the loss of respect or reputation (Jacques & Allen, 2014; Paternoster, 2010). While political sanctions are the focus of this study, Jacques & Allen (2014) explained how these sanctions can work in concert: a person with a criminal record (political) cannot find stable employment (moral), which leads to shame at being unable to provide for family (sympathetic). Sanctions can also undermine each other; using the same example religion (theology) espouses forgiveness for sins (Jacques & Allen, 2014).

The ideas that both Beccaria and Bentham developed gave rise to what we now know as deterrence theory. Beccaria thought the state was the best avenue to maintain order (Beirne, 1994; Bruni & Porta, 2014; White, 2016), and Bentham noted that state instituted political sanctions against offenders (Bentham, 1781; Jacques & Allen, 2014; Paternoster, 2010). Beccaria thought that people seek pleasure based on their particular interests and try to avoid

unpleasantness (Freilich, 2014; Bruni & Porta, 2014; White, 2016), while Bentham developed utilitarianism which said that people deal only in pleasure and pain and make their decisions based on that (Bentham, 1781; Sverdlik, 2019). Beccaria noted that the seriousness of an offense and the magnitude of the punishment must be proportional (Marwah & Joplin, 2020; White, 2016), and Bentham found that magnitude of a punishment must increase as the certainty of said punishment being implemented decreases (Bentham, 1781; Miceli, 2018).

Modern – 1968 to 2000

After Beccaria and Bentham in the 18th century, we can fast-forward to the mid-20th century to find that their ideas had resurfaced. In 1968, two works were published at approximately the same time – one by an economist named Becker and the other by a social scientist named Gibbs. Becker's work, *Crime and Punishment: An Economic Approach* (1968), looked at both enforcement and punishment from a cost perspective. Gibbs' work, *Crime, Punishment, and Deterrence* (1968), looked at deterrence as a legal reaction and the relationship between crime rates and certainty/severity via the death penalty. While neither author developed a theory of deterrence, their work built upon what Beccaria and Bentham had begun. Becker and Gibbs were perhaps the most influential in 1968 with regard to the development of deterrence theory, until other authors followed up in 1969 with deterrence-related work.

Becker begins by noting that the harm to society tends to increase as criminal activity increases, and that the value (benefit) received by offenders also tends to increase (Becker, 1968). An offender will act as long as the utility of doing so is greater than the utility of taking some other action. Becker pointed out that criminals have a different cost/benefit analysis than non-criminals; other theories merely complicate matters beyond the cost/benefit concept (Becker, 1968; Bentham, 1781). If punishment becomes more likely (certain), the total number

of offenses should decrease; a change in probability has more impact than a change to the punishment itself (Becker, 1968). Yet, Becker found that different groups respond differently to punishments, thus affecting the use of punishment as a deterrent. Unpremeditated murderers and robbers tend to be impulsive, so the magnitude of a punishment does not deter them. Young people and the insane often cannot understand consequences, so neither a magnitude increase nor an increase in conviction probability are likely to deter them (Becker, 1968). Both punishment magnitude and conviction probability are ultimately dictated by society via a legislative body (Becker, 1968). This suggests that society, without an understanding of effective deterrence, often seeks policies that would seem to deter criminals but actually have little effect at all.

Gibbs used the death penalty as the focus for his 1968 work. He noted that classic justice theory uses punishment to maximize deterrence while the positivist school of the time denies the deterrent effects of punishment in favor of rehabilitation (Gibbs, 1968). Criminological theory, such as it was in 1968, did not examine the influence of the legal reaction to crime and the relationship of that influence to crime rates. This legal reaction has two aspects. The normative aspect concerns whether or not punishment *should* be applied, while the actual aspect refers to the frequency at which said punishment actually is applied (Gibbs, 1968). Gibbs found, as Bentham did, that the certainty and celerity of that legal reaction may be more important than the severity of the punishment (Bentham, 1781; Freilich, 2014; Gibbs, 1968; White, 2016). People that advocate for punishment often point out that the offender makes a choice between the satisfaction of the act and the pain of the applicable punishment (Bentham, 1781; Gibbs, 1968; Paternoster, 2010; Sverdlik, 2019). Against this background, Gibbs conducted his study.

Gibbs sought to quantify and estimate certainty of punishment. This can be done by comparing statistics for criminal homicide in a given year to slightly later statistics for prison

admittances of those convicted of criminal homicide (Gibbs, 1968). Gibbs did this, and in his study he predicted that states whose certainty and severity were above the median would have lower homicide rates, while those whose certainty and severity were below the median would have higher homicide rates (Gibbs, 1968). He found that nine states (81%) that had low certainty/severity had a high homicide rate, and that one state (9%) had high certainty/severity and a high homicide rate. Using chi-square and phi-coefficients, Gibbs found that certainty has the stronger association to homicide rates, but that severity cannot be discounted even though the association is significantly weaker (Gibbs, 1968; Tittle, 1969). A subsequent review by Martin and Gray (1969) found that severity influenced the homicide rate (based on Gibbs' data) more than certainty did, thus casting doubt on Gibbs' conclusion. However, Martin and Gray did agree that severity and certainty do have an additive effect and as a result concurred with Gibbs' conclusion that punishment can deter crime (Martin & Gray, 1969). Gibbs' contribution to deterrence theory was to disprove the idea that a relationship between the legal reactions to an offense and the crime rate for that offense does not exist. Gibbs found that the theoretical concept of deterrence, while pre-dating modern sociological/psychological concepts, has been disadvantaged by such pre-dating, and that more evidence must be developed that would justify classifying deterrence as a theory (Gibbs, 1968). This was a significant leap for what became known as deterrence theory.

After the work of Becker and Gibbs, 1969 produced additional work relating to deterrence. Andenaes (1969) reminded us that deterrence theory was articulated as far back as 1830 by Reverend Sydney Smith. Reverend Smith noted that society should use a proven offender to help reduce crime by using his/her punishment to induce dread in the population (Andenaes, 1969). In other words, society must announce the standards of behavior as well as the

penalty for failing to observe those standards. In doing this, the choice to offend or not offend is left to the individual (Andenaes, 1969). Tittle (1969) conducted a study quite similar to what Gibbs had done. In his study, Tittle noted that a previous study by Chambliss involving parking enforcement at a university found a significant drop in violations when the certainty and severity of punishments for parking violations increased (Tittle, 1969; Salem & Bowers, 1970). Tittle noted that the data he used, the UCR and National Prisoner Statistics, to calculate certainty, severity, and crime rate indexes across seven offense categories, might have defects. He pointed out that crime statistics are often unreliable, data sources tend to be incompatible with each other, and that there often gaps in such data (Tittle, 1969).

Tittle noted that even though his data was insufficient, his findings were significant in spite of that and that deterrence studies should be given significantly more attention from sociologists (Tittle, 1969). Tittle focused the study on certainty and severity. He found that deviance is negatively related to certainty. In other words, as certainty increases, crime drops. In addition, he found that urbanization influences that relationship; the relationship is stronger when there is less urbanization (Tittle, 1969). Tittle further found that the type of offense also has an influence on the relationship between certainty and the crime rate for that offense. As an example, Tittle noted auto theft has almost no relationship between certainty and the crime rate while sex offenses have a significant relationship (Tittle, 1969). Severity, on the other hand, has a positive relationship to the crime rate(s). Generally, the more severe the punishment for an offense is, the higher the incidence rate will be. Tittle found this held true for every offense category except homicide (Gibbs, 1968; Tittle, 1969). Deterrence conditions, Tittle suggested, vary depending on the offense. Severity might not have an additive effect, but certainty likely does as crime rate drop when certainty rises (Tittle, 1969).

Scholarship regarding relationships between deterrence and severity/certainty perpetuate and are becoming more defined; the 1970s saw additional work on deterrence. Authors continued to analyze deterrence as it relates to criminal activity and it was here that we first saw mentioned a deterrence theory or deterrence principle. Salem and Bowers focused their work on severity, nothing that punishment is itself a deterrent (Andenaes, 1969; Salem & Bowers, 1970). Salem and Bowers (1970), in their study of formal sanctions on college campuses, found that deviance drops as severity of punishment rises. They noted that the effect varies by offense; for example, alcohol and cheating offenses showed a strong effect while theft of library books did not (Salem & Bowers, 1970).

Phillips and Votey (1972) noted that law enforcement itself is a deterrent because it limits crime generation. This led to Ehrlich's 1972 work on law enforcement's deterrent effect. Ehrlich said that economics theory is how a *deterrent theory of law enforcement* can be justified; that when the cost of an activity increases relative to other activities, people will shift from that activity to other, cheaper ones (Ehrlich, 1972). Probability and severity of punishment per offense represent a direct effect of law enforcement activity on offenders. When people want offenses punished more severely, law enforcement tends to devote more resources to those offenses, which causes apprehensions to increase (Ehrlich, 1972). Similarly, as probability and severity increase, offenders are incarcerated for longer periods and are thus unable to commit additional offenses (Ehrlich, 1972). Ehrlich tested probability and severity in his study by using cross-state regression analysis for seven index crimes punishable by incarceration, using Uniform Crime Statistics and National Prisoner Statistics. Ehrlich found that law enforcement *does* have a deterrent effect separate from the preventative effect of incarceration (Ehrlich, 1972).

Gibbs continued his work on deterrence in 1973, with co-author Erickson. They begin by explaining why the *deterrence principle* might be valid. First, it was questionable to extrapolate from previous death penalty studies into all other punishments. Second, the deterrence principle was not yet a theory and required restatement. Third, all tests thus far of the deterrence principle were in one way or another methodologically defective (Erickson & Gibbs, 1973). Here, Erickson and Gibbs proposed a study of homicide data (again), but with a different methodology knowing the result they identified would be imperfect but defensible. The deterrence principle deals with certainty and severity as a causal factor (Erickson & Gibbs, 1973). In conclusion, they noted that the results of this imperfect study led to one of two propositions. One, that the more variation of certainty of imprisonment there is in a given universe, the less inverse the relationship between severity and the homicide rate. In other words, punishment deters only when it is certain (Erickson & Gibbs, 1973). Or, two, the greater variation of severity of imprisonment in that given universe, the less inverse the relationship between certainty and the homicide rate. Similar to the first proposition, punishment deters only when it is severe (Erickson & Gibbs, 1973). Between Ehrlich, Erickson, and Gibbs, the idea that deterrence can serve as theory starts to become established.

Deterrence continued to be studied throughout the 1970s and into the 1990s; Black and Orsagh (1978) referred to the deterrence hypothesis, saying that the use of any legal or informal sanction rests on the three dimensions of probability (certainty), severity, and celerity. Wilson and Boland, in studying police operations, pointed out that the activities of patrol officers can influence deterrence because an offender may change his/her behavior based on observance of patrol officer activities such that the *perception* of being caught has increased (Wilson & Boland, 1978). Then in 1979, Gibbs continued his studies of what he then referred to as the deterrence

doctrine. Here Gibbs notes that when people assume that certain, swift, and severe punishment deters crime, that those same people believe that there are a total of four variables plus the crime rate when in actuality there are at least nine variables (Gibbs, 1979). The four independent variables cover objective properties of punishment. For example, punishments are established by statute and vary by magnitude (Gibbs, 1979). The five intervening variables cover perceived properties of punishment. Thus, each objective property relates to a corresponding perception; what an offender thinks the severity of a punishment is versus what punishment is actually handed down (Gibbs, 1979). To test the deterrence doctrine, Gibbs said, there are three options: 1) use the crime rate for a specific offense in two (or more) jurisdictions, 2) use the crime rates for two (or more) specific offenses in the same jurisdiction, or 3) use members of the same unit to measure the frequency of a specific offense (Gibbs, 1979).

Moving into the 1980s, Craswell and Calfee address certainty from its opposite, uncertainty. Uncertainty creates the possibility that an offender would not be punished, and allows that offender to modify their behavior such that the risk of detection and punishment is decreased (Craswell & Calfee, 1986). Legal standards and the enforcement of such laws create a great deal of uncertainty, especially when prosecutorial policies / decisions can overemphasize or undermine enforcement (Craswell & Calfee, 1986). They noted that the judicial system itself generates uncertainty via prosecutorial discretion or appellate intervention. They suggested using standard deviation as a proxy for uncertainty, noting that small deviations suggest offenders choose below the mean while large deviations suggest the opposite (Craswell & Calfee, 1986). Crime in the U.S. is too high and law enforcement officers too few to ensure certainty of punishment (Sherman, 1990).

In 1990, Grasmic and Bursik noted that deterrence theory focuses on legal sanctions; that people conceive 'perceptions' of certainty that they will be punished and 'perceptions of the magnitude of such punishment (Grasmic & Bursik, 1990). Severe punishments have a greater deterrent effect when their imposition is certain, just as punishments have greater deterrent effect is severe (Grasmic & Bursik, 1990). Knowing this, Sherman explored what happens to deterrence when police focus their resources – crackdown – on a particular location or problem. He noted that studies on this type of police action fail to separate the deterrence from the crackdown itself when more arrests are being made with the deterrence that remains after the crackdown ends (Sherman, 1990). In looking at crackdowns Sherman noted the paradox that occurs where more officer presence equals more sanctions, which then reduces officer presence as they process the increased number of arrests (Sherman, 1990). Furthermore, crime rate decreases attributed to crackdowns may not solely be general deterrence, the incapacitation of more offenders through the increased arrests may also reduce crime rates (Gibbs, 1979; Sherman, 1990). Sherman found three deterrence concepts that relate to crackdowns. First, crackdown decay occurs because the increased police presence and arrest activity is not sustainable and regression inevitably occurs as command staff moves resources to other priorities or officers burn-out. Second, initial deterrence decay occurs during the crackdown itself as crime drops because offenders overestimate certainty when they observe the increased police presence. Third, residual deterrence decay occurs after the crackdown after word-of-mouth spreads among offenders that the increased police activity has stopped (Sherman, 1990).

Shavell's study on marginal deterrence noted that deterrence theory had focused primarily on an individual's choice to commit a single offense. Marginal deterrence, wrote Shavell, is the idea that an offender is dissuaded from committing an offense because of the

difference in cost between committing that offense or instead committing a less-harmful act. With marginal deterrence, the punishments for a group of offenses need only be cumulative (Shavell, 1992). In other words, if an offender commits five offenses, if the punishments are stacked atop each other rather than served concurrently, marginal deterrence will apply. Sherman noted that the question deterrence theorists should be asking is, 'Under what conditions do sanctions influence future crimes' (Sherman, 1993)? Establishing cause and effect, noted Sherman, is a complex undertaking, as similar punishments can have different or even opposite effects in different social settings, for different offenders and/or offenses, and at varying levels of analysis (Sherman, 1993).

Stafford and Warr noted that deterrence studies have themselves become more complex as designs, experimental techniques, and other methodologies are used and refined. Stafford and Warr made two points regarding deterrence. In general deterrence, the indirect experience of punishment – knowing of the punishment or knowing someone that was subject to it – is itself the deterrent (Paternoster & Piquero, 1995; Stafford & Warr, 1993). In specific deterrence, the direct experience of the punishment is the deterrent (Paternoster & Piquero, 1995; Stafford & Warr, 1993). Yet, there were complications in deterrence studies that might not be satiated by the existing theoretical conception. When studying persons who have never suffered punishment for a crime – indirect experience – there are two types of people that fit that definition: persons that have never committed a crime *and* persons that were never caught for committing a crime (Stafford & Warr, 1993). Further, offenders often commit more than one type of crime but are not necessarily punished for each one. For example, an offender is convicted for a burglary but also committed drug use, robbery, and auto theft for which they were not punished. Claiming direct experience of punishment only on the burglary neglects the other charges (Stafford &

Warr, 1993). In their reconceptualization of deterrence, Stafford and Warr said that general deterrence consists of indirect experience with punishment where punishment avoidance is the deterrent, while specific deterrence consists of direct experience with punishment where punishment avoidance is the deterrent (Stafford & Warr, 1993). Paternoster and Piquero took this reconceptualization and amended two terms, making it possible to separate deterrent and nondeterrent effects from explanatory variables. Direct experience was changed to 'personal experiences,' and indirect experience was changed to 'vicarious experiences' (Paternoster & Piquero, 1995). Persons with limited personal experience derive a greater deterrence effect from vicarious experience than personal, while persons with greater personal experience derive a greater deterrent effect from that experience rather than vicariously (Nagin, 1998; Paterson & Piquero, 1995).

To illustrate the theoretical model of deterrence, Paternoster and Piquero took Stafford and Warr's reconceptualization and explained it two ways (Paternoster & Piquero, 1995). If one commits a crime and is punished, the perception of being caught both as self and for others increases. If one decides based on this not to commit an offense, they have been *specifically* deterred. If one commits a crime without being punished, they are not *specifically* deterred. If one learns that others have committed an offense and were punished, the perception that law punishes offenders and perception that oneself would be caught both should increase. If, based on that, one decides not to commit an offense, they have been *generally* deterred (Paternoster & Piquero, 1995). Deterrence can be reduced through a defiance effect that can occur when a punishment is perceived as unfair by an offender (Paternoster & Piquero, 1995; Sherman, 1993). Nagin noted that the change in crime rates is actually dependent on policy implementation. He noted four obstacles to developing effective crime deterrence policies (Nagin, 1998). Long-term

effects of deterrence have not been adequately studied nor has the connection between risk perception and punishment policy, policy effects are dependent on implementation, and the tie between intended policies and actual policies are not understood because laws are often not administered as intended (Nagin, 1998).

Levitt (1998), an economist, studied the impact of arrest rates on crime reduction in an effort to distinguish between deterrence and incapacitation. Levitt found four obstacles to deterrence. Criminals are uninformed about the likelihood of detection, they overstate their own criminal abilities, they know punishments will likely be far off in the future because of lag time in the criminal justice system, and for some criminals a punishment is treated as a rite of passage (Levitt, 1998). In addition, Levitt noted two shortcomings in studies that deal in the negative relationship between punishments and crime rates. First, they cannot differentiate between deterrence and incapacitation. Second, there are limitations in the data used – true arrest rates are often not used in favor of reported arrest rates. This means that there may be significant error present in the reported rates (Levitt, 1998). To differentiate between deterrence and incapacitation, one must look at repeat offenders who do not specialize in a specific crime. With this population, one can examine one crime's arrest rate versus the rate of commission of a second crime. The first crime's likelihood of arrest must affect the frequency of commission of the second crime in order to show deterrent effects across crimes (Levitt, 1998). Kessler and Levitt dug further into the difference between deterrence and incapacitation through the study of sentence enhancements (Kessler & Levitt, 1999). They found that sentence enhancements do not create an additional incapacitation effect in the short term. Thus, immediate changes to the crime rate can only be attributed to deterrence as enhancements are additives to sanctions that would otherwise have been served regardless (Kessler & Levitt, 1999).

Modern – 2000 to 2023

Moving into the 21st century, scholars continued to work on different aspects of what was by then known as *deterrence theory*. In 2001, a report on Boston's Operation Ceasefire was published. Operation Ceasefire was run in Boston, Massachusetts beginning in 1996 and was a collaborative effort between law enforcement, prosecutors, youth services, and Boston school police to resolve gang violence in Boston (Braga et. al., 2001). In it, the authors noted that law enforcement intervention can accomplish both general and 'special' deterrence. Special deterrence, as defined in this report and borrowed from Cook, deals with punishing offenders to discourage them from committing future offenses (Braga et. al., 2001). Tillyer and Kennedy described Operation Ceasefire as an example of focused deterrence, where the participants sought to identify key actors and their affiliated groups in order to approach them and communication their risk of punishment directly (Chalfin & McCrary, 2017; Tillyer & Kennedy, 2008). Braga and Weisburd described the strategy used as 'pulling levers', where participants would ensure legal consequences would attach to the violent gangs and gang members by whatever means were available (Braga et al., 2001; Braga & Weisburd, 2012). The 'pulling levers' strategy was designed to demonstrate to the gangs that punishment was *certain* (Braga & Weisburd, 2012). After Boston, other iterations of Operation Ceasefire were tried in Chicago, Indianapolis, and Los Angeles and likewise met with some success (Braga et. al., 2001).

In a similar vein, the use of law enforcement itself has a deterrent effect. Paternoster tells us that one of law enforcement's roles is to convince offenders that their activities will lead to apprehension and punishment (Paternoster, 2010). Done properly, the hiring of new officers and/or reallocation of existing officers will heighten the offender's risk of apprehension (Braga et al., 2001; Nagin, 2013). Mendes noted, however, that with scarce law enforcement resources an increase in probability of arrest necessarily will be accompanied by a decrease in probability

of conviction or punishment (Mendes, 2004). There is considerably more crime than there is law enforcement available to stop it, which affects certainty (Loughran et al., 2011). Resource scarcity affects certainty by making it ambiguous and unpredictable. That unpredictability may make it possible to increase deterrence without additional resources being necessary (Loughran et al., 2011; Sherman, 1990).

In 2002, Henderson and Palmer examined deterrence not from the individual standpoint, but from the aggregate, noting that people are individuals and individuals are different. As a result, the probability of arrest/punishment and the punishment itself will also be different (Henderson & Palmer, 2002). Nagin and Pogarsky discussed the difficulty of studying aggregate deterrence, point out that separating the deterrent effect of punishments on crime rates from the deterrent effect of crime rates on punishments is a complex undertaking (Nagin & Pogarsky, 2003). Mendes also mentions *aggregate* deterrence. Aggregate studies cannot account for variations in individuals; some ideas hold true at the aggregate level that fail when studying individuals. Further complicating matters is that policymakers whose responsibility it is to deal with crime only operate at the aggregate level (Mendes, 2004). That is why deterrence theory deals with the individual; it is the individual that decides to offend (Mendes, 2004; Nagin & Pogarsky, 2003).

Another avenue of study covered the idea of risk perception. Focused deterrence operations like Operation Ceasefire are effective because they alter the risk perceptions of their target population (Braga et al., 2001). Barnum, Nagin, and Pogarsky tell us that there are two components to risk perception. People must exhibit a cognitive bias that renders them unable to express their perception of risk as an objective probability, and they must possess some form of individual-level information that influences that probability (Barnum, Nagin, & Pogarsky, 2020).

That individual-level information might include intense imagery, feelings, small sample sizes, recall of similar incidents, or framing – and that information will skew perceived risk. These perceptions, then, are based on personal experience. That experience must be tied to reality, meaning that offenders must consider risk in different punishment contexts for the same offense (Barnum, Nagin, & Pogarsky, 2020). The risk for probation may be perceived differently than that for a suspended drivers' license, which may be different from a fine, which may be different than incarceration.

Apel introduced what he referred to as perceptual deterrence, which is based on an offender's personal and vicarious experiences (Apel, 2012, Paternoster & Piquero, 1995). Apel (2012) found that research on the accuracy of risk perception rests on three points. First, the average individual typically does have a reasonable idea regarding the legal punishment for a particular offense. Second, that average individual often lacks the ability to properly estimate the likelihood of a punishment being applied. Finally, that average individual also tends to make poor estimates of the magnitude of a particular punishment (Apel, 2012). In other words, the offender likely knows what the legal sanction actually is for a particular act but is often unable to connect that knowledge to their actual calculation for committing or not committing the offense because they underestimate how likely and how badly they might be sanctioned. Paternoster pointed out that risk perception decreases when offenders are able to commit crimes undetected and increases when offenders are caught and punished. That idea may not seem rational but to an offender, it is (Paternoster, 2010). Apel describes a perceptual deterrence process that contains four steps. First, there must be a punishment prescribed by law (Apel, 2012). With that, there are two intermediate links: threat communication and risk perceptions. Threat communications deals with how the punishing entity shares information about apprehension risk with those who would

find it relevant. Risk perceptions deals with an offender's estimate of their likelihood of being caught and punished coupled with their estimate of how severe the punishment might be (Apel, 2012). The last step is the offending behavior itself, where the punishment must be sufficiently burdensome as to cause the offender to choose an offense with a less-severe punishment or to cause them to choose not to offend at all (Apel, 2012). Perceptions are the most effective way to test deterrence theory because of deterrence theory's emphasis on fear of sanction (Matthews & Agnew, 2008).

Scholarly attention was also devoted to the basics of deterrence theory: certainty, celerity, and severity. Celerity, which deals with the time gap between the offense and the sanction, derives from Pavlovian conditioning where immediate negative reinforcement is used to change behavior. That derivation is imperfect as 'immediate reinforcement' in the criminal justice system does not exist (Nagin & Pogarsky, 2001). The celerity concept is closer to the expression 'time value for money', where the sooner a punishment can be implemented means the greater upfront cost of the punishment and therefore the greater the deterrent that punishment becomes (Nagin & Pogarsky, 2001). Nagin and Pogarsky also introduced impulsivity, the extent to which an individual ignores the future in favor of the present. The impact of punishment is reduced for impulsive offenders, while for others the likelihood of experiencing costs from a punishment increases in proportion to the likelihood of that punishment being implemented (Nagin & Pogarsky, 2001).

The probability of arrest [certainty] is a greater deterrent than punishment severity, yet scholars still disagree on this point (Mendes, 2004; Webster, Doob, & Zimring, 2006). Some scholars feel severity is unimportant while others feel severity is less important than certainty (Mendes, 2004; Nagin & Pogarsky, 2001). Still others believe all three elements – severity,

celerity, and certainty – are equally important (Mendes, 2004). Perceived certainty has a deterrent effect while perceived celerity and/or severity do not (Pickett, Roche, & Pogarsky, 2018). This is consistent with deterrence theory as deterrence theory assumes that sanctions will deter criminal activity if the three elements combined outweigh the benefits of committing a crime (Braga & Weisburd, 2012; Loughran et al., 2011; Pickett, Roche, & Pogarsky, 2018; Picquero et al., 2011). Nagin said that certainty is more consistent because it is at its core a series of probabilities. Deterrence lives in the first probability – that of apprehension after committing the offense (Nagin, 2013). The other probabilities include that of being prosecuted after apprehension, of being convicted after prosecution, and of being punished after conviction (Nagin, 2013). Kessler and Levitt's study of California's three-strikes laws demonstrated that severity of sanction has but a minor deterrent effect (Webster, Doob, & Zimring, 2006). Paternoster noted that sanctions unapplied at the time of an offense are implemented far enough into the future as to negate any deterrent effect of the sanction (Paternoster, 2010).

Jacobs noted that deterrence is situational while prevention is global. The difference between the two is that deterrence asks whether a particular offender can be stopped from offending while prevention asks whether a particular offender's conduct can be stopped without regard to circumstance (Jacobs, 2010). In some situations, restrictive or partial deterrence occurs. Here, the offender is delayed in committing an offense rather than being stopped entirely. Restrictive deterrence typically assumes one of four forms. The offender reduces their total offenses over a specific time period, the offender commits less-serious offenses with the expectation of less-severe punishment, the offender takes steps to decrease likelihood of detection, or the offender recognizes a risky situation and waits to commit an offense at another time (Jacobs, 2010). An offender's risk of apprehension is based on certain questions that are

beyond the offender's control. For example, will citizens interfere with the commission of the offense or notify law enforcement? This will depend on whether citizens trust law enforcement and/or fear retribution (Nagin, Solow, & Lum, 2015). Or, will law enforcement respond quickly if called? This might depend on whether law enforcement takes the complaint seriously, whether they have sufficient resources to respond, and whether law enforcement will step in if they do respond (Nagin, Solow, & Lum, 2015).

A new addition to deterrence theory studies was the concept of deterrability. It was Pogarsky who first noted that offenders can be broken into three categories: the conformist who obeys the law because that is the right and proper thing to do, the incorrigible who cannot be deterred from criminality, and the deterrable who could be convinced not to commit an offense (Pogarsky, 2002; Jacobs, 2010). Eight years later, Jacobs expanded on the idea of deterrability. He identified deterrability as the offender's ability to calculate the risks and rewards of an offense prior to deciding whether or not to commit the offense (Jacobs, 2010). Jacobs explained that while deterrence is a process, deterrability is the capacity of a person to meaningfully participate in that process (Jacobs, 2010). When an offender has incomplete or ambiguous information upon which to base their decision to offend, law enforcement has the advantage because law enforcement often has superior information available to them that the potential offender lacks (Loughran, et al., 2011). Remember that deterrence theory assumes that offenders are rational agents capable of making the cost/benefit calculation necessary to decide whether or not to commit an offense and that the sanction is itself a reason not to commit that offense (Lee, 2017). There are offenders that do not meet that assumption. Those who are cognitively-deficient and lack the ability to think rationally cannot be swayed by deterrence. These individuals include the mentally ill, those with personality disorders, or low intelligence (Lee, 2017). It is possible

for offenders to temporarily lose their capacity for rational thought via intoxication, drug use, sleep deprivation or strong emotions (Lee, 2017).

Conclusion

This study will use deterrence theory in a way that differs significantly from other works on deterrence theory. In the case of Philadelphia and the comparison city of Pittsburgh, the goal is to identify what happens to crime rates when a particular thing that is or appears to be a deterrent is *removed*. The studies of deterrence theory up to this point have focused on whether or not a particular thing (i.e., the threat of a fine or imprisonment) serves as a deterrent to criminal activity. With the different conceptions of bail reform being considered or even enacted in different U.S. states, the knowledge of what happens when a deterrent is added is just as important as the knowledge of what happens when a deterrent is taken away – if only to help these different jurisdictions determine if their contemplated reform(s) will help or hinder their crime-fighting efforts.

Bail

Bail has a long and storied history whose origin stretches back thousands of years. A surety, where a third party could vouch for a borrower and take on that borrower's liability if he/she defaulted, was first established in 2500 BC, and codified by the Romans 1,800 years later in 700 BC (Johnson & Warchol, 2003). This surety was the precursor to the *wergeld*, which was used in England prior to the Norman conquest in 1066 (Schnacke, 2018). The *wergeld* was similar to a surety whereby those accused of defaulting on loans had to prove they could repay their lender if convicted (Johnson & Warchol, 2003; Schnacke, 2018). In other words, it introduced the idea of collateral. *Wergeld* was based on placing a monetary value on social rank such that wrongs could be compensated based on tariff schedules established for that purpose

(Schnacke, 2018). At the same time, *bayle* also existed whereby an offender was kept in safekeeping rather than prison (Johnson & Warchol, 2003). It is likely that the combination of *bayle* and the *wergeld* influenced the bail system operated by Sheriffs between the Norman conquest in 1066 and the establishment of the American colonies in the 17th century.

When English circuit judges traveled through England to hear cases, an offender was typically kept in custody by the Sheriff until the case was adjudicated. Sheriffs had neither the space nor the personnel to detain all offenders. The bail system developed over time to allow Sheriffs to release offenders to a surety who promised to ensure the offender would return when the circuit judge was available. The surety vouched for the offender but for a time no exchange of any value was made (Johnson & Warchol, 2003; Schnacke, 2018). The surety, known as a *mainpernor*, was often a member of the offender's household or community, and who would pledge, or *mainprise* on behalf of the offender to the Sheriff (Baughman, 2018). As the English reintroduced corporal punishment, they also conceived 'crimes against the state' which led to the development of prisons, which itself led to the common law concept of bailable and non-bailable offenses (Schnacke, 2018). Since Henry II's time, criminal offenses were divided between offenses against the Crown, which were capital offenses, and misdemeanors such as theft, trespass, larceny, or maiming and those were handled by the Sheriff (Baughman, 2018). In the late 1200s, King Edward I studied the bail system of the time and found abuses within it. During the Hundred Inquests of 1274, it was found that Sheriffs were detaining bailable offenders until they paid the Sheriff to release them pre-trial, and that if the payment was large enough the Sheriffs even released non-bailable offenders (Schnacke, 2018). Reasonable bail was codified in the Magna Carta in 1275, although it was already illegal to refuse to bail an offender eligible for it (Baughman, 2018). Based on this, Parliament enacted the Statute of Westminster, which

acknowledged an offender's bail-ability based on the nature of the charge, the weight of any evidence, and the offender's character. As such, bailable offenders *would* be released and non-bailable offenders *would* be detained (Schnacke, 2018). Ultimately, under common law those charged with misdemeanor offenses had the *right* to be released before trial and those charged with more serious offenses might not be released but their detention was for the offender's safety, not the community's (Baughman, 2018).

The concepts of sureties, bail, and bailable offenses embedded within English common law transferred over to the American colonies as they were established (Abrams & Rohlfs, 2011; Baughman, 2018; Johnson & Warchol, 2003; Schnacke, 2018). The concept of the felony – a serious or violent crime punishable by imprisonment for at least one year up to and including the death penalty – was introduced to the colonies via common law (Baughman, 2018). The English Bill of Rights passed in 1689 outlawed excessive bail; the English concept of the bail decision was concerned with *how* to release an offender rather than *whether* to release him/her (Baughman, 2018). In colonial America, the rules granting release to most offenders also translated across the ocean (Schnacke, 2018). The idea of monetary bail also existed in the colonies; Pennsylvania required some offenders to post security, meaning that those offenders had to find a security that was willing to pay if the offender defaulted (Schnacke, 2018).

After the Revolutionary War, the U.S. kept the inherited bail system in place through the 19th century. The U.S., being geographically enormous compared to England and having a much more transient population meant that it was more difficult for American offenders to find a surety because community ties were weak if they existed at all (Johnson & Warchol, 2003; Schnacke, 2018). This led to the system of bail bondsmen that exists today (Johnson & Warchol, 2003) as offenders tried and failed to pay bail. The judges assigning such bail pointed out the

inability to pay bail does not negate the constitutionality of such bail (Schnacke, 2018). During the 19th century, there were three challenges to the bail bondsman system that reached the U.S. Supreme Court. In 1810, the Court noted in *Nicolls v. Ingersoll* that bounty hunters authorized by a bond agent have the same capture rights as the bond agent himself (Johnson & Warchol, 2003). In 1869, the Court found in *Reese v. United States* that bounty hunters function as a proxy for the purpose of pretrial detention and were authorized to return an offender to court. Shortly afterward in 1872 the Court found in *Taylor v. Taintor* that bounty hunters had the same authority as law enforcement when capturing escaped prisoners. Simultaneously, bounty hunters were *not* bound by 4th Amendment restrictions applicable to law enforcement – affirming that bond agents had extradition rights when it came to offenders (Johnson & Warchol, 2003; *Taylor v. Taintor*, 1872).

During the post-Civil War years, sheriffs in southern U.S. states took former slaves convicted of misdemeanor offenses and 'leased' them to private entities to serve labor sentences. This effectively reinstituted slavery and was practiced primarily by town or county courts. This system lasted for 50 years before falling into disuse after World War I (Baughman, 2018). At the turn of the 20th century, federal and state courts released offenders prior to trial unless a capital offense was involved. In 1944, the Federal Rules of Criminal Procedure were amended to permit courts to set bail based on factors including the weight/gravity of the evidence against the offender (Baughman, 2018). In 1951 the U.S. Supreme Court decided in *Stack v. Boyle* that bail must not be set higher than reasonably necessary to ensure offenders appear in court. Should other factors dictate higher-than-normal bail, such bail must be addressed via court hearing where evidence is presented (*Stack v. Boyle*, 1951). In *Gerstein v. Pugh* (1975), the Court ruled that the judiciary must decide if probable cause exists to detain an offender pre-trial; that the

declarations of a prosecutor were insufficient. Even so, the Court also noted that the hearing used to determine probable cause need not be adversarial (*Gerstein v. Pugh*, 1975).

Factors considered during a judicial bail determination were again expanded through the Bail Reform Act of 1966 to include flight risk (Baughman, 2018; Bail Reform Act of 1966). This act mandated that non-capital offenses **shall** be ordered released via personal recognizance or unsecured bond unless the judge determines that release will not assure the offender's appearance at court. Then, the judge may impose conditions such as travel restrictions, supervision, appearance bond with 10% cash deposit, bail bond with sufficient surety, or other reasonable condition (Bail Reform Act of 1966). In deciding to grant bail or set conditions, the judge must consider the nature and circumstances of the offense, the evidence against the offender, family ties, employment, financial resources, residence in the community, prior criminal record, and record of appearances at court proceedings (Bail Reform Act of 1966). In addition, the Act updated 18 USC 3150 to criminalize failing to appear such that it required forfeiture of any bail. Failure to appear for felony charges resulted in a $5,000 fine and/or up to five years imprisonment; for misdemeanor charges the fine was the maximum for the particular misdemeanor offense(s) and up to one years' imprisonment (Bail Reform Act of 1966).

A second federal Bail Reform Act [of 1984] allowed judges to deny bail in cases where the safety of the community could not be assured (Baughman, 2018; Bail Reform Act of 1984). A judge could order a person detained if no bail conditions existed that would ensure the offender's subsequent appearance(s). Or, they could be released on recognizance, unsecured bond, released with conditions, or temporarily detained (Bail Reform Act of 1984). In 1987, *United States v. Salerno* was decided by the U.S. Supreme Court, upholding the Bail Reform Act of 1984. The Court ruled it was permissible to deny bail based on the offender's potential for

placing a person or a community at risk of further criminal activity, that the judge had to document their reasoning and place their justification in the record via written findings of fact, and that such decisions were immediately reviewable. The Court found that the Bail Reform Act of 1984 was not violative of the Excessive Bail Clause in the 8th Amendment (*United States v. Salerno*, 1987).

In 2018, the U.S. Court of Appeals for the 5th Circuit heard *ODonnell v. Harris County*, in which the Appeals Court granted an injunction against a class-action suit filed against Harris County for the way in which its misdemeanor bail system operated. The Appeals Court noted that the District Court's order to Harris County to hold individualized bail hearings with 48 hours of arrest during which the judicial justification for bail decisions must be entered into the record was permissible (*ODonnell v. Harris County*, 2018). The Appeals Court said that pretrial release cannot be predicated only on what an offender can afford to pay; that the right to pretrial release was not automatic. The inability of some offenders to afford bail is also not violative of the 14th Amendment regarding equal protection (*ODonnell v. Harris County*, 2018).

Bail Today

Today, bail systems in the U.S. require that bail be only as high as necessary to compel an offender to appear in court. If bail exceeds such an amount, it is considered unlawful under the 8th Amendment to the U.S. Constitution (Foote, 1954; Johnson & Warchol, 2003). While a judge or magistrate typically sets bail, other actors also influence how the bail process plays out. Each of them, operating with the limited information available to them, exerts influence on the others. They include: legislators that decide through statute what is criminalized and who is eligible for pretrial release (bail), legislative and/or judicial officials responsible for setting bail schedule amounts, judges that use bail schedules to guide bail decisions and set bail amounts,

law enforcement that decides where to concentrate resources as well as who to arrest/detain, and prosecutors that decide what cases to pursue or to dismiss (Carroll, 2020). A common situation across courts the U.S. is an arrested person appearing before a magistrate/judge, who at best spends a few minutes deciding whether to set bail or release an individual. The judge does this without seeing evidence, without considering whether the bail amount can be met, and in some cases without an attorney present to represent that individual (Abrams & Rohlfs, 2011; Baughman, 2018).

While bail generally involves the payment of cash, most offenders regardless of socioeconomic status have difficulty obtaining the required amount. The bail bondsman system evolved beginning in the 19th century to accommodate that difficulty (Johnson & Warchol. 2003), and achieved its peak between the 1920s and the 1960s as bail amounts increased and fewer offenders could afford to pay without assistance (Gonzales, 2018; Schnacke, 2018). Offenders unable to post bail may work through a commercial bail agent, known as a bail bondsman (Gonzalez, 2018; Johnson & Warchol, 2003). The bondsman charges a non-refundable fee, usually a percentage of the bail amount, and receives collateral from the offender, family, and/or friends to secure the bond (Gonzalez, 2018). Once the transaction is completed, the bondsman takes on the liability of the offender failing to observe release conditions. By taking on this liability, the bondsman also takes on the legal authority to detain the offender and return him/her to the court (Gonzales, 2018; Johnson & Warchol, 2003). This legal authority derives not from the judicial system but instead from the bondsman's contract with the surety that underwrites the bondsman's work (Johnson & Warchol, 2003). Bail bondsmen are underwritten via this surety, which provides the financial wherewithal for the bondsman to make the required bail deposit to the court. The way sureties avoid liability by holding the *bondsman*

responsible to cover the bail forfeiture if an offender fails to appear (Gonzalez, 2018). It is through this contract system that the authority to detain an offender moves from law enforcement via the court to the surety via the bail deposit for the court to the bail bondsman via the contract with the offender (Gonzales, 2018).

While the pretrial release / bail system allows offenders the opportunity to keep their freedom pending a resolution of their case, there are disadvantages. An individual that cannot pay or is denied bail might lose employment, housing, be permanently separated from family, suffer stigma, incur increased debt, incur a criminal record, or some combination of these effects (Baughman, 2018; Sacks & Ackerman, 2014; Stevenson, 2018a; Vilcica & Goldkamp, 2015). Those detained prior to trial have a greater likelihood of conviction, a greater likelihood of being incarcerated, and a greater likelihood of a longer sentence than an offender granted bail and released before trial (Baughman, 2018; Sacks & Ackerman, 2014). Those not released on bail have less opportunity to develop their defense prior to trial (Baughman, 2018), and such offenders often accept plea bargains because their incarceration renders them less likely to present an effective defense (Stevenson, 2018a). These issues were part of the reason the bail reform movement has risen to prominence in the last sixty years.

General Statistics on Bail

There are statistics available regarding bail, though they vary from jurisdiction to jurisdiction. Baughman found in 2017 that there were 630,000 people imprisoned in local jails and of them 443,000 could have been released had they been able to afford bail (Baughman, 2018). Vilcica and Goldkamp noted that 40% of felony offenders with trials pending in state courts are detained prior to trial out of a total of 160,000 offenders (Vilcica & Goldkamp, 2015). Between 1995-2010, the number of detained offenders in Federal custody rose 76% from 27,000

to 76,000 and of those 83% were incarcerated only because they could not afford bail (Vilcica & Goldkamp, 2015). Stevenson noted in Philadelphia that 434,000 persons were imprisoned awaiting trial and five out of six were there because they could not afford the set bail. Further, Stevenson pointed out that half of the offenders detained in Philadelphia jails pending trial had bail amounts at or below $1,000 (Stevenson, 2018a). The U.S. Department of Justice (DOJ) reported that between Fiscal Years 2011-2018, one third of the 747,468 offenders processed during that period were granted pretrial release. Of those, offenders charged with property crimes were most likely to be released (68-76%), followed by public order offenses (51-62%), narcotics violations (35-38%), violent crimes (29-31%), weapons charges (25-31%) and immigration violations (9-18%) (Browne & Strong, 2022). DOJ also noted that 79% of persons granted pretrial release during the reporting period had conditions such as travel restrictions, substance abuse testing, no-contract orders, employment requirements, or home detention / electronic monitoring imposed. Of those released pretrial, 20% engaged in misconduct while released, from technical violations to failure to appear to rearrest on other charges (Browne & Strong, 2022).

Academic Studies

There are numerous academic studies published regarding bail, exclusive of recent bail reform efforts. In modern times, the first significant study of bail was conducted by Foote using Philadelphia, Pennsylvania (Foote, 1954). Looking at summer 1953 with 752 offenders, Foote found that three out of four (75%) of offenders with crimes serious enough to warrant bail set by the court were detained before trial, while only one out of four (25%) with misdemeanor or less-serious crimes that warranted bail set by a magistrate were detained before trial (Foote, 1954). Of 10,749 bail bonds executed in 1950 and worth slightly more than $7 million, nearly half of the issued bonds (45%) and total value (46%) were obtained via private sources. Surety companies

issued 16% of bonds worth 20% of the total value, while professional bondsmen issued 39% of bonds worth 34% of the total value. Of those 10,749 bail bonds, 264 were forfeited and of the forfeits 162 remained at large as of July 1953 (Foote, 1954). As a result of his study, Foote made four recommendations: criminalize failing to appear, reduce bail in favor of release on recognizance, reduce bail amounts generally, and establish and enforce rights for offenders detained prior to trial. Foote noted that reducing bail to $500 or less would ensure that 85% of offenders would be released (Foote, 1954).

The Manhattan Bail Project (MBP) study was published in 1963 and concerned pre-trial release in the New York City borough of Manhattan. The MBP was initiated in October 1961 in an effort to decide if indigent persons could be granted pretrial release and focused on the Criminal Court for the Borough of Manhattan, known as Part 1A. Judges in Part 1A are committing magistrates whose function is to preside over arraignment and set bail where appropriate (Ares, Rankin, & Sturz, 1963). The authors reviewed 726 offenders appearing in Part 1A court between October 16, 1961 and September 20, 1962. 363 of the offenders were used as a control group and not acted upon by the authors. The 363 offenders that were acted upon were interviewed prior to their Part 1A appearance to assess pretrial release risk, focusing on residence at current address for six months, employment for six months, relatives in New York City with whom the offender has relationships, no prior record, and residence in New York City for ten years (Ares, Rankin, Sturz, 1963). If an offender met at least one of these factors, the authors made a recommendation based on these factors plus references, prior bail experience, or medical treatment. Of the 363 recommendations made by the team, 215 were granted pretrial release, while only 50 (14%) of the control group offenders were granted pretrial release. Of those

granted pretrial release, only three failed to appear and two were rearrested on new charges (Ares, Rankin, & Sturz, 1963).

Next, in 1980, Goldkamp sought to establish whether pretrial detention biases an offender's adjudication and/or sentencing (Goldkamp, 1980). For this, Goldkamp used cases from Philadelphia between August 1, 1975 and November 2, 1975, and obtained final case outcomes for each by March, 1977. There were four possibilities for each case: 1) dropped, dismissed, or discharged; 2) cleared via acquittal; 3) entered diversion program; or 4) convicted (Goldkamp, 1980). Of the total sample, which varied between 8,171 and 8,316 depending on what calculation was being performed, 34% had their cases dropped, dismissed, or discharged while 9% were acquitted at trial and 31% were granted entry to a diversion program. This amounts to 74% of the total. The remainder were convicted on at least one charge (Goldkamp, 1980). Goldkamp found that 55% of offenders detained prior to trial were convicted while only 40% of those detained over 24 hours from time of arrest and only 20% of those released immediately. Goldkamp concluded that no discernable relationship existed between pretrial detention and the dismissal or non-dismissal of the case, that a moderate relationship existed between pretrial detention and diversion or non-diversion prior to trial unless controls were instituted which negate that relationship, and that no discernable relationship existed between pretrial detention and the outcome of a trial (Goldkamp, 1980).

We return to Goldkamp in 1984, this time with Gottfredson, for the Philadelphia Bail Experiment (PBE). Here, the authors studied the efficacy of bail guidelines instituted in Philadelphia's Municipal Court between January 1981 and March 1982. They devised an experiment using bail guidelines first developed by Gottfredson, Wilkins, and Hoffman in 1978, and reviewed a previous bail feasibility study conducted by Gottfredson, Goldkamp, and

Mitchell-Herzfeld in 1981 for additional insight (Goldkamp & Gottfredson, 1984). The authors created guidelines for Municipal Court judges to follow that were similar to the MBP study in 1963. Staff would investigate an offender's background and complete a worksheet prior to the offender's first appearance. They would rate risk at a score between 1-5, determine the charge severity, and submit both to the judge. The intersection of the risk score and the charge severity would lead to a presumptive bail determination of release on recognizance (ROR) or a particular bail amount. The judges were permitted to depart from these guidelines but had to note why they did so (Goldkamp & Gottfredson, 1984). Similar to the MBP, the control group and the experimental groups were the same size with 960 cases each. Eight judges were assigned to the experimental group and eight were assigned to the control group at the discretion of the President Judge of the Municipal Court. Personnel were trained on the new guidelines and rubrics were adjusted to reflect the changes (Goldkamp & Gottfredson, 1984).

The authors made a variety of findings. Judges agreed with the bail recommendation derived from the guidelines 76% of the time. When judges deviated, it was almost always to a higher amount. Judges gave reasons for their deviations 65% of the time, using prior criminal record, prior court appearance history, or nature of the current charge(s) as the most common reasons. Both 44% of the control cases and 44% of the experimental cases received ROR or unsecured bond, and both 27% of the control cases and 27% of the experimental cases were detained for at least one day (Goldkamp & Gottfredson, 1984). The decisions made by the judges varied based on the seriousness of the charge(s). The decision-making by the experimental group using the guidelines did not enhance the roles of severity and risk. The authors concluded that the guidelines they used significantly increased equity in bail decisions, even though pretrial

detention was used with the same frequency by both the experimental and control groups (Goldkamp & Gottfredson, 1984).

Moving forward to 1999, Maxwell studied the predictors of failure to appear by offenders granted release on recognizance (ROR). Maxwell found a gap in the bail literature regarding how ROR is used and how well ROR usage predicts additional crimes or failure to appear (FTA). Using New York City data within the National Pretrial Reporting Program operated by the U.S. Department of Justice for 1992, Maxwell used two dependent measures: pretrial release as ROR or not ROR, and pretrial outcome as FTA or not FTA (Maxwell, 1999). Maxwell reported three findings. ROR decisions and FTA patterns were not congruent; female offenders were more likely to be given ROR but were also more likely to FTA. This was also true for offenders with prior misdemeanor convictions (Maxwell, 1999). Certain offender characteristics, Maxwell noted, were predictive of FTA. Women and property offenders were greater flight risks regardless of pretrial release method. Release on bail aggravated FTA risk for violent offenders but mitigated it for misdemeanor offenders. Finally, the context of pretrial release and variations in the ROR predictors could not be tested in New York City because a separate entity makes pretrial release recommendations (Maxwell, 1999).

In 2003, Williams studied the effect of pretrial detention on a judge's decision(s) at sentencing. Using pretrial detention as a proxy for offense seriousness and prior criminal record, Williams used data from Leon County, Florida from January 1, 1994 to December 31, 1996 totaling 10,000 closed felony cases – from this Williams drew a sample of 412 cases (Williams, 2003). Noting that public defenders handle 80% of Leon County's felony cases, Williams further clarified the sample by dividing into two categories: cases handled by private counsel and cases handled by public defenders. Williams random sampled such that 180 cases of private counsel

and 240 cases of public defenders were identified, less 8 cases that were dismissed or the offender acquitted, leaving a total of 412 cases (Williams, 2003). From this sample, two dependent variables were considered: whether the offender was sentenced to jail (short sentence) or prison (long sentence), and the measurement of the offender's jail/prison sentence in days. The independent variable was whether pretrial detention was permitted (Williams, 2003). Williams found that 45% (185) were not incarcerated after conviction. Williams concluded that pretrial detention is a strong and significant predictor of whether an offender is incarcerated at all as well as the length of such incarceration. Pretrial detention remained significant even when controlled for prior criminal record and/or the seriousness of the offense(s) (Williams, 2003).

In 2005, a group of authors studied bail decision-making, noting that magistrates often have expansive caseloads such that mental shortcuts (i.e., looking at one or two factors) that could lead to bias against an offender. This is magnified by the fact that the bail hearing occurs so early in a criminal case that typically only law enforcement's version of events is available to the magistrate when making a bail decision (Allan et al, 2005). Their study, conducted in Australia, focused on 648 offenders appearing in one of Perth's seven courts over 138 court days, using the bail decision itself as the dependent variable. Three trained observers were used to rate the bail application (Allan et al, 2005). A quantitative methodology was used that included chi-square significance tests, analysis of variance (ANOVA), and logistic regression. The authors found that 91.4% of the offenders appeared in court from custody. Bail was mentioned first by the defense counsel 61.3% of the time, by the judge 9.3% of the time, and only 1.2% by the prosecutor. Of the 648 offenders, 374 were granted bail. If the prosecutor did not oppose bail, 90.1% of offenders in those instances were granted. Out of the 648 offenders,

24% reoffended while on bail for one or more previous offenses, and 5% reoffended while on parole (Allan et al, 2005).

In 2011, Abrams and Rohlfs completed a brief study on the optimal bail amount. Using Philadelphia Bail Experiment data, they noted that optimal bail would maximize welfare based on four costs. There is the social cost to incarcerating an offender, the private cost to the offender of being incarcerated, the cost of crimes an offender might commit while awaiting trial, and the cost to society if the offender fails to appear (Abrams & Rohlfs, 2011). The authors believed an increase in bail would lead to more pretrial incarceration due to offenders being unable to afford bail, while a decrease in bail would lead to more ROR offenders, and possibly more recidivism. The authors estimated $1,000 was the average bail amount for offenders giving them approximately 90 days of freedom, while the socially optimal bail amount was found to be $17,000 (Abrams & Rohlfs, 2011).

In 2016, Gupta, Hansman, and Frenchman studied the issuance of high bail in Philadelphia and Pittsburgh, noting that offenders assessed monetary bail are 12% more likely to be convicted; that assessment of monetary bail itself and not the amount were predictive of conviction. The authors used data from the Administrative Office of the Pennsylvania Courts for 2010-2015 that included both magistrates and the Courts of Common Pleas (Gupta, Hansman, & Frenchman, 2016). The authors conducted a quantitative analysis, using ordinary least squares regression. They found that assessment of monetary bail resulted in a 1.4% increase in the probability of an offender pleading guilty, and with controls added that probability increases by 4.3%. In addition, the authors found that issuance of monetary bail reduces release outcomes and lowers release probability by 10% even if the offender is convicted and lowers release probability by 8% if the offender is acquitted (Gupta, Hansman, & Frenchman, 2016).

In 2017, Leslie and Pope studied pretrial decision-making's impact on case outcomes in New York City. The authors studied 1,000,000 criminal cases from New York City courts between 2019-2013. This concerned only the arraignment judge, who is involved solely in the bail decision (Leslie & Pope, 2017). In New York City, the offender is arrested, booked at the local police precinct, and assigned a prosecutor. The offender is moved to a holding cell in the courthouse in the county in which the offense occurred. The Criminal Justice Agency interviews the offender and makes recommendation to the arraignment judge. The offender meets with a lawyer (appointed or otherwise) prior to seeing the arraignment judge. The arraignment judge can dismiss the case due to a case defect, adjudicate by accepting a guilty plea or dismissing the case, ROR, set a bail amount, or detain without bail (Leslie & Pope, 2017). The authors found that pretrial detention increases probability of conviction by 13% and the probability of a guilty plea by 10%. Thus, detention affects conviction by influencing some offenders to plead out, even if the plea deal is not favorable (Leslie & Pope, 2017).

In 2018, Dobbie, Goldin, and Yang also studied the effect of pretrial incarceration on conviction. They used 420,000 offenders from two large, unidentified urban counties. They used administrative court and tax records to estimate the impact of pretrial detention on case outcome, pretrial escape, future crime, and foregone earnings/benefits (Dobbie, Goldin, & Yang, 2018). The authors found that pretrial release reduced conviction probability by 14% and even more if no prior offenses during the previous year. Pretrial release also increased the probability of failing to appear by 15%, but less if no prior offenses. Further confusing the matter, the authors found that pretrial release increased the probability of rearrest prior to case conclusion by 19% (Dobbie, Goldin, & Yang, 2018). On the positive side, pretrial release increase employment as well as receipt of employment benefits and tax-related benefits; employment probability rose by

9.4% in the three years post-arrest. In addition, pretrial release decreases administrative costs, apprehension costs, future crime costs, and economic impact to the offender by between $55,000 and $99,000 *per offender* (Dobbie, Goldin, & Yang, 2018).

That same year, Stevenson studied the effect of inability to pay bail on case outcomes. Stevenson's study was conducted concurrently with Gupta, Hansman, and Frenchman (2016), Leslie & Pope (2017), and Dobbie, Goldin, & Yang (2018) and used Philadelphia data as well (Stevenson, 2018a). Using Pennsylvania Unified Judicial System records between September 13, 2006 and February 18, 2013, the author combined that with bail, magistrate, hearing, and change information derived from both Municipal Court and the Court of Common Pleas, and use Court Summary Reports to incorporate case outcomes, criminal history, and recidivism (Stevenson, 2018a). Fully half of the sample had charges dropped, dismissed or diverted. Of the cases that actually reached trial, 90% resulted in convictions (Stevenson, 2018a). Stevenson found that pretrial detention increases the likelihood that an offender will receive at least one conviction by 13%. Further, pretrial detention increases the imposed sentence by 42% (Stevenson, 2018a). Stevenson also noted the regressive taxation effect caused by pretrial detention. Such detention leads to a 41% increase in courtroom debt, which tends to confirm the 'poverty trap' for which bail is often the gateway (Stevenson, 2018a).

More recently, Monaghan, van Holm, and Surprenant studied the impact of cash bail on FTA and re-arrest in Orleans Parish, Louisiana. The authors had three hypotheses: first, that granting ROR would increase FTA and re-arrest rates; second, that the cash bail amount would not impact FTA; and third, that stricter release conditions will increase FTA (Monaghan, van Holm, & Surprenant, 2022). Their study used data from the Orleans Parish Sheriff's Office from December 1, 201 to November 30, 2019, for a total of 2,977 cases. They used four dependent

variables: did the individual receive ROR, amount of bail required for release, did ROR require drug testing, and number of days in jail prior to release (Monaghan, van Holm, & Surprenant, 2022). Out of 2,977 cases, 1,922 received cash bail. The authors found that increasing the bail amount does not increase FTA, that ROR individuals have higher FTA rate than cash bail, but when controlled for other factors the difference becomes statistically insignificant (Monaghan, van Holm, & Surprenant, 2022).

Bail Reform

For nearly as long as there has been the concept of bail, there has also been a drive to reform it. In the U.S., bail reform in recent years has taken three primary forms: formal and informal advocacy groups, risk assessment, and bail funds. Advocacy generally is a large part of any bail reform movement; what is interesting here is that the advocacy groups have highly coordinated messaging and are particular about where such advocacy is pushed forward. There are formal groups, who were created with the sole purpose of influencing for bail reform as well as informal groups which serve other formal purposes but also participate in the advocacy chorus for bail reform. Bail funds take a more active role in bail reform, serving as a direct resource for those that require financial assistance via the services of a bail fund. While both advocacy and bail funds work from outside the criminal justice system, risk assessment has been developed within criminal justice systems to try to take some of the subjective decisions of the courts and make them objective.

Bail Funds

Bail funds are revolving funds fed by donations that are used to pay the bail of persons so that they might be released pending trial for criminal charges (Akosua, 2020; Chow, 2020; Domonoske, 2020; Sanchez, 2020). Bail monies are disbursed for an individual and upon the

conclusion of the proceedings the money is returned to the bail fund which can then reissue the monies for another individual's bail (Domonoske, 2020). Bail funds, while they have been in existence for centuries, were significant in the 1960s during the civil rights movements and have again become so. They tend to be located near large cities (Chow, 2020). Bail funds are popular as several claim there are 500,000 people sitting in jail only because they cannot afford bail (Akosua, 2020; Chow, 2020; Domonoske, 2020). The Ella Baker Center estimates that 40% of all crime is attributable to poverty. 80% are of low income with two-thirds of them reporting income below the poverty line (Akosua, 2020). Bail funds and affiliated organizations also claim that the cash bail system is biased against people of color, that the bail system favors those with wealth, (Chow, 2020; Minnesota Freedom Fund, n.d.a; Solender & Sandler, 2020).

The Community Justice Exchange hosts the National Bail Fund Network (NBFN), which is a directory of community bail and bond funds. NBFN lists funds in 37 states (National Bail Fund Network, n.d.). NBFN's director, Pilar Weiss, has noted that even donations numbering in the tens of millions of dollars do not last long (Domonoske, 2020). NBFN believes its bail offerings are no different than those offered by a bail bond service (Frame, 2022; Magdaleno, 2021), and that NBFN is using its bail fund(s) to fight systemic racism and economic inequality perpetuated by the bail system (Frame, 2022). Weiss points out that need for money from a bail fund is not determined by the charge(s) filed, but rather based on those offenders at risk for losing their housing, losing employment, losing custody of their child(ren), those who serve as caretakers, or those that have a medical condition that cannot be addressed in prison (Frame, 2022).

The most famous, and possibly most controversial bail fund, is the Minnesota Freedom Fund (MFF). The MFF has paid bail for those unable to since 2016. Decisions on whom to

support with bail money are based not on charges but on the following priorities: BIPOC (black, indigenous, people of color), the homeless, Minnesota residents, those detained while 'fighting for justice', LGBTQIA and trans individuals, and immigrants (Minnesota Freedom Fund, n.d.b) The MFF has three goals: to provide immediate relief to communities by maximizing releases and supporting 'decarceration', to advocate for system change to Minnesota's criminal justice system through abolition of cash bail and supporting 'decarceration', and to build solidarity and capacity for change through supporting organizations that empower BIPOC plus others harmed by cash bail and for immigration justice (Minnesota Freedom Fund, n.d.c). As of 2018, the MFF had approximately $150,000 to provide bail (Domonoske, 2020). After the George Floyd protests in June 2020, donations to the MFF skyrocketed, leading to various reports of between $20 million and $31 million received from between 150,000 to 900,000 donations, all within a few weeks (Chow, 2020; Domonoske, 2020; Sanchez, 2020; Solender & Sandler, 2020). Other funds received significant donations as well, such as The Bail Project's $5 million (Domonoske, 2020), the Chicago Community Bail Fund's $1.5 million (Chow, 2020), or the Peoples City Council Freedom Fund in Los Angeles with $1.5 million (Chow, 2020).

Due to the MFF's belief in the bias of the cash bail system, board member Steve Boland notes that those imprisoned in Minnesota meet MFF guidelines, they will be assisted regardless of their home of record (Solender & Sandler, 2020). Although the MFF is flush with donations, the process for bail funds to actually obtain pretrial release for someone is not a simple matter of cutting a check to the court (Chow, 2020). Unlike bail bondsmen, MFF cannot merely pay a percentage of the bail and must instead pay in full because there are legal distinctions between how bail bondsmen operate and how the bail funds operate. MFF will not work through bail bondsmen because MFF does not receive the money back after disposition (Minnesota Freedom

Fund, n.d.d). The MFF, like other bail organizations, works with attorneys to facilitate these releases, and the MFF will supply activists to protest at police precincts to apply pressure, especially over weekends where courts close Friday afternoon and reopen Monday causing the offender(s) to remain in prison (Chow, 2020). The MFF notes that half of the individuals it bails out have their cases dismissed, implying that the arrest and/or charge was not founded (Minnesota Freedom Fund, n.d.d).

Bail funds often cite specific cases in explaining why they pay bail on behalf of offenders. For example, an individual that was arrested with a friend caught shoplifting had their bail set at $100,000 by the judge. The individual's family had to raise 10% of that money, $10,000, to pay the bail bondsman (Akosua, 2020). Once bonded, the family had to pay the bondsman every month to keep the individual out of jail. Their water was turned off, their car was repossessed, medical care was delayed because they could not afford the doctor, and they had difficulty buying groceries. In addition, they could not pay parking tickets or the associated late fees, and the combination of these things grew their debt tremendously (Akosua, 2020). In another example, a woman's home was raided by police to arrest the woman's son on an outstanding warrant as an alleged gang member with nine felony charges. The son's bail was set at $1 million, and as a result the son remained in jail for five months. Up to that point, the son had been employed even with his prior criminal record. After the five months, the charges were dropped (Akosua, 2020). Those who cannot make bail spend weeks or months in jail while those that can afford bail or a bail bond return to their jobs and families while their case is pending. Those who cannot afford the bail but cannot afford to be incarcerated often plead guilty to obtain release, whether they committed the act they were charged with or not (Domonoske, 2020).

There are those concerned with or opposed to charitable bail funds and how they operate. In 2018, when the RFK Human Rights Foundation planned to pay bail for 500 indigent defendants, the New York City Police Department and the District Attorneys objected, suggesting that such a mass-bailout would lead to a crime wave (Kriss, 2018). Some bail funds have become embroiled in controversy over some of the individuals being bailed out in this manner. The Massachusetts Bail Fund, established in 2011 by a group of social workers, claims pretrial detention is harmful and racist and thus it pays bail based solely on financial need without regard for charges or criminal history (Marcelo, 2020). Prior to the rush of donations following the George Floyd protests, the Massachusetts Bail Fund capped bail payments at $500 (Marcelo, 2020) but subsequently reached $5,000 or more said the fund administrator Michael Cox (Becker, 2020). In 2019, the Massachusetts Bail Fund paid $500 to bail out Chanda Kol after his arrest on possession of stolen property charges. Two days later, Kol was rearrested for driving a stolen vehicle and had his $500 bail revoked. The judge set his new bail at $1,000 (Manganis, 2019). While these were relatively minor charges, the Massachusetts Bail Fund has paid bail on more serious offenders as well. In 2020, this Fund bailed Shawn McClinton, a Level 3 sex offender, for $15,000 on rape charges. Three weeks after being freed, McClinton allegedly kidnapped, beat, and raped a woman he met on the street (Estes, 2020; Marcelo, 2020). Another individual had $85,000 bail paid by the Massachusetts Bail Fund for attempted murder charges, another that allegedly robbed five women, and a third with three pending child rape charges (Marcelo, 2020). Such events have caused Massachusetts legislators to question the Bail Fund's tax-exempt status (Battenfield, 2020).

The MFF has also come under scrutiny for similar bail decisions, so much so that in 2022 a Minnesota legislator proposed to prohibit non-profit organizations from paying bail (Crime

Watch MN, 2022). A registered sex offender who allegedly assaulted an 8-year-old female five years earlier had his $75,000 bail paid by MFF (Kerr & Hooten, 2020). Another individual with two prior rape convictions had his $350,000 bail paid by MFF for kidnapping and sexual assault charges (Blitzer, 2021; Kerr & Hooten, 2020). MFF bailed William Harold Jones after he allegedly sexually assaulted his 15-year-old daughter (Elliot, 2020), and Darnika Floyd on 2nd degree murder charges (Blitzer, 2021). MFF paid $1,500 for George Howard's bail in a domestic assault case. Howard was charged with 2nd degree murder charges over a road rage incident while out on bail (Hoyt, 2021; Miller, 2020). The Bail Project, too, has had controversies. The Bail Project pad $5,650 to bail Travis Lang on drug charges. He was subsequently rearrested for shooting a 24-year-old man to death (Daley, 2022). The Bail Project also bailed Marcus Garvin out for $1,500 for stabbing a man at a gas station. Garvin was subsequently rearrested for murdering his girlfriend by stabbing her 51 times (Daley, 2022).

Minnesota is not the only state to consider legislative changes regarding charitable bail funds (Crime Watch MN, 2022). Indiana legislators proposed restricting charitable bail funds from paying bail for those charged with felonies or those capable of paying their bail. Indiana has also proposed to require forfeited bail paid by charitable bail funds be transferred to the state treasury instead of being returned (Daley, 2022). Indiana ultimately did pass that legislation which included a $300 certification fee for bail groups. The Indiana ACLU sued Indiana on behalf of The Bail Project regarding the legislation, arguing that the law is discriminatory because bail bonds or individuals are not subject to the same restrictions now applied to bail funds (Chester, 2022). New York passed a similar law, the Charitable Bail Organization Act, which established regulations for bail funds that were expanded upon in subsequent bail reform legislation in 2019 (Lerner, 2019).

Risk Assessments

One method of bail reform that works from within the system instead of imposing itself from outside is the pretrial risk assessment. These assessments, both developed by private entities or in-house, are used to inform and enhance pretrial release decisions made by judges (Koepke & Robinson, 2018; Scurich & Krauss, 2020; Zottola & Desmarais, 2022). Risk assessments are intended to enable judges to differentiate between high-risk offenders worthy of detention from the low- and/or medium-risk offenders that could safely be released pending the disposition of their cases (Copp et al., 2022; Hamilton, 2021). Approximately half of the jurisdictions in the U.S. use some form of risk assessment (Copp et al., 2022). More succinctly, risk assessments use data to predict the likelihood that an offender will FTA or be rearrested (Copp et al., 2022; Desmarais et al., 2020; Harvard Law Review, 2018; Scurich & Krauss, 2020; Stevenson, 2018b) Risk assessments are composed of risk factors and/or protective factors that can be static or dynamic (Dalakian II, 2018; Desmarais et al., 2020). A static factor might be criminal history; the offender either has a history or the offender does not, while a dynamic factor might be an offender's age, which might change between the previous offense and the current one (Dalakian II, 2018). Using an actuarial approach, these factors are assigned weights and scored so that they might be cross-referenced to a probability table (Desmarais et al, 2020; Harvard Law Review, 2018; Solow-Niederman, Choi, & Van den broeck, 2019; Zottola & Desmarais, 2022). Actuarial tools use statistics to conduct the relevant scoring (Harvard Law Review, 2018; Solow-Niederman, Choi, & Van den broeck, 2019).

These risk assessments, often but not exclusively actuarial, use information (data) to develop a predictive model. These models are capable of sorting large numbers of people based on specified characteristics or factors. Anyone whose information is entered into the model should be grouped according to other entrants that have the same characteristics. That group of

‘same’ characteristics is converted to a percentage to reach the prediction (Eckhouse et al., 2019). Advances in technology in recent decades have made possible the collection and processing of enormous pools of data, making it feasible to use this data to inform predictions (Hamilton, 2021). The algorithms that inform these models use proven statistical methods such as regression analysis, where the scoring *and* the grouping of scores into risk categories such as low/medium/high risk can all be done by computer (Koepke & Robinson, 2018). The data used to feed all of this includes demographic, social, and criminal justice information that can be derived via interview, from administrative information, or be entirely system-generated (Copp et al., 2022).

Without the risk assessment, judges had to weigh whichever factors the law required, or if not restricted they weighed whichever factors they thought appropriate. Judges did this through their intuition, perceptions, and biases. Their individual abilities combine with assumptions, imperfect information, prejudices, educational and legal experiences (Dalakian II, 2018). Judges, like any human, were susceptible to errors in judgment. These include: failing to receive feedback on errors, failing to account for natural bias, relying on illusory correlations, or assigning incorrect or suboptimal weights (Dalakian II, 2018). Humans are incapable of screening out bias, and so data-driven options such as the risk assessment have become attractive as they appear objective and neutral (Eckhouse et al., 2019). Even so, a number of jurisdictions that use risk assessments do not require the judge to adhere to recommendations made by such assessments. Per a Harvard Law Review article on bail reform, Chicago judges followed the risk assessment recommendation only 15% of the time (Harvard Law Review, 2018).

There are a number of risk assessments in use today; the most common of these is the PSA. The risk assessment known as PSA was developed by the Arnold Foundation, and was

developed and piloted for Kentucky (Hamilton, 2021; Harvard Law Review, 2018; Stevenson, 2018b). Kentucky adopted PSA in 2013 (Stevenson, 2018b), and it is currently used in Arizona, Kentucky, Utah, Rhode Island, and New Jersey at the state level and Chicago, Houston, Phoenix, and Los Angeles at the city level (Desmarais et al., 2020). The Arnold Foundation has declined to release information on the PSA's development, methodologies, datasets, or validation due to non-disclosure requirements. The Arnold Foundation did consent to share data for a Research Triangle Institute study, which calls the subjectivity of that study into question (Hamilton, 2021). As a result, studies into PSA have developed metrics to enable evaluation of the tool. Buckley found that 91% of people flagged by PSA for violent offenses do not reoffend prior to trial. Judges tend to rely on the PSA recommendation rather than looking at the specific risk (Buskey, 2020). Hamilton found that judges across 30 different jurisdictions acknowledged that PSA informs their release decisions 80% of the time (Hamilton, 2021). PSA itself was 'trained' using 750,000 pretrial offenders across 300 jurisdictions, ensuring a sufficiently large and diverse data pool for the PSA models to work from (Hamilton, 2021).

In recent years significant scholarly effort has been devoted to PSA. Stevenson conducted their study in 2018. They noted that Kentucky began using risk assessment generally in 1976 but did not make it mandatory until 2011 when Kentucky enacted HB463 (Stevenson, 2018b). Stevenson looked at all offenders arrested and booked between July 1, 2009 and July 1, 2016, using data from Kentucky Pretrial Services. Those arrested for failing to appear, probation or parole violations, or violation of pretrial release conditions were excluded from the sample. Stevenson used graphical time-trend analyses to show the changes between the enactment of HB463 and the implementation of PSA (Stevenson, 2018b). HB463 caused an immediate 13% increase in non-financial release which then steadily declined until July 2013 when PSA was

adopted. Non-financial releases again spiked and declined with PSA, returning to status quo by the beginning of 2016 (Stevenson, 2018b). HB463 caused a significant drop in the number of offenders receiving low cash bail, particularly when PSA was adopted, and that number gradually increased. In addition, HB463 increased FTAs by 3%, where PSA did reduce that number yet violent crime rearrests remained unchanged (Stevenson, 2018b). Judges used risk assessment far more after the enactment of HB463, but efficiency did not increase. It could not be determined whether the predictive power of risk assessment was overestimated, or whether judges used their discretion to override the risk assessment rather than to correct it (Stevenson, 2018b).

Hamilton completed their study in 2021 regarding PSA. Here, Hamilton developed the sample by combining different jurisdictions, using multiple classification and predictive measures to evaluate PSA. This was an improvement over other studies that had limited data or used one or two statistical sets (Hamilton, 2021). PSA has three scales, and Hamilton's emphasis was on the scale that predicts FTA. The FTA scale has four weighted risk factors: pending charge(s) at time of arrest, prior conviction(s), prior FTA within two years, and prior FTA over two years ago. This scale can be used with available information and does not require an interview of the offender (Hamilton, 2021). Hamilton used three datasets in this study, with N = 215,738, from Illinois, Kentucky, and New Mexico. Using Microsoft Excell and SPSS 25.0, a three-risk-bin allocation was used to create low-risk (1-2), medium-risk (3-4), and high-risk (5,6). This allocation was used to establish discrimination, or how well the risk assessment distinguishes between failure and non-failure, and calibration, or how well the risk assessment's predicted outcomes match the actual outcome (Hamilton, 2021).

Hamilton's study was based on three research questions. The first was whether or not PSA classifies individuals by low-, medium-, or high-risk based on an offender's likelihood to fail. Here, PSA placed 77-95% of all offenders into low- or medium-risk. While very few were high-risk, the rate varied from one out of 20 in Illinois or one out of four in New Mexico. It should be noted that Illinois' sample is far larger than New Mexico's and includes both misdemeanor and felonies, while New Mexico is only felonies (Hamilton, 2021). The failure rates increased between each group; odds of failure in the medium-risk group were twice that of the low-risk group. Ultimately, chi-square statistics on three regression models determined the model used here was a good fit to the data, and Somers *d* showed positive associations between risk bins and failure rates that were statistically significant (Hamilton, 2021). The second research question involved the predictive accuracy rates for the PSA. Predicting low- and medium-risk groups as failures was no better than random chance; for high-risk accuracy reached the 71-81% range (Hamilton, 2021). Looked at from the opposite perspective, PSA predicted success – no FTA – for low- and medium-risk groups 80% of the time (Hamilton, 2021). There were some concerns; 70% of those classified high-risk for FTA did not actually fail to appear and persons that attended all but one hearing were still classed as failures even if transportation, employment, or childcare issues were extant (Hamilton, 2021). The risk-binning itself did correlate with FTA; thus, making the PSA a good *initial* screening option for judges. This addressed the third research question that asked whether the PSA performed consistently.

Zottola and Desmarais took their sample from a southeastern state that did *not* use pretrial release, and applied PSA to that sample. The sample contained 522 people booked in May 2018, exclusive of immigration bookings such that $n = 492$. The 492 were risk-assessed after the fact and the results were compared to the actual outcomes (Zottola & Desmarais, 2022). The authors

here sought to address three research questions. The first question sought to determine how the risk assessment scores and actual outcomes differed for offenders that FTA'd or were rearrested versus those who were not (Zottola & Desmarais, 2022). For this, chi square and *t* tests were used for bail type, bail amount, FTA subscale, and New Criminal Arrest (NCA) subscale. The bail amount skewed but the subscales did not. Levene's test was used to report *t* tests' equal or unequal variance. The Chi squares used *z* tests with Bonferroni correction to compare columns (Zottola & Desmarais, 2022). For this first question the authors found that FTA did not change across given bond types. Those with secured bond were more likely to be rearrested while those with ROR were less likely to be rearrested. Those given higher bail amounts would FTA more often than those with lower bail (Zottola & Desmarais, 2022). Those who scored highest on the FTA subscale (6) were disproportionately more likely to FTA just as those scoring lowest (1-2) on that subscale were disproportionately less likely to FTA. For the NCA subscale those who scored medium-to-highest (4-6) were disproportionately more likely to be rearrested while those scoring low-to-medium (1-3) were disproportionately less likely to be rearrested (Zottola & Desmarais, 2022).

For their second question, the authors wanted to know if risk assessment scores associated to rearrest or FT when controlled for bail amount or other covariates. For this they used multivariate logistic regressions for each outcome. Models were built hierarchically with covariates included (Zottola & Desmarais, 2022). Here, they found that bail amount was not significantly associated to FTA, or to rearrest, but as FTA subscale scores increase, the odds of FTA increased 1.5 times for each change Time spent in the community did have a small but significant effect (Zottola & Desmarais, 2022). The final question expanded on the previous question to include disaggregating the sample by race. The authors disaggregated their sample

into African American and Caucasian, and used a multivariate logistic regression for each. This generated a number of findings (Zottola & Desmarais, 2022). Bail assigned to African American offenders did not associate to FTA, but as their FTA subscale score increased the odds of FTA for both African American and Caucasian offenders rose 1.5 times per increase. The same effect was seen for African Americans' NCA subscale score increases (Zottola & Desmarais, 2022). Longer time on release associated with increased odds for both African Americans and Caucasians but for African Americans release plus fewer index charges associated to greater FTA odds while for Caucasians the effect was small (Zottola & Desmarais, 2022). Among the authors conclusions was that bail did not associate with pretrial outcomes, nor was there an association between bail and FTA or rearrest (Zottola & Desmarais, 2022). The severity of charges did not predict FTA, but it did associate to rearrest for Caucasian offenders. Bail itself does not incentivize offenders to appear for court as many FTAs derive not from mischievousness but instead from employment, childcare, or transportation issues (Zottola & Desmarais, 2022).

Another widely-used risk assessment product is the Virginia Pretrial Risk Assessment Instrument (VPRAI). VPRAI, developed in 1998-1999, has predictive validity as confirmed through two studies. It includes factors known to be predictive of FTA, such as prior FTA, prior conviction, other pending charge(s), employment, substance abuse, and residential instability. These factors combine into a single score ranging from 1-9, with low scores often receiving ROR (Barno, Martinez, & Williams, 2020). Orange County, California uses VPRAI in its Pretrial Assessment Release Supervision (PARS) program, begun in 2016. Misdemeanor offenders are cited and released without posting bond, so PARS is only available to felony offenders without a previous arrest for violent crime (Barno, Martinez, & Williams, 2020). A recent study of PARS

sought the answers to three research questions using two samples; one from eight months in 2015, and one from seven months in 2016 plus one in 2017. Using the sample to obtain data from Pretrial Services, the authors used multiple imputation by chained equations (MCE) to fill any gaps in their data (Barno, Martinez, & Williams, 2020).

The first question asked whether PARS-eligible offenders were more often released before or during their arraignment since PARS was implemented. The authors found that the release rate from the 2015 sample was slightly higher but not statistically significant, while the 2016-2017 increase was statistically significant. PARS increased non-monetary releases but the increase was offset by a reduction in offenders posting cash bond (Barno, Martinez, & Williams, 2020). The second question sought which factors influenced the decision to grant or deny PARS release after a recommendation to release was received. Here, the authors found that only 36.98% of offenders recommended for PARS release actually were released. Logistic regression found that only two factors were statistically significant: VPRAI scores and employment. The higher the VPRAI score, the less likely PARS release would be granted (Barno, Martinez, & Williams, 2020). The third question asked if PARS reduces the likelihood of FTA. Of 206 PARS participants and 107 PARS-denied offenders, those participating in PARS had a significantly lower likelihood of FTA, while the VPRAI assessment scores themselves marginally predicted FTA (Barno, Martinez, & Williams, 2020).

Risk assessment products are not without controversy. Consider the Correctional Offender Management Profiling for Alternative Scenarios (COMPAS) (Desmarais et al, 2020). COMPAS is a computer software product that incorporates both risk and needs assessment. The design of COMPAS is theory-based; it includes aspects of low self-control theory, strain theory, social control theory, social learning theory, and others (Brennan, Dieterich, & Ehret, 2008).

COMPAS was designed to measure risk and needs factors in an adult correctional population to assist in community placements for offenders. It provides four risk scores: violence, recidivism, FTA, and community failure. In addition, there is the Criminogenic and Needs Profile for the offender that includes criminal history, needs assessment, criminal attitudes, social environment, and other information (Fass et al., 2008). In 2016, ProPublica conducted an analysis of COMPAS, concluding that COMPAS was twice as likely to inaccurately predict rearrest of African-American offenders than Caucasian defenders (Desmarais et al., 2020; Eckhouse et al., 2019; Stevenson, 2020). The company that designed COMPAS, then known as Northpointe, used 137 factors in the COMPAS model but only allowed ProPublica to see some of them, nor was ProPublica given access to the weighting or calculations in the model (Dalakian II, 2018).

A 2018 study by Stevenson found that COMPAS shows predictive parity and therefore cannot be biased (Stevenson, 2018b). Concerns with COMPAS were largely resolved via a court case known as, *State v. Loomis* (Dalakian II, 2018, *State v. Loomis*, 2015). This case was decided by the Wisconsin Supreme Court in 2015. The Court held COMPAS did not violate Loomis' right to due process when used properly, noting that COMPAS scoring was supported by independent information. Loomis, when assessed by COMPAS, scored high on all three charts: pretrial recidivism, general recidivism, and violent recidivism (*State v. Loomis*, 2015). Further, the COMPAS report itself states that COMPAS should only be used a certain way and should be misused; COMPAS should not be used to determine sentence severity or incarceration. The Court did circumscribe the use of COMPAS in certain ways even while upholding it (*State v. Loomis*, 2015). The Court ruled that COMPAS scoring cannot be the determinative factor in any pretrial detention decision. If COMPAS scoring is used, the report must note that 1) COMPAS is a proprietary product therefore factor weights and risk calculations cannot be disclosed; 2)

COMPAS' model is based on a nationwide sample, not on a sample derived from Wisconsin; 3) Studies of COMPAS suggest it disproportionately classifies minority offenders as higher risks; and 4) Risk assessments like COMPAS must be regularly re-tooled to account for population changes (*State v. Loomis*, 2015). The Court also noted that Loomis did not prove that gender was one of the factors. COMPAS could be used to divert low-risk offenders to a non-prison alternative, to assess whether an offender could successfully be supervised in the community, and to impose probation and/or other conditions in response to violations (*State v. Loomis, 2015*).

COMPAS was only one example of concerns identified by critics of risk assessment tools. Other concerns also exist for risk assessment tools generally, such as rights, path dependence, transparency, and disparate impact / bias. The first issue, rights, is fairly simple. How does society decide who the 'right' people for pretrial detention? How do we determine when an offender's right to be free prior to their trial is or should be eclipsed by the danger that offender may or may not pose to the community? (Buskey, 2020). These questions are at the heart of risk assessment, yet the answers to such questions are elusive. Path dependence is another issue where risk assessment tools have been implemented. Here, the judges within whose hands pretrial detention decisions ultimately rest will seek to adapt to the changes a risk assessment brings to their decision-making in such a way as to perpetuate what they did before. Discretion is displaced rather than replaced, and local practices endure (Coop et al., 2022).

The models themselves receive the bulk of the criticism directed at risk assessments. Transparency is a significant concern. If the model itself, the weights applied to the factors, or the factors themselves are not transparent, offenders have no way to challenge decisions based on that model (Dalakian II, 2018; Scurich & Krauss, 2020). Offenders, attorneys, and judges

alike must understand what factors trigger an assessment, especially a high-risk assessment. Without that, the model cannot be adjusted when new information becomes available (Koepke & Robinson, 2018). Risk assessments that use data combined from multiple jurisdictions, especially if crime rates vary across those jurisdictions, will not be using data representative for the specific community being assessed. This can be further exacerbated when using data from areas that have yet to implement risk assessments. The behavior of people with no access to pretrial services is different than for those people who do receive pretrial services (Koepke & Robinson, 2018). Koepke and Robinson (2018, pp 1) refer to these as 'zombie predictions.' These zombie predictions, combined with an inability to update or amend the risk assessment model will lead to gross overestimations of risk, and these will skew pretrial release decisions. It is possible that this will result in more pretrial incarceration rather than less, and nothing will have changed (Koepke & Robinson, 2018). The algorithms used in risk assessment models are often trained using the data set with which the algorithms were initially developed rather than with data from the population they will actually be assessing (Hamilton, 2021).

Another concern derives from the judges themselves. Judges typically have discretion to support a risk assessment recommendation or to depart from it whether less stringent or more stringent. The judge's thought process is neither transparent nor observable. In their defense, judges making pretrial detention decisions must define several unknowns simultaneously – risk of rearrest, risk of TA, likelihood of posting bail, and/or the impact of bail on pretrial conduct (Copp et al., 2022; Stevenson, 2018b). As Hamilton noted, judges decide things such as the dangerousness of an offender entirely through gut instinct or personal experience (Hamilton, 2021). Judges might make different decisions on identical cases, or they might disagree with a judge's decision on identical cases. The judge deciding two identical cases differently might

have fluctuations in their attention span, perception, mood, or something else, while the two judges deciding the same case differently might have legitimate differences in how something in the case should be interpreted (Dhami, 2005).

The concerns surrounding bias in risk assessment models are numerous. Dalakian II noted that while gender, race, or national origin cannot be overtly considered, the design of actuarial risk assessments makes it possible to unintentionally cause disparate impact. The computer does not select the factors that inform the algorithm, people do that. Humans can and do select factors that, while legitimate for prediction, track racial, socioeconomic, and/or gender conditions that serve to build bias into the model (Dalakian II, 2018; Demarais et al., 2020; Stevenson, 2018b). Models can become hyper-focused on a small subset of factors, and without adjustment those hyper-focused models might increase racial disparity over time even though no explicitly racist factors were built into the model (Dalakian II, 2018). The actuarial models used are thought by some to themselves increase bias (Harvard Law Review, 2018). Others note that biased policing and biased prosecution processes produce the data that feeds the models, therefore the models themselves are biased by virtue of the data being used (Eckhouse et al., 2019; Stevenson, 2018b).

Bias is also a concern because of what is known as the proxy problem. Some believe that many of the factors used in risk assessment models are, while not racist themselves, serve as proxies for racist factors (Eckhouse et al., 2019; Scurich & Krauss, 2020; Solow-Niederman, Choi, & Van den broeck, 2019). Criminal record and zip code are two such examples; with criminal record referring to those previously arrested as African-Americans are disproportionately arrested versus their Caucasian counterparts, and zip code referring to an area with a high crime rate or with a disproportionately minority population (Eckhouse et al., 2019).

Assuming no biased factors were used and that the resulting model was fair, bias is still a concern because risk assessments base their conclusions not on the offender being assessed but on the *other people*'s data used to assess against. This presents another version of the proxy problem, where the other people's data might itself be perpetuating bias by not being a representative sample of the community from which the offender being assessed comes from (Eckhouse et al., 2019).

Similar to the proxy problem, the concerns about racial bias in risk assessment derive from various issues. For example, do minorities receive higher risk scores or classifications than their Caucasian counterparts? Do those minorities have higher rates of criminal behavior than their Caucasian counterparts? Knowing the answers to the first two questions, are minorities over-classified as high-risk or under-classified as low-risk relative to their actual rates of criminal activity (Desmarais et al., 2020)? These are difficult questions as significant tension has been caused by state mandates to use risk assessment tools. Statewide pronouncements often do not take local considerations into account; the state requires the use of risk assessments but also mandates that non-discrimination be ensured. Ensuring fairness and/or accuracy in a risk assessment tool may produce disparate impact, but ensuring non-discrimination in a risk assessment tool may dilute fairness and/or accuracy (Solow-Niederman, Choi, & Van den broeck, 2019).

Advocacy Groups

One significant reason that bail reform has become such a momentous topic in jurisdictions all around the country is that there are a number of advocacy groups devoted to the effort. To a not insignificant extent, these groups tend to believe in and advocate for the same things. There are numerous groups that claim bail reform as an objective; some are extensions of

known think-tank operations such as The Hamilton Project, while others are explicitly for bail reform such as the Pretrial Justice Initiative or The Bail Project, while still others have bail reform as one issue of many, such as the ACLU. While some were established in the aftermath of the George Floyd protests, others have been operating for decades.

The Hamilton Project was established by the Brookings Institution in 2006 as an economic policy initiative (The Hamilton Project, 2022). The Hamilton Project was the originator of a 2018 paper called The Economics of Bail and Pretrial Detention (Harriot, 2018; Liu, Nunn, & Shambaugh, 2018). In this paper, the authors found that bail disproportionately impacts the poor, and that problem has two components. First, per the U.S. constitution, every person imprisoned due to inability to pay money bail is *innocent*. Second, the authors assert that the failure of money bail is well-known (Harriot, 2018; Liu, Nunn, & Shambaugh, 2018). It is because of this that both the number of arrests and the number of imprisoned convicts has dropped while the number of detained innocents has doubled. The authors allege that bail caused that (Harriot, 2018; Liu, Nunn, & Shambaugh, 2018). The authors discuss the costs to society of the existing bail process, which includes costs to communities, to families, and even to the labor market. The median bail regardless of the charge is often significantly greater than any savings an offender might have, thus the offender must either pay the 10% fee to a bail bondsman or must remain incarcerated until the disposition of their charge(s) (Liu, Nunn, & Shambaugh, 2018). The authors note that the existing bail system naturally detains those at a disadvantage (Liu, Nunn, & Shambaugh, 2018). While The Hamilton Project has looked into bail and pretrial detention, this is one of many policy issues that The Hamilton Project deals with (The Hamilton Project, 2022).

The Pretrial Justice Institute (PJI) was founded 40 years ago to bridge the gap between the criminal justice system and the community in order to push real change, and combines the expertise of judges, prosecutors, and defense attorneys with the real African-American and Hispanic people harmed by the existing system (Pretrial Justice Institute, 2022a). PJI seeks alternatives to mass incarceration (Pretrial Justice Institute, 2022b), and partners with such organizations as the Casey Foundation, the Ford Foundation, and the Art for Justice Fund to achieve that end (Pretrial Justice Initiative, 2022a). PJI has been attempting to develop a theory of change using criminal justice system participants, change management experts, community organizers, and those impacted by the system to determine how best PJI can work to abolish mass incarceration (Team PJI, 2022). PJI developed Local Antiracist Pretrial Justice (LAPJ), which works with stakeholders to build smaller correctional systems that incorporate greater community support during an offender's pretrial period (Team PJI, 2022). PJI reversed its prior support for risk assessment tools after recognizing the bias of these tools as well as the harm caused to African-American communities by their use (Patterson & Guevara, 2021).

The Prison Policy Initiative (PPI) is a non-profit and non-partisan entity that researches and advocates against mass incarceration and over-criminalization using data analysis and visualization of PPI's own collected data due to the unavailability of official information (Prison Policy Initiative, n.d.). PPI notes that of 547,000 in local jails, 445,000 of them are *not* convicted (81%). Four out of five of those 445,000 are *not* awaiting trial for drug-related offenses (Sawyer & Wagner, 2022). Half of the offenders that cannot make bail are also the parents of at least one child under eighteen years of age (Sawyer & Wagner, 2018). PPI alleges that every state has concerns regarding bail, citation/arrest policies, overzealous prosecutors, criminalization generally, under-resourced pretrial services, and under-funded diversion programs. The

combination of law enforcement strategies to increase arrests and the judicial need to ensure offenders appeared for court resulted in a virtual means-test for freedom (Aiken, 2017).

The Bail Project was established in 2018 in Indianapolis explicitly to fight the cash bail system. It is active in 24 cities in 18 states across the U.S. and includes 21 branches run by The Bail Project itself along with seven partnerships. The Bail Project not only pays bail but provides support for those released, and has paid $46,000,000 in bail for 21,000 low-income persons in 30 jurisdictions for an average of $2,125 per offender (The Bail Project, 2021a; The Bail Project, 2021b; The Bail Project, 2022). They believe that the criminal justice system is racially biased, and that bail exacerbates that. Bail was not intended to keep not-yet-proven-guilty people in prison, but that is what it actually does (The Bail Project, 2021a). The heaviest burden of the bail system lands almost entirely on the indigent and especially African-Americans that are indigent (The Bail Project, 2020). The Bail Project wants to enact true change by eliminating pretrial detention except for violence or willful flight, and to combat the racial bias that contributes to inequality (The Bail Project, 2020). The Bail Project's advocacy has already contributed to changes in other states. These include a referendum in California to overturn their law mandating the use of risk assessments, the elimination of cash bail in Illinois, bail reform in Ohio, and fighting several laws that would restrict the ability to pay bail (The Bail Project, 2021b).

To attain these goals, The Bail Project wants five changes to be made to the criminal justice system (The Bail Project, 2020). First, and most importantly, they want to end cash bail. The idea that bail money makes offenders return to court is a myth, and the racial bias in cash bail is pervasive. The Bail Project wants to release offenders with community support and are developing a model to make that work, noting that offenders whose bail is funded by The Bail Project appear for 90% of their court dates (The Bail Project, 2020). They want pretrial detention

to be rare, if it occurs at all. They want drug and quality-of-life offenses decriminalized, and non-custodial citations used instead of pretrial detention. The Bail Project is not opposed to charge-based arrangements however they also note that charges should not be misused as proxies for risk, that police/prosecutors often overcharge, and that such charging decisions are often racially biased (The Bail Project, 2020). They want release to be the default, and that any pretrial release hearings conducted are adversarial, have testimony and evidence presentation, and function essentially just like any other hearing where the judge's findings are placed into the record (The Bail Project, 2020). Community support of offenders is also essential. The Bail Project wants court reminders, free or subsidized transportation to/from court appearances, and free or subsidized childcare, along with the least-restrictive conditions possible for each offender. The Bail Project wants offenders treated as people rather than risks; to do away with risk assessments which are inherently biased, inaccurate, and static (The Bail Project, 2020). To ensure The Bail Project's goals continue to progress, significant investments in social services are required along with accountability and transparency (The Bail Project, 2020).

The Marshall Project is less a specific advocacy organization and more of a news outlet with an emphasis on issues in the criminal justice system; it is both non-partisan and non-profit (The Marshall Project, 2022). The Marshal Project attempts to reach those individuals who have been involved in the criminal justice system by reporting on the racial and economic inequalities inherent in the system and how modern criminal justice is unequipped to tackle concerns underlying crime (The Marshall Project, 2022). Among their reporting efforts, The Marshall Project noted that New York City judges realized their frequent offenders had mental health or housing difficulties that prison made worse, therefore prosecutors have begun reducing back requests for less-serious cases. In Colorado, bail reforms enacted at the county level to lower bail

and reduce the jail population were undone by a subsequent administration (Hager, 2019). Following the backlash after New York's bail reform law, bail reform proponents learned to seek buy-in from law enforcement and prosecutors and putting significant effort into educating the parties that would be impacted (Lartey, 2020). The Marshall Project continues to produce articles on these matters.

The ACLU has long fought for the disadvantaged. The idea of bail reform, accordingly, has become a cause for ACLU. The ACLU seeks to reduce pretrial detention, eliminate wealth-based detention, and to fight systemic racism and bias in the criminal justice system, and the ACLU proposes to do this primarily through both decriminalization and diversion. The ACLU sees pretrial justice as the key to ending mass incarceration, and ending cash bail is only part of that equation (Woods & Allen-Kyle, 2019). Many of ACLU's recommendations are identical or nearly so to The Bail Project. The ACLU wants to encourage legalization and decriminalization, subsidize transportation to/from court appearances, and have subsidized child care for court appearances (The Bail Project, 2020; Woods & Allen-Kyle, 2019). The ACLU also seeks mandatory citation/summons practices, least restrictive conditions possible, and individualized release hearings that include due process protections such as discovery and cross-examination (The Bail Project, 2020; Woods & Allen-Kyle, 2019).

In a similar vein, the ACLU wants prosecutors to use their discretion and divert offenders from incarceration to drug rehabilitation whenever possible. In addition, ACLU wants prosecutors to see drug addiction as a disease instead of a crime; that the criminal justice system is not capable of handling the social issues and health problems associated to addiction (Baker, 2018). Prosecutors are integral to these efforts because of the vast influence they have over the criminal justice system. It is prosecutorial decisions such as who to charge, who not to charge, or

how to charge that have driven mass incarceration and the inequities inherent in the system (Baker, 2018). ACLU is active around the U.S. regarding bail reform. In New Jersey, the ACLU recognized that the New Jersey constitution explicitly lists a right to bail for all non-capital cases however their constitution *does not* require that such bail be affordable (Lyons, 2022). ACLU of Colorado acknowledges that ending cash bail will not solve the racism and bias concerns. Both the ACLU Criminal Law Reform Project and the ACLU Campaign for Smart Justice believe that stopping cash bail will result in more detention, and as a result both entities want to know what evidence the government would have to show and what criteria judges would use to make detention determinations (Buntin, 2019).

Prosecutorial Discretion

Historically, the concept of prosecutorial discretion has roots in the British idea of *nolle prosequi*, which allows a prosecutor to terminate a prosecution. When *nolle prosequi* was first formulated in the 1500s, that power was in the hands of the attorney general. When British legal notions translated to the colonies that later became the U.S., most every prosecutor was given the power to *nolle prosequi* a case (Sarat & Clark, 2008). Prosecutors themselves evolved as described by Locke in his Second Treatise on Civil Government where he noted that in situations where the law does not provide guidance an executive or sovereign has the discretion to address that situation until the legislature can be convened to craft a more permanent fix (Sarat & Clark, 2008). Montesquieu followed up this idea, pointing out that the sovereign responsible for executing the law delegates this power to a prosecutor to execute on behalf of the sovereign as the prosecutor is an officer of the court (Sarat & Clark, 2008). Thus far we see the prosecutor as acting on behalf of the executive to execute the laws, and that the prosecutor has the power to decide not to prosecute something.

In its modern form in the U.S., prosecutorial discretion derives from the concept of separation of powers. The prosecutor, acting on behalf of the executive, is thus a part of the executive branch, yet the prosecutor's work is in front of a judge who is part of the judicial branch (Loewenstein, 2001; Sarat & Clarke, 2008; Sheer, 1998). In addition to this branch-straddling responsibility, the prosecutor serves as both minister of justice and advocate in his/her representation of the executive but his/her advocacy is on behalf of society and not an individual client (Griffin & Yaroshefsky, 2017). The prosecutor serves as the gatekeeper of the criminal justice system by virtue of the discretion to prosecute or not prosecute, and acts as the go-between for law enforcement on one side and the judiciary on the other (Griffin & Yaroshefsky, 2017; Sklansky, 2016; Voight & Wulf, 2017). As noted by Attorney General Robert Jackson in 1940, prosecutors have more power over American life than any other person (Sarat & Clarke, 2008). As a result of their unique position, prosecutors are not expected to justify their decisions not to prosecute, nor do judges question those decisions except in certain, limited circumstances (Sarat & Clarke, 2008). Those limited circumstances include only constitutionally-prohibited bases such a prosecution on the basis of race, of religion, or in response to an invocation of freedom of speech (*Bordenkircher v. Hayes*, 1978; Griffin & Yaroshefsky, 2017; Lieb, 2014; Sarat & Clarke, 2008; Sheer, 1998).

Today, prosecutors exercise significant discretion regarding whether to charge a person, what to charge them with, whether to dispose of the case via diversion program, and whether and how to negotiate with a plea agreement once charges have been brought (Choe, 2014; Griffin & Yaroshefsky, 2017; Sheer, 1998; Sklansky, 2016). When a prosecutor declines to prosecute – even in cases where probable cause exists – there are two decisions that prosecutor makes. First, can the case be prosecuted successfully? A prosecutor would not pursue a case they have no

chance of winning. Second, should the case be prosecuted? (Choe, 2014; Sarat & Clarke, 2008). To make these decisions, prosecutors consider such factors as whether there are sufficient witnesses and/or evidence to prove a case, whether the offender was morally culpable, do more appropriate alternatives to charging exist, is the prosecutor's workload already overwhelming, or would it be poor public relations to prosecute a case. Regardless, a prosecutor can decline a case for no reason whatsoever (Sarat & Clarke, 2008). It should be noted that the prosecutor's discretion is not the first filter a case passes through; law enforcement first makes the decision to arrest or not to arrest. Once an arrest is made, the case then reaches the prosecutor to determine whether the arrest leads to a viable case (Sarat & Clarke, 2008). The prosecutor's flexibility in charging decisions, plea negotiations, and sentence recommendations are what makes it possible for law enforcement and the judiciary to work in concert (Sklansky, 2016).

Another aspect of a prosecutor's discretion is based in politics. Sarat and Clarke (2008) note that prosecutorial discretion is both a division of labor and an exercise in political power. Their power comes not only from their use of discretion but also from their influence. Prosecutors make bail, release, and sentencing recommendations to judges to judges and parole boards. The police conduct their investigations based on what the prosecutor requires to file charges. Grand juries make their decisions based on what the prosecutor presents them (Sklansky, 2016). The act of a prosecutor declining to prosecute a case is sometimes effectively a nullification of the law that was broken. U.S. Supreme Court Justice Scalia noted once that because the decision not to prosecute is effectively a nullification that a prosecutor ultimately which legal argument is applicable when multiple lines of argument are available (Loewenstein, 2001). While critics often suggest that the significant rise in incarceration rates is attributable at least partly on a prosecutor's discretion to file charges, it is simultaneously true that the

decriminalization of marijuana in many jurisdictions was driven by the prosecutor's refusal to prosecute such cases. From either perspective, the prosecutor has influence over the other parts of the criminal justice system, often simply by virtue of the prosecutor's relationships with the other branches (Sklansky, 2016).

A number of court cases have shaped and/or reinforced the idea of prosecutorial discretion. In *Pugach v. Klein* (1961), a case in the U.S. District Court for the Southern District of New York, the court ruled that courts cannot compel a prosecutor to act and that the prosecutor's reason(s) for not doing so were not relevant (Loewenstein, 2001). In *Oyler v. Boyles* (1962), the Supreme Court ruled that a prosecutor's selective enforcement of a law is constitutional unless the reason for the selectivity involves race, religion, or another arbitrary concept (Loewenstein, 2001). In *Brady v. United States* (1970), the Supreme Court found that the use of leverage by a prosecutor to secure a plea bargain from an offender is appropriate (Lieb, 2014). This effectively sanctioned plea bargaining. In *Imbler v. Pachtman* (1976), the Supreme Court ruled that a prosecutor has absolute immunity from lawsuits that allege that a prosecution violates an offender's constitutional protections (Loewenstein, 2001).

In *Bordenkircher v. Hayes* (1978), the Supreme Court returned to plea bargaining to rule that an offender's due process rights are not violated if a prosecutor follows through on a threat to reindict an offender on a more serious charge for which that offender would be subject to prosecution if he/she fails to plead guilty to the offense originally charged. Even though punishing an offender for taking a legal action violates the Supreme Court's holding in *North Carolina v. Pearce*, there is no element of punishment in a negotiation as the offender may freely accept or reject the prosecutors offer. (*Bordenkircher v. Hayes*, 1978). In other words, if the prosecutor offers a plea bargain for a less-serious charge in lieu of charging a more serious

charge that fits the particulars of the offense, and the offender agrees to the bargain but then fails to make the plea, it is permissible for the prosecutor to then charge the offender on that more serious violation. For those who want to prove selective prosecution, the Supreme Court decided *Wayte v. United States* (1985). In *Wayte*, the court noted that to succeed in a selective prosecution claim one must show both intent and a discriminatory effect (Loewenstein, 2001; Sheer, 1998). *United States v. Armstrong* (1996) reinforced this, noting that specific evidence is required to overcome the prosecutor's discretion (Loewenstein, 2001; Sheer, 1998). In *Town of Newton v. Rumery* (1987), the Supreme Court itself said that courts must defer to the prosecutors regarding decisions about who is or will be prosecuted (Loewenstein, 2001).

As ubiquitous as prosecutorial discretion is in the U.S., there remain various concerns regarding both its use and its existence. Vindictive prosecution is a concern; courts *will* intervene if the charges violate due process or equal protection rights. The most common example of vindictive prosecution is a re-indictment on harsher charges after the initial case is lost or dismissed (Lieb, 2014; Sarat & Clarke, 2008). The discretion available to prosecutors is believed to be one cause of racial inequities and general severity within the criminal justice system. Prosecutorial decisions are not transparent, and the rationale for prosecutorial decisions are not discussed. This is different from judges, whose decisions are made on the record and justified (Sklansky, 2016). Pretextual prosecution is another concern. Pretextual prosecution occurs when the prosecutor decides an individual needs to be charged and finds something among the myriad of laws on the books that applies. It used to be that this process was highly stigmatized but it has seen much greater acceptance in recent years (Sklansky, 2016). While there are constraints on the power and discretionary authority of prosecutors these are seldom enforced. Prosecutorial failures are often not discovered until long after a case concludes if they are discovered at all.

Prosecutors who use voir dire challenges to strike jurors on the basis of race or gender are rarely caught because of the difficulty of proving bias (Sklansky, 2016).

Prosecutors are also blamed for mass incarceration; in the last twenty years prosecutors increasingly bring felony charges in cases which lead to increased prison admissions and higher sentences (Griffin & Yaroshefsky, 2017). Collectively, prosecutors' involvement in mass incarceration stems from four issues: the increase in crime rates between 1960-1990, the political/social movements that demanded harsher punishments and increased criminalization, 'Broken Windows' policing, and mandatory minimum sentencing laws (Griffin & Yaroshefsky, 2017). While mandatory minimum sentencing reduced prosecutor discretion with regard to sentencing recommendations, the rising crime rates, demand for criminalization, and the decision to increase prosecution of order maintenance crimes (i.e., fare evasion, jaywalking, littering, and similar minor charges) did and still do impact incarceration. The relationship between police and prosecutors is also thought to be problematic as the caseload for both is so overwhelming that prosecutors rely on police to decide the charges for an offender. Their largely informal relationship makes this relatively seamless (Griffin & Yaroshefsky, 2017). From a corruption standpoint, the executive may try to take advantage of prosecutorial discretion by limiting a prosecutor's independence. This enables the executive to defer an investigation into a political ally through influence on the prosecutor or to commence a prosecution against a political opponent, whether spurious or otherwise by virtue of the same influence. It is considerably less costly to influence a prosecutor than a judge, and considerably harder to detect by virtue of prosecutorial discretion (Voight & Wulf, 2017).

Bail Reform Efforts in Other U.S. Cities

Bail reforms have been implemented in various U.S. cities and states in recent years. For this study, the arrest data collected before/after bail reform was implemented in Philadelphia, Pennsylvania will be compared with similar data in Pittsburgh, Pennsylvania, which had not implemented bail reform during the study period. To better provide context for the data from Philadelphia and Pittsburgh, the status of any bail reform efforts must be examined and understood. Six locations around the U.S. will be discussed here to understand how bail reform succeeded or failed in those places. This includes the states of New York and Illinois, and the cities of Washington, D.C., Phoenix, Pittsburgh, Los Angeles, and Indianapolis.

California (Los Angeles)

California's involvement in bail reform can best be described as in flux. Historically, Los Angeles County has long been involved in some type of bail reform. In 1963, Los Angeles County began the OR Program; OR stands for 'on recognizance'. Offenders are permitted to apply for this program, which is operated by Pretrial Services (Kuehl & Solis, 2017). In 1993 the Pretrial Services Division moved from Los Angeles Superior Court to the Probation Department, which oversees the OR Program, Bail Deviation Program, and Electronic Monitoring Program. Unfortunately, Pretrial Services can only reach one-quarter of those booked each year (Kuehl & Solis, 2017). This becomes meaningful when one considers that the Los Angeles County District Attorney's Office is responsible for 4,084 square miles with 88 cities that are home to 10,000,000 residents. The Office does this with 1,000 deputy attorneys to prosecute cases and 300 investigators to gather information (Los Angeles County District Attorney's Office, n.d.). In 2011, the Vera Institute of Justice found that Los Angeles County's pretrial release decisions are based entirely in money (bail). Judicial officers noted that because they only have limited

information on an offender, they are reliant on bail schedules (Kuehl & Solis, 2017; McAllister, 2017). By 2017, nothing had changed.

As a result, two County Supervisors put forward a motion to establish a task force to report back in 120 days regarding a variety of reform-related topics. The task force was to analyze current pretrial release practices in Los Angeles County, to hire consultants to implement a risk assessment tool, to find best practices for operating the Pretrial Services Division, and to reorient the County's approach to bail consistent with both Article 1, Section 12 of the California Constitution and 18 U.S.C. § 3142 which presumes ROR for misdemeanors and non-violent felonies (Kuehl & Solis, 2017). The Board of Supervisors' vote on the motion was unanimous (McAllister, 2017). The report submitted to the Board of Supervisors first outlined the status quo. Officers use a bail schedule upon making an arrest to set an offender's bail. If they can post bail, they are released prior to their first court appearance. If they cannot make that initial bail, offenders either an apply to enter the Bail Deviation Program or they would go to arraignment within 48 hours (Wickham, 2018). Bail Deviation is run by Pretrial Services, who determines if an offender is eligible and if so, the offender is assessed for suitability and classified as Low-Medium risk or High risk. If Low-Medium risk, bail decision goes to judicial officer for disposition, and if High risk requests for Bail Deviation are not forwarded. Acceptance into the Bail Diversion Program can lead to reduced bail or even ROR (Wickham, 2018).

If the offender goes to arraignment, they can request that bail be reduced. The California Constitution mandates primary consideration of public safety, safety of the victim, seriousness of the charge(s), criminal record, and likelihood of appearance in a pretrial decision. Misdemeanor offenders must be ROR unless the judge believes release would compromise safety or that FTA is likely, while felony offenders may request the OR Program where they will be risk-assessed

and the results reported to the court (Wickham, 2018). The report also lists next steps in the form of a timeline. Phase 1 would run between February and June 2018. Pretrial assessments would be identified, validation methods would be identified, resources and training requirements would be identified, and a pretrial assessment tool would be selected (Wickham, 2018). Phase 2 would run between June and December 2018. Here, the preliminary pilot program would be developed, identification of target population, data systems, workflow, and staffing would be completed, data collection protocols would be established, training would be developed and administered, and preliminary implementation would occur (Wickham, 2018).

In a near-parallel effort, the California Money Bail Reform Act of 2017 (SB 10) was introduced (Alas, 2021; Cannick, 2018; Wickham, 2018). If this Act were passed, it would effectively end cash bail; it would eliminate bail schedules, require individual bail determinations based on the ability to pay, require the least restrictive conditions possible, permit unsecured appearance bonds instead of bail, and mandate all counties to establish a Pretrial Services component (Wickham, 2018). The Act did pass, and efforts began in 2018 to implement the Act's ideas starting with the workgroup and piloting bail elimination for minor offenses (Grimes, 2019). The California Money Bail Reform Act generated unusual opposition; both the bail bond industry who would be destroyed by this legislation and the activists that felt the legislation did not go far enough put aside their politics long enough to force a referendum on the law (Grimes, 2019; Myers, 2019; Pohl, 2020). The referendum resulted in the defeat of the Act, known as Proposition 25 by an 11-point margin (Alas, 2021; Binion, 2020; Los Angeles Times Editorial Board, 2020; Pohl, 2020).

Nevertheless, Los Angeles County enacted Measure J in 2020, which would fund pretrial release alternatives (Los Angeles Times Editorial Board, 2020), approving a $17 million pilot

pretrial release program. It would last for two years and anyone arrested that reaches arraignment would qualify. The program would use two different risk assessments; at least one would be given to the judicial official. Low-risk offenders would be ROR and the judge can request services or mental health referrals for them (McNary, 2020). As with Proposition 25, activists object to the program because they believe risk assessments are discriminatory (McNary, 2020). When Los Angeles County DA George Gascon took office at the end of 2020, he stated in his inaugural speech that his office would cease requesting bail for misdemeanor or non-violent felony offenders (Binion, 2020; Kamisher, 2020). Upon assuming office, a new pretrial release policy was issued to the prosecutors in the Los Angeles County DA's office. It noted that the presumption is to release offenders before trial and without condition unless safety or appearance at court are at issue. It prohibited the requesting of cash bail for misdemeanor, non-serious felony, or non-violent felony offenders, and where cash bail was requested, it would be based on the offender's ability to pay (Gascon, 2020). In March, 2021, the California Supreme Court ruled that keeping an offender in custody because they cannot afford bail is unconstitutional. They also ruled that judges were required to favor pretrial release over bail unless clear and convincing evidence was available showing an impact to public safety (City News Service, 2021).

Indiana (Indianapolis)

In 2016, Indiana convened a committee that included trial judges, probation officers, legislators, a county prosecutor, the chair of the Criminal Justice division of the Indiana State Bar Association, and the Indiana Public Defender Council to revise bail policy across the state (Author Unknown, 2016). This committee proposed a rule that arrestees not posing a substantial risk of flight or danger should be released without monetary bail but with other conditions as appropriate. Exceptions include those charged for murder or treason, those already on pre-trial

release in another case, or those on probation, parole, or other supervision (Author Unknown, 2016). Almost concurrently, the Indianapolis Criminal Justice Reform Task Force produced a report with 19 recommendations. From this report, then-Mayor Hogsett made several proposals. For example, Hogsett wanted to move those with mental illness and/or drug addiction out of the criminal justice system and into treatment (McQuaid, 2016). In addition, Hogsett proposed to consolidate the courts, sheriff's office, prosecutors, public defenders, medical are, and a correctional facility onto one campus, taking the pre-existing sites for these entities and using them for treatment or community supervision. Hogsett did also propose bond reform but that entailed expanding risk assessment matrices (McQuaid, 2016). 11 Indiana counties began using risk assessments on a trial basis. The concept was to reduce prison overcrowding and concerns were raised that offenders that should not be free before trial might obtain freedom through these assessments. In addition, both the bail bond industries and civil liberties groups opposed the risk assessments but for different reasons (Kobin, 2018). The pilot counties use Indiana Risk Assessment System Pretrial Assessment Tool (IRAS-PAT), and this was developed in support of Criminal Rule 26 issued by the Indiana Supreme Court in 2016 that allows release of low-risk offenders without bail (Kobin, 2018).

In 2022, the Indiana legislature passed HB 1300. HB 1300 prohibits charitable bail organizations from bailing anyone charged with a violent crime or those that have a prior conviction for a violent crime. It limits charitable bail organizations to $2,000 bail per person, and any non-profit organization that bails more than three individuals in a 180-day period must be certified by the state and recertify every two years (Cooper, 2022; Nelson, 2022). Further, any entity receiving grant funding from state and local governments are prohibiting from paying bail for individuals (Nelson, 2022). The shift from reducing the use of cash bail to prohibiting

organizations from paying bail occurred primarily as the result of three incidents. First, Marcus Garvin's bail was paid by The Bail Project after he allegedly stabbed a man at a gas station. The judge in that case reduced his bond from $30,000 surety to $1,500 cash, making him eligible for The Bail Project to assist him. After release, he allegedly removed his ankle monitor and murdered his girlfriend (Crown, 2021; Crown, 2022; Menge, 2022). Second, Travis Lang's bail was paid by The Bail Project after he was arrested on a cocaine possession charge. He had three pending cases for burglary, breaking and entering, and resisting law enforcement. After release Lang allegedly shot Dylan McGinnis to death during a drug transaction (Crown, 2021; Crown, 2022; Menge, 2022). Third, Deonta Williams' bail was paid by The Bail Project after Williams' arrest for felony burglary. After release, Williams allegedly made a fake 911 call and stabbed the two Indianapolis Metropolitan Police Officers who responded to the call (Ryckaert, 2021).

HB 1300 was not without controversy. The Bail Project, which began operations in Indianapolis in 2018, is the only charitable bail organization operating there (Andrea, 2022a). The Bail Project, together with the ACLU, sued Indiana's Department of Insurance on the basis that HB 1300 violates both The Bail Project's 1st Amendment right to free expression as The Bail Project considers its own work to be advocacy, and the equal protection clause because HB 1300 restricts only charitable bail funds and not bail bondsmen or private individuals (Andrea, 2022b; Nelson, 2022). The Bail Project requested an injunction to prevent HB 1300 from taking effect but the injunction was denied (Nelson, 2022). The Bail Project had received $150,000 in two grants that were funded by tax dollars. The Bail Project maintains that the funding was used for overhead and services and was not used to pay bail (Andrea, 2022a; Ryckaert, 2021). Nevertheless, HB 1300 includes language to prevent tax dollars from going to charitable bail organizations.

Arizona (Phoenix)

In 2016, the Arizona Supreme Court convened the Task Force on Fair Justice for All. This group was charged with recommending best practices for pretrial release such that the public is protected and offenders are not incarcerated unnecessarily, recommending changes for court-imposed payments and repayments, identifying alternatives to driver's license suspensions, educating/training those involved in pretrial decision-making, and identifying how technology can improve access to Arizona courts (Arizona Supreme Court, 2016; Fradella & Scott-Hayward, n. d.; Task Force on Fair Justice for All, 2016). The justification for the Task Force can be broken into four parts. First and foremost, offenders should not be jailed solely for being poor; that pretrial release decisions need only protect the public and/or ensure appearance at court. Second, the Arizona constitution prohibits imprisonment for debt [except where fraud is concerned], thus people should not be jailed for their inability to pay fines or other financial sanctions (Arizona Supreme Court, 2016; Task Force on Fair Justice for All, 2016). Third, sanctions should promote compliance with the law, which leads into the fourth and final part – that courts should help people comply through alerting them for court dates, deferring fine payments, and/or allowing community service in lieu of fines (Arizona Supreme Court, 2016; Task Force on Fair Justice for All, 2016).

Prior to the Task Force, Arizona had begun implementing elements of bail reform. In 2014, the Arizona Code of Judicial Administration was updated to incorporate evidence-based pretrial services. This led to the inclusion of the PSA as Arizona's risk assessment tool, developed by the Arnold Foundation (Fradella & Scott-Hayward, n.d.). Changes were made to Rule 7.3 of the Arizona Rules of Criminal Procedure as well. Rule 7.3 limits the imposition of bail that leads to incarceration solely because the offender cannot pay. Rule 7.3(b)(2) was

established to require individualized pretrial release decisions. While Arizona has not abolished cash bail, Arizona has made it more difficult to impose (Fradella & Scott-Hayward, n.d.). State-wide use of risk assessments was implemented in 2016. The PSA used in Arizona requires no interview and focuses on nine variables including prior felony convictions or prior FTA within the last two years. The results of this assessment go to the court commissioner, who make the pretrial release decision but is not *mandated* to follow the risk assessment's recommendations (Cassidy, 2017). Further changes were made by the Arizona Supreme Court, who updated the Arizona Rules of Criminal Procedure effective in 2017. The update included a presumption of release for most cases unless the offender's appearance at court cannot be assured or to protect the community. Even when those two conditions cannot be met, the least restrictive conditions must be imposed (Fradella & Scott-Hayward, n.d.).

Washington, DC

Washington, DC largely did away with cash bail in the 1990s through the Bail Reform Act of 1992 (Block, 2018; Dorn, 2016; Lybrand & Subramaniam, 2021; NYU Law, 2016). This unprecedented reform did not arrive in a vacuum. It started with the DC Bail Project in 1963, which established Washington, DC's Pretrial Services Agency in 1967 (Tildon, 2015). At the same time, the Bail Reform Act of 1966 was passed, which introduced non-financial pretrial release into the Federal court system. Shortly thereafter, the Court Reform and Criminal Procedures Act of 1971 established pretrial detention for dangerous individuals (Keenan, 2013). The Bail Reform Act of 1984 further reformed bail practices in Washington, DC (NYU Law, 2016). Washington, DC uses algorithmic risk assessment and takes care to ensure their assessments are refined to mitigate potential bias (Block, 2018). In fact, it is illegal for

Washington, DC to impose financial conditions on an offender even to maintain community safety or ensure reappearance at court (Tildon, 2015).

Slight variations notwithstanding, between 2013 and 2017 Washington, DC released between 85-94% of all offenders without bail, 88-90% made all court appearances, and 86-91% were not rearrested before the disposition of their case(s) (Block, 2018; Dorn, 2016; Keenan, 2013; NYU Law, 2016). While Washington, DC has had bail reform for thirty years, it has not been without its drawbacks. In 2020, a review of court records showed that DC Superior Court judges placed murder suspects in high-intensity supervision or ROR 17 times. The then-police chief of the Metropolitan Police Chief, Peter Newsham, noted that of those 17 incidents, 16 involved the use of a firearm. Chief Newsham provided an additional anecdote that an offender arrested in 2018 on a murder charge from 2004 spent 17 days in pretrial incarceration before being ROR (Wagner, 2020).

New York (New York City)

The bail reform situation in New York City is somewhat contentious. In 2019, based on the idea that the cash bail system encourages a dual-track justice system, NY legislators began trying to eliminate cash bail – which many in both legislative bodies were in favor of (Yancey, 2019). Opposition to the bill, which wanted judges to have the discretion to detain certain offenders pre-trial based on their 'dangerousness', was unable to overcome the momentum, and the bill was passed. Opposition continued; the five District Attorneys and the Special Narcotics Prosecutor told the New York City Council that as a result of the legislation thousands of dangerous offenders would be released (Calder, 2019). The legislature held no hearings on the legislation, nor was input sought from police, prosecutors, or judges (Fink, 2020; Soares, 2019). The reform legislation itself was actually passed as part of the state budget and not a separate act

(Fink, 2020). The bail reform package as passed would become effective on January 1, 2020. Among the changes, cash bail would be eliminated for misdemeanors and non-violent felonies (Calder, 2019; Fink, 2020; Lekhtman, 2020; Soares, 2019). A county district attorney outside New York City noted that the reformed bail system was essentially a form of catch-and-release (Aroune, 2019).

Within four months of the bail reform changes taking effect, the Governor enacted the next year's state budget on April 3, 2020, which rolled back some of the bail reforms. Some misdemeanors and some felonies were made eligible for cash bail, such as crimes involving manslaughter, sex offenses, child abuse, or escape from custody (Lehktman, 2020). There was backlash against the reforms, and vulnerable legislators supported some changes. The updated bail reform was to take effect within 90 days of the Governor's signature (Cline-Thomas, 2022; Lehktman, 2020). Controversy continued as the New York City Police Department (NYPD) released their statistics showing that bail reform was one of several factors behind increased crime rates that began in mid-2019 after bail reform was passed but prior to its becoming effective (NYPD, 2020). Crime spiked when the bail reform went into effect in January of 2020 and only began to ease in mid-March as the COVID-19 pandemic lockdowns began. NYPD noted that non-bail-eligible felony offenders were arrested more often and for more serious offenses (NYPD, 2020). Increases included 26% of burglary offenders being rearrested within 30 days of their initial charge in 2020 versus 10% in 2019, or those offenders receiving Desk Appearance Tickets saw 14.2% being rearrested in 220 versus 9.9% in 2019 (NYPD, 2020). Prior to bail reform taking effect, 17.3% of those subject to bail were rearrested (2019) and of those, 16.8% of the rearrests were fore one of seven major crimes. After bail reform, 19.5% of those subject to bail were rearrested (2020) and of those, 34.5% were rearrested for one of seven

major crimes (NYPD, 2020). The seven major crimes include murder / non-negligent manslaughter, rape, robbery, felony assault, burglary, grand larceny, and grand larceny motor vehicle (Author Unknown, 2015b).

Other entities delved into the statistics as well. A report in the New York Post noted that the Office of Court Administration (OCA)'s data from July 1, 2020 when the first rollback became effective showed that crime continued to rise, and the report attributed that to the release of repeat offenders since most cash bail was eliminated (Quinn, 2022). The Albany Times Union did their own analysis, showing only 2% of offenders were rearrested for a felony while their original case was pending. The New York Post, using OCA data, found that between July 1 and August 30, 2020, there were 3,680 total felony offenders, 70% of whom had charges already pending when they were arrested (Quinn, 2022). OCA data showed that 594 offenders had a prior violent felony charge (attempted murder, assault, rape, kidnapping, or burglary) at the time they were arraigned. Of them, 190 were released without bail on their new arrest; that is one of every three (Quinn, 2022). Polling done in early 2022 noted that by a margin of 64% to 25%, polled voters blamed bail reform for the increase in crime (Fink, 2022). The New York City Comptroller analyzed the crime increase and found that 96% of offenders released pending trial were not rearrested as of December, 221 and 99% of those released pending trial were not rearrested for a violent crime (Prater, 2022). Critics also assailed NYPD statistics based on the fact that they refer to arrests, while the New York State Unified Court System's data refers to offenders whose cases actually reach a courtroom (Durkin & Cordero, 2022). A report in City Journal noted that OCA data was updated and OCA data now showed that rearrest rates had risen from a pre-bail-reform 17-18% to 20-21% (Lehman, 2022).

The Mayor of New York City – a former police officer (Prater, 2022) – Eric Adams was demanding changes to bail reform to include the denial of bail for firearms-related charges and permitting the consideration of likelihood of rearrest when judges made bail decisions (Cline-Thomas, 2022). By March, 2022, Governor Hochul was negotiating with lawmakers to amend the bail reform laws a second time (Cline-Thomas, 2022; Prater, 2022). Governor Hochul, running for reelection, was pressured by democrats for doing too little on bail reform, and by republicans for doing far too much (Prater, 2022). Negotiations continued, and judges were to be given discretion to consider a history of firearms use by an offender, whether the offender is charged with a violent crime, or whether a restraining order was violated. What was *not* included was the dangerousness standard, on the basis that it would exacerbate racial bias. In addition, hate crimes, certain offenses against persons, property theft, and some firearms offenses were made bail-eligible (Akinnibi & Nahmias, 2022). The charges and countercharges from bail reform advocates and opponents continued. Mayor Adams asserted that career criminals were reoffending at rates unheard of prior to bail reform and the elimination of cash bail, while Governor Hochul and the legislators insisted that there were few rearrests and many offenders were able to avoid notorious New York City jails (Durkin & Cordero, 2022). Further enflaming the issue, Lee Zeldin, Governor Hochul's opponent in the 2022 election, was attacked in public by an individual that was released from custody shortly after the incident (Durkin & Cordero, 2022). In New York's 2023 budget negotiations, Governor Hochul and the legislature agreed to remove the "least restrictive" standard that required judges setting bail to choose the method of ensuring court appearances in such a way that incarceration was the last option (Fitz-Gibbon, 2023; McKinley, Ashford, & Meko, 2023; Reisman, 2023). Even with the 2023 changes, opponents of the bail law were chagrined that certain offenses that were classified as non-violent

and thus ineligible for bail were reclassified as violent offenses (Fitz-Gibbon, 2023; Reisman, 2023).

Illinois (Chicago)

The most recent iteration of bail reform began in Chicago in 2021. The Illinois legislature developed the Illinois Pretrial Fairness Act; 300 pages of legislation that abolishes the cash-based bail system state-wide (Ali, 2021). Legislators moved ahead with the elimination of cash bail after a Loyola University Chicago study noted that after five years of bail reform efforts in Cook County (Chicago), there had been minimal impact on new criminal activity by those granted pre-trial release and that offenders saved $31.4 million in bond costs in the first six months alone (Ali, 2021). This Act and others were presented as a comprehensive package to Illinois Governor Pritzker known as the 2021 Illinois Safety, Accountability, Fairness, and Equity-Today (SAFE-T) Act. Governor Pritzker signed it on January 22, 2021 (Reichert, Zivic, & Sheley, 2021). In addition to ending cash bail, the SAFE-T Act to limit risk assessment, warrant alternatives, electronic monitoring, home confinement, among other things (Ali, 2021; Reichert, Zivic, & Sheley, 2021).

The SAFE-T Act generated a fair amount of controversy. Illinois Republicans attempted to have the SAFE-T Act repealed, complaining that crime in Illinois was rising because of the Act, even though the cash bail portion wouldn't be implemented until January 1, 2023 (Ali, 2021; Baillie, 2022; Clark, 2022; Hanley, 2022; Wall, 2022; Wilson, 2022). Illinois Democrats countered that the SAFE-T Act was crafted with input from community organizations, legal rights advocates, and law enforcement and that such input meant the Act was both evidence-based and supported by research (Miletich, 2022). Governor Pritzker noted when he signed the SAFE-T Act into law that it would dismantle systemic racism in the criminal justice system and

bring forth both safety and fairness. Supporters of the SAFE-T Act noted that Washington, DC and New Jersey eliminated bail and saw a minimal increase in crime (Corley, 2021). Supporters also note that keeping offenders in prison solely because they cannot afford bail is wrong (Baillie, 2022; Wall, 2022).

Opponents to the SAFE-T Act continue to object to the impending bail changes on January 1, 2023. The Illinois Law Enforcement Coalition, a group representing police and sheriffs, believes the Act endangers both the public as well as law enforcement. The head of the Illinois Chiefs of Police notes that the law moves past holding officers accountable and instead punishes them (Corley, 2021). Others are concerned that making arrests for certain misdemeanors would be prohibited under the SAFE-T Act; that such misdemeanors could only be issued a citation and could not be taken into custody (Wall, 2022; Wilson, 2022). The Mayor of Orchard Park voiced the same concern, using the crime of trespassing as an example. In his view, trespassers could no longer be removed from the premises; they could only be cited (Hill, 2022). Prosecutors have similar concerns; that crime and particularly violent crime will rise significantly and prosecutors will be blamed. One county sheriff suggested that his agency would have to call someone to request permission to arrest in order to avoid liability arising from arresting someone no longer subject to that under the SAFE-T Act's requirements (Baillie, 2022).

The SAFE-T Act sets crimes ineligible for pretrial detention; these include: aggravated battery, robbery, hate crimes, DUIs, or most drug offenses including trafficking offenses. For these crimes, detention can only be authorized when willful flight to avoid prosecution is a clear danger supported by sufficiently convincing evidence (Baillie & Gartner, 2022; Clark, 2022; Hanley, 2022). Otherwise, they will be released pending trial. For felonies ineligible for

probation such as murder or armed robbery, detention can only be authorized if the offender is considered a threat to the community by clear and convincing evidence. In addition, FTAs are granted two warnings before a warrant can be issued (Hanley, 2022).

In December, 2022, Governor Pritzker of Illinois signed an amendment to the SAFE-T Act that clarified certain court responsibilities regarding electronic monitoring and escape prevention, and made other changes geared toward ensuring pre-trial incarceration is based in risk determination rather than financial wherewithal (State of Illinois, 2022). At the time, over sixty lawsuits had been filed against the SAFE-T Act. Most of these lawsuits contended that the Act violated multiple provisions of the Illinois constitution, including a provision regarding bail itself and another requiring changes to the constitution to be made via public referendum rather than the Illinois legislature (Author Unknown, 2022). Supporters of the law argued that the SAFE-T Act ensure police accountability, improved public safety, and prevented financially-capable defendants from purchasing their freedom (Author Unknown, 2022). On December 29th a Kankakee County Judge ruled the cash bail provision of the SAFE-T Act unconstitutional on the basis that it violated separation of powers between the legislature and the judiciary and the Illinois constitutional requirement for bail, among other things (D'Onofrio & Wade, 2023; Rivera, Horng, & Piekos, 2022). The case was appealed to the Illinois Supreme Court, which heard arguments in March 2023 and is expected to rule later in the year (D'Onofrio & Wade, 2023; Sun-Times/NBC Chicago, 2023).

Pittsburgh

Bail reform has been controversial in Pittsburgh in recent years. The American Civil Liberties Union branch in Pennsylvania published a report in 2019 on the issuance of cash bail in Allegheny County, home of the city of Pittsburgh (ACLU of Pennsylvania, 2019). This report

reviewed two years of cases in the county and found that across five months in 2019 that cash bail was set for an offender slightly more than one out of every four times. To add context, the report noted two things. First, from 2000 through 2020 the prison population in Allegheny County rose even as crime rates fell. Second, that the African American population of Alleghany County itself is 13% while 58% of African Americans appearing in Allegheny County courts had some amount of cash bail set (ACLU of Pennsylvania, 2019).

Political activity surrounding bail in the Pittsburgh area began increasing in 2021. State Representative Summer Lee introduced a bill in the legislature that would eliminate cash bail, with the reasoning that the bails set by magistrate judges has no relationship to what an individual can afford (Deto, 2021; Micek, 2022). Further, Lee pointed out that the U.S. Circuit Court of Appeals, 3rd Circuit, said that Pennsylvania's bail system itself is flawed and inimical to justice. As the Pennsylvania legislature at that time was Republican-held, Lee's bill did not pass (Deto, 2021). With the legislative avenue to bail reform obstructed, activists ran several former public defenders and defense lawyers in the 2021 race for the Court of Common Pleas. Nine of the 34 seats on the Court were up for election that year. Among the activists' goals was to reduce the usage of cash bail (Mellins, 2021). Of the eight judges run in those elections, five of the activist judges won their elections (Moss, 2023).

The ACLU of Pennsylvania was active here as well, issuing a second report that confirmed that regardless of rural/urban status or political leaning, magistrate justices across Pennsylvania routinely set unaffordable bail amounts. Such bail amounts can cost an individual their job, their access to childcare, their access to medical care, or even their housing (Chodolofsky, 2022; Li, 2021; Micek, 2022). Efforts to replace the Allegheny County District Attorney with a more activist district attorney are ongoing; the current District Attorney lost his

primary re-election in May 2023 to a candidate supported by the ACLU of Pennsylvania. (Velluci, 2023)

Political Rhetoric Surrounding Bail Reform

Bail reform has produced and continues to generate strong feelings on both sides of the issue. As a jurisdiction where bail reform was implemented and subsequently amended twice in attempts to fix unanticipated consequences as well as quell public distrust of bail reform, New York might be considered a bellwether in how bail reform is discussed during the deliberative process with the legislature. In 2019, New York enacted bail reform through the state budget process to eliminate both cash bail and pretrial incarceration for various offenses (Arnaud & Sims-Agbabiaka, 2020). In 2020, New York amended bail reform through the budget process to increase the offenses for which bail could be set (Arnaud & Sims-Agbabiaka, 2020). In 2023, bail reform in New York was again amended through the budget process to drop the 'least restrictive' standard for release, to permit judges to consider compliance with conditions when deciding a person's propensity for flight or danger to others, and to permit judges to impose both cash bail and conditions (Office of the New York State Comptroller, 2023; Solomon, 2023).

Initially, arguments in favor of bail reform included economics and the idea that unaffordable bail was cruel. Assembly Speaker Carl Heastie and Assemblywoman Latrice Walker noted the importance of making certain that a person's financial status is not the sole reason that person remains incarcerated prior to their trial (Office of Assembly Speaker Carl E. Heastie, 2018). Walker argued that the constitution says persons cannot be subject to cruel or unusual punishment, and bail that does anything other than make sure a person will attend their court hearings meets that description (Abreu, 2018). State Senator Michael Gianaris pointed out

that bail reform would make whole those incarcerated without a conviction (Office of New York State Senator Michael Gianaris, 2019).

During the amendment campaigns in 2020 and 2023, bail reform opponents were more vocal. Assemblyman Doug Smith exhorted political leaders to address safety rather than re-election, pointing out that an individual charged with manslaughter in the death of a baby had been released pending trial (Office of Assemblyman Doug Smith, 2020). State Senator Fred Akshar said that bail reform passed under the auspices of one political party had failed public safety, law, order, and justice. Akshar argued that bail reform created a situation where criminals enter and then immediately exist the judicial system pending trial while their offenses continued uninterrupted (Office of Former New York State Senator Fred Akshar, 2020). State Senator Joseph Griffo noted that even though there was a need for bail reform, the bail reform as implemented was rushed, did not consider arguments from stakeholders, and posed a significant safety risk (Office of Former New York State Senator Fred Akshar, 2020). Assemblyman Joseph Giglio said that when New Jersey did away with bail, they studied the consequences at length, spent money and provided training, and that New York failed to do that and consequently the state found itself in a mess (Office of Assemblyman Joseph M. Giglio, 2020). In 2022 State Senator George Borrello accused ‘woke’ legislators of protecting the rights of criminals; that bail reform just resulted in more victims (Office of New York State Senator George M. Borrello, 2022).

Even bail reform proponents noted there were issues with implementation (Brand, 2020; Hogan & Campanile, 2020). Assemblyman Harry Bronson argued that while the bail reform law of 2019 and the amendments of 2020 did not cause a rise in violent crime, it did create headaches for law enforcement that the new amendments would address (Spector & Gronewold, 2022).

Assemblywoman Latrice Walker said here that political distractions should not undermine an effective policy (Spector & Gronewold, 2022). Governor Hochul noted that there was room for improvement while ensuring that the criminal justice system maintained the level of fairness that bail reform provided. This provoked a response from U.S. Congressman Lee Zeldin, who pointed out that the bail reform changes were not included until polling results on the matter came back negatively and the Governor was booed during a sporting event (Spector & Gronewold, 2022).

Similar rhetoric was heard in other jurisdictions that sought to implement bail reform. California State Senator Nancy Skinner said that California's existing bail system lets people with financial wherewithal to post bail while the poor sit in prison awaiting trial (Office of Nancy Skinner Representing Senate District 09, 2021). Assemblyman Bob Bonta said the door to the jail cell should not move based solely on one's financial means, and Senator Robert Hertzberg noted that the California Supreme Court's recent decision did not stop monetary bail, but it did take the unfairness from the system (Guardian Staff, 2021). Subsequent legislative movements on bail reform led Assemblywoman Rebecca Bauer-Kahan to point out that bail reform is intended to help the poor, while Assemblyman Jim Cooper worried that bail bondsmen would not be needed as all bail would be set at zero (Thompson, 2022).

Wisconsin's foray into bail reform between 2022 and 2023 generated similar passions among the politicians involved. State Senator Julian Bradley noted law enforcement's concerns whereby arrestees are often released immediately only to be re-arrested a short while later (Redman, 2022). Bradley said he dislikes judges and district attorneys negating the difficult work that law enforcement does, and because of that negation the safety of Wisconsin citizens is compromised (Amari, 2022; Redman, 2022). State Senator Van Wanggard pointed out that the

passing of a bail reform referendum to be voted on was solely about Wisconsin's bail system and not about permitting judges and district attorneys to set whatever bail they felt like setting. State Senator Chris Larson noted that Wisconsin has the highest level of African Americans in prison and that the state must move away from that (Banbeck & Harrison, 2023). State Representative Cindi Duchow said that judges should be able to consider criminal records, the nature of the crime(s) a person was arrested for, and any threat that person poses to the community; people assume judges can do that but that does not actually happen (Bambeck & Harrison, 2023). State Representative Scott Allen noted that crimes were being committed by those already awaiting trial for other offenses, while State Representative Dora Drake stated that using a person's financial ability to determine whether a dangerous person should remain in custody creates a dual-track system of those who can afford freedom and those who cannot (Wisconsin Right Now & The Center Square, 2023).

Texas' efforts at bail reform elicited similar discussion as those of California and Wisconsin. One of the bills passed by the Texas Senate in 2021 was discussed by State Representative Travis Clardy, who noted that the bill as submitted would prohibit bail funds and that State Representatives would not pass such a bill. State Representative Ann Johnson remarked on the loss of judicial discretion in that bill; that it essentially eliminated the state's bail bond industry (McCullough, 2021). Governor Abbott commented on the bill at the time, noting that Texas' existing bail system was not keeping dangerous individuals off the streets. He referenced State Trooper Damon Allen who was killed by an individual released on bail from prior charges of assaulting a public servant (Office of the Texas Governor, 2021). Georgia, too, became involved in bail reform. State Senator Randy Robertson said he wanted the bill to stop the revolving door between the prisons and the public while ensuring defendants could still post

bond. State Senator Kim Jackson objected to the comingling of non-serious offenses and violent crimes (Dunlap, 2023). Georgia's bail reform bill failed to pass, with State Representative Houston Gaines noting that the failed bill still shows that Georgia will not follow the path of New York, California, or Illinois, while State Representative Sam Park said that the bill would have created a dual-track system where some can afford bail while others cannot; that incarcerating poor people will not make communities safer (The CW 69 Atlanta, 2023).

"Tough on Crime" to Bail Reform, 1960-2020

The concept of "tough on crime" has been a political touchstone for at least the last half-century. "Tough on crime" includes such things as mandatory minimum sentences, long sentences for drug offenses, and sentencing guidelines. The first instance of mandatory minimum sentences occurred at the Federal level with the Narcotic Control Act in 1956. During the presidential campaigns of the 1960s, such as Goldwater and Nixon, crime was a volatile campaign issue and remains so today (Mauer, 1999). The creation of the Law Enforcement Assistance Administration in 1967 led to increased funding for law enforcement initiatives due not only to rising crime rates but also increased reporting (Mauer, 1999). In 1970, Congress tried to repeal mandatory minimum sentencing in 1970 but failed to do so (Mauer, 1999). In 1971, the Nixon administration introduced the "War on Drugs" campaign, where significant funding was pushed to the various drug control agencies in government (NeSmith, 2016). This was followed shortly after by the passage of what are known as 'Rockefeller Drug Laws' in 1973. These laws required harsh sentences for drug offenses and placed limits on plea bargaining (Mauer, 1999). Academia was also part of these changes as politicians lack the appropriate expertise to choose between competing perspectives; academia provided the experts. For example, in 1974 Martinson published "What Works? Questions and Answers About Prison Reform," which

determined that the various prison reform programs in use at the time had no effect on recidivism (Baumgartner et. al, 2021).

The 1980s continued this toughening approach. Sentencing guidelines and schedules began to appear, changing the focus from offender-based sentencing to sentencing based on the offense(s) (Mauer, 1999). Drug usage had peaked in 1979 and began to fall by 1981, but the Reagan administration pushed a number of tough policies through (NeSmith, 2016). In 1983, a sentencing report provided to the U.S. Senate contained Martinson's work on recidivism, amending his four purposes of incarceration down to three: deterrence, incapacitation, and just punishment. Rehabilitation was removed (Baumgartner et. al, 2021). The Sentencing Reform Act of 1984 established the U.S. Sentencing Commission (USSC), and abolished parole at the Federal level. The USSC created sentencing guidelines for Federal judges and tested the efficacy of different sentences and punishments (NeSmith, 2016). This was followed by the Anti-Drug Abuse Acts of 1986 and 1988. The 1986 Act established mandatory minimum sentences (Mauer, 1999; NeSmith, 2016) for drug offenses, and the 1988 Act established the Office of National Drug Control Policy to coordinate the various anti-drug efforts throughout the government (NeSmith, 2016).

The 1990s and 2000s saw the apex of "tough on crime" policies. Three-strikes laws, truth-in-sentencing laws, and the media contributed to this continuation. Politicians believed that prison sentences were not for rehabilitation and thus the dehumanization of criminals became acceptable (Baumgartner et. al, 2021). Academia continued to debate these changes as well. Some researchers saw long sentences as a deterrent that could also be used to incapacitate potential recidivists. Others thought long sentences were ineffective as they primarily affected criminals who 'age out' of their prime crime-commission years, turning those who might have

turned their lives around into career criminals (Solomon, 2019). These long sentences derived from three-strikes laws where automatic sentences were imposed after a certain number of convictions, and from truth-in-sentencing laws where offenders were required to serve a significant percentage (often 85%) of their sentence before being considered for release (Mauer, 1999).

The media's portrayal of crime had an impact. Sensational stories like the O. J. Simpson case, the explosion of crime stories into what was becoming the 24-hour news cycle, and the increase in law enforcement-themed shows such as Law & Order or NYPD Blue that often had unrealistic portrayals of how both law enforcement and the judicial system operated (Mauer, 1999). In 1995, John DiIulio published "The Coming of the Super-Predator," in which he concluded that an entire class of criminals dehumanizes its victims based on racial aspects and cooperation between such criminals resulted in 'wolf pack'-like behaviors (Baumgartner et. al, 2021; Caldwell & Caldwell, 2011). DiIulio's work was widely cited and widely criticized, and in 2000, DiIulio recanted that work claiming he overstated his conclusions (Baumgartner et. al, 2021). Legal changes continued, with the Gang Violence and Juvenile Crime Prevent Act of 2000 (Caldwell & Caldwell, 2011).

Three-Strikes Laws

Three-strikes laws are based on a simple appeal to justice. Break the rules once, even twice, and one can still be rehabilitated. Break the rules a third time, and one will be subject to lengthy imprisonment (Caulkins, 2001). Proponents of such laws believed they would lower crime rates by incapacitating career criminals via the longer sentences and simultaneously neutralize judicial discretion by mandating such sentences and eliminating the option for parole (Kovandzic, et. al, 2004). Between 1993 and 1996, fully half of the states plus the Federal

government had some version of a three-strikes law. Such laws are consistent with Beccaria's work on deterrence as three-strike laws increase certainty via the loss of judicial discretion and increase severity via the lengthy sentences (Kovandzic, et al, 2004). California has the most well-known iteration of a three-strikes law, and unlike other jurisdictions only California's has been extensively studied (Kovandzic, et. al, 2004).

California's three-strikes law was enacted twice in 1994; via statute and via Proposition 184, a referendum (Horn, 2004). The impetus for this law started with the 1992 murder of a woman by a pair of parolees. The father of victim pushed both the referendum and the statute and was successful only after the 1993 kidnapping and murder of a young girl by a convict (Horn, 2004). The California law requires a sentence enhancement for a second felony conviction that doubles the punishment for that felony, and a third felony conviction is the greater of twenty-five years or triple the punishment for that felony (Caulkins, 2001; Horn, 2004). The first two felonies must be either serious (selling drugs to minors, witness intimidation, armed assault) or violent (murder, rape, kidnapping, felony committed with firearm). The third felony can be *any* crime California considers a felony. There is also no timeframe; if the previous two felonies are twenty years old the third felony rule still applies (Horn, 2004).

The concept of three-strikes laws did not originate in the 1990s in California. A U.S. Supreme Court case, *Lockyer v. Andrade* (2003), upheld California's three-strikes law noting that it was not a violation of the 8th Amendment's prohibition on cruel or unusual punishment (Horn, 2004). The opinion in *Rummel v. Estelle* (1980) upheld Texas' recidivist statute in the case of an individual who received life in prison for three felonies; to wit: fraudulent use of a credit card in the amount of $80, passing a forged check in the amount of $28.36, and finally for

obtaining $120.75 by false pretenses (Horn, 2004; *Rummel v. Estelle* (1980)). The opinion *Hutto v. Davis* (1982) referred to an individual sentenced to forty years in prison for possessing with intent to distribute nine ounces of marijuana. Lower courts overturned the individual's sentence but the Supreme Court, citing *Rummel v. Estelle*, said Federal courts had no right to intervene in a state sentence as those are the province of that state's legislature and therefore proportionality did not apply (Horn, 2004; *Hutto v. Davis* (1982)). In *Solem v. Helm* (1983), an individual was sentenced to life under South Dakota's recidivist statute for six felonies, to wit: three convictions for 3rd degree burglary, obtaining money under false pretenses, grand larceny, third-offense driving while intoxicated, and finally for uttering a 'no account' check in the amount of $100. Here, the Supreme Court reversed itself from *Hutto v. Davis*, noting that state sentences are subject to a proportionality analysis that must include the seriousness of the offense, seriousness of the penalty imposed, whether the sentence is similar to other sentences for the same type of crime within the same jurisdiction, and whether the sentence is similar to other sentences for the same type of crime within a different jurisdiction (Horn, 2004; *Solem v. Helm* (1983)). This was again amended in *Harmelin v. Michigan* (1991), where the Supreme Court said as long as the state's basis for a sentence is reasonable and for one of four purposes of punishment, strict proportionality is not required unless the sentence is grossly disproportionate (Horn, 2004; *Harmelin v. Michigan* (1991)).

Broken Windows

In the 1990s, the New York City Police Department (NYPD) began efforts to curb significant crime rates within that jurisdiction. The entire concept behind what NYPD did was based on a 1982 article by George Kelling and James Q. Wilson that introduced the concept of "broken windows" (Golash-Boza, Oh, & Salazar, 2022; Kelling & Bratton, 1998; Kelling &

Wilson, 1982). Kelling and Wilson thought that people were just as concerned about the unpredictable people in their neighborhood that, while non-violent, engendered fear – such as prostitutes, drunks, loiterers, panhandlers, or the mentally ill. Kelling and Wilson compared it to a neighborhood in which a window is broken in a building and is not replaced. Over time, the other windows will be broken because that initial broken window is symbolic of a lack of care for the neighborhood itself, including by the people that live there (Kelling & Wilson, 1982). In other words, minor public disorder can lead to serious crime and neighborhood decay (Golash-Boza, Oh, & Salazar, 2022; Kelling & Bratton, 1998; Sampson & Raudenbush, 2004). Kelling and Wilson, in fact, were taking an idea pioneered by Philip Zimbardo in developing their "broken windows" concept. In 1973, Zimbardo staged abandoned vehicles in Palo Alto, California and New York City to see what would happen to them. The New York City vehicle was left with its hood raised and with no license plates. That car was vandalized within ten minutes and stripped of parts within 24 hours (Kelling & Wilson, 1982; Welsh, Braga, & Bruinsma, 2015). The Palo Alto car was left undisturbed for a week. Zimbardo then dented it with a sledgehammer, and after that the vehicle was overturned and destroyed (Kelling & Wilson, 1982).

Kelling and Wilson laid out this process in several steps, noting that a stable neighborhood could transition into a rundown neighborhood in a few short months. A property is abandoned and weeds begin to grow, a window is broken, adults stop monitoring neighborhood children who subsequently become unruly, families leave the neighborhood and unattached adults move in, teenagers loiter at a nearby storefront refusing to move when the merchant requests, fights start occurring and litter accumulates, people consume alcohol in front of the nearby storefront, the drunks pass out and are permitted by law enforcement to sleep there, and

panhandlers begin approaching people (Kelling & Wilson, 1982; Welsh, Braga, & Bruinsma, 2015). Once this occurs, the area becomes vulnerable to criminal activity. Such activity is not guaranteed, but it is made more likely. Informal control has disappeared at this point, and drug dealing, prostitution, and muggings begin as delinquents begin robbing the drunks (Kelling & Wilson, 1982). Unlike previous instances of urban decay, modern technology permits those who can leave the area to do so and law enforcement no longer moves in to reestablish control. Further, the move away from foot patrol in the 1960s to vehicle patrol created a barrier (the police car) between the officers and the neighborhoods they serve (Kelling & Wilson, 1982). In a different piece, Kelling and co-author Coles note that police moved into patrol cars because it was easier for police managers to monitor them, not because vehicle patrol is somehow more effective (Anderson, 1997).

Giuliani, Bratton, and Compstat

In 1993, Rudolph Giuliani was elected Mayor of New York City (Ward, 1997). During his first year in office, New York City was 87th out of 189 cities with over 100,000 inhabitants on the FBI's Index Crime Rate list. By 1997, New York City was 150th out of 189 (Greene, 1999). During his campaign, Giuliani spoke of reducing crime in the city, and was strongly influenced by Kelling & Wilson's "broken wndows" idea (Greene, 1999; Ward, 1997). To implement it, Giuliani brought in William Bratton as NYPD Commissioner, who then brought management consultant John Linder, statistical guru Jack Maple (Ward, 1997), consultant Robert Wasserman, and security professional Robert Johnson (Kelling & Bratton, 1998) in with him. Why Bratton? He was head of the New York City Transit Police in 1990 and used Kelling's ideas to address homelessness, fare evasion, substance abusers, and other disorder in the New York City subway system, and did so successfully (Kelling & Bratton, 1998).

The Giuliani administration and Commissioner Bratton took advantage of the previous administration's efforts under Mayor Dinkins and Commissioner Brown to bring on nearly 7,000 additional officers (Anderson, 1997; Greene, 1999). With this additional staffing, a number of separate but complimentary efforts were undertaken. First, officers were told to focus on quality-of-life crimes, such as open container and public urination laws. Officers would identify persons stopped for such crimes, releasing the identified with a summons and taking those lacking identification in for interrogation about illegal activities they might have information about (Anderson, 1997). Bratton decentralized NYPD headquarters, pushing discretion out to the precinct and borough commanders (Anderson, 1997; Greene, 1999).

The greatest innovation from this period is known as Compstat. Compstat was designed by Jack Maple to feed crime data to all levels of NYPD leadership and was based on four principles: actionable intelligence, rapid response, effective tactics, and comprehensive reassessment / follow-up (Greene, 1999; Ward, 2000). Compstat could produce a city-wide map with visualizations that showed 'hot spots' of crime anywhere in New York City in real-time (Ward, 2000). Compstat demonstrated the idea that information is power, mandating that statistics be submitted weekly via computer disk rather than quarterly on paper. Compstat meetings were held twice per week, and included borough/precinct commanders, probation and parole, corrections, the borough District Attorney's office, and often the NYPD Commissioner himself (Anderson, 1997). Commanders are warned 36 hours in advance if they are expected to brief out statistics on their area of responsibility and are questioned during these meetings about how they will address issues. Comments are freely made, and criticism freely given. Praise occurs but is rare, and successful commanders are granted more autonomy. Those commanders

who are unable or unwilling to address problems in their areas or are unprepared for Compstat briefings are replaced (Anderson, 1997; Ward, 1997; Ward, 2000).

Community Policing / Community-Oriented Policing

Not all policies that came from the 1990s-2000s were 'tough on crime'. Community policing became popular in the early 1990s. As defined by Trojanowicz and Bucqueroux in 1994, community policing is focused on service, with the same officers patrolling the same areas on a permanent or semi-permanent basis and working in partnership with the neighborhood to address both crimes and underlying problems (Adams, Rohe, & Arcury, 2002; Burruss & Giblin, 2009). Community policing, at its core, has three features and presents two challenges. In community policing, maintaining order is a joint responsibility of law enforcement and the neighborhood. Officers work to identify the causes of disorder in the neighborhood they patrol *and* work to address those causes. They do this without resorting to arrest whenever there are other, feasible responses (Adams, Rohe, & Arcury, 2002). Reallocation of resources from crime suppression to community policing and discretionary / problem-solving roles requires a culture change. The expectations of law enforcement officers and the incentives under which they operate must also be changed (Adams, Rohe, & Arcury, 2002). Law enforcement serves a dual role in the community policing context as both enforcing the law themselves while supporting the community's ability to enforce adherence to community rules and norms via social control (Somerville, 2009).

Community policing was popular throughout the U.S., in part because the federal government drove the funding for community policing efforts through the Office of Community Oriented Policing Services (COPS), established in the U.S. Department of Justice in 1994 (Gill et. al, 2014). This style of policing reached its peak in the mid-1990s, and while still in use today

it has diminished somewhat. The reasons for this vary, from officer opposition to inability to connect with other service providers to budget constraints (Diehr & McDaniel, 2018; Gill et. al, 2014). Community policing was more effective in jurisdictions run by a city manager instead of an elected mayor or city council; a city manager typically wields enough power to both facilitate the innovations necessary for community policing to be successful *and* to be able to quash dissent (Burruss & Giblin, 2009). Some officers see community policing as akin to social work and are thus resistant. Regardless, studies have shown that officers that embrace the community policing mindset show more job satisfaction and greater motivation (Adams, Rohe, & Arcury, 2022).

The "Ferguson effect"

In the mid-2010s, law enforcement was pushed away from the 'tough on crime' policies of yesteryear. The term "Ferguson effect" refers to an alleged cause of the violent crime increase that occurred after an African American man, Michael Brown, was shot in Ferguson, Missouri, in 2014 by a Caucasian police officer after a struggle for the officer's firearm (Pyrooz et. al, 2016; Rosenfeld & Wallman, 2019; Wolfe & Nix, 2015). The "Ferguson effect" hypothesis posits that law enforcement is aware of the negative publicity focused on them, knowing anything they do could be recorded, and in response are less willing to enforce the law as a way of avoiding accusations of racial bias or excessive force. That lack of willingness leads to a rise in crime (Morrow et. al, 2019; Wolfe & Nix, 2015). Other incidents followed: Laquan McDonald and Tamir Rice in 2014; Sandra Bland and Samuel DuBose in 2015; Alton Sterling, Philando Castile, Korryn Gaines, and Keith Lamont Scott in 2016. These fatal encounters were recorded and released onto social media, moving them from local encounters into worldwide phenomena (Morrow et. al, 2019). The term "Ferguson effect" was itself coined by the chief of Ferguson's

neighboring police department in St. Louis to describe the de-policing that was occurring as officers sought to avoid being labeled racist on social media (Morrow et. al, 2019).

Studies of a "Ferguson effect" began in 2015, and at the time anecdotal evidence was available but empirical evidence was not (Wolfe & Nix, 2015). At the time, CNN reported a policing 'slowdown' in Baltimore where law enforcement decreased interactions with the community and increased crime in doing so, and a Manhattan Institute piece argued that the rising crime rates in U.S. cities was indicative of a crime wave caused at least in part by a "Ferguson effect" (Wolfe & Nix, 2015). Pyrooz et. al (2016) noted that homicide rates did increase 15-16% between 2014 and 2015, but a systematic crime rate change for FBI Part 1 crimes was not found. Morrow et. al (2019) also noted that studies of crime rates and de-policing did not bear out evidence of a "Ferguson effect". Rosenfeld & Wallman in their study of 53 cities from 2010-2015 also found no association between decreasing arrest rates and increasing homicide rates (Rosenfeld & Wallman, 2019). Morgan and Pally did find that in Baltimore from 2010-2015 law enforcement activity did decrease at the same time that the crime rate increased for homicides, robberies, carjackings, and automobile theft (Morrow et. al, 2019).

What scholars did find, however, was that law enforcement was experiencing significant difficulty hiring new officers in the post-Ferguson environment (Morrow et. al, 2019). Research on police motivation has dwindled over the last 30 years; helping people remains a significant motivator and is consistent across two studies done 25 years apart. The authors studied two universities and received 460 responses to their survey, finding that those students that thought negative publicity affects an officer's motivation were also more likely to agree that such negativity impacts their decision to consider working in law enforcement (Morrow et. al, 2019). In addition, de-policing is a logical explanation for a decrease in UCR Part 2 crime arrests such

as disorderly conduct, drunk in public, vandalism, or loitering as police have significant discretion in dealing with these incidents (Rosenfeld & Walllman, 2019). If law enforcement is concerned about the impact of negative publicity on officer reputations, careers, and/or legitimacy, de-policing is a potential reaction to that impact (Rosenfeld & Wallman, 2019).

The "Ferguson effect" or de-policing was an outgrowth of the same movement that led to bail reform. The "tough on crime" era that began in the 1970s and 1980s pushed for more enforcement and longer sentences, even as the 1990s begat the era's greatest successes and its first move away from draconian outcomes with community policing. That began the slow swing into a "soft on crime" era which did not find its footing until the high-profile shootings of African Americans by police between 2014-2016 and later. The ideas that followed – the bail funds, the expectation of release after arrest, and the elimination of bail – are all attempting to move the U.S. criminal justice system away from "tough on crime". The impact of the 'Ferguson effect' on bail reform is of a secondary nature. As law enforcement pulled back from proactive policing, not only were fewer individuals arrested resulting in them going through the judicial process and having bail set, but also those fewer individuals arrested meant fewer bail violators caught.

Law Enforcement – Increased Resignations and Retirements

An additional side effect of controversy in U.S. law enforcement in recent years is that more officers are leaving the profession. Like the 'Ferguson effect', the loss of officers from the law enforcement profession likely also means fewer arrests, fewer bail assignments, and fewer bail violators being caught. Concurrently, there has been a significant decrease in law enforcement recruitment that puts further strain on departments as officers leave and are not

replaced. Reasons vary from department to department, but bail reform has been cited in New York as a reason for retirement or resignation (Balsamini, 2022; Balsamini et al., 2023).

For the study city of Philadelphia, when Philadelphia Police officers began leaving in significant numbers, they cited George Floyd and BLM protests, defunding police, and a lack of support from the department itself (Bykosfky, 2021). Philadelphia offers the Deferred Retirement Option Plan (DROP), where an officer selects a retirement date within the next four years and this allows Philadelphia to better anticipate officer departures. By 2022, 800 officers had signed up for this program, meaning approximately 200 officers per year would depart under the program (Bykofsky, 2021; McCormick, 2022; Orso & Briggs, 2022). The DROP numbers do not include officers who resign or retire outside of that program. In total, Philadelphia has 1,300 fewer officers than they are budgeted for (Orso & Briggs, 2022; Vargas & Chang, 2021). Worse, Philadelphia stopped academy training during the COVID pandemic, meaning 18 months passed between one academy class and the next, instead of the typical three-months between classes (Schow, 2021; Vargas & Chang, 2021). Vargas and Chang (2021) noted that Philadelphia invited 3,800 people to spring orientation to apply for the police department, 900 people came to the orientation. Of those 900, 500 failed the reading test or the agility test, leaving 65 that received job offers. Of those 65, four reported to the police academy.

Other cities are experiencing similar issues. Between 2018 and 2021, Atlanta has had 300 vacant positions (Diggs, 2018; Seiden, 2021). During 2020, in one month alone 36 officers resigned or retired (Diggs, 2020; Ford, 2020). The city council blames politics, noting that defunding proposals were considered with one bill to cut the police budget failing by a single vote and thus officers are right to feel they are not supported (Diggs, 2020). Police union officials and former officers echo that, saying that officers feel unsupported, especially if they

use force to effect an arrest (Chakraborty, 2021; Diggs, 2020; Ford, 2020; Shaw, 2021). Recruitment has not kept pace – in 2020, Atlanta had 110 recruits in or preparing for police academy training (Diggs, 2020; Ford, 2020) which would help but would not keep pace with departures if Atlanta continues to have 300 open positions each year.

New York City (NYPD) continues to lose significant numbers of officers. In 2022, over 1,500 officers resigned or retired between January and May, which itself is 38% higher than losses in 2021 and 46% higher than losses in 2020 (Balsamini, 2022). In 2023, just in January and February, NYPD lost 239 officers, which is 36% higher than the same period in 2022 and 117% higher than the same period in 2021. In two days, February 20-21, 21 NYPD officers resigned to join the Metropolitan Transit Authority (MTA) police (Balsamini et al., 2023). Departing officers cite bail reform, anti-law enforcement attitudes and policies, and rising crime for leaving NYPD (Balsamini, 2022; Balsamini, et al, 2023). Recruiting is also significantly down. In 2022, NYPD hired 2,000 officers and 500 more in January 2023 (Balsamini, et. al, 2023). With that, however, over one thousand officers were expected for an academy class and only 675 reported for training (Balsamini, 2022).

Chicago is no exception; in 2021 their police department lost 1,000 officers. 597 left between January and July, which in previous years was the agency's annual attrition (Bradley & Schroedter, 2021). Between January and March 2022, they lost 300 (Pagones, 2022). By the beginning of 2023, Chicago was down over 1,700 officers (Bradley & Schroedter, 2023). Similar to Philadelphia, Chicago's police academy sessions were impacted by the COVID pandemic; recruiting has not kept pace with attrition. In 2022, Chicago hired 950 officers but 1,046 had left that same year; Chicago's police union noted that between 700 and 900 officers are leaving annually while only 200 to 300 are being hired (Pagones, 2022; Bradley & Schroedter, 2023).

Las Vegas Metropolitan Police has seen a 37% increase in retirements from 2017 to 2020; the department cites a significant hiring push in the 1990s whose officers are all reaching retirement age (Puit, 2021; Schnur, 2021). The police did acknowledge that their recruiting has decreased and that could be attributed to the post-George Floyd protests and the resulting scrutiny on law enforcement (Schnur, 2021). Portland Police Bureau is seeing 5-7 officers per month retiring or resigning. They, too, have cited protests, restrictions, and burnout as reasons for leaving (Arden, 2021a; Arden, 2021b).

Summary

A review of the literature revealed the various aspects of deterrence theory, from Beccaria and Bentham through the 20th and 21st century to shed light on how deterrence theory informs this study. The history and modern aspects of bail, to include statistics and academic studies were covered to provide an understanding of what bail is and how it works. Bail reform, to include bail funds, risk assessments, and advocacy groups was discussed to help explain the status of bail and reform in the U.S. Understanding prosecutorial discretion will help explain how Philadelphia made changes to its bail policies in the name of reform. For comparison with this study, the status of bail reform in Pittsburgh was examined, and for context the status of bail reform in Chicago, Los Angeles, New York City, Indianapolis, Phoenix, and Washington, DC were also included. Finally, an examination of the 'tough on crime' era that ends five decades later with discussion of the *Ferguson effect* is provided to tie history into the current bail reform era.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative study was to determine the relationship between bail reform in Philadelphia, Pennsylvania, and arrest rates for aggravated assault between January 1, 2017, and December 31, 2019. The research methodology used in this study as well as design, instrumentation, and a brief discussion of the applicableness of the chosen research design are included here. Understanding the impact of bail reform on subsequent arrests will help scholars, policymakers, and the public determine whether bail reform policies are effective or not.

Research Design

A non-experimental quantitative study using correlational methods was used to identify the impact of bail reform on aggravated assault arrest statistics for the city of Philadelphia, Pennsylvania. For the aggravated assault arrest data, arrest statistics during the three-year period encompassing one year before and one year after bail reform implementation in Philadelphia for both Philadelphia and the control city of Pittsburgh for the specific offense of aggravated assault were analyzed. The *t*-test and linear regression analysis were used, along with a one-way analysis of variance (ANOVA). The *t*-test is important because it allows measurement of a variable at two different times and confirms whether the average difference between two observations is greater than zero (Kent State University Libraries, 2022). Regression analysis allows us to determine how important a given predictor variable might be and depends largely on regression coefficients (Nimon & Oswald, 2013). A regression coefficient of zero means that changes in the predictor variable (i.e., a bail request or a crime statistic, in this study) have no effect on the outcome variable (Field, 2018). As there is one predictor in the study, linear regression was used. The ANOVA allows the comparison of a dependent variable across multiple groups (Emerson, 2022),

which can be used across both Philadelphia's and Pittsburgh's data for this study and add to context.

Using *t*-tests in analysis of crime data exists in the literature; a 2021 comparison of state crime reports with the FBI's UCR used t-tests to make comparisons between states in the aggregate as well as individuals against UCR data (Comer, Jorgensen, & Carter, 2021). In this study, the authors wanted to determine whether the data in the FBI's Uniform Crime Report (UCR) is consistent with a state's reported Part I offense data. Criminological research relies on both the collection and analysis of UCR data as well as the underlying information submitted by participants to the FBI (Comer, Jorgensen, & Carter, 2021). Over the years, some scholars found inconsistencies between UCR data and other national sources of crime data, yet consistency or lack thereof between UCR data and state-level reporting had not been explored in any meaningful way. These datasets are often used to justify law enforcement staffing, agency budgets, and recommendations to policymakers, and therefore consistency – and accuracy – are essential (Comer, Jorgensen, & Carter, 2021). With state-level reporting there are a variety of reasons the data reported to FBI might be problematic – from late submissions to differences in a state's definition of a crime versus the FBI's definition, or even incomplete reporting due to agency non-participation (Comer, Jorgensen, & Carter, 2021).

Comer, Jorgensen, and Carter (2021) obtained data for 48 U.S. states across various timespans; some as long as 19 years. Ultimately, the authors winnowed this data pool down to between 777 and 858 observations across 45 of the states. The authors used two dependent variables: crime frequency and difference frequency, and several independent variables. The independent variables included SAC funding [Bureau of Justice Statistics' funding for data collection], UCR agency participation percentage [percentage of agencies in state participating in

UCR submission], NIBRS agency participation percentage [percentage of agencies in state participating in NIBRS submission], law enforcement per 1,000 citizens [number of law enforcement officers in state per 1,000 population, via UCR data], and number of arrests per 1,000 citizens (Comer, Jorgensen, & Carter, 2021). In addition to the dependent and independent variables, the authors also controlled for population density, unemployment rate, poverty rate, percentage of Republican voters, percent African American, region, and percentage of all crime linked to homicide (Comer, Jorgensen & Carter, 2021).

Here, the authors sought to identify the differences, if any, between the state-submitted data and the corresponding UCR data. For this, they used paired samples *t*-tests. They also wanted to measure the strength of any correlation between the state-submitted data and the corresponding UCR data (Comer, Jorgensen, & Carter, 2021). Comer, Jorgensen, and Carter (2021) perceived correlations to be identical to collinearity; that a correlation greater than $r = .80$ was so strong as to be making identical measurements. For this, the authors used linear regression. Their results showed the differences between state-submitted data and UCR data were statistically significant for all crimes except for robbery, with six out of seven Part I offenses showing percentage differences greater than 5% (Comer, Jorgensen, & Carter, 2021). For the correlations, they found that 70% of state-submitted Part 1 data showed a strong linear association to the UCR data. For example, data from Alaska and Texas correlated so highly against UCR data as to be nearly identical, while Massachusetts and Oregon were weakly correlated to the corresponding UCR data; in some cases, negatively associated (Comer, Jorgensen, & Carter, 2021).

In short, the authors found that some states report very accurate data as reflected in the UCR, while others do not. Regarding the dependent variables, the use of ordinary least squares

regression found that SAC funding slightly reduced difference frequency for robbery, larceny, and motor vehicle theft, while law enforcement per 1,000 citizens, UCR participation percentage, and NIBRS participation percentage were unrelated to difference frequency. Arrests per 1,000 citizens were related to difference frequency only for the Type 1 offense of rape (Comer, Jorgensen, & Carter, 2021). The authors concluded that differences may be attributable to the way the UCR ingests data, while acknowledging the possibility that small and/or rural agencies lack a reporting program or such reporting they do provide goes through other agencies (i.e., State Police) before submission to the FBI (Comer, Jorgensen, & Carter, 2021).

The use of linear regression to study crime data is likewise not unusual. For example, a 2021 study intended to develop a crime prediction capability in South Africa was based on the machine learning variant of linear regression (Obagbuwa & Abidoye, 2021). The authors of this study sought to fill a gap in the literature regarding crime prediction in South Africa. The authors built a predictive linear regression model using South African crime for the period 2005-2016 using data across 27 categories in nine regions (Obagbuwa & Abidoye, 2021). To facilitate this, the authors used Cross-Industry Standard Process for Data Mining (CRISP-DM) and developed predictive models using machine learning. Using Python Libraries, the authors were able to visualize their data across time, finding a correlation between population rates and crime rates where the higher the population, the greater the number of crimes (Obagbuwa & Abidoye, 2021).

Linear regression was used to create the machine learning model and that model was used to predict future crimes. Review of *p* values and *R*-squared values showed that the author's model showed a strong relationship – that 84.7% of the variability in crime rates can be explained by population and density. The low *F*-Stat value showed the author's model fits the

data well. The authors found that their model could effectively predict crime in any South African province (Obagbuwa & Abidoye, 2021).

Another 2021 study of the relationship between social media tweets and public violence/private conflict sought to measure crime activity across time from the basis that criminal activity is dependent on – among other things – the number and type of people in each area. In attempting this, the authors had to find a way to accurately identify or at least estimate the actual number of people in each location at a particular time (Tucker et. al., 2021). To do this, the authors used social media – Twitter, specifically – to analyze how people move across a public space via the use of geotags within the Twitter posts. The authors understood that this methodology could get to the number of people moving through a space but could not reach the type of person; specifically, residents, commuters, or tourists (Tucker et. al., 2021).

Using Boston, Massachusetts as the focus, Tucker et. al. (2021) used machine learning to identify the home locations of Twitter posts sent from within Boston. The goal was to identify the impact that populations of residents, commuters, and tourists had on crime, and to differentiate between the three populations. Tucker, et. al. (2021) used Twitter posts from 2018, and because those posts have specific identifiers it meant the authors could track individual users. They based their crime rates in blocks of 100 Twitter users. The authors hypothesized that streets with more commuters will have higher crime, and that the proportion of tourists in an area will impact crime rates (Tucker, et. al., 2021).

The authors gathered their Twitter information and from a user pool of 54,000 people they identified 232,000 posts across 327 days. The authors used cluster analysis to identify home locations for the 54,000 users. To determine how local residents, commuters, and tourists impact crime, the authors estimated what proportion each group was to the total by differentiating

between census tract (local), census metropolitan area (commuter), and the remainder were considered tourists (Tucker, et. al., 2021). These were coded across 7,301 census blocks, and across morning commute, work/school day, evening leisure, and nighttime time periods during the week and daytime/nighttime on weekends. Crime was measured using Boston Police Department's 911 dispatches (Tucker, et. al. 2021). The authors then subdivided crime incidents between public violence and private violence. They defined public violence as violent crimes where no firearms were involved, and private conflict as those crimes attributable to personal relationships, such as breaking and entering (Tucker, et. al., 2021).

With all of this information, Tucker, et. al. (2021) tested several models. They found that 64% of Twitter users had no geocoded posts on a weekday, and 65% had no geocoded Twitter posts on weekend days. The average census block had 34 users during weekdays, 26 on weeknights, 20 on weekend days, and almost 16 on weekend nights. The authors were concerned that their data was insufficient, and accordingly set out to determine if a) there is minimal ambient population in Boston, or b) people tend to use Twitter only in certain locations. As commercial and governmental census blocks had the greatest number of Twitter users, the authors proceeded with a sample based on those blocks and then to the census tracts composed of such blocks (Tucker, et. al., 2021).

The authors found that the greater the number of tourists and commuters in a block, the more public violence occurred on weekdays; for every 1% of tourists added, violent incidents increase by 1.52 and for every 1% of commuters added, violent incidents increase by 1.02. On weeknights, commuter presence was statistically significant at the census block level but not the tract level (Tucker, et. al., 2021). Similar results were found for private conflict as well. For weekends, commuters and/or tourists did not associate to violent incidents regardless of time-of-

day, however a statistically significant relationship was found between commuters and/or tourists and private conflict but that relationship was dependent on the characteristics of the census tract in question (Tucker, et. al., 2021).

A 2021 study used multiple linear regression to analyze U.S. crime rates from the 1960s. Chen (2021) used crime rate information covering 47 U.S. states for the year 1960. The author identified two dependent variables for this study: offenses per 100,000 people and the log of that crime rate as Log(Y). The independent variables included law enforcement expenditures from 1959 and 1960, value of family income / assets, ratio of the number of incarcerations to the number of offenses, state population per 100,000, average years of education for those 25 years old or older, unemployment statistics for urban males from 14-24 years old and from 35-39, labor force participation for urban males 14-24 years old, number of males per 100 females, families earning less than half of median income by percentage, average sentence in months prior to first release, and total males in state between ages 14-24 by percentage (Chen, 2021). Chen (2021) began with an initial regression model and found that while there were no collinearity or autocorrelation issues, the effect size was only 48.57% and the F-value was not sufficiently high. Chen then moved to an adjusted model. This adapted model had the desired higher F-value and a slightly higher effect size at 49.12%. The author then tested for two variables, income inequality and percentage of males aged 14-24, and this model produced an effect size of 73.53%, considerably better than the previous two models (Chen, 2021).

With the two new variables, Chen (2021) adapted the model again, which he called Model 3. With this, the effect size remained high at 76.49% as did the F-value. He also observed no outliers in this model. He compared this model with the previous one using F-statistic and found Model 3 was the better fit. Chen (2021) then sought to remove an independent variable to

improve model performance and after testing found that taking the ratio of commitment versus offenses variable out was the appropriate action. This led to Model 4, which had a slightly lower effect size at 74.73% but the adjusted *R*-squared value was higher than Model 3. Chen (2021) also obtained the highest *F*-score thus far among the models. Comparing Model 4 to the initial model, he determined Model 4 remained the best. When the Log data was converted back to crime data, Model 4 predicted a crime rate of 8356.82 per 100,000 while the initial model predicted 9800.03 offenses per 100,000. Chen found that Model 4 had the more accurate prediction of crime rate based on the variables of law enforcement expenditure, value of assets and/or income, years of schooling for those 25 years old or older, the percentage of families earning less than half the median income, and percentage of all males aged 14-24 (Chen, 2021).

The ANOVA is also a common statistical technique. Emerson (2022) points out that for the ANOVA to work, there are four conditions that must be satisfied. The data must be continuous, normally distributed, independent of the different data groups being studied, and the variance should be similar across the groups (Emerson, 2022). Like regression analysis, ANOVA is used in different types of crime studies. Hirschfield et. al.'s (2013) ecological study of burglary in Leeds, U.K., used ANOVA as part of their analysis. The authors focused on the ecology of crime which deals more with crime opportunities than crime correlations; for example, whether permeable streets facilitate entry/exit points for enterprising criminals. Here, Hirschfeld et. al. (2013) sought to determine how the arrangement of neighborhoods affects local burglary rates. Burglary was an effective subject because it can concentrate in a particular area or block, it can impact the same homes more than once, it can occur more in one type of dwelling versus another, and can involve specific methodologies (Hirschfield, et. al. 2013).

The authors sought to answer whether awareness of the socio-demographic constitution of the neighborhoods surrounding a specific area make for better predictions of the burglary rate based on that constitution. As part of that, two additional questions arose. The authors wanted to know how different types of surrounding neighborhoods affect the burglary rate, and from that which combination of surrounding neighborhoods has the greatest impact (Hirschfield, et. al., 2013). Leeds was the city chosen to analyze neighborhood impacts on burglary. Leeds has a high burglary rate, and it contains a variety of neighborhood types. Data regarding over 29,000 burglaries in Leeds from April 1, 2000, through March 31, 2022 was obtained. The authors used Census Output Areas, which Leeds has 2,439, and those 2,439 areas average 300 people each (Hirschfield, et. al., 2013). These zones contributed to what is known as the Output Area Classification, which was used to identify the different neighborhoods in Leeds. The Output Area Classifications distill from 52 sub-groups into seven super-groups, and those seven groups are: blue-collar community, city living, countryside, prospering suburb, multicultural, constrained by circumstances, and typical traits (Hirschfield, et. al., 2013).

The authors began their analysis by using the analysis of variance (ANOVA) model. They learned that the ANOVA model, while effective for finding some variation in the burglary rate, has three potential concerns. First, Output Area Classification is not a perfect proxy for neighborhoods or their demographics. Second, the crime rate for an area is not influenced by the social profile of the outlying areas, only the area itself. Third, each area's random error is independent of any other area (Hirschfield, et. al., 2013). To account for the second and third concerns, multiple ANOVA-related models were used including some with spatial effects. The authors used a contiguity matrix to differentiate between a focal neighborhood and those neighborhoods surrounding it (Hirschfield, et. al., 2013). In addition, Hirschfield, et. al. (2013)

used the Akaike Information Criterion (AIC) test where they calculated the relative AIC between each model and the lowest AIC of all of the models to determine which models were appropriate for their analysis. AIC was used because it is a measurement of how close a model can reflect reality (Hirschfield, et. al., 2023).

Ultimately, the authors chose their fifth model for the analysis. They found that the demographics of the surrounding neighborhoods could improve burglary rate predictions for an area based on that area's demographics, however the authors could not determine how the improvement effects occur (Hirschfield, et. al., 2013). They could not tell if a specific type of bordering neighborhood had an influence on the burglary rate, or whether the increase in burglary risk was simply less in the bordering neighborhood than in the area being analyzed. The fifth model showed that autocorrelations in their burglary data – because it was aggregated based on location/space – were not an error but rather part of why two demographically-similar areas might have different burglary rates because they had different surrounding neighborhoods (Hirschfield, et. al., 2013). Knowing that burglary offenders tend to focus on areas familiar to them such as their own neighborhoods, former neighborhoods, or locations they spend a lot of time in, and recognizing that when burglars do work outside their familiar places, they tend to do so in areas similar to what they are most familiar with can help explain some of the differences in burglary data.

In 2018, Schutte and Breetzke (2018) published a study dealing with weather's impact on crime, noting that previous scholarship on the subject has concluded both that weather can influence crime and that weather does not influence crime. Also, such studies had not been conducted in South Africa, which made the authors choose the community of Tshwane to

consider whether and how much crime in Tshwane changes because of extreme weather conditions (Schutte & Breetzke, 2018).

To accomplish this, Schutte and Breetzke (2018) obtained weather data from September 2001 through August 2006 for Tshwane. From here, the authors did a series of calculations. They took the average daily temperature over the 1,826 days of the study period, took the top ten highest average daily temperature days, and combined them to produce a group of 50 highest average daily temperature days across the study period and repeated for the top ten lowest average daily temperature days. They then took ten random temperature days and combined those to produce a group of 50 random average daily temperature days, but after the highest and lowest days were pulled from the growing dataset to prevent duplication (Schutte & Breetzke, 2018). The authors then created a second dataset in the same fashion using rainfall data, consisting of high-rainfall, low-rainfall, and random-rainfall days (Schutte & Breetzke, 2018).

With temperature and rainfall data in hand, the authors moved next to crime data, and working with the South African Police Service they were able to collect data across the 2001-2006 period that included the location where a crime was committed, the date and time of day for each crime, and the specific crime type. The crime data was grouped into violent, sexual, or property crimes (Schutte & Breetzke, 2018), and these groupings plus the crime, temperature, and rainfall datasets were combined into one group. They analyzed this combined dataset with two methods: an ANOVA to determine the difference between average number of crimes committed on which type of temperature and/or rainfall days, and a spatial point pattern test to determine if the distribution of crimes changes depending on the rainfall and/or temperature conditions (Schutte & Breetzke, 2018).

The authors found that average amount of violent, sexual and property crimes are greatest on high-temperature days; for example, 171.1 crimes per 1,000 population versus 91.9 crimes per 1,000 population for low-temperature and 133.1 crimes per 1,000 population for random-temperature days. For rainfall data and violent crime, the opposite was true with violent crime being highest on low-rainfall days. This was different than for property crime, where property crimes were greatest on high-rainfall days (Schutte & Breetzke, 2018). The ANOVA showed that the crime differences by temperature day were statistically significant for all types. For rainfall days, however, the ANOVA showed that crime differences by rainfall day were not statistically significant. The spatial point pattern testing found that violent crime differs by temperature day type regarding crime location, especially when compared to a cold day versus a warm one, while sexual crime had the least distribution. Although property crime's distribution differs from that of violent crime, the range within both the rainfall and temperature datasets was minimal (Schutte & Breetzke, 2018).

In 2004, Yan also looked at the connection between crime and weather. Previous studies found that assault and homicide peak during the summer months, while robbery, burglary, larceny, and auto theft peak during the winter months. Overall, though, the results of seasonal crime studies can best be described as inconsistent. (Yan, 2004). Using routine activity theory, which holds that there are three elements necessary for a crime to be committed: motivated offender, absence of capable guardian, and suitable target, Yan (2004) tied this into how weather influences contact between victims and offenders.

Yan (2004) believed that crime rates for burglary and theft would be at their highest in the winter months. Hot summers in Hong Kong mean people are less likely to congregate outdoors, and many homes have air conditioners, so people tend to stay home. Summers tend to

be rainy, which also tends to keep people at home. This tends to reduce contact between victims, offenders, and/or witnesses (Yan, 2004). Winters, however, brings pre-Chinese New Year shopping and significant cash movement around both that and Christmas. Unlike summer, there is far more opportunity for property crime both in terms of more people congregating as well as the selection of property potentially available (Yan, 2004).

Yan (2004) obtained property crime information from the Hong Kong Police Department covering 1991-2000. Theft data were organized into total theft, pickpocketing, shop theft, and snatching, and standardized such that each month averaged 30.5 days. To identify winter peaks in the data, Yan (2004) used regression analysis and to show whether the winter data differed from spring / summer / fall data, Yan used ANOVA. His study found that the average rates for burglary, total theft, and shop theft were at their highest in January, with a significant decrease in February. Conversely, pickpocketing and snatching saw their highest averages in June (Yan, 2004). Regression analysis confirmed the positive relationship between shop theft and wintertime, and ANOVA confirmed that crime rates did vary for property crimes, with shop theft greater in winter and pickpocketing greater in summer (Yan, 2004).

Research Question(s) and Hypotheses

The Research Questions used in this study were developed to respond to the four (4) hypotheses posed. The Research Questions deal with the aggravated assault arrest statistics for Philadelphia and Pittsburgh. The hypotheses used in this study were answered by the Research Questions. A 95% confidence interval with *p* value of less than or equal to 0.05 was used for the null hypotheses. If that *p* value is less than or equal to 0.05, the null hypothesis will be rejected. Here, each Research Question addresses the similarly numbered Hypothesis.

RQ_1: *How did Philadelphia's arrest rate for Aggravated Assault change in the year prior to bail reform implementation?*

H_a1: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation.

H_01: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation.

RQ_2: *How did Philadelphia's arrest rate for Aggravated Assault change in the year following bail reform's implementation there?*

H_a2: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation.

H_02: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation.

RQ_3: *How did Pittsburgh's arrest rate change in the year prior to Philadelphia's bail reform implementation?*

H_a3: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation in Philadelphia.

H_03: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation in Philadelphia.

RQ_4: *How did Pittsburgh's arrest rate for Aggravated Assault change in the year after Philadelphia's bail reform implementation?*

H_a4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation in Philadelphia.

$H_0$4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation in Philadelphia.

Participants and Setting

For this study, two populations were used; each consisting of people arrested and charged with aggravated assault between January 1, 2017, and December 31, 2019. One population derived from Philadelphia (Philadelphia District Attorney's Office, 2022) and the other population derived from Pittsburgh (Western Pennsylvania Regional Data Center, 2013). Complete data was available for both populations, and because this study deals with analysis of how bail reform impacted aggravated assault arrests in the past, no sampling was used. While this is atypical for a quantitative study as studying a large population is impractical (Banerjee & Chaudhury, 2010; Thompson, 1999.), technology has made population-size study feasible in some instances; in this case, the use of SPSS Statistics, version 29.

Instrumentation

Data for this study was derived from publicly available sources. For Philadelphia, arrest data covering the period 2017-2019 was obtained from a data repository held by the Philadelphia DAO. The arrest file contained statistics for 42 crime categories recorded daily across Philadelphia (Philadelphia District Attorney's Office, 2022), of which aggravated assault was one. For the comparison city, similar efforts were made. Pittsburgh, like Philadelphia, makes its arrest data available through a public repository. Pittsburgh (Western Pennsylvania Regional Data Center, 2013) had the necessary 2017-2019 arrest data in a single CSV file for download.

With the arrest statistics for Philadelphia and Pittsburgh, the statistical files were formatted for use with SPSS Statistics version 29. All files were formatted to include only relevant data. In addition, the data for Pittsburgh had to be aggregated to match the Philadelphia

data's format for use with SPSS Statistics. For both sets of arrest data, only arrest data for the relevant UCR crime of aggravated assault was kept, and all other data discarded. To ensure consistency, the UCR definition of aggravated assault was observed when deciding which arrest data counted toward each category (Federal Bureau of Investigation, 2011b).

Procedures

The researcher was granted approval from Liberty University's Institutional Review Board (IRB), IRB-FY22-23-1735 before conducting research. Data collection included arrest statistics for one city (Philadelphia) held by the Philadelphia District Attorney's Office (2023) and arrest statistics for the comparison city of Pittsburgh held by the Western Pennsylvania Regional Data Center (2023). Both datasets were obtained from publicly accessible websites. The data included no personally identifiable information (PII); to ensure further protection all data was stripped from both datasets except for the date and the offense. Thus, this study presented minimal, if any, risk to participants.

Data Analysis

The data analysis for this study was based on four Research Questions (RQ) that deal with the aggravated assault arrest rates both before (January 1, 2017, to February 20, 2018) and after (February 21, 2018, to December 31, 2019) in Philadelphia and Pittsburgh. Both the Philadelphia and the Pittsburgh data sets were formatted for use with SPSS Statistics, version 29. Within both sets of data, a dummy variable called 'Bail Reform Y/N' will be created whereby the time period prior to Philadelphia's implementation of bail reform is coded as '0'and the timeframe after implementation is coded as '1'. This dummy variable will enable quantitative analysis of the independent variable for this study – bail reform.

For all four RQs, the following statistical tests will be applied: *t*-test, linear regression, and one-way analysis of variance (ANOVA). The *t*-test will be used to confirm the validity of the arrest data by measuring average differences between the observations in that data to ensure such differences were greater than zero (Kent State University Libraries, 2022). Linear regression will be used to determine the importance of predictors within the arrest data (Nimon & Oswald, 2013). The ANOVA will be used to compare the predictors (crimes) in each city during the pre-implementation and post-implementation time frames (Emerson, 2022).

With SPSS Statistics for both linear regression and ANOVA, reporting on descriptive statistics and homogeneity of variance tests (homeoscedasticity) can be chosen. The homogeneity of variance is part of the assumption in linear modeling that says that variance in the outcome variable should be consistent across the predictor variable(s) (Field, 2018). The homogeneity of variance test used by SPSS Statistics is Levene's test. Lack-of-fit testing can be chosen when analyzing for linear regression to ensure the model produced is sufficient for analyzing the data set(s) (Field, 2018). SPSS Statistics also permits the selection of various 'post-hoc' tests for the ANOVA; however, because this study has one independent and one dependent variable, SPSS will not run 'post-hoc' tests.

Summary

This quantitative study will help scholars examine the ongoing effects of the bail reform movement. The methods and procedures used in this work were developed to facilitate understanding the effects of bail reform in Philadelphia. This study looked at the impact of bail reform on arrest rates in Philadelphia and compared them to the changes in arrest rates in Pittsburgh which did not have bail reform during the study period. This comparison should tell whether Philadelphia's arrest rates changed independently of the comparison city which would

support the contention that bail reform caused Philadelphia's arrest rates to change. Otherwise, if the comparison city's arrest rates and Philadelphia's arrest rates behaved similarly that would suggest that Philadelphia's bail reform may not have been the driver (primary or otherwise) behind the crime rate changes.

CHAPTER FOUR: FINDINGS

Overview

The analysis conducted for this study consisted of two parts. First, aggravated assault arrest data for the period 2017-2019 for the city of Philadelphia was analyzed. Second, the control city of Pittsburgh's aggravated assault arrest data for the period 2017-2019 was analyzed. In both parts, the *t-test*, regression analysis, and one-way ANOVA were used. The data for Philadelphia was sorted and filtered using Microsoft Excel and then imported to SPSS Statistics, version 29 for analysis. The data for Pittsburgh was also sorted and filtered with Microsoft Excel before being imported to SPSS Statistics, version 29 for analysis. For both the Philadelphia and Pittsburgh data sets, a dummy variable was created to denote the period prior to bail reform implementation in Philadelphia (coded '0') and the period after bail reform implementation (coded '1').

Philadelphia's data included the charge of 'aggravated assault' within its arrest data (Philadelphia District Attorney's Office, 2022). Philadelphia's definition of aggravated assault included not only that charge but three other charges: aggravated assault on unborn child, aggravated assault while DUI, and aggravated assault by vehicle (Philadelphia District Attorney's Office, 2023). Pittsburgh's data also had the aggravated assault charge but aggravated assault on unborn child, aggravated assault while DUI, and aggravated assault by vehicle appeared as separate charges (Western Pennsylvania Regional Data Center, 2023). Accordingly, when sorting and cleansing Pittsburgh's data, those four charges were re-coded as aggravated assault and counted accordingly.

Research Questions and Hypotheses

Research Questions 1 and 2 deal with the arrest rates for aggravated assault in Philadelphia before and after bail reform implementation on February 21, 2018. The corresponding hypotheses for these two Research Questions are:

RQ_1: *How did Philadelphia's arrest rate for Aggravated Assault change in the year prior to bail reform implementation?*

H_a1: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation.

H_01: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation.

RQ_2: *How did Philadelphia's arrest rate for Aggravated Assault change in the year following bail reform's implementation there?*

H_a2: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation.

H_02: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation.

Research Questions 3 and 4 deal with the arrest rates for aggravated assault in Pittsburgh before and after Philadelphia's bail reform implementation on February 21, 2018. The corresponding hypotheses for these two Research Questions are:

RQ_3: *How did Pittsburgh's arrest rate change in the year prior to Philadelphia's bail reform implementation?*

H_a3: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation in Philadelphia.

$H_0$3: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation in Philadelphia.

RQ_4: *How did Pittsburgh's arrest rate for Aggravated Assault change in the year after Philadelphia's bail reform implementation?*

H_a4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation in Philadelphia.

$H_0$4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation in Philadelphia.

To test these hypotheses, a paired *t-test* was used to identify any statistically significant difference in the arrest rates during two periods: January 1, 2017 through February 20, 2018, to cover the period prior to reform, and February 21, 2018 through December 31, 2019, to cover the period after reform was implemented. Regression analysis was conducted to determine the significance of bail reform as a predictor for the changes in aggravated assault arrests. For measure of associations relating to linear regression, the options to check 'model fit' and 'R squared change' was chosen, as well as Durbin-Watson for residuals. The Durbin-Watson test checks for correlation among residuals in a linear regression. If the result of the Durbin-Watson test is between 1.5 and 2.5, then auto-correlation is not affecting the results (Field, 2018). For the *t-tests*, regression analyses, and ANOVAs, the confidence interval used as 95%; any *p* value equal to or less than .05 was considered statistically significant.

Results

The Impact of Bail Reform on Philadelphia Arrest Data

We begin with the descriptive statistics for the universe of Philadelphia aggravated arrest data (N=1,095) from January 1, 2017 through December 31, 2019. This appears in Table 1.

Table 1

Descriptive Statistics for Philadelphia Arrest Data for Aggravated Assault Across the Study Period, 1/1/2017 to 12/31/2019 (N = 1,095)

Charge	Mean	Standard Deviation
Aggravated Assault	8.98	4.247

From here, three paired-sample *t-tests* were conducted (Tables 2, 3, and 4) to measure the change in aggravated assault arrests in Philadelphia before and after bail reform implementation. Here, we see that the difference in aggravated assault arrests was statistically significant at 95% CI [8.563, 9.336], $t(416)$ 45.559, $p < .001$ before bail reform, after bail reform at 95% CI [7.675, 8.337], $t(679)$ 47.514, $p < .001$, and across both bail reform periods at 95% CI [8.111, 8.618], $t(1094)$ 64.797, $p < .001$.

Table 2

Paired Samples t-test Comparing Philadelphia Arrest Data for Aggravated Assault Prior to Bail Reform Implementation, 1/1/2017 to 2/20/2018, (N = 416)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	8.95	4.007	.196	8.563	9.336	45.59	415	< .001

Table 3

Paired Samples t-test Comparing Philadelphia Arrest Data for Aggravated Assault After Bail Reform Implementation, 2/21/2018 to 12/31/2019, (N = 679)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	8.006	4.391	.168	7.675	8.337	47.514	678	< .001

Table 4

Paired Samples t-test Comparing Philadelphia Arrest Data for Aggravated Assault Before and After Bail Reform Implementation, 1/1/2017 to 12/31/2019, (N = 1,095)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	8.364	4.272	.129	8.111	8.618	64.797	1094	< .001

Linear regression was used to determine the depth (if any) of the relationship between the aggravated assault arrests and the implementation of bail reform. Table 5 shows that bail reform was not predictive of aggravated assault arrests in Philadelphia, $R^2 = .000$, $F(1,1093) = .045$, $p = .831$. Regarding measures of association, the Durbin-Watson value was 1.777, meaning that it was unlikely any autocorrelation concerns were present. The One-Way ANOVA (Table 6) showed no statistically significant difference in aggravated assault arrests in Philadelphia between the pre-bail reform and post-bail reform periods, $F(1, 1095) = .045$, $p = .831$. The

Levene statistic, $F(1,1093) = 2.214$, $p = .137$, showed variances for aggravated assault arrests were unequal and thus the Levene statistic was statistically insignificant. The Welch test revealed no statistically significant difference in mean aggravated assault arrests across pre- and post-bail reform periods, F_{Welch} (1, 939.133) = .047, $p = .828$.

Table 5

Regression Analysis of Changes in Philadelphia Aggravated Assault Arrest Data Across the Study Period, 1/1/2017 to 12/31/2019, (N = 1,095*)*

Variable	B	95% CI	ß	t	p
(Constant)	8.950	[8.541 9.358]		42.961	< .001
Bail Reform	.056	[-.463 .575]	.006	.213	.831

Table 6

One-Way ANOVA of Changes in Philadelphia Aggravated Assault Arrest Data Across the Study Period, 1/1/2017 to 12/31/2019, (N = 1,095*)*

Predictor	Sum of Squares	df	Mean Square	*F*	*p*	partial η^2	partial η^2 90% CI [LL, UL]
Between Groups	.820	1	.820	.045	.831	.000	[.000 .004]
Within Groups	19731.916	1093	18.053				
Total	19732.736	1094					

Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval.

The Impact of Bail Reform on Pittsburgh Arrest Data

Again, we begin with the descriptive statistics for the universe of Pittsburgh aggravated arrest data (N=1,095) from January 1, 2017 through December 31, 2019. This appears in Table 7.

Table 7

Descriptive Statistics for Pittsburgh Arrest Data for Aggravated Assault Across the Study Period, 1/1/2017 to 12/31/2019 (N = 1,095)

Charge	Mean	Standard Deviation
Aggravated Assault	1.98	1.710

Again, three paired-sample *t-tests* were conducted (Tables 8, 9, and 10) to measure the change in aggravated assault arrests in Pittsburgh before and after bail reform implementation. Here we see that the difference in aggravated assault arrests was statistically significant at 95% CI [2.134, 2.515], $t(416)$ 23.929, $p < .001$ before bail reform, after at 95% CI [.664, .888], $t(679)$ 13.624, $p < .001$, and across both bail reform periods at 95% CI [1.255, 1.474], $t(1094)$ 24.413, $p = < .001$.

Table 8

Paired Samples t-test Comparing Pittsburgh Arrest Data for Aggravated Assault Prior to Bail Reform Implementation, 1/1/2017 to 2/20/2018, (N = 416*)*

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	2.325	1.981	.097	2.134	2.515	23.929	415	< .001

Table 9

Paired Samples t-test Comparing Pittsburgh Arrest Data for Aggravated Assault After Bail Reform Implementation, 2/21/2018 to 12/31/2019, (N = 679)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	.776	1.484	0.57	.664	.888	13.624	678	< .001

Table 10

Paired Samples t-test Comparing Pittsburgh Arrest Data for Aggravated Assault Before and After Bail Reform Implementation, 1/1/2017 to 12/31/2019, (N = 1,095)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 – Aggravated Assault – Bail Reform	1.364	1.849	.056	1.255	1.474	24.413	1094	< .001

As with the Philadelphia data, simple linear regression was used to determine the depth (if any) of the relationship between the aggravated assault arrests and the implementation of bail reform. Table 11 shows that bail reform accounts for approximately 2.4 percent of the variance in the model, $R^2 = .024$, F (1,1093) = 27.148, $p = .001$. The Durbin-Watson value was 1.962, meaning that it was unlikely any autocorrelation concerns were present. The One-Way ANOVA (Table 12) showed a statistically significant difference in aggravated assault arrests in Pittsburgh between the pre-bail reform and post-bail reform periods, F (1, 1095) = 27.148, $p = .001$. The

Levene statistic, F (1,1093) = 20.093, p = < .001, showed variances for aggravated assault arrests were unequal however the Levene statistic of 20.093 was statistically significant, as was the Welch test, which revealed a statistically significant difference in mean aggravated assault arrests across pre- and post-bail reform periods, F_{Welch} (1, 689.911) = 23.712, p < .001.

Table 11

Regression Analysis of Changes in Pittsburgh Aggravated Assault Arrest Data Across the Study Period, 1/1/2017 to 12/31/2019, (N = 1,095*)*

Variable	B	95% CI	ß	t	p
(Constant)	2.325	[2.162 2.487]		28.047	< .001
Bail Reform	-.548	[-.755 -.342]	-.156	-5.210	< .001

Table 12

One-Way ANOVA of Changes in Pittsburgh Aggravated Assault Arrest Data Across the Study Period, 1/1/2017 to 12/31/2019, (N = 1,095*)*

Predictor	Sum of Squares	df	Mean Square	*F*	*p*	partial η^2	partial η^2 90% CI [LL, UL]
Between Groups	77.573	1	77.573	27.148	< .001	.024	[.009 .045]
Within Groups	3123.163	1093	2.857				
Total	3200.736	1094					

Note. LL and UL represent the lower-limit and upper-limit of the partial η^2 confidence interval.

Conclusions

Looking at the four research questions, the statistical analyses conducted here yielded interesting results. Research Questions 1 and 2 dealt with aggravated assault arrest rates in Philadelphia both before and after bail reform.

RQ_1: *How did Philadelphia's arrest rate for Aggravated Assault change in the year prior to bail reform implementation?*

H_a1: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation.

H_01: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation.

RQ_2: *How did Philadelphia's arrest rate for Aggravated Assault change in the year following bail reform's implementation there?*

H_a2: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation.

H_02: Philadelphia's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation.

Based on the results of the statistical tests conducted on Philadelphia's aggravated assault arrest data, we find that the correlation coefficient for the *t*-test of Philadelphia data is .006 meaning that there is virtually no correlation between aggravated assault arrests and bail reform $t(1094)$ 64.797, $p < .001$. In the regression analysis of Philadelphia data, ß is .056 with significance (p) of .831, meaning that while there appears to be a miniscule increase in aggravated assault arrests, that increase is not statistically significant $R^2 = .000$, $F(1,1093) = .045$, $p = .831$. Thus, the null hypotheses, H_01 and H_02, cannot be rejected.

RQ$_3$: *How did Pittsburgh's arrest rate change in the year prior to Philadelphia's bail reform implementation?*

H$_a$3: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase prior to bail reform implementation in Philadelphia.

H$_0$3: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease prior to bail reform implementation in Philadelphia.

RQ$_4$: *How did Pittsburgh's arrest rate for Aggravated Assault change in the year after Philadelphia's bail reform implementation?*

H$_a$4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant increase after bail reform implementation in Philadelphia.

H$_0$4: Pittsburgh's arrest rate for Aggravated Assault showed a statistically significant decrease after bail reform implementation in Philadelphia.

Based on the results of the statistical tests conducted on Pittsburgh's aggravated assault arrest data, we find that the correlation coefficient for the *t*-test of Pittsburgh data is -.156, meaning that there is a negative correlation between aggravated assault arrests and bail reform $t(1094)$ 24.413, $p <$ .001. In the regression analysis of Pittsburgh data, ß is -.548 with significance (p) of < .001, meaning that there is a statistically significant decrease in aggravated assault arrests $R^2 = .024$, $F(1,1093) = 27.148$, $p =$ < .001. Accordingly, the null hypotheses, $H_0$3 and $H_0$4, can be rejected.

CHAPTER FIVE: CONCLUSIONS

Overview

The quantitative analysis of aggravated assault arrests in Philadelphia and Pittsburgh presented a unique opportunity to measure the impact of prosecutorial bail reform. The movement towards transparency in government in recent years made possible the collection of arrest statistics for both cities. The results of this study underscore the need to devote significant scholarly resources to the impact and implications of bail reform. Legislatures and criminal justice practitioners must also devote significant attention to understanding the impacts of the various legislative bail reform proposals currently being considered and debated around the U.S.

Discussion

Philadelphia's data ultimately revealed that there was a miniscule increase in aggravated assault arrests, and that the increase was not statistically significant, $R^2 = .000$, $F(1,1093) = .045$, $p = .831$. In other words, the presence of bail reform did not influence aggravated assault arrests in Philadelphia. The answer to Research Questions 1 and 2 is that the null hypotheses for both, $H_0 1$ and $H_0 2$, were rejected. When this study began, it was thought that the removal of bail as a deterrent would cause arrest rates to increase, such as for aggravated assault. As the results indicated, however, aggravated assault arrests were not influenced by bail reform.

Contrast that with Pittsburgh, where there was a statistically significant decrease in aggravated assault arrests, $R^2 = .024$, $F\ (1,1093) = 27.148$, $p = < .001$. The answer to Research Questions 3 and 4 is that the alternative hypotheses for both, $H_a 3$ and $H_a 4$, were valid. The quantitative analysis here suggests that the implementation of Philadelphia's bail reform did influence aggravated assault arrests in Pittsburgh. The problem with that suggestion is that bail reform did not exist in Pittsburgh during the 2017-2019 study timeframe. Pennsylvania did not

have any statewide form of bail reform, and Philadelphia implemented their version through prosecutorial discretion so only Philadelphia and perhaps its surrounding communities were affected by it. Simply put, bail reform could not have influenced Pittsburgh's aggravated assault arrest numbers.

Implications

This study found that there was no statistically significant relationship between the implementation of bail reform in Philadelphia and arrests for aggravated assault within that city. This study found the opposite outcome for Pittsburgh, a city that had not implemented bail reform during the timeframe studied. Pittsburgh's aggravated assault arrests decreased after Philadelphia's bail implementation date. As safety is a concern in cities that have implemented bail reform (Gelinas, 2023), these results suggest that bail reform has had minimal effect on safety in Philadelphia. Bail reform in Philadelphia was applied to less-serious offenses, so it may be that bail reform increased arrests for charges that no longer have definitive consequences rather than charges such as aggravated assault that were not included in the bail reform changes.

What this study makes clear is that further research is necessary if we are to understand the implications of bail reform. While this study does address a significant gap in the literature, it is merely a beginning. Scholars need to look at other aspects of bail reform. For example, does bail reform cause criminality to increase for offenses other than aggravated assault? Does bail reform cause decreased arrests once law enforcement recognizes that people they arrest will be back on the street within hours? Does bail reform allow offenders to adhere to familial and employment responsibilities which ultimately leads to less recidivism? Is bail reform validity enhanced when implemented via legislation crafted by elected representatives versus when it is implemented unilaterally via prosecutorial discretion, judicial fiat, or executive order?

Limitations

The data used for this study was derived from data made available by the respective jurisdictions. Philadelphia's arrest data for 2017-2019 was sourced from the Philadelphia DAO's office (Philadelphia District Attorney's Office, 2022) while that of Pittsburgh was sourced from data publicly released by the regional data warehouse that covers that city (Western Pennsylvania Regional Data Center, 2023). Other data sources were reviewed, such as the FBI's Uniform Crime Report (UCR), the FBI's replacement for UCR, the National Incident-Based Reporting System (NIBRS), the Bureau of Justice Statistics' National Crime Victimization Survey (NCVS), and the Pennsylvania State Police's arrest data for the city of Philadelphia.

Review of these additional datasets revealed that they would not be suitable for analysis in the way that locally sourced data was. The UCR data, while providing sufficient location information, aggregates by year and cannot be drilled down to monthly, weekly, or daily data (Federal Bureau of Investigation, 2017; Federal Bureau of Investigation, 2018; Federal Bureau of Investigation, 2019). The NIBRS data was unavailable for the studied cities during the 2017-2019 timeframe (Federal Bureau of Investigation, 2023). NCVS data was available for the 2017-2019 timeframe but was coded and did not appear to have sufficient location information to separate out data from Philadelphia and Pittsburgh (Inter-University Consortium for Political and Social Research, 2020a; Inter-University Consortium for Political and Social Research, 2020b; Inter-University Consortium for Political and Social Research, 2020c). While the Pennsylvania State Police had data for Philadelphia covering the date ranges, the data was incomplete and therefore unusable (Pennsylvania State Police, 2023).

The data that the individual jurisdictions made publicly available was sufficient in both areas: Philadelphia's arrest data (Philadelphia District Attorney's Office, 2022), and Pittsburgh's

arrest data (Western Pennsylvania Regional Data Center, 2023). Both datasets contained daily statistics regarding the number of aggravated assault arrests in each location, though some formatting was required to make the datasets amenable to analysis in SPSS Statistics. Finding a jurisdiction that met the appropriate criteria to compare against Philadelphia presented some challenges. Given Philadelphia's size, finding a comparably sized city in Pennsylvania was not an option, thus the 2nd-largest city by population, Pittsburgh, was used. Pittsburgh had a different population, 302,898 as of July 2022, and a different demographic makeup of 22.9% minority population (U.S. Census Bureau, n.d.a.) than Philadelphia. What Pittsburgh did have was the appropriate 2017-2019 data available and had not instituted any form of bail reform during the study period. The minority population aspect was relevant because part of the argument in favor of bail reform is that *persons of color* are disproportionately affected by the existing bail schema (American Civil Liberties Union, 2022).

While the use of the aggravated assault charge was deliberate as it represented a concern that opponents of bail reform have with regard to personal safety, aggravated assault was not a charge included in the Philadelphia's DA's list of offenses subject to bail reform. The necessity to choose a specific charge derived from the data used for the study. For Philadelphia's data, there were 42 offenses available to choose from, some of which were contained in 'other' categories (District Attorney's Office, City of Philadelphia 2018), while for Pittsburgh there were 400 offense choices (Western Pennsylvania Regional Data Center, 2023). Attempting to analyze multiple charges for this study presented its own set of difficulties. It was not possible using the available data to identify a) what offenders were released under bail reform that otherwise would not have been, and b) what subsequent offenses (if any) would have been committed by those offenders that could not be identified.

Aggravated assault arrests typically include a call from a complainant or victim – law enforcement's role is reactive rather than proactive (i.e., watching a home where narcotics are known to be sold). In other words, aggravated assault arrests are driven by the people calling police rather than being driven by the work ethic of a particular officer or detective. Using a charge that provokes a police response as opposed to a charge police actively pursue may have influenced the results of this study, however that influence was not amenable to correction as any such influence could not be quantified. A related concern is the possibility that law enforcement or prosecutors have downgraded the charge(s); where an offense meets the elements for aggravated assault but instead is charged as a less-serious offense such as simple assault or disorderly conduct (Associated Press, 2016; Associated Press, 2022; Leonardi, 2020; Rayman, 2012). There is no way of knowing if or how many simple assault arrests were for acts that met the elements of an aggravated assault from a legal perspective; we only know what the police ultimately charged and then we may only see the 'top' or most serious charge.

Another potential influence on arrest reporting is the 'Defund the Police' movement. While the concept of 'defunding' differs among its various proponents, supporters of 'Defund the Police' generally want a combination of: law enforcement funding diverted into violence reduction, social services, ending cash bail, and/or removing police from schools (Andrew, 2020; Fernandez, 2020; Lowery, 2020; Nickeas, et. al., 2021; Wierson, 2021; Zaru & Simpson, 2020). In some cities, 'Defund the Police' has made significant advances. New York City cut $1 billion from the 2021 NYPD budget (Adams, 2021; McEvoy, 2020; Pereira, 2020; Sgueglia & Andrew, 2020). $150 million was cut each from Austin, Texas (Adams, 2021; Levin, 2021; McEvoy, 2020; Venkataramanan, 2020) and the Los Angeles Police Department (Adams, 2021; McEvoy, 2020; Tapp, 2020; Zahniser, 2021). Philadelphia cut $33 million (McEvoy, 2020) and Baltimore

cut $22 million (McEvoy, 2020; WJZ News, 2020). While these cuts may strictly be to police officer salaries/benefits, consider that Philadelphia has 6,300 sworn officers (Philadelphia Police Department, 2022) whose least-senior members are paid $61,888 at hire, exclusive of overtime (Philadelphia Police Department, 2023). If Philadelphia cut $33 million strictly from salaries, they could reduce staffing to as few as 5,767 sworn officers. That significant a reduction in staffing could negatively impact arrest rates as fewer officers would be available to cover patrol shifts.

Recommendations for Future Research

As different jurisdictions implement their versions of bail reform, the impact of that reform will continue to be a controversial topic. There are tremendous political pressures at play that represent vested interests both in bail reform's success and in its catastrophic failure (Covert, 2022; Lehman, 2022; Lewis, 2022; Quinn, 2022). As a result, conducting unbiased studies of how bail reform works in each instance and what the impacts are to crime and public safety becomes that much more essential. While the study here served as an after-the-fact examination of bail reform implemented via prosecutorial discretion using only the crime of aggravated assault, future efforts to study bail reform must be take various factors into account prior to implementation.

Future studies of bail reform, whether enacted via legislation or enabled through prosecutorial discretion must identify as many meaningful metrics as possible; from changes in arrest rates to changes in incarceration rates to bail decisions to recidivism. Such studies might best be written with an eye to policymakers, as legislatures should require reporting on such metrics. Legislatures might also consider whether prosecutors should even have the authority to implement bail reform via discretion in charging decisions or bail requests (Amy, 2023; Dupuis,

2023, Greenblatt, 2023; Grossman, 2023), or whether or not prosecutors should be able to downgrade felony charges to misdemeanor charges to ensure bail reform will attach (Klein, 2022; Wehner, 2022).

Scholars can lend significant non-partisan support to ongoing study of America's centuries-old bail system. Such scholarship need not be limited to criminologists; economists and public policy scholars have roles to play as well. For instance, economists could study what benefits accrue or fail to accrue to communities in which the primary breadwinner is no longer incarcerated prior to trial. Current scholarship appears to focus only on the savings to government accrued from bail reform, such as reduced incarceration and monitoring costs (Harrison, 2018), while Landes (1974) forty-four years earlier studied the gain accruing to a defendant released on bail, such as earned ages, wealth, and/or the value placed on being at liberty pending trial. Public policy scholars might explore how legislatures considering bail reform need to consider metrics so that the effectiveness of their bail reform legislation can be understood (Hopkins, Bains, & Doyle, 2018).

Identifying and obtaining metrics for the success or lack thereof of bail reform may be a complicated process going jurisdiction-by-jurisdiction but would ultimately be a necessary one. Given the ongoing debates about whether bail reform has been a success (Covert, 2022; Keyser, 2022; Mayer, 2023), a failure (Clayton, 2022; McCoy, 2022; Quinn, 2022), or both (Lewis, 2022), measuring bail reform's impact going forward becomes that much more essential and the only way to do that is to find and collect the appropriate measurement data. There is a gap in the research regarding *what* to measure when looking at bail reform. While this study used arrest statistics, one might study how incident/crime reports change as opposed to arrests. Even so, do incident/crime report statistics exist? Are they compatible format-wise with other forms of

statistics? Or one might study recidivism by persons released under bail reform. In that instance like the previous one, are arrest statistics appropriate than incident/crime report statistics? Is recidivism tracked by the jurisdiction – and if not, what would it take to begin gathering that data? Will the judicial system be able and/or willing to participate?

Any future studies of bail reform should also consider indirect influences on the success or failure of bail reform from a safety perspective. As mentioned in the literature review, some law enforcement agencies struggle to hire and/or retain enough officers to effectively police their jurisdictions. Is bail reform a factor that is causing law enforcement officers to leave the profession, as noted in New York City (Balsamini, 2022; Balsamini, et. al., 2023)? How has the 'Defund' movement influenced the implementation or consideration of bail reform? Does a statistically significant relationship exist between the 'Defund' movement and the staffing crisis in law enforcement, as noted in Philadelphia (Bykofsky, 2021); and Atlanta (Diggs, 2020; Ford, 2020).? If so, is there a correlation between that and rising or falling arrest rates?

Conclusion

As different communities rush to implement the different ideas that make up the universe of bail reform, other communities rush to get in front of it to slow reform down or stop it. Without an unbiased assessment of the impacts of bail reform on specific communities, it cannot be conclusively determined whether bail reform is an absolute good, an absolute disaster, or something within those two extremes. Such an assessment should be accomplished both before and after any bail reform implementation as this will give policymakers and voters the information necessary to make future decisions. .That is where academia can make significant contributions not just to the criminal justice discipline generally but to communities that grapple with bail issues in real time. Scholars and communities must work together to analyze the

different aspects of bail reform and be willing to change direction should the analyses indicate reform is making communities less safe or is reducing the number of arrestees that fail to return for court hearing(s). This study, and any future studies, cannot themselves approve or disapprove of bail reform. This study was intended to provide scholars and policymakers unbiased information regarding actual bail reform implementation from a deterrent perspective with an emphasis on safety vis a vis aggravated assault arrests. This study, in terms of the gap in the literature regarding bail reform's impact, is merely the beginning.

REFERENCES

42 Pa. C.S.A. § 5741. Definitions.

https://www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=42&div=0&chpt=57&sctn=41&subsctn=0

42 Pa. C.S.A. § 5747.1(a). General rule.

https://www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=42&div=0&chpt=57&sctn=47&subsctn=1

42 Pa. C.S.A. § 5747.1(b)(1-2). Payment.

https://www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=42&div=0&chpt=57&sctn=47&subsctn=1

234 Pa. Code § 520. Bail before verdict.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

234 Pa. Code § 523(A). Bail before verdict.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

234 Pa. Code § 524(C). Bail before verdict.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

234 Pa. Code § 526(A)(5). Conditions of bail bond.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

234 Pa. Code § 528(A)(1). Bail before verdict.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

234 Pa. Code § 528(B). Bail before verdict.

https://www.pacodeandbulletin.gov/secure/pacode/data/234/chapter5/234_0005.pdf

Abrams, D. S. and Rohlfs, C. (2011). Optimal bail and the value of freedom: Evidence from the Philadelphia bail experiment. *Economic Inquiry, 49*(3). https://dx.doi.org.ezproxy.liberty.edu/10.1111/j.1465-7295.2010.00288.x

Abreu, A. (2018, November 19). Assemblymember Walker, Sponsor of bail reform bill, Optimistic about 2019. *Gotham Gazette*. https://www.gothamgazette.com/state/8084-assemblymember-walker-sponsor-of-bail-reform-bill-optimistic-about-2019

ACLU of Pennsylvania. (2019). Punishing poverty: Cash bail in Allegheny County. *ACLU*. https://www.aclupa.org/sites/default/files/field_documents/allegheny_county_report_final.pdf

Adams, C. (2021, December 28.). Cities vowed in 2020 to cut police funding – but budgets expanded in 2021. *NBC News*. https://www.nbcnews.com/news/nbcblk/cities-vowed-2020-cut-police-funding-budgets-expanded-2021-rcna9864

Adams, R. E., Rohe, W. M., and Arcury, T. A. (2002). Implementing community-oriented policing: Organizational change and street officer attitudes. *Crime & Delinquency, 48*(3). https://doi-org.ezproxy.liberty.edu/10.1177/0011128702048003003

Aiken, J. (2017, May 31.). Era of mass expansion: Why state officials should fight jail growth. *Prison Policy Initiative*. https://www.prisonpolicy.org/reports/jailsovertime.html

Akinnibi, F. and Nahmias, L. (2022, April 8.). New York bail law gets more stringent in state budget deal. *Bloomberg.com*. https://www.bloomberg.com/news/articles/2022-04-08/bail-law-gets-tougher-in-new-york-state-budget-deal

Akosua, N. (2020, June 12.). Bail funds are a George Floyd rallying cry. But not everyone is getting out. *NBC News*. https://www.nbcnews.com/think/opinion/bail-funds-are-george-floyd-rallying-cry-not-everyone-getting-ncna1230201

Alas, H. (2021, January 14.). Why L.A. County's District Attorney has joined the movement to end bail. *U.S. News and World Report*. https://www.usnews.com/news/cities/articles/2021-01-14/los-angeles-county-district-attorney-joins-movement-to-end-cash-bail

Ali, S. S. (2021, February 15.). Did Illinois get bail reform right? Criminal justice advocates are optimistic. *NBC News*. https://www.nbcnews.com/news/us-news/did-illinois-get-bail-reform-right-criminal-justice-advocates-are-n1257431

Allan, A., Allan, M., Giles, M., Drake, D., and Froyland, I. (2005). An observational study of bail decision-making. *Psychiatry, Psychology and Law, 12*(2), 319-333. https://doi-org.ezproxy.liberty.edu/10.1375/pplt.12.2.319

Allyn, B. (2018, February 21.). New DA telling Philly prosecutors not to seek bail for defendants in low-level crimes. *WHYY.org.* https://whyy.org/segments/new-da-telling-philly-prosecutors-not-seek-bail-defendants-low-level-crimes/

American Bar Association. (2019, September 09.). How courts work: Steps in a trial: Bail. *American Bar Association*. https://www.americanbar.org/groups/public_education/resources/law_related_education_network/how_courts_work/bail/

Amari, C. (2022, January 18.). Wisconsin debates cash bail changes in wake of Waukesha parade tragedy – as some sates ditch system entirely. *Wisconsin Watch*. https://wisconsinwatch.org/2022/01/wisconsin-debates-cash-bail-changes-in-wake-of-waukesha-parade-tragedy/

American Civil Liberties Union. (2022). What's at stake. *American Civil Liberties Union.* https://www.aclu.org/issues/smart-justice/bail-reform

Amy, J. (2023, March 28.). Georgia bill is latest GOP effort targeting prosecutors. *Associated Press*. https://apnews.com/article/georgia-prosecutor-district-attorney-remove-discipline-dd06c56d0d0672e38ef11f4c63dda468

Andenaes, J. (1969). The morality of deterrence. *The University of Chicago Law Review, 37*, 649-664. https://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fmorality-deterrence%2Fdocview%2F1301259874%2Fse-2%3Faccountid%3D12085

Anderson, D. C. (1997, February 9.). Crime stoppers. *New York Times Magazine*. https://link.gale.com/apps/doc/A150398741/BIC?u=vic_liberty&sid=summon&xid=551cef94

Andrea, L. (2022a, January 12.). Republican worries crime bills package targeting Indianapolis is 'zeroing in on the poor'. *Indianapolis Star*. https://www.indystar.com/story/news/crime/2022/01/12/indiana-republican-crime-bills-face-pushback-over-constitutionality/9162032002/

Andrea, L. (2022b, May 4.). The Bail Project sues Indiana over restricting law, citing constitutional infringements. *Indianapolis Star*. https://www.indystar.com/story/news/crime/2022/05/04/bail-project-sues-indiana-over-law-restricting-who-they-bail-out-of-jail/9632177002/

Andrew, S. (2020, June 17.). There's a growing call to defund the police. Here's what it means. *CNN*. https://www.cnn.com/2020/06/06/us/what-is-defund-police-trnd/index.html

Apel, R. (2012). Sanctions, perceptions, and crime: Implications for criminal deterrence. *Journal of Quantitative Criminology, 29*(1), 67-101. https://www.jstor.org/stable/23367551

Arden, A. (2021a, April 7.). Docs: Ex-PPB officers cite low morale, burnout as reasons for leaving. *KOIN 6*. https://www.koin.com/news/special-reports/ex-ppb-officers-cite-low-morale-burnout-as-reasons-for-leaving/?ipid=promo-link-block1

Arden, A. (2021b, October 5.). PPB officer numbers continue to drop. Here's why some say they are leaving. *KOIN 6*. https://www.koin.com/news/special-reports/ppb-officer-numbers-continue-to-drop-heres-why-some-say-theyre-leaving/

Ares, C. E., Rankin, A., and Sturz, H. (1963). The Manhattan bail project: An interim report on the use of pre-trial parole. *New York University Law Review, 38*, 67-95. https://heinonline-org.ezproxy.liberty.edu/HOL/Page?handle=hein.journals/nylr38&id=85&collection=journals&index=journals/nylr

Arizona Supreme Court. (2016, March 3.). Administrative Order 2016-16. https://www.azcourts.gov/Portals/22/admorder/Orders16/2016-16.pdf

Armitage, D. (2011). Globalizing Jeremy Bentham. *History of Political Thought, 32*(1), 63-82. https://www.jstor.org/stable/26225751

Arnaud, E. H. and Sims-Agbabiaka, B. (2020). New York bail reform: A quick guide to common questions and concerns. *Cornell Law Review, 106*(1). https://cornelllawreview.org/2020/10/09/new-york-bail-reform-a-quick-guide-to-common-questions-and-concerns-2/

Aroune, J. (2019, August 6.). Monroe Co. DA says NY bail reform will lead to 'catch and release'. *Spectrum News*. https://spectrumlocalnews.com/nys/rochester/news/2019/08/06/da-says-ny-bail-reform-will-lead-to--catch-and-release-

Associated Press. (2016, May 3.). 19 police officers accused of downgrading or misreporting crimes, making precinct seem safer. *Fox News*. https://www.foxnews.com/us/19-police-officers-accused-of-downgrading-or-misreporting-crimes-making-precinct-seem-safer

Associated Press. (2022, August 28). Report: nearly 100 rape calls downgraded to non-emergency. *U.S. News & World Report*. https://www.usnews.com/news/best-states/louisiana/articles/2022-08-28/report-nearly-100-rape-calls-downgraded-to-non-emergency

Author Unknown. (2015a). Jeremy Bentham. *Stanford Encyclopedia of Philosophy*. https://plato.stanford.edu/entries/bentham/

Author Unknown. (2015b, December 13.). NYPD to post crime data on the web for 7 major felonies. *Silive.com*. https://www.silive.com/news/2015/12/nypd_to_release_incident-level.html

Author Unknown. (2016, October 6.). Indiana revises bail policy. *Indianapolis Recorder*. https://indianapolisrecorder.com/bfa86318-8bf3-11e6-8b46-4745b0a1a120/

Author Unknown. (2018). Bail reform and risk assessment: The cautionary tale of federal sentencing. *Harvard Law Review, 131*(4), 1125+. https://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA572716380?u=vic_liberty

Author Unknown. (2022, December 13.). SAFE-T Act faces next test in court, where opponents say it violates state constitution. *NBC Chicago*. https://www.nbcchicago.com/news/local/safe-t-act-faces-next-test-in-court-where-opponents-say-it-violates-state-constitution/3020725/

Bail Reform Act of 1966. https://www.congress.gov/89/statute/STATUTE-80/STATUTE-80-Pg214.pdf

Bail Reform Act of 1984, 18 U.S.C. § 3141 *et seq.* (1984). https://www.congress.gov/98/statute/STATUTE-98/STATUTE-98-Pg1837.pdf

Baillie, C. (2022, September 7.). Illinois set to eliminate cash bail in 2023. *KFVS*. https://www.kfvs12.com/2022/09/07/illinois-set-eliminate-cash-bail-2023/

Baillie, C. and Gartner, J. (2022, September 9.). 'The gates are open': Illinois ending cash bail system. *WAFF*. https://www.waff.com/2022/09/09/gates-are-open-illinois-ending-cash-bail-system/

Baker, S. (2018, August 6.). When prosecuting attorneys push back, we bring out the facts. *ACLU*. https://www.aclu.org/blog/smart-justice/bail-reform/when-prosecuting-attorneys-push-back-we-bring-out-facts

Balsamini, D. (2022, June 11.). NYPD exodus: Police on pace to quit, retire in record numbers. *New York Post.* https://nypost.com/2022/06/11/nypd-cops-on-pace-to-quit-retire-in-record-numbers/

Balsamini, D., Marino, J., McCarthy, C., and Vago, S. (2023, March 10.). NYPD cops resigning in new year at record-breaking pace – with a 117% jump from 2021 numbers. *New York Post*. https://nypost.com/2023/03/10/nypd-cops-resigning-from-force-in-2023-at-record-pace/

Banbeck, J. and Harrison, B. (2023, January 17.). Update: Wisconsin assembly passes bail reform, will be on April ballot. *WTMJ-TV Milwaukee*. https://www.tmj4.com/news/local-news/wisconsin-senate-passes-cash-bail-amendment-heads-to-assembly

Banerjee, A. and Chaudhury S. (2010). Statistics without tears: Populations and samples.

Industrial Psychiatry Journal, 19(1), 60-65. https://dx.doi.org/10.4103/0972-6748.77642

Barno, M., Martinez, D. N., and Williams, K. R. (2020). Exploring alternatives to cash bail: An evaluation of Orange County's pretrial assessment and release supervision (PARS) program. *American Journal of Criminal Justice, 45*(3), 363-378. https://doi.org/10.1007/s12103-019-09506-3

Barnum, T. C., Nagin, D. S., and Pogarsky, G. (2020). Sanction risk perceptions, coherence, and deterrence. *Criminology, 59*, 195-223. https://doi.org/10.1111/1745-9125.12266

Battenfield, J. (2020, November 15.). Massachusetts lawmaker pushes for investigation of left wing Bail Fund. *Boston Herald*. https://www.bostonherald.com/2020/11/15/massachusetts-lawmaker-pushes-for-investigation-of-left-wing-bail-fund/

Baughman, S. B. (2018). The history of misdemeanor bail. *Boston University Law Review, 98*(3), 837-883. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fhistory-misdemeanor-bail%2Fdocview%2F2115130309%2Fse-2%3Faccountid%3D12085

Baughman, S. B. (2020). Dividing bail reform. *Iowa Law Review, 105*(3), 947-1025. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fdividing-bail-reform%2Fdocview%2F2401324802%2Fse-2%3Faccountid%3D12085

Baumgartner, F. R., Daniely, T., Huang, K., Johnson, S., Love, A., May, L., Mcgloin, P., Swagert, A., Vattikonda, N., and Washington, K. (2021). Throwing away the key: The

unintended consequences of "tough on crime" laws. *Perspectives on Politics, 19*(4), 1233-1246. https://doi.org/10.1017/S153759272100164X

BBC. (2014, December 5.). Profile: Eric Garner. *BBC.com*. https://www.bbc.com/news/world-us-canada-30350648

BBC. (2016, May 23.). Freddie Gray's death in police custody – what we know. *BBC.com*. https://www.bbc.com/news/world-us-canada-32400497

BBC. (2017, June 21.). Philando Castile death: Police footage released. *BBC.com*. https://www.bbc.com/news/world-us-canada-40357355

Becker, D. (2020, August 13.). Mass. Bail fund responds to criticism after freeing a man arrested for sexual assault. *WBUR*. https://www.wbur.org/news/2020/08/13/mass-bail-fund-criticism

Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of Political Economy, 76*(2), 169-217. https://www.jstor.org/stable/1830482

Beirne, P. (1991). Inventing criminology: The 'science of man' in Cesare Beccaria's dei delittie delle. *Criminology, 29*(4), 777-820. https://doi.org/10.1111/j.1745-9125.1991.tb01088.x

Bentham, J. (1781). An introduction to the principles of morals and legislation. *BLTC Research*. https://www.utilitarianism.com/jeremy-bentham/index.html

Bessler, J. D. (2018). The economist and the enlightenment: How Cesare Beccaria changed Western civilization. *European Journal of Law and Economics, 46*(3), 275-302. https://doi.org/10.1007/s10657-016-9546-z

Binion, B. (2020, December 8.). California voters declined to end cash bail. L.A.'s new district attorney says he'll do it anyway. *Reason.com*. https://reason.com/2020/12/08/california-

voters-declined-to-end-cash-bail-los-angeles-george-gascon-district-attorney-will-do-it-anyway/

Black, T. and Orsagh, T. (1978). New evidence on the efficacy of sanctions as a deterrent to homicide. *Social Sciences Quarterly, 58*(4), 616-631. https://www.jstor.org/stable/42859920

Blitzer, R. (2021, February 2.). Bail fund backed by Kamala Harris freed same rioter twice – now he's been charged again. *Fox News*. https://www.foxnews.com/politics/bail-fund-kamala-harris-thomas-moseley

Block, M. (2018, September 2.). What changed after D.C. ended cash bail. *NPR.org*. https://www.npr.org/2018/09/02/644085158/what-changed-after-d-c-ended-cash-bail

Bordenkircher v. Hayes, 434 U.S. 357 (1978). https://supreme.justia.com/cases/federal/us/434/357/

Boyce, R. N. and Perkins, R. M. (1989). *Criminal Law and Procedure: Cases and Materials* (7th Ed.). The Foundation Press, Inc.

Bradley, B. and Schroedter, A. (2021, October 19.). Chicago on pace to lose more than 1,000 officers due to resignation, retirement. *WGN-9*. https://wgntv.com/news/wgn-investigates/chicago-on-pace-to-lose-more-than-1000-officers-due-to-resignation-retirement/

Bradley, B. and Schroedter, A. (2023, January 30.). Officer exodus: 1,000+ Chicago cops left the job last year. *WGN-9*. https://wgntv.com/news/wgn-investigates/officer-exodus-1000-chicago-cops-left-the-job-last-year/

Brand, D. (2020, February 14.). Two Queens senators open to bail reform compromise. *Queens Daily Eagle*. https://queenseagle.com/all/two-queens-senators-open-to-bail-reform-compromise

Braga, A. A. and Weisburd, D. L. (2012). The effects of 'pulling levers' focused deterrence strategies on crime. *Campbell Systematic Reviews.* https://doi.org/10.4073/csr.212.6

Braga, A. A., Kennedy, D. M., Waring, E. J., and Piehl, A. (2001). Problem-oriented policing, deterrence, and youth violence: An evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency, 38*(3), 195-225. https://doi-org.ezproxy.liberty.edu/10.1177/0022427801038003001

Braun, A. and Greenwood, M. (2015, November 25.). The Laquan McDonald case: A timeline of the past year. *Medill Reports Chicago*. https://news.medill.northwestern.edu/chicago/the-laquan-mcdonald-case-a-timeline-of-the-past-year/

Brennan, T., Dieterich, W., and Ehret, B. (2008). Evaluating the predictive validity of the Compas Risk and Needs Assessment System. *Criminal Justice and Behavior, 36*(1). https://doi-org.ezproxy.liberty.edu/10.1177/0093854808326545

Browne, G. E. and Strong, S. M. (2022). Pretrial release and misconduct in Federal district courts, Fiscal years 2011-2018. *U.S. Department of Justice, Bureau of Justice Statistics*. https://bjs.ojp.gov/content/pub/pdf/prmfdcfy1118.pdf

Bruni, L. and Porta, P. L. (2014). Cesare Beccaria's 'On crimes and punishments'. *History of Economics Review, 60*, 64-74. https://search-informit-org.ezproxy.liberty.edu/doi/epdf/10.3316/informit.197290030097553

Buckenmaier, J., Dimant, E., Posten, A., and Schmidt, U. (2021). Efficient institutions and effective deterrence: On timing and uncertainty of formal sanctions. *Journal of Risk and Uncertainty, 62*(2), 177-201. https://doi.org/10.1007/s11166-021-09352-x

Buntin, J. (2019). Bail reform. *CQ Researcher, 29*(14). https://library.cqpress.com/cqresearcher/cqresrre2019041200

Burruss, G. W. and Giblin, M. J. (2009). Modeling isomorphism on policing innovation: The role of institutional pressures in adopting community-oriented policing. *Crime & Delinquency, 60*(3). https://doi-org.ezproxy.liberty.edu/10.1177/0011128709340225

Buskey, B. (2020). Wrestling with risk: The questions beyond money bail. *North Carolina Law Review, 98*(2), 379+. https://heinonline.org/HOL/P?h=hein.journals/nclr98&i=399

Bykofsky, S. (2021, February 4.). Philly cops are defunding themselves. *Philadelphia Weekly*. https://philadelphiaweekly.com/philly-cops-are-defunding-themselves/

Calder, R. (2019, May 22.). DAs warn City Council that bail-reform laws will be a major fail. *New York Post*. https://nypost.com/2019/05/22/das-warn-city-council-that-bail-reform-laws-will-be-a-major-fail/

Caldwell, B. and Caldwell, C. (2011). "Superpredators" and "animals" – Images and California's "get tough on crime" initiatives. *Journal of the Institute of Justice and International Studies, 11*, 61-X. https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/superpredators-animals-images-californias-get/docview/903538409/se-2

Cannick, J. (2018, April 24.). L.A. County's bail reform proposal lacks actual reform. *LA Progressive.* https://www.laprogressive.com/prison-reform-2/los-angeles-bail-reform-proposal

Carroll, J. E. (2020). The due process of bail. *Wake Forest Law Review, 55*(4), 757-793. https://web-p-ebscohost-com.ezproxy.liberty.edu/ehost/pdfviewer/pdfviewer?vid=2&sid=a599e597-cac5-45ef-beea-c018e64a3999%40redis

Cassell, P. and Folkes, R. (2020). Does bail reform increase crime? An empirical assessment of the public safety implications of bail reform in Cook County, Illinois. *University of Utah, S. J. Quinney College of Law*. https://dc.law.utah.edu/cgi/viewcontent.cgi?article=1189&context=scholarship

Cassidy, M. (2017, June 21.). Bond companies 'extremely worried' as Arizona moves away from cash bail bonds. *The Republic*. https://www.azcentral.com/story/news/local/arizona/2017/06/21/arizona-courts-back-away-cash-bail-system-bond-companies-worried/400209001/

Caulkins, J. P. (2001). How large should the strike zone be in "three strikes and you're out" sentencing laws? *Journal of Quantitative Criminology, 17*(3), 227-246. https://doi.org/10.1023/A:1011098100458

Chakraborty, B. (2021, July 17.). Atlanta police ditching department and slamming leadership in letters. *Yahoo! News*. https://news.yahoo.com/atlanta-police-ditching-department-slamming-110000541.html

Chalfin, A. and McCrary, J. (2017). Criminal deterrence: A review of the literature. *Journal of Economic Literature, 55*(1), 5-48. https://doi.org/10.1257/jel.20141147

Charles, J. B. (2021, May 10.). Philadelphia embraced Larry Krasner's progressive vision. But he may be running out of time. *Thetrace.org*.

https://www.thetrace.org/2021/05/philadelphia-da-election-larry-krasner-opponent-gun-violence/

Chen, C. (2021). What factors affect the crime rate? *Medium.com*. from https://cyc-tw.medium.com/us-1960-crime-rate-analysis-by-linear-regression-6805fc95b1bb

Chester, J. (2022, May 9.). Lawsuit challenged Indiana law restricting charitable bail funds. *95.3 MNC*. https://www.953mnc.com/2022/05/09/lawsuit-challenges-indiana-law-restricting-charitable-bail-funds/

Choe, D. H. (2014). Discretion at the pre-trial stage: A comparative study. *European Journal on Criminal Policy and Research, 20*(1), 101-119. https://doi.org/10.1007/s10610-013-9216-4

Cholodofsky, R. (2022, May 1.). Cash bail system reform being explored in Pennsylvania. *Triblive.com*. https://www.triblive.com/local/regional/cash-bail-system-reform-being-explored-in-pennsylvania/

Chow, A. R. (2020, June 4.). Inside bail funds' 'nonstop' efforts to free the thousands of protestors being detained across the U.S. *Time.* https://time.com/5847555/bail-reform-funds-george-floyd-protests/

City News Service. (2021, April 21.). Los Angeles County commits to bail reform. *Fox 11 Los Angeles*. https://www.foxla.com/news/los-angeles-county-commits-to-bail-reform

Clark, J. (2022, September 10.). On January 1st, 2023, Illinois jails will turn many prisoners lose. *WQRF Rockford*. https://www.msn.com/en-us/news/crime/on-january-1st-2023-illinois-jails-will-turn-many-prisoners-loose/ar-AA11ELHz

Clayton, J. J. (2022, May.). Third time is not the charm for failed bail reform movement. *The Ripon Forum, 56*(2). https://riponsociety.org/article/third-time-is-not-the-charm-for-failed-bail-reform-movement/

Cline-Thomas, A. (2022, March 29.). Timeline: How New York's bail reform law came to be. *CBS News*. https://www.cbsnews.com/newyork/live-updates/new-york-bail-reform-timeline/

Cohen, R. A. (1978). Wealth, bail, and the equal protection of the laws. *Villanova Law Review, 23*(5-6), 977-1040. https://heinonline.org/HOL/P?h=hein.journals/vllalr23&i=1001

Comer, B. P., Jorgenson, C., and Carter, D. (2021). Reported crime frequencies: A statistical comparison of state crime reports and the UCR. *American Journal of Criminal Justice, 48*, 151-175. https://doi.org/10.1007/s12103-021-09623-y

Cooper, B. (2022, March 17.). Controversial gun, bail reform bills survive legislative session. *Indianapolis Recorder.* https://indianapolisrecorder.com/controversial-gun-bail-reform-bills-survive-legislative-session/

Copp, J. E., Casey, W., Blomberg, T. G., and Pesta, G. (2022). Pretrial risk assessment instruments in practice: The role of judicial discretion in pretrial reform. *Criminology, 21*(2), 329-358. https://doi-org.ezproxy.liberty.edu/10.1111/1745-9133-12575

Corley, C. (2021, February 22.). Illinois becomes 1st state to eliminate cash bail. *NPR.* https://www.npr.org/2021/02/22/970378490/illinois-becomes-first-state-to-eliminate-cash-bail

Covert, B. (2022, July 19.). Bail reform helps countless people. Why don't we hear more of their stories? *The Appeal*. https://theappeal.org/bail-reform-success-stories-media-coverage/

Craswell, R. and Calfee, J. E. (1986). Deterrence and uncertain legal standards. *Journal of Law, Economics, and Organization, 2*(2), 279-303. https://www.jstor.org/stable/765053

Crime Watch MN. (2022, March 23.). Felony suspect bailed out by Minnesota Freedom Fund charged with auto theft three days later. *The Tennessee Star*. https://tennesseestar.com/2022/03/23/felony-suspect-bailed-out-by-minnesota-freedom-fund-charged-with-auto-theft-three-days-later/

Crown, C. (2021, October 22.). Second man charged with murder within months after Bail Project pays bail for previous charges, releasing them before trial. *CBS 4 Indianapolis.* https://cbs4indy.com/news/second-man-charged-with-murder-within-months-after-bail-project-pays-bail-for-previous-charges-releasing-them-before-trial/

Crown, C. (2022, February 7.). The Bail Project responds to questions over who it bails out. *Fox 59.* https://fox59.com/investigations/the-bail-project-responds-to-questions-over-who-it-bails-out/

deLeon, K. (2023, May 7.). REI's planned departure a blow to Portland's Pearl District, beleaguered downtown. *Oregon Live* https://www.oregonlive.com/business/2023/05/reis-planned-departure-a-blow-to-portlands-pearl-district-beleaguered-downtown.html

Dalakian II, G. J. (2018). Open the jail cell doors, Hal: A guarded embrace of pretrial risk assessment instruments. *Fordham Law Review, 87*(1), 325-370. https://heinonline.org/HOL/P?h=hein.journals/flr87&i=336

Daley, K. (2022, January 12.). Indiana lawmakers crack down on bail charities after grisly murders. *The Washington Free Beacon*. https://freebeacon.com/policy/indiana-lawmakers-crack-down-on-bail-charities-after-grisly-murders/

Denis, A. (2021). The revolution that did not happen: Terence Hutchison on the political economy of Jeremy Bentham. *Cambridge Journal of Economics, 45*(4), 771-786. https://doi.org/10.1093/cje/beab009

Desmarais, S. L., Zottola, S. A., Duhart Clark, S. E., and Lowder, E. M. (2020). Predictive validity of pretrial risk assessments: A systematic review of the literature. *Criminal Justice and Behavior, 48*(4). https://doi-org.ezproxy.liberty.edu/10.1177/0093854820932959

Deto, R. (2021, January 15.). Rep. Summer Lee to introduce bill to end cash bail in Pennsylvania. *Pittsburgh CityPaper*. https://www.pghcitypaper.com/news/rep-summer-lee-to-introduce-bill-to-end-cash-bail-in-pennsylvania-18744679

Dhami, M. K. (2005). From discretion to disagreement: Explaining disparities in judges' pretrial decisions. *Behavioral Sciences & The Law, 23*(3), 367-386. https://doi.org/10.1002/bsl/619

Diehr, A. J. and McDaniel, J. T. (2018). Lack of community-oriented policing practices partially mediates the relationship between racial residential segregation and "black-on-black" homicide rates. *Preventative Medicine, 112*, 179-184. https://doi.org/10.1016/j.ypmed.2018.04.032

Diggs, M. (2018, March 13.). Atlanta police facing critical manpower shortage. *Fox 5 Atlanta*. https://www.fox5atlanta.com/news/atlanta-police-facing-critical-manpower-shortage

Diggs, M. (2020, September 14.). Officers leaving Atlanta Police at alarming rate. *Fox 5 Atlanta*. https://www.fox5atlanta.com/news/officers-leaving-atlanta-police-department-at-alarming-rate

District Attorney's Office, City of Philadelphia. (2018, February 21.). Philadelphia DAO policy on bail. *District Attorney's Office, City of Philadelphia.* https://phillyda.org/wp-content/uploads/2021/11/DAO-Bail-Policy.pdf

Dobbie, W., Goldin, J., and Yang, C. S. (2018). The effects of pretrial detention on conviction, future crime, and employment: Evidence from randomly assigned judges. *American Economic Review, 108*(2), 201-240. https://www.jstor.org/stable/26527904

Domonoske, C. (2020, June 23.). Protest arrests led to surge of bail fund donations: Impact could be long lasting. *NPR*. https://www.npr.org/2020/06/23/879711694/protest-arrests-led-to-surge-of-bail-fund-donations-impact-could-be-long-lasting

D'Onofrio, J. and Wade, S. (2023, March 14.). Safe-T Act goes in front of Illinois Supreme Court as arguments on eliminating cash bail begin. *ABC 7 Chicago*. https://abc7chicago.com/safe-t-act-illinois-supreme-court-2023/12951817/

Dorn, S. (2016, May 16.). How D.C. court reforms save $398 million: Impact 2016: Justice for all. *Cleveland.com*. https://www.cleveland.com/metro/2016/05/how_dc_court_reforms_save_398.html

Downey, C. (2022, October 18.). Cotopax closes San Francisco store after multiple break-ins: 'City of chaos.' *National Review*. https://www.nationalreview.com/news/cotopaxi-closes-san-francisco-store-after-multiple-break-ins-city-of-chaos/

Duffy, J. F. and Hynes, R. M. (2021). Asymmetric subsidies and the bail crisis. *The University of Chicago Law Review, 88*(6), 1285-1360. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fasymmetric-subsidies-bail-crisis%2Fdocview%2F2583133732%2Fse-2%3Faccountid%3D12085

Dunlap, S. (2023, February 16.). Tough-on-crime theme of 2023 Georgia Legislature underpinned by proposed new bail requirements. *Georgia Public Broadcasting*. https://www.gpb.org/news/2023/02/16/tough-on-crime-theme-of-2023-georgia-legislature-underpinned-by-proposed-new-bail

Dupuis, J. (2023, April 3.). Regressive prosecutors. *City Journal*. https://www.city-journal.org/article/reining-in-progressive-prosecutors

Durkin, E. and Cordero, K. (2022, August 24.). Why New York democrats can't agree on bail reform. *Politico*. https://www.politico.com/news/2022/08/24/new-york-democrats-bail-reform-00052207

Eckhouse, L., Lum, K., Conti-Cook, C., and Ciccolini, J. (2019). Layers of bias: A unified approach for understanding problems with risk assessment. *Criminal Justice and Behavior, 46*(2), 185-209. https://doi-org.ezproxy.liberty.edu/10.1177/0093854818811379

Editorial Board. (2018, March 3.). Philadelphia steps away from penalizing poverty: More should follow suit. *Washington Post.* http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fblogs-podcasts-websites%2Fphiladelphia-steps-away-penalizing-poverty%2Fdocview%2F2009798075%2Fse-2%3Faccountid%3D12085

Ehrlich, I. (1972). The deterrent effect of criminal law enforcement. *The Journal of Legal Studies, 1*(2), 259-276. https://www.jstor.org/stable/724093

Elliot, C. (2020, November 3.). Report: 'Bail fund' promoted by Kamala Harris was used to free man who sexually abused his teen daughter. *Law Enforcement Today.*

https://www.lawenforcementtoday.com/bail-fund-promoted-by-harris-was-used-to-free-child-molestor/

Emerson, R. W. (2022). ANOVA assumptions. *Journal of Visual Impairment & Blindness, 116*(4), 585-586. https://doi.org/10.1177/0145482X221124187

Engel, C. (2019). When does transparency backfire? Putting Jeremy Bentham's theory of general prevention to the experimental test. *Journal of Empirical Legal Studies, 16*(4), 881-908. https://doi-org.ezproxy.liberty.edu/10.1111/jels.12231

Erickson, M. L. and Gibbs, J. P. (1973). The deterrence question: Some alternative methods of analysis. *Social Science Quarterly, 54*(3), 534. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fdeterrence-question-some-alternative-methods%2Fdocview%2F1291640899%2Fse-2%3Faccountid%3D12085

Estes, A. (2020, August 6.). Sex offender, free on bail, is charged with new rape. *Boston Globe.* https://www.bostonglobe.com/2020/08/06/metro/sex-offender-just-set-free-by-mass-bail-fund-is-charged-with-new-violent-rape/

Ewing, M. (2017, May 16.). The progressive civil-rights lawyer Philadelphia wants for District Attorney. *The Atlantic.* https://www.theatlantic.com/politics/archive/2017/05/philadelphia-district-attorney-election-reform/526812/

Fass, T. L., Heilbrun, K., Dematteo, D., and Fretz, R. (2008). The LSI-R and the Compas: Validation data on two risk-needs tools. *Criminal Justice and Behavior, 35*(9). https://doi-org.ezproxy.liberty.edu/10.1177/0093854808320497

Federal Bureau of Investigation. (2011). Crime in the United States, 2011. *Federal Bureau of Investigation.* https://ucr.fbi.gov/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/CIUS2011topic_resourcepages.zip

Federal Bureau of Investigation. (2017). Crime in the United States. *Federal Bureau of Investigation*. https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/topic-pages/tables/table-6

Federal Bureau of Investigation. (2018). Crime in the United States. *Federal Bureau of Investigation*. https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/tables/table-6

Federal Bureau of Investigation. (2019). Crime in the United States. *Federal Bureau of Investigation*. https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/tables/table-6

Fernandez, P. (2020, June 11.). Defunding the police will actually make us safer. *ACLU*. https://www.aclu.org/news/criminal-law-reform/defunding-the-police-will-actually-make-us-safer

Ferrajoli, L. (2014). Two hundred and fifty years since the publication of *On Crimes and Punishments*: The currency of Cesare Beccaria's thought. *Punishment & Society, 16*(5), 501-519. https://doi-org.ezproxy.liberty.edu/10.1177/1462474514551524

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics, North American Edition, 5th Edition*. Sage Publications.

Fink, Z. (2020, January 02.). Democrats rethink bail reform after hate crime spike. *Spectrum News*. https://www.ny1.com/nyc/all-boroughs/politics/2020/01/03/democrats-rethink-bail-reform-after-hate-crime-spike

Fink, Z. (2022, March 28.). Bail reform changes shaping up as most contentious issue in budget talks. *Spectrum News*. https://www.ny1.com/nyc/all-boroughs/politics/2022/03/28/bail-reform-changes-shaping-up-as-most-contentious-issue-in-budget-talks

Fitz-Gibbon, J. (2023, April 30.). Staten Island DA slams NY state lawmakers for 'band-aid' tweak to bail reform. *New York Post*. https://nypost.com/2023/04/30/nyc-da-slams-albany-lawmakers-for-band-aid-tweak-to-bail-reform/

Foote, C. (1954). Compelling appearance in court: Administration of bail in Philadelphia. *University of Pennsylvania Law Review, 102*, 1031-79. https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=7812&context=penn_law_review

Ford, H. (2020, September 15.). Dozens more APD officers quit. *11 Alive*. https://www.11alive.com/article/news/local/atlanta-police-resigning-leaving-for-other-departments-low-morale-and-lack-of-support-cited/85-2e642568-981c-4f32-94d2-a442ef9d29f3

Fradella, H. F. and Scott-Hayward, C. (n.d.) Advancing bail and pretrial justice reform in Arizona. *Arizona State University, Sandra Day O'Connor College of Law*. https://law.asu.edu/sites/default/files/pdf/06%20Fradella%20%26%20Scott-Hayward.pdf

Frame, S. (2022, March 29.). Victims say Seattle-based charity bail group should stop freeing people charged with violent crimes. *KING 5*. https://www.king5.com/article/news/local/seattle-charity-group-bail-victims/281-ea8e92a7-7ca2-44d9-8374-e2186e35b8b0

Freilich, J. D. (2014). Beccaria and situational crime prevention. *Criminal Justice Review, 40*(2). https://doi-org.ezproxy.liberty.edu/10.1177/0734016814550815

Garner, J. H., Maxwell, C. D., and Lee, J. (2021). The specific deterrent effects of criminal sanctions for intimate partner violence: A meta-analysis. *Journal of Criminal Law & Criminology, 111*(1), 227-271. https://go.openathens.net/redirector/liberty.edu?url=https://www-proquest-com.ezproxy.liberty.edu/scholarly-journals/specific-deterrent-effects-criminal-sanctions/docview/2528247570/se-2

Gascon, G. (2020, December 7.). Pretrial release policy. *Los Angeles County District Attorney's Office*. https://da.lacounty.gov/sites/default/files/pdf/SPECIAL-DIRECTIVE-20-06.pdf

Gelinas, N. (2023, April 23.). Beaten on the bus? Too bad, say NYC police and prosecutors. *New York Post*. https://nypost.com/2023/04/23/beaten-on-the-bus-too-bad-say-nyc-police-and-prosecutors/

Gerstein v. Pugh, 420 U.S. 103, 114 (1975). https://supreme.justia.com/cases/federal/us/420/103/

Gibbs, J. P. (1968). Crime, punishment, and deterrence. *The Southwestern Social Science Quarterly, 48*(4), 515-530. https://www.jstor.org/stable/42867909

Gibbs, J. P. (1979). Assessing the deterrence doctrine. *The American Behavioral Scientist, 22*(6), 653-678. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fassessing-deterrence-doctrine-challenge-social%2Fdocview%2F1306754007%2Fse-2%3Faccountid%3D12085

Gill, C., Weisburd, D., Telep, C. W., Vitter, Z. and Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: A systematic review. *Journal of Experimental Criminology, 10*(4), 399-428. https://doi.org/10.1007/s11292-014-9210-y

Golash-Boza, T., Oh, H., and Salazar, C. (2022). Broken windows and order-maintenance policing in gentrifying Washington, DC. *Policing and Society.* https://doi-org.ezproxy.liberty.edu/10.1080/10439463.2022.2085268

Goldkamp, J. S. (1980). The effects of detention on judicial decisions: A closer look. *Justice System Journal, 5*, 234-257. https://www.jstor.org/stable/20877598

Goldkamp, J. S. and Gottfredson, M. R. (1984). Judicial decision guidelines for bail: The Philadelphia Experiment, 1981-1982. *U.S. Department of Justice, National Institute of Justice.* https://www.ojp.gov/pdffiles1/Digitization/95109NCJRS.pdf

Gonzalez, M. (2018). Consumer protection for criminal defendants: Regulating commercial bail in California. *California Law Review*, *106*(4), 1379-1435. https://heinonline.org/HOL/P?h=hein.journals/calr106&i=1409

Grasmic, H. G. and Bursik, Jr., R. J. (1990). Conscience, significant others, and rational choice: Extending the deterrence model. *Law & Society Review, 24*(3), 837-862. https://doi-org.ezproxy.liberty.edu/10.2307/3053861

Greenblatt, A. (2023, April 6.). Deciding who gets prosecuted is trickier than you think. *Governing*. https://www.governing.com/now/deciding-who-gets-prosecuted-is-trickier-than-you-think

Greene, J. A. (1999). Zero tolerance: A case study of police policies and practices in New York City. *Crime & Delinquency, 45*(2). https://doi-org.ezproxy.liberty.edu/10.1177/0011128799045002001

Griffin, L. and Yaroshefsky, E. (2017). Ministers of justice and mass incarceration. *Georgetown Journal of Legal Ethics, 30*(3), 301-335. https://heinonline.org/HOL/P?h=hein.journals/geojlege30&i=310

Grimes, K. (2019, August 29.). California Supreme Court is implementing Bail Reform Act prior to 2020 ballot initiative. *California Globe.* https://californiaglobe.com/articles/california-supreme-court-is-implementing-bail-reform-act-prior-to-2020-ballot-initiative/

Grimes, K. (2021, December 14.). San Francisco's pre-arraignment revolving door of arrest and speedy release. *California Globe*. https://californiaglobe.com/articles/san-franciscos-pre-arraignment-revolving-door-of-arrest-and-speedy-release/

Grossman, H. (2023, April 25.). Alvin Bragg's deputy says prosecutors have 'power' to change justice system by declining to charge criminals. *Fox News*. https://www.foxnews.com/media/alvin-braggs-deputy-prosecutors-power-change-justice-system-declining-charge-criminals

Guardian Staff. (2021, March 26.). California can no longer detain people because they can't pay bail. *The Guardian.* https://www.theguardian.com/us-news/2021/mar/26/california-bail-ruling-judge

Gupta, A., Hansman, C., and Frenchman, E. (2016). The heavy costs of high bail: Evidence from judge randomization. *The Journal of Legal Studies, 45*(2), 471-505. https://www.jstor.org/stable/26458538

Hager, E. (2019, March 14.). New York City's bail success story. *The Marshall Project*. https://www.themarshallproject.org/2019/03/14/new-york-city-s-bail-success-story

Hall, A. (2023, April 11.). Coffee shop set to close downtown Portland location due to 'extreme violence' and 'crime.' *Fox News*. https://www.foxnews.com/media/coava-coffee-close-downtown-portland-location-due-extreme-violence-crime

Hamilton, M. (2021). Evaluating algorithmic risk assessment. *New Criminal Law Review, 24*(2), 156-211. https://heinonline.org/HOL/P?h=hein.journals/bufcr24&i=159

Hanley, J. (2022, September 9.). State's Attorney: More than half of Winnebago County jail to walk out door Jan 1. *Rockford Register Star*. https://www.rrstar.com/story/opinion/columns/2022/09/09/states-attorney-illinois-safe-t-act-poses-serious-threat-to-public/67438927007/

Harmelin v. Michigan, 501 U.S. 957 (1991). https://supreme.justia.com/cases/federal/us/501/957/

Harriot, M. (2018, February 20.). Money bail might be the most racist, immoral part of America's criminal injustice system. *The Root*. https://www.theroot.com/money-bail-might-be-the-most-racist-immoral-part-of-am-1831241786

Harrison, K. (2018). SB10: Punishment before conviction? Alleviating economic injustice in California with bail reform. *The University of the Pacific Law Review, 49*(2), 533. https://search.ebscohost.com/login.aspx?direct=true&db=lgh&AN=130193934&site=ehost-live&scope=site

Harvard Law Review. (2018.) Bail reform and risk assessment: The cautionary tale of Federal sentencing. *Harvard Law Review, 131*(4), 1125+. https://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA572716380?u=vic_liberty

Henderson, J., and Palmer, J. P. (2002). Does more deterrence require more punishment? [or should the punishment fit the crime?] *European Journal of Law and Economics, 13*(2), 143-156. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fdoes-more-deterrence-require-punishment-should%2Fdocview%2F222691051%2Fse-2%3Faccountid%3D12085

Hensel, P. G. and Kacprzak, A. (2019). Curbing cyberloafing: Studying general and specific deterrent effects with field evidence. *European Journal of Information Systems, 30*(2), 219-235. https://doi-org.ezproxy.liberty.edu/10.1080/0960085X.2020.1756701

Hill, B. (2022, September 13.). Illinois mayor rips Gov. Pritzker over eliminating cash bail: 'He is not listening to us'. *Fox News*. https://www.foxnews.com/media/illinois-mayor-rips-gov-pritzker-eliminating-cash-bail-listening

Hirschfield, A., Birkin, M., Brunsdon, C., Malleson, N., and Newton, A. (2013). How places influence crime: The impact of surrounding areas on neighbourhood burglary rates in a British city. *Urban Studies Journal Limited, 51*(5), 1057-1072. https://doi.org/10.1177/0042098013492232

Hogan, B. & Campanile, C. (2020, January 31.). Assembly Democrats pushing Carl Heastie to change bail reform law. *New York Post.* https://nypost.com/2020/01/31/assembly-democrats-pushing-carl-heastie-to-change-bail-reform-law/

Hogan, B. and Golding, B. (2023, February 15.). Shoplifting epidemic costing NYC workers their jobs, Eric Adams tells Albany in bail reform plea. *New York Post*. https://nypost.com/2023/02/15/shoplifting-epidemic-costing-nyc-jobs-eric-adams-tells-albany/

Hogan, B. and Golding, B. (2021, December 9.). NY police officials, victims' families push pols to fix bail reform 'crisis.' *New York Post*. https://nypost.com/2021/12/09/get-rid-of-bail-let-judges-jail-dangerous-defendants-ny-police-chiefs/

Hopkins, B., Bains, C., and Doyle, C. (2018). Principles of pretrial release: Reforming bail without repeating its harms. *Journal of Criminal Law and Criminology, 108*(4).

https://link.gale.com/apps/doc/A581732604/LT?u=vic_liberty&sid=summon&xid=01a066a0.

Horn, D. (2004). Lockyer v. Andrade: California three strikes law survives challenge based on Federal law that is anything but "clearly established". *Journal of Criminal Law & Criminology, 94*(3), 687-722. https://doi.org/10.2307/3491395

Howe, S. W. (2014). The implications of incorporating the eighth amendment prohibition on excessive bail. *Hofstra Law Review, 43*(1), 1037-1085. https://heinonline.org/HOL/P?h=hein.journals/hoflr43&i=1

Hoylman, B. (2022, February 15.). Bail reform FAQs. *The New York State Senate.* https://www.nysenate.gov/newsroom/press-releases/brad-hoylman/bail-reform-faqs

Hoyt, G. (2021, September 8). Minnesota bail fund bails out another criminal who is now accused of murdering someone days after being released. *Law Enforcement Today*. https://www.lawenforcementtoday.com/minnesota-bail-fund-bails-out-man-accused-of-murder-days-later/

Hutto v. Davis, 454 U.S. 370 (1982). https://supreme.justia.com/cases/federal/us/454/370/

Inter-University Consortium for Political and Social Research. (2020a). National Crime Victimization Survey, [United States], 2017. *Bureau of Justice Statistics*. https://www.icpsr.umich.edu/web/NACJD/studies/36981

Inter-University Consortium for Political and Social Research. (2020a). National Crime Victimization Survey, [United States], 2018. *Bureau of Justice Statistics*. https://www.icpsr.umich.edu/web/NACJD/studies/37297

Inter-University Consortium for Political and Social Research. (2020c). National Crime Victimization Survey, [United States], 2019. *Bureau of Justice Statistics*. https://www.icpsr.umich.edu/web/NACJD/studies/37645

Jackson, P. (2018, February 21.). Krasner ends cash bail for certain crimes. *Philadelphia Tribune*. https://www.phillytrib.com/news/state_and_region/krasner-ends-cash-bail-for-certain-crimes/article_7f374d26-3365-5a57-9bb9-a50c5b8a1d28.html

Jacobs, B. A. (2010). Deterrence and deterrability. *Criminology, 48*(2), 417-441. https://doi-org.ezproxy.liberty.edu/10.1111/j.1745-9125.2010.00191.x

Jacques, S. and Allen, A. (2014). Bentham's sanction typology and restrictive deterrence: A study of young, suburban, middle-class drug dealers. *Journal of Drug Issues, 44*(2), 212-230. https://doi.org/10.1177/0022042613497936

Johnson, B. R. and Warchol, G. L. (2003). Bail agents and bounty hunters: Adversaries or allies of the justice system. *American Journal of Criminal Justice, 27*(2), 145-165. https://doi.org/10.1007/BF02885691

Jorgensen, I. and Smith, S. S. (2021). The current state of bail reform in the United States: Results of a landscape analysis across all 50 states. *Harvard University, John F. Kennedy School of Government*. https://dash.harvard.edu/bitstream/handle/1/37370366/RWP21-033_Smith.pdf?sequence=3

Kamisher, E. (2020, December 07). Newly elected Los Angeles DA will end cash bail in nation's largest prosecutor office. *The Appeal*. https://theappeal.org/newly-elected-los-angeles-da-will-end-cash-bail-in-nations-largest-prosecutor-office/

Kaste, M. (2021, November 25.). There's a backlash brewing against bail reform after the parade tragedy in Waukesha. *NPR*. https://www.npr.org/2021/11/25/1059019616/theres-a-backlash-brewing-against-bail-reform-after-the-parade-tragedy-in-waukes

Keenan, C. T. (2013, September.). We need more bail reform. *Pretrial Services Agency for the District of Columbia*. https://www.psa.gov/?q=node/390

Kelling, G. L. and Bratton, W. J. (1998). Declining crime rates: Insiders' views of the New York City story. *Journal of Criminal Law & Criminology, 88*(4), 1217-1231. https://doi.org/10.2307/1144255

Kelling, G. L. and Wilson, J. Q. (1982). Broken windows. *The Atlantic*. https://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/

Kent State University Libraries. (2022). SPSS tutorials: Paired samples *t* test. *Kent State University*. https://libguides.library.kent.edu/SPSS/PairedSamplestTest

Kerr, A. and Hooten, K. (2020a, September 16.). Bail fund promoted by Kamala Harris helped man accused of sexually penetrating a child. *The Daily Caller*. https://dailycaller.com/2020/09/16/kamala-harris-minnesota-bail-fund-accused-sexual-assault-child/

Kessler, D. and Levitt, S. D. (1999). Using sentence enhancements to distinguish between deterrence and incapacitation. *The Journal of Law & Economics, 42*(S1), 343-364. https://www.jstor.org/stable/10.1086/467428

Keyser, M. (2022, August 30). More research shows the success of Harris County's misdemeanor bail reform. *Arnold Ventures*. https://www.arnoldventures.org/stories/more-research-showing-the-success-of-harris-countys-misdemeanor-bail-reform

Kilmer, B. and Midgette, G. (2020). Criminal deterrence: Evidence from an individual-level analysis of 24/7 sobriety. *Journal of Policy Analysis and Management, 39*(3), 801-834. https://doi-org.ezproxy.liberty.edu/10.1002/pam.22217

Kimmel, B. (2022, January 24.). More from the street: Bail reform and the release of those who pose a threat to our city. *LaborPress.org*. https://www.laborpress.org/more-from-the-street-bail-reform-and-the-release-of-those-who-pose-a-threat-to-our-city/

Klein, M. (2022, November 26.). NYC convictions plummet, downgraded charges surge under Manhattan DA Bragg. *New York Post*. https://nypost.com/2022/11/26/convictions-plummet-downgraded-charges-surge-under-manhattan-da-bragg/

Kobin, B. (2018, August 26.). These Indiana counties stopped requiring bail, Here's how that worked. *Indianapolis Star*. https://www.indystar.com/story/news/2018/08/26/officials-pleased-bail-reform-effort-hamilton-county-hendricks-county-indiana-pretrial-risk-court/871229002/

Koepke, J. L. and Robinson, D. G. (2018). Danger ahead: Risk assessment and the future of bail reform. *Washington Law Review, 93*(4), 1725+. https://bi.gale.ezproxy.liberty.edu/global/article/GALE%7CA575196236?u=vic_liberty

Kohler-Hausmann, I. (2013). Misdemeanor justice: Control without conviction. *American Journal of Sociology, 119*(2), 351-393. https://www.jstor.org/stable/10.1086/674743

Kovandzic, T. V., Sloan III, J. J., and Vieraitis, L. M. (2004). "Striking out" as crime reduction policy: The impact of "three strikes" laws on crime rates in U.S. cities. *Justice Quarterly, 21*(2), 207-239. https://doi.org/10.1080/07418820400095791

Kriss, A. (2018, October 2.). Doing the mass bail out the right way. *Gotham Gazette*. https://www.gothamgazette.com/opinion/7968-how-to-do-the-mass-bail-out-the-right-way

Kuehl, S. and Solis, H. (2017, March 8.). Bail reform. *Los Angeles County Board of Supervisors*. http://file.lacounty.gov/SDSInter/bos/supdocs/112060.pdf

Ladegaard, I. (2018). We know where you are, what you are doing and we will catch you: Testing deterrence theory in digital drug markets. British Journal of Criminology, 58(2), 414-433. https://doi.org/10.1093/bjc/azx021

Landes, W. M. (1974). The bail system: An economic approach. In Becker, G.S. and Landes, W. M. *Essays in the Economics of Crime and Punishment* (pp. 135-163). National Bureau of Economic Research. https://www.nber.org/system/files/chapters/c3628/c3628.pdf

Lartey, J. (2020, April 23.). New York rolled back bail reform. What will the rest of the country do? *The Marshall Project*. https://www.themarshallproject.org/2020/04/23/in-new-york-s-bail-reform-backlash-a-cautionary-tale-for-other-states

Lee, H. (2017). Taking deterrence seriously: The wide-scope deterrence theory of punishment. *Criminal Justice Ethics, 36*(1), 2-24. https://doi.org/10.1080/0731129X.2017.1298879

Legal Information Institute. (2021a). Felony. *Cornell Law School*. https://www.law.cornell.edu/wex/felony

Legal Information Institute. (2021b). Misdemeanor. *Cornell Law School*. https://www.law.cornell.edu/wex/misdemeanor

Lehman, C. F. (2022, September 22.). Yes, New York's bail reform has increased crime. *City Journal*. https://www.city-journal.org/new-yorks-bail-reform-has-increased-crime

Lekhtman, A. (2020, April 19.). NY Gov. Cuomo signs away bail reforms despite COVID-19 decarceration calls. *Filter*. https://filtermag.org/ny-governor-cuomo-bail-reforms/

Leonardi, A. (2020, February 26.). Whistleblower claims on DC police downgrading crime appear to be corroborated by internal documents. *Washington Examiner.* https://www.washingtonexaminer.com/news/whistleblower-claims-dc-police-downgrading-crime-appear-to-be-corroborated-by-internal-documents

Lerner, K. (2019, September 30.). Nation's largest bail fund plans to stop bailing people out of jail. *The Appeal*. https://theappeal.org/nations-largest-bail-fund-plans-to-stop-bailing-people-out-of-jail/

Leslie, E. and Pope, N. G. (2017). The unintended impact of pretrial detention on case outcomes: Evidence from New York City arraignments. *Journal of Law and Economics, 60*(3), 529-557. https://web-p-ebscohost-com.ezproxy.liberty.edu/ehost/pdfviewer/pdfviewer?vid=2&sid=740c3bcb-6a91-4485-9b57-602c476961f9%40redis

Levin, S. (2021, March 7.). These US cities defunded police: 'We're transferring money to the community'. *The Guardian.* https://www.theguardian.com/us-news/2021/mar/07/us-cities-defund-police-transferring-money-community

Levitt, S. D. (1998). Why do increased arrest rates appear to reduce crime: Deterrence, incapacitation, or measurement error? *Economic Inquiry, 36*(3), 353-372. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fwhy-do-increased-arrest-rates-appear-reduce-crime%2Fdocview%2F200942227%2Fse-2%3Faccountid%3D12085

Lewis, R. C. (2022, January 4.). New data proves bail reform both worked and failed, depending on who you ask. *City & State New York.* https://www.cityandstateny.com/policy/2022/01/new-data-proves-bail-reform-both-worked-and-failed-depending-who-you-ask/360352/

Li, J. (2021, December 21.). New ACLU-PA report shows courts breaking the law with cash bail orders. *ACLU Pennsylvania*. https://www.aclupa.org/en/news/new-aclu-pa-report-shows-courts-breaking-law-cash-bail-orders

Lieb, D. (2014). Vindicating vindictiveness: Prosecutorial discretion and plea bargaining, past and future. *Yale Law Journal, 123*(4), 1014+. https://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA359333631?u=vic_liberty

Liu, P., Nunn, R., and Shambaugh, J. (2018). The economics of bail and pretrial detention. *The Hamilton Project*. https://www.hamiltonproject.org/assets/files/BailFineReform_EA_121818_6PM.pdf

Lockyer v. Andrade, 538 U.S. 63 (2003). https://supreme.justia.com/cases/federal/us/538/63/case.pdf

Loewenstein, A. B. (2001). Judicial review and the limits of prosecutorial discretion. *The American Criminal Law Review, 38*(2), 351-372. https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/judicial-review-limits-prosecutorial-discretion/docview/230346961/se-2

Los Angeles County District Attorney's Office. (n.d.) Office overview. *Los Angeles County District Attorney's Office*. https://da.lacounty.gov/about/office-overview

Los Angeles Times Editorial Board. (2020, November 17.). Editorial: Time for L.A. County to go its own way on bail. *Los Angeles Times*. https://www.latimes.com/opinion/story/2020-11-17/bail-los-angeles-county

Loughran, T., Paternoster, R., Piquero, A. R., and Pogarsky, G. (2011). Elaborating the individual difference component in deterrence theory. *Annual Review of Law and Social Sciences, 7*, 335-360. https://doi.org/10.1146/annurev-lawsocsci-102510-105404

Lowery, A. (2020, June 5.). Defund the police. *The Atlantic.* https://www.theatlantic.com/ideas/archive/2020/06/defund-police/612682/

Lozano, A. V. and Mayk, L. (2019, June 20.). U.S. Attorney McSwain, Philadelphia District Attorney Krasner clash despite shared vision for safer city. *NBC Philadelphia.* https://www.nbcphiladelphia.com/news/local/us-attorney-william-mcswain-philadelphia-district-attorney-larry-krasner-clash-despite-shared-vision-for-safer-city/185825/

Lybrand, H. and Subramaniam, T. (2021, July 7.). Fact-checking claims bail reform is driving increase in violent crime. *CNN.com*. https://www.cnn.com/2021/07/07/politics/bail-reform-violent-crime-fact-check/index.html

Lyons, K. (2022, August 7.). New Jersey mostly got rid of cash bail. Why hasn't Connecticut? *The CT Mirror*. https://www.ctpublic.org/news/state/2022-08-07/new-jersey-mostly-got-rid-of-cash-bail-why-hasnt-connecticut

MacDonald, T. (2019, June 18.). Philly DA says it's not his fault violence is getting worse. *WHYY.org.* https://whyy.org/articles/philly-da-says-its-not-his-fault-violence-is-getting-worse/

Magdaleno, J. (2021, December 17.). Marion Superior Court ends support for The Bail Project, asks for more data on defendants. *Indianapolis Star*. https://news.yahoo.com/marion-superior-court-ends-support-223919844.html

Manganis, J. (2019, January 14.). Main aided by bail fund arrested 2 days later. *Salem News*. https://www.salemnews.com/news/local_news/man-aided-by-bail-fund-arrested-2-days-later/article_cdf0151e-8abe-5c5d-a63a-df465b8f55ad.html

Mangual, R. A. (2020, April 16.). Not quite fixed. *City Journal*. https://www.city-journal.org/article/not-quite-fixed

Marcelo, P. (2020, August 12.). Bail fund answers criticism over freeing convicted rapist. *ABC News*. https://abcnews.go.com/US/wireStory/bail-fund-answers-criticism-freeing-convicted-rapist-72337580

Martin, J. D. and Gray, L. N. (1969). Punishment and deterrence: Another analysis of Gibbs' data. *Social Science Quarterly, 50*(2), 389-395. https://www.jstor.org/stable/42858514

Marwah, S. and Joplin, J. W. (2020). Modernizing and activating Beccaria's proportionality. *Journal of Theoretical and Philosophical Criminology, 12*(1), 37-51. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fmodernizing-activating-beccarias-proportionality%2Fdocview%2F2403116109%2Fse-2%3Faccountid%3D12085

Matthews, S. K. and Agnew, R. (2008). Extending deterrence theory: Do delinquent peers condition the relationship between perceptions of getting caught and offending? *Journal of Research in Crime and Delinquency, 45*(2). Https://doi-org.ezproxy.liberty.edu/10.1177/0022427807313702

Mauer, M. (1999). Why are tough on crime policies so popular? *Stanford Law & Policy Review, 11*(1), 9-22. https://heinonline.org/HOL/P?h=hein.journals/stanlp11&i=13

Maxwell, S. R. (1999). Examining the congruence between the predictors of ROR and failure to appear. *Journal of Criminal Justice, 27*, 127-141. https://doi.org/10.1016/S0047-2352(98)00052-X

Mayer, P. (2023). Justice, safety, and prosperity: New York's bail reform success story. *Fwd.us*. https://www.fwd.us/news/new-york-bail-reform-success-story/

McAllister, T. (2017, March 8.). LA jails 'debtor's prison': Rich make bail, poor doomed to trial incarceration. *Mynewsla.com*. https://mynewsla.com/government/2017/03/08/la-jails-debtors-prison-rich-make-bail-poor-doomed-to-trial-incarceration/

McCormick, A. (2022, August 19.). Staffing shortage in the Philadelphia Police Department becoming a crisis. *6ABC.com*. https://6abc.com/philadelphia-police-staffing-shortage-philly-officer-shortages-city-controller-rebecca-rhynhart/12143591/

McCoy, C. (2022, February 14.). Don't blame bail reform for a rise in violent crime – just fix it. *Bloomberg Law*. https://news.bloomberglaw.com/us-law-week/dont-blame-bail-reform-for-a-rise-in-violent-crime-just-fix-it

McCullough, J. (2021, August 27.). Texas lawmakers pass rewrite of state's bail system aimed at keeping more people behind bars who can't post cash. *The Texas Tribune*. https://www.texastribune.org/2021/08/27/texas-bail-legislature/

McEvoy, J. (2020, August 13.). At least 13 cities are defunding their police departments. *Forbes.* https://www.forbes.com/sites/jemimamcevoy/2020/08/13/at-least-13-cities-are-defunding-their-police-departments/?sh=2a2dfd929e3f

McKinley, J., Ashford, G., and Meko, H. (2023, April 28.). New York will toughen contentious bail law to give judges more discretion. *The New York Times*. https://www.nytimes.com/2023/04/28/nyregion/bail-reform-ny.html

McNary, S. (2020, February 12.). LA County will try bail reform, but critics say it's going about it all wrong. *LAist.com*. https://laist.com/news/los-angeles-county-la-board-of-supervisors-bail-reform-pilot-project

McQuaid, R. (2016, December 12.). Indianapolis Mayor Joe Hogsett unveils criminal justice reform and new jail project. *Fox 59*. https://fox59.com/news/indianapolis-mayor-joe-hogsett-unveils-criminal-justice-reform-and-new-jail-project/

Mellins, S. (2021, April 29.). How Pittsburgh activists are seizing a rare chance to reshape courts. *The Appeal*. https://theappeal.org/politicalreport/pittsburgh-activists-reshape-courts/

Mendes, S. M. (2004). Certainty, severity, and their relative deterrent effects: Questioning the implications of the role of risk in criminal deterrence policy. *The Policy Studies Journal, 32*(1), 59-74. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fcertainty-severity-their-relative-deterrent%2Fdocview%2F210559431%2Fse-2%3Faccountid%3D12085

Menge, M. (2022, February 25.). Indiana General Assembly closer to passing bail reform. *The Center Square*. https://www.thecentersquare.com/indiana/indiana-general-assembly-closer-to-passing-bail-reform/article_62b8364c-966a-11ec-a86f-97839c1a9a7d.html

Micek, J. L. (2022, January 3.). Report: unaffordable cash bail is 'a statewide crisis' in Pa.| Monday morning coffee. *Pennsylvania Capital-Star*. https://www.penncapital-

star.com/commentary/report-unaffordable-cash-bail-is-a-statewide-crisis-in-pa-monday-morning-coffee/

Miceli, T. J. (2018). On proportionality of punishments and the economic theory of crime. *European Journal of Law and Economics, 46*(3), 303-314. https://doi.org/10.1007/s10657-016-9524-5

Miceli, T., Segerson, K., and Earnhart, D. (2022). The role of experience in deterring crime: A theory of specific versus general deterrence. *Economic Inquiry, 60*(4). https://doi-org.ezproxy.liberty/edu/10.1111/ecin.13083

Miletich, M. (2022, January 20.). Illinois House Republicans push unlikely repeal of SAFE-T act. *KFVS*. https://www.kfvs12.com/2022/01/21/illinois-house-republicans-push-unlikely-repeal-safe-t-act/

Miller, J. R. (2021, September 8.). Bail fund backed by Kamala Harris freed Minneapolis man charged with murder. *New York Post*. https://nypost.com/2021/09/08/bail-fund-backed-by-kamala-harris-freed-man-charged-with-murder/

Minnesota Freedom Fund. (n.d.a). Minnesota Freedom Fund. *Minnesota Freedom Fund*. https://mnfreedomfund.org/

Minnesota Freedom Fund. (n.d.b). Frequently asked questions. *Minnesota Freedom Fund*. https://mnfreedomfund.org/frequently-asked-questions

Minnesota Freedom Fund. (n.d.c). Mission. *Minnesota Freedom Fund*. https://mnfreedomfund.org/mission

Minnesota Freedom Fund. (n.d.d). Frequently asked questions. *Minnesota Freedom Fund*. https://mnfreedomfund.org/frequently-asked-questions

Monaghan, J., van Holm, E. J., and Surprenant, C. W. (2022). Get jailed, jump bail? The impacts of cash bail on failure to appear and re-arrest in Orleans Parish. *American Journal of Criminal Justice, 47*(1), 56-74. https://doi.org/10.1007/s12103-020-09591-9

Moore, T. (2020, June 30.). NYPD commish, chief of department blame shooting spike on bail reform, coronavirus, protests. *New York Post*. https://nypost.com/2020/06/30/nypd-chief-blames-shooting-spike-on-bail-reform-coronavirus-and-protests/

Morrow, W. J., Vickovic, S. G., Dario, L. M., and Shjarback, J. A. (2019). Examining a Ferguson Effect on college students' motivation to become police officers. *Journal of Criminal Justice Education, 30*(4), 585-605. https://doi-org.ezproxy.liberty.edu/10.1080/10511253.2019.1619793

Moss, J. (2023, April 2.). Public defenders Matt Dugan, Patrick Sweeney seek to bring reform to local justice system. *Pittsburgh Union Progress*. https://www.unionprogress.com/2023/04/02/public-defenders-matt-dugan-patrick-sweeney-seek-to-bring-reform-to-local-justice-system/

Myers, J. (2019, October 1.). California voters are divided over bail reform, poll finds. *Los Angeles Times* https://www.latimes.com/california/story/2019-10-01/california-voters-divided-future-of-cash-bail-2020-election-poll

Nagin, D. S. (1998). Criminal deterrence research at the outset of the twenty-first century. *Crime and Justice, 23*, 1-42. https://www.jstor.org/stable/1147539

Nagin, D. S. (2013). Deterrence in the twenty-first century. Crime and Justice, 42(1), 199-263. https://www.jstor.org/stable/10.1086/670398

Nagin, D. S. and Pogarsky, G. (2001). Integrating celerity, impulsivity, and extralegal sanction threats into a model of general deterrence: Theory and evidence. *Criminology, 39*(4), 865-891. https://doi-org.ezproxy.liberty.edu/10.1111/j.1745-9125.2001.tb00943.x

Nagin, D. S. and Pogarsky, G. (2003). An experimental investigation of deterrence: Cheating, self-serving bias, and impulsivity. *Criminology, 41*(1), 167-193. https://doi.org/10.1111/j.1745-9125.2003.tb00985.x

Nagin, D. S., Solow, R. M., and Lum, C. (2015). Deterrence, criminal opportunities, and police. *Criminology, 53*(1), 74-100. https://doi.org/10.1111/1745-9125.12057

National Bail Fund Network. (n.d.). National Bail Fund Network. *Community Justice Exchange*. https://www.communityjusticeexchange.org/en/nbfn-directory

Nelson, S. (2022, June 29.). Judge blocks Bail Project's request to pause new law as case continues in court. *Indianapolis Star.* https://www.indystar.com/story/news/crime/2022/06/29/indiana-charitable-bail-law-injunction-denied-bail-project-case/7770174001/

NeSmith, R. C. (2016). Tough on crime or tough luck for the incarcerated? Exploring the adverse psychological impacts of mandatory minimum sentencing and pushing for action. *Law & Psychology Review, 39*, 253-266. https://search-ebscohost-com.ezproxy.liberty.edu/login.aspx?direct=true&db=i3h&AN=108771986&site=ehost-live&scope=site

Nickeas, P., Jones, J., Campbell, J., and Krishnakumar, P. (2021, May 25.). Defund the police encounters resistance as violent crime spikes. *CNN*. https://www.cnn.com/2021/05/25/us/defund-police-crime-spike/index.html

Nimon, K. F. and Oswald, F. L (2013). Understanding the results of multiple linear regression: Beyond standardized regression coefficients. *Organizational Research Methods, 16*(4). https://doi-org.ezproxy.liberty.edu/10.1177/1094428113493929

NYPD. (2020, July 10.). Bail reform. *New York City Police Department*. https://www1.nyc.gov/site/nypd/news/p0710a/bail-reform

NYU Law. (2016, March 2.). In Brennan Lecture, DC Chief Justice Eric Washington spotlights successes on long road to bail reform. *New York University, School of Law*. https://www.law.nyu.edu/news/Brennan-Lecture-Eric-Washington-DC-Court-of-Appeals-bail-reform

ODonnell v. Harris County (2018.). https://cases.justia.com/federal/appellate-courts/ca5/18-20466/18-20466-2018-08-14.pdf?ts=1534289417

Obagbuwa, I. C. and Abidoye, A. P. (2021). South Africa crime visualization, Trends analysis, and Prediction using machine learning linear regression technique. *Applied Computational Intelligence and Soft Computing, 2021*. https://doi.org/10.1155/2021/5537902

O'Brien, K. (2022, April 11.). New York budget brings changes to controversial bail reform laws. *WCAX.com*. https://www.wcax.com/2022/04/11/new-york-budget-brings-changes-controversial-bail-reform-laws/

Office of Assemblyman Doug Smith. (2020, January 17.). *Smith proud to attend assembly minority press conference to lead call for bail reform appeal* [Press release]. https://assembly.state.ny.us/mem/Doug-Smith/story/90542

Office of Assemblyman Joseph M. Giglio. (2020, February 4.). *Area legislators, Local law enforcement hold 'repeal bail reform' rally at the State Capitol* [Press release]. https://nyassembly.gov/mem/Joseph-M-Giglio/story/90762

Office of Assembly Speaker Carl E. Heastie. (2018, June 12.). *Assembly continues fight for criminal justice reform* [Press release]. https://assembly.state.ny.us/Press/files/20180612.php

Office of Former New York State Senator Fred Akshar. (2020, February 4.). *2.4.20 – Officials from across NY rally to repeal bail reform* [Press release]. https://www.nysenate.gov/newsroom/press-releases/fred-akshar/2420-officials-across-ny-rally-repeal-bail-reform

Office of Nancy Skinner Representing Senate District 09. (2021, January 27). *Lawmakers introduce bail reform measure* [Press release]. https://sd09.senate.ca.gov/news/20210127-lawmakers-introduce-bail-reform-measure

Office of the New York State Comptroller. (2023, May 18). *DiNapoli releases analysis of 2023-24 enacted state budget* [Press release]. https://www.osc.state.ny.us/press/releases/2023/05/dinapoli-releases-analysis-2023-24-enacted-state-budget

Office of New York State Senator George M. Borrello. (2022, February 11.) *Sen. Borrello calls for repeal of bail 'reforms' and restoration of judicial discretion* [Press release]. https://www.nysenate.gov/newsroom/press-releases/george-m-borrello/sen-borrello-calls-repeal-bail-reforms-and-restoration

Office of New York State Senator Michael Gianaris. (2019, March 31.). *Senate deputy leader Gianaris hails significant bail reform* [Press release].

https://www.nysenate.gov/newsroom/press-releases/michael-gianaris/senate-deputy-leader-gianaris-hails-significant-bail-reform

Office of Public Affairs. (2020, December 29.). *Justice Department announces closing of investigation into 2014 officer involved shooting in Cleveland, Ohio.* [Press Release]. https://www.justice.gov/opa/pr/justice-department-announces-closing-investigation-2014-officer-involved-shooting-cleveland

Office of the Texas Governor. (2021, August 31.). *Governor Abbott statement on passage of bail reform legislation* [Press release]. https://gov.texas.gov/news/post/governor-abbott-statement-on-passage-of-bail-reform-legislation

Orso, A. (2017, May 10.). The procrastinator's guide to the May 2017 Philadelphia primary election. *BillyPenn.com*. https://billypenn.com/2017/05/10/the-procrastinators-guide-to-the-may-2017-philadelphia-primary-election/

Orso, A. and Briggs, R. W. (2022, August 29.). Philadelphia's police department is short 1,300 officers. *Governing: The Future of States and Localities*. https://www.governing.com/work/philadelphias-police-department-is-short-1-300-officers

Otterbein, H. (2017, May 16.). Progressive firebrand Larry Krasner wins District Attorney primary. *Philadelphia Magazine.* https://www.phillymag.com/news/2017/05/16/larry-krasner-wins-district-attorney-race/

Pagones, S. (2022, April 7.). Chicago Police staffing the lowest in recent history as department reels from 'generation resignation'. *Fox News*. https://www.foxnews.com/us/chicago-police-crime-statistics-staffing-resignation-retirements

Paternoster, R. (2010). How much do we really know about criminal deterrence? *Journal of Criminal Law and Criminology, 100*(3), 765-824. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fhow-much-do-we-really-know-about-criminal%2Fdocview%2F858279264%2Fse-2%3Faccountid%3D12085

Paternoster, R. and Piquero, A. (1995). Reconceptualizing deterrence: An empirical test of personal and vicarious experiences. *Journal of Research in Crime and Delinquency, 32*(3), 251-286. https://heinonline.org/HOL/P?h=hein.journals/jrcd32&i=236

Patterson, T. and Guevara, M. (2021). What if? 10 questions for sparking local pretrial change. *Pretrial Justice Institute*. https://static1.squarespace.com/static/6018b6a3956c02769138dd6f/t/618e84ba0d01f25f634f93e7/1636730043994/What+IF_11.11.21.pdf

Pennsylvania Office of Victim Services. (2022a). Glossary. *Pennsylvania Office of Victim Services.* https://pcv.pccd.pa.gov/Pages/Glossary.aspx#AB

Pennsylvania Office of Victim Services. (2022b). The suspect goes through the bail process. *Pennsylvania Office of Victim Services*. https://pcv.pccd.pa.gov/available-services/Pages/The-Suspect-Goes-Through-the-Bail-Process.aspx

Pennsylvania Office of Victim Services. (2022c). The suspect is arrested. *Pennsylvania Office of Victim Services.* https://pcv.pccd.pa.gov/available-services/Pages/The-Suspect-is-Arrested.aspx

Pennsylvania State Police. (2023). PSP Community Access to Information. *Pennsylvania State Police*. https://reports.py.pa.gov/psp/powerbiui

Pereira, I. (2020, July 1.). NYC cuts $1B from police budget amid calls for reform. ABC News. https://abcnews.go.com/US/nyc-cuts-1b-police-budget-amid-calls-reform/story?id=71552471

Petis, L. (2022, June 13.). Criminal justice reform efforts and rise in crime: Spotlight on Allegheny County, PA. *R Street*. https://www.rstreet.org/commentary/criminal-justice-reform-efforts-and-rise-crime-spotlight-on-allegheny-county-pa/

Philadelphia District Attorney's Office. (2022). Download data. *Philadelphia District Attorney's Office*. https://github.com/phillydao/phillydao-public-data/raw/master/docs/data/arrest_data_daily_citywide.csv

Philadelphia Police Department. (2022). About the department. *Philadelphia Police Department*. https://www.phillypolice.com/about/index.html

Philadelphia Police Department. (2023). Salary & benefits. *JoinPhillyPD.com*. https://joinphillypd.com/salary-benefits/overview

Phillips, L. and Votey Jr., H. L. (1972). An economic analysis of the deterrent effect of law enforcement on criminal activity. *The Journal of Criminal Law, Criminology, and Police Science, 63*(3), 330-342. https://doi-org.ezproxy.liberty.edu/10.2307/1142056

Pickett, J. T., Roche, S. P., and Pogarsky, G. (2018). Toward a bifurcated theory of emotional deterrence. *Criminology, 56*(1), 27-58. https://doi.org/10.1111/1745-9125.12153

Piquero, A. R., Paternoster, R., Pogarsky, G., and Loughran, T. (2011). Elaborating the individual difference component in deterrence theory. *Annual Review of Law and Social Science, 7*, 335-360. https://doi.org/10.1146/annurev-lawsocsci-102510-105404

Pogarsky, G. (2002). Identifying 'deterrable' offenders: Implications for research on deterrence. *Justice Quarterly, 19*(3), 431-452. https://doi.org/10.1080/07418820200095301

Pohl, J. (2020, November 6.). California's far left activists shocked they beat Prop. 2. What's the future of bail now? *The Sacramento Bee.* https://www.sacbee.com/news/politics-government/election/article246968937.html

Prater, N. (2022, April 1.). How New York's bail-reform law became a political lightning rod. *New York*. https://nymag.com/intelligencer/2022/04/how-new-yorks-bail-law-became-a-political-lightning-rod.html

Pretrial Justice Institute. (2022a). What we do. *Pretrial Justice Institute.* https://www.pretrial.org/mission

Pretrial Justice Institute. (2022b). Pretrial justice institute. *Pretrial Justice Institute*. https://www.pretrial.org/

Prison Policy Initiative. (n.d.) About the Prison Policy Initiative. *Prison Policy Initiative.* https://www.prisonpolicy.org/about.html

Puit, G. (2021, March 3.). Las Vegas police retirements up 37% in 2020. *Las Vegas Review-Journal*. https://www.reviewjournal.com/local/local-las-vegas/las-vegas-police-retirements-up-37-in-2020-2293483/

Pyrooz, D. C., Decker, S. H., Wolfe, S. E., and Shjarback, J. A. (2016). Was there a Ferguson Effect on crime rates in large U.S. cities. *Journal of Criminal Justice, 46*, 1-8. https://doi.org/10.1016/j.jcrimjus.2016.01.001

Quinn, J. (2022, January 21.). Here's the real cost – in hard numbers – of those disastrous bail-'reform' laws. *New York Post*. https://nypost.com/2022/01/21/heres-the-real-cost-of-nys-disastrous-bail-reform-laws/

Ramello, G. B. and Marciano, A. (2018). Cesare Beccaria: Back to the future of law and economics. *European Journal of Law and Economics, 46*(3), 271-274. http://dx.doi.org.ezproxy.liberty.edu/10.1007/s10657-018-9603-x

Rayman, G. (2012, September 18.). New evidence emerges about police downgrading of crimes. *The Village Voice*. https://www.villagevoice.com/2012/09/18/new-evidence-emerges-about-police-downgrading-of-crimes/

Redman, H. (2022, January 11.). Bail reform debate proceeds without data following Waukesha tragedy. *Wisconsin Examiner*. https://wisconsinexaminer.com/2022/01/11/bail-reform-debate-proceeds-without-data-following-waukesha-tragedy/

Reese v. United States, 76 U.S. 13 (1869). https://supreme.justia.com/cases/federal/us/76/13/

Reichert, J., Zivic, A., and Sheley, K. (2021, July 15.). The 2021 SAFE-T act: ICJIA roles and responsibilities. *Illinois Criminal Justice Information Authority*. https://icjia.illinois.gov/researchhub/articles/the-2021-safe-t-act-icjia-roles-and-responsibilities

Reisman, N. (2023, April 28.). Once again, New York's bail law is set to change. *NY State of Politics.* https://spectrumlocalnews.com/nys/central-ny/ny-state-of-politics/2023/04/28/once-again--new-york-s-bail-law-is-set-to-change

Rivera, M., Horng, E., and Piekos, C. (2022, December 29.). Illinois bail reform change blocked after judge rules portion of SAFE-T Act unconstitutional. *ABC 7 Chicago*. https://abc7chicago.com/illinois-safe-t-act-safe-t-lawsuit-safety-cash-bail/12626684/

Rosenfeld, R. and Wallman, J. (2019). Did de-policing cause the increase in homicide rates? *Criminology & Public Policy, 18*(1), 51-75. https://doi-org.ezproxy.liberty.edu/10.1111/1745-9133.12414

Rummel v. Estelle, 445 U.S. 263 (1980). https://supreme.justia.com/cases/federal/us/445/263/

Ryckaert, V. (2021, December 17.). Mom wants The Bail Project reined in after her son was gunned down in Indianapolis. *WRTV.com*. https://www.wrtv.com/news/local-news/crime/mom-wants-the-bail-project-reined-in-after-her-son-was-gunned-down-in-indianapolis

Sacks, M. and Ackerman, A. R. (2014). Bail and sentencing: Does pretrial detention lead to harsher punishment? *Criminal Justice Policy Review, 25*(1), 59-77. https://doi.org/10.1177/0887403412461501

Salem, R. G. and Bowers, W. J. (1970). Severity of formal sanctions as a deterrent to deviant behavior. *Law and Society Review, 5*(1), 21. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fseverity-formal-sanctions-as-deterrent-deviant%2Fdocview%2F1297909918%2Fse-2%3Faccountid%3D12085

Sampson, R. J. and Raudenbush, S. W. (2004). Seeing disorder: Neighborhood stigma and the social construction of "broken windows". *Social Psychology Quarterly, 67*(4). https://doi-org.ezproxy.liberty.edu/10.1177/019027250406700401

Sanchez, C. (2020, June 8.). As donations pour in, bail fund organizers want to overhaul the system. *Harper's Bazaar*. https://www.harpersbazaar.com/culture/politics/a32782804/bail-funds-george-floyd-protests-pretrial-detention/

Sarat, A. and Clarke, C. (2008). Beyond discretion: Prosecution, the logic of sovereignty, and the limits of law. *Law & Social Inquiry, 33*(2), 387-416. https://heinonline.org/HOL/P?h=hein.journals/lsociq33&i=391

Sasko, C. (2018, February 21.). DA Krasner will drop cash bail for most non-violent crimes. *Philadelphia Magazine.* https://www.phillymag.com/news/2018/02/21/krasner-cash-bail-reform/

Sawyer, W. and Wagner, P. (2022, March 14.). Mass incarceration: The whole pie 2022. *Prison Policy Initiative.* https://www.prisonpolicy.org/reports/pie2022.html

Schnur, S. (2021, May 27.). Police blame Floyd case, extra scrutiny for drop in recruits. *Las Vegas News-Journal*. https://www.reviewjournal.com/crime/police-blame-floyd-case-extra-scrutiny-for-drop-in-recruits-2364590/

Schnacke, T. R. (2018). A brief history of bail. *The Judges' Journal, 57*(3). http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Fbrief-history-bail%2Fdocview%2F2111598321%2Fse-2%3Faccountid%3D12085

Schow, A. (2021, April 24.). Philadelphia sees looming police shortage as officers file for retirement and young people aren't signing up. *The Daily Wire.* https://www.dailywire.com/news/philadelphia-sees-looming-police-shortage-as-officers-file-for-retirement-and-young-people-arent-signing-up

Scurich, N. and Krauss, D. A. (2020). Public's views of risk assessment algorithms and pretrial decision making. *Psychology, Public Policy, and Law, 26*(1), 1-9. https://dx.doi.org/10.1037/law0000219

Schultz, J. D. (2019, June 27.). The disastrous consequences of DA Larry Krasner's 'reforms'. *Philadelphia Magazine.* https://www.phillymag.com/news/2019/06/27/larry-krasner-reforms-philadelphia/

Schutte, F. H. and Breetzke, G. D. (2018). The influence of extreme weather conditions on the magnitude and spatial distribution of crime in Tshwane (2001-2006). *South African Geographical Journal, 100*(3), 364-377. https://doi.org/10.1080/03736245.2018.1498384

Seiden, M. (2021, February 22.). Does Atlanta have enough police? Channel 2 investigation digs into the numbers. *WSB-TV.* https://www.wsbtv.com/news/local/atlanta/2-investigates-nearly-200-apd-officers-retired-resigned-or-were-terminated-last-year/RMUOGJBOPFED3NBLPK3ONJA2WQ/

Sexton, A. (2023, April 10.). Residents near site of man's killing urge lawmakers to act. *WMUR9*. https://www.wmur.com/article/manchester-stabbing-bail-reform-41023/43557914

Sgueglia, K. and Andrew, S. (2020, July 1.). New York Police Department's budget has been slashed by $1 billion. *CNN.com.* https://www.cnn.com/2020/07/01/us/new-york-budget-nypd-1-billion-cut-trnd/index.html

Shannon, S. K., Uggen, C., Schnittker, J., Thompson, M., Wakefield, S. (2017). The growth, scope, and spatial distribution of people with felony records in the United States, 1948-2010. *Demography, 54*(5), 1795-1818. https://doi.org/10.1007/s13524-017-0611-1

Shavell, S. (1992). A note on marginal deterrence. *International Review of Law and Economics, 12*(3), 345-355. https://doi.org/10.1016/0144-8188(92)90013-H

Shaw, J. (2021, July 18.). The Atlanta police exodus continues apace. *Hot Air*. https://hotair.com/jazz-shaw/2021/07/18/the-atlanta-police-exodus-continues-apace-n402894

Sheer, L. B. (1998). Prosecutorial discretion. *Georgetown Law Journal*, *86*(5), 1353-1365. https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/prosecutorial-discretion/docview/231485161/se-2

Sherman, J. and Abrams, L. (2018, August 17.). The bail system is racist and unjust. It needs to be reformed. *Real Clear Policy.* https://www.realclearpolicy.com/articles/2018/08/17/the_bail_system_is_racist_and_unjust_it_needs_to_be_reformed_110764.html#!

Sherman, L. W. (1990). Police crackdowns: Initial and residual deterrence. *Crime and Justice, 12*, 1-48. https://www.jstor.org/stable/1147437

Sherman, L. W. (1993). Defiance, deterrence, and irrelevance: A theory of the criminal sanction. *Journal of Research in Crime and Delinquency, 30*(4), 445-473. https://heinonline.org/HOL/P?h=hein.journals/jrcd30&i=417

Simon, J. (2018, October 14.). Adjusting the scales: The elimination of cash bail. *University of Cincinnati Law Review.* https://uclawreview.org/2018/10/14/adjusting-the-scales-the-elimination-of-cash-bail/

Sklansky, D. A. (2016). The nature and function of prosecutorial power. *The Journal of Criminal Law & Criminology, 106*(3), 473-520. https://www.jstor.org/stable/26404025

Smith, K. (2022, January 30.). Times Square Rite Aid closes after $200K in shoplifting losses. *National Review*. https://www.nationalreview.com/corner/times-square-rite-aid-closes-after-200k-in-shoplifting-losses/

Soares, D. (2019, June 16.). The Legislature endangered the public by botching criminal-justice reform. *New York Post.* https://nypost.com/2019/06/16/the-legislature-endangered-the-public-by-botching-criminal-justice-reform/

Solem v. Helm, 463 U.S. 277 (1983). https://supreme.justia.com/cases/federal/us/463/277/

Solender, A. and Sandler, R. (2020, May 30.). Minnesota freedom fund raises $20 million in 4 days amid George Floyd protests. *Forbes.* https://www.forbes.com/sites/andrewsolender/2020/05/30/minnesota-freedom-fund-raises-20-million-in-4-days-amid-george-floyd-protests/

Solomon, D. G. (2019). Lock 'em up and set them free? How to reconcile tough-on-crime sentencing policies with justice reinvestment in Maryland. *Washington University Journal of Law & Policy, 59*. https://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA601436504?u=vic_liberty

Solomon, J. (2023, May 2.). Understanding the latest changes to New York's bail laws. *The Times Union*. https://www.timesunion.com/state/article/understanding-latest-changes-new-york-s-bail-laws-18061776.php

Solow-Niederman, A., Choi, Y., and Van den broeck, G. (2019). The institutional life of algorithmic risk assessment. *Berkeley Technology Law Journal, 34*(3), 705-744. https://heinonline.org/HOL/P?h=hein.journals/berktech34&i=759

Somerville, P. (2009). Understanding community policing. *Policing, 32*(2), 261-277. https://doi.org/10.11081363951091095817 2

Spector, J. and Gronewold, A. (2022, April 11.). New York democrats pare back nation-leading bail reform amid crime wave. *Politico.com.* https://www.politico.com/news/2022/04/11/new-york-democrats-pare-back-nation-leading-bail-reform-amid-crime-spikes-and-election-fights-00024361

Stack v. Boyle, 342 U.S. 1 (1951). https://supreme.justia.com/cases/federal/us/342/1/

Stafford, M. C. and Warr, M. (1993). A reconceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency, 30*(2), 123-135. https://heinonline.org/HOL/P?h=hein.journals/jrcd30&i=114

State of Illinois. (2022, December 6.). *Governor Pritzker Signs SAFE-T Act Amendment*. [Press release] https://www.illinois.gov/news/press-release.25766.html

State of Wisconsin v. Eric L. Loomis, 2015AP157-CR. https://cases.justia.com/wisconsin/supreme-court/2016-2015ap000157-cr.pdf?ts=1468415026

Stevenson, M. (2018a). Distortion of justice: How the inability to pay bail affects case outcomes. *Journal of Law, Economics & Organization, 34*(4), 511-542. https://10.1093/jleo/ewy019

Stevenson, M. (2018b). Assessing risk assessment in action. *Minnesota Law Review, 103*(1), 303-384. https://search.ebscohost.com/login.aspx?direct=true&db-lgh&AN=13377683&site=ehost-live&scope=site

Stevenson, M. and Mayson, S. (2018). The scale of misdemeanor justice. *Boston University Law Review, 98*(3), 731-777. https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/scholarly-journals/scale-misdemeanor-justice/docview/2115130199/se-2

Stocker, A. (2021, August 18.). Amid pandemic spike in shootings, Rockland lawmaker moves to scale back New York bail law. *Lohud.com*. https://www.lohud.com/story/news/2021/08/18/amid-spike-shootings-rockland-democrat-senator-elijah-melnick-moves-scale-back-ny-bail-law/8185558002/

Stringer, R. J. (2020). Drunk driving and deterrence: Exploring the reconceptualized deterrence hypothesis and self-reported drunk driving. *Journal of Crime and Justice, 44*(3), 316-331. https://doi-org.ezproxy.liberty.edu/10.1080/0735648X.2020.1795903

Sun-Times/NBC Chicago. (2023, March 21.). What's next for the SAFE-T Act after Illinois Supreme Court hears arguments. *NBC Chicago*. https://www.nbcchicago.com/news/local/whats-next-for-the-safe-t-act-after-illinois-supreme-court-hears-arguments/3100582/

Sverdlik, S. (2019). Bentham on temptation and deterrence. *Utilitas, 31*(3), 246-261. https://doi.org/10.1017/S0953820819000104

Tapp, T. (2020, June 3.). Los Angeles Mayor Eric Garcetti, city officials cutting $100 million-$150 million from LAPD budget, funds to be reinvested in communities of color. *Deadline*. https://deadline.com/2020/06/los-angeles-mayor-eric-garcetti-city-officials-cutting-100-150-million-from-lapd-budget-funds-to-be-reinvested-in-communities-of-color-1202950811/

Task Force on Fair Justice for All. (2016). Justice for all: Report and recommendations of the Task Force on Fair Justice for All: Court-ordered fines, penalties, fees, and pretrial release policies. *Arizona Supreme Court*. https://www.azcourts.gov/Portals/74/TFFAIR/Reports/FINAL%20FairJustice%20Aug%2012-final%20formatted%20versionRED%20(002).pdf?ver=qLaRUpeufgVa_U6HFSBL9w%3d%3d

Taylor v. Taintor, 83 U.S. 366 (1872). https://supreme.justia.com/cases/federal/us/83/366/

Team PJI. (2022). News update: Early summer 2022. *Pretrial Justice Institute.* https://www.pretrial.org/news

The Bail Project. (2020). After cash bail: A framework for reimagining pretrial justice. *The Bail Project.* https://bailproject.org/wp-content/uploads/2020/02/the_bail_project_policy_framework_2020.pdf

The Bail Project. (2021a). Bail out the south. *The Bail Project.* https://bailproject.org/bailoutthesouth/

The Bail Project. (2021b). The bail project: Annual report 2021. *The Bail Project*. https://bailproject.org/wp-content/uploads/2021/11/the_bail_project_annual_report_2021_web.pdf

The Bail Project. (2022). The bail project: Indianapolis: Judiciary report. *The Bail Project.* https://indianapolisrecorder.com/wp-content/uploads/2022/03/The-Bail-Project-Indianapolis-Judiciary-Report-3-11-22.pdf

The CW 69 Atlanta. (2023, March 30). Georgia bill to require bail for more crimes fails to pass. *CW 69 Atlanta*. https://www.cbsnews.com/atlanta/news/georgia-bill-to-require-bail-for-more-crimes-fails-to-pass/

The Hamilton Project. (2022). About THP. *Brookings*. https://www.hamiltonproject.org/about/

The Marshall Project. (2022). About us. *The Marshall Project*. https://www.themarshallproject.org/about?via=navright

Thompson, C. (1999). If you could just provide me with a sample: Examining sampling in qualitative and quantitative research papers. *Evidence-Based Nursing, 2*(3), 68. https://dx.doi.org/10.1136/ebn.2.3.68

Thompson, D. (2022 September 1.). California stalls scaled down bail reform after year's delay. *U.S. News & World Report*. https://www.usnews.com/news/best-states/california/articles/2022-09-01/california-stalls-scaled-down-bail-reform-after-years-delay

Tildon, M. (2015, January). A misdemeanor and no priors, why was money bail imposed? *Pretrial Services Agency for the District of Columbia*. https://www.psa.gov/?q=node/506

Tillyer, M. S. and Kennedy, D. M. (2008). Locating focused deterrence approaches within a situational crime prevention framework. *Crime Prevention and Community Safety, 10*, 75-84. https://doi.org/10.1057/cpcs.2008.5

Tittle, C. R. (1969). Crime rates and legal sanctions. *Social Problems, 16*(4), 409-422. https://heinonline.org/HOL/P?h=hein.journals/socprob16&i=411

Tomlinson, K. (2016). An examination of deterrence theory: Where do we stand? *Federal Probation, 80*(3), 33-38, 57. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Ftrade-journals%2Fexamination-deterrence-theory-where-do-we-stand%2Fdocview%2F1917879090%2Fse-2%3Faccountid%3D12085

Truelove, V., Freeman, J., Kay, S., Watson, B., Mills, L., and Davey, J. (2021). A unified deterrence-based model of legal and non-legal factors that influence young driver speeding behavior. *Accident Analysis & Prevention, 160*. https://doi.org/10.1016/j.aap.2021.106327

Tucker, E. and Jimenez, O. (2021, August 13.). Behind police leaders claims that bail reform is responsible for surge in violence. *CNN*. https://www.cnn.com/2021/08/12/us/police-leaders-bail-reform-violence-surge/index.html

Tucker, R., O'Brien, T., Ciomek, A., Castro, E., Wang, Q., and Phillips, N. E. (2021). Who 'tweets' where and when, and how does it help understand crime rates at places? Measuring the presence of tourists and commuters in ambient populations. *Journal of Quantitative Criminology, 37*, 333-359. https://doi.org/10.1007/s10940-020-09487-1

U.S. Census Bureau. (n.d.a.) QuickFacts: Pittsburgh city, Pennsylvania; Philadelphia city, Pennsylvania. https://www.census.gov/quickfacts/fact/table/pittsburghcitypennsylvania,philadelphiacitypennsylvania/PST045222

U.S. Census Bureau. (n.d.b.). QuickFacts: Baltimore city, Maryland; Cleveland city, Ohio; Chicago city, Illinois; New York city, New York; Ferguson city, Missouri; Minneapolis city, Minnesota. *U.S. Census Bureau*. https://www.census.gov/quickfacts/fact/table/baltimorecitymaryland,clevelandcityohio,chicagocityillinois,newyorkcitynewyork,fergusoncitymissouri,minneapoliscityminnesota/PST045221

U. S. Department of Justice. (2015a, February 13.). *Department of Justice files statement of interest in Clanton, Alabama, bond case* [Press release]. https://www.justice.gov/opa/pr/department-justice-files-statement-interest-clanton-alabama-bond-case

U.S. Department of Justice. (2015b, March 4.). *Department of Justice report regarding the criminal investigation into the shooting death of Michael Brown by Ferguson, Missouri police officer Darren Wilson.* [Press release]. https://www.justice.gov/sites/default/files/opa/press-releases/attachments/2015/03/04/doj_report_on_shooting_of_michael_brown_1.pdf

U. S. v. Salerno, 481 U.S. 739 (1987). https://supreme.justia.com/cases/federal/us/481/739/

Van Brunt, A. and Bowman, L. E. (2018). Toward a just model of pretrial release: A history of bail reform and a prescription for what's next. *Journal of Criminal Law & Criminology, 108*(4), 701-774. http://ezproxy.liberty.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fscholarly-journals%2Ftoward-just-model-pretrial-release-history-bail%2Fdocview%2F2207930631%2Fse-2%3Faccountid%3D12085

Vargas, C. and Chang, D. (2021, May 6.). More violence, less cops. Why are there fewer police officers in Philly? *NBC Philadelphia*. https://www.nbcphiladelphia.com/investigators/more-violence-less-cops-whats-causing-the-shortage-of-philly-officers/2805750/

Velluci, J. (2023, May 16.). Dugan knocks off longtime incumbent Zappala in democratic race for Allegheny County DA. *Pittsburgh Tribune*. https://triblive.com/local/dugan-stakes-early-lead-over-incumbent-zappala-in-democratic-race-for-allegheny-county-da/

Venkataramanan, M. (2020, August 13.). Austin City Council cuts police department budget by one-third, mainly through reorganizing some duties out from law enforcement oversight. *The Texas Tribune*. https://www.texastribune.org/2020/08/13/austin-city-council-cut-police-budget-defund/

Vilcica, E. R. and Goldkamp, J. S. (2015). Bail prediction: Exploring the role of neighborhood context in Philadelphia. *Criminal Justice and Behavior, 42*(11). https://doi-org.ezproxy.liberty/edu/10.1177/0093854815599022

Vitali, J. (2021). The political realism of Jeremy Bentham. *European Journal of Political Theory*. https://doi-org.ezproxy.liberty.edu/10.1177/14748851211001550

Voight, S. and Wulf, A. J. (2017). What makes prosecutors independent? Analysing the institutional determinants of prosecutorial independence. *Journal of Institutional Economics, 15*(1), 99-120. https://doi.org/10.1017/S1744137417000212

Wagner, P. (2020, March 9.). Superior court judges are releasing murder suspects from jail, angering DC's police chief. *Fox 5 Washington DC*. https://www.fox5dc.com/news/superior-court-judges-are-releasing-murder-suspects-from-jail-angering-dcs-police-chief

Wall, C. (2022, August 26.). Illinois law eliminating cash bail has some in law enforcement concerned. *ABC 7 Chicago*. https://abc7chicago.com/cash-bail-illinois-no-criminal-justice-reform-safe-t-act/12169983/

Ward, J. (1997, February 1.). NYPD view: New procedures credited with crime drop. *American City & County*. https://bi.gale.com.ezproxy.liberty.edu/global/article/GALE%7CA124649602?u=vic_liberty

Ward, T. J. (2000). Commissioners, chiefs, and Compstat. *Law & Order, 48*(7), 133-137. https://go.openathens.net/redirector/liberty.edu?url=https://www-proquest-com.ezproxy.liberty.edu/trade-journals/commissioners-chiefs-compstat/docview/197217264/se-2

Watts, J. (2023, February 20.). UPDATED $0 bail study: Suspects released on $0 bail had twice the felony rearrests, three times the violent crime rearrests. *CBS News*. https://www.cbsnews.com/sacramento/news/zero-dollar-bail-study-felony-violent-crime-arrests/

Webster, C. M., Doob, A. N., and Zimring, F. E. (2006). Proposition 8 and crime rates in California. The case of the disappearing deterrence. *Criminology & Public Policy, 5*(3), 417-442. https://doi-org.ezproxy.liberty.edu/10.1111/j.1745-9133.2006.00401.x

Wehner, G. (2022, November 27.). New York City DA Bragg downgrades over half of felonies to misdemeanors. *Fox News*. https://www.foxnews.com/us/new-york-city-da-bragg-downgrades-over-half-felonies-misdemeanors

Welsh, B. C., Braga, A. A., and Bruinsma, G. J. N. (2015). Reimagining broken windows. *The Journal of research in Crime and Delinquency, 52*(4), 447-463. DOI: 10.1177/0022427815581399

Western Pennsylvania Regional Data Center. (2023). Pittsburgh police arrest data. *Western Pennsylvania Regional Data Center*. https://data.wprdc.org/datastore/dump/e03a89dd-134a-4ee8-a2bd-62c40aeebc6f

White, M. D. (2016). The neglected nuance of Beccaria's theory of punishment. *European Journal of Law and Economics, 46*(3), 315-329. https://doi.org/10.1007/s10657-016-9530-7

Williams, M. (2003). The effect of pretrial detention of imprisonment decisions. *Criminal Justice Review, 28*(2), 299-316. https://doi-org.ezproxy.liberty.edu/10.1177/073401680302800206

Wilson, J. Q. and Boland, B. (1978). The effect of police on crime. *Law & Society Review, 12*(3), 367-390. https://doi-org.ezproxy.liberty.edu/10.2307/3053285

Wilson, M. M. (2022, August 28.). Helland, Rezin speak about Safe-T Act set to take effect Jan. 1. *The Times*. https://www.shawlocal.com/mywebtimes/2022/08/28/helland-rezin-speak-about-safe-t-act-set-to-take-effect-jan-1/

Wickham, M. C. (2018, March 22.). Report back on your board's March 2017 bail reform motion. *County of Los Angeles, Office of the County Counsel*. https://file.lacounty.gov/SDSInter/bos/supdocs/112299.pdf

Wierson, A. (2021, October 16.). The Minneapolis 'defund the police' ballot question should alarm Democrats nationwide. *CNN*. https://www.cnn.com/2021/10/16/opinions/defund-the-police-question-ballot-minneapolis-democrats-wierson/index.html

Wisconsin Right Now & The Center Square. (2023, January 20.). Assembly Republicans approve bail reform amendment. *Wisconsin Right Now*. https://www.wisconsinrightnow.com/bail-reform-amendment-2/

WJZ News. (2020, June 15.). Baltimore City Council approves millions in cuts to BPD units amid nationwide calls to defund police. *CBS News Baltimore*. https://www.cbsnews.com/baltimore/news/baltimore-police-department-budget-funding-latest/

Wolfe, S. E. and Nix, J. (2015). The alleged "Ferguson Effect" and police willingness to engage in community partnership. *Law and Human Behavior, 40*(1), 1-10. https://dx.doi.org/10.1037/lhb0000164

Woods, A. and Allen-Kyle, P. (2019). A new vision for pretrial justice in the United States. *ACLU Smart Justice*. https://www.aclu.org/sites/default/files/field_document/aclu_pretrial_reform_toplines_positions_report.pdf

Yan, Y. Y. (2004). Seasonality of property crime in Hong Kong. *The British Journal of Criminology, 44*(2), 276-283. https://www.jstor.org/stable/2338616

Yancey, R. (2019, February 25.). Criminal justice reform: NY lawmakers eye bills on bail, discovery, trial. *Newsday*. https://go.openathens.net/redirector/liberty.edu?url=https://www.proquest.com/newspapers/criminal-justice-reform/docview/2185495116/se-2

Yolo County District Attorney's Office. (2022, August 22). *70% of those released on $0 bail commit new crimes.* [Press release] https://yoloda.org/70-of-those-released-on-0-bail-commit-new-crimes/

Zahniser, D. (2021, August 28.). L.A. cut the police budget, then put $47 million in overtime on the city's 'credit card'. *Los Angeles Times*. https://www.latimes.com/california/story/2021-08-28/lapd-overtime-budget-was-slashed-now-the-city-owes-47-million-dollars

Zaru, D. and Simpson, T. (2020, November 25.). 'Defund the police' movement 6 months after killing of George Floyd. *ABC News*. https://abcnews.go.com/US/defund-police-movement-months-killing-george-floyd/story?id=74296015

Zottola, S. A. and Desmarais, S. L. (2022). Comparing the relationships between money bail, pretrial risk scores, and pretrial outcomes. *Law and Human Behavior, 46*(4), 277-289. https://doi.org/10.1037/lhb0000487