

Deconstructing the Power to Arrest: Lessons from Research

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Workshop Exploring the Power of Arrest

A single day workshop to discuss the use of arrest and its alternatives was sponsored by the Laura and John Arnold Foundation at the International Association of Chiefs of Police Headquarters on February 22, 2018. The *Power of Arrest Workshop* brought together leading police executives and research experts with the goals to: 1) discuss and better understand the exercise of arrest discretion, 2) identify viable options for alternatives to arrest and 3) help identify gaps in research and knowledge. We would like to thank the following individuals for their participation and insights shared during the *Power of Arrest Workshop*:

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EXECUTIVE SUMMARY

The role of the police as enforcers of the law in democratic societies has never been in serious dispute. While policing scholars have routinely questioned whether law enforcement is – or should be – the *primary* role of police, the tremendous power of the government to deprive citizens suspected of crimes of their liberty and freedoms has remained in the hands of our uniformed police officers. As a result, at the street-level, police officers have critical policy-making power as they use their discretion in decisions regarding which laws will be enforced, against whom, and when (Brown, 1988). Given this nearly exclusive responsibility, police are often referred to as the gatekeepers of the criminal justice system, as our entire judiciary process is predicated upon an initial arrest of an individual suspected of criminal activity (Bittner, 1967).

Yet, what we know *systematically* about the use of arrest, is simultaneously overly simplistic and incredibly complex. After nearly seven decades of scientific inquiry, a body of research has developed that provides great insight, coupled with tremendous gaps in information. Given the importance and consequences surrounding the ability of the government to deprive its citizens of their liberty, the criminal justice system should face continual scrutiny, and also an expectation that the agencies within the system will routinely enhance their work based on scientific evidence of the most effective, efficient, and equitable practices. Further, because of the critical role that police play in the activation of the criminal justice system, any comprehensive reform effort targeting portions of the criminal justice system should also focus specifically on the initial arrest decision.

In the mid-1970s, incarceration rates in the United States began to rise dramatically, with an exponential increase of roughly 6-8 percent per year over the next 25 plus years (Travis, Western, & Redburn, 2014). Historically, the traditional criminal justice mechanism for crime control has been to enhance arrests for minor crimes (e.g., zero tolerance policing); these net-widening policing tactics have contributed to record-setting incarceration rates, unsustainable financial expenditures in the United States, and long-term consequences of community disruption and harm (National Research Council, 2014). In response, recent legislative and social movements have called for a reduction in incarceration rates by simultaneously reducing criminal justice involvement and increasing the focus on the development and evaluation of community and social alternatives to traditional police responses.

While the frequency and perceived disparate use of arrest continues to generate public scrutiny, we believe it is time for the research and practitioner communities to work together to systematically "deconstruct the power of arrest" (Travis, 2017). In the past several years, law enforcement executives have noted that "we cannot arrest our way out of this problem," indicating that perhaps arrest is not the most efficient or effective strategy for reducing crime and handling the social problems that plague our communities (Engel, Corsaro, & Ozer, 2017). It is therefore imperative that we collect and document what is known about the use of arrest, along with alternatives to arrest. We believe that a comprehensive review of the evidence surrounding all aspects of the decision to arrest – legal, economic, social, policy, managerial, etc. – will provide a clearer path forward.

Our objectives in this review are to extract from existing research the principal questions concerning arrest and police-led diversion, critically evaluate the tentative answers to those

questions that empirical evidence provides, and form suggestions for future inquiry. More specifically, the objectives for this review are as follows: 1) to provide a comprehensive discussion of the factors associated with arrest and alternatives to arrest including citations in lieu of arrest and third party diversion; 2) to evaluate the research that has been conducted thus far and highlight the most consistent and applicable lessons learned; and, 3) to outline suggestions for future scholarship to better illuminate unanswered empirical questions, which will have the potential to better impact policy and programs related to alternatives to arrest. This executive summary provides a brief overview of the detailed findings documented in the larger report. Our intention is to provide a starting point for more advanced discussions among practitioners, academics, policy makers, and philanthropists regarding informed, evidence-based opportunities to reduce the use of arrest while simultaneously enhancing public safety and reducing crime.

Defining Arrest

Extensive legal and scholarly examination shows that there is no standard definition for arrest. Indeed, due to its basis in centuries of common law in the United States, the definition of arrest appears to vary significantly by context and jurisdiction. While the use of arrest is regulated by the Fourth Amendment of the Constitution, the application of the Fourth Amendment, particularly the pervasive and largely unquestioned nature of the "probable cause standard," provides considerable flexibility in the definition and use of arrest (Harmon, 2016). Therefore, for this review, we follow the example of Harmon and define arrest as encompassing the following five aspects: when (1) an officer takes a suspect into custody, (2) an officer transports a suspect to a police facility, (3) the police take identifying information, (4) the police create a record of the arrest, and (5) the police detain the suspect until release or judicial review.

Costs of Arrest

Research examining the costs of arrest suggests that the reliance on arrest in the United States produces substantial consequences for both the criminal justice system and individual arrestees. Although research suggests that the costs of incarceration are typically underestimated, it has been reported that the United States spends approximately \$80 billion annually on corrections (DeVuono-Powell et al., 2015). For individuals, arrests involve a loss of time, money, liberty, and privacy. In many cases, these "process costs" surpass any type of formal penalty imposed by the criminal justice system. Arrests are also associated with long-term collateral consequences for individual arrestees, and by extension, their families. These include the denial of rights, benefits, privileges, and opportunities that occur outside of the context of the criminal justice system, including employment prospects, educational trajectories, public housing eligibility, and immigration/deportation status.

Explaining the Decision to Arrest

Research examining the decision to arrest can be traced back to the late 1950s when the American Bar Foundation (ABF) sponsored a series of seminal observational studies spanning the criminal justice system. A primary outcome of these studies was the discovery of the legitimate "pervasive discretion inherent in the enterprise" of criminal justice (Bernard & Engel, 2001). This "discovery of discretion" was particularly significant for policing, where it was recognized that the officers at

the lowest levels of police organizations had the greatest discretion over critical decisions. Early research examining police discretion was ethnographic in nature. Over time, evaluations of police behavior became more quantitative and systematic through the use of larger-scale studies and systematic social observation for data collection. Research examining police behavior, including the decision to arrest, has largely been organized according to legal and extra-legal factors (e.g., situational, individual, organizational and community factors) that influence police decision-making (National Research Council, 2004a).

Setting the Baseline: Routine Police Practice

Fifty years ago, James Q. Wilson (1968) observed the tendency of the police to underenforce the law. Regardless of sufficient evidence for arrest, police have been found to commonly use alternatives to arrest, which Wilson suggested is based on a view of arrest as just one of many resources that may be used to accomplish their objective that, in many instances, is to "handle the situation." Little research examining police officers' decision to arrest has contradicted this assertion. The most recent findings from the Police Public Contact Survey (PPCS) estimate that while 22.8% of U.S. residents age 16 and older reported having face-to-face contacts with police in 2011, only 3.1% reported being arrested during their most recent contact (Berzofsky et al., 2017). When police do not arrest, they have several alternatives; these include doing nothing, warning suspects, commanding or requesting that an individual discontinue his/her behavior, making referrals to a formal or informal third-party, or providing information or counseling. Research exploring the police decision to *not* arrest suggests police are less likely to arrest when an offense is less serious, when the officer initiates the contact, and when the suspect is respectful, compliant, and sober (Terrill & Paoline, 2007).

Factors that Predict Arrest

Examining the factors that predict arrest, multivariate statistical modeling of arrest decisions consistently suggests that legal factors, such as strength of the evidence, offense seriousness, arrest warrants, suspects' prior record, victims' preferences, suspects behaviors, and the law, have a much stronger influence on police arrest behavior compared to extra-legal factors. While these findings seem ideal, several scholars have raised concerns regarding the appropriateness of incorporating certain "legal" factors in police decision-making. For example, the use of arrest warrants as criteria for arrest has been found to increase individuals' contact with the criminal justice system for relatively minor offenses (e.g., parking infractions, traffic violations, missed court appearances). Furthermore, the consideration of suspects' prior record and/or victims' preferences in the decision to arrest is often observed to create racial disparities in outcomes.

Changes in the law, stemming from legislation and judicial decisions, have also been found to impact police use of arrest. Common topics for these types of legal reforms include the (de)criminalization of drug and other minor offenses, prostitution, driving while intoxicated, juvenile curfews, and domestic violence. Overall, the research examining the influence of these legislative and judicial changes on police use of arrest provides mixed evidence, demonstrating considerable variation based on the law under examination. In general, however, the effects of legal reform appear highly contingent upon the actual enforcement of the law in practice.

Specifically, differences in the application of a specific law by police officers may determine the outcomes of legal reform.

In addition to legal factors, some extra-legal factors, arranged across situational, individual (officer), organizational, and community categories, have been found to exert some influence on officers' decision to arrest (National Research Council, 2004a). Particular scholarly attention has been paid to suspect characteristics, including persons with mental illness, juvenile offenders, and racial/ethnic minorities, all of whom tend to be over-represented in police contacts, including arrests. The overrepresentation of persons with mental illness in the criminal justice system has been attributed, in part, to the view that police tend to criminalize the manifestations of mental illness as disorderly conduct and make arrests for minor offenses (Teplin, 1984). More recent findings provide little support for this criminalization hypothesis, demonstrating that police routinely underenforce the law when dealing with persons with mental illness, and are actually less likely to arrest these individuals compared to other suspects (Engel & Silver, 2001). Despite these findings, persons with mental illness continue to be disproportionately represented in the criminal justice system, which has led many police agencies to make concerted efforts to implement diversionary measures for this population, which are described later in this review.

Police encounters with juvenile suspects have been the focus of several analyses of observational data. Similar to encounters with adult suspects, police officers' decision to arrest is typically driven by offense seriousness, the strength of evidence, preference of complainants, and suspects' demeanor. However, the modal police response for this group of offenders is no arrest, or diversion away from the criminal justice system (Myers, 2002; Worden & Myers, 1999).

The impact of race and ethnicity on police decision-making is one of the most discussed topics in criminal justice. Concerns regarding the racial/ethnic disparities in arrest have been particularly prevalent since the 1980s, when the "War on Drugs" encouraged the aggressive targeting of drug offenders at the street level, which many argue had a disproportionate impact on juvenile, minority males, as evidenced by their disproportionate arrest rates in the 1990s. While arrest rates for minority groups have experienced declines in recent years, racial/ethnic disparities in police arrest decisions remain today. These disparities have been the focus of significant scientific inquiry, which generally find that although legal factors are stronger predictors of arrest than race/ethnicity, nevertheless suspect race/ethnicity *do* matter (Engel & Swartz, 2014; Kochel, Wilson & Mastrofksi, 2011). Unfortunately, little attention has been given to theoretical development and testing as to why these disparities exist, an understanding of which is necessary to implement policies and practices to reduce them.

Research on police behavior has also dedicated attention to other individual, organizational, and community characteristics that might impact arrest. Research in these areas is more limited in comparison to examinations of legal and situational variables and findings across this research often vary considerably. Studies that include these factors generally find that officer race and sex have little effect on their decision to arrest — though race may be significant when other factors, such as suspect race, are considered (Brown & Frank, 2006). Research examining the impact of officer education has produced mixed findings (Rydberg & Terrill, 2010). Research examining the impact of training on officer decision-making is rare (National Research Council, 2004a).

Research examining the impact of organizational characteristics have examined factors such as agency size, supervision, managerial practices, and policing styles. Little contemporary research exists examining the impact of agency size on arrest and earlier studies suggest the effects of police agency size are contingent on too many factors to determine their true impact (National Research Council, 2004a). Additionally, while the potential influence of supervisory styles on subordinate officers' attitudes and behaviors has been well discussed, the extent of supervisory influence on subordinate officers' use of arrest is uncertain—though one study suggests that supervisor presence at officer-suspect encounters increases the likelihood of arrest (Engel, 2000), and another study suggests that supervisors can, by nurturing their subordinates' judgment, minimize the use of formal authority (Muir, 1977). Managerial practices like Compstat and expectations for a particular style of policing within a police organization are also expected to influence officer behavior. Research suggests that while Compstat and accompanying aggressive styles of proactive policing increase the likelihood of arrest, Community-Oriented Policing (COP) in general does not significantly influence the likelihood of arrest. More significant impact on arrest is noted when multiple, specific COP activities are considered (Chappell, MacDonald, & Manz, 2006; Tillyer 2017). These mixed findings may be due to the wide variation in the implementation of COP across jurisdictions, but also call into question whether too much emphasis has been hypothesized to lie within the organizational context of officer behavior. Even so, the wide variation across organizations reported by Lum and Vovak (2017) indicate that organizational factors play an important role in shaping arrest decisions.

Finally, the limited research that does examine community characteristics suggests that arrest is more likely to occur in encounters taking place in neighborhoods characterized by low socioeconomic status, minority or racially mixed neighborhoods, and in neighborhoods with higher rates of crime (Chappell et al., 2006; Smith, 1984, 1986). However, their relationships to arrest, when observed, are typically weak (National Research Council, 2004a).

Mandatory Arrest

Concerns were voiced in the 1980s about the degree of officer discretion in arrest decisions for particular types of offenses, including domestic violence. The lack of information about how and why officers used discretion during police-citizen encounters gave rise, in part, to changes designed to reduce officer discretion in particular situations through the implementation of mandatory arrest laws and policies (Sherman, Schmidt, Rogan & Smith, 1992). The widespread adoption of mandatory arrest policies for domestic violence was motivated by (1) a series of lawsuits against police departments that argued the failure to arrest domestic violence offenders amounted to unequal protection for women under the law and (2) the Minneapolis Domestic Violence Experiment, which suggested arrest had the greatest deterrent effects for perpetrators of domestic violence (Sherman & Berk, 1984a). Notably, the findings were widely accepted by criminal justice policy makers, despite conflicting evidence produced by later replications of the study (Sherman & Smith, 1992).

Regarding the impact of mandatory arrest policies, research demonstrates that mandatory arrest laws have increased rates of arrest, prosecution, and conviction for domestic violence (National Research Council, 2004b). However, these changes have not necessarily translated into a reduction in rates of domestic violence. In contrast, some observe that mandatory arrest policies

can have unintended consequences (e.g., increased unwillingness to report domestic violence, increased likelihood of dual arrest, increased offender retaliation, higher victim mortality rates), resulting in greater harm to victims—particularly Black victims. For this reason, experts advise that the costs and benefits of mandatory arrest policies must be carefully considered.

Proactive Policing

Proactive policing refers to police strategies that focus on the prevention or reduction of crime through means that are *not* reactive to crimes that have already occurred. To date, the research that has examined the impact of proactive policing on arrests suggests notable effects. Officers' decisions to initiate citizen contacts for enforcement-related purposes appear to be influenced by opportunity, unassigned time, and occupational attitudes (Brown, 1981; Worden, 1989). Proactive policing is greatly influenced by police administrators, who may emphasize such activity through the creation of specialized crime units, which have been found to generate higher levels of officer-initiated contacts (McGarrell et al., 2001). Additionally, widely adopted organizational and managerial practices, such as Compstat, have been found to increase officer productivity in the form of more stops, summons, and arrests (Weisburd et al., 2003).

Strategies that involve proactive enforcement, however, are likely to have varied effects on rates of arrest based on their underlying premises. Broken windows policing (BWP) provides police discretion in the management and prevention of low-level offenses and other disorders, many of which can be handled informally. As such, it is likely that BWP would have only modest impacts on arrest rates. In contrast, zero tolerance policing, with its expectation that police respond to low-level offenses and other disorders with the invocation of the law, is likely to lead to substantial increases in arrests. Zero tolerance policing, combined with "high-voltage" Compstat (Moore & Braga, 2003) appears to have created substantial increases in New York City Police Department's rates of misdemeanor arrests in the 1990s and 2000s (Chauhan et al., 2014), though this trajectory of sharply increased arrests was fairly unusual (Lum & Vovak, 2017). Hot spots policing often involves proactive tactics to reduce crime and can be expected to increase officer-initiated contacts and, to some effect, arrests. In contrast, proactive community and problem-oriented policing are likely to reduce the rate of arrest—focusing officer attention on the mechanisms of crime prevention and control that fall outside of traditional law enforcement, and which may include police-led diversion tactics (Skogan, 2008).

An examination of the proactive policing literature suggests that crime prevention strategies may be one of the best methods for reducing the use of arrest. Specifically, because there is no need to enforce laws that have not been broken, effective crime prevention strategies may be viewed as promising "alternatives to arrest." A recent theoretical model proposed by Nagin, Sowel, and Lum (2015) outlines this argument—by embracing their role as sentinels in society (i.e., guardians capable of deterring a motivated offender) police can increase offenders' perceived risk of apprehension, effectively preventing crime without arrest. Therefore, it is important for police agencies to enact policies that increase the opportunity for officers to act as sentinels. Highly focused or targeted proactive policing strategies (e.g., problem solving, hot spots policing, focused deterrence) may be most effective in this task. As such, the policing field should continue to innovate and implement targeted strategies that can influence both offenders' perception of apprehension risk and actual risk of apprehension. Note, however, that in the process of

implementing such strategies, police executives should carefully consider the legality of specific proactive approaches, as well as the potential collateral consequences of such strategies (e.g., undermining citizen privacy, contributing to racial disparities or racial bias) (NAS, 2018). Community outcomes, such as satisfaction with police and perceptions of police legitimacy, should also be considered.

Alternatives to Arrest: Police-led Diversion

Given the social, economic, and community costs of arrest reviewed above, along with the use of proactive policing strategies, it is important to carefully consider the use and effectiveness of alternatives to arrest. Police-led diversion allows for the diversion of individuals accused of minor law violations from the criminal justice system at, or near the point of, police contact and prior to, or in lieu of, the filing of charges. In the United States, police-led diversion programs have primarily focused on diverting drug offenders, persons with mental illness, and juvenile offenders. Overall, findings suggest that, despite the development of conceptually sound police-led diversion programs, empirical evidence on the structure, operation, and effects of these initiatives is limited.

Police-Led Diversion of Drug Offenders

In the United States, police-led diversion for drug offenders appeared in the 1990s, facilitated by popular community policing initiatives of the time. Taking the form of pre-booking diversion programs for drug users, these initiatives combined therapeutic and treatment measures with enforcement. An exploration of more current practices of police-led diversion for drug offenders notes several existing programs in the United States, the most prominent of which is the Law Enforcement Assisted Diversion (LEAD) program, first launched in Seattle in 2011. It provides for the voluntary diversion of chronic, low-level drug offenders from criminal prosecution to case managers for individualized treatment in the community. The LEAD model has been adopted and adapted in numerous cities across the United States (LEAD National Support Bureau, 2018). Process evaluations of the LEAD programs in Seattle and Albany highlight significant lessons of program implementation, including the importance of productive collaboration among stakeholders and the challenge of gaining officer support and participation (Beckett, 2014; Worden & McLean, forthcoming). Retrospective evaluations of the impact of Seattle's LEAD on recidivism, housing, employment, and income/benefits provide promising (but qualified) findings for the program's outcomes, particularly in terms of reduced recidivism and improvements in participants' housing and employment (Collins et al., 2015a); causal inferences about program impact are tempered by questions about internal validity. Additional police-led drug diversion program in the United States have emerged in response to the opioid crisis. These programs vary with respect to their target populations, however, and in their degree of legal pressure on offenders, which can predict success within these drug diversion programs.

Police-Led Diversion of Persons with Mental Illness

Police-led diversion is also commonly employed in response to persons with mental illness. Emphasizing connection to treatment and services, rather than criminal justice processing, these police-led pre-booking diversion programs are believed to increase the likelihood of positive

outcomes for offenders with mental illness, including use of services, enhanced quality of life, and decrease in substance use, mental health symptoms, and criminal activity (DeMatteo et al., 2013). Police-led diversion programs for persons with mental illness typically fall into three categories: (1) police-based specialized response, (2) police-based specialized mental health response, and (3) mental health-based specialized mental health response (Broner et al., 2004). Research examining the effectiveness of police-led diversion of this population has largely focused on two diversion programs: crisis intervention teams and mobile crisis teams.

Crisis intervention teams (CIT) are a police-based specialized response that involves collaborative efforts between police and mental health experts to increase the diversion and treatment of offenders with a mental illness. The CIT model suggests that providing mental health training to officers, creating strong partnerships between police and mental health partners, and emphasizing organizational support in program implementation will increase officer awareness of mental health issues in the community, and give officers confidence in managing and responding to encounters with persons with mental illness, including the use of diversion where appropriate (IACP, 2016b; National Council of State Governments, 2002). Evaluations of the impact of CIT are limited and provide mixed findings, with some observing CIT officers as less likely to use arrest, more likely to use de-escalation, and more likely to refer to mental health services; others, however, report no such findings (Compton et al., 2006).

Mobile Crisis Team (MCT) Co-Responders are interdisciplinary crisis teams, which can be requested by police officers, and who provide immediate response at the street-level by serving as liaisons between hospitals and patients in mental health emergencies (Baess, 2005; Lurigio & Swartz, 2002). Limited research has examined the effects of MCT on the disposition of police encounters with persons with mental illness. The available evidence suggests that MCT response may result in lower rates of arrest and higher rates of referral to treatment, though others report mixed findings. Research employing self-report data suggests MCT officers undergo an attitudinal change and increased knowledge of mental illness, increasing the likelihood of officers' use of police-led diversion for individuals in crisis. However, officers' attitudes pertaining to the effectiveness of MCT in reducing arrests and maintaining community safety are less positive. Some studies report lower rates of hospitalization and greater involvement in treatment among individuals referred to treatment through MCTs, and others show little evidence of improved outcomes. Any conclusions regarding the efficacy of MCT are made further uncertain by the lack of comparison groups or application of statistical controls in available analyses, which should be an emphasis of future research in this area.

Police-Led Diversion of Juvenile Offenders

Juvenile diversion programs are designed to: 1) prevent the stigmatizing labeling of youth by limiting their contact with the justice system, 2) prevent overcrowding in juvenile detention centers, 3) encourage engagement and use of needed services, and 4) optimize the time- and cost-efficiency of juvenile justice. Pre-booking program efforts include the police use of verbal warnings (i.e., cautioning) in encounters with youth, police diversion in middle schools and high schools to juvenile justice and community-based services to reduce school-based arrests, police referrals to juvenile assessment centers, and the use of juvenile justice mobile response teams. These programs generally show promise. The restorative quality of cautioning programs has

proven effective in deterring future offending. Police school-based diversion programs also show reduced rates of school-based arrest, expulsions and behavioral incident reports. Juvenile assessment centers and juvenile mobile responses teams have aided in the prevention of formal legal processing for low-risk youth. Ultimately, meta-analyses of juvenile diversion program evaluations suggest that program outcomes are inherently linked to the qualitative nature of their implementation, that is, the intervention philosophy, offender risk-level, and intervention type of the program (Lipsey, 2009; Schwalbe et al., 2012).

Police referral and participation (e.g., providing insight for case management) in post-booking programs has also become more commonplace. Evaluations of post-booking programs for juvenile offenders report mixed findings, but some program successes have been observed in the form of reduced recidivism rates (Shelden, 1999). Evaluations of post-booking programs suggest that incorporating tenets of family and social support into programmatic elements are the most beneficial in reducing recidivism (Davidson et al., 1987). The research methodologies used to evaluate both pre- and post-booking programs have been diverse, however, making the accumulation of empirical findings somewhat difficult.

Citations in Lieu of Arrest

Research examining non-custodial alternatives to arrest typically focus on the use of citations, particularly field release citations or subpoenas to appear before the court without an arrest. A recent review conducted by the IACP (2016a) suggests that citations are primarily used for misdemeanor offenses, with research studies focusing the greatest attention on police use of citations for traffic encounters and drug offenses. Research suggests many factors that influence officers' use of citation in lieu of arrest, including: 1) constitutional law and state, local, and municipal legislation provide the legal foundation for the use of citations; 2) variation across states, such as whether citations are issued pre- or post-arrest, and 3) broader criminal justice system considerations that may impact officers' use of citations, including jail capacity issues.

Despite this variation, the use of citations in lieu of arrest is argued to generate significant savings for the individual receiving the citation, the police, and the broader criminal justice system. For example, an evaluation of Florida's Civil Citation Program highlighted the cost-efficiency of citations—with each citation estimated to cost \$386 compared to an average cost of \$5,000 per arrest (American Bar Association, 2011). Notably, however, these potential savings are tempered by findings of higher failure to appear rates when citations have been used in lieu of arrest, though not enough to completely negate the benefits of the use of citations entirely. Additionally, some scholars have cautioned against the over-use of field citations for misdemeanor offenses due to the potential for net-widening.

Research Considerations

This review highlights that much remains to be learned about police use of arrest and alternatives to arrest. Much of the variance in arrest (i.e., arrest v. no arrest) remains unexplained. Furthermore, the relevant research examining the predictors of arrest is based on data collected in the 1990s or earlier, providing a limited understanding of the contemporary factors that influence arrest. Therefore, **one of** the most critical research need, in our estimation, is to reestablish the foundation

of research that explores officer decision making. Research should address what factors influence officers' decisions to arrest and how these factors be used to enhance evidence-based practices that limit the need/use of arrest. These are the core research questions that underlie all of the remaining research issues outlined in this report.

The variation in non-arrest options, including but not limited to police-led diversion and citation in lieu of arrest, has also been largely unexamined. While research pertaining to alternatives to arrest suggest the promise of various programs aimed to divert specific populations away from the criminal justice system, program evaluations are often shallow at best and plagued with threats to internal validity. We know little about the precise processes involved in the implementation of these programs, the contexts in which they are most successful, the short- and long-term effects for diverted individuals, police departments, and the larger community, and the sustainability of program outcomes over time. The impact of proactive policing strategies and mandatory arrest policies is also uncertain. While effects can be hypothesized, the extent to which these tactical and legal factors impact police decision-making is unknown. Furthermore, this review demonstrates a lack of understanding regarding the financial and collateral consequences of arrest—though by all accounts these costs associated with arrest are substantial. In sum, a comprehensive body of rigorous evaluation evidence is needed before we can fully understand the use of, costs of, and alternatives to arrest.

We argue that large-scale studies using systematic social observation (SSO), or some comparable data collection strategy (e.g., body worn cameras), need to be employed. Importantly, SSO could offer insights into the nature of organizational effects. This research can be supplemented by other data collection methods, including surveys and analyses of official data to provide a more comprehensive understanding of officer decision making. Both experimental and quasi-experimental designs can advance evaluation research. In addition, natural experiments and case studies can also enhance our understanding of the areas described above. For example, changes in the law or police policies provide a naturally occurring opportunity for researchers to study the effects of these changes on police decision-making. Researchers should be mindful, however, that jurisdictions that enact a law (i.e., experimental group) may not be equivalent to jurisdiction without the law (i.e., natural control groups). Furthermore, variation in the implementation or enforcement of a law across jurisdictions must be considered.

Implications & Recommendations

During the *Forum on the Power to Arrest*, scholar David Bayley suggested there are three mechanisms by which police decision making is perceived as legitimate: (1) policy, (2) community, and (3) law. That is, the decisions of police officers can be more legitimate through the policies set forth by their agency, police-community collaborations, and the laws that provide guidelines for officer decision making. Each of these mechanisms has both benefits and barriers. However, used together, these mechanisms provide opportunities to enhance perceptions of legitimacy in police decision making.

This discussion of police legitimacy is pertinent to the examination of police use of arrest. As the frequency of police interaction with low-level offenders becomes more visible, researchers and policymakers are questioning the utility of arrest in solving crime and disorder problems. Just as

police executives are beginning to question whether officers' uses of force are necessary, even when legally justified (situations sometimes described as "lawful but awful," see Wogan, 2016), we are calling for a shift in the police view of arrest. Police executives should encourage officers in the field to consider not only whether an arrest *could* be made (legally justified), but whether it *should* be made. This also requires police to change their view of arrest as an output that demonstrates their activity, to an outcome with broader consequences for individuals. In short, arrests should be considered as *one of many* potential outcomes that can be used to effectively handle situations. Notably, however, calls for reform in police use of arrest and adoption of alternatives, such as police-led diversion programs, typically lack an informative evidence-base of how this change can be successfully realized. Well-designed process evaluation studies could work to generate evidence-based guidance for the implementation of police-led diversion programs.

Unintended Consequences

Evaluations of alternatives to arrest can also enhance our understanding of potential unintended consequences associated with police reform. These consequences may include issues related to 1) uncontrolled discretion, 2) net-widening, and 3) increased harm to offenders or victims. Specifically, whenever policy changes are implemented with the intention of changing police activity, it is important to monitor how and when officers use their discretion in support or hindrance of implementation. Criminal justice actors have pervasive discretionary power, and uncontrolled discretion can result in consequences such as the denial of due process, unequal protection of the law, and police corruption (Walker, 1992). An additional consideration regarding discretion is how and where police discretion may shift when it is controlled. Because of the interdependent nature of the criminal justice system, it is important to evaluate the effects of legal reforms on police behavior as well as the behavior of other criminal justice and non-criminal justice system actors.

The potential for alternatives to arrest to increase the population coming into contact with the criminal justice system is another salient concern in the discussion of police-led diversion. In theory, police-led diversion and/or citations in lieu of arrest should be used for individuals who would have otherwise been subject to arrest. Net-widening occurs when these types of programs and tactics create an overall increase in the number of individuals having contact (formal or informal) with the criminal justice system by including those that would otherwise not have had that contact. The potential for net-widening presents several concerns such as increased costs on individuals and the criminal justice system as well as the misapplication of limited services.

Finally, police reform efforts may have unintended consequences for offenders and victims. Though our understanding is somewhat limited, policy and legislative changes related to domestic violence, drunk driving, and incidents involving individuals with mental health issues provide historical examples of how less intrusive legal mechanisms or diversion programs may create unexpected harm to offenders or victims. Findings from this literature suggest that officers should arrest when the likelihood of public harm is high but should minimize their use of arrest when it is unnecessary to protect state interests and public safety (Harmon, 2016). The difficulty, however, lies in the street-level, often immediate, need to assess the potential harm if a person is diverted to

an arrest alternative. Furthermore, decisions are often made without specific guidance or directives from supervisors, risk assessments, or other evidence-based tools.

Two promising methods to reduce the likelihood of unintended consequences include the development of police-academic partnerships and the application of risk assessment tools. Police-academic partnerships can facilitate effective program implementation within police agencies. Specifically, the combination of practitioner intuitive knowledge regarding best practice and outsider empirical analysis can lead to the development of efficient and effective evidence-based practices. Furthermore, these partnerships can create a feedback loop where research informs best practices that are measured against legal, ethical, and community guidelines to create policing practices. In turn, critical examination of these practices and outcomes can guide police agencies in the refinement of their practices, facilitating the success and legitimacy of police within their communities (Engel & Eck, 2015).

To reduce the likelihood of unintended consequences, risk assessment instruments should be used to guide officer decision making. Labeled as a "best practice," these tools provide a means to increase public safety, reduce crime, reduce racial disparities in criminal just decision-making, and make effective, fair, and efficient use of public resources (Bechtel et al., 2017). In the context of policing, the identification of offenders' risk factors and criminogenic needs can maximize the likelihood that police-led diversion decisions align with the specific target population of the diversion program and enhance intervention plans for those who are diverted to treatment. Guidance in the development and application of such tools can be informed by research documenting the success of risk assessment in pre-trial and correctional settings. Furthermore, the evaluation of the use of lethality assessments in police-involved incidents of domestic violence can inform the implementation of risk assessment instruments in policing contexts. Importantly, the development and implementation of risk assessment tools in policing should be accompanied by rigorous evaluation of related data to identify potential gaps within or biases produced by the instruments. Furthermore, researchers and police executives should adopt a "deliberately transparent approach" regarding the measures and algorithms used in assessment.

Recommendations

Based on this review, we offer several conclusions regarding the state of research and recommendations for work in the future:

- We know little about the context of contemporary police decision-making. The most critical research need, in our estimation, is to reestablish this foundation of research. Large-scale studies using systematic social observation, or some comparable data collection strategy, need to be employed. The introduction of body worn cameras in police agencies across the country presents an important, cost-effective opportunity for rigorous data collection and analyses of police-civilian interactions and officer decision-making that cannot be routinely captured by other data sources.
- Despite the development and proliferation of conceptually sound alternatives to arrest, we
 know little about the long-term outcomes, unintended consequences, or systematic problems
 of implementation for such programs. Lessons from research concerning the unintended

consequences of mandatory arrest policies for domestic violence, or juvenile diversion approaches that led to systemic net widening, highlight the importance of understanding these intricacies. To address this gap in knowledge, future research should include well-designed, multi-method process evaluations and experimental or quasi-experimental outcome evaluations.

• We argue that it is possible to simultaneously reduce crime and rates of arrest and incarceration (Engel et al., 2017). To accomplish this goal, police must re-conceptualize arrest from an "output" or measure of police productivity, to an "outcome" for citizens that has associated costs and collateral consequences. Further, police executives and field supervisors should guide officers to minimize their view of arrest as the primary means to "handle situations" (Bittner, 1967), and work to support appropriate alternatives. This shift away from arrest and toward alternatives to criminal justice processing, however, will require both a change in police culture, along with the provision of a comprehensive set of alternatives for officers to use. This will also necessitate a managerial shift in how police agencies measure performance, process, activities, and productivity beyond simple arrest rates both for internal and external accountability (see Moore & Braga, 2003).

The push for greater use of alternatives to arrest is based on a simple proposition: It is better to divert low-risk offenders away from the justice system and toward the supports and services that can better address those with behavioral, health, and/or criminogenic needs. Successful implementation of such ideas, however, can prove difficult. Regardless, many police executives are poised to accept the challenges of police-led diversion programs. While existing research provides a base for the rationale of this type of diversion, much less is known about the effective design and management of the programs. Police-academic partnerships and the development of evidence-based practices can help to fill this gap in knowledge. Specifically, the examination of existing initiatives represents an opportunity to learn much more about what works, and thereupon to better inform further developments of alternatives to arrest. It is critical that we work to fill these existing gaps in knowledge with emerging research to help drive sound policy and practice.

I. INTRODUCTION

In late December 2008, Hamilton County, Ohio, which includes the City of Cincinnati, was a facing a multi-year fiscal crisis that forced the immediate closing of an 822-bed jail facility (Brown, 2008). This jail closure effectively reduced the available jail space in Hamilton County by 36 percent. Concern and fear swept across neighborhoods, as some political, civic, and law enforcement leaders predicted significant increases in crime, and declared that public safety was at risk (Bronson, 2009). Meanwhile the Cincinnati Police Department (CPD) responded differently. Their leadership recognized that the immediate reduction in jail space required a different enforcement approach; as such, they instructed officers under their command to prioritize the use of arrest. In practice, arrest was treated as a "limited commodity" to be reserved for primarily repeat and serious offenders, when possible. Using problem solving strategies, focused deterrence, and other evidence-based practices, the CPD significantly reduced the number of felony and misdemeanor arrests, while property and violent crime simultaneously continued on a downward trajectory for the next six years (Engel, Corsaro, & Ozer, 2017). In this case study, Engel and her colleagues were careful not to indicate that these trends were causally linked, however the fact remains that, contrary to the pessimistic predictions, the dramatic reduction in jail space in Hamilton County did not result in an increase in crime.

Yet as with many successful initiatives, after several leadership changes in key positions, law enforcement leaders in Hamilton County have drifted back into familiar territory, with concerns of overcrowding and recommendations to reopen the very same jail facility that had been closed a decade ago (Wartman, 2018). These and other concerns have recently led officials within the City of Cincinnati to revisit their policing practices, and again emphasize the importance of implementing problem solving and other evidence-based strategies (Green, Brann, Fagan, & Eck, 2018). In a recent meeting of law enforcement executives and civic leaders, one law enforcement executive asserted that "the role of law enforcement officers in this county is to fill the jail" and that officers across the agencies in Hamilton County have done their part; the implication of course, is that more jail space (and correspondingly more arrests) are needed to continue reductions in crime.

The current discourse in Hamilton County, Ohio is not dissimilar from the conversations shared by political, civic, and law enforcement leaders across the country. As the pendulum swings back toward law-and-order based politics (Scheingold, 1984), pro-arrest strategies are again becoming a mainstay in many communities across the country. The purpose of this literature review is to explore what we know empirically about all aspects related to the use of arrest as an action by law enforcement officials that deprives criminal suspects of their liberty with the intent to invoke the criminal justice system. Through this review, we hope to remind practitioners, policy makers, and philanthropists about the roads we have traveled, and the remaining gaps in our knowledge needed to make informed, evidence-based policy decisions moving forward.

In the mid-1970s, incarceration rates in the United States began to rise dramatically, with an exponential increase of roughly 6-8 percent per year over the next 25 plus years (Travis, Western, & Redburn, 2014). Importantly, at any one time, roughly one-third of the adult incarcerated population is housed in jails, with many of these individuals being held and accused of misdemeanor offenses. The rise in police-driven arrests for low level crime corresponded with a

national movement of 'get tough on crime' policies. In general, these policies led to unsustainable expenditures and long-term consequences of community disruption and harm. Indeed, police are routinely referred to as the gatekeepers of the criminal justice system, and therefore, their formal and informal policies surrounding the use of arrest likely have the most direct impact on incarceration rates (Bittner, 1967; Engel, Corsaro & Ozer, 2017).

Over the last six years, the rate of incarceration has slowed from its peak in 2008, as practitioners and policy makers have begun implementing concerted efforts to reduce the incarcerated population (Carson, 2018). Our most recent comprehensive figures regarding the incarcerated population stem from the Bureau of Justice Statistics released for 2014. In that year, police in the United States made an estimated 11.2 million arrests, including 477,659 for the most serious (Part I) violent offenses (excluding forcible rape), an additional 1,093,258 arrests for other assaults, and 1,553,980 for Part I property offenses (Snyder, Cooper, & Mulako-Wangoat, 2017). This represents a reduction of nearly 2 million arrests compared to figures reported for 2010 (Snyder, 2012). Nevertheless, in 2014, nearly 9.2 million of the estimated 11.2 million arrests were made for non-Part 1 crimes, including 1,295,328 arrests for drug possession, 735,979 for drunkenness and liquor law violations, and 3,274,430 for any of a variety of non-traffic offenses that are otherwise uncategorized in the Uniform Crime Reports.

A great deal of scholarly attention has been paid to police-driven arrest decisions and the various structural, historical, organizational, and situational factors associated with officer decision making and discretion. Historically speaking, the traditional criminal justice response has been to enhance arrest rates for minor crimes. For example, broken windows policing, which suggests that the police should make arrests for minor offenses to reduce the likelihood of serious violence (Wilson & Kelling, 1982), became a policing trademark despite research that suggests there is little to no association between arrests for minor offenses and more serious crime. Attempting to control for the many methodological complexities of examining the arrest-crime relationship in New York City from 1988 to 2001, Greenberg (2014) found that misdemeanor arrests had no significant impact on violent crimes in the city during this period. Likewise, as previously described, Engel et al. (2017) illustrated that a jail closure in Hamilton County, Ohio corresponded with a reduction in police-driven arrests for minor offenses; and, perhaps most importantly there was a continued decline in violent crime despite the significant shift from using arrests (particularly misdemeanor arrests) as a vehicle to control crime rates. In short, there is little current empirical evidence to support an association between arrests for misdemeanor offenses and reductions in serious crime problems. Nevertheless, such net-widening policing tactics and courtroom approaches led to record-setting state and federal incarceration rates and unsustainable financial expenditures in the 1980-1990s (National Research Council, 2014). This is one of many reasons why more recent legislative and social movements have called for a reduction in criminal justice involvement to diminish incarceration rates, strengthen community policing efforts, and provide alternatives to traditional responses (Clear & Frost, 2014; Travis, 2014).

Further, recently there has been considerable attention paid to alternatives to police custodial arrests in an effort to curb this largely untenable model of policing, including an extensive review from 2016 by the International Association of Chiefs of Police (IACP, 2016a). A growing chorus of voices inside and outside of law enforcement has called for alternative, non-arrest responses to some fraction of the voluminous and – in many instances – minor violations. Given that arrests for

minor crimes often lead to broader community problems, this review examines the range of options available to police to handle non-serious offenses and disturbances. As noted by Gottfredson and Gottfredson (1988), there are multiple reasons for the police to avoid using arrest and custody at disturbance and crime scenes. There is a desire to minimize the costs associated with traditional criminal justice processing – particularly when there is no evidence that the added expenses lead to longer term crime reduction. For other situations, the criminal justice process is thought to be an inappropriate response; that is, social and community responses are perhaps better suited to alleviate the proximate disorder or behavioral problems.

Our objectives in this review are to extract from existing research the principal questions concerning police-led diversion, critically evaluate the tentative answers to those questions that empirical evidence provides, and form suggestions for future inquiry. More specifically, the objectives for this review are as follows: 1) provide a comprehensive discussion of the factors associated with non-, partial-, and full-custodial police involvement; 2) evaluate the research that has been conducted thus far and highlight the most consistent and applicable lessons learned; and, 3) outline suggestions for future scholarship to better illuminate unanswered empirical questions and have the potential to better impact policy and programs related to alternatives to arrest. While police have at their discretion a series of alternatives to custody, in this review we focus most heavily on two non-custodial options that have been the object of much prior research. These two options include: citations in lieu of custody or arrest and third-party diversion. We focus mainly on police-led diversion, but make reference to programs that divert offenders at later stages of the criminal justice process in the interest of better understanding the impacts of the interventions to which offenders are referred.

II. DEFINING ARREST

On its face, defining an "arrest" appears to be conceptually unambiguous, but an extensive legal and scholarly examination shows that there are multiple aspects to an arrest that make it nuanced and complex. For example, while most citizens are aware of the general Fourth Amendment rule against "unreasonable searches and seizures" the word "arrest" never appears in the Fourth Amendment. Clancy (2003) illustrates that officers often detain persons in disturbance scenes to get a handle of the situation, to reduce potential risks, and to conduct more detailed investigations. The point at which an event transitions from a detention to an arrest is not always inherently clear. While Miranda warnings (i.e., the right to remain silent, to have representative counsel, that anything stated can be used against the defendant) are a legal requirement by police, the timing of the required warning is not as clear cut as the moment of the arrest but rather a combination of: a) being in police custody, and b) occurring prior to any police interrogation. Most importantly, deciding when being in police custody turns into an official arrest requires a working definition of arrest.

A. Legal Definition

The legal definition of arrest has developed, in large part, from several centuries of common law in the United States (Clancy, 2003). Notably, this reliance on common law has produced a flexible definition of arrest that varies considerably across jurisdictions (Clancy, 2003; Harmon, 2016; Sherman, 1980b). However, in his review Clancy (2003) suggests that the common law definition

of arrest consists of two primary components. Specifically, to be considered an arrest (1) an office must obtain custody of the suspect and (2) the officer's act of obtaining custody must be intentional (Clancy, 2003). Importantly, the concept of "custody" does not require formal booking or charges to be brought forth to constitute an arrest.

While this common law definition of arrest is useful, consideration of the legal definition of arrest necessitates a discussion of the Fourth Amendment of the Constitution. The Fourth Amendment is the primary mechanism of regulation for arrests. Arrest may be considered a form of state seizure, and the Fourth Amendment forbids unreasonable searches and seizures by the government. Harmon (2016) suggests that reasonableness in Fourth Amendment law consists of three components. First, police must have a constitutionally reasonable basis for initiating the search or seizure. That is, there must be probable cause for the arrest (Draper v. United States, 1959; Tennessee v. Garner, 1985). Second, the basis for initiation must be assessed by a reasonable method (Katz v. United States, 1967). In general, this is satisfied by obtaining judicial approval (i.e., warrant) prior to initiating a search, even where probable cause exists. Third, the search or seizure must be carried out in a reasonable manner (Terry v. Ohio, 1968).

Following the Fourth Amendment "[a] police officer may arrest a person if he has probable cause to believe that person committed a crime" (Tennessee v. Garner, 1985; United States v. Watson, 1976). Importantly, this standard of probable cause applies to all arrests, allowing an officer to make an arrest without considering the costs or benefits, whether the arrest is necessary, or whether the arrest serves state interests (Atwater v. City of Lago Vista, 2001; Virginia v. Moore, 2008; Whren v. United States, 1996). Additionally, excepting specific circumstances (e.g., arrests within individuals' homes, see Steagald v. United States, 1981), probable cause allows police officers to conduct arrests without warrants (Harmon, 2016). Furthermore, once probable cause has been established, the Fourth Amendment provides police officers considerable discretion in the "activities" of an arrest, including (but not limited to) handcuffing (e.g., Atwater v. City of Lago Vista, 2001), searches (e.g., Agnello v. United States, 1925), questioning (e.g., Pennsylvania v. Muniz, 1990), and use of force (e.g., Graham v. Connor, 1989; Tennessee v. Garner, 1985) (Harmon, 2016). In sum, a review of the legal literature demonstrates the pervasive and largely unquestioned nature of the probable cause standard for arrest that provides considerable leeway in the definition and use of arrest (Harmon, 2016).

B. Policy & Practice

Harmon (2016) notes that arrest definitions vary by context. Court decisions and statutes sometimes apply the term to simply handcuffing a suspect or issuing a traffic ticket; however, in other instances an event is not defined as arrest when police charge a suspect and haul the suspect to jail so long as the suspect is released without an official hearing (i.e., stationhouse release). For the purposes of clarity, Harmon (2016) thus defines an arrest as encompassing the following five aspects: 1) an officer takes a suspect into custody; 2) the officer transports him or her to a police facility; 3) the police take identifying information, 4) the police create a record of the arrest; and 5) the police detain the suspect until release or a judicial review. For this review, we define arrest as encompassing the full continuum of these five aspects; in short, a full custodial transportation from onset (typically at a disturbance scene) to closure (where the suspected defendant is released after a judicial review). Arrests are the most traditional form of initiation into the criminal justice

system, but there are other avenues the police rely upon to channel individuals into (and outside of) the criminal justice system as well.

The most salient feature of arrest that draws considerable scholarly attention centers on the initial stage of police custody. Gottfredson and Gottfredson (1988) note that there are two common features of custody decisions: (1) the physical act of taking a suspected offender into custody, and (2) initiating the criminal justice process. While certainly there is obvious overlap in that the two features are often used in conjunction during the same incident, Gottfredson and Gottfredson (1988) state that "not every arrest is made with the objective of further criminal justice processing in mind" (p.65, i.e., many arrests are made with no intention of prosecution but rather are used as incapacitation or to begin a treatment objective). Also, continued criminal justice processing is desired by police in certain circumstances even without taking a person into formal custody (e.g., citations in lieu of arrest where suspected defendants are summoned to court and the criminal justice process is initiated).

In this review we also define police custody across this continuum in terms of the type of custody a suspected defendant is taken into: non-custody, partial custody, or full custody. Non-custody is defined as an immediate release at (or nearby) a disturbance scene. Partial custody often involves the transportation from an incident or disturbance scene to a different location prior to release (e.g., release to a family or relative, stationhouse release, or a treatment-based center), but fails to incorporate booking or lockup procedures prior to a courtroom hearing. Full custody is a traditional arrest that includes release to a detention-based facility (i.e., jailhouse) for further criminal justice processing. When considering the types of alternatives to police custody, criminal justice processing and types of custody vary across different police tactics.

III. COSTS OF ARREST

The high rates of arrests in the United States has motivated significant inquiry into both the direct and collateral consequences experienced by individuals taken into police custody. By collateral consequences we mean the "denial of rights, privileges, benefits, and opportunities" that occur outside of the context of the criminal justice system (Gowen & Magary, 2011). These consequences, or "costs" of arrest, can relate to both short- and long-term outcomes. A review of the literature suggests the costs of arrest are both extensive and pervasive across the lives of arrested individuals. However, there is only limited research that provides a comprehensive review of the costs associated with arrest or examines whether those costs are justified (Gowen, & Magary, 2011; for exceptions see Harmon, 2016; Jain, 2015).

This section outlines various costs associated with arrest. It begins with a description of the financial costs of incarceration, followed by the "process costs" and criminal justice outcomes experienced by individuals taken into police custody. This section then reviews the literature on collateral consequences that can affect arrested individuals across their lifetime, and concludes with a brief discussion of the implications of these costs on the lives of arrestees.

A. Financial Costs

The reliance on arrest as a primary mechanism of crime control has significant consequences for later stages of the criminal justice system. The incarcerated population in the United States has grown by nearly 350 percent from 1980 to 2014, with approximately 2.2 million in prisons or jails (Executive Office of the President of the United States, 2016). This dramatic increase in incarceration can be attributed, in part, to tough-on-crime policies and aggressive enforcement strategies that emphasize the use of arrest. While there has been some decrease in this population in recent years (e.g., 1% decrease in prison population from 2015 to 2016; 7% decrease in jail population from 2014 to 2015), the consistently high level of incarceration carries substantial costs for both the government and communities (Carson, 2018; Minton & Zheng, 2016). The United States spends approximately \$80 billion annually on corrections (i.e., prisons, jails, parole, probation)—with the majority of this budget dedicated to the costs of incarceration (DeVuono-Powell, Schweidler, Walters, & Zohrabi, 2015; Executive Office of the President of the United States, 2016).

i. Jails

Jails are locally run confinement facilities primarily used to detain individuals who have been arrested but not yet convicted of any crime, along with those sentenced to less than one-year of incarceration (Subramanian, Delaney, Roberts, Fishman, & McGarry, 2015). There are more than 3,000 jails in the United States, holding between 720,000 to 730,000 people on any given day (Minton & Zheng, 2016; Subramanian et al., 2015). With approximately 19 times the number of annual admissions than prisons (e.g., nearly 12 million admissions in 2013), jails have grown into one of the most significant expenditures a community makes every year (Subramanian et al., 2015). In their most recent report examining local government corrections expenditures, the U.S. Department of Justice estimated that local communities spent just over \$22.1 billion on jails in 2011 (Kyckelhahn, 2013). However, some suggest the costs of jails are underestimated, arguing that other government agencies in local jurisdictions bear a large share of jail expenses (e.g., employee benefits, inmate health care, administrative costs, inmate programming) not reflected in jail budgets (Henrichson Rinaldi, & Delaney, 2015). For example, in a recent survey of 35 jail jurisdictions in 18 states, the Vera Institute found that more than 20 percent of jails costs were managed outside the jail budget in almost a quarter of the surveyed jurisdictions (Henrichson et al., 2015).

ii. Prisons

At the end of 2016, the United States had an estimated 1,505,400 prisoners under the jurisdiction of state and federal correction authorities (Carson, 2016). As institutions where all aspects of life are conducted and administered, prisons must provide everything deemed necessary for the individuals placed there—maintaining a population of this size is an expensive endeavor. For example, in a survey of state prison expenditures, the Vera Institute found that the total costs of state prisons in 2015 were approximately \$43 billion (Mai & Subramanian, 2017). Furthermore, the cost per inmate ranged from \$14,780 in Alabama to \$69,355 in New York, with an average

¹ It should be noted that five states, Maine, Mississippi, Nebraska, New Hampshire, and Wyoming, did not complete a survey for this study (Mai & Subramanian, 2017).

cost of \$33,274 per inmate (Mai & Subramanian, 2017). In the same year, the Department of Justice estimated the average cost of incarceration for Federal inmates as \$31,977.65, or \$87.61 per day (Bureau of Prisons, 2016a)—with annual costs of over \$6 billion for the Federal Prison System (Bureau of Prisons, 2016b). Similar to the findings on jail expenditures, this research suggests that employment and personnel costs (e.g., salaries, overtime, and benefits) comprise the majority of prison expenditures (Mai & Subramanian, 2017).

While the costs of incarceration cited above are substantial, it is important to note that these are conservative estimates. Specifically, it has been observed that a significant portion of corrections costs, for things like health care for inmates, staff benefits, program costs, do not appear in government budgets (Henrichson & Delaney, 2012). This suggests the total annual costs for corrections is much higher than \$80 billion—though estimates vary depending on the source (Henrichson et al., 2015; McLaughlin, Pettus-Davis, Brown, Veeh, & Renn, 2016; Wagner & Rabuy, 2017). Therefore, our understanding of the true financial cost of incarceration is, in many ways, incomplete.

B. Other Direct Costs and Collateral Consequences

For any individual, an arrest can be an embarrassing or frightening ordeal that may cause significant psychological distress. Being handcuffed, transported, fingerprinted, photographed, questioned, etc., entails an important loss of a citizen's liberty and privacy that would otherwise remain intact (Harmon, 2016; Jain, 2015). Furthermore, any arrest—including those for minor offenses—can lead to a "chain of civil consequences" (Jain, 2015). Specifically, individuals may have to sacrifice time, money (e.g., arrest fees, booking fees, attorney fees), and opportunities as a result of their arrest. Collectively, these "process costs" can quickly come to outweigh any formal penalty that might be imposed by the criminal justice system, particularly for minor offenses (Feeley, 1979). Notably, process costs of arrest and trial often encourage defendants to accept plea agreements, particularly in cases involving minor crimes (Bowers, 2008; The Bronx Defenders, 2013).

In the cases where defendants go to trial, research findings suggest there are cumulative costs of arrest for criminal justice outcomes. Specifically, research indicates that arrest, in lieu of citation, may increase the chances that a suspect will be detained before trial (Baumer & Adams, 2006). In turn, pretrial detention has been found to increase the likelihood of incarceration and sentence length (Lowenkamp, VanNostrand, & Holsinger, 2013; Phillips, 2008; Sacks & Ackerman, 2014; Williams, 2003), effectively compounding the deprivation of liberty caused by the arrest. These findings are particularly salient for misdemeanants. For example, in their examination of 153,607 defendants booked into a jail in Kentucky between June 1, 2009 and June 30, 2010, Lowenkamp et al. (2013) found low-risk defendants detained for the entire pretrial period were 5.41 times more likely to be sentenced to jail.² Furthermore, these defendants were more likely to receive longer jail sentences, with the largest effects seen for low-risk defendants (Lowenkamp et al., 2013).

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² Risk-level was determined using the research-based, validated Kentucky Pretrial Risk Assessment (KPRA). This assessment consists of 12 risk factors, including measures of offense class, criminal justice, status, criminal history, failure to appear, and community stability (Lowenkamp et al., 2013).

While short-term costs and criminal justice related experiences are important to consider, for many individuals, arrests are more than just a point of entry into the criminal justice system. Indeed, arrested individuals can face continuous, long-term consequences outside of the criminal justice system—regardless of whether the arrest resulted in a conviction (Jacobs & Crepet, 2008; Jain, 2015). There are many instances in which arrests are used systematically by noncriminal justice actors, such as employers, housing authorities, social service providers, and immigration enforcement officials, as proxies for valuable information about an individual like his/her potential for violence, unreliability, or instability (Jacobs, 2006; Jain, 2015). This reliance on arrests by noncriminal justice actors in their decision-making is argued to function as a significant source of regulation that extends the collateral consequences of arrest—setting off a "complicated and poorly understood web of interactions with the criminal justice system" (Jain, 2015, p. 809). In particular, a substantial amount of literature documents various costs of arrest in areas such as employment, education, public housing, and immigration. These areas are discussed below.

i. Employment

While the negative effects of felony-level prison records on employment opportunities has been well established (Decker, Spohn, Ortiz, & Hedberg, 2014; Pager, 2003, 2007), less is known about the impact of low-level records involving arrests for minor offenses and "misdemeanor justice" (Kohler-Hausmann, 2013; Uggen, Vuolo, Lageson, Ruhland, & Whitham, 2014). However, some suggest that individuals with arrest records may have fewer, or less desirable, financial and employment prospects in the long-term (Fields & Emshwiller, 2014; Grogger, 1992; Harmon, 2016). For example, an analysis of a National Longitudinal Survey of Youth conducted in 1997-2010 by the U.S. Bureau of Labor Statistics found that those who were arrested, but not convicted, earned \$2,000 less on average and were 8 percent more likely to be in poverty than similarly situated individuals who had never been arrested (Fields & Emshwiller, 2014; U.S. Bureau of Labor Statistics, n.d).

Others note how the increase in employer's accessibility and use of information pertaining to criminal history through background checks has magnified the consequences of arrest on employment opportunities (Uggen et al., 2014). Though the U.S. Equal Employment Opportunity Commission (EEOC) provides guidance regarding the use of criminal history in hiring and other work-related decisions, employers maintain a significant degree of discretion in this area (Kovel, 2015). Importantly, it has been observed that criminal background checks often provide flawed, incomplete, or out of date information (Duane, La Vigne, Lynch, & Reimal, 2017; Neighly & Emsellem, 2013). For example, FBI records, considered the gold standard of criminal background checks, routinely fail to update important information on the actual outcome of arrests (Neighly & Emsellem, 2013). The responsibility for correcting this information typically falls to the arrestee, who is likely to find the process complicated, time consuming, and often ineffective (Fields & Emshwiller, 2014). Therefore, while employers might view background checks as a helpful tool to (1) reduce their legal liability for negligent hiring/retention and (2) prevent the occurrence of crime or other threats to workplace safety, the use of arrest records as a screening tool for employment can have serious long-term consequences for arrestees (Duane et al., 2017; Uggen et al., 2014).

ii. Education

In addition to employment opportunities, arrests have been found to have important implications for educational attainment—particularly among juveniles. Specifically, arrests serve as a significant form of disruption to students' educational trajectories (Hirschfield, 2008; Kirk & Sampson, 2013). Research consistently demonstrates the impact of arrest on high-school dropout and college enrollment rates (Bernburg & Krohn, 2003; Hjalmarsson, 2008; Sweeten, 2006). For example, in a study of Chicago public school students, Kirk and Sampson (2013) found that the probability of dropping out of school was 22 percent greater for arrested juveniles compared to their non-arrested counterparts. Additionally, the likelihood of arrested juveniles enrolling in a four-year college was 16 percent lower than the likelihood for similarly situated non-arrestees (Kirk & Sampson, 2013).

Arthur (2001) found that one-third of all youth held in juvenile detention centers are detained for status offenses and technical violations of probation. Given that most scholarship suggests that secure confinement and detention are almost never appropriate for status offenders and other small groups of low-risk offenders (i.e., young, vulnerable, those charged with non-serious offenses or first-time offenders) it is a problem that is of pressing concern to policy makers and researchers alike.

While the association between juvenile arrest and long-term consequences (i.e., school dropout, long-term delinquency and offending, and broader health issues) has been well documented, it is difficult to establish the precise impact of arrest of juveniles with intervening selection effects and propensity toward broader offending. Hirschfield (2008) conducted analyses matching risk factors on high risk juveniles who avoided arrest with similar juveniles who were arrested and ultimately found being arrested weakens subsequent participation in urban schools, decreasing capacity to educate and otherwise help vulnerable youths, which has lasting consequences for arrested youth. Thus, it is imperative for law enforcement officials to use tools beyond arrest and custody to address juvenile delinquency patterns and yet, where possible, avoid the stigmatization and netwidening impact of arrest.

In many cases, being officially labeled as a "criminal" due to arrest may change the way educational institutions treat students. Exclusionary policies seeking to enhance accountability and school safety may prohibit students with arrest records from attending specific schools. In other cases, students with arrest records may be segregated from their peers into specialized programs for problem youth (Kirk & Sampson, 2013). In the long-term, labeled offenders may have fewer prospects for higher education due to unstated admission criteria and/or the inability to secure financial aid for schooling costs (Federal Student Aid, n.d.; Stuart, 2010). The educational disruption caused by arrest can have significant implications for other important outcomes over the life course, such as employment and family life (Western, 2006). The emphasis on "zero tolerance" policies within the educational setting is argued to exacerbate these outcomes (Mallett, 2016).

iii. Public Housing

Ineligibility for public housing is another long-term, collateral consequence affecting individuals who have been arrested. Historically, the United States has acknowledged the importance of housing for the quality of life of its citizens (see e.g., The United States Housing Act of 1937, 1990 Cranston-Gonzalez National Affordable Housing Act). Nevertheless, exclusionary public housing policies broadly based on safety goals (e.g., "one-strike" housing eviction laws) can condemn those with criminal records to homelessness or a transient lifestyle (Carey, 2005). Specifically, following federal law, public housing officials may use evidence of criminal activity to (1) screen applicants and (2) identify and evict current tenants who may be in breach of their lease (42 U.S.C. § 13661; Jain, 2015). Research suggests there are millions of Americans who have been convicted of a misdemeanor, or merely arrested but never convicted of an offense, that can be and often are excluded from public housing on the basis of their criminal record (Carey, 2005). Furthermore, for those who have managed to obtain one of the limited spaces in public housing, an arrest serves as the first step of a screening process that may lead to their eviction (Jain, 2015).

Notably, the reliance on arrest information by public housing authorities in their screening and eviction decisions affects entire households, not just the arrested individual (Austin, 2002; Jain, 2015; Rodney, 2004). Specifically, if any individual is found to participate in criminal or drug-related activity, every member of their household is eligible for eviction (Rucker v. Davis; Department of Housing & Urban Development v. Rucker). Though, subsequently, the U.S. Department of Housing and Urban Development has encouraged the consideration of a myriad of factors in eviction decisions—such as the seriousness of offense, effects of eviction on the entire household, and willingness of head of household to remove arrested individual from occupancy—the significant discretion of public housing authorities to screen and evict tenants based on arrest remains (Jain, 2015).

iv. Immigration

Finally, arrest can be used as grounds for deportation (Jain, 2015). Specifically, for immigration enforcement officials, arrests provide a screening tool to identify unauthorized immigrants for removal. Using information sharing programs, such as the former Priority Enforcement Program (PEP), immigration officials are able to check the immigration status of every arrested individual across the country (see https://www.ice.gov/pep). This information mobilizes the removal of certain noncitizens who have come into contact with the criminal justice system.

The use of arrests as a screening device for removal efforts is supported by a recent executive order, *Enhancing Public Safety in the Interior of the United States*, issued by President Trump on January 25, 2017. This executive order and its subsequent implementation memorandum (*Enforcement of the Immigration Laws to Serve the National Interest*) has expanded the focus of the U.S. Immigration and Customs Enforcement to include the removal of unauthorized immigrants who (1) have been convicted of any criminal offense, (2) have been charged with any criminal offense that has not been resolved, and/or (3) have committed acts that constitute a chargeable criminal offense (for full list see U.S. Immigration and Customs Enforcement, 2017).

By linking immigration enforcement with crime control, this executive order encourages the use of arrest records (and other information related to an individual's criminal history) as grounds for administrative arrest and removal from the United States. Indeed, the start of the Trump administration to the end of Fiscal Year 2017 demonstrated a 42 percent increase from the number of administrative arrests in the same timeframe in Fiscal Year 2016 (U.S. Immigration and Customs Enforcement, 2017). Presumably, these screening efforts are meant to target unauthorized immigrants guilty of serious offenses. However, given that the majority of arrests are for minor crimes, this screening process disproportionately impacts those arrested for low-level offenses (Jain, 2015). Therefore, while arrests for minor offenses may not lead to further consequences in the criminal justice system, they can lead to significant immigration consequences that, arguably, outweigh any legally imposed punishment fitting for the crime (Jain, 2015; Motomura, 2011).

C. Conclusion

The emphasis of this review on the direct and collateral consequences of arrest in the areas of criminal justice, employment, education, public housing, and immigration is not meant to suggest these are the only areas in which arrested individuals might encounter the costs of their arrest. However, these are the areas that have been thoroughly discussed across the wide array of literature relating to the consequences of arrest. To be sure, there are many other areas that may demonstrate negative long-term effects of arrest. For example, arrests can affect child custody rights and eligibility as a foster care household (Child Welfare Information Gateway, 2011; IACP, 2014; Puddefoot & Foster, 2007). Arrests for certain misdemeanor crimes can limit individuals' ability to purchase a firearm (Pierce, 2017). Additionally, similar to employers, many licensing authorities use arrests as a screening tool in their decision-making (Jacobs, 2006; Jain, 2015). The current challenge for research lies in the need to determine the volume and scope of the collateral consequences of arrest that exist across these numerous noncriminal justice contexts (Gowen & Magary, 2011).

Despite this challenge, this review suggests the direct and collateral consequences of arrest for individuals are substantial. Through arrests, individuals can accrue significant process costs while simultaneously increasing their likelihood of negative outcomes across a myriad of settings. In particular, the use of arrest information as a screening/regulatory tool in noncriminal justice settings places many arrestees at a consistent disadvantage. For many individuals, the most severe and long-lasting costs of an arrest do not come from conviction or formal punishment, but the myriad of collateral consequences in their personal, public, and professional worlds (Chin, 2012). This is understandable considering that the collateral consequences of arrest often far outweigh any formal penalty that could be imposed by the criminal justice system (Feeley, 1979; Harmon, 2016). Ultimately, this wide range of costs emphasizes the importance of police officers' decision to arrest—questioning the appropriateness of arrest as a primary police response, particularly for the overwhelming number of misdemeanor offenses officers encounter (Harmon, 2016).

IV. EXPLAINING THE DECISION TO ARREST

Given the significant financial costs and collateral consequences surrounding the use of arrest, it is imperative to better understand individual officers' decision-making during encounters with suspects. It is during these encounters that the majority of arrest decisions are made, often without

direct supervisory oversight or legal guidance. It is critical to understand the factors that influence officer decision making prior to implementing strategies or policies designed to limit the use of arrest or provide even to provide alternatives to arrest. Identifying the factors that influence arrest (and the relative strength of their influence) is a critical first-step, and provides the foundation upon which evidence-based strategies must be developed. In the section below, we summarize the nearly seven decades of research that has guided researchers and practitioners, and highlight the areas where additional research is needed.

A. History of Policing Research

Before 1960, only a handful of studies had been conducted in field of criminal justice, and most were the result of periodic reform commissions implemented by political leaders (Walker, 1992; Remmington, 1990). This research largely examined actual criminal justice practices and compared these practices to an expected "prescriptive ideal" or what we might expect based on a strict interpretation of agency policies and the law (Bernard & Engel, 2001). However, in the late 1950s, the American Bar Foundation (ABF) sponsored a series of observational studies that spanned the criminal justice system, and changed the collective understanding of actual practices within the criminal justice system. Unlike previous reform commission studies, the ABFsponsored studies interpreted the deviations found between the "law on the books" and actual observed practice in the field as legitimate "pervasive discretion inherent in the enterprise," rather than solely as incompetence, malice, or corruption (Bernard & Engel, 2001, p.7). This shift in interpretation resulted in a significant redesign of the studies and delayed publication of the work until 1969 (Walker, 1992). But as described by Bernard and Engel (2001, p.7), "this shift in interpretation also was the single event most responsible for the development of criminal justice as an academic field" (also see Walker, 1992; Remington, 1990). It was recognized that criminal justice officials exercise a considerable amount of discretion in the activities they perform, the manner in which they interact with citizens, and the processes by which they invoke and uphold the law.

It has been argued that the identification and recognition of pervasive discretion used by criminal justice actors in the ABF-sponsored studies – commonly referenced by academics as the "discovery of discretion" – created a paradigm shift in conventional thinking about criminal justice research and reform (Walker, 1992). This "discovery of discretion" was particularly important in the field of policing, where it was recognized that rank-and-file officers at the lowest levels within the organizational hierarchy represent "street-level bureaucrats" with the greatest discretion over critical decisions (Lipsky, 1980).

In the nearly 70 years since the ABF studies, research in the field of criminal justice has exploded; yet consistent with this paradigm shift, the majority of research has focused on explaining the discretionary decision-making exercised by criminal justice actors and organizations. Within the field of policing, research has focused primarily on easily measurable discretionary activity by police — including issuing citations, making arrests, and to a lesser extent, uses of force. For the purposes of this review, we explore the literature that has examined the arrest decision.

Early research (1960s-1970s) exploring police discretion was generally ethnographic or qualitative in nature, and typically focused on one or two police departments in the form of case studies (e.g.,

Westley, 1953, 1970; Brown, 1988; and Van Maanen, 1974, 1978). Over time the research become more systematic and quantitative, with more observations of police behavior collected through official police data sources or through systematic social observation studies, accompanied by quantitative data analyses using advanced statistical techniques.

The shift from qualitative to quantitative research was also accompanied by a change in focus from researching police agencies, where individual officers were seen as part of that larger entity, to the behavior and decision-making of individual officers. Consequently, researchers began to examine more specific questions in comparison to the earlier wide-ranging qualitative observational studies. In the 1960s and 1970s, several larger-scale studies systematically collected and analyzed observational data of police behavior, beginning with the Black and Reiss study in Chicago, Washington, and Boston in 1966 (Black, 1980; Black & Reiss, 1970); the Police Services Study which examined 24 different police departments in 1977 (Caldwell, 1978); and the Midwest City study (Sykes & Clark, 1975). The methodological approach of each of these studies was systematic social observation (SSO), which combines the rich detail of participant field research with the objectivity of systematic survey data collection (Reiss, 1971). Over the next several decades, studies followed that used secondary data analyses to examine specific research questions regarding police behavior. These studies contributed significantly to our understanding of police officers' decisions to invoke the criminal justice system through arrest (National Research Council, 2004a), and are reviewed in greater detail below.

As police practices changed and reforms were implemented in the 1990s through 2000s, our body of research became even more focused and specialized, using evaluation techniques to determine "what works" in policing, often with success defined as reductions in crime and disorder (Eck & Maguire, 2000; Sherman et al., 1997; Telep & Weisburd, 2012; Weisburd & Eck, 2004). At least some of this evaluation research used experimental designs with random assignment of criminal justice actions to determine effectiveness of actions, compared to crime-related outcomes (e.g. Braga et al., 1999; Ratcliffe, Taniguchi, Groff, & Wood, 2011; Sherman & Weisburd, 1995; Weisburd, 2000). A shift in the dependent variable – from arrest to crime – signaled a change in the predominant research focus from understanding police behavior to understanding how police behavior influenced incidents of crime and disorder. Unfortunately, this shift in research focus had a stifling effect on production of research designed to understand police behavior, including the decision to arrest.

i. Setting the Baseline: Routine Police Practice

Fifty years ago, James Q. Wilson (1968) observed that the tendency of the police is to *under-enforce* the law. Police commonly released offenders, notwithstanding evidence of culpability sufficient to make an arrest. Wilson pointed out that police see their authority as a resource in accomplishing their objectives, and in many instances their objective is merely to "handle the situation" – to restore order, and to prevent immediate violence. When an arrest is made, the "formal charge justifies the arrest but is not the reason for it" (Bittner, 1974, p.27); the reason is that the situation could not be handled in some other, informal fashion. At about the same time, systematic social observation (SSO) of the police confirmed that the arrest rate for misdemeanants with whom police had contact was slightly less than 50 percent (Black, 1971).

Little in the last fifty years of research on police behavior has contradicted Wilson's assertion. Among the misdemeanor offenses observed for the 1977 Police Services Study (PSS), Smith and Visher (1981) found that arrests were made in 14 percent. In their analysis of observational data collected 20 years later (1996-1997) for the Project on Policing Neighborhoods (POPN), Terrill and Paoline (2007) found that in encounters with (non-traffic) suspects for whom police had evidence sufficient to support an arrest, officers made custodial arrests in about one-quarter (27.2 percent) and they issued a citation in an additional 8 percent. Thus, even as policing had become more proactive with the "war" on drugs and with greater attention to the "broken windows" of disorder, in nearly two-thirds of the cases involving a face-to-face encounter with a suspected offender (whom police had probable cause to arrest), they did not arrest, in effect diverting those offenders from the criminal process.

Since 1999, the Bureau of Justice Statistics (BJS) periodically includes the Police Public Contact Survey (PPCS) as a supplement to the National Crime Victimization Survey (NCVS) to measure self-reports of citizen contacts and experiences with police officers. The most recent findings available for the PPCS conducted in 2011 estimate that 22.8% of U.S. residents age 16 and older had face-to-face contacts with police in the last year, and of those, 3.1% reported being arrested during their most recent contact (Berzofsky et al., 2017). This supports Goldstein's (1960) original observation that levels of actual enforcement, in terms of arrest, fall far short of full enforcement. How and why these discretionary arrest decisions are made was the subject of serious scientific inquiry from the 1950 - 1990s.

When police do not arrest, they may choose a course of action from among several alternatives, including warning suspects, commanding or requesting that the individual discontinue his/her behavior, making referrals to third parties of an official (e.g., a mental health facility) or unofficial (e.g., family member) nature, providing information or counseling, or doing nothing. Focusing expressly on the decision to *not* arrest, research analyzing data collected in the mid-1990s found that police were less likely to arrest when the offense was less serious, when the officer initiated the contact, and when the suspect was compliant, respectful, and sober (Terrill & Paoline, 2007). Research has not been successful in accounting for officers' choices among informal options, however (Worden, 1989; Worden & Brandl, 1990).

Referrals represent a routine form of diversion not only *from* the criminal justice process but *to* other sources of assistance, though it has not been the subject of much inquiry. Scott and Moore define referrals as "the act of directing certain citizens (i.e., suspects, offenders, persons in need) to either specialized units of the police department or to community resources outside the department for more appropriate case handling" – more appropriate, that is, than the criminal process (1981, p.3). Referrals may be "direct" – in which the officer takes steps to connect the citizen with an agency – or merely "suggested" formally or informally, and with either a voluntary or coercive nature. Overall, direct or suggested referrals were made in 12 percent of all (n=5,688) police-citizen encounters observed for the PSS data collected in 1977, although only 3 percent of suspected offenders were referred. Referrals depended on the nature of the problem that police handled, but were not influenced by officers' awareness of referral options or their attitudes toward referrals, as most officers were cognizant of available agency and community resources and were

favorable toward the use of referrals.³ Unfortunately, we could find no research of this kind that was conducted since Scott and Moore's (1981) study using data from the late 1970s.

ii. Factors that Predict Arrest

From early research based on simple bivariate comparisons of police outcomes and citizen characteristics (e.g., Piliavin & Briar, 1964; Black, 1971; 1980), research exploring police behavior evolved through the use of advanced multivariate statistical techniques that work to isolate the effects of extra-legal factors on police decision-making, after controlling for legal factors. In 1980, Sherman developed a now well-known typology of the possible influences over police discretion: 1) individual factors (e.g., officers' characteristics, including gender, race, experience, training, attitudes, and demeanor); 2) situational factors (e.g., suspect, victim, and encounter characteristics); 3) organizational factors (e.g., agency size, supervision, and managerial styles); 4) community factors (e.g., neighborhood characteristics, and political contexts), and 5) legal factors (e.g., seriousness of the offense, strength of evidence). Several other literature reviews that followed Sherman used similar frameworks to organize studies (e.g., Brooks, 2001; Gottfredson & Gottfredson, 1988; Riksheim & Chermak, 1993; Walker, Spohn, & DeLone, 1996) as a coherent body of evidence regarding police decision-making emerged. Likewise, in the early 2000s, the National Research Council convened the Committee to Review Research on Police Policy and Practices to review the volumes of research that had amassed regarding policing (National Research Council, 2004a). The Committee established four categories of explanatory factors, from the most to least proximate to officers' discretionary choices: situational factors, including both legal and "extra-legal" factors (which should not influence officers' decisionmaking processes); officers' characteristics and outlooks; organizational characteristics and policies; and community characteristics.

Using Sherman's typology, the majority of studies conducted included examinations of individual and situational factors. A smaller number of studies explored organizational factors, and finally only a handful of studies considered in impact of community factors over arrest. The uneven distribution of research studies across categories is likely due to the type of data available; specifically, SSO and official data is easiest to use for research that considers the influence of individual and situational factors.

Collectively, studies using multivariate statistical models generally demonstrated that legal factors (including seriousness of the offense, strength of evidence, resistance / noncompliance shown by the suspect, and preference of complainant, if any) had a much stronger influence over arrests compared to all of the remaining extra-legal categories (situational, individual, organizational, and community) (e.g., Brooks, 2001; Klinger, 1994; National Research Council, 2004a; Riksheim & Chermak, 1993). Nevertheless, some extra-legal factors did demonstrate influence over arrest decisions (Engel & Swartz, 2014; National Research Council, 2004a). It was the impact of these extra-legal factors – some of which directly called into question the legitimacy of police– that generated the most controversy, discussion, and additional research. In the review below of the

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³ Scott and Moore's study also included analyses of the agencies to which referrals might be made as well as an assessment of the satisfaction of the citizens who were referred.

impact of extra-legal factors on arrest decisions, only those extra-legal factors that have demonstrated consistent and moderate to strong impact are included.

a. Impact of Legal Factors

Multivariate statistical modeling of arrest decisions (using both SSO and official data sources) consistently demonstrates that, as expected, legal factors explain the vast majority of the associated variance in arrests. These legal factors include strength of the evidence, offense seriousness, arrest warrants, suspects' prior record, victim's preference, suspects' behavior, and the law itself.

First, the strength of the evidence available to officers at the time of the police-citizen encounter – including direct officer observation of the offense, eyewitness accounts, along with the suspects' behavior and admissions – is often demonstrated to be one of the strongest predictors of arrest. Likewise, seriousness of the offense is a very strong predictor of arrest (Klinger, 1995). Combined, strength of evidence along with the seriousness of the crime often effectively removes discretion from officer arrest decisions. Yet the majority of calls for service and police-citizen encounters involve less serious offenses, often with ambiguous evidence. It is in these situations where an examination of the exercise of police discretion is particularly relevant.

The presence of preexisting arrest warrants significantly increases the likelihood of arrest when these wanted offenders are encountered by police (Engel, 2008). An arrest warrant is an official document issued by a judge or magistrate, upon a showing of probable cause, that authorizes a police officer to take someone accused of a crime into custody. Though commonly used, research provides little comprehensive understanding regarding the prevalence of arrest warrants in the United States, variation in the use of warrants, or the effects of these warrants on arrest rates across jurisdictions. In a recent nationwide survey of law enforcement agencies conducted by the International Association of Chiefs of Police (2016a) found that, for many responding agencies (644 of 902; 72%), having a warrant disqualifies individuals from citation in lieu of arrest. Furthermore, warrant history was considered relevant information in the decision to cite versus arrest by more than two-thirds (586 of 848; 69%) of the responding agencies (IACP, 2016a). These findings suggest the importance of considering the impact of arrest warrants on police activities and individual officers' decision-making.

Arrest warrants, however, have raised recent concern regarding the appropriateness and legitimacy of their use. These concerns are bolstered by recent investigations in the patterns and practices of police agencies suggesting that arrest warrants may be issued for reasons outside of enhancing public safety. For example, in the examination of Ferguson Police Department (Ferguson, MO), the Civil Rights Division found that in fiscal year 2013 alone, the court issued warrants to approximately 9,007 individuals for 32,975 different offenses. The warrants were found to stem, in large part, from minor offenses such as traffic violations and parking infractions and as a routine response to missed court appearances and required fine payments (Civil Rights Division, 2015).

The impact of two additional legal factors – suspects' prior record and victim preference for disposition – have also been considered slightly controversial. While some scholars have argued that both victim preference and suspect's prior record are legal considerations that should impact arrest decisions by officers, others believe that these are actually extra-legal factors that can lead to disparate outcomes. Regardless of how they are classified, the research findings associated with

both victim preference and suspect prior record demonstrate a relative strong influence over arrest decisions.

Officers' decision to arrest is strongly influenced by the preferences of complainants, particularly when the offense is a less serious one and when there is more evidence for the crime (National Research Council, 2004; Mastrofski, Snipes, Parks, & Maxwell, 2000; Smith & Visher, 1981; for domestic violence example see Buzawa & Austin, 1993). Note, however, that the inclusion of complainant preference in police decisions to arrest has been argued to present the potential for bias. Black (1971) observed that the tendency of police officers to adhere to the preferences of complainants gives "police work a radically democratic character," allowing the standard of justice that police apply to vary with the moral standards of complainants. Specifically, Smith, Visher, & Davidson (1984) found evidence of "differential responsiveness" - suggesting police are more responsive to preferences of White victims of crime than Black victims. In their study of how patrol officers respond to citizens' requests that officers control another citizen (through persuasion, warnings, threats, making someone leave the scene, or arrest), Mastrofski and colleagues (2000) warned that officers more prone to acquiesce to citizen requests are not necessarily "better" in managing incidents. They suggest "[c]itizens may ask for many things that are trivial, unwarranted, illegal, or unjust. The police, after all, are here to act for us when the better angels of our nature are not" (Mastrofski et al., 2000: p. 338).

More recent research examining misdemeanor arrests by the New York City Police Department (NYPD) demonstrates that the presence of a complainant may influence officers' likelihood of arrest in a misdemeanor incident (Chuahan, Tomascak, Cuevas, Hood, & Lu, 2018). For example, while overall misdemeanor arrests decreased from 1993 to 2016 in New York City, misdemeanor arrests for complaint-driven charges (e.g. person-related charges and victim-related property charges) actually increased during this time period (Chuahan et al., 2018). These complaint-driven arrest charges exceeded the number of arrests for charges that are less-likely to be complaint driven (e.g. drugs, theft of services) in 2015 and 2016, despite their overall minority presence in study time frame of 1993 to 2016.

Research also consistently suggests that suspects with a prior criminal record are more likely to be arrested (National Research Council, 2004a). Racial disparities across the criminal justice system mean that certain segments of the population are more likely to have a prior criminal record. For example, in 2015 Black Americans comprised 35% of the jail population in the United States (Minton & Zeng, 2016) compared to 13.3% of the population (United States Census Bureau, 2016). To the extent that officers rely on prior criminal record in their determination of probable cause and decision to arrest, the likelihood of (re)arrest for these individuals is greater than those with no record (Duke University School of Law, 1984). The availability of arrest/prior record may affect officers' discretion in their decision to arrest to the extent that the information available to the officer (Duke University School of Law, 1984).

Scholars have also raised issues related to the influence of suspects' demeanor over officer behavior, including arrest. Early ethnographic research demonstrated that suspects who displayed disrespect toward officers were more likely to be arrested (e.g., Westley, 1953; Van Maanen, 1978). These findings were confirmed in subsequent quantitative analyses (e.g., Black, 1980; Black & Reiss, 1970; Lundman, 1974; Smith & Visher, 1981; Worden & Pollitz, 1984). However,

in 1994, David Klinger challenged this literature, suggesting that studies exploring suspect demeanor improperly conflated illegal behavior (e.g., threatening or assaulting officers) with disrespect. In summary, Klinger (1994) argued that legal factors were being combined into measurements of extra-legal factors. Later studies demonstrated that when suspects' behaviors – including actions that were noncompliance, verbally or physically resistant, or related to drug/alcohol intoxication – were separated from suspects' legal attitudinal displays of disrespect, it was primarily the former and not the latter that predicted arrest (Engel, Sobol & Worden, 2000; Worden & Shepard, 1996; NRC, 2004). While the differences in measurement may have been considered subtle, the outcomes reported from this body of research had significant implications for policy and training (Worden, Shepard & Mastrofski, 1996).

b. Changes in the Law

Legal reform is one way for police to maintain or develop legitimacy for their decision making with external stakeholders. State and federal legislation, court decisions, and local ordinances all have the ability to change the larger conversation about police work, its priorities and goals, and how the use of arrest can support these (see also Farrell & Cronin, 2015). Unlike the legal factors described above that are routinely studied by researchers, considerably less is known about the impact of legal reforms on police work. Furthermore, the purpose of reforms on police use of arrest is not uniform, as some legal reforms aim to increase police use of arrest, while others attempt to limit it. For example, two states (Georgia⁴ and Illinois⁵) introduced legislation to formalize prearrest diversion for law enforcement agencies in 2018. Both legislative efforts are designed to divert individuals with substance abuse and mental health issues from law enforcement intervention, and would formalize law enforcement abilities to connect these individuals to the necessary service providers. The effectiveness of these legislative changes has not yet been studied.

While enacting law may be the most effective route in legitimating police decision making, it can be difficult to translate the enactment of law into actual enforcement of law. That is, despite the theoretically uniform application of laws across jurisdictions, in practice legal mandates are enforced or adhered to differently by police officers (Grossman & Miller, 2015; Farrell & Cronin, 2015; Schwartz & Davaran, 2013). It can be difficult for researchers to disentangle whether the effectiveness of a law is actually in question, or whether it is simply not being enforced as intended.

The body of research assessing the influence of various legal and judicial reforms is primarily characterized by pre-post examinations of police use of arrest, usually in the form of interrupted time series designs that aim to determine the impact of a new law, ordinance, or court ruling. Commonly examined topics of legislation and, to a lesser extent, judicial decisions, include: decriminalization and stricter criminalization of drug and other minor offenses, prostitution, driving while intoxicated, juvenile curfews, and domestic violence. An overview of existing research is provided below; however, due to the comparably larger number of studies examining

⁴ Entire Georgia Legislation: http://www.legis.ga.gov/legislation/en-US/Display/20172018/HB/716

⁵ Entire Illinois Legislation: http://www.ilga.gov/legislation/billstatus.asp?DocNum=3023&GAID=14&GA=100&DocTypeID=SB&LegID=110 539&SessionID=91

the impact of mandatory arrest legislation on arrest in domestic violence incidents, this subset of the research is examined in a stand-alone section of this review.

Researchers examining how arrest is affected by the decriminalization of minor drug and other offenses have found mixed results. Ross & Walker (2017), for example, found that California jurisdictions that adopted low-priority laws (e.g., laws that mandate minor marijuana possession offenses be the lowest enforcement priority for police) experienced a reduction in arrests for misdemeanor marijuana offenses. They found a lagged effect for the reduction in arrests, indicating that it took some time after the legislation was enacted for police to change their behavior in practice. They did not, however, find evidence of an increase in arrests for more serious offenses, which was the intended purpose of the law. The authors suggested that this lack of an effect on felony arrests could be due to the law not necessarily creating enough time for officers to significantly impact more serious crime. It is also plausible, however, that the time created was not used by officers for the intended purposes of deterring and solving more serious crimes. In an examination of the impact of Colorado's legalization of marijuana on border counties in Nebraska, Ellison & Spohn (2017) found that marijuana-related arrests (both for sale and possession arrests) significantly increased in border counties of Nebraska after the expansion of the medical marijuana program in Colorado.

Farrell & Cronin (2015) used data on police arrests for prostitution over a 30-year period to examine the impact of the *Victims of Trafficking and Violence Protection Act* (2000) and state antisex trafficking legislation. They found that decreased prostitution arrests followed the enactment of federal and state human trafficking legislation, independent of the historical downward trend in prostitution arrests, and suggest that this is due to the successful reframing of prostitution enforcement by external constituencies and lawmakers into an issue of identifying and rescuing sex trafficking victims.

In contrast to these reforms aimed at decriminalization, the U.S. Supreme Court decision in *Atwater v. City of Lago Vista* (2001) allowed for the stricter criminalization of minor offenses. Specifically, the decision expanded police powers by ruling that "the Fourth Amendment does not forbid a warrantless arrest for a minor criminal offense" (*Atwater v. City of Lago Vista*, 2001, p.443). Walker & McKinnon (2003) argued that the decision gives states the ability to expand police officers' power during traffic stops by passing legislation that permits custodial arrests for minor traffic violations. Although much legal analysis and commentary followed the *Atwater* decision and the implications it has for police discretion to use arrest in citizen encounters for minor offenses (Walker & McKinnon, 2003), we could find no empirical analysis of the impact of this judicial decision on actual police arrest behavior.

Schwartz & Davaran (2013) examined how the stricter legislation that lowered the definition of alcohol-impaired driving from 0.10 percent to 0.08 percent blood alcohol content affected DUI arrest rates. They assembled data for 24 states over a seventeen-year period and generally found that the broader legal definition of drunk driving increased DUI arrests by 11-14 percent, seemingly serving the intended purpose of officially penalizing less serious offenders. Earlier research, however, showed no increase and even continued declines in DUI arrest rates following stricter BAC legislation (Kinkade & Leone, 1992). This research suggested, however, that arrest decreases were not due to lack of support for the tougher enforcement but rather the constraints of

a criminal justice system that was lacking the resources to support increased arrests. Schwartz & Davaran (2013) also note that, although their study found increased arrest rates following legislation, declines in arrest after the passage of stricter DUI laws could result from increased compliance with the law by would-be offenders or lax police enforcement efforts.

Finally, juvenile curfew laws, usually in the form of local ordinances, have received scholarly attention for their impact on both youth health and justice outcomes (Adams, 2007; Grossman & Miller, 2015). Kline (2012) suggests that curfew laws have the potential to lead to increased arrests of young people because they provide police with a legal justification for stopping and questioning people who appear to be young. Little research, however, supports this proposition. McDowall, Loftin, and Wiersema (2000) found significant reduction in juvenile arrests for property crimes and simple assaults, but increased arrests for homicide, post-curfew enactment.

Other studies also indicated a reduction in juvenile arrests (Kline, 2012) or no significant impact (Reynolds, Seydlitz, & Jenkins, 2000) following enactment of curfew laws.

There are several possible explanations for these mixed findings. Researchers note that the curfew laws' targeted times and ages vary by jurisdiction; it is plausible that these differences contribute to the differential effectiveness of these laws (Adams, 2007; Grossman and Miller, 2015; Kline, 2012). Further researchers point out that once enacted, curfew laws generally afford police wide discretion over its implementation. The non-arrest alternatives available (e.g., take violators home, give warning or citation) to officers across jurisdictions may also influence the likelihood of arrest (Adams, 2007; Kline, 2012). In their meta-analysis of juvenile curfew laws, Grossman and Miller (2015) conclude that the studies were limited in methodological rigor and further research is needed before conclusions regarding their impact on police or juvenile behavior can be drawn.

Overall, the body of research examining legal reforms' influence on police use of arrest is mixed and seems largely dependent on the actual enforcement of the law in practice. Further discussion of research methods that can advance this type of policy impact analysis is offered in the Research Considerations section of this review.

c. Impact of Extra-Legal Factors

Of greatest concern is the possible influence that extra-legal factors may have over officer decision making. Using Sherman's typology, extra-legal factors include those classified across all four categories – individual (officer), situational, organizational, and community factors. The majority of studies conducted included examinations of individual and situational factors. A smaller number of studies explored organizational factors, and finally only a handful of studies considered in impact of community factors over arrest. The uneven distribution of research studies across categories is likely due to the type of data available; specifically, SSO and official data is easiest to use for research that considers the influence of individual and situational factors. In the review below of the impact of extra-legal factors on arrest decisions, only those extra-legal factors that have demonstrated consistent and moderate to strong impact are included.

Patterns of arrest decision-making have been found among police contacts with three special populations, which have disparate contact with the police: persons with mental illness, juvenile offenders, and racial / ethnic minorities. These groups tend to be over-represented in police

contacts, including arrest counts. Many diversion programs were created to focus on persons with mental illness and juvenile offenders, as discussed in the Police-led Diversion section of this review.

1. Persons with Mental Illness

It has been suggested that the police contributed to the overrepresentation of persons with mental illness in the criminal justice system by "criminalizing" the manifestations of their illness as disorderly conduct and making arrests for relatively minor offenses (Teplin, 1984; Abramson, 1972; Lamb & Weinberger, 1998). In addition, as noted by Cotton (2004, p.136), "the concern is that behaviors that might not be regarded as criminal in other people may be treated as criminal behavior [for persons with mental illness] to provide an avenue for the police to deal with a situation that does not present any other obvious solution." For several decades, the criminalization hypothesis remained unchallenged, based almost exclusively on one study that examined police-citizen contacts in Chicago and reported that mentally disordered suspects were significantly more likely to be arrested compared to non-mentally disordered suspects (Teplin, 1984). Yet later studies using more advanced statistical techniques and controls did not support these initial findings. These studies demonstrated that police routinely under-enforced the law when dealing with persons believed to be suffering from mental illness, and are actually *less* likely to arrested these individuals compared to other suspects (Engel & Silver, 2001; Novak & Engel, 2005).

Specifically, analyzing data from two large-scale observational studies, one in 1977 and the other in 1996-1997, Engel and Silver (2001) found that police arrested only 8 to 18 percent of the mentally disordered suspects whom they encountered; they also found that, contrary to the "criminalization hypothesis," those suspects were no more (or even less) likely than other suspects to be arrested, other things being equal (also see Novak & Engel, 2005). Similarly, a study of 148 police-citizen contacts with persons in crisis in 1994 in Honolulu reported that 15 percent resulted in arrest; nearly three-quarters were handled informally by "counseling and releasing" the individual at the scene (52 percent) or with "no action" (20 percent) (Green, 1997; see also Teplin, 1984). Research more generally suggests that police use of coercion in encounters with persons with mental illness is skewed toward the low end of a continuum, as it is in police-suspect encounters generally. In a survey of officers in four Chicago police districts, two of which had developed crisis intervention team (CIT) models, police coercion reportedly took the form of mere presence in slightly less than one-third of encounters (Morabito et al., 2010). When the police confronted resistance or negative demeanor, police coercion consisted of either a verbal warning, a command, or persuasion in 70 percent (or 49.5 percent of all incidents). These findings correspond with research on police use of coercion in citizen encounters more generally (National Research Council, 2004a; Klinger, 1995; Terrill, Leinfelt & Kwak, 2008).

Nevertheless, research consistently demonstrates that individuals with mental illness continue to be disproportionately represented in the criminal justice system. The Bureau of Justice Statistics (BJS) estimated nearly 1,263,400 inmates suffered from mental illness, including 56% of those in state prisons, 45% in federal prison and 64% in local jails (James & Glaze, 2006). Further, a previous BJS report (1999) estimated that 16.0% of probationers under community supervision are also classified as having a mental illness (Ditton, 1999). A more recent BJS report (2017)

indicates that 14% of state and federal prisoners and 26% of jail inmates met the threshold for serious psychological distress within the last 30 days (Bronson & Berzofsky, 2017). Similarly, 37% of prisoners and 44% of jail inmates had been told in the past that they had a mental health disorder by a mental health professional. Regardless of how mental illness is measured, it is clear that persons with mental illness are disproportionately involved in the criminal justice system. A variety of explanations have been offered for these observations, including the deinstitutionalization of state mental hospitals, more stringent civil commitment criteria, underfunded community-based treatment programs, and the compartmentalization of the mental health systems (Lurigio, 2000; Skull, 1977; Teplin, 1983; Wachholz & Mullaly, 1993). As described later in this review, comprehensive steps have been taken by many police agencies to further divert those with mental illness from the criminal justice system.

2. Juveniles

Several analyses of observational data have focused on police encounters with juvenile suspects. From the 1960s (Black & Reiss, 1970) and the 1970s (Lundman, Sykes & Clark, 1978) and into the 1990s (Worden & Myers, 1999), police arrested about 15 percent of the juvenile suspects whom they encountered. As in encounters with adult suspects, the suspected offenses were predominantly of a less-serious nature. Moreover, the influences on arrest decisions in juvenile encounters mirror those in adult encounters, driven by offense seriousness, the strength of the evidence of wrongdoing, the preferences of complainants, and suspects' demeanor toward the police (Brown, Novak & Frank, 2009). Among the encounters in which no arrest was made, Worden and Myers' (1999) analysis of POPN data from 1996-97 showed that officers issued commands or warnings in one third and interrogated and/or searched in one half of encounters. Furthermore, in nearly one-third of the non-arrest incidents officers suggested, requested, or tried to persuade the juvenile to discontinue their illegal or disorderly conduct or to leave the area, and in nearly one-fifth they took none of these alternative actions, releasing the suspects (Worden & Myers, 1999). In a subsequent analysis of these data, Myers (2002) found that police offered a form of support – helpful information, physical assistance, emotional comfort, or sympathy – to 23 percent of the juvenile suspects.

This body of empirical evidence makes it clear that the modal response by police to suspected offending – even when they have probable cause to invoke the law – is to divert suspected offenders away from the criminal process. Those who are diverted in this way are not a random subset of suspects generally; they tend to be those suspected of less serious offenses, against whom the evidence is weaker, who are civil toward police, and whose arrest is not favored – or is opposed – by the complainant (if any). To what or whom offenders are diverted is normally not captured in police records and is, in effect, invisible most of the time. The potential for net-widening with formal diversion programs would appear to be as substantial as it would be difficult to estimate. It is important to highlight that this information is based on analyses of data collected in the 1960s-1990s; no current assessment of police practice is readily available.

3. Racial / Ethnic Minorities

One of the most discussed and researched topics in social science is the impact of race and ethnicity on criminal justice processing. The scholarly literature supports the premise that varying levels of

racial/ethnic disparities do exist at every stage in the criminal justice system, but the reasons for these differences continue to be a matter of debate.

Concerns regarding racial/ethnic disparities in arrest often focused specifically on issues surrounding drug use, apprehension, and sentencing. The changes in criminal justice processing that resulted from the "War on Drugs" in the 1980-90s often led to the aggressive targeting of drug offenders at the street level and increased rates of incarceration and sentence length (Albonetti, 1991, 1997; Brennan & Spohn, 2008, 2009; Harris, 1999; Johnson, 2005; Scalia, 2001; Steffensmeier & Demuth, 2000; Tonry, 2011). Many argued that juvenile minority males bore the brunt of these targeted enforcement strategies, as they were disproportionately subject to police surveillance and imprisonment for drug offenses (Kennedy, 1997; Harris, 1999, 2002; Walker, 2001; Tonry, 2011). A research summary by the American Sociological Association highlighted this disproportionate impact by noting that the rates of juvenile drug arrests were similar across racial groups in 1980, but by 1993 they were more than four times higher for Black youths compared to Whites (Rosich, 2007). Unfortunately, research that specifically addresses local police drug enforcement and racial bias is relatively rare, and the limited studies that are available continue to demonstrate conflicting findings (Beckett, Nyrop, & Pfingst, 2006; Ramchand, Pacula, & Iguchi, 2006; Golub, Johnson, & Dunlap, 2007; Engel, Smith, & Cullen, 2012).

Nevertheless, racial/ethnic disparities in police arrest decisions remain today, as minorities, and Blacks in particular, are still arrested at much higher rates than their representation in the general population. This racial/ethnic disparity in arrests is especially large for juveniles. Although all subgroups have experienced declines in recent years, in 2012, African-American youth comprised 52% of total arrests for violent crimes and 36% of those for property crime—despite only having a prevalence of 17% in the age 10 to 17 population (Puzzanchera, 2014). The question remains, what is the cause of these disparities in arrests?

Early police research focused on the impact of suspects' race, as well as legal and other extra-legal factors, on the likelihood of arrest decision (e.g., Black & Reiss, 1970; Black, 1971; Smith & Visher, 1981). Findings from these early studies were often mixed and indicate that both legal factors (e.g., criminal involvement or crime seriousness) and suspects' race played a role in police decision-making (Black, 1971; Hindelang, 1978; Visher, 1983). The strength of the race effects (net of legal factors), varied across studies (National Research Council, 2004a). Later studies utilizing more advanced statistical models generally demonstrated that legal factors were more stronger predictors of police arrest behavior than suspects' race and other extra-legal factors (e.g., Riksheim & Chermak, 1993; Klinger, 1994; Brooks, 2001).

In its comprehensive review of decades of police research that examined the influence of citizen's race while controlling for other legal and extra-legal factors, the National Research Council concluded that the findings regarding the impact of race were inconclusive:

There is a widespread perception of systematic police bias against racial and ethnic minority groups. The evidence is mixed, ranging from findings that indicate bias against racial minorities, findings of bias in favor of racial minorities, and findings of no race effect. The results appear to be highly contingent on the measure of police practice, other

influences that are taken into account, and the time and location context of the study (National Research Council, 2004a, p. 122-123).

The inconclusive nature of the evidence regarding racial disparities in police outcomes once legal factors were taken into account has been an enduring description of policing research (e.g., Riksheim & Chermak, 1993; Brown, 2005). More recently, however, Kochel, Wilson, and Mastrofski (2011) challenged the conclusions of previous executive summaries regarding the impact of race on police decision making, suggesting that "mixed findings" is not the most appropriate description of this body of research. Kochel et al. (2011) conducted a meta-analysis of 40 arrest studies using 23 different datasets, and boldly asserted that, in contrast to previous assessments of "mixed findings," their comprehensive analyses indicated "race matters" for arrest decisions:

From our findings, we can conclude more definitively than prior nonsystematic reviews that racial minority suspects experience a higher probability of arrest than do Whites. We report with confidence that the results are not mixed. Race matters. Our finding is consistent with what most of the American public perceives, and that finding holds over time, research site, across data collection methods, and across publication type (Kochel et al., 2011, p. 498).

The quality of their research, however, is necessarily limited by the quality of the individual studies reviewed in the meta-analysis (Gendreau & Smith, 2007). Further, their analyses cannot systematically explain why, how, and when race matters in arrest decisions; only that it does. Based on these and other research findings, a more recent comprehensive review of the literature examining the impact race on police officer decision making, Engel and Swartz (2014, p. 136) provided the following conclusions:

- Regardless of the police decision examined, some level of racial/ethnic disparities are commonly reported across research studies
- While it has been consistently reported that racial/ethnic disparities exist, theory development and testing regarding why disparities exist has been limited
- In part because there is no consensus regarding the reasons for racial/ethnic disparities in police outcomes, efforts to reduce these disparities are ineffective
- The evidence regarding citizens' perceptions of police consistently indicates that Black citizens report the most negative perceptions of police and are most likely to view the police as racially bias
- Regardless of the empirical evidence regarding the existence of racial/ethnic disparities in police outcomes, because citizens believe bias exists, police legitimacy is threatened

Collectively, research demonstrates there are chronic and pervasive racial/ethnic disparities in arrests, however the factors associated with these disparities are not clearly understood. Three important points summarize the body of research examining race and policing. First, this research—particularly the early qualitative studies—was instrumental in establishing the need for police reform and developing ideas regarding the types of changes that should be initiated. As a result, community policing, problem solving, and other innovative policing reforms were adopted across the country (Trojanowicz, 1989; Goldstein, 1990). Second, reviews of this work—

particularly the later quantitative research based on advanced statistical techniques—generally indicate that across different measures and methods, a majority of the studies demonstrate legal factors are the strongest predictors of police behavior (Klinger, 1996; National Research Council, 2004a). Finally, despite the relatively strong influence of legal factors over police behaviors, unexplained racial/ethnic disparities remain (Kochel et al., 2011; Tonry, 2011). The causes of these unexplained disparities are the center of the controversy between police and minority communities. Research into its causes, however, continues to be a daunting task with inconclusive results. Nevertheless, a better understanding of the causes of these disparities is necessary in order to implement policies and practices to reduce them.

d. Individual (Officer) Characteristics

Research on police behavior has dedicated significant attention to the factors of officer race, officer gender, and officer education and training. Findings regarding the influence of these factors on officers' decision to arrest vary considerably. Most research suggests that the race of an officer is unrelated to the decision to arrest (National Research Council, 2004a; Worden, 1989). Despite non-findings of a direct race effect, more recent research suggest that officer race may interact with other factors. For example, in their study examining difference in arrest outcomes between Black and White officers, for example, Brown and Frank (2006) found that, though White officers arrested suspects at a higher rate, Black officers were significantly more likely to arrest Black suspects. These findings suggest that though past research has generated little evidence of the officer race-arrest association, there is a need to consider the different contexts (i.e. the presence of different factors) in which the race of an officer might matter (National Research Council, 2004a).

Similar to the findings involving the impact of officer race on decisions to arrest, evidence concerning the impact of officer sex on the arrest decision is limited. While early empirical work suggests that female officers are less aggressive and therefore less likely to make arrests (Riksheim & Chermak, 1993; Sherman, 1980a), these findings are inconsistent with more contemporary research. Specifically, as the progression of time introduced more rigorous methods of statistical analyses, studies concerning the predictors of officers' decision to arrest have failed to identify a significant association between officer sex and the likelihood of arrest (Engel, 2000; National Research Council, 2004a; Worden, 1993).

Education and training have also been the focus of empirical inquiry on officers' decision to arrest. In general, it is assumed that higher education and more training will lead to more effective police officers (National Research Council, 2004a). Research corroborating these beliefs, however, is limited. Older research examining the impact of college education on police officers' decision making suggests that officers with higher levels of education had higher levels of enforcement activity including, but not limited to, arrest (Bozza, 1973; Carter & Sapp, 1990; Cascio, 1977). However, these studies were characterized by serious methodological flaws, producing mixed findings of generally weak effects (National Research Council, 2004a). Subsequent research has suggested either that higher education leads to fewer arrests (Smith & Klein, 1983) or that higher education has no influence on the probability of arrest (Brandl, Stroshine, & Frank, 2001; Rydberg & Terrill, 2010; Smith & Aamodt, 1997; Worden, 1989). In general, however, research examining

the impact of education on police decision-making is under-developed, leaving questions about the importance of higher education unresolved.

Additionally, very little is known about the short- and long-term effects of training (National Research Council, 2004a: Skogan, Van Craen, & Hennesy, 2015). Previous research efforts have examined the impact of training in areas such as officers' ability to manage crime victims (Rosenbaum, 1987), use of force (Helsen & Starkes, 1999), crisis intervention teams (Compton, Bahora, Watson, & Oliva, 2008), and procedural justice (Skogan et al., 2015). However, little empirical inquiry has focused on training effects on the use of arrest. One exception is Mastrofski and Ritti's (1996) examination of the effects of training on drunk-driving arrest productivity. These scholars found that training did increase DUI arrests—but only in agencies that were supportive of DUI enforcement (Mastrofski & Ritti, 1996). In general, however, research examining the impact of police training has relied on post-training questionnaires, providing limited insight into the behavioral effects of training and potential differences between trained and untrained officers (Skogan et al., 2015).

e. Organizational Characteristics

Wilson's seminal work on the study of police organizations argued that individual officer behavior, including the decision to arrest, is a function of the organization within which officers work and its organizational goals (National Research Council, 2004a; Wilson, 1968). Since Wilson's early work, however, there has been little contemporary study of the effects of these factors. Klinger (2004) posits that this is due to three primary factors: 1) the fragmentation of policing in the United States in terms of both agency function and structure(see also Crank & Langworthy, 1996); 2) the cost of conducting systematic observation in single police agencies, let alone multiple agencies that would enhance external validity; and 3) the wariness of police agencies to allow outside researchers access to their internal data.

Of the organizational research that has been conducted, empirical focus has centered on the influence of organizational characteristics like agency size, supervision, managerial practices or policing styles. Some research suggests that large departments tend to have higher rates of arrest and officers who readily use their formal powers of law enforcement (Brown, 1981; Mastrofski, 1981). Importantly, however, the influence of agency size on arrest has been found to vary according to offense type (Mastrofski & Ritti, 1990, 1992; Mastrofski et al., 1987). More recent research has suggested only limited effects of police agency size on many police-related outcomes (Lee, Eck, & Corsaro, 2016). In their review of the research, the National Research Council (2004a) concluded the effects of police agency size are too mixed and contingent on too many factors to determine whether agency size significantly impacts arrest.

Research also suggests that police supervisors can impact subordinate officer attitudes and behaviors on the job (Engel, 2001, 2002; Ingram & Lee, 2015; Ingram, Weidner, Paoline, & Terrill, 2013; Johnson, 2011; Van Craen & Skogan, 2017). Though less studied, it is likely this influence extends to officers' use of arrest. For example, Engel (2000) found that supervisor presence at a police-suspect encounter increased the likelihood of arrest. Notably, however, supervisory style was not found to impact an officer's likelihood to arrest (Engel, 2000). Muir's (1977) study suggests that supervisors *can* play an instrumental role in developing their subordinates' judgment,

leading to the more judicious use of their authority; the frequency with which and conditions under which this potential is realized is unknown.

Managerial practices and expectations within a police organization are also believed to influence officer behavior. The decision to arrest, in particular, may be easily influenced given it is a commonly used measure of productivity in police agencies (Moore & Braga, 2003). Indeed, Compstat, the management process that originated with the New York City Police Department, was specifically based on holding commanders responsible for increased productivity (i.e. arrests) and decreased crime rates (Bratton, 1998; Weisburd, Mastrofski, Willis & Greenspan, 2006). As Engel, Corsaro, & Ozer (2017) note, however, the use of this type of managerial oversight process led to the view of arrests as evidence of activity or productivity by officers and can encourage officers to make more arrests, including for minor, nonviolent crimes. This interpretation is supported by the strong link between Compstat in New York and disorder policing strategies (Weisburd et al., 2003). These disorder strategies encourage officers to aggressively enforce low level crimes, which resulted in a substantial increase in misdemeanor arrests during the 1990s for New York City (Eck & Maguire, 2000; Harcourt, 1998). Compstat's impact as an effective tool for crime reduction, however, is not as clear (Kelling & Sousa, 2001; Taylor, 2001; Weisburd & Eck, 2004; Weisburd et al., 2006). The evaluation of the effectiveness of Compstat is often confounded with influences of crime control strategies that are not necessarily part of Compstat, making it difficult to disentangle the causal effects of the managerial process of Compstat (Eck & Maguire, 2000; Weisburd et al., 2003).

Engel et al. (2017) describe an alternate view of arrest—arrest as a "limited commodity" to be used when no other alternatives are readily available to resolve the situation. In this way, arrest is framed as an "outcome" rather than an "output" or measure of productivity (also see Moore & Braga, 2003). Engel and her colleagues document the changes in Cincinnati Police Department's operational strategies that were developed and implemented during a situation of scarce jail-bed space. Specifically, the CPD employed a combination of crime analysis and hot spots policing, problem solving, focused deterrence, and other evidence-based approaches to address crime patterns on the basis of understanding the underlying conditions identified by analysis (Engel et al., 2017). Though causality could not be established in this study, the shift to these strategies was correlated with a reduction in both crime rates *and* arrests. The impact of other proactive, aggressive types of policing and their influence on arrests is more fully discussed in the Proactive Policing section of this document.

Finally, as policies agencies have increasingly shifted toward a focus on community policing and problem-oriented policing, researchers have also begun to examine the question of whether these organizational changes in expectations and practices that reflect these strategies influence the likelihood of arrest (Chappell, MacDonald, & Manz, 2006; Tillyer 2017). Chappell et al. explored the specific effect of Community Oriented Policing (COP) on arrest rates, but reported no statistically significant relationships between COP activity and arrest rates at the organizational-level. Tillyer (2017) also reported no significant influence on arrest behavior for the existence of a COP unit or single COP activity within police organizations. His findings, however, indicate that police agencies with a greater number of COP activities, and specifically those who included COP as part of their mission statement, did positively influence the likelihood of arrests. These mixed findings may be due to the wide variation in the implementation of COP across jurisdictions.

Chappell et al. also question whether too much emphasis has been hypothesized to lie within the organizational context of officer behavior. They argue that it may be that arrest decisions are more driven by situational demands and constraints than agency influences. The findings from this study also suggest that Wilson's original typologies for departmental structures simply may not apply to contemporary police agencies, which may be more likely to exhibit a combination of the characteristics of the watchman, legalistic, and service styles. But empirical studies like that of Chappell, et al. suffer from the limitations of available data in operationalizing key theoretical constructs; inferences that the literature has overestimated the influence of organizational characteristics are premature when they rest on models that fail to reflect theoretical expectations. The wide variation across organizations reported by Lum and Vovak (2017) indicate that organizational factors play an important role in shaping arrest decisions.

f. Community Characteristics

Very limited research has focused on the impact of community characteristics on officers' decision to arrest. Klinger (1997) hypothesized that this could be due to the lack of theoretical development regarding ecological explanations for police behavior. Nevertheless, available findings suggest that community characteristics, such as socioeconomic status, racial composition, and neighborhood crime rates, may be associated with the decision to arrest (Bonkiewicz, 2016; Chappell et al., 2006; Crank, 1990; Liska & Chamlin, 1984; Riksheim & Chermak, 1993; Sherman, 1980a; Smith, 1984, 1986). Specifically, some research suggests that arrest is more likely to occur in encounters taking place in neighborhoods characterized by low socioeconomic status, in officer-suspect encounters that occur in minority or racially mixed neighborhoods, and in neighborhoods with higher rates of crime (Chappell et al., 2006; Smith, 1984, 1986). Notably, however, the impact of these community characteristics is found to vary considerably across studies (Bonkiewicz, 2016; Crank, 1990; Liska & Chamlin, 1984; Slovak, 1988) and any findings of community effects are comparatively weak to the factors mentioned above (National Research Council. 2004a).

In summary, research that explored the decision to arrest – using ethnography, social systematic observation, and analyses of official data – emerged in the 1960s and proliferated from the 1970s through the 1990s. However, over the course of the last two decades, this type of research has declined dramatically. As a result, we know less systematically about the situational, organizational, community, and individual officer factors that influence officers' daily activities than we did two decades prior. And unfortunately, this rather bleak assessment of our knowledge base includes what is known currently about the factors that influence one of the most critical decisions in the criminal justice system – the decision to arrest.

Recognition and concern regarding the lack of information available about how officers use their discretion is not new. For example, concerns were voiced in the 1980s about the amount of officer discretion in arrest decisions for particular types of offenses, including domestic violence. The lack of information about how and why officers used discretion during police-citizen encounters gave rise, in part, to changes designed to reduce officer discretion in particular situations through the implementation of mandatory arrest laws and policies. This is the subject of the section below.

V. MANDATORY ARRESTS

Mandatory arrest laws require that under particular circumstances, rather than allowing police officers' discretion in their response to an incident, they must make an arrest of a suspect. Mandatory arrest legislation is almost exclusively related to domestic violence related assaults. A robust literature search conducted by the authors in this report could find no other offenses with an associated mandatory arrest policy; earlier reviews indicate the same (Sherman, Schmidt, Rogan & Smith, 1992). This section will cover the history and research surrounding mandatory arrest for domestic assaults, followed by what is known and still unknown about the impact of the policy.

Mandatory arrests may come about in several ways according to state statute or agency policy. For example, state laws take three approaches to handling domestic violence: arrest is mandatory, arrest is preferred, and arrest is at the officer's discretion (Hirschel, 2008). As of 2008, 23 states, including the District of Columbia, had some form of mandatory arrest provisions, 6 states had preferred arrest provisions, and 22 states had discretionary arrest provisions (Hirschel, 2008; Clark, 2010; Comission on Domestic Violence, 2011). Further, each state also had laws regarding the circumstances in which an officer is able to make an arrest—typically related to incident severity (felony or not), within a certain timeframe of the incident or the type of relationship between the victim and offender (married, blood relative, living together, or has a child together) (Hirschel, 2008). And finally, mandatory arrest may come directly from the policies of an agency. Jurisdictional agencies may implement mandatory arrest as their response to domestic violence, even if the state statute does not mandate an arrest. A recent survey conducted by the Police Executive Research Forum indicated that 87 percent of 358 responding agencies reported having mandatory arrest policies for domestic violence cases (Police Executive Research Forum, 2015). Of those agencies, 84 percent reported mandatory arrest was required by state law, 4 percent were required by local law and 12 percent were not required to have a mandatory arrest policy. They note that mandatory arrest policies vary some according the various circumstances which obligate the mandatory arrest requirement, including an aggravated offense, violation of a protection order, an officer witnessing the offense, physical evidence of an assault or requiring an arrest for a simple assault.

While most mandatory and preferred arrest state laws involve domestic violence, there are likely agency policies at the jurisdictional level which also prefer an arrest for other types of incidents, such as drinking and driving. However, we do not know anything systematic about these policies—information in the literature could not be found. Furthermore, policies preferring non-arrest (e.g. for minor misdemeanor drug offenses or minor traffic infractions) also exist at the state policy and agency policy levels. Ultimately, it is important to note that there is variation in statutes which mandate or prefer an officer to make an arrest.

A. Domestic Violence

The push for mandatory arrest to combat domestic violence was not generated from within police departments, but rather from public pressure that the police were not doing enough to intervene in domestic violence cases (Bracher, 1996; Sherman, 1992). Historically, it was argued that the police were less likely to arrest those involved in a domestic violence case as compared to other types of

violent assault (Martin, 1976). However, data on underforcement of domestic situations compared to other types of assaults is unclear (Sherman, 1992). Regardless, many police and legal organizations had historically recommended that arrest be used as a last resort in dealing with family situations, with some police agencies having explicit policies against arrest in domestic disturbances (Sherman, 1992). Often, this was because many incidents did not reach a level that required police intervention, or the officer did not see violence while they were present (Sherman, 1992). Further, police officers viewed domestic violence related cases as the riskiest for officer injury, or simply as a waste of time (Buzawa, Austin & Buzawa, 1995; Buzawa & Buzawa, 1993; Ferraro, 1989).

The adoption of mandatory arrest laws and agency policies for misdemeanor domestic violence incidents began to dramatically increase in the 1980s and 1990s, due to a convergence of lawsuits and research findings. A number of important lawsuits were filed against police departments, which alleged unequal protection for women under the law when offenders were not arrested (see *Scott v. Hart*, 1976, *Bruno v. Codd*, 1977, and *Thurman v. Torrington*, 1984). The *Thurman* case resulted in a \$2.5 million suit against the Torrington police department, who failed to arrest the battered wife's husband and protect the victim from repeated abuse. These lawsuits were instrumental for forcing police departments to change their policies toward domestic violence (Hirschel & Hutchinson, 1991).

The second critical reason for agency adoption of mandatory arrest policies and statutes was an experiment conducted by Lawrence Sherman in the early 1980's. The Minneapolis Domestic Violence Experiment (MDVE), was the first randomized test for the effects of arrest for any crime type (Sherman & Berk, 1984a). Researchers sought to identify which type of police intervention was most effective to reduce domestic violence. Three standard methods of police response to misdemeanor assaults were compared— (1) attempting to counsel both parties, (2) sending assailants away from home for several hours, and (3) arrest. Researchers concluded that arrest was considerably more effective in deterring future violence than the other two types of police response (Sherman & Berk, 1984a; Sherman & Berk, 1984b). The findings from the MDVE were widely embraced and influenced many police departments to adopt a pro-arrest policy for domestic violence cases (Sherman & Cohn, 1989).

Researchers cautioned, however, that the Minneapolis study did not prove that arrest was the best policy for every community or every offender type (Sherman, 1992). Multiple replications of the Minneapolis study were conducted in other cities with mixed findings, including Omaha (Dunford, Huizinga, & Elliot, 1990), Milwaukee (Sherman & Smith, 1992), Colorado Springs (Berk, Campbell, Klap & Western, 1992) and Dade County, Florida (Pate & Hamilton, 1992). Some studies found a deterrent effect for mandatory arrest whereas others found increased violence. For example, the Milwaukee experiment concluded that arrest had variable effects on different kinds of people; those who were employed, married, high school graduates, and White were less likely to re-offend if they were arrested than their unemployed, unmarried, less educated, and Black counterparts (Sherman & Smith, 1992). The Milwaukee, Omaha and Colorado Springs experiments found that unemployed persons became more violent after arrest while those employed were effectively deterred by arrest (Sherman, 1992). A pooled analysis of all studies found a modest average benefit to a pro-arrest policy, but continued to find disparate effects of the policy on employed suspects compared to those unemployed (Maxwell, Garner, & Fagan, 2002).

Despite conflicting evidence, the use of mandatory arrest for misdemeanor domestic assaults, embraced by state legislatures and police departments, did not diminish.

Following these high-profile lawsuits and research studies, throughout the 1990s, every state eliminated the requirement that an officer witness a misdemeanor offense before making an arrest in a domestic violence case (Miller, 1997). The new laws created in some states required that an arrest be made if certain circumstances were met, such as victim injury or violating a protection order (Bracher, 1996). State policies were designed to reduce the level of discretion by the responding officers, ensuring that officers would no longer "under-enforce" domestic violence incidents. However, Stark (1993) states that the most important reason for passing mandatory arrest laws was to control police decision making in response to political pressure and avoid liability from inaction.

Research indicates there are a number of situational variables that are closely related to the legal elements of mandatory arrest legislation. First, multiple studies have found that victim injury is associated with an increase in the likelihood of arrest (Belknap, 1995; Feder, 1996; Feder, 1999; Kane, 2000), while others have found no effect (Gondolf & McFerron, 1989; Robinson & Chandek, 2000). Second, and somewhat surprisingly, the presence of a protection order did not significantly predict the likelihood of offender arrest in research conducted during the late 1980s (Balos & Trostsky, 1988; Finn & Colson, 1990). It is a criminal offense to disobey a court-issued order of protection, which inherently provides authorization for police to intervene during a violation (Grau, 1982). Third, some research indicates that officers tend to fulfill the requests of victims—whether it is to arrest or talk to the offender; this is widely known to influence the decision to arrest as an officer knows a conviction is less likely if a victim does not cooperate (Buzawa & Austin, 1993; Sherman, 1992; Worden & Pollitz, 1984). It also appears arrest is more likely in domestic assaults when there are additional witnesses (Buzawa and Austin, 1993; Holmes, 1993). However, one study found that the officers are less apt to arrest if witnesses are present (Worden & Pollitz, 1984). Finally, research has found that offenders who are hostile and disrespectful are more likely to be arrested (Engel, Sobol & Worden, 2000; Worden & Pollitz, 1984; Worden & Shepard, 1996).

More recently, Phillips and Sobol (2010) examined the role of legal variables in predicting officer decision making using a series of vignettes of domestic violence incidents. Their findings largely confirmed the earlier research described above. Specifically, they found that arrest was more likely when: 1) there was a visible victim injury, with a stronger effect for more serious injury as compared to minor injury, 2) when there was a legal order of protection in place, and 3) when the suspect was disrespectful. The victim's preference for *no* arrest was not significant in officers' decision making, but the request for an arrest did significantly increase the likelihood of arrest. Overall, Phillips and Sobol (2010) reported officers held a pro-enforcement stance in domestic violence incidents, with more than three quarters of the officers indicating they were likely or very likely to arrest across all the included vignettes. This contrasts with earlier research that indicated that officers were somewhat reluctant to arrest in domestic assault cases (see Dutton, 1988; Waaland & Keely, 1985).

B. Policy Impact

The implementation of mandatory arrest statues and policies was intended to influence and change police behavior from a standard of under-enforcement to a level of responsiveness that would ensure reduction of the social problem of domestic violence. The law is intended to provide immediate protection for the victim, deter the specific abuser, relieve the victim from making the decision of whether to press charges, and more generally send the message that domestic violence will not be tolerated in society (Bracher, 1996; Wanless, 1996; Zorza, 1992). Research demonstrates that the rates of arrest, prosecution and conviction of domestic violence have increased due to mandatory arrest laws (National Research Council, 2004b). An increased arrest and conviction rate, however, does not necessarily translate to a reduction in domestic violence. Some argue that mandatory arrest may harm the very victims the laws intend to protect (Iyengar, 2009; Sherman & Harris, 2015). Specifically, a body of research supports the idea that mandatory arrest can have a number of unintended consequences including the increased likelihood of dual arrests and the potential for increased offender retaliation and victim mortality rates after arrest.

Research has indicated that mandatory arrest statues increase the likelihood of dual arrest, where the police arrest both parties involved in a domestic incident because they have both been violent or the police are unable to determine who is at fault (Hirschel, Buzawa, Patavina, Faggiani & Reuland, 2007; Lawrenz, Lembo & Schade, 1988; Simpson, Bouffard, Garner and Hickman, 2006). However, Hirschel et al. (2007) found that the overall national prevalence of dual arrest was only 1.9% for intimate partner assaults.

Two studies also support that idea that rather than deterring offenders from future violence with arrest, arrest actually contributes to increased retaliation and intimate partner homicides. Iyengar (2009) found that intimate partner homicides increased by about 60% in states with mandatory arrest laws compared to those without. Iyengar posited that if a victim fears that his or her partner will be arrested upon calling the police, they may be deterred from reporting to the police (Dugan, 2003; Iyengar, 2009). Without police intervention, the encounter or repeated incidents may escalate and result in homicide. Sherman and Harris (2015) found similar results; victims were 64% more likely to have died if their partners were arrested and jailed as opposed to warned. The results were even more dramatic when disaggregated by race; black victims were 98% more likely to have died if an offender was arrested compared to warned, while this difference was only 9% for the white subgroup. The authors concluded that, "mandatory arrest laws, however well-intentioned, can create a racially discriminatory impact on victims" (Sherman & Harris, 2015, p.17).

C. Conclusion

Mandatory arrest policies and laws were intended to influence and change police behavior in responding to domestic violence situations from a standard of under-enforcement to a level of responsiveness which would hopefully better protect victims and ultimately deter future domestic violence. However, the body of research on the deterrent effect of mandatory arrest is mixed, much of it indicating that deterrence may be more effective for certain types of people or situations (Sherman, 1992; Sherman & Smith, 1992).

There are a number of studies showing some substantial unintended consequences associated with mandatory arrest. Two studies have found increased retaliation and mortality rates for victims who had a partner arrested under a mandatory arrest statute or policy (Iyengar, 2009; Sherman & Harris, 2015). Furthermore, there appears to be evidence for a strong race effect—where black victims were much more likely to die if their partner was arrested compared to white victims (Sherman & Harris, 2015). Further research is necessary to determine the external validity of both of these important findings. Replication studies, potentially examining the longitudinal data from the other NIJ-sponsored mandatory arrest studies (Colorado Springs, CO; Dade County, FL; Omaha, NE) may provide further evidence to confirm these findings, the results of which may have important policy implications for mandatory arrest legislation.

Some experts have cautioned that any attempt to eradicate police discretion, as is the case in the use of mandatory arrest laws, is likely to fail (Sherman, 1992). Rather than trying to remove police discretion, research can be used to better educate police and inform their decision making. The repeal of mandatory arrest laws, however, may also have serious consequences, such as domestic violence no longer being seen as a crime or the public perceiving that the police has returned to a standard of under-enforcing incidents of assaults between domestic partners (Lerman, 1992). While it is unknown what a repeal would do, Sherman and Harris (2015) caution that policy advocates should consider whether the benefits of mandatory arrest policies outweigh the potential costs.

VI. PROACTIVE POLICING STRATEGIES

The *Misdemeanor Justice Project*, funded by the Laura and John Arnold Foundation, recently published a report on arrest trends for misdemeanor offenses in New York City. Lead researcher Preeti Chuahan and her colleagues found that the rate of aggregate-level misdemeanor arrests in NYC increased nearly 200 percent from 1980 to 2010, followed by dramatic declines from 2010 to 2016 (Chuahan et al., 2014; Chuahan et al. 2018). These trends suggest that the implementation of specific proactive policing strategies and subsequent changes in these strategies, resulted in the dramatic rise and fall of recorded misdemeanor arrests by the NYPD. Chuahan and her colleagues consider some of the most recent policy changes and initiatives that focus on lessening the harms surrounding certain low-level, non-violent offenses that are currently underway (see discussion of the *Criminal Justice Reform Act*, etc. in Chuahan et al., 2018). These initiatives are expected to reduce the number of open warrants for arrest (due to failure to appear or failure to pay) as well reduce many of the financial and collateral consequences which stem from a criminal record.

Importantly, initial findings from the *Misdemeanor Justice Project* demonstrate there are many unanswered questions concerning the variability in misdemeanor arrest trends across precincts, neighborhoods, and agencies. The findings also demonstrate the importance in considering how changes in misdemeanor and other crime enforcement impacts residents' perceptions of their communities, the police, and the criminal justice system. Finally, this research leads to the recognition of the varying impact that proactive policing strategies can have on the use of arrest by police.

Proactive policing is a broad and somewhat ambiguous term that includes a diverse group of strategies, many of which are associated with increases in the use of arrest. The recently appointed

Committee on Proactive Policing of the National Academies of Sciences (NAS) defines proactive policing as "all policing strategies that have as one of their goals the prevention or reduction of crime and disorder and that are not reactive in terms of focusing primarily on uncovering ongoing crime or on investigating or responding to crimes once they have occurred" (NAS, 2018, p. S-1). For this review, we extend the definitional boundaries of proactive policing outlined by the NAS committee. Specifically, while the NAS committee concentrate on the *strategic decisions* to use "proactive police responses in a programmatic way to reduce crime", this review discusses proactive policing as involving both strategic decisions at the agency level and the "everyday decisions of police officers to be proactive in specific situations (NAS, 2018, p. S-1)."

In this section, we review the research regarding citizens' attitudes toward various proactive policing strategies, and document the impact of various proactive strategies on arrest rates. We also consider a theoretical framework that highlights crime prevention as a more promising alternative to the use of arrest.

A. Attitudes toward Proactive Policing Strategies

Most research on proactive policing has addressed questions about its effects on crime, public attitudes toward the police, and disparity and bias. Studies on the effects of proactive policing on crime consistently demonstrate short-term reductions in crime and disorder for strategies based on hot spots, focused deterrence and problem solving, although evidence for long term impacts are relatively rare from the available research (for a thorough review see NAS, 2018). Evidence for reductions in crime and disorder for larger-community based proactive policing strategies are largely inconsistent, often due to poor evaluation designs. Place-based and community-oriented proactive policing strategies have rarely been found to be associated with negative impacts on community attitudes (Braga & Bond 2009; Kochel & Weisburd, 2017; Shaw, 1995; Skogan & Harnett, 1997; Weisburd, Morris, & Ready, 2008). In contrast, research on more person-specific proactive policing strategies have found negative impacts from stop-question-frisk (SQF) and proactive traffic enforcement strategies (Epp, Maynard-Moody, & Haider-Markel, 2014; Miller & D'Souza, 2016; Tyler, Fagan, & Geller, 2014).

Regarding racial and ethnic disparities, experts conclude that if police target high risk people or locations, as is common in most proactive police work, there are likely to be racial disparities in police-citizen encounters during their efforts (NAS, 2018). While there is limited research on the potential role of racially biased behavior on proactive policing strategies, some outcome tests have been conducted for assessing disproportionate police-citizen interactions during proactive policing efforts (see e.g. Antonovics & Knight, 2009; Goel, Rao, & Shroff, 2016; Knowles, Persico, & Todd, 2001; Perisco & Coviello, 2015). Experts caution that these studies may be undertheorized or limited in their ability to draw causal inferences (NAS, 2018).

B. Impact on Arrest

In contrast to this body of research exploring citizens' attitudes toward proactive policing strategies, very little research has considered the effects of proactive policing strategies on the decision to arrest and other discretionary dispositions of proactive police-citizen contacts.

Left to their own devices, officers' decisions to initiate citizen contacts for enforcement-related purposes appear to be driven by opportunity and unassigned time, but with variation among individual officers. Analyzing observational data collected in 1977, Worden (1989) found that officers made 1.3 stops per patrol shift – one traffic stop per shift, on average, and one suspicion stop every three shifts. Traffic stops were mainly a function of "volume of traffic in their [officers'] assigned areas, the time of day during which their shifts occur, and the amount of free time they have" (1989, p. 691); suspicion stops were driven by time of day and officers' unassigned time. The disposition of traffic stops turned on whether the driver exhibited signs of alcohol use; incidents involving drunk-driving were much more likely to end in arrest. Some research has found that individual officers' levels of proactivity are shaped in important ways by their occupational attitudes (Brown, 1988), though some evidence has failed to confirm these intuitive hypotheses (Worden, 1989). Analyzing data collected in the 1990s, after policing had become less predominantly reactive, Parks et al. (1999) found that officers made 2 to 3 officer-initiated contacts with citizens, not all of which were with suspected offenders.

As what James Q. Wilson called police-invoked law enforcement, proactive policing is subject to considerable influence by police administrators, who can, as Wilson pointed out, emphasize such activity by creating specialized units. Responsible only for traffic enforcement, traffic units will generate higher levels of officer-initiated contacts. Street crime units, freed from the radio to address crime proactively, will generate higher levels of officer-initiated contacts (Sherman & Rogan, 1995; McGarrell, Chermak, Weiss & Wilson, 2001).

With or without creating specialized units, police executives can establish expectations for proactive police work and enforce compliance, inasmuch as proactive contacts can be documented and counted. As a result, strategies that entail proactive enforcement, such as broken windows or order maintenance policing, zero tolerance policing, stop-question-frisk (SQF) programs, data-driven approaches to crime and traffic safety (DDACTS), and hot spots policing more generally, are likely to increase police-initiated contacts in proportion with the personnel resources assigned to them. The extent to which these strategies are associated with increases in arrests will, we speculate, vary. Community and problem-oriented policing, which the NAS Committee included under its proactive policing umbrella, are not (by design) enforcement-oriented strategies, and when properly implemented, are likely to have very different effects on the number of arrests.

In addition to specific proactive strategies that encourage the use of arrest, police agencies often engage in organizational and managerial practices that encourage or reward arrest activity. A preeminent example of this organizational practice is Compstat. First developed in New York City, Compstat (short for Computer Statistics) is designed as a model to focus police organizations on specific problems and give agencies better tools to identify and solve these problems. It provides a clear organizational structure to set specifics goals, holding leaders accountable for reaching goals—for example, to reduce crime by 10 percent in a specific time period (Bratton, 1998; Wesiburd, Mastrofski, Willis & Greenspan, 2006). A survey conducted in 2011 by the Police Executive Research Forum indicated that 79 percent of the 166 responding agencies utilized Compstat (Police Executive Research Forum, 2013). It has been touted as the most important reason for New York City's dramatic crime drop (Bratton, 1998; Henry, 2002; Kelling & Coles, 1998; Kelling & Sousa, 2001; Maple, 1999; Zimring, 2011).

Critics of Compstat argue it appears to be focused on reinforcing the "bureaucratic" and "paramilitary" model of police organization rather than empowering an agency to solve crime and disorder (Weisburd et al., 2006). A study conducted at the Police Foundation suggested that Compstat relies more heavily on punitive than positive consequences and reinforces the traditional hierarchical structure of para-military policing (Weisburd, Mastrofski, McNally & Greenspan, 2001). This study found Compstat placed a lot of pressure on the middle managers of the police organization to produce certain result, rather than promote innovation. Additionally, there is a danger of "looking bad" or undermining the authority of more senior officers during Compstat meetings. Putting pressure on productivity and outputs (as opposed to processes) may result in officers making more stops, summonses, and arrests than they would do otherwise. Rather than increase innovative responses based on problem solving, on-site observations found a reliance on traditional responses such as increased patrols and arrests in problem areas (Weisburd, Mastrofski, McNally, Greenspan & Willis, 2003). More importantly, putting a specific focus on numbers rather than reducing problems—can lead to abusive police practices. Survey research has found evidence to support that claim that Compstat encourages police to engage in practices to inflate or deflate their numbers to reach a goal, which comes with repercussions from communities and crime victims (Eterno, Verma & Silverman, 2016). Ultimately, Compstat has yet to be proven as an effective tool for crime reduction (Weisburd et al., 2006).

Often these managerial practices, like Compstat, are paired with specific proactive strategies. For example, Compstat in New York has been strongly linked to broken windows policing, the effectiveness of which is much debated (Kelling & Sousa, 2001; Taylor, 2001; Weisburd & Eck, 2004). Compstat, however, has also been implemented in agencies without an emphasis on disorder policing. Below we briefly summarize the most common proactive policing strategies, including broken windows policing, zero tolerance policing, hot spots policing, and problemoriented policing (see NAS, 2018 for a more complete review).

i. Order Maintenance – Broken Windows Policing

The content of broken windows policing has been a subject of some debate. As the NAS Committee asserted, "In broken windows policing, the police seek to prevent crime by addressing disorder and less serious crime problems. Such police interventions are expected to reinforce and enhance informal social controls within communities" (2018, p. S-3). The Committee went on to say that "The nature of police 'broken windows' interventions varies from informal enforcement tactics (warnings, rousting disorderly people) to formal or more intrusive ones (arrests, citations, SQF), all intended either to disrupt the forces of disorder before they overwhelm a neighborhood's capacity for order maintenance or to restore afflicted neighborhoods to a level where community sources of order can now sustain it" (NAS, 2018, p. 2-25). The Committee further asserted that "the most common implementation of the strategy has been aggressive policing against disorder that involved making large numbers of arrests for minor crimes and expanding the issuance of summons for even less-serious legal infractions" (p. 4-33), a version of broken windows policing that might be characterized as a badge-heavy cousin of broken windows policing and summarized as zero tolerance policing.

However, Thacher points out that "... criminologists have paid little attention to questions about whether order maintenance activities and the public order they hope to create are desirable in their

own right, apart from their contribution to crime prevention" (2004, p. 382), relying instead on "a stylized view of order maintenance practice that emphasizes arrests for minor violations." Similarly, Thacher points out that research does not adequately describe the kinds of situations that police treat as disorderly. He thinks it "unlikely that this stylized description of order maintenance tactics fairly captures the range of possibilities that this policing strategy potentially offers" (2004, p. 392).

As a strategy directed toward low-level offenses and other disorders about the resolution of which officers are allowed and encouraged to exercise discretion, broken windows policing would appear likely to have fairly modest impacts on the volume of arrests, as most such incidents will be resolved – as they have in the past – informally. Police agencies could (and should) guide officers in exercising this discretion (see Kelling, 1999), though we know of no systematic research that would tell us how often – and how well – such guidance has been provided, nor are we aware of research that illuminates the success with which such guidelines shape actual day-to-day practice. A reasonable question, furthermore, might concern the effectiveness with which the typical or modal officer can be expected to make the careful and nuanced judgments for which the skillful exercise of broken windows policing calls; strategies cannot be designed based on what exemplary personnel could accomplish.

ii. Zero Tolerance Policing

Zero tolerance policing, with the same attention directed toward low-level offenses and other disorders but with the expectation that police responses will emphasize the invocation of the law, are likely to lead to much more substantial increases in arrests. The New York City Police Department (NYPD) is well known for the use of such a strategy in the 1990s and 2000s. There, misdemeanor arrests doubled between 1993 and 2010 (Chauhan, et al., 2014). NYPD was apparently not typical, however; as Lum and Vovak (2017) show, only a small fraction of the nation's larger municipal and county police agencies exhibited a similar trend in misdemeanor arrests. Lum and Vovak's findings corroborate Thacher's conjecture that the zero-tolerance form of broken windows policing is not the norm. We cannot point to empirical evidence as proof, but zero tolerance coupled with a "high-voltage" Compstat (Moore & Braga, 2003) – a mechanism that has the potential to generate pressure for "numbers" on the entire police hierarchy – appears to have yielded a very substantial change in enforcement patterns in New York City, and one that is not indicative of broader national trends.

iii. Hot Spots Policing

Hot spots policing is understood as policing that is "focus[ed] on 'micro' units of geography where crime is concentrated" (NAS, 2018, p. S-3). Hot spots policing is premised on the finding that crime is not evenly distributed, but rather concentrated in very small places or "hot spots." Proponents argue it is most efficient to concentrate police resources on these small areas (Eck, 2002; Braga, Papachristos & Hureau, 2014). Hot spots policing does not specifically require proactive tactics, but in practice it often does (e.g., Ratcliffe, Taniguchi, Groff, & Wood, 2011; Groff, et al., 2015).

Multiple reviews of hot spots policing have consistently found evidence to support the conclusion that this strategy reduces crime without displacing it to other geographic areas (Sherman & Eck, 2002; Weisburd & Eck, 2004). Furthermore, the National Research Council (2004a) concluded that hot spots studies provided the strongest evidence of police effectiveness available. A recent meta-analysis confirmed that hot spots produce modest crime control gains, while typically producing diffusion of crime control benefits into areas surrounding targeted high-crime activity places (Braga et al., 2014)

The impact of hot spots policing on community relations may depend on the type of strategies used. For example, strategies which simply increase police presence and increase arrest are likely to be associated with more negative community outcomes than strategies which take a problem-oriented approach to change features of a place.

For example, proactive traffic enforcement is an integral component of DDACTS, a NHTSA/BJA initiative that has been adopted by a number of agencies; DDACTS is a form of hot spots policing that targets places at which both crime and traffic crashes are concentrated (Worden & McLean, 2010). Given the opportunity that hot spots afford and the time mandated for hot spots patrols, hot spots policing can be expected to increase officer-initiated contacts and, to some degree (even if "hit rates" are fairly low), arrests.

iv. Problem-Oriented Policing

Problem-oriented policing often addresses the same kinds of low-level offenses and other disorders with which broken windows policing is concerned, but these efforts do not rely primarily on individual contacts with the individual violators. Problem-oriented policing seeks to identify problems as patterns across crime events and identify the underlying mechanisms and causes of those problems. By design, problem-oriented policing moves beyond the application of enforcement action, to other means of addressing public safety problems (Skogan, 2008). Research has concluded problem-oriented policing is a promising approach to deal with crime, disorder and fear (National Research Council, 2004a).

Insofar as these efforts succeed, community and problem-oriented policing are likely to reduce the incidence of arrest. We would caution only that in many applications of problem-oriented policing, the range of response alternatives has been rather limited and often includes conventional enforcement action (Clark, 1998; Cordner & Biebel, 2005; Skogan, et al., 2000). Even so, in San Diego, which was considered among the leaders in problem-oriented policing in the 1990s, arrests dropped 15 percent between 1993 and 1996, while in New York City, by contrast, arrests increased 23 percent (Greene, 1999). In a randomized control trial, Taylor and colleagues (2011) compared the effectiveness of both directed patrol and problem-oriented policing interventions to a control condition at hot spots of violent crime in Jacksonville Florida. They found a statistically significant drop in street violence during their 90-day evaluation period; in contrast, the directed patrols were associated with a nonsignificant reduction in crime in comparison to the control condition (Taylor, Koper & Woods, 2011). Finally, a review of problem-oriented policing conducted for the Campbell Collaboration identified 10 rigorous study designs for these programs (Weisburd, Eck, Hinkle & Telep, 2008). From a meta-analysis of these 10 studies, they found a modest but statistically significant decrease in outcome measures for crime and disorder (Weisburd et al.,

2008).

C. Crime Prevention as Arrest Alternative

A noted above, some police departments have implemented policies designed to enhance both the efficiency and effectiveness of police while also reducing the use of arrest as the modal police response to crime. As pointed out centuries ago by Cesare Beccaria (1986 [1764]), it is "better to prevent crimes than punish them." Thus, effective crime prevention strategies should result in fewer arrests, because there is no need to enforce laws that have not been broken. Viewed in this manner, proactive crime prevention strategies may be the are could be a most promising "alternative to arrest."

A recent theoretical model proposed by Nagin, Sowel and Lum (2015) supports this position. This model frames crime control by linking three major literatures together: deterrence theories, policing theories related to crime control, and environmental/opportunity theories. The model is based on the argument that police serve two primary crime prevention roles: sentinels (guardians capable of deterring a motivated offender) and apprehension agents (after the commission of a crime) (Nagin, 2013). The theoretical model focuses on the importance of the police role in apprehension risk (Nagin, Sowel, & Lum, 2015). In contrast to actual apprehension, the risk of apprehension exists as a probability, calculated by the would-be offender; this threshold of attractive criminal opportunities likely varies from person to person. Nagin and his colleagues argue that increasing the risk of apprehension, through the use of police, will increase the likelihood a person is deterred from committing a crime, ultimately increasing the ability to prevent crime.

Strategies that are effective in increasing a would-be offender's perception of apprehension are an important tool to help reduce the use of arrest; indeed, as Cynthia Lum described during the *Power of Arrest Workshop* the use of arrest might actually be considered a "system failure" given that the crime was not initially prevented. She referenced previous work by Nagin and colleagues that described "...police effectiveness in their role as apprehension agents is an outgrowth of a failure in their role as sentinels to have successfully prevented the crime from happening in the first place" (2015, p. 84). In this sense, arrest is considered a double-edged sword because the sentinel and apprehension agent roles in policing are intertwined. Consider that an arrest would be viewed as a failure by the police to deter crime in their sentinel role, but a success in their apprehension role. Historically, police organizations have embraced their role as apprehension agents, and when they are ineffective in this role, their credibility as sentinels is also reduced. Therefore, these scholars argue that police must emphasize their role as sentinels over apprehension agents to maximize their effectiveness and legitimacy; however, this will require a fundamental shift in police operations (Nagin et al., 2015).

Therefore, it is important for police to enact policies which increase the opportunity for police to act more fully as sentinels. Increasing the risk of apprehension can be done through both targeted and non-targeted policies (Nagin et al, 2015). Non-targeted policies would include such things as random patrol or hiring more police officers. These would increase overall police presence, which may work to increase the risk of apprehension for the entire population of potential offenders. However, a better opportunity for police to act more fully as sentinels would be through targeted

proactive policies, such as hot spots policing or problem-oriented strategies such as focused deterrence, which focus on specific repeat or high-risk places, persons or targets.

Note, however, that what police officers actually do during a targeted proactive policing strategy is important. In addition, the dosage of an intervention matters; for example, hot spots policing where the officer is not in a location long enough to reach a deterrent effect may reduce their ability to prevent crime (Nagin et al., 2015). It is necessary for the law enforcement field to continue to innovate and implement strategies which may use police tactics to influence offender perceptions of apprehension risk or actual risk of apprehension. Considering how police may prevent crime in the first place is a critical alternative to the modal response of arrest to control crime.

D. Conclusion

In summary, proactive policing is a broad term which encompasses policing efforts that are preventative in nature, as opposed to being reactive to ongoing crime. Studies on specific strategy types like hot spots policing, focused deterrence and problem solving consistently demonstrate short-term reductions in crime, usually without negative consequences to community perceptions and attitudes. Some strategies do not have widespread community support, or have differential impact and therefore are associated with negative public attitudes. As far as impact on arrest, it appears that community and problem-oriented policing strategies are likely to reduce the incidence of arrest by using alternative and innovative means to respond to and resolve problems. However, organizational and managerial practices that encourage or reward arrests, like Compstat, are sometimes criticized for their focus on outputs as opposed to processes; they may also result in higher rates of stops and arrests than officers would otherwise make. Zero tolerance and broken windows policing, both with a focus on low-level offenses, likely increase the incidence of arrest. Ultimately, proactive policing strategies may be beneficial or detrimental in reducing the incidences of arrest, depending on the specific strategies implemented. Investment in crime prevention strategies may be one of the best methods for reducing the use of arrest.

VII. ALTERNATIVES TO ARREST

Given the social, economic, and community costs of arrest reviewed above, along with the use of proactive policing strategies, it is important to carefully consider the use and effectiveness of alternatives to arrest. Discussions regarding alternatives to arrest often include a wide-range of options, including cautions (formal warnings), referrals, transportations, and citations (such as field release, stationhouse release, and post-detention (jailhouse) release).

The literature on police decision making as it relates to encounters with citizens that fall short of taking a suspected defendant into full custody have typically focused on alternative decisions to arrest, beyond simply doing nothing. Options frequently include citing for a less serious offense (Piliavin & Briar, 1964), releasing an individual to a family or friend, involving an official 'third-party' (Bayley & Bittner, 1984), or a host of verbal actions (e.g., counsel, advise, and threaten future arrest) (Bayley & Bittner, 1984; Brown, 1988; Maguire, 2003; Sykes & Brent, 1980; Whitaker, Mastrofski, Ostrom, Parks, & Percy, 1982).

In this section, two common alternatives to arrest are discussed: police-led diversion programs and using citations in lieu of arrest. For police-led diversion programs, three sub-topics based on

offender type are covered in depth: (1) drug offenders, (2) persons with mental illness, and (3) juvenile offenders. Each of these sub-topics contain a discussion of what is known for each specific program. The section covers the process as discussed in the literature, including the structure and implementation of diversion, then considers programmatic outcomes and impacts.

A. Police-Led Diversion

Police-led diversion programs for substance users, persons with mental illness, and at-risk youth have existed for decades in the United States and several other countries including England, Scotland, Wales, and Australia. They provided for "pre-arrest" or (more accurately) pre-booking diversion that is prior to and in lieu of the filing of charges (Pritchard, Mugavin & Swan, 2007). However, the contemporary interest in police-led diversion is not matched by a well-developed body of sound and empirical evidence on the structure, operation, and impacts of such initiatives. The extent to which police-led diversion programs benefit the offenders, their families, their communities, and the public at large, are questions for which research offers only tentative answers.

In general, police-led diversion programs grant officers "the discretion to make a determination of whether someone meets eligibility criteria for participation This generally involves probable cause for a certain types of low-level misdemeanor offenses, someone who is deemed a minimal risk to public safety because of limited or no prior criminal arrests, and compliant behavior" (Kopak & Frost, 2017, p.729). However, these initiatives differ with respect to their target populations (e.g., first-time offenders, repeat or chronic offenders), the range of offenses and other eligibility criteria, the nature of the treatment (if any) to which offenders are referred, and whether custodial police contact arises during the encounter.

Programs of this kind are not ubiquitous but many agencies operate at least one such program, and they have become increasingly prevalent. Tallon, Spadafore, & Labriola (2016) surveyed nearly 1,500 municipal and county police agencies in 2014 about their use of police-led diversion. They report that 34 percent of agencies participate in diversionary practices, and 21 percent operate police-led programs. The most common types of programs provide for the diversion of juvenile offenders, persons with mental illness, or first-time offenders, though these types are not mutually exclusive. Moreover, 37 percent of the programs were initiated since 2010, and an additional 41 percent since 2000.

The implementation of police-led diversion can and often does pose challenges. Internally, the patterns and practices of rank-and-file officers form organizational eddies that must be navigated as any reform is put into place. The form, rationale, and operation of any diversion program may or may not be compatible with the priorities and objectives of street-level personnel, and understanding the barriers to street-level cooperation is essential for designing and managing programs that will survive and prosper in the police work environment (Lipsky, 1980). Externally, establishing and maintaining collaborative partnerships with other agencies, such as probation and/or service providers, is necessary (Katz & Bonham, 2009).

Given the discretionary nature of diversion decisions, and notwithstanding the limitations on eligibility, many commentators have noted the potential for "net-widening" (Austin & Krisberg,

1981; also Roberts & Indermaur, 2006), such that offenders who previously would have been released without further involvement in the criminal justice system are instead referred for program participation. Such offenders are not truly diverted, particularly if they fail to fulfill program requirements for their participation and are subsequently prosecuted for their offenses. Netwidening has generally acquired an image as an unintended and detrimental consequence, though arguments can be made that in some instances, referrals to services in lieu of either arrest or release could be beneficial (Roberts & Indermaur, 2006). Be that as it may, some programs provide for guided or structured discretion, including the application of risk assessment instruments, which may serve to minimize or prevent net-widening.

Another alternative to arrest that may also reduce the risk of net-widening is the use of technology to facilitate the diversion of specific populations away from the criminal justice system altogether. Some suggest the possibility of intervention at the point of the 911-call to either (1) re-direct the caller from the police to a different responding agency or (2) better inform responding officers of the nature of the incident producing the call. Examples of this can be readily pulled from the research literature pertaining to crisis intervention team training (CIT) and related police responses to persons with mental illness (see, e.g., Teller et al., 2006). Specifically, CIT often incorporates training for police dispatchers designed to increase their ability to identify calls stemming from incidents involving persons with mental illness and notify the most appropriate response team (e.g., CIT officer, mental health service providers).

The adoption of 2-1-1 information services is another potential method to divert specific callers from police attention to a more appropriate resource. The 2-1-1 information service is a nationwide number which provides resources for individuals regarding community health and human services (Brier, 2003; Saxton, Naumer, & Fisher, 2007). According to their national website, the purpose of 2-1-1 is to connect individuals to a community resource specialist in their area who can assist in finding local services and resources, including supplemental food and nutrition programs, shelter and housing options, emergency information and disaster relief, employment and education opportunities, services for veterans, healthcare, addiction prevention and rehabilitation programs, reentry programs, and support groups for individuals with mental illnesses or special needs and victims of physical or emotional domestic abuse (http://www.211.org/pages/about). Currently, 2-1-1 information services are available in all 50 states and Washington D.C.

In 2017, 2-1-1 information services across the United States answered over 13.4 million calls. Referrals were made most often for housing or utilities assistance, physical or mental health services, employment services, and services to address and prevent homelessness (http://www.211.org/pages/about). The use of 2-1-1 services have been suggested to facilitate early intervention and prevention for individuals, promote cooperation and information sharing among service agencies, and increase call avoidance of other three-digit numbers (e.g., 911, 311) (Saxton et al., 2007; Shank, 2012). However, the potential for 2-1-1 to mitigate the number of calls for service and, in turn, reduce police contact with special populations has been unexamined. Furthermore, the availability and scope of local 2-1-1 services across the United States is largely unknown. It is possible that some jurisdictions have access to more comprehensive 2-1-1 information services than others. Indeed, the ability of community resource specialists to connect individuals to local services is likely to be highly contingent upon the existence of those services in the community.

Diversion programs are in some important respects extensions and formalizations of long-standing police practices of non-enforcement and referrals to third parties. Indeed, such unprogrammed practice is the proper baseline against which to assess the operation of diversion programs, particularly the success with which offenders are genuinely diverted from the criminal process. We first consider what is known about diversion programs for drug offenders, followed by diversion programs for persons with mental illness, and finally diversion programs for juvenile offenders.

i. Drug Offenders

The history of police-led drug diversion is apparently not well-known, even among academics. For example, Katherine Beckett recently opined that Seattle's Law Enforcement Assisted Diversion (LEAD) program, implemented in 2011, "is believed to be the first pre-booking diversion program for people arrested on drug and prostitution charges in the United States" (2016, p. 86). Yet police-led diversion programs for drug offenders existed in the U.S. and other countries several decades prior to current LEAD programs. There is much we can learn from these oft-forgotten attempts at early implementation for police-led diversion of drug offenders. In the review that follows, we first describe the relevant history of police-led diversion programs in the U.S. and other countries, followed by a more detailed presentation and evaluation results (when available) for the more current primary police-led diversion programs for drug offenders, including LEAD programs, followed by other (non-LEAD) diversion programs.

a. Early Drug Diversion Programs

Drug diversion was initially incorporated into national initiatives in the United Kingdom and Australia. Examining police practices in the United Kingdom, Dorn (1994) estimated that in the late 1980s – early 1990s, approximately half the police forces in England, Wales and Scotland had some type of police referral scheme, though these programs did not formally connect the disposition of criminal cases with offenders' acceptance of a referral to services. Rather, officers informally conditioned their decisions to only "caution" rather than charge offenders with the offenders' willingness to accept a referral. The uptick of referrals was in any event very limited – less than one percent. Reflecting on the experience with these programs, Dorn offered a number of lessons learned, including "don't try to make arrestees 'earn' their cautions by taking up referral; this is procedurally improper – an abuse of police powers. The police decision over whether to caution, and arrestees' decisions whether or not to take up the offer of referral, should be independent of each other" (Dorn, 1994, p.31). Arrest referrals were subsequently incorporated into the United Kingdom's Drug Intervention Programme, which in 2003 provided for interventions for drug users at various points in the criminal process, including arrest as well as the later stages. Throughout this experience, however, many police remained skeptical about the effectiveness of the referrals (Hunter, McSweeney & Turnbull, 2005).

In Australia, the diversion of drug-involved offenders from criminal processing was part of a national initiative in the 1990s, and police-led diversion programs (among others) emerged in each Australian state or territory. All of the programs focused on offenders in possession of small amounts of drugs or drug paraphernalia, to the exclusion of non-drug offenders, and involved an educational component; many also included assessment and treatment components. Every

jurisdiction operated a program for marijuana possession, and a majority also had a program for other illicit drugs. The programs varied with respect to: whether referral was discretionary or mandatory; eligibility criteria; the nature of intervention; requirements for compliance; consequences for noncompliance; and limitations on the number of times an individual may be diverted (Payne, Kwiatkowski & Wundersitz, 2008).⁶

Australia's Illicit Drug Diversion Initiative, developed in 1999, was the subject of an outcome evaluation conducted by the Australian Institute of Criminology in 2006-2008 (Payne, et al., 2008). Programs from across eight states and territories were included. Control groups were not included in the evaluation design, however, on the reasoning that either no control group – if all eligible offenders are diverted – or no equivalent control group – with diversions at officers' discretion – could be formed. The size and nature of the samples of diverted offenders varied from jurisdiction to jurisdiction and program to program; pre- and post-program offending was measured in terms of individual offenders' arrests for a minimum of one year prior to diversion and one year following diversion.

In the Australia study, compliance with the terms of diversion tended to be high. Post-diversion offending rates ranged from 15 to 52 percent for any offense over 12 months, from 2 to 20 percent for drug offenses, and from 6 to 29 percent for property offenses. Fourteen to 30 percent of diverted first-offenders reoffended post-diversion. Among diverted offenders with a prior history of offending, half to two-thirds had lower post-program frequencies of offending. In the absence of a control group, Payne and his colleagues compared the post-program offending rates of diverted first-offenders to those of first-offenders in a previous population-based study of Western Australian first offenders. Based on comparisons of the point estimates, diverted first-offenders exhibited a greater likelihood of reoffending in the majority of programs; taking into account the confidence intervals around those estimates, only one jurisdiction had a higher rate of recidivism. Payne et al. (2008) concluded that the lack of statistical difference between the recidivism of first-time drug offenders to general first-time offenders could be viewed as a more positive result than may have been expected, since drug-crime literature in Australia states that drug-using offenders typically have higher rates of crime involvement than a general offender population.

Pre-booking diversion programs for drug users emerged in the U.S. in the 1990s, coinciding with and facilitated by community policing initiatives that stressed community engagement and problem-solving. Goetz and Mitchell characterize these programs as "pluralized" methods of drug control, which "attempted to incorporate therapeutic measures within otherwise prohibitionist regimes" (2006, p.505). They describe, for example, San Francisco's Campaign Against Drug Abuse:

Twice a month, a team of police officers would conduct early morning sweeps in select neighborhoods that lasted a few hours. Individuals would be arrested on misdemeanor charges under California's health and safety code section 11-5-50, or being under the influence of a controlled substance in public. Arrestees were taken not to jail but to a police division station—

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⁶ One-year recidivism rates varied from 15 to 52 percent, but in the absence of any control group, it is impossible to draw inferences about programmatic impacts.

usually the Mission Station—where officers would conduct an examination to determine legal intoxication (e.g., sounds of speech, appearance of eyes, etc.), and where a health worker would also be on hand to discuss treatment options. Initially, those agreeing to seek treatment would be transported to the McMillan Center by the police for an assessment by TAP officials, and ostensibly access to the city's treatment system. Those not agreeing to treatment would be cited and released (Goetz & Mitchell, 2006, p.501-502).

Another illustration of a pre-booking arrest program can be seen in the Hillsborough County Sherriff's Office and Pinellas County Police Departments (Florida) where adults charged with a misdemeanor arrest (most typically for marijuana possession or shoplifting), who have not been arrested previously for a DUI, and who have no prior misdemeanor arrests within the past two years are eligible for the Adult Pre-Arrest Diversion program (Marrero, 2018). Essentially police officers at the scene conduct a criminal background check for any one of seventeen eligible misdemeanor offenses, and under these conditions offer suspected defendants an opportunity to register for the program (within three days of the incident). Participants who complete community service and on-line courses related to the incidents are not arrested, providing participants an opportunity to avoid a criminal arrest and charge and to divert low risk individuals out of the criminal justice system.

The implementation of pre-booking diversion programs for drug users was marked by tension between the perceived needs of the community and those of individual offenders. As Goetz and Mitchell (2006) observed, pre-booking activities created tensions among drug policy stakeholders (public health officials, criminal justice officials, treatment providers and so on) regarding appropriate roles and level of coercions used by police. They point out that police traditionally favored order maintenance over re-integrative approaches which are more aligned with community-based organizations to reach socially marginalized populations and improve quality of life (Goetz & Mitchell, 2006). Such programs have also been marked by conflicts with police values. Officers who see drug users as "making a choice to be deviant" (Goetz and Mitchell, 2006, p.510) may be reluctant to divert them from the criminal process. Further, officers were more likely to engage with and provide referrals for drug users when the officers did not blame them for their behavior (Spooner, Hall, & Mattick, 2001). Such judgments by officers may help to account for the differences in the populations diverted in pre- and post-booking programs (Lattimore, Broner, Sherman, & Frisman, 2003). Specifically, Lattimore and her colleagues (2003, p.58) found that:

Subjects who were diverted at the prebooking sites were more educated, more involved with employment, and generally more satisfied with their lives, health, and finances. At the same time, they were less often arrested, less involved with treatment and other services, less likely to use emergency rooms for mental health problems, less likely to be prescribed psychotropic medication, and less seriously involved with drugs and alcohol in comparison to the subjects who were diverted at the postbooking sites.

Police officers' views might especially conflict with the harm reduction philosophy that underlies some programs. The Harm Reduction Coalition (2018) lists among the principles of harm reduction: "... the non-judgmental, non-coercive provision of services and resources to people who use drugs and the communities in which they live in order to assist them in reducing attendant harm." In both San Francisco and Baltimore in the 1990s, "pluralized" drug control gave rise to

disagreements among public officials "over the extent to which coercion should be used to guide users to treatment" (Goetz & Mitchell, 2006, p. 503). More recently, traces of similar conflicts were noted in a review of police-led diversion programs, from which Tallon, Spadafore, and Labriola (2016) drew a lesson about defendant accountability: the credibility of such programs among law enforcement is enhanced when they provide for consequences for failure.

b. Law Enforcement Assisted Diversion (LEAD) Programs

Seattle's LEAD program, launched in late-2011, provides for the voluntary diversion of drug offenders from criminal prosecution to case managers for treatment in the community. Seattle's program has been hailed as an exemplary shift from a punitive, criminal justice approach to the problem of drug abuse, and towards a public health focused approach. Coming at a time when police-community relations were particularly strained, LEAD appears to have been all the more attractive, with its promise of reducing tensions between law enforcement and the minority communities that have been hardest hit by both street-level drug markets and the war on drugs. This innovative program was featured in a national convening at the White House in July 2015, and it has attracted attention from across the United States. According to the LEAD National Support Bureau, eleven cities are reportedly operating LEAD programs, five jurisdictions are "launching" LEAD programs, fourteen are developing programs, and thirty-five are "exploring" LEAD.

LEAD rests expressly on a harm reduction philosophy, such that the object of LEAD is not abstinence, but the mitigation of harms to the offenders, people in the offenders' lives, and the community. Once enrolled in LEAD, clients are not removed for drug use. Indeed, clients are required only to engage with the process. Case managers "meet offenders where they are," which may not be a place of readiness for treatment services, and so case managers cultivate trust and rapport, moving clients through individualized intervention plans at a measured pace.

Existing LEAD programs differ in some respects. Eligibility for diversion in Seattle's and Baltimore's programs rests on a drug or prostitution offense (Rector, 2017). In Portland's program, only arrests for drug possession offenses may be diverted (Hernandez, 2017). Santa Fe's program is open to offenders with an opioid addiction regardless of the instant offense (City of Santa Fe, 2014). Albany's program provides for the diversion of a wide range of non-violent misdemeanor and lesser offenses, if the offending is driven by addiction, mental illness, homelessness, or poverty (see Worden & McLean, forthcoming). Seattle's LEAD program does not provide for pre-booking diversion, as offenders are booked prior to their referral to treatment; prosecution is suspended. By contrast, Albany's LEAD program is a pre-booking initiative.

Within the parameters of the eligibility criteria, LEAD referrals rely on the discretion of police officers and the consent of offenders. In Albany, referrals also require the consent of a complainant

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⁷ See https://www.leadbureau.org/ accessed January 13, 2018. The Bureau provides advice and technical support to jurisdictions that are considering, developing, or implementing LEAD programs. Five of the eleven operational programs are not "certified" by the Bureau. Canton, Ohio, reportedly adopted LEAD in 2015, but it is no longer listed as an operating program.

to forego legal action. Eligible offenders are primarily those who commit low-level drug offenses or whose offending is driven by an addiction. Offenders may be disqualified due to certain exclusion criteria such as specified criminal histories, the exploitation of others, or drug dealing for profit. LEAD programs typically provide for not only arrest referrals but also "social contact" referrals, which provide for the enrollment of known offenders in the absence of an instant offense.

Seattle's program, as described by Collins, Clifasefi, & Lonczak (2015a, p.1) was designed to address chronic, low-level offending:

Despite policing efforts, drug users and dealers frequently cycle through the criminal justice system in what is sometimes referred to as a "revolving door." The traditional approach of incarceration and prosecution has not helped to deter this recidivism. On the contrary, this approach may contribute to the cycle by limiting opportunities to reenter the workforce, which relegates repeat offenders to continue to work in illegal markets. This approach also creates obstacles to obtaining housing, benefits, and drug treatment. There have thus been calls for innovative programs to engage these individuals so they may exit the revolving door. The primary aim of the LEAD program is to reduce criminal recidivism.

The program was the subject of a process evaluation that retrospectively spanned the program's first two years (Beckett, 2014), when LEAD was implemented as a pilot program in the city's Belltown neighborhood. The evaluation was based on reviews of documents, interviews with stakeholders, observations of meetings of governing and operational workgroups, and observations of LEAD-affiliated officers from the Seattle Police Department (SPD) and the Washington State Department of Corrections (DOC). Some of the evaluation's more important lessons included highlighting the importance of productive collaboration amongst stakeholders. The evaluation found that forming an operation protocol was time consuming, but lead to the development of trust and respect among stakeholders and that the training for LEAD roles was essential.

Additionally, the challenge of gaining officers' support and participation was an important lesson learned in Seattle. Only 40 of Seattle's 1,300 officers were involved in LEAD (Collins, et al., 2015a). Beckett further notes the same conflict between harm reduction principles and officers' outlooks found in previous research, "The idea that people can remain in the program even if they are 'hanging out' downtown and actively using drugs is anathema to many officers" (2014, p.21), and she thus stresses that line officers need an ongoing dialogue regarding harm reduction principles as opposed to a one-time intervention. If officers do not buy-in to the program, then diversions will be few and far between.

Albany, New York also implemented a LEAD program that was the subject of a process evaluation (Worden, McLean, & Dole, 2017; Worden & McLean, forthcoming), which examined program development and the first year of implementation in real time, drawing on reviews of documents, interviews with stakeholders, observations of meetings of governing and operational workgroups, observations of officer training, analyses of arrest and referral records, and a survey of officers. Albany's program was implemented city-wide, and Albany Police Department's entire sworn force was trained in harm reduction principles and the LEAD protocol. In LEAD's first year, 43 referrals were made by 25 different officers, though 3 officers together accounted for more than one-third of the diversions; 543 arrests for LEAD-eligible offenses were not diverted, though the

available information did not reliably indicate whether the non-diverted arrestees' offending was driven by alcohol, drug, or mental health related needs. While Albany's program, like Seattle's, was originally designed to divert and treat "frequent fliers," the diversions included few such people, and changed over time, from disproportionately white and female offenders who were apprehended for thefts and drug possession in the first six months, to mostly black men apprehended for trespassing and alcohol (open container) violations. Either pattern may have been symptomatic of net-widening.

The survey of Albany Police Officers revealed mixed views of diversion in general, with half scoring in the favorable range of a diversion scale, and fewer (one-third) with positive views of LEAD in particular. Each of these outlooks independently influenced officers' discretionary decisions to divert or arrest. Interviews with officers revealed mixed views about LEAD and about its target population. Many officers were indifferent toward LEAD, with no intention of making referrals, but subject to no pressure to do so. Officers' reservations about LEAD included: "LEAD inappropriately asks officers to be social workers; LEAD is merely symbolic to show the community the 'softer side' of the police department; LEAD lacks the teeth that a court-ordered program or drug court would have; and LEAD creates unnecessary redundancy" (Worden & McLean, forthcoming, p.21). Officers opposed to LEAD believed that no program "works" for habitual drug users, or that LEAD "unfairly gives some criminals a 'free pass'" (Worden & McLean, forthcoming, p.22).

Only Seattle's LEAD program was the subject of outcome evaluation, conducted by a team of researchers in the University of Washington's Harm Reduction Research and Treatment Lab. The outcome evaluation, which was only retrospective in nature, examined recidivism, housing, employment, and income/benefits, from program initiation in 2011 through July 2014. The analysis of recidivism was quasi-experimental, including treatment (N=203) and control (N=115) groups with statistical adjustments to control for factors other than the LEAD intervention. It encompassed short- and longer-term reductions in recidivism, and the results led Collins et al. (2015a, 2017) to conclude that LEAD was associated with 58% lower odds of any arrest. Extrapolating from that finding, the estimated reductions in bookings and processing costs, jail stays, and prison sentences yielded savings of \$8,000 per participant. An assessment of housing, employment, and income/benefits outcomes for a subset of the LEAD participants showed substantial improvements from baseline (1-month retrospective at intake) through 18-month follow-up, though no comparison to a control group was feasible so inferences about programmatic impacts can be drawn only with caution. Participants were twice as likely to be sheltered in a follow-up month as at baseline, and 89 percent more likely to be housed. Participants were 33 percent more likely to have legitimate income or benefits in a follow-up month, but no more likely to be employed.

The design and execution of the recidivism evaluation does not, however, eliminate all of the ordinary threats to internal validity, leaving questions about the magnitude of the impacts (if any) of the program. The principal concern is instrumentation, particularly a differential change in the measurement of recidivism. The findings rest on an inference of no changes in arrest decision-making, as Collins et al. (2015a, p. 20) explain:

Another potential explanation for these findings is that officers could have made intentional decisions to avoid arresting LEAD participants. Upon further consideration, however, this explanation is not highly probable. Only approximately 40 of 1,300 SPD officers were involved in the LEAD program. Further, few—if any—officers outside of the LEAD squads were aware of individuals' group assignment. There were neither department-wide communications/trainings about the program nor system flags visible to officers that would signal LEAD participation. Thus, we are confident the observed LEAD effect in reducing arrest is not primarily due to intentional differences in decision-making by SPD officers.

Process evaluation findings, however, raise doubts about this inference. LEAD operated in one Seattle neighborhood in which potential clients were concentrated, and in which proactive policing was performed mainly by a fraction of Seattle's force. Focus group interviews with officers in 2013 revealed that some officers expressed cautious optimism regarding LEAD, with the officers from these optimistic units making a significant number of referrals and contacts to LEAD caseworkers (Beckett, 2014). In addition, "... the officers believed that prosecutors *never* filed charges that LEAD clients acquired after becoming a LEAD client, and therefore that LEAD functioned as a 'get out of jail free' card" (Beckett, 2014, p. 26-27), making the time that officers might spend on arrest paperwork of dubious value. Finally, Collins et al., in their evaluation of system utilization, cautioned that:

The Seattle West Precinct was subject to policy changes during the LEAD evaluation time period, which could have affected both the LEAD and control groups' number of arrests and charges and thereby resulting jail time, prison days and legal cases. It is therefore possible that more focused enforcement—and not necessarily increased criminal activity—was responsible for increases across utilization outcomes in the control group (2015b: 22).

Thus, it appears likely that arrest and booking, given a new offense, became less likely for LEAD participants, even as the risk of detection and arrest increased for the control group with intensified enforcement outside the LEAD catchment area. The estimated 58 percent reduction in recidivism is likely an overestimate, but by how much is impossible to say. Handling the continued offending of LEAD clients may have been an effective posture for programmatic purposes, but it means that an outcome evaluation cannot properly use information on arrests to measure reoffending.

Setting aside questions about the internal validity of the outcome evaluations and taking the results at face value, questions regarding the external validity of the findings should be raised—would similar impacts would be achieved in other settings? Seattle, and particularly the Belltown neighborhood in which LEAD operated for its first two years, has a substantial homeless population; more than half of the LEAD participants were homeless, and fewer than one-fifth had permanent housing. An intervention that succeeds in housing these individuals might by itself yield other beneficial outcomes. Comparable impacts might not be achieved by programs among whose clientele homelessness is less prevalent.

No other LEAD program has been the subject of an outcome evaluation, despite the program's expansion and implementation in possibly dozens of cities (LEAD National Support Bureau, 2018). In 2016 the Open Society Foundation funded the New Mexico Sentencing Commission to evaluate Santa Fe's program, however the evaluation is not complete. Preliminary results indicate

that "the program is showing a significant reduction in jail and court costs for female clients who remain engaged with counseling and other services, dropping from \$2,470 a year before LEAD to \$1,330 after, based on a \$95-a-night cost per inmate at the Santa Fe County jail. There is so far less conclusive evidence about male LEAD clients, or those who are referred to LEAD but then don't utilize its services ..." (Krasnow, 2017).

c. Other Police-Led Drug Offender Diversion Programs

LEAD is not, however, the only contemporary form of police-led drug diversion. The opioid crisis has prompted a number of law enforcement agencies to develop or consider and adopt innovative approaches to drug possession and/or offending driven by drug use. Three such programs are described next.

In 2015, the chief of the Gloucester (MA) police pledged on Facebook that "any addict who walks into the police station with the remainder of their drug equipment (needles, etc.) or drugs and asks for help will NOT be charged. Instead we will walk them through the system toward detox and recovery" (Seelye, 2016). In Gloucester's Angel Program, police contact treatment facilities to find a space for a presenting individual, and also contact a local volunteer – someone in recovery or familiar with addiction – who offers emotional support to the addict. Recognizing that relapse is a part of treatment, addicts are "welcomed back, no questions asked." By early 2016, a New York Times article reported that "56 police departments in 17 states have started programs modeled on or inspired by Gloucester's, with 110 more preparing to do so" (Seelye, 2016, p. A1). In late 2016, Schiff et al. (2016) reported that 153 police departments had adopted the program. The program gave rise to the Police Assisted Addiction and Recovery Initiative, a non-profit organization that supports Gloucester's program and promulgates similar initiatives elsewhere.⁸

Stop, Triage, Engage, Educate, and Rehabilitate (STEER), formed and implemented in Montgomery County, Maryland, also links drug users to treatment (Charlier, 2015; Addiction Policy Forum, 2017). Montgomery County police officers who make contact with drug-involved offenders may, with the agreement of the offender, divert them to treatment through a communitybased case manager – a "care coordinator" co-located in the police department – who meets the officer in the field. This is an "intervention contact." Officers may also refer drug-involved individuals against whom police have no probable cause for an arrest, much like a LEAD social contact referral, in what STEER dubs a "prevention contact." STEER is designed for people with a high need for drug treatment, but low to moderate risk for crime. Referrals turn partly on structured assessments: officers use a risk screen in the field to assess criminogenic risk, and the care coordinator applies a substance use screen to assess treatment needs. Charges are held in abeyance unless the offender is not compliant. In its first year, 158 prevention referrals had been made, 71 individuals had completed STEER screening, and 43 were engaged in treatment. The corresponding figures for intervention referrals were lower: 26 referred, 8 completed screening, and 5 engaged in treatment. Most of those engaged in treatment (45 of 48) were compliant after 30 days, and about two-thirds remained compliant after 60 days (Westwood, 2017).

⁸ http://paariusa.org/

New York City's Heroin Overdose Prevention and Education (HOPE) program, which will operate on Staten Island, is for people arrested for low-level drug possession with little to no criminal history, who qualify for a desk appearance ticket (DAT). For eligible offenders the DAT will be processed for a 7-day (rather than 30-day) return date, making HOPE a post-booking diversion program. A "peer coach" will meet participants upon their release and encourage them to visit a local resource and recovery center, where they can be assessed and treatment options can be recommended; if they do so, their case is adjourned for 30 days. If they engage with treatment within that 30-day period, they will not be prosecuted; if they fail or drop out, however, then they will be prosecuted on the original charge (New York City Police Department, 2017).

These contemporary programs vary with respect to their target populations. STEER is limited to offenders of only low to moderate risk for non-drug crime. HOPE is for offenders with little or no criminal history. Gloucester's Angel program is open to any drug addict. By contrast, and as noted above, both Seattle's and Albany's LEAD programs have been described as addressing the needs of *repeat* low-level offenders.

Contemporary drug diversion programs also appear to vary some in their degrees of legal pressure. The Angel Program involves no legal pressure, as drug users enter the program by turning themselves in at the police station with what amounts to amnesty for the possession of drugs or drug paraphernalia. LEAD is rooted in a harm reduction philosophy, which espouses a non-coercive approach and thus minimizes the degree of legal coercion. LEAD does not eliminate legal coercion, however, inasmuch as uniformed, armed officers of the law offer a referral to a case manager in lieu of arrest. STEER and HOPE involve greater levels of legal coercion, and the latter does not bypass the booking process. But pre- and post-booking diversion arguably represents a lower level of legal pressure than diversion at subsequent stages of the criminal process.

Pressure to enter (and remain in) treatment for substance abuse stems from several different sources and takes many forms (Polcin & Weisner, 1999). Family members often exert influence and may even issue ultimatums. Employers may encourage or demand (with the threatened loss of employment) treatment. The legal system is an additional source of pressure to enter and remain in treatment. As Sam Quinones (2017) observed in *The New York Times* recently:

Waiting for an addict to reach rock bottom and make a rational choice to seek treatment sounds nice in theory. But it ignores the nature of the drugs in question, while also assuming a private treatment bed is miraculously available at the moment the addict, who is usually without insurance, is willing and financially able to occupy it. The reality is that, unlike with other drugs, with opiates rock bottom is often death. ... Jail can be a necessary, maybe the only, lever with which to encourage or force an addict who has been locked up to seek treatment before it's too late. "People don't go to treatment because they see the light," said Kevin Pangburn, director of Substance Abuse Services for the Kentucky Department of Corrections. "They go to treatment because they feel the heat" (p. SR1).

Legally coerced drug treatment can work well, though the supporting evidence comes from studies of interventions at later stages of the criminal process (Bright & Martire, 2013). The strongest predictor of treatment success is treatment retention, and legal pressure promotes retention. Drug courts, which have proliferated in the past thirty years, are one setting in which legal pressure is

applied, and a substantial body of empirical evidence indicates that they reduce criminal behavior (Gottfredson, Kearley, Najaka, & Rocha, 2007; Mitchell, Wilson, Eggers, & MacKenzie, 2012; Shaffer, 2011). Recidivism is affected by program completion, not by motivation for treatment (Cosden, et al., 2006). But of course, not all offenders succeed in drug courts. Additional evidence on the effectiveness of coerced drug treatment comes from the Breaking the Cycle demonstration, which provided for "systemwide intervention to reduce drug use among offenders by identifying and intervening with drug[-]involved felony defendants;" an evaluation showed that such intervention reduced criminal behavior (Harrell, et al., 2003). Evidence can also be gleaned from experience with the swift, certain, and fair model of community supervision, which has shown some success even with high-risk drug offenders (e.g., Hamilton, Campbell, van Wormer, Kigerl & Posey, 2016; Hawken & Kleiman, 2009; Kleiman, 2009; Lattimore, MacKenzie, Zajac, Dawes, Arsenault & Tueller, 2016).

ii. Persons with Mental Illness

As greater numbers of persons with mental illness have become entangled in the criminal justice system, the public has called for improved responses by law enforcement to this population. Researchers estimate that less than one to ten percent of calls for police service involve persons with mental illness (Deane, Steadman, Borum, Veysey & Morrissey, 1999; Janik, 1992; Teller, Munetz, Gil & Ritter, 2006; Teplin, 1984; Terrill & Mastrofski, 2002). However, large scale policy changes have led to an increase in contacts between the police and persons with mental illness, including deinstitutionalization, increases in civil commitment criteria for police and underfunded community-based programs (Engel & Silver, 2001; Skull, 1977; Wachholz & Mullaly, 1993).

As first-responders to crises involving persons with mental illnesses, the police play a critical role as "gatekeepers," determining whether the individual should be arrested or referred to the mental health system for services. Arrest has traditionally been an appropriate response to "disorderly" individuals, and most of the persons with mental illness whom police contact will be arrested at least once, while many will be arrested multiple times throughout their lives (McFarland, Faulkner, Bloom, Hallaux & Bray, 1989). It is now becoming increasingly recognized that criminal justice processing may be ineffective in achieving positive outcomes for these types of offenders. Evidence suggests that once incarcerated, offenders with mental illness spend more time in jails and prison, particularly in segregation, than their non-mentally ill counterparts, and are subject to further criminalization for their symptoms (Ratansi, 2004). Rather, treatment provided to offenders in a community-based setting may be a more appropriate means of addressing these offenders' criminogenic needs (DeMatteo, LaDuke, Locklair, & Heilbrun, 2013). Subsequently, there have been calls for a more service-oriented approach, treating mental illness as a public health issue, rather than a criminal justice concern.

The police role is one of law enforcer, peace keeper, and first responder, and these roles often conflict in encounters between police and individuals with mental illness (Bittner, 1967). Under such circumstances, the police role broadens to that of "street-corner psychologists" (Teplin & Pruett, 1992, p.139). Police have been unsure how to play this role and help this population, unfamiliar with referral resources and how to contact them, and often resorting to arrest (Finn & Sullivan, 1989). Moreover, police tactics such as verbal commands, intimidation or the use of physical force, may escalate an encounter with an emotionally disturbed individual who is agitated

or experiencing acute symptoms, creating a dangerous situation for both parties (Watson, Morabito, Draine & Ottai, 2008). To address these issues, law enforcement agencies nationwide have developed and implemented police-led, pre-booking diversion programs designed to divert low level misdemeanant offenders with a mental illness away from arrest and into community based mental health treatment (Ratansi, 2004). Diversion from arrest, compared with traditional criminal justice processing, is believed to increase service utilization and client quality of life, and decrease substance abuse, mental health symptoms, and criminal activity.

Broadly speaking, police-led, pre-booking diversion efforts take three general forms: 1) policebased specialized police response, 2) police-based specialized mental health response, and 3) mental health based specialized mental health response. The police-based specialized police response incorporates special mental health training into a curriculum for a group of sworn officers who assume the role of first responders to crises with individuals displaying mental illness, sharing formal ties to the mental health system. Under this approach, officers are trained to recognize mental illness, assess individual risk and the appropriateness of diversion to mental health services, and communicate and interact with persons in crises (Broner, Lattimore, Cowell, & Schlenger, 2004). The most prevalent example is Crisis Intervention Teams (CIT), with Comprehensive Advanced Response as a modified approach. In contrast, the police-based specialized mental health response shares the burden of response with mental health professionals, who are employed by the police department and provide phone-based or on-site assistance to officers at the scene of a call. Last, the mental health-based specialized response programs incorporate a collaborative response by police officers and community mental health workers to incidents with mentally ill persons (Lurigio & Swartz, 2002). Common examples of this response are Mobile Crisis Teams (MCT) and Centralized Crisis Response Sites. These four forms of diversion -- CIT, Mental Health Professionals who Co-respond, MCT and Centralized Crisis Response Sites -- and their program evaluations (where they exist) are described below.

d. Crisis Intervention Teams (CIT)

A police-based diversion initiative, the Crisis Intervention Team (CIT) is a collaborative initiative between law enforcement and mental health experts who jointly provide crisis intervention to persons affected by mental illness, focusing on diversion and treatment over arrest and incarceration (IACP, 2016b). CIT was first developed by the Memphis Police Department in 1988 (National Council of State Governments, 2002), and has since been implemented in approximately 2,700 police departments across the U.S. (American Psychological Association, 2014). The program strives to improve officer and community safety, and redirect individuals with mental illness from the judicial system to the health care system (Dupont, Cochran & Pillsbury, 2007). CIT are considered important because encounters between people with mental illness and police can be unpredictable in their resolution; additionally, they can serve as a point of anxiety for police (Kaminski, DiGiovanni, & Downs, 2004). Also, as noted by Morabito et al. (2012), interactions between police with people with mental illness are particularly time-consuming since officers' deal with a person in crisis for hours. Connecting people with mental illness to emergency services can involve greater police resources than more traditional responses by police.

The CIT logic model posits that providing adequate mental health training to officers, strong partnerships between police and mental health partners, and organizational support to guide

program implementation will raise officers' awareness of mental health issues and encourage officers to engage in the diversion program. These mechanisms reduce the need for officers to arrest individuals in crisis and facilitate the diversion of these cases away from the criminal justice system. These three core elements are further discussed below.

Specialized training for police officers assists officers in recognizing signs of mental illness and in communicating (verbally and nonverbally) with a person in crisis, improving their responses to and de-escalation during mental health crises (Bonfine, Ritter & Munetz, 2014). Further, it is believed that officers who have been trained to recognize signs and symptoms of mental illness, have knowledge about the local community mental health system, and have support in directing people to mental health treatment resources, will be more likely to direct mentally ill people to services (Bonfine et al., 2014; Watson et al., 2010).

CIT forges partnerships between the police and the mental health community, as CIT officers assume the role of liaison to the mental health system (Borum, Williams, Deane, Steadman & Morrissey, 1998; Cochran, Deane & Borum, 2000; Reuland, 2004). Further, CIT shifts police roles and organizational priorities from a traditional law enforcement model to a service-oriented model that responds to mental health as a community safety and public health concern (National Council of State Governments, 2002). The objectives of the CIT model differ from other mental health based specialized responses in that it is aimed primarily at changing the role of the police officer in interactions with persons with mental illness (Ratansi, 2004). The program follows a generalistspecialist model, as CIT officers maintain their standard patrol duties, however upon receiving a "mental disturbance call," they may be deployed anywhere in the jurisdiction (Cochran et al., 2000; Ratansi, 2004). In Albuquerque, the department has employed a team-within-a-team approach, providing for follow-up investigations by detectives, distributing bulletins about potentially dangerous individuals to officers, and hiring support staff to perform "knock and talks," visiting individuals who potentially pose a threat to themselves or others. The department has reported CIT response to 271 calls each month, on average, 48 percent of which involve transporting an individual to local mental health facilities, while less than 10 percent of individuals contacted are arrested or taken into protective custody (Bower & Pettit, 2001). Similar CIT programs have been described in Fairfax County, Virginia (see International Association of Chiefs of Police, 2016) and Los Angeles (Finn & Sullivan, 1989).

A modification of the traditional CIT model, the Comprehensive Advanced Response, entails a training-only approach. As such, crisis intervention training may be afforded in some departments without the added features of a crisis intervention team. All officers are mandated to attend an advanced 40-hour training, which incorporates interactions with mentally ill individuals into overall training related to "special populations" (Lurigio & Swartz, 2002). The Newark Police Department has adopted this approach, placing an emphasis on treatment rather than arrest, and providing a standard training curriculum which is mandatory for all academy recruits (Sellers, Sullivan, Veysey & Shane, 2005).

Evaluations

A proliferation of police-led diversion programs nationwide has led practitioners to ask what additional benefits may be associated with such initiatives. A few diversion programs have

released reports, with analyses that are characterized as "exploratory," often descriptive in nature and free from the rigors of evaluative research. A 2008 review of empirical studies on CIT revealed only twelve reports, two of which assess police disposition of CIT calls (Compton, Bahora, Watson, & Olivia, 2008). Further, most reports have solely focused on Crisis Intervention Team (CIT) or Mobile Crisis Team (MCT) models, although other diversion efforts have developed nationwide.

Crisis Intervention Teams (CIT) strive to reduce arrests of individuals with mental illness and increase referrals to community-based treatment. Connecting individuals in crisis with community services, rather than traditional criminal justice processing, is expected to prevent reoccurrence of crises and the "revolving door" of offending (Finn & Sullivan, 1989). Several studies have reported a significant reduction in arrest by CIT officers (Dupont & Cochran, 2000; Franz & Borum, 2011; Steadman, Deane, Borum, & Morrissey, 2000). However, a pre-post examination of CIT implementation in Akron, Ohio noted no significant changes in arrest rates following police contact (Teller et al. 2006; see also Ratansi, 2004; Watson et al., 2010). It may be likely that the treatment effects reported were directly due to the absence of a comparison group (see Franz & Borum, 2011; Steadman et al., 2001) and rather were evidence of under-enforcement of the law by police (Watson et al., 2010).

In terms of treatment referrals, CIT officers reportedly directed significantly more individuals with mental illness to mental health services (Watson et al., 2010; Canada, Angell & Watson, 2010; Ritter, Teller, Marcussen, Munetz, & Teasdale, 2011; Steadman et al., 2000), rather than limiting their response to arrest or hospitalization. Similarly, Compton et al. (2014) reported that CIT-trained officers were significantly more likely to use referrals or transport to mental health services when subjects were suspected of having a drug or an alcohol problem compared with non-CIT officers. Some of these studies, however, failed to include a non-CIT officer comparison group, and when a control group was included in analyses, CIT officers transported significantly more individuals to hospitals for psychiatric evaluation than non-CIT officers (Teller et al., 2006).

CIT models rest on the shoulders of its trained officers. It is believed that police training will enhance officer understanding of mental illness and enable them to use alternative tactics for deescalating situations without resorting to violence (Abbott, 2011). In an experimental study employing hypothetical vignettes of interactions between police and persons displaying a range of acute symptoms of mental illness, Godfredson and colleagues (2010) noted that officers selected disposition responses appropriate to the mental health needs depicted in the vignette. A second factor that predicted police response was officers' confidence and awareness of the issues facing individuals with mental illness. Similarly, Watson et al., (2010) suggested that attitudinal factors moderate the impact of CIT training on officer behavior, finding that officers having relationships with a person suffering from mental illness, or those holding positive attitudes regarding mental illness, are more likely to transfer individuals in crisis to treatment rather than hospitalization or arrest. Several studies have assessed the impact of CIT training on officers' attitudes using selfreported data, finding an improvement in officers' knowledge of mental illness (Ellis, 2014; Hanafi, Bahora, Demir, & Compton, 2008), tolerance for those in crisis (Bahora, Hanafi, Chien, & Compton 2008; Compton, Esterberg, McGee, Kotwicki, & Olivia, 2006; Compton et al., 2008; Demir, Broussard, Goulding, & Compton, 2009), and ability to identify acute symptoms of mental illness and respond appropriately (Canada, Angell & Watson, 2012; Teller et al., 2006; Wells &

Shafer, 2006). Conversely, analyzing Cincinnati police officers' self-reported responses, Rantasi (2004) found no significant difference between CIT trained and non-CIT trained officers in identifying emotionally disturbed persons in crisis. Research has demonstrated that officers hold positive views toward the CIT program (Steadman et al., 2000), and believe their department is effectively diverting individuals with mental illness to appropriate services (Bonfine et al., 2014; Borum et al., 1998; Canada et al., 2012). However, it may be naïve to assume that changes in attitudinal outcomes promote behavioral changes among officers during encounters with individuals in crisis.

While it is unknown if changes in officer perceptions affect street-level behavior, the improvement in officer attitudes toward mental illness and skills in responding to emotionally disturbed persons may have important implications. CIT programs may lead to improved rapport building, deescalation abilities and communication with patients and their families, resulting in successful program outcomes (Compton et al., 2006). Several assessments of CIT programs have reported improvements in de-escalation during police interactions with individuals with mental illness. According to CIT International, police agencies in Memphis have witnessed an 80 percent reduction in injuries to police officers and subjects in crisis since the implementation of CIT (see also Bower & Pettit, 2001; Dupont & Cochran, 2000). Moreover, in Chicago, non-CIT officers reportedly relied more on use of Tasers, handcuffs and leg shackles when responding to individuals with mental illness, compared to their CIT counterparts (Canada et al., 2012; see also Allen Consulting Group, 2012; Bower & Pettit, 2001; Canada et al., 2010; Hanafi et al., 2008).

The research from CITs indicate a regular pattern of self-selection into CIT training, attitudinal differences corresponding with selection and CIT training in how to handle cases with persons with mental illness, and some potential benefits beyond arrest patterns. For example, Morabito et al. (2012) found that the types of force used are often different between CIT and non-CIT officers (e.g., verbal force is more likely among CIT officers than non-CIT officers). Morabito et al. (2012) found subjects' physical resistance was the strongest predictor of force used by police. CIT training, which focuses heavily on experiential and role-play training in verbal de-escalation, enhances officers' use of these techniques in encounters. While CIT training did not apparently impact overall use of force among CIT and non-CIT trained officers, an interaction was found between the officer's CIT status and the subject's resistant demeanor. CIT officers were likely to respond with less force for increasingly resistant demeanor in comparison with non-CIT officers. The knowledge and skills gained in CIT training are intended to assist in preventing escalation as well as deescalating an already resistant subject while also ensuring the safety of the officers. In addition to these findings, one study reported a 58 percent reduction in calls for SWAT response among CIT officers compared to their non-CIT counterparts (Bower & Pettit, 2001; also Dupont & Cochran, 2000). CIT programs are believed to slow police down, encouraging patience among officers and rapport building with individuals in crisis, though it is not designed to completely eliminate the need to use force.

Related to arrest, the most consistent finding is that CIT trained officers are significantly more likely to refer persons with mental illness and drug and alcohol dependency into diversion programs when compared with non-CIT officers. In a study that included six counties in Georgia, Compton et al. (2014) found that that only 12% of encounters between police and individuals with serious mental illness, a drug or an alcohol problem, and/or a developmental disability escalated

to the level where physical force was used. While they found no difference in use of force between officers with CIT training and those without it, encounters involving CIT-trained officers were less likely to result in arrest, particularly for subjects who were suspected of having a mental illness only. For cases that had evidence of alcohol and drug dependency without mental illness, CIT officers were significantly less likely to arrest and were more likely to refer for services, while non-CIT officers were more likely to handle such cases with traditional arrest and custody. Thus, referrals for mental health concerns as well as alcohol and drug dependency are consistently higher for CIT trained officers.

Several surveys of officers found that CIT officers felt more prepared during interactions with individuals experiencing a mental health crisis (Bonfine et al., 2014; Ritter, Teller, Munetz, Bonfine, 2010). However, a survey that compared responses of Cincinnati police officers with no CIT training, 8-hours of training, and the full 40-hour specialized training, revealed no significant differences in officers' skills or preparedness to handle such crises, or the time spent on a crisis call (Rantasi, 2004).

Empirical evidence for CIT effectiveness is limited. Generally, evaluative research on CIT has been shallow, descriptive, and reliant on self-report data. Most studies failed to include a pre-CIT or comparison group, preventing researchers from disentangling program effects. A few studies incorporated a quasi-experimental design, but reported only bivariate analyses, absent of statistical controls. Since sampling methods often resulted in unbalanced groups, these tests are insufficient for drawing causal inferences. Compliance issues further complicate inferences about program impacts. In a recent study of Chicago's CIT program, treatment districts incorporated approximately 10 to 13 percent of CIT-trained officers on patrol, compared to 4 to 5 percent of CIT-trained officers on patrol in control districts (Watson et al., 2010). Traditionally, upon contact with an emotionally disturbed individual, an officer will contact a CIT-officer to respond and often assume the primary role on-scene. Without additional data concerning Chicago's CIT response, it is difficult to determine how severe study compliance issues were, and what impact they may have had on study outcomes. Moreover, studies of CIT programs suffer from self-selection bias, as a strength of CIT is the willingness of officers to participate in the program. CIT likely attracts officers who hold more positive views toward the program and those with mental illness, thus likely overestimating the impact of CIT (Brown, Hagen, Meyers, & Sawin, 2009).

Another major source of concern is the lack of data collected by participating agencies. Conducting a survey of 146 police agencies, Belvins and colleagues (2013) identified several challenges experienced by departments in collecting data on police contacts with persons with mental illness. They noted that several departments did not incorporate a means to identify a call as CIT-related, and therefore data were never collected on the incident. Moreover, departmental forms were often duplicative and time-consuming; without incentives or accountability for completion, forms remained blank or blemished with mistakes. Finally, departments recording data differed on the information collected, preventing program comparison across jurisdictions.

e. Mental Health Professionals Who Co-Respond

This police-based mental health response incorporates civilian mental health workers, employed by the police department, who serve as secondary responders to incidents involving individuals

with mental illness, providing consultations to officers in the field (Lamb, Shaner, Elliot, DeCuir & Foltz, 1995). These mental health workers are responsible for developing relationships with community-based organizations so that, post-crisis, they can find available services for individuals (Lurigio & Swartz, 2002). The Community Service Officer in Birmingham, Alabama, is an example of one such program, in operation for more than 30 years. After six weeks of classroom and field training, civilian community service officers assist law enforcement with crisis intervention. Similarly, mental health professionals are paired with officers to respond to 911 calls and on some routine patrols in Denver, Colorado. The program seeks to calm individuals in crisis and steer them toward treatment. In 2017, the clinicians assisting the Denver police made nearly 1,000 contacts with the public, only 2.4 percent of which resulted in an arrest, while 33 percent were connected to formal outpatient mental health treatment, and more than 20 percent were placed on a mental health hold or in a hospital (Osher, 2018).

f. Mobile Crisis Team (MCT) Co-Responders

First developed during the 1960s, Mobile Crisis Teams (MCT) serve as liaisons between hospitals and patients to address mental health emergencies through immediate response to crisis situations at the street-level. MCTs are interdisciplinary crisis teams that attend to a variety of community crises (Baess, 2005). Upon responding to calls of an individual in crisis and determining that mental health issues are jeopardizing the situation, an officer will request MCT assistance (Lurigio & Swartz, 2002; Saunders & Marchik, 2007). Subsequently, licensed mental health professionals, trained to conduct on-site assessments, respond and help officers determine an appropriate action and, if necessary, provide transportation to appropriate care facilities (Geller, Fisher & McDerment, 1995; Lurigio & Swartz, 2002). The strength in MCTs lies in responders' knowledge about the acute symptoms that the individual may be experiencing on scene, allowing responders to tailor an appropriate response to de-escalate the situation (Lurigio & Swartz, 2002). Consequently, crises may be resolved without the need to resort to hospitalization or incarceration. When resolution at the scene is not possible, however, these mental health liaisons facilitate the diversion of cases to the mental health system rather than to the criminal justice system (Lamb et al., 1995). Law enforcement agencies nationwide have implemented MCT (e.g. Santa Fe, San Diego, Cincinnati), at times expanding responsibilities of responders to include follow-ups postcrisis. The Mobile Crisis Response Team in Polk County, Iowa includes a 48-hour follow-up call to ensure that the individual in crisis has received services from community mental health providers (Saunders & Marchik, 2007).

Mobile Crisis Teams are an interdisciplinary approach to a continuum of community crises, which seek to stabilize and provide community-based services to persons experiencing psychiatric emergencies in lieu of arrest (Scott, 2000). Diversion is the key intervention, yet few studies have assessed the immediate program outcomes of arrest and referral to treatment. Two studies assessed officers' self-reported accounts of contacts with individuals in crisis, finding that incidents with MCT response had lower rates of arrest compared to those to which non-MCT officers responded (Ratansi, 2004; Saunders & Marchik, 2007). Similarly, a one-month assessment in 1993 of Los Angeles' Emergency Outreach Team revealed only two arrests of its 101 cases, despite 70 individuals exhibiting psychiatric symptoms and 20 among them overtly violent. Researchers concluded that "because of the use of well-trained teams consisting of a mental health professional and a police officer, these subjects were not criminalized, even though they came from a population

at high risk for criminalization" (Lamb et al., 1995, p. 1269-1270). However, at the 7-month follow-up, 22 percent of clients had been arrested, 12 percent of whom were arrested for violent crimes. Unfortunately, without a comparison group employing traditional police response, or the application of statistical controls for relevant factors, it is difficult to draw such causal inferences. Rather, a quasi-experiment conducted in DeKalb County, Georgia, reported no significant difference in arrest rates between the mobile crisis program and a control group employing traditional police intervention (Scott, 2000).

While it remains unclear whether crisis teams have immediate success in diverting emotionally disturbed persons from the criminal justice system, it is also unclear whether crisis teams succeed in diverting those in crisis to treatment. An Australian study reported that in the program's first year, of the 109 cases responded to by the MCT, 80 were diverted to community-based mental health services, while the remaining 29 were arrested. Unfortunately, however, data on dispositions of comparable cases in the years prior to deployment of the program are unknown (Abbott, 2011). Moreover, it becomes apparent that long-term outcomes should be documented to assess successful diversion. Few studies have assessed dispositions of crisis team referrals to treatment. Little is known as to the service engagement and outcomes of referred individuals. In a quasi-experiment using a control group of a hospital-based intervention matched on subject demographics, primary diagnosis, prior use of services, substance abuse, and severe mental disability certification status, Guo and colleagues (2001) found that in comparison, the community-based crisis intervention reduced the hospitalization rate by 8 percent. Additionally, patients in the control group were 51 percent more likely to be hospitalized within 30 days of the crisis compared to the community-based crisis intervention treatment group (see also Allen Consulting Group, 2012; Scott, 2000). In Fairfax County, Virginia 71 percent of patients followed through with treatment recommendations and were actively engaged in a voluntary outpatient program within four weeks of the crisis intervention (Finn & Sullivan, 1989; see also Kisely et al., 2010). Conversely however, Lamb and colleagues (1995) reported that of an initial 101 subjects, 80 were transported to the hospital where 73 were hospitalized. After a six-month follow-up, 42 percent had been re-hospitalized and 24 percent arrested (see also Frank, Eck & Ratansi, 2004). Additional contrary evidence can be found in Cincinnati, where an increase in repeat calls for service was observed (Frank et al., 2004). Thus, although programs claim to save jurisdictions in hospital and jail costs, few studies have assessed and reported such cost-savings (see Baess, 2005; Cobb, 1997 as cited in Rosenbaum 2010; Scott, 2000).

Several studies reported that MCT clients had more timely access to mental health assessment (Allen Consulting Group, 2012; Baess, 2005) and increased response time by officers (Baess, 2005; Kisely et al., 2010). Yet, a strength of the MCT model is a streamlined referral process, allowing police to leave and return to patrol (Allen Consulting Group, 2012; Baess, 2005; Kisely et al., 2010; Saunders & Marchik, 2007; Scott, 2000).

Similar to CIT, it is presumed that mobile crisis teams undergo an attitudinal change and increased knowledge of mental illness, and it is through such shifts in perception of mental illness and those experiencing crises which results in police-led diversion. Several studies reported MCT officers to be more confident and comfortable in their role of managing individuals with mental illness (Abbott, 2011), had a better understanding of mental health issues (Baess, 2005; Ratansi, 2004), and viewed the program in a positive light (Abbott, 2011; Saunders & Marchik, 2007). These

findings were less supported in Knoxville, as slightly over half of officers rated the program as effective in maintaining community safety (Borum et al., 1998) and approximately 40 percent rated it as effective in reducing arrests (Steadman et al., 2000). Similarly, a survey of Cincinnati officers with mental health crisis training revealed that only 40 percent of officers preferred working with MCT and believed they were more effective than when responding alone. Openended responses revealed that these negative perceptions derive from belief that responding to calls with civilian MCT responders increased the liability in responding to calls of crisis (Ratansi, 2004).

MCT programs have received positive feedback from service providers and families (Baess, 2005; Ligon & Thyer, 2000). Unfortunately, studies assessing MCT outcomes are limited by small sample size, self-reported data, or internal validity threats stemming from quasi-experiments using unbalanced control and treatment groups. Further, data concerning the frequency with which police made referrals prior to CIT or in jurisdictions employing traditional police intervention was not reported, and thus cannot be reviewed.

g. Centralized Crisis Response Sites

Centralized Crisis Response (CCR) is a police-led diversion response that provides officers with an assessment site for persons experiencing acute symptoms of mental illness. Once officers determine the necessity of additional care, they may drop an individual experiencing a mental health crisis at the CCR site and quickly return to patrol. The strengths of these centers are the streamlined intake procedures for police referrals and "no refusal" policies, guaranteeing a form of response for all referrals. Once accepted into the center, persons undergo emergency psychiatric evaluation and stabilization, and are then linked to mental health services in the community or hospitalization, if necessary (Steadman et al., 2001). The Merrifield Crisis Response Center (MCRC) in Fairfax, Virginia is one such example, offering an assessment site for officers to transfer custody of nonviolent offenders seeking mental health services.

h. Comparison of Diversion Models

In general, diversion efforts aim to address criminal offending by those with mental illnesses before these offenders become entangled in the criminal justice system. Arrests, which often result in incarceration, may disrupt employment, tear families apart, and push these individuals further into crime (Osher, 2018). Police-led diversion programs seek to shift the police approach from law enforcement and order-maintenance to community-based treatment of mental health issues. The success with which they do remains an open question.

Many have voiced concerns regarding a lack of clarity about a program's role among community partners, lengthy response times (Borum et al., 1998; Forchuk, Jensen, Martin, Csiernik & Atyeo, 2010), and lack of capacity (Ratansi, 2004), which may hinder program reach. A 2010 ethnographic case-study compared three diversion programs in Southern Ontario: one that paired police officers with mental health workers to address mental health crises; one in which officers transported individuals to an emergency room for assessment by a mental health nurse; and the last that took the form of CIT. Findings highlighted the different challenges experienced by each approach, such as transportation and bed-capacity. Each program had adapted its services to

address the unique gaps in mental health services in that community (Forchuk et al., 2010). Access to and availability of services are particularly important (Morabito et al., 2012).

It appears that programs respond to a relatively small proportion of emotionally disturbed person calls in some settings, thus raising concern about programs' added value. In Knoxville, Tennessee, reports indicate that the police-mental health program responded to only 40 percent of mental disturbance calls (Steadman et al., 2000), while in Toronto, the program reported a response rate of 11 percent (Iacobucci, 2014). These response rates were empirically corroborated in an experiment that employed hypothetical video vignettes to examine officers' assessment of, as well as their *most likely* and *ideal* responses to, police interactions with individuals who displayed signs of mental illness that ranged from "not mentally ill" to "clearly mentally ill." Study findings revealed that in response to the scenario depicting ambiguous symptoms of mental illness, calling a crisis assessment and treatment (CAT) team was the ideal response for 40 percent of officers but the likely response of only 7 percent; the most frequently reported response was to handle the matter informally. A similar pattern of response for CAT assistance was found in the scenario depicting obvious signs of mental illness: ideal – 55 percent; and likely – 22 percent (Godfredson, Ogloff, Thomas & Luebbers, 2010). This pattern of responses suggests that officers' preferred outcomes might be constrained by situational and contextual variables, consistent with the belief that police officers experience a number of "barriers to care" (Dupont & Cochran, 2000).

Morabito et al. (2012) assert that CIT breaks with the traditional police chain of command, as the CIT officer is expected to become the officer-in-charge at a mental health encounter, applies nontraditional tactics, and requires a longer than average time to resolve the call. Consequently, lower ranking officers may have authority over their superiors, may be breaking tactical policing norms, and may be diverting more calls to fellow officers, thus adding to their workload. From this perspective, low levels of utilization of police-led diversion responses for persons with mental illness may be a function of cultural resistance within a department.

One study compared immediate outcomes among three different police-led diversion models. Steadman and colleagues (2000) sampled 100 consecutive cases from each of three different diversion programs: CIT in Memphis, Tennessee, a co-responder police-based mental health response in Birmingham, Alabama, and a mobile crisis team located in Knoxville, Tennessee. Findings revealed relatively low arrest rates for all three programs (2, 5, and 13 percent, respectively), but in Birmingham and Memphis informal response appeared more prevalent than treatment; most situations were resolved on scene (64 and 20 percent, respectively) while very few were referred to treatment services (3 and 0 percent, respectively). One critical limitation of this study is its lack of control groups that employ a traditional police intervention. As already noted, a review of police dispositions following (routine) police contact with persons with mental illness in Hawaii revealed that police made an arrest in 15 percent of encounters, with an informal response or no action in more than 70 percent of interactions (Green, 1997). Thus, without data indicating prior arrest rates in each jurisdiction, it is difficult to draw conclusions about the potential impacts that diversion programs have on arrest rates. More troubling however, is our limited understanding as to the number of potential incidents to which these programs respond. According to Steadman and colleagues (2000), Knoxville's mobile crisis unit responded to only 40 percent of crises, while Birmingham's co-responder program responded to only 28 percent. Surprisingly, these programs were selected because they were considered most successful. Thus,

it is likely that similar programs achieve lower rates of treatment or higher rates of arrest for individuals with mental illness. Similar findings were reported in 2001-2002 in Cincinnati, indicating response by MCT for less than 3 to 18 percent of calls involving persons with mental illness. Yet when reassessed in 2004, between 30 and 40 percent of calls were either responded to by MCT only, or a co-response by MCT and CPD (Ratansi, 2004).

A different comparison study of three programs – in Memphis, Portland (both with CIT programs) and Montgomery County, Pennsylvania – researchers employed a quasi-experimental design with a non-equivalent matched control group, and performed follow-up interviews at three and twelve months following diversion or arrest. Multivariate analyses revealed that diversion increased use of services, at least over the initial three-month follow-up, however effects disappeared by the twelve-month follow-up period across all three sites. In fact, authors report that by the twelve-month post diversion point, neither group received much treatment, with the exception of a slight increase in mental health counseling for both groups. The remaining outcomes showed little if no difference between the two patient groups (Broner et al., 2004). Unfortunately, due to unreported attrition rates, small sample size per jurisdiction, and low statistical power of the study, it is difficult to draw causal inferences from this evaluation. Moreover, initial imbalance in diverted and non-diverted groups, especially in terms of mental health symptoms, past hospitalization prior criminal activity, and history of substance abuse, make it is difficult to isolate program impacts.

Many gaps appear in our current understanding of police-led diversion programs for individuals with mental illness. Few assessments consider process, often only including a superficial description of program context, with little information concerning the populations served, program outcomes achieved, or sustainability over time. Future research should identify key ingredients, as well as how the program works, under what circumstances, and any discrepancies between the target population and those serviced. As programs shift over time, there is a greater need to understand these key elements, allowing for local adaptations to optimize fit in different service contexts.

iii. Juveniles Offenders

Juvenile justice reform has been cyclical (Bernard, 1992) and multifaceted. Legal protections for juvenile offenders were transformed, from negligible children's rights in the early 1900's to contemporary requirements for due process. A foundation of support and funding for programs whose aims included delinquency prevention and offender rehabilitation was established by federal legislation in the 1960s and 1970s. Fears about the labeling effects of juveniles' contact with the justice system inspired diversion and prevention programs, though later fears about juvenile predators inspired provisions for the prosecution of juvenile offenders in adult criminal courts. The context of juvenile justice initiatives remains one of cross-cutting pressures serving the needs of offenders and the community.

Juvenile diversion and prevention programs have a well-established lineage, but they are marked by their heterogeneity. Programmatic styles, implementation integrity, and targeted clientele range widely across the evaluated interventions. So too does research methodology, and this eclectic body of evidence does not provide a large sample of observable successes. Not only does this diversity in programming and research stymie the accumulation of empirical findings, but

divergent results from similar programs confound inferences about their effectiveness. However, by limiting our purview to a common set of variables, a clearer picture of implementation and program efficacy can be drawn. An evaluation of programs dating from the 1980s to 2017 provides a succinct and instructive review of juvenile diversion programs in the United States.

a. Pre-Booking Programs

Police-led diversion can be best exemplified by the practice of cautioning. Cautioning has long been a diversionary tactic used in the United Kingdom and Wales, designed to avoid prosecution of a juvenile offense when it is not a necessity for the public interest. An officer can administer a caution if a low- or mid-level offender admits guilt and has no prior record. The highly discretionary nature of traditional cautions paved a road for law enforcement officers to utilize cautioning sessions to pursue their own agendas, whether questioning offenders about other case details, or just generally "behav[ing] as if the offender had to account to them personally" (Wilcox, Young & Hoyle, 2004, p. 3). This latitude, as well as other issues (such as caution duration definition and lack of training), led to the formulation of a script for restorative cautions and conferences in 1998. Although many types of cautions have existed throughout history, recent definitions limit a simple caution to a verbal warning, and a conditional caution to a warning with attached conditions. These formal warnings are intended to induce feelings of guilt and shame, and to encourage the offender to take responsibility for their actions. Within the category of conditional cautions, restorative conferences permit the victim to be present, with the promise of an apology or restitution from the offender.

The level of involvement that police actively take in most juvenile diversion programs is limited, and much of the heavy lifting is performed by social workers, counselors, and probation officers. Often, police participation is limited to youth referrals to diversionary services. Cautioning programs strongly feature police participation, and the restorative quality of this style of diversion has proven to be effective. An outcome study of the cautioning methods of the Thames Valley Police used self-reported delinquency and official data for one year preceding and one year following the restorative conference or caution. The findings show that for youth ages 10 to 17 (N=56), 14 percent reoffended, compared to a recidivism rate of 29 percent in a broader sample of all youths 10 to 17 (N=4,718). This "suggests that restorative cautioning halved the likelihood of re-sanctioning within a year" (Joseph Rowntree Foundation, 2002). The authors acknowledge the possible confounding influence of differences in the character of offenders who participated in the cautioning from the more general population, as well as the small size of the treatment group. Other criticisms of outcome evaluations for cautioning techniques detail the motivations for police forces to displace reoffending cases to outside jurisdictions in order to prevent further interactions with that individual, thereby altering reported rates of recidivism (McLaughlin, Ferguson, Hughes, & Westmarland, 2003).

Many arrests are made in a distinctly juvenile domain: school grounds. As an antidote for broadly implemented zero-tolerance responses to delinquent behavior in many school districts, diversion programs in middle and high schools were introduced to reduce the rate of school-based arrests. These programs illustrate how police can counsel, mediate, or divert juveniles without the use of custody or arrest. For example, the Philadelphia Police School Diversion Program is founded on the collaboration of multiple agencies, with public schools, district police, juvenile justice services

and community services. After an incident occurs, a school administrator may contact the Philadelphia Police Department School Officer, who then reviews the case and evaluates the juvenile's eligibility for the diversion program (National League of Cities, 2017). If the offense is serious in nature, or the juvenile already has a record, he/she is formally processed through the justice system. If the offense is low- or mid-level, the student is returned to the classroom and given a 72-hour follow-up risk and needs assessment administered by a social worker. With a view toward social, environmental, physical, and mental indicators, the social worker determines which services are appropriate for the offender. Services are administered by Department of Health Services Intensive Prevention Services (IPS) and may include job development, social and emotional counseling, community service, and academic aid. Within one year of the implementation for the Philadelphia School Police Diversion Project, student arrests declined by 54 percent, and within the third year of the program, 68 percent fewer students were arrested (Stoneleigh Foundation, 2014). A 75 percent reduction in expulsions and a 17 percent decrease in behavioral incidents were also reported (Stoneleigh Foundation, 2014).

A similar concern was observed among Florida public schools, where a harsh zero-tolerance policy resulted in a glut of youth offenders referred to the juvenile justice system. From the years 2004 to 2005, 95,254 juvenile offenders were formally processed, of which 26,990 were school-related. These referrals included a disproportionate number for black students, who constituted 23 percent of the student body population, but 46 percent of the referrals (American Bar Association, 2017). In response, the Civil Citation Program was introduced to address the issues of student dropouts, educational discouragement, and possible undiagnosed mental health issues among problem students. Under the program, local juvenile assessment centers are utilized to determine whether juveniles are eligible for diversion (Florida Department of Juvenile Justice [FDJJ], 2015). If diverted, offenders' sanctions are assigned based on the assessment, and may include up to 50 hours of community service, supplementary academic work, and restitution to the victim. In 2015, the average length of stay was 107 days, and offenders were 58 percent male, 35 percent black and 20 percent Hispanic (Roberts, 2015). The use of civil citations has spread rapidly across the state in the past 6 years, from 6 counties to 61 (of 67 total) by 2016 (Menzel, 2016). Pending state legislation provides for the broadened use of civil citations: the requirement that civil citations be issued to eligible offenders; an allowance of two citations to the same juvenile before arrest; and a mandated written justification from the officer if he or she makes an arrest. Concerned about restrictions on police discretion, the Florida Police Chiefs Association and the Florida Sheriff's Association opposed an expansion bill proposed in 2016 (Menzel, 2016).

Another juvenile-based situation where police have previously relied upon custodial arrests are adolescent domestic battery, or family fights. The City of Peoria, Illinois entered into a Memorandum of Understanding (MOU) where responding officers refer the youth and family for assessment and services via the community-based provider, and do not engage in custodial arrests (National League of Cities, 2017). Patrol officers in cities such as Minneapolis, Minnesota or Lake Charles, Louisiana transport juveniles directly to local service providers rather than responding to youth misbehavior by taking them to a police precinct or detention intake center.

Information on the many risk factors for juvenile delinquency is typically scattered across multiple agencies, among which the sharing of relevant information is subject to legal and bureaucratic barriers. Florida was among the first states to overcome this fragmentation of information with the

formation of assessment centers, a concept that was subsequently further developed by the Office of Juvenile Justice and Delinquency Prevention (Oldenettel & Wordes, 2000). Variously called juvenile assessment centers (JAC) or community assessment centers, the center's main purpose is to provide a single point of entry to services for at-risk and justice-involved youth and their families, many of whom are enmeshed in multiple systems of service delivery. Comprehensive assessments tapping multiple sources of information are made by center staff, and can be provided at the time of an arrest, rather than days or weeks later. A case management style of aid is offered, in conjunction with myriad other services coordinated within the community. The two first iterations of the JAC model, in Orlando and Jefferson County, Colorado, were installed in an effort to enhance existing assessment centers in those areas and expand their information sharing systems. Police had the discretion to refer an offender to the JAC or to arrest. Most juveniles processed at the JACs are for misdemeanors – in Orlando, for example, 27 percent of juveniles are processed for felonies and 42 percent are processed for misdemeanors. These facilities are also optimally, as Orlando's is, equipped with on-site services such as drug and alcohol treatment centers. For diversion programs, assessment centers form a platform for screening both to prevent low-risk youth from entering the justice system and to ensure high-risk youth are given the attention their needs dictate.

Inspired by the expansive implementation of the JAC model, the Albany Police Department partnered with the county probation department and three community service providers to launch the Juvenile Justice Mobile Response Team (JJMRT) in 2011 (Erhard-Dietzel, Barton, & Hickey, 2017). With the goal of preventing formal processing for low-risk youth, the objectives of the JJMRT overlapped with those of the JAC model, including the increased use of diversion in both pre-arrest and time-of-arrest categories as well as reduced pre-arraignment detentions. In a broader sense, the JJMRT had the additional purpose of facilitating the growth of relationships between law enforcement partners and outside agencies. Employing the risk-need-responsivity model, the offenders were screened pre-probation at the time of their arrest with the Youth Assessment Screening Instrument (YASI) and, for subsequent high-risk screening, with the Risk Assessment Instrument (RAI). It is important to emphasize that early screening was not only for the benefit of low-risk offenders, as it was recognized that programs concentrating on high-risk offenders result in lower recidivism than programs serving both low- and high-risk offenders. JJMRT lists prescribed aid based on mental health or substance abuse problems, however the longevity of such services is not specified, and JJMRT personnel concern about a lack of client follow-up reflects some oversight on this score. Such case-management styles benefit from additional family- and restitution-based programs, as "[b]roker-only models, mentoring models, and youth courts find little support in the literature for reducing rates of recidivism among diverted youth" (Schwalbe et al., 2012, p. 32).

A number of possible events resulted from the specific outcome of the screening process, including: (1) inaction and prevented arrest; (2) prevented arrest with the offender assigned to services inside or outside the police department; (3) sustained arrest with probationary service referral for diversion; (4) sustained arrest with transportation to detention center or family court.

The analysis for the program was conducted over a 12-month period with qualitative data gleaned from interviews within JJMRT program personnel, attendees, and law enforcement, and quantitative data assembled from the intake forms (Erhard-Dietzel et al., 2017). The JJMRT

collaboration prevented arrest in 23 percent of cases, few of which were high-risk offending cases. The instruction for diversion through probation was made for 59 percent of low-risk youth, 63 percent moderate risk, and 53 percent high-risk. The RAI was utilized in 31 cases for mostly high-risk individuals. Recommendations for diversion services were agreed upon by both officers and JJMRT partners 92% of the time. The overall success of the program was limited in reducing the proportion of youth formally processed, for "while a substantial number of arrests were discontinued as a result of the JJMRT intake, a much larger proportion were recommended for continuation of the arrest" (Erhard-Dietzel et al., 2017, p. 230). The outcomes of the JJMRT are not statistically apparent; the descriptive benefits of improved relationships and increased information sharing between law enforcement and partnering agencies, however, was stressed as an important building block for further development.

There are also partial custody approaches used as both diversion and a checks-and-balances system by police in different cities when dealing with juveniles. For example, the National League of Cities (2017) reports that officers in Nashville transport youth who would otherwise be charged with truancy or loitering during school hours to the Metro Student Attendance Center (M-SAC). The services provided at the M-SAC include an attendance contract, family and crisis intervention, and case management. The Lake Charles Police Department, located in Louisiana, focuses on deployment of police officers following implementation of a protocol to transport youth accused of all crimes except felonies to the Multi-Agency Resource Center (MARC) instead of the juvenile detention center. The process of referring a youth to services at the MARC takes only 12 minutes of an officer's time, far less than the time required to complete the process of booking a youth and contacting his or her parent or guardian. Use of the MARC also resulted in zero 'youth prison' placements for status offenses. Finally, in Brookline, Massachusetts police officers that take a juvenile into custody have a supervisor who will use a university-driven risk screening instrument to decide whether to proceed with booking or stop the process and release the youth. Youth who meet established criteria and are deemed at lower risk of committing another crime under this new protocol will not be charged.

Juvenile diversion programs are designed to meet the following goals: prevent the stigmatizing labeling of youth by limiting contact with the justice system; prevent overcrowding in juvenile detention centers; ensure the engagement and continued utilization of needed services; increase compliance with restitution plans; facilitate information sharing; increase the efficiency with which officers' time is used; and optimize the cost-efficiency of juvenile justice. Yet the most salient outcome of this expansive design is reduced recidivism. The elements of diversion programs are frustratingly varied, and analysis of these variables is challenged by the fact that "there was much more variation within the various approaches than there was between them" (Lipsey, 2009, p.140).

Meta-analyses of juvenile diversion program evaluations reveal that the outcomes of these projects are related to the qualitative nature of their implementation. The characteristics of intervention philosophy, offender risk-level, physical location of services, duration of program, and intervention type are all seen as factors that moderate the effects of a diversion program. Risk-level evaluation is widely regarded as an essential tool at the foundation for program development (Lipsey, 2009; Schwalbe et al., 2012; Bonta & Andrews, 2007), and therapeutic-focused interventions such as family counseling are highlighted as pillars to successful outcomes. From

the broadly similar rates of recidivism for both interventions and inaction, some researchers infer simply that inaction is to be encouraged, out of concern for the possibility of net widening and subsequent unnecessary or harmful treatments. Schwalbe and colleagues propose that this conclusion could lead to the "provocative hypothesis that the best intervention for most diverted youths is no intervention" (2012, p. 30). Evidence of court-involved resolution is unilaterally apparent to cause greater rates of recidivism; the disparities between the outcomes of diversion with services and diversion by way of a discontinued arrest, however, are slight enough to incur some skepticism (Schwalbe et al., 2012; Petrosino, Turpin-Petrosino, & Guckenburg, 2013). Assessment of the relative effectiveness of pre-booking and post-arrest diversion programs is lacking (Wilson & Hoge, 2013). Support for the idea that program effectiveness hinges upon its implementation fidelity and consistency (Henggeler & Schoenwald 2011; Lipsey, 2009; Nadel, Pesta, Blomberg, Bales & Greenwald, 2018) is advice frequently unheeded: "such rigorous approaches to implementation and validation are uncommon" (Schwalbe et al., 2012, p. 28).

b. Post-Booking Programs

Though the focus of this literature review is police-led, pre-booking diversion, a deeper appreciation for the forms of intervention to which diverted offenders can be linked necessitates a brief review of post-booking programs.

The Juvenile Diversion/Non-Custody Intake Program (JD/NCI) was established in four regional sites to reduce the number of non-custody juvenile cases referred to the Orange County, California district attorney (Binder, Schumacher, Kurz & Moulson, 1985). The methods employed were restorative, and included case management, individual and family treatment. Police engagement in this program is limited to their referrals for diversion, collaborative feedback, and insight for case management options based on their experience with the offender. Deputy probation officers (DPOs) assessed non-custody referrals to the district attorney, and met with police officers and community personnel (e.g. counselors, educators, clinical psychologists, social workers, family therapists) to discuss case recommendations and coordinate services for eligible youth. Among the services provided were family and individual counseling, career development, drug abuse education, and community mediation. Restitution was determined by community boards, and early versions of risk-assessment instruments were employed primarily in the hope of achieving cost-efficiency.

The evaluation of the JD/NCI program was based on a quasi-experimental design comparing case referrals pre- and post-intervention (Binder, et al., 1985). Outcomes observed revealed a drop of 17 percent in cases referred to the district attorney (with a corresponding rise in appointed informal supervision) and, controlling (rather bluntly) for risk levels, a stagnant rate of recidivism between the groups. Comparisons were confounded by the asymmetric samples of juveniles, as the comparison youths were generally "less-hard criminals," but it appeared that the reduction in case referrals with the higher-risk youth was achieved at little or no cost to public safety.

To address the disproportionate number of minorities in juvenile detention facilities, the San Francisco based Detention Diversion Advocacy Program (DDAP) model focused on high-risk offenders, or juveniles most likely to be detained (Shelden, 1999). Juveniles recently sentenced or already detained were eligible, and were referred by police officers, probation, the public

defender's office, or their parents. DDAP personnel screened for risk level through review of police and school records, interviews, and psychological assessment. In some cases, pre-booking diversion was initiated by police referral to the DDAP, "but usually such youth are from more privileged backgrounds with ready access to adults willing to take responsibility for them" (Shelden, 1999, p. 12). Placement in programs was designed to facilitate career development, restitution for victims, and overall improvement of the offender's reading or writing skills.

An outcome evaluation of DDAP found almost halved rates of recidivism in the treatment group (34 percent, N=271) when contrasted with a comparison group (60 percent, N=271). However, the comparison group differed from the treatment group in numerous respects, including age, sex, risk level, prior referrals to juvenile court, and prior detentions; recidivism was measured only in terms of referrals to court on new offenses. Analysis was confined to contingency tables and chi square statistics, so these differences – not all of which favored the treatment group – were not adequately controlled.

In 1976, the Ingham County, Michigan, juvenile court, in partnership with Michigan State University, developed the Adolescent Diversion Program (ADP), which provided for a diverse set of interventions for juvenile offenders diverted from formal processing. One-hundred and fifty-three college student volunteers were extensively trained in an assigned treatment. Two-hundred and twenty youth, whose offenses ranged widely, were referred to the program and randomly assigned a volunteer (note that sixty cases were left unassigned to form a control group). The Action Condition group (N=76) focused on case management styles of diversion, the Action Condition Family Focus (N=24) applied counseling and advocacy with family members, the Relationship Condition (N=12) emphasized the importance of communication skills and interpersonal relationship counseling, Action Condition Court Setting (N=12) was used to examine the effect of the setting on the outcomes for treatment, and the Attention Placebo Condition (N=29) was focused on nonspecific attention and therefore focused on the volunteer's natural empathy and communication skills.

A replication of the ADP in 2004 assessed the efficacy of the program as it was implemented in an urban environment (Smith, Wolf, Cantillon, Thomas & Davidson, 2004). This replication replaced college volunteers with paid staff, trained in a 2-week intensive program, to direct treatment. Three-hundred and ninety-five youth were referred to the ADP by 15 youth officers, and each family was informed of the randomized treatment for the study if they agreed to participate. One-hundred and thirty-seven juveniles were assigned to the diversion condition, 134 were assigned to the diversion without services condition, and 124 were returned to the courts for traditional processing. The "diversion with services condition" group were assigned 12 weeks of an "active phase" in which service providers spent three hours per week with the family and youth, developing skills in communication, providing educational assistance, family counseling, and coordinating volunteering opportunities. In the last four weeks, service providers spent 1½ hours a week consulting on those same initiatives. The youth in the diversion without services group were dismissed from both programmatic duties and court contact.

Evaluation designs that can show not just what works, but what works best, are few in number. The experimental evaluation of the Adolescent Diversion Program (ADP) comparatively assessed the benefits of multiple forms of intervention (Davidson, Render, Mitchell, Blakely, & Emshoff,

1987). Recidivism was measured in terms of official and self-reported delinquency. No differences in self-reported delinquency could be detected. With respect to official measures of recidivism, the conditions with a court-setting focus did no better than the control group, but relationship-focused therapy, family counseling and comprehensive counseling resulted in lower recidivism rates than the control, placebo, and court-setting groups. The overall results indicate that conditions incorporating tenets of family-support and social-support are the most beneficial in reducing recidivism. The 2004 replication revealed that diversion with services resulted in 22 percent recidivism, diversion without services associated with a 32 percent rate of recidivism, and the traditional court processing resulted in a 34 percent rate of recidivism (Smith, et al., 2004). Smith and her colleagues concluded that providing services to the youth in their familial and community environment was a more effective approach to reduce juvenile delinquency than diversion without services or traditional punishment through the justice system.

c. School Resource Officers

Research suggests the use of police in schools has increased dramatically over the past two decades, with approximately 30 to 40 percent of schools having assigned police or security personnel and higher percentages for middle and high schools as compared to elementary (Gray & Lewis, 2015; Na & Gottfredson, 2013). Previous research has expressed concern about how the growing number of school resource officers (SROs) might actually "criminalize" student misbehavior, increasing the rate of school-based arrests and leading to a so-called "school-toprison pipeline" (Brown, 2006; Dohrn, 2001, 2002; Hirschfield, 2008; Kupchik, 2010; Lawrence, 2007; Skiba, Arredondo, & Williams, 2014; Theriot, 2009). That is, the presence of SROs may lead individual teachers or school policies to rely on police in the management of difficult student behaviors that would have otherwise been handled by school staff. Na and Gottfredson (2013), for example, found that as schools increase their use of police officers, they have a higher percentage of reporting non-serious violent crime (e.g., fight without a weapon) to law enforcement. It is important to note, however, that officers use their discretion to interpret student misbehavior as criminal. Therefore, one approach to reducing school-based arrests is to change how officers handle these situations (Theriot, 2009). In comparison to more objective situations for SRO intervention (e.g., possession of a weapon), incidents involving student disruption are more subjective and therefore likely to invoke more officer discretion. Theriot (2009) suggests that when approaching a disruptive student, an arrest should be the least preferred outcome, and should occur after agreement with the teacher and school principal.

Additionally, removal of students from the classroom by SROs may result in missed educational opportunities, as well as suspicion and harassment of the student upon being labeled as an offender. These are argued to potentially lead some students to drop out of school or continue on a pathway of future criminal justice system involvement (Scheffer, 1987; Skiba et al., 2014). A more indepth discussion of the potential ramifications for criminal justice involvement of juveniles is included in the Costs of Arrest section of this review.

National-level research has found that, during a single academic year, 96,000 students were arrested while on school grounds and 242,000 were referred to the juvenile courts by school officials (McCurdy, 2014). However, other researchers note that data on the number of arrests made by SROs may be limited and difficult to calculate, due to confidentiality rules protecting

juvenile records (Theriot, 2009). The only empirical analysis comparing arrest counts of schools with SROs to those without SROs is based on only a single school district with a small sample of schools and found limited support that SRO presence increases total arrests in schools, but more significant impact when narrowly examining disorderly conduct arrests (Theriot, 2009).

More rigorous research is necessary that could further explore how the placement of police in schools may influence referrals to law enforcement and juvenile involvement in the criminal justice system. Research should use a large enough sample of schools to provide sufficient statistical power for conclusive analysis. Research should also seek to compare schools with assigned SROs to schools with traditional police response to calls for service, schools with security guards (no arresting powers) and also to schools with their own police departments. Collectively these research efforts can enhance our understanding of police influence on school-based arrest patterns.

B. Citations In Lieu Of Arrest

Non-custodial alternatives to arrest most frequently center on the use of citations in lieu of arrest, particularly field release citations that are given at (or near) the scene of a disturbance. Citation release for criminal offenses has been adopted in the United States since the 1960s (during the bail reform movement) and has seemingly grown in popularity as an alternative to custody. These citation approaches adapted to low-risk (typically misdemeanor) offenses offer police and the broader criminal justice system the greatest potential in terms of savings (reduced time for transportation, booking fees, and detention facility expenditures).

The most heavily researched non-custodial option used by police has been the use of citations or subpoenas to appear before the court without an arrest. A recent extensive literature review of citations in lieu of arrest (2016a) conducted by the International Association of Chiefs of Police (IACP), sponsored by the Laura and John Arnold Foundation (LJAF), provides an expansive discussion on the legal, social, and organizational practices, benefits, challenges, and need for greater empirical understanding regarding the use of officer citations to appear in court rather than the use of custody and arrest. The review illustrates that minor offenses such as thefts, order conduct, trespassing, driving under suspension, and possession of marijuana are the most common minor offenses for which citations are typically issued.

There are different 'levels' of decision making involved related to the issuance of citations for minor offenses and disturbance incidents that involve police assistance. These include an intersection of the organizational philosophy on the use of citations, legalistic/legislative statutes, situational aspects of the incident, and individual-officer decision making.

When considering the different types of custody, citations can occur either on the street or in police custody (i.e., partial custody). Whitcomb, Levin, and Levine (1984) identified three types of citation release used in law enforcement agencies: field release; stationhouse release; and post-detention (jailhouse) release. Whitcomb et al. (1984) unsurprisingly found that each variation in citation issuance offers its own advantages and disadvantages. Field citation seemingly offers the greatest potential for benefits both to the defendant and to the criminal justice system. Patrol officers are removed from service for a brief period of time (roughly 30 minutes). Additionally,

no transportation costs are incurred and defendants are subject to the least amount of disruption. However, field release offers the arresting officer the least amount of assurance for immediate risk reduction.

Stationhouse release offers law enforcement agencies greater confidence in the authority of arrests in that information provided by the suspect can be verified and criminal histories can be checked before release is granted (e.g., fingerprint matches and more extensive criminal history reviews). This higher level of confidence is achieved at some cost, however, particularly in the time involved in transporting defendants to the stationhouse and the inconvenience suffered by the suspected defendants (who have to arrange for transportation away from the stationhouse).

Jailhouse release offered the greatest degree of assurance to arresting officers, but at considerable cost (i.e., jail release incurs the time not only of arresting or transporting officers, but of detention facility staff as well). In short, jailhouse release most closely resembles a traditional, custodial arrest and, as such, is the most disruptive non-arrest option. Importantly, while it is understood that field citations (i.e., pre-custody release) offer the greatest potential benefits to police as well as correctional agencies related to personnel and budgetary expenditures, the expected differences in time, and resource devotion was not clearly specified in the Whitcomb et al. (1984) study. In contrast, the IACP (2016a) Review on Citations in Lieu of Arrests indicate that the average time spent for an arrest for a police officer is over 85 minutes, while a field-release citation takes roughly one hour less time, on average (24 minutes). However, officer resources and time spent to process incidents are likely to mirror arrest in stationhouse, jailhouse, or post-arrest release and thus the benefits to police are potentially lost in such approaches.

While citations for thefts, order conduct, and trespassing are the most commonly issued types of citations used by police (IACP, 2016a), citations issued for traffic encounters and drug offenses (particularly marijuana) are the most common encounters that have been researched to this point. Brown and Frank (2005) showed that police were significantly more likely to issue field citations in lieu of either doing nothing or making arrests for traffic encounters, and that 1) offense seriousness was the greatest predictor of a citation or an arrest when compared with doing nothing, and 2) Black drivers were significantly more likely to be arrested than White drivers, who were more likely to receive a field release citation. Likewise, a different study of police encounters with recreational marijuana smoking illustrated that desk appearance tickets (DATs), or post-arrest citations, have been commonly used in New York City, though with a decline in their usage that coincided with the intentional increase of quality of life arrests enacted by the city in the mid-1990s (Johnson, Golub, Dunlap, & Sifaneck, 2008). Johnson et al. found that middle class and White citizens were disproportionately given DATs in lieu of arrest because citizens in these groups were more likely to have valid identification on their person at the police-citizen encounter.

While there are potential cost and time benefits for the use of citations when compared to arrests, any positive benefits must be tempered with the consistent finding that failure to appear rates are consistently higher in circumstances when citations have been used rather than traditional arrest (Berger, 1972; Brown & Frank, 2005; Whitcomb et al., 1984). Feeley and McNaughton (1974) found a direct relationship between the number of defendants arrested via citations and the increased failure to appear rate of defendants who voluntarily failed to appear for court. Their New Haven, Connecticut study showed that over one-third of all defendants released on citation or

promise to appear thereafter fail to appear at least once. Additionally, Whitcomb et al. (1984) found increased failures to appear regardless of which release approach (field, stationhouse, or jailhouse) was used by police. In sum, an increase in the use of citation releases corresponds with an increase in the failure to appear for those released on citation.

Despite increased failure to appear rates, there are still observable benefits regarding the use of citations. Hirschel and Dean (1995) conducted an economic analysis to determine whether citations are more cost effective than in-custody arrests, accounting for the potential considerable costs associated with increased failure to appear cases. Their study controlled for the differences in the characteristics of the defendant population, estimated relative cost savings of a citation (based upon time and custody expenses), and multiplied these findings by the change in case flow for a given period. They estimated potential cost savings to be roughly \$100 for each use of a citation in lieu of arrest. When accounting for the additional time needed to address failure to appear cases, they found the net benefits for the use of citations to equate to roughly \$70 for each citation used instead of arrest. Thus, even with the additional challenge of increased failure to appear cases, there are considerable time and financial benefits to the use of citations from a purely organizational standpoint.

There does appear to be a potential mechanism that can minimize the increased likelihood of failure to appear rates. Busher (1978) analyzed the impact of the length of time between the date of arrest and date of arraignment upon the failure to appear rate, and found that lengthier periods between the two dates resulted in higher failure to appear rates. Additionally, Busher found the failure to appear rate reduced substantially when the court issued a written reminder to defendants prior to their court date.

In addition to failure to appear concerns, there is also apprehension for the enhanced use of citations (particularly field citations) given the relative ease by which police can issue such citations. As citations for minor offenses (beyond traffic related incidents) became more widely used, Morris (1974) cautioned long ago against their use because it would likely lead to more people coming before the courts. In an empirical examination, Horney (1980) found that when the Omaha Police Department began using citations for assaults, a significant increase in the number of arrests for assault occurred during the same period. Whitcomb et al. (1984) also suggested that the likelihood for net widening is high with the use of citations, though they did not provide any formal test over time. While citations typically reduce the time and commitment of taking a suspect into immediate custody, citations also represent an onset into traditional criminal justice processing (i.e., court hearing and adjudication).

As previously noted, the Civil Citation Program was introduced in Florida to address issues with juvenile offenders (Florida Department of Juvenile Justice, 2015). Pending state legislation seeks to broaden the use of these citations to be required to be issued for eligible offenders, among other mandates. The use of civil citations in Florida appears to be associated with rather high rates of program completion and low rates of rearrest. The average recidivism rate across civil citation programs in twenty circuits of Florida was reportedly 5 percent for the years 2013-2014 (American Bar Association, 2011). In 2015, 7,371 youth were referred to the program and 6,224 completed it (Roberts, 2015). Cost efficiency is highlighted in the outcomes of the project, as each citation costs about \$386, while an arrest on average costs \$5,000 (American Bar Association, 2011). In a 2018

analysis performed by Nadel, Pesta, Blomberg, Bales and Greenwald was used to determine the extent to which broadened civil citation use leads to net widening. A time-series and difference-in-difference analysis revealed that only in 7 of 67 counties using civil citations showed evidence of net widening, and "only one of those counties demonstrated long-term net-widening effects" (Nadel et al., 2018, p. 26). The results of the study also confirmed the conclusions of Lipsey (2009) and Mears (2010), that a successful diversion program "...is grounded in a sound theoretical basis and... the execution of that program is appropriate and consistent" (Nadel et al., 2018, p. 26).

i. <u>Legal and Legislative Issues</u>

There are a number of legalistic and situational factors that seemingly dictate when and how citations in lieu of arrest take place. Legalistic and legislative concerns about the use of citations consistently arise across different jurisdictions. Constitutional law and state, local, and municipal legislation provide the legal foundation for the use of citations instead of custody. As noted in the IACP (2016a) review, in *Atwater v. City of Lago Vista* (2001), the Supreme Court upheld an officer's right to use discretion to cite or make a custodial arrest provided there is probable cause of a state law violation. Thus, there is constitutional precedence for the legality of the use of citations in circumstances where an officer has a decision to arrest or to cite. However, the decision of *Knowles v. Iowa* (1998) illustrates that a search of a defendant is only constitutional when an individual is fully arrested (and not simply cited for an offense where an arrest is also an option), and that an issuance of a citation without the presence of probable cause for a search warrant is not sufficient for a full search. In sum, the constitutionality for the use of citations in situations where an arrest is allowed is clearly evident, but the issuance of a citation does not exculpate police from higher order procedural responsibilities when an arrest (and search warrant) may be necessary.

The process by which citations are issued also varies considerably across different contexts. According to the National Conference of State Legislature (2017), almost all states and the District of Columbia allow the issuance of citations in lieu of arrest for misdemeanor offenses. As of 2017, four states (Alaska, Louisiana, Minnesota, and Oregon) permit citations for some specified felonies. The most pervasive legalistic distinction that exists across states for the use of citations in lieu of arrests focuses on whether the citations are issued pre-arrest or post-arrest (i.e., stationhouse or jail release). In many states, officers are required to take a suspect into partial custody (excluding booking, courtroom appearance, and bail release) only to release later at either the stationhouse or jail. According to the NCSL (2017), 15 states require the issuance of citations for misdemeanors and/or petty offenses that are to occur post-arrest. Seven states (and the District of Columbia) provide no statutory specification for pre/post arrest issuance. All other states allow for officer discretion to determine the most appropriate venue for the issuance of citation in lieu of arrest. In many contexts, differential state legislation rather than evidence of best practice offers the framework by which many law enforcement personnel use citations in lieu of arrest.

There are also broader criminal justice system considerations that should be considered beyond police involvement. In terms of legislative implementation for the issuance of citations, Baumer and Adams (2006) reviewed how a federal court order to reduce jail intake required local law enforcement to issue citations instead of standard arrest and booking practices. The legal order contained two substantive provisions. First, the sheriff (i.e., the custodian of the local correctional

facility) was told to advise all law enforcement agencies within the county to rely on citations in lieu of arrest for the specific misdemeanor offenses outlined in the order. It is important to note that if the individuals had any other criminal charges or any outstanding warrant, the sheriff could still accept and book them into the lockup just like any other criminal offense.

Second, given that the order may have disrupted long-standing police practices for arrest across different agencies within the county, the provision ordered the sheriff to stop accepting, at the lock up facility, individuals charged only with the listed misdemeanor offenses that require the use of citations. In short, the local jail was instructed to turn offenders away by refusing to book them at the facility.

Baumer and Adams (2006) found the impact of the policy on the lockup population was seen in a reduction in the number of bookings, a 10 percent reduction in the number of correctional beds used related to the implementation of the citation policy (i.e., for eligible misdemeanor offenses), and a decline in case dispositions. In short, the legislative order combined with the sheriff's outreach to local police departments corresponded with a decline in the number of arrested individuals for offenses when citations were required. It is noteworthy however to understand that while compliance occurred, the actual observed benefits did not match those that were projected at the onset of the evaluation due in part to different levels of compliance at different police departments, and a reduction in overall criminal offenses (beyond those that would likely have been influenced by citations) during the intervention period. Thus, the use of citations impacts and is influenced by police, legislation, and correctional institutions.

Apart from citation issuance, third-party release is another alternative to police custody that is widely adopted, though in a variety of different ways. Informal third-party release can take place when a police officer diverts a suspect (usually of a petty offense) to a family or friend (Bayley & Bittner, 1984) or can include a formal release or referral service to medical or psychiatric services.

C. Conclusion

This section discussed two common alternatives to arrest: police-led diversion programs and the use of citation in lieu of arrest. The review of the literature suggests a wide variation of programs designed for specific populations of offenders. Preliminary findings from evaluations of these programs leave us cautiously optimism. Specifically, while future research should seek to incorporate more rigorous methodologies in the evaluation of alternatives to arrest, the current findings suggest that these alternatives may have several benefits. In the case of police-led diversion, research suggests programs may produce a decrease in recidivism, increase in use of community services, and improved quality of life for program participants. Officer participation in training associated with the different programs has been found to increase knowledge of and sensitivities toward specific populations and improve officers' feelings of self-efficacy in the management of encounters involving these individuals. Regarding the use of citations in lieu of arrest, research suggests citations may cost less time for individual officers and less money for police agencies.

While generally positive, this literature review also demonstrates that many questions remain regarding the implementation and impact (both short- and long-term) of alternatives to arrest.

Initial findings suggest these initiatives have the potential to ameliorate many of the social, economic, and community costs produced by police reliance on arrest. While the research findings are far from conclusive, we believe the potential benefits of these initiatives warrant further development and empirical inquiry.

VIII. RESEARCH CONSIDERATIONS

In this section, we identify important and largely unanswered empirical questions and outline directions for future research studies that have the potential to better impact programmatic policy and future adaptations of alternatives to arrest. Specific recommendations regarding research designs, measures, and methods are offered to enhance the current body of research on the cost of arrests, proactive arrest strategies, and alternatives to arrest programs and initiatives.

Note however, that all of our recommendations are based on the critical foundation of what is known about how and why officers make decisions to arrest. Unfortunately, this core research foundation is now quite dated, and contemporary studies have not regenerated this vital information. Findings reported from the ABF-sponsored studies in the 1960s established the field of criminal justice research by recognizing the inherent use of discretion by criminal justice actors – sixty years later, it is time to revisit these core findings. Quite simply, the research community has not continued to invest in developing base knowledge regarding officer decision making. Therefore, the most critical research need, in our estimation, is to reestablish the foundation of research that explores officer decision making. What factors currently influence officers' decisions to arrest and how can these factors be utilized to enhance evidence-based practices that limit the need and use of arrest? These are the core research questions that underlie all the other research issues outlined below.

For the greatest impact, we believe this research should be in the form of police-academic partnerships (Engel & Whalen, 2010; Engel & Henderson, 2013). We also argue that large-scale studies using multi-organizational systematic social observation (SSO) or some comparable data collection strategy needs to be employed. SSO could offer insights into the nature of organizational effects. This research can be supplemented by other data collection methods, including surveys, protocol analysis (Worden & Brandl, 1990), and analyses of official data to provide a more comprehensive understanding officer decision making. And finally, to measure impact after implementation of different strategies, both experimental and quasi-experimental designs can advance evaluation research. Specific recommendations regarding this evaluation research are articulated below.

A. Costs of Arrest

The review of the costs associated with arrest suggested that the direct and collateral consequences of arrest for individuals are extensive—emphasizing the importance of a police officers' decision to arrest. Research indicates the incarcerated population in the US has grown nearly 350 percent from 1980 to 2014, placing major financial burdens on local, state and federal governments (Executive Office of the President of the United States, 2016). Estimates surrounding the financial cost associated with arrest and incarceration are conservative at best—research needs to better assess the financial costs associated with items often left off of government budgets (such as

healthcare for inmates, program costs, staff benefits, etc.) to better understand financial costs. Arrests also come with costs directly to the offender, such as finding the money to make bail, and long-term consequences such as eligibility for child custody or college loans. While a review of the costs of arrest has been described earlier in this text, the current challenge for research lies in the need to determine the volume and scope of the collateral consequences of arrest that exist across several noncriminal justice contexts (Gowen & Magary, 2011). Research should consider a comprehensive review for the "black box" of the costs of arrest. Currently, there is little understanding of how the various collateral consequences of arrest interact and may compound the effects on individuals and society at large.

B. Explaining Police Behavior

A substantial body of evidence has accumulated on the characteristics of police encounters with suspected offenders that influence officers' decision to arrest. Even so, much of the variance in this dichotomous variable (i.e., arrest/no arrest) remains unexplained, suggesting that we may have exhausted the explanatory utility of extant approaches. Meanwhile, the variation among non-arrest options has been largely unexamined. While we have a body of systematic research that has identified factors that predict arrest, we do not have a corresponding body of research that explains decisions for no action (Terrill & Paoline, 2007). While one might believe that the factors predicting no action are simply the opposite of those predicting arrest, such a simplistic assumption is unsupported.

Likewise, when police do not arrest but decide to *do something*, they may choose a course of action from among several alternatives. Relatively little is known, however, about the factors that influence how officers select their actions among non-arrest alternatives (Worden, 1989), and what the impact of potential net-widening is for diverted individuals. Specifically, little research has examined officer referrals as a form of diversion from the criminal justice process. This information is typically not captured in police records. It is important for future research to better understand what legal and extra-legal factors may influence officers to divert suspected offenders rather than arrest them. For example, when considering police decision-making in their encounters with low-level offenders, Worden and Myers' remarks about encounters with juveniles are probably instructive:

In a decision-making context so impoverished of information as police encounters with juveniles, police are especially susceptible to making errors. With respect to officers' choices among non-arrest alternatives, the potential for suboptimal decisions multiplies. Releasing the youth with an admonishment, subjecting the youth to interrogation, or contacting the youth's parents or guardians might each be constructive steps under some circumstances and counterproductive under other circumstances. But officers rarely receive feedback on the quality or outcomes of their judgments, even when they eventuate in review by other legal actors, and no body of knowledge accumulates about the circumstances under which offenders should be released, taken into custody, or treated in some other fashion. The decision framework is actually still more complicated, inasmuch as criteria by which police judgments might be evaluated are, of course, not established, and would properly depend on the availability of options (such as social services) that vary from locality to locality (1999, p. 12-13).

The review of the research on predictors of arrest finds that both legal and extra-legal factors exert an important influence—although legal factors including seriousness of offense, suspect noncompliance, and preference of the complainant are generally stronger predictors than suspects' race and other extra-legal factors. Nevertheless, the influence of race and ethnicity on arrest and other criminal justice outcomes is consistently demonstrated across research studies. Given their substantial impact on police relations with minority communities, particular focus should be given to better understanding racial and ethnic disparities in arrest (as well as other criminal justice outcomes). Furthermore, although a substantial body of research surrounding predictors of arrest already exists, future research should work to develop and test theories of why disparities exist, how they are manifested, and at what decision-points race and ethnicity have the most impact. The answers to these questions are the only avenue for the field to move forward in efforts to reduce these disparities.

In addition to race, a number of studies examining the police decision to arrest have focused specifically on individuals with mental illness and juvenile offenders. Many police agencies have moved toward diverting these offenders, rather than making an arrest. As a whole, our understanding of the factors that influence police decision-making, particularly the decision to arrest, is incomplete. The focus on only certain influences, inconsistencies in measurement, and variation in findings leaves researchers unable to say much about what impacts officers' decision to arrest with certainty.

No current research has examined the impact of managerial or supervisory oversight on individual officer arrest decisions. Previous research examining data gathered in 1996-97 demonstrated that certain first-line supervisory styles were more likely to increase officers' use of arrest and other measurable activities (Engel, 2000, 2001, 2002). Subsequent research demonstrated that individual officers are more likely to behave in ways that they believe are priorities for their first-line supervisors (Engel & Worden, 2003). Yet, the "middle" of police organizations continues to be one of the most understudied areas in policing, despite recognizing the profound influence sergeants and lieutenants have over officer behavior (McManus, Isaza, & Engel, 2018). Clearly the need for additional research in this area is critical to enhance the implementation and effectiveness of any evidence-based strategies or reform efforts (Engel, Isaza, Whalen, & Herold, forthcoming).

While noted previously, it bears repeating that our knowledge of predictors of arrest is inherently limited by the fact that the majority of the relevant research is based on data collected from the 1990s and earlier (e.g., Project on Policing Neighborhoods from 1996-97, and the Police Services Study from 1977). To develop a comprehensive contemporary understanding of police officer behavior, including their decision to arrest, new investments must be made in the use of systematic social observation (SSO).

Notably, the proliferation of the use of body cameras across law enforcement in recent years offers the research community new possibilities for rigorous data collection and analyses of police-civilian interactions that cannot be routinely captured by other data sources (Dymond & Hickman, 2017; Voigt et al., 2017; Willits & Makin, 2018). For police departments, body worn camera footage provides the opportunity for improved officer training on decision-making, particularly in

high-stress encounters. It also provides for supervisory review of tactics and evidence in complaint investigations (Dymond & Hickman, 2017; Richards, Roberts, Britton, & Roberts, 2017; Rowe, Pearson & Turner, 2017).

Recent studies that have coded and analyzed body-worn camera footage have examined police use of force as well as officer respectfulness toward citizens during routine traffic stops (Voigt et al., 2017; Willits & Makin, 2018; Worden & McLean, 2017). All have argued that recorded observations of police-citizen encounters offer researchers specific advantages over other types of data, better capturing the totality of incidents. Specifically, Willits & Makin (2018, p.53) note that video footage "can be re-watched and coded, whereas in-person observation approaches are dependent on the notes taken during the incident" and may introduce social desirability and reactivity effects through the observation process itself. Filmed observational research also reduces limitations associated with participant recall and lack of objectivity (Voigt et al., 2017; Worden & McLean, 2017).

While analysis of this data minimizes the limitations associated with other data sources, body camera videos have their own limitations. Specifically, the camera may not provide the angle needed to capture elements that are important to code; interactions may occur in loud or chaotic environments, making coding of audio recordings difficult; and some recordings may not capture the entirety of the incident due to delayed activation of the body camera. Willits & Makin (2018) also acknowledge that coding body camera footage will necessarily require researcher judgments, but they suggest that this limitation can be minimized with the use of a strict coding protocol, double-coders, and discussion of any coding discrepancies. Katz et al. (2014) argued that the interactions that body-worn cameras capture is dependent upon police officers' compliance with agency activation policies. Phillips (2016) warned that while a body camera video may provide an objective picture of an incident, it is possible that what the officer sees or recalls about the same incident may not match due to perceptual distortion or the development of false memories, particularly in high-stress incidents. He cautions that deviations between the "objective" video and officer recall should not necessarily equate to deception by the officer and researchers should be mindful of scrutinizing video in a way that was not available to the officer in the circumstances of the original incident. Finally, Willits & Makin (2018, p.71) posited that "the most pressing challenge will not be coding or statistical modeling nor the creation of research questions or hypotheses. Instead, this is a challenge of data access, agency trust, and receptivity to research."

Most analysis of observational data rests on a stimulus-response model, in which situational factors are the hypothesized stimuli to which police decision-makers respond. Police decisions are analyzed as a weighted sum of the postulated decision cues – legal seriousness, strength of evidence, complainant preference, suspect demeanor, and the like – and inferences are drawn from the empirically estimated relationships about how officers perceive and interpret the situations and choose among alternative courses of action (Worden & McLean 2014a, 2014b). This approach has been scientifically rigorous, but it is limited to factors that are of a priori significance, and we know that these factors fall far short of explaining police decisions. Moreover, this approach treats the process by which informational inputs are interpreted and judgments are made to reach decisions as a "black box." A different approach, that of protocol analysis or process tracing, promises to further illuminate decision-making by opening the black box of police officers' cognitive processes (Worden & Brandl 1990). Decision-makers are asked to think aloud as they

perform decision tasks, or they might be asked to recount their thinking soon after performing a decision task. Research subjects' verbal reports of their thinking are data on their decision processes. Protocol analysis does not require direct observations (see, e.g., Stalans & Finn 1995), but debriefings of officers as part of SSO can be used for this purpose. Alpert, et al. (2004) illustrate how protocol analysis can be incorporated into SSO (also see Bonner 2012; Stroshine, Alpert & Dunham 2008). Debriefings could also be incorporated into SSO conducted through body-worn camera recordings, by having officers recount their thinking as they view and listen to recordings of selected incidents. Such an approach would facilitate cross-organizational inquiry, which would afford greater insight into the influences of organizational factors.

C. Proactive Arrests

Related to the research issues described above, a central problem in the evaluation of proactive policing efforts is to measure what police officers actually do, in order to gauge the impact of strategies on arrests, crime, communities, and the legality of officer behavior. Research should measure officer behavior both before and after proactive policing policy adoption, and compare agencies with and without proactive policing strategies to better understand what may have occurred without policy adoption (NAS, 2018). Moreover, much of the existing evaluation considers agencies that mix elements from the different approaches of proactive policing, making it difficult to disentangle causal effects.

Evaluation research is often based on short-term effects; additional long-term analyses are necessary to better understand the effects of proactive policing. For example, broken windows theory lies on the presumption of the effects of disorder on social controls over time; evaluations should consider this effect with a longitudinal analysis.

It is also critically important that research consider the social costs and collateral consequences of proactive strategies, in addition to impact on crime. For example, logic models often theorize the role of community outcomes in proactive policing strategies, yet most of these remain untested. The impact of strategies on racial disparities and public attitudes needs to be better understood. While strategies may be effective in reducing crime and disorder, they need to be weighed against their potential costs—such as increases in citizen complaints (Greene, 1999) or exacerbating racial disparities and citizens' perceptions of police harassment and misconduct (Brunson and Miller, 2006). Improving citizen reactions to police as well as reducing and preventing crime and disorder are important goals. Seeing how procedural justice and community-oriented approaches can be combined with specific proactive approaches, such as hot spots or problem-oriented policing, to reduce crime may be a useful avenue to meet both goals.

D. Alternatives to Arrest

Currently, a number of alternatives to arrest are available to and employed by the police. As suggested above, each approach presents a series of potential pros, cons, as well as limitations in real world settings. Some of these programs have been subjected to evaluation research and the findings leave us with the impression that the promise of the programs' logic is being at least partially fulfilled. However, many approaches are vastly understudied, and the evidence that exists for effective practices is far from compelling, leaving many holes for future research to fill.

i. Police-Led Diversion

For the most part, research has only speculated the dynamics of police decision-making in diversion. The circumstances under which officers are more likely to make (direct or suggested) referrals, rather than release or arrest are unknown. If there are factors (e.g., individual officers' outlooks, police department policies or incentives, community context) that systematically affect the use of referrals in day-to-day police work, they have yet to be identified. Empirical evidence on this question would provide insights into the cultural milieu in which diversion programs are implemented. Analysis of this kind could be extended to the diversion decision in the context of formalized programs: Under what circumstances do officers choose to divert? Do they divert the offenders whose behavioral health problems – substance abuse, mental illness – call for intervention by treatment specialists, release those who are low-risk, and arrest those who represent more serious threats to the safety of the community? Through what programmatic components, such as brief risk screens, can officers' decisions be better informed?

Some have argued that police-led pre-arrest diversion has the largest potential as a referral source to substance use treatment (Charlier et al., 2018). Although some information is available regarding the promising evidence for pre-arrest diversion – including evaluations of programs such as LEAD, STEER and Civil Citation – a better understanding of these programs and how they work is still needed. One newly created task force is taking on some of these questions to better understand pre-arrest diversion. The Police, Treatment and Community (PTAC) Collaborative, launched in 2017, is designed to widen community health and social service options available through law enforcement diversion (Charlier, Frost, Kopak & Olk, 2018. Examining some of the core measures described by the PTAC Collaborative would be a useful start for documenting information across initiatives, and ultimately measuring their impact.

Barriers to police-led diversion must also be considered. For example, potential barriers to diversion might be found in the availability of community resources, in officers' awareness of community resources, or in officers' estimations of the effectiveness of those resources. In addition, internal policies and practices may have the (intended or unintended) effect of discouraging referrals, as mixed administrative messages can and likely do ensue from the multiplicity of demands made of police agencies. Surely police under-enforcement leaves the potential for dramatic increases in the application of the law with administrative pressure to do so; arrests and citations are outputs that can readily be counted, and expectations for "productivity" can be set without establishing "quotas." Such pressure may be amplified in the context of management accountability systems, if those systems are tightly coupled to street-level activity. Consider New York City, where misdemeanor arrests doubled between 1993 and 2010 (Chauhan, Fera, Welsh, Balazon, & Misshula, 2014), as a case in point.

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⁹ New York City's police were not typical, but the zero tolerance form of order maintenance policing coupled with Compstat appears to have yielded a very substantial change in enforcement patterns. As Lum and Vovak (2017) show, however, only a small fraction of the nation's larger municipal and county police agencies exhibited a similar trend in misdemeanor arrests.

A better understanding of the forces that shape day-to-day practices of non-arrest and referral would aid in the identification of administrative and managerial levers that can be pulled to ensure that offenders who can and should be diverted are diverted, and those who should be referred are referred. Multi-site studies of police practice that include systematic social observation, interviews and/or surveys of officers, supervisors, and command staff, and (like Scott and Moore's [1981] study of referral agencies) an accounting of community resources are quite feasible. Furthermore, with the proliferation of body-worn cameras, SSO can be done much more economically (Worden & McLean, 2017), with strategically selected samples of incidents as necessary to focus on discrete populations.

a. Police-led Diversion of Person with Mental Illness

Regarding the evaluation of CIT programs, there is scant empirical evidence around three key themes. First, the vast majority of studies that finds a CIT training impact also fails to account for officer self-selection. Morabito et al. (2012) describe the process as follows: (a) officers self-select into CIT training; (b) officers who are CIT trained are called to handle cases with persons suspected of having mental illness issues, and (c) CIT trained officers self-report a higher degree of confidence and also seemingly respond differently (i.e., use of referrals versus arrests) to mental health and substance abuse calls than non-CIT officers. However, the extent by which CIT training is associated with changes in officers' attitudes and behavior is unclear.

It is plausible that officers who self-select into CIT training have a different orientation toward diversion and arrest patterns than other officers, and the CIT task force creates a vehicle for these differences to emerge. While the Compton et al. (2014) included police agencies across six Georgia cities and counties, the number of officers trained (and likely police contacts) in Atlanta and Savannah was more than the remaining four settings combined; additionally, self-selection was used in this training component as well. Regarding the effectiveness of CIT training, a randomized design that has a representative sample of all patrol officers may shed light into the effectiveness of the training on broader patterns of behavior. Such approaches may be particularly useful for mid-to small-sized police agencies that do not have the staffing to accommodate a specialized group of CIT (only) trained officers to handle such calls.

Second, while the foundation of diversion approaches for mental health subjects is clearly based upon prior research (i.e., that arrests are harmful and that treatment programs based on risk and need can have potential benefits), there is scant empirical evidence that follows subjects through police-initiated diversion. What happens to subjects who are processed? Do they have the right to refuse treatment (and if so, what happens)? What is the completion rate of treatment for these individuals? A series of descriptive assessments of CIT treatment and actual services provided across multiple settings would enhance this body of research considerably.

Third, what are the short and long-term impacts of police-initiated diversion on subjects with these types of concerns? Certainly arrests can be harmful, but we do not know whether and to what extent CIT diversion is helpful. An evaluation of programmatic outcomes of treatment and future police contacts is sorely needed to move the CIT approach from 'evidence-driven' to 'evidence-based' strategies.

b. Police-Led Diversion of Juveniles

Similar gaps in research can be found in juvenile diversion programs. Clearly arresting juveniles particularly for minor status and non-serious offenses is harmful and corresponds with long-term negative effects. Drawing upon the juvenile trauma-exposure research as a model framework, evidence suggests that programs need to ensure that children and adolescents are screened for trauma exposure; that service providers use evidence-informed practices; that resources on trauma are available to providers, survivors, and their families; and that there is a continuity of care across service systems. While the foundation for diversion and alternatives to arrest and custody in these settings are clearly created on previously established evidence, further research needs to establish whether appropriate screening (via risk factors and not discriminatory factors) occurs in police-initiated diversion, whether resources are used by juveniles diverted to these settings, and whether continuity of care actually takes place in real world applications. The programs listed in this review (e.g., Philadelphia mediation, Peoria family assessment, and the Brookline screening tool) along with other similar programs, would provide a strong foundation for more extensive evaluation.

c. Research Design: The Importance of Equivalent Comparison Groups

Outcome evaluations of alternatives to arrest confront some of the same challenges as research on racial profiling in forming baseline measures. Offenders who are diverted and participate in the programs can be described, and (some) post-intervention outcomes can be measured for those offenders, albeit with some difficulty. However, just as satisfactory benchmarks are elusive for those who analyze police stops for evidence of bias, so too are equivalent comparison groups elusive in evaluating police-led diversion programs.

The obstacles in developing equivalent comparison groups are perhaps most readily apparent in forming comparison groups for programs that divert persons with mental illness to community-based treatment. Specifically, those who arrive for treatment by way of a referral from police are quite possibly different in relevant respects from those whose paths to treatment did not involve a uniformed officer trained in crisis intervention or who summoned a mobile crisis team. It is challenging even to count the calls for police service for which CIT officers or an MCT could appropriately have been – but were not – involved. Similar observations can be made about drug diversion programs. For example, in the evaluation of Australia's diversion initiative, the construction of control groups presented insuperable obstacles. It appears that determining in real-time or post-hoc who among the offenders could have been but were not diverted is by itself difficult, so much so that documenting the relevant characteristics of this population and rendering it statistically comparable to the population of diverted offenders is a secondary consideration (but an equally monumental task).

These observations are significant considering the strength of an evaluation can be judged by its success in forming a plausibly equivalent control group. While this need not (and often will not, as a matter of practical feasibility) involve a randomized experiment, such equivalence requires, if not a properly executed random assignment, a successfully matched design, such that no differences can be detected between groups (see Wilson & Hoge, 2013). In the absence of equivalent comparison groups, evaluations allow only the most tentative inferences about the contribution of programmatic activity to outcomes.

d. Outcomes Measured

Evaluation designs display a striking diversity and, in many instances, pay attention to only a fraction of the outcomes that might be considered important. Recidivism is one bottom line for police-led programs. Official records – of arrest, or of conviction – are normally (but not always) available and used for evaluation purposes, though we know that official records understate the level of criminal activity in most cases. And if the program alters police practice, then official records are liable to yield misleading results. For this reason, self-reported offending may be a superior source of data but is expensive to collect.

Other important outcomes for consideration include the dynamic psycho-social characteristics of diverted offenders. Data on these outcomes, like data on self-reported offending, can in principle be gathered directly from the program participants, so long as researchers can navigate the legal, organizational, and practical hurdles associated with surveying populations that tend to be transient. If service providers administer periodic needs assessments as part of their ordinary procedures, it may be possible to tap these records for evaluation purposes; though we have found social workers to be less concerned with documentation than with direct service delivery, so records of this kind are likely to be incomplete.

Future research should also consider the measurement and analysis of intermediate outcomes that appear in logic models for police-led diversion programs. Specifically, while evaluations that treat program and client dynamics as the contents of the proverbial black box can be useful, formative evaluations that can expose weak or broken links in the programmatic causal chains are more valuable. These types of evaluations can (1) reveal program linchpins in which overstated optimism was placed and/or (2) direct attention to elements of the program that might require adjustment. At the same time, research should not solely rely on intermediate outcomes to determine program effectiveness. For example, analyses of officers' attitudes as intermediate outcomes, often used in evaluations of CIT, can be important in understanding program implementation and effectiveness, however they are no substitute for objective analyses of officers' behavior.

Finally, if diversion is not merely a matter of releasing an offender, and instead involves a direct referral to a third-party, then the outcomes will turn primarily on the responses of agencies with which the police collaborate. Therefore, we must learn about the form and content of the services that are delivered, when offenders are diverted to an intervention, and the extent to which those services are tailored to the needs of the diverted individuals. This emphasizes the fact that police-led diversion is only partly a function of what the police do; its success turns also on the functioning of the agencies with which police collaborate. For this reason, program effectiveness will depend, more particularly, on whether the collaborating agencies have adopted sound intervention models and implement those models with fidelity. This can only be evaluated through well-designed, multi-method process evaluations that include not only surveys or interviews with officers and other program staff, but also analyses of administrative records and, ideally, systematic social observation. However, it can be surmised that most of the agencies that collaborate with police are local agencies and, consequently, the relevant operational features of the organizations exhibit a rich – or alarming – heterogeneity. If so, then any two similarly structured programs operating in

different locales could achieve wildly different outcomes. Generalizing from an evaluation of a program in one or a small number of sites is hazardous.

ii. Citations in Lieu of Arrest

Many states have legislation that permit patrol officers to make decisions on the use of field citations as pre- or post-arrest diversion, depending on the circumstances of the disturbance or offense, and via the officer's discretion. Drawing upon the scholarship that focuses on use of arrest decisions (i.e.., factors that influence officer discretion) would be particularly beneficial for future studies. For example, Engel et al. (2000) explored the (both direct and interactive) effects of citizen demeanor on officer decisions to issue citations, and found officers were less likely to cite a citizen when (a) other officers were present, (b) when citizen bystanders were present, and (c) there were signs of citizen alcohol or drug use. Police were also less likely to issue citations when citizens were disrespectful (particularly when other officers were present). Thus, like arrests, situational and demeanor factors seemingly correspond with citation issuance; it would be particularly useful to understand when officers employ pre- or post-arrest citations based on situational factors in contexts where officer discretion is legislatively approved.

Also, like arrests, there are opportunities for race and class to play a factor in decision making. As noted by Brown and Frank (2005) and Johnson et al. (2008) citations can be issued in ways that are potentially discriminatory or arbitrary fashion: some arrestees may be cited when they should have been detained or released with only non-official warning. Thus, the proportionality of citation issuance, whether legal and extra-legal factors determine when and how citations are issued, and the overall process by which citations are issued needs to follow the same lines of research as officer decisions to arrest or not (see LaFave, & Remmington, 1965; Klinger, 1994; Reiss, 1971). Adaptation and examination of a police-minority citation issuance (as well as traffic stops and arrests) have the potential to help guide police departments refine their tactics and responses to crime problems using such approaches (see also Engel & Calnon, 2004a).

The costs and benefits of citation in lieu of arrest must also be considered. The IACP (2016a) review on citations in lieu of arrest indicate that the average time spent for an arrest for a police officer is over 85 minutes, while a field-release citation takes roughly one hour less time, on average (24 minutes). However, officer resources and time spent to process incidents are likely to mirror arrest in stationhouse, jailhouse, or post-arrest release and thus the benefits to police are potentially lost in such approaches. What potential costs and benefits do field, stationhouse, and jailhouse citations offer police departments, accounting for the likelihood of increased "failure to appear" rates? Likewise, what long-term consequences do increased "failure to appear" rates have for police workload distributions? Finally, given that letters to citizens decrease the likelihood of failure to appear (Busher, 1978), how might police outreach (e.g., civilian employee outreach) reduce failure to appear rates? Ultimately, impact analyses assessing a variety of crime outcomes across different settings would be particularly beneficial from an evidence-based standpoint.

While background checks were a primary drawback to field citation releases at the time of the Whitcomb et al. (1984) study, in-car computers and technological advancements have likely reduced such drawbacks today (though citizens without possession of identification will continue to plague the use of field release citations). An updated analysis of field citation releases would

enhance understanding of today's advantages and concerns. As noted in the IACP (2016a) review on citations, 80% of agencies surveyed do not currently track their citation usage patterns. Additionally, thefts, order conduct, and trespassing are the most commonly issued types of citations used by police (IACP, 2016a) yet very little research exists on their issuance patterns relative to the bodies of research that have focused on traffic stops and minor drug offenses. Likewise, according to the National Conference of State Legislatures (2017), a small number of states allow for citations to be issued for some felonies though again very little research exists that specifically examine when and how such citations are actually issued.

E. Natural Experiments and Case Studies

In many cases, changes in the law or police policies provide the opportunity for researchers to study the impact of these changes on police behavior. For example, researchers have a unique opportunity to study the effects of legal and judicial reform on police use of arrest through the use of natural experiments. As described by Fagan (1990), naturally occurring events can allow for direct experiments in fields of study that may be difficult to otherwise subject to randomized experimental manipulation. In natural experiments, control over the experimental variable (the treatment or intervention) is removed from the researcher, but the controlled nature of the experiment remains, allowing the researcher to measure differences in the naturally occurring intervention and in the behaviors of interest among subjects of the intervention.

While true experiments can yield causal information because they isolate a single variable of interest and have equivalent groups, natural experiments are more predictive. Nevertheless, the natural experiment's preservation of randomness of subject participation and independence of interventions can minimize threats to validity, particularly those produced by researcher influence and subject reactivity to testing (Fagan, 1990). Possible threats to validity with natural experiments, however, must be mentioned. Because the researcher is examining impact after the fact, there may be no natural control group against which to compare the experimental group prior to the intervention. Furthermore, time series designs are particularly susceptible to the internal validity threat of history. That is, it is possible that other unmeasured events that occurred contemporaneously with the intervention also affected the dependent variable (Cook & Campbell, 1979). Researchers conducting this type of policy impact research should examine alternative explanations to minimize this threat.

The greatest weakness of natural experiments is that the sample of participants and/or setting of intervention may be unique, which reduces the generalizability of the findings. Indeed, a number of studies involving policy impact analysis note that the strength of the influence of legal reforms varied across jurisdictions. Researchers should be mindful of the fact that it is possible that areas or jurisdictions that enact a law (experimental group) may not have been actually equivalent prior to intervention to areas that did not enact (natural control groups) (Fagan, 1990; Ross & Walker, 2017). The most plausible explanation to variance in the impact of legal reforms, however, is differential implementation or enforcement across jurisdictions (Adams, 2007; Farrell & Cronin, 2015; Wagenaar, Maldonado-Molina, Ma, Tobler, & Komro, 2007). A number of scholars note that laws are often enacted for their symbolic, political appeal and to appease public concern (Farrell & Cronin, 2015; Kinkade & Leone, 1991). As such, they often come with little guidance regarding implementation or expectations for enforcement. Therefore, it is not surprising that these

elements of legal reform vary widely. For researchers, a crucial task in examining the impact of legal reforms involves measuring how police officers actually implement the law on the books and the impact of this implementation on policy effectiveness. As noted by several recent studies, however, there is little agreement about how to operationalize police enforcement efforts and little data exists for that purpose (Grossman & Miller, 2015; Schwartz & Davaran, 2013).

Evaluation research is often based on short-term effects; additional long-term analyses are necessary to better understand the effects of legal reforms. Specifically, Britt et al. (1996) argue that time series designs should be guided by theory or previous research in terms of the predictions of the impact of the intervention. In the case of police behavior, is the impact on arrests expected to be immediate or gradual? Are changes in arrest behavior sustained over time or do departments return to "business as usual" after the initial focus on the change in legislation? These questions should drive the research design. Even when guided by theory and previous research, however, the consequences of legal reform on police arrest behavior may be unexpected or contrary to predictions (Schwartz & Davaran, 2013). It is for this reason that the longitudinal analyses should examine and reexamine data over the long-term for robustness of intervention results (Britt et al., 1996).

F. Conclusion

To summarize, a more comprehensive body of evaluation evidence is needed to glean the lessons learned from the various tactics and approaches used by police as alternatives to arrest. As was seen in the case of citations in lieu of arrest, projected programmatic improvements rarely match actual observed outcomes. Officer discretion, real world constraints, and unanticipated consequences are expected – and a more extensive body of research in these areas will provide a framework that police and policy makers can use to drive their decision making involving minor offenses, status crimes, disorder incidents, and vulnerable populations.

We also take the opportunity here to reiterate the foundational needs in policing research. The policing field simply needs to know more about the context and circumstances surrounding officers arrest decisions in their current environments. This will require an investment in ethnographic, qualitative and systematic social observational research. Alternative data collection opportunities may also incorporate the use of body camera footage, along with officer and citizen surveys. Reestablishing this research foundation is critical to the subsequent success of alternative to arrest initiatives. In addition, scholars should engage in more natural experiments and case studies, which could provide opportunities for comprehensive exploration of the impact of changes in laws or policies on the decision to arrest.

IX. IMPLICATIONS & RECOMMENDATIONS

The discussion of the police decision to arrest is critical when considering police legitimacy, within communities, and particularly communities of color, as well as within police establishments themselves. For example, at the individual level, recent proactive policing strategies have increased questions concerning the impact of extra-legal factors on police decision to arrest (see, e.g., Lytle, 2014; NAS, 2018). How can perceptions of the legitimacy of police decision-making be increased, particularly in the eyes of troubled, alienated communities? Bayley (2018) suggested

there are three mechanisms by which police decision-making – including the decision to arrest – can be made more legitimate: 1) policy, 2) community, and 3) law. First, *policy* created by police executives can provide rationale for officers' decisions—outlining the role and expectations of police in their jurisdiction. These policies may be used as reference for citizens in their interactions with the police. Second, the choices of police may be legitimized through consultation with the *community*. These police-community collaborations can facilitate discussion regarding the appropriateness of arrest as a response to specific community problems. Though requiring substantial time and resources, the efficacy of community and civic leader groups in informing police strategies to address community problems has been exemplified in some proactive initiatives, such as focused deterrence strategies implemented in Boston, Cincinnati, and other locations (Braga, Kennedy, Waring, & Piehl, 2001; Engel, Tillyer & Corsaro, 2013; Braga, Weisburd, & Turchan, 2018). Finally, Bayley argued that police choices can be legitimized through *law*. Specifically, using the law as a tool, legislatures at the local, state and federal levels can change the conversation about police use of arrest, providing legal guidelines for their decision-making.

Each mechanism of legitimacy described above entails both benefits and potential barriers. For example, while policy may be the most straightforward mechanism in legitimating police decisionmaking, it may require police executives to reconsider the role of police in the community, particularly regarding the use of arrest. Legitimating police decision-making through community discussion is likely the most beneficial to police agencies. It is important to understand, however, that the police may consult several types of "community", including the people who have formal authority over and are connected to police agencies, people who have influence over those who have formal authority, and/or the broader community. Collaboration with the community to legitimate police decision-making requires a working definition of "community" and a decision regarding the aggregation of community preferences. Finally, while enacting law may be the most effective route in legitimating police decision-making, it can be difficult to navigate the landscape of politics to accomplish legal change. In reality, it is likely that these three mechanisms connect and build upon one another. Specifically, by garnering community support for specific agency policies related to police decision-making, these policies can be turned into law. In the recommendations that follow, we consider the implications of the decision to arrest on each of these areas – policy, community, and law.

A. Changing Police View of Arrest

The police role has, historically, encompassed handling low-level criminal acts (and non-criminal disorders) committed by persons struggling with mental disorders, homelessness, alcohol and drug addictions, and other social and economic ills. Police enacted this role not only through enforcement but also through direct support and/or (formal or informal) diversion. This role has arguably not changed so much as its visibility to the public has increased in recent years. The demands that the public makes of the police to address these problems with efficiency and compassion can lead to understandable exasperation by the police. As noted by one law enforcement official:

We are the agency of first resort for the poor for virtually everything, as well as the agency of first resort for every social problem that no one wants to spend money on anymore. I see

the amount of mental health work that we do, but there are no facilities for [persons with mental illness]. I see the amount of work we do with the homeless, but there are insufficient facilities for the homeless. And I see the amount of work we do with people with substance abuse problems, but there are insufficient treatment centers for substance abuse. I'm beginning to come to the conclusion that society has decided there is no social problem so complicated that it can't be fixed by more training for the police. Because every time there is a terrible social problem, they don't say, "Shouldn't we be investing in mental health facilities at the community level for low-income people who are off their meds?" No. They say, "Give the police more training in mental health." People freeze to death in the dark outside, do they say, "Let's provide more homeless shelters or more transitional housing?" No. They say, "Train the police better to deal with the homeless population!" (IACP, 2015).

In 1977, Herman Goldstein argued that it is not only misleading but dysfunctional to portray the police primarily as the front-end of the criminal justice system. Citing the diverse array of functions that police are asked to perform, he pointed out that the police role links them to multiple systems, including the social service system, the mental health system, even systems of infrastructure maintenance. The practical reality on the street has necessitated police involvement with these systems. The part of the police is properly limited; as Egon Bittner (1974) asserted, the police merely "impose or, as the case may be, coerce a provisional solution upon emergent problems". But even if we recognize those limits, we can nevertheless conclude that under ordinary circumstances, officers' formal training for these tasks is not adequate, officers' performance of these duties is not recognized or rewarded, and the links between the police and other community resources are at best ad hoc.

Goldstein suggested that it would be more constructive if the police were viewed "first and foremost – simply as an agency of municipal government," one in which a variety of responsibilities are housed (1977, p. 33). We see little evidence that either police or the public have embraced such a conception of the police. Short of such an overhauled image, improvement could be realized through the successful implementation of police-led diversion programs. If such programs prove to be effective in reducing the frequency of incidents that the public brings to the attention of police – crimes and disorders that prompt calls for police assistance – then they are likely to be seen by officers as useful tools; they would also be more likely to enjoy sustained support by the community. If the implementation of the programs includes the appropriate preparation of the officers and positive reinforcement for diversions well done, then they may be institutionalized as routine practice.

In the provocative law review article, "Why Arrest?," Harmon (2016) suggests that now is the time for significant reform in police use of arrest. She argues that the role of arrest as a police tool must be curtailed in favor of less intrusive legal mechanisms and diversion programs. Harmon (2016) questions the utility of police use of arrest on the following grounds: First, in most cases, the costs of arrest are too great, both in terms of financial costs to the criminal justice system and individual offenders as well as the collateral harms and costs associated with offenders' deprivation of liberty (see, e.g., the "costs of arrest" section within this review). Second, arrest is usually unnecessary to handle the situation confronted by an officer; that is, police officers have many less intrusive alternatives to restore order, ensure offenders appear in court, collect evidence, and solve crime. Finally, Harmon (2016) argues that arrests should "be imposed only when they serve a significant

state interest" and that most of the time other legal means exist to ensure the state interests are met (p. 320). Although arrests may be necessary under certain circumstances, the legality of an arrest does not establish its ability to further significant state interests in ways that alternative legal or social processes cannot.

A primary challenge for arrest reform is finding a method to encourage officers in the field to not only consider whether an arrest *could* be made, but whether it *should* be made. For example, Harmon (2016) argues that, "The probable cause standard presumes that (rather than considers whether) the government needs to arrest criminal suspects in order to control crime (p. 323)." In contrast to this probable cause standard, we argue that law enforcement should consider arrest as just one of many outcomes among other (and often more preferable) alternatives to address problems of crime and disorder in a more holistic and collaborative approach. Given this argument, it is important to consider how the conversation about police use of arrest can facilitate real change in the culture of policing.

As noted previously, a natural experiment in Hamilton County, Ohio involving a jail closure provides insight on how organizational change can encourage arrest to be viewed as a last resort rather than the modal response (Engel et al., 2017). Using an interrupted time series analysis of crime and arrest, the author(s) found that contrary to public and political concern, the reduction of 36% of the available jail space through the permanent closure of a jail facility did not result in an increase in crime. Rather, the Cincinnati Police Department (CPD) demonstrated a significant decline in felony arrests and a nonsignificant decline in misdemeanor arrests. Importantly, they continued to maintain a nonsignificant decline in violent and property offenses.

Engel and her colleagues concluded that changing how police officers viewed and used arrest was the defining element for change. They noted that CPD commanders had previously viewed arrests as "outputs" (i.e., demonstration of officer job performance and a criterion for funding allocation). The CPD, like many police organizations, tracked and reported arrests with officers receiving praise from supervisors based on their productivity. This routine practice in many police agencies is due to the underlying and untested assumption that more arrests lead to reductions in crime. And, this commonly held assumption has led many police organizations to view arrests as "outputs" rather than as "outcomes" (McCarthy, 2015). Yet in Cincinnati, the police moved away from discussing aggregate arrests at weekly crime analysis meetings, instead focusing on aggregate crime. Arrests were simply discussed as an outcome to specific, individual cases. The Cincinnati Police leadership instead encouraged subordinates to find alternatives to arrest, noting that "we cannot arrest our way out of this (crime) problem" (Seabrook, 2008). This shift at the police organizational level was critical, demonstrating that encouraging officers to view arrest as a "limited commodity", coupled with the use of evidence-based policing strategies, can lead to promising changes in the use of arrest for the criminal justice system.

i. Police Culture

Some might say that, for either or both routine practice and the implementation of police-led diversion programs to be institutionalized, police culture must be changed. However, prescriptions for wholesale changes in police culture are rooted in neither a properly nuanced understanding of police culture nor a base of evidence on how such shifts can be accomplished. Despite Westley's

(1953, 1970) early work describing a "single" traditional police culture, more recent research supports the idea that contemporary police culture is fragmented, not monolithic, and it consists of not only officers' outlooks but also their patterns of practice and workgroup relationships with others (Ingram, Paoline, & Terrill, 2013; Manning, 1995; Paoline, 2003, 2004; Terrill, Paoline, & Manning, 2003). Short of an entire program of research on the police culture, research on policeled diversion could, in the context of longitudinal process evaluations, chart the norms, values, and attitudes pertaining to diversion and referral. Process evaluations that attend to such cultural (or subcultural) constructs over time, and also to the organizational forces that could be expected to influence a department's culture – e.g., training, supervision – could shed considerable light on the susceptibility of culture to planned change and the steps that produce change, at least in this narrow domain. Despite research that indicates officer attitudes only weakly impact behavior (Worden, 1989), reform advocates frequently presume that the road to behavioral changes is through attitudinal change, such that the first leg of the culture change journey involves training. This might be at least partially true, though we should also contemplate the possibility that behavioral change can produce changes in outlooks over time. It might be that the behavioral change could be not direct but vicarious, through other officers' experiences (Ingram et al., 2013). In any case, welldesigned process studies could generate evidence that would cumulate to help guide the successful implementation of diversion programs. Over the shorter programmatic term, a deeper understanding of how officers interpret and apply program eligibility criteria and the factors that influence their judgments about how to resolve situations for which diversion may be appropriate.

Process evaluations should also be mindful of net-widening. A proper analysis of net-widening requires that research look beyond administrative records, as we discussed above, and also that research attend to the dynamics of program implementation that are likely to facilitate or inhibit practices that widen the net. The latter calls for an inquiry into stakeholders' conceptions of the target population, systematic analysis of diversion decisions, and an accounting of programmatic structures that guide or restrict discretion in making diversion decisions. One such structure is the mandate to conduct risk assessments.

B. Unintended Consequences

Harmon (2016) argued that there are many risks of police reliance on arrest including increased risk of injury to officers and offenders, the potential for increasing racial and ethnic disparities in criminal justice outcomes, and the continued crisis of legitimacy with the public. Alternatives to arrest, however, are not without potential risks as well, though we know far less about them. Unfortunately, reform efforts in the criminal justice system have often been associated with unintended consequences. The most prominent example is the impact of mandatory arrest laws for domestic violence incidents as described in this review.

When law enforcement executives are considering changes in police practice, policy, or the law that are designed to reduce the use of arrest, it is important to also consider the potential negative impact that may occur, and work proactively to reduce the likelihood or severity of that negative impact. Based on previous reports of issues associated with criminal justice reform, three unintended consequences appear the most likely when implementing alternatives to arrest: 1) uncontrolled discretion, 2) net-widening, and 3) increased harm to offenders or victims. Each of

these unintended consequences is considered below, and recommendations regarding minimization of these risks is provided.

i. Uncontrolled Discretion

Whenever policy changes are implemented with the intention of changing police activities or outcomes, it is important to monitor how and when officers use their discretion in ways that may support or hinder successful implementation. Criminal justice actors have pervasive discretionary power, and uncontrolled discretion can result in dire consequences including the denial of due process, unequal protection of the law, and police corruption (Walker, 1992). Without significant oversight, officers may engage in discriminatory practices (either intentionally or unintentionally), which would inevitably result in strained police-community relations and questions of police legitimacy. Fortunately, police discretion is not unlimited; rather it is significantly constrained by federal, state, and local laws, along with departmental policy and supervision. Nevertheless, concerns regarding uncontrolled police discretion persist.

There is also concern that providing officers with more opportunities for discretion – for example, in the form of alternatives to arrest – may result in additional racial/ethnic disparities and discrimination. As discussed in this review, racial and ethnic disparities have been routinely demonstrated in police arrest rates and throughout the criminal justice system. These persistent disparities can have a substantial impact on public perceptions of police and police relations with minority communities (Ekins, 2016; Stewart, Baumer, Brunson, & Simons, 2009; Weitzer & Tuch, 2005). Therefore, evaluations of alternatives to arrest must be sensitive to the potential for disparate outcomes for racial and ethnic minorities. For example, previous research indicates that Black suspects were significantly more likely than Whites to be arrested than issued a field citation and significantly less likely to be diverted into juvenile diversion programs (Brown & Frank, 2005; Ericson & Eckberg, 2016; Johnson et al., 2008). Other research examining risk assessment tools cautions that risk scores for minorities might be inflated due to the associations between race and risk screening factors (Moore & Padavic, 2011).

Research examining the influence of implicit bias on decision making suggests that caution must be exercised when granting officers increased discretion (Clemons, 2014; Fridell, 2017). Implicit bias is similar to explicit bias in the assignment of group stereotypes to individuals, but implicit bias differs from explicit bias in that it is not based on hatred or hostility toward the group (Fridell, 2017). The danger of this type of bias is that it can subconsciously impact perceptions and behavior and that the types of situations in which it is most likely to impact behavior are commonplace in law enforcement. That is, implicit bias is most likely to be manifested in situations that involve highly discretionary activities, those that are ambiguous and evolve quickly, and those that demand swift assessments of propensity for danger, violence, recidivism likelihood, and trustworthiness, often without sufficient information (Clemons, 2014; Fridell, 2017)

Obviously, situations in which officers have little to no discretion do not trigger the same potential for the introduction of such biases, but discretion is inherent in policing. Fridell (2017) argues that the implications of implicit bias can be attenuated with appropriate precautions, including 1) training, both on identifying and managing implicit bias and in de-escalation tactics that can provide officers with additional time to gather information, and 2) specific decision-making guidance for the implementation of programs or strategies that focus on behaviors not populations.

An additional consideration is how and where police discretion may shift when it is controlled. Inherent in the discussion of how legal reforms guide discretion within the criminal justice system, is the underlying assumption of "hydraulic discretion," that is, discretion that will simply shift to other stages of the criminal justice process that were not the subject of the reform. This is a particularly common assumption as it relates to the court system, where limits on prosecutorial discretion are presumed to shift to judicial discretion or vice versa (McCoy, 1984; Miethe, 1987). Despite the police role as "gatekeepers" to the criminal justice system, they are still impacted by the constraints of other actors in the criminal justice system (e.g., whether they believe prosecutor will charge offender they arrest, whether jails are currently overcrowded, etc.) (Kinkade & Leone, 1992). Because of this interdependent nature of the criminal justice system, it is important to understand the consequences (intended or not) of legal reforms not just on police behavior, but on all the actors of the criminal justice system. Kinkade & Leone (1992, p.241) argue that "it is clear that legal reform can have unintended consequences, and those impacts might, by the very nature of the system spread throughout all of its individual components."

In the case of implementing alternatives to arrest, these unintended consequences might also spread to other non-CJ systems, including mental health, education, welfare, and other social services. For example, it is now well recognized that the de-institutionalization movement resulted in the unintended consequence of releasing those with mental health issues directly to the community without the appropriate community-based services (Engel & Silver, 2001). As a result, persons with mental disorders are more likely to come into contact with the criminal justice system. As police try to reverse this trend by diverting consumers of mental health services away from the criminal justice system and back into the mental health system, the question remains whether the community mental health system is properly funded and prepared to provide quality services to those in need.

It is critical that these factors be taken into consideration when designing and implementing changes in policies designed to reduce the use of arrest. To avoid unintended consequences, every police executive should have a specific plan for supervisory oversight and training used to monitor and control officers' discretion. The collection and analysis of data should be conducted in real-time to provide continuous feedback during implementation.

ii. Net-widening

Many scholars have observed that, despite their best intentions, some criminal justice practices increase rather than decrease the number of people under some form of social control (Austin & Krisberg, 1981). The potential for diversion programs and other alternatives to arrest to increase the population coming into contact with the criminal justice system is a salient concern in the discussion of police-led diversion. In theory, police-led diversion and/or citations in lieu of arrest should be used for individuals who would have otherwise been subject to arrest. *Net-widening* occurs when these types of programs and tactics create an overall increase in the number of individuals having contact (formal or informal) with the criminal justice system by including those that would otherwise not have had that contact (Cohen, 1985; Nadel, Pesta, Blomberg, Bales, & Greenwald, 2018; Prichard, 2010). The potential for net-widening creates several concerns. For example, increasing the number of persons coming into contact with the criminal justice system through alternatives to formal sanctions can create substantial costs (financial and other) at the

individual- and system-level (Harmon, 2016). Additionally, net-widening increases the likelihood that those served by diversion programs are not necessarily the individuals that would benefit the most from the nature of the services (Klein, 1979).

Research provides some evidence of net-widening. Explored widely in juvenile contexts, diversion programs have been found to increase rather than diminish youths' contact with the juvenile justice system (see, e.g., Blomberg, 1977, 1980; Decker, 1985; Meares et al., 2016; Macallair & Males, 2004). Note, however, that some evaluations have found either mixed or no effects of net-widening from diversion programs (Barnhorst, 2004; Lipsey, Cordray, & Berger, 1981; Nadel et al., 2018; Prichard, 2010). As the development and implementation of diversion programs (e.g., police-led diversion, citations in lieu of arrest) expand to manage other populations of offenders (i.e., drug offenders, persons with mental illness), the potential for net-widening expands as well. Some critics of police-led diversion initiatives suggest that, while these practices are meant to reduce the number of persons subjected to arrest, they may also reduce the number of persons to whom nothing is done (IACP, 2016; Whitcomb, Lewin, & Levine, 1984). However, very few existing police-led diversion programs appear to have been evaluated for this outcome (for exception see Roberts & Indermaur, 2006). Given the concerns stated above, it is important to explore whether diversion programs are reaching their targeted population. Criminal justice practitioners, scholars, and policymakers must also consider whether police-led diversion programs are being used as an alternative to more punitive sanctions, or simply as supplements to punishments already in place (Blomberg, 1980; Nadel et al., 2018).

iii. Increased Harm to Offenders or Victims

Finally, police reform efforts may have unintended consequences for offenders and victims. Specifically, policies and laws that either increase the use of arrest *or* curtail the use of arrest in favor of less intrusive legal mechanisms or diversion programs may generate possibilities for unexpected harm to offenders or victims. While not a comprehensive list, obvious historical examples of unintended increased harm include policy and legislative changes related to domestic violence, drunk driving, and incidents involving individuals with mental health issues.

As described in this review, a major policy effort to better respond to the issue of domestic violence was the implementation of mandatory and preferred arrest state laws and agency policies in the 1990s, which limited officer discretion by requiring arrest based on certain criteria (Buzawa & Austin, 1993). Although initial research suggested mandatory arrest had deterrent effects for offenders (Sherman & Berk, 1984a; Sherman & Berk, 1984b), replication studies and other research examining these policies demonstrated that several unintended consequences resulted from mandatory arrest. Specifically, research has indicated that mandatory arrest increases the likelihood of dual arrest, where the police arrest both parties involved in a domestic incident (Hirschel et al., 2007; Lawrenz, et al., 1988; Simpson et al., 2006); increases partner retaliation; and increases mortality rates and intimate partner homicides (Iyengar, 2009; Sherman & Harris, 2015).

Conversely, we may not fully understand the potential harm for cases where an offender is not taken into custody. There have been several cases where police agencies and other criminal justice related entities have been civilly sued under the federal civil rights statute (Title 42, section 1983) due to failure to protect a victim. Although police are immune from liability for failure to generally

protect citizens, when an officer's actions or failure to act creates a specific dangerous situation that did not otherwise exist, citizens may have standing to sue (Kappeler & Kappeler, 1992). This "state-created danger" doctrine has resulted in a number of successful plaintiff suits, particularly with respect to cases of failure to arrest intoxicated motorists (Barret, 2002; Chereminsky, 2007; Kappeler & Del Carmen, 1990; Kernodle, 2001; Tullier, 1992). The threshold for liability under federal law is difficult to meet and is applied differently across appellate courts (Kernodle, 2001). Similarly, state tort laws on police liability vary widely. Nonetheless the potential for public outcry and civil litigation is a logical extension from incidents of unarrested offenders who go on to commit violence or other criminal acts (Chemerinsky, 2007). This is a legitimate concern regarding the implementation of alternatives to arrest. While future harm is obviously not the intention of using alternatives to arrest, the possibility exists and therefore must be carefully considered, measured, and reported throughout the implementation phase of any alternative to arrest initiative.

Furthermore, it is important to consider the unintended impact that policy and legal reform may have on officers' perceptions of liability and ultimately their behavior. For example, if officers fear litigation as a consequence of increased or limited arrest strategies, this may consciously or subconsciously impact their responsiveness or other behavior toward citizens (Hall, Ventura, Lee, & Lambert, 2003; Hughes, 2001). Worrall & Marenin (1998) caution the impact of civil liability fears could be particularly salient as policing shifts from traditional law enforcement to more collaborative, community-based efforts. On the other hand, policies can also provide law enforcement with safeguards, granting officers the ability to use diversion methods without the risk of liability for failure to arrest. This holds policymakers accountable and reduces pressure on officers to use alternatives rather than arrest where possible. Police administrators may also utilize training, enhanced recruitment, specific policies and procedures, and proper supervision to ensure appropriate conduct as well as to combat any potential chilling effect or hypervigilance due to the fear of civil liability (Hughes, 2001).

Ultimately, the unknown and unintended consequences of police arrest and diversion decisions brings us back to Bayley's argument about the community's role in legitimizing police decision making. Communities' expectations for law enforcement include both less intrusive policing and swift and effective resolution of crime and disorder problems; given these competing community demands, policy makers and police have a delicate balance to strike. Officers need to arrest when potential public harm is especially likely, and to minimize the use of arrest when that level of legal coercion is unnecessary to protect state interests and public safety (Harmon, 2016). The difficulty lies in the street-level and often immediate need to assess the potential harm if a person is diverted to an arrest alternative. Further, decisions are often made without specific guidance or directives from supervisors, risk assessments, or other evidence-based tools. It is fair to conclude that officers likely rely most on their intuition, prior experiences, and training to make these difficult decisions.

In summary, as repeatedly demonstrated in the field of criminal justice, unintended consequences can result during implementation of reform efforts, resulting in a negative impact on the very individuals and communities the reforms were designed to assist. As Harmon (2016, p.363) argued, however, "These risks suggest that we should take care in how we restrict arrests, not that we should avoid the project." In the following sections, we describe promising ways to reduce the

likelihood of unintended consequences, including police-academic partnerships and the development of risk assessment tools.

a. Police-Academic Partnerships

To enhance the efficacy of program implementation, police-academic partnerships are particularly important (Engel & Eck, 2015; Sparrow, 2011; Engel, Isaza, Whalen, & Herold, forthcoming). The promotion of evidence-based practices relies on police agencies' abilities to gather and routinely analyze data; even as research informs a newly implemented policy or practice, outcomes must be continually assessed. Many police agencies do not readily have the expertise necessary to implement and sustain EBP, and even the largest agencies rely on partnerships with independent researchers (Alpert, Rojek, & Hansen, 2013). The use of external assessments can create a feedback loop, where research informs best-practices that are then measured against legal, ethical and community guidelines to create policing practices (Sherman, 1998). Critical examination of these practices and outcomes can allow agencies to better refine their practices and raise their overall success and legitimacy within their communities (Engel & Eck, 2015; Sherman, 2013; Weisburd & Neyroud, 2011).

The biggest challenge of evidence-based policing is incorporating practitioner intuitive knowledge about perceived best approaches to outsider empirical analysis. As Bayley and Bittner (1984, p.36) than three decades ago: "What police about argued more sav policing is learned is not incompatible with attempts to make instruction in the skills of policing more self-critical and systematic." The combination of the two can lead to the development of evidence-based best practices. This allows for the targeted use of scarce resources to improve policy and practice and should also be more effective in improving public perceptions of police legitimacy and police-community relations because it is gathered and analyzed neutrally and systematically (Sherman, 2013).

Yet, while academic-police partnerships to enhance evidence-based practices are an importance advancement for the field, we also recognize that police executives cannot wait for a body of empirical evidence to form, but rather must forge ahead with the development of programs and other alternatives to arrest. The research community now needs to play catch-up. Examining pre-existing initiatives represents an opportunity to learn much more about what works, and thereupon to better inform further developments of alternatives to arrest.

b. Development of Risk Assessment Tools

As discussed above, an important consideration for process evaluations of arrest diversion programs is a program's potential for net-widening. A proper analysis of net-widening requires that research look beyond administrative records and that research attend to the details of program implementation that are likely to facilitate or inhibit practices that widen the net. The latter calls for an inquiry into stakeholders' conceptions of the target population, systematic analysis of diversion decisions, and an accounting of programmatic structures that guide or restrict discretion in making diversion decisions. One such structure for discretion is the mandate to conduct risk assessments.

In the United States, the development and implementation of risk assessments has come to be recognized as a key component to criminal justice reform and evidence-based practice. The evolution of formalized risk assessment began in the 1970s. These tools were designed to facilitate objective decision-making relying on coded individual offender characteristics to enhance uniformity (Bonta & Andrews, 2007). The development and research regarding risk assessment instruments has expanded substantially in recent years in both pre-trial and correctional settings (Bechtel, Holsinger, Lowenkamp, & Warrant, 2017; Desmarais, Johnson, & Singh, 2016). In large part, these tools are based upon the risk and need principles of effective intervention, outlined by the risk, need, and responsivity (RNR) model (Andrews, Bonta, & Hoge, 1990). The risk principle suggests that programming should be designed so the highest risk offenders receive the most intensive intervention, while preventing lower risk offenders from receiving too much intervention (Andrews, Bonta, & Hoge, 1990). Stated differently, the level of intervention should be matched to the offender's risk to re-offend. The need principle suggests that the interventions used should target relevant static (i.e., unchanging) and dynamic (i.e., changing) criminogenic factors (Gendreau, Little, & Goggin, 1996).

A review of the literature demonstrates that risk assessment instruments vary considerably both in the factors they consider and their methods of administration. While an in-depth exploration of this variation is beyond the scope of this review, it is important to acknowledge that research in this area provides valuable insight for the application of risk assessment tools in the policing context, particularly in decision-making regarding pre-arrest diversion and treatment options for specific offender populations. Specifically, research suggests that a structured and evidence-based risk assessment instrument provides greater understanding in areas such as the offender's background, home environment, physical and mental health, and peer associations. In turn, this information can assist criminal justice personnel and service providers in determining an individual offender's risk to public safety and plan for his or her treatment. For example, recent examinations of the most efficient and cost-effective methods for pre-trial risk assessment suggest that static factors found in criminal history and court records, such as prior convictions, prior failures to appear, and prior incarcerations, are among the strongest predictors for pretrial outcomes (Bechtel et al., 2011; LJAF, 2013; VanNostrand & Lowenkamp, 2013). The importance of these static factors in the prediction of future behavior has also been noted in evaluations of risk assessments in corrections (see, e.g., Lowenkamp, Holsinger, & Cohen, 2015). Furthermore, there is substantial evidence of the reliability of risk assessment instruments that incorporate these factors in predicting future behavior (e.g., general recidivism) and enhancing safety outcomes (Bechtel et al., 2017; Desmarais et al., 2016).

In the policing context, the potential benefits in incorporating risk screens for arrest diversion include, first, maximizing the likelihood that diversion decisions accord with the target population of the program, whether that population is low-risk or higher-risk offenders. This serves to prevent various forms of net-widening arising from the "tremendous pressure to focus resources on lower risk offenders. After all, low risk offenders are more cooperative and motivated to comply with

¹⁰ Though importantly, recent efforts have been made to develop national models for risk assessment. See, for example, the Public Safety Assessment, a pretrial risk assessment tool developed by researchers working with the Laura and John Arnold Foundation (LJAF, 2013).

treatment demands than high risk offenders" (Bonta & Andrews, 2007, p. 9). Expanding the boundaries of eligibility for diversion veers the concept into unnecessary, costly, and harmful inclusiveness. Evidence of this effect can be observed in tightly packed juvenile detention centers. Additionally, the use of risk assessment tools in the field can help mitigate the racial disparities produced by various forms of net-widening. An illustration of such net-widening is apparent in the introduction of civil citations in Gainesville, FL in 2011. Initial unstructured discretion yielded racial disparity, as civil citations were afforded to Black youths at a much lower rate. Subsequently, supervisory oversight was added to limit the discretion of police officers in issuing civil citations. Risk assessment could alleviate net widening by structuring diversion decisions.

As suggested previously, the use of risk assessments for arrest diversion programs could also enhance intervention plans for those who are diverted to treatment. In addition to static factors, the RNR Model includes the dynamic qualities of an offender's criminogenic tendencies, which can be influenced through services offered, such as drug counseling, relationship therapy, or career development. Unfortunately, however, it appears few police-led diversion programs make use of formal risk assessment tools. Tallon et al. (2016) report that only 11 percent of their agency survey respondents reported conducting formal risk assessments, and only 5 percent could identify the tool that they reportedly used. Where existing programs, such as STEER, use such risk assessment instruments, their actual application could be documented and the congruence of the population of diverted offenders with the target population could be assessed. If existing programs that do not use such instruments could be persuaded to adopt one, then their actual application (and resistance thereto) could be documented and changes in the diverted population could be assessed. Specifically, longitudinal processes documenting the adoption and implementation of risk assessment tools in the policing context and outcome evaluations of police-led diversion programs, conducted in real time rather than post-hoc, could document the criminogenic needs of diverted offenders, the outreach extended to those offenders and the services delivered to them, and changes in criminogenic needs over time. Recidivism - defined more broadly to include police contacts of various kinds and not only arrests – should be included among the outcomes analyzed, both for diverted offenders and for a matched or synthetic control group.

The use of risk assessment instruments in policing contexts can be further informed by examination of current police practice. The evaluation of the use of lethality assessments in policeinvolved incidents of domestic violence provides one opportunity. Used as a strategy to prevent serious injury and homicide, lethality assessment programs (LAP) typically provide a method for police officers to identify victims of domestic violence at high risk for future serious or lethal injury by their intimate partners and connect these individuals to local domestic violence services (Maryland Network Against Domestic Violence, 2011). While there has been limited evaluation of the impact of lethality assessments, the studies that exist highlight several positive effects. For example, research demonstrates high levels of sensitivity of a lethality screen used in one Southwestern state in predicting severe intimate partner violence (Messing et al., 2017). Additionally, a recent quasi-experimental evaluation of the Oklahoma LAP found that women identified by officers as high-risk who spoke to domestic violence service advocates were more likely to seek services and take protective actions (e.g., remove or hide partner's weapons; applying for/receiving protection orders, seeking medical attention) both immediately following the intervention and several months after (Messing et al., 2015a; Messing, Campbell, & Wilson, 2015b). Furthermore, post-intervention, the frequency and severity of domestic violence were

lower for women who had participated in the LAP intervention (Messing et al., 2015a). Although not without weakness (see, e.g., Grant & Cross-Denny, 2017; Klein, 2012), lethality assessments demonstrate the feasibility and utility for risk assessment administered by police officers in the field.

Positive findings regarding the development and use of risk assessment tools in criminal justice decision-making encourage the adoption of these instruments across the system. Labeled as a "best practice," these tools are viewed as a means to increase public safety, reduce crime, reduce racial disparities in criminal just decision-making, and make effective, fair, and efficient use of public resources (Bechtel et al., 2017; Clark & Henry, 2001; LJAF, 2013). The development and adoption of risk assessment tools to policing contexts should be informed by the substantial past experiences of implementation in the pretrial and correctional areas of criminal justice. Specifically, research suggests that, in practice, the success of risk assessment depends heavily on the context and details of implementation (Stevenson, 2017). It is imperative to adopt and implement risk assessments that fit the needs of the jurisdiction and minimize the introduction of unintentional biases (Moore & Padavic, 2011). Additionally, these tools should be validated on the local population (Mamalian, 2011). Furthermore, a full implementation plan is critical in ensuring fidelity to the risk assessment model. This plan should include processes to promote sustainability (e.g., "train the trainer"), quality (Bechter et al., 2017), and fairness.

Notably, the development and implementation of risk assessment tools in policing should be accompanied by the careful examination of relevant data to evaluate assessment outcomes. This process can facilitate the identification of potential gaps within or biases produced by the tools. In particular, evaluators should be sensitive to unintended disparities in outcomes generated by risk assessment. Furthermore, researchers and police executives should adopt a "deliberately transparent approach" regarding both the measures and algorithms used in assessment (Laura and John Arnold Foundation, 2013). Ultimately, these efforts will require willingness among researchers and police executives to learn from both success and failure and to share those experiences with the field. Collectively, these efforts can work to improve risk-based decision-making in policing, creating evidence-based, data-driven assessment tools that are fair, objective, and racially just.

C. Recommendations

It is a seemingly simple proposition that it is better for police to divert very low-risk offenders from the justice system, in which their involvement may have criminogenic effects, and to divert those with behavioral health and/or criminogenic needs away from the justice system and toward supports and services that can better address their needs. It is not at all simple, however, to make that proposition a reality. Alternatives to arrest can take many different forms, not all of which are equally acceptable to street-level personnel. Well-founded diversion decisions require information that officers in the field typically lack and cannot easily acquire. As a consequence, in making discretionary decisions to divert either formally, within the umbrella of a diversion program, or informally as a matter of routine practice, officers may divert those who should not be diverted or choose not to divert those for whom diversion would be effective. Further, diversion also requires that other agencies, which deliver services to diverted offenders, adopt effective intervention methods and implement them with fidelity to intervention models. Finally, police and other

agencies must forge collaborative relationships that transcend different and even conflicting priorities and orientations, as well as histories of interorganizational antagonisms, in some instances, and opposition from segments of the larger community.

Many police executives not only appear to be poised to accept these complicated challenges, but a large number have proceeded to adopt and implement police-led diversion programs. Existing research provides a base for the general rationale of diversion programs, but not for the design and management of the programs: the target population and details about eligibility; the extent to which diversion decisions should be made based on officers' discretion and how, if at all, that discretion will be structured or guided; the preparation of officers to execute their role; the nature of the information to be collected about the cases that officers choose to divert or not divert and the extent and form of supervisory oversight; even the level of involvement that officers should have in shaping the program's protocols. Furthermore, the efficacy with which service interventions are delivered to program clients is critical for programmatic success and also beyond the control of police agencies; it is likely shaped by the institutional histories and contemporary leadership of collaborating service organizations.

Based on this review, we offer several conclusions regarding the state of research and recommendations for work in the future:

- We know little about the context of contemporary police decision-making. The most critical research need, in our estimation, is to reestablish this foundation of research. Large-scale studies using systematic social observation (SSO) or some comparable data collection strategy need to be employed. The introduction of body worn cameras in police agencies across the country presents an important, cost-effective opportunity for rigorous data collection and analyses of police-civilian interactions and officer decision-making that cannot be routinely captured by other data sources.
- Despite the development and proliferation of conceptually sound alternatives to arrest, we
 know little about the long-term outcomes, unintended consequences, or systematic problems
 of implementation for such programs. Lessons from research concerning the unintended
 consequences of mandatory arrest policies for domestic violence, or juvenile diversion
 approaches that led to systemic net widening, highlight the importance of understanding these
 intricacies. To address this gap in knowledge, future research should include well-designed,
 multi-method process evaluations and experimental or quasi-experimental outcome
 evaluations.
- We argue that it is possible to simultaneously reduce crime and rates of arrest and incarceration (Engel et al., 2017). To accomplish this goal, police must re-conceptualize arrest from an "output" or measure of police productivity, to an "outcome" for citizens that has associated costs and collateral consequences. Further, police executives and field supervisors should guide officers to minimize their view of arrest as the primary means to "handle situations" (Bittner, 1967), and work to support appropriate alternatives. This shift away from arrest and toward alternatives to criminal justice processing, however, will require both a change in police culture, along with the provision of a comprehensive set of alternatives for officers to use. This will also necessitate a managerial shift in how police agencies measure performance, process,

activities, and productivity beyond simple arrest rates both for internal and external accountability (see Moore & Braga, 2003).

The push for greater use of alternatives to arrest is based on a simple proposition: It is better to divert low-risk offenders away from the justice system and toward the supports and services that can better address those with behavioral, health, and/or criminogenic needs. Successful implementation of such ideas, however, can prove difficult. Regardless, many police executives are poised to accept the challenges of police-led diversion programs. While existing research provides a base for the rationale of this type of diversion, much less is known about the effective design and management of the programs. Police-academic partnerships and the development of evidence-based practices can help to fill this gap in knowledge. Specifically, the examination of existing initiatives represents an opportunity to learn much more about what works, and thereupon to better inform further developments of alternatives to arrest. It is critical that we work to fill these existing gaps in knowledge with emerging research to help drive sound policy and practice.

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