

# UC Irvine

## UC Irvine Previously Published Works

### Title

Do progressive prosecutors increase crime? A quasi-experimental analysis of crime rates in the 100 largest counties, 2000–2020

### Permalink

<https://escholarship.org/uc/item/5xg7n75x>

### Authors

Petersen, Nick

Mitchell, Ojmarrh

Yan, Shi

### Publication Date

2024

### DOI

10.1111/1745-9133.12666

Peer reviewed

## ORIGINAL ARTICLE

# Do progressive prosecutors increase crime? A quasi-experimental analysis of crime rates in the 100 largest counties, 2000–2020

Nick Petersen<sup>1</sup>  | Ojmarrh Mitchell<sup>2</sup> | Shi Yan<sup>3</sup> 

<sup>1</sup>Department of Sociology & Criminology, University of Miami, Coral Gables, Florida, USA

<sup>2</sup>Department of Criminology, Law and Society, University of California, Irvine, California, USA

<sup>3</sup>School of Criminology and Criminal Justice, Arizona State University, Phoenix, Arizona, USA

## Correspondence

Nick Petersen, Department of Sociology & Criminology, University of Miami, 5202 University Dr., Coral Gables, FL 33146, USA.

Email: [npetersen@miami.edu](mailto:npetersen@miami.edu)

## Funding information

University of Miami Provost Research Award, Grant/Award Number: 2023-3733

## Abstract

**Research summary:** In recent years, there has been a rise in so-called “progressive prosecutors” focused on criminal justice reforms. Although there has been considerable debate about the relationship between progressive prosecution policies and crime rates, there has been surprisingly little empirical research on the topic. Building on the limited extant research, we examined whether the inauguration of progressive prosecutors in the nation’s 100 most populous counties impacted crime rates during a 21-year period (2000 to 2020). After developing an original database of progressive prosecutors in the 100 largest counties, we used heterogeneous difference-in-differences regressions to examine the influence of progressive prosecutors on crime rates. Results show that the inauguration of progressive prosecutors led to statistically higher index property (~7%) and total crime rates (driven by rising property crimes), and these effects were strongest since 2013—a period with an increasing number of progressive prosecutors. However, violent crime rates generally were not higher after a progressive prosecutor assumed control.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Authors. *Criminology & Public Policy* published by Wiley Periodicals LLC on behalf of American Society of Criminology.

**Policy implications:** Despite concerns that the election of progressive prosecutors leads to “surging” levels of violence, these findings suggest that progressive-oriented prosecutorial reforms led to relatively higher rates of property crime but had limited impact on rates of violent crime. In fact, in absolute terms, crime rates fell in jurisdictions with traditional and progressive prosecutors. Yet, relative property crime rates were greater after the inauguration of progressive prosecutors. Given that prior research shows progressive prosecutors reduce mass incarceration and racial inequalities, our findings indicate that higher property crime rates may be the price for these advancements.

**KEYWORDS**

courts, crime, criminal justice reform, progressive prosecutors, reformist prosecutors

In response to growing concerns about mass incarceration in recent decades, a cadre of so-called “progressive prosecutors”<sup>1</sup> have been elected on a platform emphasizing reducing incarceration rates (i.e., decarceration). These progressive prosecutors differ from more traditional “law-and-order” prosecutors, focusing on harsh punishments to combat crime by emphasizing decarceration policies such as diversion from prison/jail, decriminalization of low-level drug crimes like marijuana possession, and decreased use of mandatory minimum sentences. One notable example is Philadelphia District Attorney Larry Krasner, who sought to “end our addiction to mass incarceration” by expanding alternatives to prosecution, ending overly punitive sentences, and abolishing money bail, among other policies (Krasner, 2022). On the other hand, conservatives have heavily criticized progressive prosecutors for their “soft-on-crime” policies that promote “lawlessness” and fuel rising levels of crime and violence (Smith & Stimson, 2022). Criticism of progressive prosecutors reached new heights with the recall of San Francisco’s elected District Attorney Chesa Boudin (Holland & Zeidman, 2023), impeachment proceedings of Larry Krasner by Pennsylvania’s legislature (MacDonald, 2022), and the removal of State Attorneys Andrew Warren and Monique Worrell by Governor DeSantis in Florida (Sachs, 2023).

Despite the ongoing debate concerning progressive prosecutors and crime, surprisingly little scholarship exists on the topic. The limited extant research focuses on crime data from a single city within a progressive prosecutor’s jurisdiction, employs narrow timeframes, and relies on theoretically and empirically imprecise definitions of progressive prosecutors. Since prosecutors are typically elected at the county level (Bazon, 2020), analyses of crime data from a single city within a progressive prosecutor’s jurisdiction may offer a limited view of how their policies impact crime across their *entire* jurisdiction (Kaplan et al., 2022). The shorter and more recent time periods used in existing analyses may obscure important trends and disregard early waves of progressive prosecutors and their potential impact on crime in recent decades (Kajeepeta, 2022; Kaplan et al., 2022). Moreover, some studies may lack ecological validity by

relying on unspecified, vague, or imprecise definitions of who constitutes a progressive prosecutor (Kajeepeta, 2022).

Building on important insights from the extant scholarship, we sought to understand whether and to what extent the installment of progressive prosecutors in the nation's 100 most populous counties shaped crime rates during a 21-year period (2000 to 2020). We began by coding the progressiveness of prosecutors elected between 2000 and 2020 in the 100 largest counties. After developing this novel database, we used the inauguration date of progressive prosecutors as a "shock" to measure changes in local crime rates. To do so, we estimated heterogeneous difference-in-differences regressions for violent, property, and overall Part I index crimes in each county. Our results show that relative to jurisdictions that had maintained traditional chief prosecutors, jurisdictions that changed to progressive prosecutors had 7% higher total index crime rates (driven by higher property crime rates), and these effects are strongest from 2013 to 2020. In contrast, violent crime rates were not statistically higher in jurisdictions switching to progressive prosecutors over the entire study period but did experience statistically higher violent crime rates from 2014 to 2016.

## 1 | WHO ARE PROGRESSIVE PROSECUTORS?: DEFINING THE ISSUE

Though an adversarial system, decades of court research have documented the dominating power of prosecutors (Davis, 2007; Sklansky, 2016). At the case level, prosecutors heavily influence sentencing outcomes by determining the charges and plea offers (Gershman, 2011; M. Lynch, 2016, 2018; Wright & Engen, 2006). Empirical studies have found that the charging decisions (including charge reductions or bargaining) would heavily affect final sentencing outcomes (and any extralegal disparities therein) in both presumptive and voluntary guideline jurisdictions (Johnson & Larroulet, 2019; O. Johnson et al., 2022; Starr & Rehavi, 2013). More broadly, chief prosecutors often set policy priorities in their jurisdiction, heavily influencing how the criminal justice system operates (Henry et al., 2023; Wright, 2020). Researchers have named prosecutors as either the driving force (Pfaff, 2017) or the most promising solution (Bazelon, 2020) to mass incarceration and other challenges the criminal justice system faces.

Despite debate about how to define progressive prosecutors, there is a fairly broad consensus that "progressive" prosecutors differ from more "traditional" prosecutors in their focus on reducing mass incarceration and increasing fairness (Bazelon, 2020; Davis, 2019; FJP, 2021; Hessick & Morse, 2019; Hogan, 2022; Levin, 2020; Mitchell et al., 2022). A 2018 report on "21 Principles for the 21st Century Prosecutor," led by Fair and Just Prosecution, has outlined concrete ways for achieving these goals. To reduce the footprint of mass incarceration, they argue, progressive prosecutors can increase diversion usage, de-felonize selected property crimes by increasing the dollar threshold for felony offenses, decriminalize low-level drug possession, and rely less on prison/jail sanctions for technical parole/probation violations. Beyond these recommendations, progressive prosecutors frequently minimize the invocation of harsh sentencing laws, such as enhanced penalties for drug offenses, three-strikes laws, and mandatory minimums (Travis et al., 2014). Many progressive prosecutors also funnel youth and adults suffering from mental illness/addiction out of the correctional systems by emphasizing treatment, civil citations, and decreased detention among these groups. Progressive prosecutors often strive to increase fairness within the system by reducing racial/ethnic disparities, removing poverty traps (e.g., reducing court fines or cash bail), and bolstering system integrity by establishing conviction

integrity review units, prosecuting police misconduct, and broadening discovery processes. To track their performance toward these goals, progressive prosecutors typically rely on data-driven or “smart justice” approaches, such as data tracking systems, calculating incarceration costs, and implementing charging standards.

This framework dovetails with conceptual definitions of progressive prosecutors in the literature. Legal scholars define progressive prosecutors as those who “ran on ending mass incarceration” (Fleming, 2020, p. 1) or “championed or adopted prosecutorial practices intended to make the criminal justice system less punitive” (Hessick & Morse, 2019, p. 1540). Bellin (2020, p. 245) distinguishes “progressive” and “by-the-book” prosecutors based on whether they seek to “temper the overly punitive dynamics of American criminal justice,” and Levin (2020, p. 1417) characterizes “anti-carceral” prosecutors as “progressive” because they act as a “powerful antidote to mass incarceration.” Likewise, Davis (2019, p. 22) emphasizes that “Progressive prosecutors are committed to reducing mass incarceration and racial disparities in the criminal justice system.” Davis also views reforms surrounding bail, charging, the death penalty, mandatory minimums, and drug treatment as central to the mission of progressive prosecutors.

## 2 | THEORETICAL MECHANISMS LINKING PROGRESSIVE PROSECUTION POLICIES AND CRIME

Critics of progressive prosecutors argue their policies increase crime by weakening the deterrent and incapacitation effects of harsh punishments (Hogan, 2022). Deterrence theory emphasizes the certainty, celerity, and severity of sanctions in shaping the choice calculations of potential offenders (Zimring & Hawkins, 1995). As a result, deterrence theory argues more punitive penalties, like incarceration, are negatively associated with future offending and overall rates of crime (Nagin, 2013). In contrast, incapacitation focuses on crime interruption. Based on either selective or collective incapacitation, incarcerating more people and incarcerating them for longer helps keep streets safer by removing would-be offenders from free society for the duration of their incarceration (Walker, 2014; Zimring & Hawkins, 1995).

Given that progressive prosecutors advocate for less punitive alternative sanctions, these efforts could send a “message to the streets” that potential offenders will receive lenient treatment if caught or diminish incapacitation because “would-be offenders realize that they will not be prosecuted for certain offenses” (Hogan, 2022, p. 516). In addition, de-prosecution policies could lead police to de-prioritize arrests for certain types of offenses, given the tight working relationship between police and prosecutors (Gwinn & O’Dell, 1993; Holleran et al., 2010; O. Johnson et al., 2022; Spohn & Tellis, 2019). If prosecutors are reluctant to file charges for certain crimes, demoralized police officers may make fewer arrests, reducing the efficacy of deterrent effects (Green & Roiphe, 2020, 2023; Hogan, 2022; Wright, 2020). In sum, critics argue that progressive prosecution policies fuel crime by either altering the behaviors of potential offenders or police officers’ arresting practices.

By contrast, the coercive mobility thesis contends that high levels of incarceration lead to increased crime rates by negatively affecting community cohesion and stability (for a review, see Clear, 2009). Specifically, high levels of incarceration disrupt informal systems responsible for community social organization and stability, including families, local economies, and civic participation; in turn, these destabilizing effects lead to higher crime rates (Clear, 2009). While the coercive mobility thesis has typically been used to explain the relationship between high incarceration and crime rates, more recent scholarship has theorized that reductions in incarceration

rates can reduce crime (Clear, 2021; Clear & Frost, 2020). Thus, according to this perspective, progressive prosecutors' focus on alternatives to incarceration and minimizing the harmful effects of mass incarceration may be linked to falling crime rates.

Notably, and in line with the coercive mobility thesis, several progressive prosecutors have argued that overly harsh punishments increase crime rates by destabilizing families, economies, and civic systems.<sup>2</sup> Larry Krasner argues that “traditional prosecution’s grievous missteps don’t just fail to prevent crime—they actually cause it by stealing resources from crime prevention programs that restore communities. Traditional prosecution breaks the people it should protect” (Krasner, 2021, p. 8). Similarly, Andrew Warren remarks that “The system perpetuates criminal activity” (FJP, 2021, p. 4). And Kimberly Foxx claims that under her tenure, “we’ve seen violent crime go down as well as incarceration rates—and our communities are safer because of it” (Foxx, n.d.). Consistent with the coercive mobility thesis, these prosecutors note high incarceration rates increased crime by breaking down local communities and re-directing public funds away from institutions that decrease crime (e.g., schools and job training).

Like any policy change, the potential effects of progressive prosecution policies on crime would likely take time to unfold (Travis & Waul, 2016; Walker, 2014). That is, if critiques of progressive prosecutors are correct in claiming less punitive prosecution strategies send signals to would-be lawbreakers that encourage offending because of reduced punishment severity, then it would take some time for new sanctioning patterns to be established and time for the message of reduced punitiveness to be received (Hogan, 2022; Nagin, 2013). Likewise, if progressive prosecution policies reduce the destabilizing effects of punitive sanctioning regimes on communities' ability to exert informal social controls, it will take communities some time to rebuild their informal social controls (Clear, 2021; Clear & Frost, 2020). Thus, empirical assessments of the relationship between changes in crime following the inauguration of progressive prosecutors should consider the possibility of time-varying effects, as we do in this study.

Still, other theoretical perspectives, such as structural theories of crime, suggest that progressive prosecution efforts will have a limited effect on crime rates, net of structural features (Travis & Waul, 2016; Walker, 2014; Zimring & Hawkins, 1995). According to these perspectives, the influence of harsh criminal justice policies on crime has been vastly overstated, as many of the structural forces (e.g., poverty, concentrated disadvantage, residential instability, community demographics) are more proximate causes of crime, which are simply beyond the reach of criminal justice institutions and actors (for a review, see Sampson, 2012). Even among researchers emphasizing the deterrent and incapacitation effects of mass incarceration, they too acknowledge that structural factors explain the lion's share of changes in crime rates (Levitt, 2004; Levitt & Miles, 2006). This is not to say that criminal justice interventions, including mass incarceration, do not affect crime. Instead, their importance may be overshadowed by more proximate structural causes of crime. Therefore, to the extent these structural forces are the main drivers of crime, progressive prosecution policies may have no meaningful impact on crime rates after controlling for these larger contextual factors.

### 3 | PRIOR RESEARCH ON PROGRESSIVE PROSECUTORS AND CRIME

Only a handful of studies have empirically examined the relationship between progressive prosecutors and crime trends.<sup>3</sup> Most of these studies have focused on changes in crime in a single jurisdiction after the inauguration of a progressive chief prosecutor or implementation of

progressive prosecution policies. One prominent example of such studies is Hogan's (2022) examination of de-prosecution policies typically associated with progressive prosecutors and homicide trends in Philadelphia from 2010 to 2019. To construct a donor pool of cities subjected to similar de-prosecution policies for his difference-in-differences analysis, Hogan (2022) used media searches to classify chief prosecutors in the 100 most populous cities as "traditional," "middle," or "progressive" along several dimensions. The "progressive" classification served as a proxy for de-prosecution policies, which Hogan (2022) used to identify a donor pool of cities with similar de-prosecution policies. After constructing a synthetic control for Philadelphia, Hogan estimated that de-prosecution policies associated with the inauguration of progressive District Attorney Larry Krasner led to a statistically significant increase of 74 additional homicides per year, from 2015 to 2019.

There has been considerable criticism of Hogan's (2022) study of de-prosecution policies and crime in Philadelphia. Kaplan et al. (2022) reproduced Hogan's (2022) using a longer pre-intervention timeframe, homicide rates instead of counts, and implementing other important methodological changes. After correcting for these "critical errors," Kaplan et al. (2022, p. 1) find no statistically significant effect, noting that "these flaws are fatal to the author's findings and therefore the study should not be used to inform criminal justice policy." Hogan and Kaplan et al. published additional critiques of each other. In particular, Kaplan et al. (2022) re-analyzed the data based on Hogan's criticism of their replication, continuing to find Philadelphia's de-prosecution policies had no significant effect on homicide rates. Hogan (2023, p. 88) subsequently refuted these claims, arguing that Kaplan et al.'s (2022) critiques have an "ideological basis" and that once the errors in their analysis are corrected, the results show that de-prosecution policies in Philadelphia have larger positive effects on homicides than suggested in the original article. Thus, Hogan (2023) contends that data errors in Kaplan et al.'s (2022) analysis undermine their criticism of his work.

Fewer studies have investigated the effects of progressive chief prosecutors on crime using multiple jurisdictions. One such study is that of Agan et al. (2021a). Based on unspecified criteria, these authors acquired a list of 60 progressive prosecutors elected between 2015 and 2021 from an unnamed organization. Agan et al. (2021a) obtained crime data for 35 of the 60 listed cities (58%). The results of their heterogenous difference-in-differences models indicated that the installation of progressive prosecutors did not significantly predict crime rates in the cities examined. Another study by Foglesong et al. (2022) used Hogan's (2022) classification of chief prosecutors as "progressive" to conduct two separate analyses concerning the relationship between progressive prosecutors and crime rates. First, they examined homicide and robbery rates in 65 cities from 2015 to 2019 and homicide rates before/after the election of progressive prosecutors in Philadelphia, Chicago, and Los Angeles. Second, Foglesong et al. (2022) descriptively analyzed homicide rates in California and Florida counties from 2014 to 2021. Based on these analyses, Foglesong et al. (2022) conclude that there is "no evidence to indicate that progressive prosecutors caused or exacerbated the increase in homicide during or before the pandemic" (p. 0).

#### 4 | BUILDING UPON AND EXTENDING PRIOR RESEARCH

Our study builds upon this prior research in several important ways. Foremost, every study but Foglesong et al. (2022) focused on cities rather than counties. However, Foglesong et al.'s (2022) descriptive analysis of counties in California and Florida is limited to a narrow range of crimes (homicide/robbery) and time periods (2014–2021). Since prosecutors are typically elected at the

county level (Arora, 2018; Bazelon, 2020; McCannon, 2013; Wright, 2008), prior research focusing on progressive prosecutors and city-level crimes ignores the realities of criminal justice in the United States. Arora (2018) makes this point by arguing “As chief prosecutors for their counties, DAs set charging and sentencing guidelines for their entire prosecutorial staff. . . It is natural, therefore, to examine their influence on sentencing practices of *the county as a whole*” (p. 5, emphasis added). Likewise, Kaplan et al. (2022, p. 7) assert “the county is a more valid unit of observation given that DAOs prosecute cases within counties not cities.”

In line with prior studies examining the effects of prosecutorial/judicial elections on various outcomes, we assessed the influence of progressive prosecutor elections on crime rates at the county level (Arora, 2018; Bandyopadhyay & McCannon, 2014; DeAngelo & McCannon, 2020; Krumholz, 2019; Lim & Snyder, 2012; McCannon, 2013). Limiting analyses to major cities within a prosecutor’s jurisdiction may bias estimates of progressive prosecution policies on crime rates if these effects differ across cities within a county. By investigating crime rates among *all* the law enforcement agencies within a county, our study offers a more complete picture of the relationship between crime rates and progressive prosecution policies across a prosecutor’s jurisdiction.

Much of the previous research has also relied on narrow timeframes or ignored the predecessors of more recent progressive prosecutors and their potential role in shaping crime rates. Kaplan et al. (2022) and Kajeepeta (2022) have criticized Hogan (2022) for using an arbitrarily short pre-treatment period of only 5 years before Larry Krasner was elected Philadelphia’s lead prosecutor. Likewise, Agan et al. (2021a) looked at a relatively narrow time period of 6 years (2015–2021). Many of these studies also ignore that the predecessors of current/recent progressive prosecutors may have been progressive themselves. For example, Agan et al. (2021a) treat the inauguration of Chesa Boudin as San Francisco County’s prosecutor in 2020 as a progressive “shock” to local prosecution policies. However, San Francisco County has a long history of electing progressive prosecutors like George Gascón and Kamala Harris (Covert, 2021; Harris & Hamilton, 2010; Levin, 2020). Therefore, San Francisco County’s progressive prosecution policies did not begin with the inauguration of Boudin but instead represented a continuation of progressive principles. To address the possibility of progressive predecessors, we classified the predecessors of each progressive prosecutor in office in 2020, dating back to 2000. Further, given prior research indicating that short pre-intervention periods can bias difference-in-differences estimates (Abadie, 2021; Abadie et al., 2010) and the effects of progressive prosecution may unfold over time, we employ a period of analysis lasting 21 years. While there may have been external factors that impacted prosecutor offices during these 21 years (e.g., Great Recession, Black Lives Matter movement, etc.), such factors are accounted for in the DiD analysis with each county effectively acting as its own control (Agan et al., 2021a; Callaway & Sant’Anna, 2021; Wing et al., 2018).

Our coding scheme is more transparent, expansive, and true to the concept of progressive prosecutors than existing measures. For instance, a limitation of Agan et al.’s (2021a) measure of progressive prosecutors is that it is opaque, as the authors “simply relied on an outside nonprofit’s categorization of progressive prosecutors” with no validation (Hogan, 2022, p. 497). Another measure used by Hogan (2022) that classified chief prosecutors as “progressive” or “traditional,” with the remaining chief prosecutors coded as “middle,” is an improvement in terms of transparency.<sup>4</sup> However, Hogan’s (2022) coding scheme ignores important principles of progressive prosecution identified in the literature, such as using smart/data-driven policies, increasing system integrity, implementing alternatives to criminal justice intervention, and decriminalizing youth. Further, Hogan’s coding of “progressive” prosecutors includes several features that are unrelated to the



concept and principles of progressive prosecution such as “defense/civil rights experience only,” “less than eight years in office,” or “jurisdiction is in a heavily Democratic area” (Kajeepeta, 2022, p. 84). It is unclear, how or why any of these features would necessarily make a prosecutor more progressive (Foglesong et al., 2022; Kajeepeta, 2022). Considering these limitations, we developed a binary, mutually exclusive coding scheme based on a wider breadth of progressive policies.

## 5 | DATA AND METHODS

Data collection and analysis involved three major steps. First, we selected the 100 most populous U.S. counties in 2020 and examined the policies of chief prosecutors in office at that time. We coded whether the policies were indicative of progressive prosecutors based on a detailed coding scheme outlined below. Second, for all prosecutors who took office after 2000, we coded each preceding chief prosecutor in the county dating back to January 1, 2000. This is a vitally important step as it allows us to capture when a jurisdiction switches from a traditional “law-and-order” prosecutor to a progressive. These two steps resulted in a list of progressive prosecutors in the largest 100 counties from January 1, 2000, to December 31, 2020. Third, we linked our progressive prosecutor measures to county-level crime data and ran heterogeneous difference-in-differences analyses to isolate the effect of switching to a progressive prosecutor on crime rates. Our analysis stops at 2020 because national crime statistics switched from the Uniform Crime Reports (UCR) to the National Incident-Based Reporting System (NIBRS)—causing severe under-reporting in 2021 (Foglesong et al., 2022), and the COVID-19 pandemic that started in the United States in the spring of 2020 likely affected crime rates in unique ways not representative of early time periods (Abrams, 2021).

### 5.1 | Sample

We begin by selecting the 100 most populous counties in the United States based on 2020 Census population figures. We examined large, urban jurisdictions as most progressive prosecutors have been elected in such jurisdictions (Bazelon, 2020; Henry et al., 2023; Romero, 2020). This allows us to compare crime trends in urban jurisdictions with and without progressive chief prosecutors and excludes less populous jurisdictions, which may have distinct crime trends.

### 5.2 | Measuring progressive prosecutors and the timing of their inauguration

We used information from official prosecutor websites, media searches, and campaign materials to gather information on the office policies of prosecutors in these counties (for similar approaches, see Hogan, 2022; Mitchell et al., 2022). Drawing from academic and policy literature, we developed a nine-category policy coding matrix with 29 sub-items capturing policies characteristic of prototypical progressive prosecutors (Bazelon, 2020; Davis, 2019; FJP, 2021; Hogan, 2022; Levin, 2020; Mitchell et al., 2022). Relying on information from official websites and media/campaign sources, three undergraduate research assistants coded the progressiveness of chief prosecutors in the 100 largest counties based on these categories. Table 1 lists the 29 sub-items used in the

**TABLE 1** List of progressive policies and sub-items.

- 
1. **Self-proclaimed progressive prosecutor**
    1. Self-proclaimed progressive prosecutor
  2. **“Smart” justice or data-driven approach**
    2. Increased use of data systems for tracking and response
    3. Calculate the cost of incarceration
    4. Implementation of charging standards
  3. **Reducing mass incarceration**
    5. Increased use of or funding for diversion
    6. Reduce jail/prison population
    7. Decrease dollar threshold for theft crimes
    8. Decriminalizing low-level drug possessions
    9. Decreased use of probation/parole
  4. **Removing poverty traps**
    10. Release low-level/non-violent defendants from pretrial detention without cash bail
    11. Reduce the cost/use of cash bail
    12. Decreased use of court fines
  5. **Increasing system integrity**
    13. Create conviction integrity review units
    14. Prosecute police misconduct
    15. Decline prosecution for cases brought by dishonest or unreliable police officers
    16. Broaden discovery process
    17. Increased efforts to expunge and seal criminal records
  6. **Alternatives to criminal justice interventions**
    18. Increased mental health treatment
    19. Increased drug treatment
    20. Using restorative justice programs
  7. **Decriminalizing youth**
    21. Declining to transfer youth to adult court
    22. Issuing citations for youth instead of arresting them
    23. Decreased youth detention
  8. **Reducing inequities**
    24. Reduce racial disparities
    25. Increased attention to immigrant crime victims or immigration concerns for defendants
  9. **Reduced use of harsh punishment**
    26. Decline to prosecute under three-strike laws
    27. Decline to seek death penalty
    28. Decreased use of mandatory minimums
    29. Less punitive sentencing recommendations
- 

coding process and the larger nine-category policy matrix highlighted in bold font. Given that there is no publicly available list of progressive prosecutors (Agan et al., 2021a; Hogan, 2022; Mitchell et al., 2022), the development of this list is a key contribution of our study.

Each of the 29 sub-items was coded based on their presence/absence, with scores then aggregated up to one of the associated nine policy categories to determine the progressiveness of each chief prosecutor. If at least one of the individual sub-items was present for the larger policy category, the chief prosecutor was coded as having satisfied that policy category. For example, if a chief prosecutor were coded as using data tracking systems or calculating incarceration costs, he/she would be coded as satisfying the “smart”/data-driven justice category since these individual sub-items fall within this larger policy category. We rely on these larger nine categories to

define whether a prosecutor is “progressive” rather than the 29 individual sub-items because the larger policy categories better represent broader principles of progressive prosecution that can be achieved in several ways. Stated differently, prosecutors may either rely on data tracking systems or calculate incarceration costs to achieve their broader goals of “smart” or data-driven justice, as each of these sub-items represents one potential avenue for achieving “smart”/data-driven justice. Our focus on broader policy categories is consistent with the fact that prosecutor offices are hyper-local, tailoring policies to the needs of their constituents (Davis, 2019; FJP, 2021; Wright, 2008, 2014). We believe our focus on the nine policy categories better reflects the realities of prosecution in the United States and how individual prosecutor offices may strive to reach their larger policy goals using different mechanisms.

Notably, our coding system demonstrated substantial inter-rater reliability. To assess the inter-rater reliability of the coding, we randomly selected 20 counties and had the three coders review the materials gathered and code each jurisdiction’s policies using the coding matrix. We then calculated Krippendorff’s alpha, a measure of inter-coder reliability applicable to three or more coders. Krippendorff’s alpha was 0.707, showing “substantial” agreement between coders (Landis & Koch, 1977; Zapf et al., 2016).

In consultation with the literature and descriptive statistics, we developed a method for coding whether each chief prosecutor was “progressive” based on results from the nine-category policy matrix. Similar to prior research (Hogan, 2022; Mitchell et al., 2022), we classified chief prosecutors who satisfied six of the nine policy categories as “progressive.” We selected this cut-off because it represents an endorsement of the vast majority (67%) of the total number of progressive policy categories suggested in the extant literature. This cut-off also yields a measure of progressive prosecutors that has considerable face validity, as many of the chief prosecutors we classified as “progressive” have been previously considered progressive by other researchers (Foglesong et al., 2022; Hogan, 2022; Mitchell et al., 2022), policy organizations (FJP, 2021) and criminal justice organizations such as San Francisco (CA), Cook (IL), Hillsborough (FL), Philadelphia (PA), and Suffolk (MA) counties.

We also coded the number of progressive policies endorsed by each preceding chief prosecutor dating back to 2000 to determine whether these predecessors were progressive prosecutors. This process permits us to identify when each jurisdiction first inaugurated a progressive chief prosecutor, which is a required part of the staggered, heterogeneous difference-in-differences analyses used to estimate the effect of progressive prosecutors on crime rates.

Table 2 lists each of the jurisdictions classified as progressive. The table lists the individual policy categories supported by the first progressive prosecutor elected in each jurisdiction using numbers corresponding to the policy categories listed in Table 1 and the total number of progressive policies supported (see Table A1 in the Appendix in the Supporting Information for a frequency distribution of the number of progressive policies endorsed by the earliest progressive prosecutor). Based on our criterion of supporting six or more progressive policy initiatives, 44 (or 44%) of the 100 most populous counties had elected a reform-minded prosecutor by 2020.

Table 3 summarizes the date that a progressive chief prosecutor first took office in the period of interest. These data indicate that four jurisdictions had a progressive prosecutor in office before 2000. Yet, most of the progressive prosecutors (31 out of 44 or 70%) in our sample assumed office after 2010, and 43% (19 out of 44) took office between 2017 and 2020. These findings demonstrate that some places have long had progressive prosecutors, and thus progressive prosecutors are not a new phenomenon; however, the progressive prosecution movement gained momentum after 2010.

**TABLE 2** Earliest progressive prosecutor and their policies (ordered by inauguration date).

County	State	Inauguration <sup>a</sup>	Policy categories <sup>b</sup>	# of policy categories
Multnomah	OR	1981	1,2,3,5,6,8,9	7
Pima	AZ	1996	2,3,5,6,7,8	6
San Francisco	CA	1996	1,2,3,5,6,7,8,9	8
Norfolk	MA	1999	2,3,4,5,6,7,8,9	8
Essex	MA	2003	3,4,5,6,7,9	6
San Diego	CA	2004	3,4,5,6,8,9	6
Montgomery	MD	2007	1,2,3,5,6,7,8,9	8
Milwaukee	WI	2007	2,3,4,6,8,9	6
Montgomery	PA	2008	1,2,3,5,6,7	6
King	WA	2008	1,2,3,4,6,7,8,9	8
Fairfax	VA	2008	1,3,4,6,7,8	6
Alameda	CA	2010	1,2,3,4,6,7,8	7
New York	NY	2010	1,3,4,5,6,8	6
Salt Lake	UT	2011	3,4,5,6,7,8,9	7
Santa Clara	CA	2011	1,2,3,4,5,6,7,8,9	9
Clark	NV	2012	1,3,4,5,6,7	6
Lake	IL	2013	1,2,3,5,6,8	6
Middlesex	MA	2013	1,3,4,5,6,7,8	7
Kings	NY	2014	1,2,3,4,5,6,8	7
San Joaquin	CA	2015	1,2,3,5,6,8,9	7
Davidson	TN	2015	1,2,3,4,5,6,7,8,9	9
Wake	NC	2015	3,4,5,6,7,8	6
Bronx	NY	2016	2,3,5,6,8,9	6
Westchester	NY	2016	1,2,3,4,5,6,7	7
Bernalillo	NM	2017	1,2,3,5,6,9	6
Duval	FL	2017	1,2,3,5,6,7	6
Denver	CO	2017	2,3,4,5,6,7,8,9	8
Cook	IL	2017	2,3,4,5,6,8	6
Orange	FL	2017	2,3,4,5,6,7,9	7
Harris	TX	2017	2,3,4,5,6,7,8	7
Jefferson	AL	2017	2,3,4,6,8,9	6
Hillsborough	FL	2017	2,3,4,5,6,7,8,9	8
Suffolk	NY	2018	2,3,4,5,6,7,8	7
Contra Costa	CA	2018	1,2,3,4,5,6,7,8,9	9
Mecklenburg	NC	2018	1,3,4,5,6,7,8,9	8
Philadelphia	PA	2018	1,2,3,5,6,7,8,9	8
Bexar	TX	2019	2,3,4,7,8,9	6
St. Louis	MO	2019	1,2,3,4,5,6,7,8,9	9
Suffolk	MA	2019	2,3,4,5,6,7,8	7
Fort Bend	TX	2019	2,3,4,5,6,7,8	7
Dallas	TX	2019	2,3,4,5,6,8,9	7

(Continues)

TABLE 2 (Continued)

County	State	Inauguration <sup>a</sup>	Policy categories <sup>b</sup>	# of policy categories
Prince Georges	MD	2019	2,3,4,5,6,7,8,9	8
Marion	IN	2020	1,3,4,5,6,7,8	7
Queens	NY	2020	1,2,3,4,5,6,8,9	8

Note: Jurisdictions were deemed “progressive” if a chief prosecutor endorsed six or more policy categories. Jurisdictions above the dotted line were excluded from the analyses because the first progressive prosecutor was inaugurated prior to 2000. Shaded jurisdictions were excluded due to having more than one chief prosecutor responsible for felony cases.

<sup>a</sup>Most prosecutors were inaugurated in January. When prosecutors took office in other months, the inauguration year was rounded to the nearest full year.

<sup>b</sup>Number of progressive policy categories endorsed by the earliest progressive prosecutor in a particular jurisdiction.

TABLE 3 Inauguration year for progressive prosecutors.

Year <sup>a</sup>	Frequency	Percent	Cumulative
1981	1	2.27	2.27
1996	2	4.55	6.82
1999	1	2.27	9.09
2003	1	2.27	11.36
2004	1	2.27	13.64
2007	2	4.55	18.18
2008	3	6.82	25.00
2010	2	4.55	29.55
2011	2	4.55	34.09
2012	1	2.27	36.36
2013	2	4.55	40.91
2014	1	2.27	43.18
2015	3	6.82	50.00
2016	2	4.55	54.55
2017	8	18.18	72.73
2018	4	9.09	81.82
2019	6	13.64	95.45
2020	2	4.55	100.00

<sup>a</sup>Most prosecutors were inaugurated in January. When prosecutors took office in other months, the inauguration year was rounded to the nearest full year.

### 5.3 | County crime rates

To calculate county-level crime rates for the 100 most populous counties, we obtained publicly available national UCR data (Kaplan, n.d.). These data report crime statistics at the agency level for calendar years 2000–2020. Given that our interest lies in estimating the effect of elected prosecutors on local crime, we removed law enforcement agencies that rarely fall under the jurisdiction of local prosecutors—specifically, federal and tribal agencies. We then calculated annual county crime rates per 100,000 by summing the crime counts for each county and year, dividing by the county population, and multiplying by 100,000.

We examined the resulting data set county by county for evidence of irregularities. When a data irregularity was found, we compared the annual county crime statistics calculated using the national UCR data to state annual crime reports. Generally, our county crime statistics were very similar to those reported in various state crime reports. However, there were several anomalies in the county crime rates calculated using the national UCR data; in these instances, we substituted crime statistics reported in state crime reports. For instance, in the national UCR data, there was a 54% decrease in crime in Florida counties between 2017 and 2018, clearly an abnormally large drop in crime. Therefore, we cross-referenced Florida county crime statistics calculated from the national data to those reported by the state of Florida. This comparison revealed that there was no such drop in the state reports. In such instances, we substituted the county crime statistics reported by the state. We also examined the national UCR data for unusually low or high county crime statistics by cross-referencing the state reports. When the state crime reports did not verify UCR crime statistics, we used the state crime statistics to calculate county-level crime rates. As an illustration, four counties from the New York City area (Bronx, Kings, New York, and Queens counties) had unusually small crime statistics in the national UCR data. These irregularities are attributable to crime statistics from key law enforcement agencies, such as the New York City Police, which are absent in the national UCR data. For these four New York counties, more accurate crime statistics were available from the state reports, which we used to calculate crime rates for the counties. This meticulous process produced a data set without obvious irregularities and free of missing data. See Table A3 in the Appendix in the Supporting Information for a more detailed discussion of this process.

Three UCR index crime measures were of interest: property, violence, and total index crime rates per 100,000. We used these measures as dependent variables to determine whether the relationship between progressive chief prosecutors and crime rates varies by type of crime.<sup>5</sup> While some research on progressive prosecutors and crime has focused on specific offenses like homicide (Agan et al., 2021a; Foglesong et al., 2022; Hogan, 2022), we analyze index crimes given their utility for capturing general crime trends that may be of interest to the public (Blumstein & Wallman, 2000, 2006; Gove et al., 1985; J. P. Lynch & Addington, 2006). Indeed, public concern around the influence of progressive prosecutors on public safety encompasses serious crime more generally rather than being limited to specific crime types (Bazelon, 2020; Elinson & Gershman, 2022; Smith & Stimson, 2022).

## 5.4 | Analytic technique

To estimate the effect of changing from a traditional to a progressive chief prosecutor on crime, we applied heterogeneous difference-in-differences (DiD) analysis. Conceptually, this analysis compares county crime rates after a progressive prosecutor took office to the crime rate in the same county before they were inaugurated, and this difference is compared to crime trends in other counties that had traditional prosecutors throughout the time period of interest. An important feature of the analysis is that progressive chief prosecutors assumed their leadership positions at varying times, as evidenced in Table 3. The lack of a common intervention time makes standard DiD analyses based on two-way fixed effects regression, and even extensions of this approach that accommodate “staggered” interventions, problematic as they estimate a homogeneous or common treatment effect that is prone to bias (Borusyak et al., 2024; Goodman-Bacon, 2021; Roth et al., 2023; Sun & Abraham, 2021).

To address this issue, we employed heterogeneous DiD analyses based on Callaway and Sant'Anna's (2021) method. Unlike two-way fixed effects models that produced biased treatment effects when treatment timing varies, Callaway and Sant'Anna's approach is unbiased as long as this model's assumptions are valid (e.g., see Borusyak et al., 2024; Goodman-Bacon, 2021; Sun & Abraham, 2021). This approach also allows average treatment effects on the treated to vary over time. As discussed in de Chaisemartin and D'Haultfoeuille (2023), compared to competing DiD models for staggered treatments, Callaway and Sant'Anna's method is more robust to various statistical challenges (e.g., serial correlation, minor deviations from parallel trends). For these reasons, Callaway and Sant'Anna's (2021) method has become the standard for heterogeneous DiD models with binary treatments.

Valid application of Callaway and Sant'Anna's (2021) model rests on several assumptions (see Callaway & Sant'Anna, 2021, pp. 202–205; Roth et al., 2023). Assumption 1 requires that all units that were eventually treated (i.e., elected a progressive prosecutor) were untreated (i.e., did not have a progressive prosecutor) at the beginning of the observation period and “that once a unit becomes treated, that unit will remain treated” (Callaway & Sant'Anna, 2021, p. 203). In other words, all counties included in the analyses must have had a traditional prosecutor in 2000, and once a county changes to a progressive prosecutor, it remains in that status. Assumption 2 requires panel data (i.e., data on the same set of units in multiple time periods). Assumption 3 requires “limited treatment anticipation,” meaning that “the treatment has no causal effect before its implementation” (Roth et al., 2023, p. 2222). In the present case, this assumption requires that crime did not change in anticipation of a progressive prosecutor taking office. Most crucially, Assumption 4 requires that counties eventually treated would have had similar crime trends if not for exposure to the treatment; this is known as “the parallel trends” assumption. More formally, this assumption states that “the average outcome of the treated and untreated populations would have evolved in parallel if treatment had not occurred” (Roth et al., 2023, p. 2221). The first two assumptions clearly hold in our application, and below, we show the tenability of the third and fourth assumptions. Under these assumptions, heterogeneous DiD analyses estimate the causal effects of the intervention on the outcome of interest. We utilized the user-written *csdid* command in Stata to implement this analytic approach (Callaway & Sant'Anna, 2021; Sant'Anna & Zhao, 2020).

To prepare for the heterogeneous DiD analyses, we made other important adjustments to the analytic data set. First, we removed counties with a progressive chief prosecutor before our observation period (i.e., before January 1, 2000) to meet the first model assumption. This requirement removed four counties from the sample (see Table 2 for a list of these jurisdictions). Second, we removed three counties that had more than one chief prosecutor responsible for prosecuting felony cases—St. Louis (MO), Baltimore (MD), and Jefferson (AL). Including these jurisdictions could be problematic because our crime data cover whole counties, and thus these three counties were removed from the DiD analyses. After these exclusions, 93 counties remained, 38 of which elected a progressive prosecutor between 2000 and 2020 and 55 counties did not. Each jurisdiction contributed 21 years of crime data. Thus, the primary analytic sample contained 1953 county-crime year observations ( $93 \times 21 = 1953$ ).

Like any analytic strategy, ours has some shortcomings. Given our focus on larger counties, the results may be less generalizable to smaller counties. Like prior research (Hogan, 2022; Mitchell et al., 2022), our coding scheme focuses on stated prosecution policies, not actual practice. Although we recognize some policy slippage may exist (Foglesong et al., 2022), it is important to focus on the stated policies of progressive prosecutors, particularly from a deterrent perspective, since deterrent messaging (or lack thereof) may be equally, if not more, influential than actual

policy implementation (Hogan, 2022; Nagin et al., 2009). Subsequent studies should explore alternative ways of classifying prosecutors as progressive based on additional factors such as policy outcomes. Though beyond the scope of this study, future research should also examine whether the election of progressive prosecutors shapes crime rates by influencing policing behaviors, creating a “feedback loop” between citizen-initiated crime reporting and arrest rates (Green & Roiphe, 2020, 2023; Hogan, 2022, p. 511; Wright, 2020).

In addition, the UCR suffers from incomplete data. While we use data from individual states to help fill in missing data holes, relying on UCR data also means that we cannot explore crime trends beyond 2020 due to major problems with the switch to NIBRS (Foglesong et al., 2022). Since the largest 100 counties include over 3000 law enforcement agencies, collecting data from individual departments would be time-prohibitive. Therefore, relying on UCR data allowed us to investigate the influence of progressive prosecution policies on crime rates among all the law enforcement agencies within a prosecutor’s jurisdiction.

## 6 | RESULTS

### 6.1 | Comparing counties with progressive and traditional prosecutors

As a starting point, we compared county characteristics of the 93 urban jurisdictions included in our analytic sample based on 2000 data—before any of the progressive prosecutors in our analytic sample took office—to determine whether there were preexisting differences between counties with traditional versus progressive prosecutors (see Table 4). Counties that eventually elected a progressive chief prosecutor did not differ meaningfully from counties that continually had traditional chief prosecutors on most measured characteristics. Both types of counties had similar percentages of residents who were male, Hispanic (of any race), aged 15 to 29, foreign-born, on public assistance, and living in poverty. These county types also did not differ in median household income or home values. By contrast, counties that eventually elected progressive chief prosecutors had higher population density and higher percentages of non-White residents. Unsurprisingly, counties that elected a progressive chief prosecutor were less likely to vote for the 2000 Republican presidential candidate, George W. Bush. Most centrally, jurisdictions that eventually elected progressive prosecutors did not differ from other counties on index property or total crime rates but had statistically higher violent crime rates in 2000, prior to progressive prosecutors taking office.

As a visual assessment of the tenability of the parallel trends assumption, Figure 1 displays the three crime rates by the type of chief prosecutor (progressive vs. traditional) over the entire observation period. Crucially, this figure shows that crime in both counties with progressive and traditional prosecutors followed roughly similar trends, as evidenced by largely parallel crime trends. In fact, this figure indicates that crime in counties that went on to elect a progressive prosecutor generally had higher crime rates throughout the period of observation—even before 2010, when many progressive prosecutors were elected. Moreover, the magnitude of differences in crime did not grow over time, despite the growing number of progressive prosecutors in office. Finally, all three crime measures follow downward trajectories, regardless of the type of chief prosecutor. For example, total index crime fell by 45% between 2000 and 2020 in the full sample (4475 vs. 2347 per 100,000), 42% in progressive jurisdictions, and 47.5% in traditional jurisdictions. Thus, these findings indicate that crime in the period of interest dropped considerably in both progressive and traditional jurisdictions.



TABLE 4 County characteristics by type of chief prosecutor, year 2000 measures.

County characteristic	Traditional prosecutors ( <i>n</i> = 55)		Progressive prosecutors ( <i>n</i> = 38)	
	Mean	SD	Mean	SD
Population density	1701.49	1985.23	6016.95*	12,875.54
% Male	48.91	.96	48.79	1.14
% Non-White	29.17	14.15	35.84*	14.50
% Hispanic	16.90	18.63	18.18	12.55
% 15–29 years	20.36	2.77	21.45	2.72
% Foreign born	15.07	9.95	17.80	9.46
% Public assistance	3.70	2.18	3.55	2.60
% Poverty	11.33	5.55	11.82	5.66
% Voted for GW Bush	45.37	11.13	39.02*	13.57
Median household income	47,881.80	11,011.41	49,567.00	12,728.62
Median household value	144,130.91	67,200.71	173,763.16	79,691.27
County index crime rate per 100,000				
Property crime	3939.19	1689.72	4073.73	1665.41
Violent crime	526.15	320.86	704.02*	402.80
Total crime	4474.83	1938.05	4782.14	1957.72

Note: All measures are based on 2000 data—before any of the included jurisdictions had a progressive prosecutor in office. The number of jurisdictions does not equal 100 because four jurisdictions had a progressive prosecutor at the beginning of the period of interest (2000), and three other jurisdictions had multiple chief prosecutors. These jurisdictions were omitted from the analyses. \* $p < 0.05$ ; \*\* $p < 0.01$ .

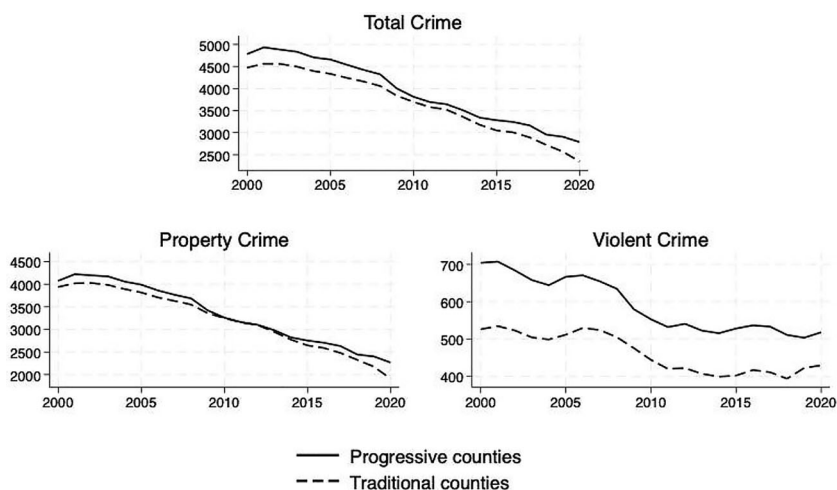


FIGURE 1 Crime by type of chief prosecutor (2000–2020).

Note: The type of prosecutor is based on whether or not the jurisdiction was ever led by a progressive chief prosecutor in the timeframe of interest (2000–2020).

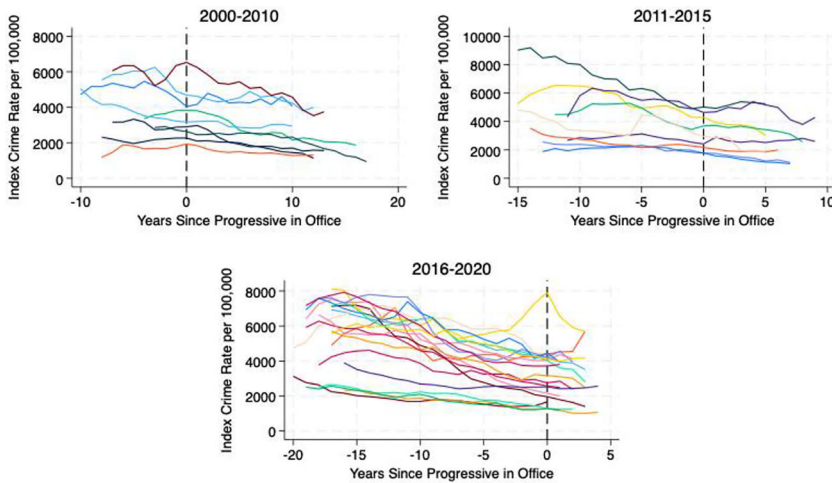


FIGURE 2 Total index crime before and after inauguration by year.

[Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

Note: Each data line represents an individual county crime rate before and after a progressive chief prosecutor took office.

To examine the data for evidence of anticipatory changes in crime prior to progressive prosecutors taking office, Figure 2 displays the total index crime in counties that eventually put progressive prosecutors in office in relation to their inauguration date. For ease of presentation, we split this figure into three parts—an early period with relatively few progressive prosecutors (2000–2010), a middle period (2011–2015) in which the progressive prosecution movement emerges, and a later period (2016–2020) that saw a host of progressive prosecutors take office. The vertical reference line at zero on the x-axis indicates when a progressive prosecutor took office, with negative values corresponding to crime trends before the progressive prosecutor took office and positive values denoting crime trends after the inauguration of a progressive prosecutor. This plot is useful for visually assessing the no anticipation assumption and examining crime changes after the inauguration. If anticipation is present, crime rates should change just before the inauguration (i.e., immediately to the left of the reference line). Specifically, if the election of progressive prosecutors sends a “message to the streets” that potential offenders will be treated leniently (Hogan, 2022, p. 516), crime should increase before the inauguration of progressive prosecutors. Similarly, if progressive prosecutors’ policies increase crime by undermining incapacitation/deterrence, as conservative politicians claim, crime is expected to rise after progressive prosecutors assume their leadership positions (i.e., to the right of the reference line). Figure 2 does not offer clear support for either of these expectations. Generally, there is no marked change in crime trends just prior to a progressive prosecutor taking office. Likewise, crime generally continues on the same trajectory after a progressive prosecutor assumes power. Put simply, total index crime rates follow downward trends both before and after the intervention of a progressive chief prosecutor taking office.

These findings have important implications for the heterogeneous DiD analyses. In particular, the finding that crime generally followed similar downward trends supports the viability of the parallel trends assumption. Moreover, there is little to no evidence of anticipatory changes in crime before progressive prosecutors take office, supporting the no anticipation assumption.

TABLE 5 Progressive prosecutors and crime, 2000–2020: Heterogenous difference-in-differences models.

Crime rate per 100,000	Coeff	SE	95% CI	n	Parallel trends?
Property crime	227.34**	79.46	71.60, 383.08	1953	Yes
Violent crime	34.11	26.86	−18.53, 86.76	1953	Yes
Total crime	251.72**	81.97	91.06, 412.39	1953	Yes

\* $p < 0.05$ ; \*\* $p < 0.01$ .

## 6.2 | Heterogeneous difference-in-differences analyses

Given the visual evidence supporting the viability of the parallel trends and no anticipation assumptions, we began by estimating unconditional heterogeneous DiD models (i.e., models without controls to adjust for non-parallel trends). These models report the overall (i.e., aggregate) effects of progressive chief prosecutors on the three crime measures, examine variation in these effects over year and time in office (i.e., event-study analyses), and provide statistical tests of the comparability of crime rates before the change in type of prosecutors, as a means of assessing the parallel trends assumption. For the models examining changes in violent crime rates, the parallel trends test consistently rejected this assumption in the unconditional models. Therefore, we estimated violent crime models conditional on the county characteristics listed in the top portion of Table 4 and geographic region (not shown in Table 4); after conditioning on these variables, the parallel trends assumption was tenable. All of the results concerning violent crime rates are based on these conditional models.

Table 5 reports the overall effects associated with installing a chief progressive prosecutor on each crime measure. The results reported in the top line of this table indicate that switching to a progressive prosecutor, on average, increases the rate of property crime by 227.34; this effect is statistically significant but rather imprecise, as its confidence interval is wide—spanning from 71.60 to 383.08. Given that the mean index property crime rate for all counties in the period of interest was approximately 3255.7 per 100,000, the estimated effect of a progressive prosecutor taking office on property crime translates into a 6.98% increase (i.e.,  $227.34/3255.7 \times 100 = 6.98\%$ ) or an interval of 2.20% to 11.77%. It is crucial to note, however, that crime was on a downward trajectory in the period of interest in both progressive and traditional jurisdictions. Thus, these findings indicate that jurisdictions switching to a progressive prosecutor experienced *relatively* higher property crime than traditional jurisdictions, but in *absolute terms*, crime was declining. Further, the results reported in this top-line indicate that a test of parallel trends in property crime by type of prosecutor for the preceding 10 years is viable (i.e., this test is not statistically significant).

The second line of Table 5 summarizes the results for violent crime rates. Here, the relative effect of switching to a progressive prosecutor on violent crime is estimated to be positive (34.11) but not statistically significant (95% CI −18.53, 86.76). Thus, in contrast to our findings on property crime, the switch from a traditional to a progressive chief prosecutor overall has no reliable effect on violent crime.

The last line in Table 5 reports the results of the heterogeneous DiD model for total index crime. Importantly, the estimated effect of a progressive prosecutor taking office on total index crime is essentially the sum of the property and violent estimates. This effect is positive and statistically significant, with a coefficient of 251.72. That is, this model estimates that a progressive prosecutor taking office increases total index crime in relative terms by roughly 251.72 per 100,000 (95% CI 91.06, 412.39) or approximately 6.67% with an interval of 2.4% to 10.9% over the marginal index

TABLE 6 Effects of progressive prosecutors by year.

Year	Property crime rate			Violent crime rate			Total crime rate		
	Coeff	95% CI		Coeff	95% CI		Coeff	95% CI	
2003	-27.71	-122.38	66.97	27.72	-17.90	73.34	-17.53	-121.41	86.35
2004	5.01	-147.98	158.00	-12.35	-42.48	17.78	1.14	-158.81	161.10
2005	59.16	-125.59	243.91	29.75	-33.05	92.56	64.96	-101.21	231.12
2006	135.95	-10.41	282.31	6.64	-48.34	61.61	107.71	-55.40	270.82
2007	135.27*	21.32	249.22	-0.94	-38.91	37.03	129.30	-8.17	266.77
2008	117.09	-32.10	266.28	1.70	-24.61	28.00	109.13	-48.38	266.65
2009	104.65	-125.90	335.21	17.66	-26.07	61.39	113.21	-137.42	363.84
2010	-4.98	-225.70	215.73	4.21	-59.74	68.15	12.60	-243.51	268.71
2011	-11.99	-207.55	183.57	7.43	-70.99	85.84	22.09	-202.87	247.06
2012	141.64	-52.53	335.80	38.01	-24.58	100.60	195.72	-10.42	401.86
2013	226.03*	32.40	419.66	32.54	-37.95	103.03	279.86*	78.05	481.68
2014	269.62*	67.55	471.68	63.26*	12.82	113.70	321.65*	109.33	533.97
2015	302.37*	80.92	523.81	75.79*	13.49	138.09	351.96*	128.89	575.04
2016	244.54*	47.18	441.91	74.04*	5.35	142.72	273.10*	68.89	477.30
2017	244.65*	73.74	415.56	63.04	-1.84	127.93	274.61*	98.74	450.47
2018	177.77	-16.57	372.12	68.23	-10.06	146.52	200.20	-1.44	401.84
2019	271.91*	61.74	482.07	-60.60	-265.78	144.58	294.85*	82.31	507.39
2020	388.48*	116.65	660.31	54.34	-166.58	275.27	383.08*	116.36	649.80

\*p < 0.05; \*\*p < 0.01.

total crime rate for this sample and time period (3774 index crimes per 100,00). Moreover, these results indicate that this model’s assumption of parallel trends is tenable.

Collectively, these results find that property crime is higher after progressive prosecutors take office, and because the vast majority (~85%) of index crimes are property crimes, total crime is also modestly elevated. These are relative differences in crime rates. In absolute terms, crime fell in both progressive and traditional counties, but in relative terms, crime fell more sharply in counties with a traditional prosecutor. By contrast, reformist prosecutors have no reliable effect on violent crime rates.

To examine variation in the effect of switching to a progressive prosecutor by year, Table 6 reports average treatment effects by year and crime type (Table A2 in the Appendix in the Supporting Information displays these estimates on a percentage basis). Between 2003 and 2012, the estimated coefficients for each crime type are generally positive but not statistically significant. Notably, this was when the progressive prosecution movement was in its infancy. Thereafter, the coefficients for property and total crime rates are consistently positive and generally statistically significant—indicating increases in property and total crime in progressive counties relative to jurisdictions with traditional chief prosecutors after 2012.

The pattern of findings for violent crimes is more ambiguous. Before 2012, the estimated effects are typically positive but small (averaging less than 10) and imprecise (i.e., having wide confidence intervals). After 2011, the yearly effects are generally positive, sizeable, and imprecise (e.g., in 2012, 38.0 with a 95% CI of -24.6 to 100.6). Most notably, starting in 2014, the magnitude of the yearly effects, while still imprecise, grows further (e.g., 63.3 in 2014) and generally remains elevated thereafter, but only the effects between 2014 and 2016 are statistically significant.

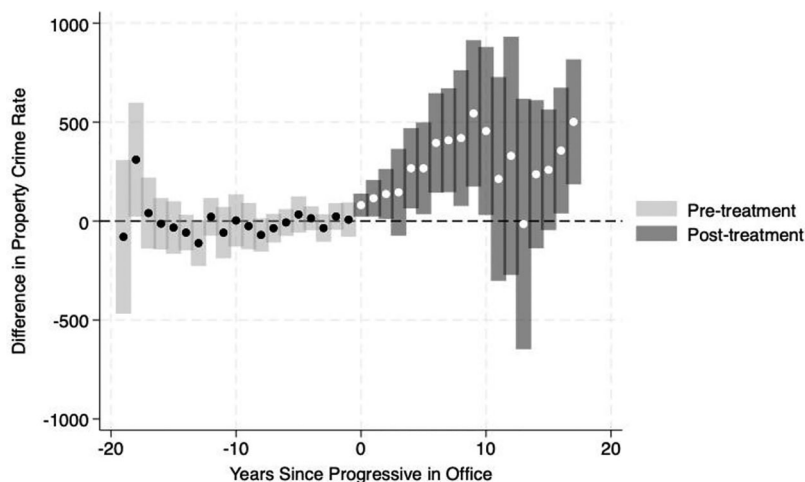


FIGURE 3 Effect of progressive prosecutor on property crime rate by years in office.

Note: Unconditional heterogeneous DiD model, test of parallel annual trends for 10 years preceding progressive in office,  $\chi^2(10) = 7.93$ ,  $p = 0.64$ .

These results comport with but add nuance to our earlier findings. In the aggregate, property and total crime rates are higher after a progressive chief prosecutor takes office, but these findings are primarily due to elevated crime rates after 2012. Similarly, before 2012, the yearly effects of the switch to a progressive prosecutor vary widely and are imprecise. After 2012, however, the estimated effects grew considerably but they were generally unreliable, except for a 3-year period between 2014 and 2016. These findings indicate that relative increases in crime were contemporaneous with the growth of the progressive prosecution movement but, in the case of violent crime, were largely fleeting.

Figures 3–5 display the results of the event-study analyses that estimate the effect of changing to a progressive chief prosecutor over time in office for each crime type. According to both perspectives on deterrent/incapacitation and coercive mobility, the effect of switching to a progressive prosecutor should strengthen and become more apparent as their time in office increases. Over time, deterrent messages and incapacitation effects may further erode as progressive prosecution policies become more entrenched (Hogan, 2022; Nagin, 2013), whereas the stabilizing effects of decarceration efforts on communities would be amplified (Clear, 2021; Clear & Frost, 2020). Therefore, if progressive policies affect crime, we expect to observe more pronounced differences in crime as years in office increase.

The results presented in these figures do not support the expectation of growing effects over time. For property and total crime, the relative effect of switching to a progressive prosecutor is greater crime for the first decade in office, but thereafter, the difference is primarily downward. These results suggest that the relative impact of progressive prosecutors on property and total crime may vary meaningfully by time in office, but only a small number of progressive prosecutors have been in office for more than ten years, which makes the findings after the first decade in office tentative. By contrast, time in office does not appear to have a discernible relationship with changes in violent crime.

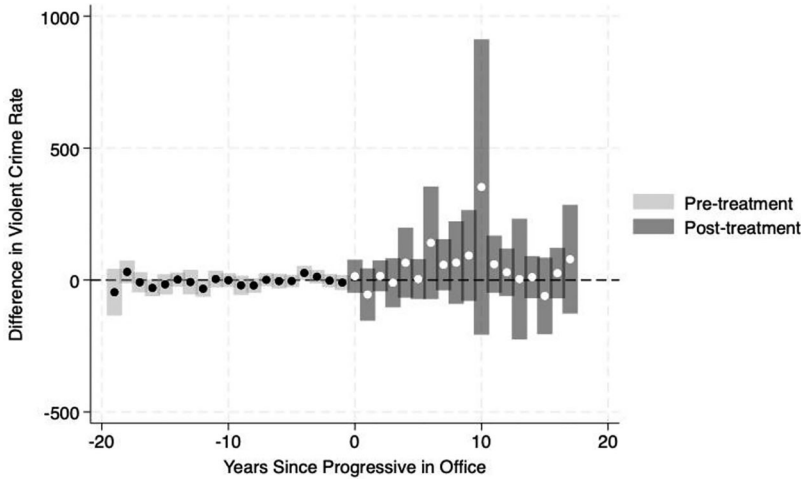


FIGURE 4 Effect of progressive prosecutor on violent crime rate by years in office.

Note: Conditional heterogeneous DiD model, test of parallel annual trends for 10 years preceding progressive in office,  $\chi^2(10) = 8.15$ ,  $p = 0.61$ .

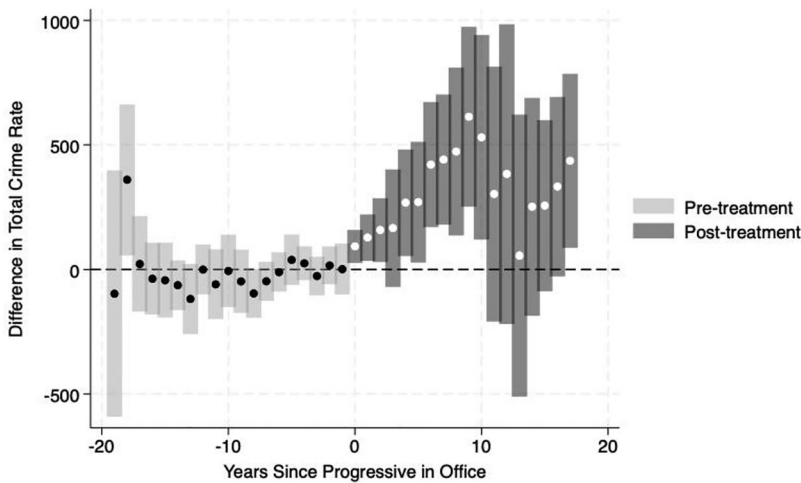


FIGURE 5 Effect of progressive prosecutor on total crime rate by years in office.

Note: Unconditional heterogeneous DiD model, test of parallel annual trends for 10 years preceding progressive in office,  $\chi^2(10) = 10.11$ ,  $p = 0.43$ .

### 6.3 | Alternative model specifications

We conducted two sets of alternative models to investigate the robustness of the preceding results to alternative model specifications. The first set changes the criterion used to distinguish progressive chief prosecutors. Recall that the preceding analyses identify progressive prosecutors based on whether a prosecutor endorsed six or more of the progressive policies listed in Table 1. In these earlier models, crime trends in counties with progressive prosecutors ( $n = 38$ ) were compared to

crime trends in all other counties ( $n = 55$ ). The first set of alternative analyses changes the criterion for progressive prosecutors to five or more progressive policies (“5+ policy measures”). Then, the criterion is changed to seven or more policies (“7+ policy measures”). These alternative models simultaneously address two issues: (1) altering the criterion for progressive prosecutors addresses concerns about measurement error in our count of the number of policies endorsed and (2) changing this criterion alleviates concerns that the earlier models used an inappropriate standard for identifying progressive prosecutors. It is important to point out that these models include all jurisdictions (except those with a progressive prosecutor before 2000 and jurisdictions with multiple felony-level chief prosecutors), and these models contrast crime trends in progressive jurisdictions to all other jurisdictions.

The top portion of Table 7 reports the results of changing the criterion used to distinguish progressive and traditional chief prosecutors. The models using a 5+ or 7+ progressive policy criterion yield the same substantive result as our primary analyses. Specifically, these alternative models continue to find that the inauguration of progressive prosecutors leads to higher property crime rates relative to jurisdictions with traditional prosecutors, which in turn also causes total crime rates to be elevated, but the type of chief prosecutor had no reliable effect on violent crime. While the magnitude of the effects estimated in these alternative specifications differs somewhat from our primary analyses, the confidence intervals from our primary analyses include the point estimates from these alternative models, and the two sets of confidence intervals overlap substantially. Thus, our primary results are robust to changes in the standard used to identify progressive prosecutors.

The second set of alternative model specifications also varies the criterion used to identify progressive jurisdictions, but these models omit ambiguously progressive jurisdictions. That is, one can debate where the line between progressive and traditional prosecutors should be drawn (e.g., endorsing 5+, 6+, 7+), which potentially leads to some jurisdictions with progressive prosecutors being mixed into the traditional category—causing bias in the estimated effect of progressive prosecutors on crime. This second set of models reported in the bottom portion of Table 7 compares crime trends in counties with progressive prosecutors (while varying the criterion used to make this distinction) to counties with prosecutors that supported four or fewer progressive policies. This means that the model using the 6+ policy measure criterion omits counties with prosecutors who endorsed five progressive policies (“ambiguously progressive prosecutors”). Likewise, the model using 7+ policy measures as the criterion omits counties with prosecutors who endorsed five or six progressive policies. In this way, each of these models compares crime trends in progressive jurisdictions to crime trends in jurisdictions that clearly are not progressive (four or fewer progressive policies supported). Again, the results from these models are substantively the same as the findings from the primary model, offering additional support for our main findings.

## 7 | DISCUSSION AND IMPLICATIONS

### 7.1 | Discussion

As the United States becomes increasingly politically polarized, debates surrounding progressive prosecution have become ground zero for political contestations about criminal justice reform (Bazelon, 2020; Bellin, 2020; Mitchell et al., 2022). In this hyper-partisan environment, employing evidence-based criminal justice policies is more critical than ever. This study seeks to aid such efforts and move the debate about progressive prosecution policies and crime forward by adding

TABLE 7 Alternative specifications: Heterogeneous difference-in-differences models.

<b>Models including all jurisdictions</b>					
<b>5+ Policy measure of progressive prosecutors<sup>a</sup></b>					
<b>Crime measure</b>	<b>Coeff</b>	<b>SE</b>	<b>95% CI</b>	<b>N</b>	<b>Parallel trends?</b>
Property crime rate	202.31**	74.13	57.02, 347.60	1911	Yes
Violent crime rate	43.15	29.35	-14.37, 100.68	1911	Yes
Total crime rate	240.43**	77.79	87.97, 392.89	1911	Yes
<b>7+ Policy measure of progressive prosecutors<sup>b</sup></b>					
<b>Crime measure</b>	<b>Coeff</b>	<b>SE</b>	<b>95% CI</b>	<b>n</b>	<b>Parallel trends?</b>
Property crime rate	308.40*	72.04	167.21, 449.60	1974	Yes
Violent crime rate	1.43	25.54	-48.62, 51.47	1974	Yes
Total crime rate	323.58*	74.85	174.91, 472.25	1974	Yes
<b>Models omitting ambiguously progressive jurisdictions</b>					
<b>6+ Policy measure of progressive prosecutors<sup>c</sup></b>					
<b>Crime measure</b>	<b>Coeff</b>	<b>SE</b>	<b>95% CI</b>	<b>n</b>	<b>Parallel trends?</b>
Property crime rate	222.00**	81.10	63.05, 380.95	1764	Yes
Violent crime rate	41.52	31.27	-19.78, 102.81	1764	Yes
Total crime rate	249.42**	84.01	84.75, 414.08	1764	Yes
<b>7+ Policy measure of progressive prosecutors<sup>d</sup></b>					
<b>Crime measure</b>	<b>Coeff</b>	<b>SE</b>	<b>95% CI</b>	<b>n</b>	<b>Parallel trends?</b>
Property crime rate	315.14**	75.83	166.52, 463.76	1512	Yes
Violent crime rate	12.17	36.83	-60.01, 84.36	1512	Yes
Total crime rate	336.15**	80.13	179.09, 493.20	1512	Yes

<sup>a</sup>These models contrast crime in 46 jurisdictions with “progressive” prosecutors (based on five or more progressive policies) to crime in 45 jurisdictions with “traditional” chief prosecutors (based on four or fewer progressive policies). Six jurisdictions were omitted due to having had a progressive prosecutor at the beginning of the period of interest. Three jurisdictions were omitted due to having more than one chief prosecutor responsible for prosecuting felony cases.

<sup>b</sup>These models contrast crime in 26 jurisdictions with “progressive” prosecutors (based on seven or more progressive policies) to crime in 68 jurisdictions with “traditional” chief prosecutors (based on six or fewer progressive policies). Three jurisdictions were omitted due to having had a progressive prosecutor at the beginning of the period of interest. Three jurisdictions were omitted due to having more than one chief prosecutor responsible for prosecuting felony cases.

<sup>c</sup>These models contrast 38 counties with “progressive” prosecutors (based on six or more progressive policies) versus 46 counties with prosecutors that endorsed four or fewer progressive policies. Nine jurisdictions with chief prosecutors who endorsed five progressive policies were removed. Four jurisdictions were omitted due to having had a progressive prosecutor at the beginning of the period of interest. Three jurisdictions were omitted due to having more than one chief prosecutor responsible for prosecuting felony cases.

<sup>d</sup>These models contrast 26 counties with “progressive” prosecutors (based on seven or more progressive policies) versus 46 counties with prosecutors that endorsed four or fewer progressive policies. Twenty-two jurisdictions with chief prosecutors who endorsed five or six progressive policies were removed. Three jurisdictions were omitted due to having had a progressive prosecutor at the beginning of the period of interest. Three jurisdictions were omitted due to having more than one chief prosecutor responsible for prosecuting felony cases.

\* $p < 0.05$ ; \*\* $p < 0.01$ .

to the handful of studies on the topic (Agan et al., 2021a; Goldrosen, 2022; Hogan, 2022; Kaplan et al., 2022).

Our analyses improve upon the small literature on progressive prosecution policies and crime in several notable ways. First, we developed a novel data set of prosecutors that is more temporally and geographically expansive than prior research, covering the largest 100 counties over 21 years rather than focusing on a small number of cities across a narrower timeframe. Since prosecutors



are typically elected at the county rather than city level (Arora, 2018; Bazelon, 2020; McCannon, 2013; Wright, 2008), our county-level crime analyses are more ecologically valid than prior city-level research on the topic, providing a richer picture of crime across progressive prosecutorial jurisdictions. In addition, the fact that our data set covers 21 years enabled us to evaluate crime trends pre-dating the recent rise of progressive prosecutors and address methodological concerns surrounding short pre-/post-intervention timeframes in some of the previous studies (Kajeepeeta, 2022; Kaplan et al., 2022). Second, we developed a novel coding scheme for prosecutorial progressiveness that is more transparent and expansive than prior research (Hogan, 2022; Kajeepeeta, 2022). This approach allowed us to compile a list of progressive prosecutors based on specific policies and principles grounded in the literature rather than relying on indicators only weakly related to the concept and principles of progressive prosecution, such as political party affiliation (Foglesong et al., 2022; Kajeepeeta, 2022). Third, we adopted a rigorous heterogeneous DiD design (Callaway & Sant'Anna, 2021) that better aligns with the staggered introduction of progressive prosecutors across the United States than traditional DiD methods requiring a single intervention period, bolstering the study's ecological validity.

Our findings indicate that the inauguration of progressive prosecutors led to higher property (~6.7%) and total index (~7.0%) crime rates, relative to other jurisdictions, between 2000 and 2020, particularly between 2013 and 2020. It must be stressed that the estimated effects are *relative* differences in crime trends, not *absolute* differences in crime. In *absolute* terms, crime rates fell in the period of interest, but property and total index crime rates declined more markedly in counties with traditional prosecutors. Yet, for violent index crimes, progressive prosecutor elections had no reliable overall effect across the entire study period, but significant positive effects on crime from 2014 to 2016. Analyses examining temporal trends and prosecutorial tenure further complicate this story. The effects of progressive prosecutors on crime generally increase and become significant after 2012, when the number of progressive prosecutors dramatically increases, but confidence intervals surrounding these effects generally widen. Moreover, the effects of progressive prosecutors appear to vary by time in office, with relatively higher crime rates in the first decade but declining relative crime rates afterward.

These findings complicate a nascent literature, revealing some consistencies and inconsistencies with prior studies. Our results indicating that progressive prosecutors are not reliably associated with a change in index violent crime rates over the entire study period are consistent with Agan et al. (2021a) and Foglesong et al.'s (2022) non-significant results for specific violent crimes (e.g., homicide, robbery), while significant increases in index property crime associated with the election of progressive prosecutors across the entire period are inconsistent with Agan et al. (2021a) and Foglesong et al.'s (2022) non-significant findings for specific property crimes (e.g., larceny/theft, burglary). Likewise, our non-significant violent crime results across the entire study period stand in contrast to Hogan's (2022) results, showing a significant increase in homicide associated with progressive prosecution policies.

However, several factors complicate comparisons with prior research. Foremost, all the previous research on progressive prosecutors and crime has employed city-level analyses, yet we employed county-level analyses. Second, our longer timeframe leads to differences in observation periods. Third, unlike much of the extant literature, our system for classifying progressive prosecutors allowed us to precisely identify when a jurisdiction first switched to a progressive prosecutor. Finally, previous studies examined specific individual crimes (e.g., homicide, robbery, etc.), whereas we analyzed index crime groups (e.g., violent vs. property) to capture more general crime trends of interest to the public.

Notwithstanding these differences, relevant criminological literature suggests three possible relationships relating progressive prosecution policies and crime: (1) deterrence/incapacitation (positive effect); (2) coercive mobility (negative effect); and (3) structural causes of crime (no effect). Our results are most consistent with deterrence theory. Prior research indicates that deterrent effects are generally strongest for non-violent crimes, where would-be offenders are more likely to rationally weigh the potential benefits associated with their crime and the possible consequences should they be caught (Apel, 2013, 2022; Nagin, 2013; Schoepfer et al., 2007). In contrast, violent crimes are more situationally dependent, arising from informal disputes or the influence of drugs/alcohol rather than rational calculus (Apel, 2022; Felson & Steadman, 1983; Miethe et al., 2004; Pizarro, 2008). Thus, it is not surprising that we find support for deterrence perspectives for property crimes but weaker support for violent crimes. Even though we were unable to test the specific mechanism here (i.e., whether the increase was because of a decline in perceived certainty or severity of punishment), we do not rule out the possibility, especially since many progressive prosecutors did primarily attain their goals by lessening the punishment for property (and other non-violent) crimes.

While our results highlight no significant relationship between progressive prosecutors and violent crime over the entire 21-year period, we find significant positive effects on violent crime between 2014 and 2016. This pattern might reflect changing dynamics in the progressive prosecution movement ushered by later cohorts of progressive prosecutors or the latent effects of prior progressive prosecutors. Whether these patterns represent changes in the impact of progressive prosecutors on violent crime, the latent effects of prior cohorts of progressive prosecutors, or some other mechanism would require additional investigation that extends beyond the scope of this paper.

## 7.2 | Policy implications

Over the past decades, research has thoroughly documented the detrimental impacts of mass incarceration (Alexander, 2012; Clear & Austin, 2009) and the benefits of community-centered and rehabilitation-based criminal justice (Bazelon, 2020; Davis, 2019; Mitchell et al., 2022). Given increases in prosecutorial power over the past few decades as judicial discretion has been limited in many jurisdictions (Davis, 2001), it is not surprising that prosecutors have borne much criticism for the harmful effects of racialized mass incarceration (Bishop & Osler, 2015; Pfaff, 2017; Starr & Rehavi, 2013). While the prosecutor's power to punish has led some academics and practitioners to argue for limiting prosecutorial power (Brown, 2016; Hessick, 2021), the power to not punish is an important feature of the debate surrounding progressive prosecutors. Declining to prosecute certain types of cases or defendants, such as the innocent, has long been a "consensus position" (Bellin, 2020, p. 243), as prosecutors have historically used declination policies and practices to "do 'the right thing' for the defendant" and to mitigate the effects of overly harsh laws (Alschuler, 1968, p. 53). Prosecutors, regardless of their progressive orientations, have always been ethically and legally obligated to decline prosecution or seek lesser sanctions in cases where justice demands such action (Alschuler, 1968; Flemming et al., 1992), but declination policies have gained newfound interest and criticism in the age of progressive prosecution (Bazelon, 2019; Green & Roiphe, 2023; Krasner, 2021).

As elected officials, lead prosecutors are further obliged to heed the calls from their constituents on a range of issues, some of which reach beyond safety and protection concerns. In recent years, there has been strong and bipartisan support for ending mass incarceration (Dagan & Teles, 2016;

Kubrin & Seron, 2016), decriminalizing non-violent actions with minimal harm, such as recreational use of marijuana (van Green, 2022), ameliorating overly harsh sentencing laws (Stalans, 2002), and assisting the re-integration of people with prior criminal records (Burton et al., 2021). For example, most Americans (nearly 75%) believe that more money and resources should be devoted to addressing the socioeconomic antecedents of crime rather than strengthening law enforcement (Brenan, 2022).

Many of these progressive ideals are correlated with efforts to reduce racial/ethnic and socioeconomic inequalities documented at nearly every stage of the criminal justice system (Clear & Austin, 2009; Spohn, 2015). With changing public opinion on crime and punishment, it is not surprising that nearly 90% of the public, including those from across the political spectrum, supports prosecutorial reform to reduce mass incarceration (American Civil Liberties Union, 2017). There has been significant progress in achieving these goals, as offices led by progressive prosecutors generally issue less harsh sentences and have fewer racial/ethnic disparities (Mitchell et al., 2022). Whether and to what extent some of the other policies advanced by progressive prosecutors (e.g., reducing cash bail, increasing resources for drug addiction or mental health, etc.) achieve their stated goals is an important question for further research.

Over the past decade, progressive prosecutors have received some praise for being “reform-minded” or “addressing the root causes of crime,” as well as criticism for being “soft on crime.” However, a closer review of the history suggests that many of the policies implemented by progressive prosecutors (e.g., declination, diversion, etc.) reflect longstanding prosecutorial goals related to justice and harm reduction (Bellin, 2020; Hessick, 2023). While recent research documents the achievements of progressive prosecution in reducing the harmful effects of racialized mass incarceration (Mitchell et al., 2022), our results suggest that these goals are not necessarily achieved by seriously jeopardizing public safety, especially as it relates to violent crime. Whether a 7% higher rate of index crime (driven by property crimes) due to the installment of progressive prosecutors is a worthwhile tradeoff in exchange for possible reductions in the harms of racialized mass incarceration is ultimately a decision for local officials and the constituencies they represent, as policy decisions nearly always have tradeoffs (Laurin, 2023; Walker, 2014; Zimring & Hawkins, 1995). However, our results make clear that the election of progressive prosecutors is not reliably associated with a “surge” in violence over the last two decades or more recently (2017–2020), as some commentators and conservative politicians have argued (Sachs, 2023, p. 1; Smith & Stimson, 2022). While violent crime rates were higher in jurisdictions that elected progressive prosecutors between 2014 and 2016, the relationship is non-significant across the study period (2000–2020) and in the most recent years (2017–2020). As such, fears about recent “surges” in violent crime mentioned in policy debates about progressive prosecution policies are not supported by this research.

## ACKNOWLEDGMENTS

This research was generously supported by Provost Research Award funds from the University of Miami. Thanks to Alexis Owens, Bridget Craig, and Sophie DeBiase-Harris for their research assistance.

## CONFLICT OF INTEREST

The authors confirm that they have no conflict of interest to declare.

## ORCID

Nick Petersen  <https://orcid.org/0000-0002-3097-2885>

Shi Yan  <https://orcid.org/0000-0002-6484-7687>

## ENDNOTES

- <sup>1</sup> Our paper uses “prosecutor” to denote elected chief prosecutors rather than non-elected line prosecutors. We opted for the term “prosecutor” instead of “District Attorney,” “State Attorney,” or “Prosecuting Attorney” because the latter terms are specific to certain states or jurisdictions, whereas “prosecutor” is broader and encompasses all these positions. Moreover, we use “progressive” rather than “reformist” to describe chief elected prosecutors focusing on criminal justice reform to maintain consistency with the literature (Bazelon, 2020; Davis, 2019; FJP, 2021; Hessick & Morse, 2019; Hogan, 2022; Levin, 2020; Mitchell et al., 2022).
- <sup>2</sup> Without necessarily endorsing the perspectives of progressive prosecutors, their proclamations are illustrative examples of how coercive mobility might operate in this context.
- <sup>3</sup> This section focuses on changes in macro-level crime after a reform-minded progressive takes office. Yet, two investigating the effects of non-prosecution of non-violent misdemeanors—a common progressive reform—on individual-level recidivism rates found that non-prosecution decreased the likelihood of reoffending (Agan et al., 2021b; Owusu, 2022). Likewise, Goldrosen’s (2022) analysis of progressive marijuana policies on drug arrests in Brooklyn, NY, revealed that the implementation of this policy did not significantly affect marijuana possession arrest rates.
- <sup>4</sup> While Hogan (2022) uses the “progressive” classification as a proxy for de-prosecution policies, others have used this classification to identify progressive prosecutors (e.g., Foglesong et al., 2022), and his results have sparked debates about the relationship between progressive prosecutors and crime (e.g., Foglesong et al., 2022; Hogan, 2023; Kajeepeta, 2022; Kaplan et al., 2022). Therefore, it is important to consider the pros and cons associated with Hogan’s (2022) classification scheme.
- <sup>5</sup> While it is common to log crime rates when used as dependent variables to reduce skew, doing so in differences-in-differences (DiD) models can be problematic. Specifically, recent research indicates that in DiD analyses logging the dependent variables can introduce bias in some situations (McConnell, 2023), and the crucial parallel trends test is sensitive to functional form (Roth et al., 2023). As such, we do not log-transform our dependent variables.

## REFERENCES

- Abadie, A. (2021). Using synthetic controls: Feasibility, data requirements, and methodological aspects. *Journal of Economic Literature*, 59(2), 391–425.
- Abadie, A., Diamond, A., & Hainmueller, J. (2010). Synthetic control methods for comparative case studies: Estimating the effect of California’s tobacco control program. *Journal of the American Statistical Association*, 105(490), 493–505.
- Abrams, D. S. (2021). COVID and crime: An early empirical look. *Journal of Public Economics*, 194, 104344.
- Agan, A., Doleac, J. L., & Harvey, A. (2021a). Prosecutorial Reform and local crime rates. George Mason Law & Economics Research Paper Series No. 22-011.
- Agan, A. Y., Doleac, J. L., & Harvey, A. (2021b). *Misdemeanor prosecution*. National Bureau of Economic Research.
- Alexander, M. (2012). *The new Jim Crow: Mass incarceration in the age of colorblindness*. The New Press.
- Alschuler, A. W. (1968). The prosecutor’s role in plea bargaining. *The University of Chicago Law Review*, 36(1), 50–112. <https://doi.org/10.2307/1598832>
- American Civil Liberties Union. (2017). *Americans overwhelmingly support prosecutorial reform, poll finds*. ACLU. <https://www.aclu.org/press-releases/americans-overwhelmingly-support-prosecutorial-reform-poll-finds>
- Apel, R. (2013). Sanctions, perceptions, and crime: Implications for criminal deterrence. *Journal of Quantitative Criminology*, 29, 67–101.
- Apel, R. (2022). Sanctions, perceptions, and crime. *Annual Review of Criminology*, 5(1), 205–227. <https://doi.org/10.1146/annurev-criminol-030920-112932>
- Arora, A. (2018). *Too tough on crime? The impact of prosecutor politics on incarceration*. American Economic Association. <https://static1.squarespace.com/static/5c8e59f6e8ba44fdeb42f85f/t/64a0e4cfe7fbef49bc4a5b7a/1688265935733/Ashna+Arora.pdf>
- Bandyopadhyay, S., & McCannon, B. C. (2014). The effect of the election of prosecutors on criminal trials. *Public Choice*, 161(1-2), 141–156.

- Bazelon, E. (2019). *Charged: The new movement to transform American prosecution and end mass incarceration*. Random House.
- Bazelon, E. (2020). *Charged: The new movement to transform American prosecution and end mass incarceration*. Random House Trade Paperbacks.
- Bellin, J. (2020). Defending progressive prosecution: A review of charged by Emily Bazelon. *Yale Law & Policy Review*, 39, 218–248.
- Bishop, J., & Osler, M. (2015). Prosecutors and victims: Why wrongful convictions matter. *The Journal of Criminal Law and Criminology*, 105(4), 1031–1047.
- Blumstein, A., & Wallman, J. (2000). *The crime drop in America*. Cambridge University Press.
- Blumstein, A., & Wallman, J. (2006). The crime drop and beyond. *Annual Review of Law and Social Science*, 2, 125–146.
- Borusyak, K., Jaravel, X., & Spiess, J. (2024). Revisiting Event-Study Designs: Robust and Efficient Estimation. *The Review of Economic Studies*, rdae007. <https://doi.org/10.1093/restud/rdae007>
- Brenan, M. (2022, November 16). “Fewer Americans call for tougher criminal justice system.” *Gallup*. <https://news.gallup.com/poll/324164/fewer-americans-call-tougher-criminal-justice-system.aspx>
- Brown, D. K. (2016). Judicial power to regulate plea bargaining. *William & Mary Law Review*, 57(4), 1225–1276.
- Burton, A. L., Cullen, F. T., Pickett, J. T., Burton, V. S., & Thielo, A. J. (2021). Beyond the eternal criminal record: Public support for expungement. *Criminology & Public Policy*, 20(1), 123–151. <https://doi.org/10.1111/1745-9133.12531>
- Callaway, B., & Sant’Anna, P. H. C. (2021). Difference-in-differences with multiple time periods. *Journal of Econometrics*, 225(2), 200–230.
- Clear, T. R. (2009). *Imprisoning communities: How mass incarceration makes disadvantaged neighborhoods worse*. Oxford University Press.
- Clear, T. R. (2021). Decarceration problems and prospects. *Annual Review of Criminology*, 4, 239–260.
- Clear, T. R., & Austin, J. (2009). Reducing mass incarceration: Implications of the Iron Law of Prison Populations. *Harvard Law & Policy Review*, 3, 307–324.
- Clear, T. R., & Frost, N. A. (2020). Coercive mobility theory in an era of declining prison populations. In C. Chouhy, J. C. Cochran, & C. L. Jonson (Eds.), *Criminal justice theory*, 187–197. Routledge.
- Covert, D. (2021). Transforming the progressive prosecutor movement. *Wisconsin Law Review*, 2021(1), 187–252.
- Dagan, D., & Teles, S. M. (2016). *Prison break: Why conservatives turned against mass incarceration*. Oxford University Press.
- Davis, A. J. (2001). The American prosecutor: Independence, power, and the threat of tyranny. *Iowa Law Review*, 86(2), 393–465.
- Davis, A. J. (2007). *Arbitrary justice: The power of the American prosecutor*. Oxford University Press.
- Davis, A. J. (2019). Reimagining prosecution: A growing progressive movement. *UCLA Criminal Justice Law Review*, 3(1).
- DeAngelo, G., & McCannon, B. C. (2020). Judicial elections and criminal case outcomes. *The Journal of Legal Studies*, 49(1), 199–242. <https://doi.org/10.1086/709203>
- de Chaisemartin, C., & D’Haultfœuille, X. (2023). Two-Way Fixed Effects and Difference-in-Differences Estimators with Heterogeneous Treatment Effects and Imperfect Parallel Trends. National Bureau of Economic Research, Working Paper 29691. [https://www.nber.org/system/files/working\\_papers/w29691/w29691.pdf](https://www.nber.org/system/files/working_papers/w29691/w29691.pdf)
- Elinson, Z., & Gershman, J. (2022, June 5). Progressive prosecutor movement tested by rising crime and angry voters. *Wall Street Journal*.
- Felson, R. B., & Steadman, H. J. (1983). Situational factors in disputes leading to criminal violence. *Criminology*, 21(1), 59–74. <https://doi.org/10.1111/j.1745-9125.1983.tb00251.x>
- Fair and Just Prosecution (FJP). (2021). 21 Principles for the 21st century prosecutor. [https://www.brennancenter.org/sites/default/files/publications/FJP\\_21Principles\\_FINAL.pdf](https://www.brennancenter.org/sites/default/files/publications/FJP_21Principles_FINAL.pdf)
- Fleming, R. (2020, May 28). ‘Miami-style smart justice’ is an ugly parody of ‘progressive’. *Filter*.
- Flemming, R. B., Nardulli, P. F., & Eisenstein, J. (1992). *The craft of justice: Politics and work in criminal court communities*. University of Pennsylvania Press.
- Foglesong, T., Levi, R., Rosenfeld, R., Schoenfeld, H., Stemen, D., Wood, J., & Rengifo, A. (2022). *Public prosecution and violent crime: A review of data on homicide and progressive prosecution in the United States*. University of Toronto.

- Foxx, K. (n.d.). Priorities. Kim Foxx for Cook County State's Attorney. <https://www.kimfoxx.com/priorities>
- Gershman, B. L. (2011). Prosecutorial Decisionmaking and Discretion in the Charging Function, 62 *Hastings L.J.* 1259. Available at: [https://repository.uchastings.edu/hastings\\_law\\_journal/vol62/iss5/6](https://repository.uchastings.edu/hastings_law_journal/vol62/iss5/6)
- Goldrosen, N. (2022). Null effects of progressive prosecution policy on marijuana enforcement. *Criminology, Criminal Justice, Law & Society*, 23, 23–45.
- Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of Econometrics*, 225(2), 254–277.
- Gove, W. R., Hughes, M., & Geerken, M. (1985). Are Uniform Crime Reports a valid indicator of the index crimes? An affirmative answer with minor qualifications. *Criminology*, 23(3), 451–502. <https://doi.org/10.1111/j.1745-9125.1985.tb00350.x>
- Green, B. A., & Roiphe, R. (2020). When prosecutors politick: Progressive law enforcers then and now. *The Journal of Criminal Law & Criminology*, 110, 719.
- Green, B. A., & Roiphe, R. (2023). A fiduciary theory of progressive prosecution. *American Criminal Law Review*, 60(4), 1431–1466.
- Gwinn, C. G., & O'Dell, A. (1993). Stopping the violence: the role of the police officer and the prosecutor. *Western State University Law Review*, 20(2), 297–318.
- Harris, K. D., & Hamilton, J. O. C. (2010). *Smart on crime: A career prosecutor's plan to make us safer*. Chronicle Books.
- Henry, T., Keah, S., Fordham, T., & Mitchell, J. (2023). Progressive politics and policy setting: Examining criminal justice reform efforts by Black prosecutors. *Crime & Delinquency*, 001112872311744. <https://doi.org/10.1177/00111287231174416>
- Hessick, C. B. (2021). *Punishment without trial: Why plea bargaining is a bad deal*. Abrams Press.
- Hessick, C. B. (2023). Pitfalls of progressive prosecution. *Fordham Urban Law Journal*, 50(5), 973–988.
- Hessick, C. B., & Morse, M. (2019). Picking prosecutors. *Iowa Law Review*, 105, 1537.
- Hogan, T. P. (2022). De-prosecution and death: A synthetic control analysis of the impact of de-prosecution on homicides. *Criminology & Public Policy*, 21(3), 489–534.
- Hogan, T. P. (2023). De-prosecution and death: A reply to an imprecise and ideological critique. *Criminology & Public Policy*, 22(1), 87–96.
- Holland, B., & Zeidman, S. (2023). Progressive Prosecutors or Zealous Defenders, from Coast-to-Coast. *American Criminal Law Review*, 60. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4462418](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4462418)
- Holleran, D., Beichner, D., & Spohn, C. (2010). Examining charging agreement between police and prosecutors in rape cases. *Crime & Delinquency*, 56(3), 385–413. <https://doi.org/10.1177/0011128707308977>
- Johnson, B. D., & Larroulet, P. (2019). The 'distance traveled': Investigating the downstream consequences of charge reductions for disparities in incarceration. *Justice Quarterly*, 36(7), 1229–1257.
- Johnson, O., Omori, M., & Petersen, N. (2022). Racial and ethnic disparities in drug charging trajectories. *Journal of Research in Crime and Delinquency*, 60(2), 255–299.
- Kajeepeeta, S. (2022). Comment on Hogan (2022): Fundamental problems with a test of 'de-prosecution'. *Criminology & Public Policy*, 22(1), 83–86.
- Kaplan, J. (n.d.). *Jacob Kaplan's concatenated files: Uniform crime reporting program data: Offenses known and clearances by arrest (Return A)*, 1960–2020. <https://www.openicpsr.org/openicpsr/project/100707/version/V17/view>
- Kaplan, J., Naddeo, J. J., & Scott, T. (2022). De-prosecution and death: A comment on the fatal flaws in Hogan (2022). <https://osf.io/z4qb8/>
- Krasner, L. (2021). *For the people: A story of justice and power*. One World.
- Krasner, L. (2022). Plans for the future. Larry Krasner for Philadelphia District Attorney. <https://krasnerforda.com/plans-for-the-future>
- Krumholz, S. (2019). The effect of district attorneys on local criminal justice outcomes. Available at SSRN 3243162. <https://ssrn.com/abstract=3243162>
- Kubrin, C., & Seron, C. (2016). The prospects and perils of ending mass incarceration in the United States. *The ANNALS of the American Academy of Political and Social Science*, 664(1), 16–24. <https://doi.org/10.1177/0002716215616341>
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33(1), 159–174.

- Laurin, J. E. (2023). Progressive prosecutorial accountability. *Fordham Urban Law Journal*, 50(5), 1067–1092.
- Levin, B. (2020). Imagining the progressive prosecutor. *Minnesota Law Review*, 105, 1415.
- Levitt, S. D. (2004). Understanding why crime fell in the 1990s: Four factors that explain the decline and six that do not. *Journal of Economic Perspectives*, 18(1), 163–190.
- Levitt, S. D., & Miles, T. J. (2006). Economic contributions to the understanding of crime. *Annual Review of Law and Social Science*, 2, 147–164.
- Lim, C. S. H., & Snyder, J. M. (2012). Elections and the quality of public officials: Evidence from US state courts (NBER Working Paper No. 18355). National Bureau of Economic Research.
- Lynch, J. P., & Addington, L. A. (2006). *Understanding crime statistics: Revisiting the divergence of the NCVS and the UCR*. Cambridge University Press.
- Lynch, M. (2016). *Hard bargains: The coercive power of drug laws in federal court*. Russell Sage Foundation.
- Lynch, M. (2018). Prosecutorial discretion, drug case selection, and inequality in federal court. *Justice Quarterly*, 35(7), 1309–1336. <https://doi.org/10.1080/07418825.2018.1535083>
- MacDonald, T. (2022). “Philly DA Krasner to fight impeachment effort at Navy Yard hearing.” *WHYY Public Radio*.
- McCannon, B. C. (2013). Prosecutor elections, mistakes, and appeals. *Journal of Empirical Legal Studies*, 10(4), 696–714.
- McConnell, B. (2023). “What’s logs got to do with it: On the perils of log dependent variables and difference-in-differences.” arXiv Preprint. arXiv:2308.00167. <https://brendonmcconnell.github.io/pdf/logDD.pdf>
- Miethe, T. D., Regoeczi, W. C., & Drass, K. A. (2004). *Rethinking homicide: Exploring the structure and process underlying deadly situations*. Cambridge University Press.
- Mitchell, O., Mora, D. O., Sticco, T. L., & Boggess, L. N. (2022). Are progressive chief prosecutors effective in reducing prison use and cumulative racial/ethnic disadvantage? Evidence from Florida. *Criminology & Public Policy*, 21(3), 535–565.
- Nagin, D. S. (2013). Deterrence: A review of the evidence by a criminologist for economists. *Annual Review of Economics*, 5(1), 83–105.
- Nagin, D. S., Cullen, F. T., & Jonson, C. L. (2009). Imprisonment and reoffending. *Crime and Justice*, 38(1), 115–200. <https://doi.org/10.1086/599202>
- Owusu, F. (2022). *Presumptive declination and diversion in Suffolk County, MA*. Harvard Kennedy School. <https://www.hks.harvard.edu/sites/default/files/Taubman/RIGB/Presumptive%20Declination%20and%20Diversion%20in%20Suffolk%20County%2C%20MA.pdf>
- Pfaff, J. (2017). *Locked in the true causes of mass incarceration and how to achieve real reform*. Basic Books.
- Pizarro, J. M. (2008). Reassessing the situational covariates of homicides: Is there a need to disaggregate? *Homicide Studies*, 12(4), 323–349. <https://doi.org/10.1177/1088767908323741>
- Romero, M. (2020). Rural spaces, communities of color, and the progressive prosecutor. *The Journal of Criminal Law and Criminology* (1973-), 110(4), 803–822.
- Roth, J., Sant’Anna, P. H. C., Bilinski, A., & Poe, J. (2023). What’s trending in difference-in-differences? A synthesis of the recent econometrics literature. *Journal of Econometrics*, 235(2), 2218–2244.
- Sachs, S. (2023, January 26). “DeSantis proposes criminal justice reforms at ‘Preserving Law and Order’ event in Miami.” *WFLA*.
- Sampson, R. J. (2012). *Great American city: Chicago and the enduring neighborhood effect*. University of Chicago Press.
- Sant’Anna, P. H. C., & Zhao, J. (2020). Doubly robust difference-in-differences estimators. *Journal of Econometrics*, 219(1), 101–122.
- Schoepfer, A., Carmichael, S., & Piquero, N. L. (2007). Do perceptions of punishment vary between white-collar and street crimes? *Journal of Criminal Justice*, 35(2), 151–163.
- Sklansky, D. A. (2016). The changing political landscape for elected prosecutors. *Ohio State Journal of Criminal Law*, 14, 647.
- Smith, Z., & Stimson, C. “Cully” (2022, August 29). Rogue progressive prosecutors promote lawlessness not reform. *The Heritage Foundation*. <https://www.heritage.org/crime-and-justice/commentary/rogue-progressive-prosecutors-promote-lawlessness-not-reform>
- Spohn, C. (2015). Race, crime, and punishment in the twentieth and twenty-first centuries. *Crime and Justice*, 44, 49–97. <https://doi.org/10.1086/681550>

- Spohn, C., & Tellis, K. (2019). Sexual assault case outcomes: Disentangling the overlapping decisions of police and prosecutors. *Justice Quarterly*, 36(3), 383–411.
- Stalans, L. J. (2002). Measuring attitudes to sentencing. In J. V. Roberts & M. Hough (Eds.), *Changing attitudes to punishment* (pp. 15–32). Willan.
- Starr, S. B., & Marit Rehavi, M. (2013). Mandatory sentencing and racial disparity: Assessing the role of prosecutors and the effects of booker. *The Yale Law Journal*, 123(1), 2–80.
- Sun, L., & Abraham, S. (2021). Estimating dynamic treatment effects in event studies with heterogeneous treatment effects. *Journal of Econometrics*, 225(2), 175–199.
- Travis, J., & Waul, M. (2016). *Reflections on the Crime decline: Lessons for the future?* Urban Institute.
- Travis, J., Western, B., & Redburn, F. (2014). *The growth of incarceration in the United States: Exploring causes and consequences*. National Academies Press.
- van Green, T. (2022). *Americans overwhelmingly say marijuana should be legal for medical or recreational use*. Pew Research Center. <https://www.pewresearch.org/short-reads/2022/11/22/americans-overwhelmingly-say-marijuana-should-be-legal-for-medical-or-recreational-use/>
- Walker, S. (2014). *Sense and nonsense about crime, drugs, and communities*. Cengage Learning.
- Wing, C., Simon, K., & Bello-Gomez, R. A. (2018). Designing difference in difference studies: Best practices for public health policy research. *Annual Review of Public Health*, 39(1), 453–469. <https://doi.org/10.1146/annurev-publhealth-040617-013507>
- Wright, R. F. (2020). Prosecutors and their state and local polities. *The Journal of Criminal Law and Criminology*, 110(4), 823–858.
- Wright, R. F. (2008). How prosecutor elections fail us. *Ohio State Journal of Criminal Law*, 6, 581.
- Wright, R. F. (2014). Beyond prosecutor elections. *SMUL Review*, 67, 593–616. <https://scholar.smu.edu/smulr/vol67/iss3/11>
- Wright, R. F., & Engen, R. (2006). The charging and sentencing effects of depth and distance in a criminal code. *North Carolina Law Review*, 84, 1935–1982.
- Zapf, A., Castell, S., Morawietz, L., & Karch, A. (2016). Measuring inter-rater reliability for nominal data—Which coefficients and confidence intervals are appropriate? *BMC Medical Research Methodology*, 16, 93.
- Zimring, F. E., & Hawkins, G. (1995). *Incapacitation: Penal confinement and the restraint of crime*. Oxford University Press on Demand.

## SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Petersen, N., Mitchell, O., & Yan, S. (2024). Do progressive prosecutors increase crime? A quasi-experimental analysis of crime rates in the 100 largest counties, 2000–2020. *Criminology & Public Policy*, 1–32. <https://doi.org/10.1111/1745-9133.12666>

## AUTHOR BIOGRAPHIES

**Nick Petersen** is an associate professor in the Department of Sociology and Criminology at the University of Miami, where he holds a secondary appointment in the School of Law. His research focuses on racial/ethnic inequalities in the criminal justice system, attitudes toward the criminal justice system, and stratification (including the collateral consequences of criminal justice contact).



**Ojmarrh Mitchell** is a professor in the Department of Criminology, Law and Society at the University of California, Irvine. Professor Mitchell earned his PhD in Criminology and Criminal Justice from the University of Maryland with a doctoral minor in Measurement, Statistics, and Evaluation. His research interests center on criminal justice policy, particularly in the areas of drug control, sentencing and corrections, and racial fairness in the criminal justice system.

**Shi Yan** is an assistant professor at the School of Criminology and Criminal Justice, Arizona State University. His research interests are sentencing, plea bargaining, and measurement issues in criminal justice research. He is also interested in the broad idea of assessing risk in the criminal justice context, with a focus on the pattern and implication of criminal records.