

THE GROWTH, SCOPE, AND SPATIAL DISTRIBUTION OF PEOPLE WITH FELONY  
RECORDS IN THE UNITED STATES, 1948 TO 2010

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## **ABSTRACT**

The steep rise in U.S. criminal punishment in recent decades has spurred scholarship on the collateral consequences of imprisonment for individuals, families and communities. While several excellent studies have estimated the former prisoner population and the collateral consequences they face, far less is known about the size and scope of the total *ex-felon* population beyond prison walls, including those who serve their sentences on probation or in jail. This article develops state-level estimates based on demographic life tables and extends previous national estimates of the U.S. ex-felon population to 2010. We estimate that ex-prisoners comprise 2.2 percent of the U.S. voting age population and 10.4 percent of the African American male voting age population; ex-felons comprise 6.4 percent of the voting age population and 25.4 percent of the African American male voting age population. We then discuss the far-reaching consequences of the spatial concentration and enormous growth of these groups since 1980.

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Social scientists have a much better understanding of the geography and demography of incarceration than of felony conviction more broadly. In particular, we are only beginning to compile basic information about the population of *formerly* incarcerated people now living and working in their home communities (Western 2006; Pettit 2012). Also overlooked amidst the focus on imprisonment is the much larger population of convicted felons who served their time on probation (Phelps 2013). The lion's share of growth in U.S. correctional supervision has been among the *non*-incarcerated population of probationers and parolees who are supervised in their communities (see Appendix Figure 1). Both populations are of growing importance to scholars and policymakers as states increasingly enact criminal justice reforms that shift from incarceration to community supervision for at least some offenses (Phelps 2013).

This article builds on previous national estimates of former prisoners and people formerly under correctional supervision for felonies<sup>1</sup> (Uggen, Manza, and Thompson 2006). While it is relatively easy to obtain data on people *currently* under criminal justice supervision (the U.S. Department of Justice has long provided detailed information on current correctional populations), there are no existing data sources for state-level *former* prison or felony probation populations. We extend national estimates to 2010 and compile the first-ever state-level estimates of these populations from 1980 to 2010.

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<sup>1</sup> The terms felon and prisoner refer to conviction and incarceration status rather than criminal behavior. These estimates are thus a reflection of a rising punishment rate, even as crime rates have declined (see, e.g., Uggen and McElrath 2014).

Given the historic increase in criminal punishment, especially since 1980, these numbers have broad implications for both science and public policy. Contact with the criminal justice system has important social and demographic consequences, as those subject to criminal sanctions face restrictions on employment, housing, voting, and welfare receipt, as well as long-term effects on physical and mental health (Ewald and Uggen 2012; Massoglia 2008; Schnittker and John 2007). Because these effects are also concentrated racially and geographically (Clear 2007; Pettit 2012; Western 2006), we present estimates by race (African American) and use GIS visualization techniques to illustrate the variation in the ex-prison and ex-felon populations across space and time.

This article thus contributes to understanding the demographic and geographic distribution of the ex-prisoner and ex-felon populations in the United States. These estimates also offer a more comprehensive view of the reach of the criminal justice system across space, time, and race than those focused on only one stage (e.g., arrest) or experience (e.g., incarceration) in the criminal justice system. The ex-felon estimates presented here thus complement prior estimates of ex-prisoners (e.g., Pettit 2012) but also include the large number of people in the United States who have not served time but experience many of the same consequences of a felony conviction as ex-prisoners. Finally, our estimates provide essential data for social scientists and policy makers interested in the broader social and institutional impacts of these populations.

## THE DEMOGRAPHY AND GEOGRAPHY OF PUNISHMENT

Several recent estimates detail the size and scope of particular populations with substantial contact with the criminal justice system. Becky Pettit's work (2012; see also Pettit and Western 2004) shows large racial disparities in the likelihood of entering

prison and documents the implications for black-white disparities in labor market, economic, and educational outcomes. Christopher Wildeman (2009) has done the same for racial disparities among children in the likelihood of experiencing parental incarceration (see also Sykes and Pettit 2014). With respect to initial contact with the criminal justice system in the current era, Brame and colleagues (Brame et al. 2012; Brame et al. 2014) estimate the likelihood of experiencing arrest, noting that almost half of all black men will be arrested prior to the age of 23.

People with any kind of criminal history experience wide-ranging penalties and disruptions in their lives, especially given the widespread availability of criminal background information (Lageson 2016; Uggen et al. 2014). Nevertheless, people convicted of felonies face far more substantial and frequently permanent consequences, including legal restrictions on employment, access to social benefits like public housing, and eligibility for educational benefits (Travis 2005; Ewald and Uggen 2012; Uggen and Stewart 2015). Some states also remove parental rights and restrict civil rights, such as the right to vote, serve on juries, and hold public office.

A felony is a broad categorization, encompassing everything from marijuana possession to homicide. Historically “felony” has been used to distinguish certain “high crimes” or “grave offenses” from less serious, misdemeanor offenses. In the United States, felonies are typically punishable by more than one year in prison, while misdemeanors garner less severe sanctions such as shorter jail sentences, fines, or both. Not everyone with a felony conviction goes to prison, however, and many more will serve time in jail or on probation. Indeed, changes in sentencing constitute one reason for the recent decline in the size of the prison population.

As David Garland (2001) has noted, mass incarceration in the United States is not simply defined by the imprisonment of large numbers of people, but by the “systematic imprisonment of whole groups of the population” (p. 2). Moreover, such concentration applies not only to prisoners but also to millions of *non*-incarcerated felons (Phelps 2013). Felons are set apart not only by the stigma and collateral consequences that come with a criminal conviction but also by its extreme concentration by sex, race, and socioeconomic status. Current prison and community corrections populations are overwhelmingly male – 93 percent of prisoners, 89 percent of parolees, and 76 percent of probationers (Bonczar and Maruschak 2013; Carson and Golinelli 2013). The social concentration of punishment by race is equally astonishing. Recent estimates show that 30 percent of black males have been arrested by age 18 (vs. 22 percent for white males) (Brame et al. 2014). This grows to 49 percent by age 23, meaning that virtually half of all black men have been arrested at least once by the time they reach young adulthood (vs. about 38 percent of white males) (Brame et al. 2014).

Sociologists Bruce Western and Becky Pettit have shown that incarceration has become a routine life event for low-skill black men, more common than serving in the military or earning a college degree (Pettit and Western 2004; Western 2006). The cumulative risk of imprisonment for black men ages 20-34 without a high school degree stands at 68 percent, as compared to 21 percent of black men *with* a high school degree and 28 percent for white men *without* a high school degree (Pettit 2012). Taken together, this research demonstrates that less educated black men are far more likely to experience the full brunt of the criminal justice system than are white men, even those of similar socioeconomic status.

Scholars have also chronicled the spatial concentration of incarceration and correctional supervision (Clear 2007; Justice Mapping Center 2010; Travis 2005; Wildeman and Muller forthcoming). Exposure to the criminal justice system clearly varies both within and across the states. Each state operates its own separate systems of incarceration and supervision, a fact which can be obscured by national level analyses. While national correctional populations have declined in recent years (Kaeble, Glaze, Tsoutis and Minton 2016), individual states vary substantially, with some experiencing increases and others decreases in either incarceration or community supervision. For example, between 2013 and 2014 Missouri's community supervision (probation and parole) population fell by 7 percent but Washington's grew by 5 percent (Kaeble, Maruschak, and Bonczar 2015). Likewise, California's Public Safety Realignment (PSR) significantly impacted not only the decline in that state's prison population in 2012 but also that of the entire nation due to the size of the California correctional system (Carson and Golinelli 2014). These geographic differences are of significant consequence not just for current correctional populations but also for former populations, as we will show in this analysis.

Variation in punishment rates by state can be attributed to differences in economics, crime rates, demographics, politics, and sentencing laws (Barker 2006; Beckett and Western 2001; Greenberg and West 2001; Jacobs and Helms 2001; Lynch 2010; Stucky, Heimer, and Lang 2005; Zimring and Hawkins 1991). More specifically, state incarceration rates vary in part due to differences in criminal justice processing, such as differential exposure to police surveillance (Beckett, Nyrop and Pfingst 2006; Tonry 1996), rates of conviction (Bridges and Steen 1998), and sentencing patterns (Steffensmeier, Ulmer and Kramer 1998). States vary substantially in the use of

imprisonment versus community supervision (Phelps forthcoming). Some states incarcerate at lower rates but sentence a substantial number of people to probation (e.g. Minnesota), while others incarcerate at high rates and have high rates of community supervision (e.g. Louisiana) (Phelps forthcoming). Criminologists are increasingly calling for a broad shift of resources away from incarceration (National Research Council 2014) and toward law enforcement (Durlauf and Nagin 2011) and communities (Clear and Frost 2014). To date, however, states have continued to implement widely varying criminal justice policies, particularly in the extent to which they emphasize law enforcement, incarceration, and community supervision (Barker 2006; Phelps forthcoming).

To explain these preferences, punishment scholars point to the neoconservative politics of late modernity (Garland 2001), a “new penology” to manage high-risk populations (Feeley and Simon 1992), public sentiment (Tonry 2004), the use of criminal justice and welfare institutions to tie post-industrial workers to precarious wage labor (Wacquant 2012), and elite desires to maintain dominance in the face of racial threat (Behrens, Uggen, and Manza 2003). The empirical literature is increasingly pointing to public sentiment to explain state differences in punishment. In her study of three states (California, New York and Washington), Barker (2006) shows how citizen participation in politics affects incarceration patterns. In Washington state, contrary to expectations, greater public participation in government seemed to decrease incarceration rates. Similarly, Lynch (2010) finds that cultural values particular to Arizona, such as distrust of government and traditional punitiveness, helped facilitate prison expansion as a means of promoting economic development in rural locales. Most



recently, Enns (2016) develops state-specific public opinion measures to show how public punitiveness helps explain variation in state incarceration rates since 1950.

To illustrate the great geographic variation in rates of punishment, the maps in Figure 1 show the percentage of adults currently in prison and under supervision for felony convictions in 2010 by state and race.

[Figure 1 about here]

These maps all apply the same color scheme and scale and, as a result, reveal startling race differences in incarceration. As of 2010, most states had less than 1 percent of all adults in prison, with the exception of Louisiana and Alaska, as shown in the top-left panel of Figure 1. The picture changes dramatically when examining the same map for African American adults (top-right panel). In numerous states, between 2.5 and 5 percent of the adult African American population was currently in prison in 2010. A few states with low baseline African American populations in the upper Midwest and Northeast had more than 4 percent of adult African Americans incarcerated.<sup>2</sup>

Beyond incarceration, sizeable racial differences are also apparent in total correctional supervision for felony convictions. The bottom-left panel of Figure 1 shows that only six states had less than 1 percent of their adult population under correctional supervision for felonies in 2010, while seven states had over 2.5 percent under such supervision. As with prisoners, a dramatically higher percentage of African American adults in most states were under correctional supervision for felonies in 2010. The bottom-right panel of Figure 1 demonstrates that by 2010, the rate exceeded 5 percent of African American adults in 24 states and no state had less than 2.5 percent of its adult African American population under supervision for felony convictions. Compared to the

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<sup>2</sup> We do not present estimates for changes in Hispanic ethnicity, as less historical demographic information is available on the ethnicity of prisoners and felons (for 2010 rates, see Shannon and Uggen 2014).

map for all adults, states such as Oregon, Rhode Island, and Wisconsin had especially high rates of African American correctional supervision (more than 8 percent).

Although we have focused on correctional populations, these percentages are also shaped by state differences in the total and race-specific baseline populations. Both the numerator (correctional population) and denominator (state population) thus affect these rates. The state of Minnesota provides a useful example. That state's low incarceration numerator is driven by policies favoring probation over prison (Phelps forthcoming), which are reflected in relatively high rates of total correctional supervision. At the same time, the denominator is impacted by shifts in population composition. In Minnesota's case, the population designated African American has grown over time to include more immigrants from Africa, particularly Somalia. Neither the numerator nor the denominator in these rates is static, and each is responsive to distinct state-level processes and population changes.

The maps above illustrate the geographic variation in *current* correctional populations by state. This is an important consideration, as much research addresses the likelihood of incarceration and its personal and collateral consequences (Wakefield and Uggen 2010). But what about the millions of people who have passed through the criminal justice system and completed their sentences? Although often viewed as social isolates, people formerly under supervision for felony convictions are embedded in every facet of social life, as neighbors, partners, parents, employees, and citizens. Yet little is known about the whereabouts or fortunes of this population. Although social scientists have done much to reveal the hidden damage of incarceration, the data they use often obscures the much broader population of felons – and what happens to them when they are no longer under supervision.

There is good reason to believe that the aggregate presence and relative size of former felon populations have spillover effects on social institutions and processes, especially in communities of color (Schnittker, Massoglia, Uggen 2011; Wakefield and Uggen 2010). A population of this size – 16 million nationwide as of 2004 (Uggen, Manza and Thompson 2006) – can be expected to substantially affect labor markets, politics, health care, education, and institutional functioning more generally. But despite intensive surveillance while under correctional control (e.g., head counts in prison, electronic monitoring in the community), this population tends to be forgotten post-sentence (Pettit 2012). Former felons are living, working, paying taxes, or otherwise getting by throughout U.S. society, but the overall extent and geographic distribution of this population remains unknown. Our estimates provide a significant first step in filling this gap by providing scholars with an important social indicator to consider in analyses of phenomena ranging from political participation to family functioning, economic conditions, and public health.

## DATA AND METHODS

There are many complications and challenges in producing these estimates. The underlying data are often incomplete, racial categorizations and reporting have changed significantly in recent decades, and states vary in recidivism, mortality, mobility, and other factors that can affect the estimates we compile. We seek to overcome these challenges using the best available data and reasonable assumptions by social scientific standards. It is important to make clear, however, that the figures we present are estimates based on models rather than a census-like enumeration of these populations. To address these sources of potential error and uncertainty, we will present state-

specific ranges, rather than point estimates in the tables below. The online version of this article provides point estimates for each state and year in a downloadable data file.

To estimate the size of these populations nationally and at the state-level, we need information about persons convicted of felonies who are no longer under supervision. We draw our data from annual series gathered by the United States Department of Justice (DOJ), including the *Sourcebook of Criminal Justice Statistics*, *Probation and Parole in the United States*, as well as the *Prisoners and Jail Inmates at Midyear* series. For early years, we also referenced *National Prisoner Statistics*, and *Race of Prisoners Admitted to State and Federal Institutions, 1926-1986*. These reports provide year-end headcounts of the number of individuals exiting and entering correctional control nationally and by state. Specifically, we take each year's reported number of prison releases (conditional and unconditional) and each year's reported number of people entering felony probation and jail to compute annual cohorts of former felons. States vary in consistency of reporting over the time period. Where data are missing for particular states or years, we assumed stability and applied a linear interpolation between years.

We begin following these groups in 1948 primarily for data reasons; 1948 is the earliest year for which detailed data are available on releases from supervision. As a result, when we cumulate the number of remaining (non-recidivists, non-deceased) ex-felons, our estimates are actually for individuals released 1948 or later. This may slightly underestimate the number of ex-felons in earlier years, but should have little effect on recent years since less than 2 percent of 1948 releases remain in the ex-felon population by 2010. To account for this problem in our earlier estimates, we add to our calculated ex-felon population an estimate of ex-felons released in the years 1925 through 1947.

This is done by taking all prison releases in these years, reducing for death and recidivism, and adding the number remaining to each year's total.

Historical data on race and sex are typically reported for prison populations but difficult to obtain for other correctional populations. This data limitation necessitated some interpolation in our estimation procedures. Prior to the mid-1970s, we used race and sex data for prison to estimate the race and sex distributions in the jail, probation, and parole populations. This estimation entailed starting with the earliest year for which we have race and sex information for the specific correctional population (e.g., probation) and altering this number based on the percent change in the prison population with that same characteristic. As a result, our estimate of the sex and race of the ex-felon population assumes stability in the ratio of African American probationers (and parolees) to African American prisoners over time. This assumption is not necessary in our prison-only estimates, however, since adequate historical data are available for this population.

With these data we compiled multiple-decrement demographic life tables for the period 1948-2010 to determine the number of released felons lost to recidivism (and therefore already included in annual head counts) and to mortality each year. Based on large-scale national recidivism studies of prison releasees and probationers, our models assume that most ex-prisoners will be reincarcerated and a smaller percentage of ex-probationers and jail inmates will cycle back through the criminal justice system. As we detail below, we also assume a substantially higher mortality rate for felons relative to the non-felon population. Both recidivists and deaths are removed from the ex-felon pool so as not to overestimate the number of ex-felons in the population. Each release cohort is thus reduced each successive year and added to each new cohort of releases.

This allows us to compute the number of ex-felons no longer under criminal justice supervision each year.

### *Recidivism*

Because our estimates are most sensitive to our assumptions about recidivism, we took several approaches to produce upper and lower bounds for these numbers. Given the poor quality or absence of state- and race-specific rates, especially for non-incarcerated correctional populations, we made a number of simplifying assumptions in obtaining these estimates. The national recidivism rate we use to decrease the release population in each state and year is based upon the Bureau of Justice Statistics “Recidivism of Prisoners Released in 1983” study and “Recidivism of Felons on Probation 1986-1989” (U.S. Department of Justice 1989; 1992). For prisoners and parolees, we use a reincarceration rate of 18.6% at one year, 32.8% at two years, 41.4% at 3 years. Although rearrest rates have increased since 1983, the overall reconviction and reincarceration rates used for this study are much more stable (Langan and Levin 2002, p. 11).<sup>3</sup> For probationers and jail inmates, the corresponding three-year failure rate is 36%, meaning that individuals are in prison or jail and therefore counted in a different population.

To extend the analysis to subsequent years, we calculated a trend line using the ratio of increases provided by Hoffman and Stone-Meierhoefer (1980) on federal prisoners. By year 10, we estimate a 59.4% recidivism rate among released prisoners and parolees, which increases to 65.9% by year 62 (the longest observation period in

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<sup>3</sup> A recent report from the Bureau of Justice Statistics using data on prisoners released in 2005 in 30 states found a 17.5% reincarceration rate at one year, 28.8% at two years, and 36.2% at three years (Durose, Cooper, and Snyder 2014). We apply the slightly higher rate from previous studies so that our numbers will produce more conservative estimates of these populations.

this analysis). Because these estimates are higher than most long-term recidivism studies, they are likely to yield conservative estimates of the ex-felon population. We apply the same trend line to the 3-year probation and jail recidivism rate of 36%; by year 62, the recidivism rate is 57.3%. We begin by applying these recidivism rates to all felon populations at the national and state levels. Because these initial estimates may slightly overestimate “surviving” ex-felon groups or states with high recidivism rates while underestimating those with lower recidivism rates we relax this assumption in sub-analyses that assume variation by race and state.

To account for a higher rate of recidivism among African Americans, we recalculate ex-prisoner estimates using the higher three-year rate of 45.3% for African American prisoners, as reported by the 1983 recidivism study. By applying the trend line (used for the total population estimates) to this higher 3-year rate, we estimate a lifetime (57th year) recidivism rate of 72.2% for African American ex-prisoners. Using the same logic, we calculate a 62.7% lifetime recidivism rate for African American probationers.

Likewise, we recalculate state-level recidivism rates based on a Pew (2011) survey of state departments of corrections regarding 3-year recidivism rates for prison release cohorts in 1999 and 2004. Using the most complete data from the survey (41 states reported for the 2004 cohort) we subdivided states into low, median, and high categories based on the median and interquartile range for all responding states (see Appendix Table1). We then further calculated the median recidivism rate within each category to which we applied the trend line used in our total population estimates above. The resulting 3-year recidivism rate is 33% for low incarceration states, 43% for median incarceration states, and 46% for high incarceration states. We estimated state-specific

recidivism rates for African American ex-prisoners by taking the difference between our original recidivism rates and the state-specific rates for the total population and adjusting our original African American rates accordingly. The 3-year African American recidivism rate is 36% for low incarceration states, 47% for median incarceration states, and 48% for high incarceration states.

To obtain state-specific recidivism rates for the probation populations we drew upon data from the National Corrections Reporting Program (NCRP) to compute the percentage of people from each state that successfully completed probation in each year between 1994 and 1997. We further adjusted these percentages using regression models controlling for the percentage of misdemeanor probationers in each state. Based on the resulting percentages, we again classified states into low, median, and high probation recidivism states. Following the procedure described above, we generated new 3-year recidivism rates for each group, keyed to the trend lines from our original rates. We retained our original national rate as the median state rate but adjusted the rate up or down for high and low states based on the rate of increase or decrease we calculated for the state-specific prison rates. The resulting 3-year recidivism rate for total probationers is 29% for low recidivism states and 39% for high recidivism states. For African American probationers, the corresponding 3-year recidivism rates are 32% and 42%.<sup>4</sup>

### *Mortality*

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<sup>4</sup> Because we use de-identified aggregate data, factors such as aliases are unlikely to significantly affect our estimates. Our state release information is based on a simple count of the number of people leaving supervision, without regard to individual releasees' names or identities. Our estimates thus model death and recidivism for the total release cohort rather than tracking individuals who may have multiple names or records within the system.



We calculate mortality based on the expected number of deaths for African American males at the median age of release for each year, multiplied by a factor of 1.46 to reflect the higher death rates observed among releasees in the Bureau of Justice Statistics' *Recidivism of Prisoners Released in 1983* study (U.S. Department of Justice 1989). We determined the median age of released prisoners based on annual data from the National Corrections Reporting Program (U.S. Bureau of Prisons 1948-2004). Using the African American death rate ensures that our estimates are conservative in this regard given that this group experiences higher mortality than the population at large.

### *Mobility*

After adjusting the estimates for recidivism and mortality, we further calculate the effect of inter-state mobility on our state-level numbers. We obtained annual average net migration rates (expressed as an annual percentage lost or gained) by state from U.S. Census sources (U.S. Bureau of the Census 1953; 1963; 1973; 1984; 2003; 2006; 2010) and apply them to the estimate for each state in each year.<sup>5</sup> If the state experienced a net mobility loss we simply subtract the number lost to mobility from the total estimate for that year. If a state experienced a net mobility gain in a given year, we further reduce the number gained for recidivism and death and add the remainder to the total estimate for that state and year.<sup>6</sup>

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<sup>5</sup> Little is known about how mobility patterns of this population might differ from the population as a whole. Available evidence suggests that at least 95 percent of former prison inmates remain in the same state post-release (LaVigne and Kachnowski 2003; LaVigne and Mamalian 2003; LaVigne and Thompson 2003; Watson et al. 2004). Given that this population faces significant socioeconomic challenges as a result of criminal conviction (see e.g. Wakefield & Uggen 2010), there is little reason to believe that ex-felons are *more* mobile than the general population. If ex-felons are *less* mobile than the population as a whole, our estimates will remain conservative.

<sup>6</sup> After calculating mobility-adjusted estimates for each state and year, we found that the resulting national totals for ex-prisoner and ex-felon populations were inflated by 2 percent over national totals without mobility adjustments. This is because we add in mobility gains each year and reduce those gains for recidivism and mortality but not subsequent mobility losses. To compensate for this inflation, we adjust each state's estimate by a factor of .98 in each year. This is a reasonable assumption since between 2 and 3 percent of the U.S. population moved from one state to

A note of caution is warranted regarding the use of these estimates. The rates of ex-prisoners and ex-felons are especially sensitive to changes in the recidivism rate (though less sensitive to changes in mortality or mobility rates). To provide a lower-bound estimate of our numbers, Appendix Tables 9 and 10 show state-level estimates for 1980 and 2010 using recidivism rates that are 25 percent higher than our original rates. It is also challenging to produce reliable age-, race-, or gender-specific estimates, given existing data limitations and the complexity of modeling inter-state mobility. We therefore urge caution in interpreting these model-based estimates, despite the great care we have taken in producing them.

### *Spatial analysis*

With the fully adjusted state-level estimates of former prisoners and felons in hand, we use GIS techniques to map changes in these populations as a percentage of each state's adult population (18 or older) over time. We also perform spatial clustering analyses to detect areas of the country with significantly higher concentrations of former prisoners and felons. Moran's *I* is the most commonly used statistic for detecting spatial clustering (Cliff and Ord 1973; Cressie 1993; Haining 1990), providing a summary, global measure of whether the null hypothesis of spatial randomness can be rejected. A significant coefficient indicates the presence of spatial dependence. Moran's *I* can be compared to a Pearson product-moment correlation with a feasible range of -1 to +1. Put simply, rather than calculating the correlation between two variables, as with the

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another annually from 1980 to 2010, with the percentage declining just below 2 percent in more recent years (U.S. Census Bureau 2013).

Pearson's  $r$ , the Moran's  $I$  statistic estimates the correlation between the same variable in two geographic areas.<sup>7</sup>

Moran's  $I$  can be expressed as follows:

$$I_x = \left( \frac{n}{\sum_{i=1}^n \sum_{j=1}^n w_{ij}} \right) \frac{\sum_{i=1}^n \sum_{j=1}^n w_{ij} (x_i - \bar{x})(x_j - \bar{x})}{\sum_{i=1}^n \sum_{j=1}^n w_{ij} \sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{j=1}^n (x_j - \bar{x})^2}}$$

where  $x$  is the value for state  $i$  and neighbor  $j$  and  $w$  denotes a spatial weights matrix, in this analysis determined by first-order queen contiguity.

This global measure, while informative, does not reveal where “hot spots” – local variation in the overall spatial pattern – might be. Local Indicators of Spatial Autocorrelation (LISA) provides a way to examine such “hot spots” by decomposing of Moran's  $I$  into the contribution made by each individual observation (Anselin 1995). In doing so, LISA statistics identify which locations contribute more than their expected share to Moran's  $I$  (Anselin 1995). LISA can be expressed as follows:

$$I_i = z_i \sum_j w_{ij} z_j$$

where  $z_i$  and  $z_j$  are deviations from the mean and  $j \in J_i$ .

## RESULTS

### *National-Level Estimates*

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<sup>7</sup> Integral to this calculation is the specification of a spatial weights matrix in order to explicitly account for the spatial arrangement of the data. This determines the “neighborhood” for each observation. Weights matrices can be determined based on distance (e.g. from one state centroid to another) or by contiguity (shared borders). Contiguity matrices can be established at higher or lower orders (e.g. first, second, third) and vary in the neighbors included (e.g. rook, queen). For example, a first-order queen contiguity matrix takes into account adjacent neighbors in all directions at the first level out from the state in question.

As Table 1 shows, there were about 2.5 million adults in prison and on parole in the United States in 2010 (Glaze and Bonczar 2011; Guerino, Harrison and Sabol 2012). Based on our life table estimates, there are an additional 5.1 million former prisoners in the U.S. population, leading to a total of 7.6 million current and ex-prisoners. As shown in the top panel of Figure 2, this number has changed considerably over time, particularly as incarceration rates began to grow dramatically in the 1970s and 1980s. As prisoners were released in subsequent years, the number of ex-prisoners also rose substantially. Although incarceration rates have declined slightly, the number of former prisoners will likely continue to rise for decades as current prisoners are released. If, as some predict (Clear and Frost 2014), states begin to significantly reduce prison populations through administrative procedures that encourage early release, the rise in former prisoners will likely be accelerated rather than reduced, at least in the short term. If substantial legal changes result in fewer convicted felons sentenced to prison, the ex-prisoner population will gradually decline over the long term.

[Figure 2 about here]

Table 1 further breaks out our national estimates of current, ex-, and total (current plus ex-) prisoner populations by gender and race. In line with previous research on race and incarceration (Western 2006; Pettit 2012), we find that African American men are represented in the former prisoner population at rates much higher than men overall. In 1980, nearly 6 percent of the adult African American male population had been to prison at some point (total prison/parole), compared to just under 2 percent of all adult men. By 2010, 15 percent of African American males had spent time in prison, versus 6 percent of all adult males.

[Table 1 about here]

The top panel of Figure 3 expresses these changes as a percentage of the U.S. voting age population since 1948 and highlights the disparity in incarceration between African American and non-African American populations. While both groups have experienced substantial increases, the absolute rates and the rate of growth have been higher for African Americans. Prisoners and former prisoners have grown significantly as a percentage of the non-African American adult population (right axis) since the 1980s, reaching 2.3% in 2010, compared to approximately 1% in 1980. For African-Americans, in contrast, the percent of adults who are current or former prisoners has more than tripled from 3% in 1980 to about 10% in 2010 (left axis).

[Figure 3 about here]

These estimates are generally comparable to those obtained by other researchers applying different demographic techniques. Bonczar (2003) estimated that in 2001, 3% of adults, 5% of adult males, and 17% of African American adult males had been to prison. Pettit and Western (2004) found that black men born between 1945 and 1949 had an 11% chance of imprisonment, relative to a 21% for the cohort of black men born between 1965 and 1969. These figures are generally congruent with our overall estimate that 15 percent of black men had experienced imprisonment by 2010. This consistency with earlier research provides an important check on our approach, which we next apply to the much broader class of convicted felons.

Although imprisonment is a serious consequence of felony conviction, most people with felony convictions never enter prison but instead serve their sentences in jail or on probation in the community. Moreover, many of the collateral consequences of mass incarceration – most notably for the labor market, housing, and access to public supports – flow not from incarceration experiences but from the application of a widely

known and publicly disseminated felony label (Uggen and Stewart 2015). We estimate the total number of ex-felons by extending the life table analysis to additionally include those leaving felony probation and jail supervision each year. The bottom panel of Figure 3 displays the growth in the total number of ex-felons in the U.S. population since 1948.

As Table 2 shows, there were 4.5 million people currently serving jail or probation sentences for felony convictions in 2010 (Glaze and Bonczar 2011; Guerino, Harrison and Sabol 2012). Our life table estimates show that there are a further 15 million former felons in the population, which sums to a total of 19.6 million felons in 2010. Probationers have lower recidivism rates than prisoners, such that a smaller percentage of former probationers are removed from the ex-felon pool each year. This results in a more rapid accumulation of ex-felons in the population and a higher ratio of former felons to current felons relative to the ratio of former prisoners to current prisoners.

[Table 2 about here]

As with ex-prisoners, we also represent the ex-felon population as a percentage of the U.S. adult population by race in the bottom panel of Figure 3. The total number of non-African American felons has grown from 2.5% of the adult population in 1980 to over 6% in 2010 (right axis). For African-Americans, total felons have increased from 7.6% of adults in 1980 to nearly 24% in 2010 (left axis).

Table 2 further shows the breakdown of current, former, and total felons by race and gender. Once again, differences are stark between African American and total adult males. Already in 1980, about 13 percent of adult African American males had a current or past felony conviction, as compared to 5 percent of the total male population. By

2010, one-third (33 percent) of adult African American males had a felony conviction, versus 13 percent of all adult males.

### *State-Level Estimates*

While national numbers provide an overall picture of ex-felon and ex-prisoner populations in the United States, these totals obscure important state-level variation in criminal punishment. To illustrate this variation, the maps in Figure 4 show the percentage of total and African American adult populations that are ex-prisoners and ex-felons for 1980 and 2010 using our lower bound estimates. Tables displaying these estimates in detail and for additional years (1990 and 2000) are located in the appendix. The appendix tables include upper and lower bounds for these numbers based on our state-specific and national assumptions regarding recidivism. The lower bound assumes a 25 percent higher recidivism rate than the national average. The upper bound is the highest number we obtained for each state from applying either the state-specific or the national recidivism rate. In all cases, the percentages are derived using the relevant estimate as the numerator and the state's population over 18 years of age as the denominator for total and African American populations. The maps in Figures 4 and 5 use the more conservative lower bound so as not to overstate each state's estimate.

[Figure 4 about here]

The top-left panel of Figure 4 shows that less than 1 percent of adults in most U.S. states had spent time in prison as of 1980. States with the lowest rates of ex-prisoners (less than .5 percent) include several in the upper Midwest, like North Dakota and Minnesota, and a handful in the Northeast, such as Massachusetts, Pennsylvania, and Vermont. As evident by the darker shading, only Maryland had ex-prisoner rates

between 1 and 2 percent. The picture changes substantially by 2010, as the bottom-left panel of Figure 4 demonstrates. No states had ex-prisoner rates of less than 1 percent. Moreover, in 17 states more than 2 percent of the adult population had spent time in state prisons by 2010. Among these, Alaska has the highest rate at nearly 4 percent of the adult population (see Appendix Table 4).

The two right-hand panels of Figure 4 depicting the percentage of African American ex-prisoners are more startling. While overall rates of former prisoners for state populations in 1980 were relatively uniform and low, this is not the case for African American adults. As the top-right panel shows, 22 states already had African American ex-prisoner rates in excess of 2 percent in 1980. In four states more than 4 percent of adult African Americans had been to prison by 1980. In New Mexico the ex-prisoner rate exceed 6 percent of the adult African American population. Such states often have low baseline populations of African Americans. For example, according to our life table estimates, New Mexico had 1,321 African American former prisoners in 1980 and a state population of 15,300 total adult African Americans (8.63 percent). When compared to states such as Texas, which had a greater absolute number of African American ex-prisoners in 1980 (over 20,000 by our estimates, no small number) but also a much higher baseline population (1.1 million adult African Americans), states such as New Mexico stand out in terms of racial disparity. By 2010, rates of African American ex-prisoners (lower-right panel) had climbed even higher with only eight states having rates under 4 percent of the adult population. Most states (33) had African American ex-prisoner rates of at least 5 percent of the adult population. California leads the nation with an African American ex-prisoner rate of about 12 percent (see Appendix Table 4).



Turning to the broader ex-felon criterion in Figure 5, the two left-hand panels display the percent of all adults in each state with felony conviction histories in 1980 (top) and 2010 (bottom). By 1980, less than 2 percent of the adult population in most states (38) had a felony record. In Alabama, California, Colorado, and Oklahoma, about 3 percent of the adult population had spent time under correctional supervision for felonies. Eight states had adult felony rates between 2 and 3 percent. As of 2010, ex-felon rates had risen such that no state had less than 2 percent of the adult population with a felony record (see bottom-left panel). Only eight states had rates between 2 and 4 percent. In most states (42), between 4 and 10 percent of the adult population had experienced prior felony supervision. In Florida about 10 percent of the total adult population had spent time under felony-level correctional supervision by 2010.

[Figure 5 about here]

As with our ex-prisoner estimates, the magnitude of ex-felon rates is much higher for African Americans, as the two right-hand panels of Figures 5 demonstrate. Already in 1980 (top), more than 10 percent of the adult African American population in four states had been under felony supervision at some point in their lives (Arizona, Massachusetts, New Hampshire, and New Mexico). By 2010 (see bottom-right panel), only 16 states had *less* than 10 percent of the adult African American population with past felony supervision. By 2010, *all but one* state (Maine) had an adult African American ex-felon rate of at least 5 percent. Most strikingly, the rate in six states exceeded 20 percent, meaning that one in five African American adults in these states had at some point been under felony supervision (California, Connecticut, Florida, Indiana, Massachusetts, and Washington). In California and Indiana, we estimate that at least one in four of all adult African Americans had a felony conviction history. While

it may seem implausible that over 20 percent of the African American adult population has a felony conviction history in such states, recall that at least 5 percent of the African American population is *currently* under felony supervision in such states.

How are we to interpret this differential exposure to criminal justice contact? Where state rates are higher, a greater share of the population will be subject to the formal and informal collateral consequences of felony conviction. As noted above, these include denial of public benefits, housing, labor market discrimination, and social exclusion more generally. In short, as the percentage of former felons rises in a state, the justice system and its after-effects become ever more central in the lives of individual citizens and their communities.

### *Space-Time Trends*

Building on the maps presented above, the results of our spatial clustering analyses reveal several significant patterns over space and time. The top panel of Figure 6 displays Moran's  $I$  coefficients by decade for ex-prisoner rates by race using our more conservative lower bound estimates.<sup>8</sup> In all four decades and in both total and African American populations we find significant spatial autocorrelation in our estimates. This indicates that there are significant clusters of states with similarly higher or lower proportions of adult ex-prisoners. LISA analyses (not shown, available by request) show a significant cluster of states with high rates in the southeast, with a significant cluster of low rates in the northeast.

[Figure 6 about here]

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<sup>8</sup> We also tested these results excluding states with especially high rates (e.g. California and Florida) as well as states with less than 10,000 African Americans in the total population. The results are similar, with the exception that no significant spatial clustering is evident in the total ex-felon estimates for any year.

These patterns are evident in Figure 4 and align with states that typically have the highest and lowest incarceration rates in the nation. For example, Louisiana and Mississippi have the two highest incarceration rates as of 2012 (893 and 717 per 100,000, respectively), while Maine (145), Rhode Island (190), and Massachusetts (200) are among the lowest (Carson and Golinelli 2013).

The trend line in spatial clustering for African American ex-prisoners shows a similar pattern to overall former prisoners. We find significant clusters of high African American ex-prisoner states in the West at the first three time points but this clustering shifts to the Midwest by 2010, as revealed by LISA analysis (not shown) and evident in Figure 4. Six of the 12 states with African American former prisoner rates above 8 percent are located in the Midwest in 2010 (Illinois, Indiana, Kansas, Ohio, South Dakota, and Wisconsin). These clusters are likely driven in part by low baseline populations of African Americans in some states. The LISA analysis also shows significant clusters of low African American ex-prisoner states in the southeast and northeast. These findings are in line with Wildeman and Muller's (forthcoming) findings that the cumulative risk of incarceration for blacks is highest in the Midwest but lower in the South and northeast.

The drop in magnitude of the Moran's *I* coefficients over time may be due to the fact that the rate of African American ex-prisoners exceeded 5 percent of the adult population in most states by 2010. This does not imply that the concentration of former inmates at lower geographic scales (e.g. neighborhoods) has diminished. Rather, formerly low incarceration states have begun to catch up with historically high incarceration states in the concentration of African American former prisoners.

Unlike ex-prisoner rate, the Moran's  $I$  for ex-felon rates are only significant in 1980 and 1990, as shown in the bottom panel of Figure 6. The magnitude of the Moran's  $I$  coefficients are never particularly high for total ex-felons. Only 1990 show significant spatial clustering for this population, with a significant cluster of high rates in the southeast. The trend for spatial clustering among states for African American ex-felons also shows a peak in 1990 with a drop in magnitude and significance as of 2000. LISA analysis for 1980 and 1990 (not shown) reveals a significant cluster of low African American ex-felon states in the southeast and a significant cluster of high ex-felon rates in the west. As with former prisoners, high rates of African American ex-felons are widespread across the nation by 2010, which is reflected in a non-significant Moran's  $I$  coefficient. This lack of significant spatial clustering in later decades may also reflect states' diverse paths in expanding the use of probation over this time period that did not necessarily follow the same patterns as the growth in incarceration and are difficult to predict (Phelps forthcoming).

## DISCUSSION

These estimates represent the first attempt to provide state-level demographic information about former felons in the United States, a population defined by incomplete citizenship and the temporary or permanent suspension of many rights and privileges. Because we currently have so little state-level information on this group, we have emphasized this new descriptive evidence. Nevertheless, a logical next step in this line of research will be to develop explanatory models to predict changes in the rate of former felons and the differing paths taken by the states during the mass incarceration era. Our estimates are also well-suited to estimating the cumulative risk of having a

felony conviction. Although criminal justice data series have improved over the 1980-2010 period, some significant gaps remain. The success of subsequent work will depend critically on developing greater consistency and completeness in state reports, particularly regarding race and ethnicity. For example, we currently lack the data needed to develop sound estimates of the rate of felony convictions among Latinos.

Despite these caveats, our life table estimates and spatial analyses show that the development of the former felon population since 1980 has been one of widespread, racialized growth. While our analysis cannot provide a critical test of competing punishment theories, these results are in many ways consistent with theories based on neo-conservatism, conflict, and group threat (Garland 2001; Behrens, Uggen, and Manza 2003; Wacqaunt 2012). African American populations in many states are now heavily burdened by the social consequences of past felony conviction. Nationwide, 3 percent of all adults and 10 percent of African American adults are currently or were once in prison.

At the state-level, rates of African American adults with prison experience range from about 1 percent in Maine to 15 percent in California as of 2010 (see Appendix Table 4). The overall numbers mask significant variation by gender as well as by geographic location. For example, 15 percent of African American men in the United States have been to prison (compared to about 6 percent of all adult men). These estimates square with other national studies on imprisonment, though they are somewhat lower than those for cohorts coming of age during the incarceration boom. For example, Pettit (2012) estimates that 28 percent of African American men in recent cohorts will have entered prison by age 30-34.

These disparities continue when we turn to the broader felony criterion. Nationwide, about 8 percent of all adults have had a felony conviction, but about 24 percent of African American adults share the same distinction. When parsed by gender, a staggering 33 percent of African American adult males have a felony conviction history (as compared to 13 percent of all men). Depending on the state, between 1 in 10 and 1 in 3 African American adults are confronting the daily reality of limited citizenship rights, diminished job prospects, and stigmatization. Beyond individual challenges that come with past entanglement in the criminal justice system, the communities and families in which former prisoners and felons live are also taxed by the material and social consequences of criminal punishment (National Research Council 2014; Wakefield and Uggen 2010). In Ferguson, Missouri, for example, the U.S. Department of Justice (2015) concluded that police and court officials systematically discriminated against black residents and imposed excessive fines and forfeitures that deepened distrust of the criminal justice system (USDOJ 2015). Ferguson is no aberration, as we identify six states in which the percentage of adult African Americans with felony convictions exceed 20 percent.

Given this pervasive, racialized growth, many phenomena of interest to social scientists are surely affected. Even social institutions and processes that would appear far removed from the criminal justice system may be impacted, including health care, politics, and the labor market (Johnson and Raphael 2009; Uggen and Manza 2002; Western and Beckett 1999). For example, using similar estimates in states where felons are barred from voting, Uggen and Manza (2002) demonstrate that the presence of disenfranchised felons in a state can impact elections by diminishing the electoral power of minority groups. The results of such elections spillover to affect a state's – and the

nation's – population as a whole, not just those directly impacted by contact with the criminal justice system. Likewise, U.S. states with higher rates of former prisoners experience lower access to and quality of healthcare, even for those who have never been incarcerated (Schnittker, Uggen, Shannon, and McElrath 2015). It is likely that similar spillover effects affect a great range of social institutions, making these estimates an important tool for social scientists and policy makers alike.

Although these model-based estimates remain less definitive than would census-based counts, they represent an important step toward providing reliable data for social scientists and policy makers on *former* prisoners and felons. This work thus complements other research with regard to imprisonment (Pettit 2012), arrest (Brame et al. 2014), family concentration (Turney 2014; Wildeman 2009), and neighborhood clustering (Kirk 2008). These estimates thus contribute to broader efforts to assess the function of major social institutions in light of the presence and growth of important population groups. With significant changes in sentencing laws likely on the horizon (Clear and Frost 2014), including shifts from incarceration to community corrections, the size as well as the geographic and demographic distribution of this population is all the more important to measure and understand.

The United States' decades-long “grand experiment” with mass incarceration may be at a crossroads (Clear and Frost 2014), though any reduction in correctional populations is likely to come at a painfully slow rate. At current rates of decline, some estimate it would take 80 years to return to 1980 levels (Mauer 2013). So too, any such declines will unfold in different ways in different states, just as the rise in criminal punishment was driven by state-specific law and policy preferences.

**Appendix Table 1. High and Low Prison and Probation Recidivism States**

<b>Prison Recidivism Rates</b>			<b>Probation Failure Rates</b>		
<i>High</i>	<i>Median</i>	<i>Low</i>	<i>High</i>	<i>Median</i>	<i>Low</i>
AK	AL	MI	AL	AK	AR
AR	AZ	MS	IN	CO	AZ
CA	CO	NE	MI	CT	CA
CT	DE	OK	NE	DE	FL
IL	GA	OR	NH	GA	MD
KS	HI	RI	OK	HI	MS
MN	ID	SC	PA	IA	ND
MO	IN	TX	RI	ID	NM
NH	IA	VA	SD	IL	VA
NJ	KY	WV	TN	KS	WY
NM	LA	WY	WA	KY	
SD	MA			MA	
UT	ME			ME	
WA	MD			MN	
WI	MT			MO	
	NV			MT	
	NY			NC	
	NC			NJ	
	ND			NV	
	OH			NY	
	PA			OH	
	TN			OR	
	VT			SC	
				TX	
				UT	
				VT	
				WI	
				WV	



**Appendix Table 2. Ex-Prisoners and African American Ex-Prisoners 1980 (in thousands)**

State	Overall Ex-Prisoners						African American Ex-Prisoners					
	Curr.	% Curr.	Est. Ex-Prisoners Lower-Upper Bound	% Ex-Prisoners	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Pris Lower-Upper Bound	% AA Ex-Prisoners	Total AA Lower-Upper Bound	% Tot.
AL	6	.2%	22 - 27	.8 - 1%	28 - 33	1 - 1.2%	4	1%	8 - 11	1 - 2%	12 - 14	1.9 - 2.3%
AK	1	.2%	0.8 - 1	.3 - .4%	1 - 2	.5 - .6%	.1	1%	.08 - .09	.8 - 1%	.13 - .14	1.4 - 1.5%
AZ	4	.2%	9 - 11	.4 - .6%	13 - 15	.7 - .8%	1	2%	2 - 3	5 - 6%	3 - 4	7 - 8%
AR	3	.2%	11 - 14	.7 - .9%	14 - 17	.9 - 1%	1	1%	4 - 5	1.6 - 2.1%	5 - 6	2 - 3%
CA	23	.1%	72 - 89	.4 - .5%	95 - 112	.5 - .6%	8	1%	17 - 22	1.4 - 1.7%	25 - 29	2 - 2.4%
CO	3	.1%	12 - 15	.6 - .7%	15 - 18	.7 - .8%	.5	1%	1.5 - 2	2 - 3%	2 - 2.5	3 - 4%
CT	3	.1%	12 - 15	.5 - .7%	15 - 18	.7 - .8%	1	1%	4 - 5	3 - 4%	5 - 6	4 - 5%
DE	1	.3%	1.7 - 2	.4 - .5%	2.7 - 3.1	.6 - .7%	1	1%	.7 - .9	1.1 - 1.4%	1.3 - 1.5	2.1 - 2.4%
FL	20	.3%	42 - 52	.6 - .7%	62 - 72	.8 - 1%	9	1%	16 - 20	1.8 - 2.3%	25 - 29	2.9 - 3.4%
GA	12	.3%	32 - 40	.8 - 1%	44 - 52	1.1 - 1.3%	6	1%	15 - 19	1.6 - 2%	21 - 25	2 - 3%
HI	1	.1%	0.9 - 1.1	.1 - .2%	1.5 - 1.7	.2 - .3%	.03	.3%	.01 - .02	.11 - .14%	.05 - .05	.4 - .4%
ID	1	.1%	3 - 4	.5 - .7%	4 - 5	.7 - .8%	.02	.3%	.11 - .14	2 - 3%	.12 - .16	3 - 3%
IL	11	.1%	35 - 42	.4 - .5%	45 - 53	.55 - .64%	6	1%	15 - 19	1.5 - 1.8%	22 - 26	2 - 2.4%
IN	6	.2%	17 - 21	.4 - .5%	23 - 27	.6 - .7%	2	1%	4 - 5	1.5 - 1.9%	6 - 7	2 - 3%
IA	2	.1%	7 - 9	.36 - .44%	10 - 12	.5 - .6%	.4	1%	.5 - .7	2 - 3%	.9 - 1.1	3.6 - 4.2%
KS	2	.1%	11 - 14	.6 - .8%	14 - 16	.8 - .9%	1	1%	2 - 3	2.5 - 3.2%	2.9 - 3.4	3.5 - 4.1%
KY	4	.1%	17 - 21	.7 - .8%	21 - 25	.8 - 1%	1	.5%	2.6 - 3.3	1.5 - 1.9%	3 - 4	2 - 2.4%
LA	9	.3%	15 - 19	.5 - .6%	24 - 28	.8 - 1%	6	1%	13 - 16	1.6 - 2.1%	19 - 23	2 - 3%
ME	1	.1%	5 - 6	.6 - .8%	5 - 7	.7 - .8%	.01	.3%	.01 - .02	.5 - .7%	.020 - .023	.8 - 1%
MD	8	.3%	34 - 42	1.1 - 1.4%	41 - 50	1.3 - 1.6%	4	1%	18 - 23	3 - 4%	21 - 26	3 - 4%
MA	3	.1%	10 - 13	.2 - .3%	13 - 16	.3 - .4%	1	1%	1.6 - 2.1	1.1 - 1.4%	2.6 - 3.1	1.8 - 2.1%
MI	15	.2%	39 - 59	.6 - .9%	54 - 74	.8 - 1.1%	8	1%	14 - 20	2 - 3%	23 - 28	3 - 4%
MN	2	.1%	8 - 11	.3 - .4%	10 - 13	.36 - .43%	.3	1%	1.1 - 1.4	3 - 4%	1 - 2	4.4 - 5.4%
MS	4	.2%	9 - 13	.5 - .7%	13 - 17	.7 - 1%	2	.5%	4 - 6	.8 - 1.1%	7 - 8	1 - 2%
MO	6	.2%	17 - 22	.5 - .6%	23 - 27	.6 - .8%	2	1%	5 - 7	1.6 - 2%	7 - 9	2 - 3%
MT	1	.1%	3 - 4	.6 - .8%	4 - 5	.7 - .9%	.01	1%	.06 - .08	5 - 7%	.07 - .09	7 - 8%
NE	1	.1%	6 - 9	.5 - .8%	7 - 10	.6 - .9%	.3	1%	1 - 1.4	3 - 5%	1 - 2	4 - 6%
NV	2	.3%	3.5 - 4.3	.6 - .7%	5 - 6	.9 - 1%	1	2%	.8 - 1	2.5 - 3.1%	1 - 2	4 - 5%
NH	0	.1%	1 - 2	.2 - .3%	1.7 - 2	.25 - .30%	.005	.2%	.01 - .01	.2 - .3%	.01 - .01	.4 - .5%
NJ	6	.1%	27 - 33	.5 - .6%	32 - 39	.6 - .7%	3	1%	10 - 12	1.6 - 2.1%	13 - 15	2 - 3%
NM	1	.1%	5 - 6	.6 - .7%	6 - 8	.7 - .8%	.1	1%	1 - 1.3	7 - 9%	1.2 - 1.5	8 - 10%
NY	22	.2%	61 - 75	.5 - .6%	82 - 97	.6 - .8%	11	1%	32 - 32	1.97 - 1.98%	42 - 52	2.6 - 3.2%
NC	14	.3%	35 - 43	.8 - 1%	50 - 57	1.2 - 1.3%	7	1%	14 - 18	1.6 - 2%	21 - 25	2 - 3%
ND	0	.0%	1 - 2	.3 - .4%	1.5 - 1.9	.3 - .4%	.002	.1%	.05 - .07	3 - 4%	.05 - .07	3 - 4%
OH	13	.2%	47 - 58	.6 - .7%	60 - 71	.8 - .9%	5	1%	15 - 19	2 - 3%	21 - 25	2.9 - 3.5%
OK	5	.2%	17 - 25	.8 - 1.1%	22 - 30	1 - 1.4%	1	1%	4 - 5	3 - 4%	5 - 7	4.1 - 5.1%
OR	3	.2%	11 - 17	.6 - .9%	14 - 20	.8 - 1%	.3	1%	.9 - 1.2	4 - 5%	1 - 2	5 - 7%
PA	8	.1%	26 - 32	.3 - .4%	34 - 40	.4 - .5%	4	1%	9 - 11	1 - 2%	12 - 15	1.7 - 2.1%
RI	1	.1%	2 - 3	.2 - .4%	2 - 3	.3 - .4%	.1	1%	.25 - .34	1 - 2%	.38 - .48	2 - 3%
SC	7	.3%	19 - 27	.9 - 1.2%	27 - 35	1.2 - 1.6%	4	1%	8 - 10	1 - 2%	11 - 13	1.9 - 2.2%
SD	1	.1%	3 - 4	.6 - .7%	3 - 4	.7 - .9%	.02	1%	.03 - .04	2 - 3%	.05 - .06	3 - 4%
TN	7	.2%	15 - 19	.5 - .6%	22 - 26	.7 - .8%	3	1%	5 - 7	1.2 - 1.5%	8 - 9	1.7 - 2%
TX	30	.3%	56 - 83	.6 - .8%	86 - 113	.8 - 1.1%	12	1%	16 - 23	1.5 - 2%	28 - 34	2.5 - 3.1%
UT	1	.1%	2 - 3	.26 - .33%	3 - 4	.36 - .43%	.1	1%	.23 - .29	3.5 - 4.4%	.31 - .37	5 - 6%
VT	0	.1%	1.9 - 2.3	.5 - .6%	2 - 3	.6 - .7%	.01	1%	.016 - .021	2 - 3%	.02 - .03	2.9 - 3.5%
VA	9	.2%	21 - 30	.5 - .8%	29 - 39	.7 - 1%	4	1%	9 - 12	1 - 2%	13 - 16	1.9 - 2.4%
WA	4	.1%	15 - 18	.5 - .6%	19 - 23	.6 - .8%	.8	1%	1.8 - 2.3	2 - 3%	2.6 - 3.1	3.6 - 4.3%
WV	1	.1%	5 - 8	.4 - .6%	7 - 9	.5 - .7%	.1	.3%	.7 - 1.1	1.6 - 2.4%	.8 - 1.2	2 - 3%
WI	4	.1%	15 - 18	.4 - .6%	19 - 22	.6 - .7%	1	1%	3 - 4	3 - 4%	4 - 5	4 - 5%
WY	1	.2%	2 - 3	.5 - .9%	2 - 3	.7 - 1%	.02	1%	.08 - .12	3 - 5%	.1 - .14	4 - 6%
WY	1	0.2%	2 - 3	0.5-0.9%	2 - 3	0.7-1%	0.02	1%	0.08 - 0.12	3-5%	0.1 - 0.14	4-6%

**Appendix Table 3. Ex-Prisoners and African American Ex-Prisoners 1990 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Prisoners Lower-Upper Bound	% Ex-Prisoners	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Pris Lower-Upper Bound	% AA Ex-Prisoners	Total AA Lower-Upper Bound	% Tot.
AL	16	.5%	31 - 38	1 - 1.3%	46 - 54	1.6 - 1.8%	10	1%	13 - 17	1.9 - 2.4%	23 - 26	3 - 4%
AK	3	.7%	3.9 - 4.4	1 - 1.2%	6 - 7	1.7 - 1.9%	.3	2%	.4 - 1	3 - 7%	.7 - 1.2	5 - 9%
AZ	14	.5%	22 - 26	.8 - 1%	36 - 40	1.3 - 1.5%	2	3%	5 - 6	7 - 9%	7 - 9	10 - 12%
AR	7	.4%	18 - 22	1 - 1.3%	25 - 29	1.4 - 1.7%	3	1%	7 - 9	3 - 4%	10 - 12	4 - 5%
CA	97	.4%	248 - 293	1.1 - 1.3%	346 - 390	1.6 - 1.8%	36	3%	77 - 93	6 - 7%	114 - 129	9 - 10%
CO	7	.3%	17 - 21	.7 - .9%	24 - 28	1 - 1.2%	2	2%	2 - 3	2.7 - 3.4%	4 - 5	4.5 - 5.2%
CT	11	.4%	26 - 31	1 - 1.2%	37 - 42	1.5 - 1.7%	7	4%	11 - 13	6 - 7%	17 - 20	9 - 10%
DE	3	.7%	3.7 - 4.4	.7 - .9%	7 - 8	1.4 - 1.6%	2	3%	1.6 - 2	2 - 2.5%	3.9 - 4.3	4.7 - 5.2%
FL	44	.4%	132 - 158	1.3 - 1.6%	177 - 202	1.7 - 2%	25	2%	60 - 73	5 - 6%	86 - 98	7 - 8%
GA	22	.5%	66 - 80	1.4 - 1.7%	88 - 103	1.8 - 2.1%	15	1%	33 - 41	2.8 - 3.4%	48 - 56	4 - 5%
HI	3	.3%	2.6 - 3.1	.3 - .4%	5 - 6	.6 - .7%	.2	1%	.1 - .2	.8 - 1%	.3 - .32	1.8 - 2%
ID	2	.3%	6 - 7	0.8 - 1%	8 - 9	1.1 - 1.3%	.03	1%	.1 - .2	5 - 6%	.18 - .22	5 - 7%
IL	28	.3%	65 - 79	.8 - .9%	93 - 107	1.1 - 1.3%	19	2%	33 - 41	2.8 - 3.5%	52 - 60	4 - 5%
IN	13	.3%	28 - 34	.7 - .8%	41 - 47	1 - 1.1%	5	2%	9 - 11	2.8 - 3.5%	13 - 16	4 - 5%
IA	4	.2%	13 - 16	.7 - .8%	17 - 20	.8 - 1%	1	3%	1 - 2	4 - 5%	2.1 - 2.4	7 - 8%
KS	6	.3%	17 - 21	.9 - 1.2%	23 - 27	1.3 - 1.5%	2	2%	4.8 - 4.9	5 - 5.1%	7 - 7	7 - 7%
KY	9	.3%	24 - 29	.9 - 1.1%	33 - 38	1.2 - 1.4%	3	1%	4 - 5	2 - 3%	7 - 8	3.7 - 4.3%
LA	19	.6%	28 - 34	.9 - 1.1%	46 - 52	1.6 - 1.8%	13	2%	24 - 30	3 - 4%	38 - 44	4 - 5%
ME	2	.2%	6 - 7	.6 - .8%	7 - 9	.8 - 1%	.03	1%	.02 - .03	.8 - 1%	.05 - .06	1.8 - 2%
MD	18	.5%	41 - 51	1.1 - 1.4%	59 - 69	1.6 - 1.9%	14	2%	23 - 29	2.6 - 3.3%	37 - 43	4 - 5%
MA	8	.2%	17 - 21	.4 - .5%	25 - 29	.5 - .6%	3	2%	4 - 5	1.8 - 2.2%	7 - 8	3 - 4%
MI	34	.5%	52 - 69	.8 - 1%	86 - 103	1.3 - 1.5%	20	2%	22 - 28	2 - 3%	42 - 48	4.6 - 5.3%
MN	3	.1%	13 - 16	.4 - .5%	16 - 19	.5 - .6%	1	2%	2 - 3	4 - 5%	3 - 4	6 - 7%
MS	8	.5%	17 - 21	.9 - 1.2%	25 - 30	1.4 - 1.6%	6	1%	9 - 11	1 - 2%	15 - 17	2 - 3%
MO	15	.4%	30 - 37	.8 - 1%	45 - 52	1.2 - 1.4%	7	2%	10 - 12	2.6 - 3.3%	17 - 19	4 - 5%
MT	1	.3%	4 - 5	.7 - .9%	6 - 7	1 - 1.2%	.02	2%	.07 - .09	6 - 8%	.09 - .12	8 - 10%
NE	2	.2%	7 - 10	.6 - .8%	10 - 12	.8 - 1%	1	2%	2 - 2	4 - 5%	2 - 3	6 - 7%
NV	5	.6%	10 - 12	1.1 - 1.3%	15 - 17	1.6 - 1.9%	2	3%	3 - 3	5 - 6%	4.5 - 5.1	8 - 9%
NH	1	.2%	2 - 3	.3 - .3%	3.6 - 4.1	.4 - .5%	.1	1%	.037 - .043	.7 - .9%	.09 - .1	1.9 - 2%
NJ	21	.4%	41 - 51	.7 - .9%	63 - 72	1.1 - 1.2%	14	2%	19 - 23	2 - 3%	33 - 37	4 - 5%
NM	3	.3%	9 - 12	.9 - 1.1%	13 - 15	1.2 - 1.4%	.3	2%	1.8 - 2.3	10 - 12%	2 - 3	12 - 14%
NY	55	.4%	105 - 128	.8 - .9%	160 - 183	1.2 - 1.3%	28	1%	61 - 75	3 - 4%	88 - 103	4 - 5%
NC	18	.4%	71 - 86	1.4 - 1.7%	89 - 105	1.8 - 2.1%	11	1%	32 - 40	3 - 4%	43 - 51	4 - 5%
ND	0	.1%	2 - 2.5	.4 - .5%	2 - 3	.5 - .6%	.01	0%	.06 - .08	3 - 4%	.06 - .08	3 - 4%
OH	32	.4%	79 - 96	1 - 1.2%	111 - 128	1.4 - 1.6%	17	2%	31 - 39	4 - 5%	48 - 55	6 - 7%
OK	12	.5%	28 - 37	1.2 - 1.6%	41 - 49	1.8 - 2.1%	4	3%	7 - 9	5 - 6%	12 - 14	8 - 9%
OR	3	.2%	22 - 28	1 - 1.3%	25 - 31	1.2 - 1.5%	1	2%	2 - 3	7 - 8%	2.7 - 3.1	9 - 10%
PA	22	.3%	37 - 46	.4 - .5%	60 - 68	.7 - .8%	12	2%	13 - 16	1.6 - 2.1%	25 - 28	3 - 4%
RI	2	.3%	3 - 4	.4 - .5%	5 - 6	.7 - .8%	1	3%	.5 - 1	1.8 - 2.2%	1.3 - 1.4	4.7 - 5.1%
SC	12	.5%	30 - 40	1.2 - 1.5%	43 - 52	1.7 - 2%	8	1%	14 - 17	1.9 - 2.4%	22 - 25	3 - 4%
SD	1	.3%	4 - 5	.9 - 1.1%	6 - 7	1.1 - 1.3%	.04	3%	.07 - .09	5 - 6%	.11 - .13	7 - 8%
TN	10	.3%	25 - 31	.7 - .9%	36 - 42	1 - 1.1%	5	1%	10 - 13	1.9 - 2.4%	15 - 18	2.8 - 3.3%
TX	50	.4%	118 - 149	1 - 1.2%	168 - 199	1.4 - 1.6%	24	2%	38 - 47	2.8 - 3.4%	62 - 71	4 - 5%
UT	2	.2%	5 - 6	.5 - .6%	8 - 9	.7 - .8%	.2	3%	.5 - 1	6 - 7%	.7 - .8	9 - 10%
VT	1	.2%	2.8 - 3.5	.7 - .8%	3.5 - 4.2	.8 - 1%	.01	1%	.03 - .04	3 - 4%	.05 - .06	4 - 5%
VA	18	.4%	38 - 49	.8 - 1%	56 - 66	1.2 - 1.4%	11	1%	18 - 22	2 - 3%	29 - 33	3 - 4%
WA	8	.2%	21 - 26	.6 - .7%	29 - 34	.8 - 1%	2	2%	3 - 4	3 - 4%	5 - 5	5 - 6%
WV	2	.1%	6 - 8	.4 - .6%	8 - 10	.6 - .7%	.2	1%	1 - 1	2 - 3%	1 - 1.3	2.5 - 3.3%
WI	7	.2%	20 - 25	.5 - .7%	27 - 32	.8 - .9%	3	2%	5 - 6	3 - 4%	8 - 9	5 - 6%
WY	1	.4%	2 - 3	.8 - 1%	3.5 - 4.4	1.1 - 1.4%	.1	3%	.1 - .13	5 - 6%	.16 - .19	7 - 9%

**Appendix Table 4. Ex-Prisoners and African American Ex-Prisoners 2000 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Prisoners Lower-Upper Bound	% Ex-Prisoners	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Pris Lower-Upper Bound	% AA Ex-Prisoners	Total AA Lower-Upper Bound	% Tot.
AL	26	1%	49 - 60	1.5 - 1.8%	75 - 87	2 - 3%	17	2%	23 - 29	3 - 4%	41 - 47	5 - 6%
AK	2	.5%	9 - 11	2.2 - 2.6%	12 - 13	2.7 - 3.1%	.3	2%	1 - 1.5	6 - 9%	1 - 2	8 - 10%
AZ	27	1%	47 - 58	1.3 - 1.6%	74 - 84	2 - 2.3%	4	3%	8 - 10	6 - 7%	12 - 14	9 - 10%
AR	12	1%	33 - 40	1.7 - 2.1%	45 - 52	2 - 3%	7	2%	14 - 17	5 - 6%	20 - 24	7 - 9%
CA	163	1%	619 - 755	2.5 - 3%	782 - 918	3 - 4%	80	4%	173 - 211	9 - 11%	254 - 292	14 - 16%
CO	17	1%	30 - 37	1 - 1.2%	47 - 54	1.5 - 1.8%	4	3%	7 - 8	5 - 6%	11 - 13	8 - 10%
CT	13	1%	32 - 40	1.3 - 1.6%	45 - 53	1.8 - 2.1%	8	4%	15 - 18	7 - 8%	23 - 27	10 - 12%
DE	4	1%	8 - 9	1.3 - 1.6%	11 - 13	2 - 2.2%	3	2%	4 - 5	3.5 - 4.3%	6 - 7	6 - 7%
FL	71	1%	181 - 226	1.5 - 1.9%	252 - 298	2 - 3%	39	2%	83 - 107	5 - 7%	122 - 146	8 - 9%
GA	44	1%	99 - 123	1.7 - 2.1%	143 - 167	2 - 3%	30	2%	54 - 69	3 - 4%	84 - 98	5 - 6%
HI	4	.4%	7 - 10	.8 - 1.1%	11 - 13	1.2 - 1.5%	.2	1%	.4 - .5	1 - 2%	.6 - .7	2.2 - 2.5%
ID	6	1%	11 - 13	1.2 - 1.5%	16 - 19	1.8 - 2.1%	.1	2%	.3 - .4	4 - 5%	.4 - .5	6 - 7%
IL	45	1%	162 - 193	1.8 - 2.2%	208 - 238	2 - 3%	33	3%	105 - 125	8 - 10%	138 - 158	11 - 13%
IN	20	.5%	50 - 61	1.1 - 1.4%	70 - 81	1.6 - 1.8%	9	2%	21 - 26	6 - 7%	30 - 34	9 - 10%
IA	8	.4%	23 - 28	1.1 - 1.3%	31 - 36	1.4 - 1.7%	2	5%	2.7 - 3.3	6 - 7%	4.7 - 5.4	11 - 12%
KS	8	.4%	27 - 33	1.4 - 1.7%	36 - 42	1.8 - 2.1%	3	3%	9 - 10	8 - 9%	12 - 13	10 - 12%
KY	15	1%	41 - 52	1.4 - 1.7%	56 - 66	1.9 - 2.2%	6	3%	10 - 13	5 - 6%	16 - 18	8 - 9%
LA	35	1%	67 - 81	2.1 - 2.5%	102 - 116	3 - 4%	27	3%	52 - 65	5 - 7%	79 - 92	8 - 10%
ME	2	.2%	7 - 8	.7 - .9%	9 - 10	.9 - 1%	.1	1%	.06 - .07	.8 - 1%	.12 - .14	1.7 - 2%
MD	24	1%	63 - 78	1.6 - 2%	87 - 102	2 - 3%	18	2%	39 - 49	4 - 5%	57 - 67	5 - 6%
MA	11	.2%	27 - 34	.6 - .7%	38 - 44	.8 - .9%	4	1%	7 - 9	2.6 - 3.3%	11 - 13	4 - 5%
MI	48	1%	75 - 101	1 - 1.4%	123 - 149	1.7 - 2%	27	3%	34 - 49	3 - 5%	61 - 76	6 - 8%
MN	6	.2%	22 - 27	.6 - .8%	28 - 33	.8 - .9%	2	2%	6 - 7	6 - 7%	8 - 10	8 - 9%
MS	20	1%	27 - 36	1.3 - 1.8%	47 - 56	2 - 3%	15	2%	16 - 22	2 - 3%	31 - 37	5 - 6%
MO	27	1%	55 - 66	1.3 - 1.6%	82 - 94	2 - 2.3%	12	3%	18 - 23	4 - 5%	31 - 35	7 - 8%
MT	3	.5%	6 - 7	.9 - 1.1%	9 - 10	1.4 - 1.6%	.04	1%	.08 - .1	2 - 3%	.12 - .14	3 - 4%
NE	4	.3%	10 - 15	.8 - 1.2%	14 - 19	1.2 - 1.5%	1	2%	2 - 3	5 - 7%	4 - 5	7 - 9%
NV	10	1%	23 - 28	1.6 - 2%	33 - 38	2 - 3%	3	3%	6 - 8	6 - 7%	9 - 11	9 - 10%
NH	2	.3%	5 - 6	.6 - .7%	7 - 8	.8 - .9%	.1	1%	.4 - .5	4 - 5%	.5 - .6	6 - 7%
NJ	30	.5%	89 - 107	1.4 - 1.7%	119 - 137	1.9 - 2.2%	21	2%	45 - 56	5 - 7%	66 - 77	8 - 9%
NM	5	.4%	15 - 19	1.2 - 1.5%	21 - 25	1.6 - 2%	1	2%	2.9 - 2.8	8 - 8%	3 - 4	9 - 10%
NY	70	1%	174 - 213	1.3 - 1.5%	244 - 283	1.8 - 2.1%	39	2%	114 - 141	5 - 6%	153 - 180	7 - 8%
NC	31	1%	100 - 125	1.7 - 2.2%	131 - 157	2 - 3%	20	2%	51 - 65	4 - 6%	72 - 86	6 - 7%
ND	1	.2%	3 - 4	.7 - .8%	4 - 5	.9 - 1.1%	.03	1%	.11 - .13	3 - 3%	.1 - .2	3 - 4%
OH	46	1%	133 - 163	1.6 - 1.9%	179 - 209	2.1 - 2.5%	25	3%	64 - 79	7 - 9%	89 - 104	10 - 12%
OK	23	1%	41 - 53	1.6 - 2.1%	64 - 76	2.5 - 3%	8	5%	11 - 15	6 - 8%	20 - 23	11 - 13%
OR	11	.4%	34 - 47	1.3 - 1.9%	44 - 58	1.8 - 2.3%	2	3%	4 - 5	7 - 11%	5 - 7	10 - 14%
PA	37	.4%	105 - 128	1.1 - 1.4%	142 - 165	1.5 - 1.8%	23	3%	35 - 44	4 - 5%	58 - 67	7 - 8%
RI	2	.3%	7 - 8	.9 - 1.1%	9 - 10	1.2 - 1.4%	1	2%	1.6 - 2	4 - 5%	2 - 3	6 - 7%
SC	22	1%	49 - 66	1.6 - 2.2%	71 - 88	2 - 3%	15	2%	26 - 37	3 - 5%	42 - 53	5 - 6%
SD	3	.5%	7 - 8	1.2 - 1.5%	9 - 11	1.7 - 2%	.1	2%	.19 - .23	4 - 5%	.3 - .35	6 - 7%
TN	22	1%	52 - 63	1.2 - 1.5%	75 - 86	1.8 - 2%	11	2%	20 - 26	3 - 4%	32 - 37	5 - 6%
TX	158	1%	241 - 310	1.6 - 2.1%	399 - 468	2.7 - 3.2%	72	4%	83 - 114	5 - 6%	155 - 186	9 - 10%
UT	6	.4%	13 - 16	.9 - 1.1%	18 - 22	1.2 - 1.5%	.4	3%	0.9 - 1.1	5 - 7%	1 - 2	8 - 9%
VT	2	.4%	4 - 5	1 - 1.2%	6 - 7	1 - 2%	.05	1%	.06 - .07	1 - 2%	.1 - .12	2.7 - 3%
VA	30	1%	62 - 83	1.2 - 1.6%	92 - 113	1.8 - 2.1%	20	2%	31 - 46	3 - 5%	52 - 66	5 - 7%
WA	15	.3%	33 - 41	.8 - .9%	48 - 56	1.1 - 1.3%	3	2%	6 - 7	4 - 5%	9 - 11	6 - 7%
WV	4	.3%	7 - 10	.5 - .7%	11 - 14	.8 - 1%	1	1%	1 - 1.5	2 - 3%	2 - 2	4 - 5%
WI	21	1%	35 - 42	.9 - 1.1%	55 - 63	1 - 2%	10	5%	12 - 15	6 - 8%	22 - 25	12 - 13%
WY	2	.5%	4 - 5	1 - 1.4%	5 - 7	1.5 - 1.9%	.1	3%	.15 - .22	4 - 5%	.2 - .32	6 - 8%

**Appendix Table 5. Ex-Prisoners and African American Ex-Prisoners 2010 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Prisoners Lower-Upper Bound	% Ex-Prisoners	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Pris Lower-Upper Bound	% AA Ex-Prisoners	Total AA Lower-Upper Bound	% Tot.
AL	32	1%	76 - 93	2 - 3%	108 - 125	3 - 3.4%	19	2%	39 - 49	4 - 5%	58 - 68	6 - 7%
AK	6	1%	20 - 23	3.7 - 4.4%	25 - 29	5 - 5%	1	3%	1.9 - 2.4	9 - 12%	2 - 3	12 - 15%
AZ	40	1%	75 - 93	1.6 - 2%	115 - 134	2 - 3%	5	3%	10 - 13	5 - 6%	15 - 18	7 - 9%
AR	16	1%	56 - 66	2.5 - 3%	72 - 83	3 - 4%	7	2%	21 - 26	7 - 8%	28 - 33	9 - 10%
CA	165	1%	900 - 1116	3 - 4%	1065 -	4 - 5%	47	2%	230 - 289	12 - 15%	277 - 336	15 - 18%
CO	23	1%	57 - 69	1 - 2%	79 - 92	2.1 - 2.4%	4	3%	10 - 13	6 - 8%	15 - 17	9 - 10%
CT	19	1%	46 - 56	1.7 - 2%	65 - 76	2 - 3%	6	2%	18 - 24	7 - 8%	24 - 29	9 - 10%
DE	7	1%	12 - 15	1.8 - 2.2%	19 - 22	2.7 - 3.1%	4	3%	6 - 8	4 - 5%	10 - 12	7 - 8%
FL	104	1%	253 - 316	2 - 3%	357 - 421	2.8 - 3.3%	51	2%	114 - 147	5 - 7%	164 - 198	7 - 9%
GA	49	1%	136 - 183	2 - 3%	185 - 232	2.4 - 3.2%	31	1%	82 - 103	4 - 5%	113 - 134	5 - 6%
HI	6	1%	10 - 13	1 - 2%	16 - 19	2 - 3%	.3	1%	.5 - .6	2 - 2.5%	.8 - .9	3 - 4%
ID	7	1%	22 - 27	1 - 2%	30 - 35	2 - 3%	.2	2%	.4 - .5	5 - 6%	.6 - .7	7 - 9%
IL	48	1%	232 - 285	2 - 3%	280 - 333	2.6 - 3.4%	28	2%	130 - 164	9 - 12%	157 - 192	11 - 14%
IN	28	1%	101 - 123	2 - 3%	129 - 151	2.9 - 3.1%	10	2%	37 - 46	9 - 11%	47 - 57	11 - 13%
IA	9	.4%	36 - 45	1.9 - 2.1%	46 - 54	2 - 3%	2	4%	5 - 6	7 - 9%	7 - 8	11 - 13%
KS	9	.4%	36 - 45	1.6 - 2.1%	45 - 54	2 - 3%	3	2%	10 - 13	8 - 10%	13 - 16	10 - 12%
KY	21	1%	80 - 98	2 - 3%	100 - 119	2 - 4%	6	2%	20 - 25	8 - 10%	25 - 30	10 - 12%
LA	39	1%	103 - 126	2 - 4%	142 - 166	3 - 5%	27	3%	67 - 85	6 - 8%	93 - 112	9 - 11%
ME	2	.2%	8 - 10	1 - 3%	10 - 12	1 - 4%	.1	1%	.12 - .15	1.1 - 1.3%	.2 - .3	2 - 2.3%
MD	23	1%	78 - 97	1 - 2%	101 - 120	1 - 3%	17	1%	50 - 63	4 - 5%	67 - 80	5 - 6%
MA	11	.2%	28 - 35	1 - 2%	39 - 46	1 - 2%	3	1%	7 - 9	1.9 - 2.5%	10 - 12	2.8 - 3.3%
MI	44	1%	102 - 146	1 - 2%	146 - 190	1 - 3%	23	2%	46 - 72	4 - 7%	68 - 95	7 - 9%
MN	10	.2%	42 - 51	1.3 - 1.3%	52 - 61	1.5 - 1.9%	3	2%	10 - 13	5 - 7%	14 - 16	7 - 8%
MS	21	1%	48 - 67	1 - 3%	69 - 88	1 - 4%	14	2%	27 - 40	3 - 5%	40 - 54	5 - 7%
MO	31	1%	108 - 132	2 - 3%	138 - 162	3 - 4%	12	2%	32 - 41	6 - 8%	44 - 53	9 - 10%
MT	4	.5%	12 - 15	1.9 - 2.4%	16 - 18	2 - 3%	.1	2%	.18 - .22	4 - 5%	.27 - .31	7 - 8%
NE	5	.3%	15 - 22	1.6 - 1.6%	19 - 26	1.9 - 2.1%	1	2%	3 - 5	5 - 8%	4 - 6	7 - 10%
NV	13	1%	40 - 47	1 - 2%	52 - 60	1 - 3%	4	2%	9 - 11	5 - 6%	12 - 15	7 - 9%
NH	3	.3%	9 - 10	1 - 2%	11 - 13	1 - 3%	.2	1%	.5 - .7	4 - 5%	.7 - .9	6 - 7%
NJ	25	.4%	119 - 145	1 - 2%	144 - 170	1 - 3%	15	2%	60 - 75	6 - 8%	75 - 90	8 - 10%
NM	7	.4%	26 - 32	1.8 - 2.1%	32 - 39	2 - 3%	1	1%	3 - 4	9 - 11%	4 - 5	10 - 12%
NY	57	.4%	213 - 265	1.7 - 1.8%	269 - 321	2.1 - 2.13%	28	1%	111 - 146	5 - 6%	139 - 175	6 - 7%
NC	40	1%	109 - 138	1 - 2%	149 - 178	2 - 2%	21	1%	54 - 72	3 - 5%	75 - 94	5 - 6%
ND	1	.3%	6 - 7	1 - 2%	7 - 9	1.7 - 2.1%	.1	2%	.2 - .3	3 - 4%	.3 - .4	5 - 6%
OH	52	1%	195 - 242	1 - 3%	247 - 293	1 - 3%	24	2%	86 - 109	8 - 10%	110 - 133	10 - 13%
OK	26	1%	63 - 86	2 - 3%	89 - 112	3 - 4%	8	4%	17 - 25	8 - 12%	25 - 33	12 - 15%
OR	14	.5%	43 - 63	2.1 - 2.2%	57 - 77	2.6 - 3.2%	1	2%	4 - 7	6 - 11%	5 - 8	9 - 13%
PA	51	1%	122 - 130	1.2 - 1.5%	173 - 182	1.7 - 1.9%	25	2%	33 - 42	3 - 4%	58 - 67	5 - 6%
RI	3	.4%	10 - 14	1 - 2%	13 - 17	1.8 - 2.1%	1	2%	2 - 4	5 - 7%	3 - 5	6 - 9%
SC	24	1%	69 - 100	1 - 3%	93 - 123	2 - 3%	15	2%	37 - 61	4 - 6%	52 - 77	5 - 8%
SD	3	1%	15 - 19	2 - 3%	19 - 22	3 - 4%	.2	3%	.6 - .7	8 - 9%	.8 - .9	10 - 12%
TN	27	1%	90 - 110	2 - 3%	117 - 138	2.8 - 3.1%	13	2%	40 - 51	5 - 7%	53 - 64	7 - 8%
TX	174	1%	428 - 598	2 - 3%	602 - 772	2 - 4%	62	3%	143 - 220	7 - 10%	205 - 282	9 - 13%
UT	7	.4%	21 - 28	1 - 2%	28 - 35	2 - 3%	.5	2%	1 - 2	5 - 7%	1.7 - 2	7 - 9%
VT	2	.4%	11 - 15	1 - 3%	13 - 17	1 - 3%	.2	4%	.4 - .5	7 - 9%	.6 - .7	11 - 13%
VA	37	1%	91 - 129	2.1 - 2.3%	128 - 166	2.69 - 2.7%	23	2%	46 - 72	4 - 6%	69 - 94	6 - 8%
WA	18	.4%	86 - 102	1 - 2%	104 - 120	2.1 - 2.3%	3	2%	16 - 19	8 - 9%	19 - 22	9 - 11%
WV	7	.5%	13 - 18	1 - 2%	20 - 25	1.7 - 2%	1	2%	1.6 - 2.5	3 - 5%	2 - 3	5 - 6%
WI	23	1%	56 - 69	1 - 2%	79 - 92	1 - 2%	10	4%	20 - 26	8 - 10%	30 - 35	12 - 14%
WY	2	.5%	5 - 7	1 - 2%	7 - 9	1.8 - 2.2%	.1	2%	.2 - .3	5 - 8%	.3 - .4	7 - 10%

**Appendix Table 6. Ex-Felons and African American Ex-Felons 1980 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Felons Lower-Upper Bound	% Ex-Felons	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Felons Lower-Upper Bound	% AA Ex-Felons	Total AA Lower-Upper Bound	% Tot.
AL	19	1%	94 - 116	3 - 4%	112 - 135	4 - 5%	9	1%	34 - 43	5 - 7%	43 - 53	7 - 8%
AK	2	1%	4 - 5	1.3 - 1.6%	5 - 6	2 - 2.3%	.1	1%	.2 - .3	2.6 - 3.3%	.4 - .5	4 - 5%
AZ	16	1%	41 - 60	2 - 3%	57 - 76	3 - 4%	2	4%	5 - 7	10 - 14%	7 - 9	15 - 18%
AR	7	.5%	13 - 17	.8 - 1.1%	21 - 25	1.3 - 1.5%	3	1%	4 - 6	1.8 - 2.5%	7 - 9	3 - 4%
CA	110	1%	503 - 754	3 - 4%	613 - 864	3 - 5%	28	2%	97 - 136	8 - 11%	125 - 164	10 - 13%
CO	12	1%	61 - 76	3 - 4%	73 - 88	3 - 4%	1	2%	6 - 8	9 - 11%	7 - 9	11 - 14%
CT	11	.5%	31 - 39	1.4 - 1.7%	42 - 50	1.8 - 2.2%	4	3%	9 - 11	6 - 8%	13 - 15	9 - 11%
DE	3	1%	2 - 2	.4 - .5%	4 - 5	1 - 1.2%	1	2%	1 - 1	1.1 - 1.5%	2 - 2.28	3 - 4%
FL	56	1%	155 - 218	2 - 3%	210 - 274	3 - 4%	20	2%	41 - 54	5 - 6%	61 - 74	7 - 9%
GA	46	1%	84 - 105	2 - 3%	129 - 151	3 - 4%	20	2%	36 - 46	4 - 5%	56 - 66	6 - 7%
HI	4	1%	8 - 10	1.2 - 1.5%	12 - 14	1.8 - 2.1%	.2	1%	.07 - .1	0.5 - .7%	.2 - .3	1.7 - 1.9%
ID	3	.5%	10 - 12	1.5 - 1.9%	13 - 16	2 - 2.4%	.1	1%	.19 - .26	4 - 6%	.2 - .3	5 - 7%
IL	50	1%	99 - 106	1.2 - 1.3%	149 - 156	1.8 - 1.9%	20	2%	25 - 34	2 - 3%	45 - 53	4 - 5%
IN	16	.4%	64 - 78	1.7 - 2%	80 - 94	2.1 - 2.4%	4	2%	13 - 13	4.8 - 4.9%	17 - 17	6.4 - 6.6%
IA	9	.4%	28 - 34	1 - 2%	36 - 43	1.7 - 2.1%	1	3%	2 - 2	7 - 9%	2.6 - 3.1	10 - 12%
KS	9	1%	23 - 29	1 - 2%	32 - 38	1.9 - 2.2%	2	3%	4 - 5	5 - 6%	6 - 7	7 - 9%
KY	21	1%	26 - 34	1 - 1.3%	47 - 55	1.8 - 2.1%	4	2%	4 - 5	2.2 - 3%	7 - 9	4 - 5%
LA	22	1%	50 - 72	1.7 - 2.5%	72 - 94	2 - 3%	12	2%	27 - 34	3 - 4%	39 - 46	5 - 6%
ME	3	.3%	12 - 14	1 - 2%	14 - 17	1.7 - 2.1%	.03	1%	.11 - .14	4 - 6%	.14 - .16	6 - 7%
MD	30	1%	65 - 93	2 - 3%	96 - 114	3 - 4%	12	2%	36 - 47	6 - 7%	48 - 59	7 - 9%
MA	11	.3%	108 - 133	2.5 - 3.1%	119 - 144	2.8 - 3.4%	3	2%	21 - 26	14 - 18%	23 - 29	16 - 20%
MI	44	1%	166 - 208	2.6 - 3.2%	210 - 252	3 - 4%	15	2%	24 - 32	3 - 4%	39 - 47	5 - 6%
MN	15	1%	42 - 52	1 - 2%	56 - 67	1.9 - 2.3%	1	4%	3 - 4	9 - 12%	4 - 5	13 - 16%
MS	11	1%	31 - 49	2 - 3%	43 - 60	2.5 - 3.5%	6	1%	16 - 23	3 - 4%	22 - 30	4 - 6%
MO	18	1%	51 - 64	1 - 2%	69 - 82	1.9 - 2.3%	6	2%	15 - 19	4 - 6%	20 - 24	6 - 7%
MT	3	1%	10 - 13	1.8 - 2.3%	14 - 16	2 - 3%	.1	5%	.07 - .1	6 - 9%	.12 - .15	11 - 14%
NE	4	.4%	17 - 22	1.5 - 2%	21 - 27	1.9 - 2.4%	1	2%	2 - 2	6 - 8%	2 - 3	8 - 9%
NV	6	1%	7 - 9	1.1 - 1.5%	13 - 15	2.1 - 2.4%	2	5%	1 - 2	4 - 5%	2.8 - 3.21	9 - 10%
NH	2	.3%	12 - 15	1.9 - 2.3%	14 - 17	2.1 - 2.6%	.1	2%	.5 - .7	20 - 25%	.59 - .73	22 - 27%
NJ	33	1%	126 - 157	2 - 3%	159 - 190	2.9 - 3.5%	15	3%	52 - 67	9 - 11%	67 - 82	11 - 14%
NM	4	.5%	11 - 15	1 - 2%	15 - 20	1.7 - 2.2%	1	4%	1.6 - 2.1	10 - 13%	2 - 3	14 - 17%
NY	70	1%	183 - 231	1 - 2%	253 - 302	2 - 2.3%	33	2%	68 - 90	4 - 6%	100 - 122	6 - 8%
NC	32	1%	37 - 70	1 - 2%	69 - 102	1.6 - 2.4%	14	2%	15 - 19	1.7 - 2.2%	29 - 33	3 - 4%
ND	1	.3%	7 - 10	1 - 2%	8 - 11	1.7 - 2.3%	.02	1%	.15 - .2	8 - 11%	.17 - .22	9 - 12%
OH	37	.5%	143 - 177	1.8 - 2.3%	179 - 214	2 - 3%	14	2%	52 - 67	7 - 9%	66 - 81	9 - 11%
OK	17	1%	61 - 77	3 - 4%	78 - 94	3.5 - 4.3%	4	3%	12 - 15	9 - 11%	16 - 19	12 - 14%
OR	14	1%	28 - 40	1.5 - 2.1%	42 - 54	2 - 3%	1	4%	1.5 - 2.1	7 - 9%	2.5 - 3.1	11 - 13%
PA	43	.5%	153 - 191	1.7 - 2.2%	196 - 234	2 - 3%	13	2%	36 - 47	5 - 7%	49 - 60	7 - 8%
RI	5	1%	8 - 10	1.1 - 1.4%	13 - 15	1.8 - 2.1%	1	4%	1 - 2	8 - 10%	2 - 3	12 - 14%
SC	19	1%	42 - 58	2 - 3%	61 - 77	2.8 - 3.5%	8	1%	16 - 21	2.7 - 3.4%	25 - 29	4 - 5%
SD	2	.5%	7 - 9	1.5 - 1.8%	9 - 11	1.9 - 2.3%	.03	2%	.04 - .05	2.6 - 3.5%	.07 - .08	4 - 5%
TN	18	1%	37 - 47	1.1 - 1.4%	55 - 64	1.6 - 1.9%	6	1%	14 - 18	3 - 4%	20 - 24	4 - 5%
TX	121	1%	179 - 250	1.8 - 2.5%	300 - 371	3 - 4%	36	3%	46 - 62	4 - 5%	82 - 98	7 - 9%
UT	4	.5%	8 - 10	.8 - 1.1%	12 - 14	1.3 - 1.5%	.3	4%	.4 - .5	6 - 8%	.7 - .8	10 - 12%
VT	2	1%	6 - 8	1.7 - 2.2%	8 - 10	2.2 - 2.7%	.01	2%	.03 - .04	4 - 5%	.04 - .05	6 - 7%
VA	24	1%	62 - 98	1.6 - 2.5%	86 - 122	2.2 - 3.1%	11	2%	22 - 34	3 - 5%	33 - 45	5 - 7%
WA	30	1%	19 - 28	.6 - 0.9%	49 - 58	1.6 - 1.9%	4	6%	1 - 3	2 - 4%	6 - 7	8 - 10%
WV	3	.2%	15 - 20	1 - 1.5%	18 - 24	1.3 - 1.7%	.2	1%	1 - 2	3 - 4%	1.5 - 2.1	3 - 5%
WI	16	.5%	45 - 57	1 - 2%	61 - 73	1.8 - 2.2%	4	4%	9 - 12	8 - 11%	13 - 16	12 - 14%
WY	1	.4%	4 - 6	1 - 2%	5 - 7	1.5 - 2.2%	.04	2%	.1 - .2	5 - 7%	.1 - .2	6 - 9%

**Appendix Table 7. Ex-Felons and African American Ex-Felons 1990 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Felons Lower-Upper Bound	% Ex-Felons	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Felons Lower-Upper Bound	% AA Ex-Felons	Total AA Lower-Upper Bound	% Tot.
AL	41	1%	103 - 130	3 - 4%	144 - 171	5 - 6%	23	3%	40 - 53	6 - 8%	63 - 76	9 - 11%
AK	7	2%	9 - 11	2 - 3%	16 - 18	4 - 5%	1	5%	.7 - 1	5 - 10%	1 - 2	10 - 15%
AZ	44	2%	70 - 101	3 - 4%	114 - 145	4 - 5%	6	8%	9 - 14	13 - 20%	15 - 20	21 - 28%
AR	24	1%	21 - 29	1 - 2%	45 - 53	2.6 - 3%	9	4%	9 - 14	4 - 6%	18 - 23	8 - 10%
CA	324	1%	721 - 999	3 - 5%	1045 -	5 - 6%	97	7%	162 - 247	12 - 19%	259 - 344	20 - 26%
CO	24	1%	81 - 102	3 - 4%	106 - 126	4 - 5%	4	4%	9 - 11	9 - 12%	12 - 15	13 - 16%
CT	35	1%	79 - 96	3 - 4%	114 - 131	4.5 - 5.2%	14	8%	26 - 32	14 - 17%	40 - 46	21 - 24%
DE	9	2%	8 - 10	1.5 - 2%	17 - 19	3 - 4%	5	6%	3 - 4	4 - 5%	8 - 9	10 - 11%
FL	146	1%	563 - 670	6 - 7%	670 - 777	7 - 8%	58	5%	180 - 233	15 - 20%	226 - 279	19 - 24%
GA	128	3%	184 - 236	4 - 5%	312 - 364	7 - 8%	71	6%	79 - 104	7 - 9%	149 - 175	13 - 15%
HI	10	1%	23 - 24	2.7 - 2.8%	33 - 33	3.9 - 4%	.5	3%	.6 - .7	3 - 4%	1.1 - 1.2	6 - 7%
ID	7	1%	17 - 21	2 - 3%	24 - 28	3 - 4%	.1	3%	.3 - .4	10 - 13%	.4 - .5	13 - 16%
IL	85	1%	206 - 220	2 - 3%	292 - 306	3.4 - 3.6%	46	4%	56 - 73	5 - 6%	102 - 119	9 - 10%
IN	41	1%	127 - 155	3 - 4%	169 - 197	4 - 5%	13	4%	28 - 35	9 - 11%	40 - 48	13 - 16%
IA	13	1%	38 - 48	1.8 - 2.3%	51 - 60	2.5 - 2.9%	2	5%	2.6 - 3.4	8 - 11%	4 - 5	14 - 16%
KS	20	1%	38 - 48	2 - 3%	58 - 68	3 - 4%	6	6%	8 - 9	8 - 10%	13 - 15	14 - 15%
KY	19	1%	54 - 68	2 - 2.5%	73 - 87	2.7 - 3.2%	5	3%	9 - 11	5 - 6%	14 - 16	7 - 9%
LA	51	2%	69 - 98	2 - 3%	121 - 150	4 - 5%	32	4%	39 - 56	5 - 7%	72 - 88	8 - 10%
ME	6	1%	19 - 23	2 - 3%	25 - 29	2.7 - 3.2%	.2	6%	.16 - .22	6 - 8%	.3 - .4	11 - 13%
MD	69	2%	127 - 176	3 - 5%	196 - 245	5 - 7%	46	5%	64 - 101	7 - 12%	194 - 230	22 - 26%
MA	50	1%	131 - 163	3 - 4%	180 - 212	4 - 5%	14	7%	27 - 35	13 - 16%	40 - 48	19 - 23%
MI	91	1%	229 - 284	3 - 4%	321 - 376	4.7 - 5.5%	36	4%	43 - 57	5 - 6%	78 - 93	9 - 10%
MN	27	1%	92 - 113	3 - 4%	119 - 140	3.7 - 4.3%	4	7%	7 - 9	14 - 18%	11 - 13	21 - 25%
MS	20	1%	42 - 64	2 - 3%	63 - 84	3 - 5%	13	2%	21 - 37	4 - 6%	35 - 51	6 - 9%
MO	45	1%	91 - 113	2 - 3%	135 - 158	3.5 - 4.1%	16	4%	25 - 32	7 - 9%	40 - 48	11 - 13%
MT	6	1%	13 - 16	2 - 3%	19 - 23	3 - 4%	.1	7%	.1 - .2	10 - 14%	.20 - .24	17 - 21%
NE	9	1%	22 - 28	2 - 2.4%	32 - 38	2.8 - 3.3%	2	5%	3 - 4	7 - 11%	4 - 6	12 - 15%
NV	15	2%	15 - 20	1.6 - 2.2%	30 - 35	3 - 4%	5	9%	3 - 4	5 - 8%	8 - 9	14 - 17%
NH	4	.5%	15 - 19	1.8 - 2.3%	19 - 23	2 - 3%	.2	3%	.6 - .8	12 - 16%	.8 - 1	16 - 19%
NJ	80	1%	143 - 184	2 - 3%	223 - 264	3.8 - 4.5%	46	6%	60 - 80	8 - 10%	105 - 126	14 - 16%
NM	9	1%	28 - 35	2.6 - 3.3%	37 - 44	3 - 4%	1	6%	4 - 5	21 - 29%	5 - 7	27 - 35%
NY	168	1%	225 - 292	1.6 - 2.1%	393 - 460	2.9 - 3.4%	83	4%	88 - 120	4 - 6%	171 - 204	8 - 10%
NC	50	1%	99 - 141	2 - 3%	148 - 191	3 - 4%	27	3%	41 - 53	4 - 5%	68 - 80	7 - 8%
ND	2	.5%	8 - 11	1.7 - 2.4%	10 - 13	2 - 3%	.02	1%	.15 - .24	7 - 11%	.2 - .3	8 - 12%
OH	72	1%	214 - 264	2.7 - 3.3%	286 - 335	3.5 - 4.2%	34	4%	92 - 116	11 - 14%	126 - 150	16 - 19%
OK	36	2%	85 - 107	3.7 - 4.6%	121 - 143	5 - 6%	10	7%	17 - 24	12 - 16%	27 - 34	18 - 23%
OR	36	2%	50 - 69	2 - 3%	86 - 105	4 - 5%	3	10%	3 - 5	9 - 14%	6 - 8	18 - 24%
PA	114	1%	141 - 167	1.5 - 1.8%	235 - 281	2.6 - 3.1%	41	5%	32 - 40	4 - 5%	67 - 81	9 - 10%
RI	13	2%	18 - 23	2 - 3%	31 - 36	4 - 5%	3	11%	3 - 4	12 - 16%	6 - 7	23 - 27%
SC	28	1%	61 - 83	2 - 3%	89 - 110	3 - 4%	16	2%	25 - 38	4 - 5%	41 - 54	6 - 8%
SD	4	1%	15 - 18	3 - 4%	46 - 47	9.2 - 9.4%	.1	5%	.10 - .13	7 - 9%	17 - .20	12 - 13%
TN	32	1%	60 - 77	1.6 - 2.1%	92 - 109	2.5 - 3%	15	3%	21 - 28	4 - 5%	36 - 43	7 - 8%
TX	321	3%	281 - 396	2 - 3%	601 - 716	5 - 6%	119	9%	60 - 106	4 - 8%	179 - 225	13 - 16%
UT	8	1%	16 - 21	1 - 2%	24 - 28	2 - 3%	1	6%	.8 - 1	10 - 13%	1 - 2	16 - 19%
VT	3	1%	10 - 13	2 - 3%	13 - 15	3 - 4%	.03	3%	.06 - .07	5 - 7%	.07 - .10	7 - 10%
VA	47	1%	89 - 136	2 - 3%	136 - 183	3 - 4%	26	3%	34 - 60	4 - 7%	59 - 86	7 - 10%
WA	60	2%	82 - 105	2 - 3%	142 - 165	4 - 5%	8	9%	9 - 12	10 - 13%	18 - 21	19 - 22%
WV	5	.4%	16 - 22	1 - 2%	22 - 27	1.6 - 2%	1	1%	1 - 2	3 - 6%	2 - 3	5 - 7%
WI	25	1%	62 - 78	1.7 - 2.2%	87 - 103	2 - 3%	7	5%	13 - 17	9 - 11%	21 - 25	14 - 17%
WY	4	1%	6 - 9	2 - 3%	10 - 13	3 - 4%	.1	6%	.1 - .3	7 - 13%	.3 - .4	13 - 19%

**Appendix Table 8. Ex-Felons and African American Ex-Felons 2000 (in thousands)**

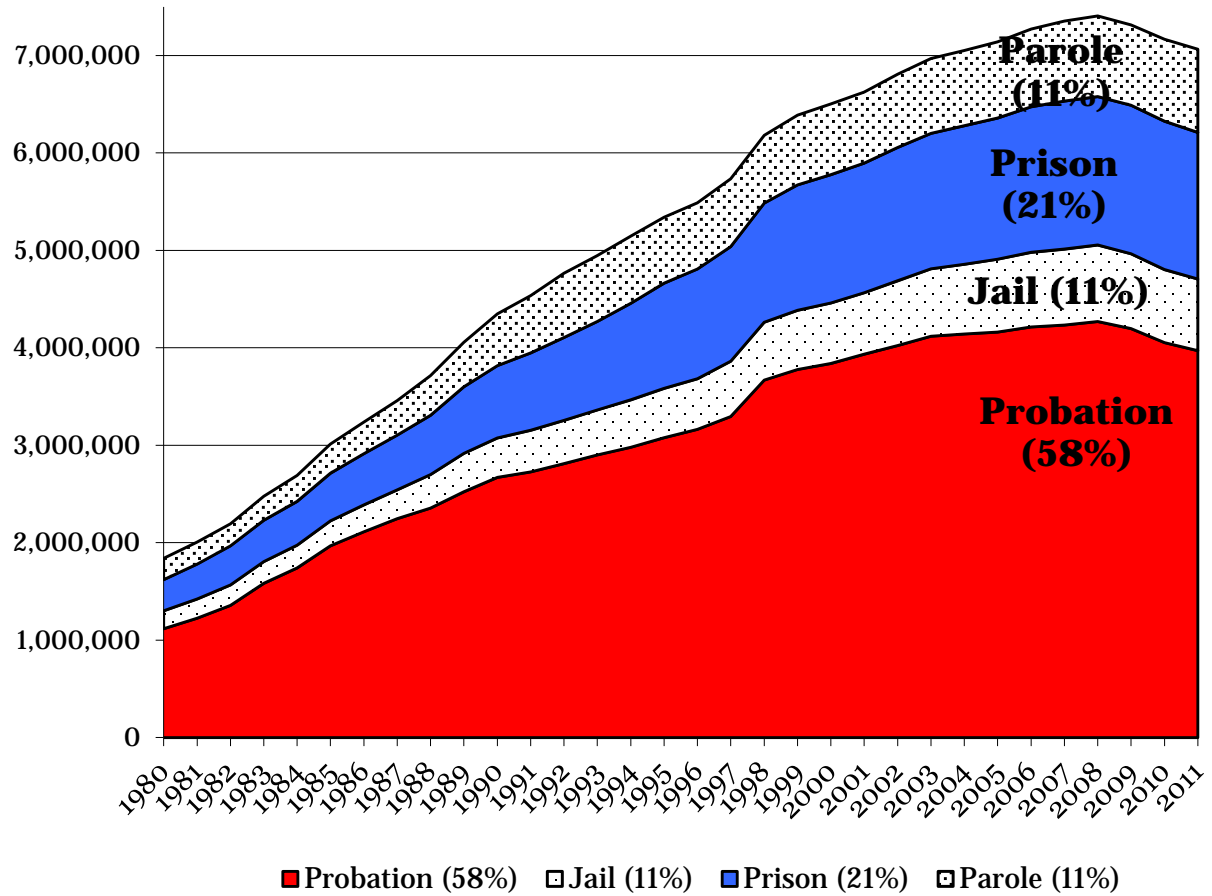
State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Felons Lower-Upper Bound	% Ex-Felons	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Felons Lower-Upper Bound	% AA Ex-Felons	Total AA Lower-Upper Bound	% Tot.
AL	64	2%	120 - 153	4 - 5%	184 - 217	6 - 7%	34	4%	57 - 74	7 - 9%	91 - 108	11 - 13%
AK	7	2%	18 - 22	4 - 5%	25 - 30	6 - 7%	1	6%	1.7 - 2.4	10 - 14%	2.7 - 3.3	16 - 20%
AZ	82	2%	154 - 193	4 - 5%	236 - 275	7 - 8%	9	7%	17 - 26	12 - 19%	26 - 35	19 - 25%
AR	51	3%	50 - 66	3 - 3%	101 - 117	5 - 6%	22	8%	19 - 28	7 - 10%	41 - 50	15 - 18%
CA	531	2%	1203 - 1520	5 - 6%	1735 - 2052	7 - 8%	193	10%	302 - 435	16 - 23%	495 - 628	27 - 34%
CO	44	1%	115 - 148	4 - 5%	159 - 192	5 - 6%	8	6%	16 - 21	12 - 16%	25 - 29	19 - 22%
CT	45	2%	138 - 171	6 - 7%	184 - 216	7 - 9%	18	8%	45 - 57	21 - 26%	64 - 76	29 - 34%
DE	16	2%	17 - 27	3 - 5%	33 - 43	6 - 7%	8	5%	8 - 13	8 - 12%	16 - 21	15 - 20%
FL	214	2%	976 - 1483	8 - 13%	1190 - 1403	10 - 12%	89	6%	337 - 483	21 - 30%	426 - 572	27 - 36%
GA	286	3%	248 - 442	4 - 8%	534 - 728	9 - 11%	162	7%	116 - 223	7 - 14%	277 - 383	18 - 24%
HI	16	2%	37 - 39	4 - 4.3%	53 - 55	5.8 - 6.1%	1	3%	1 - 2	5 - 6%	2.0 - 2.4	7 - 9%
ID	16	2%	28 - 36	3 - 4%	44 - 52	5 - 6%	0.3	4%	.6 - .7	8 - 11%	.9 - 1	12 - 15%
IL	160	2%	369 - 399	4.1 - 4.4%	528 - 559	5.9 - 6.2%	88	7%	142 - 181	11 - 14%	229 - 268	18 - 21%
IN	66	1%	227 - 277	5 - 6%	293 - 343	7 - 8%	23	7%	63 - 79	18 - 22%	86 - 102	24 - 29%
IA	20	1%	62 - 76	3 - 4%	82 - 96	4 - 5%	4	8%	6 - 7	13 - 16%	9 - 11	21 - 24%
KS	17	1%	73 - 89	4 - 5%	90 - 106	4.6 - 5.4%	6	5%	18 - 22	16 - 20%	24 - 28	21 - 25%
KY	38	1%	83 - 105	3 - 4%	121 - 143	4 - 5%	11	5%	18 - 23	9 - 11%	30 - 35	14 - 17%
LA	95	3%	125 - 160	4 - 5%	220 - 255	7 - 8%	65	7%	76 - 110	8 - 11%	142 - 175	15 - 18%
ME	6	1%	26 - 32	2.6 - 3.3%	31 - 37	3 - 4%	0.1	2%	.3 - .4	4 - 5%	.4 - .5	6 - 7%
MD	61	2%	176 - 221	4 - 6%	237 - 282	6 - 7%	43	4%	96 - 148	9 - 14%	139 - 191	13 - 18%
MA	40	1%	195 - 240	4 - 5%	235 - 279	5 - 6%	11	4%	45 - 56	17 - 21%	56 - 68	21 - 25%
MI	118	2%	187 - 246	2.5 - 3.3%	305 - 364	4 - 5%	49	5%	48 - 75	5 - 8%	97 - 124	10 - 13%
MN	41	1%	160 - 197	5 - 6%	202 - 238	6 - 7%	9	8%	17 - 22	16 - 20%	26 - 30	25 - 29%
MS	38	2%	62 - 82	3 - 4%	100 - 120	5 - 6%	26	4%	35 - 59	5 - 9%	61 - 85	9 - 13%
MO	83	2%	143 - 181	3.5 - 4.4%	226 - 264	5.5 - 6.4%	30	7%	40 - 53	9 - 12%	71 - 83	17 - 20%
MT	10	1%	17 - 21	2.5 - 3.2%	26 - 31	4 - 5%	0.1	3%	.18 - .24	4 - 6%	.3 - .4	7 - 9%
NE	9	1%	35 - 44	3 - 4%	45 - 54	3.6 - 4.4%	6	4%	5 - 8	11 - 15%	12 - 14	24 - 29%
NV	23	2%	39 - 50	3 - 4%	62 - 73	4.5 - 5.3%	6	6%	10 - 13	9 - 12%	16 - 19	15 - 18%
NH	6	1%	22 - 27	2 - 3%	28 - 33	3 - 4%	1	8%	1.7 - 2.1	19 - 23%	2 - 3	26 - 31%
NJ	143	2%	281 - 355	5 - 6%	424 - 498	7 - 8%	79	9%	135 - 175	16 - 20%	214 - 254	25 - 30%
NM	15	1%	51 - 61	4 - 5%	66 - 76	5 - 6%	1	4%	6 - 8	17 - 22%	8 - 9	21 - 26%
NY	231	2%	297 - 392	2 - 3%	528 - 623	3.8 - 4.5%	125	5%	136 - 187	6 - 8%	261 - 312	11 - 14%
NC	71	1%	190 - 250	3 - 4%	261 - 321	4 - 6%	41	3%	92 - 118	8 - 10%	133 - 159	11 - 14%
ND	4	1%	11 - 14	2 - 3%	15 - 18	3 - 4%	0.1	2%	.3 - .4	6 - 9%	.3 - .5	9 - 11%
OH	120	1%	320 - 397	4 - 5%	440 - 517	5 - 6%	57	6%	141 - 179	16 - 20%	197 - 235	22 - 26%
OK	52	2%	123 - 154	5 - 6%	175 - 206	7 - 8%	15	8%	28 - 37	15 - 20%	43 - 52	23 - 28%
OR	54	2%	82 - 108	3 - 4%	136 - 162	5 - 6%	5	11%	5 - 9	10 - 17%	10 - 14	20 - 27%
PA	163	2%	155 - 224	2 - 3%	318 - 387	3.5 - 4.2%	67	8%	39 - 59	5 - 7%	106 - 126	13 - 15%
RI	18	2%	34 - 43	4 - 6%	52 - 61	7 - 8%	4	12%	8 - 10	21 - 27%	12 - 14	33 - 40%
SC	52	2%	89 - 114	3 - 4%	141 - 166	5 - 6%	33	4%	43 - 67	5 - 14%	76 - 100	9 - 18%
SD	7	1%	22 - 28	4 - 5%	30 - 35	5.5 - 6.4%	0.2	4%	.25 - .32	5 - 6%	.5 - 1	9 - 11%
TN	62	1%	135 - 167	3 - 4%	197 - 230	4.7 - 5.4%	30	5%	52 - 67	8 - 11%	82 - 97	13 - 15%
TX	526	4%	665 - 857	5 - 6%	1191 - 1383	8 - 9%	165	9%	204 - 296	11 - 16%	369 - 461	20 - 26%
UT	16	1%	28 - 37	2 - 3%	45 - 53	3 - 4%	1	6%	1 - 2	8 - 11%	2 - 3	14 - 17%
VT	5	1%	14 - 18	3 - 4%	19 - 23	4 - 5%	0.1	2%	.14 - .18	3.6 - 4.5%	.2 - .3	6 - 7%
VA	67	1%	193 - 243	4 - 5%	259 - 310	5 - 6%	40	4%	92 - 147	9 - 15%	132 - 187	13 - 19%
WA	126	2%	112 - 198	3 - 5%	238 - 324	5 - 7%	18	9%	16 - 27	11 - 17%	34 - 42	22 - 28%
WV	9	1%	16 - 21	1 - 2%	25 - 30	1.8 - 2.1%	1	3%	2 - 3	4 - 6%	3 - 4	6 - 8%
WI	54	1%	93 - 117	2 - 3%	147 - 171	3.7 - 4.4%	21	11%	23 - 31	12 - 16%	44 - 52	23 - 27%
WY	5	1%	11 - 14	3 - 4%	16 - 19	4 - 5%	0.2	5%	.3 - .5	7 - 12%	.5 - 1	12 - 17%

**Appendix Table 9. Ex-Felons and African American Ex-Felons 2010 (in thousands)**

State	Overall Ex-Felons						African American Ex-Felons					
	Curr.	% Curr.	Est. Ex-Felons Lower-Upper Bound	% Ex-Felons	Total Lower-Upper Bound	% Tot.	Curr.	% Curr.	Est. AA Ex-Felons Lower-Upper Bound	% AA Ex-Felons	Total AA Lower-Upper Bound	% Tot.
AL	86	2%	145 - 186	4 - 5%	232 - 272	6 - 7%	45	5%	74 - 98	8 - 11%	118 - 143	13 - 16%
AK	15	3%	31 - 37	6 - 7%	46 - 51	6 - 9%	1	7%	2.5 - 3	12 - 17%	4 - 5	20 - 24%
AZ	104	2%	248 - 336	5 - 7%	352 - 439	7 - 9%	12	6%	25 - 38	12 - 18%	37 - 50	18 - 24%
AR	65	3%	89 - 118	4 - 5%	154 - 183	7 - 8%	25	8%	30 - 44	9 - 14%	55 - 69	17 - 21%
CA	486	2%	1849 - 2310	7 - 8%	2334 - 2796	8 - 10%	146	8%	490 - 681	26 - 36%	636 - 827	34 - 44%
CO	55	2%	173 - 222	5 - 6%	228 - 277	6 - 7%	8	5%	23 - 30	14 - 18%	32 - 38	19 - 23%
CT	53	2%	176 - 219	6 - 8%	229 - 272	8 - 10%	16	6%	55 - 71	20 - 25%	71 - 87	25 - 31%
DE	12	2%	42 - 52	6 - 7%	54 - 63	8 - 9%	6	4%	19 - 24	13 - 17%	25 - 30	17 - 21%
FL	287	2%	1521 - 1991	10 - 14%	1808 - 2278	12 - 15%	103	5%	518 - 738	23 - 33%	621 - 841	28 - 38%
GA	276	4%	618 - 819	9 - 11%	894 - 1095	12 - 15%	152	7%	316 - 413	15 - 19%	468 - 565	22 - 26%
HI	17	2%	42 - 54	4 - 5%	60 - 71	6 - 7%	.7	3%	2 - 3	9 - 12%	3 - 4	12 - 15%
ID	25	2%	75 - 88	7 - 8%	100 - 114	9 - 10%	.5	7%	1 - 1.5	15 - 18%	1.5 - 2	21 - 25%
IL	144	2%	482 - 603	5 - 6%	626 - 747	6 - 8%	67	5%	212 - 274	15 - 20%	279 - 341	20 - 25%
IN	100	2%	384 - 471	8 - 10%	484 - 571	10 - 12%	31	7%	112 - 141	26 - 33%	143 - 172	33 - 40%
IA	22	1%	91 - 112	4 - 5%	113 - 134	5 - 6%	4	7%	10 - 13	15 - 20%	14 - 17	22 - 26%
KS	19	1%	92 - 113	4 - 5%	110 - 132	5 - 6%	6	4%	23 - 29	18 - 22%	29 - 35	22 - 27%
KY	63	2%	146 - 184	4 - 6%	209 - 247	6 - 7%	14	6%	34 - 44	12 - 17%	48 - 58	19 - 23%
LA	112	3%	193 - 252	6 - 7%	305 - 364	9 - 11%	68	7%	111 - 160	11 - 15%	160 - 228	17 - 22%
ME	8	1%	36 - 40	3 - 4%	43 - 47	4 - 5%	.3	3%	.5 - .6	4 - 6%	.8 - 1	7 - 8%
MD	64	1%	209 - 272	5 - 6%	272 - 336	6 - 8%	41	3%	121 - 178	9 - 14%	161 - 218	12 - 17%
MA	55	1%	324 - 391	6 - 8%	378 - 446	7 - 9%	14	4%	77 - 95	22 - 27%	90 - 109	25 - 31%
MI	142	2%	250 - 327	3 - 4%	393 - 469	5 - 6%	66	6%	62 - 98	6 - 9%	127 - 164	12 - 16%
MN	59	2%	235 - 295	6 - 7%	295 - 354	7 - 9%	12	6%	31 - 39	16 - 20%	42 - 50	22 - 26%
MS	55	3%	99 - 143	4 - 7%	154 - 199	7 - 9%	34	4%	55 - 93	7 - 12%	89 - 127	12 - 16%
MO	106	2%	245 - 313	5 - 7%	351 - 419	8 - 9%	34	7%	68 - 89	13 - 17%	102 - 123	20 - 23%
MT	14	2%	32 - 40	4 - 5%	46 - 55	6 - 7%	.2	7%	.4 - .5	9 - 11%	.6 - .8	15 - 18%
NE	10	1%	47 - 59	3 - 4%	57 - 69	4 - 5%	2	3%	7 - 10	12 - 16%	9 - 12	15 - 19%
NV	26	1%	71 - 88	3 - 4%	98 - 115	5 - 6%	6	4%	16 - 23	9 - 13%	22 - 29	13 - 17%
NH	8	1%	26 - 33	2 - 3%	34 - 41	3 - 4%	.4	3%	1.8 - 2.5	15 - 19%	2 - 3	18 - 22%
NJ	100	2%	366 - 461	5 - 7%	467 - 562	7 - 8%	48	5%	173 - 223	19 - 24%	222 - 272	24 - 29%
NM	28	2%	81 - 104	5 - 7%	109 - 133	7 - 9%	2	5%	7 - 10	19 - 27%	9 - 12	24 - 31%
NY	167	1%	396 - 509	2 - 3%	564 - 676	4 - 5%	69	3%	172 - 232	7 - 10%	241 - 301	10 - 12%
NC	82	1%	273 - 349	4 - 5%	356 - 432	5 - 6%	41	3%	129 - 169	8 - 11%	171 - 210	11 - 14%
ND	5	1%	19 - 24	4 - 5%	24 - 30	5 - 6%	.2	5%	.5 - .8	9 - 12%	.8 - 1	13 - 17%
OH	118	1%	506 - 621	6 - 7%	624 - 739	7 - 8%	48	5%	198 - 251	19 - 24%	246 - 299	23 - 29%
OK	51	2%	178 - 221	6 - 8%	229 - 272	8 - 10%	14	6%	41 - 54	19 - 25%	55 - 68	25 - 31%
OR	64	2%	113 - 149	4 - 5%	177 - 213	6 - 7%	5	8%	7 - 11	12 - 19%	12 - 16	20 - 27%
PA	205	2%	223 - 304	2 - 3%	428 - 509	4 - 5%	76	7%	65 - 81	6 - 8%	141 - 156	14 - 15%
RI	22	3%	41 - 54	5 - 7%	64 - 76	8 - 9%	5	9%	9 - 12	17 - 23%	14 - 17	26 - 33%
SC	53	2%	137 - 183	4 - 5%	189 - 236	5 - 7%	31	3%	72 - 110	8 - 11%	103 - 141	11 - 15%
SD	11	2%	35 - 44	6 - 7%	46 - 54	7 - 9%	.4	5%	.6 - .8	8 - 11%	1 - 1.2	13 - 16%
TN	94	2%	217 - 274	4 - 6%	311 - 368	6 - 8%	38	5%	90 - 118	12 - 15%	129 - 156	17 - 20%
TX	532	3%	1148 - 1458	6 - 8%	1680 - 1990	9 - 11%	153	7%	301 - 440	14 - 20%	454 - 593	21 - 27%
UT	20	1%	50 - 66	2 - 3%	69 - 85	4 - 5%	1	5%	2 - 3	10 - 13%	3 - 4	15 - 18%
VT	5	1%	24 - 31	5 - 6%	29 - 36	6 - 7%	.3	6%	.6 - .7	11 - 14%	.9 - 1	17 - 20%
VA	100	2%	288 - 406	5 - 7%	387 - 506	6 - 8%	53	4%	154 - 240	13 - 20%	207 - 292	17 - 25%
WA	53	1%	326 - 409	6 - 8%	379 - 462	7 - 9%	9	4%	46 - 57	22 - 28%	55 - 66	26 - 32%
WV	16	1%	24 - 31	1 - 2%	40 - 47	2 - 3%	2	3%	2 - 4	5 - 7%	4 - 6	8 - 11%
WI	66	2%	133 - 175	3 - 4%	199 - 241	5 - 6%	22	9%	36 - 48	14 - 19%	58 - 70	23 - 28%
WY	6	1%	17 - 23	4 - 5%	23 - 29	5 - 7%	.2	5%	.4 - .8	10 - 17%	.6 - 1	15 - 22%



**Appendix Figure 1 - Correctional Populations in the United States, 1980-2011**



## REFERENCES

- Anselin, L. 1995. "Local Indicators of Spatial Autocorrelation – LISA." *Geographical Analysis* 27:93-115.
- Barker, V. 2006. "The Politics of Punishing: Building a State Governance Theory of American Imprisonment Variation." *Punishment & Society* 8:5-32.
- Beckett, K. and B. Western. 2001. "Governing Social Marginality: Welfare, Incarceration, and the Transformation of State Policy." *Punishment & Society* 3:43-59.
- Beckett, K., K. Nyrop, and L. Pfingst. 2006. "Race, Drugs, and Policing: Understanding Disparities in Drug Delivery Arrests." *Criminology* 44:105-137.
- Bonczar, T. P. 2003. "Prevalence of Imprisonment in the U.S. Population, 1974-2001." Bureau of Justice Statistics, NCJ 197976.
- Bonczar, T. P. and L. M. Maruschak. 2013. *Probation and Parole in the United States, 2012*. Bureau of Justice Statistics, NCJ 24842.
- Brame, R., S.D. Bushway, R. Paternoster, and M.G. Turner. 2014. "Demographic Patterns of Cumulative Arrest Prevalence by Ages 18 and 23." *Crime & Delinquency* 60: 471-486.
- Brame, R., M.G. Turner, R. Paternoster, and S.D. Bushway. 2012. "Cumulative Prevalence of Arrest From ages 8-23 in a National Sample." *Pediatrics* 129:21-27.
- Bridges, G.S. and S. Steen. 1998. "Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms." *American Sociological Review* 63:554-70.
- Carson, E.A. and D. Golinelli. 2013. *Prisoners in 2012*. Bureau of Justice Statistics. NCJ 243920.
- Clear, T.R. and N.A. Frost. 2014. *The Punishment Imperative*. New York: NYU Press.
- Clear, T.R. 2007. *Imprisoning Communities*. New York: Oxford University Press.
- Cliff, A.D. and J. K. Ord. 1973. *Spatial Autocorrelation*. London: Pion.
- Cressie, N. 1994. *Statistics for Spatial Data*. New York: Wiley.
- Durlauf, Stephen N. and Daniel S. Nagin. 2011. Overview of "Imprisonment and crime: Can both be reduced?" *Criminology & Public Policy* 10: 9–12.

- Durose, M.R., A.D. Cooper, and H.N. Snyder. 2014. *Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010*. Bureau of Justice Statistics. NCJ 244205.
- Enns, P.K. 2016. *Incarceration Nation: How the United States Became the Most Punitive Democracy in the World.* Cambridge: Cambridge University Press.
- Ewald, A. and C. Uggen. 2012. "The Collateral Effects of Imprisonment on Prisoners, Their Families, and Communities." Pages 83-103 in *The Oxford Handbook on Sentencing and Corrections*, edited by Joan Petersilia and Kevin Reitz. New York: Oxford University Press.
- Feeley, Malcolm, and Jonathan Simon. 1992. "The New Penology: Notes on the Emerging Strategy of Corrections and Its Implications." *Criminology* 30:449–74.
- Garland, David. 2001. *Mass Imprisonment: Social Causes and Consequences*. Thousand Oaks, CA: SAGE Publications Ltd.
- \_\_\_\_\_. 2001. *The Culture of Control: Crime and Social Order in Contemporary Society*. Chicago: University of Chicago Press.
- Glaze, L.E. and T.P. Bonczar. 2011. *Probation and Parole in the United States, 2010*. Bureau of Justice Statistics NCJ 236019.
- Greenberg, D.F. and V. West. 2001. "State Prison Populations and Their Growth, 1971-1991." *Criminology* 39:615-654.
- Guerino, P., P.M. Harrison, and W.J. Sabol. 2012. *Prisoners in 2010*. Bureau of Justice Statistics NCJ 236096.
- Haining, R. 1990. *Spatial Data Analysis in the Social and Environmental Sciences*. Cambridge: Cambridge University Press.
- Hoffman, P.B., and B. Stone-Meierhoefer. 1980. "Reporting Recidivism Rates: The Criterion and Follow-up Issues." *Journal of Criminal Justice* 8:53-60.
- Jacobs, D. and R. Helms. 2001. "Toward a Political Sociology of Punishment: Politics and Changes in the Incarcerated Population." *Social Science Research* 30:171-194.
- Johnson, R.C. and S. Raphael. 2009. "The Effects of Male Incarceration Dynamics on Aids Infection Rates among African-American Women and Men." *Journal of Law and Economics* 52:251-293.

- Justice Mapping Center. 2010. "Justice Atlas of Sentencing and Corrections." Retrieved online April 30, 2016 (<http://www.justiceatlas.org/>).
- Kaeble, D., L. Glaze, A. Tsoutis, and T. Minton. 2015. "Correctional Populations in the United States, 2014." Bureau of Justice Statistics, NCJ 249513.
- Kaeble, D., L.M. Maruschak, and T.P. Bonczar. 2015. "Probation and Parole in the United States, 2014." Bureau of Justice Statistics, NCJ 249057.
- Kirk, D.S. 2008. "The Neighborhood Context of Racial and Ethnic Disparities in Arrest." *Demography* 45:55-77.
- Lageson, S.E. 2016. "Digital Punishment's Tangled Web." *Contexts* 15:22-27.
- Langan, P.A., and D.J. Levin. 2002. *Recidivism of Prisoners Released in 1994*. Bureau of Justice Statistics Special Report. Washington, DC: Government Printing Office
- LaVigne, N.G. and V. Kachnowski. 2003. *A Portrait of Prisoner Reentry in Maryland*. Washington, DC: Urban Institute.
- LaVigne, N.G. and C.A. Mamalian. 2003. *A Portrait of Prisoner Reentry in Illinois*. Washington, DC: Urban Institute.
- LaVigne, N.G. and G.L. Thomspson. 2003. *A Portrait of Prisoner Reentry in Ohio*. Washington, DC: Urban Institute.
- Lynch, M.P. 2010. *Sunbelt Justice: Arizona and the Transformation of American Punishment*. Stanford, Calif. Stanford Law Books.
- Massoglia, M. 2008. "Incarceration, Health, and Racial Disparities in Health," *Law and Society Review* 42: 275-306.
- Mauer, M. 2013. "Can We Wait 88 Years to End Mass Incarceration?" *Huffington Post*, December 20, 2013. Retrieved April 4, 2014 ([http://www.huffingtonpost.com/marc-mauer/88-years-mass-incarceration\\_b\\_4474132.html](http://www.huffingtonpost.com/marc-mauer/88-years-mass-incarceration_b_4474132.html)).
- National Research Council. (2014). *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. Committee on Causes and Consequences of High Rates of Incarceration, J. Travis, B. Western, and S. Redburn, Editors. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Pettit, B. 2012. *Invisible Men*. New York: Russell Sage Foundation.

- Pettit, B. and B. Western. 2004. "Mass Imprisonment and the Life Course: Race and Class Inequality in U.S. Incarceration." *American Sociological Review* 69: 151-169.
- Pew Center on the States. 2011. "State of Recidivism: The Revolving Door of America's Prisons." Washington, DC: The Pew Charitable Trusts.
- Phelps, M.S. 2013. "The Paradox of Probation: Community Supervision in the Age of Mass Incarceration." *Law & Policy* 35:51-80.
- \_\_\_\_\_. Forthcoming. "Mass Probation: Toward a More Robust Theory of State Variation in Punishment." *Punishment & Society*.
- Schnittker, J. and A. John. 2007. "Enduring Stigma: The Long-Term Effects of Incarceration on Health." *Journal of Health and Social Behavior* 48:115-130.
- Schnittker, J., M. Massoglia, and C. Uggen. 2011. "Incarceration and the Health of the African American Community." *Du Bois Review* 8:133-41.
- Schnittker, J., C. Uggen, S. Shannon, and S. McElrath. 2015. "The Institutional Effects of Incarceration: Spillovers From Criminal Justice to Health Care." *Milbank Quarterly* 93: 516-560.
- Shannon, S. and C. Uggen. 2014. "Visualizing Punishment." Pages 42-62 in *Crime and the Punished*, edited by Douglas Hartmann and Christopher Uggen.
- Steffensmeier, D., J. Ulmer, and J. Kramer. 1998. "The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of Being Young, Black, and Male." *Criminology* 36:763-798.
- Stucky, T.D., K. Heimer, and J.B. Lang. 2005. "Partisan Politics, Electoral Competition and Imprisonment: An Analysis of States Over Time." *Criminology* 211-248.
- Sykes, B. and B. Pettit. 2014. "Mass Incarceration, Family Complexity, and the Reproduction of Childhood Disadvantage." *The Annals of the American Academy of Political and Social Science* 654:127-149.
- Tonry, Michael. 1996. *Malign Neglect: Race, Crime, and Punishment in America*. New York: Oxford University Press.
- Tonry, Michael. 2004. *Thinking About Crime: Sense and Sensibility in American Penal Culture*. New York: Oxford University Press.
- Travis, J. 2005. *But They All Come Back: Facing the Challenges Of Prisoner*

- Reentry*. Washington D.C.: Urban Institute Press.
- Turney, K. 2014. "Stress Proliferation across Generations? Examining the Relationship between Parental Incarceration and Childhood Health." *Journal of Health and Social Behavior* 55: 302-319.
- Uggen, C. and J. Manza. 2002. "Democratic Contraction? Political Consequences of Felon Disenfranchisement in the United States." *American Sociological Review* 67:777-803.
- Uggen, C., J. Manza, and M. Thompson, 2006. "Citizenship, Democracy, and the Civic Reintegration of Criminal Offenders." *The Annals of the American Academy of Political and Social Science* 605:281-310.
- Uggen, C. and S. McElrath. 2014. "Six Social Sources of the U.S. Crime Drop." Pages 3-20 in *Crime and the Punished*, edited by Douglas Hartmann and Christopher Uggen.
- Uggen, C., M. Vuolo, S. Lageson, E. Ruhland, and H. Whitham. 2014. "The Edge of Stigma: An Experimental Audit of the Effects of Low-Level Criminal Records on Employment." *Criminology* 52:627-54. Uggen, Christoher and Robert Stewart. 2015. "Piling On: Collateral Consequences and Community Supervision. Forthcoming in *Minnesota Law Review*.
- Uggen, C. and R. Stewart. 2015. "Piling On: Collateral Consequences and Community Supervision." *Minnesota Law Review* 99:1971-1910.
- U.S. Bureau of Prisons. 1948-2004. *National Prisoner Statistics*. Washington, DC: Government Printing Office.
- U.S. Bureau of the Census. 2013. *Annual Geographic Mobility Rates, by Type of Movement: 1948-2013*. Retrieved July 24, 2014 (<http://www.census.gov/hhes/migration/data/cps/historical.html>).
- \_\_\_\_\_. 2010. *State and County Level Estimates with Components of Change, 2000 to 2009*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 2006. *Domestic Net Migration in the United States: 2000 to 2004*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 2003. *Domestic Migration Across Regions, Divisions, and States: 1995 to 2000*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1984. *1980 Census of Population. Volume 2, Subject Reports*. Washington, DC:

- Government Printing Office.
- \_\_\_\_\_. 1973. *Census of Population: 1970 Subject Reports*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1963. *U.S. Census of Population: 1960. Subject Reports. State of Birth*. Final Report PC(2) – 2A. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1953. *U.S. Census of Population: 1950. Vol. IV, Special Reports, Part 4, Chapter A, State of Birth*. Washington, DC: Government Printing Office.
- U.S. Department of Justice. 2015. *Investigation of the Ferguson Police Department*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1998-2011. *Jail Inmates at Midyear*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1994-1997. *National Corrections Reporting Program*. Washington, DC. Retrieved online March 1, 2016 (<http://www.icpsr.umich.edu/icpsrweb/NACJD/series/38/studies?sortBy=7>).
- \_\_\_\_\_. 1998-2011. *Prisoners in the United States*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1998-2011. *Probation and Parole in the United States*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1973-2004. *Sourcebook of Criminal Justice Statistics*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 2001. *Trends in State Parole 1990-2000*. Washington, DC. Government Printing Office.
- \_\_\_\_\_. 2000. *Survey of Inmates of State Correctional Facilities Aeries, 1974-1997*. [MRDF]. Washington, DC: U.S. Department of Commerce, Bureau of the Census/Ann Arbor, MI: Inter-University Consortium for Political Science Research [producer/distributor].
- \_\_\_\_\_. 1997. *Characteristics of Adults on Probation, 1995*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1992. *Recidivism of Felons on Probation, 1986-1989*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1991. *Race of Prisoners Admitted to State and Federal Institutions, 1926-1986*. Washington, DC: Government Printing Office.

- \_\_\_\_\_. 1989. *Recidivism of Prisoners Released in 1983*. Washington, DC: Government Printing Office.
- \_\_\_\_\_. 1989-1997. *Correctional Populations in the United States*. Washington, DC: Government Printing Office.
- Wacquant, Loic. 2012. "The Punitive Regulation of Poverty in the Neoliberal Era." *Criminal Justice Matters* 89:38-40.
- Wakefield, S. and C. Uggen. 2010. "Incarceration and Stratification," *Annual Review of Sociology* 36: 387-406.
- Watson, J., A. L. Solomon, N.G. LaVigne, and J. Travis. 2004. *A Portrait of Prisoner Reentry in Texas*. Washington, DC: Urban Institute.
- Western, B. 2006. *Punishment and Inequality in America*. New York: Russell Sage Foundation.
- Western, B. and K. Beckett. 1999. "How Unregulated Is the U.S. Labor Market? The Penal System as a Labor Market Institution." *American Journal of Sociology* 104:1030-60.
- Wildeman, C. 2009. "Parental Imprisonment, the Prison Boom, and the Concentration of Childhood Disadvantage." *Demography* 46:265-280.
- Wildeman, C. and C. Muller. Forthcoming. "Geographical Variation in the Cumulative Risk of Imprisonment in the United States." *Demography*.
- Zimring, F.E. and G. Hawkins. 1991. "What Kind of Drug War?" *Social Justice* 46:104121.



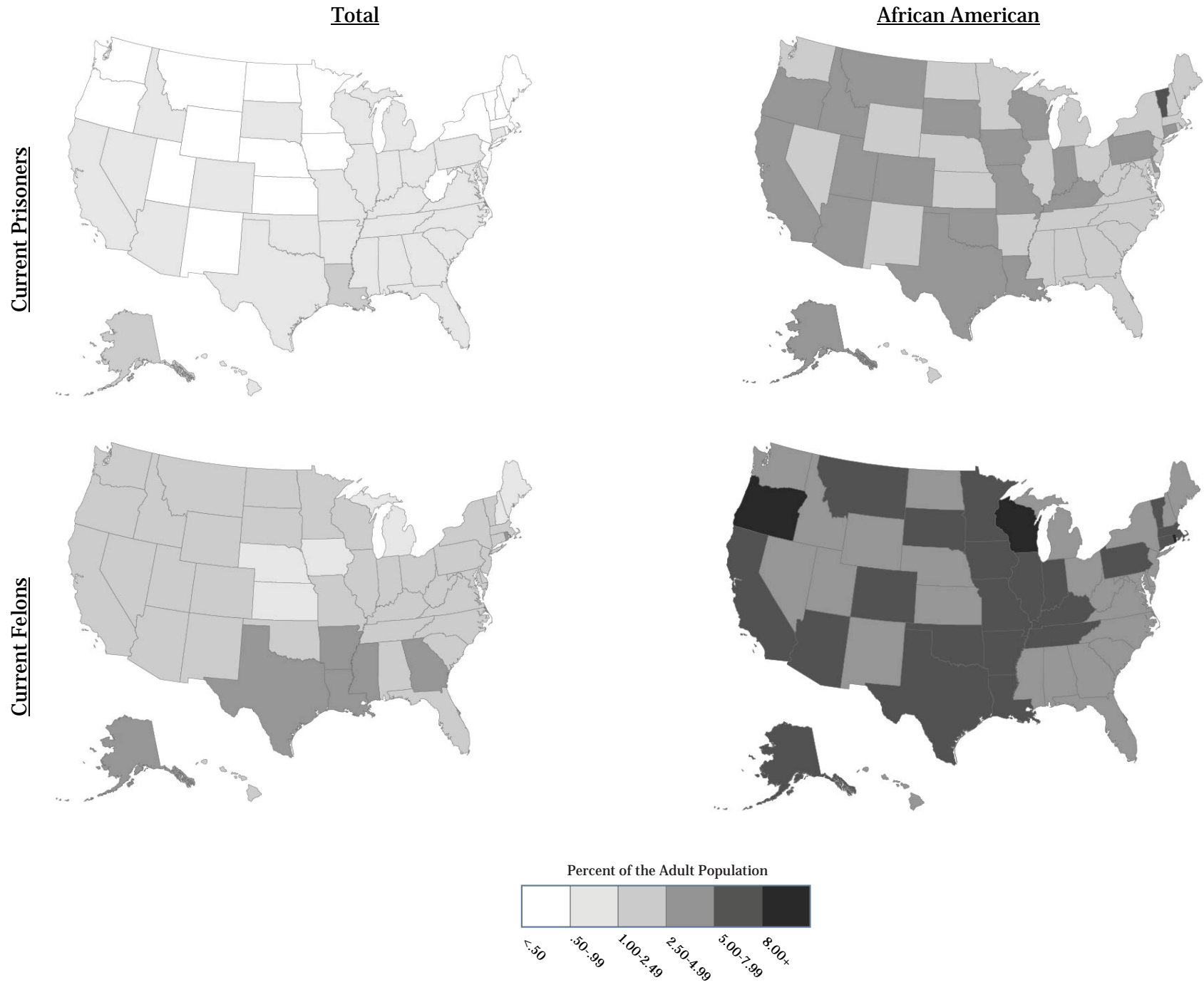
**Table 1 – Estimated U.S. Current and Ex-Prisoners by Year and Race**

Year	<u>Current Prison or Parole</u>		<u>Ex-Prison or Parole</u>		<u>Total Prison or Parole</u>	
	Total	Black	Total	Black	Total	Black
1980	551,857	225,375	1,004,380	299,660	1,556,237	525,035
% adult pop.	.34	1.31	.61	1.74	.95	3.04
% adult male pop.	.65	2.51	1.15	3.25	1.80	5.76
1990	1,305,326	640,120	1,682,474	581,742	2,987,800	1,221,862
% adult pop.	.70	3.05	.91	2.77	1.61	5.82
% adult male pop.	1.37	5.95	1.74	5.30	3.11	11.25
2000	2,107,419	928,645	3,158,408	1,306,559	5,265,827	2,235,204
% adult pop.	1.02	3.77	1.53	5.30	2.56	9.07
% adult male pop.	1.95	7.14	2.88	9.87	4.83	17.01
2010	2,477,315	880,689	5,110,013	1,974,359	7,587,328	2,855,048
% adult pop.	1.06	3.00	2.18	6.72	3.23	9.72
% adult male pop.	1.93	4.67	3.85	10.36	5.78	15.03

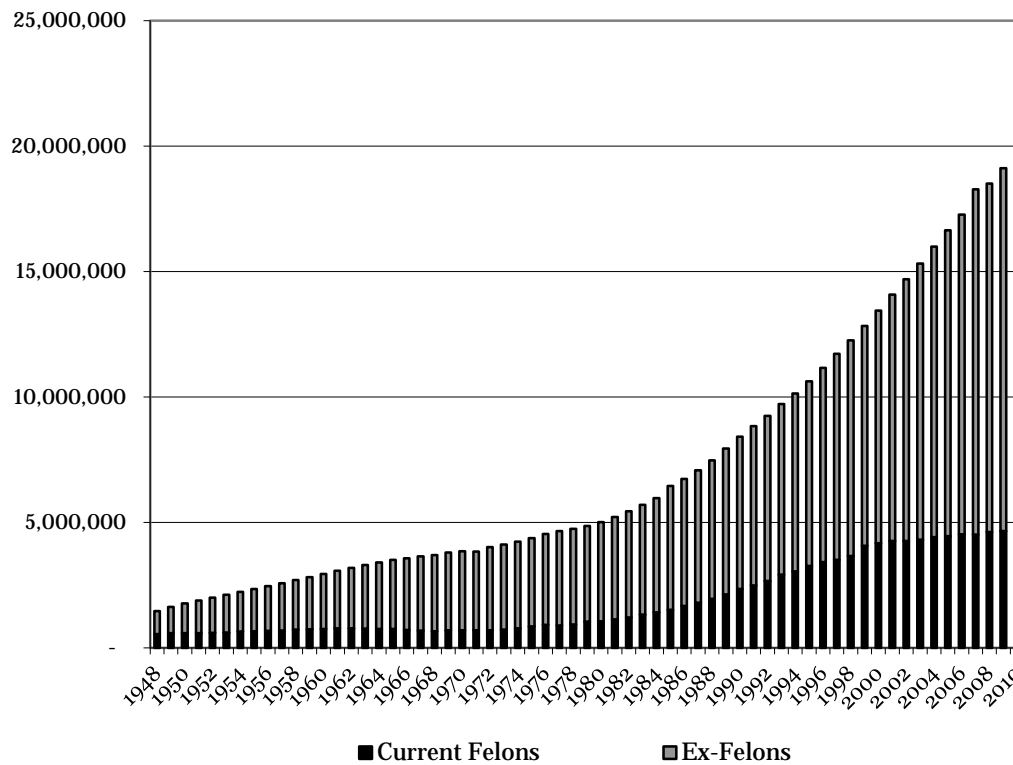
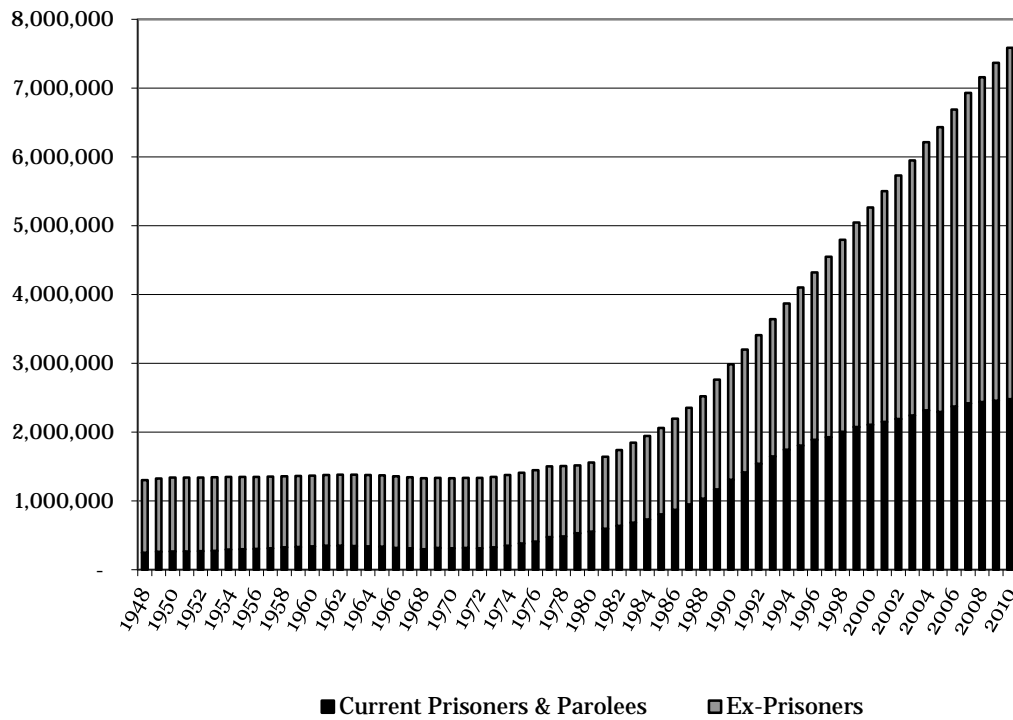
**Table 2 – Estimated U.S. Current and Ex-Felons by Year and Race**

Year	<u>Current Felons</u>		<u>Ex-Felons</u>		<u>Total Felons</u>	
	Total	Black	Total	Black	Total	Black
1980	1,058,073	368,042	3,949,917	943,669	5,007,991	1,311,711
% adult pop.	.64	2.13	2.40	5.46	3.04	7.60
% adult male pop.	1.17	3.93	4.11	9.38	5.28	13.30
1990	2,335,791	988,524	6,073,797	1,873,717	8,409,588	2,862,241
% adult pop.	1.26	4.71	3.27	8.93	4.52	13.63
% adult male pop.	2.33	8.82	5.62	15.60	7.95	24.42
2000	4,166,091	1,633,749	9,282,953	3,622,080	13,449,043	5,255,829
% adult pop.	2.02	6.63	4.51	14.70	6.53	21.33
% adult male pop.	3.58	11.81	7.47	25.00	11.05	36.81
2010	4,548,433	1,572,886	15,056,706	5,379,229	19,605,139	6,952,114
% adult pop.	1.94	5.35	6.42	18.31	8.36	23.66
% adult male pop.	3.26	7.98	9.99	25.42	13.26	33.40

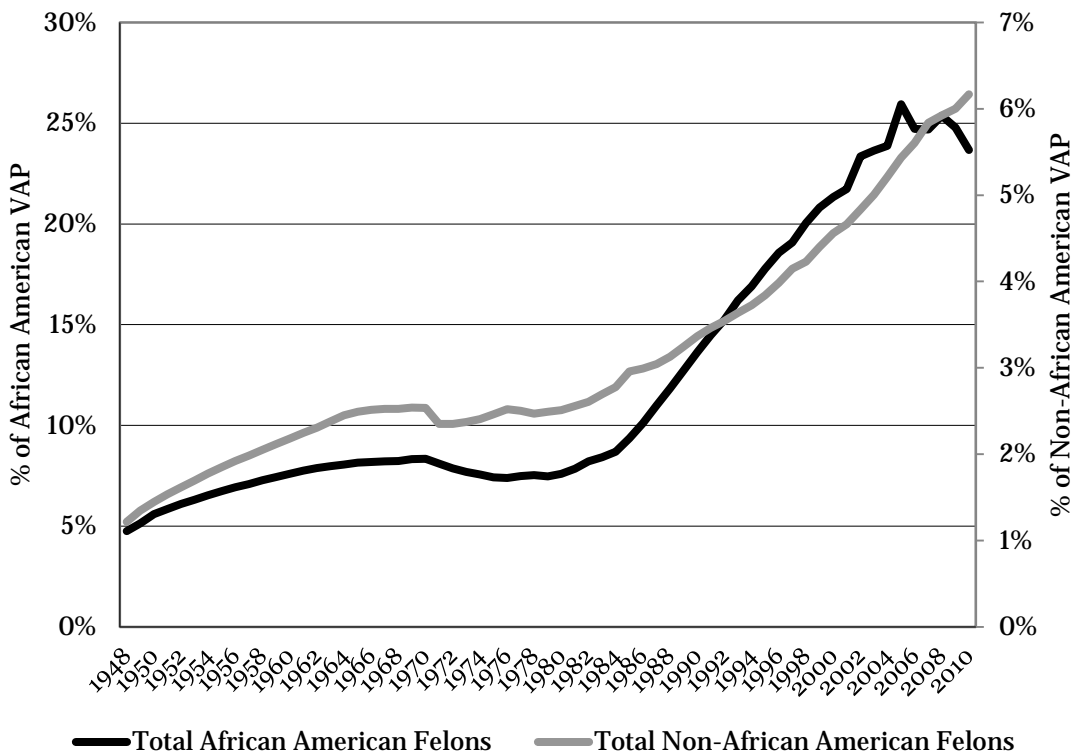
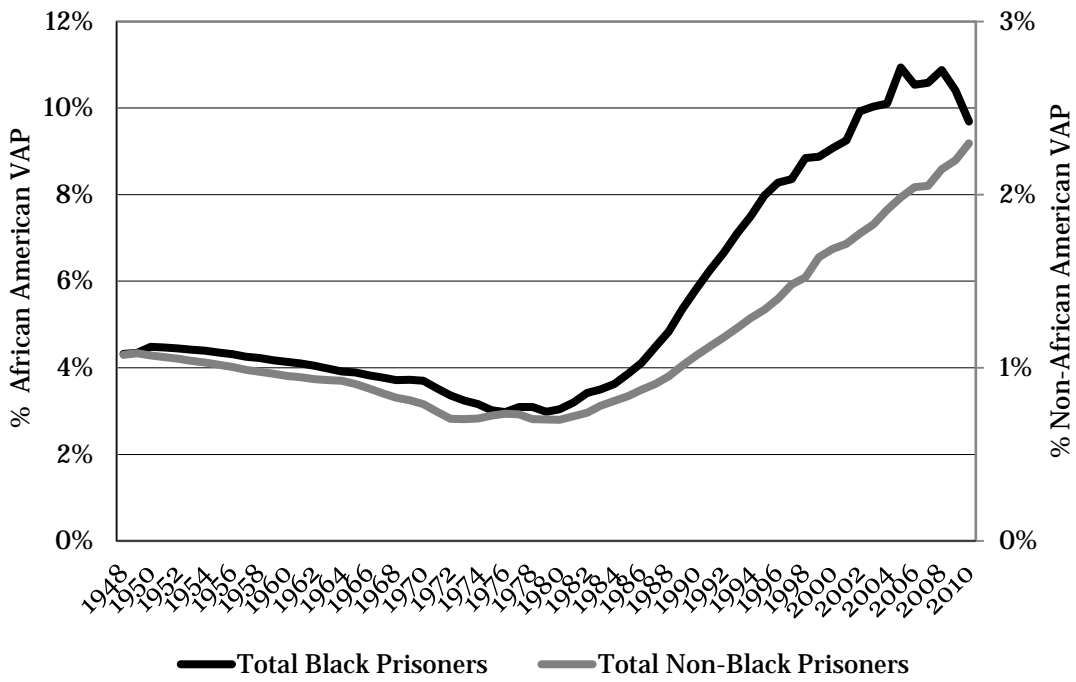
**Figure 1 – U.S. Current Correctional Populations as Percent of Adult Population by State and Race, 2010**



**Figure 2 – Growth of U.S. Ex-Prisoners and Ex-Felons, 1948-2010**



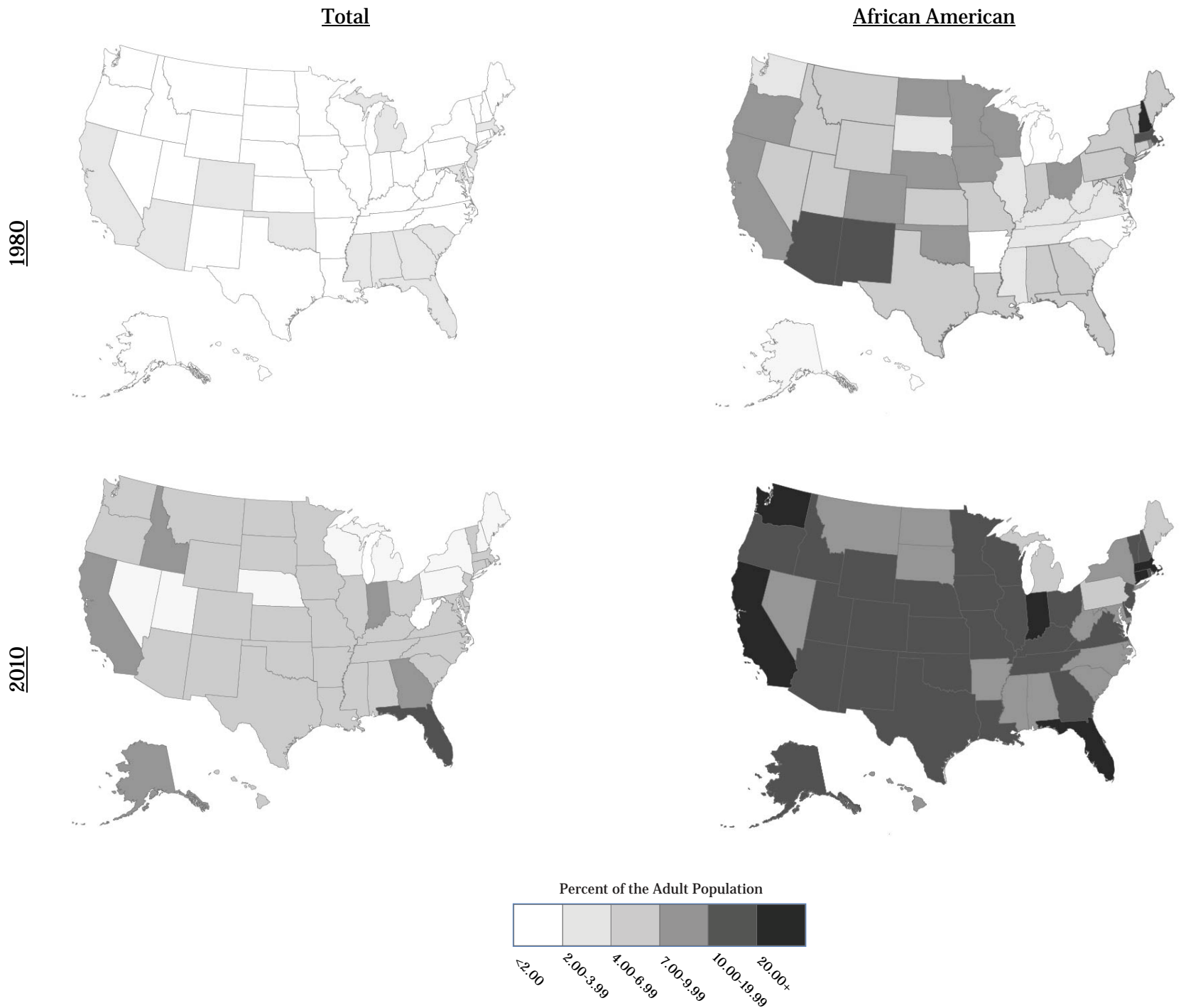
**Figure 3 – Current and Former U.S. Prisoners and Felons by Race, 1948-2010**



**Figure 4 – U.S. Ex-Prisoners as Percent of Adult Population by State and Race, 1980 & 2010**



**Figure 5 – U.S. Ex-Felons as Percent of Adult Population by State and Race, 1980-2010**



**Figure 6 – Moran's *I* for Ex-Prisoners and Ex-Felons by Race**

