

Trends in Correctional Control by Race and Sex

William J. Sabol, Thaddeus L. Johnson, and Alexander Caccavale | December 2019

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Key Findings

- From 2000 to 2016, racial and ethnic disparities declined across prison, jail, probation, and parole populations in the U.S. For example, the black-white state imprisonment disparity fell from 8.3-to-1 to 5.1-to-1, and the Hispanic-white parole disparity fell from 3.6-to-1 to 1.4-to-1.ⁱ
- Black-white disparities in state imprisonment rates fell across all major crime categories. The largest drop was for drug offenses. In 2000, black people were imprisoned for drug crimes at 15 times the rate of whites; by 2016, that ratio was just under 5-to-1.
- Among women, the black-white disparity in imprisonment fell from 6-to-1 to 2-to-1, a sharper decrease than the decline among men. The disparity among women fell because of an increase in the imprisonment rate for whites for violent, property, and drug crimes, and a decrease in the imprisonment of black women for drug crimes.
- The change in the black-white male imprisonment disparity occurred as the number of black men in state prisons declined by more than 48,000 (to about 504,000) and the number of white men increased by more than 59,000 (to roughly 476,000). Comparatively, the black-white female disparity decreased as the number of black women in state prison fell by more than 12,000 (to about 24,000) and the number of white women increased by nearly 25,000 (to about 60,000).
- Reported offending rates of blacks for rape, robbery, and aggravated assault declined by an average of 3% per year between 2000 and 2016, decreases that contributed to a drop in the black imprisonment rate for these crimes. This decrease was offset in part by an increase in the expected time to be served upon admission, which increased for both blacks and whites.
- Hispanic-white disparities in all four correctional populations have narrowed steadily since 2000. For Hispanics and whites on probation, the data showed no disparity in rates by 2016.

ⁱ In this report, the terms “white” and “black” refer to non-Hispanic white and non-Hispanic black people, and the term “Hispanic” includes persons of Hispanic or Latino origin.

Overview

American prison populations have long been characterized by racial and ethnic disparities. U.S. Census Bureau data on incarcerated persons from 1870 through 1980 show that black incarceration rates ranged from three to nine times those of whites, depending upon the decade and region of the country.¹ According to Bureau of Justice Statistics (BJS) reports over the past 40 years, black imprisonment rates ranged from about six to about eight times those of whites.²

In recent years, racial disparities in imprisonment have decreased. BJS reports have drawn attention to the trend, showing that since the mid-2000s, black and Hispanic incarceration rates have fallen faster than those for whites.³ These changes also have been noted by media,⁴ by advocacy organizations such as The Sentencing Project, and by the National Research Council.⁵

This report updates and advances earlier presentations of data on disparities by examining four questions:

- What are the national-level trends in disparity in probation, parole, jail, and prison populations?
- Are there crime-specific changes in disparity in imprisonment rates?
- Are there differences in disparity by race and sex?
- How have changes in reported offending rates and decisions at the key stages of criminal justice case processing affected black and white imprisonment rates?

The figures and tables that follow present data on these questions. The report describes and analyzes trends in disparity, imprisonment, and criminal justice processing, but the effects of broader social, economic, cultural or political factors on disparity in the criminal justice system are beyond its scope.

DATA AND DISPARITY MEASUREMENT

This report focuses on adult imprisonment rates by race and the disparity rate ratio (disparity), a measure that is the ratio of rates for two groups. The disparity measures used in this report compare a minority group (blacks or Hispanics) to whites. A black-white imprisonment disparity ratio of 5-to-1, for instance, shows that blacks are incarcerated at five times the rate of whites. A disparity of one indicates no difference between blacks or Hispanics and whites. Each rate consists of a numerator—the number of persons within a group in a correctional population—and a denominator, the adult resident population for a group. These resident population-based disparity ratios do not take into account racial differences in involvement in crime and differences in arrest and justice system case processing that may lead to disparities in imprisonment. To describe these, the report analyzes race-specific trends in offenses, arrests, prison admissions, and length of stay to determine their contributions in changes to imprisonment rates.

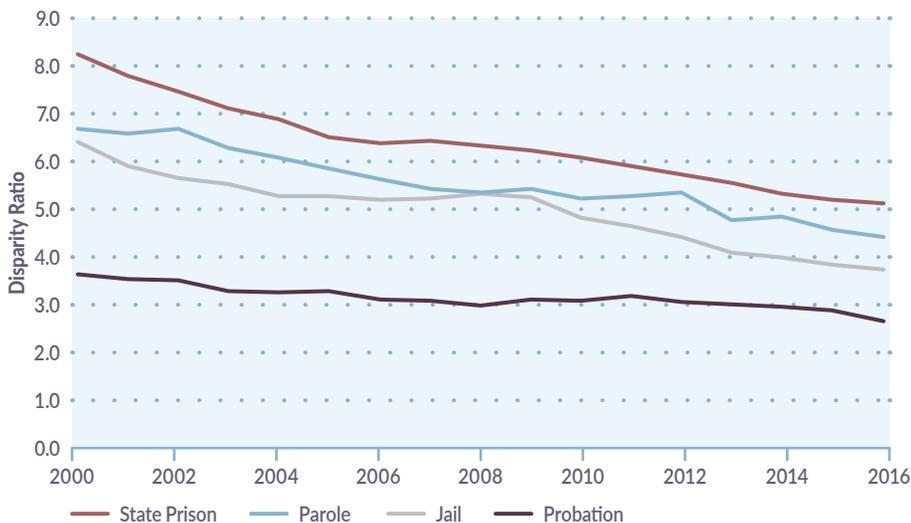
The data for this report cover the period from 2000 to 2016, the year the most recent Bureau of Justice Statistics (BJS) national data on prison populations were publicly available at the time the analyses were completed. The sources of data used in this report (described more fully in the Data and Methodology Notes section) include: administrative data submitted annually to BJS by state departments of corrections, local jails, state and county probation offices, and state parole agencies; the Federal Bureau of Investigation's Uniform Crime Reports' (UCR) data on race of persons arrested; the National Center for Health Statistics' (NCHS) Bridged-Race Population Estimates; and the National Crime Victimization Survey's (NCVS) data on victims' descriptions of the race of the person described as their assailant in violent crimes.

The imprisonment rates and disparity ratios reported here are based on the administrative data that state departments of corrections report to BJS in the National Prisoners Statistics and other sources. These rates will differ from the rates published by BJS primarily because BJS makes adjustments to the administrative data on race of persons in prison. BJS uses data from its self-report surveys of people in prison to adjust the racial distributions of people in prison so that they align with the official, federal government definitions of race and Hispanic origin. The main differences between the BJS data on imprisonment rates and their implicit disparity ratios are as follows: the BJS official statistics show lower black and white and higher Hispanic imprisonment rates than reported here. Because the BJS adjustments lower the white imprisonment rates by a proportionately larger amount than they lower the black rates (compared to the rates in this report), the implicit BJS black-white imprisonment disparity is slightly larger than the disparities reported here. The trends in the black-white disparity ratios implicit in the BJS data, however, track closely with the trends reported here. The Hispanic-white disparity implicit in the BJS reports is larger than the one reported here. The BJS methods for adjusting prisoner data on race is described in *Prisoners in 2017*.⁶ BJS does not adjust the data on race of persons in jails or on probation or parole.

Throughout this report, references to white and black refer to non-Hispanic white and non-Hispanic black people, unless otherwise specified. The counts of non-Hispanic whites and blacks under correctional authority are based upon the counts provided in the administrative data systems of departments of corrections. The population denominators are based upon the NCHS Bridged-Race Population Estimates. See the Methodology and Data Notes for a discussion of these issues.

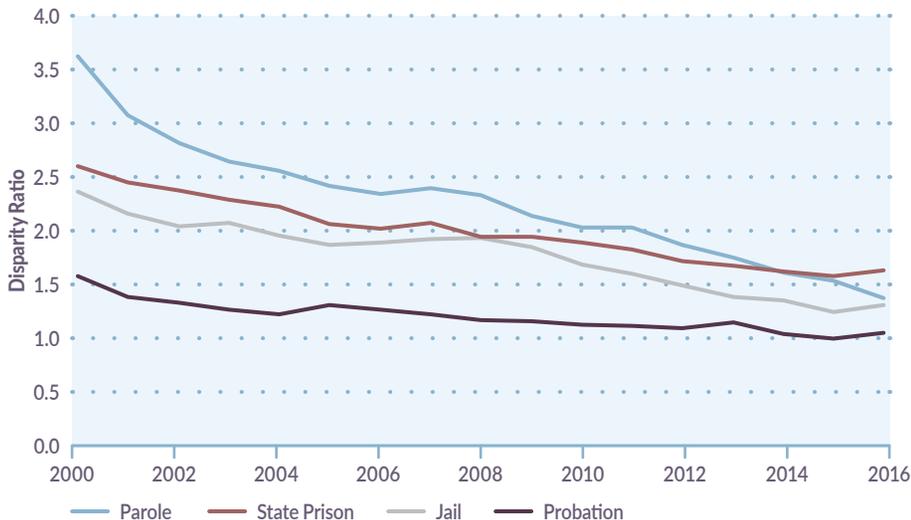
RACIAL DISPARITIES DECLINED ACROSS PRISON, JAIL, PROBATION, AND PAROLE POPULATIONS

Black-white disparity ratios for correctional populations



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

Hispanic-white disparity ratios for correctional populations



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

Between 2000 and 2016, racial and ethnic disparities in the rates at which adults were under correctional control narrowed across all four major criminal justice populations.ⁱⁱ Disparities were lowest among probation populations and highest among prison and parole populations.

Two-thirds of the decrease in the black-white disparity ratio for state prison populations occurred between 2000 and 2008, as the disparity fell from 8.3-to-1 to 6.3; by 2016, the black-white disparity ratio for people in state prison stood at 5.1.ⁱⁱⁱ The black-white disparity among people on probation was lowest throughout the period and fell from 3.7 to 2.8.

In jails, the black-white disparity ratio dropped by 42% over the study period, falling from 6.4 to 3.8. Nearly three-quarters of the decrease in the black-white jail disparity ratio decline occurred in the latter half of the timeframe, between 2008 and 2016.

The disparities for Hispanics and whites fell over time across all four populations. The largest decrease occurred among people on parole; the disparity in that population declined from 3.6 to 1.4. From 2014 to 2016, there was no disparity in Hispanic-white probation rates.

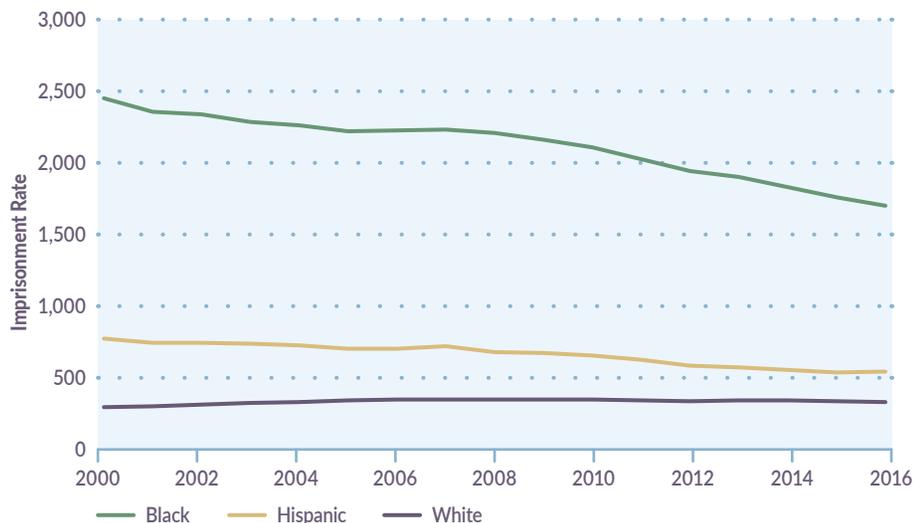
Not shown: Racial disparities also declined within the federal prison population, but by a smaller margin. The black-white racial disparity ratio decreased from 8.4 to 7 between 2001 and 2017. The Hispanic-white ratio in federal prison fell from 7.3 to 4.6.

ⁱⁱ The rates reported are based upon the race and Hispanic origin of the adult resident population, as provided by the Bridged-Race Population Estimates data.

ⁱⁱⁱ Because the denominator of the racial disparity ratio is 1, henceforth, only the numerator of the ratio will be used. For example, a disparity ratio of 8 to 1 will be reported as 8, with the comparison "to 1" implicit in the reporting of the number.

STATE IMPRISONMENT RATES FELL FOR BLACKS AND HISPANICS, INCREASED FOR WHITES

Black, Hispanic, and white state imprisonment rates



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

Between 2000 and 2016, the imprisonment rate^{iv} for blacks and Hispanics fell by about 30%, while white imprisonment rates increased by about 12%. For blacks and Hispanics, the rate of decrease was steeper between 2008 and 2016 than between 2000 and 2007. For example, the black imprisonment rate fell by 9% from 2000 to 2007, but dropped by 23% between 2008 and 2016. By comparison, the white rate increased by 17% from 2000 to 2007, but then fell by about 5% from 2008 to 2016.

NUMBER OF BLACKS IN STATE PRISON DECLINES AS WHITE, HISPANIC POPULATIONS GROW

Adults in state prison at year end in 2000 and 2016

Race/ Hispanic origin	2000	2016	Change in number of prisoners	% Change in number of prisoners
Total*	1,248,815	1,316,205	67,390	5.4%
White	452,232	536,183	83,950	18.6%
Black	589,499	527,675	-60,824	-10.3%
Hispanic	179,058	212,746	33,688	18.8%

*Total excludes persons of other races.

Sources: Authors' analysis of BJS National Prisoner Statistics data. © 2019 Council on Criminal Justice.

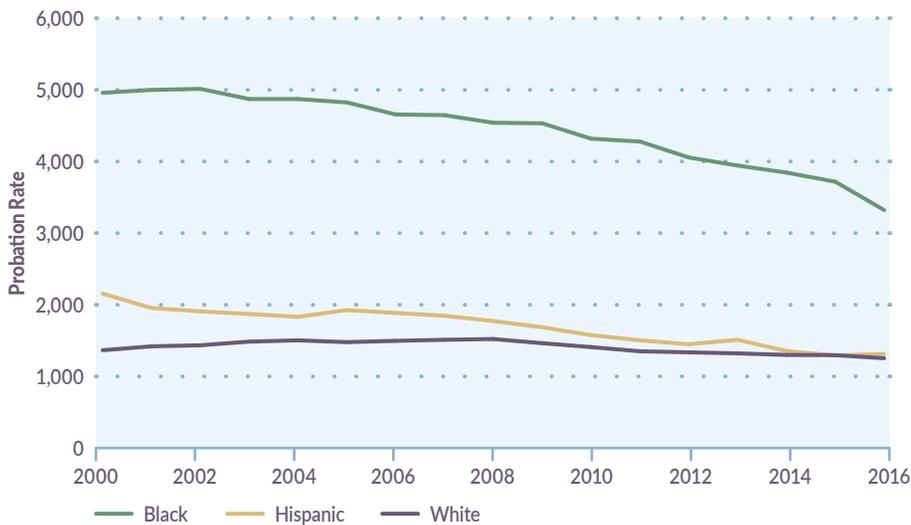
The decreases in the black and Hispanic state imprisonment rates between 2000 and 2016 occurred as the number of blacks in state prisons fell by 10% and the number of Hispanics increased by about 19%. For blacks and Hispanics, the decreases in their respective imprisonment rates occurred along with increases in the size of their respective resident populations.^v For example, between 2000 and 2016, the black adult population increased by 7 million (29%) while the number of blacks in state prisons fell by 61,000. If, in 2016, the black adult population had not increased but remained at its year 2000 level, the black imprisonment rate in 2016 would have been about 2,200 per 100,000 (and not the 1,702 level that it reached). Similarly, the 69% increase in the adult Hispanic population more than outstripped the 19% increase in Hispanics in state prison, leading to the 30% decrease in the Hispanic imprisonment rate.

^{iv} The rates listed in this report are race-specific rates per 100,000 U.S. adult residents.

^v Authors' analysis of NCHS Bridged-Race Population Estimates data.

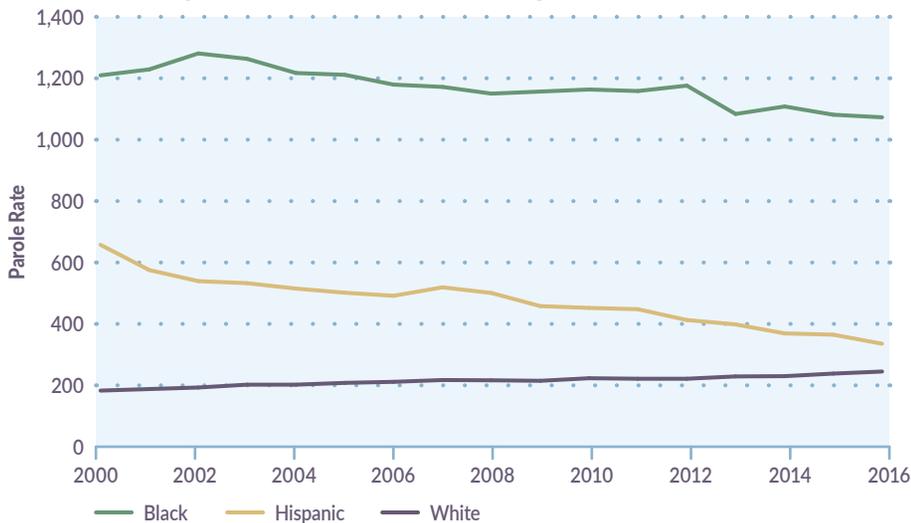
DECREASING RATES OF BLACK, HISPANIC CORRECTIONAL CONTROL DROVE DECLINES IN DISPARITY RATIOS

Probation rates for blacks, whites, and Hispanics



Sources: BJS Probation Surveys, NCHS Bridged-Race Population Estimates. © 2019 Council on Criminal Justice.

Parole rates for blacks, whites, and Hispanics



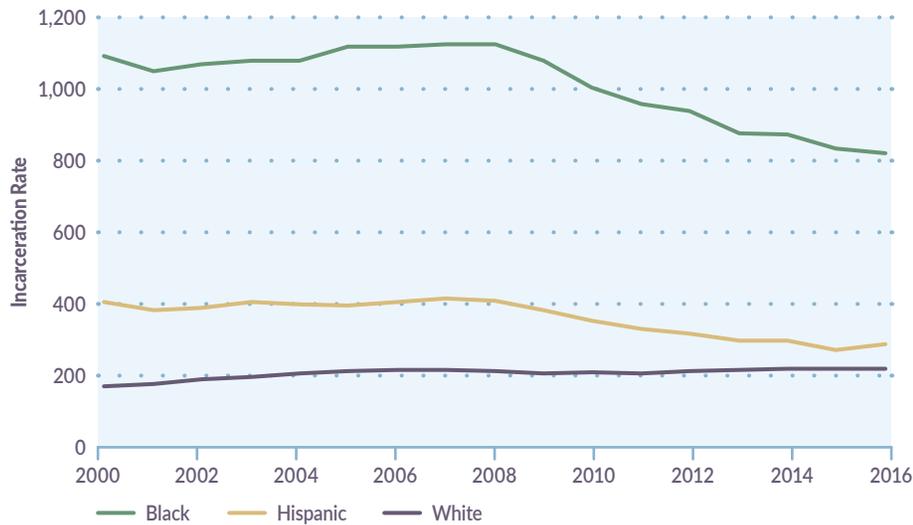
Sources: BJS Parole Surveys, NCHS Bridged-Race Population Estimates. © 2019 Council on Criminal Justice.

Among jail, probation, and parole populations, the decline in disparity ratios occurred largely as a result of decreases in the rates at which blacks and Hispanics are under correctional control. Increases in such rates for whites contributed to a lesser degree, particularly for parole and jail populations. Black and Hispanic probation rates both declined by one-third or more between 2000 and 2016, while the white probation rate fell by 8%. The decreases for blacks and Hispanics occurred almost linearly, while for whites the probation rate increased from 2000 to 2008 before decreasing. By 2016, the Hispanic and white probation rates converged.

Among people on parole, the rate for blacks decreased by 13% between 2000 and 2016 and the Hispanic rate decreased by 42%; the white rate increased by 30%. The increase in the white parole rate combined with the decrease in the black rate resulted in a decrease in the black-white disparity ratio, from 6.3 to 4.1. The same dynamics led to a Hispanic-white disparity ratio decline, from 3.1 to 1.5.

JAIL INCARCERATION RATES DROPPED FOR BLACKS AND HISPANICS, INCREASED FOR WHITES

Black, Hispanic, and white jail incarceration rates



Sources: BJS Annual Jail Surveys, NCHS Bridged-Race Population Estimates. © 2019 Council on Criminal Justice.

Jail incarceration rates fell 27% for blacks and 30% for Hispanics between 2000 and 2016, while increasing by 29% for whites. The drop in the black jail incarceration rate was associated with a significant decline in arrests of blacks for drug offenses. See page 19 for additional information.

BLACK-WHITE DISPARITIES IN STATE IMPRISONMENT DROPPED FOR ALL CRIMES; DROP WAS STEEPEST FOR DRUG OFFENSES

Black-white imprisonment rate disparity ratios by crime type



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

Although reductions in disparities in black-white imprisonment rates occurred for all crime types, the largest drop occurred for drug offenses. In 2000, black people were incarcerated for drug crimes at 15 times the rate of whites; by 2016, blacks were imprisoned at less than five (4.7) times the rate of whites. The decline in the drug disparity ratio was inconsistent throughout the period. From 2000 to 2004, it fell from 15 to 9.4, and then reached a second peak of 9.8 in 2008. Thereafter, it declined steadily to reach 4.7 in 2016. (The effects of changes in drug arrests and other criminal justice processes on black-white imprisonment rates and this disparity reduction are discussed in the final section of the report.)

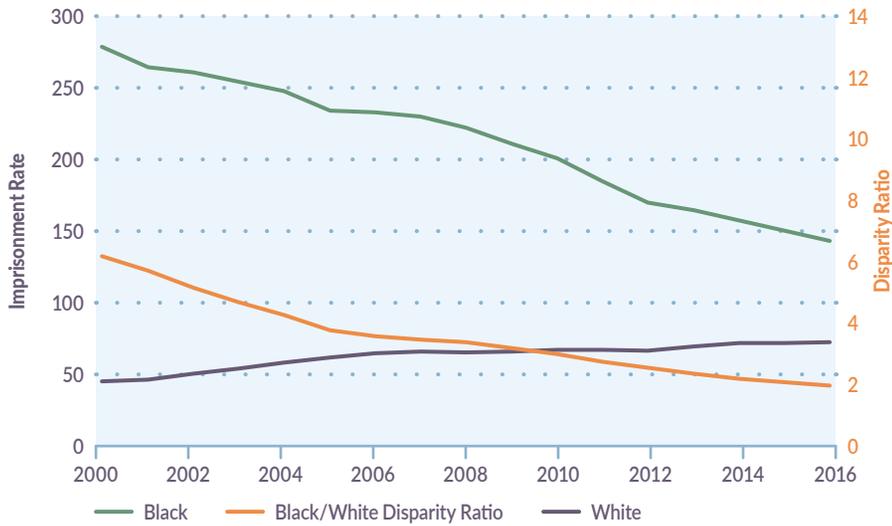
The drug imprisonment disparity decline was driven by a large reduction in the black drug imprisonment rate, which fell by nearly two-thirds, from 682 to 247 per 100,000 black adults, between 2000 and 2016. One-third of the decrease occurred from 2000 to 2008, while the remaining two-thirds occurred between 2008 and 2016. The white imprisonment rate for drug offenses increased by 7 percent over the period, from 45 to 53 per 100,000 white adults. Most of the increase occurred between 2000 and 2006, when the white rate grew from 45 to 58 per 100,000 white adults; from 2006 onward, it fell slightly, to 53 per 100,000.

The second largest black-white disparity reduction occurred for property crimes; the disparity ratio fell from 5.2 in 2000 to 3 in 2016. The reduction in the black-white disparity for property crime accompanied a sharp decline – nearly 50% – in the black imprisonment rate for such offenses, which fell from 419 to 239 per 100,000 black adults between 2000 and 2016.

For violent offenses, the disparity ratio fell from 8.4 to 6.6 during the period. Almost all of that decrease occurred between 2000 and 2010; after 2010, the violent crime disparity ratio remained relatively constant, fluctuating slightly between 6.5 and 6.8. The decrease in disparity for violent crimes was smallest among the major crime categories. This decrease was led by a drop in the black imprisonment rate for such offenses, which fell by 14%, from 1,191 to 1,015 per 100,000. The white imprisonment rate for violent crimes, by comparison, increased by 9% between 2000 and 2016, from 142 to 155 per 100,000.

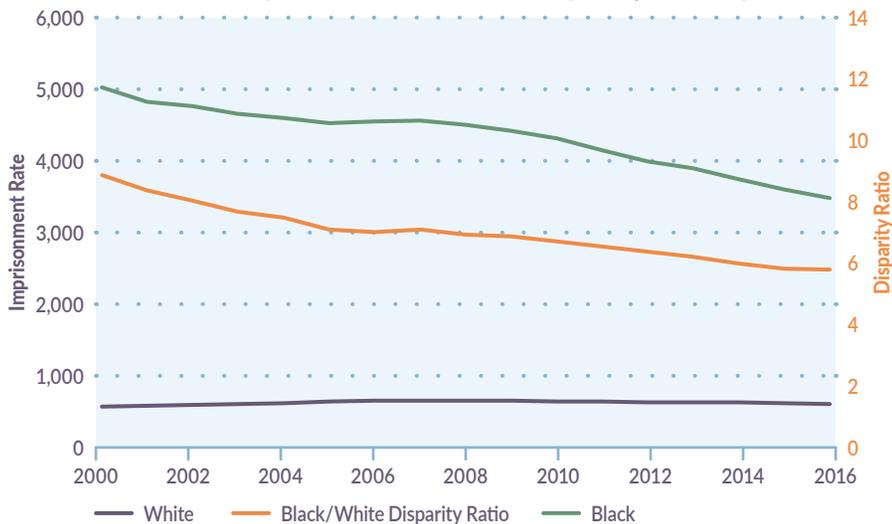
RACIAL DISPARITIES IN IMPRISONMENT FELL MORE RAPIDLY FOR BLACK WOMEN THAN FOR BLACK MEN

Black and white imprisonment rates & disparity ratios for women



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

Black and white imprisonment rates & disparity ratios for men



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

The black-white imprisonment rate disparity fell for both men and women, but it fell more rapidly for black women than for black men – and the magnitude of the declines differed. For women, the disparity ratio fell from 6 to 2; for men it fell from about 9 to just under 6. The decrease in disparity for black women resulted from a 49% decline in the black female imprisonment rate (from 279 to 144 per 100,000 black female adults) and a 62% increase in the white female imprisonment rate (from 45 to 73 per 100,000 white female adults).

For men, the black-white disparity decreased primarily because of a 30% decline in the black male imprisonment rate, as the white male imprisonment rate increased by six percent. The black male imprisonment rate fell from 5,020 to 3,476 per 100,000 black men while the white rate increased from 567 to 601 per 100,000. By 2016, about 3.5 percent of all adult black men were incarcerated in state prisons, down from 5% in 2000.

TRENDS IN STATE IMPRISONMENT, 2000-2016: 59,000 MORE WHITE MEN, 48,000 FEWER BLACK MEN

Changes in black/white male prisoner counts and imprisonment rates from 2000 to 2016

Type of offense	White Male				Black Male			
	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate
Total*	59,133	14.2%	34.6	6.1%	-48,241	-8.7%	-1,544.5	-30.8%
Violent	28,366	13.8%	16.0	5.7%	28,177	10.3%	-407.4	-16.3%
Murder	6,183	14.4%	3.7	6.3%	18,346	27.8%	-18.2	-3.0%
Rape	9,393	27.3%	4.6	18.3%	1,435	3.5%	-80.4	-21.5%
Robbery	738	12.4%	-2.4	4.4%	-4,554	-4.5%	-251.7	-27.6%
Aggravated assault	7,998	2.1%	6.7	-5.1%	7,322	14.6%	-59.8	-13.1%
Property	1,903	1.8%	-7.9	-5.4%	-21,720	-24.1%	-347.8	-42.4%
Burglary	2,428	4.5%	-2.2	-2.9%	-5,619	-11.6%	-145.1	-32.9%
Larceny	3,425	18.4%	0.2	10.0%	-4,449	-26.2%	-67.9	-44.0%
Motor vehicle theft	-4,177	-50.3%	-6.1	-53.8%	-4,760	-64.2%	-49.1	-72.8%
Drug offenses	8,397	14.3%	5.0	6.2%	-77,211	-51.4%	-862.0	-63.1%
Public order offenses	18,312	42.4%	19.0	32.3%	22,054	62.6%	74.8	23.3%

* Includes other offenses not shown separately. Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

The number of black men in state prisons declined by 9%, from 552,239 to 503,999, or more than 48,000 individuals, between 2000 and 2016. Driving the decline was a 51% decrease in the number of black men in prison for drug crimes, a drop totaling more than 77,000 black men, and a 24% decrease in the number held for property offenses, a drop of nearly 22,000 black men. Partially offsetting these declining numbers were increases in the number of black men imprisoned for violent (28,000 people) and public order offenses (22,000 individuals).

The imprisonment rate for black men decreased for all crime categories except public order offenses. Changes in the imprisonment rate can occur as a result of changes in the number of persons in prison, the size of the resident population, or both. In the case of adult black men incarcerated in state prisons for violent crimes, their number increased

by over 18,000 but their imprisonment rate decreased by 16%. This occurred because the increase in the number of adult black men in the resident population was greater than the increase in their number in prison.

By comparison, the number of white men in state prison increased by 14%, from 416,729 to 475,862, or a total of 59,000 people. The number of white men held for violent offenses increased by 14% (28,000 people), the number imprisoned for public order offenses grew by 42% (18,000 men), and the number held for drug offenses increased by 14% (nearly 8,400 people). The adult white male imprisonment rate increased for all crime categories except burglary and auto theft.

TRENDS IN STATE IMPRISONMENT, 2000-2016: 25,000 MORE WHITE WOMEN, 13,000 FEWER BLACK WOMEN

Changes in black/white female prisoner counts and imprisonment rates from 2000 to 2016

Type of offense	White Female				Black Female			
	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate
Total*	24,817	69.9%	27.8	61.7%	-12,583	-34.7%	-135.4	-48.6%
Violent	6,424	60.6%	7.1	52.8%	667	5.7%	-15.0	-16.7%
Murder	1,682	44.8%	1.8	37.8%	739	23.2%	-0.7	-2.9%
Rape	579	52.1%	0.6	44.7%	58	25.2%	0.0	-1.3%
Robbery	1,087	55.6%	1.2	48.1%	-273	-7.9%	-7.3	-27.4%
Aggravated assault	1,622	80.5%	1.8	71.8%	-172	-4.8%	-7.0	-25.0%
Property	7,016	64.8%	7.8	56.8%	-3,565	-39.5%	-36.3	-52.3%
Burglary	2,480	99.8%	2.8	90.2%	-585	-33.8%	-6.4	-47.8%
Larceny	2,878	102.6%	3.3	92.8%	-1,109	-32.0%	-12.4	-46.4%
Motor vehicle theft	70	16.9%	0.1	11.2%	-76	-38.3%	-0.8	-51.4%
Drug offenses	7,187	66.5%	8.0	58.5%	-10,236	-74.4%	-84.5	-79.9%
Public order offenses	3,670	120.7%	4.2	110.1%	563	34.1%	0.7	5.6%

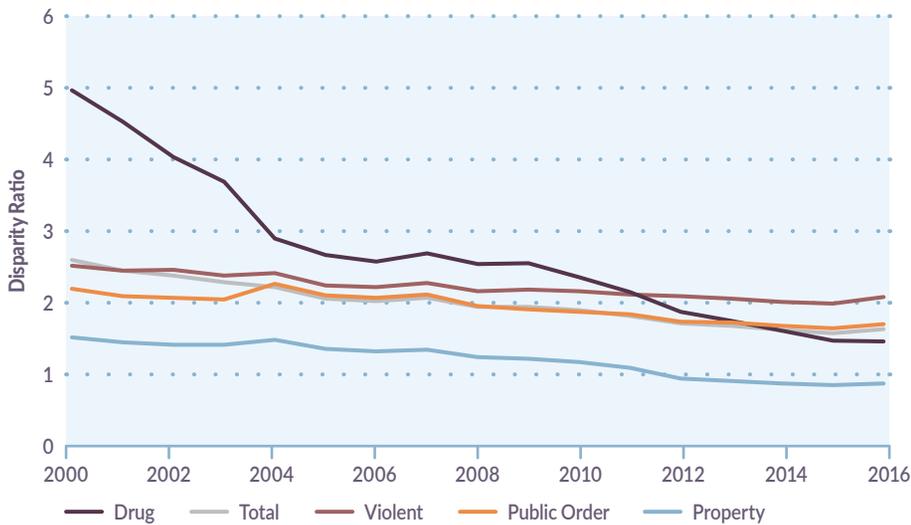
* Includes other offenses not shown separately. Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

The number of black women in prison declined 35%, from 36,260 to 23,677, more than 12,500 persons, between 2000 and 2016, while the number of white women in prison increased from 35,504 to 60,321, about 25,000 persons, or 70%. A decrease of 10,200 black women held for drug offenses accounted for the majority of the overall decrease in adult black females in state prisons. Partially offsetting the decreases were increases in the number of black women held for violent and public order offenses.

The increase in the number of white women in state prison between 2000 and 2016 resulted from increases of between 6,400 and 7,200 people held for violent, property, and drug crimes. There was no offense category for which the number of white women in prison did not increase.

HISPANIC-WHITE IMPRISONMENT DISPARITIES DECLINED OVERALL, ESPECIALLY FOR DRUG CRIMES

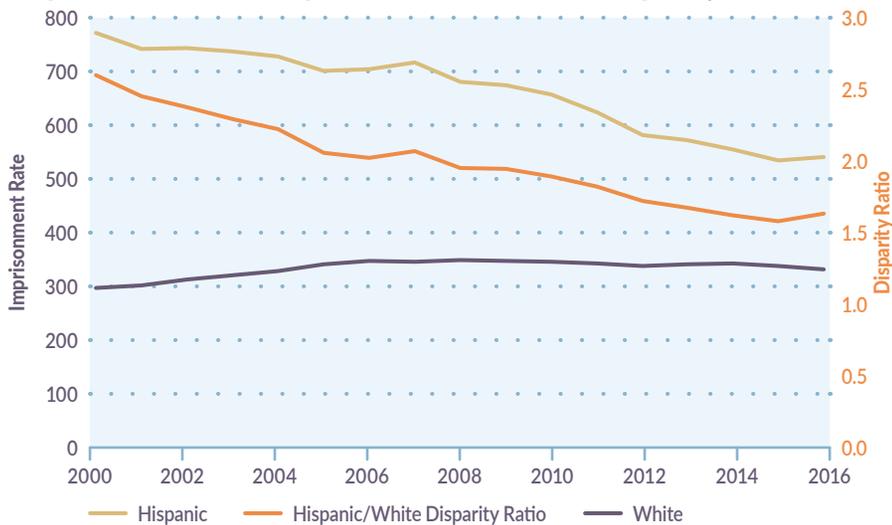
Hispanic-white imprisonment rate disparity by offense



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

The Hispanic imprisonment rate fell from 770 per 100,000 Hispanic adults in 2000 to 530 per 100,000 in 2016, even as the number of Hispanics in prison increased. That drop, combined with an increase in the white imprisonment rate from 296 to 330 per 100,000 white adults, caused the Hispanic-white disparity ratio to fall from 2.5 to 1.6 during the period.⁷ The racial disparity decline was driven by reduced imprisonment of Hispanic men and women for drug crimes. The Hispanic-white disparity ratio for drug offenses fell from 5 to 1.5.

Hispanic and white imprisonment rates and disparity ratio



Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

TRENDS IN STATE IMPRISONMENT, 2000-2016: HISPANIC POPULATION GROWS, IMPRISONMENT RATES DECLINE

Changes in Hispanic prisoner counts and imprisonment rates from 2000 to 2016

Type of offense	Males				Females			
	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate	Difference in number of prisoners	Percent change	Difference in imprisonment rate	Percent change in rate
Total*	31,205	18.2%	-403.9	-28.3%	2,484	31.0%	-17.1	-24.1%
Violent	41,381	51.3%	-56.0	-8.3%	2,379	111.3%	4.2	22.4%
Murder	12,021	63.0%	-1.9	-1.2%	661	111.5%	1.2	22.6%
Rape	11,446	65.0%	0.0	0.0%	104	113.7%	0.2	23.9%
Robbery	5,026	24.6%	41.6	24.5%	582	96.1%	0.7	13.6%
Aggravated assault	8,617	79.4%	16.9	11.0%	686	132.4%	1.6	34.7%
Property	-919	-3.6%	-88.6	-41.6%	524	31.2%	-3.6	-24.0%
Burglary	919	6.7%	-40.5	-35.3%	129	25.7%	-1.2	-27.2%
Larceny	-477	-10.2%	-17.8	-45.5%	104	17.1%	-1.7	-32.2%
Motor vehicle theft	-1,315	-40.6%	-17.3	-64.0%	36	34.3%	-0.2	-22.2%
Drug offenses	-21,023	-43.0%	-266.7	-65.5%	-1,186	-33.0%	-19.4	-61.2%
Public order offenses	11,947	80.0%	11.3	9.1%	748	136.0%	1.8	36.8%

* Includes other offenses not shown separately. Sources: Authors' analysis of multiple sources. See methodology. © 2019 Council on Criminal Justice.

The number of Hispanic males and females in state prison increased between 2000 and 2016, and for both groups, growth in the number in custody for violent offenses accounted for the majority of the increase. Also for both sexes, decreases in the number imprisoned for drug crimes partially offset the larger increases in the numbers held for violent offenses. For example, the total number of Hispanic males in prison increased from 171,044 to 202,249, or by 31,200. This resulted from an increase of 41,300 in the number of Hispanic men held for violent offenses (from 80,715 to 122,097) that was partially offset by a decrease of 21,000 in the number held for drug crimes (from 48,894 to 27,870). The increase of roughly 12,000 people held for public order offenses (from 14,942 to 26,889) also contributed to the overall increase in Hispanic men in prison.

Although the number of Hispanics in prison increased, the Hispanic imprisonment rate dropped because of a larger rise in the resident Hispanic population. For Hispanic men, the total imprisonment rate fell by 28%. Their drug offense imprisonment rate declined by 66%, larger than the 8% decrease for violent offenses and 25% drop for property crimes. For Hispanic women, the imprisonment rate fell by 24%, led by a 61% drop in their drug imprisonment rate, a 24% decline for property crimes, and a 22% increase in their rate of imprisonment for violent offenses.

THE EFFECTS OF CRIMINAL CASE PROCESSING ON RACIAL DIFFERENCES IN IMPRISONMENT BETWEEN 2000 AND 2016

Racial differences in the likelihood that a person who commits a crime is arrested, charged, convicted, sentenced to prison, or revoked for supervision violations can lead to racial differences in imprisonment rates. This section explores two questions: How much do race-specific trends in the stages of criminal justice processing influence the race-specific changes in imprisonment rates for certain crime types? And do the contributions of each stage vary between blacks and whites?

For these analyses, the average annual growth rates in reported offending, arrests, prison admissions, and expected length of prison stay, in addition to the average annual growth in imprisonment, were estimated separately by race group. The sum of the growth rates across the stages equals the growth rate in imprisonment. As some growth rates are positive (increase in a rate) and some are negative (decrease in a rate), an increase in one stage may offset a decrease in another. A rise in arrests for one racial group, for example, could be offset by a decline in prison admissions for that group, reducing any potential growth in imprisonment.

The analyses build upon prior research that assessed how racial differences in involvement at one stage of the criminal justice system are related to racial disparities in imprisonment.⁸ They also build upon work that has used data from the National Crime Victimization Survey (NCVS) to estimate racial differences in offending based on victims' descriptions of the race of their perpetrators.⁹ (See Methodology

and Data Notes section for details.) Due to data limitations, the analyses in this section are limited to black and white imprisonment rate differences. (See Methodology and Data Notes: Uniform Crime Reports, for information about the UCR reporting on the Hispanic origin of persons arrested.)

The imprisonment rates reported in this section are the same, resident-population based rates reported in the prior sections. However, the rates for each stage of the criminal justice system are based upon the size of the population in the preceding stage. For example, the growth rate for prison admissions is calculated as the number of prison admissions divided by the number of arrests. This approach accomplishes two things. First, it mirrors the case-selection processes in the criminal justice system, and second, it provides that the sum of the stage-specific growth rates add up to the total growth in the imprisonment rate.

In the charts that follow, the data on prison admissions and prison populations are based on total prison admissions (i.e., new court commitments plus parole and probation violator admissions), and the total number of prisoners under jurisdiction of state prisons.^{vii} The charts are based on the authors' analysis of data from BJS National Prisoners Statistics, the Unified Crime Reporting Program, the National Corrections Reporting Program, and Bridged-Race Population Estimates.

vi Additional data limited to new court commitments and those in prison on a new court commitment are available upon request. The analyses of new court commitments only do not differ materially from the results reported herein.

RAPE/SEXUAL ASSAULT, ROBBERY, AND AGGRAVATED ASSAULT

The first charts focus on rape, robbery, and aggravated assault, the crime types for which data on victims' perceptions of the race of their assailants were available from NCVS. For these crimes, black and white imprisonment rate growth diverged, and declining rates of reported offending contributed most significantly to changes in imprisonment rates. The decreases in reported offending rates were larger for blacks, driving black imprisonment levels downward.

As reported in the NCVS, the estimated black offending rates for the three crimes decreased by an average of 3 percent per year during the period studied, and those decreases contributed to the slowing of the growth in black imprisonment rates for these offenses. Offsetting those decreases were increases in length of stay, admissions per

arrest, and arrests per offender. The effects of these criminal justice components varied across the crime types. Increases in length of stay for rape, arrests and length of stay for robbery, and prison admissions for aggravated assault had the largest positive effects on the respective black imprisonment rates.

For whites, reported offending rates declined for aggravated assault, while growth in arrests and prison admissions offset that decline. Increased length of stay was the major contributor to growth in white imprisonment rates for rape and robbery.

For rape and robbery, the trends in black and white imprisonment rates differed significantly, as the black imprisonment rates decreased while

Average annual change in imprisonment rates and justice-system processing populations: rape and sexual assault



*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

Average annual change in imprisonment rates and justice-system processing populations: robbery



*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

Average annual change in imprisonment rates and justice-system processing populations: aggravated assault



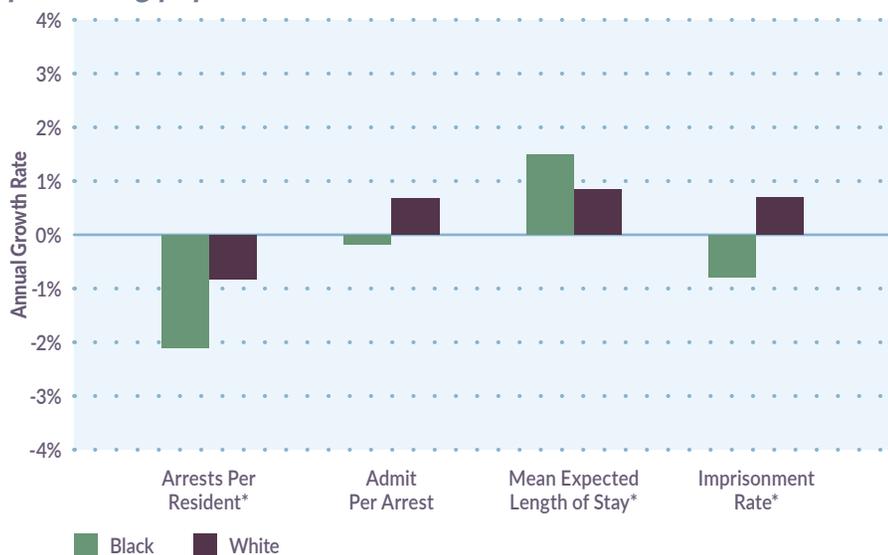
*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

the white rates increased slightly. There were also racial differences in the contributions of stage processing to growth in imprisonment. For blacks, increases in length of stay for rape and robbery partially offset the decreases in estimated offending, slowing the downward trend in the imprisonment rate. For whites, the increase in arrests and length of stay were larger than the slight decrease in offending rates.

For both blacks and whites, decreases in reported rates of aggravated assault had the largest downward influence on the imprisonment rate. But for whites, the larger increases in arrests per offender and admissions per arrest more than offset the influence of reduced rates of reported offending. Thus, the white imprisonment rate for aggravated assault rose.

ALL VIOLENT CRIMES

Average annual change in imprisonment rates and justice-system processing populations: **all violent crimes**



*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

For all violent crimes (murder, robbery, aggravated assault, simple assault, rape, and other sexual offenses) combined, the black and white imprisonment rates diverged. The black imprisonment rate declined by an average of seven-tenths of 1% annually between 2000 and 2016, and the white violent crime imprisonment rate increased by about eight-tenths of 1% annually. Arrest rates for all violent crimes declined for blacks and whites between 2000 and 2016, and the decrease for blacks (about 2% per year) was more than twice that of whites. The reduced arrests of blacks contributed to decreases in the black violent crime imprisonment rate, but the decrease was largely offset by increased length of stay in prison.

For whites, increases in prison admissions per arrest and length of stay contributed to the growth in the imprisonment rate.

DRUG CRIMES

Average annual change in imprisonment rates and justice-system processing populations: **drug crimes**



*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

For drug crimes, declining prison admissions per arrest, as well as declining drug arrests, contributed most heavily to the decrease in the black imprisonment rate for such offenses. The black imprisonment rate fell by 6% per year on average. The decline in admissions per arrest exerted the largest downward influence on black drug imprisonment rate growth, followed by the drop in arrests. Combined, these two effects more than offset an increase in length of stay for blacks convicted of drug crimes.

The pattern for whites differed. The white drug imprisonment rate increased by one-half of 1% annually. Arrest and prison admissions rates also increased, by similar amounts. The slight decrease in length of stay for whites convicted of drug offenses partially offset increases in arrests and admissions.

DRUG ARRESTS DECREASED FOR BLACKS AND INCREASED FOR WHITES, DRIVING DISPARITY DECLINE

Black and white drug arrest rates and drug arrest disparity ratio



Sources: BJS Data Analysis Tool and UCR arrest statistics. © 2019 Council on Criminal Justice.

One factor contributing to the decrease in the black and increase in the white jail incarceration rates was a shift in the racial distribution of people arrested for drug crimes. After peaking in 2006 at a rate of 2,177 per 100,000, the black drug arrest rate fell by 41%, to 1,274 per 100,000, in 2016. Over the same period, the number of arrests of blacks for drug abuse violations fell by 29%, from 597,912 to 420,418. The white drug arrest rate declined by 3% between 2000 and 2016; it fell to 479 per 100,000 by 2011 and then increased by 20% to reach 567 per 100,000 in 2016.

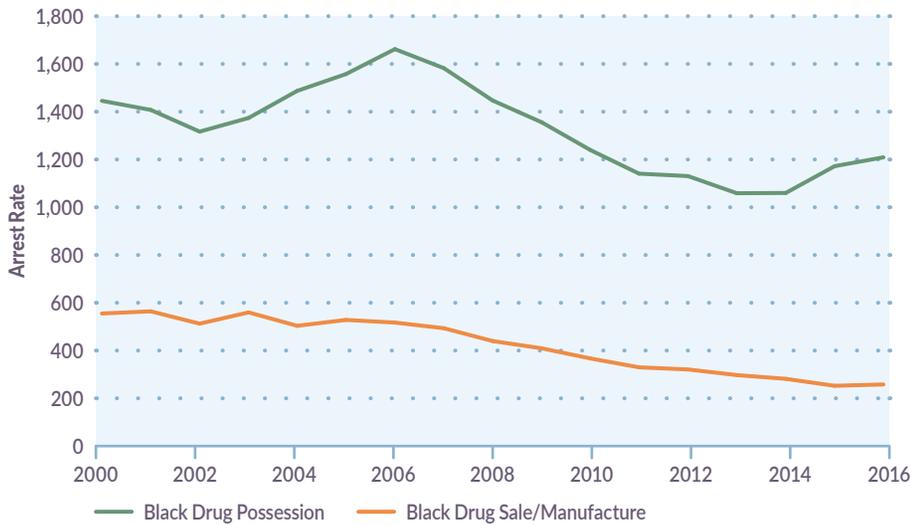
Reflecting these changes, the black-white drug arrest disparity ratio fell from 4 to 2.2 during the period, with the majority of the decrease occurring between 2006 and 2016.^{vi} The steepest decline in the black-white racial disparity in jail incarceration occurred during the same period. No similarly large changes in the black-white arrest disparity occurred for other major crime categories.

(See Methodology and Data Notes Uniform Crime Reports section for information on race of arrestees in the UCR.)

^{vii} The most recent UCR data show that drug arrest rates for both blacks and whites increased in 2017 and 2018. The racial disparity ratio, however, remained at 2.3, the same as it was in 2015.

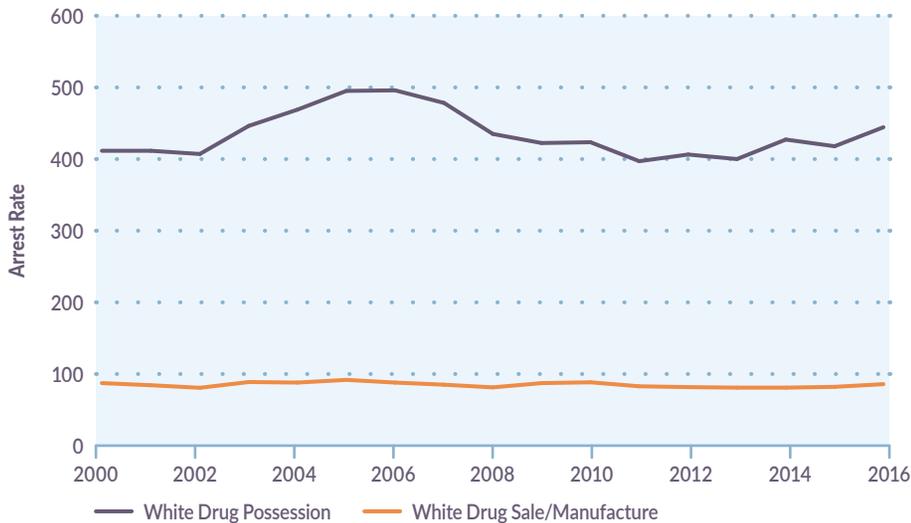
DROP IN DRUG ARRESTS FOR BLACKS OCCURRED FOR DRUG POSSESSION AND SALE/MANUFACTURE

Black arrest rates for drug-law violations



Sources: BJS Arrest Tool and UCR reports. © 2019 Council on Criminal Justice.

White arrest rates for drug-law violations



Sources: BJS Arrest Tool and UCR reports. © 2019 Council on Criminal Justice.

The decrease in arrests of blacks for drug abuse violations occurred both for drug possession and drug sale/manufacture, although the timing of the decreases in these two categories differed. The black drug sale/manufacture arrest rate fell almost continually from 2000 to 2016, while the arrest rate for drug possession did not begin its steady decline until after 2006. The white drug sale/manufacturing arrest rate did not exhibit a strong upward or downward trend, while the white drug possession arrest rate trended up from about 2011 onward.^{viii}

^{viii} Further reclassification of drug possession or sale/manufacturing arrests into a possession with intent to distribute category is not possible with the UCR data on persons arrested. According to the UCR Crime Reporting Handbook, drug abuse violations are reported only for the categories of sale/manufacturing and possession.

PROPERTY CRIMES

Average annual change in imprisonment rates and justice-system processing populations: **property crimes**



*Black-white trend differences are statistically significant. © 2019 Council on Criminal Justice.

Imprisonment rates for property offenses fell for blacks and whites, but the decrease for blacks was more than 10 times that for whites—3.2% per year, on average, for blacks, compared to an average of two-tenths of 1% per year for whites. For blacks, declining property crime imprisonment was driven mostly by changes in the ratio of admissions to arrests, which decreased by about 3% per year. The effects of arrest rates (downward influence) and length of stay (upward influence) on black imprisonment rates for property crimes offset each other.

By comparison, the property crime arrest rate increased for whites and drove the white imprisonment rate upward. That trend was more than offset, however, by decreasing rates of admissions per arrest and decreasing length of stay.

Conclusion

Racial disparities in the criminal justice system have received significant attention from researchers, the media, advocacy groups, activists, and other Americans concerned with understanding and reducing them. This study contributes to national knowledge of this issue in several ways. First, it shows that for all four correctional populations—prison, jail, probation, and parole—disparities have declined since 2000. It also demonstrates that much of the decrease in disparity is tied to drug crimes. The largest decrease in racial disparity among state prison populations, for example, occurred for drug offenses, while the decline in disparity in jail populations corresponds with a decline in disparity in drug arrests. In addition, the sizable decrease in disparity in imprisonment of black and white women was driven by a significant decline in the number of black women in prison for drug crimes, coupled with rising numbers of white women held for drug, violent, and property offenses.

In describing the contributions of stages of criminal justice system case processing to race-specific imprisonment rates, the study showed that, as measured by victims' accounts, the estimated rape, robbery, and aggravated assault crime rates for blacks have dropped considerably since 2000, by at least 3% per year, on average. These substantial decreases exerted downward influence on the black imprisonment rate. At the back end of the criminal justice system, however, growth in length of stay in prison for blacks increased, partially offsetting the effect of the declining rates of reported offending.

The effects of criminal justice case processing vary by race and type of crime, making it difficult to point to a single factor that accounts for race-specific changes in imprisonment. Of the measured stages, growth in expected time to be served upon admission occurred for blacks across crime types, as did decreases in offending and arrest rates. Time served is a function of sentences ordered by the courts and release decisions made by paroling authorities.

Additional data and research are essential to understand why precisely these trends are occurring, nationally and within state and local jurisdictions. In particular, findings of racial disparities may reflect the disparate impact of criminal histories. Under this scenario, racially neutral sentences and parole decisions based on criminal histories may perpetuate disparate practices that occur earlier in the criminal justice process and contribute to racial disparities in length of stay. Further evaluation, including research that assesses criminal history, additional case-level details and the application of prison disciplinary policies, is needed to expose practices and other factors that may result in disproportionate prison stays.

Methodology and Data Notes

DATA SOURCES

The data used in this report were drawn from several sources, including:

- The National Prisoners Statistics (NPS): Annual establishment survey of state and federal departments of corrections that provides counts of people in prison by race, Hispanic origin, and sex as defined and reported by the administrative data systems of departments of corrections. The data were obtained from the National Archive of Criminal Justice Data (NACJD). Citation: United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. National Prisoner Statistics, 1978-2016. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018-09-14. <https://doi.org/10.3886/ICPSR37003.v1>.

The NPS data provided the total number of people in prison by race-sex-and Hispanic origin. These totals include all people in prison and differ from some statistics reported by BJS, which are limited to BJS's definition of people sentenced to prison. That group includes persons whose prison sentences were longer than one year. The NPS data that are available from NACJD do not include counts of the number of sentenced prisoners by race or by race-and-sex.

- National Corrections Reporting Program (NCRP): Compiles individual-level data on admissions into and releases from state prisons and post-confinement community supervision. These data include measures of race and Hispanic origin of people in prison as defined and reported in the states' administrative systems. Data were obtained from the National Archive of Criminal Justice Data. Citation: United States Department of Justice. Office of

Justice Programs. Bureau of Justice Statistics. National Corrections Reporting Program, 1991-2016: Selected Variables. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018-08-30. <https://doi.org/10.3886/ICPSR37021.v1>.

The NCRP data were used to generate offense-specific distributions of people in state prisons by race, sex, and Hispanic origin as well as estimates of length of stay by offense and race. As not all states report to the NCRP in each year, the NCRP data were weighted to the NPS totals by the race-specific ratio of NPS-to-NCRP counts. This approach is the one that BJS and others have used with the NCRP.¹⁰ During the study period, between 42 and 50 states reported to the NCRP. Most of the non-participating states were states with smaller prison populations; their non-participation would not likely affect the distributions of people in prison by race-sex-offense. Sensitivity analyses were done to determine the effects of state participation on the race-sex-offense distribution of people in prison. This was done by dropping states that did not participate in some years from the years in which they participated and comparing distributions. The effects were minor and at most amounted to a maximum of one-percentage point difference between the estimates with the states' inclusion versus omission.

- Uniform Crime Reports (UCR): Provides data on arrests by race and offense. Data for the period covering 2000 to 2014 were obtained from the BJS online data analysis tool; see: <https://www.bjs.gov/index.cfm?ty=datool&surl=/arrests/index.cfm>. Data for 2015-2016 were estimated using arrest reports from the UCR; see e.g., <https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/persons-arrested/persons-arrested>.

- Prior to 2013, the UCR did not provide any data on the Hispanic origin of persons arrested. Beginning in 2013, it added data on the ethnicity of persons arrested, showing data for persons of Hispanic or Latino origin. In its tables showing these data, the FBI included a cautionary footnote about the data on ethnic origin, writing “The ethnicity totals are representative of those agencies that provided ethnicity breakdowns. Not all agencies provide ethnicity; therefore, the race and ethnicity totals will not be equal.” From 2013 to 2016, the data on Hispanic origin of persons arrested covered between 53% and 78% of all arrests reported. This coverage varied by crime type. Due to the absence of data on the Hispanic origin of persons arrested for most of the study period and due to the undercoverage of arrests, the report does not analyze arrest data by Hispanic origin of persons arrested.
- National Crime Victimization Survey (NCVS): Collects data on personal and household victimization through an ongoing survey of a nationally representative sample of residential addresses; data have been collected since 1973. The NCVS was designed with four primary objectives: (1) to develop detailed information about the victims and consequences of crime, (2) to estimate the number and types of crimes not reported to the police, (3) to provide uniform measures of selected types of crimes, and (4) to permit comparisons over time and types of areas. Beginning in 1992, the survey categorizes crimes as “personal” or “property.” Personal crimes include rape and sexual assault, robbery, aggravated and simple assault, and purse-snatching/pocket-picking, while property crimes include burglary, theft, motor vehicle theft, and vandalism. The data include type of crime, month, time, and location of the crime, relationship between victim and offender, characteristics of the offender, self-protective actions taken by the victim during the incident and results of those actions, consequences of the victimization, type of property lost, whether the crime was reported to police and reasons for reporting or not

reporting, and offender use of weapons, drugs, and alcohol. Basic demographic information such as age, race, sex, and income is also collected, to enable analysis of crime by various subpopulations.

The NCVS data were used to generate estimates of the race of offenders as described by victims. Since its inception, the NCVS has measured victims’ perceptions of the characteristics of their assailants. The estimates have proven to be reliable and to align with other measures of the characteristics of offenders.¹¹ For example, BJS reports from the NCVS estimates show that violent victimizations are primarily intra-racial and that the majority of victims report their perpetrators to be of the same race.¹²

The estimates of the number of offenders by race and type of offense used in this report were developed by weighting the incidents by the NCVS incident weight and by the number of offenders involved in a criminal victimization as reported by the victim. The number of offenders in an incident was capped at 10 if more than 10 were reported. The incident weights for the personal violent crimes described in this study is derived by dividing the person weight of a victim by the total number of persons victimized during an incident, as reported by the respondent. The person weight provides an estimate of the population represented by each person in the sample. The estimated number of offenders was obtained by multiplying the incident weight by the number of offenders in an incident and classifying these estimated counts by race and offense. These were compiled and used in generating the race-specific probation and parole rates.

- Two BJS annual statistical reports: (1) *Probation & Parole in the U.S.* and (2) *Jail Inmates at Midyear*¹³ : These reports provide annual estimates of the number of persons on probation, parole, or held in jail. The reports provide estimates of the race and Hispanic

origin of persons in each population, as defined and reported in the state and local agencies' administrative systems. The annual Probation & Parole in the U.S. reports present separate estimates of the percent of persons on probation and parole by race and by Hispanic origin. These percentages were applied to the total population counts provided in the reports. The annual Jail Inmates at Midyear reports provide estimates of the race and Hispanic origin of persons in jails at midyear. These were compiled and used to generate the race-specific jail incarceration rates used in this report.

- **Bridged-Race Population Estimates:** The National Center for Health Statistics releases bridged-race population estimates of the July 1st residential population of the United States. These estimates “bridge” the 31 race categories used in Census 2000 as specified by the 1997 Office of Management and Budget (OMB) standards for the collection of data on race and ethnicity, to the four categories specified under the 1977 standards (Asian or Pacific Islander, Black or African American, American Indian or Alaska Native, White.)¹⁴ Data systems such as vital statistics and the administrative data provided to BJS in the NPS, NCRP, and the probation, parole, and jail surveys generally continue to report data on race according to the 1977 OMB standards and not according to the 1997 standards. The NCHS bridged-race data provide a means to generate rate estimates using estimates of population that are more comparable to the estimates of persons under correctional control as reported by the departments' of corrections information systems. These issues are discussed more fully in the next section.

METHODS

Measuring Race and Impacts on Disparity Ratios

The statistics on race and ethnic disparities reported in this paper are drawn from administrative data reported to BJS in the NPS, NCRP, probation and parole, and jail surveys. In 1997, OMB issued guidance to federal agencies on measuring and reporting data on race and ethnicity. The guidance pertains to federal agencies but not directly to the state agencies that submit their data to BJS. To comply with OMB standards, BJS adjusts the administrative data on the race and Hispanic origin of people in prison but not of persons on probation, on parole, or in jail. Rather, for these three populations, BJS reports distributions of race and Hispanic origin based upon the administrative data that state and local departments of corrections submit to it. As a result, direct comparisons between BJS's published statistics on the race and Hispanic origin of people in prison with those for people on probation, parole, and in jail are confounded by the adjustments. Further, the most recent BJS reports on prison populations use self-report survey data to make the adjustments; these self-report survey data are not yet available to the public. Consequently, to compare changes across correctional populations, the report relies upon the administrative data and does not attempt to make BJS's adjustment.

Source of and change in the measurement of race and ethnicity

OMB's 1997 guidance on measuring and reporting data on race and ethnicity applied to federal agencies' collection and reporting of these data. OMB's guidance did not pertain directly to how states and localities collect and report these data in their administrative records systems unless the local agencies received grants that required them to report these data as part of their grant programs. Prior to the 1997 guidance, race was measured by and reported for four racial categories—white, black, American Indian, and Asian. Ethnic origin (persons of Hispanic or Latino origin) was measured separately and

reported separately from race. As a result, a person of Hispanic origin¹⁶ could be counted twice in statistical tables – once if they also reported a racial group affiliation and were included among persons also reporting a racial category, and a second time as a person of Hispanic origin. Consequently, statistical tables commonly reported distributions of persons by race separately from a distribution of persons by Hispanic origin, and if one summed across the racial distribution and added the number reported as Hispanic, one would obtain a number that exceeded 100% of the total population.

The 1997 guidance expanded from four to five the number of racial categories. The five categories included white, black or African American, American Indian or Alaska Native, and the category “Asian” was expanded into the two categories of Native Hawaiian or Pacific Islander and Asian. The guidance declared that data on race and ethnicity should be based on self-identity, and self-reporting of race and ethnicity was the preferred methodology for obtaining these data in federal data collections. The concept of self-identification allowed that persons could identify and report as persons of two or more races. Consequently, an implicit sixth racial category was the category “persons of two or more races.” As before, Hispanic origin was to be identified separately from race, as persons of Hispanic origin could be of any race, or no race, if a person chose not to identify with a racial group.

For reporting purposes under the 1997 guidance, persons of Hispanic origin, regardless of their race, are counted as Hispanic, and only non-Hispanic persons are classified and counted among the racial categories. Federal statistical reports denoted this by including as a prefix or suffix the term “non-Hispanic” on the racial categories. Persons of Hispanic origin were counted separately regardless of their race. Hence, prior to the guidance, counts of the number of white people in prison included whites who also were of Hispanic origin; the same held for blacks, and the other two, pre-1997 racial categories. After the guidance was implemented, any whites who were also

Hispanic were to be reported only as Hispanic and not included in the count of white people in prison. The same held for blacks, American Indian/Alaska Natives, and Asians.

Further, persons were to be counted among a racial group only if they were of a single race. All persons who self-identified as more than one race were classified and counted in the two-or-more race category. Prior the 1997 guidance, persons of multiple races were classified into one racial category based upon their choice of the category that best described themselves. Hence, prior to the guidance, a person who self-identified as white and another race but chose white as the race that best described himself or herself would have been counted as white; after the guidance, that person would have been classified as a person of two or more races and counted and reported in that category.

The guidance stipulated that presentations of aggregate data on race should show the number of respondents who selected only one category for the five racial categories (e.g., white only or black only). At a minimum, tabulations should show the number of respondents reporting more than one race (as a separate category), and the number of persons of Hispanic origin should either be shown for persons in each racial category (e.g., Hispanic-whites) or the distribution of Hispanics should be tabulated separately and the distributions of race should include only persons not of Hispanic origin.

In response to OMB’s guidance, beginning in 2000, BJS modified its survey instruments for the NPS to request that counts of the race of people in prison exclude persons who also were of Hispanic origin, and in 2005, BJS began asking for data on persons of two or more races as a separate category. Previously, these persons may have been included in a residual (other races) category or possibly included within counts of whites, blacks, American Indians/Alaska Natives, Asians, or Native Hawaiian/other Pacific Islanders.¹⁷

The departments of corrections that respond to the NPS report the number of imprisoned people in specific racial and Hispanic origin categories as recorded in their information systems. The DOC's administrative data systems may record information about race and ethnicity differently from the manner described in the OMB guidance. For example, the DOCs may not report race only for persons of a single race, and they may not report persons of two or more races.¹⁸

BJs also allows for differences between the DOC and OMB race/ethnicity categories by including in the NPS an item that allows departments of corrections to report the number of imprisoned people falling into a residual category labeled "Additional [race/ethnic] categories in your information system." State DOCs also vary on how they obtain the information about race and Hispanic origin. For example, states may request self-report data from incarcerated people or they may use information recorded on other criminal justice administrative records, such as court or arrest records.¹⁹

The NPS have known limitations regarding reporting data on the race and Hispanic origin of people in prison. For example, some states do not report consistently on the race of incarcerated people, especially persons of two or more races.²⁰ Additionally, as departments of corrections update their information systems and change how they record data on race, their submissions to the NPS may change as a result. For example, (not shown in a table) in the early 1990s, the NPS data from California showed an increase in Hispanics and decrease in whites that broke from the underlying trends in these counts and that reflected a change in how it measured and reported data on Hispanics. And in 2000, the Federal Bureau of Prisons changed the way it reported data on Hispanics to the NPS and did not report counts of persons of Hispanic origin to the NPS between 2000 and 2011. Beginning in 2012, it started reporting counts of the Hispanic origin of people in its prisons.²¹

BJs's Adjustments to NPS Data to Generate Distributions of Prisoners by Race and Hispanic Origin

Because BJs data are drawn from the state administrative data systems that do not explicitly follow OMB guidance on measuring race, were BJs to report data on race and Hispanic origin using only the NPS data, its reports would not follow OMB guidelines for federal statistical agencies. To report these data in a manner that is consistent with OMB guidance, BJs adjusts the NPS data using a factor that is based upon self-report data on data on race and Hispanic origin that it obtains from its periodic surveys of people in prison.

BJs obtains self-report data on race and Hispanic origin from its periodic surveys of people in prison, called the Survey of Prison Inmates (SPI)²² in 2016 and previously known as the Survey of Inmates in State and Federal Correctional Facilities.²³ For the period covered in this report, the prison surveys conducted in 1997, 2004, and 2016 are the most relevant sources of self-report data on race and ethnicity. To classify race and Hispanic origin of people in prison for reporting purposes, BJs adjusts the NPS data using an adjustment factor that is calculated as the ratio of the self-report survey race/Hispanic origin distribution of imprisoned people to the NPS distribution in the year nearest to the self-report survey year. This adjustment factor is then applied to subsequent years of NPS data.

The BJs adjustment affects the shares of people in prison who are reported as white, black, or Hispanic as follows: First, the percent of people in prison who are reported as black or white in BJs reports are smaller than the shares in the NPS. Second, the percent of people in prison who are classified as Hispanic in BJs reports is larger than their share in the NPS. Third, the BJs reports show larger percentages of people in prison who are classified as persons of two or more races as compared to the percentage in the NPS. Over time, the share of whites reported in the NPS has increased (table A.1) while the share of white people in prison in BJs reports has decreased. In 2000, about 36% of

people in prison in the NPS and BJS reports were classified as white, but by 2016, the NPS reported that about 41% were white while BJS reports showed that 31% were white. Most of the whites who were reclassified from the NPS were reclassified as Hispanic. While the share of people in prison who are classified as Hispanic has increased in both the NPS and BJS reports, the increase has been more rapid in the BJS reports. The NPS share of black people in prison fell from 47% to 40% between 2000 and 2016, but the share in BJS reports fell even more rapidly, from 47% to 33%. While some blacks in the NPS were reclassified as Hispanic in BJS reports, others were reclassified into the two or more races category.

Table A.1
Share of State sentenced prisoners, by race and Hispanic origin

Year	NPS			BJS Reports*		
	White*	Black*	Hispanic	White**	Black**	Hispanic
2000	36.2%	47.1%	14.3%	36.1%	46.5%	14.8%
2001	37.1%	46.1%	14.4%	35.1%	45.4%	17.0%
2002	37.6%	45.3%	14.7%	35.2%	40.5%	18.2%
2003	38.3%	44.3%	14.9%	36.1%	44.7%	17.4%
2004	38.6%	43.8%	15.0%	34.9%	38.6%	19.0%
2005	39.7%	42.9%	14.8%	36.3%	38.9%	18.5%
2006	39.6%	42.7%	15.0%	35.6%	38.2%	18.7%
2007	38.9%	42.8%	15.6%	35.0%	38.2%	19.4%
2008	39.2%	42.9%	15.2%	34.4%	38.7%	20.6%
2009	39.1%	42.7%	15.6%	34.2%	38.5%	21.1%
2010	39.3%	42.3%	15.7%	34.4%	38.1%	21.2%
2011	39.6%	42.2%	15.6%	34.7%	38.0%	21.0%
2012	40.1%	42.0%	15.3%	35.2%	37.9%	20.7%
2013	40.4%	41.6%	15.3%	35.4%	37.5%	20.7%
2014	40.9%	40.9%	15.3%	34.3%	34.7%	19.8%
2015	41.1%	40.5%	15.4%	31.1%	33.0%	21.5%
2016	40.7%	40.1%	16.2%	31.1%	32.6%	21.6%

*Whites and blacks exclude persons of Hispanic origin, as reported in the NPS.
**Whites and blacks exclude persons of Hispanic origin, per BJS's adjustment.

The effects of the BJS adjustments on measures of racial disparities are as follows: The black-white racial disparity in the BJS reports is slightly higher than the disparity ratios reported herein, but the differences between the two do not amount to more than one point. The trends in black-white disparity ratios are similar between the BJS reports and this report. The reason for the slightly higher disparity ratio in the BJS reports is that a larger proportion of whites are reclassified than the proportion of blacks, thereby leading to a larger reduction in the white imprisonment rate than the black imprisonment rate. As the white imprisonment rate is the denominator in the disparity ratio, this leads to a slightly higher racial disparity ratio in the BJS reports than the NPS data show. For Hispanics, the opposite occurs, as the BJS adjustments lead to larger counts of Hispanic people in prison than the NPS, which in turn lead to higher Hispanic imprisonment rates and disparity ratios.²⁴

The statistics in this report are drawn from the administrative data systems that state and local (jail and county probation) corrections departments provided to BJS in response to its survey forms. The NPS provides the data for the control totals for people in prison. The use of such administrative data has been rightly criticized for overlooking the multidimensional contexts of race (e.g., perceived discrimination and skin tone). Such arguments are credible, as different aspects of race shape a person's life experiences, including health outcomes, family income, and job prospects.²⁵ Recognition of this reality largely explains the federal government's move toward self-identification data collection standards.²⁶

While self-reported race data provide valuable insights, it does not reflect the perceptions of others. Therefore, if physical appearance is the basis of discrimination,²⁷ self-reported data does not appear to be the most appropriate for studying racial disparities. Instead, data capturing the perspective of others would be better suited.

Supporting this notion, scholars²⁸ contend that external classifications better represent discrimination based on appearance versus self-identification. Other scholars²⁹ also echo this sentiment. In their evaluation of various race measures, they reported that racial inequality is specific to how one is perceived by others.

Despite the arguments for self-identification, on balance, the weight of the empirical evidence suggests that self-reported data more accurately reflect intrinsic processes but not necessarily racialized outcomes—at least in the context of system-level outcomes. With these considerations, in addition to the impacts of the adjustments that BJS makes, this paper focuses on trends derived from administrative data sources.

DECOMPOSITION OF RACE-SPECIFIC TRENDS IN IMPRISONMENT RATES

To assess whether racial differences in the aggregate flows of persons between stages of the criminal justice system contribute to differences in imprisonment rates, a model relating the flows of persons between several stages of the criminal justice system was developed:

Equation 1

$$Imprate = \frac{off}{pop} * \frac{arr}{off} * \frac{commit}{arr} * LOS$$

where

- *Imprate* = an offense-specific adult resident-population imprisonment rate
- *off/pop* = an offense-specific ratio of offenders per adult population
- *arr/off* = an offense-specific ratio of arrests to offenders
- *commit/arr* = offense-specific ratio of commitments to arrests
- *LOS* = offense-specific mean expected length of stay, measured as the stock-flow ratio of prisoners to commitments

Each of these rate measures was calculated separately by race and offense. Where data for a specific stage were not available, such as for people who committed property or drug offenses, that stage was omitted and the first stage on the right-hand side was estimated relative to the adult population.

To estimate growth rates, equation 1 was log transformed, converting equation 1 into an additive model:

Equation 2

$$\ln(Imprate) = \ln\left(\frac{off}{pop}\right) + \ln\left(\frac{arr}{off}\right) + \ln\left(\frac{commit}{arr}\right) + \ln(LOS)$$

Equation 1 provides the basis for estimating separate race-offense-stage-specific regressions that decompose the growth rate in the imprisonment rate into the contribution of each stage. For each each rate in equation 2, trend regressions were estimated using a log-linear form:

Equation 3

$$\ln(Y_t) = a_0 + a_1T_t + e_t$$

where $\ln(Y_t)$ serves to represent the natural log of the race-offense-stage-specific rates identified in equation 2; T_t is the year or a time trend; and e_t is the error term. The subscript t refers to the year of data. The data covered the years 2000 through 2016 inclusive (or 17 annual observations). The parameter of primary interest is \hat{a}_1 , which is the percentage change in a rate per per unit of time. Equation 3 was estimated separately within each offense and race group for each of the stage-specific rates. Within an offense-race group, the sum of the sum of the estimated \hat{a}_1 for each stage equals the \hat{a}_1 parameter for the imprisonment rate.

Depending upon the type of crime, the stages analyzed differed. For rape, robbery, and aggravated assault, the offending, arrest, commitment, and length of stay stages were used. For all violent

crimes (which include murder as well as rape, robbery, aggravated assault, and simple assault), all property crimes, and drug offenses, the analysis was limited to the arrest, commitment, and length of stay stages.

The comparisons presented in this report are between blacks and whites because of data limitations. First, the UCR arrest data report arrests for blacks and whites, but not for Hispanics. In recent years, with the FBI's adoption of the National Incident Based Reporting Program, data on arrests of Hispanics are available, but those data cover only about one-third of the U.S. resident population and are not

generalizable to the total U.S. population. Second, prior to 2012, the NCVS asked victims for their perceptions of the race but not Hispanic origin of the person(s) the victims identified as their perpetrators. The pre-2012 race categories were white, black, and other. In 2012 and afterwards, the NCVS asked victims about both the race and Hispanic origin of perpetrators. It did so by asking separate questions about race and Hispanic origin. Because of the two-question format used to measure race and Hispanic origin, for this report it was possible to create a consistent series of the race of perpetrators for the entire study period.

Notes

- ¹ Thorsten Sellin, 1976. *Slavery and the Penal System*, New York: Elsevier. W.E.B. DuBois, 1899. *The Philadelphia Negro: A Social Study*. Philadelphia: University of Pennsylvania Press. Samuel L. Myers, Jr., and William J. Sabol, 1987. Business Cycles and Racial Disparities in Punishment. *Contemporary Policy Issues*, Vol. 5. Marc Mauer, 1999. *Race to Incarcerate*, New York: The New Press.
- ² Calculated based upon statistics reported in BJS annual statistical reports: *Prisoners in 1994*: Table 11; *Prisoners in 2000*: Table 15; *Prisoners in 2010*: Appendix table 15; and *Prisoners in 2017*: Table 9.
- ³ E. Ann Carson and Elizabeth Anderson, 2016. *Prisoners in 2015*, Washington, DC: Bureau of Justice Statistics. E. Ann Carson, 2018. *Prisoners in 2017*, Washington, DC: Bureau of Justice Statistics. Jennifer Bronson and E. Ann Carson, 2019. *Prisoners in 2018*, Washington, DC: Bureau of Justice Statistics.
- ⁴ Keith Humphreys, 2016, "Black incarceration hasn't been this low in a generation," *Washington Post* (August 8, 2016). Keith Humphreys, 2017, "White women are going to prison at a higher rate than ever," *Washington Post* (January 24, 2017). Charles Lane and Keith Humphreys, 2019, "Black imprisonment rate are down. It's important to know why," *Washington Post* (April 30, 2019). James Cullen, 2016, *Despite Progress, Prison Disparities Persist*. New York: The Brennan Center for Justice.
- ⁵ Ashley Nellis, 2016, *The Color of Justice: Racial and Ethnic Disparities in State Prisons*. Washington, DC: The Sentencing Project. Marc Mauer, 2013, *The Changing Racial Dynamics of Women's Incarceration*. Washington, DC: The Sentencing Project. Jeremy Travis, Bruce Western, and Steve Redburn, eds., *The growth of incarceration in the United States: Exploring causes and consequences*, (Washington, DC: National Academies Press, 2014).
- ⁶ Carson 2018, previously cited.
- ⁷ The official BJS statistics show a higher level of Hispanic-white disparity than the administrative data used for this report. Specifically, the official statistics show an increase in Hispanic-white disparity from 2.6 to 3.1 between 2000 and 2001, followed by a decline that began in 2009 and reached a low of 2.6 in 2014. The differences between the BJS statistics and the statistics reported in this report arise from adjustments that BJS makes to the administrative data gathered from the states.
- ⁸ Alfred Blumstein, 1982, "On the racial disproportionality of United States' prison populations," *Journal of Criminal Law and Criminology*, Vol. 73, No. 3, pp. 1,259-1,281. Patrick A. Langan, 1986, "Racism on trial: New evidence to explain the racial composition of prisons in the United States," *Journal of Criminal Law and Criminology*, Vol. 76, No. 3, pp. 666-683. Jeremy Travis and Bruce Western (eds.), 2014, *The Growth of Incarceration in the United States: Exploring Causes and Consequences*, Washington, DC: National Academies Press. Allen J. Beck and Alfred Blumstein, 2017, "Racial disproportionality in U.S. state prisons: Accounting for the effects of racial and ethnic differences in criminal involvement, arrests, sentencing, and time served," *Journal of Quantitative Criminology*. Published online, June 19, 2017.
- ⁹ Michael J. Hindelang, 1978, "Race and involvement in common law personal crimes," *American Sociological Review*, Vol. 43, pp. 93-109. Beck & Blumstein, 2017, cited above. James P. Lynch and Howard N. Snyder, 2012, "Juvenile crime trends and their implications for understanding" in Office of Juvenile Justice and Delinquency Prevention (ed) *Understanding the Why's of Juvenile Crime Trends*. Washington DC: Office of Juvenile Justice & Delinquency Prevention.
- ¹⁰ See the methodology in the annual BJS reports, *Prisoners in YYYY*, where YYYY refers to the year of the data. See also, Stephen Raphael and Michael Stoll, 2013, *Why are So Many Americans in Prison?* New York: Russell Sage Foundation.
- ¹¹ Mosher, C., & Miethe, T. 2015, Data bases and statistical systems: Crime. Pp. 712-716 in J.D. Wright (ed.) *International Encyclopedia of the Social and Behavioral Sciences* (2d). Oxford: Elsevier.
- ¹² Callie Rennison, 2001, *Violent Victimization and Race, 1993-98*. Washington, DC: Bureau of Justice Statistics. Rachel Morgan, 2017, *Race and Hispanic Origin of Victims and Offenders 2012-2015*, Washington, DC: Bureau of Justice Statistics.
- ¹³ The exact titles of these reports may have changed from time to time. For example, the jail population reports were included with mid-year prison population reports in a BJS report titled *Prison and Jail Inmates at Midyear*; subsequently, the jail and prisoner data were separated and the jail report was titled *Jails at Midyear*.
- ¹⁴ See "Revisions to the Standards for Classification of Federal Data on Race and Ethnicity," Office of Management and Budget. Federal Register Notice, October 30, 1997.
- ¹⁵ See Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, Office of Management and Budget, Federal Register Notice October 30, 1997; 62 FR 58782.
- ¹⁶ Throughout this report, the phrase "Hispanic origin" is used to represent "Hispanic or Latino origin." The term "white" is used to represent non-Hispanic whites, and the term "black" to represent non-Hispanic blacks.

- ¹⁷ United States Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. *National Prisoner Statistics, 1978-2016: Documentation Crosswalk*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018-09-14. <https://doi.org/10.3886/ICPSR37003.v1>.
- ¹⁸ Between 2005 and 2016, among state DOC respondents, between 0.01% and 0.06% of people in prison reported to NPS were classified as persons of two or more races.
- ¹⁹ See E. Ann Carson, 2018. *Prisoners in 2016*. Washington DC: Bureau of Justice Statistics (January 2018).
- ²⁰ Carson, 2018, cited above.
- ²¹ One additional reason this report focused on people in state prison is this complication due to how BOP changed its reporting to the NPS.
- ²² For additional information about the survey, see: <https://www.bjs.gov/index.cfm?ty=dcdetail&iid=273>.
- ²³ For additional information about the survey, see: <https://www.bjs.gov/index.cfm?ty=dcdetail&iid=488> and <https://www.bjs.gov/index.cfm?ty=dcdetail&iid=275>
- ²⁴ Sabol and Johnson, "Measuring race in correctional populations: Impacts and Implications." Georgia State University, unpublished manuscript. 2019.
- ²⁵ Campbell, M. E., & Troyer, L. (2007). The implications of racial misclassification by observers. *American Sociological Review*, 72(5), 750-765. Campbell, M. E., & Troyer, L. (2011). Further data on misclassification: A reply to Cheng and Powell. *American Sociological Review*, 76(2), 356-364. Keith, V. M., & Herring, C. (1991). Skin tone and stratification in the black community. *American Journal of Sociology*, 97(3), 760-778. Saperstein, A. (2012). Capturing complexity in the United States: which aspects of race matter and when? *Ethnic and Racial Studies*, 35(8), 1484-1502.
- ²⁶ Morning, A., & Sabbagh, D. (2005). From sword to plowshare: Using race for discrimination and antidiscrimination in the United States. *International Social Science Journal*, 57(183), 57-73.
- ²⁷ Sollors, W. (2002) What race are you? in J. Perlmann and M.C. Waters (eds.), *The New Race Question: How the Census Counts Multiracial Individuals* (pp. 263 -268). Russell Sage.
- ²⁸ Telles, E. E., & Lim, N. (1998). Does it matter who answers the race question? Racial classification and income inequality in Brazil. *Demography*, 35(4), 465-474.
- ²⁹ Saperstein, A., Kizer, J. M., & Penner, A. M. (2016). Making the most of multiple measures: Disentangling the effects of different dimensions of race in survey research. *American Behavioral Scientist*, 60(4), 519-537.