

# America's Soaring Prison Population

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Factors widely reported to explain record prison population increases since 1973 were generally not substantiated in national data. No clear evidence was found that prosecutors were increasingly using mandatory prison sentencing laws, that judges were imposing longer prison sentences than previously, or that parole boards were making prisoners serve longer before their first release. Changes since 1973 in population demographics and in police-recorded crime and arrest rates were found to have only a modest impact on prison population growth. The war on drugs was found to have only a small impact despite increased drug arrest and imprisonment rates. One change found to have a major impact was the increased chance of a prison sentence after arrest for nearly every type of crime. This change has helped to drive incarceration rates to their highest levels ever. Accompanying rising incarceration rates have been gradual reductions in U.S. crime rates after 1973, according to annual crime victimization surveys. The possibility that rising incarceration rates are helping to reduce crime must be weighed in debates about America's prisons.

**T**HE PRISON POPULATION IN THE UNITED STATES HAS grown in most years since 1926, when the federal government began keeping annual records (1). What is exceptional today is the pace of growth. For example, latest figures show that on 31 December 1989, state prisons nationwide held a record 610,000 inmates (2), or 63,000 more than on the same day the year before. Keeping up with that level of growth requires building the equivalent of a 1000-bed prison every 6 days (3).

Record growth in 1989 continues an upward trend that began in 1973, following a decade of declining prison population (Fig. 1). Before 1973, it was rare for the prison population to grow by more than 7% in a single year (1927, 1930, and 1947). Since 1973, that level has become the norm (1974, 1975, 1976, 1981, 1982, and 1985–1989). Moreover, the four largest percentage increases ever recorded have all occurred since 1973. Propelled by so many record increases, the U.S. prison population has tripled in size in only 16 years.

What accounts for today's rapid growth? The war on drugs, the baby boom, mandatory sentencing laws, longer sentences, and parole boards keeping felons behind bars longer are causes proposed by some criminologists. I have examined historical trends in state prison populations for evidence of these factors. In some cases no

evidence was found. In others, the evidence suggested a modest role at best. A major source of prison population growth overlooked by criminologists is rising chances of a state prison sentence following arrest.

I examine here state prison populations exclusively. State prisons include penitentiaries, reformatorys, half-way houses, and all other correctional facilities operated by the states. All prisons are long-term facilities for persons convicted of serious crimes, called felonies. State prisons are distinguished from federal prisons by whether conviction occurs in a state or a federal court. Today, state prisons hold 92% of the nation's prison population. State prisons also differ from jails. Jails are operated by county and city governments and are short-term facilities for persons convicted of less serious crimes, misdemeanors, and for nonconvicted persons awaiting trial.

## How Prison Population Growth Is Measured

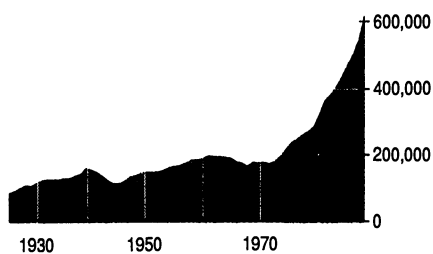
The prison population continually changes, with prisoners entering and leaving daily. The problem of keeping track of this ever-changing population was tackled by statisticians working 140 years ago on the census of 1850, the first-ever federal government census of the nation's prisons. Their solution was to take a single "snapshot" count of the prison population every census year, always on the same day. That allowed comparison of the 1-day count from year to year.

From 1850 until 1926, measurements of the prison population were taken about every 10 years, usually in connection with the decennial census. In 1926, the federal government began gathering and reporting national statistics annually. The new statistical series, named National Prisoner Statistics (NPS), has now been in operation for 64 consecutive years.

During the 64 years of record keeping, there were 48 years in which admissions (the number of prisoners admitted in the year) exceeded releases (the number released). Admissions exceeded releases, and growth in prison populations occurred, either when the flow of persons into prison increased or the flow out decreased. Criminologists claim that both account for today's growth. In particular, demographic changes and mandatory sentencing laws are credited with accelerating the flow in; longer sentences and toughening prison release policies are credited with slowing the flow out (4).

Evidence of these trends was sought in three NPS data collections: two recurring censuses of prison records that compiled information (sentence length, conviction offense, and so on) on all persons admitted in the year ("admission census") and on all persons released in the year ("release census"), and a sample inmate interview survey conducted in 1974 and 1986 that collected detailed information on persons in prison on the day of the survey ("inmate survey") (5).

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**Fig 1.** State prison population, 1925 to 1989.

## Trends in Sentence Length and in Time Served

Longer sentences and conservative prison release policies keep inmates behind bars longer, and the longer inmates are kept in, the larger the prison population grows. Changes after 1973 in legal practices affecting length of stay therefore become potentially important for understanding prison population growth.

One such change was the abandonment by numerous states of indeterminate sentencing or, at least, its principal aim. Indeterminate sentencing is the system of sentencing adopted by every state before 1967. Its distinctive feature was an emphasis on the different rehabilitative needs of offenders. Indeterminate sentencing took differences into account in two ways: (i) prison sentencing laws set wide penalty ranges (for example, a law authorizing a sentence of 1 day to 50 years), allowing judges to tailor the sentence to the particular treatment needs of the individual offender; (ii) legislatures let parole boards decide when an offender was ready for release. The system was named "indeterminate" because, at the time of sentencing, the offender does not know (as a practical matter, cannot know) how long the prison stay will be.

Early in the post-1973 period indeterminate sentencing came under intense attack. Predictably, researchers found that it produced widely disparate sentences for the same offense. Worse, they found that prison rehabilitation programs (the main justification for indeterminate sentences) were not effective. These findings, released at a time of growing public demand for tougher criminal penalties, precipitated widespread sentencing reform. Prisons were no longer solely for rehabilitating offenders, but also served punitive functions: retribution (certain crimes deserve imprisonment), incapacitation (prison bars prevent the offender from committing new crimes against the public), and deterrence (the threat of imprisonment inhibits people from committing crimes).

Many specific reforms dealt with length of the prison stay: sentencing commissions and guidelines were formed to reduce disparities and ensure appropriate punishment (6); legislatures passed laws authorizing longer sentences, tightened parole eligibility requirements, and reduced good time credits (7); at least ten states abolished parole and replaced indeterminate with determinate sentencing (8). Regarding the latter, the expanding role of parole boards in the pre-1973 period and their declining role in the post-1973 period are clearly discernible in national data (Table 1). In 1940, a year when only about 28 states had a parole board, 44% of all releases were by parole. By 1967, when every state had a board, 62% were by parole. Though the percentage continued to rise into the post-1973 period, peaking in 1977 at 72%, thereafter parole releases fell sharply, in 1988 reaching an all-time low of 40%.

Those looking for an explanation for post-1973 prison population growth have pointed to the numerous post-1973 reforms that at least had the potential of lengthening prison stays. This explanation, however, has no support from NPS data: average prison sentences have not lengthened, and time served in prison has not grown. The admission census (Table 1) shows that, compared to the pre-1973 period, persons admitted since 1973 were less likely to have a life

sentence (2 to 3% versus 4 to 5%), had a shorter median sentence length (4 years versus 5 years); and were less likely to have sentences 10 to 19 years in length (16 versus 21% on average). Although fewer inmates had short sentences under 2 years, definitional changes probably account for them (Table 1). Inmate surveys also do not show a trend toward lengthened sentences from 1974 to 1986 (Table 2). Data from the release census do not show an increase in time served (Table 1). Instead, after 1973 the amount of time prisoners served before their first release, a median of from 14 to 17 months, was consistently lower than that before 1973 (9).

## Demographic Trends

Relative to their representation in the general population, males (48% of the population and 95% of all prisoners), blacks (11% of the population and 48% of prisoners), and persons in their twenties (24% of the population but 50% of prisoners) are highly overrepresented in prisons. Such segments form the "prison-prone" population. Increases in their numbers during the post-1973 period are known to have affected prison population growth, although whether the effect is as strong as some criminologists claim is debatable.

Record numbers of persons from the baby boom (born between 1947 and 1964) reached the prison-prone age during the post-1973 period. For example, around 1986 the numbers of persons ages 20 to 29, both black and white, climbed to their highest levels ever (42 million altogether) and the largest birth cohort from the baby boom, those born in 1961, reached a peak age of imprisonment, age 25. Nevertheless, demographic shifts that occurred between 1974 and 1986 fall far short of fully accounting for the prison population explosion during the period.

To gauge the impact of demographic changes on prison population growth, the size of the 1986 prison population was estimated by applying age-race-specific imprisonment rates of 1974 to the bulging prison-prone population of 1986 (10). The estimated 252,699 inmates were 32% larger than the 1974 prison population of 190,717 inmates. But 32% growth over a 12-year period amounts to about a 2.1% annual increase, which is only slightly more than the 1.5% historical average since record keeping began in 1926 (11). Criminologists in 1974 predicting the 1986 prison population would have done almost as well using the historical average as using the more refined demographic method. Compared to the actual 1986 prison population, the method's projection was also unimpressive. The 1986 prison population was more than 450,000, having grown more than four times as large (136%) than would have been predicted (32%). The 252,699 figure was surpassed sometime in 1978.

## Mandatory Sentencing Laws

After 1973 most states enacted laws mandating prison sentences for repeat offenders and for persons convicted of certain serious offenses (7). Because offenders targeted in these laws make up a large percentage of the persons arrested each year, mandatory prison sentences for them could swell the prison population. Chances of a prison sentence following arrest have risen sharply since 1973. But it is not clear that mandatory sentencing laws were the reason. Chances of a prison sentence following arrest have risen for all types of offenses, not just for those targeted by mandatory prison sentence laws—sex offenses, violent offenses, drug offenses, and weapons offenses. Also, if mandatory sentencing laws were the reason for the increased chances of a prison sentence, the composition of the prison population would have changed after 1973, with repeat

offenders and offenders convicted of targeted offenses becoming a larger fraction of the prison population. For the most part, that has not occurred. Offense distributions documented in the 1974 and 1986 inmate surveys were essentially unchanged (9, table 19). Whether defined narrowly as adjudicated habitual offenders or more broadly as offenders with prior convictions, repeat offenders as a percentage of the prison population were also unchanged across the two surveys (9, table 21). Furthermore, violent offenses and other offenses targeted by mandatory sentencing laws have not grown as a percentage of prison admissions, according to the admission census (Table 3). The one exception is growth in drug offenders (Table 3). Again, however, it is not clear that mandatory sentencing laws were responsible. The trend toward growing percentages of drug offenders among admissions actually began before 1973, in the 1960s (Table 3), and largely reflects increases in drug offense arrests since the 1960s.

A fact already noted also runs counter to claims about the effects of mandatory sentencing laws. Prison sentence lengths have not gotten longer since 1973, although mandatory sentencing laws commonly authorized or required long sentences.

## Trends in Reported Crime, Arrest, and Imprisonment Rates

A judge's decision to send a felon to prison and a parole board's decision to release a prisoner represent two stages in a process with many stages. The process begins with a crime. Someone decides

whether to call the police. Police decide whether to investigate and, if successful in the investigation, whether to make an arrest. The prosecutor decides whether to take the suspect to court and for what crime. The judge or jury decides whether to convict.

Change at any stage can cause prison population growth. When growth does occur, pinpointing the stage that was responsible is difficult because of gaps in U.S. criminal justice statistics. However, existing national data do permit an investigation of how the number of prison commitments was affected by changes in the demographic composition of the adult population, by changes in the probability that an adult committed a crime that was reported to police, by changes in the probability that a reported crime led to an adult arrest, and by changes in the probability that an adult arrest resulted in a prison sentence.

The investigation uses data from near the beginning of the post-1973 period, 1974, and data from 14 years into the period, 1986. These are also years with both an admission census and inmate survey.

The analysis uses a criminal justice model that defines the number of criminals sentenced by courts to prison in 1974 as a product of the 1974 adult population multiplied by the probability that a population member committed a crime that was reported to police (the 1974 "reported crime rate," defined as reported adult crimes divided by adult population), multiplied next by the probability that a person was arrested for a reported crime (the 1974 "arrest rate," defined as adult arrests divided by reported adult crimes), and then multiplied by the probability that an arrestee was convicted and sentenced to prison (the 1974 "imprisonment rate," defined as

**Table 1.** Maximum state prison sentences for felons, average time served, and percentage released by parole, 1940–1988 (5). Detail does not sum to 100% because of rounding. Definition of felon varied as follows: 1940 to 1960, prisoners with maximum sentences of 6 months and more; 1964 to

1970, 1 year and more; 1974 to 1988, more than 1 year. Comparable data for years not shown are not available. Medians rather than means are given because means are not available.

Year	Percentage of felons serving:							Median sentence (months)	Median time served before release (months)	Released by parole (%)
	<2 years	2–4 years	5–9 years	10–19 years	20–99 years	Life	Death			
1940									21	44
1943	13	28	22	21	10	5	0.3		28	
1944	13	29	23	22	10	5	0.2		30	55
1945	13	32	26	24	11	6	0.2		30	55
1946	15	28	21	21	9	5	0.2		25	56
1950	14	32	23	20	7	4	0.1			
1951									21	56
1952									21	
1953									22	
1954									21	55
1957									21	55
1960	13	33	24	20	6	4		60	21	59
1964	12	36	24	19	6	4		60	21	
1967										62
1970	10	33	22	19	9	7		60		
1974	6	41	28	16	6	3	0.1	60	14	68
1975										68
1976	6	37	28	18	8	4	0.1	60	15	69
1977									18	72
1978	12	31	28	17	9	2	0.1	60	19	70
1979	12	31	28	17	9	2		60	19	60
1980	11	34	27	17	10	2		60	19	57
1981								53	17	55
1982								51	16	52
1983	7	48	22	13	6	3	0.1	48	19	48
1984	7	42	25	16	8	3	0.1	60	17	46
1985	10	42	25	14	7	2	0.1	54	14	43
1986	8	45	24	14	7	3	0.1	48	15	43
1987										41
1988										40

**Table 2.** Sentence length of persons in state prisons on a day in 1974 and 1986 (5).

Sentence (years)	In prison on a day (%)	
	1974	1986
Less than 2	6	5
2 to 4	19	19
5 to 9	25	24
10 to 19	24	24
20 to 99	14	19
Life	12	9
Death	0.4	0.3

prison admissions divided by adult arrests). Varying a parameter by substituting a 1986 rate for a 1974 rate enabled an assessment of the effect of the rate change on prison admissions.

The model addresses growth in prison admissions rather than in the 1-day prison population. Although the two are not the same, the distinction is unimportant for the post-1973 period. When 1-day population growth arises from admission increases and from delayed releases, a model addressing both is needed. Because no evidence of release slow downs was found, the less complex model is sufficient. Additional justification for equating admissions and 1-day population comes from their parallel growth—from 1974 to 1986 admissions increased 142%, and 1-day populations increased 140%.

*Sources of data.* Needed for the study were 1974 and 1986 national data for nine offense categories (murder and nonnegligent manslaughter combined, rape and sexual assault combined, robbery, aggravated assault, burglary, larceny and auto theft combined, fraud and forgery and embezzlement combined, drug offenses, and all other offenses combined) giving the number of reported crimes com-

mitted by, arrests of, and prison sentences for each of six adult population sectors defined by combining race (white, black, other) and two adult age categories (those in their twenties and all other ages). Age-race-specific data were needed to assess demographic shifts on prison population growth. Sex-specific data were unimportant because the sex distribution barely changed from 1974 to 1986. Offense-specific data were needed because changes from 1974 to 1986 varied by offense. Offense categories were limited to nine because that number was sufficient to preserve distinctions between the most frequent admission offenses.

None of the available sources met all data requirements. The Federal Bureau of Investigation's Uniform Crime Reports (UCR) (12) provided national data on police-recorded crimes, but the data covered only the first six (excluding sexual assault) in the list of nine categories and did not give offenders' age and race (13). The UCR also provided data on arrests, but the data were age-specific and race-specific but not simultaneously age-race-specific and represented only 60% of the nation in 1974 and 80% in 1986. NPS provided data on court commitments, but a national count of total commitments from an annual prisoner movement census was not collected by offense, age, and race (14). The admission census gave an offense distribution for persons admitted, but the data were not age-race-specific and represented 50% of the nation in 1974 and 80% in 1986 (15). Finally, inmate surveys gave age-race-specific estimates, by offense, of persons admitted, but the estimates were limited to persons who were admitted in the year and who were present on the survey day.

These missing data problems were handled through imputations. Age-race-offense-specific numbers of annual arrests were estimated from age-offense-specific and race-offense-specific data. Age-race distributions obtained from these arrest estimates were then applied to data for each of the six categories of reported crimes to obtain annual estimates of numbers of reported crimes committed by each

**Table 3.** Offense distribution of felons committed to state prisons (5). Comparable data for years not shown between 1937 and 1986 are not available.

Year	Total admissions (%)								
	Murder	Sexual assault	Robbery	Assault	Burglary	Larceny	Fraud	Drugs	Other
1937	8	8	11	6	25	26	10	1	5
1938	7	7	11	6	25	25	11	1	7
1939	7	7	11	6	25	25	11	1	7
1940	6	7	11	6	24	24	11	1	10
1941	8	7	10	7	22	25	10	1	10
1942	8	8	11	8	21	26	9	1	8
1943	9	10	11	8	21	25	8	1	7
1944	8	9	10	7	22	26	8	1	9
1945	7	9	11	7	22	26	8	1	9
1946	8	7	11	7	23	25	10	1	8
1947	7	7	13	7	23	23	12	1	7
1948	7	7	12	6	24	23	13	1	7
1949	6	6	12	6	25	21	13	1	10
1950	6	6	12	6	26	21	14	1	8
1960	5	5	11	6	28	18	15	4	8
1963	5	5	11	6	28	17	14	4	10
1964	6	5	12	6	29	17	14	4	7
1970	8	4	17	8	22	14	9	10	8
1974	9	5	20	8	24	11	6	12	5
1978	9	5	19	7	25	12	6	8	9
1979	9	5	20	8	24	11	6	8	9
1980	12	7	19	8	23	10	5	7	9
1981	7	3	19	7	27	11	6	8	12
1982	7	4	18	7	28	12	6	8	10
1983	6	5	14	7	26	14	6	8	14
1984	6	5	15	7	24	12	6	9	16
1985	6	7	13	7	21	12	5	13	16
1986	4	8	13	7	19	12	5	16	16

age-race category. To obtain age-race-offense-specific national estimates of number of admissions, an age-race distribution within each offense category was obtained from the inmate surveys and was then applied to the offense distribution obtained from the admission census. All estimates included corrections for underreporting. Also, in deriving age-race-specific arrest estimates, the age distribution of arrestees was assumed to be identical across the races. To derive age-race-specific estimates of crimes committed, the age-race-specific distribution of persons committing crimes was assumed to be identical to that of persons arrested. Consequently arrest rates were not age-race-specific but were actually identical across the six population segments for the six offenses with reported crime data.

Aggregate totals were used to form rates of reported crime, arrest (16), and imprisonment. Because these rates are based on cross-sectional data rather than data that track the same individuals across criminal justice stages, they are more properly described as ratios rather than rates.

**Findings.** Court commitments (felons sentenced to prison, including 6,830 parole violators returned to prison with a new sentence in 1974 and 29,654 in 1986) totaled 96,073 in 1974 and 232,969 in 1986, or a growth of 136,896 admissions. The findings below show how well certain changes from 1974 to 1986 explained this growth.

**Demographics.** The number of whites in their twenties grew by 16% but the highest prison-prone segment, blacks in their twenties, grew by 40%. These and other population shifts explained 20% of admission growth (found by applying 1986 age-race-specific population estimates to 1974 age-race-offense-specific crime, arrest, and imprisonment rates).

**Reported crime and arrest rates.** Generally higher reported crime rates in 1986 were largely offset by lower arrest rates for most offenses. For example, the reported robbery rate increased 10% but the 34% chance of arrest dropped to 27% (Table 4). Changes in crime and arrest rates explained only 9% of admission growth (found by applying 1986 age-race-offense-specific crime and arrest rates and 1974 age-race-offense-specific imprisonment rates to 1974 age-race-specific populations).

**Imprisonment rates.** Imprisonment rates for every offense category except fraud showed an increase. For example, a person arrested for sexual assault had a 9% chance of going to prison in 1974 but 16% in 1986 (Table 4). Imprisonment rate changes explained 51% of admission growth (found by applying 1974 age-race-offense-specific crime and arrest rates and 1986 age-race-offense-specific imprisonment rates to 1974 age-race-specific populations).

**War on drugs.** Both drug arrest and imprisonment rates increased from 1974 to 1986 (Table 4), accounting for 8% of growth in overall admissions. Although the 8% figure suggests a modest role played by the war on drugs during most of the post-1973 period, its

impact on prison population growth during more recent times (since around 1984) has probably grown.

Discussion

Prison population growth since 1973 has been driven by increases in prison admissions. To determine the source of growth, various factors that can increase admissions were investigated: changes from 1974 to 1986 in reported crime and arrest rates, in imprisonment rates, in drug arrest and imprisonment rates, and in population demographics. Only 9% of admission growth from 1974 to 1986 was found to be attributable to changes in reported crime and arrest rates. Changes in drug arrest and imprisonment rates explained only 8%. Demographic changes were responsible for a modest amount of growth, explaining 20%. By far the strongest determinant was higher imprisonment rates, explaining 51% (17).

As the term was used here, higher imprisonment rates meant more prison sentences for every 100 arrests. This occurs when prosecutors obtain more felony convictions or judges give more prison sentences. Both probably account for today's higher imprisonment rates. To explain, if the only change since 1973 were at sentencing, with prison sentences accounting for a larger percentage of sentences imposed, the result would have been rapid growth in the prison population but not in persons receiving jail and probation sentences, the two penalties that together with prison sanctions constitute virtually 100% of the sentences felons receive. But because jail and probation populations have also grown rapidly since 1973 (from 1974 to 1986, jail and probation populations rose 86% and 93%, respectively, versus 140% for the prison population and 22% for the general population) (18), the implication is that felony convictions have risen rapidly since 1973. Prison populations have risen the most, indicating that increases in court commitments have been driven not just by more convictions but also by more prison sentences as a percentage of sentences imposed.

Besides the toughening practices of prosecutors and judges, those of probation officers and parole boards have probably also contributed to prison population growth. That is the implication of a finding from the inmate surveys. Inmates who were on parole or probation when last arrested grew from 16% of the 1-day prison population in 1974 to 42% in 1986 (19). Some increase would be expected, given the growth in parole and probation populations. But such a large increase probably also reflects toughening policies toward parole and probation violators. The best data on the issue, national parole statistics, appear to bear this out. In 1974 courts returned to prison (with new sentences) 4% of the parole population, and parole boards returned an additional 6%. In 1986 the

**Table 4.** Reported crime, arrest, and imprisonment rates, 1974 versus 1986. Arrest rates for the first six listed offenses are the ones actually used to test the

effect of rate changes from 1974 to 1986. All other table rates are overall rates aggregated across all age-race combinations.

Crime	Reported crime rate		Arrest rate		Imprisonment rate	
	1974	1986	1974	1986	1974	1986
Murder	13	11	0.98	0.93	0.481	0.534
Sexual assault*	22	43	1.65	1.52	0.089	0.161
Robbery	206	226	0.34	0.27	0.190	0.281
Aggravated assault	259	408	0.52	0.42	0.040	0.053
Burglary	977	1167	0.17	0.14	0.095	0.153
Larceny	2218	3196	0.20	0.18	0.017	0.027
Fraud			140.63†	237.52†	0.028	0.028
Drugs			326.88†	417.15†	0.024	0.050
Other			548.66†	691.16†	0.006	0.030

\*Crime rate is the number of rapes per 100,000 population. Arrest rate is arrests for both rape and other sexual assault divided by reported rapes. Imprisonment rate is prison commitments for both rape and sexual assault divided by arrests for both. †Number of arrests per 100,000 population.

figures were 10% and 14%, respectively (20). Together, courts and parole boards returned 10% of the parole population in 1974 and 24% in 1986.

## Deterrent and Incapacitative Effects of Prisons

Theoretically, rising incarceration rates reduce crime in two ways. Through their deterrent effect, would-be offenders are deterred from committing crimes by the growing threat of a prison sentence. Through their incapacitative effect, increasing numbers of offenders are physically prevented from committing new crimes because they are behind bars. Whether rising incarceration rates have reduced crime in the United States cannot be said with certainty. What is clear is that, since 1973, per capita prison incarceration rates have risen to their highest levels ever (21) while crime rates measured in the National Crime Survey (the NCS is an annual nationwide household interview survey that asks household members about crimes they may have suffered) have gradually fallen to their lowest levels ever (22, 23). The changing age structure apparently does not explain most of the declines (24). Whatever the causes, in 1989 there were an estimated 66,000 fewer rapes, 323,000 fewer robberies, 380,000 fewer assaults, and 3.3 million fewer burglaries attributable to the difference between the crime rates of 1973 versus those of 1989 (25). If only one-half or even one-fourth of the reductions were the result of rising incarceration rates, that would still leave prisons responsible for sizable reductions in crime. That possibility must be seriously weighed in debates about America's prisons.

### REFERENCES AND NOTES

1. State prison populations declined 15 times: 1940 to 1944, 1951, 1962 to 1967, and 1970 to 1972.
2. Bureau of Justice Statistics, *Correctional Populations in the United States, 1989*, in preparation.
3. A 1000-bed prison is large by today's standards. Only 12% of today's approximately 1000 state prisons are that size.
4. For example, see A. Blumstein, in *Crime and Justice: A Review of Research*, M. Tonry and N. Morris, Eds. (Univ. of Chicago Press, Chicago, 1988), vol. 10, pp. 231-266; in *The American Prison*, L. Goodstein and D. MacKenzie, Eds. (Plenum, New York, 1989), pp. 13-22; J. Austin and A. McVey, *The NCCD Prison Population Forecast: The Growing Imprisonment of America* (National Council on Crime and Delinquency, San Francisco, 1988).
5. Sources of inmate survey data are data sets at the University of Michigan, Inter-university Consortium for Political and Social Research (Ann Arbor) for 1974, no. 7811; for 1986, no. 8711. Sources of admission and release data are archived data sets and published and unpublished reports. A full list of sources is available from the author.
6. National Center for States Courts, *State Court Organization 1987* (Williamsburg, VA, 1988), table 28.
7. S. Shane-Dubow, A. Brown, E. Olsen, *Sentencing Reform in the United States* (Government Printing Office, Washington, DC, 1985), p. 280.
8. M. Tonry, in Tonry and Morris in (4), p. 316.
9. Except for sexual assault, disaggregated data also show a decline in time served for individual offense categories (L. Greenfeld and P. Langan, "Trends in prison populations," paper presented at the National Conference on Punishment for Criminal Offenses, Ann Arbor, MI, 9 and 10 November 1987, table 12).
10. Sources of prisoner data are the inmate surveys. Imprisonment rates were calculated for whites, blacks, and others, and for 16 age categories.
11. The average annual change from 1926 through 1973 is 1.5%.
12. Federal Bureau of Investigation, *Crime in the United States 1974* (U.S. Department of Justice, Washington, DC, 1975), table 2 for reported crimes, tables 28, 34, and 38 for arrests; *Crime in the United States 1986* (U.S. Department of Justice, Washington, DC, 1987), table 1 for reported crimes, tables 24, 33, and 38 for arrests.
13. The model described earlier applies to the six offenses that have data on reported crimes. No such data exist for the three remaining offense categories. A second model was therefore used for them. It defined the number of criminals sentenced to prison in 1974 for each of the three as a product of the 1974 adult population multiplied by the 1974 arrest rate (number of arrests per 100,000 population) and then multiplied by the 1974 imprisonment rate (commitments divided by arrests).
14. The 1974 admissions totaled 89,243 court commitments plus an estimated 6,830 parolees with new sentences [National Criminal Justice Information and Statistics Service, *Prisoners in State and Federal Institutions on December 31, 1974* (U.S. Department of Justice, Washington, DC, 1976), table 5]; 1986 admissions totaled 203,315 court commitments plus 29,654 parolees with new sentences [Bureau of Justice Statistics *Correctional Populations in the United States, 1986* (U.S. Department of Justice, Washington, DC, 1989), tables 5.10a and 5.16].
15. The 1974 admission offense distribution was estimated from table 5 of an unpublished report (untitled) available at Bureau of Justice Statistics (U.S. Department of Justice, Washington, DC); for 1986, from dataset 9276, University of Michigan, ICPSR (Ann Arbor, MI).
16. The denominator of the imprisonment rate for "other" offenses excluded disorderly conduct, vagrancy, curfew violations, loitering, runaways, suspicion, violations relating to drinking, and "all other offenses."
17. Annual imprisonment rates (that is, prison admissions divided by arrests) calculated by the author for each of the nine offense categories and for each year from 1960 to 1986 (data permitting) show a downward trend from 1960 to 1970, followed by an upward trend. Although such rates have risen since 1974, in 1986 they still had not returned to 1960 levels. Also, relative to the volume of reported crimes, the number of persons sentenced to prison in 1986 had not yet returned to 1960 levels.
18. Sources of all correctional figures are available from the author.
19. This finding does not necessarily conflict with the earlier finding that repeat offenders are a stable percentage of the prison population.
20. In 1974 parole boards returned an estimated 9,054 of the 15,884 parolees admitted to prison [National Criminal Justice Information and Statistics Service, *Prisoners in State and Federal Institutions on December 31, 1974* (U.S. Department of Justice, Washington, DC, 1976), table 5]; in 1986, parole board returns totaled 39,129 [Bureau of Justice Statistics *Correctional Populations in the United States, 1986* (U.S. Department of Justice, Washington, DC, 1989), table 5.16].
21. L. Greenfeld, *Prisoners in 1989* (U.S. Department of Justice, Washington, DC, 1990), p. 1.
22. Bureau of Justice Statistics, *Criminal Victimization 1989* (U.S. Department of Justice, Washington, DC, 1990), tables 3 and 4. The NCS is the preferred measure of crime because the UCR is limited to reported crimes whereas the NCS includes all crimes, whether or not those crimes were reported to and recorded by police. Despite the advantage, NCS data could not be used in my model because NCS information on offender age is too limited.
23. Past research has consistently found a negative association between imprisonment rates and crime rates [A. Blumstein, J. Cohen, D. Nagin, Eds., *Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates* (National Academy of Sciences, Washington, DC, 1978), p. 4].
24. D. Steffensmeier and M. Harer, *J. Res. Crime Delinquency* 24, 35 (1987), table 2 compared 1980 and 1984 NCS crime rates and found that age structure changes explained none of the declines in several NCS offense categories and roughly half of the declines in several others.
25. Crime reductions were defined as the difference between 1989 survey estimates of victimization and the number obtained by applying 1973 NCS rates to the 1989 population.
26. The author gratefully acknowledges the assistance of J. Dawson, D. Farrington, L. Greenfeld, T. Hester, R. Solari, and an anonymous reviewer.