

# Costs and Benefits of Sanctions: A Synthesis of Recent Research

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## Introduction

American prison populations have risen dramatically over the past twenty years. Prisoners in State and Federal systems totalled 198,000 in 1971. By 1981, populations had increased 316,000. Growth accelerated even more rapidly over the next decade, reaching 805,000 inmates by mid-1991. This rapid growth created substantial strains on state budgets. It also led to increased prison crowding and large-scale experimentation with new, less-restrictive sanctions.

Despite the growth in prison populations and alternative sanctions, the key questions asked of criminal justice policy makers have remained relatively unchanged: Are additional prison cells necessary and don't many alternatives to prisons cost less and still provide safety? These questions have no easy answers. They involve not only economic issues but also questions of what is morally right. They intermix dollars and cents with issues of justice, victims rights, and humane treatment. No study or group of studies will therefore provide a definitive answer that will satisfy the diverse interests and values found in American society.

Acknowledging the implicit vastness of the questions asked, this paper adopts a limited focus. It summarizes the empirical research on costs and benefits of prisons relative to the alternatives.

The basic answer derived from cost-benefit studies is that prison expansion has been a sound investment. When society imprisons offenders, it receives back in crime savings far more than it pays out in prison costs. These returns are neither phantom savings nor are they based on future projections. They are reductions in the current crime costs that Americans pay -- through law enforcement, victim costs, personal protection, and business losses -- relative to what they would have paid if those offenders had remained in their communities. The evidence on new, so-called intermediate, sanctions is far from conclusive. However, that which exists suggests that current versions of intermediate sanctions have not been cost-effective in that they cost more than conventional community supervision and offer no greater safety. This evidence should be used to improve the design of existing programs and perhaps point to new program premises.

The paper starts with an overview of conceptual cost issues that governments must consider when they examine their prison capacity. It then presents the available evidence on prison costs and benefits, and follows with a discussion of some limitations of the findings. The paper reviews recent trends and the limited findings on intermediate sanctions. It concludes with a discussion of possible future sentencing options.

### overview

While a great deal of attention has been given to the growth in prison populations, the growth in other correctional populations has gone largely unnoticed. Between 1979 and 1990, prison populations grew from 314,000 to 771,000, an increase of 457,000 inmates. Probation populations grew equally rapidly, from 1.1 million to 2.7 million. In national terms, table 1 shows that all forms of correctional supervision grew at roughly the same rates, leaving the relative use of sentencing options unchanged. This result is somewhat surprising in light of perceptions that the 1980s were a period of tougher sentencing. More important from the perspective of public safety is the implication that the number of known offenders on the streets actually increased by 1.9 million. If prison and jail expansion have created cost concerns, then probation and parole growth have created offsetting safety concerns.

Table 1. Correctional Populations 1979-1990 <sup>1</sup>			
Component	1979 (Thsnd)	1990 (Thsnd)	Growth %
Probation	1,087	2,670	146
Jail	171	405	137
Prison	314	771	146
Parole	219	531	142

Much of the debate over prison construction focusses unduly on the cost side of prisons, ignoring the possible benefits. Critics argue that the direct costs of a year in prison are about \$20,000 when construction costs are amortized in. Frequently, the safety bought is ignored. A \$20,000 investment confines one offender for one year. What do we get for that amount in terms of crimes and costs averted? Is it more than we get from a year in probation, which costs about \$2,000?

If we restrict our interests in costs solely to correctional expenditures by state and local governments, then probation is a clear winner. The shortsightedness of this view is apparent, however: imposing no sanction at all would be even less costly than probation. Clearly officials must consider more than just tax costs when deciding among sentencing options, and public safety is an important part of the decision.

<sup>1</sup> Bureau of Justice Statistics Bulletins: Prisoners, Jail Inmates, Probation and Parole, various years.

While not always framed as an explicit tradeoff, recent debate over prison construction and intermediate sanctions has revolved around whether they produce benefits beyond satisfying the desire to punish. In particular, it engenders the question of whether sanction benefits can be translated into other cost savings.

Few would refuse to acknowledge that the costs of crime extend beyond corrections budgets into many aspects of everyday consumption and behavior. These costs are difficult to estimate and, as a result, they are under-counted. Restricting an offender's freedom reduces some number of crimes and their attendant costs. Because off-setting costs are under-counted, correctional services tend to be undervalued. Because they are undervalued, policy makers tend to under-allocate resources to correctional services and other forms of crime prevention. A goal of recent research on sanctions has been to correct this undervaluation so that decisions are made which reflect the real balance between corrections expenditures and the safety they finance.

#### Estimating the Costs and Benefits of Prisons

Crime causes people to spend a great deal of money. Taxpayers finance the criminal justice system. Households and businesses buy private protection such as lighting, locks, dogs, fences, and alarm systems. They buy insurance. Victims absorb costs of lost property, lost work, hospitalization, and sometimes death. Each of these purchases is a direct outlay of taxpayer dollars to prevent crime or because of crime.

The public also spends money on crime that is hidden in other purchases and is therefore more difficult to calculate. Businesses, for instance, pass on to customers their costs for security and stolen merchandise. Households also pay for crime by altering their behaviors and life styles. William Greer<sup>2</sup> estimated that crime increases in the early 80s caused 150,000 more New Yorkers to take taxis instead of public transportation; some 140,000 more New York City households sacrificed trips rather than leave their apartments unprotected. Even more difficult to assess are the costs of "urban blight" such as abandoned buildings, unsafe schools, and inner city unemployment. Quite possibly the costs we can't count exceed the ones we can.

Four authors have estimated some of these broader social costs of crime and subsequently inferred the cost savings of imprisonment. Each study used a different approach and is subject to criticism for errors in omission. Not surprisingly given the paucity of data available for the task, their estimates differ widely.

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<sup>2</sup> William W. Greer, "What Is the Cost of Rising Crime?" New York Affairs, January 1984:6-16.

Austin (1985) analyzed the cost implications of a specific event: four years (1980-1983) of early prison releases in Illinois. He gathered detailed cost information on prison operating costs, other correctional costs associated with early release, criminal justice processing costs associated with the arrest of offenders during their early release periods, and victim costs associated with crimes imputed to early release offenders. Austin estimated that the direct savings to society from early releases ranged between \$23.9 million and \$49.0 million depending on the assumptions made about prison operating costs. He estimated the incremental costs associated with early releases to be between \$17.9 million and \$19.3 million, thereby realizing a net saving of between \$4.6 million and \$31.6 million for the four years. The main cost components of Austin's study are displayed in table 2.

Table 2. Costs of Early Releases - Austin		
Cost Source	High Estimate (\$M)	Low Estimate (\$M)
Parole Supervision	0.2	0.2
Police Arrests	0.6	0.6
Pretrial Detention	0.9	1.7
Court Processing	1.2	1.2
Return to Prison	1.0	2.0
Victim Costs	6.8	6.8
<b>Savings Source</b>		
Prison Operations	49.0	23.9
<b>Net Savings</b>	<b>31.6</b>	<b>4.6</b>

With the exception of victim costs, Austin's estimates were all traditional criminal justice system costs. He assumed that the incremental effects of early release on private security expenditures and on total criminal justice costs in Illinois were negligible and therefore omitted them from his calculations. This implies that the crimes caused by early-release offenders add no burden to the general safety costs of communities. An alternative approach would have been to allocate shares of criminal justice budgets and private security expenditures in proportion to the crimes committed by early release offenders. Austin also undercounts the crimes committed by offenders. He reaches his crime estimates by attributing crimes from the National Crime Survey to offenders in proportion to their share of Illinois

arrests. He therefore omitted all commercial victimizations as well as all kinds of crimes not covered in the Survey such as arson, fraud, and drug dealing.

Zedlewski (1987) tried to capture a broader array of crime costs. He estimated the direct costs of crime for private security, victims, and the criminal justice system. He found that they represented roughly equal components of expenditure (\$30.6 million, \$35.4 million, and \$33.8 million respectively) totalling about \$100 million annually. Specific costs and crimes are shown in table 3. Using both the National Crime Surveys and the FBI's Uniform Crime Reports, he estimated that 42.5 million crimes were committed each year. Dividing aggregate costs by aggregate crimes yielded a direct social cost of \$2354 per crime.

To estimate potential savings from a year in prison, he needed to apply the average costs of a crime to the number of crimes likely to be saved. Using a study by the RAND Corporation that had surveyed prisoners, he found that inmates had committed an average of 187 crimes in the year prior to their incarceration. Applying that rate as indicative of the crimes to be saved if an additional prison cell were available, he estimated the social benefits of an additional prison cell at \$440,000 (187 crimes times \$2354) per year. In contrast, the costs associated with a year in prison were \$25,000, including amortized construction, operation, and possible losses incurred by the offender and his family.

Table 3. Social Costs of Crime -- Zedlewski			
Total Crimes - 1983 (Millions)		Expenditures From Crime - 1983 (\$ Billions)	
Violence	5.0	Firearms	0.3
Robbery	1.4	Guard Dogs	4.2
Burglary	7.5	Victim Loses	35.4
Larceny	27.4	Criminal Justice	33.8
Theft	1.2	Commercial Security	26.1
Total	42.5	Total	99.8

Zedlewski's figures were criticized because they equated average costs to incremental costs of safety. Critics argued that communities had police and private security resources already in place, so small numbers of crimes saved would not necessarily

reduce expenditures on public and private safety proportionately. Similarly, the incremental crime savings per prisoner might not be 187 crimes per year if the additional offenders incarcerated were less active than those already in prison. Surely at some point, critics argued, the criminal justice system would find it was locking up some very petty offenders. Critics also argued that Zedlewski's numbers represented crime costs, not crime savings; that is, not all the costs attributable to a crime would necessarily be saved if the crime were averted<sup>3</sup>.

**Table 4. Victim Costs of Crime: Pain, Injury, and Risk of Death -- Cohen**

Crime	Victim Cost
Rape	\$51,058
Robbery	\$12,595
Assault	\$12,208
Theft	\$181
Auto Theft	\$3,127
Burglary	\$939
Larceny	\$173
Kidnapping	\$110,469
Bombing	\$77,123
Arson	\$33,549

Cohen (1988) focussed exclusively on the costs of crime to victims. Unlike criminal justice or private security, victim costs would surely disappear in their entirety if certain crimes never occurred. While his estimates represented only a single component of the total social costs of crime, they avoided the crime costs versus crime savings issues of Zedlewski's analysis.

Cohen added important dimensions to traditional cost calculations. He defined victim costs as the sum of three factors: cash and property losses, the costs of pain and suffering, and the risk of death. He estimated pain and suffering costs from data on medical claims and jury awards

for various types of traumatic injuries and applied his estimates to the fraction of crimes reporting similar injuries. In a similar fashion, Cohen placed a value on human life of \$2,000,000,

<sup>3</sup> Readers are referred to the exchange between F. Zimring and G. Hawkins, "The New Mathematics of Imprisonment, Crime and Delinquency, October 1988:425-436 and E. Zedlewski, "New Mathematics of Imprisonment: A Reply to Zimring and Hawkins'" Crime and Delinquency, January 1989:169-173.



based on jury awards for wrongful deaths. He applied that amount to the small fraction of crimes resulting in death. After accounting for these "intangibles", he estimated victims' costs at \$92.6 billion annually. Cohen's estimate is directly comparable to Bureau of Justice Statistics estimates of out-of-pocket costs of \$10.9 billion for the same crimes. Averaged over the 36 million crimes of the National Crime Survey, this amounts to \$2572 in victim costs per crime, as compared to Zedlewski's \$2354 total crime cost. Estimates for some specific crimes are shown in table 4.

Cohen applied his estimates of the values of crimes averted to a variety of sentencing policy questions and showed in general that longer prison term costs were more than offset by victim savings. Of particular interest is his recalculation of Austin's victim costs. Whereas Austin concluded that incremental costs of early releases were about \$17 million, these estimates increase to \$110 million when pain, suffering, and risk of death are taken into account. These adjustments reverse Austin's conclusion of a saving of \$1,480 per release to a net cost of \$2,870 per release.

Cavanagh and Kleiman (1990) performed a broad analysis of criminal justice and other social costs associated with prison and probation. They skirted the question of declining crime savings as less active offenders are incarcerated by estimating costs of an extra year in prison for current inmates rather than the addition of new inmates. Data on crimes committed by existing inmates were thus appropriate bases for crime savings estimates.

Table 5. Costs and Savings from Prisons Cavanagh and Kleiman		
Prison Costs (1 year)	Low	High
Construction	1,907	13,913
Operations	9,670	33,558
Lost Wages	8,653	8,653
Welfare Costs	3,219	13,503
Total	\$23,450	\$69,627
Crime Savings	Low	High
Victim Costs	49,019	525,326
Social Overhead	122,547	1,838,641
Total	\$171,566	\$2,363,967

Cavanagh and Kleiman supplemented their own analyses with estimates drawn from other researchers. They estimated plausible ranges within which prison and victim costs should fall. Rather than attempt estimates of specific social cost components, they multiplied victim costs by a "social overhead" factor of 2.5 to 3.5 to obtain a measure of aggregate social costs. They arrived at the figures in table 5 for the costs and benefits of an additional year in prison.

The cost detail of Cavanagh and Kleiman's analysis points out that prisons, like crime, have hidden costs. By including an inmate's lost wages and welfare costs to his family as consequences of confinement, they estimated that a prison year cost society about \$35,000. Nonetheless, their lowest estimate of crime savings to society was more than twice the greatest estimate of the cost of an additional year in prison for a current prison inmate. The high-end estimate of savings is over 30 times the high-end estimate of prison costs.

### Measurement Issues

Each of the studies discussed made significant contributions to our understanding of crime savings and the broad range of costs implied by sentencing policies. Each also has significant shortcoming brought about by aggregating data and by outright omissions. This section discusses some of the points a policy maker should be aware of.

Deterrence. All of the studies reviewed focus exclusively on crime savings through incarceration and ignore the deterrent effects of sanctions. General deterrence is the amount of crime saved through the fear of punishment exerted by the existing risks and severity of sanctions exerted on the general public. Specific deterrence is the effect of punishment upon the future behavior of a sanctioned offender.

Studies of general deterrence enjoyed considerable popularity during the 1970s. The National Academy of Sciences Panel on Deterrence<sup>4</sup> reviewed more than twenty such studies in their 1978 report, concluding:

"We believe scientific caution must be exercised in interpreting the limited validity of the available evidence and the number of competing explanations for the results. Our

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<sup>4</sup> A. Blumstein et al., Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates, National Research Council, Washington, 1978.

reluctance to draw stronger conclusions does not imply support for a position that deterrence does not exist, since the evidence certainly favors a proposition supporting deterrence more than it favors one asserting that deterrence is absent." (p. 7)

Estimates on the size of deterrence effects are quoted in percentage relationships: "an x percent increase in a sanction produces a y percent decrease in crime rates." The most-cited deterrence estimates were produced by Ehrlich<sup>5</sup>. Using state crime data from 1960, he found that a one percent increase in arrest rates would produce a 1.0 decrease in crime rates; similarly, a one percent increase in sentence lengths would produce a 1.1 percent decrease in crime rates from combined deterrent and incapacitative influences. Converted to 1990 statistics for illustrative purposes, a one percent increase in prison capacity is roughly 7,700 cells or \$154 million per year in additional costs. Crime savings would be 1.1 percent of reported crimes, or 160,000 crimes. Valued at \$2,500 per crime, the savings would be \$400 million. Whether these estimates have any real-world value is of course debatable. The point is that deterrence is not an insignificant contributor to crime savings.

Crime Savings Data Sources. The number of crimes saved may be the most critical element in sentencing cost-benefit analyses. If the number is small, then prison costs will exceed public savings. If the opposite is true, then prisons will pay for themselves. Researchers face a difficult task in obtaining reliable and accurate estimates of individual crime rates.

Official statistics provide inadequate information. The FBI crime index and the National Crime Survey tap into a handful of the hundreds of offenses listed in criminal statutes. They do not include many serious crimes such as kidnapping, bombings, and child pornography. They also ignore many garden variety crimes committed by everyday street offenders such as forgery, fraud, and drug dealing. They even report poorly on the extent of crimes they do cover by virtue of their design limitations (FBI covers only crimes reported to police; NCS covers only crimes reported by households). If official statistics are used, research will grossly misrepresent the amount and nature of criminal activity.

Self-report studies have helped illuminate this question. By interviewing offenders directly and carefully, researchers have not only discovered important crime patterns but also meaningful

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<sup>5</sup> Isaac Ehrlich, "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation," Journal of Political Economy, May/June 1973:521-564.

offender profiles. The most common venue for self-report studies has been prisons. Interviewers have asked offenders about the kinds of crimes they committed when free and their frequency of offending. Some studies have incorporated checks on the consistency and validity of responses, including cross-checks within the questions and on prior arrests.

The most publicized self-report study of inmates is the RAND Corporation's interviews for the National Institute of Justice. The study focussed on more than two thousand prison and jail inmates in California, Texas, and Michigan. The results of these interviews, given in part in table 6, are the basis for the crime savings in both the Zedlewski study and the Cavanagh and Kleiman study. RAND's study has been replicated in Nebraska and Colorado, and similar results were obtained.

Table 6. Annual Offense Rates - RAND <sup>6</sup>	
Crime	Annual Rate
Burglary	76
Robbery	41
Assault	5
Theft	135
Auto Theft	76
Forgery/Credit Cards	62
Fraud	127
Drug Dealing	880
All Crimes Except Drugs	187

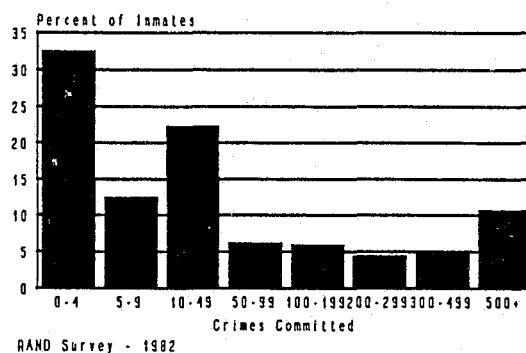
Entries in the table indicate the average number of times per year an offender committed a particular crime, given that he had committed any of that kind of crime at all. Few inmates committed every kind of crime surveyed; however, they averaged 187 offenses per year among the crimes above, excluding drug deals. Obviously offenders must commit large numbers of lesser crimes to reach a 187 crime total. These lesser crimes -- shoplifting, theft from loading docks, using stolen credit cards, etc. -- are "lesser" in the sense that they tend to represent small losses with negligible risk of injury to a victim. One is hard-pressed, however, to consider a hundred or more of these events per year

<sup>6</sup> J. Chaiken and M. Chaiken, Varieties of Criminal Behavior, Appendix A, RAND Corporation, Santa Monica, 1982.

as a nuisance that society should overlook. Cohen estimated a modest cost of roughly \$180, with zero pain and suffering or death costs, for this kind of theft. At 135 thefts per year, a petty offender still causes over \$24,000 of losses to his victims.

Career Criminals. These self-report findings also showed that offenders in prison had many different levels of activity as depicted in the adjacent figure. About a third said they had committed fewer than 5 crimes per year; about ten percent committed more than 500 per year. This discovery promoted a widespread interest in "career criminals," or persistent high-rate offenders. Policy makers and academics focussed on the possibility that these dangerous offenders could be identified and locked up for longer periods, increasing the average number of crimes saved per prison cell. Lesser-rate offenders would be given shorter prison terms or alternative sentences to free space for careerists.

Frequencies Of Crime Commission



Experience has proven career criminals to be elusive targets. Although police and prosecutors may target offenders with lengthy arrest records, prior arrests are poor predictors of the frequency of offending. Even with extensive information on drug use and juvenile records along with their self-report records, the RAND selective incapacitation study showed limited ability to identify high-rate offenders through statistical models.<sup>7</sup>

As table 7 indicates, sizable errors are likely to be made when offenders must be divided into high-rate versus "others" groups. Of the 28 percent "high-rate" offenders in their sample, RAND's prediction model classified nearly half (13 percent) as low- or medium-rate offenders. The high-rate offenders who were identified correctly (15 percent of total sample) were matched by a nearly equal number of lower-rate offenders (14 percent) who were labelled as high-rate.

<sup>7</sup> Peter W. Greenwood, Selective Incapacitation, RAND Corporation, Santa Monica, 1982.

Table 7. Classifying Offenders <sup>8</sup>			
Crime Rates	True Rate (percent)		
Predicted (percent)	Other	High	Total
Other	58	13	71
High	14	15	29
Total	72	28	100

Critics of prison expansion have used the RAND study to document that current sentencing policies place large numbers of low-rate offenders in prisons. Surely they exist; the median offense rate among the RAND inmates was 15 crimes per year. One can argue on the other side that, despite their crudeness, these policies are effective: they will save an average of 187 or so crimes per year. If research can improve upon the identification of low and high rate offenders, expenditures for prison operations can be reduced.

Drug Offenders. Virtually all analyses of the costs of crime to date have concentrated on ordinary street crimes. There has been no integration of the social costs created by drug dealing into the criminal justice literature. This shortcoming is critical in light of the rapid growth of drug offenders within the criminal justice population. Drug arrests increased by 95 percent over the 1979 to 1990 period. Drug offenders were 9.3 percent of the jail population in 1983; by 1989 they had risen to 23 percent. The omission of drug-related costs of crime is a major weakness in current cost-benefit analyses.

Formidable obstacles exist to estimating costs for drug offenses and progress in removing these obstacles will be slow. Aggregate cost estimates of drug abuse exist. The Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) estimated the aggregate social cost of drug abuse at \$44.1 billion in 1988, without many of the crime-related costs referenced in this paper.<sup>9</sup>

Drug costs undoubtedly exist and some can certainly be curtailed. The difficulties lie in arriving at a defensible cost per deal

<sup>8</sup> Derived from Table 4.5, Selective Incapacitation, op. cit.

<sup>9</sup> D. Rice et al., The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985, U.S. Public Health Service, Alcohol, Drug Abuse and Mental Health Administration, Washington, 1990.

and in attributing the deals saved to a particular criminal justice policy. Even if we accept ADAMHA's estimates of total costs, we need to apportion these costs to each drug transaction. Not having any notion of how many drug deals occurred in any given year, we can't impute a cost per transaction. Beyond that, we need to estimate how many drug deals would be averted by the incarceration of a small fraction of the drug dealing population. If demand for drugs stayed constant, one would believe that the net effect of incarceration on the market would be small.

### Intermediate Sanctions

The 1980s witnessed a growth in interest and in actual numbers in intermediate sanctions programs. This growth had both theoretical and pragmatic aspects. From a theoretical side, judges and policy makers believed that the conceptual gap between total incarceration and minimally supervised community probation was too large. They called for sanctions that were more severe than probation but that fell short of extended confinement. Prison crowding and budgetary pressures added a fiscal dimension to the search for sentencing options. States needed programs that reduced costs but still constituted acceptable risks to public safety.

Experience with modern intermediate sanctions now extends for ten years, beginning with the development of intensive supervision programs (ISPs) for probationers in the early 1980s, followed by boot camps (1983) and electronic monitoring of house arrest (circa 1984). It is fair to say that these sanctions are in different stages of maturation, with boot camps and monitoring still refining their practices and growing.

Table 8. Intermediate Sanctions - 1990 <sup>10</sup>	
Sanction	Population
Intensive Supervision	72,509
Electronic Monitors	7,868
Boot Camps	5,286
All Corrections	4,378,204

<sup>10</sup> Intensive Supervision and Electronic Monitoring populations from Bureau of Justice Statistics, Probation and Parole 1990. Boot camp populations from Bureau of Justice Statistics Sourcebook of Criminal Justice Statistics - 1990, Table 6.86.

Realistically, however, it is unlikely that any of the current sanctions will displace large segments of either the prison or probation populations: the combined populations comprised only two percent of all persons under supervision. The "gap" filled by intermediate sanctions has been narrow. Typical eligibility criteria for the programs have excluded violent offenders, sex offenders, multiple recidivists, and drug traffickers under mandatory sentences. Many states also exclude various groups of white collar offenders as inappropriate for program objectives or in the interests of justice. These exclusions preclude inroads into prison populations. And faced with budgetary limitations, states have been reluctant to move probationers into these higher cost programs.

Findings on program effectiveness are limited, but none support intermediate sanctions for utilitarian reasons. In general, offenders in intermediate sanctions have performed neither better nor worse than comparable offenders in traditional forms of supervision and intermediate sanctions programs cost more to operate. Specific programs are discussed below.

#### Intensive Supervision Programs (ISPs).

Intensive supervision has been applied to both probation and parole populations. As currently practiced today, ISPs emphasize increased surveillance -- with supervisor contacts typically in the range of 20 to 25 per month -- although some programs offer rehabilitative services also.

ISPs were promoted as lower cost sanctions than prisons, with surveillance to control risk to the community. Most of the goals for these programs have not been met, however, according to a recently completed review of evaluations.<sup>11</sup> Principal findings are that:

- Prosecutors and judges have resisted ISP directed at prison diversion;
- ISPs don't reduce prison crowding and may actually increase it;
- ISP costs more than its advocate realize when offenders are incarcerated for technical violations; and
- ISP is no more effective than routine probation and parole in curbing recidivism.

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<sup>11</sup> J. Petersilia et al., Intensive Probation and Parole: Research Findings and Policy Implications, Working Draft WD-5616-1-NIJ/RC, RAND Corporation, January 1992.



However, evaluators found that intensive supervision did hold offenders more accountable and increased the credibility of community sanctions.

Table 9 summarizes the findings with respect to new arrests and technical violations in the fourteen programs evaluated.

Table 9. ISP Recidivism Summary -- 14 Programs		
Recidivism Measure/Program Type	ISP	Other
Technical Violations	Percent	
Probation/Parole Enhancement	64	38
Prison Diversion	92	27
Arrests	Percent	
Probation/Parole Enhancement	37	33
Prison Diversion	52	15

Twelve of the programs were intensive supervision enhancements to probation or parole. Offenders were randomly assigned to the ISP pool or the conventional supervision alternative. Two sites diverted a random sample of offenders from prison terms and compared their performance with a pool of offenders who served their sentences. Over 2,000 offenders were in the combined samples. As table 9 demonstrates, ISP clients were substantially more likely to receive technical violations; this is consistent with the higher levels of supervision received. They also were slightly more likely to be arrested for new crimes; these arrests resulted from routine police activity and not the supervising staff.

#### Boot Camps

Early boot camp programs attracted advocates from across the political spectrum. Program goals promised something for everyone: punishment, rehabilitation, crime control, and cost control. Subsequent versions of boot camps have evolved into two modalities: a punishment camp (e.g., Georgia) emphasizing military discipline and self-control and an extended program (e.g., New York) that combines discipline with rehabilitative services through a lengthy post-camp supervision.

Evaluation findings on boot camps have been limited partly because of the recency of the programs and partly because of the voluntary nature of boot camp participation. Every program

requires the offender's consent as part of its screening process. This requirement generates the possibility that boot camp inmates differ, at least in willingness to change their behavior, from those who opt for regular prison stays. While this condition precludes ideal comparisons across offenders, evaluations have found that:

- Boot camp graduates do not differ in recidivism from similar prison, probation or parole offenders (see table 10)<sup>12</sup>;
- Cost savings result solely from shorter confinements -- daily boot camp costs exceed those of prisons<sup>13</sup>; and,
- Boot camp graduates leave with more positive social attitudes than traditional prison releases.<sup>14</sup>

The last finding is largely responsible for the development of aftercare programs in New York which try to extend the positive attitudes at graduation into community supervision. Table 10 summarizes the early experiences of the Louisiana boot camp program.

Table 10. Boot Camp Recidivism Comparisons (12 months after release)		
Group	N	Pct. Arrested
Boot Camp Graduates	74	37.8
Boot Camp Dropouts	17	35.3
Parolees	74	25.7
Probationers	110	28.2

<sup>12</sup> Doris MacKenzie, "The Parole Performance of Offenders Released from Shock Incarceration (Boot Camp Prisons): A Survival Time Analysis," Journal of Quantitative Criminology, vol. 7, no. 3: 213-236, 1991.

<sup>13</sup> Doris MacKenzie, "Boot Camp Prisons: Components, Evaluations, and Empirical Issues," Federal Probation, September 1990: 44-52.

<sup>14</sup> D. MacKenzie and J. Shaw, "Inmate Adjustment and Change During Shock Incarceration: The Impact of Correctional Boot Camp Programs," Justice Quarterly, March 1990: 125-150.

Samples were drawn from similar Louisiana offenders in boot camps, probation, and parole who were released into their communities at approximately the same time. Because the samples were not perfectly matched through random assignment to boot camps or other forms of supervision, some differences exist between groups. The most significant difference may be that boot camp entrants had somewhat longer initial sentences (47 months versus 35 for parolees and 31 for probationers). As is evident, boot camp graduates performed slightly more poorly in terms of arrests than other groups. Whether this experience will be repeated in other programs remains to be seen.

### Electronic Monitoring

Electronic surveillance has been the fastest growing option between prison and probation. The entire electronic monitoring population averaged only 95 persons a day in 1986. By 1989, the daily population had soared to 6,490.<sup>15</sup>

Not only the numbers but also the kinds of offenders monitored have changed rapidly. The first National Institute survey of monitoring in 1987 found that three out of four persons monitored were probationers. Its 1989 survey discovered the proportion had changed to only one in four. Crimes of conviction have also changed, indicating that judges are now placing more serious offenders under supervision. In 1987, a third of all monitored offenders had been convicted of major traffic offenses (e.g., drunk driving); this factor had fallen to 19 percent by 1989. Recent populations have shifted toward more drug offenders (14 percent in 1987 to 22 percent in 1989), more property offenders (19 percent to 32 percent), and more violent offenders (6 percent to 12 percent).<sup>16</sup>

Practitioners have contended that 60 to 120 days is the range over which monitors are tolerable; current use averages 79 days. Yet experience indicates that chances for successful completion actually improve as monitoring periods are lengthened toward one year. Technical violations and new offenses decrease over time to a small but stable rate. This finding suggests that monitors "weed out" those who will not comply with restrictions early in the program.<sup>17</sup> Most importantly from a crime control perspec-

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<sup>15</sup> M. Renzema and D. Skelton, "Use of Electronic Monitoring in the United States: 1989 Update," National Institute of Justice, NIJ Reports, Nov./Dec. 1990:9-13.

<sup>16</sup> *ibid.*

<sup>17</sup> *ibid.*

tive, the monitoring programs sampled averaged fewer than 4 percent failures for new crimes.

Table 11. Monitoring Failure Rates - 1989		
Monitoring Duration (months)	N	Percent Failures
1	371	29.6
2	289	27.0
3	219	22.4
4	163	21.5
5	86	22.1
6	57	19.3
7-12	84	21.4
13-24	17	17.6

Little is known about the effectiveness of electronic monitoring in controlling crime. The only successful evaluation of an electronic monitoring program compared two populations of early releases from prison. One group was subjected to a 90-day period of house arrest; the other received house arrest plus electronic monitoring. Parolees under house arrest without monitors actually performed slightly better than those on monitors.<sup>18</sup>

### Future Directions

Cost-benefit analyses have valuable messages, but readers should not take numerical results too literally. After digesting pages of statistical tables, often depicting answers to the penny, there is a tendency to place great confidence in a study's conclusions. This confidence would be misplaced. Cost-benefit analyses of prison policies depend heavily on a series of assumptions about what to count and how to measure it. As the Austin and Cohen analyses demonstrated, conclusions can be reversed by changing just one aspect. Readers must pay close attention to the assumptions behind the big-dollar elements in an analysis. They must convince themselves that the assumptions are reasonable, and that other reasonable assumptions would not

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<sup>18</sup> Patricia Hardyman and James Austin, Evaluation of the Oklahoma Department of Corrections Pre-Parole Supervised Release With Electronic Monitoring, National Council on Crime and Delinquency (Draft Final Report to the National Institute of Justice, Grant Nr. 89-IJ-CX-0005), October, 1991.

overturn the author's conclusions. Most importantly, they should consider what factors are included and omitted by the analysis. Cost-benefit studies may indicate the direction in which policy should change, but rarely do they indicate appropriate magnitudes of change reliably.

Study findings reviewed here depend heavily on how many crimes offenders commit each year and how much is saved if the crimes are prevented. Estimates of prison and intermediate sanction costs are of second-order importance. The criminal justice literature contains wide-ranging estimates of offending rates, from 5 to 187 crimes per year depending on what crimes are included and the data methodology. Crime cost estimates vary by similar magnitudes; a rape costs \$357 in Austin's study and \$51,058 in Cohen's. Clearly the outcome of any study will be affected by whether the high or low estimates of these factors are used.

Despite these shortcomings, one must still believe that prisons have been good investments for two reasons: the magnitudes of the benefit-cost ratios and the biased nature of omitted cost factors. Estimated benefit-cost ratios (dollars saved per dollar spent) have favored the sound investment conclusion heavily. Zedlewski computed a benefit return for prisons of 17 to 1; Cavanagh and Kleiman computed returns ranging from 3 to 1 to as high as 37 to 1. Cutting their cost-saving estimates in half would not reverse their conclusions. Secondly, the costs omitted in the analyses err toward understating the savings. Zedlewski computed only the direct expenditures on crime, omitting all the social costs associated with urban decay. Cohen estimated only costs associated with victims. Cavanagh and Kleiman omitted costs of rape, homicide, and drug dealing from their analyses. All authors have omitted the crime savings from deterrence. On the prison costs side, all major cost components -- operations, construction, and inmate welfare costs -- have already been included. Increasingly comprehensive estimates would accrue to the crime savings side of the ledger.

Should prison be expanded beyond present levels? Probably, but policy makers should consider two questions:

- Are the incremental crime savings from additional imprisonments at the 800,000 inmate levels of 1991 as large as they were at the 300,000 levels of 1980?
- Are there alternatives for some offenders that are even more cost-effective than prisons?

We need to update our information on crimes averted by imprisonment. Data from RAND's inmate surveys are more than ten years old. They may no longer be realistic estimates of the average offending rates of inmates, particularly if prison expansion has

brought lower-rate offenders under custody. The large fraction of today's inmates imprisoned for drug offenses is particularly troubling because we don't know how to estimate the crimes averted by imprisoning drug dealers. This is a limitation of current cost analysis capabilities, not a criticism of current policies. These policies may be justified for moral reasons but a cost benefit basis would be more comforting.

Prison is not cost-effective for all offenders. Cavanagh and Kleiman show that, even with their high social cost estimates, low-rate (non-violent) offenders cost the public less on probation or parole than in a prison cell. We must therefore return to the eternal problem of identifying high-rate and low-rate offenders. We need to know what fraction of present inmate populations could have been safely placed in less expensive custody. Is it one percent, ten percent, or thirty percent? Similarly, what percent of those in community supervision should have been sent to prison?

If we can't improve on our abilities to sort offenders in appropriate risk categories, then we need to experiment with new forms of community supervision that either detect offenses quickly or prevent offenses effectively. Neither conventional supervision nor present intermediate sanctions seem to perform these functions very well. A variety of clues for safer sanctions exist.

#### Continuous Restraint

Supervising offenders by probation or parole officers is expensive and places the burden of detecting criminal activity upon the active efforts of the officers. Corrections officials need to find ways to constrain or monitor offender activity more effectively. Recent experiences with intensive supervision programs have pointed up the limitations of spot checks on performance. Probation and parole officers were able to detect more technical violations than they did under conventional levels of supervision, but they were unable to prevent more crimes. The problem with supervision by officers as a means of restraint is that they either control a small amount of the offender's total time or they become prohibitively expensive.

Contrast the logic of active but intermittent supervision of ISP to the passive but continuous supervision of electronic monitoring: departures of offenders from their residences during proscribed hours send immediate signals to supervising authorities. Furthermore, a small cadre of operators can maintain continuous surveillance of a large group of offenders. While electronic monitors do not control all forms of criminal activity equally well (e.g., drug dealers can traffic at home), they deserve more extensive testing than they have had to date. Rigorously supervised schedules of offenders in community corrections programs like day reporting centers also deserve more study.

### Observable Signals.

Several opportunities exist to tap into offender mentalities and to adjust sanctions appropriately, either upward or downward. Drug testing is one such opportunity. Researchers found that offenders on pretrial release in the District of Columbia who failed to appear for drug tests were more likely to be arrested for pretrial crimes. Whether this "signal" was merely a surrogate for drug use or an indicator of contempt for law is unclear. It does appear, however, that drug testing tells criminal justice officials something about the likelihood of offending. Similarly, failure to observe conditions of house arrest and electronic monitoring may be signalling a tendency to commit crimes. These signals should be tested more formally and rigorously in community supervision programs. Prisons offer unmatched opportunities to infer offender tendencies. Gang membership, disciplinary infractions, and overall confinement performance should be tested as predictors of post-release crime.

### Stronger Deterrence.

Many community corrections programs suffer a crisis in credibility. Staffs are stretched to supervise 3.5 million people. The crowded prisons in most states communicate to probationers and parolees that the likelihood of incarceration for failure to comply with conditions of release is small. Thus, offenders have few incentives to comply with program requirements.

Policy makers have two ways to alter these perceptions; the certainty of detecting violations and the severity of penalties imposed. If they feel the latter is limited because of prison capacity constraints, then they need to devise combinations of certain but less severe penalties for violations. Minor violations of probation and parole can be punished by relatively inexpensive means: fines, increased reporting requirements, short jail confinements, curfews, and short community service terms. States can also set aside a portion of their prison capacity for short returns to prison. Governments should be encouraged to experiment with sanctions that can be applied quickly and surely to offenders in community programs.

### Low-Cost, High-Volume Punishment.

While probation is less costly than prison for many offenders, it is not free. Policy makers need to ask the same questions of probation that they ask of prisons: What do we get for the money spent and are there viable alternatives that cost less? For high-risk offenders, the answer may well be that additional prison capacity is in the taxpayer's interest. For low-risk offenders the answer may be to drop probation in favor of fines and suspended sentences.

European nations have enjoyed long and successful experiences with fines as sanctions. They apply them to many more offenses than we do in the American system and set fine amounts in proportion to income to insure punitiveness. American experiences to date with income-based fines have been successful and additional demonstrations are under way. We need to consider whether fines should replace probation as our primary sentence for first-time offenders. They are arguably more punitive and represent a cash inflow, rather than outflow, to the correctional system. Fine payment and subsequent behavior can be enforced by imposing suspended sentences.

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# STEPS IN IDENTIFYING AND SOLVING THE JUVENILE CRIME PROBLEM

by

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## STEP 1...First Juvenile Report entitled:

### **"Analysis of Juvenile Crime and the Juvenile Justice System in New Orleans, LA"**

- \* Presented at Citizen's Coalition Against Crime citywide forum, May 1991
- \* Listed number and type of offenses committed by juveniles over a 6 year period
- \* Copies distributed to the Governor, all legislators, the Mayor and all city/parish elected officials as well as the media.

## STEP 2...Publication entitled:

### **"Word to the World"**

- \* Booklet containing letters from 46 juvenile offenders
- \* Copies distributed to the Governor, all Legislators, the Mayor, all city/parish officials, the media, and all principals, teachers, and parent-teachers groups.
- \* Response has been terrific - now in third printing. Teachers report using this publication in their lesson plans.

## STEP 3...Committee formed in February 1992:

### **Juvenile Anti-Violence Committee**

- \* Purpose is to provide leadership in reducing juvenile violence in New Orleans
- \* Support for programs such as: Cease Fire, Intervention Volunteers, Plan for Parental Involvement
- \* Support legislative package re: juveniles

## STEP 4...Second report entitled:

### **"Juvenile Agenda: Reducing Juvenile Crime in New Orleans"**

- \* Presented at Citizens Coalition Against Crime citywide forum, March 1992
- \* Includes information on juveniles as victims of crime
- \* Proposals for change in the juvenile justice system as well as proposals for involvement at different levels within the community

## STEP 5...Third report was in the form of a proposal to the School Board:

### **"Joint Venture : Making Our Schools Safe"**

- \* School patrols by deputy sheriffs
- \* Plans to form Student Crime Watch programs in each school

## STEP 6...Fourth report entitled:

### **"Juvenile Crime in New Orleans, An Analysis of Weapons Use Among Our City's Juvenile Offenders"**

- \* Presented at Crime Committee of the Chamber of Commerce, June 1992
  - \* Findings from separate local surveys on juvenile offenders and their use of guns
  - \* Copies distributed to the Governor, all Legislators, the Mayor, and all city/parish officials as well as the media.
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