The Costs and Benefits of Electronic Monitoring for Washington, D.C.

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Executive Summary

This cost-benefit analysis (CBA) describes the costs of operating electronic monitoring (EM) and the savings (benefits) to city and federal agencies and to society from reduced recidivism compared to standard probation.

Estimated Impact of EM on Recidivism

The program's effectiveness in reducing reoffending and rearrest are developed from a thorough review of all prior (rigorous) research on EM.

- On average, EM reduces arrests by 24 percent for program participants.
- EM would prevent at least one arrest 84 percent of the time in one year of an EM program serving 800 people.

Agency Savings from Averted Criminal Justice Costs

Benefits to agencies derive from criminal justice costs that are saved at each stage of criminal case processing (arrest, court, probation, jail, prison). Decades of data from states and jurisdictions across the country are also analyzed to estimate how spending (i.e., budgets) tends to respond to reductions in arrests.

- We find that, on average, EM reduces per participant costs to local agencies by $580 and saves federal agencies $920.
- The probability that probation with EM serving 800 people would yield any agency savings is 84 percent.

Societal Savings from Averted Victimization

Another benefit to society results from reduced victimization. This benefit depends on the number of crimes prevented, rather than the number of arrests prevented. Where appropriate, clearance rates are used to help infer how many offenses were averted from the reduction in arrests found in prior research. The prices of crimes to victims are based on jury-award and criminal incident data (Roman 2011).

- We find that the average number of arrests prevented per participant can be expected to generate $3,800 in societal benefits per participant.
- We estimate an 84 percent probability that EM programs with 800 participants would produce societal benefits from averted victimization.

Costs of Program Operation

- We estimate that EM costs approximately $750 per participant per year, and ranges between $460 and $1,070.

Combining Benefits and Costs

To combine the range of the estimated impact of the program with the range of costs of operating the program and the range of savings resulting from those averted offenses and arrests, the District of Columbia's Crime Policy Institute (DCPI) uses Bayesian methods to simulate costs and benefits for programs serving 800 people.

- We find that there is an 80 percent chance that a new EM program will be cost-effective, that is, that the combined agency savings and societal benefits are greater than the cost of implementing the program.
- Though both large positive and negative values are possible, the average expected net benefit is $4,600 per person and the median is $4,800 per person.

Introduction

This is the second in a series of reports that forecast how cost-effective various evidence-based programs would be if operated/expanded in the District of Columbia (DC). These reports use data from many prior research studies, combined with DC-specific costs and DC-specific case processing statistics, to forecast the costs and benefits of implementing the target programs in the District. This report analyzes the annual costs and benefits of probation augmented with electronic monitoring (EM) compared to probation without EM.[1]

After briefly describing the expected outcomes of the average EM program, we estimate the savings from those outcomes for DC residents and local and federal agencies, and describe expected program costs. These data are then combined to produce estimates of the cost-benefit of EM in the District.

Most cost-benefit analyses (CBAs) generate only average cost-benefit (CB) results without discussing uncertainty, statistical significance, or confidence bounds. Without knowing how widely results are expected to vary, such average results provide insufficient basis to forecast the cost-effectiveness of a new program. It is common in criminal justice for positive results to be largely driven by a few program participants with large benefits. In that case, the average is driven by many offenders with little program benefit and a few offenders with large program benefits. This is more likely to be the case if the program to be implemented is small. As a result, while the program may on average yield benefits greater than the costs, in any one replication, there may be a reasonable chance that a program will not be cost-beneficial.

The District of Columbia's Crime Policy Institute's (DCPI's) CBA predicts the range and distribution of expected costs and benefits, and forecasts both the average expected CB result and the probability that the result will be positive.

We find that there is an 80 percent chance that an EM program for 800 offenders would yield benefits that exceed its costs. The expected net benefit per participant of EM is more than $4,500, suggesting that the program is generally quite cost-effective.

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[1] This report is neither an evaluation of existing EM programs nor an evaluation of the EM infrastructure in DC.

Electronic Monitoring

Electronic monitoring is a method of increasing surveillance of offenders who are under some form of community supervision. EM can be employed at various stages of the criminal justice system, from pretrial to parole. EM allows authorities to monitor and verify offenders' whereabouts, increasing the likelihood that violations of the terms of community supervision can be detected and sanctions applied. EM may also deter new offending.

EM is appealing because it is less expensive than incarceration but provides additional supervision compared with traditional probation. We note that our CBA does *not* compare EM to incarceration but rather to traditional probation. Further, in this study EM does not replace any aspect of community supervision. Rather, building on existing evaluation studies, we explore the cost and benefits associated with *adding* EM to standard community supervision.

Two forms of electronic monitoring have become especially prevalent: radio-frequency (RF) and global positioning system (GPS) monitoring. RF monitoring measures whether an offender is within a certain distance of the fixed transmitter; it is almost exclusively used in home curfew sentences and orders. If an offender leaves the home at a prohibited time (often late at night), the RF unit alerts the offender's supervisors that curfew has been violated.

GPS monitoring tracks offenders' movements in real time. In addition to imposing home curfews like RF, GPS is useful for enforcing more complicated supervision orders. For example, it can be programmed to issue a warning to authorities or potential victims if a high-risk sex offender approaches a school or a victim's residence. Real-time GPS (if monitored) can detect absconding much earlier than RF. GPS can also be used to corroborate alibis when new crimes occur.

Despite these differences, GPS and RF monitoring are functionally quite similar—both prescribe acceptable places for an offender to go while on supervision, along with a timetable. Prior studies that compare GPS and RF find very similar effects. As GPS becomes cheaper and more precise, authorities appear to be moving away from RF and toward GPS when administering electronic monitoring (Bales 2010).

Data and Methods Used in DCPI Cost-Benefit Estimates

DCPI cost-benefit analyses combine estimated impact of the program on participant behavior, costs of operating the program, and the benefits from the program to estimate the net benefits to city agencies, to federal agencies, and to society. DCPI presents average cost-benefit estimates as well as the probability that the program is cost-effective.

Program Impacts

The program's impacts are estimated in terms of reduced reoffending and rearrest for one year of EM. These impacts are estimated from prior evaluations of EM. Prior evaluations are combined statistically via a meta-analysis (see appendix A) to generate the average program effect and a distribution about that average. Comparison probationers under Court Services and Offender Supervision Agency (CSOSA) supervision are assumed to be rearrested within one year at the average rate, which is 30 percent (CSOSA 2011).

Savings from Averted Arrest and Offending

Agencies benefit from programs by saving criminal justice resources. For example, preventing an arrest saves police time, court time, jail time, and prison time. The criminal justice resources saved depend on the probability that an averted arrest would have led to jail time, to probation, or to prison time. These probabilities are derived from DC-specific adult criminal justice case processing statistics of those arrested while on probation or parole (see appendix B). These probabilities are combined with regression results from decades of data from states and jurisdictions across the country to determine how spending actually changed in response to changes in arrests, jail and prison populations, and probation caseloads.

Societal Savings from Averted Victimization

Society also benefits from reduced offending in the form of avoided losses to victims. This benefit depends on the number of *crimes* prevented, rather than the number of *arrests* prevented. Where appropriate, clearance rates are used to help infer how many offenses were averted from the reduction in arrests found in the program evaluations. DCPI estimates the monetary value of harm experienced by victims of crime from prior research using jury awards (Roman 2011).

The number of offenses prevented (from the meta-analysis) is combined with a mix of types of offenses prevented by EM.

Costs of Program Operation

Prior program evaluations are used to estimate the amount of resources required for program operations. Where possible, a range of costs is used, because not all programs and participants use the same level of resources. These cost estimates are combined with DC-specific prices for each resource, which in turn are based on current data and expert perspectives from the DC agencies.

Simulation
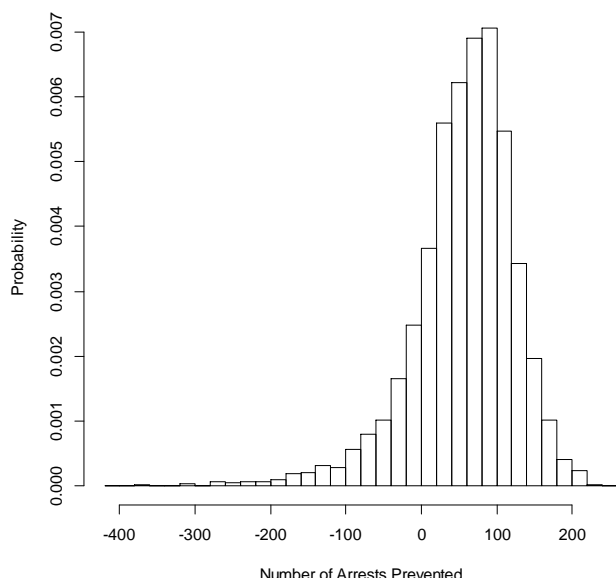
DCPI uses Bayesian simulations to combine the range of the estimated impact of the program with the range of costs of operating the program and the range of benefits resulting from those averted offenses and arrests. For these estimates, we simulate the impacts, costs, and benefits for a hypothetical program serving 800, and run this simulation 4,000 times. For each simulated program, the average costs and benefits per participant were calculated. (We note that we find that the smaller the program, the greater the risk that a generally effective program will be found not to be cost-beneficial. We find empirically that 800 is the minimum number of participants to minimize that risk.)

Estimated Program Impacts

Seven prior evaluations of EM supervision were used to estimate program effectiveness in preventing new offending and arrests[2]. DCPI combined these prior studies using a meta-analysis. (**Appendix A** describes the underlying studies and the meta-analysis.)

We find that EM programs are generally effective in reducing offending. However, effectiveness varies considerably among programs. **Figure 1** displays these results in terms of the expected outcomes for 4,000 simulated programs, each involving 800 offenders.

Figure 1. Histogram of Number of Arrests Prevented by EM Programs for 800 Probationers

The EM program is effective (the number of arrests prevented is greater than zero) 84 percent of the time. Programs with 800 offenders reduce rearrests by 23.5 percent, or by 56 arrests, on average. (Our simulations find that 184 of the 800 offenders in the EM group are rearrested, on average, compared to 240 rearrests for standard community supervision.) There is a 25 percent probability that the program will prevent more than 100 arrests, and there is also a 25 percent probability that EM will prevent fewer than 23 arrests. The variability also means that there is some possibility that the program will increase arrests.

Savings from Averted Arrests and Offending

Cost-benefit analysis requires that the arrests prevented by the EM programs be translated into dollars so they can be compared to the program cost. The benefits of preventing new crimes and new arrests include savings to criminal justice agencies[3] as well as savings from prevented victimizations.

The arrests prevented by an EM program (shown in **figure 1**) are expected to generate $5,300 in benefits per participant, on average, as shown in **table 1**.

The benefits for an EM program with 800 participants also have considerable variation. For society as a whole, there is a 25 percent chance that savings per participant will be $9,400 or more, and a 25 percent chance that savings will be $1,700 or less. For city agencies, there is a 25 percent chance that savings will exceed $1,030, but a 25 percent chance that they will be $230 or less.

Table 1. Expected Benefits per Participant, from a Program Involving 800 Offenders

Stakeholder	Mean	Median	25 percent chance greater than	25 percent chance less than	Percent greater than zero
All society	$5,300	$5,600	$9,400	$1,700	84
City agencies	$580	$640	$1,030	$230	84%
Federal agencies	$920	$900	$1,650	$280	84%
Potential victims	$3,800	$3,800	$6,800	$1,100	84%

Most of the savings—$3,800 on average—are from prevented victimizations. City agencies can expect to save $580 per participant, on average, and federal agencies can expect to save $920 per participant.

The savings from prevented victimizations are much greater than the agency savings for two reasons. First, most of the offenses prevented would not have led to substantial criminal justice costs, because most offenses committed do not lead to arrests or criminal justice costs. And even for serious crimes like assault, only 4 percent of arrests result in prison, the most costly sanction. But society and victims benefit from all offenses prevented, including offenses that would not have been detected. Second, savings to victims are considerably larger than criminal justice costs. For example, the harm from a prevented assault is three

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[2] This report is not an analysis of any program currently operating in DC. CSOSA numbers were used as a guide to estimate of the size of a hypothetical EM program.

[3] Because EM involves monitoring offenders more closely, it may also increase arrests and corresponding criminal justice costs—whether or not offending is changed.

times the cost of a year in prison. Therefore, the savings of preventing victimization are higher than the savings of avoiding the most costly intervention by an agency. (See DCPI's prior report, Downey et al 2012, for more detail.)

Costs of EM Program Operation

Program costs are estimated by combining the estimated length of EM surveillance and the DC-specific costs of implementing an EM program.

Because GPS technology is becoming cheaper and more widely used relative to RF, we use estimates of the cost of GPS. GPS costs included the cost of the equipment and the cost of monitoring. The cost of equipment varies considerably across GPS programs. We used a range of equipment cost from $1 a day to $12 a day in our simulations. We assume that the length of time on electronic monitoring is between 14 and 90 days (CSOSA n.d.). Consistent with the current EM practice in DC and from previous studies (e.g., Bales 2010), we estimated that monitoring costs are $8 per day per supervisee.

We estimate that the average per person cost is $750, and that there is a 25 percent chance that it will be less than $610 and a 25 percent chance that it will exceed $900. Compared to the variation in benefits, though, this variation in costs is fairly minimal.

Combining Costs and Benefits

When costs and benefits are combined, the result is the *net benefit*. **Figure 2** shows the probability of each level of expected costs and benefits, per participant, for programs involving 800 participants. The net benefit is the difference between cost (the red line) and benefit (the blue line). When benefits exceed costs, then the program has a positive net benefit.

The costs (red line) of program implementation are relatively low and almost constant. The benefits (in black) vary considerably, with both extremely positive and negative outcomes being possible. The point where the two lines cross is the "break-even point" where total benefits equal the costs of program implementation. This occurs at a probability of 0.2, meaning there is a 20 percent chance EM will have costs that exceed the benefits and an 80 percent chance the benefits will exceed the costs. **Figure 2** also suggests that the benefits are likely to be much larger than the costs.

Figure 2. Probabilities of EM Costs and Benefits per Participant, for a Program with 800 Participants
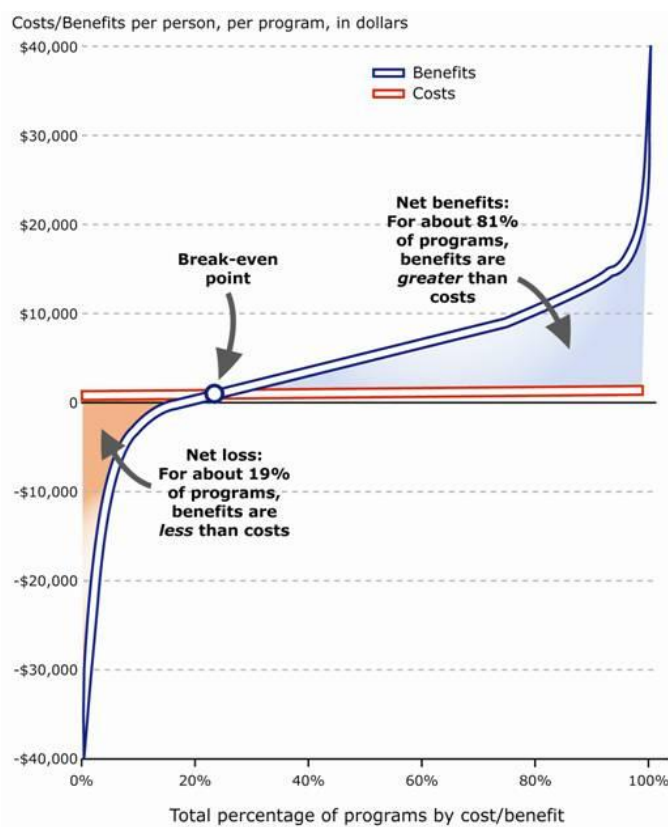
On average, EM generates $4,600 net benefits per participant, with a median net benefit of $4,800. There is a 25 percent chance that EM will generate more than $8,700 in net benefits per participant. On the low end, there is also a 25 percent probability that EM will generate $1,000 or less in net benefits per participant.

Table 2. Expected Net Benefits per Participant, for a Program with 800 Participants

| Stakeholder	Mean	Median	25 percent chance greater than	25 percent chance less than	Percent greater than zero
All society	$4,600	$4,800	$8,700	$1,000	80%
City and federal agencies	$750	$850	$1,930	-$230	70%
Victims	$3,800	$3,800	$6,800	$1,100	84%

Discussion

The analyses in this report document the effectiveness of electronic monitoring. Compared to standard probation, probation augmented with electronic monitoring is expected to reduce the rearrest rate within one year by more than 23.5 percent. Weighing

together the costs and benefits of implementing electronic monitoring in DC, there is an 80 percent chance that that an EM program will be cost beneficial and that the average benefit (before costs are taken out) is almost $5,000 per participant. In conclusion, probation with EM is generally cost beneficial compared to probation without EM.

The above results are based on an assumption that an EM program in DC would serve 800 probationers. The assumptions made about program size have an effect on the results. Though the average net benefit does not change considerably as program size changes, the probability of achieving that result does (**figure 3**).

Figure 3. Probabilities of EM Costs and Benefits per Participant, as Program Size Increases
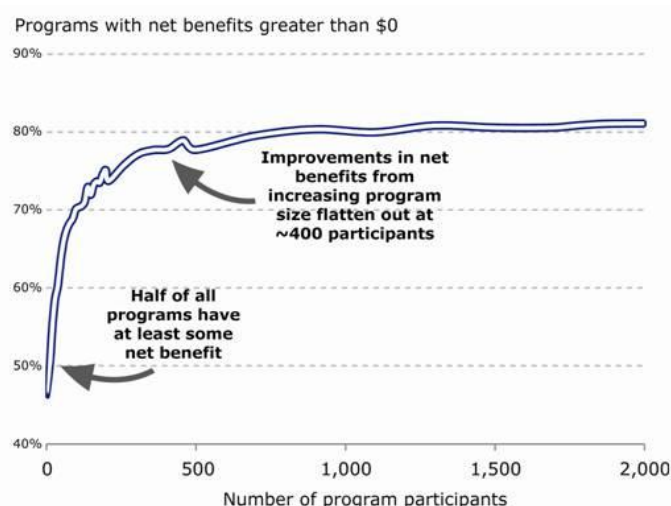
There is more variation in effectiveness in smaller programs, and there is also a smaller probability of preventing socially costly but relatively rare arrests such as aggravated assault or homicide. Thus, the probability that the net benefit will be above zero is smaller for small programs. As **table 3** indicates, a pilot program of just 50 or 100 participants is much less likely to generate positive net benefits than one with 800 participants. Overall, for an EM program in Washington, DC, at least 400 individuals would need to be enrolled to achieve an 80 percent probability that overall benefits will exceed overall costs.

Table 3. The Probability of Net Benefits for Differently Sized Programs

Program Size	Mean	Median	Percent greater than zero
10 Participants	$4,500	-$150	48.6%
50 Participants	$4,500	$2,000	63.6%
100 Participants	$4,600	$2,900	69.0%
500 Participants	$4,400	$4,300	78.4%
800 Participants	**$4,600**	**$4,800**	**80.4%**
1000 Participants	$4,300	$4,800	80.5%
2000 Participants	$4,400	$5,000	81.0%
7500 Participants	$4,400	$5,100	82.4%

It is also important to note that a comparison of EM to other interventions (including jail or prison) may lead to very different results. On the one hand, comparing prison to EM, for example, the expected budgetary savings would be much higher, as incarceration is more expensive than probation. On the other hand, crime would always be higher for the nonincarcerated population on EM than for offenders who are incarcerated. This means that societal benefits would always be *negative* for the EM population—in contrast to the current findings that offenders under EM commit fewer offenses than while under standard community supervision. The current results, therefore, provide little basis for estimating the cost-effectiveness of EM relative to prison, which are likely to be substantially higher.

Finally, we note that the mix of EM participants will also affect cost-effectiveness. From the meta-analytic data, we are not able to isolate the cost-effectiveness of various populations (e.g., drug offenders compared with sex offenders) or various risk levels. As follow-on, that analysis is critical for identifying programs that are as far as possible to the right in **figure 2**.

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Appendix A: The Meta-Analysis

Several recent rigorous studies of the effectiveness of EM have considerably enhanced the literature of rigorous evaluations of EM. In light of these newly available studies, DCPI conducted a new meta-analysis of EM studies, limited to those that meet a high standard of methodological rigor.

Thirty-seven studies were identified that quantified recidivism measures for offenders placed on EM, using previous meta-analyses as a starting point (Aos et al. 2011; Renzema and Mayo-Wilson 2005), and drawing upon the National Reentry Resource Center's *What Works* library and recently published academic research. The seven studies that met our inclusion criteria are listed in table A-1. These seven studies were subjected to a random-effects meta-analysis. Most of the studies were published in the past five years; three were published in the past two years.

Inclusion Criteria

The meta-analysis was limited to studies that met high levels of rigor. Key inclusion criteria included the following:

Comparison Groups. Only studies with strong comparison groups were included. One random assignment study was included. Other studies included were well-conducted quasi-experimental studies with plausible equivalent comparison groups, and statistical methods used to control for preexisting differences between EM and comparison-group members.

The Marginal Impact of EM. The comparison group must have been treated similarly except for EM. This allows us to measure the "marginal" impact of EM. If, for example, the EM group received additional help finding a job, then we required that the comparison group also receive comparable employment assistance. Studies were not included when they evaluated EM as part of a package involving other components (e.g., drug treatment) in a way that did not allow us to disentangle these program components and isolate the marginal impact of EM.

Follow-Up Period. Only studies with a properly constructed follow-up period that were equivalent across the EM and comparison groups, or that used proper statistical methods to equate follow-up periods (survival methods), were included.

EM Technology. Studies using either RF or GPS monitoring were included. These technologies are functionally similar and have been deployed similarly. One study examined only GPS monitoring, four examined only RF, and two involved both. Given that GPS is hypothesized to be more effective than RF, we may be modestly underestimating the effectiveness of EM.

Domestic and International. Studies from abroad were included. Although the structure of the criminal justice system is different from country to country, electronic monitoring involves the targeted implementation of a consistent technology, which should have similar effects across countries. Four of the studies are from abroad, and three are domestic.

Findings

The seven studies have heterogeneous findings: Three find essentially no effect for EM, while three find that it is effective and statistically significant. The final study does not find that EM is statistically significant, but shows that EM is effective at reducing arrests.

One outlier study found that EM almost completely eliminated recidivism. Because meta-analysis is susceptible to extreme bias at the hands of outliers, we follow Lipsey and Wilson (2001) in recoding the outlier to be less extreme. Considerable variation remained among the study effects.

Only one study showed a negative effect, which was not statistically significant. However, the level of variation among studies implies that the range of possible effects extends to negative effects, using standard meta-analytic techniques. That is, based on the observed variation patterns in these studies, our best estimate is that when more studies have accumulated, they will include negative effects as well.

Table A-1. Key Features of Studies Included in the Meta-Analysis

Citation	Dependent variable	Control Group	Treatment Group	Number of participants	Analytic Method	Notes	Follow-up	Findings
Bales et al. 2010	Absconding, revocation for technical violation, revocation for misdemeanor or felony	Moderate- and high-risk offenders who did not receive EM at any point, under some form of community supervision	Moderate- and high-risk offenders who received any EM at any point during supervision	5,034 treatment and 266,991 control	Propensity score matching for control and Cox-Proportional Hazard	Examined both GPS and RF, State of Florida 2000–2007	N/A—length of supervision only	Hazard ratio = .687
Bonta et al. 2000	Reconviction within one year of completion of supervision or prison; treatment completion	Treated probationers, Released inmates in places where EM is unavailable	Moderate-risk (nonviolent or nonsexual) offenders who received EM as part of community supervision	54 on EM; 17 on probation; 100 no supervision	Matched control in places where EM is unavailable; ordinary least squares (OLS)	Newfoundland, Canada; treatment completion tied to revocation only for EM	1 year	Odds ratio: .84, 95% CI: [0.27, 2.66]
Di Tella and Schargrodsky 2010	Whether they have been "returned" to the criminal justice system "for another crime"	Individuals with similar characteristics to treatment population sampled randomly; most recent form of supervision is prison, also pretrial	Offenders on pretrial detention (both violent and nonviolent)—given RF for house arrest as most recent supervision. Also: • Not dangerous • Under 40 • Not sick/dying	386 EM; 1,152 control	OLS/Probit	Buenos Aires; Natural experiment; control has spent time in prison on pretrial detention	N/A	Probit results: coefficient= -.42, t score = -3.99

Citation	Dependent variable	Control Group	Treatment Group	Number of participants	Analytic Method	Notes	Follow-up	Findings
Dodgson et al. 2001	Reconviction rate	Offenders with similar characteristics who were sentenced before home detention curfew (HDC) was available (historical controls)	Any offender sentenced to between 3 months and 4 years eligible for release 60 days early w/ EM	676 treatment period; 6,723 control	Comparing averages of all current vs. all historical	England; HDC (house arrest); no control for time on HDC	6 months	Difference in offending = 30.8%–30%, favoring the nontreatment period (no Standard Error given)
Killias et al. 2010	Reconviction for a new offense, mean number of new offenses	Minor property or drug offenders who are eligible for both community service (CS) and EM randomly assigned to community service	Minor property or drug offenders who are eligible for both community service and EM randomly assigned to home curfew with RF monitoring	115 EM, 117 control	Random assignment; matched for age, gender, nationality, and marital status	Curfew order with RF monitoring in Switzerland	3 years from placement	EM rate=23%; CS rate = 31%. Chi-squared test = 1.97
Padgett et al. 2006	Revocation for new offense	Offenders placed on home confinement between 1998 and 2002 but not put on EM	Offenders placed on home confinement at same time they received EM (either RF or GPS)	3,253 RF, 2,270 GPS, 70,138 control	Survival analysis	Includes both GPS and RF as treatment options; includes other conditions of supervision as control	104 weeks from the first day on placement	Revocation for new offense (both RF and GPS): hazard ratio = .053

Citation	Dependent variable	Control Group	Treatment Group	Number of participants	Analytic Method	Notes	Follow-up	Findings
Turner and Jannetta 2007	Technical Violations; new criminal behavior; time to recidivism	High-risk sex offenders (HRSOs) (parolees) at same time and same place not on GPS surveillance (but subject to a host of restrictions related to HRSO parole)	High-risk sex offenders (parolees) in San Diego County on GPS surveillance (generally deemed highest risk)	94 EM, 91 control	Fisher's exact test, logistic regression	GPS, targets only sex offenders; examines both success rate and time to follow-up	6-month follow-up constructed individually for each participant	Odds ratio: 0.883 95%; CI: [.388, 2.011]

Appendix B. Criminal Justice Processing Probabilities Used in the Analysis

The criminal justice agency savings that result from preventing an arrest are the costs that would have been incurred had that arrest not been prevented. For instance, while an arrest may lead to costly prison sentences or jail stays, it also may prevent new crime by keeping an offender off the streets. To do this, we estimate the likelihood that an arrest for a particular crime would lead to probation, jail, or prison. We refer to these as "conditional probabilities," as they are the probability of an event, conditional on there being an arrest. To capture the variation in these probabilities, the analysis used simulation-based methods, rather than simply using an average value. This table, compiled using data from the DC Pretrial Services Agency, includes the probabilities of arrest and case processing for probationers, which are used in the analyses.

Table B-1: Case Processing Probabilities for Probationers in the District of Columbia

Arrest charge	Overall Probabilities			Conditional on being arrested			Conditional on being convicted			
	Percentage of all arrests	Prob. use a public defender	Prob. of being held pretrial	Prob. of being acquitted in trial	Prob. of being convicted in trial	Prob. of pleading guilty	Prob. of being sentenced to prison	Prob. of being sentenced to jail	Prob. of being sentenced to probation	Prob. of being fined
Arson	0.1%	51.6%	100.0%	6.3%	8.1%	65.8%	75.1%	24.9%	12.0%	83.3%
Assault (Felony)	5.9%	56.0%	74.4%	8.2%	5.4%	43.3%	36.5%	37.8%	23.6%	85.7%
Assault (Misdemeanor)	21.1%	56.0%	57.3%	6.2%	3.9%	31.2%	1.3%	60.1%	41.3%	88.0%
Burglary	1.2%	62.0%	100.0%	4.1%	9.1%	73.4%	63.1%	36.3%	21.3%	87.9%
Disorderly Conduct	2.6%	52.7%	16.0%	0.0%	1.3%	10.5%	0.0%	39.1%	49.7%	96.6%
Drug (Felony)	13.8%	56.3%	72.9%	1.3%	6.9%	55.9%	35.3%	39.7%	39.1%	91.6%
Drug (Misdemeanor)	23.7%	61.0%	41.6%	2.0%	5.4%	43.5%	2.0%	56.3%	35.7%	86.3%
Family	1.2%	0.0%	65.6%	8.9%	5.3%	43.3%	1.2%	62.5%	41.2%	85.1%
Fraud/Forgery	0.2%	55.6%	69.4%	5.8%	3.5%	28.6%	31.0%	25.1%	53.9%	57.7%
Motor Vehicle Theft	1.8%	67.5%	56.9%	1.0%	2.7%	22.0%	7.8%	54.6%	28.4%	79.0%
Murder	0.8%	36.0%	100.0%	12.3%	6.9%	56.1%	91.9%	3.2%	4.9%	90.4%
Property	6.4%	60.6%	46.6%	3.0%	4.2%	33.7%	2.4%	57.9%	23.0%	75.1%
Prostitution	7.3%	0.0%	39.4%	1.3%	4.7%	38.4%	0.6%	67.7%	15.2%	77.4%
Rape/Sexual Abuse	0.2%	46.0%	100.0%	11.5%	7.7%	62.3%	68.9%	31.1%	30.1%	78.6%
Robbery	2.6%	55.1%	88.5%	0.7%	6.8%	55.4%	70.8%	26.9%	23.2%	84.0%

District of Columbia Crime Policy Institute (DCPI)

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DCPI is a nonpartisan, public policy research organization focused on crime and justice policy in Washington, D.C. DCPI connects a diverse team of prominent scholars and policy experts. With funding from the Justice Grants Administration (JGA) in the Executive Office of the District of Columbia Mayor (EOM), DCPI was established at the Urban Institute in 2009.

Administered by the Justice Policy Center at the Urban Institute, DCPI's mission involves three tasks: conduct analyses of the costs and benefits of justice policies and programs for the District of Columbia; create a publicly accessible research library of crime and justice research in the District of Columbia; and conduct research and evaluation projects concerning District of Columbia crime and public safety, crime prevention, and crime policy.

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