A study of California high-risk sex offenders on parole found that those placed on GPS monitoring had significantly lower recidivism rates than those who received traditional supervision.

Researchers examined the effectiveness of using GPS to monitor high-risk sex offenders placed on parole in California (see sidebar, “Using GPS to Monitor Sex Offenders,” on page 23). The NIJ-sponsored study included 516 high-risk parolees who had been released from prison between January 2006 and March 2009. Half of the parolees wore GPS monitoring devices in addition to receiving traditional parole supervision, which involves regular contact by parole agents and weekly sex-offender treatment classes (“GPS group”); the other half received only traditional parole supervision (“traditional group”). Researchers tracked each parolee for one year following his initial parole date.

The study involved:

- An outcome evaluation to assess both the cost of the GPS program and its effectiveness in reducing the criminal behavior of high-risk sex offender parolees.
- A process evaluation to assess the program’s design and implementation.

The researchers collected information from the state’s data
management system and examined official arrest records, parole supervision records, GPS monitoring data and state cost information. In addition, they conducted a survey of roughly 1,000 California Department of Corrections and Rehabilitation (CDCR) parole officers. The survey included questions about the GPS monitoring system, caseloads, program staffing and screening of high-risk sex offender parolees.

GPS More Expensive, but Also More Effective

The researchers found that parolees in the traditional group — those not placed on GPS monitoring — committed new crimes and had their parole revoked more often than did parolees in the GPS group. In addition, the traditional group returned to custody at a rate 38 percent higher than the GPS group.

The cost analysis showed that in California, monitoring parolees using GPS costs approximately $35.96 a day per person, while the cost of traditional supervision is about $27.45 a day. The GPS program is more expensive but more effective. Although the GPS program costs $8.51 more per day than traditional supervision, the GPS approach produced a decrease of 12 percentage points in arrests for any offense (from approximately 26 percent to 14 percent). In addition, offenders who were monitored using GPS complied with the terms of their parole at higher rates than did offenders on traditional parole.

The cost of California’s GPS monitoring is lower than the cost of moving parolees to “indefinite civil commitment,” which entails sending sex offenders whose prison sentences are over, but who are believed to be too dangerous to release into the community, directly from confinement in prison to confinement in dedicated institutions. Such civil confinement programs can cost an average of more than $100,000 a year per person because of the programming that must be provided.

Reexamine the identification of high-risk sex offenders. To identify high-risk populations, California currently uses the standardized Static-99 risk instrument, which measures “static” factors that do not change over time (see related article, “Predicting Recidivism Risk: New Tool in Philadelphia Shows Great Promise,” on page 4). However, in the survey of parole agents, nearly half of respondents said that the Static-99 does a poor job of identifying high-risk sex offenders. The researchers noted that the current risk instrument may predict

Using GPS to Monitor Sex Offenders

GPS monitoring uses satellites to calculate an offender’s physical position. The offender wears a tamper-resistant bracelet — typically worn around the ankle — that receives transmissions from the satellites and calculates the offender’s location. In “passive” monitoring systems, this information is stored and transmitted at appointed times to a monitoring station. In “active” systems, information on the individual’s location transmits to a monitoring station in near real time, allowing the station to alert officers immediately when a violation occurs. Both systems allow exclusion zones (such as schools or other places where children congregate) or inclusion zones (such as a workplace) and provide information on when and where an individual has been throughout the day.

In California, sex offenders designated as high-risk are placed on actively GPS-monitored caseloads, while non-high-risk sex offenders are on passively GPS-monitored caseloads. However, in the state, information in both caseload types is received at near-real-time intervals. The difference is that information in the active system is reviewed more frequently than information in the passive system. Vendor-operated monitoring centers track this information and email daily reports to parole agents that detail all of the activity recorded by the GPS device. The centers also send an immediate alert notification to agents via text message whenever the GPS device records an inclusion/exclusion zone violation, tampering with the strap, a low battery, a cell communication gap or no GPS communication.
recidivism, but those convicted of noncontact offenses such as exhibitionism pose less of a threat than do rapists and child molesters. Thus, the researchers recommend using a system that accounts for the different recidivism risks among offenders and the varying threats to public safety.

**Monitor attendance at treatment classes.** CDCR mandates that high-risk sex offender parolees attend weekly treatment classes. However, the researchers found a disconnect between parole agents and service providers in terms of tracking treatment attendance; 100 parolees had no record of attending treatment during the study period. Further, in the survey of parole agents, only 75 percent of agents said that their parolees attended treatment at least once a week. Previous research indicates that the meticulous monitoring of sex offender treatment is an important facet of sex offender supervision and that sex offenders who stop attending treatment have higher recidivism rates. The researchers recommend that parole authorities strictly monitor and enforce weekly class attendance.

**Use graduated sanctions that balance cost and risk.** Instantly sending someone back to prison for a minor violation is costly. GPS supervision costs $35.96 daily, whereas the cost of keeping someone in a California prison is about $129 per day. The researchers recommend that CDCR — rather than issuing blanket parole revocations and sentencing violators to go back to prison for a few months at a time — employ a graduated sanctions system for dealing with parole violations. Such a system weighs the gravity of the offense against the need to preserve public safety, thereby increasing the likelihood that a parolee with a serious violation is incarcerated, while one who presents less danger is still sanctioned but in a less restrictive, less costly manner (for example, by imposing a home curfew on the offender). The researchers added that California is in the process of piloting a new, structured decision-making system for dealing with parole violations, which will allow parole agents to scientifically weigh an offender’s risk level and the benefits of alternatives to prison as part of their decision-making process.

**Mandate the use of zones.** The researchers also found that parole agents were neglecting to use inclusion and exclusion zones. Such zones are intended to keep parolees either within certain areas, such as home and work, or away from certain

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**History of GPS Monitoring Policies in California**

The California Department of Corrections and Rehabilitation (CDCR) began using GPS to supervise sex offenders in the community in 2005, when it began a two-year pilot program involving 500 GPS devices. The goals of the pilot were to give corrections officials experience with GPS monitoring and to resolve as many implementation issues as possible before expanding the program. However, the passage of California Proposition 83 — better known as Jessica’s Law — in November 2006 forced the department to quickly expand its efforts; Jessica’s Law required that all sex offenders be placed on GPS monitoring for life. The law also:

- Forbade sex offenders from living within 2,000 feet of any school or park where children congregate.
- Increased sentences for some sex crimes, including life sentences for some offenses against children.
- Changed the criteria for sexually violent predators, increasing the number of sex offenders who are eligible for a civil commitment for treatment instead of being released on parole.
- Made CDCR parole officers responsible for enforcing the terms and conditions of Jessica’s Law while a parolee is under the state’s supervision.

By April 2008, CDCR had equipped its high-risk sex offender population of 2,500 with ankle monitors. By the end of 2008, the department had fully implemented the program by equipping 2,300 non-high-risk offenders with monitors, bringing the total to 4,800. This total was nearly three times as many as that in Florida, which has the second-largest use of GPS units.

As of August 2011, almost 10,000 sex offenders were on parole in California. About 7,000 of them were living in the community, with roughly 99 percent being monitored by GPS technology.
Sex Offenders Monitored by GPS Found to Commit Fewer Crimes

For more information:

- To learn more about the Offender Tracking Standard under development at NIJ, visit http://www.nij.gov/nij/topics/corrections/community/monitoring-technologies/tracking-standards.htm.


Use a monitoring center to screen alerts. The large majority of parole agents (89 percent) reported in the survey that GPS monitoring was more time-intensive than traditional supervision. Until fairly recently, officers were receiving alerts when offenders tampered with the GPS device or committed other detectable violations. These alerts might also have included incidents such as an offender being in the basement of a building, sounding an “alarm” simply because someone was out of reach of the GPS monitoring system for a few minutes. From January 2009 until December 2010, paroled California sex offenders generated 1.5 million alert notifications. The researchers noted that according to an internal CDCR document, officers spend 44 percent of their time monitoring movements by GPS and only 12 percent of their time in the field.

To help remove the burden on agents of responding to “minor” alerts, California switched to a centralized monitoring system in 2011. Under the new system, two vendor-operated centers screen the thousands of GPS alerts that agents receive each month and respond to the more technical alarms, such as a battery that has run too low. The centers forward alerts that are more serious to parole officers, allowing officers to focus more closely on direct supervision and on responding to real threats to community safety.

Limit caseload to 20. GPS increases the information that officers receive about parolees, but reviewing this information is time-consuming and reduces the time available for direct supervision. As noted, agents spend only about 12 percent of their time in the field. According to the researchers, the best way to ensure that parole agents have sufficient time to directly supervise offenders is to limit the caseloads of GPS parole agents. In fact, the researchers found in their outcome evaluation that the size of the caseload was correlated with parole violations and with parolees returning to custody. Therefore, the researchers recommend smaller caseloads of no more than 20 people per officer.

Issues and Concerns

Finally, the researchers noted that GPS monitoring is not a panacea. The systems can give false positives for violations. For example, sometimes a monitored offender “disappears” simply because he is in an underground location, forgets to recharge the battery that powers the system, or even decides to go to sleep under an electric blanket that disrupts the GPS signal. In these instances, the system would send an alert even though no criminal activity was taking place.

The researchers also pointed out other possible limitations of their work. The study lasted only a year, and results may vary over longer periods. In addition, at least one previous study found that once the GPS monitoring ends, offenders who had been monitored by GPS do just as poorly as other offenders.


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