

**MONITORING HIGH RISK CRIMINAL OFFENDERS
A LOOK TO THE FUTURE**

by

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

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A LOOK TO THE FUTURE

An unstable economy (Samuels, 2011), US Supreme Court mandates (Thompson, 2011) and recent legislation have come together to force population reductions in California prisons. (Watkins & Thompson, 2011) This has subsequently increased the parolee populations in California communities (Villacorte, 2012) and a need to evaluate how parolees are monitored today and in the future. One well established method is the electronic monitoring system, but what will these systems look like in one or two decades; further, how will we get there?

In 1977, Jack Love read a Spiderman comic book in which the villain, Kingpin, tracked Spiderman's every movement using a monitoring device worn on Spiderman's wrist. Jack Love would later become a New Mexico District Court Judge. Judge Love was so intrigued by the idea of monitoring the movements of another that he pursued the development of a similar device for use in real-life situations. Such a device was soon created, and in 1983 the device, the *electronic handcuff* ("Once judge finishes," 1983), was used on five offenders in Albuquerque, New Mexico (Klein-Saffran, 1993). The National Institute Of Justice would later proclaim that these monitoring devices were a beneficial alternative to incarceration (Klein-Saffran, 1993) . After the 1983 trials prove to be successful, radio frequency monitoring began to be used with greater regularity. It enhanced the ability to monitor high-risk offenders with more oversight than simple probation or parole could provide, yet it also allowed greater freedoms than incarceration.

The earliest models of radio frequency monitoring devices were primarily used for house arrest. The monitored subject wore an ankle bracelet that transmitted a radio signal to a receiving unit within the subject's home. The receiver sent messages to the monitoring agency through the

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telephone hooked up to the receiver. If the subject moved too far away from the receiver, authorities would be notified through the landline phone service (MDOC, 2004). Radio frequency monitoring devices allowed authorities to know if the monitored subject was abiding by their conditions of probation or parole and confirmed the subject was at their residence at mandated times.

In 1947, California became the first State in the Nation to register and monitor convicted sex offenders in. The majority of states didn't begin registering and monitoring sex offenders until the 1990's (DOJ, 2001). Old fashioned house visits were the standard for monitoring prior to the early 1980s. With signing of the Adam Walsh Child Protection and Safety Act in 2006, however, all US states were required to register sex offenders (Rogers, 2007).

By the mid-1990's, electronic monitoring began using cell phone technology to communicate with authorities. This was a simple modernization of the previous system and did not allow for greater mobility of the monitored subject. These systems were used for home detention or house arrest and are often referred to as "tethers", because they kept the monitored subject within about 150 feet of the receiver unit. Moving beyond this perimeter would result in a lost radio frequency signal and a notification to authorities. While the earlier systems of electronic monitoring allowed for greater oversight of the monitored subject, there are many instances of failures in monitoring due to the actions of those required to wear them.

The most common failure of EM monitoring was when a subject slipped off the ankle monitor to commit crimes away from the home without detection (Harig, 2002). Many simply cut the monitor off and went about their criminal ways. "Man cuts off ankle monitor, skips court date" (Cominsky, 2012) is a headline seen far too many times with electronic monitoring. A

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simple Internet search of, “*cut off ankle monitor*” will reveal page after page of related news articles. Some criminals go right back to their criminal ways when they know they can no longer be tracked. The cost is an increased fear in the community, new incidents of victimization, tracking costs to locate the suspect and of course, replacement cost of the destroyed tracking device.

Today, advancements in technology and robust infrastructures make electronic monitoring a much more effective way to track probationers and parolees. Contemporary EM can also offer an alternative to incarceration. The significant difference in capacity was the 2005 introduction of GPS systems to monitor high-risk sex offenders (HRSO's) by the California Department of Corrections and Rehabilitation (CDCR) (Gies, Gainey, Cohen, Healy, Duplantier, Yeide, Bekelman, Hopps & Bobnis, 2012). The passing of Jessica's Law in 2006 mandated the CDCR to monitor all HRSO's via GPS for the rest of the offender's life. In December 2008, roughly 4,800 HRSO's were monitored with GPS by CDCR. In just over three years, that number had risen to 6,600, an increase of about 33% (DAPO, 2012). Unlike the original home detention models, the latest technology allows for greater freedom of movement for the monitored subject while providing real-time location notification and tampering identification to the monitoring agency.

In 2012, California parole agents began using the newest technology in GPS monitoring. Satellite Tracking Of People, a company based in Houston, Texas, now provides GPS monitors for use by parole agents with HRSO's. Steve Van Bebber, a parole agent in Santa Clara County, is currently assigned to the High Risk Sex Offender GPS Tracking Unit . Van Bebber described the current technology as a great step in monitoring HRSO's. "The biggest impact with the new units is deterrence" explained Van Bebber. He frequently interviews HRSO's and explained that,

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"Many are tempted (to reoffend) but knew they would get caught", because they wore GPS monitoring devices. (S.Van Bebber, personal communication, June 27, 2012). In fact, Van Bebber continued, some parolees on GPS monitoring keep doing "what they know" despite the data collected to reflect their whereabouts. One stark example of this penchant is the case of Frank Raymond Floyd, convicted of a string of burglaries while wearing his GPS monitor. In trial, the judge noted "they actually have your little (GPS) dot going to a house that was broken into...you've really wreaked havoc all over the community. The only thing we can do is take you off the street..." (Johnson , 2012).

In spite of the flaws and misuse, GPS monitoring continues to become more sophisticated. The newest units have many features seen in older versions such as tampering notification, zone violation alerts (specified areas where the parolee is prohibited) and real-time location verifications. A new feature includes notifications when the parolee attempts to jam the GPS signal with radio frequencies or shields the unit from GPS satellites by covering the unit with a foreign material (STOP, 2012). Additionally, the software allows a search to determine if a monitored subject was in the area of a criminal event at the time it occurred. The program can also identify which monitored subjects may have jammed or shielded their devices when a criminal event occurred. This feature, known as crime correlation, will help to identify criminal suspects while moving others out from under the cloud of suspicion (STOP,2012). A report released by CDCR and the National Institute Of Justice in April of 2012 indicates that it costs just \$8.51 more per day to monitor a HRSO with GPS tracking units than traditional forms of monitoring (Gies, Gainey, Cohen, Healy, Duplantier, Yeide, Bekelman, Hopps & Bobnis, 2012).

The evolution of electronic monitoring from its 1977 Spiderman comic beginnings to the 2012 real-time and tamper-resistant GPS unit is an indicator that electronic monitoring of high-

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risk criminal offenders is not a passing fad. The obvious question then, is its effectiveness. Does the use of GPS monitoring of high-risk criminal offenders reduce recidivism and increase levels of parole compliance? A study conducted by Florida State University and funded by the National Institute of Justice sought to answer these very questions in a report released in September of 2011.

Research conducted in 2011 of Florida parolees showed a reduction in revocation, absconding, recidivism and new crimes by those with GPS monitoring as opposed to those without GPS monitoring. The researchers compared 5000 subjects monitored with GPS to 266,000 subjects without GPS monitoring over a six years. Comparisons were made by age, gender, and crime type such that it was truly an apple to apple comparison with GPS monitoring being the only significant difference (NIJ, 2011). The study was quite extensive and the results are very impressive. The research indicates that there was a 31% reduction in failure in those subjects monitored by GPS over similar subjects monitored by other traditional methods (Bales, Mann, Blomberg, Gaes, Barrick, Ghungana & McManus, 2010). Failure was identified in the study as a revocation, recidivism, absconding or by committing new crimes. The research is relative to California probation and parole agents because Florida ranks second behind California and GPS monitoring of high-risk criminal offenders (DAPO, 2012) With proven effectiveness, the only question that remains is how to fund and deploy GPS monitors in sufficient numbers to monitor each parolee in the State.

Funding GPS Long-Term

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In today's economy, methods to reduce states' budgets are continually being sought and monetary constraints continue to cause personnel reductions in the criminal justice system. Prosecuting attorneys are being laid off (Furillo, 2010), public defender numbers are being reduced (McDonough, 2011), and prison personnel are being cut (CCPOA, 2012). With fewer people to prosecute, defend and ultimately guard California criminals, coupled with a 65% recidivism rate (Cate, 2012), an alternative to incarceration and a greater oversight of probationers and parolees is imperative.

Researchers recognize that GPS monitoring for high-risk criminal offenders is not a panacea (Butler & Bales, 2012). All monitoring devices are just another modern tool to (hopefully) prevent recidivism by sometimes dangerous criminals. Although advancements in GPS technology continue to be made, the tool is not without its shortcomings. Radio frequencies can still interfere with GPS transmissions, the transmission itself can be shielded and all units are subject to being cut off and discarded. The California Correctional Peace Officers Association lists incident after incident of HRSO's who have cut off their monitoring devices in 2012 and committed additional sexual attacks or other significant crimes (Corrections, 2012)). For GPS monitoring systems to reach their true potential, the industry must continue to advance the technology to counteract attempts to defeat it.

Some have suggested implanting GPS under the skin of a parolee to track their movements. In truth, implanting nano GPS devices powered by human energized batteries is not yet out of the development stage, so it is difficult to accurately project the cost for the device and monitoring. We do know that the average cost to house a general population inmate at Pelican Bay State Prison is \$58,000 per year (CDCR, 2011). The average cost to monitor a parolee with GPS is \$13,000 per year (Gies, Gainey, Cohen, Healy, Duplantier, Yeide, Bekelman, Hopps &

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Bobnis, 2012). The cost for a nano device will undoubtedly be pricey initially just as all new technology gadgets are. But, just as they all do, the price will come down over time.

Let's assume the cost to monitor one HRSO is \$25,000 per year with a nano device. While it may be almost double today's costs, it is still a savings of \$33,000 per year as opposed to actual incarceration. Why pay more for something we already have? Because an implantable nano device will likely see (at least) the 31% decrease in recidivism rates noted in Florida rise to an even higher percentage with a device that cannot be cut off. Decreased failure rates will begat creative initiatives in prisoner release and ultimately reduce prison populations considerably. Costs could be significantly less for those who get in on the ground floor of implementation as companies scurry to get their products into circulation by offering reduced rates in the beginning.

Nano-GPS Technology – a Foolproof Tool

Although sub dermal GPS is still in development, its path follows science fiction and cinema, both of which forecast a future that includes it. For instance, in the 2006 James Bond movie, *Casino Royale*, Bond is injected with a rice-size GPS device which enables the character M to monitor his every move. More recently, in the 2012 movie, *The Hunger Games*, the technology is again predicted when each tribute is injected with a GPS device prior to the beginning of the games. Whether the writers of these movies accurately portray the future of GPS or not is not as important as the likelihood that nano-GPS technology is on the fringes of reality. With a GPS device the size of a rice grain and powered by human generated electricity (Thermo Life, 2012), the gap in GPS monitoring of high-risk criminal offenders will be closed. Strategically placed in the back or other area of the body not easily accessed by the host, and

where removal by anyone results in significant medical risk, should greatly reduce tampering efforts.

Is nano GPS technology with a 50 year human-powered battery the last word in monitoring high risk criminal offenders? Probably not, but the application of such devices will undoubtedly result in safer and more secure communities.

Social Acceptance and The Future

There are strong early indications that the introduction of implantable GPS devices will be met with coordinated resistance. The group, *We The People, Will Not Be Chipped*, began their Internet movement against mandatory chipping in 2006 ("We the people," 2006). Radio Frequency Identification Devices (RFID) is the technology to which the group stands specifically opposed. RFID is most commonly known in its retail security form, where transmitters are inserted inside of merchandise packaging or attached directly to merchandise that sets off the alarm when you walk out of the retail store. You know, they are the ones that set off alarms where the whole store seems to be looking at you as the cashier runs up to remove the tag from its hiding place or otherwise disable it.

Verichip, a company based in Florida, created a rice-sized RFID and received FDA approval for human implants in 2004 (MSNBC, 2004) . Over the next few years, complaints were made that the Verichip might cause cancer in lab rats (Lewan T , 2007). Verichip, now known as VeriTeQ, showed that these revelations were faulty and has retained its FDA approval. Verichip and similar devices have been used by physicians in patients with heart conditions, to monitor glucose levels for diabetics and for Alzheimer's patients. Military units around the

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world are stocking up RFID's to be used in catastrophic events with mass casualties (Prutchi, 2011).

Somark, a company making identification devices to track and maintain information on lab animals, now has an RFID imbedded in ink. The company uses a tattooing process to mark the lab animals and does not involve an implant. The process is done in about 20 seconds and the information is viewed with a reader like most other RFID processes (Somark, 2012). The source of frustration from *We The People, Will Not Be Chipped* , antichip.com and others is the reported health risks and involuntariness of mandatory chipping proposals. With companies continuing to vigilantly develop their products, prove them medically safe and make them less intrusive, the worries of medical risk will likely fade over time.

The "Big Brother" question and those questions of mandatory chipping will likely be an ongoing debate. Several states, including California, have enacted legislation prohibiting, with few exceptions, the mandatory chipping of anyone (SB 362, 2007). These legislative enactments are specifically designed to protect the average citizen and do not make reference to parolees or other high risk criminal offenders although these groups would likely be included by extension. Section 3010 of the California Penal Code gives specific authorization for CDC to use GPS to monitor parolees. An amendment to California Civil Code Section 52.7, where subsection (g) provides exceptions and allows for chipping by parents of minor children over 12, will need to include the monitoring of high risk criminal offenders to incorporate this specific type of implant. Again, legislation would be made specific to monitoring high risk criminal offenders and not the average law-abiding citizen.

In addition to privacy rights advocates and proponents against mandatory chipping are those who, for religious reasons, fear that chipping is the mark of the beast as prophesized in Revelation 13:16 (Edwards, 2009) and animal rights groups who worry about their pets getting cancer from an implanted RFID tag (Ayers, 2012). Even “Obama Care” gets into the action with some activists believing that a segment of the plan calls for mandatory RFID chipping of all US residents by 2013 (Eowyn, 2012). The original language that caused the scare was not present in the final approved version but it still left people with a "could that really happen" aftertaste. In fact, in September of 2005, then Senator Joe Biden, spoke at a US Senate Judiciary Committee on the nomination of John Roberts to be Chief Justice of the US Supreme Court. Biden said to Roberts, "...and we'll be faced with equally consequential decisions in the 21st century. Can a microscopic tag be implanted in a person's body to track his every movement? There's actual discussion about that. You will rule on that -- mark my words -- before your tenure is over" (Morningside Partners, 2005)

Social acceptance of GPS implants may be slow initially, but successful use on HRSO's should result in a greater understanding by society of the true potential of nano-GPS technology. While it may initially sound Orwellian in design, success in HRSO monitoring could well open the door for broader application. The device could help safely return Alzheimer's patients who walk away from their residence and could be a means to end child abduction and exploitation. If our pets are so prized as to be chipped and wearing GPS imbedded collars, why wouldn't we want our children to wear an unassuming piece of jewelry with a nano-GPS device discretely in place?

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In 1991, Philip Garrido was already on parole and identified as a high risk sex offender (NDPS, 2009). Also in 1991, he committed one of the most heinous crimes against a child in California in the last two decades. If the technology existed in 1991, with crime correlation software and real time parolee location verification, Jaycee Dugard's horror might have ended in less than 18 hours versus the 18 year long nightmare she actually suffered. Notwithstanding any failures in monitoring Garrido that have been identified since Dugard's recovery, an implantable GPS monitoring device would have pointed the finger of guilt squarely at Garrido. Case after case of crime committed against California's children by HRSO's and other high risk criminal offenders should be impetus enough to move probability to reality.

CONCLUSION

There can be little doubt that financial instability and overcrowded prisons will continue to plague California for some time to come. With it, comes the necessity to reduce the number of prisoners being housed at the state and county level while maintaining security in our communities. GPS monitoring of HRSO's and other high risk criminal offenders has proven to be a viable tool to meet this demand. It offers an alternative to incarceration while increasing community safety by as much as 31% compared to parolees and probationers without GPS monitors. In all likelihood, implantable GPS monitoring devices will see that percentage increase as those being monitored will be far less inclined to remove the device versus cutting an ankle monitor.

Politicians, including Vice President Biden, agree that implantable GPS devices are soon to become a reality and will be a source of political and constitutional debate in the future (Morningside Partners, 2005). There will always be the need to strike balance between the

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greater good and individual rights. Nicole Ozer, technology and civil liberties policy director at ACLU of Northern California, explained, "With the signing of SB 362, California has taken an important first step in crafting legislation to properly balance the potential benefits of RFID technology while safeguarding privacy and security" (Boucher-Ferguson, 2007). It should be hoped that this opinion of "balance" is consistent when it comes to utilizing implantable GPS devices to safeguard the security of California's communities.

The technology is on its way. Political proponents of a process that allows for decreased prison populations, a reduction in our state budget and an increase in security to the communities of California need only ensure that the road is free of legislative obstacles. An addition to section 52.7 of the California Civil Code is an integral step to this end. State, county and private entities that monitor high risk criminal offenders should guide their agencies toward the future by monitoring the technological advancements of implantable GPS devices and getting in on the ground floor of implementation.

Only through active involvement in the evolution of GPS monitoring can the benefits be truly realized. Reductions in prison populations, state budgets, and community fears can come to fruition. Failing to act however, can result in the creation of obstacles too large to overcome.

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