What is GPS Monitoring

The U.S. Department of Defense (DOD) controls a system of 24 global positioning satellites (GPS) and three back up satellites that orbit the earth in fixed position. These satellites send signals to tracking devices on the ground. By calculating the time it takes for the signal from three satellites in different locations to reach a tracking device, it is possible to figure the tracking device’s location - this process is called triangulation. In the case of GPS for domestic violence offenders, each offender has his own personal tracking unit which reveals an offender’s accurate location within 5 meters.

For detailed explanation of the what GPS is and how it functions see DLR GPS and technology and Brown, McCabe and Wellford, “Global Positioning System (GPS) Technology for Community Supervision: Lessons Learned” (2007), available here

Types of GPS Monitoring

There are two types of GPS tracking: **active and passive**. [make a table]

Passive monitoring is not recommended for use with stalkers and violent offenders. Usually the offender wears a device 24 hours a day but the monitoring official might only receive an offender’s location information once a day when the offender uploads it from home.

Active tracking provides real-time location of the offender 24 hours a day. However, active monitoring is only effective if an administrator continually monitors the location of offenders, 24/7. In some places, monitoring is done by corrections or local police officers who know the offender and the victim while other communities outsource this function to a vendor that works elsewhere.

An electronic monitoring program can set up “exclusion zones” around the victim’s home, work, etc., and an enrolled offender may not enter those geographic areas. If the offender enters those zones, an alert can be immediately sent to the monitor.

Some systems notify the victim with a pager if the offender enters any exclusion zone. Other systems track the victim’s real-time location by using GPS on the victim’s pager device. If the victim is not in the exclusion zone and the offender comes near the victim, the system will typically alert both the monitoring official and the victim. The offender can also be contacted and police can be dispatched.

An outside company can be hired to monitor the offender. SecureAlert and isecuretrac are two companies that provide offender-monitoring services.

GPS can also be used to alert the victim whenever an offender has violated an order of protection. This can give the victim an opportunity and time to leave the area where her potential attacker is and alert police that she is in danger. Active GPS has victim alert capabilities. GPS
technology does, however, have weaknesses that require extra police support. GPS devices do not cover telephone conversations, email or U.S. mail; therefore, the state should provide the victim with a device to record when the batterer calls her home and collect all emails and U.S. mail.iii

Active judicial monitoring in combination with the immediate response monitoring should be used in order to reduce the number of repeat offenses. Once a judge releases a defendant on probation he should maintain an active role in monitoring the defendant’s case. Follow-up hearings, graduated sanctions and coordination among involved parties send the message that the defendant remains accountable even once he is released, and help courts fashion the most appropriate response to each individual caseiv. An offender cannot run or play basketball with a one-piece device and is required to stay stationary for thirty minutes at least twice a day to charge the battery. The one-piece is also more easily circumvented than two-piece devices because they do not have the extra protection of RF between the PTU and the bracelet, and one-piece units attach to the ankle, meaning the device is close to the ground and subject to greater obstruction.

The GPS technology must sometimes be adapted for rural or urban areas. In rural areas a potential problem for GPS technology is a lack of cell towers. This problem can be circumvented through Wireless LAN technology that can access the Internet and eliminate some cellular problems, and radio frequency identification, which is free, works indoors and is already well established. Additionally, dead reckoning sensors based on speed or direction work well indoors and eliminate the problem of losing signals in car rides.

Another potential problem in rural areas does not have to do with the logistics of the technology, but the fact that there may only be one or very few businesses and establishments that both the victim and offender must frequent, such as a grocery store or bank. In order to combat this dilemma, the victim should be able to chose the best times for her to access necessities, and the batterer should be limited to presence on the commercial property only at times outside the victim’s chosen times.

Urban areas present a problem for GPS monitoring due to the fact that GPS receives weaker signals indoors. However, when the batterer may be frequently entering and exiting buildings, television frequencies can supplement to provide stronger indoor coverage. v

What GPS manufacturer is the best?

There is no “best” GPS manufacturer. Each manufacturing company has its own strengths and weaknesses. However, some companies are particularly strong in certain areas. Local law enforcement agencies must decide their goals and find a company that provides the services necessary to meet those goals. For example, a parole department without adequate staff to monitor offenders may want to find a vendor that provides monitoring service. The most
important factor for a successful monitoring program is not the manufacturing company, but the effort the parole department puts into reacting to the monitoring information. vi

**GPS Monitoring Does Not Restrict the Batterer’s Liberty**

- Batterers are subject to GPS monitoring when they commit a criminal act by violating their protective orders. The alternative to GPS monitoring is jail. Therefore, GPS monitoring actually enhances the batterer’s liberty by allowing him to remain in the community.
- By violating the protective order the batterer has become a criminal and his expectation of privacy is significantly reduced.
- Protective orders are not issued without procedural protections. There is a hearing when the protective order is first issued and a second hearing to determine whether GPS monitoring is appropriate.
- The batterer has no reasonable expectation of privacy in public. It would be permissible for an individual to follow the batterer around to ensure compliance with the protective order. GPS monitoring is merely a substitute for this method of enforcing compliance.

**GPS Monitoring Is the Least Restrictive Means to Ensure the Victim’s Protection**

- GPS monitoring is a very successful way to prevent further abuse/homicide and represents a minimal invasion of the batterer’s liberty.
- GPS monitoring allows for immediate response when the batterer enters the victim’s liberty zone thereby allowing for greater opportunities to save lives.
- Without this type of monitoring protection orders are useless and the victim has no meaningful way to escape the abuse of the batterer.

**Costs:**

The critical tradeoff is clear. That state should increase the quality of life and safety of domestic violence victims with a GPS program rather than let a batterer continue to terrorize his victim when she has done everything to protect herself. Moreover, the monetary costs:

- Are far lower than the cost of incarceration: According to U.S. Department of Justice statistics, incarceration of one inmate costs $62 a day. GPS costs about $10 a day. Can be offset by requiring the batterer to contribute to the costs. The Judge can order wage garnishment to ensure compliance with payment requirements.
- If the defendant cannot afford to help cover costs, he can be required to perform community service of equivalent value. A judge ordering the offender to pay for GPS
monitoring should take into account the effect of such an order on the victim if she is dependent on the offender’s continued payment of child support or maintenance.

- Pay off in reducing the staggering costs created by domestic violence. A murder trial alone costs\(^{\text{vii}}\)
- Violence and homicide are likely results if the batterer is not monitored, because GPS is only used in highly dangerous situations. If the batterer commits a crime while on parole (and not on GPS), the state would be responsible for the investigation, prosecution, and prison costs.\(^{\text{viii}}\)

GPS Concerns FAQ

Is GPS feasible with today’s technology?

Yes. Current GPS technology is capable of alerting the monitoring agency and the victim when an offender violates an order of protection (OP). New, tamper-proof GPS bracelets experience fewer false alarms.\(^{1}\) New technology no longer depends on phone lines. Instead, the state can provide the woman with a cell phone or a panic button so that she can alert the authorities if she is in danger.\(^{2}\)

Will GPS restrict where the victim can travel?

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http://findarticles.com/p/articles/mi_qa4144/is_200406/ai_n9446514/pg_1?tag=artBody;col1

2 Cite to that paper on the program review
No. GPS is designed to restrict the batterer, not the victim. GPS technology keeps the batterer in a specified area. He can only leave the area when he has a specific destination, and only after he clears it with his parole officer. This means that victims no longer have to check off where they would like to be free from gender violence. Victims can roam about their area freely and observe a safer and better quality of life. While victims are still advised to stay away from the batterer’s “area,” they have far more freedom than they would without the GPS device.

**Who pays for GPS?**

In most cases, the batterer pays for GPS. GPS is relatively inexpensive, costing about five to ten dollars a day.\(^3\) GPS is more cost-effective than incarceration, and allows states to save money, while the offender continues working and supporting the woman or himself.\(^4\)

**Would GPS still be cost-effective if the batterer is unable to pay for the cost of monitoring?**

Yes. Even if a state has to pay for GPS, five to ten dollars a day is substantially less than the cost of housing a batterer as an inmate, should he resort to violence or homicide against his victim.\(^5\)

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\(^3\) Edmonson, Rebecca D., Jason A. Guida and Margaret Levy, *Domestic Violence In Massachusetts: Providing tools to Protect Victims* at 10 (May 2006), http://senatorbarrios.org/dvreport.pdf.

\(^4\) Erez, Edna, *Electronic Monitoring of Domestic Violence Cases – A Study of Two Bilateral Programs*, http://findarticles.com/p/articles/mi_qa4144/is_/ai_n9446514 (last visited Oct. 1, 2008) (saying it cost ten dollars a day);

Violence and homicide are likely results if the batterer is not monitored, because GPS is only used in highly dangerous situations.\(^6\) If the batterer commits a crime while on parole (and not on GPS), the state would be responsible for the investigation, prosecution, and prison costs.

Additionally, GPS may reduce the amount of money states already spend on programs to support offenders and victims. For example, many states require offenders to attended batterer’s detention facilities or batterer intervention programs as a condition of parole.\(^7\) Not only are those programs costly, they are only effective about half of the time.\(^8\) This means the offender is likely batter again after the program, and will go back into the system at the state’s expense. Conversely, GPS devices have proven **100%** effective.\(^9\)

GPS may also save states money by reducing the number of women who rely on state-funded programs, such as battered women’s shelters or emergency rooms. If states implement GPS programs, battered women’s shelters could be transformed into resource centers, and no longer require the expense of keeping victims overnight.\(^10\) If the victim is so poor that she relies on her batterer for money, she will probably not be able to afford health care either. This means that if she is injured in a repeat offense, the burden will fall on the state to cover the cost.

\(^6\) Find a citation saying the number of dangerous batterers that later attack their victims. Do they go back into the system? 
\(^7\) CITE 
\(^8\) CITE 
\(^9\) CITE. (should I add how after about a year it usually calms down)? 
\(^10\) This argument assumes it would cost less money to run a resource center than to run an overnight shelter. Additionally, if less women need GPS, then there will be more shelter space. Even if this does not reduce the cost of shelters, it would reduce the long waitlists and help save more lives.
Finally, even if GPS become a cost to the State, the program may still be worthwhile to implement. GPS is a moral imperative that is worth the cost. It is the State’s responsibility to protect its citizens, and GPS has the potential to save lives. The police force is a public good. The state has burden of bearing the cost of life-saving programs.

**Will GPS revictimize the woman if the batterer sets off the alarm to harass the woman, or if the system experiences false alarms?**

Probably not. If a batterer sets off the device to harass the victim, his is in contempt of court and can be punished accordingly. Unlike a typical OP, GPS monitoring provides clear documentation of OP violations. Moreover, the batterer is likely to continue harassing the victim if he did not have the device.\(^\text{11}\) Furthermore, new technology allows for fewer false alarms.\(^\text{12}\) Although all technology has the possibility of failure, the small problems with the system may be better than the larger problem of homicide. The purpose of the system is to prevent homicide. It is better to do something to stop homicide than do nothing for fear it might not be perfect. GPS is not the ultimate solution to domestic violence battering, but it is a worthwhile start.

**Will manufacturers want to produce GPS devices if they cannot guarantee 100% safety?**

Yes. iSecure and SecureAlert are examples of companies that currently manufacturer GPS devices.\(^\text{13}\) Many successful products that increase safety are successful even without guaranteeing 100% effectiveness. For example, many people buy helmets, because they prefer increased safety over no safety at all. The same is true with many women who would chose to have the increased safety of GPS over unenforced OPs. The manufacturer can warn the victim

\(^{11}\) Should I CITE the MN thing?  
\(^{12}\) CITE  
\(^{13}\) CITE
that the system is not a guarantee of protection and then allow the victim to opt in. It is patronizing for the state to cancel the entire program because it thinks the woman will expect 100% safety. If states waited until a program was perfect, there would be no programs in place.

Can victims give informed consent if there are unknowns about the system?

Yes, victims can give an acceptable level of informed consent. Experts know enough about GPS to answer some of the difficult questions, and help women decide if they want to opt into the program. While there are some unknowns about the program, they are an acceptable level of unknowns. The state can avoid the problem on uninformed consent by telling the victim that there are no guarantees, and disclosing that there are some unknowns about the system. It is unrealistic for a state to expect that they will be able to truly ask for informed consent about any program, since all programs have unknowns. Likewise, the more offenders the state prosecutes, the more certain the woman will become about how the system works.

Will prosecutors hold it against a woman if she does not want to participate in the program?

No. Victims have the option of not participating in the program. The argument that prosecutors will view a woman as complacent if she does not consent is easily overcome. Michigan has

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14 Say if GPS is already in demand. CITE
15 Moreover, the program has been 100% effective so far. However, that is not a guarantee that it will always be 100% effective.
written into its statute that the program is voluntary, and a victim cannot be prejudiced for not participating in the program.\textsuperscript{16} States can easily write the same provision into their statutes.

**Will GPS give victims a false sense of security or encourage women to take fewer precautions?**

No, not if GPS is used in the context of a larger system of protection. GPS on its own is not enough. States must also implement a community-based support system for victims and give them accurate information about how to use the technology.\textsuperscript{17} The state can avoid a false sense of security by providing women with a manual about how the system works, as well as support groups to see how the program affected other women.\textsuperscript{18} The more information women have about the program, the more they will understand the benefits and shortcomings of the GPS technology.

Additionally, a “false sense of security” might not change how the woman acts, since the GPS devices are only implemented when the woman has already done everything in her power (that the system provides) to escape the violence. If she is at the point where she needs the device, she is probably aware that her batterer is extremely dangerous. Victims are usually the most cognizant about whether or not their batterer will continue to harass them, and may prefer some security over no security at all.\textsuperscript{19} One victim told researchers, “‘while the system sometimes lets

\begin{footnotesize}
\begin{enumerate}
\item M.C.L.A. 765.6b.
\item Edmonson, Rebecca D., Jason A. Guida and Margaret Levy, *Domestic Violence In Massachusetts: Providing tools to Protect Victims* at 18 (May 2006), http://senatorbarrios.org/dvreport.pdf.
\item CITE – I think the JGGCC paper says this
\end{enumerate}
\end{footnotesize}
us women down, at least we have a little bit of comfort knowing we have a box that will go off if he comes into the area where he does not belong.”

Finally, the state has the responsibility of enforcing GPS technology to make sure the victim is as safe as possible. It is not the woman’s responsibility to protect herself from the offender; it is the state’s responsibility. If a state has adequate protection, the woman will feel more secure. One of the reasons GPS legislation is necessary, is that it shifts the burden from the woman to the law enforcement. If GPS gives the woman a new sense of security and cases her to take fewer precautions, the system should take more precautions.

**What if police are slow to respond to violations or the monitoring agency does not answer the call?**

States can avoid this problem by writing accountability into the statute. States can come up with a minimum response time for officers. GPS may even increase response time, because officers know the offender’s location. In one Midwestern county, women reported faster police response time when they pushed their “help buttons,” than when they had dialed 9-1-1 before the batterer participated in the GPS program. Additionally, monitoring agencies should have someone

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answering calls at all times. Since monitoring agencies deal exclusively with GPS, they can focus their attention on intercepting calls.

It is the police department’s responsibility to make sure that someone responds to the violation. Not allowing the GPS based on the expectation that police will not respond is unacceptable. The system already has the problem of limited police response, and no requirement to enforce orders of protection. The system itself needs to change to require timely police response.

**What if courts misuse GPS?**

Potential for misuse should not be an impediment to implementing the program. The judicial system puts a lot of trust into judges by giving them discretion with many sentencing decisions. If the state feels judges will not abuse their discretion in other areas of the law, it should not fear judges will abuse their discretion in relation to GPS for domestic violence offenders. If judges have good intentions but misunderstand the GPS program, the state can provide them with educational training. Also, the state can create guidelines to help judges determine when GPS sentencing is appropriate.

**Will GPS unnecessarily burden already overworked officers by requiring them to monitor the batterer and also the victim?**

No. GPS is a worthwhile and necessary burden on responsible agencies. An overburdened police force does not diminish the responsibility of the state to prevent homicide and protect its citizens.
A Minnesota report on GPS technology addresses the problem of an overburdened workforce, saying, “The victim must be attended to as a legitimate party of the criminal process.” The Report also suggests that government agencies could enlist help from the monitoring agencies by having the monitoring agencies install the device and perform necessary field work. Any new program requires work, but GPS is necessary work. GPS devices are only implemented in extreme cases. Preventing homicide is a burden belonging to the officers and the system as a whole.

**Does GPS take away civil liberties from the offender?**

No. GPS does not take away civil liberties from batterers, because GPS is an alternative to jail. When an offender has to go to jail, he forfeits some of his liberty and freedom. With GPS technology, he has more freedom than he would in jail. This is a more complicated question. Talk to professor Rosenfeld about the conference last year, and see if someone from the conference can write this answer?

**Is GPS too lax of a punishment? Why not just send a very dangerous man to jail?**

It is expensive and often not feasible to send all batterers to jail. GPS allows the offender to keep his job and reduces a burden on the state. If the offender commits a serious crime he will go to prison. However, GPS is an intermediate step between a regular OP and prison time.

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Will GPS have a racially disparate impact?

No. States can write into their statutes that GPS must be implemented in a racially neutral way.26 There is a fear that judges will use GPS for ulterior racial motives or to keep an eye on the black community.27 However, this problem is avoidable by a provision in the statute requiring a yearly review of the program. Batterers should only be required to use GPS monitoring when they meet certain danger assessments. Black women can chose to opt into the system. If they feel that their batterer was singled out for being black, they have the option of not participating in the program.

GPS gives the batterer more freedom than prison. Critics argue that GPS will further alienate the black man and make him feel powerless.28 However, the black batterer has more power and freedom with GPS than he would in prison. With GPS, he is able to move around in a large area and keep his job.

{More articles on GPS Monitoring are available here}

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26 There was a state that did this. CITE to that statute.