



Vermont Legislative Research Shop

GPS Tracking Applications

Global Positioning Systems (GPS) technology has become increasingly popular in the past decade to monitor individuals on probation and parole. GPS technology monitors the movements of individuals using a transmitter tracked by satellites. GPS technology is preferred by law enforcement agencies because it provides comprehensive tracking of the subject compared to Radio Frequency technology whose tracking capabilities are limited by the range of the transmission device. GPS tracking of individuals can be used in the pre-trial, probation, and parole components of the criminal justice system. GPS-based monitoring can also be employed as an alternative to incarceration of non-violent and first time offenders, and has been found by The American Probation and Parole Association to reduce rates of recidivism.¹ Following the recommendation of the Governor's Commission on Prison Overcrowding, Governor Douglas is establishing a pilot GPS program to track a group of felony DUI offenders.² The success or failure of this program should provide valuable evidence as to the viability of GPS offender tracking in Vermont.

Inclusive and Exclusive Zones

Using GPS and computer technology, exclusion and inclusion zones are mapped for each client. Exclusion zones are areas into which the client is prohibited from entering. For example, sex offenders can be excluded from the workplace of their victim, or pedophiles can be excluded from school zone. If the perimeter is violated, then the individuals within the exclusion zone can be notified by telephone or fax. Inclusion zones can also be created using both Active and Passive GPS technology utilizing locations where the

¹ American Probation and Parole Association. "Offender Supervision with Electronic Technology." http://www.appa-net.org/publications%20and%20resources/pubs/electronic_monitoring.pdf pg. 56 viewed 02/01/05

² Gibbs, Jason. State of Vermont Website. "Douglas Administration Announces First Phase of Overcrowding Reforms" <http://www.vermont.gov/tools/whatsnew2/index.php?topic=GovPressReleases&id=1056&v=Article> viewed 01/25/05

client is expected to be, including their home, place of employment, or school. In the case of inclusion zones, an alert can be issued if the client is not in the expected territory.³

Active and Passive Monitoring

Active and passive systems of GPS tracking have the same features, but differ in their speed of communication between the client and their supervisor. Active GPS monitoring utilizes a wireless modem to monitor the client's zoning adherence. If a violation of an inclusion or exclusion zone occurs, the supervisor is alerted instantaneously. Under passive supervision, a land based telephone line instead of a wireless modem is employed, which results in decreased response time if the client has not adhered to his/her designated zones.⁴

GPS in Action

GPS Community Monitoring in Florida

Florida has used GPS monitoring in their correction system longer than any other state. The Florida Department of Corrections (FDC) monitors approximately 400 probationers found guilty of violent crimes with active GPS and another 150 non-violent offenders with Passive GPS.⁵ Florida, utilizing ProTech GPS devices, experienced a drop in recidivism from 12% to 3% in the first 18 months of release.⁶ *A Report on Community Control, Radio Frequency (RF) Monitoring and Global Positioning Satellite (GPS) Monitoring* published by the Florida Department of Corrections in October of 2003, for the period from July 1, 1993 to June 30, 2003 provides comprehensive statistics regarding the results of the use of GPS in that ten-year period. According to the report, after a two-year period, the most commTJbs out i t-21.0951ypJ-TJ period1-ththatw GPa18.84501 Tc-0.00

Massachusetts began a pilot program monitoring individuals on work release with GPS in March of 2004. In September 2004, GPS monitoring was expanded to all 219 of the state's level three sex offenders currently on parole, in a 1 million dollar pilot program. This four-month endeavor is expected to cost approximately \$10 per person per day. Governor Romney intends to request funding for a year-long pilot program as a part of the 2006 budget.⁸

Tennessee has budgeted \$2.5 million dollars for a GPS pilot project to track the state's paroled violent sex offenders, a program which will monitor approximately 600 individuals.⁹

Oklahoma began a GPS monitoring program in May of 2004, following a successful pilot program. The expanded GPS tracking program will be used to monitor approximately 1,000 individuals. The Deputy Commission of Community Corrections in Oklahoma estimates the use of GPS will save the State approximately \$9 million dollars per year.¹⁰

Potential Benefits of GPS Tracking in Vermont

GPS as a Cost-Effective Technology

GPS monitoring of persons on probation, parole, or released on bail appears to be cost effective in comparison to alternative technologies and methods. In Seminole County, Florida authorities use GPS to monitor persons out on bond at a cost of six dollars per person per day. As a condition of their release, participants incur the cost of monitoring. Seminole County Sheriff Don Eslinger estimates that the county saves between 45 and 55 dollars per person/per day using GPS in this fashion.¹¹ Other estimates place the cost of GPS monitoring between 4 and 10 dollars per inmate per day, depending upon the level

Figure 1.1

Figure 1.2

Vermont Department of Corrections: FACTS & FIGURES FY 2003

Part One: Population Numbers Section I: Population Growth: The Overriding
Corrections Issue¹⁹

and GPS monitoring in particular are relativ

Sources

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Compiled at the request of Representative Jason Lorber by Russ Buchanan, Anna DeAngelis, and Laura Denison under the Supervision of Professor Anthony Gierzynski on February 1, 2005.

Disclaimer

This report has been prepared by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the reports does not reflect official policy of the University of Vermont.