



Chapter XI

Integrating GIS, GPS and MIS on the Web: EMPACT in Florida

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Abstract

Computer applications for conducting complex spatial analysis of crime data are widely used by law enforcement agencies. By combining sophisticated geographic information systems with global positioning satellite tracking devices, a new tool is emerging that will remove the criminal anonymity of probationers, parolees and offenders on pretrial release. Every year, an ever-increasing number of offenders are set free on either probation or parole within our nation's communities. As the number of offenders on our streets grows, the need for the criminal justice system to hold these offenders accountable and exert some level of control also increases. Florida's Electronic Monitoring Protection and Crime Tracking (EMPACT) project is breaking new ground in an effort to use technology as an effective way to remove the anonymity of crime. Through the automated correlation of GPS tracking data and local crime incident data, participating criminal justice agencies are able to determine if a tracked offender was at the scene of a crime when it occurred. In addition, because EMPACT uses a Web-based interface, participating agencies also have

access to each other's data. This creates a crime-mapping environment where crime analysts and investigators have the opportunity to evaluate, at the click of a button, multi-jurisdictional crime patterns and offender track data.

Introduction

The use of sophisticated geographic information systems (GIS) as a part of the crime analysis process has significantly impacted law enforcement's understanding of offender behavior and its relationship to crime. This increased understanding has, in turn, translated into more effective enforcement operations and crime prevention strategies. Today's complex analysis of spatial factors such as crime location, offender residence, transportation routes, police patrol zones and residential and commercial areas enables problem solving at a level that was unheard of just a dozen years ago. And more advanced systems are being continually developed. Keith Harries accurately forecasted how crime mapping would evolve:

The hallmark of the first decade or so of the modern era of crime mapping was the use of geographic information systems (GIS). Perhaps the next decade will see the integration of previously separate technologies such as global positioning systems (GPS)...and a wide range of local databases with relevance to policing – and the World Wide Web. (1999, p. 151)

The Florida Electronic Monitoring Protection and Crime Tracking (EMPACT) project is making Harries' forecast a reality. By combining GIS technologies with GPS data from tracked probationers and parolees, and crime data extracted from local law enforcement agencies' records management systems, a new tool has been created that enables the criminal justice system to effectively remove anonymity and reduce the likelihood of criminal behavior.

Criminologists have acknowledged for decades that the best predictor of future criminal activity is an offender's past criminal behavior (MacKenzie, 1997). Law enforcement officers also know that only a small percentage of the community members they police are responsible for the majority of criminal offenses – and it is these offenders who continually cycle through the criminal justice system. As a society, we cannot lockup all criminal offenders and throw away the key. Not only is the “throw away the key” proposition economically unfeasible, it is not justified under our nation's legal philosophies. One of the results, however,

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