

Criminal justice



**ASSIGN
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Your supervisor informs you that your department will have a significant amount of extra funds available at the end of the year. These funds must be spent before the formulation of the next year's budget. Your supervisor tasks you to write a proposal for a single technology purchase that should be bought with these funds. Using the Library and other available resources, research a recent technological advancement that could be used to aid your department in any area, including the following:

officer safety

communication

forensic investigation

public safety

organization

case management

Assess the benefit your department could expect to gain by employing this technology. In your proposal, be sure to include the following:

brief history of the technology

purpose of this technology

description of how this technology is implemented

explanation of how the technology could change

Pages = 2

Sources = 5

Style = APA

Running Head: Geographic Information System

Geographic Information System

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Geographic Information System

History of GIS

Geographic Information System technology can be employed in crime investigation department. The application of GIS will increase and enhance criminal analysis capacities and law enforcement operation. Law enforcement agencies have been using GIS since early 1970s (Albert & Leipnik, 2003). In 1970s, technological advancements in the field of computers made computerized pin mapping available only to large police agencies. These systems were complex and required mainframe computers in order to be operational. The development of client server technology in 1980s made it possible for GIS to be obtainable at inexpensive cost. However, it was in 1990s when GIS technology progressed because of strong, efficient personal computers that were capable of handling considerable amounts of data.

Implementation of GIS

When implementing GIS, the organization will require efficient and enhanced computer systems to manage the rising number of records in their database. It will be essential to provide the staff with consistent power backup, archival gadgets and software, good quality printer having the ability to give color prints, user responsive GIS mapping software (Asbell, 2003). The law enforcement agency will be required to buy and install several copies of the mapping and provide it to the crime analyst. Advance computer networks will be required in order to connect to its own local network as well as countrywide network in order to distribute and share the data in all the existing departments of the organization (Burns, Leipnik, & Evans, 2003). This will enable all crime analysts to exchange data and examine all the

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reports. The computer system has to be aided with Computer Dispatch System to make the records management efficient and operational (Messina & May, 2003).

Purpose of GIS and Impact of GIS on Law Enforcement

The purpose of GIS is to successfully handle and control resources; offer enhanced and improved situational alertness, make more knowledgeable and up to date assessments in an appropriate manner, increase planned and functional planning, effective communication, understanding the crime in a community, enhancing police officer and community security and protection as well amplifying community certainty and satisfaction (Boba, 2003). Other purposes of GIS in crime investigation department include investigation and analyzing crime, vehicle tracking, management of urgent situation and incident, crime mapping, etc. GIS also gives information on crime incident locations to police officers and detectives.

The GIS used in law enforcement agency has been recognized for its value and benefits. Undoubtedly, the GIS have effectively revolutionized law enforcement agencies. GIS has allowed agencies to add all types of data to map in determining spatial patterns which has effectively organized crime analysis and prevention. (Albert & Leipnik, 2003) Computer mapping will enable them to map numerous levels of data which assists in understanding the holistic view of crime in its settings. The mapping through GIS calculates crime density which can assist in patrol activities. Data analysis aided with GIS has made it possible to characterize crime situation around a specific location. GIS has become a controlling and prevailing management information tool. GIS can completely affect the law enforcing agencies to understand the parameters of illegal activities.

References

Albert, D., & Leipnik, M. Towards a lexicon of criminology and geography: 25 useful terms. Leipnik & D. Albert (Eds.), GIS in law enforcement:

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