

Internet access



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Nowadays, the word " maps" are becoming less popular and has evolved into the word " GPS". Simply, the Global Positioning System is a system of satellites and receiving devices used to compute positions on Earth. The information can be used in a three-way communication for use as positioning system. After much evolution of the GPS technology, it is very useful in tracking down an individual- not only humans, but also animals. A tiny modem, attached to their collar, sends out a text message to a mobile phone, PDA, or other two-way wireless device, whenever a pet leaves any predetermined boundaries.

Not only is the owner notified, but the receiver gives directions, and even maps, with certain supported mobile phones, for finding the wandering pet. Many mobile phones, PCs or PDAs already have real-time tracking software readily installed in them, making it accessible and easy to operate.

PawTRAX(tm) is an example of an online program that allows users to track their pets. Users can enable geo-fences, and follow the pet's movements in real time. b. The IT Background of the subject Since 2001, developers have tried to analyze using the method of instantaneous positioning for continuous access to high-rate data.

The first effort was taken by the Orange County Real Time Network. Now, Real time GPS can now commonly be found in any new mobile phones, PDAs and PCs. These programs, along with a receiver device (preferably a GPS embedded collar), enables pets owners to locate their pets' positions- prevent the pet from wandering off by itself and minimize pet-napping. A Real-Time GPS Tracking System has a built-in connection to the internet so you can log-on and see where the device is and check most current location

from anywhere in the world. Global Pet Finder is the world's first GPS location device for pets.

PetSafe - reportedly the first company to bring dog owners the electronic fence - today unveiled its PetSafe GPS Locator, a GPS- and cellular-based tracking collar for dogs. Currently, only GPS embedded collars are available for the GPS pet-tracking. There have only been minor developments in this area- mostly revolving around additional features, but no discovery of GPS microchips or so forth yet. So there is not yet a great choice of devices, but this probably will change rather fast. A GPS pet collar can be purchased within a price range of US \$100- \$400.

Cheaper devices have only basic features required for pet tracking whilst others have several complementary features. Consider several types of GPS tracking devices, from those that allow you to program safety zones, waterproof and weatherproof models if you live in temperate zones, and advanced features such as heart rate, blood pressure, body temperature to see if your pet is truly 100% safe inside and out. c. The Impact of the Issue In the use of this technology, the user needs to subscribe to a GSM network provider which issues SMS-enabled SIM card and a mobile phone or a GSM modem that can send SMS message to the GPS service provider.

The GPS device or collar also needs to be purchased and installed to the user's mobile phone before the GPS can be activated. The government plays a role in which they need to make these necessary advancements available for public use. GPS pet tracking devices use two different technologies. First GPS for calculating the position and second a GSM modem to send this

information to a server or directly through the wireless network. Both the GPS and the GSM need a minimum antenna surface for a correct working with their operation frequencies.

A GPS chip needs 0.25 to 0.5W and the GSM modem needs 1W to send out information to a cell tower at great distance. This requires heavy, bulky batteries to provide the relatively lots of power. It seems that volume and weight will remain a problem for some time. The advantages of GPS embedded collars are that these collars are always attached to the pets without causing any harm. No surgical implantation or electric shock of any kind is required, hence it is completely safe. However, users should not be over-dependent on this technology because these collars are easy to remove.

Some pets also tend to be able to scratch off their collars, hence the owner may lose track of the pet too. A GPS Pet-tracking device that is not being worn is useless. Heavy wireless traffic used by installed software too can create problems. Users must also make sure that the pet's movement area is covered by GSM. Pet-finding software will sound an alarm if your pet goes beyond its boundaries so you can quickly locate where the animal has gone. The alarm can be disabled on your own accord and while visiting another area, you can upload new boundaries.

Most systems allow more than one area to be entered. d. Solutions to Problems Arising from the Issue The government and individual GSM Provider companies are responsible in expanding and detailing the range of the GSM coverage in the country. Without this, the GPS tracking system will

not be very efficient due to limitations of the street directories. There are various ways of accessing the information that your GPS receives. These include via home phone, Internet, and software installed on your computer. Phone access is not recommended and installed software limits your access to information.

Internet access to your GPS data is the recommended way to go. You just log on, enter your password and your pet is located. Yes, animal snatchers will sometimes remove collars, but a surprising number will not. Combined with other technology like micro-chipping and registration, pet-tracking GPS device will go a long way to ensure that lost pets will be located. GPS tracking devices will not substitute common sense and vigilance in watching over your pets, but rather help reduce the chances of your pet running off by accident. This technology only helps us ease emotional burdens of losing our beloved pets.