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TELEMATICS and the ***"CONNECTED" VEHICLE***

Telematics in the auto industry refers to passenger cars that have a cellular connection to an outside source. Vehicle Telematics were designed to offer security services to the vehicle's occupants. These types of services include but are not limited to automatic collision notification, stolen vehicle assistance, and emergency road side services. Non-emergency services such as navigation assistance and unlocking a vehicle after accidentally locking oneself out are a convenience feature. Telematics have become a selling feature to the OEM's. There seems to be a never ending stream of Telematics based innovations that are being offered in the vehicles sold today.

The "Connected" Vehicle is one that has Internet access, and can communicate with other connected devices or systems. If your home's electronic infrastructure is connected through the internet you can turn lights on and off or adjust the temperature in your home using the features programmed into the electronics of your car. The owners Smart Phone is also a device that can also be linked to a vehicle.

There are also third parties that that would be able to link into and connect to a vehicle. The OBD II Port provides Third Parties an optional way to tap into the electronics of a vehicle. This is accomplished with a little help from the owner of the vehicle who voluntarily plugs a devise into the OBD II Port of their vehicle that has been given to them by this third party. Insurance companies fall into this third party group. Some insurance companies offer discounts to their customers that can prove that they are "good drivers". The data extracted from the vehicle would be the source information used to prove good driving habits.

Every vehicle produced since September 1st of 2014 must be equipped with an Event Data Recorder (EDR). It is equivalent to the "Black Boxes" used in commercial airlines. This EDR was first initiated in 1994 by General Motors for some the vehicles that they produced. The EDR's help the manufacturers learn how their vehicles perform in crashes. The National Highway Traffic Safety Administration (NHTSA) also has been gathering crash data obtained from these recording devices. These EDR's are now required to record 15 key elements such as braking action, vehicle speed, and seatbelt use. The Manufacturers may also record more than the 15 elements if they so choose to do so. These EDR's will only store 20 seconds of information relevant to the crash. The EDR records the key data surrounding the activation of an automatic collision notification (ACN). The information stored within the EDR can only be accessed by the use of a Crash Data Retrieval system that plugs into the OBD II port. Car manufacturers have this equipment. The NHTSA and law enforcement agencies either have this equipment or can use third party providers to obtain the data. In general the data contained in the EDR is the property of the owner of the vehicle. Permission to pull such data would have to be authorized by the owner of the vehicle or by a court order. Law enforcement, the NHTSA, insurance companies, and law firms may all have an interest in what information can be retrieved from the EDR.

Here is something that everyone might not be aware of. There also some STAND ALONE Smart Phone Crash Detection Applications that do NOT rely upon the vehicle to activate a signal of a "Crash". They are autonomous. These Smart Phone Applications rely only upon the components of the Smart Phone itself to determine if a "Crash" might have occurred. These applications use the device's internal components such as the gyroscope, GPS, accelerometer, proximity meter, and magnetometer to detect sudden changes of velocity and direction that are similar to that of a crash. This includes any mode of transportation or movement. It does not have to be a vehicle. Once the Application has detected what it thinks might be a crash it goes into a pre-set emergency response routine.