Car Insurance Discount Devices May Disclose Car's Location

Those insurance company apps that track an individual's driving habits in exchange for lower rates also can determine the car's physical location even without global positioning capabilities, a new study finds.

Some car insurance companies offer discounts if the driver allows a data collection device to be plugged into the on-board diagnostic port of the car. The devices collect driving habit data over a period of several days to a few months. Some of the devices can be periodically uploaded onto the insurance company's network so that the driver can see the data online.

By using speed, braking, and time data from the devices, the destination of the trips may also be determined, creating the loss of geolocational privacy, the report finds.

The report, "Inferring Trip Destinations From Driving Habits Data," was prepared by computer scientists at the University of Denver and will be presented at the 12th Annual ACM Workshop on Privacy in the Electronic Society in November.

The four computer scientists found that the computer programs used by the insurance companies to track driving habits can provide sufficient data to allow the destinations of certain trips to be "very easily identified, thereby raising concerns about current expectations of privacy set by the collection agencies."

The report noted that "location tracking enables inferences about an individual's lifestyle and social circles, most of which may be considered private."

Because cars generally are parked overnight at the home of an insurance company's customers, the start location of trips can be reasonably determined. Once that information is known, the scientists found "it is possible to infer the destination (often the full route) of a trip from driving habits data such as speed and distance traveled." However, the scientists observed that the insurance companies do not inform their customers of the ability to physically track their cars.

"Privacy advocates have presumed the existence of location privacy threats in non-tracking telematics data collection practices; our work shows that the threats are real," the paper concludes.