

# USE OF AUTOMOTIVE TELEMATICS TO IMPROVE ROAD SAFETY

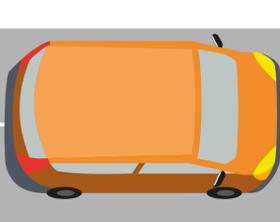


## THE CONTEXT

### AUTOMOTIVE TELEMATICS

Is the technology of sending, receiving and storing information relating to vehicles, or their drivers using telecommunication devices.

Automotive telematics devices are used to enable a range of applications that include:



INFOTAINMENT

NAVIGATION

TOLLING SOLUTIONS

The global automotive telematics market is set to experience rapid growth in coming years

**88%**  
of new cars are expected to have some form of connectivity by **2025**

## ROAD SAFETY



Increasingly telematics devices are being used to improve road safety by monitoring the behaviour of drivers



LIST OF CAUSES OF DEATH GLOBALLY BY **2030** ACCORDING TO THE WORLD HEALTH ORGANISATION

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_
- 7** Traffic Accidents
- 8 \_\_\_\_\_
- 9 \_\_\_\_\_
- 10 \_\_\_\_\_

## TYPES OF TELEMATICS DEVICES FOR ROAD SAFETY APPLICATIONS

BLACK-BOX DEVICES THAT ARE FITTED WITHIN THE VEHICLE POST-MANUFACTURE



SMARTPHONE APPLICATIONS



ORIGINAL EQUIPMENT THAT IS FITTED AT THE POINT OF MANUFACTURE



These devices typically provide feedback reports after a journey and monitor and measure aspects of driving behaviour including:



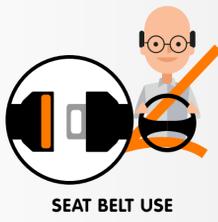
JOURNEY START AND FINISH TIMES



VEHICLE SPEED AND LOCATION



ACCELERATION, BRAKING AND CORNERING



SEAT BELT USE

## TARGET USER GROUPS FOR ROAD-SAFETY TELEMATICS SOLUTIONS



### YOUNG DRIVERS

The most targeted user group for in-vehicle telematics devices is the young driver user group (typically drivers between the ages of 18 and 24), as these drivers are still involved in disproportionately high numbers of accidents. More insurance providers are offering younger drivers competitive premiums, on the condition that they have an in-vehicle telematics device installed to monitor their driving behaviour.

### 'AT WORK' DRIVERS

An increasing number of employers with fleets of vehicles are utilising telematics devices to reduce risk and/or improve efficiencies amongst their drivers. Several studies have shown that the technology can lead to reduced crash rates among their fleet drivers, as employers are able to use the data produced to change schedules and routes, offer driving training courses and in some cases, initiate disciplinary action.



### ELDERLY DRIVERS

The driving standards of elderly people can deteriorate due to age-related conditions. However, the point at which these deteriorations happen is different for every individual. There are several benefits to keeping older people mobile for longer including improved wellbeing and physical health, as well as economic benefits for the wider community due to their increased ability to spend. Therefore, there is an opportunity to utilise in-vehicle telematics devices to support older people in driving for longer and to accurately identify the point at which they should stop driving.

### DISABLED DRIVERS

A smaller and more niche target group are the disabled drivers, where telematics devices can be used to make them feel more comfortable and confident in their driving. Advanced telematics systems are monitoring factors like driver fatigue and the onset of various medical conditions and alert the driver when measurements exceed pre-set parameters.



### ROAD OFFENDERS

A Freedom of Information (FOI) request from July 2016 has revealed that a third of motorists with 12 or more penalty points on their licence are still on the road and have not been disqualified from driving. Many of these drivers escaped disqualification due to the 'exceptional hardship' it would cause them. In these cases, there is an opportunity to mandate that telematics devices are installed in the cars of offenders, in order to monitor and alert authorities if any dangerous behaviour is observed.

