

# Combining technology and coaching to reduce risk on the roads

Improving the behaviour and attitudes of commercial vehicle drivers

A special report for fleet insurers and commercial fleet owners looking to reduce risk





# Executive Summary

Commercial fleet motor insurance costs are rising as insurers continue to struggle to offer competitive insurance whilst not making a loss. The current economic volatility is also limiting insurers' ability to recoup losses through investments.

This is leading to rising insurance costs and some commercial insurers leaving the market.

There is a requirement to tackle the cause of rising insurance premiums, which means reducing incidents on the roads.

This white paper introduces the concept of evidence based coaching intervention. This involves using actual commercial driver footage to coach drivers on improving behaviour behind the wheel and, thereby, reducing risk.

Commercial vehicle CCTV company, VUE CCTV, commissioned a research project which produced encouraging findings in relation to the impact of an in-vehicle recording device on improving driver behaviour. This was particularly prevalent when implemented with a corresponding coaching intervention.

In essence, the presence of a camera device and data recorder does appear to have a positive effect on the frequency of inappropriate behaviours over time, behaviours which lead to accidents.

We believe this focus on behaviours and not just skills will have a big impact on safety on the roads and, therefore, allow insurance companies to return to profitable and competitive insurance cover.

This white paper explains evidence based coaching intervention in the context of commercial fleet risk.



# Introduction

**What's happening on our roads**  
- and what does it mean for you?

# Road accidents in context



## “There’s no such thing as an accident”

Whilst this statement might not be entirely accurate, there’s no denying the majority of incidents on the roads are caused by driver error.

# 95%

According to ROSPA 95% of all road accidents involve some human error.

# 76%

In 76% of incidents human error was solely to blame.

It is estimated that up to a third of all road traffic accidents involve someone who is at work at the time. This may account for more than

# 20

**fatalities**  
and  
**250**  
**serious injuries**  
every week.<sup>4</sup>

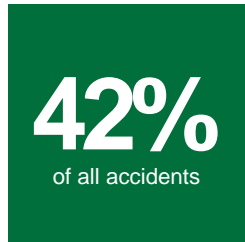
1 Department for Transport – ‘Reported road casualties in Great Britain – main results 2012’  
2 Department for Transport – ‘Reported road casualties in Great Britain – main results 2012’  
3 [www.rospa.com](http://www.rospa.com) – ‘FAQ What are the most common causes of road accidents’  
4 HSE ‘Driving at Work, managing work-related road safety’

# Let's look at the facts...

Many accidents happen due to inattention and distraction, as well as failure to observe the Highway Code.

## Failed to look properly

was the most frequently reported contributory factor and was reported in 42% of all accidents reported to police in 2011.<sup>5</sup>



## Exceeding the speed limit



+

## travelling too fast for the conditions

was reported in 12% of all accidents and accounted for 25% of all fatalities.<sup>5</sup>



Other driver error or reaction related causes of accidents, such as 'failing to look properly', 'loss of control' and 'sudden breaking' accounted for over 60% of fatalities.<sup>5</sup>



# ...And understand human emotion

Stress and strong emotions, whether they result from the driving task itself or unrelated matters can affect a driver's abilities; research has shown that angry drivers are more likely to take risks such as speeding, rapidly switching lanes, tailgating and jumping red lights.<sup>6</sup>

If a person drives while stressed they run a much greater risk of being involved in a crash that kills or injures them or another road user.

The UK's Health and Safety Executive (HSE) research shows stress, feeling rushed and lower life satisfaction (i.e. being generally unhappy) are all factors associated with an increased risk of collisions.<sup>7</sup>

More than four out of five drivers think about something else other than their driving when behind the wheel and more than half of these drivers say this affects their concentration.<sup>8</sup>

Those who talk on the phone, whether hand-held or hands-free, are four times more likely to be in a crash that causes injury.<sup>9</sup> It is the distraction of the call, not the actual holding of the phone, which is the main risk factor.



6 Jerry Deffenbacher, PhD, Colorado State University (2005), [www.apa.org/monitor/jun05/anger.html](http://www.apa.org/monitor/jun05/anger.html) Burns, PC; Parkes, A; Burton, S; Smith, RK; Burch, D, How  
7 The contribution of individual factors to driving behaviour: implications for managing work-related road safety, (HSE, 2002)  
8 The Green Flag Report on Safe Driving (BRAKE 2001)  
9 [www.brake.org.uk](http://www.brake.org.uk) – Road Safety Factsheet 484 Mobile Phones

## Some food for thought

# 39%

Road crashes account for 39% of work related deaths in the European Union.<sup>10</sup>

# 400

Around 400 people a year are killed in crashes in which someone exceeds the speed limit or drives too fast for the conditions.<sup>11</sup>



Nearly a quarter of all deaths involving vehicles at work occur during reversing.<sup>12</sup>

# 300

Around 300 deaths a year involve someone being 'careless, reckless, or in a hurry' and a further 125 deaths involve 'aggressive driving'.<sup>11</sup>

# 20%

of businesses have had more than one accident in the last year

<sup>13</sup>



# 18% £400m

Personal injury claims rose by 18% in 2011 costing the insurance industry in excess of £400m a year.<sup>14</sup>

At work road crashes are estimated to cost UK employers more than

# £2.7 Billion a year

<sup>15</sup>

<sup>10</sup> Reducing Road Safety Risk Driving For Work and to Work in the EU, European Transport Safety Council (ETSC)

<sup>11</sup> www.rosipa.com 'FAQ – what are the most common causes of road accidents?'

<sup>12</sup> www.hse.gov.uk – Health and Safety Executive Reversing Factsheet

<sup>13</sup> IAM Drive and Survive Driver Risk Management Survey 2012

<sup>14</sup> Actuarial Profession 'The 2012 report on third party motor claims and periodic payment orders (PPOs) from the institute and Faculty of Actuaries

<sup>15</sup> Association of British Insurers – 'Insurance for small businesses: a guide to protecting your business'



# Implications of current statistics on fleet owners and insurers



# Motor insurance is losing insurers money

# 23.3m

There were 23.3 million private cars, 0.6 million motorcycles and 3.7 million commercial vehicles insured in 2012.<sup>16</sup>

# -£286m

The underwriting loss to the motor insurance industry was £286 million. The industry has not made an underwriting profit since 1994.<sup>16</sup>

# £19.1m

There were 2.9 million claims notified for private cars for which insurers paid out an average of £19.1 million in claims every day.<sup>16</sup>

## This is unsustainable

# Insurance Profit and Loss for Motor Fleet Explained

Third party claims frequency, increasing number of claimants per claim and fraud are key features in motor insurance pricing.

Insurance companies use Combined Operating Ratio (COR) as their primary measure to judge their operational performance. COR is the total cost divided by the net earned premium. A COR below 100% means an underwriting profit has been made. A COR above 100% means the insurer is making an underwriting loss. Insurance costs associated with COR include operating expenses (including broker commissions), claims handling and, where applicable, re-insurance costs.

According to Zurich<sup>17</sup> the latest market figures show the COR for Motor Fleet was 106%. This can be made up of attritional losses (increasing personal injury claims, claims frequency, increasing number of injuries to cyclists, third party damage claims and inflation), large and catastrophe losses (large loss inflation and periodic payment orders (PPOs) rather than lump sum payments) and expenses and commissions.

Added to this the current low interest rates have had a negative impact on insurers' investment returns meaning they can no longer balance the losses made on insurance accounts.

A COR above  
**100%**  
means the insurer  
is making an  
underwriting loss

# What does this mean for fleet owners?

Quite simply, insurance premiums will continue to rise or insurance cover will be removed, creating a direct threat to businesses operating fleets.

According to Insurance Age in August 2013, Aviva is looking to reduce its exposure to some £100m of commercial fleet business over the next 12 months.

According to its latest half-year 2013 results, Aviva posted a combined operating ratio (COR) of 113% for commercial motor, markedly worse than the 101% recorded for the same period the previous year. It also recorded a commercial motor COR of 106% for its full-year 2012 results.

**There is a direct need to reduce risks on the roads in order for competitively priced insurance to be offered to fleet operators**

# Introducing Evidence Based Driver Intervention Coaching



# Evidence Based Driver Intervention Coaching

In September 2012, VUE CCTV commissioned a market research project to examine the degree to which the presence of on-board cameras could positively influence driver safety performance when combined with a structured feedback intervention.

The research was carried out by B.S.A.P. Ltd and the results independently analysed by Dr Julie Gandolfi of Driving Research Ltd.

## Research Design

The research involved 60 drivers from two vehicle fleets. Within each fleet three groups were formed:

**Group 1:** Control Group

**Group 2:** Drivers with vehicle fitted with VUE camera and data recorder

**Group 3:** Drivers with vehicle fitted with VUE camera and data recorder and also receiving feedback and a coaching intervention

Prior to the study, each group answered two questionnaires. One was a general attitudinal and behaviour questionnaire, and the other queried drivers' views relating to on-board cameras and data recording. The questionnaires were once again completed at the conclusion of the study.

The intervention element involved the drivers' line managers sampling recorded footage and vehicle acceleration and deceleration data and recording observed performance on a score sheet that examined the type and severity of instances of under performance.

Managers were trained in interpreting the footage and data in order to achieve consistency. They were also trained in providing non-threatening feedback in a positive vein by following a structured procedure.

# Principles of coaching style intervention used by VUE

- Set goals for target behaviour
- Give information on behaviours that increase crash risk
- Give information about the consequences of taking risk
- Assess intention and commitment to behaviour change
- Provide support/resources for achieving target behaviour
- Develop stress and time management strategies
- Provide praise and encouragement
- Monitor behaviour and review goals
- Develop relapse prevention strategies

## The Outcome

- Introduction of the Video Data Recorder (VDR) significantly changed drivers' attitude to **driving more carefully**
- Drivers' opinions on the presence of cameras **improved significantly** where coaching had been delivered
- Drivers' perception of the requirement to drive more carefully when a VDR is present **significantly increased**
- Drivers in vehicles with a VDR fitted and receiving coaching intervention feedback **take significantly fewer risks**
- Cameras and intervention **increased driver acceptance**
- Under the duration of the study the frequency of incidents was **reduced significantly**

# CCTV and driver intervention training statistics



# Effects of vehicle CCTV and driver intervention training

# 25.8%

## Increased acceptance

Analysis indicated that drivers who had the VDR and coaching intervention displayed the highest change in acceptance of VDRs with a positive increase of 25.8%

### Reduction in van drivers' risk following intervention coaching

Close Following	14.2%
Risky attitude towards speeding	14.5%
Overtaking risk	15.3%
Hazard monitoring risk	20.5%
Aggression	16.2%
Stress	4.2%

# 25.3%

## Reduction in risk

Drivers who received intervention showed a considerable 25.3% reduction in risk taking frequency

# 39.6%

## Fewer incidents

Van drivers with intervention coaching showed a considerable 39.6% reduction in incidents

# Summary

There needs to be a step change of attitude towards managing risk in the commercial motor market.

Fleet owners and insurance companies must work together to ensure fleets can be insured competitively.

Fleet owners must play their part in helping insurance companies reduce their exposure to risk in this market.

Insurers must accept their role in helping fleet owners with the tools they need to reduce risk.

**The underlying principle:** Commercial vehicle driver training based purely on teaching driving skills is not having the required effect to ensure fleet insurance remains competitive for insurance companies. The record of incidents and an abundance of research (over 50 published research papers) confirms this skills training is very limited in producing a sustained improvement in driving standards.

**Coaching must focus on driver behaviour in order to have the most impact on reducing risk.**

Having CCTV technology in a vehicle is shown to have a positive effect on a driver driving more carefully. Therefore, their attitude to safer driving stays with them whilst out on the road, and not left in the classroom.

With positive reinforcement coaching this impact is amplified.

# More information

Whether you are an insurance company looking to reduce risk or a fleet owner needing to improve efficiency we can help you achieve your objectives.

Contact us to discuss the research we undertook in more detail and how the installation of camera technology and coaching intervention can help your business.

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