WORK RELATED ROAD SAFETY RISKS: SOCIETAL, BUSINESS, LEGAL, & COST FACTORS

Dr Will Murray*
Research Director, Interactive Driving Systems, England

Abstract

Globally, using the road is one of the most risky activities that most people undertake. In the world of government and commerce, there are many societal, business, legal and cost reasons for organisations to focus on road safety. With this societal and organisational context in mind, the article sets out the business case for work-related road safety. It aims to assist policy makers understand the importance of work-related travel and of support managers (such as in fleet, transport or health & safety) seeking board authorisation to implement a sustainable long term work-related road safety policy with supporting interventions. It focuses on why work-related road safety is important, based on the author's company research and experiences in a number of organisations over the past twenty years. This article also has links to other useful business case documents, in the Appendix.

บทคัดย่อ

กิจกรรมการใช้ถนนของมนุษย์เป็นหนึ่งในความเสี่ยงที่สูง ในส่วนภาครัฐบาล และภาคธุรกิจได้มีสมาคม, ธุรกิจ, กฎหมาย และค่าใช้จ่ายสำหรับองค์กรที่ให้ความสำคัญกับความปลอดภัยบนถนน ซึ่งในเนื้อหาของสมาคมและองค์กร บทความนี้ได้กล่าวถึงกรณีธุรกิจที่เกี่ยวข้องกับความปลอดภัยบนถนน มีจุดประสงค์เพื่อช่วยให้ผู้ทำกรมธรรม์มีความเข้าใจในความสำคัญของงานที่เกี่ยวข้องกับการเดินทาง และความสำคัญของผู้จัดการสนับสนุน (เช่น กลุ่มรถยนต์, การขนส่ง หรือ สุขภาพและความปลอดภัย) ที่มีนโยบายการทำงานที่เกี่ยวข้องกับการรักษาความปลอดภัยบนถนนในระยะยาว โดยมุ่งทำความเข้าใจในความสำคัญของงานที่เกี่ยวข้องกับการรักษาความปลอดภัยบนถนนบนพื้นฐานประสบการณ์ทางด้านการวิจัย และการทำงานในองค์กรของผู้เขียนมากกว่า 20 ปี อนึ่งบทความนี้ได้มีการกล่าวถึงกรณีธุรกิจที่เป็นประโยชน์ซึ่งได้แนบมาด้วยในภาคผนวก

*Dr. Murray is also Visiting Research Fellow, Loughborough University and at the Centre for Accident Road Research and Safety, Australia. www.virtualriskmanager.net and www.fleetsafetybenchmarking.net

WHY IS WORK-RELATED ROAD SAFETY IMPORTANT?

Road safety is a major burden on global well-being. World Health Organisation data (1, 2) suggests that approximately 1.2 million of the 5 million global injury deaths each year are road crashes. Governments all over the world have implemented many engineering, educational, enforcement and evaluation based programs – some of which have been more effective than others.

In the UK and around the world, using the road for business is the single largest cause of work related fatalities (1). Despite this, it has typically been overlooked by all except the most proactive Fleet and Safety Health and Environment (SHE) professionals. This article therefore explores why road safety is important for fleet and SHE and management within organisations, and how to make a business case to focus on it.

Unfortunately, there are still some organisations that have not actively focused on road safety, mainly due to a lack of understanding and ownership or even confusion between who manages the risk. In some organisations the lack of action is due to SHE Managers believing that Fleet Managers are responsible for road safety and vice versa, leading to no action being taken at all. In other cases, the fact that road safety is not included in many of the formal qualifications undertaken by fleet and SHE specialists has led to a lack of awareness of road safety and the measures that can be implemented to help control or reduce risk. There are some notable exceptions to this rule (4, 5).

We are aware of several cases where new SHE or fleet managers wanting to make a large impact in their new organisations have identified road safety as the largest risk, and have been successful in their own career progression by focusing on it.

In fact, there are several societal, business, legal and cost reasons why organisations should manage road safety. Each is considered in turn, and is of most importance depending on who the business case is being made to. Typically, senior managers involved in marketing and branding are influenced by the CSR and business benefits; compliance and legal managers take notice of the legal requirements; and accountants/business managers are most likely to be persuaded by strong financial arguments. In our experience, the message should be pitched accordingly.

SOCIETAL OR MACRO LEVEL FACTORS

Road safety has a massive impact on society, and for this reason can play a major role in improving (or damaging) an organisation's corporate social responsibility (CSR). In reality, at present there is still only limited data on the true extent of the work-driver effect on road safety because few jurisdictions around the world maintain any 'purpose of journey information' in relation to road crashes. Some of the best data currently available is for Queensland in Australia (3), where at least 16% of hospitalisation crashes and 24%

of fatal crashes involve someone driving for work. Figure 1 shows that there is some similar data emerging in the UK, and since 2005 the Government has monitored purpose of journey – but the data remains sketchy.

Linked to this, many organisations have large and distinctive fleets in the UK and it is important for both employees and customers that they demonstrate a proactive approach to managing foreseeable risks. Due to their public exposure, it is in their best interests to inform customers of road safety initiatives and deliver on promises to ensure a positive impact on society.

CSR, or corporate social responsibility, protecting people, profit and the planet, has grown increasingly important, with most organisations now having a CSR strategy or statement of intent. In recent years, more proactive organisations have begun to see the link between CSR and road safety – which has a massive potential impact on all three strands of people, profits and the planet. Good work-related road safety helps to protect people from injury, saves money and is good for the environment. Our company's work-related road safety CSR programs can be found at: www.virtualriskmanager.net/csr

Figure 1 - Seven societal reasons to improve work-related road safety in the UK

There have been over 20 million people killed on world roads since 1885, including 3 million in the USA which is twice as many as were killed in all the wars it has been involved in. Death on the road in the USA is 12 times more likely than murder.
European Commission data (1) suggests there are 1.3 million road accidents in Europe each year, including over 40,000 fatalities and 1.7 million injuries. These are estimated to cost over €160 billion, or 2% of gross national product.
In the UK road death is the most likely way for 4-44 year olds to die (1, 2). Earlier police trials in England and Scotland indicated that about 25% of the 7-8 road fatalities a day in the UK are work-related. This means that there are about 4 times more work-related road related fatalities than non-vehicle based work based fatalities in the UK. Company owned vehicles only make up 14% of the UK's 28 million vehicles. This excludes people driving their own vehicle for work, but is still a massively disproportionate statistic.
Purpose of journey data is limited, but business travel makes about 30% of all UK travel, rising to over 50% if commuting is included. Fleets purchase between 50-70% of new vehicles, which are normally sold on within 2-3 years, which means that the safety features they specify filter into standard production and to the general public relatively quickly.
Large goods vehicles (LGVs) make up approximately 1% of vehicles registered or 6% of kilometres (kms) travelled, and are involved in over 15% of road fatalities in the UK. It is not known how many of these are actually caused by LGVs. Small goods vehicles (such as vans) are involved in about 300 fatalities per annum, but remain outside strict regulations on drivers' hours, tachographs and licences.
Transport Research Laboratory (TRL) surveys suggest that company car drivers have about 50% more accidents than ordinary drivers, even after allowing for their higher mileages. Other TRL surveys show that drivers doing >80% of their mileage on work business (23% of all those that drive for work) had 53% more injury accidents than those not driving for work.
Insurance data shows that between 20-65% of company cars are involved in an accident each year. This equates to more than a million fleet vehicle insurance claims in the UK costing almost £2 billion in claims. Each commercial vehicle averages approximately one crash per year in the UK.

So, from a government or societal level, and from a CSR perspective, there are many good reasons to focus on work-related road safety. There are also many business, legal and cost reasons why it should be taken seriously.

BUSINESS FACTORS

From a more general organisational or business perspective, and when managed in a proactive way, there is a clear link between safety, quality, customer service, efficiency and the environment, through getting things right first time, better fuel efficiency, less downtime and reduced asset wear and tear. Work-related road safety is a core activity which cannot be isolated from the business overall, and offers many benefits, in marketing, business development, corporate social responsibility, staff wellbeing, and brand enhancement or protection opportunities, by ensuring employees continue to drive safely. At the most simple level, it is much better for an organisation to be promoting a good news safety story, such as winning a safety award, than it is to have to react to and suppress the outcomes of a major incident.

A proactive safety program can also keep an organisation ahead of and protected from regulations and legal requirements. Proactive organisations can also help to shape and lead forthcoming regulation, offering them a competitive advantage by being ahead of more reactive organisations. Many such companies have also used safety as part of their business development process and to help them diversify by promoting their safety systems to others. The UK Driving for Better Business and Fleet Safety Benchmarking projects are both good examples of how this works.

LEGAL FACTORS

Legally, many jurisdictions around the world – including the UK – have tightened up their Occupational Health and Safety (OHS) and other regulations to include work-related driving. Examples include:

- Globally – impact of the ISO39001 standard.
- Relevant European regulations such as: the Certificate of Professional Competence (CPC) for large vehicle drivers, EU Framework Directive 89/391/EEC, and Working Time Directive.
- UK regulation, including vehicle as part of the workplace under Health and Safety law, corporate manslaughter, and vicarious liability.
- Eastern Europe – importance of the Labour Code in engaging organisations.
- Australia – Chain of Responsibility rules, a vehicle as part of the workplace under Health and Safety law, and Fatigue Management.
- US – Negligent Entrustment, ANZI 15 standard, and Hours of Service. Under Negligent Entrustment, an organisation that fails to enforce policy regarding driver qualification, hiring and safety standards runs the risk of po-

tential lawsuits and large financial settlements. This means it is important that organizations have policies, processes and procedures in place to hire and manage competent and qualified drivers. It also means that a negligent entrustment case against your company can be built on what you should have known about a problem driver.

- Germany – workers compensation, social insurance, and the role of the Berufsgenossenschaftens.
- Sweden – Vision Zero, engaging suppliers through building safety into purchasing, interpretation of EU Framework Directive 89/391/EEC, and government leadership on vehicle safety features.
- New Zealand – Chain of Responsibility rules, The Accident Compensation Commission fleet guide, and vehicle as part of the workplace under Health and Safety law.
- South Africa – road safety regulations called Administrative Adjudication of Road Traffic Offences (AARTO), including substantial fines for organisations operating vehicles illegally.
- In the emerging or BRICK economies (Brazil, Russia, India, China and Korea) there appears to be limited legal processes in place for work related road safety, even those in such regions where vehicles being driven for work are involved in about 70% of road fatalities.

In the UK, for example, the joint Health and Safety Executive/ Department for Transport (HSE/DfT) guidance on 'Work-related Road Safety', issued in 2003 and updated in 2014 sets out how this should be achieved by competent people in organisations taking a risk assessment led approach to managing drivers, vehicles and the journeys they undertake.

Although the HSE/DfT document is only a guidance, it has become a minimum benchmark standard for organisations to work to. This means that not only do organisations have to ensure that their workers drive within the road traffic rules, but also the organisations themselves must have clearly risk assessed and documented safe systems of work in place for their vehicles, drivers, journeys, sites and processes. The guidance covers all forms of work-related transport, including cars, trucks, bicycles, buses, vans, construction plant and towing units, and clarifies that the Management of Health and Safety at Work Regulations on risk assessment do apply to work-related driving – even where people are using their own vehicle.

The guidance has also seen moves towards a closer relationship between the Police, HSE and Department for Transport in road vehicle collision investigations, where questions the police are asking include 'was there a work element involved and did the organisation have appropriate management policies, procedures and audit trails in place?'

The above questions need to be covered by an organisation's work-related road safety policy, ideally incorporated in its Health and Safety policy, which should be

reviewed and reissued on an annual basis to check compliance with current legislation, and ensure that it is being applied.

Compliance with guidance such as the joint **Health and Safety Executive/ Department for Transport guidance on 'Work-related Road Safety'**, is particularly important and should be the basis of an organisations fleet safety policy – which details how to effectively manage work-related road safety legally, whilst minimising the risks to the brand, employees and other road users in a cost effective way. Linked to this, fleet and SHE decision makers operating at the pan-European level should particularly familiarise themselves with **EU Framework Directive 89/391/EEC** covering Health and Safety at Work, with recent mumblings from Brussels suggesting that it does apply to vehicles being driven on the road for work purposes, requiring fleet operators in the public and private sectors to:

- Protect workers through preventive measures, information, consultation, balanced participation and training.
- Evaluate the occupational risks and make provision for adequate protection and prevention.
- Ensure that all workers receive adequate on-going training.

Overall, compliance with transportation and occupational safety & health regulations are important legal considerations for organisations requiring their people to travel as part of their work.

COST FACTORS

Particularly in the current climate of recession, rationalisation, downsizing, the limited availability of capital, economic austerity and financial prudence, maintaining safety in a cost effective way – or loss prevention – is particularly important, making up between 3-6% of gross domestic product (GDP) in most countries around the globe.

The financial implications of work-related road safety can be massive, with significant increases in insurance costs, ambulance chasing, legal fees and personal injury costs in recent years. Industry research (3) shows that typically workplace injury costs are met 40% by the employee, 30% by the employer and 30% by the community as a whole.

Figure 2 shows a cost model that many organisations have used to show the financial implications of work-related road safety. It can also be used to project long-term costs and potential returns on investment, from adopting a proactive Work-related Road Safety Policy. It is based on one typical collision, where our vehicle ran into the rear of a third party, and which cost £$€1,000 to repair the damage to our own vehicle.

Figure 2 - Model of collision costs

Item of cost	Sample data
Own damage costs	£$€1,000
Third party vehicle damage costs	£$€1,000
Third party injury costs	£$€1,000
Reported cost of collisions	£$€3,000
Total cost of collisions (including hidden costs @ 2 times reported costs)	£$€6,000
Revenue required to fund collisions at 10% Return on Sales	£$€60,000
Widget sales (at £$€0.5) required to fund fleet safety costs	120,000

A more detailed cost modelling spreadsheet based on Figure 1 is freely available by contacting the author via www.virtualriskmanager.net

Including own damage costs, third party vehicle damage costs and third party injury costs, Figure 2 shows the full financial implications of an organisation's collisions. HSE data suggests that this figure should be multiplied by between 8 to 36 times to identify the actual total costs of the collisions to an organisation. Industry experience suggests that such hidden costs should be treated more conservatively, so in Figure 2 a hidden cost multiplication factor of 2 has been used. To cover a £$€3,000 collision, £$€60,000 of revenue would be required, equating to sales of 120,000 units. In building a business case, it is worth asking the question: '*Is it easier to sell 120,000 extra products, or be more proactive in preventing collisions?*'

In the current economic climate, where organisations are looking to cut costs, up-front investment in safety programs is becoming much more difficult to justify. The model shown in Figure 2, identifying the full costs of risk, has allowed many organisations to continue investing in safety – and to take a data led 'risk targeting' based approach. The model can also be used to project long-term costs and potential returns on investment from adopting a proactive Work-related road safety Policy.

Risk financing is also becoming increasingly important – finding clever ways to fund programs, and to minimise the cost of work-related road safety through data led 'risk targeting' based on sound science. Sources of funding we have seen used recently include:

- Detailed, costed, internal business case to the board.
- Investing some of the insurance captive in risk management.
- Asking insurer, leasing company or vehicle supplier to provide funding support for risk management.
- Focusing attention on uninsured loss recoveries and using the money clawed back from third parties to invest in risk programs.
- Using government funding 'pots' for training.

SUMMARY OF THE BUSINESS CASE FOR WORK-RELATED ROAD SAFETY

Overall, there are some strong **societal, business, legal, and financial** arguments in favour of taking proactive steps to improve fleet or occupational road safety.

The potential benefits of improving road safety include: reputational risk management; industry recognition; a reduction in personal injury, at work and leisure; increased awareness of 'on the road' risks; improved safety; industry leadership and significant collision rate reductions.

Obtainable financial benefits include: reductions in vehicle downtime and repair costs and higher productivity of employees through reductions in injury absence.

References

1. Murray, W., Pratt, S., Hingston, J. & Dubens, E. (2009). Promoting Global Initiatives for Occupational Road Safety: Review of Occupational Road Safety Worldwide, UK National Institute for Occupational Safety and Health.
2. Murray, W. (2003). Company Vehicle Incident Reporting and Recording (CoVIR). *Department for Transport Road Safety Report,* Government of Australia, Transport and Safety Bureau.
3. Murray, W., Newnam, S., Watson, B., Davey, J. & Schonfeld, C. (2003). *Evaluating and improving fleet safety in Australia.* Canberra: ATSB. www.infrastructure.gov.au/roads/safety/publications/2003/eval_fleetsafe.aspx
4. Murray, W., Ison, S., Gallemore, P. & Nijjar, H. (2009). Effective Occupational Road Safety Programs: A Case Study of Wolseley. *Transportation Research Record: Journal of the Transportation Research Board.* ISSN: 0361-1981, Volume 2096/2009, DOI 10.3141/2096-08, p55-64.
5. Wallington D, Murray W, Darby P, Raeside R & Ison S. Work-related road safety: Case study of British Telecommunications (BT). *Transport Policy.* Volume 32, March 2014, p194-202.
6. HSE internet site (2003). Health and Safety Executive/Department for Transport Guidance on Driving at work: Managing work-related road safety, London. www.hse.gov.uk/pubns/indg382.pdf

Appendix 1 – Some useful web-based source materials

- Socio-economic costs of accidents at work and work related ill health, http://ec.europa.eu/social/main.jsp?catId=716&langId=en&intPageId=1716
- Can you afford to waste money?, Canadian Centre for Occupational Health and Safety: Making the Business Case, http://www.ccohs.ca/healthy work-places/employers/businesscase.html
- Industrial Accident Prevention Association (Canada): The Business Case for a Healthy Workplace, http://www.iapa.ca/pdf/fd_business_case_healthy_workplace.pdf
- Canadian Workplace Safety and Insurance Board & Canadian Manufacturers and Exporters: Business Results Through Health and Safety, http://www.wsib.on.ca/files/Content/Downloadable%20FileBusiness%20Results%20Through%20Health%20&%20Safety/Biz.pdf
- United States Department of Labor: Making the Business Case for Safety and Health, http://www.osha.gov/dcsp/products/topics/businesscase/index.html
- Resources on the business case for safety and health – including business cases for Motor Vehicle Safety, http://www.osha.gov/Publications/safety-health-addvalue.html
- The American Society of Safety Engineers: Return on Investment in OSH, http://www.asse.org/professionalaffairs-new/bosc/ROI.php
- ILO paper: Prevention is good for health and good for business, http://www.issa.int/details?uuid=f070f204-5fbd-4017-8afb-e07d98ba53ba