

**GLASGOW CITY COUNCIL
WORK RELATED ROAD SAFETY
COUNCIL ACCIDENT REDUCTION SCHEME**

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1. INTRODUCTION

Driving is without doubt, the most dangerous work related activity undertaken by the vast majority of workers in the UK. It has been estimated that up to a third of all road traffic accidents involve somebody who is at work at the time. This may account for over 20 fatalities and 250 serious injuries every week. The overall cost to British business is in the region of 3.5 billion pounds a year. The human costs alone should be enough to encourage employers to take action, but unfortunately many companies fail to see the major benefits of managing occupational road risk.

In 2003 the Health and Safety Executive (HSE) and the Department for Transport published the 'Driving at Work' document. This provided clear guidance on the subject of managing occupational road risk and advised employers of their responsibilities under existing health and safety legislation. The document emphasised the importance of creating and managing a road risk policy as an integral part of existing health and safety policies.

Local authority Road Safety Unit's (RSU's) and other road safety organisations have been at the forefront of promoting occupational road risk. For example the RSU in Glasgow has visited over 100 companies providing them with advice, guidance and resources to assist in developing a policy. There is still much more to be done to encourage managers and fleet operators to invest in road safety. The Department for Transport (Dft) and Health and Safety Executive have set the ground rules for managing occupational road risk and it is now up to fleet operators and business managers to react to reduce the number of work related road accidents. Failure to do so may result in stricter regulations and enforcement in the years to come.

This paper will discuss Glasgow City Council's (GCC) approach to managing occupational road risk, and in particular the development and management of the Council Accident Reduction Scheme (CARS). The CARS scheme forms part of the Council's overall strategy to reduce and manage road accidents involving Council employees.

2. BACKGROUND

Glasgow City Council (GCC) employs over 30,000 staff and operates a large and diverse fleet of vehicles ranging from mopeds to heavy goods vehicles. For a large number of Council employees, driving at work forms a fundamental part of their duties, and in some cases their core duty. Managing workplace transport safety within GCC involves controlling a wide range of issues including the driver, vehicle, journey, loading /unloading, incident reporting and accident investigation etc.

GCC's Health and Safety Executive (GCCChse) are responsible for ensuring that adequate policies and guidelines are in place to ensure the safety and wellbeing of all employees who may be exposed to risk, including those who drive or operate on the roads. Policies are then applied and effectively communicated within the workplace using local Health and Safety Officers (HSOs).

The remit of HSOs, and their support staff, in each service area is vast, and it is therefore not practical or reasonable to expect them to be fully proactive in every area. Employees must realise that they also have an important role to play by not undertaking any activity which they perceive, know or suspect may lead to a breach of health and safety guidelines, policy or legislation.

There are many examples of driving and procedural malpractice carried out by sections of the workforce which only come to the attention of HSOs and managers in the event of an injury accident. The CARS scheme is designed to identify these malpractices by increasing the communication gap between drivers and managers and by thoroughly investigating all incidents, malpractice can be identified and stopped before it results in an injury accident.

3. DRIVING FOR WORK AND THE LAW

In terms of the law the protection of the public and persons working on the highway is regulated under Road Traffic legislation, and enforced by the various agencies, including the police. The police are responsible in the main for investigating and detecting road traffic offences and establish causation and responsibility. However the Health and Safety Executive tends to investigate accidents resulting in serious or fatal injury which are work related and which usually occur in or around works premises. Goods hauling or carrying vehicles are controlled by the Traffic Commissioner who has the power to grant and revoke operator's licences.

The Health and Safety at Work Act 1974 requires the Council to ensure, so far as is reasonably practicable, the safety of all employees while at work. There is also a responsibility to ensure that others are not put at risk by work-related driving activities. Under the management of Health and Safety at Work regulations, employers have a

responsibility to manage health and safety effectively. This includes the responsibility of carrying out an assessment of the risks to the safety of employees, while they are at work, and to other people who may be affected by their work activities.

The Provision and Use of Work Equipment Regulations apply to any work equipment, and vehicles come into this category. Where a vehicle is provided by the employee and used for work purposes, the circumstances might be slightly different, but the duty still exists.

4. Dft RESEARCH – WORK RELATED ROAD TRAFFIC ACCIDENTS

In August 2005 the Dft published Road Safety Research Report No 58 entitled 'An in-depth Study of Work related Road Traffic Accidents. A sample of 2111 accident cases was considered, including 1099 in detail, from Midland police forces, involving drivers/workers of all ages and covering the years 1996-2004 inclusive.

The background to this report highlights the following:

- Traffic Accidents while at work are the single biggest cause of employment-related fatality in the UK. (Rospa)
- Company car drivers in the UK are 49% more likely to be involved in an accident than an ordinary driver (Lynn and Lockwood 1998)
- Drivers who drove more than 80% of their annual mileage on work-related journeys had about 53% more accidents than similar drivers who had no work-related mileage (Broughton et al)
- High mileage company drivers are more likely to use mobile phones whilst driving than other drivers (BRAKE 2001)
- Work-related drivers have shown higher levels of risk taking behaviour than others across various studies (Stradling 2001)
- The safety culture within an organisation is important in relation to work-related road accidents. There is a key relationship between safety culture, driver attitudes and accidents (Bomel 2004)

The main findings of this report are:

- The six main categories of vehicles involved in accidents were Company cars, vans/pickups, lorries – large goods vehicles (LGV), buses, taxi's and emergency vehicles.
- Company drivers had a high 'blameworthiness' ratio in their accident involvement.
- Company car drivers showed excess speed as a casual factor, whilst van drivers showed more observational failures.
- LGV drivers showed more fatigue and vehicle defects as factors
- The safety of 'at work drivers' could be improved by addressing such factors as speed, safe distance and distraction.

5. GCChse GUIDANCE ON FLEET SAFETY POLICY

In 2005 GCChse recognised the need to review and merge existing transport policies and this resulted in the production of a draft Transport Safety Document, outlining in detail the Council's policies in relation to employees using or working on Glasgow's roads.

The documents contents included:

- Risk Assessments
- Vehicle Safety
- Driver Selection
- Driver Assessment and Training
- Convictions, Penalty Points, disciplinary action
- Licence, insurance and MOT checks
- Alcohol and Drugs
- Transport of Materials and Passengers
- Seat Restraints
- Breakdown, Emergency Assistance
- Speed
- Fatigue
- Illness and Medication
- Mobile Phones and Personal Equipment
- Incident Reporting and Accident Investigation

All service areas within the Council now have to implement the Fleet Safety document including all of its recommendations and actions. Some of the policies listed, such as alcohol and drugs, speeding and licence checks are already standard Council wide policies. Other areas such as Incident Reporting and Accident Management vary from service to service; in most instances the existing accident management policies are not sufficient to meet the specified criteria. It is in this particular area that the RSU, with their specialist knowledge, felt it was

appropriate to take a leading role by recommending that each service adopt the CARS scheme.

6. Fleet Safety Document Recommendations

The Council will benefit by adopting a Safety Culture. The system, which most encourages open incident reporting, is one where no blame is apportioned. This helps to fulfil the employer's "duty of care" to employees and the general public.

Development of this culture is about reducing road incidents and crashes. Everyone should be made aware of their responsibilities in this process.

- Any incidents, including near misses and damage only, should be logged and codified for analysis.
- Employees can admit to incidents without punishment or penalty.
- Managers encourage and enable the "no blame" process.

Once established, this culture enables identification of drivers requiring re-training or assistance, vehicle inadequacies and problematic sites/routes/schedules. Many of these issues are much less likely to become apparent within a blame culture (It wasn't me! It happened whilst it was parked).

Departments should record details of every vehicle / driver related incident no matter who is to blame. This is an important area of risk management. It should include - type, severity, casualties, location, time of day, weather, road type and condition, manoeuvre, speed, drivers view of incident and fault estimation - insurance details - claim type, frequency (per vehicle, driver, route), claim costs including excess, premiums, liability, history (improving, deteriorating, static?) Data analysis should provide driver/vehicle risks, financial overheads and liabilities (amongst individual driver/sections/departments). Reference to driver assessment and training records should indicate driver status, dates, type, duration, result, trainer, location, vehicle type and incident history.

When there has been a reportable injury or dangerous occurrence on the public road or due to a driving activity, it must be reported using the Council Incident Report Form in compliance with the Council's Incident Reporting and Investigation Policy Arrangement, even though it may already have been reported to, or involved, the police or other emergency services.

Action required

- Departments controlling fleets of vehicles must establish a record system for incident recording as detailed.
- Data from the record system must be analysed on an on-going basis.
- Ensure that where identified, through data analysis, that individual drivers require retraining or additional assistance, this must be provided timeously.
- Ensure that all incidents are recorded and investigated.

7. COMPANY VEHICLE INCIDENT REPORTING AND RECORDING (COVIR)

The Dft commissioned research to better understand accidents involving company vehicles in Britain; the research was undertaken by Dr Will Murray and had two primary objectives:

- to produce a comprehensive review of company vehicle incident reporting and recording (CoVIR) systems currently employed by a range of organisations; and
- to develop best practice recommendations for a company vehicle accident recording system that could be used throughout the UK.

The long term objective of the CoVIR report was to help companies and organisations which use vehicles, to properly record and analyse data involving their employees. In doing so it would help managers make informed decisions on the most effective measures to put in place to reduce accident rates. To meet the objectives of the report, more than 80 existing accident procedural forms were studied and over 50 managers were interviewed.

The main findings of the CoVIR research suggested that companies were strong on claims management, but weaker on accident investigation and analysis for risk management purposes. Based on these findings Dr Murray developed a new system for converting insurance data into risk analysis data.

The RSU studied Dr Murray's report and adopted many of the data analysis recommendations which now form part of the CARS database. It was important however that the database reflected the needs and requirements of the Council and that specific data was included to ensure all incidents were noted. The RSU worked closely with the internal IT department before launching the database in 2005. The database has since been updated to a version 2 which is capable of handling accidents from every service department within the council.

Further enhancements will be added during 2007 to allow more information to be distributed and acted upon by managers.

8. CARS BACKGROUND

The RSU forms part of Land Services (LS) which has a remit to manage, maintain and develop the city's land, road transport and environmental resources in a sustainable manner.

Land Services employs over 3000 staff and operates a diverse fleet of approximately 600 vehicles ranging from mopeds to large goods vehicles. Like any large organisation, policies are already in place, to ensure employee welfare whilst driving on Council business. The Councils' RSO proactively promotes occupational road risk to private companies in Glasgow and was asked by senior management to assist in developing a scheme to reduce road risk within Land Services. The RSO researched best practice in private industry, and recommendations from professionals in the field of fleet safety, before developing the Council Accident Reduction Scheme (CARS)

The proposed scheme had to be accepted by staff, management and more importantly the trade unions. There was some opposition from local union representatives, who saw the introduction of a new scheme, as a further tool to discipline drivers. A series of meetings and presentations took place to assure representatives that any proposed scheme would be of benefit to employees and would not include any form of discipline. This was a major step forward as any objections from the unions could have significantly delayed the introduction of the scheme.

Due to staffing and budget restraints, the CARS scheme had to be easily managed, efficient, and adapted to the unique workings within the Council. Consultations with fleet management, health and safety, legal services, internal training and depot managers, ensured the scheme would run effectively and efficiently.

A study of accidents within LS, carried out by the RSU, over a one year period, revealed that over half of the fleet had been involved in a road traffic accident or other incident involving damage or injury to employees. The study also found that on a year to year basis LS accident costs fluctuated, but were generally in the hundreds of thousands of pounds. There was therefore a major financial benefit to be gained from the managing and preventing accidents.

The RSU had previously attempted to introduce a driver training programme to reduce accident risk. This involved employing IAM fleet in a trial scheme targeting thirty high risk drivers. The scheme was praised by the participants, many of whom stated that they had benefited greatly from the instruction, however the proposal to extend the trial was rejected in terms of costs and logistics. By in large this is a

typical response from company managers, who fail to see the long term financial benefits of proactively managing occupational road risk.

CARS was initially piloted at two main depots. The significant success of this pilot resulted in the scheme being expanded throughout Land Services in August 2004. The expansion of the scheme required the development of a computer database to cope with the amount of information required, ensuring the scheme moved away from being reactive to proactive; identifying accident trends, areas of high risk and drivers who required remedial training. The database was designed by the Unit working closely with internal IT professionals and based on research into existing fleet management tools. The resulting database is comparable to any equivalent database found in the private sector, and is continually being enhanced to achieve further improvements.

9. THE CARS SCHEME

The CARS scheme became fully operational throughout Land Services (LS) on 1 August 2004. The primary purpose of the scheme is to reduce road incidents and crashes involving Land Services vehicles and thereby reducing any associated injury accidents and financial costs. CARS has been designed and developed by the Road Safety Unit based on recommendations from leading professionals in the field of fleet safety.

The CARS database is continually updated to provide a wealth of valuable accident data that can be distributed to the appropriate managers within LS to assist in a review of any identifiable road risks.

To date, the Road Safety Unit has received 750 accident reports for investigation, which has resulted in over 400 inputs to the CARS database. A total of 200 drivers have been offered a confidential interview to discuss their accidents by telephone and over 30 have been interviewed in person, resulting in extensive individual driver training.

Every accident involving an LS vehicle is recorded on an internal Motor Accident Report Form (MARF). The main purpose of this form is to allow the Council's legal section to log and process accident claims. Following an accident drivers are obliged to complete the form on return to the depot and before the end of their shift. The MARF is currently the primary document used to process accident data.

The RSU considered updating the form to include further data from the scene to assist with data and claims. However, after discussions with GCC Claims Section, it was decided that the form was sufficient to provide a basis for further investigation by the appropriate staff. The RSU was slightly concerned that drivers were not providing sufficient

information on the MARF form and took steps to address this by introducing an administrative policy to ensure that all forms were completed correctly.

Managers are now faxed to ascertain why the form was not completed correctly and are asked to re-submit the form fully completed. This minor administrative policy was the first step to ensuring compliance at the primary recording stage.

To further enhance the primary recording stage, the RSU has also designed and implemented a comprehensive accident pack, which is currently on trial at three depots. The pack contains:

- an Accident Report Book (ARB), designed by the Unit, and specific to Council requirements. This booklet should ensure all data and evidence is gathered at the scene;
- a camera, to assist with fraudulent and legitimate third party claims and to help investigators understand the scene; and
- a tape measure, Crayon and Pen.

Once completed, the Accident Pack is used by the employee to assist in the correct completion of the MARF form on return to the depot. The pack is then forwarded to the RSU to collate data and assist with the accident investigation. The Council's Legal section is supplied with photographs and any other relevant material to assist with claims.

There have been incidents in the past where a Council employee insists that the damage caused to a third party vehicle or property, was of a 'very minor nature'. However on contacting GCC Claims Section the RSU were surprised that claims of a 'very minor nature' were in some cases in excess of £3000. It was therefore decided to introduce the accident pack to ensure third party damage was recorded in detail. If the trial of the pack is successful, it will be implemented throughout the LS fleet.

Once the MARF form is completed a copy is forwarded to the RSU for investigation. The investigation is undertaken by a Road Safety Officer with a background in accident investigation. Accidents are classified as follows:

- Criminal damage incidents, which are recorded and filed. The RSU has volunteered their services look at preventative measures to reduce criminal damage costs.
- Procedural Damage, which is also recorded and filed, but in some cases can be forwarded to the HSO for information/action. The RSU also plan to review their involvement in procedural incidents during 2007.

- Non blameworthy accidents, which are recorded and filed, are entered onto the CARS database for statistical purposes.
- Blameworthy accidents, which are also recorded, are then filed and entered onto the CARS database. A full investigation is then instigated which involved an employee being formally interviewed by the RSO.

Incidents where the RSO is concerned about employee welfare are sent to health and safety for action. The RSO will then decide from the information provided on the accident sheet whether or not the accident is blameworthy. If there is insufficient information to make a decision the RSO will make further enquiries into the circumstances of the accident.

A points system is in operation which allows accidents to be graded in terms of seriousness and risk. Minor accidents such as wing mirror damage are graded at 1 point, medium damage risk at 3 points and more serious accidents graded accordingly. Points are valid for three years and the more points an employee gathers over the three years the more training they receive.

If an accident has been identified as blameworthy, points are issued pending an interview with the employee. If an employee declines an interview then points will automatically be entered into the CARS database. Personal interviews are compulsory on reaching three points and at every three point stage thereafter. Training is issued at various stages to employees who have been involved in crashes.

10. Accident Grading/Investigation Examples

Example 1

A GCC Driver is despatched on the same route each day to pick up parts for machinery repair. He becomes extremely familiar with the route, which includes a large roundabout. On entering the roundabout at speed, the driver failed to give way and collides with a police car causing minor damage. The driver admits that he had not noticed the police car and that if he had entered the roundabout half a second earlier it may have resulted in a serious injury accident.

This incident was graded as minor damage/high risk. On interview the driver stated that he had become so familiar with the route that his speed and confidence had steadily increased to the point where he approached the roundabout at an inappropriate speed. He also informed the interviewing officer that he travelled in excess of 25,000 miles per annum and had received no formal driver training since passing his driving test some 20 years ago.

This is typical of many company drivers and managers who accept that possession of a full driving licence is all that is required to allow employees to be exposed to the risk of high mileage driving.

The employee was issued with extensive, compulsory training which concentrated on speed and hazard awareness and approaching junctions/roundabouts.

Example 2

A GCC Driver exits depot behind another GCC vehicle. On approach to red traffic light, the first vehicle brakes and second driver fails to stop, colliding with rear of vehicle; the Vehicle (3.5t pick up) is written off. On the accident form the driver alleges that the brakes are faulty. On this information the Road Safety Officer requests that the fleet manager produces the vehicle service records and also carry out a brake test.

The Service records indicate that vehicle was tested two weeks prior to the accident and records show the brakes were 13% above recommended efficiency rate. A further rolling brake test reveals no faults.

This type of allegation is typical of some drivers who are unwilling to admit that it was their driving behaviour which resulted in the accident. The driver was informed of the tests and awarded training.

Example 3

GCC driver on gritting route performs a 'U turn' through a 'cut' in a four lane carriageway with a speed limit of 50mph. This results in a third party vehicle colliding side on with the GCC vehicle in a damage only accident. Had the third party been travelling at the maximum 50mph limit, the outcome could have been more serious.

This incident highlighted one of the benefits of the CARS database, which is linked to a GIS mapping system allowing for accidents to be plotted. The mapping system enables RSU staff to identify high risk routes and locations. On this particular occasion this was the second accident recorded at the location; the first involved a third party crashing into the rear of a gritter. On examining the map it was clear that there was a roundabout some 100 yards ahead of the accident locus and the Investigating Officer could not understand why the driver did not choose to perform the U turn there.

On interview the driver pre-empted the question and handed a route map to the interviewing officer, which clearly stated that the driver must turn at this cut. Apparently failure to follow the given route, which was tracked by satellite, could result in disciplinary procedures.

Further investigation revealed the gritting routes were planned by computer and not necessarily tested prior to the gritting season.

This incident resulted in the route being changed to include the roundabout as the turning point and further routes are also being reviewed. The RSU is currently reviewing the benefits of 'route analysis' targetting drivers who regularly travel the same routes. This will be included in a yearly training package and will include a video of the full route with commentary on potential hazards

11. CARS DATABASE

The CARS database has been designed by the RSU to specifically meet the requirements of the Council. The scheme was originally paper based, but within a few months it became quite clear, that if the scheme was to be successful it required recording and analysis of accidents to identify risk, and take appropriate action. A brief was given to LS internal IT department to create the CARS database and over the last three years a system has been designed which is comparable if not better than equivalent systems in the private industry. The cost of developing such a system through commissioning a private sector organisation is estimated at between £30k to £40k.

This investment by GCC is an indication of the commitment to reduce accident risk. The data recorded on the system includes:

- Driver details
- Vehicle details
- Journey
- Accident
- Interview
- Training
- General driver stats etc.

12. Results

In the first full year of operation the CARS scheme recorded a 39% reduction in all accidents. This was followed by a further 16% reduction in year two, although the reduction in year two was adversely affected by a main depot which recorded a 50% increase over the period.

The CARS scheme is specifically designed to target blameworthy accidents, thereby reducing the amount of liability and costs to Land Services. A significant decrease of 34% in such accidents was recorded in year two.

Year	2004	2005	2006
Accident Costs (e)*	£400,000	£264,000	£227,040

e* estimated

Statistical data is now being used to target resources in effort to bring about further reductions in accidents. For example the highest volume of 'accidents by type' were all attributable to human error and included a large proportion of reversing accidents within premises. This will be targeted by both driver training and reviewing policies involving vehicle movement within depots.

Another identifiable trend was the number of drivers who are repeatedly involved in accidents. At one of the largest depots 15% of the drivers were responsible for 75% of the accidents. Following extensive training and publicity at the depot, none of those drivers identified have since been involved in an accident.

13. Savings

The scheme was not designed specifically to save costs. However, it is inevitable that a reduction in the number of accidents will contribute to a savings in cost. GCC 'own damage' costs are difficult to assess as the repair procedures following accidents often include non accident damage and routine servicing. Third party claims are measurable. GCC Claims Section has verified that third party claims had fallen by over 32% (£40,000) in the first year of the CARS scheme, which is comparable with the overall actual accident reduction of 39%.

14. Initiatives

New initiatives for 2007 to enhance the scheme include

- Route Analysis
- Accident Packs
- Drivers Handbook
- Post accident advice pack
- Hazard awareness DVD
- Speed Check / Awareness days
- Vehicle / Driver - spot checks/surveys
- Increased publicity at depots
- Private car use study/policies etc.

15. The Future - expanding the Scheme

The CARS scheme has contributed significantly to the reduction of accidents within Land Services. The scheme has now been offered to the remaining services in Glasgow, and it is likely that Environmental Protection Services will be the first to benefit. This will provide an immense challenge for the Road Safety Unit, managing accidents for one of the largest and most diverse fleets in Glasgow.

There will also be further challenges as other services are introduced with their own specific policies and working practices. Examples such as the carriage of children, larger proportion of own vehicle use and voluntary drivers are only a few examples.

The CARS scheme has generated interest from a number of local authorities who are considering implementing an accident management system. The RSU will provide and assist any external organisation with information and guidance on how to reduce road accidents in the workplace. LS IT department has confirmed they are able to convert the CARS database to suit any organisation. The database would be provided free of charge to any interested local authority with a nominal IT cost for the conversion.

The Council's RSU is committed to reducing road casualties in Glasgow, and will continue to promote the benefits of managing occupational road risk.

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