



SAFED for Vans

A Guide to Safe And Fuel Efficient Driving for Vans







Foreword

This guide is part of a series of publications produced by the Department for Transport to encourage safe and fuel efficient driving under the Freight Best Practice programme.

The aims of the guide are to:

- Outline the elements of Safe and Fuel Efficient Driving (SAFED) training specifically relevant to the driving of vans
- Define the qualifications, skills and experience required by trainers intending to deliver the SAFED training programme to candidate drivers
- Explain the content, and assist in the delivery, of the one-day SAFED training course designed to improve the safe and fuel efficient driving techniques of existing van drivers

The Freight Best Practice programme provides a range of free information to help you improve the efficiency and safety of your operation. Guides, case studies and videos are available on topics such as saving fuel, developing skills, equipment and systems, operational efficiency and performance management. A full list of the publications available can be obtained by contacting the Hotline on **0845 877 0 877 or** via the website **www.freightbestpractice.org.uk**

A series of SAFED training days for trainers, operators and drivers is currently being developed for England. Details of how to register are given on the back cover of this guide. The Department for Transport is sponsoring this training programme until the 31st of March 2007. SAFED training will still be commercially available after that date. To experience the benefits of SAFED training sign up as soon as possible using the details given on the back cover.

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1: Background

During 2003 UK Light Commercial Vehicle (LCV) activity accounted for some 58 billion kilometres (Department for Transport statistics). Over 90% of this distance was in connection with collection and delivery of goods, travel between home and workplace or journeys between jobs.

There were approximately 6,897 casualties in LCV road accidents, including 765 killed or seriously injured. In addition 58 billion km is commensurate with approximately 5 billion litres of fuel used. With around 2.5 million vans being used in the UK this relates to an average of 23,160 kms or 14,391 miles per vehicle per year.

Safer driving means:

- Less injuries and fatalities on our roads
- Less accident damage to vehicles
- Less unproductive downtime for vehicle repair
- The potential for reduced insurance premiums

Fuel efficiency means:

- Lower costs
- Improved profit margins
- Reduced emissions
- Improved environmental performance

Where operators actively monitor and manage the fuel used by vehicles a fleet's fuel consumption can typically be reduced by 10%, with an equivalent cost saving. Use of safe and fuel efficient driving techniques as part of fuel management will make a major contribution to this fuel saving.

1.1 Introduction to the Safe And Fuel Efficient Driving (SAFED) course

SAFED for Vans has been designed as a single course aimed at improving the safe and fuel efficient driving techniques of LCV drivers.

SAFED training has been developed specifically to enable both fleet operators and training providers to implement driver training within the LCV industry. It provides training and development for existing LCV drivers through instruction relating to vehicle craft and road craft.

Ideally, training should be performed in a driver's usual vehicle. If this is not possible, the training provider should arrange for a similar vehicle to be available when a course is booked. Some drivers will benefit from training in a laden vehicle, but this is not essential.

The LCV driver is initially assessed by a qualified trainer. Training on best practice in safe and fuel efficient driving techniques is then given. The driver is then reassessed to record improvements in driving technique and where possible actual fuel consumption.

The driver is also assessed on performance in safety check and knowledge test exercises as well as the number of faults recorded during the day's practical driving sessions.

Successful drivers receive a certificate of achievement.

1.2 How the SAFED for Vans Scheme was developed

Initially SAFED was focused on truck drivers. Following an implementation programme where 375 trainers and 6375 drivers were trained, the Department for Transport was keen to transfer the success and develop a training course specifically for van drivers.

The training course was developed and reviewed by a steering group of industry experts, including training providers, van fleet operators, trade associations, van manufacturers and Government organisations.

During the development phase, currently available safe and fuel efficient training courses for van drivers were examined and common themes highlighted which formed the foundation of the new course.

The proposed training course was also piloted with a range of drivers to check the content and record its achievements. The results from this pilot study showed that on average, the fuel economy improved by 9%, the drivers felt in more control of their vehicles and less stressed. The time the route took to complete was the same or shorter and the wear and tear on the vehicle reduced as a result of fewer stops and less gear changing.

1.3 The pilot study

The pilot scheme trained a total of 25 drivers from late September into November 2005. The study was completed in two phases.

During the lead up to the pilot study a training programme was designed that was workable and followed the principals of SAFED. The training programme was similar to that outlined in the SAFED truck guide. It retained many of the concepts that have proved to be successful, and developed the areas that are exclusive to van drivers. The training was discussed at two stakeholder meetings with industry experts to finalise the SAFED for Vans guide.

Some of the findings and results from the pilot study are listed below:

- The first six drivers were assessed in their own vehicles with the fuel consumption being logged at the fuel pump
- The remaining nineteen drivers were trained and assessed in a van fitted with a fuel monitoring device supplied by LDV Group
- Fuel use dropped in twenty three of the twenty five drivers assessed
- Fuel consumption in Phase One reduced by approximately 12%
- Fuel consumption in Phase Two reduced by approximately 8%
- Giving a total of approximately 10% fuel use reduction over the whole of the pilot study
- The average journey length was nine miles, covering predominately urban and rural roads.
- The assessment drives lasted approximately twenty five minutes and followed the same route on both occasions for continuity
- Overall, there was no increase in the time the route took to complete and in some cases the timing of the route reduced
- Gear changing was reduced by an average of 59%

Additional and Projected Benefits

There are numerous benefits that are evident from a SAFED for Vans training programme, some of which have been mentioned above, namely fuel economy, no increase in journey length and a reduction in gear use. However additional benefits include a very positive response from the drivers in relation to stress levels being lowered, the ease at which the training techniques can be adopted and continued. Driver's reported that their fatigue levels were also reduced as a result of doing less physical work in the vehicle and by having greater control on the approach to hazards. Due to them having more time to assess the actions of other drivers, the drivers reported the style of driving was less mentally demanding than stop/start driving.

In the long term, if the SAFED style of driving and fuel monitoring is upheld, there could be significant changes in the running costs of a van fleet. Accident rates within a fleet of vans can be reduced if the driver can maintain the driving style introduced during the SAFED training. Parking and manoeuvring incidents can also be lowered as many drivers have never received any formal training in manoeuvring a vehicle of this size. The training gives the driver greater awareness of how to handle the vehicle size and a better appreciation of the difficulties in manoeuvring in tight spaces with limited all round visibility.

With the large reduction in gear use, clutches and gearboxes should last longer; in addition to brakes and tyre wear reducing as a result of less stop/start driving.

1.4 Who is this guide aimed at?

The guide is for training providers, fleet operators, inhouse driver trainers and LCV drivers. It outlines the principles of SAFED and provides a step-by-step guide through the one-day SAFED training course.

The SAFED course should be considered as a baseline for the development of driver skills and knowledge specifically in the areas of safety and fuel efficiency. Operators and training providers may choose to build upon the information, methodology and techniques contained in this document to meet their specific needs.

1.5 Who should deliver the SAFED training course?

Commercial Training Providers

SAFED trainers wishing to deliver the full course on a commercial basis must be Approved Driver Instructors (ADI) Fleet Registered and have achieved an 'excellent' grade in the SAFED training assessment.

In-house Driver Trainers and Assessors

The legislation requires that anyone providing paid in-vehicle driver training in vans (Category B) is on the DSA Register of Approved Driving Instructors.

In-house trainers wishing to deliver the full SAFED course, on behalf of their employers, therefore must be ADIs and have achieved an 'excellent' grade in the SAFED training assessment.

In house trainers, who are not ADIs, are permitted to provide the classroom instruction and/or driver assessment aspects of SAFED only, on behalf of their employers. They must achieve an 'excellent' grade in SAFED and should also attend and pass an assessor's course at a DSA accredited training centre. This will prepare them with the skills and knowledge to assess their own drivers using the relevant SAFED guide and forms. However these non-ADI staff would not be permitted to provide the in-vehicle driver training aspects of SAFED.

1.6 How should this guide be used?

SAFED is a supplementary driver development course, consisting of assessment and training.

This guide is specific in its nature, focusing on safe and fuel efficient driver training. It should complement a much broader programme of commercial vehicle fleet efficiency management.

Fleet operators and training providers using the SAFED guide should also be aware of the following:

- The Official DSA Guide to Driving, The Essential Skills www.dsa.gov.uk
- Roadcraft, The Police Drivers Handbook
- HSE Vehicle Checking www.hse.gov.uk
- RoadSafe www.roadsafe.com
- Highway Code www.highwaycode.gov.uk
- ORSA www.orsa.org.uk



Van Driver's Handbook FTA

This guide contains the basic information to enable both training providers and fleet operators to deliver the SAFED course. It should be issued to drivers before the training commences and used as a record of their personal performance throughout the day.

The essential core information on safe and fuel efficient driving techniques (see section 3) will underpin all classroom and practical instruction given by SAFED trainers to drivers throughout the training day.

1.7 Information and material for trainers

The basic information needed by trainers to deliver the SAFED course is included within this guide.

It is vital that SAFED trainers have a detailed knowledge of the core information in section 3.

Documents required throughout the training day (timetable, assessment guide and other relevant documentation) have been included in this guide. SAFED trainers will be issued with blank working documents i.e. assessment and evaluation sheets, to be used during the training day. It is essential that SAFED trainers fully understand how, when and why each document is used during the course (see section 4).

At the end of the training day, the driver and trainer will agree a target for future improvement in fuel consumption. This figure will broadly reflect any improvement evident between the driver's first and second drives. Feedback will also be provided to the fleet operator to allow them to regularly assess driver improvements.

1.8 Information for fleet operators

In order to monitor a driver's performance after training, fleet operators should record a driver's fuel consumption (miles per gallon or kilometers per litre) for a given period (e.g. a week or a fortnight) prior to attendance at SAFED training. This pre-SAFED figure will provide the benchmark for future performance. Fuel consumption should then be monitored after SAFED training. This data will illustrate the benefits of the SAFED training course to both employers and drivers.

1.9 Informaton for drivers

On the training day drivers will need to bring:

- Driving licence (both parts if applicable)
- Normal working clothes/uniform
- Personal Protective Equipment (safety footwear and gloves etc) if required
- Glasses or corrective lenses required for driving.

Drivers should be in a fit and able condition to drive.

2: Prior to undertaking a training programme

An effective driver development plan will need commitment from everyone within the organisation.

A co-ordinator will need to establish any activities and maintain momentum following implementation. In most organisations, this person is likely to be the fleet manager.

2.1 Awareness raising

The majority of driver development is about changing driver attitudes and behaviour. In many instances this cannot be done by compulsion. Even if this is used, immediate reaction to proposed measures may be dismissive. So the benefits have to be sold to the drivers. Experience has shown that drivers respond well to initiatives that result in personal benefits such as safety, time and cost savings.

Many driver development initiatives involve some level of change and it is important that they do not feel threatened by these changes. Raising awareness to the nature of the proposed development programme, asking for views and responding to ideas will help motivation and commitment.

It is also important to publicise successes to let drivers know what they have achieved to give them the motivation to continue. For example consider publishing a regular newsletter, detailing progress to date.

Driver development activities may be part of wider business initiatives such as a health and safety policy. Where this is the case, consider promoting the training activities through embedding campaigns associated with these wider business initiatives.

2.2 The fleet operator

The fleet operator is often best placed to improve the performance of company van drivers. In addition, they are also likely to be the best person to take responsibility for actions aimed at reducing business fleet costs, since there is overlap between these and fleet management responsibilities.

However, depending on the organisation, the fleet operator may not have the authority to implement many of the measures required for driver development. For this reason senior management must be persuaded of the commercial benefits that can be achieved.

2.3 Senior management commitment

With commitment from senior management it is more likely that initiatives will succeed. Senior management commitment:

- Allows budget allocations for training activities
- Secures staff time for work concerned with developing initiatives
- Can lead by example
- Can give the go ahead to measures that may require changes in policy

It is also useful to consider the role of those responsible for environmental and health and safety policy as they may see the advantages of such driver development initiatives in helping their activities.

2.4 Tips for success

To ensure that a driver development programme is successful, the following should be implemented as far as practical.

Monitor Incident Rates

Incidents can be anything from parking scrapes to high-speed road traffic accidents. Monitoring each type of incident gives an understanding of the type of incidents that individual drivers are experiencing and how they decrease following training.

Undertake a Risk Assessment

Risk assessment is vital to the efficiency of any organisation. Occupational road risk issues have major implications for every employer operating vehicles as part of their business. No employer can have a true picture of their situation without systematic checks. Risk assessments should be carried out to determine the suitability of vehicles, the areas in which they are to be used, the level and type of driver training required and any other activities involving vehicles and their use.

Monitor Fuel Consumption

To do so effectively the following data needs to be collected for each driver/ vehicle:

Distance covered

Volume of fuel used

- Cost of fuel (per litre)
- Total cost of fuel used

Calculate Performance Indicators

Monthly reports on performance indicators such as fuel economy (miles per gallon), travel cost (pence per mile) and incidents (incidents per mile) will help assess and compare the overall performance of drivers and vehicles. This helps managers to better target their effort and resources.

Monitor Driver Performance

Examination of monthly reports will usually show up inconsistencies in driver performance. By identifying the reasons for these it will be possible to separate good from bad practices and concentrate on consistently achieving the best performances. A good starting point is to identify the best and worst performing drivers in the fleet over the last month. Then try to identify the underlying cause; is it the driver, the vehicle or the type of work or route? Switching vehicles, drivers and work could be considered as a way to help to confirm the diagnosis.

Reward Drivers for Improved Performance

Using a form of driver reward through the posting of a league table of efficient drivers can assist in getting support from your company van drivers. By posting such a list you will begin to involve the drivers in the scheme and they will begin to see the benefits. Some companies have taken this a stage further and have developed a high profile annual driver awards scheme, where the driver who has achieved the lowest incident rate and highest fuel economy gains a cash reward. For this to be effective it is essential that senior management are involved.

Continual Assessment

The information gained through effective monitoring will identify any major opportunities for future savings, e.g. certain types of vehicles may be pinpointed as more efficient than others and there may be differences in the efficiency achieved by various drivers. This information allows you to target your future investment decisions appropriately, i.e. to choose more efficient vehicles, to invest in further driver training, or to fit fuel-saving telematics.

Policies in Place

In line with other Health and Safety policies you should be promoting a positive safety culture throughout the organisation. With adequate policies in place covering the driver, vehicle and journey planning this will help:



- Reduce the costs of these to your company and other road users
- Indicate your commitment to road safety and care of the environment

Encourage drivers to be aware of their own driving standards and to drive safely

It is important that these policies state how you deal with:

- Oriver hours
- Incident reporting
- Regular driving licence checks
- Eyesight checks
- Vehicle checks
- Mileage and fuel monitoring

The policies should state who is responsible and the frequency with which any checks should be carried out. This should have been explained to the driver and be readily available for the driver to read at any time.

Health and Safety Issues

Health and Safety legislation not only affects company vans, but also extends to all forms of workrelated road travel. This includes company cars; pool cars; hire cars and employees' own cars (if they are used for company activities). In essence the employer's duty of care has been extended to cover all journeys or on-road activities that are undertaken for work-related purposes. Therefore the driver's ability to operate the vehicle safely, and the vehicle's general condition and roadworthiness are of paramount importance. The good news is that improvements in the safety aspects of fleet operation will bring benefits through lower threats of prosecution, lower costs and lower emission levels.

Alongside road traffic legislation, the Health and Safety at Work Act applies to employees whilst they are driving their vehicles as part of their job. Consequently there is a legal duty on the employer to take all reasonable practicable precautions to secure the safety of the employees whilst on the road and others who may be affected by company activities. A guidance document (Driving at Work – managing work related road safety) has been produced by the Health and Safety Executive (HSE) to help organisations understand their requirements under health and safety. A copy of this document is available from the HSE website, details on the next page.

Road accidents impact on every level of society and every level of responsibility. Put quite simply road accidents represent losses:

- Lost efficiency
- Lost productivity
- Lost quality
- Lost profit

Many organisations do not understand how much accidents really cost. They only see the cost of repairs, medical treatment and compensation. Many believe these are the inevitable costs of doing business or assume that accident costs are borne by the insurance carrier. The reality of the situation is no longer a question of whether an accident will occur – but when it will happen, how serious it will be, who will be involved and how much it will cost. Road accidents are not simply "bad luck" or some "skill deficiency"; they are understandable, predictable and preventable.

Useful information

Department for Transport

Road Safety Web: www.roads.dft.gov.uk/roadsafety

Health & Safety Executive

Document: Reducing at work road traffic incidents http://www.hse.gov.uk/roadsafety/traffic1.pdf Document: driving at work – managing work related road safety http://www.hse.gov.uk/pubns/indg382.pdf

Occupational Road Safety Alliance

Tel: 0121 248 2095 Web: http://www.orsa.org.uk/ Email: help@orsa.org.uk

The Royal Society for the Prevention of Accidents

Edgbaston Park, 353 Bristol Road, Edgbaston, Birmingham B5 7ST, Tel: 0121 248 2000 Fax: 0121 248 2001 E-mail: help@rospa.co.uk Web: www.rospa.co.uk/roadsafe.htm

BRAKE

PO Box 548 Huddersfield HD1 2XZ Tel: 01484 559909 Fax: 01484 559983 E-mail: brake@brake.org.uk Web: www.brake.org.uk

3: Essential core information

The following three sections form the core principles of the SAFED for Van drivers.

Drivers' success on the SAFED course will depend on both understanding the following information and putting it into practice.

It is vital that trainers who deliver the SAFED course fully understand these elements and convey their importance to drivers throughout the training day.

3.1 Benefits of Safe And Fuel Efficient Driving

For Van Drivers

Drivers develop skills that promote their safety and that of their vehicle, their load and other road users. Through fuel efficient driving, drivers raise their levels of professionalism and become a greater asset to their employer. Personal benefits include:

- Reduced risk of accidents whilst driving
- Reduced stress levels and enhanced satisfaction of driving



Potential financial incentives



For Fleet Operators

By developing the skills of their van drivers, in line with SAFED, employers benefit due to:

Reduced accidents

Less vehicle down time due to a reduction in accidents

Reduced fuel spend
Increased productiv

- Increased productivity and vehicle utilisation
- Improved resale value of vehicles
- Reduced running costs (particularly relating to maintenance and tyres)
- Potential reductions in insurance premiums
- Reduced environmental impact

Wider Implications of Adopting SAFED for Vans

Through driver training, the following wider benefits can be achieved:

- Reduced national numbers of vehicle accidents and personal injuries
- Improved risk management within organisations
- Reduced fuel consumption and associated reduction in CO₂ emissions and other air pollutants

3.2 Fundamentals of Safe And Fuel Efficient Driving

The following section outlines the key factors to be addressed to both ensure safety and optimise fuel economy. This is a comprehensive list intended to be used by trainers and drivers to provide a background to the issues likely to arise during driver assessments.

The core components have been grouped into the following three areas and correspond to those assessed by the trainer. The areas are:

The driving environment

Operating the vehicleVehicle dynamics

The Driving Environment

Hazards

Fact: there are three types of general hazards, permanent, temporary, and environmental

Permanent hazards include junction bends and street furniture. Use of information gained through earlier observation of these hazards gives more time to plan ahead and systematically avoid.

Temporary hazards include the position and movement of other road users. They make driving unpredictable.

Environmental hazards include the nature of the road surface and weather conditions. Maintaining vigilance on frequently changing weather conditions and road surfaces is essential to road safety.

Driver Behaviour

Fact: driver's attitude and behaviour directly affect the safety of all other road users. The better the driver's behaviour, the less chance there is of incidents and accidents occurring

The task of driving requires a great deal of patience due to the constant interaction with other drivers, some of whom will not necessarily drive in the style and manner that matches our own. This can lead to frustration and possibly anger building to a level that results in a road rage incident. Having a greater understanding of the way other drivers' deal with situations will assist in keeping stress levels low and behaviour under control.

Driver Fatigue

Fact: driver fatigue kills and injures more people than drinking and driving

By the very nature of the driving task, fatigue will be a problem with some drivers; this could be mental fatigue caused by the degree of concentration needed to driver safely, or physical fatigue caused by the effort exerted when delivering the goods. Keeping the body hydrated and taking a break from driving every two hours can combat the effects of fatigue. But ultimately a good night's sleep of at least six hours is recommended to ensure the risk of falling asleep at the wheel is minimised.

Operating the Vehicle

Fact: less than five percent of accidents are due to mechanical failure of the vehicle. Many more accidents occur through driver neglect and poor maintenance. It is the driver's responsibility to ensure the vehicle is roadworthy before it travels on the public highway

Before Starting the Vehicle

There are a number of key actions to be taken before starting the vehicle to ensure that the drive will be a safe one:

- Put the seat belt on. Van drivers and passengers are required by law to use them, where installed. The only exception is when less then 50 metres is driven between stops when delivering or collecting
- Check and alter driving position and head restraint
- Check and alter mirrors to ensure maximum visibility
- Familiarise yourself with the controls e.g. signals, lights, windscreen wipers and horn
- Switch mobile phone off or place in hands free equipment

Tyres

Fact: correctly inflated tyres offer less resistance on the road, increase fuel economy, give greater stability and reduce the risk of accidents

Under inflated tyres will reduce mpg and increase wear, thereby reducing tyre life and increasing running costs. Over inflated tyres offer less stability, less grip on the road and increased braking distance.

Acceleration and Appropriate use of Speed

Fact: speeding is illegal, jeopardises road safety and reduces fuel efficiency

Inappropriate speed is dangerous. It puts your life and the lives of other road users at risk. Excessive speed will have negative effects on fuel economy and increases the braking distance. In addition excessive acceleration can also put extra stress on the engine and transmission system, resulting in shorter component life and increased maintenance costs and fuel consumption.

Speed limits are different for different categories of vehicles on different classes of road. Current regulations prohibit goods vehicles under 7.5 tonnes from traveling faster than 50mph on single carriageways and 60mph on dual carriageways. Vans derived from cars up to two tonnes (max laden weight) are exempt and have the same speed limits as cars (see Highway Code www.highwaycode.gov.uk).

Use of the Signals

Fact: intelligent use of the signals will reduce the risk of accidents

Correct use of the signals available to the driver can ensure other road users are fully aware of your intentions on the road. Use the indicators in plenty of time; consider the use of the horn to raise other driver's awareness of your presence, being careful that it is not seen to be aggressive. The brake lights are also a signal to following drivers of your intention to slow down and using the brakes as well as the gears to slow down will reduce the risk of being hit from behind.

Braking

Fact: smooth and tapered braking will save fuel and reduce stress on the driver, vehicle and load

In most cases, when the footbrake is used the road speed that has been lost has to be made up by using the accelerator pedal, thereby burning fuel. If it becomes necessary to change down a gear then even more fuel is used. By braking smoothly the amount of road speed that is lost can be minimised (and can help avoid having to stop completely). Harsh braking uses more fuel and can increase the number of gear changes that the driver subsequently has to make. The load is also more likely to shift under heavy braking and reduces the driver's ability to observe hazards effectively.

Clutch Control

Fact: clutch pedals in larger vehicles are heavier to operate and therefore excessive use causes driver fatigue and unnecessary wear on the vehicle

When driving a LCV, the clutch can be heavier to operate and is therefore prone to wear more quickly if the vehicle is held on the biting point whilst stationary. The handbrake needs to be used to prevent this wear. It will also reduce fuel use due to the accelerator not being needed to balance the clutch when trying to keep the vehicle from rolling back.

Use of Gears

Fact: by using the correct gear at the correct time, power is delivered more fuel efficiently with better engine performance

Even when a vehicle is fully laden, it is not always necessary to use every gear as the brakes on modern vans are so much more efficient. Every time you change up a gear you improve fuel consumption, so keeping the engine from over revving will reduce fuel use. Reducing the number of gear changes also creates a safer, cleaner environment and reduces engine wear.

Forward Planning

Fact: planning well ahead and keeping the vehicle moving will reduce journey time. A driver should 'plan to stop but look to go' when approaching a hazard

By keeping the vehicle moving the running cost is reduced as the brakes and the accelerator are used less. Speed gathered under power can be used to descend hills on undulating roads. The modern engine will cease to inject fuel into the combustion chambers once the accelerator pressure is removed, consequently saving fuel. By rushing into a hazard, the driver will not have time to assess the actions of other road users and will have to stop to observe effectively, so wasting time and fuel and raising the risk of being hit from behind. There is very little point in rushing into hazards just to stop and wait for the hazard to clear.

Parking and Manoeuvring

Fact: parking and manoeuvring is a factor in up to 35-40% of all accidents recorded

Drivers of vans in particular may have problems when manoeuvring the vehicle. The size and dimensions of the vehicle vary significantly from other vans. If allowances are not made in relation to the vehicle dimensions it will be all too easy to miss a hazard when manoeuvring or parking at low speed. Reversing a van poses unique problems for a driver who is not used to the blind spots around the vehicle; hidden hazards are easy to miss unless the area is assessed prior to the reverse commencing.

Urban Driving

Fact: 75% of all accidents and 46% of fatal accidents happen in urban areas

Many van drivers do significant amounts of driving and delivering in urban areas. This puts a van driver at a higher risk of having an accident due to the increased traffic volumes and pedestrian movement.

Personal and vehicle security are also factors to be considered when driving and parking in urban areas as many deliveries are carried out during the hours of darkness.

Vehicle Dynamics

Plan your Route

Fact: the AA estimates that 20% of driving time on unfamiliar roads is spent getting lost

By effectively planning journeys before setting out, through the use of maps and electronic route planning software, driving time and stress can be significantly reduced. Much of this route planning software is freely available and accessible on the Internet.

Efficient route planning increasingly involves the use of on-board satellite navigation equipment and these systems are becoming cheaper as the technology becomes commonplace.

Loading, Restraining and Off-Loading

Fact: the positioning of a load can influence fuel consumption and vehicle driving dynamics

The load should be positioned to avoid overloading any axles and to maintain good vehicle stability.

A load should be secured correctly and, if possible, no gaps left between any boxes. This will ensure that the load cannot build up much momentum in the event of it shifting in a crash situation. Heavy loads need to be evenly distributed around the vehicle to ensure no axle is over loaded.

Additional regulations apply once a vehicle is 3.5 tonnes or more. A van of less than 3.5 tonnes will be subject to the stricter regulations if it is towing a trailer that takes the combined weight to 3.5 tonnes.

REMEMBER: The Driver has the single biggest impact on both fuel consumption and safety.

An alert, positive and professional driver can reduce fuel use, vehicle operating costs and contribute to greater road safety.

3.3 Tips for Safe And Fuel Efficient Driving

The following tips are for drivers:

Acceleration Sense

Drive using the brake more lightly and less frequently by extending your observation and anticipating traffic movement. Keeping a good distance from the vehicle in front is key to this.

Ease and Squeeze

Smooth driving is achieved by easing off and squeezing on pressure to the brake or accelerator pedals.

Take the Snap Shot View

When exiting a bend or joining a new road take a long distance view to the left or right of traffic ahead before your view is blocked.

REPS (Rear End Protection System)

Use your mirrors prior to braking.

SLOW (Speed Low – Observer Warning) SLOW painted on the road suggests a history of accidents due to restricted view.

Vision Before Decision

Approaching a hazard, perhaps a roundabout? Got the view? Clear? Now take the gear and GO!

Better 20 Seconds Late In This World Than 20 Years Too Early In The Next

Even the time saved by an emergency vehicle going to the scene of an incident is marginal and they have sirens! Speeding rarely has a significant effect on journey time.

🔶 TNT

Tyres 'n' Tarmac should be visible on the vehicle in front when in stationary traffic.

Only A Fool Breaks The 2 Second Rule 2 seconds of following distance between you and the vehicle ahead. Keep that gap open and don't worry about other drivers filling the gap. What difference will another few vehicles ahead of you really make to your journey time?

Be Proactive Not Reactive

Being proactive will dramatically improve your safety.

Look OUT

Look **O**ver, **U**nder and **T**hrough parked vehicles at the side of the road.

I Want My License To Expire Before I Do Self-explanatory!

Where There's One There's Two

If one vehicle emerges from a side road, be ready for the second, which is often behind it.

Brakes To Slow, Gears To Go

Slow the vehicle using the brakes, engage the correct gear for your speed and by-pass all intermediate gears.

LADA (Look, Assess, Decide then Act) Build time into your drive to do this.

🔶 Creep And Peep

When emerging from a side road creep forward to obtain the full view.

Look For The Lurker

The lurker is the oncoming driver who 'pops out' from behind another vehicle looking to overtake.

6% Acceleration

Accelerate through bends at 6% of the total acceleration power to maintain stability and grip.

4: Training programme and assessment material

4.1 Training course

This section describes the content of the one-day SAFED training course.

The course, timetabled in Document 1, consists of one full day of off-the-job training and will normally be on a driver:trainer ratio of 2:1. The course which includes practical assessments and knowledge exercises, is based around the following main themes:

- Accident prevention and reduction
- Fuel efficient driving

SAFED trainers will use the guidance in section 4.2, Assessment guide when assessing drivers during the practical driving sessions. These assessments will be recorded on the Driver Training Report and Trainers Summary (see Documents 2 and 3).

The grading system combines the overall scores from the practical driving assessment with those achieved in the vehicle checks and knowledge exercises. Minimum standards of competence must be achieved to pass the vehicle checks and knowledge exercises. In the practical driving assessment, the fewer the faults throughout the day, the higher the driver's grade will be.

The days training is described in detail in the following sections:

Introduction/Preliminary Sessions – 2 hours

This initial session outlines the fundamental aims and objectives of the course. Licences will be checked for valid entitlements and penalty points/ restrictions and a driver eyesight check will be carried out. Risk factors relating specifically to LCV drivers will be discussed by the trainer using an interactive presentation.

If drivers are not using their own (or usual) vehicle, they will be informed of the characteristics of the vehicle to be used for training.

During this session, drivers will undertake a vehicle inspection and the driver's knowledge and skills on basic vehicle maintenance will be assessed. The trainer will then note Document 2, of the driver's completion of the vehicle checks. If a driver does not complete the checks satisfactorily, then they will not receive a certificate of achievement, but they can still attend the remainder of the day.

First Drive (Assessment) – 1 hour (30 minutes per driver)

Drivers will undergo an initial assessment drive influenced by a variety of road and traffic conditions. The route will preferably contain flat sections, hills, stretches of single and dual carriageway, elements of open road and urban driving and motorway (if possible). SAFED trainers will take detailed notes along route and record time taken, distance traveled, number of gear changes, calculate miles per gallon, and the main training objectives. This information will be recorded using Document 2 and attached Notes.

If using a van without a fuel flow metre, the trainer will supervise the refueling of the vehicle and log and record on the training report the amount of fuel needed to refill the tank up to the second click of the fuel pump. This will need to be done following all drives throughout the day for continuity and accuracy of fuel consumption. NB – If a driver is considered to be dangerous on this first drive, the SAFED trainer may decide to defer further practical training and take control of the vehicle and return to base. A deferred driver will not be able to receive a certificate of achievement but can still attend the classroom based instruction sessions.

Driver Debrief – 30 minutes (15 minutes per driver)

Feedback takes place in the vehicle with the trainer highlighting any corrections. Areas for drivers to develop in relation to road craft and vehicle craft will also be discussed.

Demonstration Drive – 30 minutes

SAFED trainers will conduct a 30-minute demonstration drive along the same route tailored to the drivers training objectives. The driving will be based along the Roadcraft System of Car Control. Drivers will be encouraged to question the trainer throughout as to why the drive is carried out in a particular way.

Vehicle and Roadcraft Instruction – 60 minutes (30 minutes per driver)

On road training will be given to the driver(s) focussing on the training objectives raised from the first drive as well as developing observation and planning techniques. Drivers will have the opportunity to trial driving techniques used in the demonstration drive and consider the benefits of adopting this system.

Parking and Manoeuvring – 30 minutes (15 minutes per driver)

Trainers will assess drivers on observation, accuracy and speed. Advice will be given back to the drivers accordingly. Trainers will record the results using Document 2 and Document 3.

Second Drive – 60 minutes (30 minutes per driver)

Candidates will then undertake a second drive, taking the opportunity to demonstrate the new techniques learned. Trainer's input and support is continuous throughout this second drive.

SAFED trainers will record detailed performance indicators using Document 2.

Once the second drive has been completed information from Document 2 will be transferred to Document 3 together with any training recommendations. The trainer will discuss this with the driver at the end of the assessment.

Knowledge Exercise – 30 minutes

Drivers will undertake knowledge exercises covering Highway Code, driving knowledge and an understanding of fuel efficient driving (see sample Document 4). Drivers must pass the tests to successfully complete the course and to receive a certificate of achievement.

Final Debrief – 30 minutes

This session will include a summary of the day's events and an explanation of the knowledge exercises, Trainer's Summary Report and final grade allocated. Drivers will be encouraged to compare their first drive results with that of the second drive, noting improvements and making observations on their own performance and potential to change their driving techniques. Drivers should agree for future improvements in fuel consumption with the trainer. This figure will reflect the percentage improvement evident between the drivers' first and second drives. The outcome will be reported to each driver's employer to enable future performance monitoring. The fuel consumption figure measured before SAFED training will be used as a benchmark.

Evaluation Forms (see Document 5) will be issued for drivers to provide feedback on the day's course.

Finally, SAFED trainers will issue the SAFED Certificate of Achievement to successful drivers and distribute copies of handouts for future reference.

4.2 Assessment guide

This section is to be used by all SAFED trainers when completing the Driver Training Report (see Document 2) and the Trainers Summary Report (Document 3). It provides the criteria for assessing driver's performances over 18 separate elements of safe and fuel efficient driving techniques. It will enable appropriate grades to be allocated.

Fault Allocation

The grading system is based on a driver's performance against 18 individual elements of safe and fuel efficient driving over the second drive. A driver's performance in each element is rated as good, fair or unsatisfactory.

If a driver's performance on a particular element is deemed to be Good (G), then zero faults are allocated. If performance on an element is deemed to be Fair (F), then one fault is allocated. If performance on an individual element is Unsatisfactory (U), then three faults are allocated.

Note: The number of faults does not correspond to the actual number of errors or omissions observed during the drives.

Performance on each of the 18 SAFED elements will be assessed on the second drive. This will be used as the total for the day's practical sessions. The fewer the faults, the higher a driver's grade will be.

EXAMPLE

Drive 2:

Good 11 elements $11 \times 0 = 0$ Fair 6 elements $6 \times 1 = 6$ TOTAL FAULTS 6

Grading

Excellent

This grade will be awarded to drivers that pass the vehicle check exercises, knowledge exercises and score no more than 8 faults in the practical driving assessment. Should the driver be graded unsatisfactory in any element, then an excellent grading cannot be given.

Good

This grade will be awarded to drivers that pass the vehicle check exercises, the knowledge exercises and score between 9 and 17 faults in total in the practical driving assessment. Should the driver be graded unsatisfactory in any element, then a good grading cannot be given.

Fair

This grade will be awarded to drivers that pass the vehicle check exercises, the knowledge exercises and score between 18 and 34 faults in total in the practical driving assessment.

Unsatisfactory

Drivers will be graded unsatisfactory on the SAFED course if they fail any of the vehicle check exercises, the knowledge exercises, or score more than 34 faults in total in the practical driving assessment.

In addition, drivers that have been deferred by their trainer on the grounds of safety during either drive will not have reached the required standard and further training is recommended at a date to be arranged.

Drivers who are graded unsatisfactory, or who have been deferred, will not be issued with a Certificate of Achievement. The trainer should recommend further training.

It may be helpful to express the grading as a percentage as well the number of faults. The graph below depicts the relationship between driver performance and number of faults. 100% implies no faults, where as 54 faults (i.e. all elements unsatisfactory) implies 0%.



The SAFED Elements

The following sections outline the assessment criteria for each of the 18 key elements of the SAFED Course:

1 Driver's Behaviour/Technique

- G A competent driver, skilful and well aware of other road users. Concentrated well and displayed a high level of consideration and courtesy for other road users. The driver had command of the road, using size of vehicle appropriately, without taking advantage. A positive attitude was evident.
- F The driver was relaxed and aware of the presence of other road users making adjustments to the drive accordingly. Demonstrated acceptable levels of consideration, attitude and ability.
- U The driver showed little interest during the assessment and generally displayed a negative attitude. The driver displayed unacceptable forcefulness on at least one occasion and there was evidence of a lack of courtesy to other road users.

2 Road and Weather Conditions

- G A competent driver, skilful and aware of surrounding road and weather conditions.
 Braking distances and visibility were constantly considered when external changes occurred.
- **F** The driver's driving style was a little casual considering the conditions but full control of the vehicle was maintained.
- U During the drive there was little evidence shown that the driver was aware of changes in road conditions or weather and driving style was not adapted accordingly. During heavy rain the driver tended to drive in water filled troughs in the road.

3 Seating Position/Seat Belt

- **G** A business-like approach, the driver sat alert in an upright position and maintained posture throughout the drive. The seat belt was used.
- F The driver tended to be a little casual in the driving position or did not appear to be at ease in his/her driving position. The seat belt was used.

U The driver adopted a lazy seating position, potentially leading to impaired visibility. The driver failed to use the seat belt automatically and required prompting.

4 Use and Timing of Mirrors/ Blind Spots

- **G** Mirrors were all used effectively and blind spots were checked when required.
- F Although often used, checking the mirrors was not always linked to the other features of vehicle control.
- U There was inconsistent, insufficient or delayed use of mirrors and blind spot checks were missed on occasions.

5 Use of Brakes

- **G** Braking was positive and smooth, tapering on and off. Hand brake was applied when required.
- F Braking was occasionally harsh and rushed.
 More thought to braking would have avoided late and hurried applications.
- U Brakes were applied too frequently and unnecessarily. Incorrect use of or failure to apply the handbrake.

6 Use and Timing of Signals

- **G** Excellent information given to other road users during the drive. Signals were used correctly whenever needed.
- **F** Signals were overused/underused at times but road safety was never compromised.
- U Insufficient use made of signals and/or misleading signals given to other road users.

7 Steering Technique

- **G** Correct steering technique was clearly demonstrated.
- F Although there were no positional errors on the road, the steering method used tended to be unorthodox and minor errors were made. The vehicle was driven one-handed on a number of occasions.
- U There was a lack of discipline towards steering. Both hands were removed from the steering wheel at the same time.

8 Use of Clutch

- **G** The clutch was used in a most efficient manner and was well controlled at all times.
- **F** Generally the use of the clutch was sound but occasional inappropriate operation resulted in some errors in control.
- U The clutch was disengaged too early causing the vehicle to coast. Observed riding the clutch on a number of occasions or holding the vehicle using the clutch on inclines at junctions etc.

9 Use of Gears

- **G** The gearbox was used in a most efficient manner, with the vehicle kept moving whenever possible. Gear selection was accurate and block changing was continually employed both up and down. The vehicle was always in the right gear for the conditions.
- F Generally correctly geared, with occasional minor incorrect selections made due to haste, inexperience and/or lapses in concentration.
 Block changing was demonstrated at times.
- U The use of the gearbox was erratic and clumsy, lacking style and timing. There were occasions when gears were selected too late and vehicle speed and gear selection did not match, resulting in the driver looking at the gear lever and not at the road.

10 Dealing with Junctions, Road Markings and Signs

- G Strictly observed all junctions, markings and signs and reacted accordingly in a safe and efficient manner. Junctions were dealt with at a steady speed with good levels of observation and anticipation of other road users. The vehicle was kept on the move as often as possible without interrupting the flow of other traffic.
- F Observed junctions and signs but at times failed to react accordingly. However, road safety was not compromised. Generally good approach to junctions with occasional unnecessary stops.

U Missed several signs resulting in potentially hazardous situations. Speed too high on the approach to junctions, no time for effective observation, harsh braking and frequent, unnecessary stops.

11 Acceleration and Appropriate use of Speed

- G Applied steady and progressive acceleration whenever possible. Avoided speed peaks. Acceleration sense was well developed, resulting in a smooth, safe and efficient driving style. Legal speed limits were strictly observed. Constantly matching the speed with visibility/road conditions and planning ahead for changes.
- F On occasions, the accelerator could have been used more smoothly and with greater control. Speed limits were observed but better forward planning, taking into account imminent changes to speed limits, would have resulted in a smoother drive.
- U Erratic use of the accelerator resulted in a poorly controlled drive. There was a lack of acceleration sense. Speed limits were exceeded on occasions. Inappropriate speeds also evident on approaches to hazards, junctions, traffic lights etc.

12 Vehicle Positioning and Lane discipline

- G Adherence to lane markings was exemplary, with the vehicle positioned to maximise both visibility and safety and to facilitate progress. The correct braking distance was observed at all times.
- **F** Generally good lane discipline and positioning but at times markings were cut or straddled.
- U Consistently straddled lane markings. Positioning was inconsistent, resulting in poor space around the vehicle and reduced visibility.

13 Overtaking

- **G** Overtaking was carried out in a safe and positive manner.
- F Overtaking manoeuvres were safe but lacked a degree of urgency. Greater attention to position, prior to and whilst overtaking, would have resulted in a better line.
- **U** Inadequate planning caused overtaking to be aborted.

14 Safety Margins and Following Distance

- **G** Ample clearance and consideration was given to all other road users whether stationary or moving. Good clearance given to overhanging obstacles. Correct following distances kept for the weather conditions and the size of the vehicle being driven.
- F Generally good safety margins kept most of the time. Occasional stops too close to the vehicle in front and getting too close to parked vehicles.
- U Shaves off parked cars and general lack of appreciation if something goes wrong, constantly too close to be able to stop safely in the event of an emergency.

15 Parking and Manoeuvring Techniques

- **G** Good all round observation prior to and during the manoeuvre, smooth and slow vehicle control, accurate with excellent use of the mirror with good awareness of other road users and potential danger. Demonstrates a thorough thought process of where to park.
- **F** The driver has fairly good levels of awareness but demonstrates weakness' in speed control or inconsistent observation skills.
- Very poor co-ordination, little regard to the safety of the vehicle and surrounding areas, poor mirror checking and rearward observation.
 Driver poses a high risk of causing damage.

16 Awareness of Hazards and Risks

- **G** Good forward observation, resulting in a uniform, foresighted and safe style of driving.
- **F** Read the road well but room to improve observation, hazard perception and attention to finer detail.

U There were clear examples of poor planning and observation resulting in an unprepared approach to hazards. Little appreciation of how to systematically anticipate and deal with a hazard.

17 Uninterrupted Progress

- **G** Good safe progress was maintained. Taking advantage of gaps in traffic due to long forward planning without compromising safety. There was a constant smooth flowing rhythm throughout the drive.
- **F** The flow and progress of the drive were lost on occasions.
- Little attempt was made to maintain safe progress, with lost opportunities throughout the drive. A lack of ability to link the elements of the drive together adversely affected flow.
 A distinct lack of planning was evident.

18 Vehicle Sympathy

- G The driver displayed obvious sympathy for the vehicle. Evidence of low engine speed where possible and high power when necessary.
 The vehicle was controlled smoothly throughout the drive.
- F Control of the vehicle was fairly smooth, only disrupted by occasional unevenness caused by hitting avoidable potholes etc. in the road. Greater attention would lead to improved vehicle sympathy.
- U There was a distinct lack of sympathy shown for the vehicle, with a noticeable disregard for changes in the condition of the road surface. The result was a roughly controlled almost abusive drive.

4.3 Assessment material

Document 1: SAFED Course Timetable
 Document 2: Driver Training Report
 Document 3: Trainers Summary after Drive 2
 Document 4: Safe and Fuel Efficiency Sample Knowledge Exercise
 Document 5: Evaluation Form

Document 1 SAFED LCV Course Timetable

Time	Summary	Content	Location
08:30 (15 minutes)	Introduction	Introductions to the aims and objectives of the course and its contents.	Classroom
08:45 (60 minutes)	Interactive Presentation	This presentation serves to set the scene for the drivers, receive facilitated learning and enables the trainer to gauge a driver's knowledge and attitude towards driving.	Classroom
09:45 (15 minutes)		BREAK	
10:00 (30 minutes)	Preliminary Candidate & Vehicle Checks	Full driver eyesight check and vehicle inspection undertaken. Acronym POWDER is used. (Petrol/diesel, oil, water, damage, electrics and rubber/tyres)	Around the Vehicle
10:30 (60 minutes)	First Drive (30 minutes per driver)	Drivers are assessed on driving abilities.	In Vehicle
11:30 (30 minutes)	Driver Debrief (15 minutes each driver)	Each driver will receive a de-brief on their performance and driving style.	In Vehicle
12:00 (30 minutes)	Demo Drive	The trainer will deliver a demonstration drive tailored to the drivers training objectives.	In Vehicle
12:30 (45 minutes)		LUNCH	
13:15 (60 minutes)	Vehicle And Roadcraft Instruction (30 minutes per driver)	On road training will be given to both drivers. The training techniques deployed cater for 2:1 training enabling the second driver to benefit from watching and listening to instruction given to the other driver.	In Vehicle
14:15 (30 minutes)	Parking & Manoeuvring	Each driver will undertake two manoeuvres.	In Vehicle
14:45 (15 minutes)		BREAK	
15:00 (60 minutes)	Second Drive (30 minutes per driver)	Each driver will be given the opportunity to demonstrate the techniques learned, along the original assessment route with ongoing input and guidance, where necessary.	In Vehicle
16:00 (30 minutes)	Knowledge Exercise	A knowledge exercise is conducted covering both pertinent Highway Code, driving knowledge and understanding of safe and fuel efficient driving.	Classroom
16:30 (30 minutes)	Final Debrief	Both drivers will undergo a final debrief and recap and completion of driver course evaluation forms	Classroom
17:00	Conclusion		

Document 2 Driver Training Report

To be completed by the trainer during the training day.

Course Date:			Drivers Name:	
Client Company:			Eyesight Check:	Pass/Fail
Training Vehicle:			Trainers Name:	
Registration No:			Licence Check:	Yes/No*
Odometer reading Start:	Drive 1	Drive 2	*If No, why not?	
Odometer reading Finish:	Drive 1	Drive2	Licence expiry date: Sect 4b on new licence	
Vehicle Checks Completed Satisfactorily:	Yes/No		Comments:	

Driver Risk Assessment Rating

To be completed by the trainer during the training day.

	Drive One	Drive Two
Start Time		
Finish Time		
SAFED Elements		
1. Driver Behaviour/Technique		
2. Road and Weather Conditions		
3. Seating Position/Seat belt		
4. Use and Timing of Mirrors/Blind Spots		
5. Use of Brakes		
6. Use and Timing of Signals		
7. Steering Technique		
8. Use of Clutch		
9. Use of Gears		
10. Dealing with Junctions, Road Markings & Signs		
11. Acceleration and Appropriate use of Speed		
12. Vehicle Positioning/Lane Discipline		
13. Overtaking		
14. Safety Margins/Following Distance		
15. Parking & Manoeuvring Techniques		
16. Awareness of Hazards & Risks		
17. Uninterrupted Progress		
18. Vehicle Sympathy		
Fuel Used (Litres)		
Good = 0 pts Fair = 1 pt Unsatisfactory = 3 pts Totals		

NOTES – DRIVE ONE

Document 3 Trainer's Summary after Drive Two

To be completed by the trainer during the training day.

Course Date:	
Client Company:	
Drivers Name:	
Training Vehicle:	
Registration No:	

On Road Training

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Parking and Manoeuvring

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Training Recommendations

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Document 4

Safe and Fuel Efficiency Sample Knowledge Exercise

Pass Mark 75%

Please answer all questions

Vehicle Maintenance and Pre Drive Checks

- Q1) As an occupational company driver what chance do you have of being killed in an accident during a lifetime of driving in the UK?
 - (a) 1:200
 - (b) 1:300
 - (c) 1:400
 - (d) 1:500
- Q2) You must be able to read a new style car number plate from a distance of:
 - (a) 10 metres/33 feet
 - (b) 15 metres/49 feet
 - (c) 20 metres/66 feet
 - (d) 25 metres/82 feet
- Q3) The minimum legal tread depth on a van tyre in the UK is:
 - (a) 1.0mm
 - (b) 1.6mm
 - (c) 1.75mm
 - (d) 2.00mm
- Q4) Van drivers are required by law to wear a seat belt?
 - (a) True
 - (b) False

Driving Technique and Knowledge

Q5) What is the speed limit for a van over 2 tonne GUW on a national speed limit dual carriageway?

- (a) 40
- (b) 50
- (c) 60
- (d) 70

- Q6) At box junctions you may enter the box and wait to turn right when:
 - (a) Always
 - (b) If waved on by the other driver
 - (c) If you are only stopped from doing so by oncoming traffic
 - (d) If the lights have only just changed to green
- Q7) You must not use the horn or reversing beepers between the hours of:
 - (a) 11.00pm and 7.00am
 - (b) 10.30pm and 7.30am
 - (c) 11.30pm and 7.00am
 - (d) 11.30pm and 7.30am
- Q8) You must use headlights when visibility is reduced, generally when you can not see for more than:
 - (a) 50 metres/164 feet
 - (b) 75 metres/246 feet
 - (c) 100 metres/328 feet
 - (d) 125 metres/410 feet
- Q9) Braking on ice can increase your stopping distance by:
 - (a) x4
 - (b) x6
 - (c) x8
 - (d) x10
- Q10) What does the flashing of headlights mean?
 - (a) Your coat is stuck in the door
 - (b) Speed trap ahead
 - (c) Warning of presence
 - (d) You may proceed
- Q11) What colour studs mark the central reservation of a dual carriageway or motorway?
 - (a) Amber
 - (b) Red
 - (c) Green
 - (d) Clear/White
- Q12) In a 20mph impact, the chance of killing a pedestrian is:
 - (a) 1 in 5
 - (b) 1 in 10
 - (c) 1 in 15
 - (d) 1 in 20

Q13) In a 40 mph impact, the same pedestrians' chances of survival are:

- (a) 1 in 20
- (b) 1 in 15
- (c) 1 in 10
- (d) 1 in 5
- Q14) What do the initials ABS mean?
 - (A) Advanced Braking System
 - (B) Anti-lock Braking System
 - (C) Advanced Brake-Bias system
 - (D) Anti Brake Screech

Q15) The Highway Code advises that at 30 mph your stopping distance is:

- (a) 50 feet/15 metres
- (b) 75 feet/23 metres
- (c) 100 feet/30 metres
- (d) 125 feet/38 metres
- Q16) Of all fatal and serious injury accidents, what percentage happens in built up areas?
 - (a) 20%
 - (b) 40%
 - (c) 60%
 - (d) 75%
- Q17) Triangular signs mostly:
 - (a) Order
 - (b) Inform
 - (c) Direct
 - (d) Warn
- Q18) The middle lane on a motorway is for:
 - (a) Cruising
 - (b) Medium speed cars
 - (c) Overtaking vehicles in the left lane
 - (d) Lorries and vans only
- Q19) Temporary speed limits on a motorway with a red circular border are:
 - (a) Mandatory
 - (b) Advisory

- Q20) What actions affect the stability of a vehicle?
 - (a) Accelerating
 - (b) Braking
 - (c) Cornering
 - (d) Poor load distribution
 - (e) All the above
- Q21) The Maximum Gross Weight is?
 - (a) The maximum weight the vehicle can carry
 - (b) The weight of the vehicle only
 - (c) The maximum combined weight of the vehicle and load

Fuel Efficiency

Q22) To maintain fuel efficiency, which of the following statements is true?

- (a) Low revs/high gear
- (b) High revs/low gear
- Q23) List two tasks a driver can do to improve fuel economy

·····

Q24) Name two advantages of block gear changing

Q25) What does SAFED stand for?

Q26) Whilst driving, planning ahead and maintaining the vehicles momentum will save fuel?

- (a) True
- (b) False

Document 5 Evaluation Form

Drivers will be asked to complete a copy of this form during the final feedback session of the day. It will be used to gauge opinion on the content and delivery of the course.

Driver's Name (optional):
Venue:
Trainer's Name:
Date:

Please rate the following aspects of the SAFED course, by circling the appropriate number on a scale of 1 to 4, where 1 = Unsatisfactory and 4 = Excellent.

Please Circle:

The explanation of and subsequent delivery of the course	1	2	3	4
Help in developing new ideas, skills and techniques to benefit both your company and you	1	2	3	4
Clarity, conciseness and relevance of the course content	1	2	3	4
Trainer's responsiveness to your needs	1	2	3	4
The usefulness of the training materials used	1	2	3	4
Location and standard of the venue and its facilities	1	2	3	4
The date and time of the course	1	2	3	4
The time taken to complete the course	1	2	3	4

If you have given a low score for any of the above, it would be helpful if you could explain how you think we could improve the course.

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Were the Health and Safety procedures explained (please tick)?

Yes

No

In general, how satisfied are you with the services you have received today from the training provider (please tick)?

Very Satisfied	Dissatisfied
Satisfied	Very Dissatisfied

What do you feel has been the most valuable part of today's course?

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Please use the following space to make any additional comments about this course.

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Safe and Fuel Efficiency Sample Knowledge Exercise Answers

Vehicle Maintenance and Pre Drive Checks

- Q1) a: 1:200
- Q2) c: 20 metres
- Q3) b: 1.6mm
- Q4) a: True

Driving Technique and Knowledge

- Q5) c: 60
- Q6) c: If you are only stopped from doing so by oncoming traffic
- Q7) c: 11.30pm and 7.00am
- Q8) c: 100 metres
- Q9) d: X10
- Q10) c: Warning of presence
- Q11) a: Amber
- Q12) d: 1 in 20
- Q13) c: 1 in 10
- Q14) b: Anti-lock Braking System
- Q16) d: 75%
- Q17) d: Warn
- Q18) c: Overtaking vehicles in the left lane
- Q19) a: Mandatory
- Q20) e: All the above
- Q21) c: The maximum combined weight of the vehicle and load

Fuel Efficiency

- Q22) a: Low revs/high gear
 Q23) Correct tyre pressures
 Correct load distribution
 Reduce acceleration and braking
 Forward planning
 Obey speed limits
 Smooth and tapered braking
 Q24) Increased protection for the rear of the vehicle by the brake lights
 Less wear and tear on the gearbox and clutch
 Q25) Safe and Fuel Efficient Driving
- Q26) a: True

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