## Face the facts on transport safety

## By Norman Bradbury

Recent surveys have shown that public perceptions of rail travel safety are very low and bear no resemblance to the reality of travel risks. There is evidence that a major contributing factor to this state of affairs is the intense, and frequently inaccurate and negative reporting of rail accidents by the media on the rare occasions that they occur.

This briefing therefore aims to set the record straight so that misconceptions can be avoided in future. This is very important simply because anyone choosing to travel by alternatives to rail because they fear for their safety, will in fact be putting their lives at greater risk, as will be seen below.

To illustrate this point, a survey of car drivers carried out by Green Flag and Brake, found only 13% thought rail was the safest travel mode while 20% thought air was safest and 67% thought it was the car.

More recently, a national transport survey for the Commission for Integrated Transport in 2001 found public confidence in the privatised railway had been shattered by the accidents at Southall, Ladbroke Grove and Hatfield and that one person in three would not travel by train. The respondents' perceptions of risk showed 47% saw air travel as the safest form of transport, 15% said it was the car, 13% the bus and just 7% mentioned rail. As will be seen, such views cannot be substantiated by facts.

It should be explained that measuring travel safety is not a simple black and white issue.

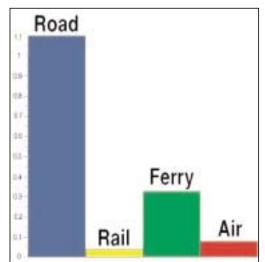


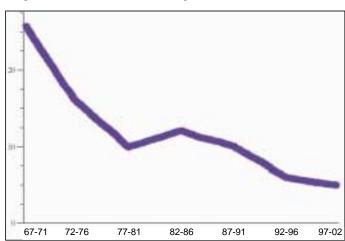
Table 1. Fatalities per 100 million passenger kilometres

Source: European Union

There are different criteria to be considered. The methodology chosen by airline operators measures distance travelled per fatality but this is simply because the average air journey is comparatively long distance and airlines generate passenger miles more quickly than other modes in consequence.

There are different ways of measuring risk. It can be assessed based on the number of journeys taken, or, probably the most meaningful comparison for most travellers, risk per hour of travel.

The figures above in Tables 1 and 2 are the most recent statistics released on this subject by the European Commission and show clearly how widely disparate conclusions can be



**Table 3. Number of fatal train accidents 1967 to 2002**Source: Professor Andrew Evans *Modern Railways* 8/02

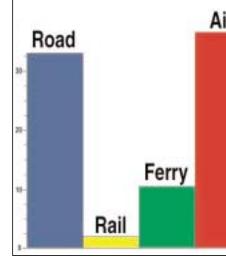


Table 2. Fatalities per 100 million passenger hours

Source: European Union

drawn from the different criteria, and it will also become evident that a more in-depth understanding of these statistics is needed in order to make a true and fair comparison.

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Britain's railways are generally in line with the European average.

When compared to rail, the risk of death in a road accident is 27.5 times greater, by ferry it is eight times greater and by air it is twice as great even using the measure favoured by airlines.

When passenger hours per fatality are compared the ratios become 16.5 to 1 for road, 5 to 1 for ferry and 18 to 1 for air travel.

Clearly, by whichever method is chosen, rail travel stands out as the safest mode by far and it is interesting that when measuring risk by time, air transport appears to be less safe than road.

Even so, these statistics need closer scrutiny to be fully understood. This is because Department for Transport statistics for rail accidents include those for which the victim is either partly or wholly responsible such as trips and falls on stairs, escalators and platforms, and trespassers on railway property. Comparative statistics for other modes may be difficult or impossible to obtain. For this reason, the rail statistics are confined to fatalities occurring in train accidents.

The statistics for road accidents

conceal wide variations of risk between different classes of road user, with pedestrians, cyclists and motor cyclists being at greatest risk while the bus is (contrary to public perceptions) easily the safest way to travel by road. Although modern cars provide a much safer environment for their occupants than in the past, the risk of fatality or serious injury with car travel is still thought to be at least six times greater than rail.

It is probable that one factor influencing motorists' erroneous belief that they are safe is because they think they are in control. When someone else is in control they feel less safe and are unwilling to trust them.

This is despite the fact that a train driver or airline pilot is far more highly trained than the vast majority of car drivers.

Again contrary to public opinion, rail safety in the UK is still continuing to improve. Although it is understandable that the spectacular nature of the rail accidents mentioned above would attract media attention, their frequency has been no greater than accidents in previous years and great care must be taken to avoid misunderstandings as a consequence of the intense media focus on rail accidents in recent times.

The underlying trend of safety indicators confirms continuing improvement. Fatal train accidents have continued to fall as shown in Table 3 (left). It should be noted how an isolated multi-

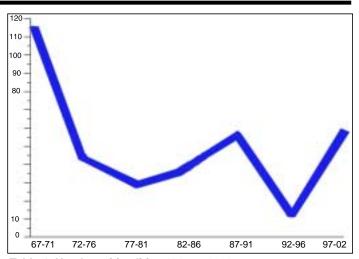
The safe way to see Scothe Keith & Dufftown rai opportunities to explore ration with rail companion board ScotRail trains Tel/fax: 01283 821472. E

ple fatality accident can conceal the underlying trend for a five-year period, these being Clapham (1987-91) and Ladbroke Grove (1997-2002), as shown in Table 4. It should also be noted that the number of deaths on Britain's roads each year is 10 times greater than for the 35 years of train accidents put together and that the final period includes the accident at Great Heck which was in truth a road accident for which the railway cannot be held responsible. Ten people died in this accident.

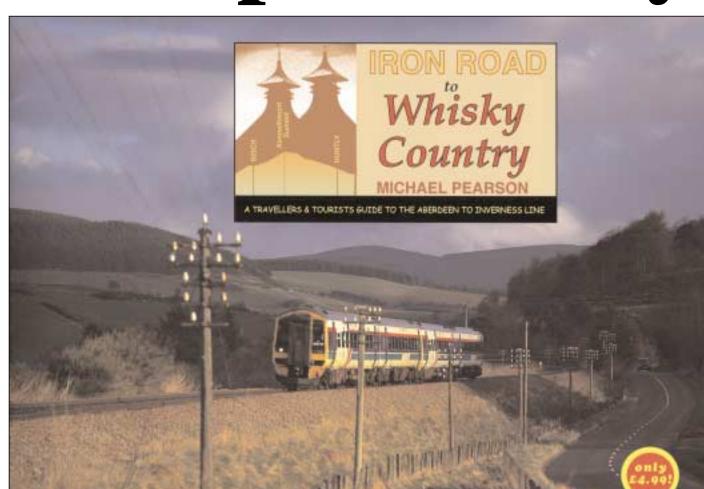
Other safety indicators also point to significant safety improvements. Signals Passed at Danger (Spads) are now at their lowest level since records began and the work to install the Train Protection and Warning System (TPWS) is progressing well and this equipment now seems likely to remove about 80% of the risk from Spads.

The purpose of this briefing is to allay the public's fears of rail safety through a more responsible and better informed media thereby avoiding the near hysteria seen when rail accidents have occurred in the recent past.

Rail travel is very safe and getting still safer and the public should be given every opportunity to be better informed and so make a truly objective choice of mode when travelling. Instead of constantly casting doubts about rail travel, it is time the media gave credit where it is due.



**Table 4. Number of fatalities 1967 to 2002**Source: Professor Andrew Evans *Modern Railways* August 2002



The safe way to see Scotland – by rail. This is the cover of the latest line guide from Wayzgoose which includes information on the Keith & Dufftown railway and the 108-mile line from Aberdeen to Inverness which has nine stations offering plenty of opportunities to explore. Author Michael Pearson's book is full of maps, pictures and practical information. Because of collaboration with rail companies and local authorities, the 44-page booklet costs only £4.99. It is available from CCG catering trolleys on board ScotRail trains, stations on the route or from Wayzgoose, Park View, Tatenhill Common, Staffordshire DE13 9RS. Tel/fax: 01283 821472. Email: karen@wayzgoose.org.uk