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accidents don't have to happen

Public Health England

Safety issue

Delivering Accident Prevention at local level in the new public health system

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Delivering accident prevention at local level in the new public health system

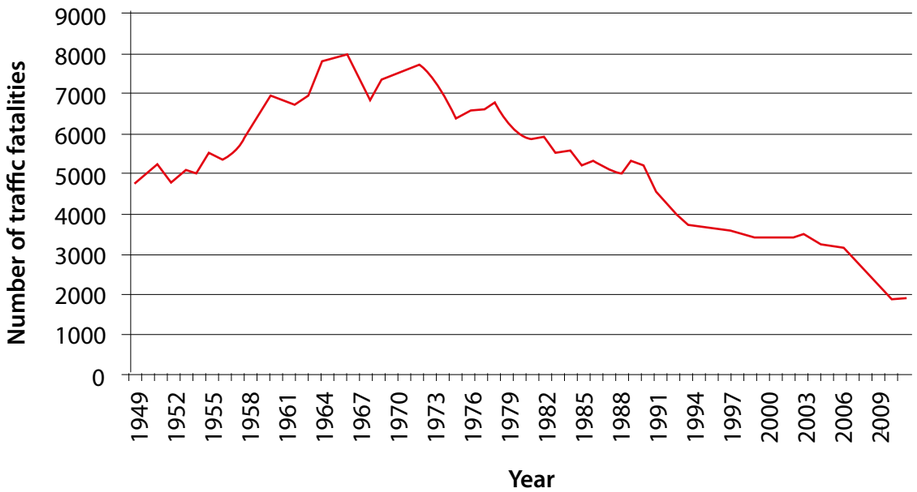
Part 2
RS2

Accident prevention in practice

FACT SHEET: Road casualties – trends and changes

The number of deaths from traffic injuries in Great Britain has been in decline since 1966, when 7,985 people were fatally injured on the roads. This followed a steady increase in the number of deaths on the roads after the Second World War.

Figure 1: Number of reported traffic fatalities, 1949-2011[1]



The peak in 1966 was followed by the white paper "Road Safety: A Fresh Approach." [2] This set the groundwork for how road safety was managed in Britain. For example, a central road safety unit was established within the Ministry of Transport, and area road safety units were established so that the government could give more help and guidance to local authorities. This support would mean that local road safety officers had wider responsibilities and a greater expertise in order to manage local road safety activities.

As well as establishing how road safety would be managed, a programme of public information was launched, with a special focus on the use of seatbelts and the recently introduced law on drink driving. Engineering approaches were also highlighted, with new regulations on the fitting of seatbelts, work with car manufacturers to establish a programme of research and action on vehicle safety, and a priority on small road engineering schemes which have a high safety value for their cost.

Central leadership on road safety has been a necessary part of the response to reduce traffic injury. Successive governments have sustained action on road safety through the publication of strategies, and in 1987 the first government targets were set in Road Safety: The Next Steps. The target was to reduce road traffic accident casualties by one third by the year 2000, using the average of 1981-5 as the baseline. This was based on research by TRRL (now TRL) that showed the contribution that different activities could make to meet the target.

Road casualty reduction targets help to focus and motivate the work of policy makers and practitioners, set clear priorities, and ensure that resources are allocated. International evidence [3,4,5] supports the case for casualty reduction targets.

In 2000 a second round of targets was introduced in "Tomorrow's Roads - Safer for Everyone." [6] This included a second round of targets for 2010, which took the 1994-8 average as the baseline. There were three targets:

- A 40% reduction in the number of people killed or seriously injured in road accidents
- A 50% reduction in the number of children killed or seriously injured in road accidents
- A 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle miles.

This strategy was reviewed twice at three year intervals to identify new actions for meeting the targets and was accompanied by specific strategies or policy reviews in speed management, child safety and motorcycling.

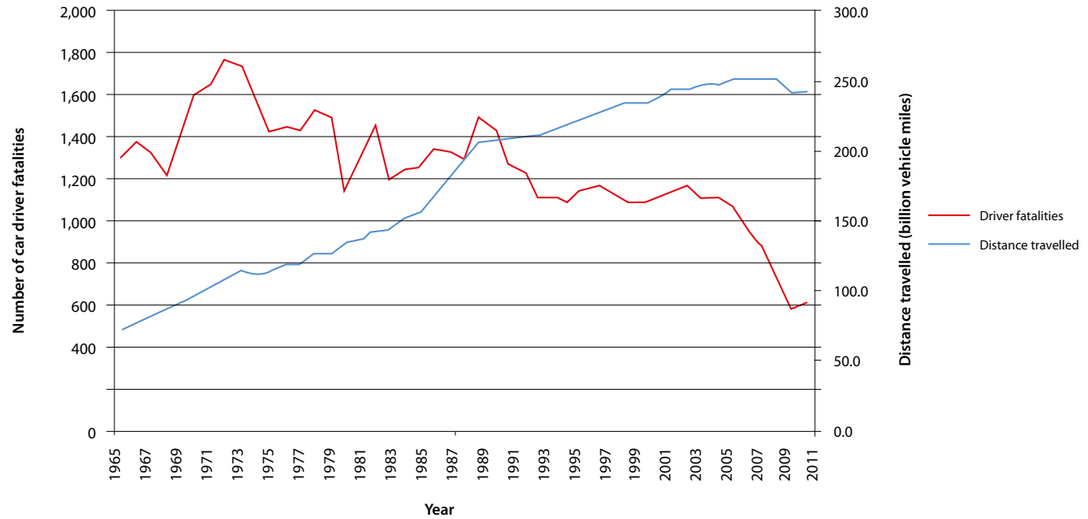
The current road safety strategy in England is "The Strategic Framework for Road Safety. "[7] The overall number of traffic fatalities is the aggregate of several different trends, and it is necessary to explore these in more detail.

Car driver fatalities

Between 1949 and 1965 the number of vehicle occupant deaths increased. The categorisation of vehicle occupant deaths was different before 1965, which means that it cannot be easily combined with the post 1965 data when car drivers and passengers became separate categories.

From 1965 to 2007, the number of driver deaths remained relatively static, although there was a slight decline during these 40 years. Within the same time frame the amount of travel by car saw a fivefold increase. This shows that the risk of fatal injury per mile travelled has declined; this is due to improved safety measures although it may also have been influenced by other factors such as the increase in the proportion of car travel in less risky urban environments or by less risky demographics.

Figure 2: Number of car driver fatalities and distance travelled per year, 1965-2011[1]



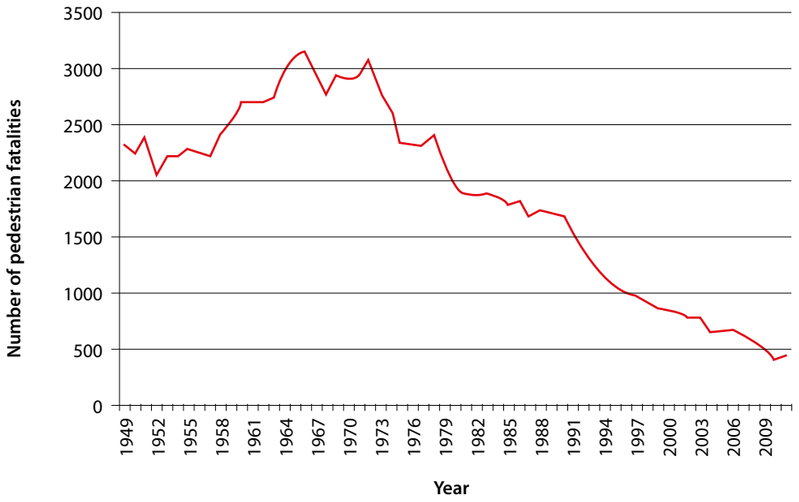
In the same period, between 1965 and 2007, the amount of miles travelled by passengers almost halved from 4.4billion miles to 2.6. The number of passenger fatalities dropped from 543 to 136. The percentage of houses with two or more cars increased from about 5% to 30%. Of note is the large fall in the number of driver deaths between 2007 and 2011, in which the numbers almost halved. This coincided with a recession and occurred against the backdrop of a smaller drop in road travel. The mechanisms which would explain such a large drop in the UK are unexplored, although similar drops have been seen in other Western countries. In Sweden and the US, the declining number of young drivers – who are most at risk of serious injury – has been established as a partial explanation.

Pedestrian fatalities

The number of pedestrians killed in Great Britain follows a similar pattern to the total number of road deaths – rising following the Second World War until a peak at the end of the 1960s and then a general decline to 2011. The peak number of pedestrians killed was in 1966, the same as the peak for the total number of fatalities – and this peak was relatively sustained from 1964 until 1973.

There are no reliable statistics for exposure over this time period, such as the amount of miles annually travelled by foot, and so it is difficult to estimate how much of the decline is due to road design and vehicle speeds or a reduction in the amount of walking. However, car use has increased significantly over this period without any increase in the weekly number of trips that people make.

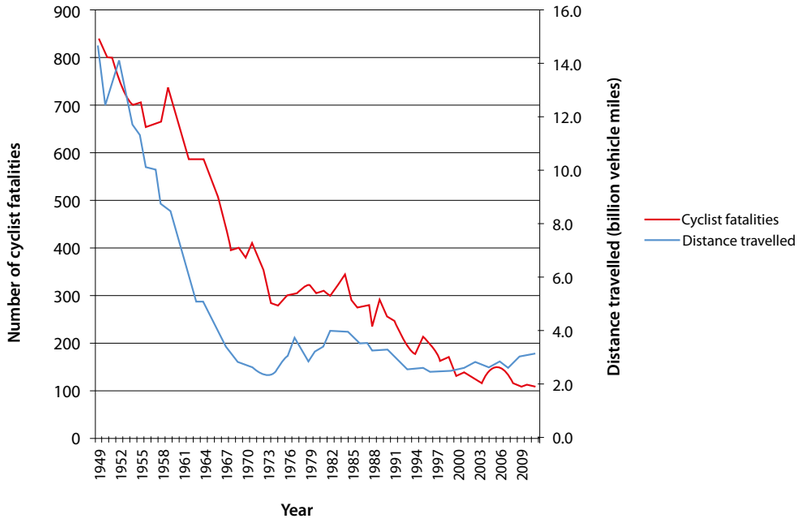
Figure 3: Number of reported pedestrian fatalities, 1949–2011[1]



Cyclist fatalities

There have been large reductions in the number of cyclists killed on the roads since the end of the Second World War. Unlike car users and pedestrians the numbers did not rise and peak in the mid to late 1960s, but they fell sharply from just under 850 deaths in 1949 to around 300 deaths per year in the mid 1970s. Following this, the decreases in the annual number of deaths continued, although the rate of change each year had decreased and from 2000 onwards there were typically between 100 and 150 deaths every year.

Figure 4: Number of cyclist fatalities and distance travelled per year, 1949–2011[1]



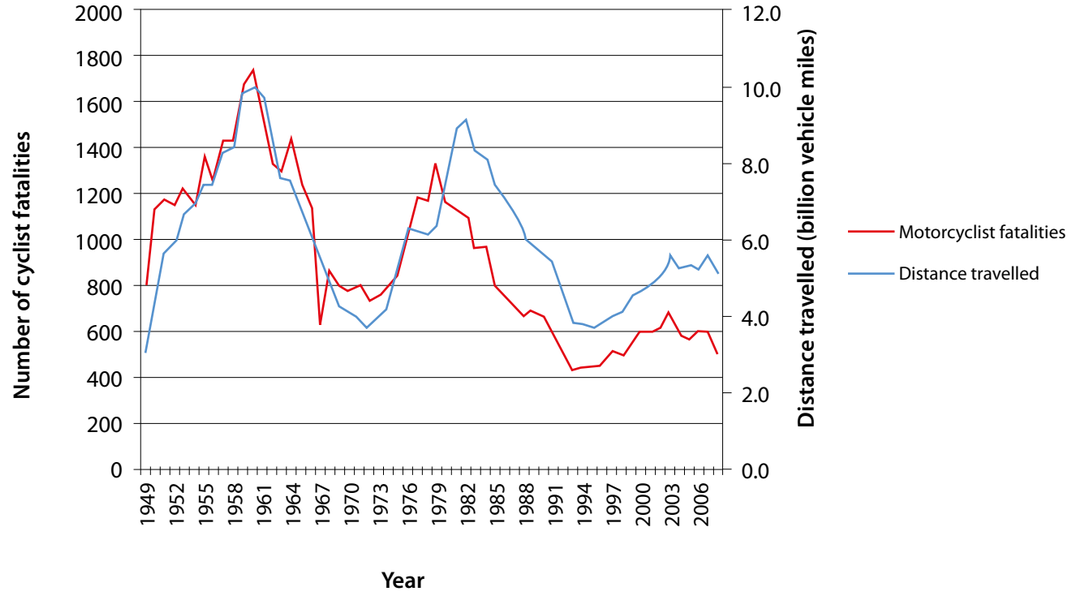
The reason for the large decreases in the annual number of cyclist deaths becomes apparent when comparing them against the distance travelled by bicycle each year. In 1949 just less than 15billion miles were travelled by bicycle and this had dropped to 2billion miles by 1973. The amount of travel dropped much more quickly than the number of road deaths, and this led to increases in the number of fatalities per mile travelled by bicycle. Although the amount of cycling increased during the early 1980s to around 4billion miles per year, it again dropped away. The last two decades have been characterised by a relatively small yet sustained increase in bicycle use.

Motorcyclist fatalities

The number of motorcyclist fatalities (which for this section includes other powered two wheelers and passengers) has had two peaks since 1949. The first was in 1961 when the number of fatalities reached 1,743, before dropping to about 800 deaths per year in the 1970s. The number then rose quickly to 1,340 deaths in 1979 before dropping to a little more than 400 deaths per year. Since 1997 the annual number of deaths has increased again.

The risk per mile travelled by motorcycle has remained relatively constant over time. This has meant that the number of fatalities follows the amount of use very closely. There was perhaps a slight change in the risk of fatal injury per mile travelled around the start of the 1980s, although the strong relationship between motorcycle use and number of fatalities remains.

Figure 5: Number of motorcyclist fatalities and distance travelled per year, 1949–2011[1]



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