

# Rail capacity

The modern railway is based on a cruel paradox. Some of its routes into the main cities are too popular at peak times, with overcrowding. The commuters are made to pay premium prices for what can be an inferior service. Many other routes have too few passengers, and those who do travel often benefit from heavily discounted or off peak prices well below the costs of running those trains.

We need to solve the problem of too little capacity for some, and too much capacity and too little revenue from others. What should be done? Commuters naturally think it unfair that they have to provide a disproportionate part of the fare revenue in what remains overall a heavily subsidised business. Other travellers often do not appreciate just how large a gap there is between what they pay to travel and the costs of providing the train they use.

The problem of capacity may be easier to solve than many think. According to the railway management they can typically only run 20 mainline trains an hour on any given line. At peaks there are still large gaps between trains on uni direction track. Poor signals, poor brakes and heavy trains mean the safety margin required to stop a train in time leaves much of the track empty. Modern digital signalling could alter that. If a train is equipped with on board signals and sensors, and automatic braking where needed, it is possible according to railway experts to run 30 trains a hour safely. That is a massive increase of 50% in capacity. It also means a service which at best is one train every three minutes becomes one train every two minutes, more like the tube. If new trains are built out of lighter though strong materials, and equipped with better brakes, there could be further improvements.

I have been urging the government and railway to get on with digital signal investment. They have now established a larger fund to tackle the five most overcrowded routes into London. I am asking them to do more, as so many commuter routes into major cities are afflicted.

Getting more people to use the trains off peak and on longer routes does not have such an easy fix. There needs to be more analysis of why people travel and what they want to get out of it. We need timetables that offer good services more geared to the pattern of passenger needs, and sensible pricing which offers a discount for off peak but does not simply dump seats at prices well below marginal costs.