

# A better railway

If you flew above busy roads into our great cities at 8.30 on a mid week morning you would see busy and congested roads with many queues of traffic at traffic lights. Much of the traffic would be bumper to bumper in slow moving blocks or close together where it is flowing.

You would also observe large runs of empty train track going straight into the heart of the city interspersed with some well distanced trains. If you wait at a provincial station most of the time the track is empty.

The railways usually tell us they are using all the capacity on main lines, particularly at busy times. Despite all the trains going in the same direction on main track runs , and despite the ability of a system controller to know exactly where all the trains are, there are large gaps for safety reasons.

Modern digital signalling can allow much greater control and accuracy which in turn could allow at least 50% more trains to use the same track run safely. It does not need the wildly expensive extra HS 2 track to increase capacity to the north. Improving signals and extra surveillance of train positions and speeds should mean more trains and fewer accidents. More technology could stop drivers passing red signals by mistake or without permitted override. Knowing speeds and locations of trains can drive the signals.

Having extra capacity on the existing network is important to cater for bulges in demand and to offer more timetable flex. Trains should be good at moving large numbers of people to a single point, as for a large sporting event, concert, conference or busy office district, Rail needs to lay on more specials and peak services when trainload numbers are wanting to travel. Reception stations for such venues need to be safe for peak crowds instead of tube stations closing for fear of too many people turning up.