

RAILWAY STATIONS AND THE GROWTH OF ENGLISH TOWNS

The growth of towns in England and Wales over the past 150 years has been intimately linked to the opening of new railway stations. That is one of the findings of new research by Dr **Marta Felis-Rota**, which uses geographical information systems' software to track the exact geographic location of all train stations in England and Wales since 1851 and match them with population densities in every parish.

Her study, presented at the Economic History Society's 2011 annual conference, also finds that the proportion of the population with direct access to a train station has declined over the last 60 years. At the same time, a large number of train stations have remained in rural areas instead of urban sites until considerably late in railway history.

The research shows that in the boom expansion phase of the British railway during the second half of the nineteenth century, population developments grew unevenly and very much linked to rail expansion. Later on, with the advent of the motor vehicle, numerous railway lines and stations became redundant, inefficient or not economically viable. But rural and urban development remained uneven with all human settlements profoundly marked by the history of British rail.

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Which came first: town settlements suitable for setting up a railway station or rail stations that would attract population to their surroundings areas? Researchers from the Universidad Autónoma de Madrid and Universidad de Lleida in Spain find that this is a chicken or egg question. They use a sophisticated geographical information systems' software to track the exact geographic location of all train stations in England and Wales since 1851 and match them with population densities in every parish.

The study finds that:

- first, the growth of towns in England and Wales has been intimately linked to the opening of newly established train stations;
- second, the proportion of the population with direct access to a train station has declined for the last 60 years;
- and third, a large number of train stations have remained in rural areas instead of urban sites until considerably late in rail history.

The results of this research show that in the boom expansion phase of the British railway during the second half of the nineteenth century, population developments grew unevenly and very much linked to rail expansion. So, setting up a station in a given parish would have boosted the settlements within one to five miles of the station.

Later on, during the twentieth century, with the advent of the motor vehicle, numerous railway lines and stations became redundant, inefficient or not economically viable. The result was the closing down of many old lines and stations all over England and Wales.

By then, population had a much more smooth and constant growth. But rural and urban developments remained uneven. This is because population settlements were already there and would persist, profoundly marked by the history of British rail.

Ever since the Second World War, the proportion of population with direct access to a train station in England and Wales has declined from 70% to less than 60%. This could be attributable to the motorisation of population. More and more people have their own car and so locate their homes less and less dependently on where the train stops.

There are additional motivations for this decline in 'connected' homes besides motorisation:

- first, a crowding out effect: as the free spaces around the existing train stations are progressively built, so the new houses need to be located further away from the stations.
- second, there might be a price effect: house prices in England and Wales have risen so it is now relatively more expensive to be able to afford a house with direct access to train;
- and third, a number of stations have been closed down in the last decades, so there are some houses that previously had access to a train station and have now been deprived of it.

The last striking finding of this research is that despite the power of attraction of rail stations for new settlements, most of the stations were actually in a rural setting. Indeed, in 1871, only slightly above 20% of train stations were on urban space.

In just 30 years, by 1901, this proportion had doubled to 40%; but it took more than 70 years – it was not until the 1980s – for this proportion to rise to 70% of stations on urban space. So, contrary to what we might have thought, a great deal of train stations belonged to rural areas until very late in the twentieth century.

The way forward is to realise that maybe the commuting and general passenger needs in advanced economies have changed enough for allowing combined means of transport in journeys and more distant homes to the nearest point of connection to the network.

ENDS

'A GIS analysis of the evolution of the railway network and population densities in England and Wales (1851-2000)'

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