



Timing is Everything

How has the performance of railways in Britain changed in the last 100 years?



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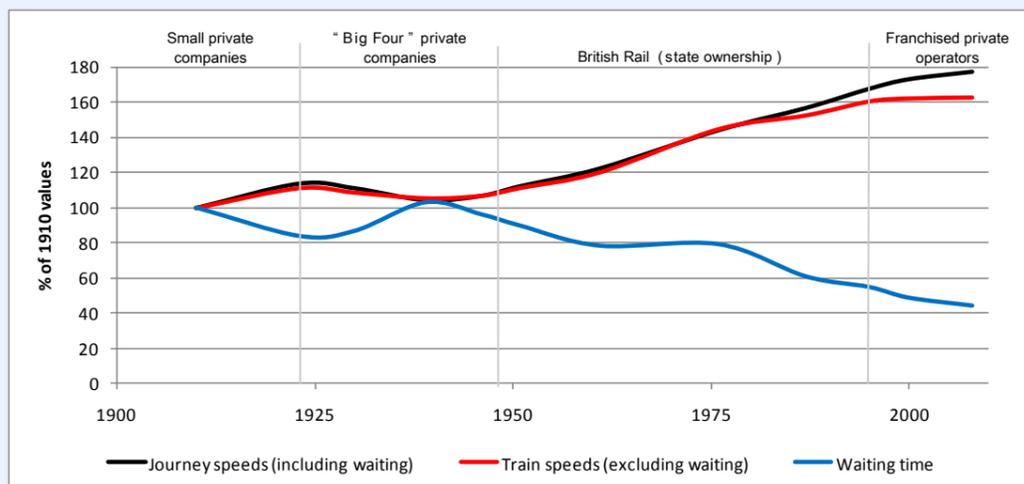


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Background

Work on public services tends to concentrate on the big three: health, education and crime, and to have a relatively recent focus. This project aimed to broaden that focus, both by covering a different policy area, and by looking at a much longer time span. Railways have highest level of government involvement of any means of transport, and a longer time horizon is appropriate because of the sheer longevity of railway assets. This project built on earlier work by the authors on the performance of nineteenth century British railways and extended the analysis to the present day.

Figure 1. Train speeds and waiting times since 1910



On average, train speeds have increased since 1910, and waiting times have decreased

What We Did

- ❖ We computerized the departure and arrival times of every train on 48 key routes on 12 dates over the last century – more than 40,000 train journeys.
- ❖ We eliminated trains that were overtaken en-route, and calculated the average speed of remaining trains, taking into account that some trains carry more passengers than others.

Findings

Figure 1 shows

- ❖ On average, trains were more than 60% faster in 2008 than in 1910.
- ❖ Trains did not get faster between the two World Wars – and in fact got slower under the “big four” private companies (LNER, GWR, LMS and SR).
- ❖ Trains got much faster under state ownership from 1948 to 1995.
- ❖ Since the 1980s, improvements have come from more trains (hence less waiting), but trains have stopped getting faster.

Figure 2 shows

- ❖ Post-World War II improvements were unevenly distributed, depending on route.
- ❖ Long-distance trains got much faster, and regional trains got significantly faster.
- ❖ Commuter trains were faster if they were on long distance routes but otherwise performance was mixed.
- ❖ Short distance trains into London Waterloo are actually slower now than when BR was created.
- ❖ BR seems to have prioritized more glamorous but less used long distance lines over less glamorous but more heavily used commuter lines.

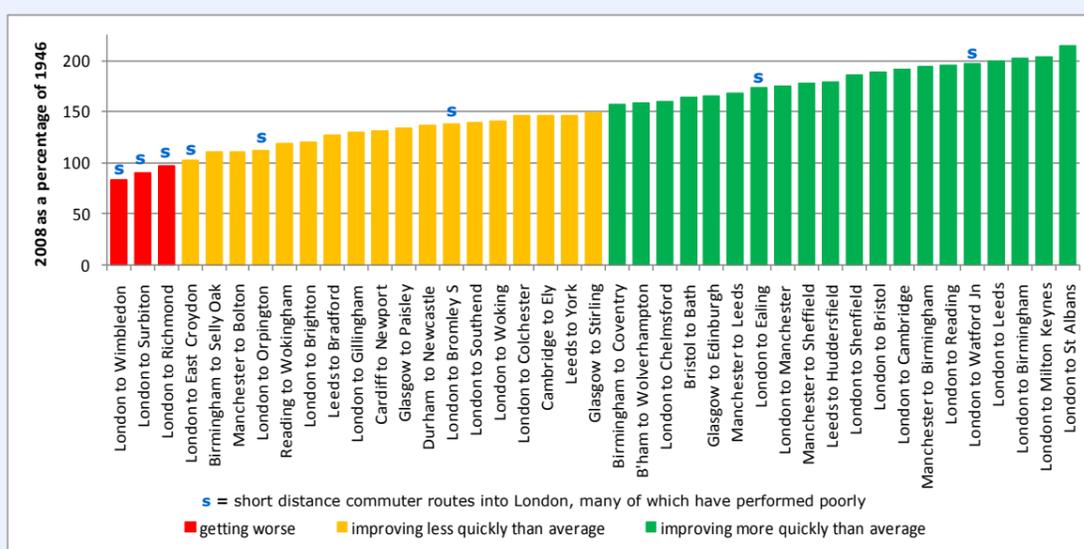
Aims

To establish whether the quality of train service has improved over time in the UK:

- ❖ we measured service quality by the speed of the train, and the waiting time at the station
- ❖ we used the UK’s Department for Transport methodology throughout.

Although overcrowding, comfort and so on are important, all the evidence is that people pick the fastest train (almost) every time. Therefore, this study focused on total journey times (including scheduled waiting times) since this has the greatest importance for most passengers.

Figure 2. Performance by Route—change in overall journey speeds between 1946 and 2008



Journey speed changes are highly varied

Find out more...



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