



## Road versus rail: Facts sheet No 11: Journey Length distributions/Speed and fares

This note provides comparisons between bus/coach and rail as now and as might be if the bus/coach enjoyed rights of way similar to those enjoyed by rail.

Table 3.3 of the Transport Statistics Bulletin with the sub title National Travel Survey 1997/99 Update, published by the DETR in August 2000 provides journey length distributions. We plotted the data and found that 50% of all surface rail journeys are less than 19 miles long 85% are less than 52 miles long and 90% are less than 80 miles long. In contrast dividing passenger-km by passenger journeys from tables 5.11 and 9.2 of Transport Statistics Great Britain yields an average journey length of 41 km or 25 miles for national rail.

Hence although the headline speed for a high-speed train is much faster than an express coach, those speed differences will be of little interest to bulk of rail passengers. Additionally the bus would offer a service frequency up to 10 times that of rail.

Meanwhile rail fares are up to 5 times as expensive as existing express coach fares and perhaps 10 times as expensive as would arise if the coaches could used uncongested rights of way as do trains. Moreover, rail fares would have to at least double to eliminate subsidy from the tax payer whilst the buses are profitable despite paying substantial taxes.

For illustrative purposes we quote the distances, journey times and fares for a sample of journeys from Euston. The fares are those for 2001. Estimated express coach times are based on 60 or 65 mph average speeds. (Railtrack used 65 mph at the Inquiry into the West Coast Main Line Modernisation Programme). Proposed fares for Return Bus are based on a doubling of the bus productivity since journey times would often be reduced by a factor of 2 and occupancy would rise above the average achieved today.

Omitted from the data is a plethora of special offers for rail but no doubt the bus industry would offer the same as the market developed.

|             | Miles  | Times Hours-min, |                                 | Fares Pounds and pence |             |             |              |             |             |
|-------------|--------|------------------|---------------------------------|------------------------|-------------|-------------|--------------|-------------|-------------|
|             |        | Rail             | Bus to Euston                   | Single                 |             | Return Rail |              | Return Bus  |             |
|             |        | Dist miles       | Now : future<br>hr-min : hr-min | Rail                   | Bus         | Season /day | Range        | Now         | Proposed    |
| Watford     | 17.75  | 0-20             | N/A                             | 5.20-5.80              | N/A         | 12.20       | 5.30-10.60   | N/A         | N/A         |
| Milton K    | 49.75  | *0-38/1-07       | 1-25 : 0-42                     | 12.60-15.20            | 6.00-7.00   | 12.50       | 12.70-26.60  | 6.50-9.50   | 3.25-4.75   |
| Northampton | 65.75  | *1-16/0-56       | 2-05 : 1-00                     | 14.80-20.60            | 6.50-8.50   | 13.40       | 14.90-35.10  | 7.50-12.00  | 3.75-6.00   |
| Birmingham  | 115.25 | 1-35 : 1-10      | 2-40 : 1-46                     | 29.50-43.50            | 9.00-10.00  | 24.90       | 21.50-80.00  | 10.00-15.00 | 5.00-7.50   |
| Manchester  | 195.50 | 2-30 : 1-50      | 4-30 : 3-00                     | 19.00-44.00            | 13.00-15.00 | N/A         | 45.00-150.00 | 14.00-25.00 | 9.80-17.50  |
|             |        |                  |                                 |                        |             | In advance  | 20.00-40.00  |             |             |
| Liverpool   | 193.50 | 2-45 : 1-50      | 4-30 : 3-00                     | 19.00-44.00            | 13.00-15.00 |             | 45.00-140.00 | 14.00-25.00 | 7.00-17.50  |
|             |        |                  |                                 |                        |             | In advance  | 20.00-40.00  |             |             |
| Glasgow     | 401.25 | 5-15 : 4-10      | 9-10 : 6-10                     | 28.00-76.00            | 20.00-24.00 |             | 77.00-175.00 | 25.00-34.00 | 17.50-23.80 |
|             |        |                  |                                 |                        |             | In advance  | 29.00-60.00  |             |             |

Notes:

- 1 Future rail times are those proposed by Railtrack.
- 2 Future bus times and proposed bus fares assume uncongested roads providing 65 mph average speeds through to Euston.  
\*fast/slow.

The data shows that the express bus would be ever so attractive except to those on the most immense salaries. Even the latter would probably prefer the bus to the rail for all but the longest journeys. Certainly Commuters could all have seats.

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