Dear Lord Hollick,

Thank you for your letter dated 24th November 2014 which followed up the data that I sent to your committee on 19th November. I have set out the answers to your data requests under the following headings:

(1) How is passenger loading data for trains on the West Coast Main Line collected?

In accordance with their franchise agreements with the Department, Train Operating Companies (TOCs) are required to carry out periodic counts of the number of passengers travelling on their services and to provide data on passenger numbers and capacity provision to the DfT.

To accompany its annual statistical release on rail passenger numbers and crowding, the Department publishes full notes and definitions providing details of the passenger counts methodology. A copy is included with this response and it can be found at this link: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/352512/rail-notes-definitions.pdf

The passenger counts are collected either manually or by electronic counting equipment fitted to the train. The count methods vary for each of the operators on the West Coast Main Line. Manual counts are usually carried out by guards on-board trains, but may also be conducted by specialist firms who place people on station platforms to carry out the counts.

The two main types of automatic passenger counts come from 'load weighing' and 'infra-red counters. Load weighing equipment weighs the train at certain points estimating the number of passengers on board by assuming an average weight per passenger. Infra-red equipment uses sensors fitted around each door to count the numbers of passengers boarding and alighting at each station. From these it can be calculated how many passengers are on board the train at any point along its route.

Although train operators will carry out many more counts for their own purposes, the counts received by the Department at present are typically carried out on weekdays during the spring (mid-February to mid-March) and autumn (mid-September to mid-December) periods. School holidays, bank holiday and other major events are generally excluded from the data. Counts are supplied for all train services during the census periods, and are provided as an average midweek count (Tuesdays to Thursdays combined). In the autumn period some additional counts are provided for Monday mornings, Friday afternoons and for weekends.
I have attached a copy of the notes and definitions document which accompanies DfT’s publication on rail passenger numbers and crowding statistics.

(2) The Virgin Trains services from Manchester Piccadilly to London Euston which arrive in London Euston during 3 hour morning peak are shown as having 57% load-capacity ratio.

(a) How many of the 8,667 passengers on these services are long-distance passengers from the North-West as opposed to commuters from Rugby, Nuneaton, Milton Keynes and Watford Junction?

Passenger counts data tells us how many passengers are on board trains at specific points but it is not possible to tell from it where people begin or end their journeys.

The Department uses data on ticket sales to calculate the number of people travelling between specific stations. This ticket sales data is highly commercially sensitive as it could give competitors a commercial advantage in planning their operations and setting their prices. We have strict confidentiality clauses with the Train Operating Companies as part of the franchises agreements and so are unable to share this information with the Committee.

Instead, the committee may find the 2012 Demand Appraisal\(^1\) report of use. Table 3.1 of that report (attached at annex A) shows average weekday rail trips between London and city council areas without HS2 in 2010 and 2026. This shows that there is considerable demand for long distance travel on the West Coast Mainline. Figure 3.3 of that report (attached at annex B) shows long distance rail trips on the West Coast Mainline in 2010. All-day long-distance passenger numbers were 62,000 using the southern section of the West Coast Mainline, with 60,000 using the line north of Milton Keynes, 35,000 to north of Birmingham, with 10,000 to Manchester. This shows that there are a large number of passengers travelling beyond Milton Keynes and Watford.

This report also shows that, by the time demand is capped in 2037 the average all day train loading\(^2\) of long distance services at arrival/departure at London would have increased to around 86%. This means that many trains likely to have loadings greater than 100%. This analysis factored in lengthening; approximately 70% of Pendolino trains currently running on the WCML will have been lengthened to 11 cars. On a long distance service, even 86% would feel extremely busy as with luggage a train can seem full even when there are seats available. In practice, this level of all day loading shows a network that has been running well over its realistic capacity for some time and would have resulted in people being crowded off the network for large parts of the day.

Please note that the table provided to you previously showing passenger numbers and load factors at London Euston included all Virgin Trains services in the totals, not just those on the route to and from Manchester. So the 8,667 passengers arriving at Euston in the 3 hour morning peak on Virgin Trains services included passengers across all of its routes.

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\(^2\) Average train loading is the average all day load factor (number of passengers as a percentage or available seats) of services modelled within Planet Long Distance model. This includes all long distance services but excludes local and suburban services.
(b) What assessment has the Department made of whether the passenger growth in recent years on these services is as a result of commuter traffic or long-distance traffic travelling from Manchester and other stations in the north of England?

As with the previous question, passenger count data only provides a snapshot of the passengers on board a train at a point in time. The Department is able to estimate passenger flows for point to point journeys using ticket sales data. Again, however, we are unable to share these with the committee for reasons of commercial confidentiality. This means that we are unable to split out passengers travelling on long-distance passengers from Manchester and other stations in the north of England from other passengers.

What we can show is the relative growth of passenger numbers based on service type. In my previous letter, I detailed the relative increases on passengers broken down by long-distance (Virgin) services, and suburban (London Midland and London Overground) services. It showed that recent years, passenger growth on the West Coast Mainline has been considerable for both types of franchise. Between 2008 and 2013, arrivals into Euston during the 1 hour AM peak increased by 14% for long-distance services and 15% for suburban services. For the 3 hour AM peak, the increase has been even larger – an increase of 28% for long-distance services and 24% for suburban services.

Information from the National Travel Survey tells a similar story. Since 2007, the average number of surface rail trips (per person per year) has grown by 12% for short distance services (less than 50 miles) and 20% for long distance services (greater than 50 miles).

**Figure 1** shows the average number of surface rail trips (per person per year) over the period 2002 to 2012.

**Figure 1: Average number of surface rail trips per person per year: GB 2002-2012**

![Graph showing average number of surface rail trips per person per year: GB 2002-2012](image)

HS2 will provide benefits to both long-distance passengers and commuters. The West Coast Mainline is a mixed-use network – with fast, time critical intercity journeys sharing the same infrastructure as slow freight, regional and commuter services. This mixed use reduces efficiency and results in target levels of service punctuality being missed. Congestion on the West Coast Main Line has a noticeably detrimental effect on the reliability of intercity and commuter services that use it.
(3) How many peak return tickets, both standard and first class, are sold on an average weekday for the following journeys:
(a) Manchester Piccadilly to London Euston
(b) Stockport to London Euston

Data on Rail Passenger journeys is available from the ticket sales database LENNON, which is managed by Rail Settlement Plan on behalf of train operators. Although the Department for Transport has access to this database to assist with managing franchises and competitions, information about individual operators or routes is commercially sensitive and cannot be released.

While we cannot provide ticket sales data, the Office of Rail Regulation (ORR) publishes statistics that show the estimated number of passengers using each station in Great Britain (broken down by category of available ticket products) and can be found at the link below:


(4) How does the average load-capacity ratio of trains arriving in London Euston in the 3 hour morning peak vary across the working week (i.e. what are the load-capacity ratios for commuter and long-distance figures for each day of the week?)

The Department publishes load factors and passenger counts for a typical weekday as daily data can fluctuate considerably due to seasonality. Generally, commuter figures tend to be relatively stable across the week but long-distance figures vary considerably more. The Department does not hold data for individual weekdays so we cannot provide this information at present.

THE RT. HON. PATRICK McLOUGHLIN
Annex A: PLANET Long Distance: Average weekday rail trips and growth, between London and city council areas without HS2

<table>
<thead>
<tr>
<th>Key HS2 zone to zone movements</th>
<th>2010 demand</th>
<th>2026 demand</th>
<th>% Growth 2010 - 2026</th>
<th>2037 demand</th>
<th>% Growth 2010 - 2037</th>
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</thead>
<tbody>
<tr>
<td>Birmingham - Central London</td>
<td>7,500</td>
<td>11,700</td>
<td>55%</td>
<td>16,000</td>
<td>113%</td>
</tr>
<tr>
<td>Manchester - Central London</td>
<td>7,000</td>
<td>12,100</td>
<td>74%</td>
<td>16,700</td>
<td>140%</td>
</tr>
<tr>
<td>Leeds - Central London</td>
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<td>7,200</td>
<td>66%</td>
<td>10,300</td>
<td>136%</td>
</tr>
<tr>
<td>Glasgow - Central London</td>
<td>1,300</td>
<td>2,100</td>
<td>62%</td>
<td>2,900</td>
<td>125%</td>
</tr>
<tr>
<td>Liverpool - Central London</td>
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<td>4,500</td>
<td>55%</td>
<td>6,100</td>
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</tr>
<tr>
<td>Newcastle - Central London</td>
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<td>3,900</td>
<td>66%</td>
<td>5,500</td>
<td>138%</td>
</tr>
<tr>
<td>Edinburgh - Central London</td>
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<td>3,800</td>
<td>68%</td>
<td>5,400</td>
<td>141%</td>
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</tbody>
</table>

Source: PLD Framework Model