# **GB rail industry** financial information 2010-11



January 2012



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# Executive Summary

#### Introduction

1.1 The complex structure of the rail industry makes it difficult for stakeholders to understand the income, expenditure and government funding of the industry as a whole. This publication of rail industry financial information starts to address this need to improve understanding of the rail industry's money flows and to help inform the debate about its value for money for passengers and the taxpayer.

1.2 The UK Government is seeking greater transparency in public services to improve accountability to the taxpaying public. Likewise, the Scottish Government is of the view that providing better information on public services will help to increase the usefulness of those services, as well as improving accountability and creating economic opportunity. More specifically in relation to the rail industry, the Rail Value for Money study<sup>1</sup> identified a need for regionally disaggregated rail industry financial information to improve well informed debate across the industry.

1.3 The information presented within this report is intended to help:

- (a) interested parties to gain a better understanding of industry financial performance;
- (b) allow a clearer picture of where Government is providing support;
- (c) inform decisions on the future structure of the rail industry;
- (d) improve industry planning;
- (e) improve partnerships and co-operation within the industry;

(f) enable more efficient regulation and incentives for the rail industry, e.g. to support regional efficiency and revenue sharing mechanisms;

- (g) support increased route level accountability and decision making; and
- (h) provide better benchmarking data of costs and efficiencies.

## Information presented within this document

1.4 We present regional financial information about the 19 franchised train operating companies  $(TOCs)^2$  and Network Rail for the year 1 April 2010 to 31 March 2011 (2010-11), the latest financial year for which

<sup>&</sup>lt;sup>1</sup> This is available at <u>http://assets.dft.gov.uk/publications/report-of-the-rail-vfm-study/realising-the-potential-of-gb-rail-summary.pdf</u>.

<sup>&</sup>lt;sup>2</sup> These are listed in Table 8.

information is readily available. Our analysis is presented in Section 2 (Analysis) and the methodology underpinning our analysis is explained in Section 3 (Methodology).<sup>3</sup>

1.5 This work has been undertaken in collaboration with Network Rail, the Association of Trail Operating Companies (ATOC) and its members, the Department for Transport and Transport Scotland,. It draws largely on unpublished management accounting data and provides a more comprehensive understanding of regional industry income and expenditure than has previously been available from companies' statutory and Network Rail's regulatory financial statements.

1.6 Regional financial information is presented for each of Network Rail's nine operating routes.<sup>4</sup> There is a general consensus that disaggregation by operating route is the most useful as operating routes are aligned to the management responsibilities within Network Rail, the boundaries of the operating routes give a reasonable geographic alignment to franchised train operations, the structure aligns with the current reporting for Scotland, and nine operating routes are considered an appropriate number to make informed observations about regional financial performance.

1.7 Care needs to be taken in interpreting our regionally disaggregated findings due to several train companies operating across multiple operating routes. For example, five train companies operate in Scotland (First Scotrail, Virgin Trains, East Coast, Cross Country and First Transpenine Express). Our analysis shows £241m of government funding for train operators in Scotland whereas Transport Scotland funding of First Scotrail was £270m. The £29m variance is due to the four train operators who primarily operate in England & Wales operating routes. These operators made net payments to the Department for Transport of which some has been allocated to Scotland in proportion to train distance travelled within each operating route. Consequently total funding of train operators in the Scotland operating route is less than Transport Scotland's funding of First Scotrail.

1.8 Our analysis largely excludes freight and open access train operators as these are significantly smaller components of the industry,<sup>5</sup> information is less readily available and there is a lower need for public accountability as they are not direct recipients of government support. Our analysis also does not explicitly focus on less integrated components of the rail industry, in particular engineering contractors<sup>6</sup> and financial institutions.<sup>7</sup> These have been excluded as they are not considered core railway activities. It is also unclear how accurately these companies' income and expenditure relating solely to rail activities can be separately identified using publicly available information.

1.9 We have not analysed industry income and expenditure by train operator due to train operators' concerns about commercial confidentiality, or at greater level of geographical disaggregation (such as by individual train route) due to the large volume of data which would complicate any high level analysis. We would welcome views on whether different approaches to disaggregating rail industry financial information by operating route would be useful.

<sup>&</sup>lt;sup>3</sup> Our analysis is also available in Excel format at <u>www.rail-reg.gov.uk/upload/xls/industry\_financials\_2010-11.xls</u>.

<sup>&</sup>lt;sup>4</sup> The operating routes in 2010-11 were Anglia, East Midland, Kent, London North East (LNE), London North West (LNW), Scotland, Sussex, Wessex and Western. Network Rail has subsequently created a separate operating route for Wales from parts of the LNW and Western operating routes. More information about Network Rail's operating routes is available on Network Rail's website <a href="http://www.networkrail.co.uk/Network\_Specifications.aspx">http://www.networkrail.co.uk/Network\_Specifications.aspx</a>.

<sup>&</sup>lt;sup>5</sup> E.g. the franchised train operators listed in Table 8 contributed over 96% of Network Rail's track access charges.

<sup>&</sup>lt;sup>6</sup> Network Rail contracts out a large proportion of its renewals and enhancements work to engineering and construction companies such as Amey, Balfour Beatty and Carillion.

<sup>&</sup>lt;sup>7</sup> The majority of trains are operated under lease finance contracts from Rolling Stock Leasing Companies ('ROSCOs').

### Summary of our findings

#### **General observations**

1.10 Industry income and expenditure for the key components of the rail industry in 2010-11 are shown in Figure 1. Regionally disaggregated income, expenditure and government funding are summarised in Table 1 and using a cash-based approach for Network Rail's capital expenditure in Table 6.

1.11 Total industry costs were £11.0bn in 2010-11, of which 52.5% were incurred in operating and maintaining the rail network and 47.5% in train operations. These costs were covered by passenger fare box income (£6.6bn), other income (£1.0bn) and net government funding of £4.0bn, resulting in an overall industry 'surplus' of £0.6bn.<sup>8</sup> As shown in Table 6, using a cash-based approach for Network Rail's capital expenditure the industry in total would be in deficit by £1.3bn, the difference being due to the currently higher level of renewals and enhancements expenditure being incurred than the current level of amortisation / depreciation. The difference is funded by Network Rail borrowing.

1.12 As shown in Figure 2 there are significant regional variations in industry income and expenditure. The London Northwest (LNW) operating route received the largest share of industry income<sup>9</sup> and net government funding (20.5% and 29.9% of industry total respectively) and incurred the highest expenditure (23.4%). London North East (LNE) and Western were the second and third largest operating routes based on the majority of these financial measures. As shown in Table 7, these were also the largest and busiest operating routes as measured by train and passenger distance travelled, number of passenger journeys, route length, track length and number of stations.

1.13 East Midland was the smallest operating route based on its share of industry income and expenditure (5.3% and 4.9% respectively), although both the Wessex and Sussex operating routes received a lower share of government funding (2.6% and 3.9% compared to 4.4% in East Midland). East Midland was the smallest operating route as measured by train and passenger distance travelled, number of passenger journeys and number of stations, although Sussex had a significantly shorter route length (512km compared to 698km for East Midland).

1.14 The Anglia, East Midland, Sussex and Wessex operating routes each received a significantly lower proportion of government funding than the five other operating routes. Together, these received 15.8% of government funding, or an average of £160m each compared to an average of £680m for each of the five other operating routes. In contrast, these routes contributed 45.6% of all passenger journeys.

1.15 The Scotland operating route had the largest variation between government funding and industry income and expenditure. It received the second highest share of government funding (15.2%), contributed the eighth lowest income (6.4%) and incurred the seventh lowest level of level of expenditure (8.6%) of the nine operating routes.

1.16 Industry income, expenditure and government funding across operating routes are analysed below using the non-financial metrics shown in Table 7. Figure 3 illustrates some of these findings by presenting the financial information shown in Figure 2 normalised for the number of passenger kilometres travelled in each operating route.

<sup>&</sup>lt;sup>8</sup> The difference between income and expenditure (either surplus or deficit) based on companies' management and regulatory accounting information. This will be different to aggregate statutory profits due to statutory financial reporting adjustments for the treatment of deferred tax, pension schemes, derivative fair values, dividends etc. There are also timing differences between Network Rail's revenue and expenditure due to its ability to phase the timing of its expenditure differently within a control period compared to what we assumed in our periodic review determination.

<sup>&</sup>lt;sup>9</sup> Excluding government funding.

#### Fare box income

1.17 Average fare box income<sup>10</sup> was 12.1 pence per passenger kilometre travelled. Using this measure, there was relatively little variation in fare box income between operating routes.<sup>11</sup> It was highest in the Kent operating route at 13.4 pence per kilometre and lowest in the Scotland operating route at 10.6 pence per kilometre.

#### **Government funding**

1.18 Average government funding was 7.5 pence per passenger kilometre travelled. Using this measure, there was significant variability in government funding between operating routes.<sup>12</sup> Government funding was highest in the Scotland operating route at 15.6 pence per kilometre and lowest in the Wessex operating route at 1.7 pence per kilometre. This variability is consistent with the relative passenger densities in these operating routes with Wessex having the highest average passenger density of any operating route (143 passengers per train) and Scotland the lowest (84 passengers per train).<sup>13</sup>

#### Expenditure

1.19 Average network costs were £0.37m per route kilometre.<sup>14</sup> Using this measure, there was a fairly high level of variability in network costs between operating routes, although as noted below, the level of variability was low as measured by train distance travelled.<sup>15</sup> Network costs were highest in the Sussex operating route at £0.77m per route kilometre and lowest in the Scotland operating route at £0.21m per route kilometre.

1.20 Average network costs were £0.19m per track kilometre. Using this measure, Sussex had the highest and Scotland had the lowest network costs per track kilometre (£0.35m and £0.13m respectively), although variability between routes was slightly lower than as measured per route kilometre.<sup>16</sup> The consistency between the regional variations in network costs as measured per route and track kilometre suggests that this variability is not due to regional variations in the proportions of single and mulitple tracks.<sup>17</sup>

1.21 Average network costs were £12.10 per train kilometre travelled. Using this measure, there was a low level of variability in network costs between operating routes. Network costs were highest in the Kent operating route at £12.80 per train kilometre travelled and lowest in the Western operating route at £11.20 per train kilometre travelled.<sup>18</sup>

<sup>18</sup> The standard deviation across the nine operating routes is £0.50 per train kilometre travelled and coefficient of variation is 4.2%.

<sup>&</sup>lt;sup>10</sup> I.e. ticket income from passenger journeys as opposed to non-ticket income such as car parking and the sale of food and drink on trains.

<sup>&</sup>lt;sup>11</sup> The standard deviation is 0.9 pence per passenger kilometre and coefficient of variation is 7.5%.

<sup>&</sup>lt;sup>12</sup> The standard deviation is 4.2 pence per passenger kilometre and coefficient of variation is 56.7%.

<sup>&</sup>lt;sup>13</sup> Calculated by dividing passenger kilometres travelled by train kilometres travelled.

<sup>&</sup>lt;sup>14</sup> Route length is a measure of network length rather than individual track lengths within an operating route. This measure is not affected by the number of individual tracks that may run alongside each other on a line.

<sup>&</sup>lt;sup>15</sup> The standard deviation is £0.16m per route kilometre and coefficient of variation is 44.5%.

<sup>&</sup>lt;sup>16</sup> The standard deviation is £0.07m per track kilometre with a coefficient of variation of 36.5%.

<sup>&</sup>lt;sup>17</sup> Note for example that whilst track 'density' (i.e. number of track kilometres per route kilometre within an operating route) is lowest in Scotland (1.6), it is only 2.2 in Sussex which is less than one standard deviation above the mean of 2.2. East Midland has the highest track density (2.5). Overall, variability of track density is quite low with a coefficient of variation of 13.6%.

1.22 Average train operator costs were  $\pounds$ 10.90 per train kilometre travelled. Using this measure, there was a fairly high level of variability in network costs between operating routes.<sup>19</sup> Train operator costs were highest in the Kent operating route at £18.10 per train kilometre travelled and lowest in the Scotland operating route at £8.10 per train kilometre travelled.



#### Figure 1: Rail industry income and expenditure in 2010-11





2.1 Our analysis of regional rail industry financial information is presented in this section.

2.2 Table 1 presents a high level summary of industry income, expenditure and government funding within each operating route with more detailed information shown in Tables 2, 3 and 4. This information is presented as a chart within Figure 2.

2.3 Table 5 shows the income and expenditure which are internal to the industry, in particular, Network Rail's charges to train operators.

2.4 Table 6 provides an overview of industry income and expenditure using a cash-based approach for Network Rail's capital expenditure. This approach shows the actual amount of money that Network Rail spent during the year, rather than the amortisation / depreciation (accruals-based) approach to Network Rail's expenditure shown in Table 1.

2.5 Non-financial information for each operating route is shown in Table 7. This includes employee numbers, train and passenger distances travelled, number of passenger journeys and route length.

2.6 Table 8 shows the train operators that have been included within our analysis and the operating routes that they operate in.

2.7 Tables 9 to 11 provide a high level analysis of the financial information presented within the above tables.

2.8 Figure 3 shows regional income and expenditure per passenger kilometre travelled.

#### Table 1: Industry income, expenditure and government funding

	Operating route												
£m	Anglia	East Midland	Kent	LNE <sup>a</sup>	LNW <sup>b</sup>	Scotland	Sussex	Wessex	Western	Total			
Income <sup>c</sup>													
Franchised train operators income	735	388	634	1,103	1,482	463	598	893	944	7,240			
Network Rail income	42	11	44	45	71	20	23	31	36	323			
	777	399	678	1,148	1,553	483	621	924	980	7,563			
Expenditure <sup>c</sup>													
Franchised train operators expenditure	469	239	597	809	1,205	379	410	477	651	5,236			
Network Rail expenditure	546	303	415	894	1,370	570	396	511	768	5,771			
·	1,015	542	1,012	1,703	2,575	949	805	988	1,419	11,007			
Income less expenditure	-238	-143	-334	-555	-1,022	-466	-184	-64	-439	-3,444			
Net government funding <sup>c</sup>	196	179	395	596	1,207	613	159	104	586	4,035			
Income less expenditure including government funding <sup>d</sup>	-42	36	61	41	185	147	-25	40	147	591			

<sup>a</sup> London North East <sup>b</sup> London North West

<sup>c</sup> Tables 2, 3 and 4 provide more detailed information about income, expenditure and government funding. London North East London North East

<sup>d</sup> As explained in footnote 8, this is not an accounting profit in a statutory reporting sense.

#### **Table 2: Industry income**

					Ope	rating route				
£m	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total
Franchised train operators income										
Fare box income	695	349	592	977	1,342	416	542	827	829	6,569
Other <sup>a</sup>	40	39	42	126	140	47	56	66	115	671
	735	388	634	1,103	1,482	463	598	893	944	7,240
Network Rail income										
Fixed charges	62	51	59	130	226	118	45	66	153	910
Variable charges <sup>b</sup>	65	46	55	97	165	39	60	77	87	691
Other <sup>c</sup>	66	25	79	75	149	48	57	68	71	638
Less income from train operators <sup>d</sup>	-151	-111	-149	-257	-469	-185	-139	-180	-275	-1,916
	42	11	44	45	71	20	23	31	36	323
Total income	777	399	678	1,148	1,553	483	621	924	980	7,563

<sup>a</sup> Other train operator income includes income from car parking facilities and the sale of food and drink at stations and on trains. <sup>b</sup> Variable charges include traction electricity provided to power electric trains and other variable usage charges. Traction electricity was the largest individual component (£218m). An offsetting expense is included in Network Rail's non-controllable costs (see Table 3).

<sup>c</sup> Network Rail's other income includes £372m of stations income (of which our analysis shows that £256m is from franchised train operators, see Table 5) and £140m from Network Rail's commercial property portfolio. <sup>d</sup> See Table 5 for further details.

#### **Table 3: Industry expenditure**

					Оре	rating route				
£m	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total
Franchised train operators										
expenditure Staff costs	170	95	171	298	457	100	166	204	296	2.040
	173 156	95 51	171 150	296 188	457 361	190 122	166 111	204 121	286 133	2,040
Rolling stock charges Other <sup>a</sup>	291	204	425	580	856	252	272	332	507	1,393 3,720
Less Network Rail charges to franchised	-151	204 -111	425 -149	-257	-469	-185	-139	-180	-275	-1,917
train operators <sup>b</sup>	-131	-111	-145	-251	-409	-105	-139	-100	-275	-1,917
	469	239	597	809	1,205	379	410	477	651	5,236
Network Rail expenditure <sup>c</sup>										
Controllable opex	89	43	72	143	217	83	69	77	116	909
Non controllable opex	43	22	37	71	112	28	35	47	24	419
Maintenance	107	56	75	164	281	96	57	84	148	1,068
Amortisation of capital expenditure	145	85	109	247	375	196	110	148	230	1,644
Financing costs	138	81	105	236	359	155	105	141	219	1,539
Other	24	16	17	33	26	12	20	14	31	192
	546	303	415	894	1,370	570	396	511	768	5,771
Total expenditure	1,015	542	1,012	1,703	2,575	949	805	988	1,419	11,007

<sup>a</sup> For this report we have not attempted to determine the reasons for the significant differences between train operators' other expenditure when adjusted for Network Rail charges. These may be due to factors such as mix of locomotive power (diesel costs are directly incurred by train operators whereas traction electricity is included as a Network Rail charge) or due to train operators allocating similar types of expenditure to different expenditure lines within their management accounts.

<sup>b</sup> See Table 5 for further details.

<sup>c</sup> Controllable operating expenditure ('opex') include operations & customer services, e.g. signallers and support costs, e.g. human resources. Non-controllable opex costs include traction electricity costs and British Transport Police. Maintenance expenditure relates to activities that sustain the condition and capability of the existing infrastructure to the previously assessed standard of performance. Amortisation / depreciation represents the long-run annual average annual capital expenditure required on the network.

#### Table 4: Government premium and funding

		Operating route											
£m	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total			
Franchised train operators													
Payments to government	-150	-64	-9	-218	-151	-35	-63	-264	-252	-1,206			
Receipts from government	33	8	125	240	421	274	20	1	137	1,259			
Other revenue support	40	8	18	1	28	2	8	78	133	316			
	-77	-48	134	23	298	241	-35	-185	18	369			
Network Rail													
Receipts from government	283	233	269	590	935	384	202	299	584	3,779			
Rebates to government	-10	-6	-8	-17	-26	-12	-8	-10	-16	-113			
-	273	227	261	573	909	372	194	289	568	3,666			
Net government funding	196	179	395	596	1,207	613	159	104	586	4,035			

Sources of government funding			
£m	Train operators	Network Rail	Total <sup>a</sup>
Department for Transport	-170	3,294	3,124
Transport Scotland	270	372	642
Welsh Government	127	-	127
Transport for London and Merseyside PTE	142	-	142
	369	3,666	4,035

<sup>a</sup> Governments have the flexibility to pay grants to the industry through train operators or Network Rail. For example, rather than as a direct grant to Network Rail, government could instead pay train operators with an equal increase to Network Rail's charges to train operators.

#### Table 5: Income and expenditure that are internal to the industry

		Operating route											
£m	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total			
Network Rail income from fra	nchised train ope	rators <sup>a</sup>											
Track access charges	-127	-97	-114	-227	-391	-157	-105	-143	-240	-1,601			
Stations income	-19	-10	-29	-24	-66	-22	-28	-32	-25	-256			
Depots income	-5	-4	-6	-6	-12	-6	-6	-5	-10	-60			
·	-151	-111	-149	-257	-469	-185	-139	-180	-275	-1,917			

<sup>a</sup> These 'consolidation' adjustments to determine income and expenditure that are external to the industry are explained in Section 3 (Methodology).

	Operating route												
		East											
£m	Anglia	Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total			
Income													
Franchised train operators income	735	388	634	1,103	1,482	463	598	893	944	7,240			
Network Rail income	42	11	44	45	71	20	23	31	36	323			
	777	399	678	1,148	1,553	483	621	924	980	7,563			
Expenditure (cash basis)													
Franchised train operators expenditure	469	239	597	809	1,205	379	410	477	651	5,236			
Network Rail non-capex expenditure <sup>a</sup>	401	218	306	647	995	374	286	363	538	4,127			
Network Rail capex – renewals <sup>b</sup>	161	94	181	361	575	264	90	136	372	2,234			
Network Rail capex – enhancements <sup>c</sup>	77	14	434	233	154	191	49	26	160	1,338			
	1,108	565	1,518	2,050	2,929	1,208	835	1,002	1,721	12,937			
Income less expenditure (cash basis)	-331	-166	-840	-902	-1,376	-725	-214	-78	-741	-5,374			
Net government funding	196	179	395	596	1,207	613	159	104	586	4,035			
Income less expenditure including government funding (cash basis)	-135	13	-445	-306	-169	-112	-55	26	-155	-1,339			

#### Table 6: Industry income and expenditure – a cash-based approach for Network Rail's capital expenditure

<sup>a</sup> Network Rail expenditure excluding amortisation shown in Table 3. <sup>b</sup> Renewals expenditure is incurred where the existing infrastructure is replaced with new assets that not result in any change to the performance of the original asset.

<sup>c</sup> Enhancement expenditure is defined as expenditure resulting in a change to network outputs, which improves network capacity or capability (e.g. enabling higher speeds).

#### Table 7: Non-financial information

					Oper	ating route				
	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total
Average number of employees (FT	Es)									
Train operators Network Rail	4,155	2,296	4,116	7,084	10,826	5,043	4,027	5,027	6,606	49,180
Operations Maintenance Other	795 1,618 1,030	376 910 547	537 991 653	1,643 2,689 1,855	2,101 4,692 2,899	756 1,583 998	530 728 539	501 1,170 713	1,068 2,262 1,422	8,307 16,643 10,656
	3,443	1,833	2,181	6,187	9,692	3,337	1,797	2,384	4,752	35,606
Total	7,598	4,129	6,297	13,271	20,518	8,380	5,824	7,411	11,358	84,786
<b>Other non-financial information</b> Train km travelled (millions)	43	25	33	74	112	47	33	44	69	480
Passenger km travelled (millions)	5,600	2,739	4,414	8,453	11,455	3,926	4,202	6,301	7,051	54,141
Number of passenger journeys	184	48	179	126	229	85	169	220	121	1,361
Route length (km)	1,186	698	816	2,703	3,261	2,689	512	1,041	2,872	15,778
Track length (km)	2,271	1,751	1,754	5,693	7,058	4,232	1,126	2,084	5,139	31,108
Number of stations	233	75	203	307	594	350	157	208	394	2,521

## Table 8: Franchised train operators included within our analysis

					Operatir	ng route				
	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Total train km travellee (millions)
Arriva Trains Wales	-	-	-	-	-	-	-	-	x	22
c2c	х	-	-	-	-	-	-	-	-	6
The Chiltern Railway Company	-	-	-	-	х	-	-	-	х	8
Cross Country	х	х	-	х	х	х	-	х	х	31
East Coast	-	-	-	х	х	х	-	-	-	19
East Midlands	х	х	-	х	х	-	-	-	-	21
First Capital Connect	х	х	х	х	х	-	х	х	-	23
First Great Western	-	-	-	-	х	-	х	х	х	41
First ScotRail	-	-	-	х	х	Х	-	-	-	40
First Transpenine Express	-	-	-	х	х	Х	-	-	-	16
London Midland	-	-	-	-	х	-	-	-	х	22
London Overground	х	-	х	-	х	-	х	-	-	4
Merseyrail	-	-	-	-	х	-	-	-	-	6
National Express East Anglia	х	-	-	х	-	-	-	-	-	31
Northern Rail	-	х	-	х	х	-	-	-	-	43
Southeastern	-	-	х	-	-	-	х	-	-	29
Southern	-	-	х	-	Х	-	х	х	-	33
Stagecoach South Western	-	-	-	-	-	-	х	х	х	38
Virgin Trains	-	-	-	-	Х	х	-	-	х	35
-										470
							Freight an	d other oper	ators	44
							Total	·		514



### Figure 2: Industry income, expenditure and government funding

## Table 9: High level analysis – industry income and government funding

					Oper	ating route				
	Anglia	East Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Average
Total income (excluding government	t fundina)									
Share of income	10.3%	5.3%	9.0%	15.2%	20.5%	6.4%	8.2%	12.2%	13.0%	100.0%
Share of income (rank)	5	9	6	2	1	8	7	4	3	-
Passenger fare box income										
Fare box per passenger km (pence)	12.4p	12.7p	13.4p	11.6p	11.7p	10.6p	12.9p	13.1p	11.8p	12.1p
Fare box per passenger km (rank)	5	4	1	8	7	9	3	2	6	-
Fare box revenue less industry costs (£m)	-321	-194	-428	-731	-1,236	-537	-264	-161	-593	-4,465
Fare box as a percentage of industry costs	68.4%	64.3%	58.0%	57.2%	52.0%	43.6%	67.2%	83.7%	58.3%	59.5%
Government funding										
Share of government funding	4.9%	4.4%	9.8%	14.8%	29.9%	15.2%	3.9%	2.6%	14.5%	100.0%
Government funding per passenger km travelled (pence)	3.5p	6.5p	8.9p	7.1p	10.5p	15.6p	3.8p	1.7p	8.3p	7.5p
Government funding as a percentage of total income	20.1%	31.0%	36.8%	34.2%	43.7%	55.9%	20.4%	10.1%	37.4%	34.8%
Share of government funding (rank)	6	7	5	3	1	2	8	9	4	-
Government funding per passenger km travelled (rank)	8	6	3	5	2	1	7	9	4	-

## Table 10: High level analysis – industry expenditure

		Operating route										
		East										
	Anglia	Midland	Kent	LNE	LNW	Scotland	Sussex	Wessex	Western	Average		
Industry total												
Share of expenditure	9.2%	4.9%	9.2%	15.5%	23.4%	8.6%	7.3%	9.0%	12.9%	100.0%		
Share of expenditure (rank)	4	9	5	2	1	7	8	6	3	-		
Network Rail												
Share of Network Rail expenditure	9.4%	5.2%	7.3%	15.5%	23.7%	9.9%	6.8%	8.8%	13.3%	100.0%		
Analysis of Network Rail expenditure by	route lenat	h										
Network Rail exp. per route km (£m)	0.46	0.44	0.52	0.33	0.42	0.21	0.77	0.49	0.27	0.37		
Controllable opex per route km (£m)	0.08	0.06	0.09	0.05	0.07	0.03	0.13	0.07	0.04	0.06		
Maintenance exp. per route km (£m)	0.09	0.08	0.09	0.06	0.09	0.04	0.11	0.08	0.05	0.07		
Renewals exp. per route km (£m)	0.14	0.13	0.22	0.13	0.18	0.10	0.18	0.13	0.13	0.14		
Network Rail exp. per route km (rank)	4	5	2	7	6	9	1	3	8	_		
Controllable opex. per route km (rank)	3	6	2 2 2	7	5	9	1	4	8	-		
Maintenance exp. per route km (rank)	3	6	2	7	4	9	1	5	8	-		
Renewals exp. per route km (£m)	4	5	1	6	2	9	3	7	8	-		
Analysis of Network Rail expenditure by	v train distan	ce travelled	within eac	h operatin	a route							
Network Rail exp. per train km (£)	£12.69	£12.12	£12.59	£12.07	£12.23	£12.13	£11.99	£11.61	£11.12	£12.02		
Controllable opex. per train km (£)	£2.07	£1.72	£2.18	£1.93	£1.94	£1.77	£2.09	£1.75	£1.68	£1.89		
Maintenance exp. per train km (£)	£2.49	£2.24	£2.27	£2.22	£2.51	£2.04	£1.73	£1.91	£2.14	£2.23		
Renewals exp. per train km (£)	£3.74	£3.76	£5.48	£4.88	£5.13	£5.62	£2.73	£3.09	£5.39	£4.65		
Network Rail exp. per train km (rank)	1	5	2	6	3	4	7	8	9	-		
Controllable opex per train km (rank)	3	8	1		4	6	2	7	9	-		
Maintenance exp. per train km (rank)	2	4	3	5 5 5	1	7	9	8	6	-		
Renewals exp. per train km (rank)	7	6	2	5	4	1	9	8	3	-		

<b>Train operators</b> Train operator expenditure per train km travelled (£) Train operator expenditure per passenger km travelled (pence)	£10.90 8.4p	£9.56 8.7p	£18.09 13.5p	£10.94 9.6p	£10.76 10.5p	£8.07 9.7p	£12.42 9.8p	£10.84 7.6p	£9.44 9.2p	£10.91 9.7p
Train operator expenditure per train km travelled (rank)	4	7	1	3	6	9	2	5	8	-
Train operator expenditure per passenger km travelled (rank)	8	7	1	5	2	4	3	9	6	-



#### Figure 3: Industry income, expenditure and government funding per passenger km travelled

# 3. Methodology

#### Basis for regional disaggregation

3.1 There are various ways in which geographically disaggregated rail industry financial information can be presented. These include:

(a) for each of Network Rail's regional operating routes. In 2010-11 Network Rail had nine operating routes; eight in England & Wales and one in Scotland;<sup>20</sup>

(b) for each of the passenger franchises; and

(c) at a greater level of granularity, for example for each individual train route.

3.2 Within this analysis we have chosen to present regional financial information for each of Network Rail's nine operating routes. There is a general consensus that disaggregation by operating route is the most useful for the following reasons:

(a) operating routes are aligned to the management responsibilities within Network Rail. Under the recently devolved management structure, Network Rail has undertaken significant work to increase the proportion of directly attributed income and costs and hence ownership of the information at a regional operating route level;

(b) the boundaries of the operating routes give a reasonable geographic alignment to franchised train operations and the structure aligns with the current reporting for Scotland; and

(c) nine operating routes are considered an appropriate number to make informed observations about regional financial performance.

3.3 Analysing income and expenditure for each of the 19 passenger franchises could provide useful insights into relative train operator performance. However, allocating Network Rail's expenditure under this approach could be harder as several franchised operators share parts of the rail network. Train operators have also expressed concerns that publishing individual train operators' management accounting information could undermine commercial confidentiality.

3.4 We have not attempted to analyse industry income and expenditure at the individual train route level as we consider that information is more informative at a higher level. It is questionable how accurately many items of income and expenditure can be attributed beneath the geographic level at which costs are actually managed.

<sup>&</sup>lt;sup>20</sup> The operating routes in 2010-11 were Anglia, East Midland, Kent, London North East (LNE), London North West (LNW), Scotland, Sussex, Wessex and Western. Network Rail has subsequently created a separate operating route for Wales.

#### Network Rail source data

3.5 Network Rail publishes both statutory and regulatory financial statements for each financial year.<sup>21</sup> The format of the regulatory financial statements is prescribed by ORR and includes comprehensive statements on Network Rail's income and expenditure.<sup>22</sup> The regulatory financial statements have been disaggregated between England & Wales and Scotland for the past five years and from 2011-12 will include statements on income and expenditure for each operating route, Wales and Merseyside.

3.6 The operating route information included within our analysis has been mostly taken from unpublished statements within Network Rail's 2011 regulatory financial statements.<sup>23</sup> Network Rail has agreed to the publication of this information within our analysis. However, this represents Network Rail's first attempt to attribute income and expenditure between operating routes. The information has not been audited and Network Rail may refine the ways in which it attributes items of income and expenditure between operating routes.

3.7 To prepare operating route level financial information, Network Rail has classified income and expenditure into the following three categories dependent on how the items are managed:

(a) directly attributed – route managed. For items such as signaller staff costs and managed stations operations and maintenance, there is a direct alignment between management responsibility and route.

(b) centrally managed – attributable to routes. For these items, management responsibility may not be locally based, however, the income and expenditure are incurred locally, so attributing these items to the applicable route is relatively straightforward. These include the majority of renewals and enhancements costs.

(c) centrally managed – network wide. Income and expenditure in this category is incurred for the whole network, for example, insurance costs. Network Rail has allocated network-wide income and expenditure to operating routes based on the total number of train miles travelled in each route.

3.8 Our analysis includes some items of income and expenditure that Network Rail has not reported separately between England & Wales operating routes.<sup>24</sup> Therefore we allocated these items between England & Wales operating routes as follows:

(a) amortisation, financing costs, corporation tax and rebates have been allocated based on the proportion of train kilometres travelled within each operating route in 2010-11.<sup>25</sup> This is consistent with our approach for allocating train operators' income and expenditure and is considered appropriate for allocating group-wide costs.<sup>26</sup>

<sup>&</sup>lt;sup>21</sup> Network Rail's financial year runs from April to March.

<sup>&</sup>lt;sup>22</sup> The ORR regulatory accounting guidelines for Network Rail are available at: <u>http://www.rail-reg.gov.uk/upload/pdf/regulatory-accounting-guidelines-2011.pdf</u>.

<sup>&</sup>lt;sup>23</sup> In addition to the published regulatory financial statements, Network Rail also submits detailed statements for some components of income and expenditure to ORR. Network Rail's published regulatory financial statements are available at: <a href="http://www.networkrail.co.uk/browseDirectory.aspx?root=&dir=%5cRegulatory%20Documents%5cRegulatory%20Co">http://www.networkrail.co.uk/browseDirectory.aspx?root=&dir=%5cRegulatory%20Documents%5cRegulatory%20Co</a> mpliance%20and%20Reporting%5cRegulatory%20Accounts.

<sup>&</sup>lt;sup>24</sup> Though has reported separately for England & Wales and Scotland.

<sup>&</sup>lt;sup>25</sup> This information has been provided to us by Network Rail and is considered the most appropriate currently available to the industry. Network Rail has identified some issues relating to route boundaries which it is currently improving; however, these are likely to have only a minor effect on our regional analysis.

 $<sup>^{26}</sup>$  We tested the accuracy of this approach for the Scotland operating route. Allocating Scotland financing costs in proportion to train kilometres travelled resulted in an allocation of £152m which is only £3m (2%) lower than Network Rail's actual attribution.

(b) stations income from franchised train operators has been allocated in the same proportion as total stations income, which Network Rail has reported between operating routes. Stations income from franchised operators comprises franchised stations income, and the long term charge and qualifying expenditure components of managed stations income. These contribute around 70% of Network Rail's total stations income.<sup>27</sup>

3.9 The current work on industry structure reform may involve closer cooperation between Network Rail and regional train operators. These discussions will likely involve a different cut of Network Rail's costs to those presented here, in particular they are expected to focus more on directly attributed route managed costs rather than the allocation of centrally managed costs.

#### Franchised train operators source data

3.10 A list of the franchised train operators included within our analysis, the operating routes in which they operate and train distances travelled is shown in Table 8.

3.11 Statutory financial statements are available from the Companies House website for all train operators. However, due to the flexibility of the Companies Act statutory financial reporting requirements,<sup>28</sup> there are significant differences in the information presented within train operators statutory financial statements which limits the extent to which these can be used to develop an understanding of whole industry income and expenditure. In particular:

(a) franchised train operators have various financial year-ends complicating comparisons across consistent time periods;<sup>29</sup>

(b) items of income and expenditure are presented in different formats and with different levels of detail (in both the primary statements and the accompanying notes);<sup>30</sup> and

(c) differences in accounting policies may result in differences to reported income and expenditure. This is not expected to have a significant impact due to the similar nature of train operators' businesses and our understanding of the similar accounting policies that are applied within the industry.<sup>31</sup>

3.12 Franchised train operators are also required to submit four-weekly management accounts to government as part of their franchise agreements. These avoid the problems noted above for the purposes of our analysis. In particular:

(a) four-weekly management accounts can be collated over consistent twelve month periods, thereby avoiding the problem of different year-ends; and

(b) the formats of management accounts submitted to government are largely standardised and include detailed information about income and expenditure.

<sup>&</sup>lt;sup>27</sup> We tested the accuracy of this approach for the Scotland operating route. Allocating franchised stations income in proportion to total stations resulted in a difference of only £0.4m (3%) compared to Network Rail's actual attribution.

<sup>&</sup>lt;sup>28</sup> And accounting standards set out within the Companies Act.

<sup>&</sup>lt;sup>29</sup> Of a randomly selected sample of eleven train operator financial statements downloaded from the Companies House website, two had year-ends in December, one in January, six in March and two in May.

<sup>&</sup>lt;sup>30</sup> For example, of the sample of eleven train operator financial statements, three did not disclose information about franchise payments to or from government. Within expenditure, non-staff operating costs were presented in five separate formats with different levels of detail.

<sup>&</sup>lt;sup>31</sup> For example, of the sample of eleven train operator financial statements, all reported under UK Generally Accepted Accounting Principles ('UK GAAP'), used the same operating lease approach for train financing and had similar depreciation policies and asset lives for similar asset types.

3.13 Due to concerns about commercial confidentiality, franchised train operators agreed for the Department of Transport and Transport Scotland to provide a limited subset of their management accounting information to support our analysis provided that our analysis is collated together for each operating route and is not presented by individual franchisee.<sup>32</sup>

3.14 Train operators' income and expenditure have been allocated across operating routes in proportion to the number of train kilometres travelled in 2010-11.<sup>33</sup> This is considered a reasonable approach for allocating expenditure across operating routes as the majority of train operators' expenditure is expected to vary closely with train distance travelled.<sup>34</sup> It also seems a reasonable approach for allocating centrally incurred overheads such as HR and Finance costs, and franchise payments to and from government.

3.15 However, train kilometres travelled might not be the most appropriate metric for allocating train operators' income. In particular, passenger fare box income will vary with passenger density which is expected to be higher close to urban centres and lower on rural stretches of a train journey. We have not adjusted our analysis for this effect. It should not affect our analysis for the majority of train journeys which are either mostly within one operating route, or have similar passenger densities when crossing operating routes. However, it may particularly affect the allocation of Virgin and East Coast's income from train services on the west and east coast main lines where a proportion of income may have been misallocated from the (assumed) higher density London North West (LNW) and London North East (LNE) operating routes to the (assumed) lower density Scotland operating route.<sup>35</sup>

3.16 Using different metrics could help to improve the accuracy of allocating train operator income and expenditure between operating routes. However, as yet we have been unable to obtain any potentially useful alternative metrics that are disaggregated between operating routes.

3.17 The analysis could be improved by asking train operators to attribute their income and expenditure between operating routes. However, this could result in the adoption of many different allocation approaches which in itself could be confusing. This could be overcome by establishing a common approach reflecting learning experiences.

# Network Rail's income and expenditure from freight and open access operations

3.18 A proportion of Network Rail's costs are incurred from freight and open access operations. However, given the largely fixed nature of its network costs, Network Rail considers that it is not yet possible to separately identify the proportion of its costs that are due to these operations.<sup>36</sup> Consequently, the Network

<sup>&</sup>lt;sup>32</sup> Merseyrail and London Overground operate under franchise from local rather than central government. Due to their relatively small size we have not sought to obtain management accounting information from these companies but have instead used information from their statutory financial statements and other public sources. Any resulting differences would be expected to have only a minor effect on our analysis.

<sup>&</sup>lt;sup>33</sup> This information has been provided to us by Network Rail and is considered the most appropriate currently available to the industry. Network Rail has identified some issues relating to route boundaries which it is currently improving; however, these are likely to have only a minor effect on our regional analysis.

<sup>&</sup>lt;sup>34</sup> In particular, staff, rolling stock, fuel and maintenance costs.

<sup>&</sup>lt;sup>35</sup> We have not attempted to assess the variability of passenger density along the west and east coast main lines. However, increasing the proportion of Virgin and East Coast passenger fare box income to the LNW and LNE operating routes by 5% would decrease income allocated to Scotland by approximately £70m (16%).

<sup>&</sup>lt;sup>36</sup> There are some freight only lines for which fixed costs have been estimated. However, given the limited number of these lines, the charges that were set to recover their cost (approximately £3m per annum) are very small compared to the overall costs of maintaining and renewing the network. Further details are available in Chapter 19 of our Periodic Review 2008 (PR08) determination which is available at <a href="http://www.rail-reg.gov.uk/upload/pdf/383.pdf">http://www.rail-reg.gov.uk/upload/pdf/383.pdf</a>.

Rail costs shown in Table 3 have not been adjusted to remove costs that relate to freight and open access operations. To ensure consistency between income and expenditure within our analysis, Network Rail's income has also not been adjusted to remove the £43m of charges to freight operators and £21m of charges to open access operators. These are included within 'other income' in Table 2.<sup>37</sup>

#### Franchised train operations on High Speed 1

3.19 Southeastern operates some train services on High Speed 1 ('HS1'), a separate rail infrastructure concession in Kent. Our analysis does not explicitly include HS1, due to the difficulty of reliably separating its costs arising from Southeastern and other train operators, notably Eurostar. <sup>38</sup> However, our analysis does include Southeastern's income and expenditure from operations on HS1. Any further adjustment to include the component of HS1's net profit from franchised operations is likely to be highly immaterial as the company made a small loss overall in the period.<sup>39</sup>

#### A cash-based approach for Network Rail's capital expenditure

3.20 The majority of Network Rail's renewals and enhancements expenditure is capitalised and amortised (or depreciated) over the life of the assets for statutory and regulatory financial reporting purposes. Network Rail's amortisation in our Periodic Review 2008 determination is based on the long-run annual average investment expenditure that is required in order to maintain the network in a steady state.<sup>40</sup>

3.21 Network Rail's expenditure presented in Tables 1 and 3 includes the annual amortisation charge for this capital expenditure. Within Table 6 we present Network Rail's capital expenditure on a cash basis, i.e. the amount of cash actually spent on renewals and enhancements projects 2010-11.

# Consolidation adjustments to determine whole industry income and expenditure

3.22 A number of adjustments to Network Rail's and train operators' financial information are required to avoid overstating whole industry income and expenditure for money flows that are internal to the industry.<sup>41</sup> The following adjustment has been made in our analysis. Network Rail's income from franchised train operators has been deducted from Network Rail income in Table 2 and train operator's expenditure in Table 3. This income includes fixed and variable access charges, franchised stations income, depot income and Schedule 4 and 8 receipts.

3.23 Train operators perform a variety of services on behalf of other operators including station access, train maintenance and staffing. However, train operators have informed us that these services typically

<sup>&</sup>lt;sup>37</sup> As Network Rail's income arising from freight and open access operations is not generally considered to exceed its expenditure, the combined £64m of freight and open access income could be estimated as a lower limit for an adjustment to remove network costs relating to freight and open access operations. However, Network Rail has objected to this approach which it considers to be overly simplistic given the lack of understanding of cost drivers. Not adjusting for Network Rail's profit or loss relating to freight and open access operations is likely to have only a minor effect on our analysis of franchised industry income less expenditure.

<sup>&</sup>lt;sup>38</sup> This is a similar issue to the difficulty of separately identifying Network Rail's infrastructure costs in relation to freight and open access operations.

<sup>&</sup>lt;sup>39</sup> HS1 Limited made a £0.6m loss before taxation in the year to 31 December 2010 per its latest statutory financial statements.

<sup>&</sup>lt;sup>40</sup> See Chapter 15 of our Periodic Review 2008 determination for further details. This is available at <u>http://www.rail-reg.gov.uk/upload/pdf/383.pdf</u>.

<sup>&</sup>lt;sup>41</sup> These adjustments are similar to the consolidation adjustments that are required to prepare group financial statements.

represent less than 2 per cent of turnover. No adjustment has been made in our analysis for this internal industry income on the grounds of materiality.

#### A note on Schedule 4 & 8 payments

3.24 Schedule 4 is the possessions regime which compensates train operators for planned engineering works and Schedule 8 is the performance regime which compensates train operators for unplanned engineering works that affect their access to the rail network<sup>42</sup> As with other inter-industry income and expenditure, it is necessary to adjust for Schedule 4 and 8 payments to and from Network Rail to avoid overstating industry income and expenditure.

3.25 Network Rail records Schedule 4 and 8 receipts from train operators within its variable charges income line. As this income has been deducted through the general adjustment for Network Rail's income from train operators explained above, there is no need for a separate consolidation adjustment for Network Rail's Schedule 4 and 8 income.

3.26 Network Rail's Schedule 4 & 8 payments are treated as negative (contra) expenses in train operators' management accounts rather than as income.<sup>43</sup> Consequently, no consolidation adjustment is needed for these payments as both the income and expenditure net off within total industry expenditure.<sup>44</sup>

#### **Non-financial information**

3.27 We have included some non-financial information about each operating route to inform users' interpretation of the financial information presented. These include:

- (a) employee numbers;
- (b) train kilometres travelled;
- (c) passenger kilometres travelled;
- (d) number of passenger journeys;<sup>45</sup>
- (e) route and track length; and
- (f) number of stations;

<sup>&</sup>lt;sup>42</sup> The Schedule 4 and 8 regimes are explained in Chapters 25 and 26 of our Periodic Review 2008 determination.

<sup>&</sup>lt;sup>43</sup> One franchised train operator accounts for net Schedule 4 & 8 receipts as income rather than as a contra-expense. For simplicity, the management accounts of this operator have been restated on a consistent basis as other train operators.

<sup>&</sup>lt;sup>44</sup> Approximately £10m of Network Rail capitalised enhancements expenditure is due to capitalised Schedule 4 payments. Because these costs are not reflected in the amortisation charge this gives rise to a mismatch with train operators who record all net Schedule 4 & 8 income in the year that it is received. Due to its relatively small amount, we have not adjusted for this effect in our analysis. Consequently total industry expenditure will be understated in Tables 1 and 3 due to the inclusion of this train operator income (it is reported as a contra-expense by train operators). Note that no adjustment is required for presenting Network Rail's costs on a cash basis as the enhancements expenditure in Table 6 includes the relevant Schedule 4 costs which net-off against the train operators contra-expenses.

<sup>&</sup>lt;sup>45</sup> Numbers of passenger journeys and passenger kilometres travelled within each operating route have been estimated by allocating individual train operator data across operating routes on the same basis as train operator income and expenditure have been allocated. Train operator data has been taken from the National Rail Trends yearbook 2010-11.

#### Feedback

3.28 We are keen to discuss our analysis and any ideas for how it can be developed. Please contact:

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