# Improving our performance

Annual Return 2006



# Contents

Executive summary	
Introduction	1
Targets	1
Key Performance Indicators (KPIs)	1
Section 1 – Operational performance	1
Public performance measure (PPM)	2
Summarised network-wide data	
(delays to major operators)	2
National delay data by cause	2
Results for operating routes by delay category	2
Asset failure	3
Customer and supplier satisfaction	4
Passenger complaints Customer satisfaction	4
<ul> <li>passenger and freight operators</li> </ul>	4
Supplier satisfaction	4
Joint Performance Process	4
Route Utilisation Strategies (RUSs)	4
Section 2 – Network capability	4
Linespeed capability (C1)	5
Gauge capability (C2)	5 5
Route availability value (C3) Electrified track capability (C4)	5
Mileage	5
Million kGTMs by Freight Train Operator	5
Bottlenecks	5
Section 3 – Asset Management	6
Number of broken rails (M1)	6
Rail defects (M2)	6
Track geometry	G
<ul> <li>– national standard deviation data (M3)</li> <li>Track geometry – poor track geometry (M3)</li> </ul>	6 6
Track geometry – speed band data (M3)	6
Condition of asset temporary	0
speed restriction sites (M4)	8
Track geometry – level 2 exceedences (M5)	8
Earthwork failures (M6)	8
Bridge condition (M8)	8
Signalling failures (M9)	8
Signalling asset condition (M10)	8
Alternating current traction power incidents	0
causing train delays (M11) Direct current traction power incidents	8
causing train delays (M12)	9
Electrification condition – AC traction feeder	5
stations and track sectioning points (M13)	9
Electrification condition – DC traction	
substations (M14)	9
Electrification condition – AC traction	
contact systems (M15)	9
Electrification condition – DC traction	
contact systems (M16)	9
Station condition index (M17)	9
Station facility score (M18) Light maintenance depot – condition index (M19)	9 10
Network Rail Asset Stewardship	10
Incentive Index (ASII)	10

1	Section 4 – Activity volumes	103
9	Activity Volume KPI	104
13	Rail renewed (M20)	104
17	Sleepers renewed (M21)	104
	Ballast renewed (M22)	106
19	Switches and crossings renewed (M25)	108
20	Signalling renewed (M24)	109
	Bridge renewals and remediation (M23)	111
20	Culverts renewals and remediation (M26)	112
24	Retaining walls remediation (M27)	113
29	Earthwork remediation (M28)	114
38	Tunnel remediation (M29)	115
43		
43	Section 5 – Safety and environment	117
	Pollution Prevention Programme	118
44	Other S&E Plan Schemes	118
45		
45	Section 6 – Expenditure and efficiency	119
47	Network Total	120
	Route 1 Kent	122
49	Route 2 Brighton Main Line and Sussex	123
50	Route 3 South West Main Line	124
53	Route 4 Wessex Routes	125
55	Route 5 West Anglia	125
56	Route 6 North London Line and Thameside	126
57	Route 7 Great Eastern	127
58	Route 8 East Coast Main Line	128
59	Route 9 Northeast Routes	129
	Route 10 North Transpennine, North and West Yorks	130
63	Route 11 South Transpennine, South Yorks and Lincs	131
64	Route 12 Reading to Penzance	131
65	Route 13 Great Western Main Line	132
	Route 14 South and Central Wales and Borders	133
67	Route 15 South Wales Valleys	133
68	Route 16 Chilterns	134
69	Route 17 West Midlands	135
	Route 18 West Coast Main Line	136
80	Route 19 Midlands Main Line and East Midlands	137
82	Route 20 North West Urban	138
83	Route 21 Merseyrail	139
84	Route 22 North Wales and Borders	139
86	Route 23 North West Rural	140
87	Route 24 East of Scotland	141
	Route 25 Highlands	141
89	Route 26 Strathclyde and South West Scotland	142
	Central (Other)	143
90	WCRM	146
	Maintenance by Operating Route	147
91	Efficiency	149
	Financial Efficiency Index	152
93		
	Section 7 – Financing	153
94	Debt to RAB ratio	154
	RAB adjustment for passenger and freight volume	
95	incentives	154
96	Overall Cost Control or Expenditure Variance	155
98		
100	Section 8 – Customer reasonable requirements	157
101	Key Overall Results	158
101		101
	Appendix 1 – Station condition	161
	Appendix 2 – Depot condition	215

# Executive summary

This is the sixth Annual Return. It describes performance for the year 2005/06 for Great Britain's rail network infrastructure provider, Network Rail. The Annual Return reports on our achievements and developments during the year and is the primary means by which we demonstrate progress in delivering outputs established in the Access Charges Review 2003. The Annual Return is a publicly available document, which enables stakeholders to use it as an important reference document especially as it also includes historic information. This year the Annual Return has been re-structured and includes more information to reflect changes in the industry. These changes have arisen principally as a result of the Government's recent Rail Review with the relevant provisions of the Railways Act having come into force in June 2005. During 2005/06 many of our processes and reporting have been adapted to enable separate disaggregated information for Scotland, England and Wales and a Network Total. We have therefore included this in the Annual Return, where appropriate; there are some measures which only have network-wide information and cannot be disaggregated further. This Annual Return follows the agreed form as approved by ORR in 2006 and is prepared in accordance with Condition 15 of the network licence.

### Network Rail during 2005/06

This year has been another successful year showing our continued substantial improvement. We have met the targets established by ORR and the tougher internal targets we set ourselves. We have continued to increase our investment on the network, whilst continuing to deliver efficiency savings.

Our good performance is highlighted by the following key figures for the year:

- Public Performance Measure 86.4%: 2.8% better than 2004/05
- train delay minutes 10.5m: 7.1% better than regulatory target
- 6.7% increase in freight gross tonne miles
- 13.5% reduction in Temporary Speed Restrictions
- Asset Stewardship Incentive Index 0.8: beating regulatory target of 0.9
- 1120 km of rail renewed
- Financial Efficiency Index 1,972: beating internal target of 2,037
- significant efficiency savings.

Further details, including explanations of these measures, are included throughout this document.

A summary of the year's performance against the regulatory targets is set out in Table 1 below. The regulatory targets were established in the Access Charges Review 2003 (ACR 2003) and provide the output targets which Network Rail is required to deliver for Control Period 3 (CP3) the five year period to 2008/09. Most of these targets are for achievement of an overall target improvement at the end of the five year control period but some have immediate aims or milestones for earlier years so this table reports on our progress generally. Later sections of this Annual Return provide more detailed information. Overall we are achieving our annual targets and are on course to meeting the regulatory requirements for this control period.

These results continue the significant progress we have made to fulfilling our objective of operating a safe, reliable and efficient rail infrastructure. We have also continued to improve and maintain safety on the railways with our principal measures indicating a positive result at the end of the year. Broken rails and signals passed at danger have continued to reduce for the seventh successive year. This is largely due to the introduction of the Train Protection and Warning System, which stops or slows trains that pass red

Measure	Target	Performance 2004/05	Performance 2005/06	Met target?
Total Network Rail caused delay (million minutes)	2004/05: 12.3 2005/06: 11.3 2006/07: 10.6 2007/08: 9.80 2008/09: 9.10	11.4	10.5	Yes
Train delay minutes per 100 train kms (franchised passenger operators)	2004/05: 2.34 2005/06: 2.12 2006/07: 1.97 2007/08: 1.80 2008/09: 1.65	1.96	1.93	Yes
Broken rails	No more than 300 per annum by 2005/06.	322	317	No
Track geometry	L2 exceedences per track mile to no more than 0.9 by 2005/06.	0.91	0.82	Yes
Temporary speed restrictions	Annual reduction in TSRs.	942	815	Yes
Structures & electrification	Condition & serviceability to return to 2001/02 levels.	See detail in section 3 Annual Return 2005	See detail in section 3 Annual Return 2006	Yes
Other measures	No deterioration from 2003/04 levels.	See detail in section 3 Annual Return 2005	See detail in section 3 Annual Return 2006	Yes
Network capability	Maintain the capability of the network for broadly existing use at April 2001 levels (subject to network changes authorisedunder the Network Code).	See detail in section 5 Annual Return 2005	See detail in section 5 Annual Return 2006	Broadly in line

signals. Significant train accidents and factors contributing to train accidents have also reduced. With the reduction in other risks, those caused by level crossings has now become the single biggest risk of a train accident.

In April 2006, we launched a public campaign to reduce this risk. We are also working with industry partners to improve workforce safety.

### Industry wide initiatives

The Rail Review has, amongst other things, introduced the development of the Route Utilisation Strategies (RUS) and encouraged improvements in train performance through Joint Performance Improvement Plans (JPIPs).

The RUSs consider options for available capacity on specific routes and develop strategies for meeting demands for growing capacity. At the end of 2005/06 a programme with target establishment dates for each RUS was drafted and discussed in consultation with industry and government parties and the ORR. During the year the South West Main Line RUS was completed. Continuing on from this, work on seven other RUSs is also currently underway. A review exercise for lessons learnt and to identify best practice is currently being done.

# Working together with our customers to improve performance

The joint performance process (JPP) is the rail industry's process for bringing together performance improvement throughout the network and aligning this with output to passengers. Through this, JPIPs have been developed in consultation with train operating companies (TOCs) and industry parties. By 31 March 2005 JPIPs were produced for all franchised TOCs and broadly comprised the individual plans of Network Rail and each TOC, plus a statement of intent to further develop these during 2005/06 and work on implementing these plans on the network thereafter. By the end of 2005/06 an industry agreed process has been jointly developed and compiled with TOCs. This has resulted in significantly more comprehensive JPIPs for 2006/07. It should be noted that all this work had been achieved before the formal requirements of the Network Code were established on 1 April 2006. It is an achievement that all franchised TOCs have formally adopted the JPIP approach to enable implementation from 2006/07 onwards and we are working with other operators to encourage a move to similar joint working.

As well as the JPP and RUS process, there are a number of other efforts focused on working with our customers to improve our performance for them. This in turn benefits the rail industry as a whole. During the year we developed the action plan for customer satisfaction improvement, CS1, following on from the results of the 2005 MORI survey.

During the year we have also invested in our staff with our new training centre, Westwood, opened in Coventry. Various courses including our Leadership programmes have been launched. This focus on our people is encouraging better ways of doing business as well as engendering a positive and more customer focused culture.

# Train performance and customer satisfaction

Train punctuality is at its highest level for six years with 86.4% of passenger trains arriving on time. This has beaten our target of 85.5% for the year and is 2.8% better than the end of 2004/05. It represents a reduction of 17% in the number of trains running late. It is also considerably higher than the 78.6% level existing in the twelve months before Network Rail took over responsibility for the rail network. Although the punctuality for all train operators has improved, the year has ended with London and South East operators having the highest punctuality and Regional operators seeing the largest improvements.

Total Network Rail delay minutes were 10.5 million minutes, in 2005/06, 7.3% better than the regulatory target of 11.3 million minutes and a reduction from 2004/05.

Train performance has continued to be good this year with Network Rail caused delays to passenger trains falling by 10% despite traffic volumes increasing by 2% compared to last year. In addition Network Rail delay minutes to freight trains fell by 1% despite a 6.7% increase in gross freight tonne miles.

This improvement in delay minutes is illustrated in Figure 1 overleaf. This indicates the trends in delays to passenger trains (relative to train kilometres run) over the last seven years. It highlights the impact of the disruption after the Hatfield accident, the subsequent recovery, the impact of the relatively severe autumns in both 2002 and 2005, and the improving trend over the last few years, culminating in three very good periods for performance (January-March 2006).



The largest improvements in categories of delays were seen in network management delays. This illustrates our focus on improving timetabling and possession management with:

- delays due to dispute takeback dropping by 153,792 minutes
- operations responsibility delays having a reduction of 109,929 minutes, which reflects the decrease in delays due to signaller and train regulation errors, alongside improvements in other operations causes;
- possessions-related delays improving by 13% (50,963 minutes)
- 'other infrastructure' causes also improving by 12% (54,680 minutes)
- train planning delays falling by 5% (34,507 minutes).

Despite these improvements and delays related to signalling and electrification and power improving, the number of track related incidents increased. This increase was due to exceptional weather changes during the year which caused higher track faults. This together with 'autumn leaf fall and adhesion' delays will be the focus of both Network Rail and industry improvement plans in the coming months.

Generally improvements in performance have been due to increased cooperation between Network Rail and train operators through integrated control centres and on strategic issues through JPIPs. The preparation for the JPIPs has been through consultations with train operators and developing an agreed process and mutually beneficial plans.

### **Customer focus**

Although customer satisfaction from train operators has improved, it has deteriorated for

freight operators and we will continue to work with all operators to bring benefits to the whole rail industry especially with the continuing work of CS1. In early 2005, MORI surveyed a sample of Train Operators' managers and drivers to identify how they judged Network Rail's treatment of them and understanding of their needs. The results of the survey were (despite some improvements from the previous year) disappointing and highlighted the need to support fully and follow through on the Customer Satisfaction Improvement Plan, CS1. This is an action plan that is designed to change Network Rail's culture so that it recognises and actively promotes the importance of internal and external customer service. Following the publication of the MORI survey, a series of meetings were held between senior route teams and customers to share the results and understand the underlying causes. The outputs from this have been incorporated into CS1 which is being rolled out across Network Rail throughout 2006. The work-streams focus on four principle areas: communications, training and education, people and processes and benchmarking and measurement.

### Asset management

We have had a good year, further improving on our performance last year with the majority of annual targets met and even some of the overall targets for the five year control period already being exceeded. Table 2 indicates our performance for the year related to our asset measures.

The Asset Stewardship Incentive Index is a composite measure of various other asset measures and provides an indication of our

asset quality and stewardship. It consists of weighted values for track geometry, broken rails, level 2 exceedences, points and track circuit failures, signalling failures, electrification failures and structures and earthworks temporary speed restrictions. We have already surpassed the regulatory target for the control period which is 0.9, as the result for 2005/06 is 0.8. The individual elements of this measure all exceeded this year's targets except for broken rails. In respect of broken rails, the outturn of 317 in 2005/06 is the lowest ever recorded.

This improvement in the condition of our assets is largely due to our high levels of investment in the network and bringing maintenance in-house. In 2005/06 we spent £2.7 billion on renewals. Our asset management activities, such as the development of route specifications, asset policies and the continuing improvements in the processes underlying asset information, have also contributed to this overall improvement.

Examples of these are as follows:

• During this year we have improved the process and cleansed the data collection for rail defects and are in the early stages of implementing a new purpose built rail defect management and reporting system, Rail Defect Tracker.

- By focusing on removing TSRs with high performance impacts and undertaking specific major renewals to alleviate TSRs, the number of TSRs has greatly reduced during this year.
- Level 2 Exceedences have reduced due to better maintenance attention to the treatment of repeat faults.
- The transfer of maintenance in-house working effectively with designated E&P engineering teams has also contributed to the reduction in AC and DC traction power incidents causing train delays.

We not only need to maintain this situation but should also continue to improve the condition of our assets and our general stewardship which will bring benefits to the rail industry as a whole by affecting other areas like train performance. We are currently working on improvements to our station condition measure as well as refining the process for reporting condition of electrification.

Broken rails were not reduced as much as anticipated because of the exceptional weather changes during the year. A very cold period followed the warm summer which resulted in an increase in broken rails during that time. However we are continuing to reduce broken rails with the operation of the Ultrasonic Testing Units and targeted track renewals programme.

Table 2 Asset measures –	comparison against previous year a	nd regulatory tar	get	
Measure	Regulatory target	Performance 2004/05	Performance 2005/06	Met target?
M1 Broken rails	Reduction in the number of broken rails to no more than 300 per annum by 2005/06. No increase thereafter.	322	317	No
M2 Rail defects	No regulatory target	30,778	20,605	_
M3 Track geometry	The regulatory target is to maintain 2003/04 levels; no deterioration from this level during this control period.	See detailed tables in section 3 Annual Return 2005	See detailed tables in section 3	Yes
M4 TSRs	Annual reduction required from 2003/04 levels onwards i.e. from 1,199 for track, structures and earthworks TSF	942 Rs.	815	Yes
M5 L2 Exceedences	Reduction in the number of L2 exceedences per track mile to greater than 0.9 by 2005/06. No increase thereafter.		0.82	Yes
M6 Earthworks failures	No deterioration from 2003/04 levels, i.e. 47 national earthwor failures.	54 rk	41	Yes
M8 Bridge condition	Condition and serviceability to return to 2001/02 levels, which was approximately 2.0, but the full target (and tolerance) canr be firmly established until all bridges have undergone Struc Condition Monitoring Index, wh anticipated to be in 2007/08.	n e not stures	2.0 b	Yes (based on number of ridges done to date) continued

Table 2 Asset measures – comparison against previous year and regulatory target (continued)						
Measure	Regulatory target	Performance 2004/05	Performance 2005/06	Met target?		
M9 Signalling failures	No deterioration from 2003/04 levels, i.e. 28,098 signalling fail at 59 million train km per annur		23,367	Yes		
M10 Signalling asset condition	No deterioration from 2003/04 levels, i.e. 2.5.	2.5	2.4	Yes		
M11 AC power incidents	No deterioration from number of incidents reported in 2001/0 i.e. 107.	71	49	Yes		
M12 DC power incidents	No deterioration from number of incidents reported in 2001/02,		6	Yes		
M13 AC traction sub-stations condition	Condition and serviceability to return to 2001/02 levels, i.e.	1.87 2.1.	1.85	Yes		
M14 DC traction sub-stations condition	Condition and serviceability to return to 2001/02 levels, i.e.	2.3. 1.82	1.78	Yes		
M15 AC contact systems condition	Condition and serviceability to return to 2001/02 levels, i.e.	1.7 1.8.	1.7	Yes		
M16 DC contact systems condition	Condition and serviceability to return to 2001/02 levels, i.e.	1.9 1.8.	1.8	Yes		
M17 Station condition	No deterioration from 2003/04 levels, i.e. 2.25.	2.23	2.22	Yes		
M18 Station facilities	No regulatory target.	See detail on page 102 Annual Return 2005	See detail on page 98 Annual Return 2006	_		
M19 LMD condition	No deterioration from 2003/04 levels, i.e. 2.7.	2.63	2.58	Yes		
Asset Stewardship Incentive Index	0.90	0.89	0.80	Yes		

Table 3 Activity volumes					
	2001/02	2002/03	2003/04	2004/05	2005/06
Rail (km of track renewed)	983	1,010	1,401	816	1,120
Sleeper (km of track renewed)	636	666	837	670	744
Ballast (km of track renewed)	624	665	812	685	798
Switch & crossing (No. of full units replaced)	136	254	373	511	520
Signalling (SEUs)	1,440	810	604	1,678	278*
Bridge renewals and remediation (No.)				260	157
Culverts renewals and remediation (No.)				16	9
Retaining walls remediation (No. of schemes)				10	10
Earthwork remediation (No.)				106	76
Tunnel remediation (No.)				38	39

\* The relatively large annual fluctuation in this measure reflects the fact that the SEU count is dominated by a fairly small number of major schemes and only records the number of signalling units once they are actually commissioned. Apart from some delay in commissioning the Sandbach – Wilmslow scheme the SEU volume delivered in 2005/06 was broadly in line with our plans.

### **Activity volumes**

In total, 1,120 km of rail, 744 km of sleepers and 798 km of ballast were replaced during 2005/06. This volume of activity maintains the high levels of the last five years and represents a substantial increase on the level of renewals on the railway carried out in the late 1990s.

### **Finance and efficiency**

Table 4 outlines the outturn on the key areas of expenditure for the business over the last three years.

During 2005/06 there were savings in controllable OPEX made due to the targeted reduction in agency staff and contractors being used as consultants. We also spent less

Table 4 Expenditure comparison (£m)				
	2003/04	2004/05	2005/06	
OPEX (Controllable)	1,060	934	865	
Maintenance	1,245	1,271	1,192	
Renewals	3,203	2,665	2,673	
Enhancements	770	821	473	

Notes: 1) Opex and maintenance figures are from the regulatory accounts (2) Opex excludes items classified as non-controllable (e.g. ORR licence fee, British Transport Police, electricity traction costs, railway safety levy and cumulo rates) (3) Investment figures include expenditure on the WCRM project (4) Enhancements include investments by third parties.

on Maintenance as a result of renegotiated commercial contracts, reduced reliance on sub-contractors, productivity improvements as well as cost savings from the elimination of contractors' profits and overheads with Maintenance being brought in-house.

By the end of the year we also established a unit cost framework for some of our maintenance costs (coverage will be extended over the coming year), which provides us with a better understanding of these costs so that we may identify areas for savings. We have continued to progress our detailed Cost Analysis Framework (CAF) which has helped us deliver efficiencies in investment and gain value for money. It provides consistent volume and cost collection rules with processes for estimating reporting costs throughout the year. We also had joint audits with Halcrow, one of the regulatory reporters, on costs emerging from the CAF. The use of high output plant and equipment has also contributed to efficiencies particularly for volume activity. There have been efficiencies for all asset renewals during 2005/06 but the most significant are for signalling and civils work. This is a result of better contracting arrangements and the bringing in-house of front end work like signalling design.

The efficiency requirement established at the ACR 2003 was for Network Rail to produce efficiencies of 15% for operating costs, maintenance costs and renewal costs in the first two years of CP3. Our current outturn

indicates that we have achieved a saving of about 20%. We will endeavour to achieve further savings in future years to achieve our efficiency targets. However, this will become more difficult as the cost bases contract.

Table 5 compares the efficiencies we have achieved against the breakdown assumed in the Access Charges Review 2003.

As described in this Annual Return, our performance over the first two years of CP3 has been good and we are currently beating the regulatory output targets and efficiency targets established by ORR at ACR 2003. We expect to continue to outperform against the projections made at the last regulatory review and we were pleased to announce in our 2006 Business Plan that we were putting aside an extra £200million towards enhancements over the next three years. This money will be focussed particularly on capacity improvements needed to deal with projected growth in demand. This is tangible evidence of our ambitions for the railway and also demonstrates that our not-for-dividend structure is delivering additional investment to create a better railway for Britain.

### **Network capability**

The reported changes in section 2 of this report are mainly due to improvements in data quality from data cleansing rather than any changes in the network. Gauge capability enhancements have been made to reflect requirements from our freight customers. Two new route sections were opened to traffic at Allington Chord and Haughhead Junction to Larkhall. During the year ORR imposed a £250,000 financial penalty on Network Rail for discrepencies between actual and published capability. An extensive programme of work is underway to improve the information and measures as well as identifying capability on the network. The development of RUSs has also helped this work. In addition there has also been a 6.7% increase in gross tonne miles on the network during the year. We are on our way to achieving the regulatory target for the control period.

	By end 2	004/05	By end 2	005/06
	ACR Assumption	Actual Achieved	ACR Assumption	Actua Achieved
Controllable Opex	8	16	15	24
Maintenance	8	10	15	19
Renewals	8	8	15	15

# Introduction

The Annual Return reports on Network Rail's performance in the stewardship of the rail network. It includes information on operational performance, asset management, activity volumes, investment and expenditure. Given our wider responsibilities for the rail network following the recent Rail Review, reporting in the Annual Return has been extended to reflect this. The Annual Return is structured slightly differently this year with new areas and sections:

- we have included updated regulatory targets and KPI sections
- there is a section specifically related to our customers which combines train performance with customer satisfaction and it also includes information on JPIPs and RUSs
- the section on network capability now also includes information on mileages and actions to alleviate bottlenecks
- the asset management section reports on the condition of various assets
- the activity volumes section covers renewals for track, signalling and 'civils' e.g. bridge renewals by the eight operating routes
- there is a new section on the Safety and Environment Plan
- as well as the Business Plan reconciliations for the 26 strategic routes, the finance and efficiency section provides information on identified efficiencies and the further progress that has been made this year in this area
- we also have a new financing section which provides more detail on the measures looking at our finances in comparison to our expenditure
- the final section is on customer reasonable requirements
- as well as including the list of stations on the network, the appendices now also include a list of our depots.

A network total is included for each measure and where appropriate more detailed information is provided by the 26 strategic routes, by the 8 operating routes and by territory. The map of the network at the end of this section illustrates this.

It should be noted that throughout the document '0' represents rounded numbers less than 0.5 and '-' means that there is no figure or a zero, unless otherwise stated.

As with previous years it should be noted that end of year figures are taken at a specific point in time for publication. Therefore some figures have been restated from last year, although most of these figures have not been adjusted significantly.

# Scope of reporting against targets

This Annual Return reports on the second year of the third Control Period (CP3) with outputs and regulatory targets as specified in the Access Charges Review 2003: Final Conclusions (ACR 2003). In order to facilitate comparisons of our performance, we measure our performance against these regulatory targets and also provide previous years' data.

Most asset condition information is based on assessments from a sample of assets and as more surveys are carried out, the reliability of the data reported for each asset category will improve, hence facilitating better comparisons with requirements.

In addition, as well as striving to improve our performance we are working on improving our measures, where appropriate, so that we may improve our accountability to stakeholders and the public.

### Asset data quality

We have continued to improve our data processes for better data quality. Further to last year's workstream to streamline and align reporting within the company, we have undertaken further data cleansing, e.g. with rail defects data, as well as internal audits, e.g. investment efficiency audits, to identify efficiencies and explain under or over spend on renewals and enhancements, the latter of which the Reporter was also invited to attend. We have also aligned the Annual Return processes and data with other reports throughout the company to ensure consistency.

### **Confidence reporting**

We have assessed the quality of the data presented and described this by the use of confidence grades. At the time of publication, those included in this Annual Return are provided by Network Rail and used as a basis for discussion with the Reporter. Following the Reporter's audits, the Reporter may either agree with this assessment or provide their reasoning for wanting to change this, which they will include in the Reporter's report available in August.

The confidence grades consist of two aspects, an alpha part indicating the reliability of the

data (A-D) where A is the most reliable, being based on sound documented records, procedures, investigations and/or analysis, and D relies on, at best, unconfirmed verbal reports, cursory inspections or analysis, being little better than a guess; and a numeric part describing the accuracy (1-6 where 1 is within  $\pm$  1% and 6 indicates poor accuracy defined as within the band  $\pm$ 50% –  $\pm$ 100%). Most measures are reported as at A2, A3, B2 or B3 confidence; however there are some reported outside this typical range. For small numbers, where accuracy cannot be properly ascribed, an 'X' is substituted in the numeric part of the confidence grade.

The tables below summarise the gradings:

### Table 6 Reliability band description

- A Sound textual records, procedures, investigations or analysis properly documented and recognised as the best method of assessment.
- B As A but with minor shortcomings. Examples include old assessment, some missing documentation, some reliance on unconfirmed reports, some use of extrapolation.
- C Extrapolation from limited sample for which Grade A or B data is available.
- D Unconfirmed verbal reports, cursory inspections or analysis.

### Table 7 Accuracy band (%)

	Accuracy to within +/-	But outside +/-
1	1	
2	5	1
3	10	5
4	25	10
5	50	25
6	100	50
X	Accuracy outs small numbers or otherwise	ide +/- 100 %, e incompatible

Table 8 Compatible confidence grades					
	Reliability band				
Accuracy band	Α	В	С	D	
1	A1				
2	A2	B2	C2		
3	A3	B3	C3	D3	
4	A4	B4	C4	D4	
5			C5	D5	
6				D6	
x	AX	BX	СХ	DX	

### Independent Reporter

Since October 2002, the company together with the Office of Rail Regulation (ORR) have had independent Reporters. The role of the Reporters is to provide independent technical audit services for ORR and Network Rail. Whilst undertaking this role, they are also expected to deliver benefits to Network Rail through suitable recommendations about how we can improve our business processes. For Annual Return work, the Reporter is expected to provide an independent view on the accuracy and significance of the data and related processes that we use for reporting our performance during the year.

After a careful tendering process, ORR and ourselves agreed to appoint Halcrow as the sole Reporter for Annual Return work. This new contract began in January 2006 with duration of 3 years. Halcrow are therefore dealing with all measures for the whole network. The appointment of one Reporter should help with comparisons each year as well as consistency and follow through of recommendations. As well as the August Reporter report on the Annual Return, they will also be providing an interim report in January. This January report provides progress of Network Rail's action plans in response to the recommendations in the August report. We have been working with Halcrow to build this into our Annual Return processes so that we may provide a status on progress during the year. Halcrow reported favourably on our progress and input into the first interim report earlier this year. As in previous years, we have taken into consideration the Reporters' recommendations both in improving our processes and in the compilation of this Annual Return, after discussion with ORR.

### **Regulatory accounts**

The ORR reporting regime includes a requirement to prepare a set of Regulatory Accounts to report information that is relevant to setting access charges and which allows Network Rail's financial performance compared to the ACR 2003 to be monitored. Regulatory Accounts for 2005/06 are not included in this Annual Return, but are submitted to ORR in a separate document that is also made publicly available. Where common information exists between the Regulatory Accounts and the Annual Return, the related processes and data have been aligned, unless otherwise stated. This is also the case between the Annual Return and, as far as possible, all other Network Rail reports.

### Figure 2 Map of the network



Introduction

# Targets

Table 9 Regulatory targets for the five year period 2004/05 to 2008/09				
Name of measure	Regulatory targets			
Total Network Rail caused delay (million minutes)	2004/05:       12.30         2005/06:       11.30         2006/07:       10.60         2007/08:       9.80         2008/09:       9.10			
Train delay minutes per 100 train kms (franchised passenger operators)	2004/05:       2.34         2005/06:       2.12         2006/07:       1.97         2007/08:       1.80         2008/09:       1.65			
Broken rails	Reduction in the number of broken rails to no more than 300 per annum by 2005/06. No increase thereafter.			
Track geometry	Reduction in the number of L2 exceedences per track mile to no greater than 0.9 by 2005/06. No increase thereafter. Track geometry (standard deviations) – the regulatory target is to maintain 2003/04 levels.			
Temporary speed restrictions	Annual reduction required.			
Structures and electrification	Condition and serviceability to return to 2001/02 levels.			
Other measures	Other asset condition and serviceability measures to show no deterioration from 2003/04 levels.			
Network capability	Maintain the capability of the network for broadly existing use at April 2001 levels (subject to network changes authorised under the Network Code).			

Network Rail's regulatory targets for CP3 cover the period April 2004 to March 2009 and were established in the ACR 2003. The company also sets itself internal targets every year which is our way of managing the achievement of the overall regulatory targets over the five year control period. Some of these measures also contribute towards the company incentive regime and provide a means of additional remuneration to us if the company improves on certain baseline levels of performance. This is covered in more detail in the section on Key Performance Indicators (KPIs).

Table 9 above summarises our regulatory targets for CP3 established in the ACR 2003. A number of these targets for assets and network capability are specified as required to be demonstrating our performance relative to that in earlier years (e.g. condition for electrical condition etc. to be returned to that at 2001/02).

We have translated these targets into values for our measures as reported in the Annual Return. Table 10 overleaf illustrates this. These regulatory targets are for the five year control period. These are also included with the detailed reports for each of the measures within this document to illustrate our progress this year. Together with this, the table on page 14 also includes the annual target for 2005/06, where one exists, to illustrate how we are achieving the five year regulatory targets and also how we manage and operate our business. Where there is no regulatory target but an internal target, this illustrates other areas of our internal management which support our industry goals for continual improvement. Also where there is a regulatory target but no annual target, this is because we consider the 5 year period as the target period and are managing the achievement of the overall target over this time rather than year by year.

All infrastructure output measures are subject to statistical variability caused by random fluctuation and the accuracy of data measurement. Tolerances for the regulatory targets are stated but these are simply illustrative as tolerances were not established in the ACR 2003. However, ORR has stated that it will take into account statistical variations when assessing performance against regulatory targets and we are discussing this with them.

## Table 10 Summary of targets

No regulatory target. 11.3 for 2005/06.	-	85.5%
11.3 for 2005/06.		
	-	10.6
Reduction in the number of broken rails to no more than 300 per annum by 2005/06. No increase thereafter.	The statistical tolerance for the broken rail measure has has been assessed as ±13.7% of the target.	300
No regulatory target.	_	
The regulatory target is to maintain 2003/04 levels (see section 3 for further details); no deterioration from this level during this control period.	The statistical tolerance for an average of the 12 measures has been assessed as +/- 0.7 on an average measure. Tolerances for each of the 12 individual measures which make up track geometry have not been assessed.	Same as regulatory target
Reduction in the number of L2 exceedences per track mile to no greater than 0.9 by 2005/06. No increase thereafter.	The statistical tolerance for the level 2 exceedence measure has been assessed as $\pm 7\%$ of the target.	0.86
Annual reduction required from 2003/04 levels, i.e. from 1,199 for track, structures and earthworks TSRs.	To be assessed.	942
This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 47 national earthwork failures.	To be assessed.	-
Condition and serviceability to return to 2001/02 levels, which was approximately 2.0, but the full target (and tolerance) cannot be firmly established until all bridges have undergone bridge surveys and given an SCMI score (Structures Condition Monitoring Index), which is anticipated to be in 2007/08.	The tolerance for the bridge condition index has been assessed as approximately $\pm$ 0.1 on the target.	2.0
This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 28,098 signalling failures	The statistical tolerance for signalling failures has been assessed as $\pm 7.3\%$ of the target.	24,972
This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.5.	The tolerance for the signalling condition index has been assessed as $\pm$ 0.1 on the target.	2.4
No deterioration from number of incidents reported in 2001/02, i.e. 107.	The statistical tolerance for overhead line failures has been assessed as $\pm 28\%$ of the target.	65
No deterioration from number of incidents reported in 2001/02, i.e. 30.	The statistical tolerance for conductor rail failures has been assessed as $\pm 47\%$ of the targ	15 get.
Condition and serviceability to return to 2001/02 levels, i.e. 2.1.	The tolerance for AC feeder station condition has been assessed as $\pm 0.1$ on the target.	2.1 continued
	broken rails to no more than 300 per annum by 2005/06. No increase thereafter. No regulatory target is to maintain 2003/04 levels (see section 3 for further details); no deterioration from this level during this control period. Reduction in the number of L2 exceedences per track mile to no greater than 0.9 by 2005/06. No increase thereafter. Annual reduction required from 2003/04 levels, i.e. from 1,199 for track, structures and earthworks TSRs. This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 47 national earthwork failures. Condition and serviceability to return to 2001/02 levels, which was approximately 2.0, but the full target (and tolerance) cannot be firmly established until all bridges have undergone bridge surveys and given an SCMI score (Structures Condition Monitoring Index), which is anticipated to be in 2007/08. This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 28,098 signalling failures This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 28,098 signalling failures This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.5. No deterioration from number of incidents reported in 2001/02, i.e. 107. No deterioration from number of incidents reported in 2001/02, i.e. 30. Condition and serviceability to	broken rails to no more than 300 per annum by 2005/06.the broken rail measure has has been assessed as ±13.7% of the target.No regulatory targetThe regulatory target is to maintain 2003/04 levels (see section 3 for further details); no deterioration from this evel during this control period.The statistical tolerance for an average of the 12 measures has been assessed as +/-0.7 on an average measure.level during this control period.The statistical tolerance for the level 2 exceedence per track mile to no greater than 0.9 by greater than 0.9 by for track, structures and earthworks TSRs.The statistical tolerance for the level 2 exceedence measure has been assessed.This is covered by 'Other asset condition and serviceability to te firmly established until all bridges have undergone bridge surveys and given an SCMI score (Structures Condition mod terioration from 2003/04 levels, i.e. 2.5.The statistical tolerance for the level 2 exceedence measure has been assessed.This is covered by 'Other asset condition and serviceability with no deterioration from 2003/04 levels, i.e. 2.5.The tolerance for the bridge condition index has been assessed as approximately ± 0.1 on the target.This is covered by 'Other asset condition and serviceability with no deterioration from 2003/04 levels, i.e. 2.5.The statistical tolerance for secsed as ± 0.1 on the target.This is covered by 'Other asset condition and serviceability with condition and serviceability with condition and serviceability with condition from 2003/04 levels, i.e. 2.5.The statistical tolerance for secsed as ± 0.1 on the target.No deterioration from number 

Targets

### Table 10 Summary of targets (continued)

Measure	Regulatory target for CP3	Tolerance	Internal target/ Business Plan target for 2005/06
M14 DC Traction substations	Condition and serviceability to return to 2001/02 levels, i.e. 2.3.	The tolerance for DC feeder station condition has been assessed as $\pm$ 0.1 on the target.	2.3
M15 AC Traction contact systems	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	The tolerance for overhead line condition has been assessed as $\pm$ 0.1 on the target.	1.8
M16 DC Traction contact systems	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	The tolerance for conductor rail condition has been assessed as $\pm$ 0.1 on the target.	1.8
M17 Station condition index	This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.25.	The tolerance for the station condition index has been assessed as $\pm 0.1$ on the target.	2.25
M18 Station facility score	No regulatory target.	-	-
M19 Light maintenance depots – condition index	This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.7.	The tolerance for the depot condition index has been assessed as $\pm$ 0.1 on the target.	_
Asset Stewardship Incentive Index	0.90	-	0.85
C1 Linespeed capability	The regulatory target for each of the network capability measures is to maintain the capability of the network for broadly existing use at April 2001 levels (subject to network changes authorised under the Network Code).	– Same as re	egulatory target
C2 Gauge capability	Same as C1.	– Same as re	egulatory target
C3 Route availability value	Same as C1.	– Same as re	egulatory target
C4 Electrified track capability	Same as C1.	– Same as re	egulatory target
M20 Rail renewals (km)	No regulatory target.	-	1,002
M21 Sleeper renewals (km)	No regulatory target.	-	733
M22 ballast renewals (km)	No regulatory target.	-	752
M25 S&C renewals (units)	No regulatory target.	-	508
M24 Signalling renewals (SEUs)	No regulatory target.	-	n/a
Financial Efficiency Index	No regulatory target.	-	2,037
Debt to RAB %	Under Licence Condition 29 the company is not to incur financial indebtedness in excess of 100% of the RAB and must take all reasonable endeavours to keep the ratio below 85%.	-	80.6
	be noted that the Business Plan red diture with the latter being the Busir		ual expenditure

Targets

# Key performance indicators

Network Rail's performance and achievement of the company's corporate goals is measured through a set of high level key performance indicators (KPIs). These high level KPIs are supported by a set of secondary KPIs. This full set of KPIs has been embedded into the Business Plan and included within the internal reporting cycle. An agreed selection of the high level KPIs is also used as part of the performance incentive regime throughout the company. ORR has also used many of these KPIs to inform the Network Rail Monitor which is published quarterly on their website.

Table 11 provides the results for the KPIs for 2005/06.

The purpose and explanations of these KPIs are below.

### Public performance measure

This indicator monitors performance of the railway network for passengers. It is defined as the percentage of trains arriving on time. 'On time' is defined as planned and arriving less than 5 minutes late at final destination or less than 10 minutes late for inter-city operators. Therefore the higher the percentage the better.

### **Train delay minutes**

This is the primary supporting measure in the delivery of improved PPM punctuality for franchised passenger operators, and as the main measure of network performance delivery to other operators (including freight). Delay minutes provide detailed management information on the location, cause and nature of disruption leading to poor PPM performance. As such it provides crucial management information to allow the prioritisation of management action and resources.

### Asset failure

This indicator measures the total number of asset failure incidents causing train delay where the cause is the responsibility of Network Rail. Therefore the performance of the assets can be measured where failure directly delays trains.

Table 11 Key performance indicators					
	Unit of measure	2005/06 Target	2005/06 Actual	Variance	Relative to target
Train performance					
Public performance measure	%	85.5	86.4	0.9	Good
Train delay	Millions of Minutes	11.3 (NR internal target 10.6)	10.5	0.8 (0.1 against NR target)	Good
Asset failure					
Asset failures	Number of incidents	n/a	56,460	n/a	n/a
Asset quality					
Network Rail asset stewardship incentive inde	ex (ASII) %	0.85	0.80	0.05	Good
Activity volumes					
Activity volumes: activity compared with plan	%	100	107	7	Good
Finance and efficiency					
Debt to RAB ratio	%	80.6	78.1	2.5	Good
Network Rail financial efficiency index (FEI)	Index	2,037	1,972	65	Good
RAB adjustment for passenger volume incent	tives £m	n/a	169.9	n/a	n/a
RAB adjustment for freight volume incentives	£m	n/a	4.4	n/a	n/a
Cost control/expenditure variance	£m	5,763	5,409	-6.1%	n/a
Customer satisfaction					
Passenger complaints	Number per 100K journeys	70	75	-5	n/a
Customer satisfaction – train operators	Index from -2 to +2	n/a	-0.30	n/a	n/a
Customer satisfaction – freight operators	Index from -2 to +2	n/a	-0.99	n/a	n/a
Supplier satisfaction – major suppliers		n/a	-0.06	n/a	n/a

### Asset stewardship incentive index

The asset stewardship incentive index reflects the overall status of a number of contributory indicators that have been selected to provide an incentive for our stewardship of the rail network. The contributors are track geometry, number of broken rails, level 2 exceedences, number of signalling failures, points/track circuit failures, structure and earthwork TSRs and traction power supply failures. The asset stewardship incentive index is the weighted sum of these individual components.

### **Activity volumes**

This indicator gives the percentage of track renewals actually delivered compared to the volume planned.

### Debt to RAB ratio

This financing indicator measures Network Rail's net debt as a percentage of its regulatory asset base. This can be considered as a proxy for the financial gearing of the company.

### **Financial efficiency index**

This indicator measures the efficiency of expenditure on Territory-level operations, maintenance, plain line track renewals and key headquarter based expenditure items.

# Regulatory asset base (RAB) adjustment for passenger and freight volume incentives

The passenger and freight volume incentives provide a RAB addition in 2009 for growth above a baseline level and thus give an incentive for Network Rail to facilitate growth in traffic on the network.

The passenger volume incentive is based on the growth over and above a baseline level of growth in:

- 1. actual passenger train miles
- 2. farebox revenue.

The freight volume incentive is based on incentive rates multiplied by the growth over and above a baseline level of growth in: 1. actual freight train miles

2. gross tonne miles.

### Cost control/expenditure variance

This indicator measures the percentage overspend/underspend on total expenditure with the aim to encourage more effective cost control at both a Territory and central level. The overspend/underspend measure is relative to the final budget agreed prior to the start of the year.

### **Passenger complaints**

This indicator aims to improve services to passengers by assessing their direct feedback. It is defined as an expression of dissatisfaction by a customer or potential customer about service delivery or about company or industry policy. This is an industry-wide measure of average quarterly complaints per 100,000 journeys and is collected and reported by ORR in National Rail Trends.

# Customer satisfaction – train operators and freight operators

This indicator measures the attitude directed towards Network Rail from board members of the TOCs and FOCs in respect to their satisfaction with the service being provided. This assessment aims to generate clear evidence over a period of time that Network Rail can improve its level of service to the TOCs.

### Supplier satisfaction – major suppliers

This indicator measures the attitude major suppliers direct towards Network Rail in respect to their levels of satisfaction of the service being provided. The index is calculated by measuring responses from major suppliers using the advocacy rating.

# Section 1 Operational performance

The main cross-industry measure of operational performance for franchised passenger services is PPM (Public Performance Measure), which is a measure of the overall punctuality and reliability of train services delivered to passengers. Network Rail is accountable for the reporting of industry train performance, and PPM figures are shown in this section at national and operator level (see Table 13).

Delay minutes remain the main operational performance measure underpinning the punctuality of passenger and freight train services. Delays to train journeys experienced by passenger and freight companies are broken down into Network Rail attributed delays and those attributed to train operators. Those attributable to Network Rail typically relate to infrastructure, timetabling and operation of the network or external events impacting the network. Those attributable to train operators typically relate to train operations, fleet reliability, problems with train crew resources or external causes affecting trains.

In 2005/06 some 53% of all delays to passenger trains were attributable to Network Rail. Of the remaining 47%, 34% were 'TOC-on-self' (i.e. where delays to an operator's trains are attributed to the same operator) and 13% were 'TOC-on-TOC' (i.e. where delays are attributed to incidents caused by other operators).

This Annual Return provides data on Network Rail attributed delays only. Figures are presented for 2005/06 in delay minutes and in minutes delay per 100 train kilometres, with disaggregated results split down by cause, by Network Rail route and into those delays affecting passenger and freight trains.

### **Overview: PPM and Delay Minutes**

PPM punctuality increased by 2.8 percentage points to 86.4% for the full year 2005/06. This represents a reduction of 17% in the number of trains running late, and compares to a reduction in total delays to franchised passenger operators (whether attributable to Network Rail or to train operators) of 15% after allowing for the change in train km run.

Delay minutes attributable to Network Rail's infrastructure and network management fell by 8% (or 0.9 million minutes) to 10.5 million minutes in 2005/06. This level of delay achieved remained ahead of the existing regulatory target for the year (11.3 million minutes).

Table 12 National delays to all train services								
Network Rail-attributed delays	2001-02 <sup>2</sup>	2002/03	2003/04	2004/05	2005/06			
Total delay minutes (including minor operators) <sup>1</sup>	13,787,916	14,716,772	13,716,937	11,402,720	10,464,387			
Train km³	464,536,115	472,173,008	482,059,147	478,038,920	488,059,212			
Delay per 100 train km⁴	2.97	3.12	2.85	2.39	2.14			
Regulatory target (total delay minutes)				12,300,000	11,300,000			

1. Total delay minutes include delays to a number of minor operators and some unallocated minutes, which are excluded from the main measure of Major Operators (Passenger and Freight).

 Data definitions and process were changed slightly from 2002/03 onwards. The figures shown for 2001/02 are re-stated for comparison purposes based on a methodology consistent with 2002/03 and 2003/04 figures.

3. Train kilometres run excluding empty coaching stock movements, as recorded in the performance database (PALADIN).

4. Based on delay minutes, divided by the train kilometres run, multiplied by 100.

# Public performance measure (PPM)

PPM combines figures for punctuality and reliability into a single performance measure covering all scheduled services operated by franchised passenger operators. PPM measures the performance of individual trains against their planned timetable for the day, and shows the percentage of trains 'on time' compared to the total number of trains planned.

A train is defined as 'on time' if it arrives at its planned destination station within five minutes (i.e. 4 minutes 59 seconds or less) of the planned arrival time. For longer distance operators, a criterion of arrivals within 10 minutes (i.e. 9 minutes 59 seconds or less) is used; for the 2005/06 data presented in this report, these operators comprise First Great Western, GNER, Midland Mainline, Virgin Cross Country and Virgin West Coast, together with the former Anglia inter-city services operated by 'one'.

### Summarised network-wide data (delays to major operators) Introduction

The delay minutes data presented in the remainder of this section are Network Rail attributed delays to the main scheduled passenger train services and freight operators. This is consistent with data presented for previous years and excludes delays to other types of operator (such as London Underground services and charter operations), which account for around 0.4% of the total Network Rail attributed delays.

### Table 13 Public performance measure by network and train operating company (%)

Applic	cable passenger operators	2005/06
EA	Transpennine Express	79.3
EB	one	86.7
ED	Northern Rail	86.5
HA	ScotRail	85.8
HB	Great North Eastern Railway	83.5
HE	Mersey Rail Electrics 2002	92.2
HF	Virgin West Coast Trains	83.5
HG	Central Trains	79.1
НН	Virgin Cross Country Trains	80.9
HI	Midland Mainline	92.5
HJ	First Great Western*	74.5
ΗК	Wessex Trains*	85.2
HL	Arriva Trains Wales	81.4
ΗN	First Great Western Link*	83.5
HO	Chiltern Railway	91.8
HP	Silverlink	90.0
HQ	WAGN*	89.5
ΗT	c2c Rail	92.9
HU	South Eastern Trains	86.7
ΗV	Gatwick Express	91.0
HW	Southern Trains	88.1
HX	Thameslink Rail*	86.2
ΗY	South West Trains	89.6
ΗZ	Island Line	97.4
Total	(franchised passenger operators)	86.4

The above table reflects the name and definition of franchised operators which existed in 2005/06. The five marked operators now come under the two new franchises First Great Western (First Great Western, First Great Western Link and Wessex Trains) and First Capital Connect (Thameslink Rail and WAGN).

### National delays to passenger train services

Total Network Rail-attributed delays to passenger trains fell by 10% in 2005/06. Traffic volumes, measured in train kilometres run, increased by 2% compared to 2004/05. Within this total, delays to franchised passenger operators fell to 1.93 minutes per 100 train km, which was 9% better than the regulatory target for this measure. The trends in delays to passenger trains (measured as delay per 100 train km) over the last seven years is illustrated in Figure 3. This highlights the impact of the disruption after the Hatfield accident, the subsequent recovery, the impact of the relatively severe autumns in both 2002 and 2005, and the improving trend over the last few years, culminating in three very good periods for performance (January – March 2006).

Network Rail-attributed delays	<b>2001/02</b> ⁴	2002/03	2003/04	2004/05	2005/06
Delay minutes <sup>1</sup>	11,289,684	12,214,993	11,394,367	9,311,884	8,386,939
Train km <sup>2</sup>	412,176,056	421,267,094	430,472,798	428,829,386	437,524,953
Delay minutes per 100 train km <sup>3</sup>	2.74	2.90	2.65	2.17	1.92
Delays to franchised operators (minutes per 100 train km)					
Actual	2.75	2.92	2.66	1.96	1.93
 Regulatory target⁵				2.34	2.1

1. The delay totals are based on all PfPI delays, affecting applicable passenger operators (main scheduled operators).

2. Train km run for trains of applicable operators, excluding empty coaching stock movements, as recorded in PALADIN.

3. Based on all PfPI Delay minutes, divided by the train kilometres run, multiplied by 100.

4. Data definitions and process were changed slightly for 2002/03. The effect of applying these to 2001/02 data for comparison purposes would be to increase the delay minutes from 11.29m to 11.64m.

5. From 2004/05 onwards, targets were set based on delay to franchised passenger operators only. This excludes results for non-franchised operators (Eurostar, Heathrow Express, Hull Trains and Nexus) which are included in the remaining figures in this table.



### National delays to freight train services

Delays to freight trains fell by 1% to 2.0 million minutes. This represents a real improvement of nearly 4% after allowing for the increase in train kilometres run approaching 3%.

Table 15 National delays to freight train services								
Network Rail-attributed delays	<b>2001/02</b> ⁴	2002/03	2003/04	2004/05	2005/06			
Delay minutes <sup>1</sup>	2,094,688	2,451,402	2,279,360	2,057,063	2,036,592			
Train km²	48,761,221	47,201,404	47,828,365	45,519,096	46,727,870			
Delay minutes per 100 train km <sup>3</sup>	4.30	5.19	4.77	4.52	4.36			

1. The delay totals are based on all PfPI delays affecting applicable freight operators (main scheduled operators).

2. Train kilometres run for trains of applicable operators, excluding empty coaching stock movements, as recorded in PALADIN. Based on all PfPI delay minutes, divided by the train kilometres run, multiplied by 100.
 Data definitions and processes were changed slightly for 2002/03. The effect of applying these to 2001/02 data

for comparison purposes would be to increase the delay minutes from 2.09m to 2.11m.

### Breakdown of performance data by operator

Table	Table 16 Delays to individual operators 2005/06								
Applica	ble passenger operators	Delay minutes	Train kilometres (million)	Delay per 100 train km					
EA	Transpennine Express	248,951	12.70	1.96					
EB	one	652,081	29.69	2.20					
ED	Northern Rail	1,062,876	41.89	2.54					
HA	Scotrail Railways	632,656	37.24	1.70					
HB	Great North Eastern Railway	210,660	18.16	1.16					
HE	Merseyrail Electrics 2002	84,777	5.44	1.56					
HF	Virgin West Coast Trains	503,595	21.38	2.36					
HG	Central Trains	753,614	28.59	2.64					
НН	Virgin Cross Country Trains	526,126	27.03	1.95					
HI	Midland Mainline	126,755	9.92	1.28					
HJ	First Great Western*	341,428	16.70	2.04					
HK	Wessex Trains*	184,321	11.07	1.66					
HL	Arriva Trains Wales	393,662	20.03	1.97					
HM	Heathrow Express	42,372	1.51	2.81					
HN	First Great Western Link*	341,189	12.52	2.72					
НО	Chiltern Railways	107,796	8.20	1.31					
HP	Silverlink	163,441	8.78	1.86					
HQ	WAGN*	110,668	11.16	0.99					
HT	c2c Rail	51,079	5.82	0.88					
HU	South Eastern Trains	527,494	27.67	1.91					
ΗV	Gatwick Express	28,967	2.42	1.20					
HW	Southern Trains	515,855	26.46	1.95					
HX	Thameslink Rail*	191,754	10.83	1.77					
HY	South West Trains	538,852	37.24	1.45					
GA	Eurostar (UK)	15,453	0.87	1.77					
PF	Hull Trains	18,818	1.25	1.51					
PG	Nexus	11,699	2.94	0.40					
Total		8,386,939	437.52	1.92					
	of which franchised operators	8,298,597	430.96	1.93					

Applica	able freight operators	Delay minutes	Train kilometres (million)	Delay per 100 train km
WA	English Welsh and Scottish Railway	1,283,218	31.02	4.14
DB	Freightliner Ltd	404,509	8.54	4.74
D2	Freightliner Heavyhaul	261,144	4.71	5.55
PE	GB Rail Freight	50,877	1.12	4.56
ХН	Direct Rail Services	36,844	1.34	2.74
Total		2,036,592	46.73	4.36
		, ,		
Comb	pined total for all applicable operators	10.423.531	484.25	2.15

\* The above table reflects the name and definition of franchised operators which existed in 2005/06. The five marked operators now come under the two new franchises First Great Western (First Great Western, First Great Western Link and Wessex Trains) and First Capital Connect (Thameslink Rail and WAGN).

Table 17 Delays per 100 train kil	ometre	s to ind	ividual	operato	ors 200	5/06								
	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Period	Full
Applicable passenger operators	1	2	3	4	5	6	7	8	9	10	11	12		Year avg
EA Transpennine Express	1.71	1.68	2.28	1.79	1.76	1.92	1.78	2.99	3.05	2.11	1.45	1.66	1.28	1.96
EB one	2.59	3.06	2.57	2.21	2.10	1.90	1.67	2.47	3.42	1.80	1.26	1.51	2.00	2.20
ED Northern Rail	2.14	1.95	2.59	2.33	2.13	2.34	2.33	3.75	4.15	3.13	2.14	2.17	1.87	2.54
HA Scotrail Railways	1.77	1.42	1.74	2.01	1.39	1.40	1.59	3.03	2.40	1.70	1.36	1.22	1.06	1.70
HB Great North Eastern Railway	1.03	0.91	1.45	1.80	0.82	1.33	1.09	1.43	1.39	1.25	0.88	0.92	0.80	1.16
HE Merseyrail Electrics 2002	0.77	1.35	1.27	1.56	1.02	2.18	1.44	2.46	2.35	1.14	1.32	1.60	1.81	1.56
HF Virgin West Coast Trains	2.49	2.15	2.97	2.47	1.77	2.22	2.16	3.46	2.90	2.42	1.65	1.99	2.05	2.36
HG Central Trains	2.21	2.41	2.91	3.18	2.41	2.42	2.90	4.00	3.73	2.92	1.82	1.82	1.66	2.64
HH Virgin Cross Country Trains	2.13	2.01	2.11	2.27	1.55	1.67	1.89	2.71	2.60	1.98	1.47	1.53	1.35	1.95
HI Midland Mainline	1.02	0.95	1.47	1.75	1.07	1.50	1.37	2.06	1.83	1.05	1.13	0.84	0.62	1.28
HJ First Great Western*	1.88	1.91	2.74	2.84	1.63	1.80	1.74	2.89	2.63	1.47	1.30	1.90	1.78	2.04
HK Wessex Trains*	1.83	1.55	2.22	2.73	1.30	1.10	1.46	2.17	2.04	1.62	1.31	1.24	1.11	1.66
HL Arriva Trains Wales	1.92	1.85	2.45	2.50	1.70	1.73	1.41	2.75	2.77	2.09	1.56	1.51	1.46	1.97
HM Heathrow Express	2.02	2.11	2.59	2.96	3.20	2.95	2.13	3.18	3.35	2.13	3.05	4.19	2.89	2.81
HN First Great Western Link*	2.43	2.72	3.26	3.44	2.56	2.57	1.92	3.49	3.41	2.42	2.28	2.69	2.16	2.72
HO Chiltern Railways	0.77	0.80	1.24	2.11	1.06	1.85	2.21	1.77	1.29	1.05	1.06	0.81	1.28	1.31
HP Silverlink	1.77	1.89	2.19	2.58	2.05	1.67	1.59	2.28	1.59	2.06	1.45	1.92	1.22	1.86
HQ WAGN*	0.86	1.02	1.07	1.51	0.58	1.10	0.70	1.53	1.70	1.08	0.61	0.70	0.51	0.99
HT c2c Rail	0.94	0.74	0.70	0.78	0.56	0.54	0.94	1.57	1.02	0.67	1.01	0.70	1.20	0.88
HU South Eastern Trains	1.79	1.62	1.78	1.71	2.03	1.66	2.07	2.79	2.90	2.17	1.47	1.59	1.19	1.91
HV Gatwick Express	0.93	0.83	1.29	1.38	1.31	1.06	1.19	1.46	1.59	1.14	1.13	0.97	1.32	1.20
HW Southern Trains	1.68	1.43	1.90	2.37	1.66	1.63	1.94	2.65	3.16	2.13	1.82	1.43	1.60	1.95
HX Thameslink Rail*	1.21	1.44	1.58	2.15	1.79	1.87	1.70	2.50	2.63	2.15	1.47	1.27	1.35	1.77
HY South West Trains	1.35	1.01	1.77	1.42	1.17	1.20	1.10	1.99	2.69	1.75	0.90	1.11	1.42	1.45
GA Eurostar (UK)	1.37	3.80	2.44	1.88	1.71	0.60	0.74	2.28	3.32	1.04	1.19	1.43	1.34	1.77
PF Hull Trains	1.26	1.55	2.53	2.64	1.19	1.56	1.11	2.04	1.95	1.31	1.16	0.79	0.66	1.51
PG Nexus	0.67	0.37	0.30	0.41	0.45	0.29	0.43	0.33	0.41	0.46	0.23	0.39	0.40	0.40
Total	1.80	1.72	2.13	2.19	1.66	1.75	1.76	2.73	2.79	2.00	1.45	1.52	1.46	1.92
Applicable freight operators		-	-			-	-	-	-			-		
WA English Welsh and Scottish Railway	4.08	3.95	4.16	4.38	3.49	4.08	4.14	5.44	5.39	4.04	3.55	3.41	3.67	4.14
DB Freightliner Ltd	6.59	4.47	5.17	4.27	4.18	3.87	4.15	8.05	5.10	4.06	3.58	3.27	4.66	4.74
D2 Freightliner Heavyhaul	4.26	4.43	5.32	5.26	5.19	5.59	5.28	7.48	8.03	5.28	5.48	4.96	5.41	5.55
PE GB Rail Freight	5.01	5.83	7.59	4.50	4.90	3.92	3.63	4.93	5.39	3.61	3.18	2.94	5.29	4.56
XH Direct Rail Services	3.69	2.90	2.54	1.96	2.54	1.86	2.01	4.58	5.16	2.54	2.31	1.83	2.04	2.74
Total	4.56	4.09	4.48	4.38	3.79	4.12	4.19	6.10	5.61	4.11	3.70	3.48	4.02	4.36

\* The above table reflects the name and definition of franchised operators which existed in 2005/06. The 5 marked operators now come under the two new franchises First Great Western (First Great Western, First Great Western Link and Wessex Trains) and First Capital Connect (Thameslink Rail and WAGN).

Table 18 De	lay minutes to	o all trains sp	lit by operat	ing route an	d by four-we	eekly period	I			
Period	London North Eastern	London North Western	South East Anglia	South East Kent	South East Sussex	South East Wessex	Western	England & Wales	Scotland	Network Total
P1	170,679	202,900	100,192	51,488	39,343	56,916	125,683	747,201	80,997	828,198
P2	156,760	176,968	97,241	48,806	28,497	40,943	115,460	664,675	63,032	727,707
P3	215,012	209,673	84,355	47,680	39,271	63,964	152,501	812,456	70,630	883,086
P4	213,393	206,811	79,840	47,285	51,299	53,648	167,196	819,472	81,273	900,745
P5	159,836	164,845	76,725	53,133	38,399	43,215	104,198	640,351	57,050	697,401
P6	188,917	198,245	62,963	47,325	35,935	41,346	104,090	678,821	62,187	741,008
P7	172,020	213,630	56,883	52,381	45,605	42,859	95,519	678,897	70,947	749,844
P8	244,627	310,696	102,798	71,670	56,993	75,647	155,322	1,017,753	114,094	1,131,847
P9	266,770	292,390	104,455	76,700	64,777	94,243	152,659	1,051,994	93,884	1,145,878
P10	185,490	194,922	52,860	51,226	44,033	55,661	88,604	672,796	71,127	743,923
P11	156,069	168,453	47,740	33,714	45,625	36,788	91,221	579,610	54,517	634,127
P12	150,631	170,237	56,389	40,923	32,993	39,052	107,101	597,326	51,880	649,206
P13	133,482	166,466	74,943	30,914	38,728	49,884	94,892	589,309	42,108	631,417
Year total	2,413,686	2,676,236	997,384	653,245	561,498	694,166	1,554,446	9,550,661	913,726	10,464,387

### Note:

P1 Friday 01 April 2005 – Saturday 30 April 2005

P2 Sunday 01 May 2005 – Saturday 28 May 2005

P3 Sunday 29 May 2005 – Saturday 25 June 2005

P4 Sunday 26 June 2005 – Saturday 23 July 2005

P5 Sunday 24 July 2005 – Saturday 20 August 2005

P6 Sunday 21 August 2005 – Saturday 17 September 2005

P7 Sunday 18 September 2005 – Saturday 15 October 2005
P8 Sunday 16 October 2005 – Saturday 12 November 2005
P9 Sunday 13 November 2005 – Saturday 10 December 2005

P10 Sunday 11 December 2005 – Saturday 07 January 2006

P11 Sunday 08 January 2006 – Saturday 4 February 2006

P12 Sunday 05 February 2006 – Saturday 4 March 2006

P13 Sunday 05 March 2006 – Friday 31 March 2006

### National delay data by cause National data by delay category grouping

The trends in delay minutes by broad category groupings are shown below, followed by a detailed commentary focusing on these groups and the individual delay categories.

Table 19 Network delays to pas	senger and fre	eight trains by sur	nmarised catego	ry groups – trend	ls
Category group'	2001/02 Total delay minutes	2002/03 Total delay minutes	2003/04 Total delay minutes	2004/05 Total delay minutes	2005/06 Total delay minutes
Track defects and TSRs <sup>2</sup>	3,024,543	2,514,840	2,128,394	1,399,184	1,505,947
Other asset defects <sup>3</sup>	4,058,661	4,656,471	4,510,007	3,667,027	3,388,263
Network management/other4	3,547,582	4,041,872	3,884,869	3,601,440	3,124,193
Autumn leaf fall and adhesion <sup>5</sup>	476,773	529,550	469,113	287,282	313,941
Severe weather/structures6	778,207	1,042,184	737,445	796,378	458,122
External factors7	1,498,606	1,881,478	1,943,899	1,617,636	1,633,065
Total minutes	13,384,372	14,666,395	13,673,727	11,368,947	10,423,531
Train km (millions)	460.94	468.47	478.30	474.35	484.25

Category group <sup>1</sup>	2001/02 Delay minutes per 100 train km	2002/03 Delay minutes per 100 train km	2003/04 Delay minutes per 100 train km	2004/05 Delay minutes per 100 train km	2005/06 Delay minutes per 100 train km
Track defects and TSRs <sup>2</sup>	0.66	0.54	0.44	0.29	0.31
Other asset defects <sup>3</sup>	0.88	0.99	0.94	0.77	0.70
Network management/other4	0.77	0.86	0.81	0.76	0.65
Autumn leaf fall and adhesion	<sup>5</sup> 0.10	0.11	0.10	0.06	0.06
Severe weather/structures6	0.17	0.22	0.15	0.17	0.09
External factors7	0.33	0.40	0.41	0.34	0.34
Total minutes	2.90	3.13	2.86	2.40	2.15

1. Delay totals are based on all delays recorded for attribution of responsibility to Network Rail, divided by train kilometres run where applicable.

2. Track defects and TSRs include broken rails, other track faults and speed restrictions for condition of track and rolling contact fatigue.

3. Other asset defects include points, track circuits, signal and signalling system failures, overhead power/third rail supply etc.

4. Network management/other delays include possessions, signalling errors, timetabling, dispute resolution and unexplained.

5. Autumn leaf fall and adhesion include leaf fall related delays and Network Rail's share of industry adhesion delays.

6. Severe weather/structures includes direct delays due to severe weather and all structures delays, which include weather related delays due to embankment instability risks, bridge scour and flooding. Heat-related speed restrictions are also shown within this category.

7. External factors include road-related incidents, fires, trespass and vandalism, security alerts, suicides and other external events.

### Commentary

The largest improvements in Network Rail attributed delay minutes in 2005/06 (compared to 2004/05), were in Network management/other and severe weather/structures delay (see tables 19 and 20).

In absolute minutes, improvements in delays are as follows:

- the largest improvement was seen in the 'Network management/other' group with an improvement of 477,247 minutes (a 13% improvement)
- dispute takeback (category 502c) dropped by 153,792 minutes
- operations responsibility (category 501) recorded a reduction of 109,929 reflecting a reduction in delays due to signaller and train regulation errors, alongside improvements in other operations causes
- possessions-related delays (categories 107a/b) improved by 13% (50,963 minutes)
- 'other infrastructure' causes (category 106) fell by 12% (54,680 minutes)
- train planning delays (category 502a) fell by 5% (34,507 minutes) for the full year. This category was subject to close management focus, following the marked deterioration seen during the course of the previous year, and achieved a continuous improvement through the year and a level of delay in the final 3 periods which was around one third lower than a year earlier.

Delays attributed to 'severe weather/structures' fell by the largest percentage (42%) contributing a reduction of 338,256 minutes. Delays fell in all major components of this category covering severe weather, flooding and structures. Track-related delay ('Track defects and TSRs') increased by 106,763 (or 8%). This reflected broadly similar rates of increase in TSRs due to condition of track and track faults (including broken rails). Around one half of this increase was on the LNE route, while Western also saw a significant deterioration. Towards the end of the year, delays levels started to show significant improvement, responding to the additional management focus on prioritisation of critical speed restrictions and an acceleration of spending in some key areas.

By contrast there was an improvement of 8% (or 278,764 minutes) in 'other asset defects' group of categories (points, track circuits, signalling and power supply etc). This reflected a 4% reduction in incidents and a 4% improvement in the average delay per incident reflecting both improvements in asset maintenance and incident management achieved through operational initiatives such as the establishment of integrated controls, supported by close industry co-operation. Delays due to points (category 101) and track circuit failures (category 301b) fell by 5% and 7% respectively while overhead line/third rail fault delays (category 201) improved by 17%. Other signalling equipment delays (category 302b) fell by 32% partly reflecting the sharp reduction in TPWS-related faults.

External category delays (categories 112, 401-403, 503-506) rose by 1%, but with some material differences in performance between individual categories of delay. Delays due to 'bridge strikes' (road vehicles hitting bridges, category 401) fell sharply recording a 24% improvement (78,552 minutes reduction). This was primarily in response to a range of local and nationally co-ordinated initiatives; best practice

initiatives on the operational procedures and responses to bridge strikes were combined with targeted investment in improved warning signs and protection beams and sensors.

By contrast, delays due to fatalities and trespass (category 503) increased by 16% (or 87,356 minutes) and delays due to security issues doubled (an increase of 41,008 minutes), due to the London bombings and associated security alerts. Delays due to vandalism/theft also increased by 18,652 minutes.

Autumn leaf fall and adhesion' delay minutes increased by 9% (or 26,659 minutes), partly reversing the major improvements seen in recent years. This in part reflected the extended autumn season (due to the unusually mild weather conditions in October being extended until almost Christmas), it also reflected some difficult local conditions, triggering a renewed cross-industry review of autumn preparation and railhead cleaning.

Table	Table 21 National delays to passenger and freight trains by detailed cause category 2005/06 (delay minutes)							
		Passer	nger trains per 100	Fre	ight trains per 100	Com	bined total per 100	
No	Category		train km		train km		train km	
101	Points failures	657,399	0.15	177,577	0.38	834,976	0.17	
102	Problems with trackside signs, TSR boards	37,519	0.01	5,613	0.01	43,132	0.01	
103	Level crossing failures	109,869	0.03	16,552	0.04	126,421	0.03	
104A	TSRs due to condition of track	300,165	0.07	266,046	0.57	566,211	0.12	
104B	Track faults (including broken rails)	710,169	0.16	215,090	0.46	925,259	0.19	
104C	Rolling contact fatigue	12,236	0.00	2,241	0.00	14,477	0.00	
105	Lineside structure defects (inc. weather impact)	72,382	0.02	52,522	0.11	124,904	0.03	
106	Other infrastructure	312,094	0.07	74,453	0.16	386,547	0.08	
107A	Possession over-run and related faults	183,494	0.04	75,670	0.16	259,164	0.05	
107B	Possession work left incomplete	71,280	0.02	19,546	0.04	90,826	0.02	
108	Mishap – infrastructure causes	59,720	0.01	12,298	0.03	72,018	0.01	
109	Animals on line	124,085	0.03	17,017	0.04	141,102	0.03	
110	External weather impact	279,771	0.06	53,447	0.11	333,218	0.07	
111A	Wheel slip due to leaf fall	90,676	0.02	6,269	0.01	96,945	0.02	
111B	Vegetation management failure	10,067	0.00	1,642	0.00	11,709	0.00	
112	Fires on Network Rail infrastructure	36,681	0.01	5,085	0.01	41,766	0.01	
150	Network Rail share of industry leaf fall/adhesion delay	s 189,827	0.04	5,262	0.01	195,089	0.04	
201	Overhead line/third rail faults	208,216	0.05	36,130	0.08	244,346	0.05	
301A	Signal failures	339,628	0.08	51,043	0.11	390,671	0.08	
	Track circuit failures	862,883	0.20	122,652	0.26	985,535	0.20	
	Signalling system and power supply failures	296,540	0.07	71,995	0.15	368,535	0.08	
	Other signal equipment failures	59,283	0.01	13,006	0.03	72,289	0.01	
303	Telephone failures	49,837	0.01	6,572	0.01	56,409	0.01	
304	Cable faults (signalling and telecoms)	119,139	0.03	36,780	0.08	155,919	0.03	
	Change of aspects – no fault found	10,407	0.00	1,653	0.00	12,060	0.00	
305	Track circuit failures – leaf fall	17,931	0.00	3,976	0.01	21,907	0.00	
401	Bridge strikes	223,051	0.05	22,412	0.05	245,463	0.05	
402	External infrastructure damage – vandalism/theft	262,572	0.06	75,861	0.00	338,433	0.00	
403	External level crossing/road incidents (not bridges)	79,013	0.00	10,001	0.02	89,014	0.02	
501	Network Rail operations responsibility	611,777	0.02	104,566	0.02	716,343	0.02	
	Train planning	390,603	0.09	221,628	0.47	612,231	0.13	
	Network Rail commercial: other	4,601	0.00	3,953	0.01	8,554	0.00	
	Network Rail commercial: dispute take-back	479,613	0.00	108,554	0.01	588,167	0.00	
5020	External fatalities and trespass	570,879	0.11	70,796	0.23	641,675	0.12	
503 504	1		0.13		0.15		0.13	
504 505	External police on line/security alerts	75,266	0.02	8,194	0.02	83,460 69,421	0.02	
505 506	External fires	61,614	0.01	7,807		,	0.01	
	External other	105,321		18,512	0.04	123,833		
601 Total	Unexplained	301,331	0.07	34,171	0.07	335,502	0.07	
	minutes	8,386,939	1.92	2,036,592	4.36	10,423,531	2.15	
ı raın	km (million) 4	37,524,953		46,727,870		484,252,823		

No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	953,254	1,206,543	1,065,887	882,872	834,976
102	Problems with trackside signs, TSR boards	68,313	86,155	72,769	61,106	43,132
103	Level crossing failures	140,098	168,363	142,037	134,181	126,42
104A	TSRs due to condition of track	1,005,580	1,085,208	809,947	530,427	566,211
104B	Track faults (including broken rails)	1,030,372	1,178,882	1,244,069	849,711	925,259
104C	Rolling contact fatigue	988,591	250,750	74,378	19,046	14,477
105	Lineside structure defects (inc. weather impact)	330,529	332,341	274,968	234,619	124,904
106	Other infrastructure	470,863	582,746	610,463	441,227	386,547
107A	Possession over-run and related faults	291,435	364,411	304,992	305,317	259,164
107B	Possession work left incomplete	113,273	94,410	117,898	95,636	90,826
108	Mishap – infrastructure causes	55,776	53,061	107,970	80,707	72,018
109	Animals on line	173,562	153,377	162,510	148,178	141,102
110	External weather impact	447,678	709,843	462,477	561,759	333,218
111A	Wheel slip due to leaf fall	130,718	113,069	124,301	87,761	96,945
111B	Vegetation management failure	14,797	18,966	12,542	18,734	11,709
112	Fires on Network Rail infrastructure	65,155	60,911	81,642	45,887	41,766
150	Network Rail share of industry leaf fall/adhesion delay	ys 325,031	306,079	305,232	178,960	195,089
201	Overhead line/third rail faults	357,032	350,894	395,062	292,970	244,346
301A	Signal failures	463,732	509,725	510,991	434,036	390,67 <i>°</i>
301B	Track circuit failures	1,179,782	1,418,682	1,269,960	1,058,772	985,535
302A	Signalling system and power supply failures	473,516	482,853	572,099	410,155	368,535
302B	Other signal equipment failures	88,441	133,160	130,046	106,218	72,289
303	Telephone failures	38,932	44,014	48,806	42,513	56,409
304	Cable faults (signalling and telecoms)	168,104	146,318	193,616	141,302	155,919
304A	Change of aspects – no fault found	22,208	42,542	18,993	15,830	12,060
305	Track circuit failures – leaf fall	21,024	110,402	39,580	20,561	21,907
401	Bridge strikes	232,588	357,427	335,176	324,015	245,463
402	External infrastructure damage – vandalism/theft	403,708	369,946	341,241	319,781	338,433
403	External level crossing/road incidents (not bridges)	105,775	121,076	123,666	92,057	89,014
501	Network Rail operations responsibility	1,078,029	996,320	963,008	826,272	716,343
502A	Train planning	538,930	574,950	496,376	646,738	612,23
502B	Network Rail commercial: other	53,578	31,743	22,965	13,074	8,554
502C	Network Rail commercial: dispute take-back	394,876	859,141	756,976	741,959	588,16
503	External fatalities and trespass	449,755	605,212	611,448	554,319	641,675
504	External police on line/security alerts	44,719	38,473	50,776	42,452	83,460
505	External fires	49,054	111,896	124,129	56,553	69,42 <sup>-</sup>
506	External other	147,852	216,537	275,821	182,572	123,833
601	Unexplained	467,712	379,969	418,910	370,670	335,502
Total n	ninutes	13,384,372	14,666,395	13,673,727	11,368,947	10,423,53
Train	(million)	460.94	468.47	478.30	474.35	484.25

### National data by delay category

Material changes in delay minutes by cause category are described above, and the detailed figures by category are presented above: actual delay minutes for 2005/06 split between passenger and freight services (Table 21); and total delays for each category compared to previous years (Table 22).

No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	0.21	0.26	0.22	0.19	0.17
102	Problems with trackside signs, TSR boards	0.01	0.02	0.02	0.01	0.01
103	Level crossing failures	0.03	0.04	0.03	0.03	0.03
104A	TSRs due to condition of track	0.22	0.23	0.17	0.11	0.12
104B	Track faults (including broken rails)	0.22	0.25	0.26	0.18	0.19
104C	Rolling contact fatigue	0.21	0.05	0.02	0.00	0.00
105	Lineside structure defects (inc. weather impact)	0.07	0.07	0.06	0.05	0.03
106	Other infrastructure	0.10	0.12	0.13	0.09	0.08
107A	Possession over-run and related faults	0.06	0.08	0.06	0.06	0.05
107B	Possession work left incomplete	0.02	0.02	0.02	0.02	0.02
108	Mishap – infrastructure causes	0.01	0.01	0.02	0.02	0.01
109	Animals on line	0.04	0.03	0.03	0.03	0.03
110	External weather impact	0.10	0.15	0.10	0.12	0.07
111A	Wheel slip due to leaf fall	0.03	0.02	0.03	0.02	0.02
111B	Vegetation management failure	0.00	0.00	0.00	0.00	0.00
112	Fires on Network Rail infrastructure	0.01	0.01	0.02	0.01	0.01
150	Network Rail share of industry					
	leaf fall/adhesion delays	0.07	0.07	0.06	0.04	0.04
201	Overhead line/third rail faults	0.08	0.07	0.08	0.06	0.05
301A	Signal failures	0.10	0.11	0.11	0.09	0.08
301B	Track circuit failures	0.26	0.30	0.27	0.22	0.20
302A	Signalling system and power supply failures	0.10	0.10	0.12	0.09	0.08
302B	Other signal equipment failures	0.02	0.03	0.03	0.02	0.01
303	Telephone failures	0.01	0.01	0.01	0.01	0.01
304	Cable faults (signalling and telecoms)	0.04	0.03	0.04	0.03	0.03
304A	Change of aspects – no fault found	0.00	0.01	0.00	0.00	0.00
305	Track circuit failures – leaf fall	0.00	0.02	0.01	0.00	0.00
401	Bridge strikes	0.05	0.08	0.07	0.07	0.05
402	External infrastructure damage – vandalism/theft	0.09	0.08	0.07	0.07	0.07
403	External level crossing/road incidents (not bridges)	0.02	0.03	0.03	0.02	0.02
501	Network Rail operations responsibility	0.23	0.21	0.20	0.17	0.15
502A	Train planning	0.12	0.12	0.10	0.14	0.13
502B	Network Rail commercial: other	0.01	0.01	0.00	0.00	0.00
502C	Network Rail commercial: dispute take-back	0.09	0.18	0.16	0.16	0.12
503	External fatalities and trespass	0.10	0.13	0.13	0.12	0.13
504	External police on line/security alerts	0.01	0.01	0.01	0.01	0.02
505	External fires	0.01	0.02	0.03	0.01	0.01
506	External other	0.03	0.05	0.06	0.04	0.03
601	Unexplained	0.10	0.08	0.09	0.08	0.07
Total n	ninutes	2.90	3.13	2.86	2.40	2.15

# Results for operating routes by delay category

### Commentary on operating routes

The delays by cause category across Network Rail's eight routes are shown in tables 24 – 31. These show delays to passenger and freight services, and delay per 100 train kilometres. From these it can be seen that:

- overall delay per 100 train km is highest on London North Western (LNW) (2.45 minutes per 100 train km) and lowest on Wessex (1.57 minutes per 100 track km)
- other routes are within two relatively narrow ranges:
- 1. LNE, Anglia and Western are in the range 2.19 2.28 minutes
- 2. Sussex, Kent and Scotland are in the range 1.88 2.03 minutes
- the impact of track delays is relatively severe on the London North Western and London North Eastern routes relative to train kilometres run (compared to other routes)
- Sussex has a disproportionately high share of external caused delay, increasing further this year to 26% of total delays. This compares with a national average of 16% while the lowest share occurs in Scotland (10%)
- Anglia experiences the highest relative share of overhead line/third rail delays (6% of route delays), compared to a national average of 2%. These differences partly reflect the nature of infrastructure on these routes (i.e. Western has virtually no delays in this category, and only minimal electrified routes).

The trends in train performance during the year can be seen from Table 18, which shows delays by route split down into four-week periods. Figure 1 highlights both the improving trend of performance during the year, and the normal seasonal patterns of relatively weaker performance in summer and autumn.

The first half of the year was marked by two relatively poor periods (Periods 3 and 4):

- both Periods 3 and 4 saw an increase in delays from track circuit failures, points failures and summer weather related incidents (thunder storms and heat-related speed restrictions). The increase in delays can be seen across most Routes
- in addition in Period 4, delays arising from the London bombings and associated security alerts led to an additional 40,000 minutes of delay, across a number of Routes, but most noticeably in Sussex, LNE, Anglia and Western.

The main autumn periods (Periods 8 - 9) saw a normal seasonal increase in delays across a wide range of categories, although this was slightly more pronounced in 2005 than in the previous year. This year, the autumn period included a period of relatively mild but wet weather in October, followed by very low temperatures in the second half of November. It also extended further into Period 10 than is normal, due primarily to these relatively mild conditions at the start of the autumn period.

Table 24 London North Eastern delays to passenger and freight trains by detailed cause category 2005/06							
		Train delay minutes					
No	Category	Passenger	Freight	Combined	Per 100 train km		
101	Points failures	91,554	44,165	135,719	0.12		
102	Problems with trackside signs, TSR boards	8,489	1,788	10,277	0.01		
103	Level crossing failures	30,801	9,791	40,592	0.04		
104A	TSRs due to condition of track	156,085	156,575	312,660	0.28		
104B	Track faults (including broken rails)	196,338	87,534	283,872	0.26		
104C	Rolling contact fatigue	1,307	176	1,483	0.00		
105	Lineside structure defects (inc. weather impact)	19,337	27,987	47,324	0.04		
106	Other infrastructure	44,117	35,012	79,129	0.07		
107A	Possession over-run and related faults	25,711	18,992	44,703	0.04		
107B	Possession work left incomplete	5,194	1,948	7,142	0.01		
108	Mishap – infrastructure causes	24,687	6,576	31,263	0.03		
109	Animals on line	34,170	6,196	40,366	0.04		
110	External weather impact	65,099	12,161	77,260	0.07		
111A	Wheel slip due to leaf fall	13,546	1,190	14,736	0.01		
111B	Vegetation management failure	828	143	971	0.00		
112	Fires on Network Rail infrastructure	1,177	170	1,347	0.00		
150	Network Rail share of industry leaf fall/adhesion delay	s 38,724	953	39,677	0.04		
201	Overhead line/third rail faults	51,875	3,913	55,788	0.05		
301A	Signal failures	56,073	13,969	70,042	0.06		
301B	Track circuit failures	81,368	23,848	105,216	0.10		
302A	Signalling system and power supply failures	60,097	20,694	80,791	0.07		
302B	Other signal equipment failures	15,891	4,773	20,664	0.02		
303	Telephone failures	14,470	3,759	18,229	0.02		
304	Cable faults (signalling and telecoms)	24,691	10,832	35,523	0.03		
304A	Change of aspects – no fault found	1,633	201	1,834	0.00		
305	Track circuit failures – leaf fall	7,979	1,863	9,842	0.01		
401	Bridge strikes	37,405	7,688	45,093	0.04		
402	External infrastructure damage – vandalism/theft	56,135	27,875	84,010	0.08		
403	External level crossing/road incidents (not bridges)	28,918	4,954	33,872	0.03		
501	Network Rail operations responsibility	114,054	35,781	149,835	0.14		
502A	Train planning	46,731	63,141	109,872	0.10		
502B	Network Rail commercial: other	329	273	602	0.00		
502C	Network Rail commercial: dispute take-back	105,689	29,226	134,915	0.12		
503	External fatalities and trespass	108,809	17,880	126,689	0.12		
504	External police on line/security alerts	16,716	3,358	20,074	0.02		
505	External fires	13,215	2,465	15,680	0.01		
506	External other	28,556	9,932	38,488	0.03		
601	Unexplained	66,055	16,499	82,554	0.08		
Total n	ninutes	1,693,853	714,281	2,408,134	2.19		
Train km (million) 110,032,198							

Table 25 London North Western delays to passenger and freight trains by detailed cause category 2005/0						
			Train de	lay minutes		
No	Category	Passenger	Freight	Combined	Per 100 train km	
101	Points failures	159,763	55,651	215,414	0.20	
102	Problems with trackside signs, TSR boards	11,679	1,424	13,103	0.01	
103	Level crossing failures	16,493	1,417	17,910	0.02	
104A	TSRs due to condition of track	98,560	96,312	194,872	0.18	
104B	Track faults (including broken rails)	161,565	47,505	209,070	0.19	
104C	Rolling contact fatigue	5,836	1,686	7,522	0.01	
105	Lineside structure defects (inc. weather impact)	27,235	13,018	40,253	0.04	
106	Other infrastructure	112,646	17,584	130,230	0.12	
107A	Possession over-run and related faults	48,880	23,706	72,586	0.07	
107B	Possession work left incomplete	45,902	14,847	60,749	0.06	
108	Mishap – infrastructure causes	8,897	1,443	10,340	0.01	
109	Animals on line	35,122	4,891	40,013	0.04	
110	External weather impact	48,019	19,966	67,985	0.06	
111A	Wheel slip due to leaf fall	21,961	1,746	23,707	0.02	
111B	Vegetation management failure	717	4	721	0.00	
112	Fires on Network Rail infrastructure	4,108	3,592	7,700	0.01	
150	Network Rail share of industry leaf fall/adhesion delay	s 32,372	1,218	33,590	0.03	
201	Overhead line/third rail faults	54,047	19,495	73,542	0.07	
301A	Signal failures	88,015	14,914	102,929	0.10	
301B	Track circuit failures	238,669	42,766	281,435	0.26	
302A	Signalling system and power supply failures	62,795	22,003	84,798	0.08	
302B	Other signal equipment failures	11,480	4,168	15,648	0.01	
303	Telephone failures	4,128	293	4,421	0.00	
304	Cable faults (signalling and telecoms)	24,524	10,417	34,941	0.03	
304A	Change of aspects – no fault found	4,129	559	4,688	0.00	
305	Track circuit failures – leaf fall	3,521	1,193	4,714	0.00	
401	Bridge strikes	48,594	5,473	54,067	0.05	
402	External infrastructure damage – vandalism/theft	101,343	38,093	139,436	0.13	
403	External level crossing/road incidents (not bridges)	5,644	311	5,955	0.01	
501	Network Rail operations responsibility	128,836	26,330	155,166	0.14	
502A	Train planning	72,677	33,252	105,929	0.10	
502B	Network Rail commercial: other	1,657	986	2,643	0.00	
502C	Network Rail commercial: dispute take-back	134,949	27,592	162,541	0.15	
503	External fatalities and trespass	104,024	17,879	121,903	0.11	
504	External police on line/security alerts	10,011	1,378	11,389	0.01	
505	External fires	9,266	1,495	10,761	0.01	
506	External other	17,500	1,970	19,470	0.02	
601	Unexplained	103,426	6,771	110,197	0.10	
Total m	ninutes	2,068,990	583,348	2,652,338	2.45	
Train k	m (million)		1	08,221,761		

Table 26 Anglia delays to passenger and freight trains by detailed cause category 2005/06							
			Train del	ay minutes			
No	Category	Passenger	Freight	Combined	Per 100 train km		
101	Points failures	62,243	14,539	76,782	0.18		
102	Problems with trackside signs, TSR boards	2,496	425	2,921	0.01		
103	Level crossing failures	18,372	1,599	19,971	0.05		
104A	TSRs due to condition of track	9,679	3,114	12,793	0.03		
104B	Track faults (including broken rails)	67,660	27,566	95,226	0.22		
104C	Rolling contact fatigue	215	107	322	0.00		
105	Lineside structure defects (inc. weather impact)	5,374	8,091	13,465	0.03		
106	Other infrastructure	43,153	8,332	51,485	0.12		
107A	Possession over-run and related faults	27,445	7,736	35,181	0.08		
107B	Possession work left incomplete	6,007	994	7,001	0.02		
108	Mishap – infrastructure causes	3,905	183	4,088	0.01		
109	Animals on line	6,875	275	7,150	0.02		
110	External weather impact	24,535	2,800	27,335	0.06		
111A	Wheel slip due to leaf fall	5,132	638	5,770	0.01		
111B	Vegetation management failure	1,786	495	2,281	0.01		
112	Fires on Network Rail infrastructure	978	192	1,170	0.00		
150	Network Rail share of industry leaf fall/adhesion delays	14,955	351	15,306	0.03		
201	Overhead line/third rail faults	48,990	10,260	59,250	0.14		
301A	Signal failures	32,862	3,947	36,809	0.08		
301B	Track circuit failures	85,939	12,311	98,250	0.22		
302A	Signalling system and power supply failures	26,256	7,405	33,661	0.08		
302B	Other signal equipment failures	3,305	602	3,907	0.01		
303	Telephone failures	6,827	480	7,307	0.02		
304	Cable faults (signalling and telecoms)	2,751	525	3,276	0.01		
304A	Change of aspects – no fault found	1,470	426	1,896	0.00		
305	Track circuit failures – leaf fall	5,256	889	6,145	0.01		
401	Bridge strikes	15,248	1,684	16,932	0.04		
402	External infrastructure damage – vandalism/theft	14,794	1,003	15,797	0.04		
403	External level crossing/road incidents (not bridges)	18,907	2,274	21,181	0.05		
501	Network Rail operations responsibility	66,093	14,241	80,334	0.18		
502A	Train planning	45,467	39,021	84,488	0.19		
502B	Network Rail commercial: other	882	967	1,849	0.00		
502C	Network Rail commercial: dispute take-back	19,692	6,681	26,373	0.06		
503	External fatalities and trespass	65,343	8,609	73,952	0.17		
504	External police on line/security alerts	10,953	1,423	12,376	0.03		
505	External fires	15,397	2,373	17,770	0.04		
506	External other	7,631	926	8,557	0.02		
601	Unexplained	6,665	762	7,427	0.02		
Total n	ninutes	801,538	194,246	995,784	2.27		
Train k	m (million)		4	3,824,910			

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			Train dela	ay minutes	
No	Category	Passenger	Freight	Combined	Per 10 train k
101	Points failures	52,525	1,825	54,350	0.1
102	Problems with trackside signs, TSR boards	470	21	491	0.0
103	Level crossing failures	7,031	93	7,124	0.0
104A	TSRs due to condition of track	0	_	0	
104B	Track faults (including broken rails)	34,240	1,912	36,152	0.1
104C	Rolling contact fatigue	598	62	660	0.0
105	Lineside structure defects (inc. weather impact)	1,425	11	1,436	0.0
106	Other infrastructure	17,145	1,397	18,542	0.0
107A	Possession over-run and related faults	11,996	3,073	15,069	0.0
107B	Possession work left incomplete	6,129	674	6,803	0.0
108	Mishap – infrastructure causes	1,643	9	1,652	0.0
109	Animals on line	2,750	108	2,858	0.0
110	External weather impact	22,552	467	23,019	0.0
111A	Wheel slip due to leaf fall	9,974	369	10,343	0.0
111B	Vegetation management failure	1,959	8	1,967	0.0
112	Fires on Network Rail infrastructure	8,520	140	8,660	0.0
150	Network Rail share of industry leaf fall/adhesion delays	35,304	469	35,773	0.1
201	Overhead line/third rail faults	10,575	219	10,794	0.0
301A	Signal failures	24,589	1,182	25,771	0.0
301B	Track circuit failures	68,934	1,775	70,709	0.2
302A	Signalling system and power supply failures	44,565	2,356	46,921	0.1
302B	Other signal equipment failures	2,201	321	2,522	0.0
303	Telephone failures	745	72	817	0.0
304	Cable faults (signalling and telecoms)	4,662	241	4,903	0.0
304A	Change of aspects – no fault found	351	6	357	0.0
305	Track circuit failures – leaf fall	202	13	215	0.0
401	Bridge strikes	20,086	339	20,425	0.0
402	External infrastructure damage – vandalism/theft	15,087	513	15,600	0.0
403	External level crossing/road incidents (not bridges)	1,491	28	1,519	0.0
501	Network Rail operations responsibility	78,728	3,366	82,094	0.2
502A	Train planning	18,672	5,999	24,671	0.0
502B	Network Rail commercial: other	54	9	63	0.0
502C	Network Rail commercial: dispute take-back	42,821	1,918	44,739	0.2
503	External fatalities and trespass	44,127	1,773	45,900	0.1
504	External police on line/security alerts	4,344	123	4,467	0.0
505	External fires	13,548	732	14,280	0.0
506	External other	5,179	34	5,213	0.0
601	Unexplained	4,716	202	4,918	0.0
	ninutes	619,938	31,859	651,797	2.0

Table 28 Sussex delays to passenger and freight trains by detailed cause category 2005/06							
			Train del	ay minutes			
No	Category	Passenger	Freight	Combined	Per 100 train km		
101	Points failures	30,452	436	30,888	0.10		
102	Problems with trackside signs, TSR boards	384	_	384	0.00		
103	Level crossing failures	4,181	17	4,198	0.01		
104A	TSRs due to condition of track	159	0	159	0.00		
104B	Track faults (including broken rails)	19,682	313	19,995	0.07		
104C	Rolling contact fatigue	2,403	4	2,407	0.01		
105	Lineside structure defects (inc. weather impact)	4	_	4	0.00		
106	Other infrastructure	22,821	188	23,009	0.08		
107A	Possession over-run and related faults	8,348	936	9,284	0.03		
107B	Possession work left incomplete	616	16	632	0.00		
108	Mishap – infrastructure causes	6,118	341	6,459	0.02		
109	Animals on line	2,810	43	2,853	0.01		
110	External weather impact	20,681	968	21,649	0.07		
111A	Wheel slip due to leaf fall	8,141	73	8,214	0.03		
111B	Vegetation management failure	363	40	403	0.00		
112	Fires on Network Rail infrastructure	10,490	77	10,567	0.04		
150	Network Rail share of industry leaf fall/adhesion delays	5 15,534	72	15,606	0.05		
201	Overhead line/third rail faults	12,705	102	12,807	0.04		
301A	Signal failures	14,580	349	14,929	0.05		
301B	Track circuit failures	39,861	595	40,456	0.14		
302A	Signalling system and power supply failures	17,332	135	17,467	0.06		
302B	Other signal equipment failures	2,174	26	2,200	0.01		
303	Telephone failures	4,305	15	4,320	0.01		
304	Cable faults (signalling and telecoms)	8,484	109	8,593	0.03		
304A	Change of aspects – no fault found	222	1	223	0.00		
305	Track circuit failures – leaf fall	435	10	445	0.00		
401	Bridge strikes	25,382	344	25,726	0.09		
402	External infrastructure damage – vandalism/theft	11,302	102	11,404	0.04		
403	External level crossing/road incidents (not bridges)	2,769	_	2,769	0.01		
501	Network Rail operations responsibility	67,880	1,295	69,175	0.23		
502A	Train planning	22,324	2,029	24,353	0.08		
502B	Network Rail commercial: other	81	_	81	0.00		
502C	Network Rail commercial: dispute take-back	39,812	612	40,424	0.14		
503	External fatalities and trespass	63,564	854	64,418	0.22		
504	External police on line/security alerts	13,959	268	14,227	0.05		
505	External fires	1,681	45	1,726	0.01		
506	External other	14,084	525	14,609	0.05		
601	Unexplained	33,345	446	33,791	0.11		
Total m	inutes	549,468	11,386	560,854	1.90		
Train k	Train km (million) 29,576,804						
		Operational performance					
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			Train del	ay minutes	
No	Category	Passenger	Freight	Combined	Per 100 train km
101	Points failures	75,476	4,764	80,240	0.18
102	Problems with trackside signs, TSR boards	1,946	93	2,039	0.00
103	Level crossing failures	8,502	425	8,927	0.02
104A	TSRs due to condition of track	0	_	0	
104B	Track faults (including broken rails)	64,626	8,187	72,813	0.16
104C	Rolling contact fatigue	1,164	50	1,214	0.00
105	Lineside structure defects (inc. weather impact)	624	13	637	0.00
106	Other infrastructure	15,857	755	16,612	0.04
107A	Possession over-run and related faults	19,909	4,632	24,541	0.06
 107B	Possession work left incomplete	1,989	48	2,037	0.00
108	Mishap – infrastructure causes	704	21	725	0.00
109	Animals on line	4,481	485	4,966	0.01
110	External weather impact	14.603	379	14,982	0.03
 111A	Wheel slip due to leaf fall	10,704	390	11,094	0.03
 111B	Vegetation management failure	1,027	70	1,097	0.00
112	Fires on Network Rail infrastructure	8,115	99	8,214	0.02
150	Network Rail share of industry leaf fall/adhesion delays	17,583	559	18,142	0.04
201	Overhead line/third rail faults	19,835	445	20,280	0.05
301A	Signal failures	26,068	2,552	28,620	0.06
301B	Track circuit failures	108,372	5,590	113,962	0.26
302A	Signalling system and power supply failures	12,654	872	13,526	0.03
302B	Other signal equipment failures	1,283	108	1,391	0.00
303	Telephone failures	1,667	156	1,823	0.00
304	Cable faults (signalling and telecoms)	12,555	2,631	15,186	0.03
304A	Change of aspects – no fault found	146	_	146	0.00
305	Track circuit failures – leaf fall	538	8	546	0.00
401	Bridge strikes	14,392	603	14,995	0.03
402	External infrastructure damage – vandalism/theft	21,595	1,164	22,759	0.05
403	External level crossing/road incidents (not bridges)	5,273	767	6,040	0.01
501	Network Rail operations responsibility	41,366	3,669	45,035	0.10
502A	Train planning	27,290	7,351	34,641	0.08
502B	Network Rail commercial: other	957	342	1,299	0.00
502C	Network Rail commercial: dispute take-back	28,801	4,194	32,995	0.07
503	External fatalities and trespass	51,140	2,844	53,984	0.12
504	External police on line/security alerts	1,764	236	2,000	0.00
505	External fires	201	_	201	0.00
506	External other	12,336	203	12,539	0.03
601	Unexplained	1,877	501	2,378	0.01
	ninutes	637,420	55,206	692,626	1.57

Table	<b>30</b> Western delays to passenger and freight trains by d	etailed cause	category 20	005/06	
			Train del	ay minutes	5 400
No	Category	Passenger	Freight	Combined	Per 100 train km
101	Points failures	117,924	34,087	152,011	0.22
102	Problems with trackside signs, TSR boards	8,178	920	9,098	0.01
103	Level crossing failures	15,810	2,155	17,965	0.03
104A	TSRs due to condition of track	17,360	4,577	21,937	0.03
104B	Track faults (including broken rails)	121,808	25,475	147,283	0.22
104C	Rolling contact fatigue	266	31	297	0.00
105	Lineside structure defects (inc. weather impact)	12,413	1,821	14,234	0.02
106	Other infrastructure	46,546	8,085	54,631	0.08
107A	Possession over-run and related faults	31,438	11,402	42,840	0.06
107B	Possession work left incomplete	2,473	465	2,938	0.00
108	Mishap – infrastructure causes	12,243	3,380	15,623	0.02
109	Animals on line	24,268	2,715	26,983	0.04
110	External weather impact	49,360	7,323	56,683	0.08
111A	Wheel slip due to leaf fall	8,867	871	9,738	0.01
111B	Vegetation management failure	3,076	866	3,942	0.01
112	Fires on Network Rail infrastructure	3,290	815	4,105	0.01
150	Network Rail share of industry leaf fall/adhesion dela	ys 15,326	458	15,784	0.02
201	Overhead line/third rail faults	2,054	156	2,210	0.00
301A	Signal failures	52,477	6,606	59,083	0.09
301B	Track circuit failures	171,994	21,071	193,065	0.28
302A	Signalling system and power supply failures	38,481	10,381	48,862	0.07
302B	Other signal equipment failures	14,859	1,949	16,808	0.02
303	Telephone failures	13,210	1,170	14,380	0.02
304	Cable faults (signalling and telecoms)	24,962	6,837	31,799	0.05
304A	Change of aspects – no fault found	1,856	448	2,304	0.00
305	Track circuit failures – leaf fall	0	_	0	_
401	Bridge strikes	51,515	4,706	56,221	0.08
402	External infrastructure damage – vandalism/theft	27,178	3,853	31,031	0.05
403	External level crossing/road incidents (not bridges)	11,877	1,056	12,933	0.02
501	Network Rail operations responsibility	78,157	10,973	89,130	0.13
502A	Train planning	104,425	45,120	149,545	0.22
502B	Network Rail commercial: other	221	14	235	0.00
502C	Network Rail commercial: dispute take-back	57,672	24,339	82,011	0.12
503	External fatalities and trespass	101,185	16,408	117,593	0.17
504	External police on line/security alerts	15,513	1,241	16,754	0.02
505	External fires	3,877	300	4,177	0.01
506	External other	10,584	1,502	12,086	0.02
601	Unexplained	12,778	2,020	14,798	0.02
Total n	ninutes	1,285,521	265,596	1,551,117	2.28
Train k	xm (million)		6	67,958,779	-

36

Table	31 Scotland delays to passenger and freight trains by deta	ailed cause	category 20	005/06	
			Train dela	ay minutes	
No	Category	Passenger	Freight	Combined	Per 100 train km
101	Points failures	67,462	22,110	89,572	0.18
102	Problems with trackside signs, TSR boards	3,877	942	4,819	0.01
103	Level crossing failures	8,679	1,055	9,734	0.02
104A	TSRs due to condition of track	18,322	5,468	23,790	0.05
104B	Track faults (including broken rails)	44,250	16,598	60,848	0.13
104C	Rolling contact fatigue	447	125	572	0.00
105	Lineside structure defects (inc. weather impact)	5,970	1,581	7,551	0.02
106	Other infrastructure	9,809	3,100	12,909	0.03
107A	Possession over-run and related faults	9,767	5,193	14,960	0.03
107B	Possession work left incomplete	2,970	554	3,524	0.01
108	Mishap – infrastructure causes	1,523	345	1,868	0.00
109	Animals on line	13,609	2,304	15,913	0.03
110	External weather impact	34,922	9,383	44,305	0.09
111A	Wheel slip due to leaf fall	12,351	992	13,343	0.03
111B	Vegetation management failure	311	16	327	0.00
112	Fires on Network Rail infrastructure	3	_	3	0.00
150	Network Rail share of industry leaf fall/adhesion delays	20,029	1,182	21,211	0.04
201	Overhead line/third rail faults	8,135	1,540	9,675	0.02
301A	Signal failures	44,964	7,524	52,488	0.11
301B	Track circuit failures	67,746	14,696	82,442	0.17
302A	Signalling system and power supply failures	34,360	8,149	42,509	0.09
302B	Other signal equipment failures	8,090	1,059	9,149	0.02
303	Telephone failures	4,485	627	5,112	0.01
304	Cable faults (signalling and telecoms)	16,510	5,188	21,698	0.04
304A	Change of aspects – no fault found	600	12	612	0.00
305	Track circuit failures – leaf fall	0	-	0	_
401	Bridge strikes	10,429	1,575	12,004	0.02
402	External infrastructure damage – vandalism/theft	15,138	3,258	18,396	0.04
403	External level crossing/road incidents (not bridges)	4,134	611	4,745	0.01
501	Network Rail operations responsibility	36,663	8,911	45,574	0.09
502A	Train planning	53,017	25,715	78,732	0.16
502B	Network Rail commercial: other	420	1,362	1,782	0.00
502C	Network Rail commercial: dispute take-back	50,177	13,992	64,169	0.13
503	External fatalities and trespass	32,687	4,549	37,236	0.08
504	External police on line/security alerts	2,006	167	2,173	0.00
505	External fires	4,429	397	4,826	0.01
506	External other	9,451	3,420	12,871	0.03
601	Unexplained	72,469	6,970	79,439	0.16
Total m	ninutes	730,211	180,670	910,881	1.88
Train km (million) 48,436,411					

Operational performance

#### Asset failure

# Infrastructure incidents recorded for attribution of delay

The number of performance incidents in asset related categories is shown in this section. These incidents are recorded for the purpose of identifying the cause and responsibility of delays and cancellations, whilst providing valuable management information on the causes of and trends in delays and hence an indication of where to maintain or renew the network assets. The records do not seek to represent a catalogue of every single physical component or system failure occurring on the network.

Bridge strikes represent externally caused incidents (road vehicles hitting bridges). However, Network Rail has some influence over prevention measures, and is able to mitigate the impact to either prevent or reduce the train delays arising.

Table	32 Network infrastructure incidents recorded fo	r delay att	<b>ribution</b> (num	nber)		
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	10,240	10,844	9,802	8,769	8,717
103	Level crossing failures	2,808	3,050	2,794	2,725	2,657
104A	TSRs due to condition of track	2,945	4,078	3,860	3,158	2,800
104B	Track faults (including broken rails)	6,047	6,545	7,450	5,774	6,293
104C	Rolling contact fatigue	3,139	640	219	98	71
105	Lineside structure defects (including weather impact)	1,078	1,067	1,090	841	611
106	Other infrastructure	5,791	7,027	8,219	7,951	7,960
108	Mishap – infrastructure causes	214	203	308	369	468
112	Fires on Network Rail infrastructure	426	424	513	282	314
201	Overhead line/third rail faults	1,743	1,547	1,475	1,601	1,492
301A	Signal failures	9,206	9,160	9,119	8,300	8,141
301B	Track circuit failures	10,900	10,668	9,935	9,226	8,568
302A	Signalling system and power supply failures	3,408	3,494	3,719	3,448	3,272
302B	Other signal equipment failures <sup>1</sup>	2,034	2,591	2,653	2,337	1,735
303	Telephone failures	922	1,008	994	1,060	1,067
304	Cable faults (signalling and telecoms)	515	423	535	445	470
304A	Change of aspects – no fault found	458	534	342	274	231
401	Bridge strikes <sup>2</sup>	1,626	1,912	2,009	1,888	1,593
Total		63,500	65,215	65,036	58,546	56,460

Note: incidents are recorded for the attribution of delays and cancellations. In a small number of cases more than one incident will be created for the same physical incident, to reflect different phases of an incident or responsibilities for contractual delay attribution purposes. The impact on bridge strike incident numbers is noted below.

 The increase and subsequent decline recorded under category 302B above is largely accounted for by faults occurring with TPWS equipment. In 2005/06 this accounted for 598 in this category. This was a reduction from 829 in 2004/05. A further 55 TPWS incidents are included within the 301A category.

2. The number of bridge strike incidents created for attribution purposes (as shown above) tends to overstate the actual number of physical incidents causing delay. This is due to the existence of duplicate incidents created for attribution purposes. In recent years, the need to split these incidents has reduced and this overstatement is estimated at 3% for 2005/06. The underlying reduction in bridge strike incident numbers in 2005/06 was 10% rather than 18% as implied from the figures shown above.

#### **Network-wide totals**

39

#### Commentary

For most signalling categories, the number of asset failure incidents causing delay fell in 2005/06. Points failures were down by 1%, signal failures fell by 2%, track circuit failures fell by 7% and signalling system and power supply failures fell by 5%. The other minor categories of signalling faults combined fell by 15%.

This is the third successive year with a reduction in the numbers of points and track circuit failures. Over the three years, incident numbers for both of these two categories has fallen by 20%.

The number of track related incidents (categories 104a - c) increased by 1%. A 9% increase in the

number of incidents for track faults (including broken rails), was offset by a reduction of 11% in the recorded incidents for TSRs due to condition of track.The number of traction power supply incidents (overhead line/third rail faults) fell by 7%, largely reversing the increase seen the previous year.

The number of level crossing incidents fell once again by 2%. Fires starting on Network Rail's infrastructure increased by 11%, after falling sharply the previous year.

The underlying number of bridge strike incidents causing delay fell by 10% (although the actual number of incidents created fell by more than this – see note 2 on page 38).

Table	Table 33 London North Eastern infrastructure incidents recorded for delay attribution (number)							
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06		
101	Points failures	1,991	2,376	2,037	1,697	1,741		
103	Level crossing failures	1,005	1,146	899	824	839		
104A	TSRs due to condition of track	1,465	1,950	2,118	1,550	1,354		
104B	Track faults (including broken rails)	1,521	1,723	1,911	1,732	1,832		
104C	Rolling contact fatigue	770	161	86	9	7		
105	Lineside structure defects (including weather impact)	340	333	403	247	202		
106	Other infrastructure	1,475	1,996	2,400	2,754	1,962		
108	Mishap – infrastructure causes	42	43	101	216	328		
112	Fires on Network Rail infrastructure	46	33	50	20	24		
201	Overhead line/third rail faults	278	274	342	361	324		
301A	Signal failures	2,008	1,979	1,791	1,819	1,642		
301B	Track circuit failures	1,877	2,206	1,577	1,386	1,239		
302A	Signalling system and power supply failures	981	971	1,036	765	839		
302B	Other signal equipment failures	624	802	819	671	498		
303	Telephone failures	344	375	350	351	331		
304	Cable faults (signalling and telecoms)	158	119	203	114	171		
304A	Change of aspects-no fault found	74	59	47	60	44		
401	Bridge strikes	342	391	388	457	343		
Total		15,341	16,937	16,558	15,033	13,720		

#### Operating Routes London North Eastern

### London North Western

Table	34 London North Western infrastructure incider	nts recorde	ed for delay a	attribution (n	umber)	
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	2,746	2,803	2,757	2,328	2,319
103	Level crossing failures	411	385	353	345	355
104A	TSRs due to condition of track	754	1,004	830	950	839
104B	Track faults (including broken rails)	1,503	1,566	1,904	1,373	1,338
104C	Rolling contact fatigue	493	202	74	29	24
105	Lineside structure defects (including weather impact)	319	268	255	267	138
106	Other infrastructure	1,970	2,643	2,943	2,425	2,189
108	Mishap – infrastructure causes	27	33	63	32	32
112	Fires on Network Rail infrastructure	88	76	72	49	52
201	Overhead line/third rail faults	513	414	342	492	440
301A	Signal failures	2,404	2,473	2,501	2,159	2,199
301B	Track circuit failures	3,049	2,683	2,806	2,685	2,672
302A	Signalling system and power supply failures	816	782	865	910	763
302B	Other signal equipment failures	382	446	460	511	330
303	Telephone failures	115	140	112	117	108
304	Cable faults (signalling and telecoms)	189	158	129	112	103
304A	Change of aspects – no fault found	105	149	118	101	93
401	Bridge strikes	472	558	529	477	388
Total		16,356	16,783	17,113	15,362	14,382

# Anglia

No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	777	892	728	618	622
103	Level crossing failures	358	431	436	403	347
104A	TSRs due to condition of track	9	410	332	305	222
104B	Track faults (including broken rails)	622	665	850	663	630
104C	Rolling contact fatigue	641	60	12	4	3
105	Lineside structure defects (including weather impact)	36	48	44	28	37
106	Other infrastructure	381	484	486	662	881
108	Mishap – infrastructure causes	17	12	19	17	16
112	Fires on Network Rail infrastructure	19	22	23	9	35
201	Overhead line/third rail faults	279	314	363	294	288
301A	Signal failures	732	856	776	569	589
301B	Track circuit failures	965	921	921	797	664
302A	Signalling system and power supply failures	330	367	317	381	265
302B	Other signal equipment failures	105	140	144	141	92
303	Telephone failures	111	112	143	129	136
304	Cable faults (signalling and telecoms)	11	10	21	21	16
304A	Change of aspects – no fault found	10	35	48	21	42
401	Bridge strikes	109	115	133	142	140
Total		5,512	5,894	5,796	5,204	5,025

41

# Kent

Table	36 Kent infrastructure incidents recorded for de	lay attribut	i <b>on</b> (number	)		
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	615	712	578	605	527
103	Level crossing failures	74	119	101	110	121
104A	TSRs due to condition of track	0	1	0	0	0
104B	Track faults (including broken rails)	320	355	392	300	445
104C	Rolling contact fatigue	26	25	2	14	7
105	Lineside structure defects (including weather impact)	21	37	19	20	8
106	Other infrastructure	183	253	349	314	532
108	Mishap – infrastructure causes	20	24	19	9	6
112	Fires on Network Rail infrastructure	56	65	85	42	59
201	Overhead line/third rail faults	103	115	76	80	57
301A	Signal failures	470	501	625	483	574
301B	Track circuit failures	774	790	787	647	590
302A	Signalling system and power supply failures	252	351	308	244	286
302B	Other signal equipment failures	93	134	149	89	87
303	Telephone failures	27	19	33	28	34
304	Cable faults (signalling and telecoms)	62	61	49	54	18
304A	Change of aspects – no fault found	70	58	19	21	24
401	Bridge strikes	125	174	131	128	116
Total		3,291	3,794	3,722	3,188	3,491

### Sussex

Table	37 Sussex infrastructure incidents recorded for	delay attri	bution (num	oer)		
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	574	581	512	411	299
103	Level crossing failures	153	140	161	131	111
104A	TSR's due to condition of track	0	0	1	10	2
104B	Track faults (including broken rails)	204	152	178	145	193
104C	Rolling contact fatigue	29	1	0	2	10
105	Lineside structure defects (including weather impact)	18	9	13	11	1
106	Other infrastructure	233	152	178	208	375
108	Mishap – infrastructure causes	24	10	16	13	30
112	Fires on Network Rail infrastructure	76	83	94	64	67
201	Overhead line/third rail faults	68	59	54	53	112
301A	Signal failures	681	494	506	471	324
301B	Track circuit failures	535	490	478	396	394
302A	Signalling system and power supply failures	159	158	200	162	204
302B	Other signal equipment failures	103	133	50	79	68
303	Telephone failures	24	19	22	22	32
304	Cable faults (signalling and telecoms)	19	13	23	17	40
304A	Change of aspects – no fault found	57	66	15	14	13
401	Bridge strikes	94	68	175	100	74
Total		3,051	2,628	2,676	2,309	2,349

#### Wessex

No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	730	834	629	696	827
103	Level crossing failures	225	214	251	235	242
104A	TSRs due to condition of track	3	0	0	0	0
104B	Track faults (including broken rails)	434	541	816	498	574
104C	Rolling contact fatigue	4	7	2	8	9
105	Lineside structure defects (including weather impact)	56	46	28	15	6
106	Other infrastructure	581	679	895	640	785
108	Mishap – infrastructure causes	54	22	35	15	5
112	Fires on Network Rail infrastructure	135	131	183	93	68
201	Overhead line/third rail faults	54	69	90	102	93
301A	Signal failures	537	607	641	658	539
301B	Track circuit failures	969	1,034	1,054	1,172	928
302A	Signalling system and power supply failures	257	196	233	281	222
302B	Other signal equipment failures	85	233	198	153	107
303	Telephone failures	35	34	37	30	58
304	Cable faults (signalling and telecoms)	41	17	34	41	22
304A	Change of aspects – no fault found	133	87	40	11	4
401	Bridge strikes	123	161	142	120	140
Total		4,456	4,912	5,308	4,768	4,629

### Western

Table	39 Western infrastructure incidents recorded fo	r delay attr	<b>ibution</b> (num	ıber)		
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	1,564	1,530	1,513	1,343	1,316
103	Level crossing failures	390	378	362	401	411
104A	TSRs due to condition of track	504	519	433	233	235
104B	Track faults (including broken rails)	882	1,049	982	662	828
104C	Rolling contact fatigue	393	25	28	17	6
105	Lineside structure defects (including weather impact)	150	108	189	79	112
106	Other infrastructure	330	487	667	704	927
108	Mishap – infrastructure causes	22	49	43	44	39
112	Fires on Network Rail infrastructure	2	12	6	5	8
201	Overhead line/third rail faults	12	15	9	7	11
301A	Signal failures	974	946	876	876	940
301B	Track circuit failures	1,423	1,337	1,280	1,100	1,090
302A	Signalling system and power supply failures	275	344	440	344	357
302B	Other signal equipment failures	444	462	533	404	316
303	Telephone failures	170	172	184	238	235
304	Cable faults (signalling and telecoms)	22	36	65	60	56
304A	Change of aspects – no fault found	6	50	52	42	5
401	Bridge strikes	226	304	305	318	282
Total		7,789	7,823	7,967	6,877	7,174

43

#### Scotland

Table	40 Scotland infrastructure incidents recorded fo	r delay att	ribution (nun	nber)		
No	Category	2001/02	2002/03	2003/04	2004/05	2005/06
101	Points failures	1,243	1,116	1,048	1,071	1,066
103	Level crossing failures	192	237	231	276	231
104A	TSRs due to condition of track	210	194	146	110	148
104B	Track faults (including broken rails)	561	494	417	401	453
104C	Rolling contact fatigue	783	159	15	15	5
105	Lineside structure defects (including weather impact)	138	218	139	174	107
106	Other infrastructure	638	333	301	244	309
108	Mishap – infrastructure causes	8	10	12	23	12
112	Fires on Network Rail infrastructure	4	2	0	0	1
201	Overhead line/third rail faults	436	287	199	212	167
301A	Signal failures	1,400	1,304	1,403	1,265	1,334
301B	Track circuit failures	1,308	1,207	1,032	1,043	991
302A	Signalling system and power supply failures	338	325	320	361	336
302B	Other signal equipment failures	198	241	300	289	237
303	Telephone failures	96	137	113	145	133
304	Cable faults (signalling and telecoms)	13	9	11	26	44
304A	Change of aspects – no fault found	3	30	3	4	6
401	Bridge strikes	135	141	206	146	110
Total		7,704	6,444	5,896	5,805	5,690

# Customer and supplier satisfaction

This section provides an indication of customer and stakeholder satisfaction through the following measures:

- passenger complaints
- customer satisfaction passenger operators
- customer satisfaction freight operators
- supplier satisfaction.

#### Passenger complaints Definition and reporting method

This measure reflects direct feedback from passengers. A complaint is defined as "any expression of dissatisfaction by a customer or potential customer about service delivery or about company or industry policy". Train operators record complaints made by letter, fax, e-mail, pre-printed form or telephone and ORR report the results each quarter in National Rail Trends as the number of complaints per 100,000 journeys.

#### Commentary

In previous years the targets set for this measure have been easily beaten, hence the target reducing by 40 to 70 for 2005/06.

Despite the slight increase in complaints per 100,000 journeys, it should be noted that this does not necessarily indicate a worse performance by the industry. A number of factors can affect the volume of complaints received. An operator for example, may make it easier for a passenger to complain (e.g. by advertising, through the availability of pre-printed forms, by opening and extending complaint telephone lines) thereby possibly affecting the number of complaints.

#### Results

Table 41 Passenger complaints per 100k journeys						
	2004/05 target	2004/05 actual	Variance	2005/06 target	2005/06 actual	Variance
Passenger complaints	110	71	39	70	75	-5

#### Definition and reporting method

We have a measure for customer satisfaction both for passenger and freight operators, which is based on a questionnaire administered by MORI. One of the questions asks:

"Which of these best describes how you feel about Network Rail?"

The respondent chooses an answer from the following exhaustive list, with a numerical value assigned to the response on data analysis (as shown in brackets), but which is not explicit to the respondent:

I would be critical without being asked [-2]

I would be critical if someone asked my opinion [-1]

I would be neutral if someone asked my opinion [0]

I would speak highly if someone asked my opinion [1]

I think so much that I would speak highly of them without being asked [2]

By summing the scores and dividing by the number of respondents a weighted index score is derived:

Index -2 to 2

#### Commentary

This shows an improving trend for passenger operators' customer satisfaction despite them still being overall dissatisfied. However, the freight operators' score has continued to deteriorate indicating that far more work needs to be done.

Following the publication of the MORI survey results last year, meetings were held between senior route teams and customers to share the results and understand what underpinned the responses. These meetings tried to identify the main issues that, if they were addressed, would improve the customers' satisfaction with Network Rail.

The outputs of these meetings have been incorporated into the Customer Satisfaction Improvement Plan, CS1, that will be rolled out across the company in 2006. This action plan is designed to change company culture so that we promote both internal and external customer service. This will comprise work streams covering four principle areas:

-0.87

-0.99

-0.12

- communications
- training and education
- people and processes
- benchmarking and measurement.

#### Results

Customer satisfaction

Table 42 Customer satisfaction – passenger operators								
Unit of measure	2004/05	2005/06	Variance					
Customer satisfaction Index -2 to 2	-0.47	-0.30	0.17					
Table 43 Customer satisfaction – freight operators								
Unit of measure	2004/05	2005/06	Variance					

45

Table 44 Supplier satisfaction – major suppliers								
	Unit of Measure	2004/05	2005/06	Variance				
Customer satisfaction	Index -2 to 2	-0.30	-0.06	0.24				

#### Supplier satisfaction Definition and reporting method

The supplier satisfaction survey is also carried out by MORI on behalf of Network Rail and is based on the same methodology as that for the passenger and freight surveys.

#### Results

The results are shown in Table 44 above.

#### Commentary

Due to Maintenance being brought in-house during 2004/05 the method for collection of data has slightly changed to take account of all major suppliers for renewals and enhancements work. Taking into account this recent change, which excludes Maintenance staff that are now integrated into Network Rail, the supplier satisfaction has improved. We will continue to work with suppliers to improve this further.

#### Joint performance process Introduction and origin

The joint performance process (JPP) is the rail industry's process for bringing together performance improvement throughout the network and aligning this with output to passengers.

Its origin is the 'Future of Rail' Review carried out by Government in 2004. A key output from the review was that Network Rail should take over management of network performance, moving performance management into the responsibility of one party.

Before this change, the separate rail companies focussed on individual targets as specified in contracts. For Network Rail this was the Delay Minutes target set by ORR under its network licence. Whilst reductions in delays produce benefits to passengers, the separated approach to performance improvement meant that best value was not always delivered.

The objective of the JPP is to bring together performance improvement across the industry and align all actions to the provision of punctual train services for passengers. The prime target is to improve PPM. In principle, the collaborative network thus achieved should make performance improvement easier, more aligned to customer expectations and, over time, better than might otherwise be possible. The key process is the production of an annual Joint Performance Improvement Plan (JPIP) against which monitoring and review takes place throughout the year – a 'plan, do, review' cycle.

#### Progress in 2005/06

As a first step, JPIPs were produced for every franchised TOC before 31 March 2005. These were compiled against an industry template and broadly comprised the individual plans of Network Rail and each TOC, plus a statement of intent to develop the collaborative network through 2005/06.

Within the year, progress has focussed on process and people issues.

#### Process

The key aim for process development has been to achieve an industry consensus for the best approach. In principle Network Rail owns the process, with the industry consensus being established through an industry working group and specific simple networking, visits etc. Secondary aims have been to:

- strike the right balance between a national consistency – to report to stakeholders, enable good practice transfer, etc – and enabling work at local level without unnecessary constraint, and appropriate to the challenge on a TOC by TOC basis
- build on the wording now included in the Network Code (Condition LA), which sets the overall framework within which the process is to deliver the collaborative working.

Within this context, the process documentation has significantly evolved to include:

- an increasing toolkit as relationships are explored and better understood e.g. between delay minutes and PPM
- appropriate templating
- national reporting and data provision
- an assessment process which broadly measures the quality of the JPIP relationships.

#### People

The main task in developing the people elements of the JPP has been to change behaviours.

Specifically for Network Rail this has involved increasing awareness of the new output focus (PPM) and expanding knowledge, capability and action in non-traditional areas of performance improvement which impact on PPM whilst not necessarily delivering specific delay minute reductions.

- engendering a joint challenge approach from simple exchange of target information upwards
- · ensuring that the process framework does not constrain actual operations
- · encouraging the search for and sharing of good practice.

#### **Outputs**

The product of JPP development in 2005/06 has been:

- an industry agreed process documentation suite
- · collaboratively compiled and significantly more comprehensive JPIPs for 2006/07

- a 3 year industry trajectory for PPM using the bottom up JPP as a base
- some significant 'best ever' improvements in PPM and PPM achievements
- · increased engagement of other key parties - FOCs, DfT
- an increased level of joint plans up to 25% of plans for 2006/07.

This development occurred before completion of relevant changes to and under the Network Code was achieved (franchised TOCs formally adopted the JPP approach so as to enable implementation from 31 March 2006), so that the process was relatively fit for purpose by the time that the related contractual changes took place.

Below is a list of TOCs with JPIPs.

Table 45 Passenger operators v	vith JPIPs
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Table 45 Passenger operator	rs with JPIPs			
Operator	Type of operator	Lead Network Rail route	Transfer from LOC to JPP 1/4/06?	Notes
Arriva Trains Wales	Franchised	Western	Yes	NOLES
c2c Rail	Franchised		Yes	
Central Trains	Franchised	Anglia LNW	Yes	
First Great Western	Franchised	Western	Yes	New franchise combining FGW, FGWL, Wessex trains. JPIP at 1/4/06 will be for new franchise
First Great Western – First Great Western link	Franchised	Western	Yes	Current JPIP for 2005/06 to be merged for new franchise
First ScotRail	Franchised	Scotland	Yes	
Gatwick Express	Franchised	Sussex	Yes	
Great North Eastern Railway	Franchised	LNE	Yes	
Merseyrail Electrics 2002 Ltd	Franchised	LNW	Yes	
Midland Mainline	Franchised	LNE	Yes	
Northern	Franchised	LNE	Yes	
one	Franchised	Anglia	Yes	
Silverlink Train Services	Franchised	LNW	Yes	
South Eastern	Franchised	Kent	Yes	
Southern	Franchised	Sussex	Yes	
South West Trains	Franchised	Wessex	Yes	
First Capital Connect	Franchised	LNE	Yes	FCC is the new franchise. JPIP documents – Thameslink Rail currently split as Thameslink and WAGN
The Chiltern Railway Co.	Franchised	LNW	Yes	
Transpennine Express	Franchised	LNE	Yes	
Virgin Cross Country Trains	Franchised	LNW	Yes	
Virgin West Coast Trains	Franchised	LNW	Yes	
First Great Western – Wessex	Franchised	Western	Yes	Current JPIP for 2005/06 to be merged for new franchise
First Capital Connect – WAGN	Franchised	LNE	Yes	FCC is the new franchise. JPIP documents currently split as Thameslink and WAGN
Heathrow Express	Open	Western	No	Informal JPIP compiled during 2005/06; position for 2006/07 to be clarified following contract change
Eurostar (UK)	Open	Kent	No	Informal JPIP compiled during 2005/06; position for 2006/07 to be clarified following contract change

Operational performance

### **Route Utilisation Strategies (RUSs)**

Network Rail has been developing RUSs in accordance with its obligations under Licence Condition 7. This section provides a list of RUSs in place and those under preparation at the end of the year 2005/06.

#### **Objectives**

RUSs seek to achieve the 'route utilisation objective' as defined in section 8 of Licence Condition 7, that is, 'the effective and efficient use and development of the capacity available, consistent with the funding that is, or is likely to become, available during the period of the route utilisation strategy and with the licence holder's performance of the duty.'

#### Process

The process being used to develop RUSs in accordance with ORR RUS Guidelines was published in the RUS Manual. This consists of a Consultation Guide and a Technical Guide, both of which are available on the Network Rail website. These documents will be updated as the process develops.

A programme showing target establishment dates for each RUS, in accordance with paragraph 3A.2(a) of Licence Condition 7, was drafted, discussed, reviewed during the year with input from industry, government parties and ORR. At the end of the year 2005/6 this programme was pending formal submission for ORR approval.

#### List of RUSs

Completed:

South West Main Line

Underway – work is in progress on the following RUSs, which are at various stages of development:

- Cross London
- Scotland
- North West
- Freight
- East Coast Main Line
- Greater Anglia.

Scoping – the definition of this RUS is being discussed with industry stakeholders prior to work starting:

• Yorkshire & Humber.

#### Issues

As the first RUSs are completed, review exercises will be held to identify best practice, lessons learned and key process issues to be addressed during the year 2006/07.

# Section 2 Network capability

This section reports data on two new areas of reporting for this year:

- mileage and
- bottlenecks.

In addition to the usual four measures of network capability:

- linespeed capability
- gauge capability
- · route availability value
- · electrified track capability

As per the process first introduced last year, the 'running lines' for network capability purposes are derived from about a quarter of a million GEOGIS records. The linespeed and electrification information is part of that data, whereas gauge and route availability are assigned via reference tables.

Following on from the GEOGIS Data Improvement Programme, (which closed down in early 2005), GEOGIS data improvement work has continued throughout 2005 in conjunction with various light touch assurance activities. This included an extensive review of the recorded linespeeds compared to the Sectional Appendix entries, and infill of some electrification coding. Most of the implied net 377 track kilometre network reduction in size is not however as a result of formal closures under the Network Code, but data cleansing. This resulted, in particular, from a review of the branch status and/or freight lease boundaries for collieries, docks, depots and private preservation railways etc. Two new route sections were opened to traffic during the year, the East Coast Main Line related Allington Chord (Barkston South to East Junction closing) and Haughhead Junction to Larkhall in Scotland.

A review of three of the four measures (linespeed capability, gauge capability and route availability) is being undertaken during this and next year. The programme which is agreed with the ORR, will verify the accuracy of published data for these measures and will establish three definitions for new measures of network capability:

- · total tonnage measure for each route
- length limits
- · gradient profile.

There are two further elements of the programme, the first of which will review and establish a robust long term process to ensure data integrity. The second is to review how network capability should be published in future.

#### **Regulatory targets**

The regulatory target for each of the network capability measures is to maintain the capability of the network for broadly existing use at April 2001 levels (subject to network changes authorised under the Network Code).

# Linespeed capability (C1)

This is a measurement of the length of running track in kilometres in the following speed bands:

- up to 35 miles per hour
- 40 75 miles per hour
- 80 105 miles per hour
- 110 125 miles per hour
- over 125 miles per hour.

The measure includes running lines and loops but excludes sidings and depots. Where differential speeds apply to a section of track, the highest linespeed applies for that section.

#### Results

Table 46 Linespeed capability								
Speed Band (mph)	March 2004 km of track in each speed band	March 2005 km of track in each speed band	March 2006 km of track in each speed band					
Up to 35	5,570	4,163	3,821					
40 – 75	16,585	16,927	16,895					
80 – 105	6,994	7,650	7,482					
110 – 125	2,415	2,741	2,907					
Over 125	0	0	0					
Total	31,564	31,482	31,105					

Table 47 Linespeed capability by operating route									
Speed band (mph)/ Operating routes	Up to 35	40 – 75	80 – 105	110 – 125	Over 125	Total			
London North Eastern	924	3,943	1,370	1,250	0	7487			
London North Western	1,000	3,977	1,168	943	0	7,088			
South East – Anglia	267	1,406	627	0	0	2,300			
South East – Kent	192	1,039	531	0	0	1,762			
South East – Sussex	113	757	257	0	0	1,127			
South East – Wessex	173	1,023	887	0	0	2,083			
Western	694	2,376	1,560	493	0	5,123			
England and Wales	3,363	14,521	6,400	2,686	0	26,970			
Scotland	458	2,374	1,082	221	0	4,135			
Network total	3,821	16,895	7,482	2,907	0	31,105			

Table 48	Linespeed c	hange: increas	ses				
Territory	Operating route	ELR	Track	Start mileage	Length (miles.yards)	Old speed band	New speed band
LNE	LNE	ACD	1100	0.0003	0.0547	new	0 – 35
LNE	LNE	ACD	2100	0.0003	0.0544	new	0 – 35
LNE	LNE	LEN3	1100	89.0110	0.0726	0 – 35	40 – 75
LNE	LNE	STF	1100	8.1166	0.0704	0 – 35	40 – 75
LNE	LNE	STF	2100	8.1166	0.0704	0 – 35	40 – 75
LNE	LNE	STF	2100	9.0110	1.0000	0 – 35	40 – 75
LNE	LNE	WEB	2100	79.0935	0.1045	0 – 35	40 – 75
LNW	LNW	CBC1	1100	70.0242	0.0374	0 – 35	40 – 75
LNW	LNW	CGJ5	2100	19.0880	0.0792	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	0.1628	1.0132	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	14.0440	4.0660	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	14.1627	3.1211	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	32.1650	4.0616	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	38.0418	3.9594	80 – 105	110 – 125
LNW	LNW	CGJ7	1100	63.0726	0.0484	80 – 105	110 – 125
LNW	LNW	CGJ7	1500	0.0146	0.0200	0 – 35	40 – 75
LNW	LNW	CGJ7	2100	0.0506	1.1254	80 – 105	110 – 125
LNW	LNW	CGJ7	2100	14.0418	0.1342	80 – 105	110 – 125
LNW	LNW	CGJ7	2100	15.0286	3.0814	80 – 105	110 – 125
LNW	LNW	CGJ7	2100	33.0264	3.1496	80 – 105	110 – 125
LNW	LNW	CGJ7	2100	64.0704	3.0594	80 – 105	110 – 125
LNW	LNW	CWJ	2100	2.0594	1.0396	0 – 35	40 – 75
LNW	LNW	CWJ	2100	16.0022	0.1650	0 – 35	40 – 75
LNW	LNW	MVE2	1100	25.0378	0.0425	0 – 35	40 – 75
LNW	LNW	RBS1	1100	83.1606	7.0154	80 – 105	110 – 125
LNW	LNW	RBS1	1100	106.0506	2.1254	80 – 105	110 – 125
LNW	LNW	RBS1	2100	83.1628	7.0132	80 – 105	110 – 125
LNW	LNW	RRN2	3100	14.0664	0.0216	0 – 35	40 – 75
LNW	LNW	WAW	3101	5.1694	0.1694	0 – 35	40 – 75
LNW	LNW	WAW	3102	5.1694	0.1166	0 – 35	40 – 75
LNW	LNW	WNS	1700	1.0088	0.0522	0 – 35	40 – 75
SEA	AN	WHC1	3100	9.0110	0.0220	0 – 35	40 – 75
WES	WES	VOG	2100	10.1276	0.0264	0 – 35	40 – 75
SCO	SCO	LRK	3400	0.0000	0.0540	new	0 – 35
SCO	SCO	LRK	3400	0.0540	2.0930	new	40 – 75
SCO	SCO	LRK	3500	0.1440	0.0440	new	0 – 35
SCO	SCO	LRK	3601	2.1470	0.0310	new	0 – 35
SCO	SCO	LRK	3602	2.1470	0.0310	new	0 – 35
SCO	SCO	WCM1	1100	12.0810	12.1140	80 - 105	110 – 125
SCO	SCO	WCM1	1100	37.0000	3.0390	80 - 105	110 – 125
SCO	SCO	WCM1	1100	40.0880	3.0880	80 – 105	110 – 125
SCO	SCO	WCM1	1100	59.0710	10.0190	80 – 105	110 – 125
SCO	SCO	WCM1	1100	72.0700	0.1060	80 - 105	110 – 125
SCO	SCO	WCM1	2100	12.0820	12.1120	80 - 105	110 – 125
SCO	SCO	WCM1	2100	37.0000	2.0990	80 - 105	110 – 125
SCO	SCO	WCM1	2100	39.0957	5.0363	80 - 105	110 – 125
SCO	SCO	WCM1	2100	60.1320	8.1340	80 - 105	110 – 125

2 Network capability

Territory	Operating route	ELR	Track	Start mileage	Length (miles.yards)	Old speed band	Nev speed band
LNE	LNE	KWS	1100	67.1210	0.0396	40 – 75	0 – 35
LNE	LNE	KWS	2100	67.1232	0.0374	40 – 75	0 – 35
LNW	LNW	CGJ1	1300	170.1086	0.0240	40 – 75	0 – 35
LNW	LNW	CGJ5	2100	21.0000	0.0880	110 – 125	80 - 105
LNW	LNW	CGJ6	2100	1.0440	0.0242	110 – 125	80 – 10
LNW	LNW	CGJ6	2100	20.0220	0.1298	80 – 105	40 - 7
LNW	LNW	CGJ7	1100	0.0440	0.0880	80 – 105	40 - 7
LNW	LNW	CGJ7	1100	0.1320	0.0308	80 – 105	40 - 7
LNW	LNW	CNH1	2100	158.0814	0.0836	80 – 105	40 - 7
LNW	LNW	CWJ	2100	15.1672	1.0000	40 – 75	0 – 3
LNW	LNW	LEC1	1100	46.0814	0.0550	110 – 125	80 – 10
LNW	LNW	LEC5	2100	158.1055	0.0243	110 – 125	80 – 10
LNW	LNW	MCJ2	2100	37.1298	0.0858	40 – 75	0 – 3
SEA	KE	HHH	2100	0.1100	0.0660	40 – 75	0 – 3
SEA	SU	BBJ	2100	7.0242	0.0726	40 – 75	0 – 3
SEA	WE	BML1	1100	47.0660	0.0440	80 – 105	40 – 7
SEA	WE	WPH1	1100	35.0792	0.0638	80 – 105	40 – 7
SCO	SCO	MLA	3400	0.0210	0.0270	40 – 75	0 – 3

#### **Reporting confidence**

This data is taken from GEOGIS, which has benefited from light touch assurance activity. It is considered that this data merits a confidence grade of B2.

#### Commentary

GEOGIS data improvement work has continued throughout 2005 in conjunction with various light touch assurance activities. This consolidation and validation of information remains the main source of apparent changes to speed capability in the year. This included an extensive review of recorded linespeeds compared to the Sectional Appendix entries.

The main actual change to linespeed capability over the year has been in speed increases.

This includes the enabling of Enhanced Permissible Speeds to facilitate further tilting train operation on the West Coast Main Line (as a result of project enhancements) and the installation of Absolute Track Geometry, affecting both LNW and Scotland routes. These Enhanced Permissible Speeds are based upon the application of higher values of cant deficiency for tilting operation up to speeds of 125 mph along alignments where the previous limiting maximum speeds were generally 110 mph.

In addition, two new route sections were opened to traffic during the year being the Allington chord on the East Coast Main Line (ELR of ACD in the band 0 - 35 mph) and Haughmead Junction to Larkhall in Scotland (ELR of LRK up to 75 mph).

2 Network capability

# Gauge capability (C2)

This is a measurement of the length of route in kilometres capable of accepting different freight vehicle types and loads by reference to size (gauge). This measurement is reported against five gauge bands:

- W6, height of vehicle (h)3,338mm width of vehicle (w)2,600mm
- W7, (h)3,531mm (w)2,438mm
- W8, (h)3,618mm (w)2,600mm
- W9, (h)3,695mm (w)2,600mm
- W10, (h)3,900mm (w)2,500mm.

A fuller definition of these individual Freight Gauges can be found in Railway Group Guidance Note GE/GN8573 (October 2004) 'Guidance on Gauging' Appendices 1 to 5. Reference to W6 in this report is actually to the W6A profile (modified for third rail). W6 or W6A, W7, W8 and W9 are strictly static profiles to which allowances for dynamic effects must be applied, and are broadly incremental. W10 is derived upon a dynamic basis and is a suite of swept envelopes for permitted vehicle load combinations.

#### Results

Table 50 Gauge capability			
Gauge band	March 2004 km of route in each gauge band	March 2005 km of route in each gauge band	March 2006 km of route in each gauge band
W6	5,223	4,955	4,771
W7 and W6	2,284	2,794	2,741
W8	6,340	5,648	5,504
W9	2,483	1,714	1,615
W10 and W6	-	6	6
W10 and W8	_	60	73
W10 and W9	163	939	1,100
Total	16,493	16,116	15,810

Table 51 Gauge capability by operating route									
Gauge band/Operating routes	W6	W7 and W6	W8	W9	W10 and W6	W10 and W8	W10 and W9	Total	
London North Eastern	974	521	1,303	626	0	0	0	3,424	
London North Western	921	600	743	261	0	2	789	3,316	
South East – Anglia	299	5	521	153	6	71	149	1,204	
South East – Kent	490	76	67	185	0	0	0	818	
South East – Sussex	300	120	61	32	0	0	0	513	
South East – Wessex	549	189	299	5	0	0	0	1,042	
Western	1,118	398	1,315	18	0	0	0	2,849	
England and Wales	4,651	1,909	4,309	1,280	6	73	938	13,166	
Scotland	120	832	1,195	335	0	0	162	2,644	
Network total	4,771	2,741	5,504	1,615	6	73	1,100	15,810	

#### **Reporting Confidence**

The data used in this reporting is now drawn directly from the records tracking issued Gauging Certificates maintained by the Track Geometry and Gauging National Specialist Team. It is considered that this data merits a confidence grade of B1.

#### Commentary

The apparent reduction in overall network extent is entirely due to further data cleansing within GEOGIS resulting from various light touch assurance activities. The Track Geometry and Gauging National Specialist Team has now assumed full ownership of the supporting gauge capability data and some further sense checking and data cleansing has been undertaken. This consolidation and validation of information remains the main source of apparent changes to capability in the year.

Gauge capability enhancements have been achieved in response to requests for new flows from freight customers and by more creative and strategic investigation of latent gauge capability by the National Specialist Team. Tactical enhancement of these relatively short lengths has enabled the joining up of existing capability to create new enhanced paths extending over a wider area. Examples of these incremental upgrades in direct response to customer need include W9 from Retford to Manton Wood Junction (via Thrumpton West Junction), W8 between Carmuirs East and Larbert Junctions, and W9 between Niddrie South and North Junctions and Portobello Junctions (Edinburgh). Future enhancements are anticipated as part of the projects for Elgin to Mossend and upgrading between Ipswich and the Yorkshire terminals.

The enhancement in Gauge Capability from Norton Bridge to Stone (NBS) and in the Macclesfield area (MCH) is as a result of works on West Coast Route Modernisation project, where there has been some future proofing in creating lengths of W12 gauge capability. This is reported as new W10 here.

In addition, two new route sections were opened to traffic during the year being the Allington chord on East Coast Main Line (ELR of ACD) as W8 and Haughmead Junction to Larkhall (ELR of LRK) as W6.

2 Network capability

# Route availability value (C3)

This is a measurement of the length of track in kilometres capable of accepting different loaded vehicle types by reference to the structures route availability (RA) value. There are three RA value bands:

- RA1 6
- RA 7 9
- RA10.

This measure represents the lesser of the maximum single axle weight or the maximum equivalent load effect of a whole vehicle for underline bridges and structures on a route, specified in the definitive operating publication.

#### Commentary

Two new route sections were opened to traffic during the year, the Allington chord on the East Coast Main Line (ELR of ACD RA7-9) and Haughmead Junction to Larkhall (ELR of LRK RA7-9).

Apart from the changes resulting from the addition of the above new lines, the changes in the structures route availability measure are a result of data cleansing and the GEOGIS Data Improvement Programme.

A full review of data, undertaken as part of the Infrastructure Capability Programme agreed with ORR, will be completed by September 2007.

#### **Results**

Table 52 Structures route availability			
Speed Band (mph)	March 2004 km of track in each RA band	March 2005 km of track in each RA band	March 2006 km of track in each RA band
RA 1 – 6	2,375	2,529	2,309
RA 7 – 9	26,297	26,319	25,935
RA 10	2,585	2,634	2,861
Total	31,257	31,482	31,105

Table 53 Structures route availability by operating route					
RA bands/Operating routes	RA 1 – 6	RA 7 – 9	RA 10	Total	
London North Eastern	208	7,188	91	7,487	
London North Western	10	7,065	13	7,088	
South East – Anglia	118	2,182	0	2,300	
South East – Kent	60	1,702	0	1,762	
South East – Sussex	120	1,007	0	1,127	
South East – Wessex	189	1,894	0	2,083	
Western	865	4,241	17	5,123	
England and Wales	1,570	25,279	121	26,970	
Scotland	739	656	2,740	4,135	
Network total	2,309	25,935	2,861	31,105	

# Electrified track capability (C4)

This is a measurement of the length of electrified track in kilometres in the following bands:

- overhead line at 25kV AC
- third rail 650/750V DC
- 1,500V DC overhead.

The measurement includes the length of running track, including loops but excluding sidings and depots. Lengths of track with dual electrification are not double counted here, i.e. they are not also shown within the respective electrification types. In addition, line that is not energised and permanently earthed, is counted as non-electrified.

#### **Reporting confidence**

This data is taken from GEOGIS, which has benefited from light touch assurance activity. The contiguity of coding and then reference to track (Omnicom) videos and 'drawings' has resulted in over 130km of 25kV AC electrification being in-filled. It is considered that this data merits a confidence grade of B2.

#### Commentary

No electrified track has been closed in the year. The Larkhall line in Scotland represents new capability.

#### **Results**

Table 54 Electrification capability (km of electrified track)			
	March 2004	March 2005	March 2006
25kV AC overhead	7,780	7,748	7,882
3rd rail 650/ 750V DC	4,483	4,497	4,493
Dual AC, overhead/3rd rail DC	33	35	39
1500V DC overhead	19	39	39
Total electrified	12,315	12,319	12,453
Non-electrified	19,249	19,163	18,652
Total	31,564	31,482	31,105

#### Table 55 Electrification capability

			Dual AC,				
Electrification capability/ Operating route	25 kV AC overhead	3rd rail 650/750V DC	overhead/ 3rd rail DC	1,500V DC overhead	Total electrified	Non- electrified	Total
London North Eastern	2,314	9	1	39	2,363	5,124	7,487
London North Western	2,746	289	8	0	3,043	4,045	7,088
South East – Anglia	1,454	41	15	0	1,510	790	2,300
South East – Kent	8	1,649	15	0	1,672	90	1,762
South East – Sussex	3	1,033	0	0	1,036	91	1,127
South East – Wessex	0	1,472	0	0	1,472	611	2,083
Western	104	0	0	0	104	5,019	5,123
England and Wales	6,629	4,493	39	39	11,200	15,770	26,970
Scotland	1,253	0	0	0	1,253	2,882	4,135
Network total	7,882	4,493	39	39	12,453	18,652	31,105

2 Network capability

# Mileage

Train mileage is defined as the number of miles travelled by passenger trains. The passenger train miles are derived from PALADIN (the computerised performance for recording performance data). There was an increase of 1.86% in franchised passenger train miles between 2004/05 and 2005/06. This was a reversal of the negative growth of -0.27%, which was experienced the previous year. Open access services in particular experienced significant growth, was driven by Nexus and Hull Trains. Virgin West Coast and Southwest Trains were among the passenger operators who experienced strong growth.

#### Results

Table 56 Train mileage for franchised passenger operators (m	illions)		
Train operator	2003/04	2004/05	2005/06
Transpennine Express	8.2	8.8	7.9
one	_	18.3	18.5
Northern Rail/ATN/FNW	-	25.1	26
ScotRail	22.7	22.7	23.1
Great North Eastern Railway	11.3	11.2	11.3
Arriva Trains Northern	14.7	_	_
First North Western	11.6	_	_
Merseyrail Electrics 2002	3.5	3.4	3.4
Virgin West Coast Trains	10.6	11.3	13.3
Central Trains Ltd	17.7	17.4	17.8
Virgin Cross Country Trains	16.7	16.7	16.8
Midland Mainline	6.8	6.5	6.2
First Great Western	9.8	10	10.4
Arriva Trains Wales	12.5	11.9	12.4
Wessex Trains	6.5	6.7	6.9
First Great Western Link (formerly Thames)	8.0	7.9	7.8
Chiltern Railway	4.8	5	5.1
Silverlink	6.1	5.5	5.5
WAGN	11.9	7.2	6.9
Great Eastern Railways	7.8	-	_
Anglia Railways	5.5	_	_
c2c Rail	3.6	3.6	3.6
South Eastern Trains	17.1	17.2	17.2
Gatwick Express	1.4	1.5	1.5
Southern Trains (formerly South Central)	16.0	15.9	16.4
Thameslink Rail	6.7	6.8	6.7
South West Trains	22.1	22.3	23.1
Total franchised passenger	263.6	262.9	267.8

Table 57 Train mileage for open access operators and total passenger train mileage (millions)				
Train operator	2003/04	2004/05	2005/06	
Heathrow Express	1.0	1	0.9	
Eurostar (UK)	1.0	0.5	0.5	
Hull Trains	0.5	0.6	0.8	
Nexus	1.4	1.4	1.8	
Total open access	3.9	3.5	4.0	
Total passenger (franchise and open access)	267.5	266.4	271.8	

Note: empty coaching stock has been excluded from both the above tables.

# National train mileage by freight train operator

Freight train mileage is defined as the number of miles travelled by freight trains. The freight data is derived from the Billing Infrastructure Freight System (BIFS). BIFS is a centrally managed computerised system that invoices freight train operators, based on information generated by train reporting systems. The error correction process is undertaken centrally by the track access billing team at Headquarters.

Table 58 Train mileage for freight operators ('000s)				
	2003/04	2004/05	2005/06	
Advenza	_	_	51	
Direct Rail Service Ltd	682	802	1,024	
EWS International	1,783	1,683	1,733	
EWS Railway Ltd	19282	17,393	18,422	
Freightliner Heavy Haul	2,608	2,803	3,269	
Freightliner Ltd	4,627	4,739	5,542	
GB Railfreight	359	505	741	
Total	29,341	27,925	30,782	

#### Million kGTMs by freight train operator

Gross tonne miles is the mileage for each locomotive, wagon or coaching stock multiplied by the weight for each relevant vehicle. This data is also derived from BIFS

Table 59 Million kGTMs by freight train operators				
	2003/04	2004/05	2005/06	
Advenza	-	-	8	
Direct Rail Service Ltd	357	497	603	
EWS International	1,349	1,290	1,204	
EWS Railway Ltd	18,092	18,268	19,341	
Freightliner Heavy Haul	2,721	3,068	3,350	
Freightliner Ltd	4,342	4,748	5,139	
GB Railfreight	374	521	660	
Total	27,235	28,392	30,305	

# Freight gross tonne miles and freight train miles

Much of the growth in gross tonne miles and freight train miles between 2004/05 and 2005/06 can be accounted for by a large increase in coal, domestic intermodal, iron ore and general merchandise traffic and the re-entry of Royal Mail to the rail sector.

#### Bottlenecks

This section provides an update on the progress of actions during the year to alleviate bottlenecks as stated in the 2005/06 Business Plan. This information is also available in the 2006/07 Business Plan.

Table 60 i	Bottlenecks		
Map ref	Location/Problem	Possible solutions	Action
1	Kent There is significant overcrowding on all services with no spare capacity for additional trains to operate through the critical London	Diversion of longer distance trains via the CTRL to St Pancras would free up some capacity in the London area for suburban passengers.	To be delivered when the Integrated Kent Franchise (IKF) timetable is introduced in 2009.
	Bridge area.	Upgrades on the Hastings, Sidcup and Bexleyheath lines would allow longer trains to run from these routes.	Proposal under development.
		Construction of the Thameslink programme would provide increased capacity through the London Bridge area.	To be delivered by the Thameslink programme.
2	Brighton Main Line There is significant overcrowding on Southern and Thameslink services, whilst Gatwick Express services exhibit lower levels of loading. There is no spare capacity for	Restructuring of the main line service pattern (and potentially a revised fares structure) could allow improved distribution of passengers across all service groups.	Under development as part of ongoing work on the BML RUS.
	additional trains to operate.	Restructuring of the suburban service pattern will be required to maximise use of capacity, and to allow East London line trains to operate.	Under development by East London Line extension project.
3	South West Main Line Existing overcrowding and continued strong demand growth results in continued pressure on the services into London Waterloo.	Train and platform lengthening on the Windsor and suburban lines to 10 or 12 car operation. A major redevelopment scheme at London Waterloo.	Under development as part of ongoing work on the SWML RUS.
	Infrastructural constraints at Waterloo itself, Clapham Junction and Woking Junction prevent the provision of additional services to relieve the problem.	Investigation of grade separation at Woking Junction.	
4	West Anglia London – Bishops Stortford: The mix of fast and stopping trains on this predominantly double track route, constrains the development of services.	Additional services could be accommodated through a range of options from changes in the timetable to providing additional track and signalling, especially on the Lea Valley section of the route and additional platforms at Liverpool Street station.	The timetable will be reviewed as part of the Greater Anglia RUS process (and work being undertaken by BAA). An improvement in capacity is likely to be driven by the decision to build a second runway at Stansted Airport.

59

Table 60	Bottlenecks (continued)		
Map ref	Location/Problem	Possible solutions	Action
5	West Anglia Stansted Airport, Cambridge and Ely track layouts.	Modified layouts including signalling and track remodelling would bring improved operation and performance at these locations.	These will be reviewed as part of the Greater Anglia RUS process (and in the case of Stansted, work being undertaken by BAA).
6	Great Eastern Port developments and increasing freight services conflict with the increased need for engineering access along the Great Eastern route. This is coupled with the mix of fast and stopping trains on a predominantly double track route and increasing Thameside freight services crossing the GE between Forest Gate and Stratford. These factors constrain the development of additional passenger and freight services.	Additional services could be accommodated through providing diversionary routes for freight services on both the cross country route via Bury St Edmunds, Ely, March and Peterborough and via the Barking to Gospel Oak route. Both these routes would need upgrading for gauge and route availability.	These upgrades will be reviewed as part of the Greater Anglia RUS process.
7	WCML, MML, ECML At their southern end these three main lines will be running at high levels of utilisation (even after the upgrade in the case of WCML) because of continued growth of passenger and freight trains.	Long term: A new high–speed route could relieve each of these lines by providing additional capacity, and by allowing a greater segregation of traffic of differing speeds.	Long term: The DfT is studying this option for possible long term implementation.
		Short/medium term: see text below.	Short/medium term: see text below.
7a	WCML See 7	Increasing route capacity through route upgrade and timetable specification.	We are implementing the West Coast Route Modernisation, which will provide an increase in capacity.
7b	MML See 7	Short/medium term: Significant changes to the timetable structure to improve use of current capacity. Small infrastructure upgrades could also create additional capacity between Bedford and Leicester.	The route is covered in the RUS which the SRA published in December 2004
7c	ECML See 7	Short/medium term: Analysis suggests that a number of solutions are possible including changes to the timetable and a series of schemes to improve performance and capacity.	Network Rail, in conjunction with internal and wider stakeholders, will publish its ECML RUS in 2006.
8	Trans-Pennine The mix of freight and passenger trains consumes much of the available capacity on the routes across the Pennines.	Possible solutions include timetable changes, and development of alternative routes allowing diversion of some freight trains.	Options for the route will be examined in detail in a RUS during 2006.

Map ref	Location/Problem	Possible solutions	Action
9	Paddington – Reading The current pattern of services constrains the ability to run additional trains to cater for forecast growth. Train service proposals for the new Greater Western Franchise due to commence in December 2006 further constrain growth due to the introduction of additional main line station calls at Slough, which reduces capacity.	Re-timetabling of trains to reduce intermediate main line station calls between Paddington and Reading and replacing these with improved journey times for relief line services particularly between Paddington and Slough, together with remodelling of Reading station would allow an increase in the throughput of trains.	Network Rail and Reading Borough Council are jointly developing plans to modernise Reading station and its approaches.
10	Coventry – Wolverhampton The mix of traffic along this double track route consumes all available capacity and constrains growth.	A significant revision of the timetable structure would provide some relief. Options for train lengthening exist and have the potential for increases in passenger capacity on most services.	An improved timetable was introduced between Coventry and Birmingham in December 2005. Following a RUS recommendation, we are working with industry partners in a joint timetable development group to identify a sustainable timetable structure for the Coventry – Birmingham – Wolverhampton corridor to deliver appropriate capacity and improved performance.

2 Network capability

# Section 3 Asset management

This section reports data on the condition and quality of our assets, an indication of our asset stewardship. The section documents trends over time as well as our progress against targets. The following measures are reported:

- · broken rails
- rail defects
- track geometry
- condition of asset TSRs
- level 2 exceedences
- · earthwork failures
- bridge condition
- signalling failures
- signalling asset condition
- AC Traction power incidents
- DC Traction power incidents
- AC electrification condition
- DC electrification condition
- AC contact system condition
- DC contact system condition
- station condition index
- station facilities
- light maintenance depots
- Asset Stewardship Incentive Index.

All infrastructure output measures are subject to statistical variability caused by random fluctuation and the accuracy of data measurement. We have therefore included tolerances for the regulatory targets in this section but these are simply illustrative as tolerances were not established in the ACR 2003. Many of these tolerances are based on an analysis of historical data. However ORR has stated that it will take into account statistical variations when assessing performance against regulatory targets and we are discussing this with them.

### Number of broken rails (M1)

A broken rail is one which, before removal from the track, has a fracture through the full crosssection, or a piece broken out of it, rendering it unserviceable. This includes broken welds. Only broken rails occurring in running lines are included in this measure (i.e. sidings, depots, etc are excluded).

#### **Reporting Method**

This is in accordance with the company procedures for measuring and reporting broken rails, with a minor change to reporting processes to accommodate the implementation of the new Rail Defect Tracker (RDT) system (see commentary below).

#### Results

The results are shown in Table 61 below.

#### **Regulatory target**

The regulatory target is to reduce the number of broken rails to no more than 300 per annum by 2005/06 and have no increase thereafter. The statistical tolerance for the broken rail measure is assessed as  $\pm 13.7\%$  of the target.

#### **Reporting confidence**

The procedure for reporting broken rails is proven and robust, and this data could justify an A1 confidence grade. However, as we are in the early stages of implementing RDT, a new system for the management and reporting of rail defects (including broken rails) that has meant minor changes to the reporting process, we consider that A2 is appropriate for this year.

#### Commentary

Work has continued to reduce the number of broken rails with volumes of rerailing and renewals being maintained. In addition, improved rail management, particularly inspection equipment and procedures, and the increased volume of grinding and train based ultrasonic testing being delivered on the network, has contributed to improvements.

The final number of broken rails for the year was 317, a slight reduction over the previous year's total of 322. This continues the year on year reduction since 2000.

Figures for Periods 1 to 8 for 2005/06 showed a reduction of 25% compared to the previous year. The effects of exceptional change in weather at the beginning of Period 9, largely removed the Period 1 to 8 improved performance. Period 8 was significantly warmer than average and was followed by a nationwide, below average cold snap for the first 2 weeks of Period 9. This resulted in a significant increase in Period 9 broken rails in 2005/06 compared to the same period in the previous year.

The continued operation of the Ultrasonic Test Units (UTUs) on category 1A, 1, 2 and 3 routes is starting to deliver significant reductions in the number of broken rails. This is shown on West Coast South where the train based ultrasonics has been operating over most of the area and broken rail figures were lower than any other area on the Network.

The enhanced frequency of UTU testing should also result in a reduction in the numbers of rail breaks, due to the ability to monitor defect growth rates and to only remove those defects where removal is required.

The programme of plain rail and switch and crossing grinding is also contributing to the reduction in the number of breaks from surface initiated squat or Rolling Contact Fatigue (RCF).

Table 61 Number of broken rails					
Operating Routes	2001/02	2002/03	2003/04	2004/05	2005/06
London North Eastern	179	119	77	101	98
London North Western	128	120	88	61	52
South East – Anglia	34	31	29	26	23
South East – Kent	23	28	22	19	17
South East – Sussex	15	15	11	9	7
South East – Wessex	36	47	30	43	37
Western	75	44	42	31	37
England and Wales	490	404	299	290	271
Scotland	46	40	35	32	46
Network total	536	444	334	322	317
CG	_	_	A2	A1	A2
Regulatory target (Network)	735	705	675	n/a*	300

\* No specific annual target set, only that broken rails should reduce to 300 per annum by 2005/06.

Asset management

In addition to this, revised Track Specifications requiring inspection and repair/removal of joints in response to varying dip angles, identified from the track geometry recording outputs, has also been issued to remove potential breaks.

Continued targeting of track renewals/rerailing to remove pre-concast rail (pre-1974) and high defect population lengths will also support the further reduction in the number of rail breaks.

#### Rail defects (M2) Definition

A defective rail is a rail that has any fault requiring remedial action (repair or replacement) to make it fit for purpose in accordance with RT/CE/S/103 and other Network Rail standards. This measure is reported split between isolated defects (i.e. welds, switches and crossings, etc) and continuous defects (i.e. corrosion, corrugations, etc).

#### **Reporting Method**

See commentary on page 66.

#### Results Isolated rail defects

Type of defect	Net data correction	New defects detected	Weld repairs and defects removed	Defects remaining
Rail ends	-258	1,780	1,939	729
Welds	-775	4,451	5,743	2,141
Midrail	-1,343	21,545	25,445	14,751
Switches and Crossings	-1,676	3,150	3,801	2,932
Incorrectly classified	-121	27	25	52
Total number	-4,173	30,953	36,953	20,605
CG				B4

Table 63 Number of isolated rail defects remaining					
Type of defect	2001/02	2002/03	2003/04	2004/05	2005/06
Rail ends	1,670	1,196	1,358	1,146	729
Welds	1,873	2,889	3,735	4,208	2,141
Midrail	25,705	26,460	21,852	19,994	14,751
Switches and Crossings	2,773	4,081	4,274	5,259	2,932
Incorrectly classified	1,637	338	82	171	52
Total number	33,658	34,964	31,301	30,778	20,605
CG	_	_	B2	B4	B4

# Table 64 Isolated rail defects by operating route

Operating routes	Defects discovered 2004/05	Defects removed/ repaired 2004/05	Defects remaining 2004/05	Defects discovered 2005/06	Defects removed/ repaired 2005/06	Defects remaining 2005/06
London North Eastern	6,587	6,070	4,403	6,114	6,975	2,779
London North Western	10,695	9,922	10,529	9,888	13,847	6,269
South East – Anglia	1,457	1,557	516	1,840	1,979	413
South East – Kent	700	746	403	697	843	110
South East – Sussex	256	357	75	437	434	76
South East – Wessex	527	482	221	587	528	263
Western	4,917	3,857	6,363	6,523	5,484	6,926
England and Wales	25,139	22,991	22,510	26,086	30,090	16,836
Scotland	6,396	4,767	8,268	4,867	6,863	3,769
Network total	31,535	27,758	30,778	30,953	36,953	20,605

#### Continuous rail defects

Table 65 Lengths of continuous rail defects 20	05/06				
	Net data correction	New RCF defects detected	New other defects detected	Defective rail removed/ repaired	Defects remaining at year end
Total length (yards)	-233,123	165,664	200,018	542,607	2,013,319
Total length (km)	-213	151	183	496	1,841

Table 66 Lengths of continuous rail defects remaining									
	2001/02	2002/03	2003/04	2004/05	2005/06				
Total length (yards)	1,781,718	1,731,185	2,042,032	2,423,367	2,013,319				
Total length (km)	1,629	1,583	1,867	2,216	1,841				

Table 67 Isolated rail defects by operative	ating route					
Operating routes	Defects discovered 2004/05	Defects removed/ repaired 2004/05	Defects remaining 2004/05	Defects discovered 2005/06	Defects removed/ repaired 2005/06	Defects remaining 2005/06
London North Eastern	73,786	116,614	396,326	36,131	81,697	349,502
London North Western	162,189	215,017	546,275	126,774	149,537	334,839
South East – Anglia	38,369	40,164	113,809	24,750	29,269	106,170
South East – Kent	11,514	18,779	165,909	31,939	14,429	176,534
South East – Sussex	45,384	49,739	63,746	36,507	36,375	63,853
South East – Wessex	17,570	12,150	110,226	17,488	10,640	117,049
Western	66,996	109,584	273,855	45,013	55,288	233,725
England and Wales	415,808	562,047	1,670,146	318,602	377,235	1,381,672
Scotland	107,543	102,649	753,221	47,080	165,372	631,647
Network total	523,351	664,696	2,423,367	365,682	542,607	2,013,319

#### **Regulatory target**

There is no regulatory target for this measure.

#### **Reporting confidence**

Issues arising from the initial implementation stages of the new Rail Defect Tracker (RDT) system have meant that a greater than 10% data correction to the 'lengths of continuous rail defects' has been required. Therefore, although broadly we believe these systems justify confidence grading at B3, we are rating these at B4.

#### Commentary

Rail defect reporting continues to be sourced from the pre-existing contractors' databases that were adapted when Maintenance transferred in-house in 2004. The number of, and variations between, these databases have continued to lead to logistical problems with defect reporting. This has resulted in inconsistencies in the classification and mapping of the defective rail data to the central Raildata reporting system. To resolve these reporting difficulties, a new purpose built rail defect management and reporting system, (RDT), has been developed; this is in the early stages of implementation. The process for reporting rail defects has changed for 2005/06 year end reporting. This year, as a result of early RDT implementation work requiring a significant data cleansing of the pre-existing contractors' databases and inaccuracies in Raildata, the process required manual reporting and collation of the data, with considerable scope for error. The process now requires that the data (for all defects, RCF and non-RCF) is:

- input to RDT where this has been implemented and reported by the National Engineering Reporting Team, or
- input to pre-existing contractors' databases and up-loaded to Raildata by Maintenance staff where it is all subject to the same automatic processing via MS Access and Excel as was done in 2004/05, or
- input to pre-existing contractors' databases and reported via spreadsheets (where Raildata information is considered to be of unsatisfactory quality) to the National Engineering Reporting Team.

The data has been collated centrally and sent out to the Territory Rail Management Engineers and Area Track Engineers for confirmation and sign-off. Therefore it is considered that this process is more robust than reliance on RDT and Raildata information alone. At the same time however, the process has highlighted areas where the standard of data has been inconsistent and much effort has been spent in the last year to improve this at source. This can be seen in the data correction to last year's figures, which show a significant decrease in the reported continuous defects. It is believed that one of the problems with the process is that completion of remedial action had not been properly recorded or updated on Raildata, with the result that the recorded defects remaining were higher than in reality.

Data for RCF is still reported via spreadsheets as it is still not possible to report for all areas by track chain, in accordance with PWSI/4. This also means that all RCF sites, including a number which have been rerailed, are included in the 'continuous remaining' figure. Much of this is classified as 'Light' or 'Moderate' RCF which requires no corrective or increased minimum action. RCF is now being managed with a rail management policy, coupling increased visual and ultrasonic inspection frequencies where RCF exists, a regular grinding programme on all main lines and targeted rerailing of affected sites. The situation with inconsistent reporting practices will be addressed with the full implementation of the RDT in 2006, which will then permit an accurate classification of RCF from light to severe, including those sites which have been remediated through grinding or rerailing. This should be reflected by a significant reduction in the amount of 'Heavy' and 'Severe' RCF reported once RDT has been implemented nationally.

# Track geometry – national standard deviation data (M3) Definition

This section is concerned with track geometry condition and trends in terms of the four principal standard deviation (SD) parameters expressed as percentages achieving good, satisfactory and poor track geometry. Results are expressed for the network as a whole and split into seven operating routes, Scotland and England and Wales.

During the assessment of track geometry quality by track recording vehicles, the relative positions of the rail running faces (both vertically and horizontally) are measured and recorded. These raw measurements are subject to the application of high-pass wavelength filters which adjust the measured values to correspond to 35 and 70 metre chord lengths. The 35 metre values are determined for all routes, whereas the 70 metre values are only applied to sections of route having a linespeed of 80 mph and above. The resulting measurements are used in two ways:

- identification of discrete imperfections or faults (known as 'Level 2' exceedences) used for the front-line monitoring and correction of track geometry. These feed into measure M5, dealt with in a later section.
- as reported in this section, combined into standard deviation (SD) values indicative of the smoothness of track geometry over each eighth-mile length (220 yards) of track.
   Lower SD values indicate less imperfections and therefore smoother track.

The resulting principal parameters of track geometry quality are 35m top (35 metre vertical position) and 35m line (35 metre horizontal alignment) and, for higher speed routes, 70m top and 70m line. For each of these parameters, linespeed-dependant target SD values are specified, within Railway Group Standards, to be achieved or bettered by 50%, 90% and 100% respectively of recorded track.

The percentages of track across the network meeting these target SD values, and compared against these defining percentages, are shown in the following tables: Table 68 compares 31 March 2006 network total condition with that for the previous four years; Table 69 shows 31 March 2006 condition for each operating route, England and Wales and Scotland.

	35m Top (vertical deviation)			35m Alignment (horizontal deviation)		70m Top (vertical deviation)		70m Alignment (horizontal deviation)					
Actuals	50	90	100	50	90	100	50	90	100	50	90	100	CG
Network total recorded at													
31 March 2002	62.4	89.4	97.1	73.6	93.1	96.3	61.9	92.5	95.6	80.0	96.0	97.4	_
31 March 2003	61.9	88.9	97.0	74.7	93.6	96.7	62.2	92.1	95.2	80.9	96.2	97.5	_
31 March 2004	62.4	89.2	97.0	72.7	92.9	96.5	63.6	92.3	95.3	79.5	95.8	97.2	A2
31 March 2005	66.0	90.9	97.7	76.9	94.1	97.0	67.7	93.6	96.2	82.8	96.9	98.0	A1
31 March 2006	67.9	91.8	98.0	78.8	94.8	97.3	70.5	94.3	96.5	83.2	97.1	98.2	A1

Results

Note: A higher percentage indicates better performance.

Table 69 Track geometry – standard	d deviations	2006 (	%)									
	35m Top (vertical deviation)				35m Alignment (horizontal deviation)			70m To ertical dev	•	70m Alignment (horizontal deviation)		
Standards	50	90	100	50	90	100	50	90	100	50	90	100
London North Eastern	69.6	92.5	98.2	80.2	94.8	97.3	72.5	94.8	96.7	84.7	96.9	98.0
London North	67.6	91.4	97.9	80.2	95.2	97.6	69.4	94.3	96.5	82.0	97.4	98.5
South East – Anglia	66.0	90.1	97.3	75.6	93.4	96.5	66.9	90.7	93.4	78.9	95.3	96.7
South East – Kent	60.2	90.8	98.5	73.7	93.0	96.2	56.6	92.1	95.4	74.8	96.0	97.3
South East – Sussex	65.8	90.3	97.8	74.7	92.2	95.6	59.8	91.9	95.4	76.9	96.0	98.0
South East – Wessex	59.5	87.0	96.5	79.6	94.1	96.9	71.6	95.2	97.3	86.3	97.1	98.2
Western	68.9	92.1	98.0	81.1	96.0	98.1	73.1	94.7	97.0	86.3	97.9	98.8
England and Wales	67.1	91.3	97.9	79.3	94.7	97.3	70.2	94.2	96.4	83.4	97.1	98.2
Scotland	73.3	94.5	98.8	76.1	95.0	97.8	72.6	94.9	97.0	82.1	97.4	98.6
Network total	67.9	91.8	98.0	78.8	94.8	97.3	70.5	94.3	96.5	83.2	97.1	98.2

Note: A higher percentage indicates better performance.

#### **Regulatory target**

- 1. To maintain the 2003/04 levels of achievement; no deterioration from this level to be permitted during the current control period.
- 2. In addition, to reduce as far as reasonably practical the amount of track not achieving the 100% standard for the four main parameters.

#### **Reporting confidence**

National SD data is reported to a high degree of accuracy consistent with the assessment of A1 confidence limits applied to the poor track geometry measure (dealt with in the next section). Enhancements continue to be made to both the track recording systems and associated data storage at the Engineering Support Centre to underpin the high levels of confidence that can be attributed to the track geometry data reported in this and subsequent sections covering M3 and M5 data.

#### Commentary

Table 68 demonstrates that incremental improvements continue to be sustained across all twelve values for the overall network, some results now being well in excess of the Group Standard SD target percentages. The rate of improvement is significantly lower than that for 2004/05, when improvement was continuous throughout the year. This can be attributed to the combination of gradual soil moisture recovery in many areas (following the extreme conditions of summer 2003) and the comparatively mild summer which followed in 2004. A substantial proportion of the network suffered a sharp seasonal deterioration in summer 2005, due to desiccation of clay formations, from which it is unlikely that recovery was complete by 31 March 2006.

Table 69 demonstrates compliance across all Routes with the Group Standard 50% and 90% targets, with the one exception of Wessex, for which reported achievement against the 90% 35m target is 87%. However, this reflects a steady recovery, the results for the previous four years being 83.1%, 83.6%, 83.7% and 86.0% respectively, and is in large part attributable to the especially high proportion of jointed track, about 20% of the route trackmiles, and to a similarly high concentration of switch and crossing layouts. Despite the uneven rate suggested by the reported yearend figures, influenced as they are by variable seasonal effects, the measured condition is steadily improving.

Reported improvement in the four 100% parameter categories is reinforced and discussed in the next section which deals with the poor track geometry measure (M3). This in turn is followed by the Speed Band Data section which provides further evidence, analysis and commentary on changes and trends in SD-related track geometry.

#### Track geometry – poor track geometry (M3) Definition

This measure focuses upon the monitoring of track geometry where current performance exceeds SD values corresponding to the 100% target ('very poor' track geometry) and to the 35 metre parameter maximum values ('superred' track geometry).

Poor track geometry (PTG) reflects combinations of underlying poor component condition and undesirable geometrical features such as severely constrained junction layouts and tight and irregular curve radii. Such conditions can give rise to a severe anomaly which dominates the SD result over an entire 220 yard length (as well as being a discrete and immediately actionable fault detected by measure M5). Rectification can often only be achieved by significant design alterations, treatment of underlying ground and other environmental conditions, and wholesale renewal. Their location is often in the vicinity of major junctions and switches and crossings. This compounds the scope and complexity of any effective remediation and results in a relatively high cost compared to the overall benefits achieved, especially on tertiary routes.

PTG results are presented for each operating route, England and Wales, Scotland and network total for 31 March 2006 and the four previous years.

#### Results

The results are shown in Table 70 below.

#### **Regulatory target**

There is no regulatory target for this measure. Targets are set internally to promote a greater understanding of the drivers affecting and progress made towards reducing, as far as reasonably practical, the amount of track not achieving the 100% standard for the four main SD parameters.

#### **Reporting confidence**

Poor track geometry is reported to A1 confidence limits.

#### Commentary

The results for all Routes continue to show a modest year-on-year improvement but the general rate now appears to be slowing. The continuing improvement can be attributed to effective targeting of maintenance and renewals, especially on S&C layouts. Of particular note, the rate of improvement in Scotland has significantly increased, against the general trend.

The slowing improvement, affecting generally the South East and Western Routes and in the southern portions of LNE and LNW is attributable to the effects of drying-out and subsequent moisture-content recovery of the commonlyoccurring clay embankments and formations. These effects have been particularly pronounced in Western, Anglia and Wessex and recovery has been especially slow in Kent and Sussex.

#### Track geometry speed band data – (M3) Definition

This section presents standard deviation values, in millimeters, for each of the four parameters broken down into linespeed ranges as follows:

- for the 35m parameters: 15 40, 45 70, 75 110 and 115 125 mph
- for the 70m parameters: 80 110 and 115 – 125 mph.

The information is presented in both graphical and tabular format for the total network, and in tabular form only for seven operating routes, Scotland and England and Wales.

#### **Explanation**

For each of the four parameters and for each linespeed range the standard deviation in mm for each eighth-mile of track is determined. An overall SD value is calculated, for each speed range, from these individual values. The results are displayed in tabular form as follows:

- Table 71 displays results for the total network, with four previous years for comparison. The right-most column displays track kilometres in each linespeed range, for the most current date. Differences of 0.01 mm or less in overall SD should be regarded with caution, being close to the accuracy limits of measurement data
- the total network data is then split down into seven operating routes, Scotland, England and Wales, for 2005/06 only. Tables 72 – 77 display the resulting overall SD and corresponding track kilometre data.

Results for the total network are displayed in greater detail as standard deviation distribution charts. The charts, preceded by an explanation, are on pages 74 to 79.

Table 70 Poor track geometry (%)					
Operating routes	2001/02	2002/03	2003/04	2004/05	2005/06
London North Eastern	3.57	3.39	3.61	2.82	2.71
London North Western	3.77	3.96	3.83	3.19	2.74
South East – Anglia	4.71	5.46	6.15	4.33	3.95
South East – Kent	4.87	4.14	4.54	3.50	3.35
South East – Sussex	5.18	5.10	4.76	3.97	3.92
South East – Wessex	4.74	4.60	4.94	4.07	3.40
Western	3.62	3.46	3.41	2.56	2.28
England and Wales	3.96	3.93	4.03	3.17	2.87
Scotland	3.05	2.86	2.61	2.56	2.07
Network total	3.84	3.79	3.85	3.09	2.77
Confidence Grade			A2	A1	A1

Note: A lower percentage indicates better performance.

Asset management

# Table 71 Network track geometry summary

Track recording parameter	Linespeed range (mph)	Overall SD at 31/03/02	Overall SD at 31/03/03	Overall SD at 31/03/04	Overall SD at 31/03/05	Overall SD at 31/03/06	Total track km in this linespeed range
35m top	15 – 125	3.031	3.036	3.023	2.933	2.873	29,671.0
	15 – 40	4.240	4.243	4.276	4.227	4.160	3,817.9
	45 – 70	3.309	3.340	3.338	3.245	3.195	11,907.6
	75 – 110	2.513	2.517	2.497	2.395	2.340	11,721.7
	115 – 125	1.799	1.819	1.808	1.728	1.678	2,223.8
35m line	15 – 125	2.033	1.965	1.981	1.893	1.841	29,671.0
	15 – 40	4.331	4.089	4.082	4.055	3.933	3,817.9
	45 – 70	2.061	2.009	2.042	1.944	1.879	11,907.6
	75 – 110	1.229	1.224	1.267	1.169	1.141	11,721.7
	115 – 125	0.837	0.832	0.895	0.788	0.757	2,223.8
75m top	80 – 125	3.261	3.263	3.208	3.064	2.969	10,390.9
	80 – 110	3.363	3.368	3.325	3.188	3.122	8,167.1
	115 – 125	2.424	2.482	2.489	2.428	2.347	2,223.8
75m line	80 – 125	2.234	2.191	2.226	2.071	2.030	10,390.9
	80 – 110	2.326	2.284	2.326	2.181	2.154	8,167.1
	115 – 125	1.478	1.476	1.609	1.488	1.516	2,223.8
Confidence grade	_	_	A2	A1	A1		

Note: A lower of overall SD indicates better performance.

Table 72 35m top track geometry summary – overall SD 2005/06 (mph)									
	Linespeed range								
Operating routes	15 – 125	15 – 40	45 – 70	75 – 110	115 – 125				
London North Eastern	2.814	4.015	3.150	2.348	1.654				
London North Western	2.954	4.348	3.407	2.283	1.662				
South East – Anglia	2.920	4.258	3.138	2.458	No track				
South East – Kent	3.087	4.192	3.216	2.554	No track				
South East – Sussex	2.913	4.034	3.037	2.553	No track				
South East – Wessex	2.950	4.289	3.249	2.544	No track				
Western	2.766	4.185	3.170	2.219	1.736				
England and Wales	2.884	4.192	3.228	2.360	1.672				
Scotland	2.798	4.012	2.989	2.208	1.747				
Network total	2.873	4.160	3.195	2.340	1.678				

### Table 73 35m line track geometry summary – overall SD (mph)

		L	inespeed rang	e			
Operating routes	15 – 125	15 – 40	45 – 70	75 – 110	115 – 125		
London North Eastern	1.810	3.879	1.860	1.166	0.744		
London North Western	1.826	3.892	1.911	1.095	0.738		
South East – Anglia	1.944	4.276	1.961	1.235	No track		
South East – Kent	2.075	4.524	1.900	1.261	No track		
South East – Sussex	2.050	4.877	1.998	1.313	No track		
South East – Wessex	1.766	4.283	1.859	1.172	No track		
Western	1.701	3.615	1.811	1.044	0.807		
England and Wales	1.832	3.964	1.886	1.144	0.754		
Scotland	1.901	3.784	1.842	1.120	0.800		
Network total	1.841	3.933	1.879	1.141	0.757		
Table 74 35m top and line track km in this	linespeed range 20	<b>05/06</b> (mph)	)				
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Operating routes	15 – 125	Linespeed range 15 – 125 15 – 40 45 – 70 75 – 110					
London North Eastern	7,152.7	905.2	2978.8	2373.3	<b>115 – 125</b> 895.3		
London North Western	6,626.2	803.6	2647.8	2395.9	778.9		
South East – Anglia	2,194.1	267.4	869.9	1056.8	0.0		
South East – Kent	1,675.6	203.7	880.3	591.5	0.0		
South East – Sussex	1,078.8	98.3	548.8	431.6	0.0		
South East – Wessex	2,009.8	171.7	767.2	1070.9	0.0		
Western	4,962.5	774.5	1566.4	2249.6	371.9		
England and Wales	25,699.7	3224.4	10259.3	10169.7	2046.2		
Scotland	3,971.4	593.5	1648.3	1552.0	177.6		
Network total	29,671.0	3817.9	11907.6	11721.7	2223.8		

Table 75 70m top track geometry summary – overall SD 2005/06 (m)	bh)	
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		Linespeed range		
Operating routes	80 – 125	80 – 110	115 – 125	
London North Eastern	2.842	3.124	2.225	
London North Western	2.834	3.057	2.427	
South East – Anglia	3.329	3.329	No track	
South East – Kent	3.572	3.572	No track	
South East – Sussex	3.484	3.484	No track	
South East – Wessex	3.107	3.107	No track	
Western	2.846	2.944	2.362	
England and Wales	2.968	3.135	2.329	
Scotland	2.977	3.041	2.550	
Network total	2.969	3.122	2.347	

# Table 76 70m line track geometry summary – overall SD 2005/06 (mph)

		Linespeed ra	nge
Operating routes	80 – 125	80 – 110	115 – 125
London North Eastern	1.957	2.190	1.435
London North Western	1.926	2.124	1.550
South East – Anglia	2.368	2.368	No track
South East – Kent	2.537	2.537	No track
South East – Sussex	2.429	2.429	No track
South East – Wessex	2.088	2.088	No track
Western	1.860	1.925	1.539
England and Wales	2.023	2.158	1.498
Scotland	2.077	2.132	1.699
Network total	2.030	2.154	1.516

# Table 77 70m top and line track km in this linespeed range 2005/06 (mph)

		Linespeed rar	nge
Operating routes	80 – 125	80 – 110	115 – 125
London North Eastern	2,621.1	1,725.8	895.3
London North Western	2,112.2	1,333.3	778.9
South East – Anglia	626.9	626.9	0.0
South East – Kent	525.1	525.1	0.0
South East – Sussex	257.8	257.8	0.0
South East – Wessex	886.1	886.1	0.0
Western	2,059.3	1,687.4	371.9
England and Wales	9,088.6	7,042.4	2,046.2
Scotland	1,302.3	1,124.7	177.6
Network total	10,390.9	8,167.1	2,223.8

#### **Reporting confidence**

Reporting of individual and overall SDs is to a very high degree of precision consistent with the assessment of A1 confidence limits for PTG (see previous section).

#### Commentary

Table 70 shows improvements (i.e. reductions) in overall SD throughout with one exception: 70m line 115 – 125 mph overall SD increased from 1.49 to 1.52 mm. As can be seen from the chart, 1.52 mm SD is comfortably below the 1.8 mm target for Good (i.e. 50%) track and therefore acceptable. The chart also reveals a substantial increase in track in this linespeed range, details of which are as follows:

- LNW route: Total 294 track-km, an increase of 51.9% compared to 31/3/05, all on WCML infrastructure comprising: 18 track-km immediately north of Lichfield, 253 track-km between Wigan and Carlisle and 23 track-km between Rugby and Coventry
- Scotland: WCML infrastructure, 142 track-km between Gretna and Carstairs South junctions, an increase of 385.2% compared to 31/3/05 Network-wide, this is an increase of 22.3% compared to 31/3/05 for 115+ mph track.

There have been corresponding reductions of 68 track-km in the 15 - 40 and 398 track-km in the 45 - 70 mph speed-bands. In spite of this, the 35m line graphs for both speed-bands

show a small increase in measured track. This reflects the slightly better reliability of the alignment measurement system resulting in a higher proportion of measurements being accepted as valid. However, there remains further work to be done in this area and it is likely that these results are still being uplifted due to this effect.

From the more detailed data provided by tables 71 – 76 particular attention is drawn to Table 77, 70m alignment in the 115 – 125 mph speed range. The substantial increase in extent of track in this speed-range reflects progress on the West Coast Main Line upgrade as a result of work carried out during the year. This has had contrasting influences on the affected routes as follows:

- in Scotland, overall SD has increased from 1.51 mm at 31/3/05 (not shown) to 1.70 mm. This is below 1.8 mm, the 'good' target, therefore of acceptable quality
- on LNW route overall SD has, meanwhile, improved from 1.63 mm to 1.55mm; a better result than that for Scotland, although on a significantly smaller proportion of upgraded track.

This difference appears to reflect the unlocking of the benefits of the full implementation of 'Absolute Track Geometry' techniques on the southern portion of the route, whereas this is not yet fully installed on the northern portion.

# Standard deviation distribution charts – explanation

The charts on succeeding pages relate to the total network and show, for each parameter and speed range, the total length of track (in kilometres) for each SD value in 0.1mm increments. Corresponding results for 12 months ago are superimposed as a dashed line on each chart. The boundaries between the 'Good', 'Satisfactory', 'Poor' and 'Very Poor' areas of the graphs are representative of the 50%, 90% and 100% SD target values, allowing for the fact that the speed ranges for the graphs are wider than those specified in the company standard. The graphs have been smoothed using curve-fitting techniques on the raw data. This smoothing is, however, for presentation purposes only, the overall standard deviation values quoted in Table 69 being calculated from the raw, not the smoothed, data.

Displacement of the current graph to the left of that for the previous year, i.e. towards lower SD values, indicates improvement in track geometry, displacement to the right indicates deterioration. The curves do not always give a clear indication of the degree or nature of the change, in which case reference to the overall SD data in Table 71 might be helpful. A change in overall SD of 0.01 or less is, however, close to the limits of accuracy of the data and might not be significant.

Chart data for 35m alignment in the 15 – 40 mph speed range contains a significant amount of track with SD 10mm or more. Some of this can with reasonable certainty be attributed to constraining track features and geometry, especially in the vicinity of urban junctions, and also to spurious readings caused by features such as guard-rails and high ballast to which the alignment measurement system remains susceptible.









Asset management

3

75









Asset management

3

Network Rail Annual Return 2006









### Condition of asset temporary speed restriction sites (M4) Definition

This measure provides an assessment of the quality of stewardship of track, structures and earthworks by identifying the number of sites where track geometry or asset condition has fallen sufficiently below that required for the route speed and traffic type to require the imposition of a temporary speed restriction (TSR) or an emergency speed restriction (ESR). It is a cumulative measure indicating the annual number of sites where an FSR or TSR has been imposed for a duration of four weeks or more due to a degradation in the condition of the asset (track, structure or earthworks). As an additional indicator of stewardship, a severity score is calculated to measure the degree and the duration of the deterioration. The severity score is calculated using the formula below.

#### Formula for severity score

The total severity score reported is the sum of the individual severity scores for all of the speed restriction sites in force during the year which are within the scope of the measure. The severity score for an individual speed restriction site is calculated using the following formula:

Severity score = LT(I-F)

#### where:

- L is the length of the speed restriction site measured to 3 decimal points (miles)
- T is the duration of the speed restriction in weeks, measured by the day (e.g. 2 days are 2/7 = 0.286 weeks). For the purpose of calculating the annual severity score only days that the site is active during the reporting year are included in the duration. (i.e. days in prior years are not included in the severity calculation, although days in prior years are included for the purpose of determining if the site has been active for 4 weeks or more).
- F is the fraction of the imposed (restricted) speed divided by the linespeed

 $\mathsf{F} = \frac{\mathsf{imposed speed}}{\mathsf{line speed}}$ 

Where there are differential speeds for different traffic types (e.g. different freight and passenger speeds):

 $F = \left(\frac{\text{lowest imposed speed}}{\text{lowest line speed}} + \frac{\text{highest imposed speed}}{\text{highest line speed}}\right)/2$ 

If the imposed speed or linespeed varies along the length of the speed restriction site, then the severity is calculated separately for each distance, and summed to give the total severity for that speed restriction.

If the length, speed or linespeed changes during the life of the speed restriction, then the severity is calculated separately for each time interval, and summed to give the total severity for that speed restriction.

The annual number of sites and the severity score is reported, by route, individually for track, structures and earthworks. The reporting year begins on 1 April and ends on 31 March.

#### **Reporting method**

For Condition of Track speed restrictions, all TSR data is captured in a single information system, the Possession Planning System (PPS). This data is used to produce the Weekly Operating Notice (WON) and thus is checked against operational conditions every week. At the end of the year, the data is extracted from PPS and copied onto a spreadsheet that contains various automatic checks as to the validity of the data. It is then subject to further manual checking, with addition of linespeed data from the Sectional Appendix to allow the severity score to be calculated.

For Structures and Earthworks speed restrictions, each of the five Territory Assurance Engineers submit a spreadsheet containing details of all Structures and Earthworks speed restrictions, both Temporary and Emergency, planned and unplanned, that are in force on their territory each period. Each successive period is cumulative, with removal dates, new speeds, alterations to existing sites added as necessary, so that the Period 13 spreadsheets contain a complete history of each site from the 1 April or the date of imposition. Each period is sense checked and any ambiguity as to whether a site should be included in the measure is taken up with the Territory concerned. After the receipt of the Period 13 spreadsheets, the data is copied onto spreadsheets containing various checks as to the validity of the data, whereby any errors that could affect the number or severity of speeds are corrected, and the formulae that calculate the number and severity for each territory. This is then copied by route into Tables 78 to 80 of the Reporting document.

# Results

Table 78 Track temporary speed restrictions										
Operating routes	2004/05 TSR sites	Severity score	CG	2005/06 TSR sites	Severity score	CG				
London North Eastern	304	2,481		267	2,057					
London North Western	267	1,172		245	1,349					
South East – Anglia	71	106		30	80					
South East – Kent	14	9		8	16					
South East – Sussex	4	5		5	2					
South East – Wessex	28	36		50	41					
Western	105	514		79	454					
England and Wales	793	4,323		684	3,999					
Scotland	74	98		83	153					
Network total	867	4,420	B2	767	4,152	B2				

# Table 79 Structures temporary speed restrictions

Operating routes	2004/05 TSR sites	2004/05 Severity score	CG	2005/06 TSR sites	2005/06 Severity score	CG
London North Eastern	22	29		4	11	
London North Western	1	0		6	4	
South East – Anglia	0	0		0	0	
South East – Kent	0	0		0	0	
South East – Sussex	0	0		3	1	
South East – Wessex	2	6		2	0	
Western	11	9		1	0	
England and Wales	36	44		16	16	
Scotland	2	2		4	1	
Network total	38	45	B2	20	17	B2

# Table 80 Earthworks temporary speed restrictions

Table of Latinworks temporary speed resultions										
Operating routes	2004/05 TSR sites	2004/05 Severity score	CG	2005/06 TSR sites	2005/06 Severity score	CG				
London North Eastern	12	61		7	27					
London North Western	6	13		3	3					
South East – Anglia	3	4		1	2					
South East – Kent	0	0		0	0					
South East – Sussex	0	0		0	0					
South East – Wessex	0	0		0	0					
Western	14	68		15	84					
England and Wales	35	146		26	116					
Scotland	2	11		2	0					
Network total	37	157	B2	28	116	B2				

# **Regulatory target**

Whilst ORR has not historically set a regulatory target for this measure, to ensure that there is no disincentive to applying a speed restriction when it is judged to be necessary on safety grounds, it indicated in the Access Charges Review 2003 that an 'annual reduction (was) required'. We have assumed therefore that the regulatory target is for a reduction from 2004/05 levels, when there were 942 TSRs due to condition of asset.

# **Reporting confidence**

Condition of Track – the reporting confidence is at a similar level to the 2004/5 return. The method used is very similar to last year, with some improvements in data handling and quality:

- all TSR data is captured in a single information system, the Possession Planning System (PPS) which eliminates any potential for duplication at the boundaries of areas
- with a single system there is a reduced requirement for human intervention to

compile the reporting information and, therefore, less potential for error

 a national list of all TSRs on the network is distributed each week to the Area teams who check to ensure that the list is correct.
 Further information checks are provided due to the data being published in the Weekly Operating Notice (WON).

Structures and Earthworks – due to the low numbers involved, a close watch can be kept on the TSRs to ensure all changes are recorded accurately.

#### Commentary

This year's Annual Return shows a greater than 10% reduction in the number of TSR sites and a small reduction in the severity score for Condition of Track TSRs compared to last year. An increased focus on removing TSRs with a high performance impact, in conjunction with several major renewals, has greatly contributed to this trend.

One major point to note is that this measure appears to return a very high severity score for long (in terms of mileage) TSRs that occur on minor branch lines. For example, 30% of the London North Eastern severity score arises from a 15 mile long TSR on the Coalville branch (a freight-only route) that has little impact on the daily running of the network.

56% of the London North Western severity score arises from multiple TSRs on only two secondary routes: the Bedford to Bletchley line (44%), and the Settle and Carlisle line (12%). Both these routes have seen concentrated renewals work towards the end of the 2005/06 year, and this should be reflected in a major severity score improvement in the 2006/07 Annual Return.

# Track geometry – level 2 exceedences (M5) Definition

This measure is based upon the incidence of discrete faults identified against four principal parameters of top (relative vertical position), line (relative horizontal position), gauge (the distance between the rails) and twist (relative vertical position across the opposite corners of a 3 metre bogie or vehicle). These form part of the real-time output from the track recording vehicles to front-line maintenance employees and will prompt intervention and rectification actions to fixed timescales. Both the Level 2 trigger values and these specified timescales are mandated within Railway Group Standards.

The measure records the incidence of these discrete faults per track mile thereby complementing the standard deviation measures (M3) dealt with in earlier sections. However, it should be noted that most of the current Level 2 trigger values are not speed related, being more closely related to final safety parameters. The population of Level 2 exceedences covers a wide range from serious primary defects, of Twist and Gauge, requiring immediate response (block the line or reduce speeds) to relatively minor Top and Line anomalies requiring only review and monitoring. In contrast, SD parameters relate to passenger comfort and overall trends in track asset performance. The highest incidence of Level 2 exceedences is predominantly on lower category routes, therefore this measure may be less indicative than M3 of overall network stewardship.

Results are presented in terms of seven operating routes, Scotland, England and Wales and network total.

#### Results

Table 81 Level 2 exceedences per track mile					
Operating routes	2001/02	2002/03	2003/04	2004/05	2005/06
London North Eastern	1.21	1.11	1.01	0.83	0.75
London North Western	1.59	1.40	1.34	1.10	1.01
South East – Anglia	1.50	1.61	1.77	1.24	1.06
South East – Kent	1.40	0.95	0.86	0.60	0.59
South East – Sussex	1.60	1.37	1.01	0.93	0.80
South East – Wessex	1.53	1.22	1.21	0.95	0.93
Western	1.35	1.08	1.06	0.92	0.75
England and Wales	1.42	1.23	1.17	0.95	0.85
Scotland	0.95	0.83	0.72	0.67	0.63
Network total	1.35	1.17	1.11	0.91	0.82
Confidence Grade			A2	A1	A1

Note: A lower number indicates better performance.

# **Regulatory target**

Network total Level 2 exceedences should not exceed 0.9 per track mile during the current control period. The statistical tolerance for the level 2 exceedence measure has been assessed as  $\pm 7\%$  of the target.

# **Reporting confidence**

Level 2 exceedences are reported to an accuracy within A1 confidence limits.

# Commentary

Overall Level 2 exceedences continue to improve steadily and this is mirrored in the results for every Route, with particular improvement having been achieved on Western and Anglia. Gauge is now static reflecting recent enhancements in track recording techniques with false 'gauge spikes' having been virtually eliminated. Twist, the second primary measure, continues to improve and it is noteworthy that the network numbers have halved since April 1998.

These improvements reflect more rigorous maintenance attention to the effective treatment of repeating faults and also to targeting of renewals. In particular, Scotland, Kent, Wessex and LNE have now all achieved a level on which it will be very difficult to significantly improve, when it is considered that this measure forms part of the fault-finding regime.

# Earthwork failures (M6) Definition

This measure reports the annual number of embankment or cutting failures and separately identifies the number of failures causing a passenger or freight train derailment on running lines.

# **Reporting method**

This is in accordance with the company procedures for measuring and reporting earthworks failures and derailments. Generally this involves details of incidents, which fall under the above definition, to be captured in the Daily National Incident Log and from Hazard Reports. These are checked with the Territory Civil Engineers every three periods for their agreement and for discrepancies to be incorporated.

# Results

Based on data reported to HQ Civil Engineer (Geotechnics) during the year, the correct figures with this definition for Territories are set out in Table 82 below.

# **Regulatory target**

This is covered by other asset condition and serviceability measures and should be no deterioration from the 2003/04 levels, which is 47 national earthworks failures.

The tolerance for this measure is still to be assessed.

# **Reporting confidence**

Number of failures and derailments is supported by territory data.

Given that the hazard reporting system that generated the data has been running since August 2003, we believe that a rating of A2 is appropriate both for the operational route split and for the total.

# Commentary

All earthwork failures are reported, regardless of the amount of delay caused. The term earthwork for this reporting measure includes embankments, cuttings, rock cuttings and natural slopes.

There were two slope failures causing derailment in 2005/06 and both were subject to Formal Investigations to establish cause.

1.A passenger train derailment occurred on 4 November 2005 at Oubeck in LNW Territory due to a cutting failure. The slope had been examined in April 2003 and classified as in

Table 82 Earthworks failures			
Operating routes	2003/04	2004/05	2005/06
London North Eastern	3	4	8
London North Western	8	21	3
South East – Anglia	7	5	2
South East – Kent	1	1	1
South East – Sussex	0	1	0
South East – Wessex	0	0	2
Western	21	11	18
England and Wales	40	43	34
Scotland	7	11	7
Network total	47	54	41
CG	AX	AX	A2

serviceable condition at the time of examination. Topography adjacent to the railway slopes down towards the railway cutting slope crest and following prolonged heavy rainfall led to an earthflow from the cutting side onto the railway causing the derailment. Works carried out to the cutting following the derailment included a slope regrade with granular dressing, reinstatement of cutting crest cutoff drain, drain chamber to intercept a land drain outfall and slope drainage.

2. A passenger train derailment occurred on 26 November 2005 at Moy in Scotland Territory due to a cutting failure. The slope had been examined by aerial inspection early in November 2005. Rapid snowmelt water from the adjacent catchment area led to overtopping of the cutting crest cut-off drain and erosion of soil and toppling of shallow rooted trees on the cutting slope onto the railway causing the derailment.

# Bridge condition (M8) Definition

The bridge condition grade is a measure from 1 to 5, with 1 representing good condition and 5 poor condition. Each bridge is graded from a structures condition marking index (SCMI) value determined using the scoring tool set out in the SCMI handbook. The SCMI process is a marking methodology that grades the condition of each bridge on a 1-100 scale and involves defining the elements of the bridge and determining the extent and severity of defects in each of the elements. The bridge scores are collated into 5 bands: (1) 100 – 80, (2) 79 – 60, (3) 59 – 40, (4) 39 – 20 and (5) 19 – 1.

#### Results

Table 83 Bridge condition index									
Bridge condition grade	Equivalent SCMI value	2001/02	2002/03	2003/04	2004/05	2005/06			
1	80 – 100	340	1015	733	793	855			
2	60 – 79	815	2,484	2,067	3,193	3,263			
3	40 – 59	249	692	789	923	1,217			
4	20 – 39	16	61	126	90	94			
5	1 – 19	1	3	3	5	1			
Total number examined		1,421	4,255	3,718	5,004	5,430			
Average condition grade		2.0	2.0	2.1	2.1	2.1			

#### Table 84 Bridge condition index

Bridge condition	Equivalent SCMI								
grade	value	Adjustments	2004/05	2000/05	CG	Adjustments	2005/06	2000/06	CG
1	80 – 100	-28	793	3,020	B3	-14	855	3,861	B3
2	60 – 79	-43	3,193	9,158	B3	-85	3,263	12,336	B3
3	40 – 59	-25	923	2,818	B3	-15	1,217	4,020	B3
4	20 – 39	-3	90	304	B3	-4	94	394	B3
5		0	5	12	B3	0	1	13	B3
Total num	per examined	-99	5,004	15,312	A1	-118	5,430	20,624	A1
Average c	ondition grade	Э	2.1	2.0	B2		2.1	2.0	B2

84



#### **Reporting method**

The reported measure is presented as a distribution graph (see Figure 4) showing the cumulative number of bridges assessed since 2000 on a 1-100 scale. Additionally, bridge mark data is collated into each of the 5 condition grades, and numbers of bridges reported by band (in Table 84).

Progress of the bridge condition measure is monitored against the cumulative number of bridges entered on the SCMI tool compared to the total population (from GEOGIS).

#### **Regulatory target**

The regulatory target is to return bridge condition to 2001/02 levels. However, the quantification of the regulatory target for SCMI would need to be based on a small sample of inspections which were conducted in 2001/02, which may not be representative. The adjustments to the annual return figures in Table 84 data relate to bridges that have undergone a further SCMI (e.g. tenanted arch where cladding is removed and bridge rescored) and the SCMI score for a bridge is only counted once. The tolerance for the bridge condition index has been assessed as  $\pm$  0.1 on the target. However, it has been discussed with the ORR that a full target and the tolerance cannot be firmly established until all bridges have undergone SCMI which is anticipated to be April 2008.

#### **Reporting confidence**

The confidence grades allocated for this measure are B3 for numbers of bridges in each condition grade (1 - 5) and B2 for the average condition grade for the inspected bridges stock. There are improvements to be made which would deal with the small number of errors/duplicate entries found in the data (these are reflected in the adjustments figures in Table 84). However our grades are supported by audits carried out on a sample of the data in 2005/06 (see commentary).

#### Significant changes since Annual Return 2005

The SCMI tool is networked with all Territory Process Owners for M8 and the HQ Champion and the data is linked to bridge listing data downloaded from GEOGIS into National Bridge & Culvert Books (Issue 2 – March 2005) to enable the progress of bridge condition to be monitored against the total population of 41,251. The population of bridges comprises:

- 26,373 underbridges (including intersection bridges and viaducts)
- 12,291 overbridges
- 2,587 side bridges.

#### Commentary

A sample audit of 216 of the bridges marked by Structures Examination Contract (SEC) employees was undertaken by the same team of experienced bridge engineers used for the previous three years to ensure consistency and validate the results on all Routes. 57% of the audited scores were within the variability expected of the system (i.e. 3 points on the 1-100 scale), which represents a 1% drop on the previous year.

As an additional measure of the data quality we have introduced error ratio values to quantify the significance and range of errors for each of the bridges audited and to serve as an aid for SEC employees.

The data available for 2006 is for 20,624 bridges in all Territories and includes:

- 14,894 underbridges
- 5,626 overbridges
- 104 side bridges.

### Signalling failures (M9) Definition

This measure reports the total number of signalling failures causing a cumulative total train delay of more than 10 minutes per incident, and only includes failures on Network Rail owned infrastructure.

#### **Reporting Method**

The data was compiled from the TRUST system (Train Running System) and shows the number of signalling failures where train delays in excess of 10 minutes have been recorded. This data was merged with the reported train mileage then allocated to the business operating routes.

#### Results

The results are set out in Table 85 below.

#### **Regulatory target**

The ORR target is for no deterioration of the asset from the 2003/04 levels i.e. 28,098 signalling failures. The statistical tolerance for signalling failures is assessed as  $\pm$  7.3% of the target.

#### **Reporting confidence**

Train running information is reported in TRUST. All signalling failures are also reported in FMS (Fault Management System) and are allocated to areas (routes). FMS is used to manage failures and produce data on the reasons for equipment failure. Changes have been made to FMS during the review period following the transfer of maintenance contracts to Network Rail. This involved changing the allocation of failure data between areas. The reported values allow for any minor errors in attribution of data between areas within the overall value given.

#### Commentary

The total number of failures recorded has fallen by 7% from the 2004/05 figure. The national train mileage run has increased by 2% from the 2004/05 figure with an increase showing on all but one route. The number of signalling failures per number of train km run has shown a reduction on all routes.

The previous Annual Return referred to a series of changes including the transfer of maintenance activities directly to Network Rail, the introduction of a new computerised Fault Management System and major installation of new equipment particularly on the West Coast Main Line and Cross Country Routes. These initial changes have bedded in during the 2005/06 period.

The new signalling equipment installed recently, particularly on the West Coast Main Line and Cross Country routes are now performing better as equipment failure modes have become known, equipment upgrades have been identified and modifications installed, giving the projects the benefit of the new technology. The use of this new equipment is now being used on other schemes throughout the network and the early evidence of a reduction of signalling equipment failures has resulted. A third successive good autumn has enabled the performance throughout that season to be maintained at a good level.

An increase in the number of train-km per annum reduces the opportunity that staff have for maintenance and failure rectification. This has the potential to adversely affect the train service. Despite the increase in the train km run, the number of failures affecting the train service has reduced on each of the Operating Routes. The Network Rail overall total is well within the ORR target set.

		Per million				
Operating routes	2004/05	train km	CG	2005/06	train km	CG
London North Eastern	5,234	49	B3	4,835	44	B3
London North Western	6,382	60	B3	6,146	57	B3
South East – Anglia	2,057	47	B3	1,882	43	B3
South East – Kent	1,559	51	B3	1,509	47	B3
South East – Sussex	1,104	35	B3	846	29	B3
South East – Wessex	2,273	53	B3	1,938	44	B3
Western	3,373	52	B3	3,368	50	B3
England and Wales	21,982	-	B3	20,524	_	B3
Scotland	2,968	63	B3	2,843	59	B3
Network total	24,950	63	B3	23,367	48	B2
Regulatory target	28,098	59		28,098	59	

#### Table 85 Number of signalling failures (number)

# Signalling asset condition (M10) Definition

The purpose of this measure is to assess the condition of signalling assets in terms of a 1-5 grading system, where a condition grade of 1 is good and 5 poor. Condition grade is based on residual life of the equipment in a signalling interlocking area using the signalling infrastructure condition assessment (SICA) tool. While the assessment is dominated by the condition of the interlocking, the condition of lineside signalling equipment is also taken into account. This measure does not include level crossings, remote frames or ground frames.

#### **Reporting method**

This Annual Return has been collated from SICA assessment records held as spreadsheets from individual operating routes which were then compiled and analysed manually to produce a national summary as presented here. This process has been used for deriving information presented in this Annual Return previously.

#### Results

The results are set out in Tables 86 and 87 below.

There are 53 interlockings less than 5 years old which are not required to have SICA assessments and have not been included.

Total interlocking population for total network is 1,687.

Total interlockings with a SICA assessment or not required to have one is 1,666.

Percentage coverage is 99%.

#### **Regulatory target**

Network Rail is obliged to ensure that asset condition as defined by the M10 measure does not deteriorate from year to year. In last year's return, the average condition was 2.5. This year's average is 2.4, representing lower average interlocking age. This lowering is partly due to renewal activity but also the large number of new SICA assessments which have been carried out this year leading to greater asset knowledge. If the new interlocking less than five years old, which we currently do not have assessments for (in accordance with standards) had been included, the average condition would be reduced to 2.3. The tolerance for the signalling condition index is ±0.1 on the target.

Condition grade	Observed nominal residual life (in years)	2000/02 2-year total number of interlocking areas in condition band	2000/03 3-year total number of interlocking areas in condition band	2000/04 4-year total number of interlocking areas in condition band	2000/05 5-year total number of interlocking areas in condition band	CG	2000/06 6-year total number of interlocking areas in condition band	CG
1	>20	31	15	0	5	B3	8	B3
2	10 to 20	671	655	736	782	B3	1,024	B3
3	3 to 10	262	295	559	626	B3	530	B3
4	<3	79	67	98	97	B3	51	B3
5	At end of life	0	0	0	0	B3	0	B3
Average of	ondition grade	2.4	2.4	2.5	2.5	B3	2.39	B3
Total num	ber assessed	1,043	1,032	1,393	1,510	B3	1,613	B3

Table 87 Track geometry	– Sig	nalling c	ondition	index by	territo	ory								
Operating routes/ condition grade	1	2	3	4	5	Total 2004/05	CG	1	2	3	4	5	Total 2005/06	CG
London North Eastern	0	255	96	17	0	368	B3	4	323	120	14	0	461	B3
London North Western	1	197	145	40	0	383	B3	0	216	109	7	0	332	B3
South East – Anglia	1	28	48	7	0	84	B3	0	52	77	9	0	138	B3
South East – Kent	0	66	21	3	0	90	B3	0	59	33	2	0	94	B3
South East – Sussex	0	19	40	0	0	59	B3	1	24	29	0	0	54	B3
South East – Wessex	2	57	22	1	0	82	B3	0	44	41	5	0	90	B3
Western	0	55	193	27	0	275	B3	0	212	53	12	0	277	B3
England and Wales	4	677	565	95	0	1,341	B3	5	930	462	49	0	1,446	B3
Scotland	1	105	61	2	0	169	B3	3	94	68	2	0	167	B3
Network total	5	782	626	97	0	1,510	B3	8	1,024	530	51	0	1,613	B3

#### **Reporting confidence**

Reporting confidence for this Annual Return is stated as B3. The very nature of the SICA tool means that an accuracy band better than 3 cannot be realistically achieved. A reliability band of B is claimed as although there is no extrapolation of the data, there are still a number of older SICA assessments carried out to an earlier version and a small number of interlockings did not have assessments at the end of the reporting period.

#### Commentary

The most significant change from the last Annual Return has been in the number of interlockings which have an assessment. Network Rail undertook to have achieved 100% assessment coverage by the end of the 2005/06 reporting period. The actual number achieved was 99%, coverage with the few remaining interlockings programmed for assessment early in the 06/07 period. Network Rail's Territory Engineers have carried out 678 SICA assessments of interlockings in the 2005/06 period. This considerable number is a reflection that within Network Rail's organisation there are posts whose role is largely to carry out assessments resulting in greater focus on this key area of asset management. The SICA process remains, and will continue to remain, Network Rail's prime tool for assessing the condition of its signalling assets.

In last year's Annual Return, comment was made on developments in Network Rail's business planning processes for signalling and in particular the development of Interlocking Data Cards (IDC) as a means of recording asset knowledge and as a key input to the business planning process. The IDC system is now running and acts as a repository for all renewals information pertaining to interlockings including such data as assessment dates, renewals dates, project dates, minor works and other asset attributes. The IDC systems is now being integrated into Network Rail's business planning process and has already been shown to be a key development in asset management. The IDC process is also being extended to cover level crossings, and signal boxes.

# Alternating current traction power incidents causing train delays (M11)

#### Definition

This measure reports the number of overhead line equipment (OLE) component related failures that lead to incidents of duration exceeding 500 train delay minutes. Incidents due to bird strikes and vegetation incursion are included but those proved to have been caused by defective train operating company (TOC) equipment, outside parties, vandalism and those arising as a direct result of extreme weather conditions are excluded.

#### **Reporting method**

The national report has been produced in accordance with the Network Rail Asset Reporting Manual Procedure NR/ARM/M11PR. Generally this involves the National Engineering Reporting Manager (NERM) monitoring failures reported in the Daily National Incident Report and at each period end the summary is sent to the Territory Electrical and Plant Engineers for their review and verification. It is they who investigate the cause of each traction power incident, and the verified figures are provided to the NERM.

#### Results

The results are set out in Table 88 below.

#### **Regulatory target**

The regulatory target is for no deterioration from the number of incidents reported for

2001/02 (107). The statistical tolerance for overhead line failures is assessed as  $\pm 28\%$  of the target.

#### **Reporting Confidence**

Overall the confidence level is considered to be B2.

#### Commentary

The 2005/06 national figure (49) shows a reduction in traction power supply failures of 22 which equates to 31% of the total (71 reportable incidents). Most of these reductions occurred on Anglia, the East Coast Main Line and the West Coast Main Line.

The following factors have contributed to the reduction in traction power supply failures:

- increase in volume of OLE condition-led renewals (span wires, catenary wires, contact wires and campaign changes)
- more effective maintenance delivery following the transfer of Maintenance in-house and the creation of the Area E&P engineering teams
- relatively favourable weather conditions through 2005/06.

Operating routes	2001/02	2002/03	2003/04	2004/05	CG	2005/06	CG
London North Eastern			21	20	B2	13	B2
London North Western			31	28	B2	20	B2
South East – Anglia			24	17	B2	10	B2
South East – Kent			0	0	BX	0	BX
South East – Sussex			-	_	_	-	
South East – Wessex			_	_	_	_	
Western			0	0	BX	0	BX
England and Wales			76	65	B2	43	B2
Scotland			3	6	BX	6	BX
Network total	107	102	79	71	B2	49	B2

# Direct current traction power incidents causing train delays (M12)

#### Definition

This measure reports the number of conductor rail component related failures that lead to incidents of duration exceeding 500 train delay minutes. It excludes incidents proved to have been caused by defective TOC equipment, outside parties, vandalism, animals and those arising as a direct result of extreme weather conditions.

#### **Reporting method**

The national report has been produced in accordance with the Network Rail Asset Reporting Manual Procedure NR/ARM/M12PR. Generally this involves the National Engineering Reporting Manager (NERM) monitoring failures reported in the Daily National Incident Report and at each period end the summary is sent to the Territory Electrical and Plant Engineers for their review and verification. It is they who investigate the cause of each traction power incident, and the verified figures are provided to the NERM.

#### **Regulatory target**

The regulatory target is for no deterioration from the number of incidents reported for 2001/02 (30). The statistical tolerance for conductor rail failures is assessed as  $\pm 47\%$  of the target.

#### **Reporting Confidence**

Overall the confidence level is considered to be BX (it should also be noted that the size of the data set is very small).

#### Commentary

The 2005/06 national figure (6) shows a reduction in traction power supply failures of 7 which equates to 54% of the total (13 reportable incidents).

The reduction in failures can be attributed to more effective maintenance delivery following the transfer of Maintenance in-house and the creation of the Area E&P engineering teams.

#### Results

Table 89 Electrification failu	ires: conduct	or rail					
Operating routes	2001/02	2002/03	2003/04	2004/05	CG	2005/06	CG
London North Eastern			0	0	BX	0	BX
London North Western			2	1	BX	0	BX
South East – Anglia			0	0	BX	0	BX
South East – Kent			8	4	BX	1	BX
South East – Sussex			11	5	BX	3	BX
South East – Wessex			12	3	BX	2	BX
Western			-	-	-	-	
England and Wales			33	13	_	6	BX
Scotland			_	_	_	-	
Network total	30	32	33	13	BX	6	BX

### Electrification condition – AC traction feeder stations and track sectioning points (M13) Definition

This is a measure of the condition of alternating current (AC) traction feeder stations (FSs) and track sectioning points (TSPs), on a scale of 1-5, based on visual inspection and the age, robustness of design, maintenance/refurbishment history and operational performance of the 25kV switchgear:

- band 1: equipment is free from defects with negligible deterioration in condition
- band 2: evidence of minor defects and/or early stage deterioration that may require some remedial work to be undertaken
- band 3: defects and/or a level of deterioration that requires remedial work to be undertaken
- band 4: significant defects and/or a high level of equipment deterioration needing major repairs/heavy maintenance or complete renewal to be programmed

• band 5: serious defects and deterioration of a level that, should the equipment still be in operation, has potential for service disruption.

The measure reports the percentage of feeder stations and track sectioning points falling within each of the defined condition grades.

#### **Reporting method**

The national report has been produced in accordance with the Network Rail Asset Reporting Manual Procedure NR/ARM/M13PR. Generally condition assessment is done through a combination of visual inspections of 25kV switchgear at feeder stations and a selection of traction sectioning points together with consideration of robustness of design and particular service, maintenance and refurbishment history aspects of the switchgear. Each inspection is based on a standard set of pre-determined questions.

#### Results

#### Table 90 Electrification condition – AC traction 2000 – 06 year total

Condition grade	Network	South East	London North East	London North West	Scotland
1	31%	40%	27%	16%	62%
2	53%	45%	53%	67%	35%
3	15%	14%	19%	17%	3%
4	1%	1%	1%	0%	0%
5	0%	0%	0%	0%	0%
Average condition grade	1.85	1.76	1.95	2.00	1.41

#### Table 91 Electrification condition – AC traction 2005/06 year total

Condition grade	Network	South East	London North East	London North West	Scotland
1	37%	44%	10%	50%	67%
2	40%	56%	20%	50%	33%
3	23%	0%	70%	0%	0%
4	0%	0%	0%	0%	0%
5	0%	0%	0%	0%	0%
Average condition grade	1.87	1.56	2.60	1.50	1.33

Network Rail Annual Return 2006

### **Regulatory target**

The target for year 2005/06 was to complete the measure for the remaining 10% of assets that had not previously been assessed. All assets under this measure have now been assessed between control periods 2000 to 2006. The tolerance for AC feeder station condition has been assessed as  $\pm 0.1$  on the target.

#### **Reporting confidence**

The measure is awarded a B2 tolerance band as 100% of the assets have been assessed and the overall score should be accurate within  $\pm 5\%$  taking into account the subjective nature of the condition assessments.

#### Commentary

During 2005/06, 5 FSs and 25 TSPs were inspected. The 83 FSs and 207 TSPs on the Network Rail's 25kV AC electrification system have been inspected since period 2000/01 as per the agreed target with the ORR.

A renewal programme of the aging minimum oil switchgear type for modern switchgear is underway to improve performance and reliability of the AC electrification system.

Expired protection relays are being replaced with a modern equivalent on the East Coast Main Line, Midland Main Line and in the South East Territory. The new relays will enhance the compatibility between the protection system and regenerative braking, leading to realisation of significant energy savings.

Maintenance by Network Rail is having a positive benefit to the servicing of the assets.

# Electrification condition – DC traction substations (M14) Definition

This is a measure of the condition of Network Rail's direct current (DC) traction substations, on a scale of 1-5, based on visual inspection and the age, robustness of design, maintenance/refurbishment history and operational performance of the high voltage (HV) switchgear, rectifier transformers, rectifiers and DC switchgear:

- band 1: equipment is free from defects with negligible deterioration in condition
- band 2: evidence of minor defects and/or early stage deterioration that may require some remedial work to be undertaken
- band 3: defects and/or a level of deterioration that requires remedial work to be undertaken
- band 4: significant defects and/or a high level of equipment deterioration needing major repairs/heavy maintenance or complete renewal to be programmed
- band 5: serious defects and deterioration of a level that, should the equipment still be in operation, has potential for service disruption.

#### **Reporting method**

The national report has been produced in accordance with the Network Rail Asset Reporting Manual Procedure NR/ARM/M14PR. Generally condition assessment is to be done through a combination of visual inspection of HV switchgear, rectifier transformer, rectifier and DC switchgear equipment at traction substations and the consideration of age, robustness of design and particular service, maintenance and refurbishment history aspects of this switchgear. Each inspection is based on a standard set of pre-determined questions.

#### Results

The results are set out in Tables 92 and 93 below.

#### **Regulatory target**

The target for year 2005/06 was to complete the measure for the remaining 10% of assets that had not previously been assessed. All assets under this measure have now been assessed between control periods 2000 to 2006. The tolerance for DC feeder station condition has been assessed as  $\pm$  0.1 on the target.

#### **Reporting confidence**

The measure is awarded a B2 tolerance as 100% of the assets have been assessed and the overall score should be accurate within  $\pm 5\%$  taking into account the subjective nature of the condition assessments.

#### Commentary

During 2005/06, 44 substations were inspected. The 415 substations on Network Rail's infrastructure have all been inspected since period 2000/01 as per the agreed target with ORR.

The power supply upgrade programme has improved performance and reliability of the DC electrification system.

Maintenance by Network Rail is having a positive benefit to the servicing of the assets.

Table 92 Electrification condition – DC traction substations 2000/06 year total									
Condition grade	Network	South East	London North East	London North West	Scotland				
1	37%	39%	50%	23%	n/a				
2	49%	46%	33%	68%	n/a				
3	13%	14%	17%	9%	n/a				
4	1%	1%	0%	0%	n/a				
5	0%	0%	0%	0%	n/a				
Average condition grade	1.78	1.78	1.67	1.86	n/a				

#### Table 93 Electrification condition – DC traction substations 2005/06 year total

Condition grade	Network	South East	London North East	London North West	Scotland
1	57%	54%	100%	50%	n/a
2	38%	41%	0%	50%	n/a
3	5%	5%	0%	0%	n/a
4	0%	0%	0%	0%	n/a
5	0%	0%	0%	0%	n/a
Average condition grade	1.48	1.51	1.00	1.50	n/a

# Electrification condition – AC traction contact systems (M15) Definition

This is a measure of the condition of AC contact systems, on a scale of 1-5, based on physical wear measurement of contact wire and visual inspection of key components including contact and catenary wires, registration assemblies and structures. A condition grade of 1 is good and 5 is poor. This measure excludes all earthing, bonding and traction return circuits.

#### **Reporting method**

This is in accordance with the company's Asset Reporting Manual procedures.

#### Results

The results are set out in Tables 94 and 95 below.

#### **Regulatory target**

The regulatory target is under 'Condition and

serviceability' to be maintained at 2001/02 levels i.e. the national average of 1.8. The tolerance for overhead line condition is assessed as  $\pm$  0.1 on the target.

#### **Reporting confidence**

Reporting of M15 – Electrification Condition AC traction contact systems is graded at B3 confidence.

#### Commentary

Following the transfer of Maintenance in house, condition assessments have been undertaken by Maintenance staff as opposed to utilising a dedicated Engineering resource. The method of inspection however remains unchanged.

21% of the total asset base has now been assessed.

The additional 4% surveyed this year on LNE, LNW and SE territories has not changed the average condition score from 1.7.

Table 94 Electrification cor	ndition – AC	traction cor	ntact system				
Condition grade	2000/02 2-year total contact wire/key components	2000/03 3-year total contact wire/key components	2000/04 4-year total contact wire/key components	2000/05 5-year total contact wire/key components	CG	2000/06 6-year total contact wire/key components	CG
1	35%	35%	39%	39%		38%	
2	55%	55%	53%	53%		54%	
3	9%	10%	9%	8%		7%	
4	1%	0%	0%	0%		0%	
5	0%	0%	0%	0%		0%	
Average condition grade	1.8	1.8	1.7	1.7	B3	1.7	В3
Percentage of assets surve	eyed 7%	11%	15%	17%		21%	

#### Table 95 Electrification condition – AC traction contact system

Condition grade	London East	London West	Scotland	South West	Western
1	42%	24%	54%	40%	80%
2	49%	66%	40%	55%	20%
3	8%	10%	5%	5%	0%
4	0%	0%	1%	0%	0%
5	0%	0%	0%	0%	0%
Average condition grade	1.7	1.9	1.5	1.7	1.2
Percentage of assets surveyed	17%	26%	19%	22%	11%

Asset management

# Electrification condition – DC traction contact systems (M16) Definition

This is a measure of the condition of DC contact systems, on a scale of 1-5, based on physical wear measurement of conductor rail. A condition grade of 1 is good and 5 is poor. The measure excludes any associated equipment (e.g. insulators, anchor assemblies, protective boarding etc.).

#### **Reporting method**

This is in accordance with the company's Asset Reporting Manual procedures.

#### **Results**

The results are set out in Tables 96 and 97 below.

#### **Regulatory target**

The regulatory target is under 'Condition and serviceability' to be maintained at 2001/02 levels i.e. the national average of 1.8. The tolerance for overhead line condition is assessed as  $\pm$  0.1 on the target.

#### **Reporting confidence**

Reporting of M16 – Electrification Condition (DC traction contact systems) is graded at B3 confidence.

#### Commentary

69% of the total asset base has now been assessed.

The additional 1% surveyed this year includes 17km of conductor rail renewal on South East territory.

Table 96 Electrification condition – DC traction contact system									
Condition grade	2000/02 2-year total conductor rail	2000/03 3-year total conductor rail	2000/04 4-year total conductor rail	2000/05 5-year total conductor rail	CG	2000/06 6-year total conductor rail	CG		
1	39%	37%	37%	35%		39%			
2	43%	42%	44%	44%		41%			
3	16%	16%	16%	18%		18%			
4	2%	2%	2%	3%		2%			
5	0%	0%	0%	0%		0%			
Average condition grade	1.8	1.8	1.8	1.9	B3	1.8	B3		
Percentage of assets survey	ed –	_	64%	68%		69%			

#### Table 97 Electrification condition – AC traction contact system

Condition grade	London North East	London North West	South East
1	-	37%	36%
2	_	33%	42%
3	_	18%	19%
4	_	9%	3%
5	-	3%	0%
Average condition grade		2.1	1.9
Percentage of assets surveyed		15%	73%

Note: There are no DC assets in Scotland and Western territories. London North Eastern only has a very small amount.

# Station condition index (M17) Definition

This is the average condition rating of each station where trains make timetabled stops, summarised into categories (A – F, national hub – small unstaffed station) together with the overall condition rating for all stations.

This is calculated by assessing the condition of each element of a station by visual inspection. These condition scores are then combined into an overall score of each station. The scale represents a combination of the degree of deterioration. It has been adopted as a standard method for assessing the condition of a variety of asset types.

The condition rating score of each station is the average of the condition ratings of the individual assets rated on a scale of 1 - 5. The scale of 1 - 5 is a summary of the remaining asset life, expressed as a percentage of the expected full life of the asset, as in the table below.

# Remaining life as a percentage of

expected full life	Condition rating
76% – 100%	1
46% - 75%	2
16% – 45%	3
1% – 15%	4
0%	5

# **Reporting method**

The condition score is an average of the score from 34 elements on the stations such as platforms, canopies, structure and decoration. These elements are condition rated using a scale of 1 - 5, where one is 'as installed' and five is 'no longer serviceable'.

#### **Regulatory target**

This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels i.e. 2.25. The tolerance for the station condition index is assessed as  $\pm$  0.1 on the target.

#### **Reporting confidence**

Reporting of M17 – Station Condition Index, is confidence rated B2.

#### Commentary

The overall score has improved slightly from 2.23 to 2.22. It is felt that changes in scores are an accurate reflection of work carried out to our assets.

Work continues between Network Rail and ORR for the implementation of a new measure.

Ta	ble 98 Station numbers								
		London North Eastern	London North Western	Scotland	South East Anglia	South East Kent	South East Sussex	South East Wessex	Western
А	National Hub	5	8	3	3	2	4	0	3
В	Regional Hub	9	13	5	13	5	3	14	5
С	Important Feeder	26	37	6	43	33	26	51	22
D	Medium, Staffed	42	56	23	28	46	41	36	26
E	Small, Staffed	53	217	107	59	60	67	57	58
F	Small, Unstaffed	245	272	198	92	36	35	48	273
То	tal	380	603	342	238	182	176	206	387

Station category	Year	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total
A – national hub	2001/02	0	15	11	0	0	26
	2002/03	1	19	7	0	0	27
	2003/04	1	21	6	0	0	28
	2004/05	0	24	4	0	0	28
	2005/06	0	23	5	0	0	28
B – regional hub	2001/02	0	54	12	0	0	66
	2002/03	0	54	13	0	0	67
	2003/04	1	52	14	0	0	67
	2004/05	1	54	12	0	0	67
	2005/06	1	54	12	0	0	67
C – important feeder	2001/02	8	179	49	0	0	236
	2002/03	8	175	59	0	0	242
	2003/04	7	172	62	0	0	241
	2004/05	10	166	65	0	0	241
	2005/06	11	167	65	0	0	243
D – medium, staffed	2001/02	19	212	60	1	0	292
	2002/03	18	200	78	1	0	297
	2003/04	18	190	89	0	0	297
	2004/05	21	189	88	0	0	298
	2005/06	19	192	87	0	0	298
E – small, staffed	2001/02	35	505	127	3	0	670
	2002/03	35	492	145	4	0	676
	2003/04	34	486	152	4	0	676
	2004/05	43	472	159	3	0	677
	2005/06	45	480	150	3	0	678
F – small, unstaffed	2001/02	63	804	296	5	0	1,168
	2002/03	61	833	292	4	0	1,190
	2003/04	44	894	249	4	0	1,191
	2004/05	76	861	254	3	0	1,194
	2005/06	78	871	242	1	0	1,192
All stations	2001/02	125	1,769	555	9	0	2,458
	2002/03	123	1,773	594	9	0	2,499
	2003/04	105	1,815	572	8	0	2,500
	2004/05	151	1,766	582	6	0	2,505
	2005/06	154	1,787	561	4	0	2,506

# Table 100 Condition grade by operating route

Operating routes	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total
London North Eastern	39	286	55	0	0	380
London North Western	35	518	48	1	0	602
South East – Anglia	12	211	15	0	0	238
South East – Kent	1	79	101	1	0	182
South East – Sussex	2	64	107	2	0	175
South East – Wessex	0	89	115	0	0	204
Western	2	279	105	0	0	386
England & Wales	91	1,526	546	4	0	2,167
Scotland	63	261	15	0	0	339
Network total	154	1,787	561	4	0	2,506

Scoring scale: Grade 1 is good, grade 5 is poor. The average condition grade for all stations in 2005 - 06 is 2.22.

Station facility score (M18)

present at stations broken down by station category and by theme. The score is calculated by counting the number of specific items at each station.

Each station is allocated to one of six categories: (A) – national hub, (B) – regional hub, (C) – important feeder station, (D) – medium staffed station, (E) – small staffed station and (F) – small unstaffed station.

The facilities are grouped into 'themes'. The themes include the following facilities:

- access disabled lavatories, induction loops, escalators
- comfort and convenience lavatories, shelters, covered trail on platforms
- information and communications clocks, public address, customer information systems
- integrated transport taxi ranks, car parks, highway markings

 safety and security – lighting, handrails and anti-slip floors on footbridges and subways, CCTV, security doors and windows on employee accommodation, secure cash transfer facilities.

#### **Reporting method**

This aligns with the Network Rail Asset Reporting Manual reporting procedure for Station Facilities. The measure is reported giving a total of 30 outputs. Generally, there is the Stations Facilities Excel Database and the territories and managed stations input data into this Excel database with information coming from three sources; account surveyors, station facility owners through the landlords approval and station change procedures, and project managers/building surveyors. There are continuous checks by Network Rail and the routes and the quinquennial station surveys also provide an additional check to changes in station facilities.

#### Results

Table 101 Access score					
Station category	2000/01	2002/03	2003/04	2004/05	2005/06
A – national hub	100 (955)	110.7 (1,057)	112.0 (1,070)	113.4 (1,083)	113.4 (1,083)
B – regional hub	100 (1,026)	101.9 (1,045)	103.2 (1,059)	104.5 (1,072)	104.5 (1,072)
C – important feeder	100 (2,272)	102.8 (2,336)	104.3 (2,369)	104.2 (2,368)	104.6 (2,377)
D – medium, staffed	100 (1,959)	102.5 (2,008)	102.9 (2,016)	103.7 (2,032)	104.2 (2,042)
E – small, staffed	100 (2,435)	101.7 (2,477)	103.6 (2,522)	103.4 (2,518)	106.3 (2,589)
F – small, unstaffed	100 (3,775)	98.5 (3,720)	99.2 (3,745)	100.0 (3,776)	102.4 (3,867)

Table 102 Comfort and	convenience scor	е			
Station category	2000/01	2002/03	2003/04	2004/05	2005/06
A – national hub	100 (5,545)	102.2 (5,667)	106.8 (5,924)	106.8 (5,924)	106.8 (5,924)
B – regional hub	100 (5,679)	100.0 (5,678)	100.4 (5,702)	100.3 (5,697)	101.0 (5,736)
C – important feeder	100 (10,131)	99.5 (10,081)	99.4 (10,074)	99.8 (10,115)	100.0 (10,126)
D – medium, staffed	100 (3,963)	101.2 (4,012)	101.8 (4,035)	101.8 (4,036)	102.2 (4,050)
E – small, staffed	100 (4,694)	101.5 (4,763)	103.6 (4,865)	105.0 (4,931)	105.2 (4,938)
F – small, unstaffed	100 (2,631)	97.8 (2,574)	99.3 (2,612)	99.7 (2,623)	101.8 (2,678)

Table 103 Information a	nd communicatior	ns score			
Station category	2000/01	2002/03	2003/04	2004/05	2005/06
A – national hub	100 (2,149)	106.8 (2,295)	122.6 (2,635)	122.6 (2,635)	123.2 (2,647)
B – regional hub	100 (1,860)	100.3 (1,865)	101.4 (1,886)	101.6 (1,890)	101.7 (1,892)
C – important feeder	100 (3,803)	105.3 (4,005)	107.4 (4,084)	109.5 (4,163)	109.9 (4,178)
D – medium, staffed	100 (2,738)	107.4 (2,941)	109.6 (3,001)	112.0 (3,067)	113.3 (3,102)
E – small, staffed	100 (2,676)	103.7 (2,775)	104.7 (2,801)	106.3 (2,844)	107.4 (2,874)
F – small, unstaffed	100 (49)	128.6 (63)	165.3 (81)	177.6 (87)	187.8 (92)

Table 104 Integrated tra	nsport score				
Station category	2000/01	2002/03	2003/04	2004/05	2005/06
A – national hub	100 (603)	104.6 (631)	114.1 (688)	114.1 (688)	114.1 (688)
B – regional hub	100 (1,062)	96.2 (1,022)	97.5 (1,035)	97.8 (1,039)	97.8 (1,039)
C – important feeder	100 (2,517)	99.2 (2,496)	100.0 (2,518)	101.6 (2,557)	101.9 (2,566)
D – medium, staffed	100 (1,644)	102.3 (1,682)	104.3 (1,714)	106.1 (1,744)	106.7 (1,754)
E – small, staffed	100 (1,373)	100.1 (1,374)	101.2 (1,390)	103.1 (1,415)	105.2 (1,444)
F – small, unstaffed	100 (1,590)	98.1 (1,559)	98.2 (1,562)	98.2 (1,562)	99.1 (1,576)

Table 105 Safety and se	ecurity score				
Station category	2000/01	2002/03	2003/04	2004/05	2005/06
A – national hub	100 (15,919)	111.0 (17,670)	117.2 (18,649)	117.2 (18,649)	117.2 (18,656)
B – regional hub	100 (12,462)	102.8 (12,812)	104.4 (13,012)	104.6 (13,040)	104.6 (13,041)
C – important feeder	100 (23,583)	103.4 (24,388)	107.2 (25,271)	109.1 (25,718)	109.4 (25,806)
D – medium, staffed	100 (17,209)	103.7 (17,852)	104.9 (18,057)	107.3 (18,463)	109.4 (18,821)
E – small, staffed	100 (21,568)	101.1 (21,812)	101.6 (21,921)	102.3 (22,065)	106.8 (23,041)
F – small, unstaffed	100 (15,577)	98.9 (15,398)	99.4 (15,480)	99.8 (15,544)	102.1 (15,911)

Table 106 Network	score				
All stations	2000/01	2002/03	2003/04	2004/05	2005/06
Network score	100 (173,447)	102.7 (178,056)	104.8 (181,778)	105.7 (183,344)	107.0 (185,609)

#### **Regulatory target**

There is no regulatory target for this measure.

#### **Reporting confidence**

We consider this can be reported at B2 confidence. Again there are issues with the scoring system, for example distributed lighting is valued, but these should not mean our reporting is outwith the +/- 5% reporting band, broken down by station category and by theme. When totalled up for network scores, non-systematic error is cancelled and confidence in the score is increased.

#### Significant changes since Annual Return 2005

Overall the scores for 2005/06 show the total asset units for all stations to have increased against the base of 2000/01 and generally show an incremental increase over the figures for 2004/05. The key themes which have contributed to this increase are information and communication i.e. provision of customer information systems, and improvements to safety and security i.e. lighting, CCTV. This is consistent with Network Rail's continuing commitment to work with our customers in improving passenger facilities at stations.

#### Commentary

The scores for 2000/01 are presented as an index of 100 for ease of onward tracking of performance. Scores for 2005/06 and preceding years are shown relative to the index base. The number of relevant assets in each category is shown in parenthesis.

#### Light maintenance depot – condition index (M19) Definition

This measure assesses the overall average condition of light maintenance depots (LMDs) by providing, at each financial year-end, the number of depots in individual average condition ratings of 1 - 5.

#### **Reporting method**

This measure is similar to M17 Station Condition Index. The condition score is an average of the score from 11 elements in the light maintenance depots such as wheel lathes, structure and facilities. The elements are condition rated using a scale of 1 - 5, where one is 'as installed' and five is 'no longer serviceable'.

#### **Regulatory target**

This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels i.e. 2.7. The tolerance for the depot condition index is assessed as  $\pm$  0.1 on the target.

#### **Reporting confidence**

Reporting of M19 – Light maintenance depot condition index, is confidence rated B2.

#### Commentary

The overall score has improved from 2.70 to 2.58. This change is due to work being carried out prior to re-franchising. It is felt that changes in scores are an accurate reflection of work carried out to our assets.

#### Results

Table 107 Light maintenance depot – inspections and condition index (number of depots in each grade)									
Condition grade	2001/02 1-year total	2001/03 2-year total	2001/04 3-year total	2001/05 4-year total	2000/06 5-year total				
1			2	2	2				
2	2	3	17	17	27				
3	13	13	15	15	20				
4	5	5	5	5	5				
5	0	0	0	0	0				
Total	20	21	39	39	54				
Average condition grade	3.07	3.04	2.63	2.63	2.58				

Operating routes/ condition grade	1	2	3	4	5	Total 2005/06	Average condition grade
London North Eastern	1	1	3	0	0	0	2.68
London North Western	1	4	6	2	0	0	2.60
South East – Anglia	0	1	4	2	0	2.77	2.99
South East – Kent	0	3	0	0	0	2.17	2.02
South East – Sussex	0	2	1	1	0	0	2.99
South East – Wessex	0	4	1	0	0	2.48	2.38
Western	0	9	2	0	0	2.45	2.36
England and Wales	2	24	17	5	0	2.46	2.59
Scotland	0	3	3	0	0	0	2.51
Network total	2	27	20	5	0	2.46	2.58

Scoring scale: 1 good, 5 poor.

Asset management

#### Network Rail Asset Stewardship Incentive Index (ASII) Definition

The ASII is an indication of how asset stewardship is being improved. It is an aggregated index comprising weighted components representing the asset stewardship of elements of track, signalling, electricity and plant and civil engineering.

The 2002/03 actuals (used as the baseline for the target) and 2008/09 incentive target set by ORR together with the actual result for 2005/06 are as follows:

# Commentary

The year 2005/06 has shown a reduction in this index with improvements in all contributory indicators. The regulatory target for broken rails has been exceeded by 17 – refer to page 64, the section on the number of broken rails (M1) for more details.

#### **Results**

Table 109 Asset stewardship incentive index				
Asset measure	Weightings	2002/03 actuals	2005/06 actuals	2008/09 incentive target
Track geometry	20%	1.11	0.835	1.00
Broken rails	15%	444	317	300
Level 2 exceedences	15%	1.2	0.820	0.9
Points/track circuit failures	10%	21,511	17,285	19,360
Signalling failures	20%	29,077	23,367	28,750
Electrification failures	10%	134	55	133
Structures and earthworks temporary speed restrictions	10%	152	48	100
ASII		1.20	0.803	0.90

Results for the year 2005/06 and 2004/05 along with internal targets are as follows:

Table 110 Results for 2005/06 and 2004/05 (with internal ta	argets)			
	2004/05 Actual	2004/05 Target	2005/06 Actual	2005/06 Target
ASII	0.898	1.063	0.803	0.850

# Section 4 Activity volumes

This section provides data on the level of renewal activity on the network by giving volumes of work undertaken for ten separate measures; four for track renewals, one for signalling renewals and five for 'Civils' (e.g. bridge) renewals. As is the case for many other measures, previous year's data from 2003/04 and before are not separated into the eight operating routes as the company was not structured this way.

With track activity volumes, there are forecasts from the Business Plan 2005/06 included. A degree of variance from forecasts is expected as the details of the planned work are refined in response to more detailed site knowledge, and as engineering priorities are adjusted during the year. These priority changes may be in response to emerging urgent works, to changes in standards, or to changes in funding. For the first year, the Business Plan 2005/06 also had forecasts for signalling renewal volumes but this only covered major schemes (i.e. excluded level crossings) and so is not comparable with actual volumes delivered. We have commented on progress against these plans in the signalling renewed (M24) section.

There are no forecasts for the 'Civils' activity volumes. This is because the delivery teams work to their budgets with part of their workbanks defined at the start of the year and the rest of the year's workbank for these volumes are defined in more detail as the designs are progressed during the year.

The volumes for 2005/06 have been provided for the network total and by eight operating routes. Due to the re-structuring of the company, only West Coast Route Modernisation and the network totals for historical data have been included for the years before 2004/05.

# Activity Volume KPI

This measure reports the volume of track renewal actually delivered compared to the planned volume and is based on the sum of rail renewal, sleeper renewal and ballast renewal for core track renewal activity (excluding WCRM). The planned volume for 2005/06 was 2280km (930 rail, 665 sleeper and 685 ballast) and the actual volume delivered was 2446km (1076 rail, 653 sleeper and 717 ballast). The index for the year is thus 2446/2280 = 107, compared to a forecast of 100.

# Rail renewed (M20) Definition

The total length of track in kilometres where re-railing has been carried out. This measure counts the total length of plain line track where both rails have been replaced; if one rail is replaced the length counts as half.

#### Results

The results are show in Table 111 below.

Table 111 Rail renewed (kilometres)						
	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM	88	69	236	132	72	44
Non-WCRM						
London North Eastern	-	-	_	156	155	185
London North Western	-	-	-	141	198	237
Anglia	-	-	_	٦	132	101
Kent	-	-	_	- 199	58	58
Sussex	_	-	_		23	27
Wessex	-	-	_		73	76
Western	-	-	_	139	234	265
England and Wales	_	_	_	635	873	949
Scotland	_	_	_	49	57	127
Network total	983	1,010	1,401	816	1,002	1,120

#### Sleepers renewed (M21) Definition

The total length of track in kilometres where re-sleepering has been carried out.

#### Results

Table 112 Sleepers renewed: all types	(kilometres)					
	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM	169	137	223	152	68	91
Non-WCRM						
London North Eastern	_	_	_	122	119	130
London North Western	_	_	_	91	112	114
Anglia	_	_	_	7	100	83
Kent				- 151	23	27
Sussex					18	12
Wessex					55	52
Western	_	_	_	121	196	177
England and Wales	_	_	_	485	623	595
Scotland	_	_	_	33	42	58
Network total	636	666	837	670	733	744

# Table 113 Concrete sleepers (kilometres)

	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM		169	137	190	148	91
Non-WCRM						
London North Eastern		-	_	-	48	58
London North Western		_	_	-	38	41
Anglia		_	_	-	7	37
Kent		-	-	-	- 125	27
Sussex		-	-	-		12
Wessex		-	-	-		48
Western		-	-	-	78	138
England and Wales		_	_	_	289	361
Scotland		_	_	_	15	17
Network total		347	367	486	452	469

# Table 114 Timber sleepers (kilometres)

	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM		0	0	0	1	0
Non-WCRM						
London North Eastern		-	_	-	22	16
London North Western		_	_	_	0	11
Anglia		_	_	_	7	0
Kent		-	_	-	- 4	0
Sussex		-	_	-		0
Wessex		-	-	-		0
Western		_	_	_	0	7
England and Wales		_	_	_	26	34
Scotland		_	_	_	0	2
Network total		17	37	51	27	36

# Table 115 Steel sleepers (kilometres)

	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM		0	0	33	3	0
Non-WCRM						
London North Eastern		_	_	-	52	58
London North Western		-	_	-	53	60
Anglia		-	_	-	7	47
Kent		-	-	-	- 22	0
Sussex		_	_	-		0
Wessex		-	_	-		3
Western		-	_	-	43	32
England and Wales		_	_	_	170	200
Scotland		_	_	_	18	39
Network total		272	263	300	191	239

# Ballast renewed (M22) Definition

The total length of track, in kilometres, where re-ballasting has been carried out.

### Results

Table 116 Ballast renewed: all type	es (kilometres)					
	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM	90	90	205	122	67	81
Non-WCRM						
London North Eastern	-	_	_	129	162	177
London North Western	_	_	_	97	108	128
Anglia	-	-	_		95	85
Kent	-	_	_	- 158	23	27
Sussex	-	-	_		18	12
Wessex	_	-	_		53	52
Western	_	-	_	143	186	177
England and Wales	_	_	_	527	645	658
Scotland	_	_	_	36	40	59
Network total	624	665	812	685	752	798

Table 117 Full ballast rer	newal by excavation	(kilometres)

	Actual 2003/04	Actual 2004/05	Actual 2005/06
WCRM	88	113	81
Non-WCRM			
London North Eastern	_	53	68
London North Western	_	43	40
Anglia	- '		33
Kent	_	<b>-</b> 126	18
Sussex	_		11
Wessex	-		34
Western	_	74	86
England and Wales	_	296	290
Scotland	_	18	20
Network total	388	427	391
Activity	4		
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' volumes			

Table 118 Partial reballast – automatic ballast cleaning (kilometer	res)		
	Actual 2003/04	Actual 2004/05	Actual 2005/06
WCRM	84	9	0
Non-WCRM			
London North Eastern	_	22	50
London North Western	-	1	28
Anglia	-	7	5
Kent	_	- 10	2
Sussex	_		0
Wessex	-		3
Western	-	35	59
England and Wales	_	68	147
Scotland	_	2	0
Network total	122	79	147

Table 119 Scarify – reballast with steel sleeper relay (kilometres)			
	Actual 2003/04	Actual 2004/05	Actual 2005/06
WCRM	32	0	0
Non-WCRM			
London North Eastern	_	54	58
London North Western	_	53	61
Anglia			46
Kent	_	- 22	7
Sussex	_		2
Wessex			16
Western	_	34	32
England and Wales	_	163	222
Scotland	_	16	39
Network total	299	179	261

# Switches and crossings renewed (M25) Definition

This measure records the total number of switches and crossing (S&C) units that have been renewed.

For previous years this measure has recorded only the number of units installed (i.e. not the number removed and replaced with plain line track or where the asset life has been extended and/or S&C partially renewed). These additional units are now shown in the tables below. The Business Plan and our unit cost efficiency assessment include figures for S&C equivalent units to give a better reflection of activity delivered by including partial renewals and removed units as well as full renewals. For the 2005/06 Business Plan forecast an S&C equivalent counted a full renewal as 1.0, a removed unit as 1.0 and a life extension or partial/reballasted renewal as 0.33. We have slightly revised this for the latest 2006/07 plan and our efficiency assessment and an S&C equivalent now counts a full renewal as 1.0, a removed unit as 0.5 and a life extension or partial/reballasted renewal as 0.33.

#### **Results**

Table 120 S&C full renewals (kilometre	es)					
	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM	26	50	138	170	155	151
Non-WCRM						
London North Eastern	-	-	_	56	72	75
London North Western	-	-	_	99	91	95
Anglia	-	-	_	7	20	21
Kent	-	_	_	- 92	9	9
Sussex	-	-	_		7	7
Wessex	-	-	_		65	69
Western	-	-	_	75	76	80
England and Wales	_	_	_	322	340	356
Scotland	_	_	_	19	12	13
Network total	136	254	373	511	507	520

### Table 121 S&C removals/recoveries (kilometres)

	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM			_	0	0	0
Non-WCRM						
London North Eastern			_	0	0	0
London North Western			4	7	0	0
Anglia			_	7	0	0
Kent			_	- 0	0	0
Sussex			-		0	0
Wessex			_		2	2
Western			18	6	23	24
England and Wales			22	13	25	26
Scotland			_	0	0	0
Network total			22	13	25	26

Activity volumes

### Table 122 S&C partial renewals/reballasting (kilometres)

	Actual 2001/02	Actual 2002/03	Actual 2003/04	Actual 2004/05	Business Plan forecast 2005/06	Actual 2005/06
WCRM			_	46	0	0
Non-WCRM					0	0
London North Eastern			_	0	3	3
London North Western			2	0	0	0
Anglia			_	0	0	0
Kent			-	0	6	6
Sussex			-	0	5	5
Wessex			-	0	36	38
Western			2	2	0	0
England and Wales			4	2	50	52
Scotland			_	0	0	0
Network total			4	48	50	52

# Signalling renewed (M24) Definition

This measure reports the total number of signalling equivalent units (SEUs) which were commissioned each year.

The rules used to count signal renewals as SEUs are set out in 'Definitions for Reporting Signal Renewals', NR/ARM/M24DF. The weightings specified are as follows:

- 100% SEU for a full renewal;
- 50% SEU for an interlocking renewal;
- 100% SEU for the renewal of a level crossing.

### Commentary

The SEU count is not a measure of renewal activity, but is simply a record of signalling units commissioned in each financial year. The installation of a unit of signalling may take place over a period of time greater than one year, therefore, the commissioning is an indication of work completed, but is not necessarily an indication of the quantum of activity carried out in that year alone. Therefore, the apparently low equivalent SEU count of 278 in 2005/06 does not reflect the increasing investment in new projects, which will be commissioned in future years.

### Results

Table 123 Signalling renewed				10		
	Actual 2001/02 (SEUs)	Actual 2002/03 (SEUs)	Actual 2003/04 (SEUs)	Actual 2004/05 (SEUs)	Actual 2005/06 (SEUs)	Business Plan 2005/06
WCRM	_	_	87	1002	0	
Non-WCRM						
London North Eastern	_	_	105	246	3	
London North Western	_	_	86	178	96	
Anglia	_	_	19	14	1	
Kent	_	_	7	7	63	
Sussex	-	_	<b>-</b> 132	<b>-</b> 104	107	
Wessex	-	-			0	
Western	_	-	63	34	7	
England and Wales	_	_	405	576	277	
Scotland	_	_	112	100	1	
Network Total	1,440	810	604	1678	278	254*

\* The forecast stated in our business plan excluded minor works, life extensions and WCRM.

In 2005/06 the major signalling project in the LNW route was Willesden Suburban. This scheme commissioned the equivalent of 92 SEUs. This comprised the replacement of the solid state interlocking equipment only and left the external equipment unchanged. The remaining life of the external equipment provides an upgrade path to a cab signalling system such as ERTMS, should this be available at the time. Should such a system remain unavailable when the external equipment is no longer maintainable, it will be replaced.

On the Kent route the major resignalling scheme was Medway Valley. This scheme commissioned the equivalent of 62 SEUs including renewal of an absolute block signalled area with colour light signalling and Automatic Warning System between Strood and Paddock Wood.

On the Sussex route the major resignalling scheme was Horsham. This scheme commissioned the equivalent of 106 SEUs including the replacement of life expired mechanical interlocking with conventional solid state interlocking.

Eighteen level crossings were renewed across the network of which seven were manual crossing barriers; six were manual crossing barriers with CCTV; three were automatic half barriers; one was automatic barrier crossing locally controlled; and one was miniature warning light.

On WCRM the commissioning at Sandbach-Wilmslow (of 257 SEUs) due in 2005/06 was reprogrammed for delivery in 2006/07. All other commissionings in the 2005/06 Business Plan were delivered. Other investment in signalling renewals includes £94 million in minor works and £15 million in complementary works. Minor works are signal renewals which are too small to be let as major contracts, such as the replacement of life expired location cases and colour light signals. Complementary works are signal renewals carried out by other delivery groups within Network Rail such as Track and Maintenance.

Revision to SEU volumes for 2003/04 and 2004/05 has been included in the above table following extensive review by Network Rail's Engineering and Delivery functions of the applicable reporting of commissioned signalling renewal work in accordance with this KPI. The main changes have occurred due to correction of the assignment of renewal schemes between routes and amendment to Scotland as the scope of the Edinburgh-Waverley scheme included re-locking and as such only 50% of the volume was applicable for reporting purposes (thus a reduction of 98 SEUs in 2004/05). This 50% reduction was also applicable to the Scunthorpe scheme in LNE (equating to a reduction of 107 SEU). This review indicated the need to express the volume of signalling renewal activity better, which is not transparent in the reporting of commissioned volume alone and for this reason we would like to progress agreeing a revision to the definition for this measure with ORR.

volume

Activity volumes

# Bridge renewals and remediation (M23)

# Definition

The total number and square area of bridge decks that have been subject to renewal or remediation, with total cost per scheme greater than £100k. The term 'bridge' includes over- and under- bridges, side of line bridges and footbridges.

#### Results

The results are shown in Tables 124 and 125 below.

#### Commentary

Network Rail owns some 40,000 bridges (with 68,000 spans) on the rail network: it is the largest asset owner in Britain. During 2005/06, works costing in excess of £100k were undertaken on 157 sites: this represents about 0.4% of the bridge stock. The deck area replaced through such works in 2005/06 was 5,433 m<sup>2</sup>. The cost of such works were broadly in line with the Business Plan. The comparative data for 2003/04 and 2004/05 are 143 and 187 sites; and 5,611 and 10,222 m<sup>2</sup> for replaced deck area. The variations in the number of site works and in the replaced deck area are not significant, they reflect changes in the type, size, complexity and completion date of the works from year to next.

Table 124 Bridge renewals and remediation: number by task category						
	Preventative 2005/06	Repair Strengthening 2005/06 2005/06		Replacement 2005/06	Total 2005/06	
WCRM	0	0	0	0	0	
Non-WCRM						
London North Eastern	3	10	5	13	31	
London North Western	6	33	15	13	67	
Anglia	2	3	0	0	5	
Kent	0	1	3	1	5	
Sussex	4	1	1	1	7	
Wessex	1	5	5	3	14	
Western	5	7	0	8	20	
England and Wales	21	60	29	39	149	
Scotland	0	1	4	3	8	
Network total	21	61	33	42	157	

Table 125 Bridge renewals and remediation: square area of deck replacement (actual sq m)					
	2003/04	2004/05	2005/06		
WCRM	792	_	0		
Non-WCRM					
London North Eastern	-	2,299	1,747		
North Western	-	3,202	1,866		
Anglia	-	7	0		
Kent	-	- 1,120	98		
Sussex	-		17		
Wessex	-		135		
Western	-	630	1,079		
England and Wales	_	7,251	4,943		
Scotland	_	2,971	489		
Network total	5,611	10,222	5,433		

### Culverts renewals and remediation (M26) Definition

The total number of culverts that have been renewed or where major components have been replaced with a total cost per scheme greater than £50k.

#### Results

The results are shown in Table 126 below.

### Commentary

There are about 23,000 culverts on the rail network. During 2005/06, works costing in excess of £50k were undertaken at just nine sites: at eight of these the culvert was replaced. The comparative number of culverts replaced in 2004/05 was five. Such low numbers are because, overall, the stock of culverts is in good condition and also because the cost of most repair works undertaken on them is less than £50k and is not included in this measure.

Table 126 Culverts renewed 2005/06				
	Preventative	Repair Rep	lacement	Total
WCRM	0	0	0	0
Non-WCRM				
London North Eastern	0	0	5	5
London North Western	0	0	1	1
Anglia	0	0	1	1
Kent	0	0	0	0
Sussex	0	0	0	0
Wessex	0	0	0	0
Western	0	1	1	2
England and Wales	0	1	8	9
Scotland	0	0	0	0
Network total	0	1	8	9

112

Activity volumes

### Retaining walls remediation (M27) Definition

The total number and area in square metres of retaining walls of scheme value greater than £50k where renewal works have been carried out.

### Results

The results are shown in Tables 127 and 128 below.

### Commentary

There are about 17,000 retaining walls on the rail network. During 2005/06, works costing in excess of £50k were undertaken at just ten sites: walls were replaced at two sites. The total renewed area of the walls was 2,016 m<sup>2</sup>. The comparative number of works in 2004/05 was eight, and the renewed area was 2,635 m<sup>2</sup>. Such low numbers are because overall, the stock of retaining walls is in good condition and also because the cost of most repair works undertaken on them is less than £50k and is not included in this measure.

	Preventative	Repair	Replacement	Total
WCRM	0	0	0	0
Non-WCRM				
London North Eastern	0	0	2	2
London North Western	0	0	0	0
Anglia	0	0	0	0
Kent	0	2	0	2
Sussex	0	1	0	1
Wessex	0	1	0	1
Western	2	2	0	4
England and Wales	2	6	2	10
Scotland	0	0	0	0
Network total	2	6	2	10

Table 128 Retaining wall renewed: area (actual sq m)				
	2002/03	2003/04	2004/05	2005/06
WCRM	320	656	_	0
Non-WCRM				
London North Eastern	_	_	336	200
London North Western	_	_	99	0
Anglia	_	_		0
Kent	_	_	- 1800	800
Sussex	_	_		6
Wessex	_	- ,		70
Western	-	_	400	940
England and Wales	_	_	2,635	2,016
Scotland	_	_	0	0
Network total	1,208	8,811	2,635	2,016

# Earthwork remediation (M28) Definition

The total number of earthwork schemes that have been subject to remediation, with total cost per scheme greater than £100k.

#### Results

The results are shown in Table 129 below.

### Commentary

There are about 10,000 route kilometres of earthworks along the rail network. Substantial lengths of these are prone to deterioration through the effects of extreme weather, blocked drains, traffic loading, long-term creep movements, and vegetation. Preventative works are undertaken to safeguard train movements and avoid disruption to train services, but some repair works are required, for example, following periods of wet weather. During 2005/06, works costing in excess of £100k were undertaken at 75 sites: representing 56 preventative works and 19 repair works. The comparative number of works in 2004/05 was 69: 55 preventative works and 14 repair works. These relatively low numbers of repair works reflect the fact that prolonged periods of wet weather have not occurred over large tracts of the rail network in the past couple of years.

Table 129 Earthwork renewals 2005/06 (number)			
	Preventative	Repair	Actual
WCRM	1	0	1
Non-WCRM			
London North Eastern	23	0	23
London North Western	11	10	21
Anglia	0	0	0
Kent	1	0	1
Sussex	1	0	1
Wessex	0	1	1
Western	8	7	15
England & Wales	45	18	63
Scotland	12	1	13
Network total	57	19	76

# Tunnel remediation (M29) Definition

The total number of remediation schemes on tunnels with a total cost per scheme greater than £50k.

#### Results

The results are shown in Table 130 below.

### Commentary

There are about 700 tunnels on the rail network, having a combined length of about 200 miles. Such structures are prone to degradation through, for example, the deleterious effects of water on the lining, and long-term creep movements of the material surrounding the tunnel. Preventative works are undertaken to safeguard train movements and avoid disruption to train services, but some repair works are required because the degradation of tunnel linings cannot be readily predicted at every site.

During 2005/06, works costing in excess of £50k were undertaken at 39 sites: that is, 16 preventative works and 23 repair works. The comparative data for 2004/05 were 31 sites comprising 11 preventative works and 20 repair works. The successive increase in the number of preventative works undertaken over the past few years represents a shift in policy away from a largely reactive intervention regime of an inherited stock of structures in a poor condition towards one of pro-actively improving the condition of this stock.

Table 130 Tunnel renewals 2005/06 (number)			
	Preventative	Repair	Actual
WCRM	0	0	0
Non-WCRM			
London North Eastern	11	1	12
London North Western	0	17	17
Anglia	0	0	0
Kent	0	3	3
Sussex	0	0	0
Wessex	0	0	0
Western	3	0	3
England and Wales	14	21	35
Scotland	2	2	4
Network total	16	23	39

# Section 5 Safety and environment

The Safety and Environment Plan (S&E Plan) comprised the major pollution prevention programme at light maintenance depots (LMDs) and a provision for small safety related

projects that meet particular safety criteria. Expenditure during the year was as set out in Table 131 below.

Table 131 Expenditure (£ million)			
	2005/06 Business Plan forecast	2005/06 Actual expenditure	2005/06 Variance
LMD pollution prevention programme	19	21	(2)
Other S&E Plan schemes	46*	10	36
Total	65	31	34

\* This was a provision rather than a firm budget.

#### **Pollution Prevention Programme**

This national programme of works relates to securing compliance with the Control of Pollution (Oil Storage) Regulations and the Groundwater Regulations. The priority works at fuel-dispensing depots were successfully completed by the deadline of 1 September 2005. We have now rationalised the remaining works into a new programme covering the remaining depots and over 300 other locations where oil is stored. Planned completion for the full programme is December 2007.

In summary over the last year we have:

- completed phase 1 works at all LMDs in England to achieve compliance with the oil storage regulations, which are not yet applicable in Scotland and Wales
- progressed design work on the full scope of work at the LMDs in Scotland and Wales
- initiated design work on phase 2 improvements to aprons and drainage systems at the LMDs in England
- completed defect surveys of the drainage system at the remaining LMDs and minor oil storage facilities at over 300 other sites.

We plan to continue this work with the following programme:

- continue to implement emergency works at specific sites where contamination occurs, or there is a high risk
- continue design and implementation work to control any remaining risks to groundwater posed by the storage and use of oil at these sites
- undertake design and implementation work at our depots in Scotland and Wales to meet standards equivalent to the oil storage regulations in England
- continue implementation of works to minor oil storage equipment at over 300 other locations, for example, standby generators and signal boxes
- develop, design and subsequently implement improvements to aprons and drainage systems to mitigate any contravention of the ground water regulations at the remaining 42 light maintenance depots.

Implementation of all these works requires agreement with the train operating companies (TOCs) and depot facility operators (DFOs) to be reached. We will accelerate the entire programme to achieve completion by December 2007, one year earlier than previously planned.

#### **Other S&E Plan Schemes**

Our 2005 Business Plan for other S&E schemes was based on a small number of specific schemes and a provision for future, as yet unidentified, safety enhancements that are justified and authorised throughout the year. The provision was also included to fund compliance issues arising as a result of unanticipated legislation changes.

In the 2005 Business Plan, Network Rail committed to concentrate on three main areas that could potentially require safety enhancement funding:

- train accident risk
- other risk to passengers and the public
- workforce safety risk.

All safety enhancement proposals are assessed in accordance with an agreed safety justification process. This is based on cost/benefit criteria; a successful scheme is one that demonstrates that the safety benefits anticipated following implementation, would be broadly equitable or outweigh the costs when calculated using DfT's values for preventing a fatality. Because of the eligibility criteria, it is important to understand that S&E funding is by means of a 'provision' and not budget. During 2005/06 a total of forty-two enhancements were authorised with a total cost of £17.5 million.

The successful enhancements ranged from low cost site specific enhancements (such as a £8k level crossing closure) through to more significant (such as £2.5 million securing safe access arrangements). The authorised enhancements were spread in the three broad risk areas as:

Train accident risk – 27 schemes were authorised in 2005/06 for a total cost of £10.5 million (comprising of 13 level crossing risk reduction or eradication schemes, five signalling enhancements and nine others).

Other risk to passengers and the public – ten enhancement schemes were authorised in 2005/06 for a total cost of £3.2 million (comprising programmes of work to reduce child trespass and effects of vandalism).

Workforce safety risk – five enhancement schemes were authorised for a total cost of £3.8 million (comprising improved access arrangements and a pilot for lighting at strategic junctions).

# Section 6 Expenditure and efficiency

This section provides the actual expenditure on renewals, enhancements and maintenance on the network during 2005/06 as compared to the forecasts reported in the Business Plan 2005.

All financial figures are in 2005/06 prices uplift of 3.4% and are rounded to the nearest £1 million (unless otherwise stated). As a result of this rounding, totals will therefore not necessarily be the exact sum of the individual lines.

Included within this section is:

 a network total for expenditure against the Business Plan 2005 provided together with reconciliations for each of the 26 strategic routes, which align to the traffic flows in the planning areas.

- there are also reconciliations for expenditure on West Coast Main Line and Central
- as maintenance on the network is conducted by territory rather than by strategic route, there is a separate page for maintenance expenditure
- more detailed analysis on variance of expenditure on non-WCRM renewals throughout the network.

Also included in this section is an update on our progress for work on efficiency. This includes information both on efficiencies made during the year as well as on unit costs.

# Expenditure

# Network total expenditure

Table 132 Expenditure 2005/06 prices (£ mill	Forecast	Actual	Variance
Maintenance	1,232	1,195	-37
Renewals	1,202	1,100	-01
Track	703.5	807.5	104.0
Signalling	335.9	286.5	-49.4
Structures	296.1	300.1	4.0
Electrification	42.0	53.2	11.1
Plant and machinery	67.9	67.0	-0.8
Information technology	108.9	88.4	-20.5
Telecoms	203.9	135.0	-68.9
Stations	139.9	162.6	22.7
Depots	11.2	40.0	28.8
Lineside buildings	18.9	23.7	4.8
Other	32.7	36.1	3.4
Renewals (non-WCRM)	1,960.9	2,000.1	39.2
Renewals (WCRM)	696.3	673.3	-23.0
Total renewals	2,657.2	2,673.4	16.2
Enhancements			
Enhancements (non-WCRM)	582.2	303.4	-278.8
Enhancements (WCRM)	178.8	169.7	-9.1
Total enhancements	761.0	473.1	-287.9

A breakdown of this network total is shown in the remaining tables in this section giving details of expenditure for the 26 strategic routes, Central (other), West Coast Route Modernisation (WCRM) and Maintenance by territory. The commentary below relates to non-WCRM expenditure – WCRM has a separate page with commentary.

### **Reconciliation with Regulatory Accounts**

The expenditure figures presented in this Annual Return need three adjustments to reconcile to the Regulatory Accounts:

 Enhancements – the Annual Return includes £67 million of third party funded schemes that are not reported in our accounts

- Renewals the Annual Return includes expenditure on WCRM power supply points (£13 million) to be consistent with the renewals forecast in the 2005 Business Plan that was classified as operating cost in the accounts
- Maintenance the Annual Return includes £3 million on the S&E plan.

As reported in the regulatory accounts, operating expenditure in the year was £1,130 million compared with the ACR 2003 Final Determination of £1,196 million. Within this total, controllable opex was £865 million compared with the ACR allowance of £960 million and non-controllable opex was £265 million compared with an ACR allowance of £236 million.

### Commentary

The following provides explanations which also relates to many of the variances in the routes. For this reason they are not repeated under the Route commentaries and only additional route specific explanations are included for each route.

### Renewals

#### Track

The 2005/06 spend for track renewals is £808 million compared to the business plan forecast of £704 million, an increase of £104 million. Key reasons for the increase are:

- based on our experiences in 2004/05, we held an additional central provision (a deliverability overlay) of £46 million for the deliverability of track renewals, to be released as required during the year. As the track renewals programme delivered its full outputs for the year this additional £46 million was spent
- to improve the overall performance of the network, we released an additional £15 million of funds to the maintenance teams to respond at short notice to emerging risks. This funding was spent mainly on rerailing activities to prevent the imposition of TSRs and has contributed to the overall reduction in TSRs on the network
- there has been an escalation in track renewals prices as £11 million more than the RPI provision that is included in our ACR 2003 settlement was spent during the year. The increase in price levels was driven by the increase in input prices of materials, in particular global steel prices, and construction industry labour rates. In addition the track renewals programme also fell short in the delivery of £8 million of efficiencies due to the settlement of a number of commercial issues
- £4 million of work in Scotland was brought forward from 2006/07 for efficiency purposes as the work was contiguous with other sites within the programme.

### Signalling

The £49.4 million underspend was the result of activity efficiency (£34.6 million), planned slippage to maximise efficiency (£6.5 million), scope changes (£8.8 million) and general slippage (£0.5 million).

Good progress has been made with delivering the efficiency programme over the past year generating further efficiencies above the targets in the Business Plan. A decrease in the unit prices of SEUs delivered with projects such as Port Talbot, Coventry and Knottingley and Ferrybridge has contributed to this.

We have delayed awards of Leamington and North Erewash part 1 so that we could competitively tender a larger volume to the market at the same time. This approach has also been adopted for control centre buildings and level crossings where asset condition will allow us sufficient time to align renewals dates.

### Electrification

The £11.1 million variance is mainly due to acceleration of work from future years, notably overhead line renewals on the ECML.

#### Telecoms

The major variance in telecoms relates to FTN/GSM-R which accounts for £60 million of the £69 million underspend. Analysis of this underspend can be found under the Central (Other) heading.

### Stations and depots

A significant amount of slippage, both planned and unplanned was expected based on past experience. As a result a deliverability overlay was included in the Business Plan. Not all this slippage occurred and combined with the unplanned roll-over of work not undertaken in 2004/05, led to significantly higher expenditure than originally planned. There has also been additional reactive maintenance work on specific route depots.

#### Enhancements

The key variances were in centrally held expenditure – this is explained in more detail under the Central (Other) heading.

Table 133 Expenditure 2005/06 prices (£ m $$	illion)		
	Forecast	Actual	Variance
Renewals			
Track	32.2	30.6	-1.6
Signalling	7.5	11.4	3.9
Structures	14.4	14.2	-0.2
Electrification	6.1	11.0	4.9
Plant and machinery	1.7	0.3	-1.4
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	11.0	13.5	2.5
Depots	0.0	2.8	2.8
Lineside buildings	0.0	0.2	0.2
Other	0.0	0.7	0.7
Total renewals	72.9	84.7	11.8
Total enhancements	2.7	2.2	-0.5

### Commentary

## Track

Overall spend was in line with the Business Plan with the exception of Rochester S&C. The S&C renewal could not be completed in the year due to possession clashes with CTRL works.

### Signalling

The £3.9 million variance was largely due to the Medway Valley project (£6.4 million) that had previously been allocated to the Central (Other) section in the Business Plan. There was also planned slippage on East Kent resignalling (£0.6 million) which contributed to this variance. As well as this, there was an efficiency on Sheerness resignalling (£0.8 million) as the scope was fully defined and the works were able to be completed in 2004/05.

#### Electrification

The £4.9 million overspend is due to an acceleration from future years of transformer rectifiers (£2.0 million) and switchgear and conductor rail renewals (£2.9 million).

#### Plant

The £1.4 million underspend is due to slippage of the points heating programme of work to take advantage from new contracting arrangements.

#### Depots

The £2.8 million represents the unplanned rollover of the Depots Renewals programme from 2004/05.

6

# **Route 2 Brighton Main Line and Sussex**

Table 134 Expenditure 2005/06 prices ( $\pounds$ million)			
	Forecast	Actual	Variance
Renewals			
Track	18.7	21.6	2.8
Signalling	12.3	13.4	1.1
Structures	10.8	9.4	-1.4
Electrification	4.3	5.8	1.5
Plant and machinery	0.5	0.2	-0.3
Information technology	0.0	0.0	0.0
Telecoms	0.2	1.3	1.1
Stations	8.6	10.5	1.9
Depots	0.0	3.4	3.4
Lineside buildings	0.0	0.2	0.2
Other	0.0	0.0	0.0
Total renewals	55.5	65.7	10.2
Total enhancements	1.3	1.3	0.0

# Commentary

### Signalling

The £1.1 million variance is largely due to additional costs incurred on the Horsham resignalling project (£1.8 million) offset by deferral of Arun Valley signal conversions (£0.9 million) due to difficulties developing the project.

#### Structures

The variance is mainly due to efficiencies delivered on Riddlesdown Viaduct (£1.5 million).

### Electrification

The  $\pounds 1.5$  million overspend is due to acceleration from future years on a number of projects including feeder cable and switchgear renewals.

### Depots

The overspend against Business Plan was due to reactive maintenance required on route depots.

# **Route 3 South West Main Line**

Table 135 Expenditure 2005/06 prices (£ million	)		
	Forecast	Actual	Variance
Renewals			
Track	61.2	73.6	12.4
Signalling	45.4	36.6	-8.9
Structures	12.6	8.9	-3.7
Electrification	3.7	5.4	1.7
Plant and machinery	0.3	0.3	0.0
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.1	0.1
Stations	12.7	15.8	3.1
Depots	0.0	1.3	1.3
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	136.0	142.0	6.0
Total enhancements	1.2	6.2	5.0

### Commentary

## Track

The variance is due to the major S&C renewal at Woking being delivered in the year as well as additional investment in TSR removal across the routes.

### Signalling

The £8.9 million variance was largely caused by unplanned slippage on Basingstoke Resignalling (£6.6 million) following delays in awarding the main contract; this has no impact on the commissioning date. The level crossings programme in the Feltham area (£1.5 million) has slipped whilst an efficient contract was agreed. The start of the Farncombe to Petersfield resignalling project (£0.7 million) has been re-phased into 2006/07.

#### Structures

There was planned slippage on Hamble Viaduct (£1.3 million) with works forecast into 2006/07 plus delivery on efficiencies as the target cost was lower than estimated. Efficiencies were delivered on Battledown Flyover (£0.5 million), and the slippage of River Wey (£0.8 million) was due to difficulty in securing possessions.

# **Route 4 Wessex Routes**

Table 136 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	4.1	6.1	2.0
Signalling	0.9	1.3	0.4
Structures	1.5	0.4	-1.1
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.0	0.0
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.0	5.1	5.1
Depots	0.0	1.0	1.0
Lineside buildings	0.0	0.2	0.2
Other	0.0	0.0	0.0
Total renewals	6.5	14.1	7.6
Total enhancements	0.0	0.0	0.0

# Commentary

Stations

The variance is principally due to work rolledover from 2004/05 and works brought forward from future years. There was £0.8 million unplanned roll-over of asbestos removal works from 2004/05; £1.6 million unplanned roll-over of platform repair works from 2004/05 at West Byfleet and reactive building works across the route. £2.7 million work was also brought forward for repair works to platforms, canopies, car parks at various locations.

# **Route 5 West Anglia**

Table 137 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	32.4	36.1	3.7
Signalling	5.2	2.2	-3.0
Structures	4.4	3.6	-0.8
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.1	0.1
Information technology	0.0	0.0	0.0
Telecoms	0.2	0.3	0.1
Stations	2.9	8.4	5.5
Depots	0.1	1.0	0.9
Lineside buildings	0.4	0.4	0.0
Other	0.0	0.0	0.0
Total renewals	45.6	52.1	6.5
Total enhancements	1.7	0.8	-0.9

#### Commentary Signalling

The  $\pounds$ 3.0 million variance is largely due to unplanned slippage into 2006/07 on Duxford and Hinxton level crossings ( $\pounds$ 1.5 million) and Spooner Row level crossing ( $\pounds$ 0.9 million) due to internal resource constraints.

### Stations

Spend in excess of plan consists of £0.7 million deliverability overlay and £4.8 million on MP&I Station Renewals brought forward from 2006/07.

# **Route 6 North London Line and Thameside**

Table 138 Expenditure 2005/06 prices (£ millio	n)		
	Forecast	Actual	Variance
Renewals			
Track	15.3	15.1	-0.2
Signalling	1.7	1.4	-0.3
Structures	4.5	6.2	1.7
Electrification	2.4	1.9	-0.5
Plant and machinery	0.0	0.1	0.1
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	2.0	3.7	1.7
Depots	0.0	0.8	0.8
Lineside buildings	0.5	0.5	0.0
Other	0.0	0.0	0.0
Total renewals	26.4	29.6	3.3
Total enhancements	0.7	0.2	-0.5

# Commentary

# Structures and stations

The largest variances are for these assets and are principally due to works accelerated from future years.

Expenditure and efficiency

# **Route 7 Great Eastern**

Table 139 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	32.2	39.6	7.3
Signalling	7.4	5.4	-2.0
Structures	8.3	5.6	-2.7
Electrification	0.4	1.7	1.3
Plant and machinery	0.1	0.2	0.1
Information technology	0.0	0.0	0.0
Telecoms	1.9	1.7	-0.2
Stations	8.1	8.2	0.1
Depots	1.7	1.6	-0.1
Lineside buildings	1.3	1.3	0.0
Other	0.0	0.0	0.0
Total renewals	61.5	65.3	3.8
Total enhancements	0.7	0.9	0.2

### Commentary

# Track

In addition to the reasons under the Network Total, we have experienced significant cost pressure due to the increased renewals around level crossings and on single lines.

### Signalling

The £2.0 million variance was largely caused by slippage on Colchester Clacton signalling renewals (£0.7 million) due to delays to scheme plan development and signal sighting. There is also unplanned slippage on Cantley minor renewals (£0.8 million).

### Electrification

The £1.3 million variance is due to acceleration of work on Romford Electrical Control Room (£0.7 million), campaign changes (£0.3 million) and other minor renewals (£0.3 million).

#### Structures

Implementation works of the Thrandeston Bog ( $\pounds$ 2.2 million) project were deferred to 2007/08 due to complications following the initial design development, requiring a complete re-evaluation of the project (including delivery strategy).

# **Route 8 East Coast Main Line**

Table 140 Expenditure 2005/06 prices (£ millio	n)		
	Forecast	Actual	Variance
Renewals			
Track	37.5	45.9	8.4
Signalling	12.4	11.5	-0.9
Structures	7.5	7.0	-0.5
Electrification	9.8	12.8	3.0
Plant and machinery	2.9	0.8	-2.1
Information technology	0.0	0.0	0.0
Telecoms	0.1	4.6	4.5
Stations	12.1	10.2	-1.9
Depots	0.7	1.2	0.5
Lineside buildings	0.4	0.5	0.1
Other	0.0	0.0	0.0
Total renewals	83.2	94.5	11.3
Total enhancements	34.6	10.5	-24.1

## Commentary

### Electrification

The £3.0 million overspend is primarily due to the acceleration of a significant amount of catenary and spanwire renewals between Kings Cross and Peterborough. We have been able to achieve efficiencies from competitively tendering this work.

### **Plant and Machinery**

The £2.1 million underspend is mainly due to depot plant (£1.8 million). Spend incurred in the year (£0.5 million) has been allocated to depot renewals with the balance of £1.3 million slipping into the first quarter of 2006/07.

### Telecoms

The £4.5 million variance was largely caused by expenditure on Doncaster concentrator renewals (£1.5 million), concentrator renewals in the Wakefield area (£0.7 million) and West Riding area (£0.7 million) and Concentrator Renewals (Package 4) (£0.4 million) that had initially been allocated to the Central (Other) route in the Business Plan.

### Stations

The planned slippage (£1.9 million) of Kings Cross major renewals was due to the inclusion of Platform Y into the project scope. This has also had the benefit of maximising efficiencies on design costs.

### Enhancements

There was a £20 million slippage of the LUL Kings Cross project causing deferral of the Network Rail contribution to this project. There was also £1.2 million deferral of the Kings Cross programme start up works to 2006/07; £0.9 million efficiencies on Peterborough bi-directional signalling; £0.5 million efficiencies on Allington Chord; and £3.6 million of anticipated third party projects not commenced.

6

# **Route 9 Northeast Routes**

Table 141 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	11.3	9.9	-1.4
Signalling	3.3	3.1	-0.2
Structures	12.5	12.3	-0.2
Electrification	0.3	-0.6	-0.9
Plant and machinery	0.1	0.0	-0.1
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.2	0.2
Stations	0.3	2.4	2.1
Depots	0.0	0.0	0.0
Lineside buildings	0.1	0.1	0.0
Other	0.0	0.0	0.0
Total renewals	28.0	27.4	-0.7
Total enhancements	2.5	0.4	-2.1

# Commentary

Electrification

The £0.9 million variance is mainly due to a credit of £0.6 million received from an insurance recovery in respect of works completed at Pallion sub-station. This had been treated as expenditure in the previous year.

# Stations

There was £2.1 million of unplanned rollover of station maintenance across North East Route specific projects from 2004/05.

# Enhancements

Slippage of snagging works on Sunderland Direct (£1.1 million) and anticipated third party projects were not commenced (£1.2 million).

	Forecast	Actual	Variance
Renewals			
Track	22.6	27.1	4.5
Signalling	28.4	32.5	4.1
Structures	9.3	9.0	-0.3
Electrification	0.0	0.1	0.1
Plant and machinery	2.4	0.1	-2.3
Information technology	0.0	0.0	0.0
Telecoms	0.6	0.0	-0.6
Stations	2.6	3.7	1.0
Depots	1.0	1.8	0.8
Lineside buildings	0.2	0.3	0.1
Other	0.0	0.0	0.0
Total renewals	67.1	74.5	7.5
Total enhancements	1.5	1.4	-0.1

# **Route 10 North Transpennine, North and West Yorks**

### Commentary Signalling

The £4.1 million variance was largely due to planned minor renewals ( $\pounds$ 5.0 million) that had previously been allocated to the Central (Other) section in the business plan. There is also additional expenditure on Hambleton interlocking renewal ( $\pounds$ 1.0 million) and Healey Mills loc renewals ( $\pounds$ 0.8 million). These variances are offset by efficiencies of  $\pounds$ 2.9 million on the Knottingley – Ferrybridge renewal arising from contractor efficiencies.

### Plant and machinery

The £2.3 million underspend is mainly due to depot plant (£1.8 million). Spend incurred in the year (£0.8 million) has been allocated to depot renewals with the balance of £1.0 million slipping into the first quarter of 2006/07.

<b>Route 11 South Transpennine</b>	e, South Yorks and Lincs
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Table 143 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	53.5	38.6	-15.0
Signalling	16.8	16.9	0.1
Structures	6.7	7.3	0.6
Electrification	0.0	0.0	0.0
Plant and machinery	1.1	0.6	-0.5
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.5	0.8	0.3
Depots	0.3	0.6	0.3
Lineside buildings	0.2	0.2	0.0
Other	0.0	0.0	0.0
Total renewals	79.2	64.9	-14.2
Total enhancements	4.5	3.6	-0.9

### Commentary

Track

Spend was below plan due to the deferral of the number of S&C renewals on the route to allow the acceleration of the Foreign Ore S&C renewal.

# **Route 12 Reading to Penzance**

Table 144 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	15.3	24.3	9.0
Signalling	3.4	2.9	-0.5
Structures	2.2	2.4	0.2
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.2	0.2
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.0	0.2	0.1
Depots	0.1	1.8	1.7
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	21.0	31.7	10.7
Total enhancements	5.5	-0.6	-6.1

# Commentary

### Track

In addition to the reasons under the Network Total, we also took advantage of a series of possession opportunities to complete targeted steel renewals on a number of lines in the Newquay and Newton Abbott area.

### Enhancements

A project in Falmouth delayed by a 3rd Party accounts for  $\pounds$ 4.7 million and the settlement of claims on Probus-Burngullow allowed the release of provisions during the year ( $\pounds$ 1.0 million).

# **Route 13 Great Western Main Line**

Table 145 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	71.8	151.9	80.1
Signalling	27.6	23.7	-3.9
Structures	23.0	25.8	2.8
Electrification	0.0	0.0	0.0
Plant and machinery	1.7	2.0	0.3
Information technology	0.0	0.0	0.0
Telecoms	2.8	2.1	-0.7
Stations	1.9	5.8	3.8
Depots	0.1	0.1	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	128.8	211.3	82.5
Total enhancements	9.7	9.0	-0.7

### Commentary

# Track

2005/06 saw the successful introduction of the High Output Track Renewals System and Ballast cleaners onto the GWML. As well as the significant renewals delivered by the system, we continued the high volume of conventional plain line and S&C renewals. Although this work had been planned for the year, an error in the compiling of the data resulted in an inaccurate allocation between Routes 13, 14, 15.

### Signalling

The £3.9 million variance was mainly due to Port Talbot resignalling (£5.4 million) arising from contractor efficiencies offset by minor renewals (£1.5 million) that had previously been allocated to the Central (Other) section of the Business Plan.

### Structures

Paddington Long Term Vehicular Access (LTVA) (£4 million) was reclassified to renewals but was initially allocated as an enhancement within the plan.

#### Telecoms

The £0.7 million variance was largely caused by planned slippage into 2006/07 of the Newport SPT concentrator renewal (£0.5 million) to align delivery with the Newport FTN programme, thereby generating efficiencies. The same project also experienced some contractor delays leading to unplanned slippage (£0.2 million).

# **Route 14 South and Central Wales and Borders**

Table 146 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	21.6	7.0	-14.5
Signalling	3.0	3.0	0.0
Structures	3.5	5.5	2.0
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.2	0.2
Information technology	0.0	0.0	0.0
Telecoms	0.2	0.0	-0.2
Stations	0.0	0.3	0.3
Depots	0.0	0.1	0.1
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	28.3	16.1	-12.3
Total enhancements	0.1	0.3	0.2

## Commentary

Track

As per Route 13, an inaccurate allocation of the costs between Route 13, 14 and 15 overstated the Business Plan provision for this route.

### Structures

The variance is due to slippage of Waunawrllwydd Overbridge Gowerton project from 2004/2005 (£0.5 million) and emergency works on Friog Sea Wall (£1.3 million).

# **Route 15 South Wales Valleys**

### Table 147 Expenditure 2005/06 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	3.6	0.5	-3.1
Signalling	3.7	2.1	-1.6
Structures	2.0	2.4	0.3
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.0	0.0
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.0	0.1	0.0
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	9.4	5.0	-4.4
Total enhancements	10.7	7.4	-3.3

# Commentary

### Track

As per Route 13, an inaccurate allocation of the costs between Route 13, 14 and 15 overstated the Business Plan provision for this route.

#### Signalling

The £1.6 million variance is due to deferral of work at Ystrad Rhondda to replace train operated points due to technical issues

(£1.0 million) and delays to Cardiff resignalling (£0.6 million) due to internal resource constraints.

#### Enhancements

The variance is due to Energlyn project (£2.3 million) and Merthyr frequency enhancements (£0.2 million) being deferred by the funders of these projects.

# **Route 16 Chilterns**

Table 148 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	9.0	11.0	2.0
Signalling	0.0	1.0	1.0
Structures	9.0	8.8	-0.2
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.0	0.0
Information technology	0.0	0.0	0.0
Telecoms	1.1	0.0	-1.1
Stations	2.4	0.6	-1.8
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	21.5	21.5	-0.1
Total enhancements	0.8	2.0	1.2

### Commentary

### Signalling

The £1.0 million variance was largely due to minor works that had previously been were allocated to the Central (Other) section in the Business Plan.

### Telecoms

The £1.1 million variance is due to deferral of the Marylebone concentrator renewal project until 2006/07.

### Stations

This variance is as a result of scope changes on general station L&B and P&M renewals across the route ( $\pounds$ 1 million) and Chiltern Station Reactive Renewals ( $\pounds$ 0.8 million). These works have been deferred to 2006/07.

### Enhancements

The variance is due to additional works at Gerrards Cross following the physical collapse of third party works (£1 million).

6

# **Route 17 West Midlands**

Table 149 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	57.0	64.4	7.4
Signalling	29.4	24.7	-4.7
Structures	13.2	12.4	-0.8
Electrification	2.7	3.1	0.4
Plant and machinery	1.9	0.9	-1.0
Information technology	0.0	0.0	0.0
Telecoms	0.4	1.0	0.6
Stations	2.7	2.6	-0.1
Depots	0.4	4.1	3.7
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	107.8	113.2	5.3
Total enhancements	5.1	4.1	-1.0

# Commentary

# Signalling

The £4.7 million variance was due to:

- Learnington resignalling (£2.9 million); re-phasing of programme to accommodate Tyseley South junction enhancement with commissioning on schedule for Easter 2007
- Coventry resignalling (£1.6 million); re-phasing of programme to ensure efficient contract awarded with commissioning on schedule for October 2007
- Codsall-Madeley resignalling (£0.9 million net); due to efficiencies (£2.3 million) offset by acceleration of future year's work (£1.4 million)

- West Midlands resignalling project (£0.8 million); due to contractor efficiencies
- Minor works (£1.5 million); that had previously been allocated to the Central (Other) route in the Business Plan.

### Telecoms

The £0.6 million variance is due to acceleration of expenditure on Walsall concentrator renewal (£0.4 million) and Saltley concentrator renewal (£0.2 million).

# **Route 18 West Coast Main Line**

Table 150 Expenditure 2005/06 prices (£ millio	on)		
	Forecast	Actual	Variance
Renewals			
Track	13.5	16.0	2.5
Signalling	10.6	13.7	3.1
Structures	1.4	1.3	-0.1
Electrification	4.9	3.6	-1.3
Plant and machinery	0.3	0.8	0.5
Information technology	0.0	0.0	0.0
Telecoms	0.7	3.1	2.4
Stations	4.6	3.3	-1.2
Depots	1.1	1.8	0.7
Lineside buildings	0.2	0.2	0.0
Other	0.0	4.9	4.9
Total renewals	37.3	48.7	11.5
Total enhancements	3.2	1.9	-1.3

## Commentary

# Signalling

The £3.1 million variance is mainly due to: emergency works on Garston Signal Box reinstatement (£1.6 million); additional contractor and material costs on the Willesden suburban project (£0.8 million); and additional scope on Watford North level crossing renewal (£0.5 million).

Expenditure and efficiency

6

# **Route 19 Midlands Main Line and East Midlands**

Table 151 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	53.0	62.9	9.9
Signalling	25.1	25.5	0.4
Structures	8.1	7.8	-0.3
Electrification	0.2	0.1	-0.1
Plant and machinery	3.7	0.6	-3.1
Information technology	0.0	0.0	0.0
Telecoms	1.3	1.7	0.4
Stations	2.1	2.7	0.6
Depots	0.7	0.6	-0.1
Lineside buildings	0.0	1.6	1.6
Other	0.0	0.0	0.0
Total renewals	94.3	103.5	9.2
Total enhancements	1.3	3.0	1.7

### Commentary

### Track

In addition to the reasons under the Network Total, the variance is due to the close out of outstanding commercial accounts which resulted in an additional spend against this route of £3 million.

### Signalling

The £0.4 million variance was largely due to planned minor renewals (£1.9 million) that had previously been allocated to the Central (Other) section in the Business Plan. These variances are offset by efficiencies (£1.5 million) on the East Midlands renewal project arising from contractor efficiencies.

### Plant and machinery

The £3.1 million underspend is mainly due to slippage on the depot plant renewal programme (£1.9 million) and points heating work delayed to take advantage of the new contracting arrangements (£0.9 million).

### Lineside buildings

The variance is due to unplanned rollover of the lineside renewals programme as well as on roofing maintenance on lineside buildings from 2004/05.

### Enhancements

Additional work undertaken at East Midlands Parkway was offset by delays in third party investment.

# **Route 20 North West Urban**

Table 152 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	21.5	27.2	5.7
Signalling	7.6	9.2	1.6
Structures	7.5	6.8	-0.7
Electrification	0.3	1.0	0.7
Plant and machinery	2.0	1.1	-0.9
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.5	0.5
Stations	5.4	5.0	-0.4
Depots	1.1	1.0	-0.1
Lineside buildings	0.2	0.6	0.4
Other	0.0	0.0	0.0
Total renewals	45.5	52.4	6.9
Total enhancements	15.1	0.7	-14.4

### Commentary

### Track

In addition to the reasons under the Network Total, the variance is due to significant renewals on the Buxton Branch which we carried out to remove the majority of the speed renewals. This is 18 months earlier than originally planned.

### Signalling

The £1.6 million variance was largely due to planned minor renewals in the Manchester and Liverpool areas that had previously been allocated to the Central (Other) section in the Business Plan.

### Electrification

The £0.7 million variance is due to acceleration of switchgear renewals.

### Plant

The £0.9 million variance is mainly due to slippage of depot plant renewals into 2006/07 (£0.7 million).

#### Telecoms

The £0.5 million variance is due to expenditure on retail telecoms schemes that were allocated to the Central (Other) route in the Business Plan.

#### Stations

Following negotiations with Virgin Trains over the scope of works, £0.4 million of station car park works were re-prioritised.

#### Lineside buildings

The variance is due to the re-prioritisation of the lineside building planned preventative maintenance programme across the route (£0.3 million) and Signal Box Refurbishments (£0.1 million).

### Enhancements

The variance is due to the deferral of third party funded projects such as: St Helens ( $\pounds$ 2.5 million), Liverpool Lime Street ( $\pounds$ 3.8 million), Bolton Station Car Park ( $\pounds$ 1.0 million), Wigan and Bolton TIF ( $\pounds$ 1.0 million), SEMMS ( $\pounds$ 0.9 million), Salford ( $\pounds$ 1.2 million) and other schemes ( $\pounds$ 3.5 million).

6

# Route 21 Merseyrail

Table 153 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	9.2	8.3	-0.8
Signalling	0.0	0.7	0.7
Structures	0.9	0.8	-0.1
Electrification	0.9	1.7	0.8
Plant and machinery	0.8	1.1	0.3
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.2	0.2
Stations	1.1	2.2	1.1
Depots	0.0	0.4	0.4
Lineside buildings	0.0	0.4	0.4
Other	0.0	0.0	0.0
Total renewals	12.8	15.9	3.0
Total enhancements	3.5	4.0	0.5

# Commentary

### Signalling

The variance is due to planned minor renewals that had previously been allocated to the Central (Other) in the Business Plan.

### Electrification

The £0.8 million overspend is due to acceleration of the feeder cable renewals (£0.3 million) and other minor renewals (£0.5 million).

# **Route 22 North Wales and Borders**

### Table 154 Expenditure 2005/06 prices (£ million)

· · · · /	Forecast	Actual	Variance
	Forecast	Actual	variance
Renewals			
Track	3.3	4.2	0.9
Signalling	0.0	8.0	8.0
Structures	2.3	1.8	-0.5
Electrification	0.0	0.0	0.0
Plant and machinery	0.2	0.0	-0.2
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.1	0.1	0.0
Depots	0.0	0.4	0.4
Lineside buildings	0.0	0.4	0.4
Other	0.0	0.0	0.0
Total renewals	5.8	15.0	9.1
Total enhancements	0.4	0.6	0.2

# Commentary

# Signalling

The £8.0 million variance is due to expenditure on Mickle Trafford (£2.8 million), Abergele Signal Box (£1.4 million), Monks Siding (£1.1 million), Valley Level Crossing (£1.0 million), Gaerwen Level Crossing (£0.9 million) and planned minor renewals (£0.8 million) all of which had previously been allocated to the Central (Other) section in the Business Plan.

# **Route 23 North West Rural**

Table 155 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	10.8	14.2	3.4
Signalling	2.6	4.8	2.2
Structures	12.1	15.1	3.0
Electrification	0.0	0.0	0.0
Plant and machinery	0.0	0.0	0.0
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.6	0.6
Stations	0.0	0.0	0.0
Depots	0.0	0.4	0.4
Lineside buildings	0.0	0.4	0.4
Other	0.0	0.0	0.0
Total renewals	25.5	35.6	10.1
Total enhancements	0.1	0.6	0.5

# Commentary

# Track

Spend was above forecast due to the introduction of the Settle and Carlisle blockade works in March 2006. The renewals were accelerated from future years due to the number of TSRs on the route which would have prevented the delivery of sustainable service. The additional investment on the route was partly offset by the deferral of the Howe & Co. Siding S&C renewals which was deferred to 2006/07 due to a possession conflict with West Coast programme works.

# Signalling

The £2.2 million variance was due to planned minor renewals in the Preston, Manchester and Liverpool areas that had previously been allocated to the Central (Other) section in the Business Plan.

### Structures

The Leven Viaduct Reconstruction work was brought forward to maximise blockade opportunities.

### Telecoms

The £0.6 million variance is due to concentrator and minor renewals that were allocated to the Central (Other) route in the Business Plan.

#### Enhancements

The variance is due to the acceleration of level crossing replacement at Bailey Lane (£0.5 million).

# **Route 24 East of Scotland**

Table 156 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	16.5	25.3	8.8
Signalling	1.4	2.3	0.9
Structures	28.1	26.7	-1.4
Electrification	0.0	0.0	0.0
Plant and machinery	0.1	0.4	0.3
Information technology	0.0	0.0	0.0
Telecoms	0.4	0.3	-0.1
Stations	0.9	1.2	0.3
Depots	0.0	1.1	1.1
Lineside buildings	0.1	0.1	0.0
Other	0.0	0.0	0.0
Total renewals	47.5	57.4	9.9
Total enhancements	13.0	12.9	-0.1

# Commentary

Track

In addition to the reasons under the Network Total, the variance is due to a number of re-railing sites introduced into the programme to remove UTU identified defects.

### Signalling

The £0.9 million variance is largely made up of expenditure on TDM renewals (£0.5 million) and minor works (£0.6 million) that had previously been allocated to the Central (Other) section in the Business Plan.

### Structures

The Laurieston Rd Grangemouth project suffered slippage due to Council delays in funding (£0.6 million). Following a review of the possession strategy the planned work on Craigton Rock Cuttings has been re-programmed over a number of years (£1.2 million).

### Depots

The variance is due to £1.1 million unplanned roll-over on Route Depots Planned Maintenance from 2004/05.

# **Route 25 Highlands**

Table 157 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Renewals			
Track	9.1	8.6	-0.5
Signalling	1.0	0.6	-0.4
Structures	3.2	4.3	1.1
Electrification	0.0	0.0	0.0
Plant and machinery	0.3	0.2	-0.1
Information technology	0.0	0.0	0.0
Telecoms	1.8	1.4	-0.4
Stations	1.4	1.4	0.0
Depots	0.3	0.3	0.0
Lineside buildings	0.1	0.3	0.2
Other	0.0	0.0	0.0
Total renewals	17.2	17.1	-0.1
Total enhancements	0.2	0.1	-0.1

# Commentary

### Structures

The variance is principally due to coastal defence work on Duirinish – Kyle brought forward to maximise the efficiency of the possession ( $\pounds 0.8$  million).

	Forecast	Actual	Variance
Renewals			
Track	14.9	19.5	4.7
Signalling	7.3	7.3	0.0
Structures	4.6	5.6	1.0
Electrification	2.5	4.0	1.5
Plant and machinery	0.0	0.7	0.7
Information technology	0.0	0.0	0.0
Telecoms	2.9	2.2	-0.7
Stations	4.0	2.7	-1.3
Depots	0.1	0.6	0.5
Lineside buildings	0.3	0.8	0.5
Other	0.0	0.0	0.0
Total renewals	36.5	43.5	7.0
Total enhancements	12.9	10.1	-2.8

# **Route 26 Strathclyde and South West Scotland**

### Commentary

### Structures

The variance is due to Longford Viaduct where works were brought forward to maximise the efficiency of the possession.

### Electrification

The £1.5 million variance is mainly due to acceleration of the programme on Shields-Gourock and Glasgow North and South Electric contact wires project.

#### Enhancements

The variance is due to:

- the deferral of third party funded works at Auchinleck Opencast Freight Terminal (Powerharnal) (£0.5 million)
- slippage of third party funded work at Glasgow airport by the funder (£0.3 million)
- slippage of third party funded work at Partick station by the funder
- slippage of the relocation of Polmadie Depot by the funder (£0.5 million).
## **Central (Other)**

Table 159 Expenditure 2005/06 prices (£ million)			
	Forecast	Actual	Variance
Total maintenance	270.1	247.7	-22.4
Renewals			
Track	52.6	18.1	-34.5
Signalling	71.8	21.4	-50.4
Structures	82.7	88.7	6.0
Electrification	3.5	1.6	-1.9
Plant and machinery	47.8	56.2	8.4
Information technology	108.9	88.4	-20.5
Telecoms	189.2	113.7	-75.5
Stations	52.3	52.3	0.0
Depots	3.4	11.7	8.3
Lineside buildings	15.0	15.0	0.0
Other	32.7	30.6	-2.1
Total renewals	660.0	497.7	-162.2
Total enhancements	449.2	219.8	-229.4

## **Central specific projects**

Table 160 Expenditure 2005/06 prices (£ million)						
	Forecast	Actual	Variance			
Renewals						
Telecoms – GSM-R/FTN	167	107	-60			
Enhancements						
SRNTP	158.1	141.0	-17.1			
Pollution prevention at LMDs	18.1	20.6	2.5			
'Access for All' investments	6.6	4.2	-2.4			

## Commentary Maintenance

Successful management of risks resulted in non utilisation of contingency held within maintenance (£9.0 million) and engineering (£4.2 million). Further savings of £3.6 million were delivered within the engineering function. The majority of this underspend (£2.8 million) resulted from the reprofiling of the FTN programme and subsequent associated maintenance. Efficiencies were delivered within Network Delivery Services on the rail grinding contact (£2.8 million) and measurement train (£3.1 million).

## Track

£37.1 million of the variance relates to indirect overheads for the National Delivery Service (NDS). Actual costs have been allocated to the strategic routes.

## Signalling

The £50.4 million variance comprises:

- £33.2 million of costs that were held centrally in the 2005 plan but subsequently allocated to route (see individual route explanations)
- £6.1 million underspend on Headquarters initiatives arising from efficiencies (£1.0 million) and planned deferral of work (mainly SICA related) into 2006/07
- £13.2 million relating to minor works that were included in the business plan in the Central (Other) section. These arise from contractor efficiencies, agreed scope changes and planned deferral of work to maximise efficiency from the new type C contracts (£3.9 million).

#### Plant and machinery

The £8.4 million variance is primarily due to acceleration of expenditure relating to the purchase of the high output equipment for mechanised track renewals. There was also £0.7 million of costs that were held centrally in the 2005 Business Plan but subsequently allocated to route (see individual route explanations).

## Depots

The Business Plan expenditure forecast included a negative overlay because slippage to the planned work was expected. In the event, this slippage did not occur and there was therefore an overspend against forecast.

## Information technology

There were favourable savings delivered on Information Management schemes principally as a result of scope changes (£16.7 million), which included the redefinition of the OCS Control Strategy and Maintenance work planning programmes. During the year, £3.9 million of delivered efficiencies were achieved, £20.9 million of unplanned slippage for schemes including TMS Replacement, MIMS Handhelds and Asset Condition Monitoring offset by £6.5 million work brought forward from future years. These underspends are offset by a deliverability overlay as a significant amount of slippage (both planned and unplanned) was expected and provided for in the Business Plan.

## Telecoms

GSM-R/FTN; £60 million underspend due to:

- Efficiencies (route works); We have achieved unit rates on route works which are below the (post-efficiency) budget rates and spent £13 million less. These were driven by:
  - a. improved contracting strategy (fixed price lump sum)
  - b. better route condition than anticipated
  - c. use of super-armoured cable (rather than concrete trough route).
- 2. Deferral of contingency drawn down (on scope deferred to 2006/07); with £18 million less spent than forecast. The budget allocated £20 million to in-year contingency spend, representing 13% of post-efficiency programme contingency, on the basis that 13% of total programme costs were allocated to the year. The actual draw down in the year was £2 million, generating a variance of £18 million to budget. This arose because the activities which cause the risks to crystallise have not yet occurred. For example, there has been no draw down against the risks around copper condition as the remedial works programme did not commence during 2005/06.

- Slippage on construction (site works); with £13 million less spent due to the slippage in site works being attributed to delays in recruitment against templated positions and delays caused by late delivery of designs, consents, Permitted Development Rights and power supplies.
- 4. Deferral of synergy schemes spend; with £27 million less spent than forecast. The budget was prepared on the basis of the live P3 Plan at April 2005, which included both construction managed directly by the programme and that delivered via MP&I synergy schemes. Full year spend from MP&I was £10 million against the budget of £37 million, representing a deferral of £27 million into 2006/07 and 2007/08. This underspend was caused by the time taken to negotiate and agree contract rates and by the incorrect alignment of the original plans. There is also an element of efficiency savings in the MP&I spend.

The above savings and underspend are offset by £11 million overspend. This is due to the scope being brought forward from future years for route works. The reasons for this are:

- To substitute for slippage in site works (see below), in order to sufficiently maintain a workbank for contractors and so protect efficient rates (e.g. Kilmarnock – Gretna).
- 2. To support wider business needs, e.g. signalling schemes.

Other telecoms variances like £9.1 million is due to costs that were held centrally in the 2005 Business Plan but subsequently allocated to routes (see individual route explanations).

## Enhancements

### Thameslink: £19.2 million underspend

Funding of £32 million was established as part of ACR 2003 to progress design and development of the scheme. The Business Plan for 2005/06 projected that these funds would be exhausted during the financial year as the Public inquiry was expected to take place in early 2005. The Public inquiry started later in the year and completed on 7 December 2005. This combined with a slower than expected build up of Programme staff, resulted in the underspend.

## Southern Region New Trains Programme: PSU works £2.9 million less spend

During the year, SRA requested that the scope of the programme be increased to include the electrical equipment at three depots operated by Southern Trains. Also rollover from 2004/05 due to programme delays was compensated by slippage into 2006/07, due to delays whilst testing is completed to establish the need for these works. There are also adverse variances due to:

- roll over from 2004/05 being £17 million.
- scope change of £3.9 million offset by unplanned slippage of £19 million.
- unplanned slippage on the installation of impedance bonds £4.8 million (£5.6 million expenditure incurred within the routes, mainly in Route 3).

## Non PSU Work

There was slippage of TOC delivered works by £7 million and efficiencies on platform extension works as well as £6.2 million slippage of work into 2006/07.

## **Pollution Prevention**

Work has been accelerated with the aim of completing the work a year earlier.

## Access for All

Development works have been reprogrammed for 2006/07.

## Safety & Environment Expenditure

There is provision for emerging works (£17 million) for schemes not developed in the year.

A number of development funds were included in the Business Plan and provision was held centrally for these. Some projects from these funds were not developed in the year in particular:

- Safety & Environment Plan £31.1 million
- provision for minor discretionary schemes £45.7 million
- Schemes Development fund £4.8 million.

These development funds were provisional sums set aside for emerging works with good business cases. In the event schemes with good business cases have not materialised at the anticipated rate, it is expected that these funds will still be required in future years.

## CAB Mobile Associated with GSMR: £11.5 million more spent

The 2005 Business Plan for Cab Mobile showed expenditure of £15 million in 2005/06, which assumed that the Siemens contract would be let during 2004/05. Due to delays in agreeing the details within the cross-industry group, the contract was not let until period 3. Subsequently, further delays were incurred in reaching agreement with the cross-industry group on the man-machine interface ('MMI') specification. As a result, 2005/06 spend was reduced to £3 million.

## Asset Enhancement Schemes: £13.2 million less spent due to:

- reduced scope on annual SPACIA portfolio reflecting market conditions £8.8 million
- Newcastle Arches third party project delayed and awaiting Railway Heritage Trust (RHT) approval £1.2 million
- Southwark arches project deferred pending business case review £1 million
- portfolio efficiencies through competitive tendering £1 million
- Battersea Land at Culvert Place delayed awaiting RHT approval £0.6 million
- slippage of works into 2006/07 £0.6 million.

Other savings include £11 million for contaminated land work. This work was included within the plan as an enhancement. Firm proposals were developed for £4.8 million of work which was funded via the Environment provision.

## ETRMS: £13 million

This has £6 million efficiencies delivered, and £7 million planned slippage to maximise efficient delivery.

CTRL Blockade had £10 million unutilised programme contingency as a result of successful management of emerging risks.

Heathrow Terminal 5 had £9 million less spend due to the scheme being transferred to Great Western Mainline (Route 13).

The deferral of the User Worked Crossing Programme resulted in £5.5 million less spend with the programme delayed subject to the development of a business case as unit costs remain too high.

Table 161 Expenditure 2005/06 prices (£ million)					
	Forecast	Actual	Variance		
Maintenance	0.7	0.1	-0.6		
Renewals					
Track	297.2	349.4	52.2		
Signalling	175.9	140.9	-35.0		
Structures	74.2	53.0	-21.2		
Electrification	118.0	94.0	-24.0		
Plant and machinery	14.0	12.0	-2.0		
Information technology	0.0	0.0	0.0		
Telecoms	17.0	24.0	7.0		
Stations	0.0	0.0	0.0		
Depots	0.0	0.0	0.0		
Lineside buildings	0.0	0.0	0.0		
Other	0.0	0.0	0.0		
Total renewals	696.3	673.3	-23.0		
Total enhancements	178.8	169.7	-9.1		

## Commentary

## Maintenance

Provisions were included to cover various telecoms concentrators being commissioned during 2005/06. Where maintenance costs are being incurred, budget has been transferred to the maintenance function.

### Track

As highlighted in last year's annual return West Coast Engineering re-assessed the asset condition which led to certain scope increases. This was particularly prevalent in the Manchester area for Stockport and Sandbach-Wilmslow projects under S&C.

## Signalling

Due to extended negotiations on signalling contracts, commencement of works for both Rugby and Nuneaton projects has been delayed. A revised contracting strategy is now in place.

### Structures

This variance is largely driven by a reprioritisation across the WCRM structures and earthworks portfolio and deferral of works into 2006/07 and

beyond has resulted in an underspend against budget. It should be noted that these renewal works will be carried out by MP&I in future years. A small element of the variance is due to Trent Valley works being slightly delayed.

## Electrification

This variance is due to delays on the Power Supply Upgrade project and specifically to system design and AIP on the Harker site deferred to December 2006 with reductions for Elvanfoot.

## Plant and machinery

There are small variances over many projects.

## Telecoms

This overspend is due to scope changes across the renewals portfolio and some transfers of work to territories.

## Enhancements

The variance is largely due to authorised scope reductions in Train Systems projects.

Expenditure and efficiency

## Maintenance by Operating Route

Table 162 Expenditure 2005/06 prices (£ million)					
	Forecast	Actual	Variance		
Operating route					
London North East	190.4	190.8	0.4		
London North West	238.0	236.2	-1.7		
South East Anglia	111.3	106.3	-5.1		
South East Kent	63.9	63.8	-0.1		
South East Sussex	51.2	49.4	-1.8		
South East Wessex	72.2	72.1	-0.1		
South East – Other	5.8	4.7	-1.0		
Western	144.1	141.3	-2.8		
England & Wales	876.9	864.7	-12.2		
Scotland	84.3	82.5	-1.8		
Total territory maintenance	961.2	947.2	-14.0		

## Commentary

**London North East** The variance is due to:

- staff cost savings of £1.8 million as a result of planned recruitment delays to fund compliance defect removal (£2.8 million)
- £1.3 million savings in plant costs with both volume and commercial savings
- £1.5 million savings on property costs£1.0 million savings on off track work
- as a result of delays in awarding contracts
- £0.7 million favourable variance as a result of the capitalisation of work undertaken on maintainer delivered renewals plus other miscellaneous savings £0.3 million
- sub-contractor spend £3.6 million adverse as a result of the vacancy gap
- work around defect removal and maintainer renewals and adverse spend on property maintenance costs £0.6 million.

## London North West

The variance is due to:

- savings of £1.7 million within the territory
- £2.7 million as a result of delays in recruitment
- £0.5 million savings in accommodation
- £4.1 million favourable variance as a result of the capitalisation of work undertaken on maintainer delivered renewals
- £1.4 million savings on off track work and the release of a £0.7 million provision held against the contractor when maintenance was in-sourced.

These savings were offset by:

- compliance defect removal of £2.0 million
- increased plant costs of £1.7 million
- sub-contractor costs of £1.7 million adverse as a result of the vacancy gap
- work around defect removal and maintainer renewals increased material costs by £1.0 million and prior year expenditure of £1.2 million was not provided for.

## Anglia

The variance is due to:

 savings of £5.1 million largely around the favourable settlement of the pre-in house contract (£1.9 million) and reduction in subcontractor costs (£2.9 million).

## Sussex

The variance is due to:

 savings of £1.3 million largely around the favourable settlement of the pre-in house contract and delays to recruitment (£0.9 million), offset by the increase in sub-contractor costs (£0.3 million).

## Western

The variance is due to:

- £6.9 million savings as a result of delays in recruitment
- £1.2 million savings on plant
- £0.6 million accommodation savings
- £0.4 million savings on off track work
- savings of £1.0 million largely around favourable settlement of the pre-in house contract offset by compliance defect removal £1.3 million
- sub-contractor spend was £4.2 million adverse as a result of the vacancy gap for work around defect removal and maintainer renewals, and higher material costs £1.5 million.

## Scotland

The variance is due to:

- savings on materials £2.4 million
- non utilisation of the ballast regulator  $\pounds 0.9 \text{ million}$
- increased recoveries from third parties for isolations and bridge strike insurance £1.3 million
- reduced use of vactor machine coupled with specialist welders being taken on as core staff rather than contractors £0.6 million
- £0.3 million savings on staff costs as result of delays to recruitment
- £0.4 million savings elsewhere offset by the costs of compliance defect removal being £3.2 million
- additional costs incurred for tamper and stoneblower machines as forecast rates not realised in contract negotiations £0.9 million.

## Other

Other variance is due to:

- savings on staff costs from the property works management team (£0.4 million)
- rate reduction on weed killing (£0.1 million)
- a favourable variance as a result of the capitalisation of work undertaken on maintainer delivered renewals.

## Introduction

The ACR 2003 set output targets and provided funding based on ORR's assessment of the expenditure needed to deliver these outputs. The expenditure determination included challenging targets for improving efficiency, through reductions in unit costs and scope efficiencies. The determination specified profiles for efficiency improvement over the control period, adding up to 35% for maintenance and 30% for controllable operating costs (opex) and renewals (excluding WCRM for which specific assumptions were made), equivalent to overall savings of 31% over CP3. The ACR assumed savings of 8% in 2004/05 and in 2005/06 for opex, maintenance and renewals. This section summarises our progress in delivering improvements in efficiency.

It is important to note that the measurement of efficiency improvement against these targets is not, and will never be, a straightforward exercise. The determination did not define baseline volumes of activity or unit costs against which changes could be measured, and there is limited information on the unit costs of activities in 2003/04 to provide benchmarks. The assessment of efficiency improvement over the first two years of CP3 set out here must be treated with caution as firm conclusions on efficiency trends can only be drawn over a longer period of time.

## **Overall assessment**

Efficiency improvement in controllable opex is assessed by comparing total expenditure with the ACR 2003 determination for 2005/06. For maintenance, we have compared expenditure with the ACR but also taken account of the impact of traffic growth. For renewal expenditure, the assessment of efficiency is informed by the unit cost indices and budget variance analysis. The overall assessment is shown in the table below and explained further in the following sections.

## **Operating Costs**

Table 163 below compares total controllable operating costs in 2004/05 and 2005/06 with the levels assumed by the ORR in the ACR 2003 determination. The comparison shows that in 2005/06 controllable opex was 24% lower than the pre-efficient level assumed by ORR and therefore well ahead of the 15% ACR assumption (8% per annum).

## Maintenance

Table 165 on page 150 compares the total level of maintenance expenditure in 2004/05 and 2005/06 with the levels assumed by ORR in the ACR 2003 determination. The comparison shows that in 2005/06 maintenance expenditure was 17% lower than the pre-efficient level assumed by ORR and therefore ahead of the 15% ACR assumption (8% per annum).

The overall assessment of maintenance efficiency requires the costs to be normalised to take account of changes in traffic, which is clearly a major cost driver. We have therefore proposed that the monitoring of efficiency over time should be based on costs per equated track mile (ETM). Table 166 on page 150 shows that the number of ETMs increased by 3% in 2005/06 as a result of traffic growth and also shows a reduction in the cost per ETM of 10%, i.e. a slightly bigger saving than the 8% reduction in expenditure.

Taking the 10% efficiency improvement in 2005/06 (as measured by the reduction in cost per ETM) on top of the 10% achieved in 2004/05 gives an overall saving to date of 19%. We believe this is more reflective of the true saving than the 17% identified by a simple comparison of actual expenditure with ACR assumptions.

We also note that the continuing improvements in performance and asset serviceability measures provide evidence of improvements in the quality of maintenance work that is being undertaken, a key element of the overall improvement in efficiency.

## **Unit cost indices**

The development of the recording of unit costs of key maintenance activities progressed significantly in 2005/06, however data integrity is still circumspect in some cases, in particular reporting of volumes and hours, and hence the establishment of consistent benchmarks has not been totally achieved.

Six unit cost indices for various permanent way maintenance activities are now used routinely for internal monitoring, however this has not yet generated sufficiently consistent data to create a reliable baseline to publish in the Annual Return.

Table 163 Overall efficiency improvement assessment (%)							
	By end	By end 2004/05 By end 2005/06					
	ACR Assumption	Actual Achieved	ACR Assumption	Actual Achieved			
Controllable opex	8	16	15	24			
Maintenance	8	10	15	19			
Renewals	8	8	15	15			

- (1) Ultrasonic testing
- (2) Spot re-sleepering
- (3) Wet bed removal
- (4) S&C unit renewal half switches
- (5) Visual inspection (patrolling)
- (6) Manual correction of plain line track.

A further 12 activities have been identified and will be added progressively to form a suite of 18 unit costs during 2006/07.

## Renewals

Assessing the efficiency of our renewals programme is complex. The level and nature of activity that is required (and for which we have been funded) over the control period is not constant and trends in total expenditure do not provide any indication of efficiency. The efficiency assessment draws on two key sources:

- unit cost indices: where consistent data is available to compare the unit costs of specific activities over time we have derived unit cost indices
- budget variance analysis: our financial

control process involves recording and categorising all changes in budgets during the year between activity efficiency, changes in the scope of work necessary to deliver the outputs, and deferral of planned activity into later years. This analysis provides insights for the efficiency assessment.

### Unit cost indices

A key element of improving efficiency is reducing the unit costs of specific activities on the network. During 2005/06 we have implemented a comprehensive Cost Analysis Framework which will ensure that cost data is captured on a consistent basis across the company, providing a much more robust basis for estimating the costs of renewal projects and allowing trends in actual unit costs to be tracked. Unit cost reporting therefore commenced for all assets in the final quarter of 2005/06 and this covers a total of 51 repeatable renewals activity types; however this has not generated sufficient volume of completed project data in a particular activity to create a reliable baseline and to warrant inclusion in this Annual Return.

Table 164 Controllable operating cost efficiency improvements						
Controllable opex Nominal prices	ACR pre-efficiency allowance £m	Actual Opex £m	Variance £m	Actual Saving %	ACR efficiency assumption %	
2004/05	1107	934	(173)	(16)	(8)	
2005/06	1134	865	(269)	(24)	(15)	

Table 165 Maintenance efficiency improvements						
Maintenance costs Nominal prices	ACR pre-efficiency allowance £m	Actual Maintenance £m	Variance £m	Actual Saving %	ACR efficiency assumption %	
2004/05	1408	1271	(137)	(10)	(8)	
2005/06	1443	1192	(251)	(17)	(15)	

Table 166 Annual changes in maintenance costs						
Maintenance costs at 2005/06 prices	2004/05	2005/06	Variance			
Total actual maintenance costs (£m)	1,302	1,192	(8%)			
Equated track miles (ETM) *	21,896	22,599	3%			
Cost per ETM (£k)	59	53	(10%)			

\* Rebased as a result of GEOGIS data improvement project.

## Table 167 Unit cost indices 2005/06

Index (100 = 2003/4)	2004/05	2005/06	Coverage	% change 2005/6 on 2003/4
Track – plain line	94.5	95.7	87%	4.3
Track – S&C	98.1	88.6	94%	11.4
Track – total	95.6	93.8	89%	6.2
Civils (04/5 linear m measure)	87.0	80.0	48%	20.0
Civils (new square m measure)	94.0	88.0	48%	12.0

1	51

Table 168 Composite rate measures							
Rate at 2005/06 prices	2002/03	2003/04	2004/05	2005/06	Saving from 2004/05	Saving from 2003/04	Saving from 2002/03
Plain line (£/metre)	273	266	245	244	0.5%	9%	11%
S&C full renewal (£k/unit)	606	609	529	498	6%	18%	18%
S&C equivalent renewal (£k/unit)	600	579	518	461	11%	20%	23%
Aggregate efficiency					2.7%	12.5%	14%

Unit cost improvements in 2005/06 are shown in Table 167 those activities for which sufficient cost data had been collected during 2003/04 to form a reliable benchmark, and for which sufficient volumes of activity were completed in 2005/06. The actual costs in 2005/06 are expressed as an index where costs in 2003/04 =100 and are an average of the changes in unit costs across a range of activities, weighted by the volume of each activity in 2005/06. The table also indicates the approximate proportion of renewal expenditure for each asset that is covered by the unit cost analysis.

In Table 167, there have been small increases (reductions in efficiency) to the indices previously reported (in the 2005 Annual Return) for 2004/05 for S&C and civils activity, as additional activity types have now been included.

For civils activity, a change has also been made to the units of measure this year, with the intention of improving accuracy. Where relevant, activity volume is now measured on the basis of the square meterage of output, rather than linear meterage. This has had the effect of reducing the apparent improvement in unit costs, but this volume measurement basis is nonetheless believed to be more representative of the work undertaken, and therefore more appropriate as a normaliser. For comparison purposes, both measurements are indicated in the table above. These imply an efficiency of between 12% and 20% for civils renewals.

For plain line track renewals activity, there have been reductions in activity unit costs for a majority of activities. However, these have been offset by significant increases in unit cost for the two largest expenditure activities (category 4 steel sleeper relaying and re-rail, and category 11 full rail plus sleeper plus ballast relaying and traxcavating), reflecting the treatment of a large number of shorter length work sites. For S&C there has been a significant reduction in unit costs for all activity types. Overall the track renewals activity efficiency implied is 6.2%. Civils renewals have shown a reduction in most activity unit costs in 2005/06, but this is partially offset by an increase in the unit costs for preventative earthworks. This category includes a diverse range of treatments suited to different locations, and in 2005/06 we have needed to undertake a large number of more expensive treatments. We are proposing to further subdivide this activity type for unit cost analysis purposes in 2006/07, in order that the levels of efficiency achieved can be more accurately monitored.

The unit cost indices above show the reductions in unit cost for the work delivered but do not provide insight into the efficiency of the mix of work undertaken. Further indicators of track renewal efficiency are the composite unit rates shown in Table 168 above. For plain line track this is the average expenditure per composite metre of rail, sleeper and ballast delivered, while for S&C it is average expenditure per composite unit renewed. Two alternative measures of S&C efficiency are included: the first line shows the total cost divided only by complete units of renewal, whereas the lower line shows the total cost divided by equivalent units of renewals, including allowance for reballasting, partial renewals and abandonments. This latter measure has been adopted within the business during the last year and is the basis of planned volumes reported in our Business Plan. It is therefore considered to be a more robust overall indicator of efficiency. These composite rates also allow for certain central overheads, and the impact of contractual settlements on aggregate expenditure and therefore provide a fuller picture of the overall efficiency improvement. The final row above shows the composite rate efficiency aggregated for all track renewals activity, weighted by expenditure. Efficiency relative to 2003/04 is 12.5% (this was 8% in 2004/05). Relative to 2002/03 the aggregate improvement is 14%. Since the ACR 2003 determination was based upon the 2002/03 composite unit rates, we consider this to be the most accurate overall assessment of track renewals efficiency.

#### Variance analysis

The assessment of efficiency improvements in areas where we do not have robust unit cost information is more difficult. The best indicator is the budget variance analysis summarised below. Annual budgets for each delivery programme and project are set on the basis of meeting the efficiency improvement targets, i.e. generally 15% savings for 2005/06. During the year, changes in project budgets, whether increases or savings, are classified according to whether they represent changes in unit costs or other activity efficiencies, changes in scope of works or deferral.

The scope changes cover a range of factors, some of which reflect improvements in efficiency, but the interpretation of these changes is not always clear cut. Rescheduled activity is the net of un-budgeted roll-over, work brought forward from later years in the plan, and work deferred to later years in the plan; this category of change is neutral on efficiency. The savings classified as additional activity efficiency are a good indicator of additional efficiency improvements over and above those budgeted.

The final column of the table indicates the derived overall efficiency percentage, based upon the sum of budgeted efficiency, scope change and additional activity efficiency. This is only presented for the core renewals activity excluding WCRM and FTN.

### **Commentary on renewals efficiency**

The efficiency indicated by the variance analysis for Track of 9.6% excludes good performance in smaller works delivered by our Maintenance organisation, and is therefore below that indicated by the composite unit rate analysis. The efficiency indicated by the variance analysis for Civils renewals of 26.6% is greater than that indicated by the unit costs analysis, partly reflecting additional scope efficiency and also because only 50% of the civils activity is included in the unit costs measure. The net impact is broadly similar to the savings identified through the unit rate analysis described above, which we believe provides a more robust indicator of efficiency, albeit limited in scope. The variance analysis table indicates that overall efficiency savings across the core renewals programme are around 18%, and therefore ahead of the 15% target for 2005/06.

Our assessment is that improvements in efficiency on the overall renewals portfolio are broadly in line with the ACR 2003 assumptions of 15% improvement in 2005/06. However, we believe that these figures should be treated with a degree of caution and that a more robust assessment of efficiency can only be made over a longer period of time and informed by the much more extensive unit cost framework that we have implemented during 2005/06.

#### **Financial Efficiency Index**

The Financial Efficiency Index is a measure of the efficiency of operations, maintenance, track renewals and other key central expenditure normalised to take account of changes in the volume of work. A reduction in the index represents improved efficiency. The measure is used in the company's management incentive plan. The target set by the Remuneration Committee for the year was 2,037. The actual outturn was 1,972, 3.2% better than target.

Table 169 Variance analysi	s						
Renewals expenditure by programme in 2005/06	Actual £m	Budget £m	Variance £m	Scope change £m	Additional activity efficiency £m	Rescheduled activity £m	Efficiency savings %
Track	808	705	(102)	(2)	(34)	(66)	9.6
Signalling	286	310	24	0	26	(2)	29.7
Civils	301	296	(5)	(2)	35	(37)	26.6
Electrification, Plant & Machinery	119	117	(2)	3	20	(24)	37.7
Information Technology	88	109	20	18	4	(2)	_
Telecoms	134	204	70	3	19	47	17.8
Stations, Depots & Lineside Buildings	223	161	(60)	6	7	(73)	24.1
Other	40	38	(2)	(22)	0	20	_
Total (exc. WCRM)	1,999	1,942	(57)	4	77	(138)	18.1
WCRM	663	740	78	70	(6)	14	
Total Renewals	2,661	2,682	21	74	70	(124)	_

Note: Some of the budget figures shown here differ slightly from the original Business Plan forecasts given in other tables in this section. They reflect approved changes that occurred after the business plan figures were prepared and are a better comparator for use in the efficiency assessment.

# Section 7 Financing

This is a new section providing further information on the following measures which are also reported in the KPI section:

- debt to RAB ratio
- RAB adjustment for passenger volume incentives
- RAB adjustment for freight volume incentives
- overall cost control.

Whilst Section 6 provides information on Network Rail's expenditure during the year as well as how efficient we have been in our spending, this section provides an indication of our finances. The measures indicate the most current position as at the end of the year 2005/06.

## Debt to RAB ratio

This financing indicator measures Network Rail's net debt as a percentage of its regulatory asset base (RAB). This can be considered as a proxy for the financial gearing of the company and indicates Network Rail's ability to finance its activities in a sustainable manner.

This measure is calculated by dividing the company's statutory debt by the year end RAB and expressing this as a percentage.

Under Licence Condition 29 the company is not to incur financial indebtedness in excess of 100% of the RAB and must take all reasonable endeavours to keep the ratio below 85%.

The debt to RAB ratio at the end of the year was 78.6% against a budget of 80.6%. This variance mainly reflects the savings in budgeted expenditure that we made during the year and, consequently, the lower increase in forecast borrowings.

## RAB adjustment for passenger and freight volume incentives

The passenger and freight volume incentives provide a RAB addition in 2009 for growth above a baseline level and thus give an incentive for Network Rail to facilitate growth in traffic on the network.

The passenger volume incentive is based on the growth over and above a baseline level of growth in:

- 1. actual passenger train miles
- 2. farebox revenue.

The freight volume incentive is based on incentive rates multiplied by the growth over and above a baseline level of growth in: 1. actual freight train miles

2. gross tonne miles.

Any award that Network Rail earns through the volume incentive will be added to the RAB at the end of the control period in 2009 and will be based on the actual adjustment figures for 2008/09. This ensures that we will not benefit from accommodating the same level of traffic at the end of the control period as at the beginning as a result of fluctuations within the control period.

Based on current estimates the volume incentive adjustment will be £174.3 million in 2009. The figures for the years 2004/05 - 2007/08 are illustrative and forecast how the incentive moves over time, and give a useful snapshot for each year of the control period.

The key reason for the significant increase in passenger incentive value between 2004/05 and 2006/07 was the increase in train miles by 1.9%. The freight market also saw substantial growth, with a 10.2% in mileage and a 6.7% in gross tonne miles.

Table 170 Debt to RAB Ratio (%)	)									
		2004/05 Actual	2005/06 Target	2005/06 Actual	Variance for 2005/06					
Debt to RAB Ratio		77.2	80.6	78.1	2.5					
Table 171 Volume incentives (£m)										
	2004/05	2005/06	2006/07	2007/08	2008/09					
Passenger volume incentives	13.7	145.8	194.9	204.6	169.9					
Freight volume incentives	0.3	3.4	6.3	6.6	4.4					
RAB Adjustment	14.0	149.2	201.2	211.2	174.3					

## Overall Cost Control or Expenditure Variance

This is the percentage variance of Network Rail actual expenditure against the company's budgeted expenditure agreed at the start of 2005/06. Expenditure includes controllable and uncontrollable operating costs, maintenance costs, renewals and enhancements costs.

This measure is calculated by dividing the variance between actual and budgeted expenditure against budgeted expenditure and expressing this as a percentage.

The measure aims to encourage effective cost control during the year so that we may deliver against the expenditure allowances as set out in the ACR 2003. As we aim to keep within the ACR 2003 levels, the company budget is usually more stringent than the levels in the ACR 2003. This also promotes efficiencies to be identified and delivered.

The main elements of the variance were: maintenance expenditure 3% below budget, controllable operating costs 8% below budget, enhancement expenditure 35% below budget and renewals 1% below budget.

Table 172 Key performance indicators $(\pounds m)$			
	2005/06 Actual expenditure	2005/06 Budget expenditure	Variance
Overall cost control	5,409	5,763	-6.1%

# Section 8 Customer reasonable requirements

This report summarises progress from 1 April 2005 to 1 April 2006.

CRRs are reviewed at our account management meetings with operators and PTEs. Operators and PTEs can at any time add, or withdraw CRRs and they can use the CRR process to record and track the delivery of their reasonable requirements.

### Key overall results

In summary, progress of CRRs during the year shows:

CRRs are becoming increasingly superseded by a number of other initiatives including Dependant Persons Code of Practice; introduction of templated contracts for third party enhancements and Joint Performance Improvement Plans. As a consequence, the CRRs process is becoming increasingly redundant.

Commercial account teams now receive very few requests to be registered under this process and are currently solely engaged in closing out existing CRRs as these are delivered, replaced by other initiatives or become out of date. Successfully completed CRRs during the year include:

- renewal and replacement of ticket offices.
- Marylebone station roof overhaul to prevent leaks
- Tay Bridge bridge strengthening
- Treeton Junction re-instatement of access routes to Masboro/Barrow Hill from Tinsley East
- Aylesbury North Loop reinstatement of disused Loop to facilitate extra Freight Trains
- Mossend Down Yard reinstatement of yard sidings
- Bescot Yard improvement in Downside operations and performance
- Glengarnock Car Park Extension provision of 15 additional car parking spaces
- Dalmuir Car Park Extension provision of 32 additional car parking spaces.

Live CRRs at start of year	5
Numbers submitted during the year	
Numbers completed or withdrawn during the year	2

Table 174 Customer reaso	onable require	ments (nur	nber)				
	CRRs	Total			Total of Live		
Operator	Live end of 2004/05	of new CRRs	Total completed	Total withdrawn	CRRs end of 2005/06	Enhancement CRRs	Process CRRs
Arriva Trains Wales	0	0	0	0	0	0	0
ATOC	1	0	0	0	1	1	0
c2c	1	0	1	0	0	0	0
Central Trains	0	0	0	0	0	0	0
Centro	0	0	0	0	0	0	0
Chiltern Railways	1	0	1	0	0	0	0
DRS	5	0	0	0	5	0	5
Eurostar	8	0	0	0	8	0	8
EWS – Freight	20	0	5	13	2	2	0
EWS – Passenger	1	0	0	0	1	0	1
FGW Link	0	0	0	0	0	0	0
First Great Western	0	0	0	0	0	0	0
First Scotrail	0	0	0	0	0	0	0
Freightliner	0	0	0	0	0	0	0
Gatwick Express	0	0	0	0	0	0	0
GB Railfreight	0	0	0	0	0	0	0
GMPTE	0	0	0	0	0	0	0
GNER	0	0	0	0	0	0	0
Heathrow Express	0	0	0	0	0	0	0
Hull Trains	0	0	0	0	0	0	0
Island Line	0	0	0	0	0	0	0
Merseyrail	0	0	0	0	0	0	0
Merseytravel	1	0	0	0	1	1	0
Midland Mainline (MML)	1	0	0	0	1	1	0
Nexus	0	0	0	0	0	0	0
Northern	0	0	0	0	0	0	0
one	0	0	0	0	0	0	0
Silverlink Metro & City	1	0	0	0	1	1	0
South Central	1	0	0	0	1	1	0
South Eastern	0	0	0	0	0	0	0
South West Trains	3	0	0	0	3	3	0
SPTE	6	0	2	0	4	4	0
SYPTE	0	0	0	0	0	0	0
Thameslink	1	0	0	1	0	0	0
TPE	0	0	0	0	0	0	0
Virgin Cross Country	0	0	0	0	0	0	0
Virgin West Coast	0	0	0	0	0	0	0
WAGN	0	0	0	0	0	0	0
Wessex Trains	0	0	0	0	0	0	0
West Coast Railway	1	0	0	0	1	1	0
WYPTE	0	0	0	0	0	0	0
Totals	52	0	9	14	29	15	14

# Appendix 1 – Station condition

The following table provides a list of all stations and their condition grades each year. The grading system is from 1 to 5 with the lower the number i.e. closer to 1, the better. The regulatory target is 2.25 overall. The condition score is an average score from 34 elements on stations such as platforms, structure etc. These elements are condition rated 1 - 5 with 1 being 'as installed' and 5 being 'no longer serviceable'.

Appendix 1 – Station conditior	1						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Acle	Anglia	1.31	1.31	1.31	1.31	2.00	2.00
Acton Central	Anglia	2.10	2.10	2.10	2.12	2.12	2.12
Alresford	Anglia	2.89	2.89	2.89	2.50	2.50	2.50
Althorne	Anglia	2.14	2.14	2.14	2.14	2.00	2.00
Angel Road	Anglia	2.11	2.11	2.11	2.11	2.11	2.11
Attleborough	Anglia	0.00	0.00	2.45	2.45	2.45	2.45
Audley End	Anglia	1.42	1.42	1.42	1.42	1.42	1.42
Barking	Anglia	1.88	1.88	1.92	1.92	2.09	2.09
Basildon station	Anglia	0.00	0.00	2.14	2.13	2.13	2.13
Battlesbridge	Anglia	0.00	0.00	2.52	2.41	2.41	2.41
Beccles	Anglia	1.23	1.23	1.23	1.23	1.83	1.83
Benfleet	Anglia	1.88	1.88	1.99	1.99	1.99	1.99
Berney Arms	Anglia	3.20	3.20	3.20	3.22	3.22	3.22
Bethnal Green	Anglia	2.19	2.19	2.19	2.19	2.19	2.19
Billericay	Anglia	2.10	2.10	2.14	2.14	2.14	2.14
Bishops Stortford	Anglia	2.93	2.93	2.93	2.26	2.26	2.26
Blackhorse Road	Anglia			1.97	1.97	1.97	1.97
Braintree	Anglia	1.96	1.96	1.96	1.96	1.95	1.97
Braintree Freeport	Anglia	0.00	0.00	1.97	1.90	1.89	1.89
		2.38	2.38	2.38	2.38	2.38	2.38
Brampton (Suffolk)	Anglia						
Brandon	Anglia	0.00	0.00	2.83	2.44	2.44	2.44
Brentwood	Anglia	2.20	2.20	2.35	2.35	2.35	2.35
Brimsdown	Anglia	2.06	2.06	2.06	2.04	2.04	2.04
Brondesbury	Anglia	1.73	1.73	1.73	1.73	1.73	1.73
Brondesbury Park	Anglia	1.73	1.73	1.73	1.73	1.75	1.75
Broxbourne	Anglia	2.01	2.01	2.01	2.01	2.01	2.01
Bruce Grove	Anglia	2.00	2.00	2.09	2.09	2.09	2.09
Brundall	Anglia	2.55	2.55	2.55	2.39	2.39	2.39
Brundall Gardens	Anglia	2.19	2.19	2.19	2.47	2.47	2.47
Buckenham	Anglia	1.72	1.72	1.72	1.72	2.38	2.38
Bures	Anglia	2.25	2.25	2.25	2.25	2.25	2.25
Burnham-On-Crouch	Anglia	-	-	2.07	2.07	2.07	2.07
Bury St Edmunds	Anglia	2.02	2.02	2.02	2.02	2.02	2.02
Bush Hill Park	Anglia	1.91	1.91	1.91	1.91	1.91	1.91
Caledonian Road and Barnsbury	Anglia	2.10	2.10	2.10	2.10	2.10	2.10
Cambridge	Anglia	1.99	1.99	2.02	2.02	2.03	2.03
Cambridge Heath	Anglia	2.13	2.13	2.13	2.13	2.13	2.13
Camden Road	Anglia	0.00	0.00	1.94	1.94	1.94	1.94
Canning Town	Anglia	1.00	1.00	1.00	1.00	1.00	1.00
Cannon Street	Anglia	1.96	1.96	1.96	1.73	2.04	2.04
Canonbury	Anglia	2.45	2.45	2.45	2.45	2.31	2.31
Cantley	Anglia	2.76	2.76	2.76	2.68	2.68	2.68
Chadwell Heath	Anglia	2.25	2.25	2.25	2.25	2.25	2.25
Chafford Hundred	Anglia	1.30	1.30	1.30	1.30	1.30	1.30
Chalkwell	Anglia			1.94	1.94	1.94	1.94
Chappel and Wakes Colne	Anglia	2.02	2.02	2.02	2.02	2.04	2.04
Chelmsford	Anglia	1.82	1.82	1.82	1.82	1.82	1.82
Cheshunt	Anglia	0.00	0.00	2.16	2.16	2.16	2.16
		1.99			2.16		2.16
Chingford	Anglia	1.99	1.99	1.99	2.03	2.03	continued
							continuou

Appendix 1 – Station condition

Station name   Route   score	5/06
Station nameRoutescore </th <th>5/06</th>	5/06
Clapton   Anglia   2.20   2.41   2.43   2.43	core
Colchester North   Anglia   2.02   2.02   2.05   2.05   2.09   2     Colchester Town   Anglia   2.82   2.82   2.82   2.91   2.28   2     Cressing   Anglia   3.16   3.16   3.16   3.16   2.48   2.53   2     Crower   Anglia   2.48   2.48   2.48   1.63   1.63   1     Crouch Hill   Anglia   -   -   1.79   1.79   1.79   1     Custom House   Anglia   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.24   2.17   2   2.01   2.24   2.17   2.24   2.17   2.24   2.17   2.24   2.17   2.24   2.17   2.24   2.17   2.25   2.24   2.17   2.24   2.17   2.24   2.17   2.25   2.24   2.17   2.24   2.17   2.24   2.17   2.25   2.24   2.17   2.25	2.26
Colchester TownAnglia2.822.822.822.912.282CressingAnglia3.163.163.162.482.482.532CromerAnglia2.482.482.481.631.631Crouch HillAnglia1.791.791.791Custom HouseAnglia2.302.302.302.302.302.302Dagenham DockAnglia2.002.002.002.002.0022Dalston KingslandAnglia2.152.152.242.1722Derby Road (Ipswich)Anglia1.931.931.931.931.9311DissAnglia2.782.782.782.862.842Downham MarketAnglia2.002.002.002.0022DullinghamAnglia2.242.242.402.4022Loss RoadAnglia2.242.242.402.4022Downham MarketAnglia2.242.242.402.402222Loss RoadAnglia1.341.341.341.281.2811Loss RoadAnglia2.642.642.642.462.4622Edmonton GreenAnglia2.102.102.192.192.192.1922	2.41
Cressing   Anglia   3.16   3.16   3.16   2.48   2.48   2.48   1.63   1.63   1     Cromer   Anglia   2.48   2.48   2.48   1.63   1.63   1     Crouch Hill   Anglia   -   -   1.79   1.79   1.79   1     Custom House   Anglia   2.30   2.00   2.00	2.09
Cromer   Anglia   2.48   2.48   2.48   1.63   1.63   1     Crouch Hill   Anglia   -   -   1.79   1.79   1.79   1     Custom House   Anglia   2.30   2.00   2.00   2.00   2.00   2.00   2.01   2.17   2   2   2.44   2.17   2   2.1	2.28
Cromer   Anglia   2.48   2.48   2.48   1.63   1.63   1     Crouch Hill   Anglia   -   -   1.79   1.79   1.79   1     Custom House   Anglia   2.30   2.00   2.00   2.00   2.00   2.00   2.01   2.17   2   2   2.44   2.17   2   2.1	2.53
Crouch Hill   Anglia   -   -   1.79   1.79   1.79   1     Custom House   Anglia   2.30   2.00   2.00   2.00   2.00   2.01   2.17   2.27   2.24   2.24   2.24   2.17   2.27   2.75   2.27   2.75   2.27   2.75   2.27   2.75   2.27   2.00	1.63
Custom House   Anglia   2.30	1.79
Dagenham Dock   Anglia   2.00	2.30
Dalston Kingsland   Anglia   2.07   2.07   2.07   2.15   2.01   2     Darsham   Anglia   2.15   2.15   2.24   2.24   2.17   2     Derby Road (lpswich)   Anglia   1.93	2.00
Darsham   Anglia   2.15   2.15   2.24   2.24   2.17   22     Derby Road (Ipswich)   Anglia   1.93   1.9	2.01
Derby Road (lpswich)   Anglia   1.93   1.9	2.17
Diss   Anglia   2.68   2.68   2.68   2.75   2.75   2     Dovercourt   Anglia   2.78   2.78   2.78   2.78   2.86   2.84   2     Downham Market   Anglia   2.00	1.93
Dovercourt   Anglia   2.78   2.78   2.78   2.86   2.84   22     Downham Market   Anglia   2.00   2.40   2.40   2.40   2.40   2.40   2.40   2.40   2.40   2.40   2.40   2.40   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46   2.46 </td <td>2.75</td>	2.75
Downham Market   Anglia   2.00	2.84
Dullingham   Anglia   2.24   2.24   2.24   2.40	2.00
East Tilbury   Anglia   1.34   1.34   1.34   1.28   1.28   1     Eccles Road   Anglia   2.64   2.64   2.64   2.46 <td>2.40</td>	2.40
Eccles Road   Anglia   2.64   2.64   2.64   2.46	1.28
Edmonton Green   Anglia   2.10   2.10   2.19   2.19   2.19   2.19	
	2.46
	2.19
	2.10
	1.94
	2.42
	1.82
	2.10
	2.07
	1.64
	2.15
	2.17
	2.18
	2.31
	2.38
	2.71
	1.93
	2.26
Gospel Oak   Anglia   2.05	2.05
Grays Anglia 1.99 1.99 1.99 1.99 1.99 1	1.99
Great Bentley Anglia 2.77 2.77 2.77 2.46 2.46 2	2.46
Great Chesterford Anglia 1.82 1.82 1.82 1.82 1.82 1.82 1.82	1.82
Great Yarmouth   Anglia   1.92   1.92   1.92   1.92   1.88   1	1.88
Gunnersbury   Anglia   1.90   1.85   1.85   1.85   1	1.85
Gunton   Anglia   2.59   2.59   2.16   2.16   2	2.16
Hackney Central   Anglia   2.06   2.06   2.06   2.06   2.07   2	2.07
Hackney Downs   Anglia   1.92   1.92   2.00   2.00   1.76   1	1.76
Hackney Wick   Anglia   1.95   1.95   2.05   2.05   1.94   1	1.94
Haddiscoe   Anglia   2.36   2.36   2.36   2.36   2.12   2	2.12
Halesworth   Anglia   1.64   1.64   1.64   1.64   1.73   1	1.73
Hampstead Heath   Anglia   1.80   1.80   2.05   2.05   2.05   2.05	2.05
Harling Road   Anglia   2.57   2.57   2.39   2.39   2	2.39
Harlow Mill   Anglia   0.00   0.00   2.17   2.17   2.01   2	2.01
contir	nued

Appendix 1 – Station condition (	continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Harlow Town	Anglia	2.01	2.01	2.01	2.01	2.01	2.01
Harold Wood	Anglia	1.97	1.97	1.97	1.97	1.97	1.97
Harringay Green Lanes	Anglia	0.00	0.00	1.95	1.95	1.95	1.95
Harwich International Port	Anglia	1.89	1.89	1.95	1.95	1.70	1.70
Harwich Town	Anglia	2.72	2.72	2.72	2.56	2.56	2.56
Hatfield Peverel	Anglia	2.86	2.86	2.86	2.38	2.38	2.38
Hertford East	Anglia	2.40	2.40	2.22	2.22	2.22	2.22
Highams Park	Anglia	1.95	1.95	1.95	1.95	1.95	1.95
Highbury and Islington (N.London Line)	Anglia	2.34	2.34	2.34	2.34	2.34	2.34
Hockley	Anglia	2.50	2.50	2.50	2.50	2.50	2.50
Homerton	Anglia	2.07	2.07	2.07	2.07	2.07	2.07
Hoveton and Wroxham	Anglia	1.94	1.94	1.94	1.94	1.94	1.94
Hythe	Anglia	2.69	2.69	2.69	2.83	2.83	2.83
llford	Anglia	1.89	1.89	1.89	1.89	1.89	1.89
Ingatestone	Anglia	2.07	2.07	2.07	2.07	2.07	2.07
Ipswich	Anglia	1.93	1.93	1.93	1.93	1.95	1.95
Kelvedon	Anglia	1.95	1.95	1.95	1.95	1.91	1.91
Kennett	Anglia	2.39	2.39	2.39	3.14	3.14	3.14
Kensal Rise	Anglia	1.95	1.95	1.95	1.95	1.95	1.95
Kentish Town West	Anglia	2.00	2.00	2.00	2.00	2.15	2.15
Kew Gardens	Anglia	2.00	2.00	2.02	2.02	2.02	2.02
Kings Lynn	Anglia	1.87	1.87	1.87	1.87	1.87	1.87
Kirby Cross	Anglia	0.00	0.00	2.55	2.39	2.39	2.39
Laindon	Anglia	1.82	1.82	1.93	1.93	1.93	1.93
Lakenheath	Anglia	1.57	2.56	1.83	1.97	1.97	1.97
Leigh-on-Sea	Anglia	1.95	1.95	1.95	1.95	1.95	1.95
Leyton Midland Road	Anglia	2.80	2.80	2.80	2.00	2.00	2.00
Levtonstone High Road	Anglia	1.81	1.81	1.81	1.81	1.81	1.81
Limehouse	Anglia	2.29	2.29	2.29	2.29	2.28	2.28
Lingwood	Anglia	1.86	1.86	1.86	2.31	2.31	2.31
Littleport	Anglia	2.04	2.04	2.04	2.04	2.04	2.04
London Fields	Anglia	2.00	2.00	2.00	2.04	2.04	2.04
London Liverpool Street	Anglia	3.13	3.13	2.10	2.10	2.10	2.10
Lowestoft	Anglia	1.34	1.34	1.20	1.24	1.24	1.24
Manea	Anglia	2.35	2.35	2.35	2.23	2.23	2.23
Manningtree	Anglia	2.13	2.33	2.33	2.23	2.23	2.23
0		2.30	2.13	2.13	2.13		2.13
Manor Park	Anglia					2.30	
March	Anglia	2.49	2.49	2.49	2.49	2.49	2.49
Marks Tey	Anglia	1.98	1.98	1.98	1.98	1.98	1.98
Maryland	Anglia	2.23	2.23	2.23	2.23	2.31	2.31
Meldreth	Anglia	1.77	1.77	1.77	1.77	1.77	1.77
Melton	Anglia	1.75	0.00	1.89	1.89	1.89	1.89
Mistley	Anglia	2.22	2.22	2.22	2.22	2.22	2.22
Needham Market	Anglia	2.41	2.41	2.41	2.41	2.41	2.41
Newmarket	Anglia	2.24	2.24	2.24	2.40	2.40	2.40
Newport	Anglia	2.31	2.31	2.31	2.31	2.40	2.40
North Walsham	Anglia	1.76	1.76	1.83	1.83	1.83	1.83
North Woolwich	Anglia	0.00	0.00	2.18	2.18	2.18	2.18
Northumberland Park	Anglia	1.69	1.69	1.99	1.99	1.99	1.99
							continued

Appendix 1 – Station conditio	(	2000/01	2004/02	2002/02	2002/04	2004/05	2005/06
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Norwich Thorpe	Anglia	0.00	0.00	1.72	1.72	1.72	1.72
Ockendon	Anglia	2.18	2.18	2.18	2.18	2.18	2.18
Oulton Broad North	Anglia	2.71	2.71	2.71	2.43	2.43	2.43
Oulton Broad South	Anglia	2.38	2.38	2.38	2.38	2.38	2.38
Pitsea	Anglia	0.00	0.00	2.16	2.16	2.16	2.16
Ponders End	Anglia	2.10	2.10	2.15	2.15	2.15	2.15
Prittlewell	Anglia	2.09	2.09	2.09	2.09	2.09	2.09
Purfleet	Anglia	2.00	2.00	2.00	2.00	2.00	2.00
Rainham (Essex)	Anglia	2.00	2.00	2.00	2.00	2.00	2.00
Rayleigh	Anglia	2.23	2.23	2.27	2.27	2.27	2.27
Rectory Road	Anglia	2.10	2.10	2.32	2.32	2.32	2.32
Reedham	Anglia	2.50	1.99	2.53	2.37	2.37	2.37
Rochford	Anglia	-	_	1.71	1.71	1.71	1.71
Romford	Anglia	2.01	2.01	2.04	2.04	2.04	2.04
Roughton Road	Anglia	2.11	2.11	2.11	2.11	2.11	2.11
Roydon	Anglia	2.20	2.20	2.20	2.20	2.20	2.20
Rye House	Anglia	2.50	2.50	2.31	2.31	2.31	2.31
Salhouse	Anglia	2.37	2.37	2.37	2.37	2.37	2.37
Sawbridgeworth	Anglia	2.13	2.13	2.13	2.13	2.12	2.12
Saxmundham	Anglia	2.23	2.23	2.23	2.16	2.16	2.16
Seven Kings	Anglia	2.02	2.02	2.02	2.52	2.52	2.52
Seven Sisters	Anglia	2.34	2.34	2.47	2.47	1.99	1.99
Shelford	Anglia	1.88	1.88	1.88	1.88	1.88	1.88
Shenfield	Anglia	2.33	2.33	2.33	2.33	2.33	2.33
Shepreth	Anglia	-	-	2.13	2.13	2.13	2.13
Sheringham	Anglia	3.00	3.00	3.00	2.39	2.39	2.39
Shippea Hill	Anglia	2.34	2.34	2.34	2.34	2.34	2.34
Shoeburyness	Anglia	2.16	2.16	2.16	2.16	2.16	2.16
Silver Street	Anglia	1.30	1.30	1.30	1.30	1.34	1.34
Silvertown and City Airport	Anglia	1.96	1.96	1.96	1.96	1.96	1.96
Somerleyton	Anglia	3.72	3.72	3.72	3.14	3.14	3.14
South Acton	Anglia	2.00	2.00	1.86	1.86	1.86	1.86
South Tottenham	Anglia	1.50	1.50	1.50	1.50	1.50	1.50
Southbury	Anglia	2.00	2.00	2.00	2.04	2.04	2.04
Southend Central	Anglia	0.00	0.00	2.27	2.27	2.27	2.27
Southend East	Anglia	1.99	1.99	1.99	2.01	2.01	2.01
Southend Victoria	Anglia	2.04	2.04	2.04	2.04	2.04	2.04
Southminster	Anglia	1.78	1.78	1.78	1.78	1.78	1.78
Spooner Row	Anglia	2.60	2.60	2.60	2.89	2.89	2.89
St Margarets (Hertfordshire)	Anglia	1.90	1.90	2.00	2.00	2.00	2.00
St. James Street (Walthamstow)	Anglia	2.99	2.99	2.99	2.68	2.68	2.68
Stamford Hill	Anglia	1.91	1.91	2.82	2.82	2.82	2.82
Stanford-Le-Hope	Anglia	1.94	1.94	1.94	1.94	1.94	1.94
Stanstead Mountfichet	Anglia	1.34	1.34	1.38	1.38	1.38	1.38
Stansted Airport	Anglia	2.27	2.27	2.27	2.27	2.27	2.27
Stoke Newington	Anglia	1.69	1.69	2.36	2.36	2.36	2.36
Stowmarket	Anglia	2.03	2.03	2.03	2.03	2.03	2.03
Stratford (London)	Anglia	2.35	2.35	2.34	2.34	2.34	2.34
Sudbury (Suffolk)	Anglia	1.50	1.50	1.55	1.55	1.55	1.55
							continued

Appendix 1 – Station condit	tion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Theobalds Grove	Anglia	2.10	2.10	2.10	2.16	2.16	2.16
Thetford	Anglia	2.18	2.18	2.18	2.18	2.18	2.18
Thorpe Bay	Anglia	2.06	2.06	2.06	2.06	2.06	2.06
Thorpe-Le-Soken	Anglia	2.01	2.01	2.05	2.05	2.08	2.08
Thurston	Anglia	1.71	1.71	1.71	1.71	1.71	1.71
Tilbury Town	Anglia	1.24	1.24	1.24	1.26	1.26	1.26
Tottenham Hale	Anglia	2.00	2.00	2.00	2.00	2.00	2.00
Trimley	Anglia	2.36	2.36	2.36	2.36	2.36	2.36
Turkey Street	Anglia	2.18	2.18	2.18	2.24	2.20	2.20
Upminster	Anglia	2.38	2.38	2.38	2.38	2.33	2.33
Upper Holloway	Anglia	2.03	2.03	2.03	2.03	2.03	2.03
Waltham Cross	Anglia	2.00	2.00	2.00	2.09	2.09	2.09
Walthamstow Central	Anglia	2.04	2.04	2.04	2.04	2.04	2.04
Walthamstow Queens Road	Anglia	2.36	2.36	2.36	2.36	2.36	2.36
Walton-On-Naze	Anglia	1.19	1.19	1.19	1.19	1.19	1.19
Wanstead Park	Anglia	1.40	1.10	1.40	1.40	1.40	1.40
Waterback	Anglia	2.20	2.20	2.17	2.17	2.17	2.17
Waterbeach	Anglia	2.39	2.39	2.39	2.39	2.24	2.24
Watlington	Anglia	2.45	2.45	2.45	2.45	2.50	2.50
Weeley	Anglia	2.11	2.11	2.11	2.11	2.40	2.40
West Ham	Anglia	1.00	1.00	1.00	1.00	1.00	1.00
West Hampstead	Anglia	1.99	1.99	1.99	1.99	1.99	1.99
West Horndon	Anglia	2.02	2.02	2.02	2.02	2.02	2.02
West Runton	Anglia	2.83	2.83	2.83	2.17	2.17	2.17
Westcliff	Anglia	-	-	1.98	1.98	1.98	1.98
Westerfield	Anglia	2.07	2.07	2.07	2.10	2.10	2.10
White Hart Lane	Anglia	1.90	1.90	2.03	2.03	2.03	2.03
White Notley	Anglia	2.25	2.25	2.22	2.22	2.22	2.22
Whittlesea	Anglia	2.35	2.35	2.35	2.35	2.35	2.35
Whittlesford	Anglia	1.43	1.43	1.43	1.43	1.43	1.43
Wickford	Anglia	2.03	2.03	2.18	2.18	2.18	2.18
Wickham Market	Anglia	2.50	2.50	2.50	2.27	2.27	2.27
Willesden Junction	Anglia	_		2.16	2.16	2.16	2.16
Witham	Anglia	2.01	2.01	2.01	2.01	2.01	2.01
Wivenhoe	Anglia	2.23	2.23	2.23	2.01	2.20	2.20
Wood Street		3.71	3.71	3.71	2.23	2.20	2.20
	Anglia						
Woodbridge	Anglia	2.38	2.38	2.38	2.38	2.17	2.17
Woodgrange Park	Anglia	1.50	1.50	1.50	1.50	1.50	1.50
Woodham Ferrers	Anglia	-	-	2.38	2.38	2.38	2.38
Worstead	Anglia	2.85	2.85	2.85	2.18	2.18	2.18
Wrabness	Anglia	2.26	2.26	2.26	2.46	2.46	2.46
Wymondham	Anglia	1.64	1.64	1.64	1.64	1.64	1.64
Abbey Wood	Kent	1.83	1.83	2.09	2.09	2.09	2.09
Adisham	Kent	3.00	3.00	3.00	3.00	3.00	3.00
Albany Park	Kent	2.48	2.48	2.48	2.48	2.48	2.48
Appledore	Kent	2.66	2.66	2.66	2.66	2.66	2.66
Ashford International	Kent	1.86	1.86	1.86	1.86	1.86	1.86
Aylesford	Kent	2.42	2.42	2.42	3.04	3.04	3.04
Aylesham	Kent	2.78	2.78	2.78	2.78	2.78	2.78
							continued

Appendix 1 – Station condition

Appendix 1 – Station condition	on (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Barming	Kent	2.43	2.43	2.43	2.44	2.44	2.44
Barnehurst	Kent	2.31	2.31	2.37	2.37	2.12	2.12
Bat and Ball	Kent	2.44	2.44	2.67	2.67	2.67	2.67
Battle	Kent	2.44	2.44	2.56	2.56	2.56	2.56
Bearsted	Kent	2.75	2.75	2.75	2.75	2.75	2.75
Beckenham Hill	Kent	2.37	2.37	2.37	2.95	2.95	2.95
Beckenham Junction	Kent	2.54	2.54	2.54	2.82	2.82	2.82
Bekesbourne	Kent	2.34	2.34	2.34	3.02	3.02	3.02
Bellingham	Kent	2.43	2.43	2.43	2.43	2.43	2.43
Beltring	Kent	2.26	2.26	2.26	2.26	2.26	2.26
Belvedere	Kent	1.83	1.83	1.96	1.96	1.96	1.96
Bexley	Kent	2.57	2.57	2.57	2.57	2.31	2.31
Bexleyheath	Kent	2.43	2.43	2.43	2.43	2.43	2.58
Bickley	Kent	2.42	2.42	2.43	2.85	2.45	2.95
Birchington-On-Sea	Kent	2.42	2.42	2.42	2.03	2.03	2.33
Blackheath	Kent	2.38	2.38	2.38	2.73	2.73	2.75
Borough Green and Wrotham	Kent	2.38	2.38	2.38	2.38	2.38	2.30
Brixton	Kent	2.02	2.02	2.02	2.02	2.02	2.02
Broadstairs	Kent	2.02	2.02	2.02	2.02	2.02	1.61
	Kent	2.23	2.23	2.23	2.23	2.23	2.89
Bromley North	Kent			2.69			
Bromley South		2.51	2.51		2.51	2.26	2.26
Canterbury East	Kent	2.56	2.56	2.56	2.56	2.26	2.26
Canterbury West	Kent	2.27	2.27	2.27	3.01	3.01	3.01
Catford	Kent	2.45	2.45	2.95	2.95	2.95	2.95
Catford Bridge	Kent	2.42	2.42	2.42	2.42	2.59	2.59
Charing	Kent	2.46	2.46	2.46	2.46	2.63	2.63
Charlton	Kent	2.00	2.00	2.17	2.17	2.17	2.17
Chartham	Kent	2.37	2.37	2.37	2.37	2.37	2.37
Chatham	Kent	2.48	2.48	2.48	2.48	2.48	2.23
Chelsfield	Kent	2.51	2.51	2.51	2.51	2.51	2.51
Chestfield and Swalecliffe	Kent	2.56	2.56	2.56	2.91	2.91	2.91
Chilham	Kent	2.91	2.91	2.91	2.91	2.91	2.91
Chislehurst	Kent	2.47	2.47	2.47	2.85	2.85	2.85
Clock House	Kent	2.55	2.55	2.96	2.96	2.96	2.96
Crayford	Kent	1.38	1.38	1.38	1.38	1.38	2.10
Crofton Park	Kent	2.30	2.30	2.30	2.92	2.92	2.92
Crowhurst	Kent	2.45	2.45	2.68	2.68	2.68	2.68
Cuxton	Kent	2.68	2.68	3.00	3.00	3.00	3.00
Dartford	Kent	2.59	2.59	2.59	2.59	2.51	2.51
Deal	Kent	2.73	2.73	2.73	2.73	2.73	2.73
Denmark Hill	Kent	2.46	2.46	2.46	2.83	2.83	2.83
Deptford	Kent	2.42	2.42	2.42	2.54	2.54	2.54
Doleham	Kent	2.37	2.37	2.37	2.37	2.37	2.37
Dover Priory	Kent	2.48	2.48	2.48	2.48	2.25	2.25
Dumpton Park	Kent	2.23	2.23	2.23	2.23	2.34	2.34
Dunton Green	Kent	2.80	2.80	2.80	2.80	3.05	3.05
East Farleigh	Kent	2.46	2.46	2.46	3.05	3.05	3.05
East Malling	Kent	2.50	2.50	2.53	2.53	2.44	2.44
Eden Park	Kent	2.43	2.43	2.43	2.43	2.86	2.86
							continued

Appendix 1 – Station cor	ndition (continued)						
Appendix 1 – Station Col		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Edenbridge	Kent	2.75	2.75	2.87	2.87	2.87	2.87
Elmers End	Kent	2.63	2.63	2.63	2.63	2.63	2.38
Elmstead Woods	Kent	2.55	2.55	2.55	2.82	2.82	2.82
Eltham	Kent	2.40	2.40	2.40	2.40	2.40	2.40
Erith	Kent	2.44	2.44	2.44	2.44	2.46	2.46
Etchingham	Kent	2.73	2.73	2.94	2.94	2.65	2.65
Eynsford	Kent	1.97	1.97	1.97	1.97	2.38	2.38
Falconwood	Kent	2.48	2.48	2.48	2.48	2.65	2.65
Farningham Road	Kent	2.60	2.60	2.60	2.60	2.60	2.60
Faversham	Kent	2.30	2.30	2.30	2.30	2.26	2.26
Folkestone Central	Kent	2.28	2.28	2.28	2.28	2.28	2.28
Folkestone Harbour	Kent	3.00	3.00	3.00	3.26	3.26	3.26
Folkestone West	Kent	2.41	2.41	2.41	2.41	2.41	2.41
Frant	Kent	2.58	2.58	2.58	2.58	2.58	2.58
Gillingham	Kent	2.54	2.50	2.54	2.54	2.50	2.30
	Kent	2.73	2.34		3.28		
Godstone				3.28		3.28	3.28
Gravesend	Kent	2.35	2.35	2.35	2.35	2.35	2.35
Greenhithe	Kent	2.00	2.00	2.00	2.00	2.27	2.27
Greenwich	Kent	2.28	2.28	2.28	2.38	2.38	2.38
Grove Park	Kent	2.42	2.42	2.42	2.89	2.89	2.89
Halling	Kent	2.41	2.41	2.41	2.20	2.20	2.20
Ham Street	Kent	2.56	2.56	2.56	2.56	2.56	2.56
Harrietsham	Kent	2.51	2.51	2.51	2.51	2.62	2.62
Hastings	Kent	0.00	-	-	-	0.00	1.37
Hayes	Kent	2.68	2.68	2.68	2.68	2.68	2.65
Headcorn	Kent	2.38	2.38	2.55	2.55	2.55	2.55
Herne Bay	Kent	2.39	2.39	2.39	2.79	2.79	2.79
Herne Hill	Kent	2.56	2.56	2.56	2.56	2.56	2.56
High Brooms	Kent	2.41	2.41	2.41	2.41	2.41	2.22
Higham	Kent	2.34	2.34	2.34	2.80	2.80	2.80
Hildenborough	Kent	2.37	2.37	2.37	2.37	2.37	2.35
Hither Green	Kent	2.44	2.44	2.44	2.44	2.44	2.44
Hollingbourne	Kent	2.96	2.96	2.96	2.96	2.45	2.45
Kearsney	Kent	2.66	2.66	2.66	2.66	2.66	2.60
Kemsing	Kent	2.50	2.50	2.66	2.66	2.66	2.66
Kemsley	Kent	2.87	2.87	2.50	2.50	2.50	2.50
Kent House	Kent	2.54	2.54	2.54	2.54	2.54	2.86
Kidbrooke	Kent	2.49	2.49	2.49	2.49	2.49	2.49
Knockholt	Kent	2.57	2.57	2.57	2.57	2.57	2.57
Ladywell	Kent	2.46	2.46	2.46	2.46	2.46	2.51
Lee	Kent	2.16	2.16	2.16	2.16	2.16	2.20
Lenham	Kent	2.62	2.62	2.62	2.62	2.58	2.58
Lewisham	Kent	2.43	2.43	2.43	2.43	2.50	2.50
London Bridge	Kent	2.11	2.11	3.09	2.91	2.65	2.65
Longfield	Kent	2.36	2.11	2.36	2.91	2.05	2.05
Lower Sydenham	Kent	2.30	2.30	2.30	2.30	2.30	2.30
·							
Maidstone Barracks	Kent	2.24	2.24	2.24	2.61	2.61	2.61
Maidstone East	Kent	2.51	2.51	2.51	2.51	2.65	2.65
Maidstone West	Kent	2.53	2.53	2.53	2.53	2.53	2.53 continued

Appendix 1 – Station co	ondition (continued)						
		0000/04	0001/00	0000/00	0000/04	000 1/05	0005/00
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Marden	Kent	2.51	2.51	2.51	2.51	2.53	2.53
Margate	Kent	2.29	2.29	2.29	2.29	2.29	2.29
Martin Mill	Kent	4.35	4.35	2.62	2.62	2.62	4.35
Meopham	Kent	2.47	2.47	2.47	2.47	2.47	2.47
Minster	Kent	2.26	2.26	2.26	2.26	2.26	2.26
Mottingham	Kent	2.51	2.51	2.51	2.51	2.51	2.53
New Beckenham	Kent	2.38	2.38	2.38	2.38	2.38	2.22
New Cross	Kent	2.38	2.38	2.65	2.65	2.65	2.65
New Eltham	Kent	2.28	2.28	2.29	2.29	2.29	2.29
New Hythe	Kent	2.77	2.77	2.77	3.44	3.44	3.44
Newington	Kent	2.80	2.80	2.80	2.80	2.80	2.80
Northfleet	Kent	2.73	2.73	2.73	3.05	3.05	3.05
Nunhead	Kent	2.55	2.55	2.94	2.94	2.94	2.94
Nutfield	Kent	2.93	2.93	2.93	2.93	2.65	2.65
Ore	Kent	2.70	2.70	2.70	2.70	2.70	2.70
Orpington	Kent	2.49	2.49	2.49	2.49	2.23	2.23
Otford	Kent	0.00	_	_	_	2.26	2.26
Paddock Wood	Kent	2.46	2.46	2.46	2.46	2.65	2.65
Peckham Rye	Kent	2.60	2.60	2.60	2.60	2.89	2.89
Penge East	Kent	2.46	2.46	2.46	2.46	2.46	2.42
Penshurst	Kent	2.65	2.65	2.87	2.87	2.87	2.87
Petts Wood	Kent	2.46	2.46	2.46	2.46	2.46	2.46
Pluckley	Kent	2.46	2.46	2.94	2.94	2.94	2.94
Plumstead	Kent	2.00	2.00	2.06	2.06	2.06	2.06
Queenborough	Kent	2.72	2.00	2.72	2.72	2.00	2.50
Rainham (Kent)	Kent	2.38	2.38	2.38	2.38	2.04	2.03
Ramsgate	Kent	2.80	2.80	2.80	2.80	2.80	2.80
Ravensbourne	Kent	2.58	2.58	2.58	2.77	2.00	2.00
Robertsbridge	Kent	2.46	2.30	3.21	3.21	3.21	3.21
Rochester	Kent	2.58	2.40	2.58	2.58	2.42	2.42
	Kent	2.62	2.50	2.62	2.62	2.42	2.42
Rye Sandling	Kent	2.43	2.02	2.02	2.02	2.02	2.02
Sandwich	Kent	2.43	2.43	2.43	2.43	2.43	2.43
	Kent	2.50	2.50	2.50	2.90	2.50	2.50
Selling Sevenoaks	Kent	2.30	2.30	2.30	2.30	2.30	2.30
Sheerness-On-Sea	Kent	2.58	2.41	2.41	2.41	2.34	2.34
Shepherdswell	Kent	3.05	3.05	3.05	3.05	3.05	2.38
· · · · · · · · · · · · · · · · · · ·							
Shoreham (Kent)	Kent	2.00	2.00	2.73	2.73	2.73	2.73
Shortlands	Kent	2.40	2.40	2.40	2.86	2.86	2.86
Sidcup	Kent	2.26	2.26	2.26	2.26	2.29	2.29
Sittingbourne	Kent	2.44	2.44	2.44	2.44	2.37	2.37
Slade Green	Kent	2.49	2.49	2.49	2.49	2.49	2.49
Shodland	Kent	2.24	2.24	2.24	2.60	2.60	2.60
St Johns	Kent	2.46	2.46	3.01	3.01	3.01	3.01
St. Mary Cray	Kent	2.52	2.52	2.52	2.52	2.52	2.48
Staplehurst	Kent	2.41	2.41	2.60	2.60	2.60	1.98
Stone Crossing	Kent	2.34	2.34	2.34	2.78	2.78	2.78
Stonegate	Kent	2.32	2.32	2.95	2.95	2.55	2.55
Strood	Kent	2.61	2.61	2.61	2.61	2.22	2.22
							continued

Appendix 1 – Station cor	dition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Sturry	Kent	2.53	2.53	2.53	2.53	2.53	2.53
Sundridge Park	Kent	2.44	2.44	2.44	2.44	2.96	2.96
Swale	Kent	2.41	2.41	2.65	2.65	2.65	2.65
Swanley	Kent	2.57	2.57	2.57	2.57	2.57	2.57
Swanscombe Station	Kent	2.33	2.33	2.25	2.73	2.73	2.73
Sydenham Hill	Kent	1.99	1.99	1.99	2.48	2.48	2.48
Teynham	Kent	2.49	2.49	2.49	2.49	2.49	2.41
Three Oaks	Kent	2.43	2.43	2.43	2.43	2.43	2.43
Tonbridge	Kent	2.75	2.75	2.75	2.75	2.75	2.75
Tunbridge Wells	Kent	2.47	2.47	2.47	2.47	2.75	2.75
Wadhurst	Kent	2.43	2.43	2.43	2.43	2.43	2.43
Walmer	Kent	2.43	2.43	2.80	2.80	2.80	2.80
Wateringbury	Kent	2.72	2.72	2.72	2.72	2.72	2.72
Waterloo	Kent	2.78	2.78	2.63	2.38	2.22	2.22
Waterloo East	Kent	1.64	1.64	2.33	2.33	2.33	2.33
	Kent	2.46	2.46	2.46	2.46	2.66	2.66
Welling							
West Dulwich	Kent	2.47	2.47	2.47	2.47	2.47	2.47
West Malling	Kent	2.41	2.41	2.57	2.57	2.57	2.57
West St Leonards	Kent	2.42	2.42	3.08	3.08	3.08	3.08
West Wickham	Kent	2.66	2.66	2.66	2.66	2.66	2.60
Westcombe Park	Kent	2.42	2.42	2.42	2.49	2.49	2.49
Westenhanger	Kent	2.41	2.41	2.41	2.41	2.41	2.41
Whitstable Station	Kent	2.46	2.46	2.46	3.00	3.00	3.00
Winchelsea	Kent	2.30	2.30	2.30	2.30	2.30	2.30
Woolwich Arsenal	Kent	2.01	2.01	2.01	2.01	2.22	2.22
Woolwich Dockyard	Kent	1.93	1.93	1.93	2.21	2.21	2.21
Wye	Kent	2.62	2.62	2.62	2.72	2.72	2.72
Yalding Station	Kent	2.75	2.75	2.75	2.69	2.69	2.69
Acklington	LNE	1.95	1.95	1.95	1.95	1.52	1.52
Adwick	LNE	1.60	1.60	2.09	2.09	2.09	2.09
Alexandra Palace	LNE	2.53	2.53	2.53	2.18	2.18	2.18
Alfreton	LNE	1.29	1.29	1.32	1.64	1.64	1.64
Allens West	LNE	1.99	1.99	1.99	2.56	2.56	2.56
Alnmouth	LNE	2.08	2.08	2.08	2.08	1.33	1.33
Althorpe	LNE	2.50	2.50	2.50	2.71	2.71	2.71
Ambergate	LNE	2.43	2.43	2.43	2.43	2.43	2.00
Ancaster	LNE	2.43	2.45	2.40	2.43	2.43	2.60
Arlesey	LNE	2.00	2.00	2.00	2.00	2.00	2.00
Arram	LNE	2.14	2.14	2.14	2.14	2.14	2.14
Ashwell and Morden	LNE	2.34	2.34	2.34	2.34	2.34	2.34
Aslockton	LNE	1.15	1.15	1.23	1.23	1.23	1.23
Attenborough	LNE	1.43	1.43	1.43	1.43	1.43	1.43
Baildon	LNE	2.30	2.30	2.30	2.30	1.31	1.31
Baldock	LNE	2.06	2.06	2.06	2.06	2.06	2.06
Bardon Mill	LNE	2.40	2.40	2.40	2.40	2.40	2.40
Barnetby	LNE	1.49	1.49	1.83	1.83	1.54	1.54
Barnsley Exchange	LNE	1.10	1.10	1.10	1.10	1.10	1.10
Barrow Haven	LNE	2.70	2.70	2.70	2.48	2.48	2.48
Barrow On Soar	LNE	2.11	2.11	2.11	2.11	2.11	2.41
							continued

Appendix 1 – Station conditior	n (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Barton On Humber	LNE	2.35	2.35	2.35	2.35	1.11	1.11
Batley	LNE	2.00	2.00	2.00	2.19	2.19	2.19
Battersby	LNE	2.45	2.45	2.24	2.24	2.24	2.24
Bayford	LNE	2.83	2.83	2.83	1.96	1.96	1.96
Bedford	LNE	1.67	1.67	1.67	1.67	1.67	1.67
Beeston	LNE	1.21	1.21	1.21	1.21	1.21	1.21
Belper	LNE	1.80	1.80	2.28	2.28	2.28	2.28
Bempton	LNE	1.72	1.72	1.72	1.72	1.72	1.72
Ben Rhydding	LNE	2.21	2.21	2.21	2.21	2.21	2.21
Bentley (S.Yorks)	LNE	1.40	1.40	1.40	1.40	1.64	1.64
Berry Brow	LNE	2.29	2.29	2.29	2.29	2.29	2.29
Berwick-Upon-Tweed	LNE	2.14	2.14	2.14	2.14	2.14	2.14
Beverley	LNE	2.26	2.26	2.26	2.26	1.70	1.70
Biggleswade	LNE	2.06	2.06	2.06	2.06	2.06	2.06
Billingham	LNE	2.17	2.17	2.40	2.40	2.40	2.40
Bingham	LNE	1.28	1.28	1.28	1.28	1.28	1.28
Bingley	LNE	2.50	2.50	2.50	2.61	2.61	2.61
Bishop Auckland	LNE	1.85	1.85	1.85	1.93	1.93	1.93
Blaydon	LNE	2.27	2.27	2.27	2.24	2.24	2.24
Bleasby	LNE	1.33	1.33	1.77	1.77	1.77	1.77
Blythe Bridge	LNE	2.82	2.82	2.82	2.42	2.42	2.42
Bolton On Dearne	LNE	2.44	2.44	2.44	2.34	2.01	2.01
Boston	LNE	2.56	2.56	2.56	2.56	2.56	2.56
Bottesford	LNE	2.23	2.23	2.23	2.23	2.23	2.58
Bowes Park	LNE	2.15	2.15	2.15	2.15	2.15	2.15
Bradford Forster Square	LNE	1.00	1.00	1.03	1.03	1.03	1.03
Bradford Interchange	LNE	1.20	1.20	1.20	1.20	1.20	1.20
Bramley	LNE	1.30	1.30	1.30	1.30	1.30	1.30
Brampton	LNE	2.61	2.61	2.61	2.28	2.28	2.28
Bridlington	LNE	2.43	2.43	2.43	2.43	1.65	1.65
Brigg	LNE	2.67	2.67	2.67	2.66	1.76	1.76
Brighouse	LNE	0.00		1.36	1.36	1.36	1.36
British Steel Redcar	LNE	2.69	2.69	2.36	2.36	2.36	2.36
Brockholes	LNE	2.64	2.64	2.52	2.52	2.52	2.52
Brookmans Park	LNE	2.53	2.53	2.53	2.07	2.07	2.07
Broomfleet	LNE	2.25	2.25	2.25	2.25	2.25	2.25
Brough	LNE	2.14	2.14	2.14	2.14	1.40	1.40
Bulwell	LNE	1.77	1.77	1.77	1.77	1.77	1.77
Burley Park	LNE	1.60	1.60	3.00	1.99	1.99	1.99
Burley-in-Wharfdale	LNE	2.10	2.10	2.10	2.10	2.10	2.10
Burton Joyce	LNE	1.36	1.36	1.36	1.36	1.36	1.36
Burton-on-Trent	LNE	1.24	1.24	1.60	1.60	1.60	1.60
Carlton	LNE	1.45	1.45	1.45	1.45	1.45	1.45
Castleford Central	LNE	1.90	1.10	1.90	2.22	2.22	2.22
Castleton Moor	LNE	2.67	2.67	2.67	2.67	2.67	2.67
Cattal	LNE	1.76	1.76	1.76	1.76	1.76	1.76
Chapeltown	LNE	2.34	2.34	2.34	2.34	2.34	2.34
Chathill	LNE	2.34	2.34	2.34	2.34	2.34	2.34
Chesterfield	LNE	2.37	2.37	1.36	1.36	1.37	1.37
		2.40	2.40	1.00	1.00	1.07	continued

Appendix 1 – Station condition

Appendix 1 – Station conditi	ion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Chester-Le-Street	LNE	1.69	1.69	1.69	1.69	1.69	1.69
Church Fenton	LNE	1.90	1.90	1.98	1.98	1.98	1.98
Cleethorpes	LNE	2.39	2.39	2.39	2.39	2.39	2.39
Collingham	LNE	1.42	1.42	1.95	1.95	1.95	1.95
Commondale	LNE	2.28	2.28	2.28	2.45	2.45	2.45
Conisbrough	LNE	1.55	1.55	1.80	1.80	1.80	1.80
Cononley	LNE	2.30	2.30	2.33	2.33	2.33	2.33
Corbridge	LNE	2.25	2.25	2.25	2.10	2.10	2.10
Cottingham	LNE	2.20	2.20	2.45	2.45	2.45	2.45
Cottingley	LNE	3.10	3.10	3.10	2.26	2.26	2.26
Cramlington	LNE	2.29	2.29	2.29	2.29	1.66	1.66
Creswell	LNE	0.00	_	1.88	1.88	1.88	1.88
Crews Hill	LNE	2.04	2.04	2.04	2.04	2.04	2.04
Cricklewood	LNE	2.00	2.00	2.00	2.03	2.03	2.03
Cromford	LNE	2.92	2.92	2.92	2.92	2.92	2.20
Crossflatts	LNE	1.90	1.90	1.90	1.90	1.90	1.90
Crossgates	LNE	1.50	1.50	3.13	3.13	3.13	3.13
Crowle	LNE	1.99	1.99	1.99	1.99	1.99	1.99
Cuffley	LNE	2.02	2.02	2.02	2.02	2.02	2.02
Danby	LNE	2.50	2.50	2.50	2.48	2.48	2.48
Darlington (Bank Top)	LNE	2.34	2.34	2.34	2.34	2.34	2.34
Darnall	LNE	2.24	2.24	2.24	2.24	2.24	2.24
Darton	LNE	1.70	1.70	1.70	1.70	1.70	1.70
Deighton	LNE	2.71	2.71	2.71	2.71	2.71	2.71
Denby Dale	LNE	2.22	2.22	2.22	2.22	2.22	2.22
Derby	LNE	1.41	1.41	1.61	1.61	1.61	1.61
Dewsbury	LNE	3.00	3.00	3.00	3.00	1.44	1.44
Dinsdale	LNE	2.84	2.84	2.84	2.84	2.84	2.84
Dodworth	LNE	1.80	1.80	1.80	1.80	1.53	1.53
Doncaster	LNE	1.88	1.88	1.88	1.73	1.52	1.52
Dore	LNE	2.00	2.00	2.00	2.00	1.68	1.68
Drayton Park	LNE	2.08	2.08	2.08	2.08	2.08	2.08
Driffield	LNE	2.20	2.20	2.54	2.54	2.54	2.54
Dronfield	LNE	2.30	2.30	2.30	2.30	2.30	2.30
Duffield	LNE	2.01	2.01	2.12	2.12	2.12	2.12
Dunston	LNE	2.21	2.21	2.48	2.48	2.48	2.48
Durham	LNE	2.37	2.37	2.37	2.39	1.57	1.57
Eaglescliffe	LNE	2.49	2.49	2.49	2.49	2.49	2.49
East Garforth	LNE	1.50	1.50	1.31	1.31	1.31	1.31
Eastrington	LNE	2.40	2.40	2.42	2.42	1.23	1.23
Egton	LNE	2.48	2.48	2.48	2.31	2.31	2.31
Elsecar	LNE	2.30	2.30	2.30	2.24	1.61	1.61
Elstree and Borehamwood	LNE	2.05	2.05	2.05	2.05	2.05	2.05
Elton and Orston	LNE	1.65	1.65	1.65	1.65	1.65	1.65
Enfield Chase	LNE	1.99	1.99	1.99	1.99	1.99	1.99
Essex Road	LNE	2.26	2.26	2.26	2.26	2.26	2.26
Farringdon	LNE	2.00	2.00	2.00	2.00	2.00	2.08
Featherstone	LNE	2.00	2.00	2.00	2.00	2.00	2.00
	LNE	2.15	2.15	2.15	2.30	1.98	1.98
Ferriby	LINL	2.39	2.39	2.39	2.49	1.90	1.90

Appendix 1 – Station condition	(continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Filey	LNE	2.43	2.43	2.43	2.43	2.43	2.43
Finsbury Park	LNE	2.17	2.17	2.17	2.17	2.17	2.17
Fiskerton	LNE	1.00	1.00	1.00	1.00	1.00	1.00
Fitzwilliam	LNE	2.30	2.30	2.30	2.30	2.30	2.30
Flitwick	LNE	2.07	2.07	2.07	2.09	2.09	2.09
Frizinghall	LNE	2.10	2.10	2.10	2.10	2.10	2.10
Gainsborough Central	LNE	3.43	3.43	3.43	3.43	3.43	3.43
Gainsborough Lea Road	LNE	1.86	1.86	1.86	1.86	1.86	1.86
Garforth	LNE	1.50	1.50	1.50	2.36	2.36	2.36
Gargrave	LNE	1.30	1.30	1.30	1.95	1.95	1.95
Gilberdyke	LNE	2.35	2.35	2.37	2.37	2.37	2.37
Glaisdale	LNE	2.40	2.40	2.56	2.56	2.56	2.56
Goldthorpe	LNE	2.25	2.25	2.25	2.25	2.25	2.25
Goole	LNE	2.12	2.12	2.12	2.12	2.12	2.12
Gordon Hill	LNE	2.04	2.04	2.04	2.04	1.93	1.93
Goxhill	LNE	2.22	2.22	2.22	2.14	1.12	1.12
Grange Park	LNE	2.22	2.22	2.22	2.22	2.22	2.22
Grantham	LNE	2.19	2.19	2.23	2.23	2.00	2.00
Great Ayton	LNE	2.33	2.33	2.33	2.33	2.33	2.33
Great Coates	LNE	2.47	2.47	2.47	2.47	2.47	2.47
Grimsby Docks	LNE	2.35	2.35	2.24	2.24	1.69	1.69
Grimsby Town	LNE	2.29	2.29	2.58	2.58	2.58	2.58
Grosmont	LNE	2.86	2.86	2.86	2.53	2.53	2.53
Guiseley	LNE	2.30	2.30	2.30	2.30	1.47	1.47
Gypsy Lane	LNE	2.50	2.50	2.50	2.50	2.50	2.50
Habrough	LNE	2.48	2.48	2.29	2.29	2.29	2.29
Hadley Wood	LNE	1.99	1.99	1.99	1.99	1.99	1.99
Halifax	LNE	0.00	_	1.95	1.95	1.95	1.95
Haltwhistle	LNE	2.26	2.26	2.26	1.98	1.98	1.98
Hammerton	LNE	0.00	_	1.64	1.64	1.64	1.64
Harlington	LNE	1.98	1.98	1.98	2.10	2.10	2.10
Harpenden	LNE	2.18	2.18	2.18	2.18	2.18	2.00
Harringay	LNE	2.37	2.37	2.37	2.37	2.37	2.37
Harrogate	LNE	2.30	2.30	2.30	2.37	2.37	2.37
Hartlepool	LNE	2.20	2.20	2.35	2.35	2.35	2.35
Hatfield	LNE	1.83	1.83	1.83	1.83	1.83	1.83
Hatfield and Stainforth	LNE	2.50	2.50	2.10	2.10	2.10	2.10
Havenhouse	LNE	1.76	1.76	2.35	2.35	2.35	2.35
Haydon Bridge	LNE	2.08	2.08	2.08	2.17	2.17	2.17
Headingley	LNE	2.80	2.80	2.80	2.80	1.73	1.73
Healing	LNE	3.24	3.24	3.24	3.24	3.24	3.24
Hebden Bridge	LNE	2.26	2.26	2.29	2.29	2.29	2.29
Heckington	LNE	1.89	1.89	1.89	2.46	2.46	2.46
Heighington	LNE	1.61	1.61	1.61	1.86	1.86	1.86
Hendon	LNE	2.23	2.23	2.23	2.23	2.23	2.10
Hensall	LNE	1.93	1.93	1.93	1.93	1.93	1.93
Hertford North	LNE	2.12	2.12	2.12	2.12	2.29	2.29
Hessle	LNE	2.12	2.12	2.12	2.40	2.20	2.40
Heworth	LNE	2.43	2.43	2.43	2.43	2.43	2.43
		2.10	2.10	2.10	2.10	2.10	continued

	_	2000/01	2001/02	2002/03	2003/04	2004/05	2005/00
Station name	Route	score	score	score	score	score	scor
Hexham		2.15	2.15	2.15	2.08	2.08	2.0
Highbury and Islington (Gn City Line)		2.32	2.32	2.32	2.32	2.32	2.3
Hinckley Hitchin	LNE	2.59	1.70	1.70 2.59	1.70 2.59	1.70 2.59	1.70
			2.59				2.5
Honley Hornbeam Park		2.54	2.54	2.51	2.51	2.51	2.5
		2.10	2.10	2.67	2.67	2.67	2.6
Hornsey		2.54	2.54	2.54	2.54	2.54	2.5
Horsforth		2.40	2.40	2.40	2.40	2.40	2.40
Howden	LNE	3.30	3.30	2.97	2.97	2.97	2.9
Hubberts Bridge	LNE	2.67	2.67	2.67	2.67	2.67	2.6
Hucknal	LNE	1.52	1.52	1.52	1.08	1.08	1.08
Huddersfield	LNE	2.20	2.20	2.38	2.38	2.38	2.38
Hull	LNE	2.76	2.76	2.76	2.47	2.47	2.4
Hunmanby	LNE	1.98	1.98	1.98	1.98	1.61	1.6
Huntingdon	LNE	2.28	2.28	2.28	2.28	2.28	2.2
Hutton Cranswick	LNE	2.69	2.69	2.69	2.69	2.69	2.69
Hykeham	LNE	2.80	2.80	2.80	2.80	2.80	2.80
Ilkley	LNE	2.30	2.30	2.30	2.30	2.30	2.30
Keighley	LNE	2.70	2.70	2.70	2.70	2.70	2.70
Kentish Town	LNE	2.24	2.24	2.27	2.27	2.27	2.2
Kettering	LNE	1.75	1.75	1.75	1.75	1.75	1.75
Kildale	LNE	2.30	2.30	2.30	2.79	2.79	2.79
King's Cross Thameslink	LNE	2.07	2.07	2.07	2.07	2.07	2.00
King's Cross	LNE	2.11	2.11	2.37	2.44	2.44	2.44
Kirk Sandall	LNE	2.59	2.59	2.59	2.59	1.57	1.57
Kirkby in Ashfield	LNE	1.35	1.35	1.27	1.27	1.27	1.2
Kirton Lindsey	LNE	3.18	3.18	3.18	3.18	3.18	3.18
Kiveton Bridge	LNE	2.17	2.17	2.17	2.17	2.17	2.1
Kiveton Park	LNE	2.14	2.14	2.09	2.09	2.09	2.09
Knaresborough	LNE	2.40	2.40	2.40	2.49	2.49	2.49
Knebworth	LNE	2.23	2.23	2.23	2.23	2.01	2.01
Knottingley	LNE	2.41	2.41	2.41	2.42	2.42	2.42
Langley Mill	LNE	1.75	1.75	1.75	1.75	1.75	1.75
Langwith Whaley Thorns	LNE	0.00	-	2.00	2.00	2.00	2.00
Leagrave	LNE	2.00	2.00	2.00	2.00	2.00	2.20
Lealholm	LNE	2.39	2.39	2.39	2.39	2.39	2.39
Leeds City	LNE	3.02	3.02	1.91	1.97	1.97	1.9
Leicester	LNE	1.55	1.55	1.55	1.55	1.55	1.5
Letchworth	LNE	2.10	2.10	2.10	2.10	2.10	2.10
Lincoln Central	LNE	1.27	1.27	1.27	2.28	2.28	2.28
Lockwood	LNE	2.38	2.38	2.38	2.38	2.38	2.38
Long Eaton	LNE	1.31	1.31	1.31	1.31	1.31	1.3
Longbeck	LNE	2.57	2.57	2.57	2.57	2.57	2.5
Longton	LNE	2.79	2.79	2.79	2.79	2.79	2.3
Loughborough	LNE	1.91	1.91	1.91	1.91	1.91	1.9
Lowdham	LNE	1.42	1.42	1.42	1.42	1.42	1.42
Luton	LNE	2.68	2.68	2.68	2.08	2.08	2.08
		0.00		1.00	1.00	1.00	1.01

0.00

2.18

1.02

2.18

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2.18

1.02

2.28

1.02

2.28

1.02

2.28

continued

LNE

LNE

Luton Airport Parkway

Malton

Appendix 1 – Station condition	on (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Manors	LNE	2.65	2.65	2.65	2.65	1.63	1.63
Mansfield	LNE	1.10	1.10	1.10	1.10	1.10	1.10
Mansfield Woodhouse	LNE	1.01	1.01	1.01	1.35	1.35	1.35
Market Harborough	LNE	1.99	1.99	1.99	1.99	1.99	1.99
Market Rasen	LNE	1.28	1.28	1.32	2.42	2.46	2.46
Marske	LNE	1.73	1.73	1.73	2.56	2.56	2.56
Marton	LNE	2.61	2.61	3.06	3.06	3.06	3.06
Matlock	LNE	2.75	2.75	2.75	2.21	2.21	2.21
Matlock Bath	LNE	2.47	2.47	2.47	2.47	2.47	2.40
Meadowhall	LNE	1.35	1.35	1.46	1.46	1.46	1.46
Melton Mowbray	LNE	3.90	3.90	3.90	3.90	3.90	2.47
Menston	LNE	2.50	2.50	2.50	2.33	2.33	2.33
Metheringham	LNE	1.38	1.38	2.14	2.14	2.14	2.14
Metrocentre	LNE	2.08	2.08	2.42	2.42	2.42	2.42
Mexborough	LNE	2.19	2.19	1.90	1.90	1.90	1.90
Micklefield	LNE	1.30	1.30	1.30	2.09	2.09	2.09
Middlesbrough	LNE	2.48	2.48	2.48	2.48	2.48	2.48
Mill Hill Broadway	LNE	2.63	2.63	2.63	2.63	2.63	2.41
Mirfield	LNE	1.00	1.00	2.44	2.44	2.44	2.44
Moorgate	LNE	2.22	2.22	2.22	2.22	2.22	2.22
Moorthorpe	LNE	2.41	2.41	2.41	2.41	2.41	2.41
Morley	LNE	2.04	2.04	2.04	2.04	2.26	2.26
Morpeth	LNE	2.22	2.22	2.22	2.19	2.19	2.19
Mytholmroyd	LNE	2.19	2.19	2.89	2.89	2.89	2.89
Nafferton	LNE	2.25	2.25	2.25	2.25	2.25	2.25
Narborough	LNE	1.87	1.87	1.87	1.87	1.87	1.87
Netherfield	LNE	1.13	1.13	1.13	1.91	1.91	1.91
New Barnet	LNE	2.40	2.40	2.40	2.40	2.40	2.40
New Clee	LNE	2.47	2.47	2.33	2.33	2.33	2.33
New Holland	LNE	2.68	2.68	2.68	2.68	2.68	2.68
New Pudsey	LNE	2.00	2.00	2.00	2.00	2.00	2.00
New Southgate	LNE	2.41	2.01	2.41	2.01	2.01	2.41
Newark Castle	LNE	1.26	1.26	1.55	1.55	1.55	1.55
Newark North Gate	LNE	2.15	2.15	2.20	2.20	2.20	2.20
Newcastle	LNE	2.64	2.64	2.20	2.20	2.43	2.43
Newstead	LNE	1.31	1.31	1.31	1.31	1.31	1.31
Newton Aycliffe	LNE	1.88	1.88	2.80	2.80	2.80	2.80
Normanton	LNE	2.44	2.44	2.00	2.00	2.44	2.44
North Road (Darlington)	LNE	2.44	2.44	2.44	2.44	2.44	2.44
Northallerton	LNE	2.22					2.22
	LNE	2.24	2.24	2.22	2.22	2.22	
Nottingham			2.30	2.30		2.03	2.03
Nunthorpe		2.43	2.43	2.43	2.13	2.13	2.13
Oakham		2.03	2.03	2.03	2.03	2.03	2.25
Oakleigh Park		2.56	2.56	2.56	2.56	2.56	2.56
Old Street	LNE	2.45	2.45	2.45	2.45	2.45	2.45
Outwood	LNE	1.60	1.60	2.27	2.27	2.27	2.27
Palmers Green	LNE	2.24	2.24	2.24	2.24	2.24	2.24
Pannal	LNE	1.60	1.60	1.60	1.60	1.55	1.55
Peartree	LNE	2.15	2.15	2.15	2.15	2.15	2.50 continued

Appendix 1 – Station condit	ion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Pegswood	LNE	2.48	2.48	2.48	2.48	2.48	2.48
Penistone	LNE	1.30	1.30	1.30	1.30	1.30	1.30
Peterborough	LNE	2.22	2.22	2.22	2.22	2.22	2.22
Pontefract Baghill	LNE	3.00	3.00	3.00	2.35	2.35	2.35
Pontefract Monkhill	LNE	2.29	2.29	2.29	2.27	2.27	2.27
Pontefract Tanshelf	LNE	1.60	1.60	2.36	2.36	2.36	2.36
Poppleton	LNE	1.70	1.70	1.70	1.70	1.70	1.70
Potters Bar	LNE	2.50	2.50	2.50	2.50	2.50	2.50
Prudhoe	LNE	2.71	2.71	2.71	2.20	2.20	2.20
Radcliffe (Nottinghamshire)	LNE	1.38	1.38	2.13	2.13	2.13	2.13
Radlett	LNE	2.13	2.13	2.13	2.13	2.13	2.25
Rauceby	LNE	2.59	2.59	2.74	2.74	2.74	2.74
Ravensthorpe	LNE	2.90	2.90	2.90	2.49	2.49	2.49
Rawcliffe	LNE	2.40	2.40	2.40	2.60	2.60	2.60
Redcar Central	LNE	2.06	2.06	2.06	2.11	2.11	2.11
Redcar East	LNE	2.43	2.00	2.43	2.43	2.43	2.11
Retford	LNE	2.37	2.37	2.37	2.37	2.37	2.37
Riding Mill	LNE	2.41	2.41	2.41	2.15	2.15	2.15
Rolleston	LNE	1.28	1.28	1.28	1.96	1.96	1.96
Rotherham Central	LNE	2.14	2.14	2.12	2.12	2.12	2.12
Royston	LNE	2.24	2.24	2.24	2.24	1.79	1.79
Ruskington	LNE	1.81	1.81	1.81	2.16	2.16	2.16
Ruswarp	LNE	2.31	2.31	2.31	2.31	2.31	2.31
Saltaire	LNE	2.14	2.14	1.98	1.98	1.98	1.98
Saltburn	LNE	2.43	2.43	2.43	2.61	2.61	2.61
Saltmarshe	LNE	2.06	2.06	2.06	2.25	2.25	2.25
Sandal and Agbrigg	LNE	1.30	1.30	1.30	1.30	1.60	1.60
Sandy	LNE	2.42	2.42	2.42	2.42	2.42	2.42
Saxilby	LNE	1.38	1.38	1.38	1.38	1.38	1.38
Scarborough	LNE	2.73	2.73	2.73	2.72	2.72	2.72
Scunthorpe	LNE	2.32	2.32	2.32	2.32	2.32	2.32
Seaham	LNE	2.18	2.18	2.18	2.25	2.25	2.25
Seamer	LNE	2.01	2.01	2.07	2.07	2.07	2.07
Seaton Carew	LNE	2.43	2.43	2.36	2.36	2.36	2.36
Selby	LNE	2.43	2.45	2.15	2.33	2.33	2.33
Sheffield	LNE	2.13	2.13	2.13	2.55	2.64	
	LNE						2.64
Shepley		2.19	2.19	2.19	2.19	2.19	2.19
Sherburn-in-Elmet	LNE	2.08	2.08	2.65	2.65	2.65	2.65
Shildon	LNE	2.20	2.20	2.20	2.20	2.20	2.20
Shipley	LNE	2.03	2.03	1.63	1.63	1.63	1.63
Shirebrook	LNE	1.90	1.90	1.93	1.93	1.93	1.93
Shireoaks	LNE	2.89	2.89	2.89	1.80	1.80	1.80
Sileby	LNE	1.73	1.73	1.73	1.81	1.81	1.81
Silkstone Common	LNE	1.70	1.70	1.70	1.79	1.70	1.70
Skegness	LNE	1.67	1.67	1.67	1.67	1.67	1.67
Skipton	LNE	2.10	2.10	2.10	2.10	2.10	2.10
Slaithwaite	LNE	2.80	2.80	2.07	2.07	2.07	2.07
Sleaford	LNE	2.55	2.55	2.55	2.55	2.55	2.55
Sleights	LNE	2.89	2.89	2.89	2.89	2.89	2.89
							continued

Appendix 1 – Station condition	(continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Snaith	LNE	2.33	2.33	2.33	2.33	2.33	2.33
South Bank	LNE	2.67	2.67	2.67	2.85	2.85	2.85
South Elmsall	LNE	1.80	1.80	1.80	2.28	2.28	2.28
South Milford	LNE	1.70	1.70	1.70	2.25	2.25	2.25
South Wigston	LNE	3.03	3.03	3.03	3.03	3.03	2.32
Sowerby Bridge	LNE	3.09	3.09	3.09	2.14	2.14	2.14
Spalding	LNE	1.44	1.44	1.47	1.47	1.47	1.47
Spondon	LNE	1.39	1.39	1.47	1.46	1.46	1.46
St Albans	LNE	2.08	2.08	2.06	2.06	2.06	2.06
St Neots	LNE	2.07	2.07	2.07	2.07	2.07	2.07
	LNE	2.56	2.56	2.56	2.57	2.57	2.57
Stamford	LNE	2.59	2.59	2.59	2.59	2.59	2.18
Starbeck	LNE	2.80	2.80	2.80	2.44	2.44	2.44
Steeton and Silsden	LNE	2.10	2.10	2.50	2.50	2.50	2.50
Stevenage	LNE	2.52	2.52	2.52	2.52	2.52	2.52
Stocksfield	LNE	2.13	2.13	2.13	2.13	2.13	2.13
Stocksmoor	LNE	2.57	2.57	2.57	2.57	2.57	2.57
Stockton	LNE	2.38	2.38	2.38	2.42	2.42	2.42
Streethouse	LNE	1.50	1.50	1.50	1.53	1.53	1.53
Sunderland	LNE	2.28	2.28	2.28	2.28	2.28	2.28
Sutton Parkway	LNE	1.20	1.20	1.20	1.55	1.55	1.55
Swinderby	LNE	1.50	1.50	1.56	2.28	2.28	2.28
Swineshead	LNE	1.09	1.09	1.09	1.09	1.09	1.09
Swinton (South Yorks.)	LNE	2.01	2.01	2.01	2.01	2.01	2.01
Syston	LNE	2.17	2.17	2.17	2.17	2.17	2.32
Tees-Side Airport	LNE	2.65	2.65	2.65	2.65	1.87	1.87
Thirsk	LNE	1.46	1.46	1.46	1.46	1.57	1.57
Thornaby	LNE	3.03	3.03	3.03	1.68	1.68	1.68
Thorne North	LNE	2.03	2.03	2.03	2.03	2.03	2.03
Thorne South	LNE	2.36	2.36	2.36	2.36	2.36	2.36
Thornton Abbey	LNE	2.95	2.95	2.95	2.95	1.95	1.95
Thorpe Culvert	LNE	2.43	2.43	2.38	2.38	2.38	2.38
Thurgarton	LNE	1.10	1.10	1.95	1.95	1.95	1.95
Thurnscoe	LNE	2.28	2.28	2.28	2.25	2.25	2.25
Tutbury and Hatton	LNE	3.00	3.00	3.00	3.00	3.00	2.20
Ulceby	LNE	2.38	2.38	2.50	2.50	1.64	1.64
Ulleskelf	LNE	1.00	1.00	1.00	1.00	1.00	1.00
Uttoxeter	LNE	2.63	2.63	2.03	2.03	2.03	2.03
Wainfleet	LNE	0.00	-	1.61	1.61	1.49	1.49
Wakefield Kirkgate	LNE	3.30	3.30	3.30	2.88	2.88	2.88
Wakefield Westgate	LNE	2.80	2.80	2.80	2.81	2.81	2.81
Watton-At-Stone	LNE	2.14	2.14	2.14	2.14	2.14	2.14
Weeton	LNE	3.00	3.00	2.73	2.73	2.73	2.73
Welham Green	LNE	2.34	2.34	2.34	2.34	2.34	2.34
Wellingborough	LNE	2.00	2.00	2.00	1.98	1.98	1.98
Welwyn Garden City	LNE	2.00	2.00	2.00	2.00	2.00	2.00
Welwyn North	LNE	2.39	2.39	2.39	2.39	2.39	2.39
West Hampstead	LNE	2.08	2.08	2.08	2.08	2.08	2.11
Wetherall	LNE	2.59	2.59	2.59	2.59	2.59	2.59
							continued

Station am   Rotat   Station am   Station am </th <th>Appendix 1 – Station cond</th> <th>lition (continued)</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Appendix 1 – Station cond	lition (continued)						
Whetstandwell   LNE   2.19   1.83   1.93   1.93   1.93     Whity   LNE   2.04   2.04   2.04   2.04   2.04   2.05   2.50   2.50   2.50   2.50   2.50   2.50   2.50   2.51   2.78   2.76   2.16								2005/06
Whity   LNE   2.04   2.04   2.04   2.04   2.04   2.04   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.05   2.06   2.06   2.06   2.07   2.07   2.07   2.07   2.07   2.07   2.07   1.07 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>score</td></th<>								score
Whitey Bridga   LNE   2.50   2.50   2.41								1.93
Whitwell   LNE   0.00   -   1.91   1.91   1.91   1.91     Windington   LNE   2.27   2.78   2.76   2.77   2.77   2.31   2.31   2.7   7   7   7   7   7   7   7   7	,							2.35
Wildington LNE 2.27 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 2.78 1.87 1.67								2.41
Willington Staton   LNE   2.39   2.39   2.39   1.88   1.88   1     Winchmore Hill   LNE   1.67 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.91</td>								1.91
Winchmore Hill   LINE   1.67								2.78
Monthweil   LNE   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.08   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.16   2.36								1.88
Woodhouse   LNE   2.76   2.76   2.11   2.16   2.16   2.11   2.16   2.11   2.16   2.11   2.16   2.11   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12	Winchmore Hill							1.67
Woodlesford   LNE   1.00	Wombwell	LNE	2.08	2.08	2.08	2.08	2.08	2.08
Worksop   LNE   2.36   2.36   2.36   2.36   2.36   2.36   2.36   2.36   2.36   2.36   2.36   2.37   2.31 <th2.31< th="">   2.31   2.31   <t< td=""><td>Woodhouse</td><td>LNE</td><td>2.75</td><td>2.75</td><td>2.16</td><td>2.16</td><td>2.16</td><td>2.16</td></t<></th2.31<>	Woodhouse	LNE	2.75	2.75	2.16	2.16	2.16	2.16
Wresie   LNE   2.84   2.84   2.88   2.17   2     Wyam   LNE   2.72   2.72   2.72   2.72   2.73   2.31   2     Yarm   LNE   1.92   1.92   1.92   2.16   2.16   2.16     Abergele and Pensarn   LNW   2.84	Woodlesford	LNE	1.00	1.00	1.00	1.00	1.00	1.00
Wylam   LNE   2.72   2.72   2.71   2.31   2.31   2     Yarm   LNE   1.92   1.92   1.92   2.50   2.56   2.56   2.56 </td <td>Worksop</td> <td>LNE</td> <td>2.36</td> <td>2.36</td> <td>2.36</td> <td>2.36</td> <td>2.36</td> <td>2.36</td>	Worksop	LNE	2.36	2.36	2.36	2.36	2.36	2.36
Yarm   LNE   1.92   1.92   1.92   2.16   2.16   2.16     York   LNE   2.50	Wressle	LNE	2.84	2.84	2.88	2.88	2.17	2.17
Virk   LNE   2.50 <th2< td=""><td>Wylam</td><td>LNE</td><td>2.72</td><td>2.72</td><td>2.72</td><td>2.31</td><td>2.31</td><td>2.31</td></th2<>	Wylam	LNE	2.72	2.72	2.72	2.31	2.31	2.31
Abergele and Pensarn   LNW   2.84   2.40   2     Actors Bridge   LNW   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.99   1.00   2.11   2.14   2.14   2.14   2.14   2.14   2.14   2.12   2.14   2.16   2.16   2.56   2.56	Yarm	LNE	1.92	1.92	1.92	2.16	2.16	2.16
Accington   LNW   2.88   2.88   2.88   2.21   2.21   2     Accords Green   LNW   1.77   1.72   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.10   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11	York	LNE	2.50	2.50	2.50	2.50	2.50	2.50
Acocks Green   LNW   1.77	Abergele and Pensarn	LNW	2.84	2.84	2.84	2.84	2.84	2.00
Acocks Green   LNW   1.77	Accrington	LNW	2.88	2.88	2.88	2.21	2.21	2.21
Acton Bridge   LNW   2.34   2.34   2.34   2.34   2.40   2     Adderley Park   LNW   1.99		LNW						1.77
Adderley Park LNW 1.99 1.91 2.10 2.11 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.40</td>								2.40
Adington (Cheshire)   LNW   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.10   2.11 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.99</td>								1.99
Adington (Lancs)   LNW   2.10   2.13   21   2.13   21   2.13   21   2.13   21   2.13   21   2.13   21   2.13   21   2.								2.12
Algourth LNW 2.41 2.41 2.41 2.41 2.12 2   Ainsdale LNW 2.02 2.02 2.07 2.07 2 2   Ainsdale LNW 2.37 2.37 1.44 1.44 1.44 1.44   Albrighton LNW 2.37 2.77 2.90								
Ainsdale   LNW   2.02   2.02   2.07   2.07   2     Aintree   LNW   2.37   2.37   1.44   1.44   1.44   1.44     Albrighton   LNW   2.37   2.77   2.90 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2.14</td></t<>								2.14
Aintree   LNW   2.37   2.37   1.44   1.44   1.44   1.44     Albrighton   LNW   2.77   2.77   2.90   2.90   2.90   2     Alderley Edge   LNW   1.99   2.03   2.03   2.03								2.12
Albrighton LNW 2.77 2.77 2.90 2.90 2.90 2   Alderley Edge LNW 1.99 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.07</td>								2.07
Alderley Edge   LNW   1.99								1.44
Allerton LNW 2.34 2.34 2.34 2.34 2.13 2   Alsager LNW 2.56 2.56 2.56 2.56 2.56 2   Altrincham LNW 2.20 2.20 2.20 2.20 2.20 2								2.90
AlsagerLNW2.562.562.562.562.562.562.62.562.562.562.562.562.562.562.522.202.212.312.3122.312.3122.312.332.302.312.312.312.312.312.312.312.312.31 <td>Alderley Edge</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.99</td>	Alderley Edge							1.99
Altrincham   LNW   2.20   2.21   2.51   2.51   2.31   23   2.31   23   2.31   23   2.31   23   2.31   23   2.31   23   2.31   23   2.31   2.31   23   2.33   2.33   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.30   2.31   2.31   2.31   2.31   2.31   2.31   2.31   2.34	Allerton	LNW	2.34	2.34	2.34	2.34	2.13	2.13
AlvechurchLNW2.542.542.542.541.701.701Ansdell and FairhavenLNW2.812.812.812.812.812.312Appleby In WestmorlandLNW2.342.342.342.342.342.182Appley BridgeLNW2.302.302.302.302.302.302ApsleyLNW2.242.242.242.072.072ArdwickLNW2.042.042.042.042.042ArmsideLNW2.042.042.042.042.042ArmsideLNW2.252.252.252.252.252AshburysLNW1.991.991.992.032.032Ashton Under LyneLNW2.752.752.752.751AsamLNW1.981.982.232.232.2322Aspley GuiseLNW2.232.232.232.2322AstonLNW1.101.101.101.1011AthertonLNW2.362.362.362.362.362.36AstonLNW2.232.232.232.232.232.2322Aspley GuiseLNW2.962.962.962.962.962.962.962	Alsager	LNW	2.56	2.56	2.56	2.56	2.56	2.17
Ansdell and FairhavenLNW2.812.812.812.812.812.312Appleby In WestmorlandLNW2.342.342.342.342.342.342.182Appley BridgeLNW2.302.302.302.302.302.302.302ApsleyLNW2.242.242.242.072.072ArdwickLNW2.042.042.042.042.042ArmsideLNW2.042.042.042.042.042ArmsideLNW2.252.252.252.252.252AshburysLNW1.991.991.992.032.032Ashton Under LyneLNW2.752.752.752.751AskamLNW1.981.982.232.232.232Aspley GuiseLNW1.101.101.101.101.10AtherstoneLNW2.472.472.442.442.442.44AstonLNW2.362.362.362.362.362.36	Altrincham	LNW	2.20	2.20	2.20	2.20	2.20	2.20
Appleby In WestmorlandLNW2.342.342.342.342.342.182Appley BridgeLNW2.302.302.302.302.302.302ApsleyLNW2.242.242.242.242.072.072ArdwickLNW2.042.042.042.042.042.042ArmathwaiteLNW2.042.042.042.042.042ArmathwaiteLNW2.252.252.252.252.252AshburysLNW1.991.991.992.032.032AshleyLNW2.752.752.752.752.751AshanLNW3.143.143.143.142.262Ashton Under LyneLNW1.981.982.232.232.232AsperiaLNW1.981.982.232.232.2322AstonLNW1.101.101.101.101.101.101.10AtherstoneLNW2.362.362.362.362.362.362.362.36Asuphy GuiseLNW2.042.472.442.442.442.442.442.442.442.442.442.442.442.442.442.252.252.252.252.252.252.252.252.252.252.252.252.252.252.252.25 <td>Alvechurch</td> <td>LNW</td> <td>2.54</td> <td>2.54</td> <td>2.54</td> <td>1.70</td> <td>1.70</td> <td>1.70</td>	Alvechurch	LNW	2.54	2.54	2.54	1.70	1.70	1.70
Appley BridgeLNW2.302.302.302.302.302.302ApsleyLNW2.242.242.242.072.072ArdwickLNW2.042.042.042.042.042.042ArmathwaiteLNW2.042.042.042.042.042ArnsideLNW2.252.252.252.252.252AshburysLNW1.991.991.992.032.032AshleyLNW2.752.752.752.751AshanLNW2.752.752.752.751AshanLNW3.143.143.143.142.262Ashon Under LyneLNW1.981.982.232.232.232AspatriaLNW1.101.101.101.101.101.10AtherstoneLNW2.472.472.442.442.442.44AstonLNW2.362.362.362.362.362AstonLNW2.472.442.442.442.442.44Aspley GuiseLNW2.362.362.362.362.362.36AstonLNW2.36 <td>Ansdell and Fairhaven</td> <td>LNW</td> <td>2.81</td> <td>2.81</td> <td>2.81</td> <td>2.81</td> <td>2.31</td> <td>2.31</td>	Ansdell and Fairhaven	LNW	2.81	2.81	2.81	2.81	2.31	2.31
ApsleyLNW2.242.242.242.072.072ArdwickLNW2.042.042.042.042.042.0422ArmathwaiteLNW2.042.042.042.042.0422ArnsideLNW2.252.252.252.252.2522AshburysLNW1.991.991.992.032.0322AshleyLNW2.442.442.442.442.292Ashton Under LyneLNW2.752.752.752.752.751AskamLNW3.143.143.143.142.262AspatriaLNW1.981.982.232.232.2322AstonLNW1.101.101.101.101.1011AtherstoneLNW2.362.362.362.362.362.362Aughton ParkLNW2.052.052.052.052.0522	Appleby In Westmorland	LNW	2.34	2.34	2.34	2.34	2.18	2.18
ArdwickLNW2.042.032.05	Appley Bridge	LNW	2.30	2.30	2.30	2.30	2.30	2.30
ArmathwaiteLNW2.042.052.25	Apsley	LNW	2.24	2.24	2.24	2.07	2.07	2.07
ArnsideLNW2.252.232.232.232.232.232.232.232.232.242.44	Ardwick	LNW	2.04	2.04	2.04	2.04	2.04	2.04
ArnsideLNW2.252.232.232.232.232.232.232.232.232.242.44	Armathwaite	LNW	2.04	2.04	2.04	2.04	2.04	2.04
AshburysLNW1.991.991.992.032.032AshleyLNW2.442.442.442.442.292Ashton Under LyneLNW2.752.752.752.752.751AskamLNW3.143.143.143.142.262AspatriaLNW1.981.982.232.232.2322Aspley GuiseLNW2.232.232.232.2322AstonLNW1.101.101.101.101.101AtherstoneLNW2.472.472.442.442.442AthertonLNW2.362.362.362.362.3622Aughton ParkLNW2.052.052.052.052.0522								2.25
AshleyLNW2.442.442.442.442.292Ashton Under LyneLNW2.752.752.752.752.751AskamLNW3.143.143.143.142.262AspatriaLNW1.981.982.232.232.232.23Aspley GuiseLNW2.232.232.232.232.232.23AstonLNW1.101.101.101.101.101AtherstoneLNW2.472.472.442.442.442AthertonLNW2.362.362.362.362.362Aughton ParkLNW2.052.052.052.052.052								2.03
Ashton Under LyneLNW2.752.752.752.752.751AskamLNW3.143.143.143.143.143.142.262AspatriaLNW1.981.982.232.232.232.232Aspley GuiseLNW2.232.232.232.232.2322AstonLNW1.101.101.101.101.1011AtherstoneLNW2.472.472.442.4422AthertonLNW2.362.362.362.362.3622Aughton ParkLNW2.052.052.052.0522								2.29
AskamLNW3.143.143.143.142.262AspatriaLNW1.981.982.232.232.232.232Aspley GuiseLNW2.232.232.232.232.2322AstonLNW1.101.101.101.101.101AtherstoneLNW2.472.472.442.442AthertonLNW2.362.362.362.362.362Aughton ParkLNW2.052.052.052.0522								1.45
AspatriaLNW1.981.982.232.232.232.232Aspley GuiseLNW2.232.232.232.232.2322AstonLNW1.101.101.101.101.101AtherstoneLNW2.472.472.442.442AthertonLNW2.362.362.362.362.362Aughton ParkLNW2.052.052.052.0522								
Aspley GuiseLNW2.232.242.242.242.242.24 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.26</td>								2.26
Aston   LNW   1.10 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2.23</td></th<>								2.23
Atherstone   LNW   2.47   2.47   2.44								2.11
Atherton   LNW   2.36								1.10
Aughton Park   LNW   2.05	Atherstone	LNW	2.47		2.44		2.44	2.44
	Atherton	LNW	2.36	2.36	2.36	2.36	2.36	2.36
Aylesbury LNW 2.14 2.14 1.99 1.99 1.99 1	Aughton Park	LNW	2.05	2.05	2.05	2.05	2.05	2.05
	Aylesbury	LNW	2.14	2.14	1.99	1.99	1.99	1.99
Appendix 1 – Station condi	tion (continued)							
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Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score	
Bache	LNW	1.97	1.97	1.97	1.97	1.97	1.97	
Bamber Bridge	LNW	2.45	2.45	2.45	2.10	2.10	2.10	
Bamford	LNW	2.40	2.40	2.40	2.40	2.40	2.40	
Banbury	LNW	1.45	1.45	1.45	1.45	1.45	1.45	
Bangor	LNW	2.10	2.10	2.10	2.10	2.10	2.04	
Bank Hall	LNW	2.15	2.15	2.15	2.15	2.15	2.15	
Bare Lane	LNW	2.23	2.23	2.04	2.04	2.04	2.04	
Barlaston	LNW	2.86	2.86	2.86	2.86	2.86	2.00	
Barnt Green	LNW	2.24	2.24	2.24	2.24	2.24	2.24	
Barrow-in-Furness	LNW	2.17	2.17	2.17	2.17	2.17	2.17	
Beaconsfield	LNW	2.06	2.06	2.06	2.06	2.08	2.08	
Bearley	LNW	3.33	3.33	3.33	3.33	3.33	1.57	
Bebbington	LNW	2.25	2.25	2.25	2.25	2.25	2.25	
Bedford St Johns	LNW	1.67	1.67	1.67	2.20	2.20	2.22	
Bedworth	LNW	1.91	1.91	2.37	2.37	2.81	2.81	
Belle Vue	LNW	2.48	2.48	1.98	1.98	1.98	1.98	
Bentham	LNW	2.57	2.57	2.57	2.57	2.57	2.57	
Berkhamsted	LNW	1.98	1.98	1.97	1.97	1.97	1.97	
Berkswell	LNW	1.63	1.63	1.63	1.63	1.63	1.63	
Bescar Lane	LNW	2.55	2.55	2.55	2.25	2.25	2.25	
Bescot	LNW	1.26	1.26	1.26	1.26	1.26	1.26	
Betws-Y-Coed	LNW	2.31	2.31	2.31	2.31	2.33	2.33	
Bicester North	LNW	2.03	2.03	2.03	1.82	1.82	1.82	
Bidston	LNW	3.17	3.17	3.17	3.17	3.17	2.35	
Bilbrook	LNW	1.52	1.52	1.52	1.52	2.14	2.14	
Birchwood	LNW	2.01	2.01	2.01	2.01	2.01	2.01	
Birkdale	LNW	2.35	2.35	2.35	2.14	2.14	2.14	
Birkenhead Central	LNW	2.35	2.35	2.35	2.35	2.12	2.12	
Birkenhead North	LNW	2.24	2.24	2.24	2.24	2.24	2.24	
Birkenhead Park	LNW	2.04	2.04	2.04	2.04	2.04	2.04	
Birmingham International	LNW	1.94	1.94	1.94	1.94	1.94	1.94	
Birmingham Moor Street	LNW	1.83	1.83	1.83	1.83	1.83	1.83	
Birmingham New Street	LNW	1.81	1.81	1.00	1.70	1.70	1.70	
Birmingham Snow Hill	LNW	1.78	1.78	1.78	1.78	1.78	1.78	
Blackburn	LNW	2.83	2.83	2.83	2.83	2.83	2.01	
Blackpool North	LNW	2.33	2.37	2.03	2.03	2.03	2.01	
Blackpool Pleasure Beach	LNW	2.84	2.84	2.17	2.17	2.17	2.17	
	LNW	2.39	2.39	2.39	2.27	2.00		
Blackpool South							2.00	
Blackrod		1.97	1.97	1.97	1.97	1.97	1.97	
Blaenau Ffestiniog	LNW	2.06	2.06	2.06	2.06	2.03	2.03	
Blake Street	LNW	1.81	1.81	1.69	1.69	1.69	1.69	
Blakedown	LNW	1.83	1.83	1.83	1.83	2.57	2.57	
Bletchley	LNW	2.15	2.15	1.90	1.90	1.90	1.90	
Bloxwich	LNW	2.47	2.47	2.47	2.49	2.22	2.22	
Bloxwich North	LNW	2.40	2.40	2.40	2.40	2.40	2.40	
Blundellsands and Crosby	LNW	2.53	2.53	2.53	2.53	2.18	2.18	
Bodorgan	LNW	2.54	2.54	2.50	2.50	2.50	2.00	
Bolton	LNW	2.20	2.20	2.20	2.20	2.20	2.20	
Bootle	LNW	2.14	2.14	2.02	2.02	2.02	2.02	
							continued	

Annondix 1 Station condi	tion (continued)						
Appendix 1 – Station condi	tion (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Bootle New Strand	LNW	1.97	1.97	1.97	1.97	1.68	1.68
Bootle Oriel Road	LNW	2.20	2.20	2.20	2.20	2.20	2.20
Bordesley	LNW	2.42	2.42	2.42	2.42	2.42	2.42
Bourneville	LNW	1.96	1.96	1.96	1.96	1.96	1.96
Bow Brickhill	LNW	1.67	1.67	1.67	1.67	1.67	2.40
Bramhall	LNW	2.33	2.33	1.54	1.54	1.54	1.54
Braystones	LNW	2.48	2.48	2.04	2.04	2.04	2.04
Bredbury	LNW	2.31	2.31	2.31	2.31	2.16	2.16
Bricket Wood	LNW	1.84	1.84	1.84	2.43	2.43	2.43
Brierfields	LNW	2.60	2.60	2.05	2.05	2.05	1.78
Brinnington	LNW	2.22	2.22	2.22	2.22	2.28	2.28
Broad Green	LNW	2.27	2.27	2.27	2.06	2.06	2.06
Broadbottom	LNW	2.15	2.15	2.15	2.15	2.61	2.61
Bromborough	LNW	2.09	2.09	2.09	2.05	2.05	2.05
Bromborough Rake	LNW	2.09	2.09	2.09	2.09	2.09	2.09
Bromley Cross	LNW	2.31	2.31	2.31	2.10	2.10	2.10
Brunswick	LNW	1.00	1.00	1.00	1.00	1.07	1.07
Bryn	LNW	2.71	2.71	2.72	2.72	2.72	2.02
Buckley	LNW	2.30	2.30	2.12	2.12	2.12	2.13
Burnage	LNW	2.20	2.20	2.20	2.20	2.13	2.13
Burneside	LNW	2.23	2.23	2.23	2.15	2.15	2.15
Burnley Barracks	LNW	3.10	3.10	3.10	2.06	1.79	1.79
Burnley Central	LNW	2.80	2.80	2.80	2.80	2.80	2.41
Burnley Manchester Road	LNW	1.96	1.96	1.96	2.00	2.00	2.41
Burscough Bridge	LNW	1.80	1.80	1.50	1.51	1.51	1.51
Burscough Junction	LNW	1.94	1.00	1.94	1.94	1.94	1.94
Bushey	LNW	2.32	2.32	2.00	2.00	2.00	2.00
Butlers Lane	LNW	1.33	1.33	1.34	1.34	1.34	1.34
Buxton	LNW	2.61	2.61	2.61	2.61	2.16	2.16
Caergwrle	LNW	2.21	2.01	2.01	2.01	2.10	2.10
Canley	LNW	1.24	1.24	1.24	1.24	1.24	1.24
Cannock Capenhurst	LNW LNW	2.13	1.95 2.13	2.23	2.23	2.23	2.23
	LNW			2.13		2.11	
Cark and Cartmel		2.23	2.23	2.23	2.23	2.23	2.23
Carlisle	LNW	2.75	2.75	2.16	2.16	2.16	2.17
Carnforth	LNW	1.99	1.99	1.99	1.99	1.99	1.99
Carpenders Park	LNW	2.48	2.48	2.48	2.04	2.04	2.04
Castleton	LNW	2.19	2.19	2.19	2.19	2.19	2.19
Cefn-Y-Bedd	LNW	3.00	3.00	1.95	1.95	1.95	2.20
Chapel-en-le-Frith	LNW	3.20	3.20	3.20	3.20	3.20	3.20
Chassen Road	LNW	2.28	2.28	2.28	2.01	2.01	2.01
Cheadle Hulme	LNW	2.08	2.08	2.07	2.07	2.07	2.07
Cheddington	LNW	2.12	2.12	2.12	2.03	2.03	2.03
Chelford	LNW	2.18	2.18	2.18	2.18	2.18	2.18
Cherry Tree	LNW	2.49	2.49	2.49	2.14	2.14	2.14
Chester Midland	LNW	2.42	2.42	2.42	2.42	2.17	2.17
Chester Road	LNW	1.30	1.30	1.30	1.30	2.12	2.12
Chinley	LNW	2.07	2.07	2.07	2.07	2.07	2.07
Chorley	LNW	2.04	2.04	2.04	2.04	2.04	2.04
							continued

	Appendix 1 – Station condit	tion (continued)						
Church and Oswaldtwistle   LNW   2.11   2.11   2.11   2.11   2.18   2.18     Clapham   LNW   2.45   2.45   2.38   2.38   2.38     Clapham   LNW   2.40   2.91   2.11								2005/06
Clapham   LNW   2.46   2.45   2.38   2.38   2.38     Clayerdon   LNW   2.90   2.16   2.16   2.16   2.16   2.11								score
Link   2.90   2.90   2.90   2.90   2.90   2.90     Clifton   Link   3.39   3.39   3.39   2.16   2.16     Cliftone   Link   1.51   1.51   1.51   2.15   2.00     Codsall   Link   2.73   2.42   2.42   2.42     Colore   Link   2.11   2.11   2.11   2.11   2.11     Codoyn Bay   Link   2.16   2.11   2.11   2.11   2.11     Consyn Park   Link   1.08   1.08   1.08   1.08   1.08   1.08     Consyn Park   Link   2.02   2.17   2.17   2.17   2.17     Cordrode   Link   2.06   2.66   2.66   2.66   2.66     Cosolity   Link   1.32   1.32   1.32   1.32   1.32     Cosolity   Link   2.18   2.16   2.16   2.16   2.16     Cosolity   Link   2.13   2.18 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.18</td>								2.18
Clifton   LNW   3.39   3.39   2.16   2.16     Cliftore   LNW   1.51   1.51   1.51   2.00   2.00     Codsall   LNW   2.73   2.73   2.42   2.42   2.42     Colne   LNW   2.11   2								2.38
Clitheroe   LNW   1.51   1.51   1.51   2.00   2.00     Codsall   LNW   2.73   2.73   2.42   2.44   2.41								2.07
Codsail   LNW   2.73   2.73   2.42   2.42   2.42     Colne   LNW   2.11								2.16
Coline   LNW   2.11 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2.00</td></t<>								2.00
Colwyn Bay   LNW   2.19   2.19   2.06   2.06   2.06     Congleton   LNW   2.16   2.11   2.11   2.11   2.11     Conway Park   LNW   1.08   1.08   1.08   1.08   1.08   1.06   1.15     Conway Park   LNW   2.02   2.02   2.17   2.17   2.17     Corkickle   LNW   2.86   2.86   2.86   2.86   2.86   2.86     Cosolid   LNW   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.66   2.86								2.42
Conjeton   LNW   2.16   2.16   2.11   2.11   2.11     Convay Park   LNW   1.08								2.11
Convay Park   LNW   1.08   1.08   1.08   1.08   1.15     Convy   LNW   2.02   2.02   2.17   2.17   2.17     Carkickie   LNW   2.86   2.86   2.86   2.86   2.86   2.86     Coselery   LNW   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.63   2.67   Coventry   LNW   1.65   1.61   2.61	Colwyn Bay	LNW	2.19	2.19	2.06	2.06	2.06	2.06
Convy   LNW   2.02   2.17   2.17   2.17     Corkickle   LNW   2.86   2.86   2.86   2.86   2.86     Cosley   LNW   1.32   1.32   1.32   1.32     Cosford   LNW   2.63   2.63   2.63   2.63   2.63     Cosford   LNW   1.65   1.65   1.65   1.65   1.65     Cradley Heath   LNW   1.57   1.58   1.75   1.75     Cressington   LNW   2.18   2.11	Congleton	LNW	2.16	2.16	2.11	2.11	2.11	2.11
Corkickle   LNW   2.86   2.86   2.86   2.86   2.86   2.86   2.86   2.86   2.86   2.83   2.87   2.75   1.75	Conway Park	LNW	1.08	1.08	1.08	1.08	1.15	1.15
Coseley   LNW   1.32   1.32   1.32   1.32   1.32   1.32     Cosford   LNW   2.63   2.65   2.65   2.65   2.65   2.65   2.65   2.65   2.65   2.61 <t< td=""><td>Conwy</td><td>LNW</td><td>2.02</td><td>2.02</td><td>2.17</td><td>2.17</td><td>2.17</td><td>2.17</td></t<>	Conwy	LNW	2.02	2.02	2.17	2.17	2.17	2.17
Cosford   LNW   2.63   2.64   2.61   <	Corkickle	LNW	2.86	2.86	2.86	2.86	2.86	2.69
Coventry   LNW   1.65   1.65   1.65   1.65   1.65     Cradley Heath   LNW   1.57   1.57   1.58   1.75   1.75     Cressington   LNW   2.19   2.18   2.18   2.18   2.18     Crewe   LNW   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.18   2.16   2.61	Coseley	LNW	1.32	1.32	1.32	1.32	1.32	1.32
Cradie   LNW   1.57   1.57   1.58   1.75   1.75     Cressington   LNW   2.19   2.19   2.18   2.11   2.61	Cosford	LNW	2.63	2.63	2.63	2.63	2.87	2.87
Cressington   LNW   2.19   2.19   2.18   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.11   2.12	Coventry	LNW	1.65	1.65	1.65	1.65	1.65	1.65
Crewe   LNW   2.18   2.18   2.18   2.18   2.18   2.18   2.82     Croston   LNW   2.41   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.62   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68   2.68	Cradley Heath	LNW	1.57	1.57	1.58	1.75	1.75	1.75
Croston   LNW   2.41   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.61   2.62   2.23   2.23   2.23   2.23   2.23   2.23   2.23   2.23   2.28   2.28   2.28   2.28   2.28   2.28   2.28   2.28   2.28   2.28   2.24   2.21   2.21   2.21   2.21   <	Cressington	LNW	2.19	2.19	2.18	2.18	2.18	2.18
Cuddington   LNW   2.78   2.78   2.78   2.60   2.50     Daisy Hill   LNW   2.61   2.61   2.61   2.61   2.61   2.61     Dalston   LNW   0.00   -   -   2.02     Dalton-in-Furness   LNW   2.23   2.23   2.23   2.23     Darzey   LNW   1.86   1.86   1.86   2.65     Darven   LNW   2.28   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88     Deagarwy   LNW   2.09   2.09   2.10   2.10   2.21     Degarwy   LNW   2.24   2.24   2.24   2.24   2.24     Denham   LNW   2.33   2.33   2.33   2.33   2.33     Dentham   LNW   2.27   2.27   2.27   2.27	Crewe	LNW	2.18	2.18	2.18	2.18	2.82	2.82
Daisy   LNW   2.61   2.61   2.61   2.61   2.61   2.61     Daiston   LNW   0.00   -   -   2.02     Daiston   LNW   2.23   2.23   2.23   2.23     Darzey   LNW   1.86   1.86   1.86   2.65     Darven   LNW   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.09   2.09   2.13   2.13   2.13     Delarmere   LNW   2.33   2.33   2.33   2.33   2.33     Denham   LNW   2.27   2.27   2.27   2.27   2.27     Denham   LNW   2.49   2.49   2.49   2.49     Denham   LNW   2.49   2.49   2.49   2.49     Denton   LNW   2.49	Croston	LNW	2.41	2.41	2.41	2.41	2.41	2.41
Dation   LNW   0.00   -   -   -   2.02     Dalton-in-Furness   LNW   2.23   2.24   2.24   2.24   2.24   2.21 <t< td=""><td>Cuddington</td><td>LNW</td><td>2.78</td><td>2.78</td><td>2.78</td><td>2.50</td><td>2.50</td><td>2.50</td></t<>	Cuddington	LNW	2.78	2.78	2.78	2.50	2.50	2.50
Daton-in-Furness   LNW   2.23   2.23   2.23   2.23   2.23     Danzey   LNW   1.86   1.86   1.86   1.86   2.65     Darven   LNW   2.28   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.09   2.10   2.10   2.11   2.13   2.13     Delamere   LNW   2.09   2.09   2.13   2.13   2.13     Denham   LNW   2.24   2.24   2.24   2.24   2.24     Denham Golf   LNW   2.33   2.33   2.33   2.33   2.33     Denton   LNW   2.49   2.49   2.49   2.49     Dinting   LNW   2.02   2.02   2.03   2.03     Dolgarrog   LNW   2.28   2.28	Daisy Hill	LNW	2.61	2.61	2.61	2.61	2.61	2.17
Danzey   LNW   1.86   1.86   1.86   1.86   2.65     Darwen   LNW   2.28   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.09   2.10   2.10   2.10   2.13   2.13     Deganwy   LNW   2.09   2.09   2.13   2.13   2.13     Delamere   LNW   1.82   1.82   1.82   2.24   2.24     Denham   LNW   2.21   2.21   2.21   2.21     Denham Golf   LNW   2.33   2.33   2.33   2.33   2.33     Denton   LNW   2.27   2.27   2.27   2.27   2.27     Denton   LNW   2.02   2.03   2.03   2.03     Distoy   LNW   2.10   2.10   2.1	Dalston	LNW	0.00	_	_	_	2.02	2.02
Daven   LNW   2.28   2.28   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.10   2.10   2.10   2.11   2.11     Deganwy   LNW   2.09   2.09   2.13   2.13   2.13     Delamere   LNW   1.82   1.82   1.82   2.24   2.24     Denham Golf   LNW   2.33   2.33   2.33   2.33   2.33     Denton   LNW   2.27   2.29	Dalton-in-Furness	LNW	2.23	2.23	2.23	2.23	2.23	2.23
Daveno   LNW   2.28   2.28   2.28   2.28   2.28   2.28     Davenport   LNW   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.10   2.10   2.10   2.13   2.13     Deganwy   LNW   2.09   2.09   2.13   2.13   2.13     Delamere   LNW   1.82   1.82   1.82   2.24   2.24     Denham   LNW   2.33   2.33   2.33   2.33   2.33     Denham Golf   LNW   2.27   2.29   2.49	Danzey	LNW	1.86	1.86	1.86	1.86	2.65	2.65
Davenport   LNW   2.19   2.19   2.19   2.19   2.19   2.19     Dean Lane   LNW   2.88   2.88   2.88   2.88   2.88   2.88   2.88     Deansgate   LNW   2.10   2.10   2.10   2.10   2.21     Deganwy   LNW   2.09   2.09   2.13   2.13   2.13     Delamere   LNW   1.82   1.82   2.24   2.24   2.24     Denham   LNW   2.33   2.33   2.33   2.33   2.33     Denham Golf   LNW   2.27   2.27   2.27   2.27   2.27     Dento   LNW   3.06   3.06   3.06   3.06   3.06     Derker   LNW   2.49 <t< td=""><td></td><td>LNW</td><td>2.28</td><td></td><td></td><td></td><td></td><td>2.28</td></t<>		LNW	2.28					2.28
Dean LaneLNW2.882.882.882.882.882.88DeansgateLNW2.102.102.102.102.21DeganwyLNW2.092.092.132.132.13DelamereLNW1.821.821.822.242.24DenhamLNW2.242.242.212.212.21Denham GolfLNW2.332.332.332.332.33DentLNW2.272.272.272.272.27DentonLNW3.063.063.063.06DerkerLNW2.492.492.492.49DintingLNW2.102.102.102.36DolgarrogLNW2.022.022.032.032.03DolyddelanLNW2.282.282.402.402.40DorridgeLNW3.023.023.023.023.02DoryddelanLNW3.063.063.063.063.06Dove HolesLNW3.263.263.263.26DuddestonLNW3.263.263.263.26	Davenport	LNW						2.19
DeansgateLNW2.102.102.102.102.21DeganwyLNW2.092.092.132.132.13DelamereLNW1.821.821.822.242.24DenhamLNW2.242.242.212.212.21Denham GolfLNW2.332.332.332.332.33DentLNW2.272.272.272.272.27DentonLNW3.063.063.063.06DerkerLNW2.102.102.102.102.36DintingLNW2.022.022.032.032.03DolgarrogLNW2.282.282.402.402.40DolwyddelanLNW2.362.362.362.362.36Dove HolesLNW3.023.023.023.023.02DriggLNW3.263.263.263.263.26DuddestonLNW3.263.263.263.26								2.88
DeganwyLNW2.092.092.132.132.13DelamereLNW1.821.821.822.242.24DenhamLNW2.242.242.212.212.21DenhamColumbraColumbra2.332.332.332.332.33DentLNW2.272.272.272.272.27DentonLNW3.063.063.063.063.06DerkerLNW2.492.492.492.492.49DintingLNW2.022.022.032.032.03DisleyLNW2.232.232.232.232.23DolyddelanLNW2.282.282.402.402.40DorridgeLNW3.023.023.023.023.02Dove HolesLNW3.263.263.263.263.26DriggLNW1.771.771.771.771.77								2.21
Delamere   LNW   1.82   1.82   1.82   2.24   2.24   2.24   2.21   2.27   2.29   2.49   2.49   2.49   2.49								2.13
DenhamLNW2.242.242.212.212.21Denham GolfLNW2.332.332.332.332.332.33DentLNW2.272.272.272.272.272.27DentonLNW3.063.063.063.063.06DerkerLNW2.492.492.492.492.49DintingLNW2.102.102.102.102.36DisleyLNW2.022.022.032.032.03DolgarrogLNW2.282.282.402.402.40DorridgeLNW2.362.362.362.362.36Dove HolesLNW3.023.023.023.023.02DriggLNW3.263.263.263.263.26DuddestonLNW1.771.771.771.77								2.24
Denham GolfLNW2.332.332.332.332.332.33DentLNW2.272.272.272.272.27DentonLNW3.063.063.063.063.06DerkerLNW2.492.492.492.492.49DintingLNW2.102.102.102.102.36DisleyLNW2.022.022.032.032.03DolgarrogLNW2.282.282.402.402.40DorridgeLNW3.023.023.023.023.02Dove HolesLNW3.263.263.263.263.26DriggLNW1.771.771.771.771.77								2.24
Dent   LNW   2.27   2.29   2.43   2.03   2.03   2.03   2.03   2.03								2.21
DentonLNW3.063.063.063.063.063.06DerkerLNW2.492.492.492.492.49DintingLNW2.102.102.102.102.36DisleyLNW2.022.022.032.032.03DolgarrogLNW2.232.232.232.232.23DolwyddelanLNW2.362.362.362.362.36DorridgeLNW3.023.023.023.023.02Dove HolesLNW3.263.263.263.263.26DriggLNW1.771.771.771.771.77								2.93
DerkerLNW2.492.492.492.492.49DintingLNW2.102.102.102.102.36DisleyLNW2.022.022.032.032.03DolgarrogLNW2.232.232.232.232.23DolwyddelanLNW2.282.282.402.402.40DorridgeLNW2.362.362.362.362.36Dove HolesLNW3.023.023.023.023.02DriggLNW1.771.771.771.771.77								2.27
DintingLNW2.102.102.102.102.36DisleyLNW2.022.022.032.032.03DolgarrogLNW2.232.232.232.232.23DolwyddelanLNW2.282.282.402.402.40DorridgeLNW2.362.362.362.362.36Dove HolesLNW3.023.023.023.023.02DriggLNW1.771.771.771.77								2.82
Disley   LNW   2.02   2.02   2.03   2.03   2.03     Dolgarrog   LNW   2.23   2.240   2.40								
Dolgarrog   LNW   2.23   2.24   2.40								2.36
Dolwyddelan   LNW   2.28   2.28   2.40   2.40   2.40     Dorridge   LNW   2.36   3.02   3.02   3.02   3.02   3.02   3.02   3.02   3.02   3.26								2.03
Dorridge   LNW   2.36   3.02	8 8							2.23
Dove Holes   LNW   3.02								2.40
Drigg   LNW   3.26   3.26   3.26   3.26   3.26   3.26     Duddeston   LNW   1.77   1.77   1.77   1.77   1.77								2.36
Duddeston   LNW   1.77   1.77   1.77   1.77								2.45
								2.05
Dudley Port   LNW   1.75   1.75   1.75   1.75								1.77
	Dudley Port	LNW	1.75	1.75	1.75	1.75	1.75	1.75

2.98

2.35

3.12

1.17

2.90

2.98

2.35

3.12

1.17

2.90

2.98

2.35

3.12

1.33

2.10

2.98

2.35

3.12

1.41

2.10

Earlstown

Earlswood

Eccles

East Didsbury

Eastham Rake

LNW

LNW

LNW

LNW

LNW

181

2.22

2.65

3.12

1.41

2.10

2.22

2.65

2.26

1.41

2.13 continued

Appendix 1 – Station condition	(continued)						
	(continued)	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Eccleston Park	LNW	2.20	2.20	2.08	2.08	2.08	2.08
Edale	LNW	2.68	2.68	2.68	2.01	2.01	2.01
Edge Hill	LNW	2.48	2.48	2.48	2.02	2.02	2.02
Ellesmere Port	LNW	2.03	2.03	2.03	2.00	2.00	2.00
Entwhistle	LNW	2.05	2.05	2.05	2.05	2.05	2.05
Erdington	LNW	1.74	1.74	1.26	1.26	1.26	1.26
Euxton Balshaw Ln	LNW	0.00	_	1.89	1.89	1.89	1.00
Failsworth	LNW	2.78	2.78	2.78	2.78	2.78	2.78
Fairfield	LNW	2.11	2.11	2.11	2.14	2.14	2.14
Farnworth	LNW	2.10	2.10	2.10	2.25	2.25	2.25
Fazakerley	LNW	1.85	1.85	1.85	1.85	1.85	1.85
Fenny Stratford	LNW	1.83	1.83	1.83	1.83	1.83	2.23
Five Ways	LNW	1.60	1.60	1.60	1.60	1.60	1.60
Flimby	LNW	2.39	2.39	2.14	2.14	2.14	2.14
Flint	LNW	2.96	2.96	2.96	2.96	2.96	1.96
Flixton	LNW	2.14	2.14	2.30	2.01	2.01	2.01
Flowery Field	LNW	2.00	2.00	2.00	2.01	2.01	2.01
,	LNW	2.00	2.00	2.00	2.00	2.00	2.00
Formby							
Four Oaks	LNW	1.96	1.96	1.93	1.93	1.93	1.93
Foxfield	LNW	3.10	3.10	1.92	1.92	1.92	2.00
Freshfield	LNW	1.99	1.99	1.99	2.10	2.10	2.10
Frodsham	LNW	3.80	3.80	2.00	2.04	2.04	2.04
Furness Vale	LNW	2.92	2.92	2.92	2.92	2.92	2.08
Garsdale	LNW	2.78	2.78	2.78	2.78	2.78	2.78
Garston	LNW	1.50	1.50	1.50	1.50	1.50	2.03
Garston (Merseyside)	LNW	2.20	2.20	2.04	2.04	2.04	2.04
Garswood	LNW	3.35	3.35	3.35	3.35	2.03	2.03
Gathurst	LNW	2.16	2.16	2.16	2.16	2.16	2.16
Gatley	LNW	3.12	3.12	3.12	3.12	3.12	2.30
Gerrards Cross	LNW	2.25	2.25	2.25	2.25	2.25	2.12
Giggleswick	LNW	2.03	2.03	2.06	2.06	2.06	2.06
Glan Conwy	LNW	2.30	2.30	2.13	2.13	2.13	2.13
Glazebrook	LNW	2.01	2.01	2.01	2.07	2.07	2.07
Glossop	LNW	2.97	2.97	2.97	2.97	2.52	2.52
Godley	LNW	2.17	2.17	2.17	2.17	2.17	2.17
Goostrey	LNW	2.10	2.10	2.14	2.14	2.14	2.14
Gorton	LNW	2.33	2.33	2.33	2.13	2.13	2.13
Grange Over Sands	LNW	3.00	3.00	3.00	3.00	3.00	2.02
Gravelly Hill	LNW	1.96	1.96	1.96	1.96	1.96	1.96
Great Missenden	LNW	2.01	2.01	2.01	2.06	2.36	2.36
Green Lane	LNW	2.40	2.40	1.92	1.92	1.92	1.92
Green Road	LNW	2.12	2.12	2.12	2.12	2.12	2.12
Greenbank	LNW	2.41	2.41	2.41	2.41	2.41	2.41
Greenfield	LNW	3.35	3.35	3.35	3.35	3.35	2.05
Grindleford	LNW	2.40	2.40	2.36	2.36	2.36	2.36
Guide Bridge	LNW	2.36	2.40	2.30	2.30	2.30	2.30
Gwersyllt	LNW	2.30	2.30	2.30	2.04	2.04	2.04
Haddenham and Thame Parkway	LNW	1.74	1.74	1.74	1.74	1.99	1.99
Haddennam and mame Parkway Hadfield	LNW	2.66	2.66	2.18	2.18	2.18	2.12
		2.00	2.00	2.10	2.10	2.10	continued

2005/06 score
2.29
2.15
2.29
2.05
2.51
2.43
2.02

Jation in Arian   Jaton in Arian <thjaton arian<="" in="" th="">   Jaton i</thjaton>	Appendix 1 – Station cor	ndition (continued)						
Haghold INW 2.32 2.32 2.32 2.32 2.29 2.29   Hagby LNW 1.33 1.25 2.15 2.21 2.24		Dente						
Heighey   LNW   1.33   1.33   1.33   1.33   2.15   2.15     Halewood   LNW   2.27   2.27   2.27   2.27   2.27   2.27   2.27   2.27   2.28   2.28   2.28   2.28   2.28   2.24   2.44   <								
Hei   LNW   227   227   227   227   228   229   225   229   225   229   225   225   225   225   225   225   225   225   225   225   225   225   225   225   225   225   223   224   224   224   224   224   224   224   224 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Halewood   LNW   229   2.93   2.93   2.95   <								
Hall Green   LNW   2.00   2.27   2.51   5.51   5.51								
Hall F. H. Wood   LNW   2.43   2.43   2.43   2.43   2.43   2.43   2.43   2.43   2.43   2.02   2.02   2.02     Hall Road   LNW   2.44   2.41   2.41   2.41   2.41   2.41   2.41   2.41   2.41   2.41   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.24   2.24   2.24   2.24   2.24   2.24   2.24   2.24   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21								
Hail Read LNW 2.43 2.43 2.43 2.02 2.02 2.02   Hamiton Square LNW 2.44 2.41 2.10 2.11 2.12 2.12 2.12 2.12 2.12 2.12 2.12 2.1								
Hamilton Square LNW 2.44 2.41 2.42 2.22 2.28 2.29 2.29 2.29 2.29 2.29 2.29 2.29 2.29<								
Hampton In Ardon   LNW   2.23   2.23   2.23   2.12   2.12     Hamstead   LNW   1.56   1.56   1.56   1.56   1.56     Hardficth   LNW   2.10   2.11   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.21   2.22								
Hamstead LNW 1.56 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.28 1.26 2.00 2.00 2.00 2.00 2.00 2.00 2.01 2.10 2.11 2.24 2.24 2.24 1.28 1.38 1.98	·							
Handfurth   LNW   2.10   2.11   2.21   2.21   2.24   2.24   2.24   2.24   2.24   2.24   2.24   2.24   2.22   2.29								
Hapton   LNW   2.10   2.24   2.21   2.12   2.12   2.12 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
Hartesden   LNW   2.17   2.17   2.17   2.08   2.08     Harrington   LNW   2.21   2.21   2.21   2.21   2.24   2.24     Harrow and Weaddstone   LNW   2.41   2.41   2.41   2.41   2.41   2.24   2.24     Harrow and Weaddstone   LNW   1.08   1.98   1.98   1.98   1.98   1.98   1.98   1.98   1.98   1.98   1.08								
Harrington   LNW   2.21   2.21   2.21   2.21   2.24   2.24     Harrow and Wealdstone   LNW   2.41   2.41   2.41   2.41   2.41   2.24   2.24     Hartova and Wealdstone   LNW   1.98   1.93   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53	· · · · · · · · · · · · · · · · · · ·							
Harrov and Wealdstone   LNW   2.41   2.42   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.12   2.13   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53<	Harlesden							
Harlford   LNW   1.98   1.93   1.93   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53   1.53								
Hartlebury   LNW   1.00   1.08   1.08   1.08   1.08   1.08     Hatch Erd   LNW   2.29   2.19   2.19   2.10   2.10   2.10   2.10   2.11   2.13   2.13   1.53	Harrow and Wealdstone							2.22
Hatch End   LNW   2.29   2.10   2.11 <th2.11< th="">   2.11</th2.11<>	Hartford	LNW	1.98	1.98	1.98	1.98	1.98	1.98
Hathersage   LNW   2.12   2.13   2.13   1.53	Hartlebury	LNW	1.00	1.00	1.08	1.08	1.08	1.08
Hattersley   LNW   2.10   2.11   2.13   1.53	Hatch End	LNW	2.29	2.29	2.29	2.29	2.29	2.29
Halton   LNW   1.53 <t< td=""><td>Hathersage</td><td>LNW</td><td>2.12</td><td>2.12</td><td>2.12</td><td>2.12</td><td>2.12</td><td>2.12</td></t<>	Hathersage	LNW	2.12	2.12	2.12	2.12	2.12	2.12
Hawarden   LNW   2.65   2.65   2.65   2.05   2.05   2.05     Hawarden Bridge   LNW   2.71	Hattersley	LNW	2.10	2.10	2.10	2.10	2.19	2.19
Hawarden Bridge   LNW   2.71   2.71   2.71   2.71   2.71   2.71   2.23   2.23     Hazel Grove   LNW   1.20   1.20   2.17   2.11   2.13   2.13   2.13   1.86   Hedron Chapel   LNW   1.90   1.90   1.90   1.90   2.41   2.41   2.41   4.41   Hedron Line   2.10   2.07   2.07   2.00   2.00   2.00   2.00   2.00   2.00   2.00   2.00   2.01   2.11   2.13   2.13   2.13	Hatton	LNW	1.53	1.53	1.53	1.53	1.53	1.53
Hazel Grove   LNW   1.20   1.20   2.17   2.17   2.17   2.17     Headstone Lane   LNW   2.03   2.04   2.44   2.44   2.44   1.40   1.40   1.40   1.41   2.13   2.13   2.13   2.13   2.13   2.13   2.14   2.34   2.34   2.34	Hawarden	LNW	2.65	2.65	2.65	2.05	2.05	2.05
Headstone Lane   LNW   2.03   2.04   2.35   2.35   2.35   1.46   1.81   1.81   1.81   3.13	Hawarden Bridge	LNW	2.71	2.71	2.71	2.71	2.23	2.23
Heald GreenLNW3.093.093.093.093.092.352.35Heaton ChapelLNW1.901.901.901.902.412.41HednesfordLNW1.931.931.861.861.861.86HellfieldLNW2.262.262.262.262.262.26HelsbyLNW2.072.072.072.002.002.00Hemel HempsteadLNW2.122.132.132.132.132.13Henley In ArdenLNW3.363.363.3413.413.41HeyfordLNW2.072.072.072.072.07HeyfordLNW2.342.342.342.342.34HeyfordLNW2.072.072.072.072.07HeyshamLNW2.802.802.482.482.21High WycombeLNW2.572.572.122.122.12Hill SideLNW2.342.342.342.342.34Hill SideLNW2.302.302.152.152.15HollmwoodLNW2.342.342.342.352.052.05Holmes ChapelLNW2.302.302.152.152.152.15HollmeadLNW2.372.372.372.371.391.89HolmeadLNW2.362.062.062.052.052.05Ho	Hazel Grove	LNW	1.20	1.20	2.17	2.17	2.17	2.17
Heaton ChapelLNW1.901.901.901.902.412.41HednesfordLNW1.931.931.861.861.861.86HellifieldLNW2.262.262.262.262.262.26HelsbyLNW2.072.072.072.002.002.00Hemel HempsteadLNW2.122.122.132.132.132.13Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.07HeyshamLNW2.802.482.482.482.48High WycombeLNW2.142.142.142.141.141.99HightownLNW2.572.572.122.122.122.18Hill SideLNW2.062.062.062.052.052.05HolinwoodLNW2.342.342.342.342.052.05Holmes ChapelLNW2.332.302.152.152.152.15Holmes ChapelLNW2.132.132.092.092.092.09HootonLNW2.372.372.371.891.891.89Holmes ChapelLNW2.372.372.372.372.372.18Holmes Chapel <td< td=""><td>Headstone Lane</td><td>LNW</td><td>2.03</td><td>2.03</td><td>2.03</td><td>2.03</td><td>2.03</td><td>2.03</td></td<>	Headstone Lane	LNW	2.03	2.03	2.03	2.03	2.03	2.03
HednesfordLNW1.931.931.861.861.861.86HellifieldLNW2.262.262.262.262.262.26HelsbyLNW2.072.072.072.002.002.00Hemel HempsteadLNW2.122.122.132.132.132.13Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.07HeyshamLNW2.802.802.482.482.21High WycombeLNW2.572.572.122.122.12High KownLNW2.062.062.012.112.11HindleyLNW2.322.322.322.262.26HolinwoodLNW2.342.342.342.052.05Holmes ChapelLNW2.302.302.152.152.15Holmes ChapelLNW2.372.372.372.092.092.09HootonLNW2.372.372.372.172.172.172.17HopeLNW2.562.562.562.562.562.562.56Hoge GreenLNW2.372.372.371.891.89HoudoLNW2.642.642.642.642.642.64 <td< td=""><td>Heald Green</td><td>LNW</td><td>3.09</td><td>3.09</td><td>3.09</td><td>3.09</td><td>2.35</td><td>2.35</td></td<>	Heald Green	LNW	3.09	3.09	3.09	3.09	2.35	2.35
HellifieldLNW2.262.262.262.262.262.262.26HeisbyLNW2.072.072.072.002.002.00Hemel HempsteadLNW2.122.122.132.132.132.13Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.572.572.122.122.11Hill SideLNW2.062.062.062.112.112.11Hill SideLNW2.322.322.322.262.26HollinwoodLNW2.342.342.342.052.05Holmes ChapelLNW2.302.302.152.152.15HolyheadLNW2.372.372.372.372.07HopeLNW2.372.372.372.371.891.89HoronLNW2.372.372.372.372.172.17Hope (Fintshire)LNW2.562.562.562.562.56HoscarLNW2.642.642.642.642.642.64How WoodLNW3.183.183.183.182.04 </td <td>Heaton Chapel</td> <td>LNW</td> <td>1.90</td> <td>1.90</td> <td>1.90</td> <td>1.90</td> <td>2.41</td> <td>2.41</td>	Heaton Chapel	LNW	1.90	1.90	1.90	1.90	2.41	2.41
HelsbyLNW2.072.072.072.002.002.00Hemel HempsteadLNW2.122.122.132.132.132.13Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.141.99HightownLNW2.062.062.062.112.112.11Hill SideLNW2.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.372.372.372.372.372.372.37HopeLNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.042.042.04How WoodLNW3.183.183.183.183.182.142.042.04	Hednesford	LNW	1.93	1.93	1.86	1.86	1.86	1.86
Hemel HempsteadLNW2.122.122.132.132.132.132.13Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.18Hill SideLNW2.062.062.062.112.112.11HindleyLNW2.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.372.372.372.372.372.372.09HootonLNW2.372.372.372.372.372.372.362.56HopeLNW2.562.562.562.562.562.562.562.56HopeLNW2.372.372.371.891.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW3.183.183.183.18<	Hellifield	LNW	2.26	2.26	2.26	2.26	2.26	2.26
Henley In ArdenLNW3.363.363.363.413.413.41HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.18Hill SideLNW2.062.062.062.112.112.11HindleyLNW2.322.322.322.262.26HollinwoodLNW2.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.15HolyheadLNW2.132.132.092.092.09HootonLNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW3.183.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.44	Helsby	LNW	2.07	2.07	2.07	2.00	2.00	2.00
HeswallLNW2.342.342.342.342.342.342.34HeyfordLNW2.072.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.12Hill SideLNW2.062.062.062.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Hemel Hempstead	LNW	2.12	2.12	2.13	2.13	2.13	2.13
HeyfordLNW2.072.072.072.072.072.072.07HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.18Hill SideLNW2.062.062.062.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.372.372.372.371.891.89Hope (Flintshire)LNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.642.042.04How WoodLNW1.751.751.751.751.752.462.46	Henley In Arden	LNW	3.36	3.36	3.36	3.41	3.41	3.41
HeyshamLNW2.802.802.482.482.482.21High WycombeLNW2.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.18Hill SideLNW2.062.062.062.112.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Heswall	LNW	2.34	2.34	2.34	2.34	2.34	2.34
High WycombeLNW2.142.142.142.142.142.141.99HightownLNW2.572.572.122.122.122.122.18Hill SideLNW2.062.062.062.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.062.062.062.092.092.09HootonLNW2.132.132.092.052.05HopeLNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Heyford	LNW	2.07	2.07	2.07	2.07	2.07	2.07
HightownLNW2.572.572.122.122.122.122.18Hill SideLNW2.062.062.062.112.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.172.172.172.172.172.17HopeLNW2.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.56HoscarLNW2.642.642.642.642.642.04Hough GreenLNW3.183.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Heysham	LNW	2.80	2.80	2.48	2.48	2.48	2.21
Hill SideLNW2.062.062.112.112.11HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.17Hope (Flintshire)LNW2.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.56HoscarLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	High Wycombe	LNW	2.14	2.14	2.14	2.14	2.14	1.99
HindleyLNW2.322.322.322.322.262.26HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.56HoscarLNW2.642.642.642.642.04Hough GreenLNW3.183.183.182.042.04How WoodLNW1.751.751.751.752.462.46	Hightown	LNW	2.57	2.57	2.12	2.12	2.12	2.18
HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.042.04Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Hill Side	LNW	2.06	2.06	2.06	2.11	2.11	2.11
HollinwoodLNW2.342.342.342.052.052.05Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.042.04Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Hindley	LNW						
Holmes ChapelLNW2.302.302.152.152.152.15HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.042.04Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Hollinwood	LNW	2.34	2.34				
HolyheadLNW2.132.132.092.092.092.09HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.042.04Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	Holmes Chapel	LNW	2.30			2.15		
HootonLNW2.062.062.062.052.052.05HopeLNW2.172.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.642.04Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46	· · · · ·	LNW						
HopeLNW2.172.172.172.172.172.17Hope (Flintshire)LNW2.372.372.372.371.891.89Horton in RibblesdaleLNW2.562.562.562.562.562.56HoscarLNW2.642.642.642.642.642.04Hough GreenLNW3.183.183.182.042.04How WoodLNW1.751.751.751.752.46								
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HoscarLNW2.642.642.642.642.642.642.05Hough GreenLNW3.183.183.182.042.042.04How WoodLNW1.751.751.751.752.462.46								
Hough Green   LNW   3.18   3.18   3.18   2.04   2.04   2.04     How Wood   LNW   1.75   1.75   1.75   1.75   2.46   2.46								
How Wood   LNW   1.75   1.75   1.75   2.46   2.46								
			1.75	1.75	1.75	1.75	2.40	

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	scor
Hoylake	LNW	2.18	2.18	2.18	2.01	2.01	2.01
Humphrey Park	LNW	2.08	2.08	2.08	2.08	2.08	2.08
Huncoat	LNW	1.20	1.20	1.20	2.15	2.15	2.15
Hunts Cross	LNW	2.08	2.08	2.08	2.08	2.08	2.08
Huyton	LNW	2.15	2.15	2.15	2.15	2.04	2.04
Hyde Central	LNW	2.30	2.30	2.30	2.30	2.56	2.56
Hyde North	LNW	3.65	3.65	3.65	3.65	3.65	2.33
Ince (Manchester)	LNW	3.65	3.65	2.00	2.00	2.00	2.00
Ince and Elton	LNW	2.57	2.57	2.08	2.08	2.11	2.22
Irlam	LNW	2.30	2.30	1.96	1.96	1.96	1.96
James Street	LNW	2.30	2.30	2.30	2.30	2.30	2.30
Jewellery Quarter	LNW	1.01	1.01	1.01	1.01	1.01	1.01
Kearsley	LNW	4.00	4.00	2.39	2.39	2.39	2.07
Kempston Hardwick	LNW	1.67	1.67	1.67	1.67	1.67	1.67
Kendal	LNW	2.56	2.56	2.56	2.56	2.56	1.87
Kensal Green	LNW	1.80	1.80	1.80	1.91	1.91	1.91
Kenton	LNW	2.05	2.05	2.05	2.05	2.05	2.37
Kents Bank	LNW	2.00	2.00	2.00	2.00	2.00	2.00
Kidderminster	LNW	1.85	1.85	1.85	1.81	1.81	1.81
Kidsgrove	LNW	3.11	3.11	3.11	3.11	2.51	2.51
Kilburn High Road	LNW	1.81	1.81	1.81	2.02	2.02	2.02
Kings Langley	LNW	2.01	2.01	2.01	2.01	2.11	2.11
Kings Norton	LNW	2.16	2.16	2.16	2.16	2.16	2.16
Kings Sutton	LNW	2.18	2.18	2.18	2.18	2.18	2.18
Kirkby	LNW	2.06	2.06	2.06	2.06	2.07	2.07
Kirkby Stephen	LNW	2.37	2.37	2.37	2.37	2.37	2.37
Kirkby-in-Furness	LNW	1.88	1.88	2.01	2.01	2.01	2.01
Kirkdale	LNW	1.18	1.18	1.65	1.65	1.65	1.65
Kirkham and Wesham	LNW	2.49	2.49	2.49	2.23	2.23	2.23
Knutsford	LNW	2.38	2.38	2.38	2.38	2.07	2.07
Lancaster	LNW	2.11	2.11	1.94	1.94	1.94	1.94
Landywood	LNW	2.02	2.02	2.02	2.16	2.12	2.12
Langho	LNW	1.68	1.68	1.68	1.68	2.15	2.15
Langley Green	LNW	1.19	1.19	1.20	1.20	1.20	1.20
Langwathby	LNW	1.51	1.51	1.51	1.51	1.51	1.51
Lapworth	LNW	1.44	1.44	1.44	1.44	1.44	1.44
Layton	LNW	2.36	2.36	2.36	2.26	2.26	2.26
Lazonby and Kirkoswald	LNW	1.66	1.66	1.66	1.66	1.66	1.66
Lea Green	LNW	0.00	_	1.92	1.92	1.92	2.00
Lea Hall	LNW	1.34	1.34	1.34	1.34	1.34	1.34
Leamington Spa	LNW	1.81	1.81	1.81	1.81	1.81	1.81
Leasowe	LNW	2.14	2.14	2.00	2.00	2.00	2.00
Leighton Buzzard	LNW	2.00	2.00	1.84	1.84	1.84	1.84
Levenshulme	LNW	2.19	2.19	2.19	2.19	2.19	2.19
Leyland	LNW	2.13	2.13	2.19	2.19	2.19	2.2
Litchfield City	LNW	2.29	2.29	2.29	2.29	2.29	2.2
Litchfield Trent Valley (Combined)	LNW	2.99	2.03	2.91	2.55	2.55	2.0
		2.91	2.91	2.91	2.01	2.01	2.2

2.00

2.75

2.00

2.75

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2.75

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2.64

2.75

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2.64 continued

LNW

LNW

Lidlington

Little Kimble

Appendix 1 – Station condition	(continued)						
	(continued)	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Little Sutton	LNW	2.30	2.30	2.06	2.06	2.06	2.06
Littleborough	LNW	2.13	2.13	2.06	2.06	2.06	2.06
Liverpool Central	LNW	2.31	2.31	2.31	2.31	2.31	1.97
Liverpool Lime Street	LNW	2.55	2.55	2.55	2.55	2.42	2.42
Liverpool Lime Street (Low Level)	LNW	0.00	-	2.90	2.90	2.90	2.04
Liverpool Sandhills	LNW	2.21	2.21	2.21	2.21	1.96	1.96
Llandudno	LNW	2.27	2.27	2.09	2.09	2.09	2.09
Llandudno Junction	LNW	2.23	2.23	2.23	2.23	2.04	2.04
Llanfairfechan	LNW	2.19	2.19	2.19	2.19	2.04	2.04
Llanfairpwll	LNW	2.22	2.22	2.22	2.22	2.22	2.22
Llanwrst	LNW	2.11	2.11	2.11	2.11	2.00	2.00
London Euston	LNW	2.40	2.40	2.64	2.29	2.29	2.29
Long Buckby	LNW	2.13	2.13	2.13	2.16	2.16	2.16
Long Preston	LNW	2.33	2.33	2.33	2.33	2.33	2.33
Longbridge	LNW	1.68	1.68	1.83	1.83	1.83	1.83
Longport	LNW	3.23	3.23	3.23	3.23	2.57	2.57
Lostock	LNW	2.10	2.10	2.10	2.32	2.32	2.32
Lostock Gralam	LNW	3.68	3.68	2.00	3.68	3.68	2.33
Lostock Hall	LNW	2.39	2.39	2.39	2.24	2.24	2.24
Lye	LNW	1.82	1.82	1.82	1.82	2.48	2.48
Lytham	LNW	2.47	2.47	2.47	2.47	2.47	2.47
Macclesfield	LNW	2.29	2.29	2.29	2.29	2.29	2.29
Maghull	LNW	1.87	1.87	1.79	1.79	1.79	1.79
Manchester Airport	LNW	1.61	1.61	1.61	1.61	2.03	2.03
Manchester Oxford Road	LNW	2.21	2.21	2.01	2.01	2.01	2.01
Manchester Piccadilly	LNW	0.00	2.00	1.50	2.80	1.69	1.69
Manchester United Halt	LNW	2.17	2.17	2.17	2.17	2.17	2.17
Manchester Victoria	LNW	2.67	2.67	2.02	2.02	2.02	1.97
Manor Road	LNW	2.07	2.07	2.07	2.08	2.08	2.08
Marple	LNW	2.07	2.07	2.07	2.07	2.26	2.26
Marsden	LNW	2.36	2.36	2.36	1.95	1.95	1.95
Marston Green	LNW	1.39	1.39	1.39	1.39	1.39	1.39
London Marylebone	LNW	2.03	2.03	2.03	2.03	2.03	2.53
Maryport	LNW	1.88	1.88	2.00	2.00	2.00	2.00
Malyport Mauldeth Road	LNW	3.04	3.04	3.04	3.04	3.04	2.98
Meols	LNW	2.18	2.18	2.18	2.36	2.36	2.36
Meols Cop	LNW	2.58	2.58	2.58	2.58	2.58	2.58
Middlewood	LNW	2.75	2.75	2.36	2.75	2.75	2.75
Mill Hill (Lancashire)	LNW	3.03	3.03	3.03	2.03	2.03	2.03
Millbrook	LNW	1.00	1.00	1.00	1.10	1.10	2.03
Millom	LNW	1.88	1.88	2.00	2.00	2.00	2.00
Mills Hill	LNW	2.46	2.46	2.46	2.00	2.00	2.00
Milnrow		2.58	2.58	2.58	2.58	2.58	2.58
Milton Keynes Central		2.00	2.00	1.93	1.93	1.93	1.93
Mobberley Maples Disbaraush	LNW	2.70	2.70	2.70	2.35	2.35	2.35
Monks Risborough	LNW	2.40	2.40	2.00	2.00	2.00	2.00
Moorfields	LNW	2.48	2.48	2.48	2.48	2.48	2.48
Moorside	LNW	2.41	2.41	2.41	2.41	2.46	2.46
Morecambe	LNW	2.05	2.05	2.05	2.05	2.05	2.05
							continued

Appendix 1 – Station co	ndition (continued)						
Appendix 1 – Station Co		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	2004/05 score	2005/06 score
Moreton (Merseyside)	LNW	2.13	2.13	2.11	2.11	2.11	2.11
Moses Gate	LNW	2.70	2.70	2.70	2.00	2.00	2.00
Moss Side (Lanc)	LNW	2.58	2.58	2.58	2.42	2.42	2.42
Mossley	LNW	2.34	2.34	2.34	2.05	2.05	2.05
Mossley Hill	LNW	2.25	2.25	2.25	2.01	2.01	2.01
Moston	LNW	2.66	2.66	2.66	2.23	2.23	2.23
Mouldsworth	LNW	2.30	2.30	2.30	2.49	2.49	2.49
Navigation Road	LNW	2.05	2.05	2.05	2.05	2.05	2.05
Nelson	LNW	3.10	3.10	3.10	3.10	3.10	2.63
Neston	LNW	1.69	1.69	1.69	1.69	1.69	1.69
Nethertown	LNW	3.39	3.39	3.39	3.39	2.45	2.45
New Brighton	LNW	2.25	2.25	2.25	2.25	2.25	2.25
New Hey	LNW	2.00	2.00	2.00	2.00	2.00	2.00
New Lane	LNW	2.64	2.64	2.64	2.28	2.28	2.28
New Mills Central	LNW	2.15	2.15	2.15	2.08	2.08	2.08
New Mills New Town	LNW	2.74	2.74	2.74	2.74	2.74	2.05
Newton For Hyde	LNW	2.25	2.25	2.33	2.33	2.33	2.33
Newton-le-Willows	LNW	2.23	2.23	2.33	2.33	2.33	2.33
North Llanwrst	LNW	2.76	2.76	2.76	2.76	2.76	2.10
North Wembley	LNW	2.07	2.07	2.07	2.16	2.16	2.16
Northampton	LNW	2.00	2.00	2.00	1.95	1.95	1.95
Northfield	LNW	1.28	1.28	1.28	1.28	1.28	1.28
Northolt Park	LNW	2.29	2.29	2.29	2.29	2.29	2.29
Northwich	LNW	2.41	2.41	2.41	2.41	2.21	2.21
Norton Bridge	LNW	3.18	3.18	3.18	3.18	2.51	2.51
Nuneaton	LNW	1.79	1.79	1.66	1.66	1.66	1.66
Oakengates	LNW	1.81	1.81	1.91	1.91	1.91	1.91
Old Hill	LNW	1.84	1.84	2.07	2.07	2.15	2.15
Old Roan	LNW	2.16	2.16	2.16	1.00	1.00	1.00
Oldham Mumps	LNW	2.58	2.58	2.58	2.58	2.58	2.22
Oldham Werneth	LNW	2.74	2.74	2.74	2.74	2.74	2.00
Olton	LNW	1.36	1.36	1.36	1.36	1.36	1.36
Ormskirk	LNW	2.04	2.04	2.10	2.10	2.10	2.10
Orrell	LNW	2.47	2.47	2.47	2.47	2.18	2.18
Orrell Park	LNW	2.13	2.13	2.07	2.07	2.07	2.07
Overpool	LNW	2.11	2.11	2.11	2.00	2.00	2.00
Oxenholme	LNW	2.69	2.69	2.69	2.69	2.17	2.17
Padgate	LNW	2.18	2.18	2.18	2.07	2.07	2.07
Parbold	LNW	2.27	2.27	2.51	2.51	2.51	2.51
Park Street	LNW	1.73	1.73	1.73	2.07	2.07	2.07
Parton	LNW	2.22	2.22	2.22	2.22	2.73	2.73
Patricroft	LNW	2.50	2.50	2.50	2.50	2.12	2.12
Pemberton	LNW	2.30	2.30	2.30	2.30	2.30	2.30
Penkridge	LNW	2.67	2.67	2.14	2.14	2.14	2.14
Penmaenmawr	LNW	2.24	2.24	2.26	2.26	2.26	2.26
Penrith	LNW	2.67	2.67	2.67	2.39	2.39	2.39
Penyfford	LNW	1.96	1.96	1.96	1.96	1.96	1.96
Perry Barr	LNW	2.03	2.03	2.03	2.03	2.03	2.03
Pleasington	LNW	2.60	2.60	2.60	2.04	2.04	2.03
		2.00					continued

003/04 score	2004/05 score	2005/06 score
2.41	2.41	2.41
2.79	2.79	3.59
2.24	2.24	2.24
2.14	2.14	2.14
2.32	2.32	2.00
2.24	2.24	2.24
3.13	3.13	2.14
2.96	2.96	2.02
2.29	2.29	2.29
2.43	2.44	2.44
1.77	1.77	2.01
1.80	2.20	2.20
2.58	2.58	2.58
2.27	2.27	2.27

Appendix 1 – Station co	ndition (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Plumley	LNW	2.24	2.24	2.24	2.41	2.41	2.41
Polesworth	LNW	2.65	2.65	2.79	2.79	2.79	3.59
Pont-y-Pant	LNW	2.22	2.22	2.24	2.24	2.24	2.24
Port Sunlight	LNW	2.14	2.14	2.14	2.14	2.14	2.14
Poulton-Le-Fylde	LNW	2.63	2.63	2.32	2.32	2.32	2.00
Poynton	LNW	2.25	2.25	2.24	2.24	2.24	2.24
Prescot	LNW	3.13	3.13	3.13	3.13	3.13	2.14
Prestatyn	LNW	2.96	2.96	2.96	2.96	2.96	2.02
Prestbury	LNW	2.35	2.35	2.29	2.29	2.29	2.29
Preston	LNW	2.43	2.43	2.43	2.43	2.44	2.44
Princes Risborough	LNW	1.77	1.77	1.77	1.77	1.77	2.01
Queens Park	LNW	1.80	1.80	1.80	1.80	2.20	2.20
Rainford	LNW	2.79	2.79	2.58	2.58	2.58	2.58
Rainhill	LNW	2.27	2.27	2.27	2.00	2.27	2.27
Ramgrave and Wiltshire	LNW	1.43	1.43	1.43	2.05	2.05	2.05
Ravenglass for Eskdale	LNW	2.25	2.25	2.46	2.05	2.46	2.46
Reddish North	LNW	2.23	2.23	2.40	2.40	2.40	2.40
Reddish South	LNW	3.88	3.88	3.88	3.88	3.88	3.16
	LNW	1.66	1.66		1.66	1.66	1.54
Redditch				1.66	2.34		
Rhosneigr	LNW	2.34	2.34	2.34		2.34	2.34
Rhyl	LNW	2.19	2.19	1.92	1.92	1.92	1.92
Ribblehead	LNW	2.00	2.00	2.00	2.00	2.00	2.00
Rice Lane	LNW	2.14	2.14	2.04	2.04	2.04	2.04
Ridgmont	LNW	1.99	1.99	1.99	1.99	1.99	2.38
Rishton	LNW	2.99	2.99	2.99	2.38	2.38	2.38
Roby	LNW	2.28	2.28	2.28	2.03	2.03	2.03
Rochdale	LNW	2.26	2.26	2.26	2.26	2.26	2.04
Rock Ferry	LNW	2.24	2.24	2.24	2.24	2.07	2.07
Roman Bridge	LNW	2.27	2.27	2.21	2.21	2.21	2.21
Romiley	LNW	2.43	2.43	2.43	2.43	2.16	2.16
Roose	LNW	2.99	2.99	2.99	2.99	2.99	2.28
Rose Grove	LNW	2.40	2.40	2.40	2.40	2.40	2.40
Rose Hill (Marple)	LNW	1.92	1.92	1.92	2.00	2.00	2.00
Rowley Regis	LNW	1.57	1.57	2.28	2.28	2.24	2.24
Rufford	LNW	2.09	2.09	2.09	2.17	2.17	2.17
Rugby	LNW	2.83	2.83	2.83	2.83	2.83	2.41
Rugeley	LNW	1.06	1.06	1.06	1.27	1.27	1.27
Rugeley Trent Valley	LNW	1.99	1.99	1.99	1.99	1.99	2.06
Runcorn	LNW	2.06	2.06	2.06	2.06	2.06	2.06
Runcorn East	LNW	2.33	2.33	2.13	2.13	2.13	2.13
Ryder Brow	LNW	2.75	2.75	2.75	2.75	2.75	1.91
Salford Central	LNW	0.00	_	2.09	2.09	2.09	2.09
Salford Crescent	LNW	1.91	1.91	2.00	2.00	2.00	2.00
Salwick	LNW	2.70	2.70	2.70	2.38	2.38	2.38
Sandbach	LNW	2.92	2.92	2.92	2.92	2.36	2.36
Sandwell and Dudley	LNW	1.05	1.05	1.05	1.05	1.05	1.05
Sankey	LNW	2.21	2.21	2.21	2.21	2.66	2.66
Saunderton	LNW	2.29	2.29	2.29	2.29	2.29	2.29
Seaforth and Litherland	LNW	2.62	2.62	1.84	1.84	1.84	2.05
							continued

Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/0 scor
Seascale	LNW	3.30	3.30	2.03	2.03	2.03	2.22
Seer Green and Jordans	LNW	2.35	2.35	2.35	2.35	2.35	2.13
Sellafield	LNW	3.08	3.08	1.95	1.95	1.95	2.0
Selly Oak	LNW	1.42	1.42	1.42	1.42	1.42	1.42
Settle	LNW	2.23	2.23	2.01	2.01	2.01	2.0
Shaw and Crompton	LNW	2.23	2.23	2.23	2.23	2.23	2.23
Shenstone	LNW	1.77	1.77	1.77	1.92	1.92	1.92
Shifnal	LNW	2.81	2.81	2.81	2.30	2.03	2.03
Shirley	LNW	2.08	2.08	2.08	2.08	2.08	2.2
Shotton (High Level)	LNW	2.30	2.30	2.30	2.30	2.30	2.30
Shotton (Low Level)	LNW	2.57	2.57	2.57	2.57	2.57	2.5
Silecroft	LNW	2.03	2.03	2.03	2.03	1.98	1.98
Silverdale	LNW	3.01	3.01	3.01	3.01	3.01	3.0
Small Heath	LNW	2.28	2.28	2.28	2.28	2.48	2.48
Smethwick, Rolfe Street	LNW	1.15	1.15	1.15	1.15	1.15	1.1
Smethwick Galton Bridge	LNW	1.15	1.15	1.15	1.11	1.11	1.1
Smithy Bridge	LNW	2.68	2.68	2.68	2.68	2.68	2.6
Solihull	LNW	2.01	2.01	2.02	2.02	2.02	2.02
South Hampstead	LNW	1.73	1.73	1.73	1.93	1.93	1.90
South Kenton	LNW	1.79	1.79	1.79	1.79	2.42	2.42
South Ruislip	LNW	2.00	2.00	2.00	2.00	2.00	2.19
Southport	LNW	2.16	2.16	2.16	2.16	2.19	2.19
Spital	LNW	2.06	2.06	2.06	2.07	2.07	2.0
Spring Road	LNW	2.58	2.58	2.58	2.58	2.58	2.2
Squires Gate	LNW	2.50	2.50	2.50	1.93	1.93	1.9
St Albans Abbey	LNW	1.96	1.96	1.96	2.30	2.30	2.30
St Annes-On-Sea	LNW	2.04	2.04	2.04	2.04	2.04	2.04
St Bees	LNW	3.28	3.28	3.28	3.28	2.59	2.59
St Helens Central	LNW	2.21	2.21	2.14	2.14	2.14	2.14
St Helens Junction	LNW	2.05	2.05	2.12	2.12	2.12	2.12
St Michaels	LNW	2.41	2.41	2.12	2.12	2.12	2.12
Stafford	LNW	2.23	2.23	2.23	2.23	2.23	2.23
Stalybridge	LNW	2.45	2.45	2.45	2.45	2.45	2.4
Stanlow and Thornton	LNW	2.44	2.44	2.44	2.44	2.44	2.44
Stavely	LNW	2.05	2.05	2.05	2.05	2.05	2.0
Stechford	LNW	2.18	2.18	2.18	2.18	2.18	2.18
Stewartby	LNW	1.90	1.90	2.40	2.40	2.40	1.84
Stockport	LNW	2.12	2.12	2.12	2.12	2.09	2.09
Stoke Manderville	LNW	2.12	2.12	1.77	1.77	1.77	1.7
Stoke-on-Trent	LNW	1.96	1.96	1.96	1.96	1.96	1.96
Stone	LNW	1.56	1.56	1.56	1.56	1.56	1.5
Stonebridge Park	LNW	1.53	1.53	1.53	1.53	1.53	1.5
Stourbridge Junction	LNW	1.67	1.67	1.67	1.86	1.86	1.8
Stourbridge Town	LNW	1.22	1.07	1.07	1.00	1.80	1.9
Stratford Upon Avon	LNW	2.83	2.83	2.57	2.57	2.57	2.04
Strational Opon Avon	LNW	3.00	3.00	2.93	2.57	2.57	2.0
00000		5.00	5.00	2.30	۷.۱۱	<u> </u>	۷.۱

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Sudbury and Harrow Road

Sudbury Hill Harrow

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LNW

LNW

LNW

Appendix 1 – Station condit	ion (continued)						
Appendix 1 – Station condit	ion (continued)	0000/04	0004/00	0000/00	0000/04	000 4/05	0005/00
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Sutton Coldfield	LNW	2.04	2.04	2.04	2.04	2.10	2.10
Swinton	LNW	2.29	2.29	2.29	2.29	2.24	2.24
Tal-Y-Cafn	LNW	2.79	2.79	2.02	2.02	2.02	2.14
Tamebridge Parkway	LNW	1.05	1.05	1.05	1.05	1.05	1.05
Tamworth High Level	LNW	2.18	2.18	1.96	1.96	1.96	2.25
Telford	LNW	1.79	1.79	1.79	1.87	1.87	1.87
Thatto Heath	LNW	1.90	1.90	2.08	2.08	2.08	2.08
The Hawthorns	LNW	1.01	1.01	1.01	1.01	1.01	1.01
The Lakes	LNW	2.00	2.00	2.00	2.00	2.87	2.87
Tile Hill	LNW	1.16	1.16	1.16	1.16	1.16	1.16
Tipton	LNW	2.21	2.21	2.21	2.21	2.21	2.21
Todmorden	LNW	2.19	2.19	2.19	2.19	2.21	2.19
Town Green	LNW	2.21	2.13	2.13	2.06	2.06	2.06
Trafford Park	LNW	1.70	1.70	2.21	2.00	2.00	2.00
	LNW	2.07	2.07	2.11	2.11	2.11	2.11
Tring							
Ty Croes	LNW	2.20	2.20	2.20	2.20	2.20	2.20
Tyseley	LNW	1.40	1.40	1.40	1.40	1.40	1.40
Ulverston	LNW	2.97	2.97	2.97	2.97	2.97	2.06
University	LNW	1.65	1.65	1.65	1.65	1.65	1.65
Upholland	LNW	2.48	2.48	2.48	2.48	2.48	2.48
Upton	LNW	2.55	2.55	2.55	2.55	2.55	2.65
Urmston	LNW	2.06	2.06	1.92	1.92	1.92	1.92
Valley	LNW	2.20	2.20	2.17	2.17	2.17	2.17
Walkden	LNW	2.82	2.82	2.82	2.82	2.82	2.04
Wallasey Grove Road	LNW	2.99	2.99	2.99	2.30	2.30	2.30
Wallasey Village	LNW	2.26	2.26	2.26	2.14	2.14	2.14
Walsall	LNW	1.48	1.48	1.47	1.47	1.47	1.47
Walsden	LNW	2.35	2.35	2.35	2.35	2.35	2.35
Walton Junction	LNW	2.01	2.01	2.01	2.01	2.01	2.01
Warrington Bank Quay	LNW	1.90	1.90	1.90	1.90	2.08	2.08
Warrington Central	LNW	2.08	2.08	2.08	2.08	2.10	2.10
Warwick	LNW	1.64	1.64	1.64	1.64	1.64	1.64
Water Orton	LNW	2.93	2.93	2.93	2.93	2.93	2.81
Waterloo (Merseyside)	LNW	2.24	2.24	2.24	2.24	2.24	2.24
Watford High Street	LNW	2.26	2.26	2.26	2.04	2.04	2.04
Watford Junction	LNW	2.11	2.11	1.64	1.64	1.64	1.64
Watford North	LNW	2.00	2.00	1.97	1.97	1.97	1.97
Wavertree Technology Park	LNW	0.00	_	1.00	1.00	1.00	1.00
Wedgwood	LNW	3.25	3.25	3.25	3.25	3.25	1.94
Wellington	LNW	1.98	1.98	1.98	1.98	2.16	2.16
Wembley Central	LNW	2.17	2.17	2.04	2.04	2.04	2.04
Wembley Stadium	LNW	0.00	_	2.60	2.60	2.60	2.00
Wendover	LNW	2.00	2.00	2.00	1.91	1.91	1.91
Wennington	LNW	1.92	1.92	1.92	1.92	1.92	1.92
West Allerton	LNW	2.36	2.36	2.36	2.05	2.05	2.05
West Houghton	LNW	2.88	2.88	2.88	2.88	2.03	2.03
West Kirby	LNW	1.95	1.95	1.95	1.95	1.95	1.95
	LNW	2.49	2.49	2.49	2.49	2.49	1.95
West Ruislip	LINW						
Whaley Bridge	LINVV	2.03	2.03	2.03	2.03	2.08	2.08 continued

Appendix 1 – Station cond	lition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Whalley	LNW	1.79	1.79	1.79	2.10	2.10	2.10
Whiston	LNW	3.04	3.04	3.04	2.06	2.06	2.06
Whitehaven	LNW	2.11	2.11	2.11	2.11	2.12	2.12
Whitlocks End	LNW	2.75	2.75	2.75	2.75	2.44	2.44
Widnes	LNW	2.03	2.03	2.03	2.02	2.02	2.02
Widney Manor	LNW	1.15	1.15	1.15	1.15	1.15	2.00
Wigan North Western	LNW	2.52	2.52	2.52	2.52	2.17	2.17
Wigan Wallgate	LNW	2.57	2.57	2.57	2.57	1.98	1.98
Wigton	LNW	2.18	2.18	2.00	2.00	2.00	2.00
Willesden Junction	LNW	2.06	2.06	2.06	1.90	1.90	1.90
Wilmcote	LNW	1.98	1.98	1.98	1.98	2.61	2.61
Wilmslow	LNW	3.03	3.03	3.03	3.03	3.03	3.03
Wilnecote	LNW	2.24	2.24	2.24	2.24	2.41	2.41
Windermere	LNW	1.96	1.96	2.04	2.04	2.04	2.04
Winsford	LNW	2.15	2.15	2.06	2.06	2.06	2.06
Witton	LNW	1.92	1.92	1.92	1.92	1.92	2.25
Woburn Sands	LNW	1.94	1.94	2.03	2.03	2.03	2.41
Wolverhampton	LNW	2.15	2.15	2.15	2.15	2.15	2.15
Wolverton	LNW	2.00	2.00	2.51	2.51	2.51	2.30
Wood End	LNW	2.82	2.82	2.82	2.58	2.32	2.32
Woodley	LNW	2.15	2.15	2.38	2.38	2.38	2.38
Woodsmoor	LNW	0.00		2.00	2.00	0.00	2.17
Wootton Wawen	LNW	2.10	2.10	2.10	2.48	2.48	2.48
Workington	LNW	2.44	2.10	2.10	2.40	2.40	2.40
Wrexham	LNW	2.78	2.78	2.78	2.78	2.78	2.03
Wrexham Central	LNW	1.15	1.15	1.15	1.06	1.33	1.33
	LNW	1.13	1.13	1.13	1.84	2.14	
Wylde Green							2.14
Wythall	LNW	2.04	2.04	2.04	2.25	2.25	2.25
Yardley Wood	LNW	2.21	2.21	2.21	2.21	2.07	2.07
Aberdeen	SCT	2.51	2.51	2.60	2.55	2.55	2.55
Aberdour	SCT	2.12	2.12	2.10	2.12	1.11	1.11
Achanalt	SCT	2.08	2.08	2.08	2.08	2.08	2.08
Achnasheen	SCT	2.03	2.03	2.03	2.03	2.03	2.03
Achnashellach	SCT	2.11	2.11	2.11	2.11	2.11	2.11
Addiewell	SCT	2.44	2.44	2.70	2.68	2.68	2.68
Airbles	SCT	1.94	2.63	2.14	2.14	2.14	2.14
Airdrie	SCT	2.26	2.26	2.32	2.32	2.32	2.32
Alexandra Parade	SCT	2.93	2.93	2.72	2.31	2.31	2.31
Alexandria	SCT	2.15	2.15	2.03	2.10	2.10	2.10
Alness	SCT	2.59	2.59	2.59	2.59	2.59	2.59
Altnabreac	SCT	2.42	2.42	2.42	2.42	2.42	2.42
Anderston	SCT	2.18	2.18	2.19	2.19	2.19	2.19
Annan	SCT	2.00	2.00	2.22	2.15	2.15	2.15
Anniesland	SCT	2.21	2.93	2.18	2.14	2.14	2.14
Arbroath	SCT	2.23	2.23	2.30	2.34	1.42	1.42
Ardgay	SCT	2.52	2.52	2.52	2.52	2.52	2.52
Ardlui	SCT	2.00	2.00	2.13	2.13	1.22	1.22
Ardrossan Harbour	SCT	2.17	2.17	2.17	2.14	2.14	2.14
Ardrossan South Beach	SCT	2.21	2.21	2.21	2.14	2.14	2.14
							continued

Appendix 1 – Station col	ndition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Ardrossan Town	SCT	2.05	2.05	2.05	2.05	2.05	2.05
Argyle Street	SCT	2.29	2.29	2.23	2.23	2.23	2.23
Arisaig	SCT	2.32	2.32	2.32	2.32	2.32	2.85
Arrochar and Tarbet	SCT	3.00	3.00	2.14	2.14	1.20	1.20
Ashfield	SCT	2.17	2.17	2.06	2.06	2.00	2.00
Attadale	SCT	2.00	2.00	2.00	2.00	2.00	2.00
Auchinleck	SCT	2.11	2.11	2.11	2.12	2.12	2.12
Aviemore	SCT	1.47	1.47	1.47	1.47	1.47	1.67
Ayr	SCT	2.38	2.38	2.38	2.40	2.40	2.40
Baillieston	SCT	2.04	2.04	2.10	2.10	2.10	2.10
Balloch	SCT	2.07	2.07	2.20	2.22	2.22	2.22
Balmossie Halt	SCT	2.43	2.43	2.80	2.81	1.90	1.90
Banavie	SCT	2.13	2.13	2.13	2.13	2.13	1.86
Barassie	SCT	2.17	2.17	2.17	2.17	2.17	2.17
Bargeddie	SCT	2.22	2.22	2.17	2.17	2.17	2.17
Barnhill	SCT	2.21	2.21	2.24	2.24	2.24	2.24
Barrhead	SCT	3.00	3.00	2.30	2.30	2.30	2.30
Barrhill	SCT	1.93	1.93	1.93	1.84	1.84	1.84
Barry Links	SCT	2.76	2.76	2.50	2.49	1.33	1.33
Bathgate	SCT	2.07	2.07	2.07	2.07	1.90	1.90
Bearsden	SCT	2.21	2.21	2.18	2.17	2.17	2.17
Beasdale	SCT	2.10	2.10	2.10	2.10	2.10	2.05
Beauly	SCT	0.00	-	1.00	1.00	1.00	1.33
Bellgrove	SCT	3.00	3.00	3.00	2.20	2.20	2.20
Bellshill	SCT	3.01	3.01	2.48	2.48	2.48	2.48
Bishopbriggs	SCT	1.47	1.47	1.60	1.62	1.19	1.19
Bishopton	SCT	2.00	2.00	2.00	2.00	2.00	2.05
Blair Atholl	SCT	2.05	2.05	2.05	2.05	2.05	1.97
Blairhill	SCT	2.19	2.19	2.19	2.17	2.17	2.17
Blantyre	SCT	1.91	2.72	2.14	2.14	2.14	2.14
Bogston	SCT	2.69	2.69	2.69	2.69	2.69	2.04
Bowling	SCT	2.90	2.68	2.16	2.35	2.35	2.35
Branchton	SCT	2.45	2.45	2.45	2.45	2.45	2.16
Breich	SCT	2.50	2.50	2.60	2.60	2.60	2.60
Bridge Of Allan	SCT	2.69	2.69	2.69	2.69	2.69	2.00
Bridge Of Orchy	SCT	2.72	2.72	2.72	2.72	1.12	1.12
Bridgeton	SCT	2.17	2.17	2.18	2.18	2.18	2.18
Brora	SCT	2.29	2.29	2.32	2.32	2.32	2.32
Broughty Ferry	SCT	1.54	1.54	2.10	2.10	1.37	1.37
Brunstane	SCT	0.00	_	1.00	1.00	1.00	1.00
Burnside	SCT	2.19	2.19	2.17	2.17	2.17	2.13
Burntisland	SCT	2.21	2.21	2.20	2.22	1.41	1.41
Busby	SCT	2.38	2.38	2.02	2.02	1.90	1.90
Cambuslang	SCT	2.25	2.25	2.02	2.24	2.24	2.24
Camelon	SCT	2.23	2.25	2.24	2.24	2.24	1.89
Cardenden	SCT	2.34	2.20	2.20	2.19	1.33	1.33
Cardonald	SCT	2.22	2.22	2.20	2.24	2.18	2.18
Cardross	SCT	2.13	2.13	2.13	2.18	2.18	2.18
Cardioss	SCT	1.83	1.83	1.83	1.83	1.83	2.07
	001	1.03	1.00	1.03	1.03	1.00	continued

continued

Appendix 1 – Station condition

Appendix 1 – Station con	dition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Carluke	SCT	1.80	2.80	2.08	2.08	2.08	2.08
Carmyle	SCT	2.16	2.16	2.13	2.13	2.13	2.13
Carnoustie	SCT	2.22	2.22	2.60	2.57	1.44	1.44
Carnoustie Golf Street	SCT	3.02	3.02	1.60	1.63	1.22	1.22
Carntyne	SCT	2.39	2.39	2.20	2.20	2.20	2.20
Carrbridge	SCT	2.23	2.23	2.23	2.23	2.23	2.42
Carstairs	SCT	1.22	1.22	1.29	1.29	1.29	1.29
Cartsdyke	SCT	2.00	2.00	2.00	2.00	2.00	2.00
Cathcart	SCT	2.07	2.07	2.14	2.14	2.14	2.04
Charing Cross	SCT	1.67	1.67	1.67	2.00	2.00	2.00
Clarkston	SCT	2.23	2.23	2.19	2.19	2.08	2.08
Cleland	SCT	2.28	2.28	2.28	2.28	2.28	2.20
Clydebank Central	SCT	2.11	2.11	2.15	2.20	2.20	2.20
Coatbridge Central	SCT	2.16	2.16	2.16	2.16	2.16	2.18
Coatbridge Sunnyside	SCT	1.80	2.89	2.24	2.33	2.33	2.33
Coatdyke	SCT	2.75	2.99	2.55	2.25	2.25	2.25
Connel Ferry	SCT	2.43	2.43	2.43	2.43	1.18	1.18
Corkerhill	SCT	2.32	2.30	2.25	2.25	1.50	1.50
Corpach	SCT	2.07	2.07	2.07	2.07	2.07	2.00
Corrour	SCT	2.95	2.95	2.95	2.95	1.50	1.50
Cowdenbeath	SCT	2.12	2.12	2.20	2.21	1.67	1.67
	SCT	2.04	2.12	2.20	2.21	1.81	1.81
Craigendoran	SCT	2.04	2.04	1.67	1.67	1.70	1.70
Crianlarich Croftfoot	SCT	2.11	2.11	2.18	2.18	2.18	2.07
Crookston	SCT	2.19			2.18		
			2.00	2.25		1.13	1.13
Crosshill	SCT	2.15	2.15	2.07	2.07	2.07	2.14
Crossmyloof	SCT	2.39	2.39	2.39	2.39	2.39	2.04
Croy	SCT	1.35	1.35	1.40	1.40	1.35	1.35
Culrain	SCT	2.26	2.26	2.26	2.26	2.26	2.26
Cumbernauld	SCT	2.20	2.20	2.20	2.20	2.20	1.99
Cupar	SCT	2.05	2.05	2.05	2.05	1.53	1.53
Curriehill	SCT	2.01	2.01	2.00	2.02	2.02	2.02
Dalgety Bay Halt	SCT	1.01	1.01	1.20	1.18	1.07	1.07
Dalmally	SCT	2.42	2.42	2.42	2.42	1.13	1.13
Dalmarnock	SCT	2.16	2.16	2.25	2.25	2.25	2.25
Dalmeny	SCT	2.34	2.34	2.40	2.37	1.48	1.48
Dalmuir Park	SCT	2.23	2.23	2.10	2.14	2.14	2.14
Dalreoch	SCT	2.10	2.10	2.14	2.14	1.96	1.96
Dalry	SCT	2.10	2.10	2.10	2.07	2.07	2.07
Dalwhinnie	SCT	2.36	2.36	2.36	2.36	2.36	2.09
Dingwall	SCT	2.10	2.10	2.10	2.10	2.10	2.22
Drem	SCT	2.11	2.11	2.20	2.20	1.36	1.36
Drumchapel	SCT	2.18	2.18	2.06	2.06	2.06	2.06
Drumfrochar	SCT	1.20	1.20	1.20	1.20	1.20	1.89
Drumgelloch	SCT	2.26	2.26	2.35	2.34	2.34	2.34
Drumry	SCT	2.20	2.20	2.12	2.05	2.05	2.05
Duirinish	SCT	2.30	2.30	2.30	2.30	2.30	2.30
Duke Street	SCT	2.17	2.17	2.17	2.17	2.17	2.17
Dumbarton Central	SCT	2.37	2.37	2.53	2.58	2.58	2.58
							continued

2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
3.37	2.66	2.01	2.22	2.22	2.22
2.06	2.06	2.01	2.01	1.30	1.30
2.00	2.00	2.18	2.20	2.20	2.20
1.86	1.86	1.86	1.86	1.04	1.04
2.33	2.33	2.30	2.34	2.34	2.26
2.19	2.19	2.19	2.19	2.19	2.19
2.46	2.46	2.50	2.47	2.47	2.28
2.08	2.08	2.10	2.12	1.46	1.46
1.13	1.13	1.10	1.14	1.00	1.00
2.41	2.41	2.30	2.31	2.31	2.30
2.18	2.18	2.18	2.03	2.03	2.03
2.47	2.47	2.47	2.47	2.47	2.47
1.95	1.95	1.80	1.83	1.83	1.83
2.15	2.15	2.18	2.18	1.94	1.94
2.89	2.82	2.30	2.22	2.22	2.22
2.31	2.31	2.50	2.46	2.46	2.46
2.20	2.20	2.09	2.05	2.05	2.05
2.08	2.08	2.10	2.08	2.08	1.94
2.16	2.16	2.16	2.05	2.05	2.05
2.80	2.77	2.86	2.86	2.86	2.18
2.18	2.18	2.20	2.21	1.64	1.64
2.46	2.46	2.50	2.46	1.08	1.08
2.52	2.52	2.49	2.49	2.49	1.88
2.33	2.33	2.30	2.33	2.33	2.33
2.16	2.16	2.18	2.18	2.18	2.18
2.27	2.27	2.49	2.49	2.49	2.49
2.76	2.76	2.80	2.76	2.76	2.76
2.28	2.28	2.28	2.28	2.28	2.17
2.25	2.25	2.25	2.25	1.99	1.99
2.42	2.42	2.42	2.42	1.80	1.80
2.98	2.98	2.98	2.18	2.18	2.18
2.16	2.16	2.17	2.22	2.22	2.22
2.07	2.07	2.07	2.07	2.07	2.07
2.17	2.17	2.17	2.17	2.17	2.17
1.79	2.74	2.16	2.16	2.17	2.17
0.00	0.00	0.00	0.00	0.00	2.00

Appendix 1 – Station condition (continued)

Route

SCT

SCT

SCT SCT

SCT

SCT

SCT

SCT

SCT

SCT SCT

SCT

SCT SCT

SCT

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SCT SCT

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SCT

SCT

SCT

SCT

2.22

2.29

2.83

2.25

2.84

2.08

2.10

2.30

2.18

2.60

2.07

1.37

1.59

2.26

2.22

2.29

2.83

2.25

2.84

2.08

2.10

2.30

2.18

2.60

2.07

2.29

1.59

2.26

2.06

2.29

2.12

2.29

2.84

2.08

2.10

2.44

2.20

2.60

2.07

1.96

1.59

2.26

2.06

2.27

2.12

2.29

2.84

2.08

2.13

2.44

2.18

2.60

2.07

1.96

1.59

2.33

2.00

2.27

2.12

2.29

2.84

2.08

2.13

1.26

2.18

2.60

2.07

1.96

1.59

2.33

Station name

Dumbreck

Dumfries

Duncraig

Dunfermline

Dunlop Dunrobin

Dyce

Elgin Fairlie

East Kilbride Easterhouse

Dundee Tay Bridge

Dunkeld and Birnam

Edinburgh Haymarket

Edinburgh Waverley

Falkirk Grahamston

Falls Of Cruachan

Finnieston Exhibition Centre

Falkirk High

Fauldhouse

Fearn

Forres

Forsinard

Fort Matilda

Fort William

Garrowhill

Garve

Giffnock Gilshochill

Girvan

Garscadden

Georgemas Junction

Glasgow Central

Gleneagles

Glenfinnan

Golspie

Gourock

Greenfaulds

Greenock Central

Greenock West

Gretna Green

Glengarnock

Glasgow Central Low Level

Glenrothes and Thornton

Garelochhead

Dunfermline Queen Margaret

Dunbar Dunblane

Dumbarton East

193

2.33 continued

2.00

2.27

2.12

2.29

2.59

2.25

2.13

1.26

2.18

2.50

2.00

1.94

1.92

Appendix 1 – Station co	ndition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Hairmyres	SCT	2.18	2.18	2.18	2.18	1.68	1.68
Hamilton Central	SCT	2.11	2.81	2.21	2.21	2.21	2.21
Hamilton West	SCT	2.35	2.35	2.16	2.16	2.16	2.16
Hartwood	SCT	2.19	2.19	2.19	2.19	2.19	2.15
Hawkhead	SCT	2.22	2.22	2.19	2.19	1.49	1.49
Helensburgh Central	SCT	2.22	2.22	2.19	2.15	2.15	2.15
Helensburgh Upper	SCT	2.57	2.57	2.57	2.36	2.36	2.36
Helmsdale	SCT	2.39	2.39	2.39	2.39	2.39	2.39
High Street	SCT	2.84	2.57	2.38	2.29	2.29	2.29
Hillfoot	SCT	2.18	2.18	2.33	2.27	2.27	2.27
Hillington East	SCT	2.16	2.16	2.16	2.08	2.08	2.08
Hillington West	SCT	2.33	2.33	2.33	2.37	2.37	2.37
Holytown	SCT	2.42	2.42	2.42	2.42	2.42	2.20
Howwood	SCT	2.00	2.00	2.00	2.00	2.00	2.00
Huntly	SCT	1.22	1.22	1.22	1.22	1.22	1.16
Hyndland	SCT	3.04	3.04	3.04	2.09	2.09	2.09
Ibm Halt	SCT	1.97	1.97	1.97	1.97	1.97	1.90
Insch	SCT	1.49	1.49	1.37	1.37	1.37	1.37
Invergordon	SCT	2.57	2.57	2.60	2.57	2.57	2.57
Invergowrie	SCT	2.76	2.76	2.89	2.89	1.74	1.74
Inverkeithing	SCT	2.14	2.14	2.10	2.15	1.37	1.37
Inverkip	SCT	2.09	2.09	2.10	2.09	2.09	2.01
Inverness	SCT	2.16	2.16	2.16	2.16	2.16	2.00
Invershin	SCT	2.11	2.11	2.11	2.11	2.11	2.11
Inverurie	SCT	1.97	1.97	1.97	1.97	1.97	1.97
Irvine	SCT	2.09	2.09	2.09	2.17	2.17	2.17
Johnstone	SCT	2.11	2.11	2.11	2.13	2.13	2.13
Jordanhill	SCT	2.26	2.26	2.07	2.02	2.02	2.02
Keith	SCT	1.88	1.88	2.02	2.02	2.02	1.90
Kennishead	SCT	2.40	2.40	2.40	2.40	2.40	2.51
Kildonan	SCT	2.61	2.61	2.61	2.61	2.61	2.61
Kilmarnock	SCT	1.98	1.98	1.98	2.03	2.03	2.03
Kilmaurs	SCT	2.31	2.31	2.31	2.23	2.23	2.23
Kilpatrick	SCT	2.11	2.11	2.21	2.49	2.49	2.49
Kilwinning	SCT	2.28	2.28	2.28	2.32	2.32	2.32
Kinbrace	SCT	2.75	2.75	2.75	2.75	2.75	2.75
Kinghorn	SCT	2.11	2.11	2.16	2.16	1.22	1.22
Kings Park	SCT	2.90	2.16	2.10	2.10	2.10	2.05
Kingsknowe	SCT	2.26	2.26	2.03	2.03	2.03	2.03
Kingussie	SCT	2.00	2.00	2.00	2.00	2.00	2.03
Kirkcaldy	SCT	2.05	2.05	2.03	2.03	1.44	1.44
Kirkconnel	SCT	3.00	3.00	2.30	2.23	2.23	2.23
Kirkhill	SCT	2.33	2.33	2.20	2.20	2.20	2.00
Kirknewton	SCT	3.19	3.19	2.22	2.22	2.22	2.22
Kirkwood	SCT	2.00	2.00	2.10	2.06	2.06	2.06
Kyle of Lochalsh	SCT	2.00	2.00	2.10	2.00	2.00	2.00
Ladybank	SCT	2.02	2.02	2.02	2.02	1.17	1.17
,	SCT	2.20	2.28	2.35	2.35	2.25	2.25
Lairg	SCT				2.25		
Lanark	301	1.57	2.46	2.26	2.20	2.26	2.26 continued

Appendix 1 – Station co	ndition (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Langbank	SCT	2.49	2.49	2.49	2.49	2.49	2.46
Langside	SCT	2.60	2.75	2.65	2.65	2.65	2.18
Larbert	SCT	2.09	2.09	2.09	2.09	2.09	2.15
Largs	SCT	1.43	1.43	1.43	1.51	1.51	1.51
Lenzie	SCT	2.00	-	2.22	2.22	1.39	1.39
Leuchars	SCT	2.09	2.09	2.10	2.14	1.14	1.14
Linlithgow	SCT	2.37	2.37	2.40	2.35	1.59	1.59
Livingston North	SCT	2.26	2.26	2.30	2.33	1.94	1.94
Livingston South	SCT	2.30	2.30	2.50	2.53	2.53	2.53
Loch Awe	SCT	2.47	2.47	2.50	2.47	1.18	1.18
Lochailort	SCT	2.23	2.23	2.23	2.23	2.23	2.19
Locheil Outward Bound	SCT	2.00	2.00	2.00	2.00	2.00	2.00
Locheilside	SCT	2.00	2.00	2.00	2.00	2.00	2.14
Lochgelly	SCT	2.17	2.17	2.16	2.16	1.30	1.30
Lochluichart	SCT	1.99	1.99	2.00	1.99	1.99	1.99
Lochwinnoch	SCT	2.04	2.04	2.04	2.02	2.02	2.02
Lockerbie	SCT	2.05	2.05	2.18	2.18	2.18	2.18
Longniddry	SCT	2.40	2.40	2.25	2.25	1.24	1.24
Mallaig	SCT	2.07	2.07	2.10	2.07	2.07	2.20
Markinch	SCT	2.22	2.22	2.23	2.23	1.41	1.41
Maryhill	SCT	2.33	2.33	2.10	2.13	2.13	2.13
Maxwell Park	SCT	2.71	2.71	2.14	2.14	2.14	2.16
Maybole	SCT	2.35	2.35	2.35	2.42	2.42	2.42
Milliken Park	SCT	2.13	2.13	2.13	2.09	2.09	2.09
Milngavie	SCT	2.02	2.02	2.02	2.04	2.04	2.04
Monifieth	SCT	2.36	2.36	2.36	2.36	1.42	1.42
Montrose	SCT	2.07	2.07	2.07	2.07	1.40	1.40
Morar	SCT	2.20	2.20	2.20	2.20	2.20	1.99
	SCT	2.11	2.11	2.11	2.11	1.25	1.25
Motherwell	SCT	2.29	2.29	2.29	2.29	2.29	2.29
Mount Florida	SCT	2.20	2.20	2.15	2.15	2.15	2.16
Mount Vernon	SCT	2.00	2.00	2.09	2.09	2.09	2.09
Muir Of Ord	SCT	2.28	2.28	2.28	2.28	2.28	1.74
Muirend	SCT	1.92	2.16	2.20	2.20	2.20	2.16
Musselburgh	SCT	2.01	2.01	2.01	2.01	1.33	1.33
Nairn	SCT	1.66	1.66	1.70	1.66	1.66	1.87
Neilston	SCT	2.14	2.14	2.18	2.18	2.18	2.16
New Cumnock	SCT	2.11	2.11	2.11	2.06	2.06	2.06
Newcraighall	SCT	0.00		1.00	1.00	1.00	1.00
Newton	SCT	2.25	2.25	2.31	2.31	2.31	2.01
Newton On Ayr	SCT	2.56	2.56	2.56	2.24	2.24	2.24
Newtonmore	SCT	2.30	2.30	2.30	2.30	2.30	2.10
Nitshill	SCT	2.59	2.59	2.59	1.82	1.82	1.82
North Berwick	SCT	2.02	2.02	2.03	2.07	1.02	1.02
North Queensferry	SCT	2.28	2.28	2.40	2.39	1.52	1.52
Oban	SCT	2.28	2.20	2.40	2.59	1.97	1.97
Paisley Canal	SCT	1.98	1.98	1.96	1.96	1.11	1.11
Paisley Canal Paisley Gilmour St	SCT	2.53	2.53	2.53	2.41	2.41	2.41
· · · ·	SCT	2.33	2.53	2.33	2.41	2.41	
Paisley St James	301	2.33	2.33	2.33	2.33	2.33	2.19 continued

Appendix 1 – Station condi	tion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Park	SCT	0.00	0.00	0.00	-	1.00	1.00
Partick	SCT	2.22	2.22	2.16	2.22	2.22	2.22
Patterton	SCT	1.92	2.23	2.05	2.05	2.05	2.02
Perth	SCT	2.69	2.69	2.69	2.69	2.69	2.34
Pitlochry	SCT	2.54	2.54	2.54	2.54	2.54	2.25
Plockton	SCT	2.13	2.13	2.13	2.13	2.13	2.13
Pollokshaws East	SCT	2.49	2.49	2.29	2.29	2.29	2.20
Pollokshaws West	SCT	2.21	2.21	2.40	2.40	2.40	2.07
Pollokshields East	SCT	2.23	2.23	2.05	2.05	2.05	2.10
Pollokshields West	SCT	2.40	2.40	2.08	2.08	2.08	2.07
Polmont	SCT	2.15	2.15	2.20	2.22	1.46	1.46
Port Glasgow	SCT	1.47	1.47	1.47	1.47	1.47	1.50
Portlethen	SCT	2.17	2.17	2.30	2.25	1.27	1.27
Possilpark and Parkhouse	SCT	2.14	2.14	2.06	2.06	2.00	2.00
Prestonpans	SCT	2.17	2.17	2.17	2.17	1.21	1.21
Prestwick Town	SCT	1.99	1.99	1.99	2.14	2.14	2.14
Priesthill and Darnley	SCT	2.24	2.24	2.24	2.00	2.00	2.00
Queen St High Level	SCT	2.48	2.48	2.48	2.50	2.50	2.50
Queen St Low Level	SCT	2.20	2.20	2.24	2.16	2.16	2.16
Queens Park	SCT	2.32	2.32	2.09	2.09	2.09	2.10
Rannoch	SCT	2.45	2.45	2.45	2.45	1.31	1.31
Renton	SCT	2.03	2.03	2.00	2.03	2.03	2.03
Rogart	SCT	2.03	2.03	2.23	2.03	2.03	2.03
	SCT	2.23	2.23	2.20	2.20	1.17	1.17
Rosyth Halt	SCT	2.12		2.20	2.20	1.17	1.17
Roy Bridge			2.16				
Rutherglen	SCT	2.28	2.28	2.30	2.30	2.30	2.30
Saltcoats	SCT	2.14	2.14	2.14	2.22	2.22	2.22
Sanquhar	SCT	2.00	2.00	2.04	1.96	1.96	1.96
Scotscalder	SCT	2.25	2.25	2.25	2.25	2.25	2.25
Scotstounhill	SCT	2.12	2.12	2.15	2.20	2.20	2.20
Shawlands	SCT	2.65	2.65	2.39	2.39	2.39	2.15
Shettleston	SCT	2.14	2.14	2.28	2.23	2.23	2.23
Shieldmuir	SCT	2.17	2.17	2.05	2.05	2.05	2.05
Shotts	SCT	2.24	2.24	2.24	2.24	2.24	2.12
Singer	SCT	2.08	2.08	2.14	2.25	2.25	2.25
Slateford	SCT	2.37	2.37	2.40	2.40	2.40	2.40
South Gyle	SCT	2.42	2.42	2.60	2.59	1.54	1.54
Spean Bridge	SCT	2.41	2.41	2.41	2.41	1.12	1.12
Springburn	SCT	2.37	2.37	2.32	2.39	2.39	2.39
Springfield	SCT	2.55	2.55	2.40	2.42	1.46	1.46
Stepps	SCT	2.05	2.05	2.05	2.05	2.05	2.00
Stevenston	SCT	2.22	2.22	2.22	2.09	2.09	2.09
Stewarton	SCT	2.38	2.38	2.39	2.37	2.37	2.37
Stirling	SCT	3.00	3.00	3.00	3.00	3.00	2.05
Stonehaven	SCT	1.68	1.68	1.68	1.68	1.17	1.17
Stranraer Harbour	SCT	2.26	2.26	2.26	2.40	2.40	2.40
Strathcarron	SCT	2.27	2.27	2.27	2.27	2.27	2.27
Stromeferry	SCT	2.18	2.18	2.18	2.18	2.18	2.18
Summerston	SCT	2.31	2.10	2.10	2.10	2.00	2.10
	001	2.01	2.01	2.10	2.10	2.00	continued

		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Tain	SCT	2.18	2.18	2.18	2.18	2.18	2.18
Taynuilt	SCT	2.45	2.45	2.45	2.45	1.00	1.00
Thornliebank	SCT	2.48	2.48	2.48	2.48	2.03	2.03
Thorntonhall	SCT	2.54	2.54	2.13	2.13	1.80	1.80
Thurso	SCT	2.11	2.11	2.11	2.11	2.11	2.11
Troon	SCT	2.35	2.35	2.35	2.38	2.38	2.38
Tulloch	SCT	2.19	2.19	2.19	2.19	1.86	1.86
Tyndrum Lower	SCT	2.60	2.60	2.60	2.60	1.37	1.37
Tyndrum Upper	SCT	2.25	2.25	2.25	2.25	1.99	1.99
Uddingston	SCT	2.45	2.45	2.46	2.46	2.46	2.46
Uphall	SCT	2.31	2.31	2.40	2.36	1.95	1.95
Wallyford	SCT	2.09	2.09	2.10	2.15	1.22	1.22
Vemyss Bay	SCT	2.30	2.30	2.30	2.30	2.30	2.34
West Calder	SCT	2.19	2.19	2.10	2.14	2.14	2.14
West Kilbride	SCT	2.07	2.07	2.07	2.17	2.17	2.17
Westerhailes	SCT	2.26	2.26	2.10	2.14	2.14	2.14
Westerton	SCT	2.18	2.18	2.01	1.99	1.99	1.99
Whifflet	SCT	2.01	2.01	2.07	2.07	2.07	2.04
Whinhill	SCT	2.55	2.55	2.55	2.55	2.55	2.35
Whitecraigs	SCT	2.37	2.37	2.36	2.36	2.36	2.09
Vick	SCT	2.07	2.07	2.07	2.07	2.07	2.07
Villiamwood	SCT	2.10	2.10	2.25	2.25	2.25	2.07
Vishaw	SCT	2.06	2.06	1.42	1.42	1.42	1.42
Woodhall	SCT	2.40	2.00	2.40	2.40	2.40	2.13
/oker	SCT	2.40	2.40	2.40	2.40	2.40	2.10
							2.20
Aldrington	Sussex	2.33	2.33	2.33	2.33	2.33	
Amberley	Sussex		2.48	2.48	2.94	2.94	2.94
Anerley	Sussex	2.14	2.14	2.14	2.14	2.14	2.14
Angmering	Sussex	2.51	2.51	2.51	2.51	2.51	2.34
Arundel	Sussex	2.59	2.59	3.55	3.55	3.55	3.55
Ashford (Surrey)	Sussex	2.48	2.48	2.81	2.82	2.82	2.82
Ashtead	Sussex	2.21	2.21	2.21	2.21	2.16	2.16
Ashurst	Sussex	2.52	2.52	2.65	2.65	2.65	2.65
Balcombe	Sussex	2.43	2.43	2.43	2.43	3.02	3.02
Balham	Sussex	2.00	2.00	2.00	2.78	2.78	2.78
Banstead	Sussex	2.42	2.42	2.42	2.42	2.42	2.42
Barnham	Sussex	2.53	2.53	2.94	2.94	2.94	2.94
Battersea Park	Sussex	2.23	2.23	2.23	2.88	2.88	2.88
Belmont	Sussex	2.26	2.26	2.26	2.26	2.26	2.26
Berwick	Sussex	2.60	2.60	3.61	3.61	3.61	3.67
Bexhill	Sussex	2.11	2.11	3.28	3.28	3.28	2.11
Billingshurst	Sussex	2.52	2.52	2.90	2.90	2.90	2.90
Birkbeck	Sussex	2.18	2.18	2.18	2.18	2.18	2.18
Bishopstone	Sussex	2.67	2.67	2.67	2.67	2.67	2.67
Blackfriars	Sussex	1.74	1.74	1.74	1.74	1.74	1.74
Bognor Regis	Sussex	2.26	2.26	2.26	2.26	2.26	2.58
Bosham	Sussex	2.51	2.51	3.00	3.00	3.00	3.00
Boxhill and Westhumble	Sussex	2.41	2.41	2.41	2.41	2.41	2.62
Brighton	Sussex	2.51	2.51	2.51	2.51	2.51	2.40

continued

Appendix 1 – Station con	dition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Brockley	Sussex	2.11	2.11	2.58	2.58	2.58	2.58
Burgess Hill	Sussex	2.37	2.37	3.22	3.22	3.22	3.22
Buxted	Sussex	2.43	2.43	2.43	2.43	2.43	2.43
Carshalton	Sussex	2.43	2.43	2.43	2.43	2.28	2.28
Carshalton Beeches	Sussex	2.40	2.40	2.40	2.74	2.74	2.74
Caterham	Sussex	2.50	2.50	2.50	2.50	2.51	2.51
Cheam	Sussex	2.36	2.36	2.97	2.97	2.97	2.97
Chichester	Sussex	2.53	2.53	2.53	2.98	2.98	2.98
Chipstead	Sussex	2.22	2.22	2.22	2.22	2.22	2.22
Christs Hospital	Sussex	2.36	2.36	2.36	2.36	2.36	2.84
City Thameslink	Sussex	1.41	1.41	1.41	1.41	1.41	1.41
Clapham High Street	Sussex	2.08	2.08	1.93	1.93	1.93	1.93
Collington	Sussex	2.36	2.36	3.30	3.30	2.73	2.73
Cooden Beach	Sussex	2.37	2.37	2.37	2.37	2.37	2.37
Cooksbridge	Sussex	2.52	2.52	2.84	2.84	2.84	2.84
Coulsdon South	Sussex	2.53	2.53	2.53	2.53	2.53	2.71
Cowden	Sussex	2.55	2.55	2.55	3.23	3.23	3.23
Crawley	Sussex	2.49	2.49	2.49	2.49	2.68	2.68
Crowborough	Sussex	2.35	2.35	2.35	3.10	3.10	3.10
Crystal Palace	Sussex	2.48	2.48	2.48	2.48	2.48	2.48
Dorking	Sussex	2.53	2.53	2.58	2.58	2.58	2.58
Dormans	Sussex	2.62	2.62	2.62	2.62	2.62	2.71
		2.48		2.48			
Durrington-on-Sea	Sussex	2.40	2.48	2.40	2.48	2.48	2.48
Earlswood	Sussex		2.71		2.71		2.71
East Croydon	Sussex	1.98	1.98	1.98	1.98	1.98	2.22
East Dulwich	Sussex	2.11	2.11	2.11	2.28	2.28	2.28
East Grinstead	Sussex	2.51	2.51	2.51	2.51	2.51	2.51
East Worthing	Sussex	2.84	2.84	2.84	2.84	2.84	2.84
Eastbourne	Sussex	1.95	1.95	1.95	1.95	1.95	2.48
Edenbridge Town	Sussex	2.45	2.45	2.45	3.13	3.13	3.13
Elephant and Castle	Sussex	2.02	2.02	2.02	2.02	2.16	2.16
Emsworth	Sussex	2.53	2.53	2.86	2.86	2.86	2.86
Epsom	Sussex	2.52	2.52	2.52	2.84	2.84	2.84
Epsom Downs	Sussex	2.20	2.20	2.20	2.20	2.20	2.20
Eridge Station	Sussex	2.71	2.71	2.71	3.46	3.46	3.46
Ewell East	Sussex	2.56	2.56	2.56	2.56	2.26	2.26
Falmer	Sussex	2.48	2.48	2.48	2.48	2.68	2.68
Faygate	Sussex	2.63	2.63	2.63	2.63	2.63	1.77
Fishbourne	Sussex	2.56	2.56	2.56	2.56	2.56	2.77
Fishergate	Sussex	2.54	2.54	2.54	2.54	2.35	2.35
Ford	Sussex	2.50	2.50	2.65	2.65	2.65	2.65
Forest Hill	Sussex	2.04	2.04	2.30	2.30	2.30	2.30
Gatwick Airport	Sussex	2.00	2.00	2.57	2.53	2.48	2.48
Gipsy Hill	Sussex	2.05	2.05	2.62	2.62	2.62	2.62
Glynde	Sussex	3.44	3.44	3.45	3.45	3.45	3.45
Goring By Sea	Sussex	2.52	2.52	2.52	2.52	2.52	2.78
Hackbridge	Sussex	2.18	2.18	2.18	2.18	2.24	2.24
Hampden Park	Sussex	2.18	2.10	2.16	3.30	3.30	3.30
Hassocks	Sussex	2.43	2.43	3.26	3.30	3.26	2.93
1 10330013	JUSSEX	∠.40	2.40	3.20	J.20	3.20	2.93

Appendix 1 – Station condition (	continued)						
	_	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Haydons Road	Sussex	2.44	2.44	2.44	2.30	2.30	2.61
Haywards Heath	Sussex	2.44	2.44	2.44	2.66	2.66	2.66
Hever	Sussex	2.27	2.27	2.27	3.02	3.02	3.02
Holmwood	Sussex	2.70	2.70	2.70	2.70	2.70	2.77
Honor Oak Park	Sussex	2.02	2.02	2.52	2.52	2.52	2.52
Horley	Sussex	2.50	2.50	2.89	2.89	2.89	2.81
Horsham	Sussex	2.62	2.62	2.62	2.62	2.71	2.71
Hove	Sussex	2.50	2.50	2.50	2.50	2.72	2.72
Hurst Green	Sussex	2.40	2.40	2.40	2.89	2.89	2.89
lfield	Sussex	2.52	2.52	2.52	2.52	2.79	2.79
Kenley	Sussex	2.49	2.49	2.49	2.49	2.26	2.26
Kensington Olympia	Sussex	2.43	2.43	2.43	2.43	2.43	2.43
Kingswood	Sussex	2.57	2.57	2.57	2.57	2.57	2.57
Lancing	Sussex	2.30	2.30	2.30	2.30	2.30	2.48
Leatherhead	Sussex	2.49	2.49	2.49	2.92	2.92	2.92
Leigh (Kent)	Sussex	2.54	2.54	3.06	3.06	3.06	3.06
Lewes	Sussex	2.13	2.13	2.13	2.13	2.13	2.31
Lingfield	Sussex	2.48	2.48	2.48	2.48	2.52	2.52
Littlehampton	Sussex	2.49	2.49	2.63	2.63	2.63	2.63
Littlehaven	Sussex	2.59	2.59	2.59	2.58	2.58	2.58
London Charing Cross	Sussex	2.40	2.40	2.17	2.17	2.17	2.17
London Road (Brighton)	Sussex	2.52	2.52	2.52	2.52	2.52	2.52
London Victoria	Sussex	2.70	2.70	2.56	2.54	2.45	2.45
Loughborough Junction	Sussex	2.46	2.46	2.46	2.46	2.46	2.46
Maze Hill	Sussex	2.37	2.37	2.37	2.51	2.51	2.51
Merstham	Sussex	2.51	2.51	2.51	3.08	3.08	3.08
Mitcham Junction	Sussex	2.22	2.22	2.86	2.86	2.86	2.86
Morden South	Sussex	2.15	2.15	2.15	2.81	2.81	2.81
Moulsecoomb	Sussex	2.44	2.44	3.00	3.00	3.00	3.00
New Cross Gate	Sussex	2.01	2.01	2.28	2.28	2.28	2.28
Newhaven Harbour	Sussex	2.83	2.83	2.83	2.83	2.83	2.83
Newhaven Town	Sussex	2.56	2.56	2.56	2.56	2.56	2.56
Norbury	Sussex	2.33	2.33	2.33	2.23	2.23	2.23
Normans Bay	Sussex	2.38	2.38	2.38	2.38	2.38	2.38
North Dulwich	Sussex	2.11	2.11	2.11	2.11	1.92	1.92
Norwood Junction	Sussex	2.07	2.07	2.62	2.62	2.62	2.62
Nutbourne	Sussex	2.62	2.62	2.62	2.62	2.55	2.55
Ockley	Sussex	2.43	2.43	2.43	2.43	2.43	2.74
Oxted	Sussex	2.49	2.49	2.49	2.95	2.95	2.95
Penge West	Sussex	2.14	2.14	2.65	2.65	2.65	2.65
Pevensey and Westham	Sussex	2.41	2.41	2.41	2.41	2.41	2.41
Pevensey Bay	Sussex	2.63	2.63	2.63	2.63	2.63	2.63
Plumpton	Sussex	2.53	2.53	2.03	2.03	2.92	2.92
Polegate	Sussex	2.33	2.33	3.08	3.08	3.08	3.08
Portslade	Sussex	2.47	2.47	2.36	2.36	2.36	2.73
Preston Park	Sussex	2.38	2.30	3.28	3.28	3.28	3.28
Pulborough	Sussex	2.48	2.48	2.48	2.98	2.98	2.98
Purley	Sussex	2.54	2.54	2.54	2.54	2.54	2.82
Purley Oaks	Sussex	2.23	2.23	2.23	2.23	2.23	2.23 continued
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Appendix 1 – Station cond	ition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Queens Rd, Peckham	Sussex	2.37	2.37	2.37	2.41	2.41	2.41
Redhill	Sussex	2.51	2.51	2.51	2.51	2.51	2.68
Reedham (Surrey)	Sussex	2.53	2.53	2.53	2.53	2.53	2.53
Riddlesdown	Sussex	2.47	2.47	2.47	2.47	2.25	2.25
Salfords	Sussex	2.56	2.56	2.56	3.04	3.04	3.04
Sanderstead	Sussex	2.49	2.49	2.49	2.49	2.13	2.13
Seaford	Sussex	2.47	2.47	3.19	3.19	3.19	3.19
Selhurst	Sussex	2.60	2.60	2.60	2.60	2.60	2.60
Shoreham By Sea	Sussex	2.51	2.51	2.51	2.51	2.51	2.57
Smitham	Sussex	2.50	2.50	2.50	2.50	2.50	2.50
Snowdown	Sussex	2.95	2.95	2.93	2.93	2.40	2.40
Sole Street	Sussex	2.44	2.44	2.44	2.44	2.44	2.44
South Bermondsey	Sussex	2.02	2.02	2.49	2.49	2.49	2.49
South Croydon	Sussex	2.09	2.09	2.09	2.09	2.09	2.44
South Merton	Sussex	2.16	2.16	2.16	2.79	2.79	2.79
Southbourne	Sussex	2.37	2.37	2.37	2.37	2.58	2.58
Southease	Sussex	2.58	2.58	2.58	2.58	2.94	2.94
Southwick	Sussex	2.61	2.61	2.61	2.61	2.61	2.94
St Helier	Sussex	2.01	2.01	2.08	2.79	2.79	2.34
St Leonards Warrior Square	Sussex	2.20	2.00	2.62	2.79	2.79	2.79
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Streatham	Sussex	2.45	2.45	2.45	2.85	2.85	2.85
Streatham Common	Sussex	2.07	2.07	2.07	2.07	2.33	2.33
Streatham Hill	Sussex	2.13	2.13	2.13	2.13	2.47	2.47
Sutton	Sussex	2.59	2.59	2.59	2.59	2.59	2.69
Sutton Common	Sussex	2.11	2.11	2.11	2.11	2.21	2.21
Sydenham	Sussex	2.06	2.06	2.36	2.36	2.36	2.36
Tadworth	Sussex	2.40	2.40	2.40	2.40	2.40	2.40
Tattenham Corner	Sussex	2.44	2.44	2.44	2.44	2.44	2.44
Thornton Heath	Sussex	2.45	2.45	2.45	2.60	2.60	2.60
Three Bridges	Sussex	2.73	2.73	2.73	2.67	2.67	2.67
Tooting	Sussex	1.50	1.50	1.50	2.11	2.11	2.11
Tulse Hill	Sussex	2.35	2.35	2.35	2.35	2.26	2.26
Uckfield	Sussex	2.40	2.40	2.40	2.40	2.40	2.40
Upper Warlingham	Sussex	2.53	2.53	2.53	2.53	2.17	2.17
Waddon	Sussex	2.45	2.45	2.45	2.87	2.87	2.87
Wallington	Sussex	2.36	2.36	2.36	2.74	2.74	2.74
Wandsworth Common	Sussex	2.02	2.02	2.02	2.71	2.71	2.71
Wandsworth Road	Sussex	2.40	2.40	2.51	2.51	2.51	2.51
Warblington	Sussex	3.64	3.64	3.64	3.64	2.94	2.94
Warnham	Sussex	2.77	2.77	2.77	2.77	2.77	2.53
West Brompton	Sussex	_	-	1.00	1.00	1.00	1.00
West Croydon	Sussex	2.34	2.34	2.34	2.34	2.34	2.66
West Norwood	Sussex	2.50	2.50	2.50	2.50	2.50	2.74
West Sutton	Sussex	2.40	2.40	2.40	2.69	2.69	2.69
West Worthing	Sussex	2.47	2.47	2.47	2.47	2.47	2.47
Westgate-On-Sea	Sussex	2.41	2.41	2.41	2.60	2.60	2.60
Whyteleafe	Sussex	2.41	2.41	2.41	2.41	2.27	2.27
Whyteleafe South	Sussex	2.46	2.46	2.46	2.46	2.13	2.13
Wimbledon Chase	Sussex	2.40	2.40	2.40	2.83	2.83	2.83
							continued

Appendix 1 – Station condition	(continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Wivelsfield	Sussex	2.22	2.22	2.40	2.40	2.40	2.40
Woldingham	Sussex	2.48	2.48	2.48	2.48	2.29	2.29
Woodmansterne	Sussex	2.45	2.45	2.45	2.45	2.45	2.45
Worthing	Sussex	2.48	2.48	2.48	2.48	2.74	2.74
Addlestone	Wessex	2.37	2.37	2.37	2.37	2.60	2.60
Aldershot	Wessex	2.15	2.15	2.15	2.15	2.15	2.49
Alton	Wessex	2.58	2.58	2.58	2.58	2.81	2.81
Andover	Wessex	2.05	2.05	2.35	2.40	2.40	2.40
Ascot	Wessex	2.40	2.40	2.40	2.40	2.40	2.40
Ash	Wessex	2.23	2.23	2.23	2.23	2.23	2.29
Ash Vale	Wessex	2.44	2.44	2.44	2.44	2.44	2.51
Ashurst (New Forest)	Wessex	2.26	2.26	2.26	2.26	2.31	2.31
Axminster	Wessex	2.55	2.55	2.40	2.38	2.38	2.38
Bagshot	Wessex	2.09	2.09	2.09	2.09	2.09	2.10
Barnes Bridge Station	Wessex	1.71	1.71	1.15	1.99	1.99	1.99
Barnes Station	Wessex	2.45	2.45	2.77	2.79	2.79	2.79
Basingstoke	Wessex	2.22	2.22	2.22	2.22	2.22	2.38
Beaulieu Road	Wessex	2.46	2.46	2.46	2.46	2.94	2.94
Bedhampton	Wessex	2.41	2.41	2.41	2.41	2.98	2.98
Bentley	Wessex	2.45	2.45	2.45	2.45	2.45	2.60
Berrylands	Wessex	2.45	2.45	2.74	2.85	2.85	2.85
Betchworth	Wessex	2.68	2.68	2.68	2.68	2.68	2.85
Bitterne	Wessex	2.16	2.16	2.16	2.16	2.97	2.97
Blackwater	Wessex	2.65	2.65	2.65	2.65	2.65	3.07
Bookham	Wessex	2.39	2.39	2.39	2.39	2.39	2.39
Botley	Wessex	1.97	1.97	1.97	1.97	2.56	2.56
Bournemouth	Wessex	2.37	2.37	2.37	2.37	2.10	2.10
Bracknell	Wessex	2.40	2.40	2.40	2.40	2.40	2.40
Brading	Wessex	2.41	2.41	2.41	2.41	2.41	1.91
Bramley (Hants)	Wessex	2.33	2.33	2.33	2.33	2.33	2.33
Branksome	Wessex	2.46	2.46	2.46	2.46	2.90	2.90
Brentford	Wessex	2.04	2.04	1.52	2.51	2.51	2.51
Brockenhurst	Wessex	2.60	2.60	2.60	2.60	2.44	2.44
Brookwood	Wessex	2.32	2.32	2.32	2.32	2.32	2.44
Burseldon	Wessex	2.21	2.21	2.21	2.21	2.44	2.44
Byfleet and New Haw	Wessex	2.12	2.12	2.12	2.12	2.12	2.12
Camberley	Wessex	2.49	2.49	2.49	2.49	2.66	2.66
Chertsey	Wessex	2.55	2.55	2.55	2.55	2.91	2.91
Chessington North	Wessex	2.52	2.52	2.52	2.52	2.52	2.98
Chessington South	Wessex	2.46	2.46	2.46	2.46	2.46	2.46
Chetnole	Wessex	3.30	3.30	3.30	3.30	3.30	2.69
Chilworth	Wessex	2.81	2.81	2.81	2.81	2.81	2.71
Chiswick	Wessex	2.36	2.36	2.36	2.36	2.36	2.36
Christchurch	Wessex	2.48	2.48	2.48	2.48	2.87	2.87
Clandon	Wessex	2.62	2.62	2.62	2.62	2.62	2.62
Clapham Junction	Wessex	2.39	2.39	2.39	2.39	2.39	2.35
Claygate	Wessex	2.38	2.38	2.38	2.76	2.76	2.76
Cobham and Stoke D'Abernon	Wessex	2.58	2.58	2.58	2.58	2.58	2.58
Cosham	Wessex	2.42	2.42	2.42	2.42	2.42	2.42
							continued

Appendix 1 – Station cor	ndition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Crewekerne Station	Wessex	2.69	2.69	2.76	2.70	2.70	2.70
Crowthorne	Wessex	2.62	2.62	2.62	2.62	2.62	2.52
Datchet	Wessex	2.24	2.24	2.11	2.23	2.23	2.23
Dean	Wessex	2.33	2.33	2.33	2.33	2.86	2.86
Dorchester South	Wessex	2.35	2.35	2.88	2.45	2.45	2.45
Dorchester West	Wessex	2.68	2.68	2.68	2.68	2.68	2.68
Dorking Deepdene	Wessex	2.79	2.79	2.79	2.79	2.79	2.79
Dorking West	Wessex	2.71	2.71	2.71	2.71	2.71	2.73
Dunbridge Station	Wessex	2.03	2.03	2.03	2.15	2.15	2.15
Earley	Wessex	2.29	2.29	2.34	2.34	2.34	2.55
Earlsfield	Wessex	2.41	2.41	2.41	2.41	2.41	2.41
Eastleigh	Wessex	2.48	2.48	2.48	2.48	2.48	2.51
Effingham Junction	Wessex	2.70	2.70	2.70	2.70	2.70	2.70
Egham	Wessex	2.14	2.14	2.33	2.33	2.33	2.33
Esher	Wessex	2.13	2.13	2.13	2.13	2.30	2.30
Ewell West	Wessex	2.44	2.44	2.44	2.44	2.44	2.44
Fareham	Wessex	2.02	2.02	2.02	2.02	2.02	2.02
Farnborough	Wessex	2.52	2.52	2.52	2.52	2.72	2.72
Farnborough North	Wessex	2.96	2.96	2.96	2.96	2.96	2.15
Farncombe	Wessex	2.58	2.58	2.58	2.58	2.58	2.58
Farnham	Wessex	2.24	2.24	2.24	2.24	2.24	2.41
Feltham	Wessex	2.26	2.26	1.93	1.93	1.93	1.93
Feniton	Wessex	2.69	2.69	2.69	2.69	2.33	2.33
Fleet	Wessex	2.45	2.45	2.45	2.45	2.45	2.54
Fratton	Wessex	2.50	2.50	2.50	2.50	2.50	2.50
Frimley	Wessex	2.43	2.43	2.43	2.43	2.43	2.52
Fulwell	Wessex	2.56	2.56	2.56	2.56	2.56	2.56
Gillingham	Wessex	2.43	2.43	2.43	2.09	2.09	2.09
Godalming	Wessex	2.49	2.49	2.49	2.49	2.49	2.49
Gomshall Station	Wessex	3.21	3.21	2.78	2.76	2.76	2.76
Grateley	Wessex	2.13	2.13	2.32	2.60	2.60	2.60
Guildford	Wessex	2.05	2.05	2.05	2.05	2.05	2.32
Hamble	Wessex	2.19	2.19	2.19	2.19	2.65	2.65
Hampton	Wessex	2.61	2.61	2.61	2.61	2.74	2.74
Hampton Court	Wessex	2.97	2.97	3.28	3.27	3.27	3.27
Hampton Wick	Wessex	1.73	1.73	1.73	1.73	1.73	1.73
Hamworthy Station	Wessex	2.60	2.60	3.22	3.20	3.20	3.20
Haslemere	Wessex	2.05	2.05	2.05	2.05	2.05	2.05
Havant	Wessex	2.39	2.39	2.39	2.39	2.39	2.39
Hedge End	Wessex	2.03	2.03	2.03	2.03	2.06	2.06
Hersham	Wessex	2.52	2.52	2.52	2.52	2.52	2.52
Hilsea	Wessex	2.40	2.40	2.40	2.40	2.40	2.40
Hinchley Wood	Wessex	2.40	2.40	2.40	2.40	2.40	2.40
	Wessex	2.81	2.61	2.01	2.01	2.61	2.61
Hinton Admiral							
Holton Heath	Wessex	2.67	2.67	2.67	2.67	2.67	2.50
Honiton	Wessex	2.32	2.32	2.44	2.44	2.44	2.44
Hook	Wessex	2.40	2.40	2.40	2.40	2.40	2.51
Horsley	Wessex	2.62	2.62	2.62	3.19	3.19	3.19
Hounslow	Wessex	2.52	2.52	2.52	2.52	2.52	2.52 continued
							continued

Appendix 1 – Station condit	tion (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Isleworth	Wessex	2.81	2.81	2.81	2.81	2.54	2.54
Kempton Park	Wessex			_		2.54	2.54
Kew Bridge	Wessex	3.01	3.01	3.01	3.01	2.71	2.71
Kingston	Wessex	2.53	2.53	2.53	2.53	2.53	2.53
Lake	Wessex	2.44	2.44	2.44	2.44	2.44	2.44
Liphook	Wessex	2.61	2.61	2.61	2.61	2.61	2.61
Liss	Wessex	2.51	2.51	2.51	2.51	2.51	2.51
London Road (Guildford)	Wessex	2.58	2.58	2.58	2.58	2.58	2.58
Longcross	Wessex	2.82	2.82	3.44	3.37	3.37	3.37
Lymington Pier	Wessex	2.21	2.21	2.21	2.21	2.21	2.11
Lymington Town	Wessex	2.48	2.48	2.48	2.48	2.48	2.72
Maiden Newton	Wessex	3.00	3.00	2.94	2.57	2.57	2.57
Malden Manor	Wessex	2.55	2.55	2.55	2.55	2.55	2.55
Martin's Heron	Wessex	2.11	2.11	2.12	2.22	2.22	2.22
Micheldever	Wessex	2.23	2.23	2.23	2.23	2.23	2.30
Milford	Wessex	2.59	2.59	2.59	2.59	2.59	2.59
Millbrook	Wessex	2.68	2.68	2.68	2.68	2.48	2.48
Moreton	Wessex	2.23	2.23	2.67	2.78	2.78	2.78
Mortimer	Wessex	2.42	2.42	2.42	2.42	2.66	2.66
Mortlake	Wessex	2.67	2.67	2.70	2.71	2.71	2.71
Motspur Park	Wessex	2.37	2.37	2.40	2.40	2.40	2.40
Netley	Wessex	2.57	2.57	2.57	2.57	2.71	2.71
New Malden	Wessex	2.48	2.48	2.48	2.48	2.90	2.90
New Milton	Wessex	2.64	2.64	2.64	2.64	2.94	2.94
Norbiton	Wessex	2.24	2.24	2.24	2.24	2.24	2.24
North Camp	Wessex	2.51	2.51	2.51	2.51	2.51	2.38
North Sheen	Wessex	2.38	2.38	2.95	2.74	2.74	2.74
Overton	Wessex	2.13	2.13	2.21	2.01	2.01	2.01
Oxshott	Wessex	2.31	2.31	2.89	2.70	2.70	2.70
Parkstone	Wessex	2.54	2.54	2.54	2.54	2.97	2.97
Petersfield	Wessex	2.15	2.15	2.15	2.15	2.15	2.15
Pokesdown	Wessex	2.67	2.67	2.67	2.67	2.98	2.98
Poole	Wessex	2.44	2.44	2.44	2.44	2.44	2.44
Portchester	Wessex	2.58	2.58	2.58	2.58	2.58	2.58
Portsmouth and Southsea	Wessex	2.50	2.50	2.50	2.50	2.50	2.50
Putney	Wessex	2.30	2.30	2.30	2.30	2.30	2.50
Queenstown Road	Wessex	2.51	2.51	2.51	2.51	2.51	2.65
Raynes Park	Wessex	2.26	2.26	2.26	2.26	2.26	2.26
Redbridge	Wessex	2.60	2.60	2.60	2.60	2.92	2.92
Reigate	Wessex	2.68	2.68	2.68	2.68	2.68	2.95
Richmond	Wessex	2.49	2.49	2.77	2.77	2.77	2.77
Romsey	Wessex	2.07	2.07	2.07	2.07	2.55	2.55
Rowlands Castle	Wessex	1.92	1.92	1.92	1.92	1.92	1.92
Ryde Esplanade	Wessex	2.34	2.34	2.34	2.34	2.34	2.34
Ryde Pier Head	Wessex	2.18	2.18	2.18	2.18	2.18	3.09
Ryde St. Johns	Wessex	2.48	2.48	2.48	2.48	2.48	2.48
Salisbury	Wessex	2.00	2.00	2.00	2.00	2.00	2.00
Sandhurst	Wessex	2.49	2.49	2.00	2.00	2.81	2.81
Sandown	Wessex	2.73	2.43	2.43	2.43	2.73	2.01
	**63357	2.10	2.10	2.10	2.10	2.10	continued

continued

Appendix 1 – Station condit	on (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Shalford	Wessex	2.65	2.65	2.65	2.65	2.65	2.57
Shanklin	Wessex	2.44	2.44	2.44	2.44	2.44	2.44
Shawford	Wessex	2.22	2.22	2.22	2.22	2.22	2.74
Shepperton	Wessex	2.15	2.15	2.15	2.15	2.15	2.15
Sherborne	Wessex	1.98	1.98	1.98	1.98	1.98	1.98
Sholing	Wessex	2.54	2.54	2.54	2.54	2.62	2.62
Smallbrook Junction	Wessex	2.38	2.38	2.38	2.38	2.38	2.38
Southampton Central	Wessex	2.05	2.05	2.05	2.05	2.05	2.25
Southampton Parkway	Wessex	2.07	2.07	2.07	2.07	2.22	2.22
St Margarets	Wessex	2.19	2.19	2.42	2.42	2.42	2.42
St. Denys	Wessex	2.46	2.46	2.46	2.46	2.99	2.99
Staines	Wessex	2.23	2.23	2.54	2.54	2.54	2.54
Stoneleigh	Wessex	2.83	2.83	2.83	2.83	2.83	2.83
0	Wessex	2.62	2.62	2.62	2.62	2.62	2.66
Strawbery Hill							
Sunbury	Wessex	2.72	2.72	2.72	2.72	2.72	2.72
Sunningdale	Wessex	2.53	2.53	2.53	2.53	2.77	2.77
Sunnymeads	Wessex	3.19	3.19	3.01	3.02	3.02	3.02
Surbiton	Wessex	2.45	2.45	2.45	2.45	2.45	2.45
Swanwick	Wessex	2.00	2.00	2.00	2.00	2.00	2.00
Sway	Wessex	2.45	2.45	2.45	2.45	2.45	2.45
Swaythling	Wessex	2.81	2.81	2.81	2.81	2.81	2.81
Syon Lane	Wessex	2.32	2.32	2.85	2.85	2.85	2.39
Teddington	Wessex	2.33	2.33	2.33	2.33	2.33	2.84
Templecombe	Wessex	2.49	2.49	2.49	2.49	2.49	2.49
Thames Ditton	Wessex	2.38	2.38	2.61	2.61	2.61	3.00
Thornford	Wessex	3.06	3.06	3.06	3.06	3.06	2.61
Tisbury	Wessex	2.47	2.47	2.47	2.47	2.47	2.47
Tolworth	Wessex	2.60	2.60	2.60	2.60	2.60	2.60
Totton	Wessex	2.51	2.51	2.51	2.51	2.51	2.51
Twickenham	Wessex	2.45	2.45	2.69	2.69	2.69	2.69
Upper Halliford	Wessex	2.07	2.07	2.07	2.07	2.07	2.22
Upwey	Wessex	2.51	2.51	2.51	2.51	2.51	2.51
Vauxhall	Wessex	2.40	2.40	2.00	2.00	2.00	2.00
Virginia Water	Wessex	2.40	2.40	2.40	2.40	2.40	2.40
Walton-On-Thames	Wessex	2.33	2.33	2.33	2.33	2.33	2.33
Wanborough	Wessex	3.45	3.45	2.81	2.81	2.81	2.81
Wandsworth Town	Wessex	2.36	2.36	2.36	2.36	2.36	2.28
Wareham	Wessex	2.51	2.51	2.51	2.51	2.51	2.51
West Byfleet	Wessex	2.61	2.61	2.61	2.61	2.61	2.61
Weybridge	Wessex	2.70	2.70	2.70	2.63	2.63	2.63
Weymouth	Wessex	2.46	2.46	2.46	2.46	2.46	2.46
Whimple	Wessex	2.55	2.55	2.55	2.55	2.55	2.55
Whitchurch (Hants)	Wessex	2.52	2.52	2.52	2.52	2.52	2.52
Whitton	Wessex	2.59	2.59	2.87	2.87	2.87	2.87
Wimbledon	Wessex	2.47	2.47	2.47	2.47	2.47	2.63
Winchester	Wessex	2.15	2.15	2.15	2.15	2.15	2.00
Winchfield	Wessex	2.16	2.16	2.16	2.16	2.16	2.31
Windsor and Eton Riverside	Wessex	2.33	2.33	2.33	2.33	2.33	2.33
Winnersh	Wessex	2.41	2.41	2.41	2.41	2.41	2.41
							continued

Appendix 1 – Station cond	dition (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Winnersh Triangle	Wessex	2.17	2.17	2.17	2.17	2.17	2.17
Witley	Wessex	2.75	2.75	2.75	2.75	2.75	2.75
Woking	Wessex	2.34	2.34	2.34	2.34	2.34	2.51
Wokingham	Wessex	2.51	2.51	2.51	2.51	2.51	2.51
Wool	Wessex	2.69	2.69	2.69	2.69	2.69	2.58
Woolston	Wessex	2.35	2.35	2.35	2.35	2.35	2.17
Worcester Park	Wessex	2.46	2.46	2.90	2.90	2.90	2.90
Worplesdon	Wessex	2.15	2.15	2.15	2.15	2.15	2.29
Wraysbury	Wessex	2.49	2.49	2.49	2.49	2.45	2.45
Yeovil Junction	Wessex	2.53	2.53	2.53	2.95	2.95	2.95
Yeovil Pen Mill	Wessex	2.51	2.51	2.51	2.78	2.78	2.78
Yetminster	Wessex	2.66	2.66	2.66	3.01	3.01	3.01
Aber Station	Western	1.98	2.17	2.04	2.04	2.42	2.42
Abercynon North	Western	2.04	2.04	2.04	2.04	2.04	2.04
Abercynon South	Western	1.90	1.90	1.90	1.90	2.30	2.30
Aberdare	Western	2.06	2.06	2.06	2.06	2.06	2.03
Aberdovey	Western	1.66	1.66	1.66	1.77	1.77	1.77
Aberech	Western	1.80	1.80	1.80	2.22	2.22	2.22
Abergavenny	Western	2.05	2.05	2.05	2.05	2.05	2.05
Aberystwyth	Western	1.85	1.85	1.85	1.85	1.85	1.85
Acton Mainline	Western	1.91	1.91	1.91	1.91	1.91	1.91
Aldermaston	Western	2.07	2.07	1.98	1.98	1.98	1.98
Ammanford	Western	2.25	2.25	2.25	2.25	2.25	2.25
Appleford	Western	2.06	2.06	2.06	2.53	2.53	2.53
Ascott-Under-Wychwood	Western	2.50	2.50	2.50	2.50	3.13	3.13
Ashchurch for Tewksbury	Western	2.00	2.00	2.00	2.00	2.00	2.00
Avoncliff	Western	2.20	2.20	1.70	1.83	1.83	1.83
Avonmouth	Western	3.03	3.03	2.13	2.13	2.71	2.71
Baglan	Western					0.00	2.19
Bargoed	Western	2.03	2.03	2.03	2.03	2.03	2.03
Barmouth	Western	1.99	1.99	1.99	1.96	1.96	1.96
Barnstaple	Western	2.20	2.20	2.20	1.89	1.89	1.89
Barry (Town)	Western	1.94	1.94	1.94	1.94	1.94	1.94
Barry Docks	Western	2.12	2.12	2.12	2.12	2.12	2.29
Barry Island	Western	2.00	2.00	2.00	2.00	2.00	2.00
Bath Spa	Western	2.21	2.21	2.13	2.12	2.12	2.79
Bedminster	Western	2.24	2.24	2.13	1.96	1.96	2.75
Bedwyn	Western	2.10	2.24	2.12	2.12	2.12	3.03
Bere Alston	Western	2.16	2.16	2.12	2.12	2.12	3.35
Bere Ferrers	Western	2.16	2.16	2.16	2.16	2.16	2.06
Bicester	Western	2.46	2.46	2.16	2.46	2.77	2.77
Birchgrove	Western	2.03	2.03	2.40	2.01	2.34	2.34
Bidnigiove Bodmin Parkway	Western	2.23	2.00	2.23	2.20	2.20	2.20
Borth	Western	2.23	2.23	2.23	1.82	1.82	1.82
Bourne End	Western	1.95	1.95	1.95	1.82	1.82	2.88
Bradford on Avon	Western	2.21	2.21	2.26	2.26	2.48	2.00
		2.21	2.21	2.20	2.28	2.48	2.40
Bridgend Bridgwater	Western				2.09		2.09
Bristol Parkway	Western	2.30	2.30 2.10	2.30	1.20	2.30	1.20
	VVESIEITI	2.10	2.10	2.10	1.20	1.20	continued

Appendix 1 – Station con	dition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Bristol Temple Meads	Western	2.90	2.90	2.05	2.05	2.05	2.05
Brithdir	Western	1.80	1.80	1.80	1.80	1.99	1.99
Briton Ferry	Western	2.00	2.00	2.00	2.00	2.00	2.60
Bromsgrove	Western	2.00	2.00	2.00	2.00	2.00	2.00
Broome	Western	2.00	2.00	2.00	2.00	2.00	2.00
Bruton	Western	2.88	2.88	2.88	2.17	2.17	2.17
Bucknell	Western	2.00	2.00	2.00	2.00	2.00	2.00
Bugle	Western	2.08	2.08	2.08	2.08	2.08	2.61
Builth Road	Western	2.08	2.08	2.08	2.08	2.08	2.08
Burnham	Western	2.10	2.10	2.74	2.74	2.74	2.74
Butlins Penychain	Western	1.56	1.56	1.56	1.65	1.65	1.65
Bynea	Western	2.30	2.30	2.30	2.30	2.30	2.86
Cadoxton	Western	1.94	1.94	1.94	1.94	1.94	1.94
Caerphilly	Western	2.04	2.68	2.14	2.14	2.18	2.18
Caersws	Western	2.04	2.08	2.08	1.99	1.99	1.99
Caldicot		2.03	2.03		2.03		
	Western			2.03		1.98	1.98
Calstock	Western	2.24	2.24	2.24	2.24	2.24	2.33
Cam and Dursley	Western	2.05	2.05	2.05	2.05	2.57	2.57
Camborne	Western	2.30	2.30	2.30	2.24	2.24	2.24
Carbis Bay	Western	2.05	2.05	2.05	2.05	3.01	3.01
Cardiff Bay	Western	2.00	2.00	2.19	2.19	2.07	2.07
Cardiff Central	Western	2.16	2.16	2.16	2.15	2.15	2.15
Cardiff Queen Street	Western	2.05	2.05	2.05	2.05	2.05	2.05
Carmarthen	Western	2.08	2.08	2.08	2.08	2.22	2.22
Castle Bar Park	Western	2.09	2.09	2.09	2.09	2.39	2.39
Castle Cary	Western	2.30	2.30	2.15	2.15	2.52	2.52
Cathays	Western	2.88	2.88	2.88	2.88	2.88	2.88
Causeland	Western	2.00	2.00	2.00	2.06	2.06	2.06
Chapleton	Western	2.40	2.40	2.40	2.35	2.35	2.35
Charlbury	Western	2.04	2.04	2.04	2.56	2.56	2.56
Cheltenham	Western	2.48	2.48	2.48	2.28	2.28	2.28
Chepstow	Western	2.00	2.00	2.00	2.00	2.75	2.75
Chippenham	Western	2.66	2.66	2.05	2.05	2.05	2.64
Chirk	Western	2.04	2.04	2.04	2.04	2.04	2.04
Cholsey	Western	2.10	2.10	2.80	2.80	2.80	2.80
Church Stretton	Western	2.10	2.10	2.10	1.77	1.77	1.77
Cilmeri	Western	2.00	2.00	2.00	2.00	2.00	2.00
Clarbeston Road	Western	2.03	2.03	2.03	2.03	2.03	2.58
Clifton Down	Western	2.20	2.20	2.53	2.38	2.38	2.38
Clunderwen	Western	1.78	1.78	1.78	1.78	1.78	3.27
Cogan	Western	2.00	2.00	2.00	2.00	2.00	2.01
Colwall	Western	2.41	2.41	2.41	2.41	2.09	2.09
Combe	Western	2.37	2.37	2.37	2.20	2.20	2.20
Cookham	Western	1.50	1.50	1.50	1.50	1.50	2.89
Coombe Halt	Western	2.17	2.17	2.17	1.78	1.78	1.78
Copplestone	Western	2.70	2.70	2.70	2.12	2.12	2.12
Coryton	Western	2.21	2.21	2.21	2.21	2.21	2.21
Craven Arms	Western	2.00	2.00	2.00	2.00	2.00	2.58
Crediton	Western	2.47	2.47	2.47	2.36	2.36	2.36
							continued

Appendix 1 – Station condi	tion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Criccieth	Western	1.82	1.82	1.82	2.34	2.34	2.34
Culham	Western	2.70	2.70	2.70	2.28	2.28	2.28
Cwmbach	Western	3.17	3.17	3.17	3.17	3.17	2.12
Cwmbran	Western	2.65	2.65	2.65	2.65	2.65	2.65
Cynghordy	Western	2.00	2.00	2.00	2.00	2.00	2.00
Danescourt Station	Western	3.19	2.27	2.20	2.20	2.25	2.25
Dawlish	Western	2.45	2.45	2.45	2.45	2.45	2.45
Dawlish Warren	Western	2.07	2.07	2.07	2.07	2.07	2.07
Devonport	Western	2.96	2.96	2.96	2.55	2.55	2.55
Didcot Parkway	Western	1.80	1.80	2.21	2.21	2.21	2.21
Digby and Sowton	Western	2.20	2.20	2.20	2.20	2.43	2.43
Dilton Marsh	Western	1.45	1.45	1.45	1.45	1.45	2.44
Dinas Powys	Western	2.04	2.04	2.04	2.04	2.04	2.26
Dinas Rhondda	Western	1.81	1.81	1.81	1.81	1.81	2.00
Dingle Road	Western	-	1.81	1.81	1.81	1.81	1.81
Dockyard	Western	2.76	2.76	2.76	2.19	2.19	2.19
Dolau	Western	2.00	2.00	2.00	2.00	2.00	2.00
Dovey Junction	Western	2.50	2.50	2.50	1.54	1.54	1.54
Drayton Green	Western	2.11	2.11	2.11	2.11	2.51	2.51
Droitwich Spa	Western	2.10	2.10	2.10	2.10	2.10	2.10
Dyffryn Ardudwy	Western	1.40	1.40	1.40	2.01	2.01	2.01
Ealing Broadway	Western	2.39	2.39	2.39	2.39	2.39	2.39
Eastbrook	Western	2.16	2.16	2.16	2.16	2.16	2.16
Eggesford	Western	2.40	2.40	2.40	2.30	2.30	2.30
Evesham	Western	2.07	2.07	2.07	2.31	2.31	2.31
Exeter Central	Western	_	_	_	_	2.03	2.03
Exeter St Davids	Western	2.51	2.51	2.10	2.10	2.10	2.10
Exeter St Thomas	Western	2.39	2.39	2.39	2.39	2.39	2.39
Exmouth Station	Western	2.30	2.30	2.30	2.29	2.19	2.19
Exton	Western	3.20	3.20	3.20	3.20	1.89	1.89
Fairbourne	Western	1.42	1.42	1.42	1.73	1.73	1.73
Fairwater Station	Western	2.36	2.36	2.36	2.36	2.49	2.49
Falmouth Docks	Western	2.50	2.50	2.50	2.50	2.50	2.91
Falmouth Town	Western	2.00	2.00	2.00	1.92	1.92	1.92
Fernhill	Western	2.87	2.87	2.87	2.87	2.87	2.16
Ferryside	Western	1.70	1.70	1.70	1.70	1.70	2.50
Ffairfach	Western	2.00	2.00	2.00	2.30	2.30	2.30
Filton Abbey Wood		1.80	1.80	1.80	1.90	1.90	1.90
	Western						
Finstock	Western	2.33	2.33	2.33	2.24	2.24	2.24
Fishguard Harbour	Western	2.15	2.15	2.15	2.15	2.15	2.15
Freshford	Western	2.36	2.36	2.36	2.36	2.36	3.10
Frome	Western	2.25	2.25	2.25	2.25	2.25	2.25
Furze Platt	Western	2.10	2.10	2.10	2.10	2.10	3.03
Garth	Western	2.00	2.00	2.00	2.00	2.00	2.00
Garth (Mid-Glamorgan)	Western	2.29	2.29	2.29	2.29	2.29	2.29
Gilfach Fargoed Station	Western	2.28	2.28	2.74	2.74	2.94	2.94
Gloucester	Western	2.20	2.20	2.20	2.20	2.20	2.35
Gobowen	Western	1.98	1.98	1.98	1.98	1.98	1.98
Goring and Streatley	Western	2.30	2.30	2.67	2.67	2.67	2.67
							continued

Appendix 1 – Station condition	(continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	2.00	2.00	score	2.00	score	score
Gowerton	Western			2.00		2.00	2.48
Grangetown	Western	2.10	2.10	2.10	2.10	2.10	2.51
Great Malvern Station	Western	2.10	2.10	2.10	2.10	2.27	2.27
Gunnislake	Western	2.00	2.00	2.00	2.00	2.00	2.11
Hanborough	Western	2.41	2.41	2.41	1.37	1.37	1.37
Hanwell	Western	2.31	2.31	2.64	2.64	2.64	2.64
Harlech	Western	1.63	1.63	1.63	1.63	1.63	1.63
Haverfordwest	Western	1.92	1.92	1.92	1.92	1.92	1.92
Hayes and Harlington	Western	2.18	2.18	2.37	2.37	2.37	2.37
Hayle	Western	2.05	2.05	2.51	2.51	2.51	2.51
Heath High Station	Western	2.09	2.09	2.09	2.09	2.60	2.60
Heath Low Level Station	Western	2.83	2.42	2.30	2.30	2.38	2.38
Hengoed Station	Western	2.16	2.16	2.16	2.16	1.87	1.87
Henley	Western	2.00	2.00	2.00	2.00	2.00	2.56
Hereford	Western	2.01	2.01	2.01	2.01	2.01	2.42
Highbridge and Burnham-On-Sea	Western	2.90	2.90	2.90	2.66	2.66	2.66
Honeybourne Station	Western	2.37	2.37	2.37	2.37	2.24	2.24
Hopton Heath	Western	2.32	2.32	2.32	2.32	2.32	2.32
Hungerford	Western	2.40	2.40	1.87	1.87	1.87	2.66
Islip Station	Western	2.00	2.00	2.00	2.00	2.40	2.40
lver	Western	2.43	2.43	2.53	2.43	2.43	2.43
lvybridge	Western	2.00	2.00	1.84	1.84	1.84	1.84
Johnston	Western	1.70	1.70	1.70	1.70	1.70	2.74
Kemble	Western	2.30	2.30	2.30	2.30	2.30	2.30
Keyham	Western	2.56	2.56	2.56	2.34	2.34	2.34
Keynsham	Western	2.62	2.62	2.05	2.05	2.05	2.05
Kidwelly	Western	1.78	1.78	1.78	1.78	1.78	2.77
Kilgetty	Western	1.71	1.71	1.71	1.71	1.71	1.71
Kingham	Western	2.31	2.31	2.31	2.31	2.31	2.71
Kings Nympton	Western	3.30	3.30	3.30	2.75	2.75	2.75
Kintbury	Western	2.39	2.39	2.39	2.39	2.39	3.04
Knighton Station	Western	2.07	2.07	2.07	2.07	2.11	2.11
Knucklas	Western	2.00	2.00	2.00	2.00	2.00	2.00
Lamphey	Western	1.57	2.07	2.00	2.00	2.00	2.00
Langley	Western	2.00	2.00	2.53	2.53	2.53	2.53
Lapford	Western	2.36	2.36	2.36	2.31	2.31	2.31
Lawrence Hill	Western	2.15	2.15	1.84	2.24	2.24	2.24
Ledbury	Western	2.04	2.04	2.04	2.31	2.31	2.31
Lelant Slatings	Western	2.08	2.08	2.08	2.08	2.16	2.16
Lelant Station	Western	2.06	2.06	2.06	2.06	2.27	2.27
Leominster	Western	1.96	1.96	1.96	2.00	2.27	2.21
Liskeard	Western	2.61	2.61	2.61	2.61	2.61	2.61
Lisvane and Thornhill	Western	2.00	2.00	2.00	2.00	2.00	2.00
Llanaber	Western	1.80	1.80	1.80	1.90	1.90	1.90
Llanbedr	Western	1.25	1.25	1.25	2.29	2.29	2.29
Llanbister Road	Western	2.00	2.00	2.00	2.00	2.00	2.00
Llanbradach Station	Western	2.09	2.17	1.73	1.73	1.99	1.99
Llandaf	Western	2.92	2.92	2.92	2.92	2.92	2.92
Llandanwyg	Western	1.31	1.31	1.31	1.87	1.87	1.87
							continued

Appendix 1 – Station condition (	continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Llandecwyn	Western	1.46	1.46	1.46	1.97	1.97	1.97
Llandeilo	Western	3.11	3.11	3.11	3.11	3.11	3.11
Llandovery	Western	2.00	2.00	2.00	2.00	2.00	2.00
Llandrindod Wells	Western	2.00	2.00	2.00	1.95	2.00	2.00
Llandybie	Western	2.00	2.02	2.00	2.02	2.02	2.02
Llanelli	Western	2.02	2.02	2.02	2.02	2.02	2.02
Llangadog	Western	2.11	2.10	2.11	2.11	2.11	2.11
Llangammarch	Western	2.00	2.10	2.10	2.10	2.10	2.00
		2.00	2.00	2.00	2.00	2.00	2.00
Llangennech	Western						
Llangynllo	Western	2.00	2.00	2.00	2.00	2.00	2.00
Llanishen	Western	2.07	2.07	2.07	2.07	2.07	2.07
Llansamlet	Western	2.00	2.00	2.00	2.00	2.00	2.27
Llanwrda	Western	2.00	2.00	2.00	2.00	2.00	2.00
Llanwrtyd	Western	2.57	2.57	2.57	2.57	2.57	2.57
Llwyngwril	Western	2.23	2.23	2.23	1.61	1.61	1.61
Llwynypia	Western	2.10	2.10	2.10	2.10	2.10	2.20
Looe	Western	2.17	2.17	2.17	2.24	2.24	2.24
Lostwithiel	Western	2.67	2.67	2.67	2.67	2.67	2.67
Ludlow	Western	2.00	2.00	2.00	2.00	2.00	2.10
Luxulyan	Western	2.08	2.08	2.08	2.08	2.61	2.61
Lydney	Western	2.09	2.09	2.09	2.09	2.09	2.09
Lympstone Commando	Western	2.80	2.80	2.80	2.80	1.99	1.99
Lympstone Village	Western	2.70	2.70	2.70	2.70	2.02	2.02
Machynlleth	Western	1.70	1.70	1.70	1.70	1.70	1.70
Maesteg	Western	2.14	2.14	2.14	2.14	2.14	2.14
Maesteg (Ewenny Road)	Western	2.14	2.14	2.14	2.14	2.14	2.14
Maidenhead	Western	2.20	2.20	2.62	2.62	2.62	2.62
Malvern Link	Western	2.09	2.09	2.09	2.09	2.09	2.09
Manorbier	Western	2.00	2.00	2.00	2.00	2.00	2.00
Marlow	Western	2.19	2.19	2.19	2.19	2.19	2.71
Melksham	Western	2.25	2.25	2.25	2.25	2.25	2.86
Menheniot	Western	3.14	3.14	3.14	3.14	3.14	3.14
Merthyr Tydfil Station	Western	2.79	2.79	2.79	2.79	2.01	2.01
Merthyr Vale Station	Western	2.86	2.86	2.86	2.86	2.12	2.12
Midgham	Western	2.17	2.17	2.22	2.22	2.22	2.78
Milford Haven	Western	2.00	2.00	2.00	2.00	2.00	2.00
Minffordd	Western	1.32	1.32	1.32	2.01	2.01	2.01
Montpelier	Western	1.48	1.48	2.45	2.35	2.35	2.35
Morchard Road	Western	2.22	2.22	2.22	1.87	1.87	1.87
Moreton in the Marsh	Western	2.10	2.10	2.10	2.88	2.88	2.88
Morfa Mawddach	Western	1.54	1.54	1.54	1.75	1.75	1.75
Mountain Ash	Western	2.78	2.78	2.78	2.78	2.78	2.78
Nailsea and Backwell	Western	2.43	2.43	2.43	2.43	2.43	2.43
Nantwich	Western	2.62	2.62	2.62	2.13	2.13	2.13
Narberth	Western	1.67	1.67	1.67	1.67	1.67	1.67
Neath Station	Western	2.24	2.24	2.49	2.49	2.11	2.11
Newbury	Western	2.19	2.19	2.32	2.32	2.32	2.32
Newbury Racecourse	Western	2.00	2.00	2.06	2.06	2.06	2.06
Newport	Western	2.00	2.00	2.00	2.30	2.30	2.30
							continued

Appendix 1 – Station condi	tion (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Newquay Station	Western	2.30	2.30	2.30	2.30	2.61	2.61
Newton Abbot	Western	1.90	1.90	2.26	2.26	2.07	2.07
Newton St Cyres	Western	2.00	2.00	2.00	2.00	2.00	2.00
Newtown (Powys)	Western	2.06	2.06	2.06	2.06	2.06	2.06
Ninian Park	Western	2.00	2.00	2.05	2.05	2.22	2.22
Oldfield Park	Western	1.88	1.88	1.88	1.88	1.88	1.88
Oxford	Western	2.00	2.00	2.00	2.65	2.65	2.65
Paddington	Western	3.12	3.12	2.35	2.40	2.40	2.40
Paignton	Western	2.99	2.99	2.99	2.60	2.60	2.60
Pangbourne	Western	2.30	2.30	2.72	2.72	2.72	2.72
Pantyffynnon	Western	3.44	3.44	3.44	2.92	2.92	2.92
Par	Western	2.24	2.24	2.24	2.24	2.24	2.24
Parson Street	Western	2.30	2.30	2.30	2.30	2.30	2.30
Patchway	Western	3.20	3.20	2.19	2.06	2.06	2.06
Pembrey and Burry Port	Western	1.70	1.70	1.70	1.70	1.70	1.70
Pembroke	Western	2.97	2.97	2.97	2.00	2.00	2.00
Pembroke Dock	Western	1.78	1.78	1.78	1.78	1.78	1.78
Penally	Western	1.89	1.89	1.89	1.89	1.89	1.89
Penarth	Western	1.96	1.96	1.96	1.96	1.96	2.06
Pencoed	Western	2.22	2.22	2.22	2.22	2.22	2.87
Pengam Station	Western	2.01	2.13	2.39	2.39	2.51	2.51
	Western	1.42	1.42	1.42	1.64	1.64	1.64
Penhelig							
Penmere	Western	2.23	2.23	2.23	2.23	2.23	2.29
Penrhiwceiber	Western	2.10	2.10	2.10	2.10	2.10	2.10
Penrhyndeurdraeth	Western	1.85	1.85	1.85	1.85	1.85	1.85
Penryn	Western	2.00	2.00	2.00	2.00	2.00	2.49
Pensarn	Western	1.31	1.31	1.31	1.94	1.94	1.94
Pentrebach	Western	2.43	2.43	2.43	2.43	2.55	2.55
Pen-Y-Bont	Western	2.00	2.00	2.00	2.00	2.00	2.00
Penzance	Western	2.85	2.85	2.15	2.13	2.13	2.13
Perrannwell	Western	2.06	2.06	2.06	2.06	2.06	2.48
Pershore Station	Western	2.30	2.30	2.30	2.30	2.27	2.27
Pewsey	Western	2.18	2.18	2.70	2.70	2.34	2.34
Pilning	Western	3.62	3.62	2.30	2.87	2.87	2.87
Pinhoe	Western	2.62	2.62	2.62	2.85	2.85	2.85
Plymouth	Western	2.58	2.58	2.07	2.07	2.07	2.07
Polsloe Bridge Station	Western	4.00	4.00	4.00	4.00	2.19	2.19
Pontarddulais	Western	2.00	2.00	2.00	2.00	2.00	2.00
Pontlottyn Station	Western	2.03	2.03	2.03	2.03	2.41	2.41
Pontyclun	Western	2.00	2.00	2.00	2.00	2.00	2.18
Pontypool and New Inn	Western	2.07	2.07	2.07	2.07	2.07	2.07
Pontypridd Station	Western	2.33	2.33	2.79	2.79	2.72	2.72
Port Talbot Parkway	Western	2.09	2.09	2.09	2.09	2.09	2.36
Porth	Western	2.16	2.16	2.16	2.16	2.16	2.04
Porthmadog	Western	1.23	1.23	1.23	2.02	2.02	2.02
Portsmouth Arms	Western	3.10	3.10	3.10	2.49	2.49	2.49
Prees	Western	1.84	1.84	1.84	2.13	2.13	2.13
Pwllheli	Western	1.80	1.80	1.80	1.80	1.80	1.80
Pyle							
	Western	2.00	2.00	2.00	2.00	2.00	2.64

Appendix 1 – Station condi	tion (continued)						
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Quakers Yard	Western	2.77	2.77	2.77	2.77	2.14	2.14
Quintel Downs Station	Western	2.00	2.00	2.00	2.00	2.27	2.27
Radley	Western	2.13	2.13	2.13	2.51	2.51	2.51
Radyr	Western	2.82	2.82	2.82	2.82	2.82	2.82
Reading	Western	2.51	2.51	2.56	2.56	2.56	2.56
Reading West	Western	2.20	2.20	2.20	2.66	2.66	2.66
Redland	Western	2.20	2.20	2.25	1.92	1.92	1.92
Redruth	Western	2.22	2.22	2.22	2.18	2.18	2.18
Rhiwbina	Western	2.03	2.03	2.03	2.03	2.03	2.03
Rhymney Station	Western	2.94	2.94	2.94	2.94	2.52	2.52
Roche	Western	2.00	2.00	2.00	2.00	2.63	2.63
Ruabon	Western	2.36	2.36	2.36	1.98	1.98	2.42
Saltash	Western	2.16	2.16	2.16	2.16	2.16	2.12
Sandplace Halt	Western	2.03	2.03	2.03	1.62	1.62	1.62
Sarn	Western	2.00	2.00	2.00	2.00	2.00	2.00
Saundersfoot	Western	2.00	2.00	2.00	2.00	2.00	2.00
Sea Mills	Western	2.08	2.00	2.00	2.89	2.89	2.89
Severn Beach	Western	2.08	2.08	2.23	1.78	1.78	1.78
Severn Tunnel Junction	Western	2.68	2.68	2.68	2.68	2.68	2.68
Shiplake Station	Western	2.03	2.03	2.03	2.03	2.00	2.00
Shipton	Western	2.43	2.03	2.03	1.96	1.96	1.96
	Western	1.34	1.34	1.83	1.68	1.68	1.68
Shrewebury		2.06		2.06		2.11	
Shrewsbury Skewen	Western	2.00	2.06	2.00	2.11	2.11	2.11
	Western	2.19			2.19	2.19	2.46
Slough	Western		2.10	2.59			2.59
South Greenford	Western	2.27	2.27	2.27	2.27	2.41	2.41
Southall	Western	1.94	2.24	2.28	2.28	2.28	2.28
St Andrews Road	Western	1.67	1.67	1.67	1.74	1.74	1.74
St Austell	Western	2.00	2.00	2.00	2.00	2.00	2.00
St Budeaux F R	Western	2.53	2.53	2.53	1.96	1.96	1.96
St Columb Road	Western	2.20	2.20	2.20	2.20	2.07	2.07
St Erth	Western	2.30	2.30	2.57	2.57	2.57	2.57
St Germans	Western	2.57	2.57	2.57	2.57	2.57	2.57
St Ives	Western	2.00	2.00	2.00	2.00	1.95	1.95
St James Park	Western	1.90	1.90	1.90	1.90	1.90	1.90
St Keyne	Western	2.00	2.00	2.00	1.93	1.93	1.93
St. Budeaux Victoria Road	Western	2.14	2.14	2.14	2.14	2.14	2.42
Stapleton Road	Western	2.40	2.40	2.30	2.10	2.10	2.10
Starcross	Western	2.36	2.36	2.36	2.36	2.36	2.36
Stonehouse	Western	2.50	2.50	2.50	2.50	2.50	2.50
Stroud	Western	2.19	2.19	2.19	2.19	2.19	2.19
Sugar Loaf Halt	Western	2.63	2.63	2.63	2.63	2.63	2.63
Swansea Station	Western	2.37	2.37	2.61	2.61	2.32	2.32
Swindon	Western	2.74	2.74	2.08	1.73	1.73	2.39
Tackley Halt	Western	2.00	2.00	2.00	2.00	2.57	2.57
Taffs Well	Western	2.05	2.05	2.05	2.05	2.48	2.48
Talsarnau	Western	1.53	1.53	1.53	1.97	1.97	1.97
Talybont	Western	2.02	2.02	2.02	2.00	2.00	2.00
Taplow	Western	2.33	2.33	2.73	2.73	2.73	2.72
							continued

Appendix 1 – Station cond	ition (continued)						
		2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Station name	Route	score	score	score	score	score	score
Taunton Station	Western	2.31	2.31	2.10	2.10	2.13	2.13
Teignmouth	Western	2.13	2.13	2.13	2.13	2.13	2.13
Tenby	Western	1.92	1.92	1.92	1.92	1.92	1.92
Thatcham	Western	2.18	2.18	2.05	2.05	2.05	2.05
Theale	Western	2.50	2.50	2.22	2.22	2.22	2.22
Tilehurst	Western	2.22	2.22	2.56	2.56	2.56	2.56
Tir-Phil	Western	2.04	3.09	2.18	2.18	2.43	2.43
Tiverton Parkway	Western	1.61	2.37	1.50	1.50	1.50	1.50
Ton Pentre	Western	1.93	1.93	1.93	1.93	1.93	2.19
Tondu	Western	2.00	2.00	2.00	2.00	2.00	2.00
Tonfanau	Western	0.00	_	_	1.70	1.70	1.70
Tonypandy	Western	1.84	1.84	1.84	1.84	1.84	2.28
Topsham	Western	2.64	2.64	2.64	2.36	1.83	1.83
Torquay	Western	2.40	2.40	2.40	2.73	2.73	2.73
Torre	Western	2.40	2.40	2.40	2.76	2.76	2.76
	Western	2.32	2.20		2.10	2.10	2.70
Totnes				2.15			
Trefforest	Western	1.98	1.98	1.98	1.98	1.98	1.98
Trefforest Estate	Western	2.03	2.03	2.03	2.03	2.69	2.69
Trehafod	Western	2.82	2.82	2.82	2.82	2.82	2.82
Treherbert	Western	2.20	2.20	2.20	2.20	2.20	2.14
Treorchy	Western	1.95	1.95	1.95	1.95	1.95	2.13
Troed-y-Rhiw Station	Western	1.85	1.85	1.85	1.85	2.19	2.19
Trowbridge	Western	1.80	1.80	1.80	1.80	1.80	1.80
Truro	Western	2.38	2.38	2.44	2.44	2.44	2.44
Twyford	Western	2.00	2.00	2.53	2.53	2.53	2.53
Ty Glas Station	Western	2.03	2.03	1.77	1.77	2.46	2.46
Tygwyn	Western	1.44	1.44	1.44	2.42	2.42	2.42
Tywyn	Western	2.30	2.30	2.30	1.60	1.60	1.60
Umberleigh	Western	3.10	3.10	3.10	2.08	2.08	2.08
Wargrave	Western	2.13	2.13	2.13	2.13	2.13	3.09
Warminster	Western	2.10	2.10	2.10	2.10	2.10	2.83
Waun Gron Park Station	Western	2.00	2.00	2.00	2.00	2.24	2.24
Welshpool	Western	1.59	1.59	1.59	1.59	1.59	1.59
Wem	Western	2.23	2.23	2.23	2.40	2.40	2.40
West Drayton	Western	2.20	2.20	2.73	2.73	2.73	2.73
West Ealing	Western	2.03	2.03	2.73	2.73	2.75	2.30
Westbury		2.40	2.40	2.30	2.30	2.30	2.30
	Western						
Weston Milton	Western	2.36	2.36	2.45	2.75	2.75	2.75
Weston-super-Mare	Western	2.15	2.15	2.05	2.03	2.03	2.03
Whitchurch (Salop)	Western	2.19	2.19	2.19	2.41	2.41	2.41
Whitchurch Station	Western	2.00	2.00	2.00	2.00	2.73	2.73
Whitland	Western	2.18	2.18	2.18	2.18	2.18	1.91
Wildmill	Western	2.00	2.00	2.00	2.00	2.00	2.00
Windsor and Eton Central	Western	2.05	2.05	2.05	2.05	2.05	2.05
Worcester Foregate Street	Western	2.10	2.10	2.10	2.10	2.10	2.10
Worcester Shrub Hill	Western	2.58	2.58	2.58	2.58	2.58	2.58
Worle	Western	2.30	2.30	2.30	2.30	2.30	2.30
Wrenbury	Western	2.13	2.13	2.13	1.69	1.69	1.69
Yate Station	Western	2.86	2.86	2.86	2.86	2.66	2.66
				-	-		continued

Appendix 1 – Station condition (continued)							
Station name	Route	2000/01 score	2001/02 score	2002/03 score	2003/04 score	2004/05 score	2005/06 score
Yatton	Western	2.23	2.23	2.23	2.64	2.64	2.64
Yeoford	Western	2.05	2.05	2.05	2.05	2.05	2.05
Ynyswen	Western	2.10	2.10	2.10	2.10	2.10	2.19
Yorton	Western	2.12	2.12	2.12	2.62	2.62	2.62
Ystrad Mynach Station	Western	2.14	2.68	2.74	2.74	2.51	2.51
Ystrad Rhondda	Western	2.00	2.00	2.00	2.00	2.00	2.00

## Appendix 2 – Depot condition

The following table provides our list of depots and their condition grades each year. The grading system is from 1 to 5 with the lower number i.e. closer to 1, the better. The regulatory target is 2.7. The condition score is an average of the score from 11 elements such as wheel lathes, structure etc. These elements are condition rated 1 - 5 with 1 being 'as installed' and 5 being 'no longer' serviceable'.

	Average	Average	Average	Average	Average	
Location (also	Touritours	score	score	score	score	score
includes depot code)	Territory Scotland	2001/02	2001/03	2001/04	2001/05	2001/06
Aberdeen Clayhills (ABC)				2.50	2.50	2.50
Ashford (ASH)	Kent	-	-	-	-	
Aylesbury (AYL)	London North West	1.49	1.49	1.49	-	
Ayr-Townhead (AYR)	Scotland					
Barrow-in-Furness (BIF)	London North West	3.70	3.70	3.70	3.70	3.70
Bedford Midland (BEM)	London North West	3.08	3.08	3.08	3.08	3.08
Birkenhead North (BKN)	London North West	2.63	2.63	2.63	2.63	2.63
Birkinheath Central (BKC)	London North West	-	-	-	_	
Birmingham Soho (BIS)	London North West	1.94	1.94	1.94	-	
Birmingham Tyseley (BIT)	London North West	2.73	2.73	2.73	2.73	2.73
Blackpool North (BLN)	London North West	2.20	2.20	2.20	-	
Bletchley (BLE)	London North West	-	-	-	-	
Bound's Green (BOG)	London North East	-	-	-	-	
Bournemouth West (BOW)	Wessex	-	-	-	-	2.46
Brighton (BRI)	Sussex	3.10	3.10	3.10	3.10	3.10
Bristol St. Phillips Marsh (BSP)	Western	-	-	-	-	2.15
Cambridge (CAM)	Anglia	_	-	2.37	2.37	2.37
Camden Primrose Hill (CAP)	London North West	_	-	-	-	-
Cardiff Canton (CAC)	Western	_	_	2.34	2.34	2.34
Chester (CHE)	London North West	_	-	_	_	
Chingford (CHI)	Anglia	_	-	-	-	2.79
Clacton (CLA)	Anglia	_	_	_	_	
Clapham Junction (CLJ)	Wessex	_	_	_	_	
Cleethorpes (CLE)	London North East	_	_	_	_	
Colchester (COL)	Anglia		_	2.82	2.82	2.82
Derby Etche's Park (DEP)	London North West	3.10	3.10	3.10	3.10	3.10
East Ham (EAH)	Anglia	3.60	3.60	3.60	3.60	3.60
Eastbourne (EAS)	Sussex					0.00
Edinburgh Craigentinny/Portobello (EDC)	Scotland	2.94	2.94	2.94	2.94	2.94
	Scotland	2.94	2.94	2.94	2.94	2.94
Edinburgh Haymarket (EDH)						
Exeter St. David's (ESD)	Western	-	_	2.01	2.01	2.01
Ferme Park (FEP)	London North East		-	-	-	
Foregate (SAF)	Western	_	-	-	-	
Fratton (FRA)	Wessex		-	-	-	
Gillingham (GIL)	Kent	-	-	-	-	
Glasgow Cokerhill (GLC)	Scotland	-	-	-	-	
Glasgow Polmadie (GLP)	Scotland	-	-	-	-	
Glasgow Shields (GLS)	Scotland	2.56	2.56	2.56	2.56	2.56
Glasgow Yoker (GLY)	Scotland	-	-	1.98	1.98	1.98
Grove Park (GRP)	Kent	-	-	-	-	2.21
Holyhead (HOL)	London North West	2.65	2.65	2.65	-	
Hornsey (HOR)	London North East	2.70	2.70	2.70	2.70	2.70
Hull Botanic Gardens (HBG)	London North East	2.44	2.44	2.44	-	
Ilford (ILF)	Anglia	3.54	3.54	3.54	3.54	3.54
Inverness (INV)	Scotland	2.70	2.70	2.70	2.70	2.70
Kensal Green (KEG)	Western	_	_	-	-	3.11
Leeds Neville Hill-MML (LNM)	London North East	3.28	3.28	3.28	3.28	3.28
Leeds Neville Hill-RNE (LNR)	London North East	3.33	3.33	3.33	3.33	3.33
· · · · · · · · · · · · · · · · · · ·		0.00			2.00	
Letchworth (LET)	London North East	-	-	-	-	

		Average	Average	Average	Average	Average
Location (also includes depot code)	Territory	score 2001/02	score 2001/03	score 2001/04	score 2001/05	scor 2001/0
Liverpool Edge Hill (LEH)	London North West	_	-	-	-	-
Liverpool Hall Road (LHR)	London North West	_	-	-	-	-
Liverpool Kirkdale (LKD)	London North West	_	-	-	-	
Machynlleth (MAC)	Western	-	-	_	-	
Manchester Longsight (MAL)	London North West	-	-	-	-	-
Manchester Newton Heath (MNH)	London North West	3.60	3.60	3.60	3.60	3.6
Marylebone (MRY)	London North West	-	-	-	-	
Newcastle Upon Tyne Heaton (NEH)	London North East	_	-	-	-	
Norwich Crown Point (NCP)	Anglia	3.10	3.10	3.10	3.10	3.1
Nottingham, Eastcroft (NOE)	London North West	2.16	2.16	2.16	2.16	2.1
Old Oak Common (OOC)	Western	_	-	-	-	1.8
Orpington (ORP)	Kent	_	-	-	-	
Penzance Long Rock (PEN)	Western	_	-	-	-	2.4
Perth (PER)	Scotland	_	-	-	-	
Peterborough (PET)	London North East	_	-	-	-	
Plymouth Laira (PLY)	Western	_	-	2.37	2.37	2.3
Ramsgate (RAM)	Kent	_	-	-	-	
Reading (REA)	Western	_	-	-	-	2.3
Ryde	Wessex	-	_	_	_	2.6
Salisbury (SAL)	Wessex	-	_	2.02	2.02	2.0
Selhurst (SEL)	Sussex	-	_	2.17	2.17	2.1
Sheffield (SHE)	London North East	-	_	_	-	
Shoeburyness (SHO)	Anglia	-	_	_	_	2.7
Shrewsbury Abbey	-	_	_	_	_	
Skipton (SKI)	London North East	1.35	1.35	1.35	_	
Slade Green (SLG)	Kent	-	_	_	_	2.1
Southend (SOU)	Anglia	-	_	_	_	
St. Leonard's (SLE)	Kent	-	-	1.72	1.72	1.7
Stewart's Lane (STL)	Wessex	-	_	_	_	2.4
Strawberry Hill (STH)	Wessex	_	_	_	_	
Streatham Hill (STR)	Sussex	-	2.50	2.50	2.50	2.5
Swansea High Street (SWH)	Western	-	_	-	-	2.3
Swansea Landore (SWL)	Western	_	_	-	-	2.9
Victoria (VIC)	Sussex	4.18	4.18	4.18	4.18	4.1
Watford Junction (WAJ)	London North West	_	_	_	_	
Welwyn Garden City (WGC)	London North East	_	_	_	_	
Wembley Central (WEC)	London North West	2.20	2.20	2.20	_	
Willesden (WIL)	London North West	2.90	2.90	2.90	2.90	2.9
Wimbledon (WIM)	Wessex	-	_	_	_	2.3
Wolverhampton Oxley (WOO)	London North West	_	_	_	_	
Worcester Shrub Hill (WSH)	Western		_	2.05	2.05	2.0
York	London North East		_			2.0

Appendix 2 – Depot condition

This report is printed on Revive Special Silk which is produced from pulp containing a minimum of 30% post-consumer and 10% pre-consumer recovered fibre. A further 30% of the fibre comes from well-managed forests which have been independently verified.

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