Annual Return 2007

Network Rail

Delivering for you

Network Rail helps bring the country together. We own, operate, maintain and invest in Britain's rail network. Increasingly we are delivering improved standards of safety, reliability and efficiency. This benefits our customers and society at large.

Every day. Everywhere.

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Introduction

This is the fifth Annual Return under Network Rail stewardship. It reports on our achievements and developments during 2006/07 and is the primary means by which we demonstrate progress in delivering outputs established in the Access Charges Review 2003 (ACR 2003). The year 2006/07 is the third year of Control Period 3 (CP3). The targets to date from this Control Period are currently being used to inform the expected outputs for the next Control Period beginning in April 2009.

The Annual Return is a publicly available document, which enables stakeholders to use it as an important reference document. This document and previous editions of the Annual Return referring to previous years' performance are available on the Network Rail website under Regulatory documents.

In 2006/07 we continued to adapt our processes and reporting to enable separate disaggregated information for Scotland and England & Wales together with providing 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 the Office of Rail Regulation (ORR) in 2007 and is prepared in accordance with Condition 15 of the network licence.

Network Rail during 2006/07

This has been another year of improved performance and we are still on course to meeting the regulatory targets for CP3. However, we missed some of our internal targets and our rate of improvement for some areas has not been as good as in 2005/06.

Highlights for the year include the following:

- Public Performance Measure of 88.1per cent: the highest in eight years
- Broken rails of 192: lowest ever recorded
- Temporary Speed Restrictions of 710: continued reduction and ahead of regulatory target of 1,199 for CP3 and ahead of 2006/07 target of 815
- Asset Stewardship Incentive Index of 0.72: surpassing regulatory target of 0.9
- 24per cent efficiency saving over three years of CP3
- £3.3bn investment
- £1bn profit.

Further details and explanations of measures are included throughout this document.

Although our safety performance continues to improve, there was a tragic incident at Grayrigg in Cumbria on 23 February due to a derailment on a set of points causing a fatality. Network Rail has taken full responsibility for the incident and continues to put in place various measures for safety improvements. The Rail Accident Investigation Branch and British Transport Police continue to investigate the derailment. Safety is our highest priority and rail transport continues to be the safest form of transport in Great Britain.

A summary of the year's performance against the regulatory targets is in Table 1. The regulatory targets were established in the ACR 2003 and provide the output targets which Network Rail are required to deliver for Control Period 3 (CP3). 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 will provide more detailed information.

Table 1 Performance against regulatory targets

Measure	Regulatory target	Performance 2004/05	Performance 2005/06	Performance 2006/07	Met Target?
Total Network Rail attributed delay (million minutes)	2004/05: 12.3 2005/06: 11.3 2006/07: 10.6 2007/08: 9.8 2008/09: 9.1	11.4	10.5	10.5	Yes
Train delay minutes/100 train kms (franchised train operators)	2004/05: 2.34 2005/06: 2.12 2006/07: 1.97 2007/08: 1.80 2008/09: 1.65	2.18	1.93	1.92	Yes
Broken rails	No more than 300 pa by 2005/06	322	317	192	Yes
Track geometry	L2 exceedences per track mile to be no more than 0.9 by 2005/06	0.91	0.82	0.72	Yes
Temporary speed restrictions	Annual reduction in TSRs	942	815	710	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	See detail in section 3 Annual Return 2007	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	See detail in section 3 Annual Return 2007	Yes
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).	See detail in section 5 Annual Return 2005	See detail in section 2 Annual Return 2006	See detail in section 2 Annual Return 2007	Broadly in line

Following the end of 2006/07, on 6 June 2007, the ORR concluded that weakness in the planning and execution of the Portsmouth resignalling scheme by Network Rail caused us to be in breach of Licence Condition 7 of our network licence. We have consulted the affected train operating companies to identify a suitable time to complete the project that will have the least impact on services. The project should be completed by the end of October 2007.

Operational performance and stakeholder relationships

Train punctuality continued to improve. At the end of 2006/07, PPM was at 88.1 per cent, better than the record level of 86.4 per cent at the end of 2005/06. This also beat our target of 87.6 per cent.

The train delays attributed to Network Rail were 10.53 million minutes in 2006/07. Although this is better than the regulatory target (10.6 million minutes), this number is a slight increase from 2005/06 (10.46 million minutes). We also did not achieve our internal target of 9.8 million minutes.

Train performance in 2006/07 was particularly affected by the hot summer in June, flooding in July, the effects of the late autumn weather in November and the gales and snow in the early part of 2007. As well as the effects of weather, external factors such as the rise in cable thefts caused an increase in Network Rail delays and the high winds increased the number of overhead line incidents. The adverse effects of these factors on train performance were mitigated by the improvement in the number of delays caused by network management compared to last year. This includes better train planning and possessions management. Track related delays also improved particularly due to the reduction in TSRs.

We will work to improve train performance and will focus on the underlying reasons behind infrastructure incidents as well as manage our weather preparedness measures. We will also use the Joint Performance Process (JPP) to work with the TOCs to make performance improvements.

Good progress on the Joint Performance Improvement Plans (JPIPs) continued during 2006/07. There is increased stakeholder engagement and an increased focus on action planning. We are working towards including open access operators under the JPP as well.

The last customer satisfaction survey was conducted in October and November 2006. Although the results raise a number of issues which the company is seeking to address, results in relation to train operators (TOCs) and freight operators (FOCs) have improved. The survey indicates a linkage between improvements in train performance and customer satisfaction. Two thirds of managers sampled agreed with the view that Network Rail is doing its best for the rail industry. During the year our customer services team was re-structured and strengthened to better meet the needs of our customers.

We will continue to improve relationships and understand our customers' businesses and work together to benefit the rail industry. During 2006/07 there has been work on a new measure based on the more detailed information gained from the latest survey. This is to enable results and action planning to be developed by operator and by Route.

Our work with other stakeholders has also continued. For 2006/07, the supplier satisfaction result was positive. We consider this reflects our work towards more partnership relationships with them. We have also published our Code of Practice for anyone wishing to do business with us.

We continue to progress our Route Utilisation Strategy (RUS) programme. During the year a second RUS (Cross London) was established, two final strategy documents were published (Freight and Scotland) as was the consultation document for the North West RUS. At the end of the year 11 RUSs were in progress. There was even greater inclusion of our stakeholders with 'Baseline roadshows' and regular meetings with various stakeholder groups. Each RUS is also overseen by an industry stakeholder management group.

Network capability

The reported changes in network capability in section 2 of this report are due to ongoing data quality improvement as well as some actual changes to the network. The substantive changes include speed band changes due to WCRM and the Portsmouth area infrastructure project as well as changes due to permanent speed restrictions. Changes in gauge capability occurred in LNW and there were gauge capability upgrades in LNE. The development of RUSs has also progressed this work. In 2006/07 we also established a process for the management of Congested Infrastructure. The following have been declared as Congested Infrastructure (as defined by the European Directive 2001/14/EC):

- Barassie Junction/Kilmarnock/Newton Junction/Mauchline Junction to Gretna Junction;
- Gospel Oak to Barking; and
- Reading to Gatwick Airport.

In line with our obligations under the Directive, we undertook capacity analysis studies and are now producing capacity enhancement plans.

Asset management

Overall, we have had a good year with the condition of our assets generally sustaining last year's level of performance and for some measures improving on results from 2005/06. However, our level of improvement was not as good as 2005/06 with three measures not meeting the regulatory target. In addition, there are another three measures, which although surpassing the regulatory targets, had worse results than in 2005/06. A summary of the results for the asset condition and quality measures for 2006/07 are in Table 2. Generally we are on course to meeting all our regulatory targets for CP3 and in some cases our performance is already exceeding the target.

The Asset Stewardship Incentive Index is an example of where we are surpassing the regulatory target. This is a composite measure of various 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 & earthworks temporary speed restrictions. We have already surpassed the regulatory target for the control period which is 0.9, as the result for 2006/07 is 0.72. All these individual measures have continued to meet their regulatory targets and shown improvements except for electrification failures which, although meeting target, has shown deterioration in performance compared to last year.

During 2006/07 we had the lowest incidence of broken rails ever recorded with 192 – a significant reduction compared to previous years and the 2005/06 total of 317. We have more than achieved the regulatory target of 300. This is due to improved inspection equipment and procedures as well as increased rail grinding during the year. We are now better at monitoring, predicting and preventing broken rails than previously.

The number of Temporary Speed Restrictions (TSRs), in particular track TSRs continued to decrease due to the company's focus on removing high impact TSRs and increased major renewals work.

There was a reduction in the number of signalling failures largely due to the introduction of LED ground signals and the installation of the high performance switch system point operating mechanism. Due to the success of these, their installation is being increased throughout the country.

We continue to invest in the network and to develop and implement improved asset management activities. By way of example, during 2006/07 (besides our usual annual condition surveys) we specifically determined the condition of all signalled level crossings. This has informed the renewals work bank for 2007/08 as well as for CP4.

The poor performance of our electrification assets was principally due to adverse weather, therefore the worst affected areas were targeted for investment projects to enable reliability improvements.

Although track geometry and Level 2 exceedences have continued to perform well compared to the regulatory target, there has not been an improvement compared to 2005/06, principally due to the hot summer. However, we will continue to target our renewals programme and our maintenance procedures for effective treatment of recurring faults so that we sustain good performance.

The increase in incidents caused by earthworks failures is due to three slope failures which caused derailments. With our increased renewals activity for earthworks during 2006/07, this should help reduce the number of incidents for 2007/08.

We targeted our investment to improve the serviceability and reliability of our assets, focusing on the worst affected areas as well as moving towards predicting potential issues and renewing assets, where appropriate. For 2006/07, the issues relating to those asset measures that did not perform well have mainly been due to adverse weather. We are therefore developing strategies to mitigate this risk for future years.

During 2006/07, we began reviewing all our asset measures as the results of some have stabilised. This provides us with the opportunity to develop more appropriate measures to reflect how far our assets have improved, which in turn will also help us improve our performance. We are looking into precursor measures which, aligns with our strategy towards being proactive rather than reactive by preventing failures.

Table 2 Asset measures – comparison against previous year and regulatory target

Measure	Regulatory target	Performance 2005/06	Performance 2006/07	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	317	192	Yes
M2 Rail defects	No regulatory target	20,605	18,455	–
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 of the Annual Return 2006	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 TSRs.	815	710	Yes
M5 L2 Exceedences	Reduction in the number of L2 exceedences per track mile to no greater than 0.9 by 2005/06. No increase thereafter.	0.82	0.72	Yes
M6 Earthworks failures	No deterioration from 2003/04 levels, i.e. 47 national earthwork failures.	41	90	No
M8 Bridge condition	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 Structures Condition Monitoring Index, which is anticipated to be in 2007/08.	2.0	2.1	Yes (based on 2006/07)
M9 Signalling failures	No deterioration from 2003/04 levels, i.e. 28,098 signalling failures at 59 million train km per annum.	23,367	22,704	Yes
M10 Signalling asset condition	No deterioration from 2003/04 levels, i.e. 2.5.	2.4	2.4	Yes
M11 AC power incidents	No deterioration from number of incidents reported in 2001/02, i.e. 107.	49	69	Yes
M12 DC power incidents	No deterioration from number of incidents reported in 2001/02, i.e. 30.	6	11	Yes
M13 AC traction sub-stations condition	Condition and serviceability to return to 2001/02 levels, i.e. 2.1.	1.85	1.88	Yes
M14 DC traction sub-stations condition	Condition and serviceability to return to 2001/02 levels, i.e. 2.3.	1.78	1.64	Yes
M15 AC contact systems condition	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	1.7	1.7	Yes
M16 DC contact systems condition	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	1.8	1.9	No
M17 Station condition	No deterioration from 2003/04 levels. i.e. 2.25	2.22	2.24	Yes
M18 Station facilities	No regulatory target	See detail in Section 3 of Annual Return 2006	See detail in Section 3	–
M19 LMD condition	No deterioration from 2003/04 levels, i.e. 2.7.	2.58	2.58	Yes
Asset Stewardship Incentive Index	0.90	0.80	0.72	Yes

Activity Volumes

In total, 1028 km of rail, 738 km of sleepers and 850 km of ballast were replaced during 2006/07. The activity volume for other assets is shown in Table 3.

Table 3 Activity volumes

	2002/03	2003/04	2004/05	2005/06	2006/07
Rail (km of track renewed)	1,010	1,401	816	1,120	1,028
Sleepers (km of track renewed)	666	837	670	744	738
Ballast (km of track renewed)	665	812	685	798	850
Switch & crossing (No. of full units replaced)	254	373	511	520	439
Signalling (SEUs)*	810	604	1,678	278	401
Bridge renewals and remediation (No.)			260	157	154
Culverts renewals and remediation (No.)			16	9	10
Retaining walls remediation (No. of schemes)			10	10	7
Earthwork remediation (No.)			106	76	68
Tunnel remediation (No.)			38	39	19

* 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.

Safety and Environment

Last year we introduced the Safety and Environment section into the Annual Return. This year we have included more information with the principal Safety KPIs as well as information on environmental initiatives. This section remains concise because the reporting of our safety performance and results for the year is principally covered by the Safety & Environment Assurance Report.

Our safety performance continued to improve during 2006/07:

- The Accident Frequency Rate which measures workforce safety shows a continued reduction with zero fatalities. This is largely due to the 'Safety 365 Challenge' which encourages local safety initiatives as the challenge is for teams to complete 365 days without a single RIDDOR reportable accident (the definition of RIDDOR is included in section 5).
- Infrastructure wrong side failures continued to reduce reflecting the general improvement in the condition of our assets.
- Category A SPADs (Signals passed at danger) is at the lowest ever level even though the 2006/07 target was not achieved.
- Operating irregularities decreased with 17 per cent less than 2005/06 due to company initiatives to improve safety communications and reporting.
- Criminal damage did not substantially decrease during the year but we will continue with the 'No Messin'!' campaign aimed at 10 – 16 year olds on the risks of playing on the railway. The CCTV installation programme and more community support officers are expected to make a difference for 2007/08.
- Misuse of level crossings still presents the biggest risk of a train accident. Although the number of major incidents was the same as in previous years, there were fewer minor incidents. This is largely due to the level crossing awareness campaign (as indicated from statistics in our follow- up work) as well as the increase in upgrades on level crossings. New road safety legislation, which we lobbied for relating to the road-rail interface, should further decrease the number of incidents in the future.

Under the Safety & Environment Plan, the pollution prevention programme at light maintenance depots continues steadily.

Finance and Efficiency

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

In 2006/07 there were savings made in OPEX principally due to the continued work to reduce agency staff, contractors and consultants and the general management of their costs. Although this reduction is not as much as last year, this is due to the initial costs of decreasing our reliance on agency staff and contractors and appointing more permanent staff.

We have also made efficiencies in maintenance costs as the benefits from the commercial contracts renegotiated in 2005/06 have become established. With the capital investment portfolio of maintenance increasing due to better planning, it has been possible to share overheads with capital projects as well. There has also been a stronger reliance on our own in-house staff, therefore reducing the need to use contractors. The improvements in track quality with the reduction in broken rails are an indication of improved maintenance as well as investment in the infrastructure.

Table 4 Expenditure comparison in outturn prices (£m)

	2003/04	2004/05	2005/06	2006/07
OPEX (Controllable)	1,060	934	865	878
Maintenance	1,245	1,271	1,192	1,146
Renewals	3,203	2,665	2,673	2,777
Enhancements	770	821	473	569

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

Table 5 Overall efficiency improvement assessment (%)

	By end 2005/06		By end 2006/07	
	ACR assumption	actual achieved	ACR assumption	actual achieved
Controllable Opex	15	24	22	25
Maintenance	15	19	22	26
Renewals	15	15	22	23

Work on the Maintenance Unit Cost (MUC) framework continued with the focus on consistency of methodology and data capture. There is now information on 18 separate work activities with 53 per cent of maintenance costs covered. We will continue to look into getting consistent data across the company, particularly at a lower level of work order to improve data quality.

We have also achieved efficiencies with renewals, which we have been able to identify through our unit costs and budget variance analysis. We are continuing to develop the Cost Analysis Framework (CAF). The use of innovative delivery and contracting mechanisms, the high output plant and equipment as well as better planning are helping to deliver efficiencies. Table 5 compares the efficiencies we have achieved against the breakdown assumed in ACR 2003.

We have two years of this Control Period remaining and are on target to achieving the improvement over efficiency for the five year period. Overall, we are surpassing our regulatory output and efficiency targets and we continue to strive towards delivering a safer, more efficient and reliable railway.

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. This year's Annual Return is structured similarly to last year but we have added a few new things and extended other areas. It no longer includes Customer reasonable requirements as this process is being closed off and has been replaced principally by the Joint Performance Process. However, as we generally have more information relating to customers, we have further extended the operational performance and stakeholder relationships section to include this.

This year's Annual Return is structured as follows:

- The introduction, which includes updated regulatory targets and KPI sections.
- The operational performance and stakeholder relationships section, which includes information on the Dependent Persons Code of Practice.
- The network capability section, which includes information on the management of congested infrastructure.
- The asset quality and condition section, which includes some updated definitions for measures.
- The activity volumes section, which includes the new activity volumes KPI.
- The safety & environment section, which includes more information on our Safety KPIs and general performance as well as our environmental initiatives.
- The finance and efficiency section, which includes an update on unit costs as well as the Business Plan reconciliation.
- The financing section, which includes more details on our financial KPIs.

A network total is included for each measure and where appropriate more detailed information is provided for the 26 strategic routes, the 8 operating routes and the 5 territories. The map of the network at the end of this section illustrates these.

It should be noted that throughout the document '0' represents rounded numbers less than 0.5.

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 figures have not been adjusted.

Scope of reporting against targets

This Annual Return reports on the third year of the third Control Period (CP3) with outputs and regulatory targets as specified in the Access Charges Review 2003: Final Conclusions (ACR 2003). This year, 2006/07, has also seen a lot of preparations for the next Control Period beginning in April 2009 with many of the outputs for CP3 to date being used to inform the Periodic Review for Control Period 4. In order to facilitate comparisons of our performance, we measure our performance against these regulatory targets each year 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 against our 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 customers, stakeholders and the public.

This year we have updated some of the definitions for measures to reflect improvements in processes. These changes do not affect the substance of the measures, which can still be compared year on year.

Confidence reporting

We have assessed the quality of the data and information presented and described this by the use of confidence grades. At the time of publication, those included in this Annual Return for 2006/07 data and information are provided by Network Rail and used as a basis for discussion with the Reporter. Following the Reporter's audits, the Reporters 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 for last year included within this Annual Return have been updated with the confidence grades from Halcrow's report from 2006.

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; and a numeric part

describing the accuracy (1-6 where 1 is within ± 1% and 6 indicates poor accuracy defined as within the band ±50% - ±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 outside +/- 100 ,	small numbers or otherwise incompatible

Table 8 Compatible confidence grades

		Reliability band		but outside +/-
Accuracy band	A	B	C	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	CX	DX

Independent reporter

Independent reporters were appointed in October 2002 in accordance with the requirements of Condition 23 of our network licence. The function and role of the reporter is to provide ORR with independent, professional opinions and advice on the reliability of data and data systems relating to the licence holder's provision of railway services. 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.

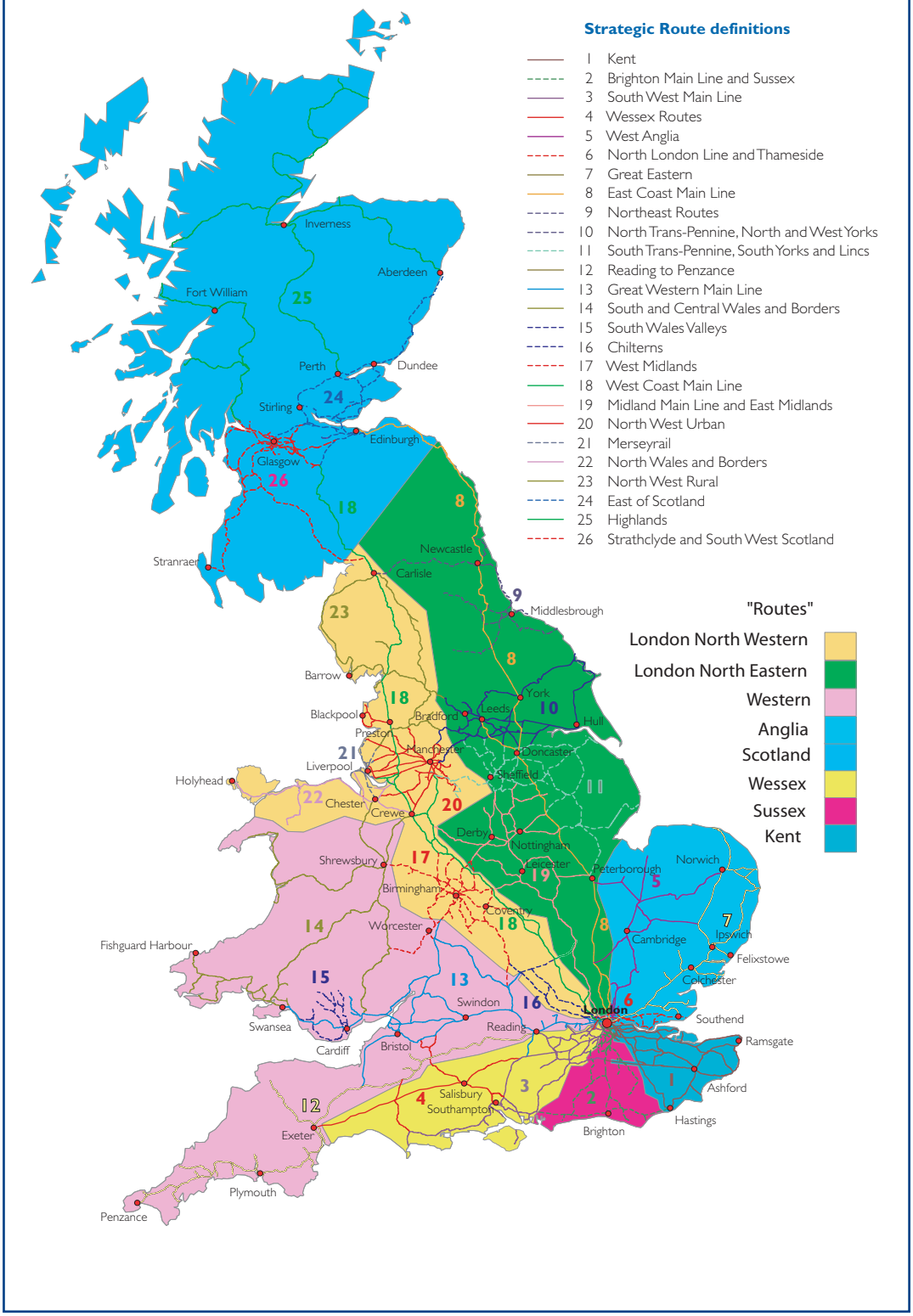
For Annual Return work, the Reporter is expected to provide an independent view on the accuracy and significance of the data and related processes that we use for reporting our performance during the year.

The Reporter for the Annual Return, is in the second year of a three year contract with ORR and ourselves. This year the Annual Return process, which includes the Reporter audits, was further refined. More preparation was done during the year to enable audits to be undertaken earlier. This was done in three parts: with the HQ champions to discuss the process; out-based audits in Territories and Areas to see processes in practice and sample data; and finally HQ champion audits to discuss data and information. These earlier audits will enable the Reporter's report to be produced earlier, which in turn will enable the ORR's Annual Assessment to be produced earlier. Both the ORR and the Reporter will have recommendations in their reports. As in previous years, we have taken into consideration the Reporter and the ORR recommendations both in improving our processes and in the compilation of this Annual Return, after discussion with the ORR. Our aim is that many of these recommendations are addressed during the year and closed off during the audits.

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 2006/07 are not included in this Annual Return, but are submitted to the ORR in a separate document that is also made publicly available. As details of operating expenditure are included in the Regulatory Accounts, this information has not been duplicated in the Annual Return. Where there is common information 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 1 Map of the Network



Targets

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 each year which is its way of managing the achievement of the overall regulatory targets over the five year control period. These internal targets are generally tougher than the regulatory ones as we are continuously working to improve performance over and above that expected by ORR. 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 summarises our regulatory targets for CP3 established in the ACR 2003. A number of these targets for assets and network capability are specified relative to performance in earlier years (e.g. condition for electrical condition etc. to be returned to that at 2001/02).

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:	12.3
	2005/06:	11.3
	2006/07:	10.6
	2007/08:	9.8
	2008/09:	9.1
Train delay minutes/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).	

We have translated these targets into values for our measures as reported in the Annual Return. The table below illustrates this. It should be noted that every year we work to improve both what we measure and how we measure it. This year there are no substantial changes or new measures. The introduction of new measures is only done through consultation with our stakeholders. This enables comparisons and trends to be established, which in turn helps with informing the Periodic Review process to determine targets for the next Control Period.

Table 10 also includes the annual regulatory target for 2006/07, where one exists and our own business plan targets.

All infrastructure output measures are subject to statistical variability caused by random fluctuation and the accuracy of data measurement. We have assessed tolerances for the output measures but these have not been agreed with the ORR. However, the ORR has stated that it will take into account statistical variations when assessing performance against regulatory targets.

Table 10 Summary of targets

Measure	Regulatory target for CP3	Internal target/ Business Plan target for 2006/07
Public Performance Measure	No regulatory target	87.6%
Total Network Rail caused delay (million minutes) 2006/07	10.6	9.8
M1 Broken rails	Reduction in the number of broken rails to no more than 300 per annum by 2005/06. No increase thereafter.	290
M2 Rail defects	No regulatory target.	–
M3 Track geometry	The regulatory target is to maintain 2003/04 levels (see section 3 for further details); no deterioration from this level during this control period.	0.85
M5 Level 2 exceedences	Reduction in the number of L2 exceedences per track mile to no greater than 0.9 by 2005/06. No increase thereafter.	0.81
M4 Temporary speed restrictions	Annual reduction required from 2003/04 levels, i.e. from 1,199 for track, structures and earthworks TSRs.	815
M6 Earthwork failures and derailments	This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 47 national earthwork failures.	–
M8 Bridge Condition	Condition and serviceability to return to 2001/02 levels, 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.	–
M9 Signalling failures	This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 28,098 signalling failures (equivalent to 59 per million train km per annum).	22,500

Table 10 Summary of targets (continued)

Measure	Regulatory target for CP3	Internal target/ business plan target for 2006/07
M10 Signalling asset Condition	This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.5.	2.5
M11 AC Traction Power Incidents causing train delays	No deterioration from number of incidents reported in 2001/02, i.e. 107.	50
M12 DC Traction Power Incidents causing train delays	No deterioration from number of incidents reported in 2001/02, i.e. 30.	8
M13 AC Feeder stations and track sectioning points	Condition and serviceability to return to 2001/02 levels, i.e. 2.1. on the target.	2.1
M14 DC Traction substations	Condition and serviceability to return to 2001/02 levels, i.e. 2.3.	2.3
M15 AC Traction contact systems	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	1.8
M16 DC Traction contact systems	Condition and serviceability to return to 2001/02 levels, i.e. 1.8.	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	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.	2.7
Asset Stewardship Incentive Index	0.90	0.81
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 regulatory target
C2 Gauge capability	Same as C1	Same as regulatory target
C3 Route availability value	Same as C1	Same as regulatory target
C4 Electrified track capability	Same as C1	Same as regulatory target
M20 Rail renewals (km)	No regulatory target	958
M21 Sleeper renewals (km)	No regulatory target	730
M22 ballast renewals (km)	No regulatory target	926
M25 S&C renewals (units)	No regulatory target	434
M24 Signalling renewals (SEUs)	No regulatory target	663
Financial Efficiency Index	No regulatory target	1,877
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%.	74.8%
Expenditure – it should be noted that section 6 compares actual expenditure against forecast expenditure with the latter being the Business Plan 2006 targets.		

Key performance indicators (KPIs)

Network Rail's performance and achievement of the company's corporate goals is measured through a set of high level KPIs. These are supported by a set of secondary KPIs. The full set is 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. The ORR has also used some of these KPIs to form the Network Rail Monitor which is published quarterly on its website.

Table 11 provides the results for the KPIs for 2006/07.

Table 11 Key performance.indicators

	Unit of measure	2006/07 Target	2006/07 Actual	Variance	Relative to target
Train performance					
Public performance measure	%	87.6	88.1	0.5	Good
Train delay minutes	Minutes (millions)	9.8 (regulatory target 10.6)	10.5	0.7 (against internal target) –0.1 (against regulatory target)	Bad (against internal target) Good (for regulatory target)
Asset failure					
Asset failures	No. of incidents	53,612	58,163	4,524	Bad
Asset quality					
Asset Stewardship Incentive Index(ASII)	%	0.78 (regulatory target 0.9)	0.72	–0.6 (against internal target) –0.18 (against regulatory target)	Good
Activity volumes					
Activity volumes: % of activity compared with plan	%	100	98.9	–1.1	n/a
Finance and efficiency					
Debt to RAB ratio	%	74.8	73.5	–1.3	Good
Financial Efficiency Index (FEI)	Index	1,877	1,904	27	Bad
RAB adjustment for passenger volume incentive	£m	n/a	209.0	n/a	n/a
RAB adjustment for freight volume incentive	£m	n/a	7.1	n/a	n/a
Expenditure variance	£m	5,760	5,570	–3.3%	n/a
Customer satisfaction					
Customer satisfaction – train operators	Index from –2 to +2	+0.33	–0.14	+0.47	Good
Customer satisfaction – freight operators	Index from –2 to +2	–0.22	0.0	+0.22	Good
Supplier satisfaction – major suppliers	Index from –2 to +2	–0.06	+0.33	+0.39	Good

Our performance during the year has been generally good although areas that we are focusing on improving in 2007/08 are:

- Train delay minutes, so that we can achieve our internal targets;
- Reducing the number of delay incidents caused by asset failures;
- Decreasing the FEI.

A description of each KPI is set out below.

Public performance measure

This indicator monitors punctuality of passenger services. 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 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.

Asset stewardship incentive index

This indicator shows how asset stewardship is being improved. 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 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).

Debt to RAB ratio

This financing indicator measures Network Rail's net debt as a per centage 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 incentive rates multiplied by the growth over and above a baseline level of growth in:

1. actual passenger train miles; and
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; and
2. gross tonne miles.

Expenditure variance

This indicator measures the per centage 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.

Customer satisfaction – train operators and freight operators

This indicator measures views of the TOCs and FOCs in respect to their satisfaction with the service being provided by Network Rail.

Supplier satisfaction – major suppliers

This indicator measures the views of major suppliers towards Network Rail. The index is calculated by measuring responses from major suppliers using the advocacy rating.

Section 1 – Operational performance and stakeholder relationships

Introduction

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.

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. This Annual Return provides data on Network Rail attributed delays only. Figures are presented for 2006/07 in delay minutes and in minutes delay per 100 train kilometres, with disaggregated results split by cause, by Network Rail route and into those delays affecting passenger and freight trains.

This section has now been extended to cover stakeholder relationships. It includes our customer and supplier satisfaction results as well as progress on the RUSs and JPIPs. We have also provided information on our Dependent Persons Code of Practice for parties interested in doing business with Network Rail.

Overview: PPM and delay minutes

PPM punctuality increased by 1.7 percentage points to 88.1% for the full year 2006/07. This represents a reduction of 12% 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 8% after allowing for the change in train km run. Most of this improvement is attributable to TOCs, however part of the improvement in PPM also arose from initiatives specifically targeting punctuality and small delays (such as improved timetables), which resulted in a greater improvement in PPM than the equivalent improvement in above-threshold delays.

There is no regulatory target for PPM but we work to our Business Plan target, which was 87.6% for 2006/07. We therefore met this target with our result of 88.1% for 2006/07.

Delay minutes attributable to Network Rail increased marginally at 10.53 million minutes. This level of delay achieved remained ahead of the regulatory target for the year (10.6 million minutes). However we did not meet our Business Plan target of 9.8 million minutes for 2006/07. Within this total, delays caused by Network Rail's infrastructure and operations improved by around eight per cent. However, delays caused by adverse weather and external events such as cable theft increased by 35 per cent and resulted in an additional 680,000 minutes delay.

Table 12 National delays to all train services

Network Rail-attributed delays	2002/03	2003/04	2004/05	2005/06	2006/07
Total delay minutes (including minor operators)[1]	14,716,772	13,716,937	11,402,720	10,464,387	10,531,216
Train Km[2]	472,173,008	482,059,147	478,038,920	488,059,212	487,603,246
Delay per 100 train km[3]	3.12	2.85	2.39	2.15	2.16
Regulatory target (total delay minutes)	–	–	12,300,000	11,300,000	10,600,000

Notes:

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).
2. Train kilometres run excluding empty coaching stock movements, as recorded in the performance database (PALADIN).
3. 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. PMM for the year is expressed as a moving annual average.

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 2006/07 data presented in this report, these operators comprise First Great Western (high speed services), GNER, Midland Mainline, Virgin Cross Country and Virgin West Coast, Transpennine Express, together with the former Anglia inter-city services operated by 'One'. Table 13 presents the results for the year.

Table 13 Public Performance Measure by network and train operating company (%)

Applicable passenger operators		
EA	Transpennine Express	89.3
EB	One	87.1
ED	Northern Rail	87.3
EF	First Capital Connect	83.2
EG	First Great Western	88.1
HA	First ScotRail	88.8
HB	Great North Eastern Railway	82.7
HE	Merseysrail Electrics 2002	92.5
HF	Virgin West Coast Trains	86.0
HG	Central Trains	84.5
HH	Virgin Cross Country Trains	83.9
HI	Midland Mainline	92.3
HL	Arriva Trains Wales	87.6
HO	Chiltern Railway	93.8
HP	Silverlink	90.8
HT	c2c Rail	94.3
HU	South Eastern Trains	88.5
HV	Gatwick Express	90.3
HW	Southern Trains	89.2
HY	South West Trains	89.8
HZ	Island Line	96.7
Total	(franchised passenger operators)	88.1

Summarised network-wide data (delays to major operators)

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.

National delays to passenger train services

Total Network Rail-attributed delay minutes to passenger trains were virtually unchanged in 2006/07 (0.2% higher). Traffic volumes, measured in train kilometres run, increased by 0.4% compared to 2005/06. This resulted in a combined impact of a 0.2% improvement in delay minutes per 100 train km, which fell to 1.91 minutes. Within this total, delay minutes to franchised passenger operators also fell marginally to 1.92 minutes per 100 train km, which was 2% better than the regulatory target for this measure.

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 other figures in Table 14.

The trends in delays to passenger trains (measured as delay per 100 train km) over the last five years is illustrated in Figure 2. This highlights the general improvement over this time-frame, together with the impact of particular periods of poor performance, which generally coincide with unusually severe weather impacts. During the last year, these periods included Period 4 (during the hot summer), Period 9 (late autumn) and Period 11 (winter, including gales of January 2007).

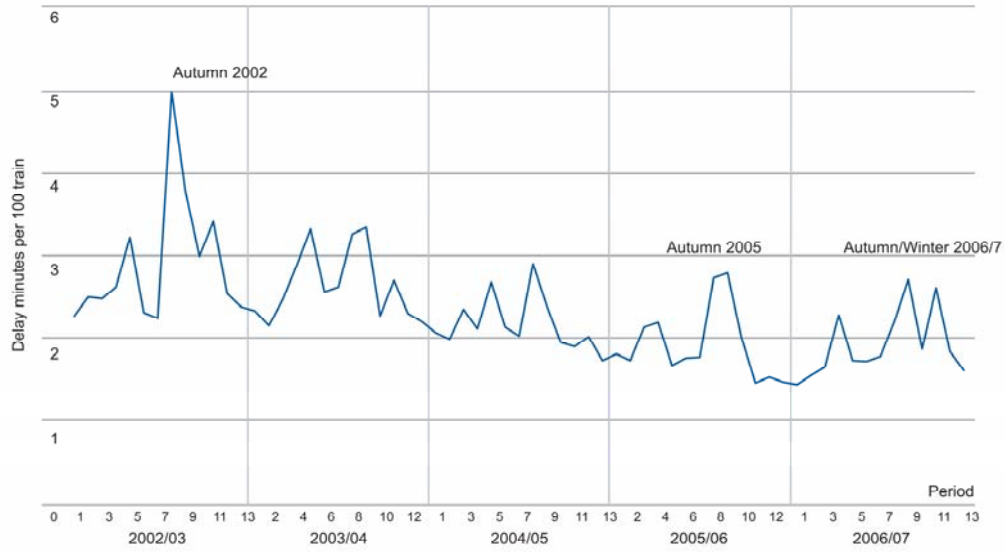
The poor performance in Period 4, was particularly pronounced in the London North Eastern and London North Western Routes and affected track categories as well as points, track circuit failures and other signalling. In Period 9, a number of Routes were hit by poor weather and the relatively late onset of autumn, while the gales of Period 11 were particularly pronounced in Kent, Sussex and Wessex affecting results on those Routes. The overall results by Route and period are shown in Table 18.

Table 14 Delays to passenger train services

Network Rail-attributed delays	2002/03	2003/04	2004/05	2005/06	2006/07
Delay minutes	12,214,993	11,394,367	9,311,884	8,386,939	8,403,701
Train Km	421,267,094	430,472,798	428,829,386	437,524,953	439,123,839
Delay per 100 train km	2.90	2.65	2.17	1.92	1.91
Delay minutes to franchised operators per 100 train km					
Actual	2.92	2.66	2.18	1.93	1.92
Regulatory Target			2.34	2.12	1.97

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

Figure 2 Delay minutes per 100 train km over time



National delays to freight train services

Delays to freight trains increased by 3 per cent to 2.1 million minutes. When combined with a reduction of 3 per cent in train kilometres run, this represents a deterioration of 6 per cent in delay minutes per 100 train km. Due partly to the concentration of freight services in the North East and Great Northern areas, freight trains were particularly badly affected by the increase in cable theft (incurring 52 per cent of the overall increase in these delays) and other external categories. The increase in external delays (118,177 minutes) broadly equates to the 6 per cent deterioration in overall delay per 100 train km seen by freight services.

Table 15 National delays to freight train services

Network Rail-attributed delays	2002/03	2003/04	2004/05	2005/06	2006/07
Delay minutes[1]	2,451,402	2,279,360	2,057,063	2,036,592	2,088,205
Train km[2]	47,201,404	47,828,365	45,519,096	46,727,870	45,258,631
Delay minutes per 100 train km[3]	5.19	4.77	4.52	4.36	4.61

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

Breakdown of performance data by operator

Table 16 Delays to individual operators 2006/07

Applicable passenger operators		Delay minutes	Train kilometres (million)	Delay per 100 train km
EA	Transpennine Express	297,110	13.78	2.16
EB	One	647,901	30.37	2.13
ED	Northern Rail	1,069,913	40.43	2.65
EF	First Great Western*	862,839	39.86	2.16
EG	First Capital Connect*	327,032	22.15	1.48
HA	First ScotRail	548,853	37.01	1.48
HB	Great North Eastern Railway	226,484	17.80	1.27
HE	Merseyrail Electrics 2002	85,534	5.49	1.56
HF	Virgin West Coast Trains	442,990	21.29	2.08
HG	Central Trains	737,553	28.51	2.59
HH	Virgin Cross Country Trains	532,806	27.23	1.96
HI	Midland Mainline	131,501	10.00	1.31
HL	Arriva Trains Wales	428,612	21.35	2.01
HM	Heathrow Express	42,049	1.47	2.86
HO	Chiltern Railways	95,188	8.74	1.09
HP	Silverlink	164,446	9.03	1.82
HT	c2c Rail	44,200	5.79	0.76
HU	South Eastern Trains	526,500	27.66	1.90
HV	Gatwick Express	31,649	2.37	1.33
HW	Southern Trains	519,953	26.82	1.94
HY	South West Trains	593,522	36.89	1.61
GA	Eurostar (UK)	15,875	0.91	1.74
PF	Hull Trains	20,848	1.31	1.59
PG	Nexus	10,343	2.88	0.36
Total		8,403,701	439.12	1.91
of which franchised operators		8,314,586	432.55	1.92
Applicable freight operators				
WA	English Welsh and Scottish Railway	1,280,074	28.38	4.51
DB	Freightliner Ltd	401,628	8.52	4.71
D2	Freightliner Heavy Haul	303,278	5.06	6.00
PE	GB Railfreight	55,011	1.54	3.56
XH	Direct Rail Services	48,214	1.75	2.76
Total		2,088,205	45.26	4.61
Combined total for all applicable operators		**10,491,906**	**484.38**	**2.17**

* The above table reflects the name and definition of franchised operators which existed in 2006/07. The 5 following operators which existed in 2005/06 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 kilometres to individual operators 2006/07

	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8	Period 9	Period 10	Period 11	Period 12	Period 13	Full Year total
Applicable passenger operators														
EA Transpennine Express	1.67	1.88	1.80	2.82	2.10	2.06	2.02	3.06	2.72	1.67	2.52	1.88	1.71	2.16
EB One	1.92	1.58	1.82	2.80	1.88	2.22	1.76	2.11	2.78	1.91	2.90	1.89	2.14	2.13
ED Northern Rail	1.97	2.40	2.42	3.20	2.23	2.58	2.53	3.62	3.98	2.37	2.80	2.26	2.08	2.65
EF First Great Western	1.65	1.84	1.99	2.40	1.97	2.20	1.75	2.22	2.99	1.73	3.41	2.08	1.93	2.16
EG First Capital Connect	1.05	0.92	1.16	2.04	1.32	1.29	1.34	1.60	2.36	1.50	1.84	1.67	1.12	1.48
HA First ScotRail	1.35	1.32	1.18	1.27	1.12	1.03	1.36	1.86	2.03	2.45	1.74	1.47	1.26	1.48
HB Great North Eastern Railway	0.85	1.06	1.08	1.70	1.31	1.04	1.21	1.47	1.48	1.30	1.43	1.39	1.23	1.27
HE Merseyrail Electrics 2002	1.32	1.06	1.05	2.27	1.70	1.32	1.27	2.28	2.08	1.28	2.46	1.22	0.93	1.56
HF Virgin West Coast Trains	1.75	1.45	1.92	2.68	1.67	1.64	1.82	2.17	2.16	2.75	2.96	2.09	2.10	2.08
HG Central Trains	1.69	1.98	2.23	3.62	2.83	2.56	2.46	2.86	3.37	2.28	3.22	2.53	2.07	2.59
HH Virgin Cross Country Trains	1.39	1.55	1.47	2.30	1.76	2.10	2.04	2.34	2.45	1.75	2.71	1.76	1.83	1.96
HI Midland Mainline	0.99	0.87	1.14	2.19	1.49	1.19	1.28	1.47	1.89	1.00	1.50	1.08	1.00	1.31
HL Arriva Trains Wales	1.58	1.91	1.62	2.74	2.33	1.96	1.74	2.14	2.90	1.97	2.19	1.84	1.23	2.01
HM Heathrow Express	4.18	2.99	2.63	1.79	3.38	3.43	2.81	1.96	3.14	2.44	3.73	1.67	3.02	2.86
HO Chiltern Railways	0.59	1.03	1.35	1.79	1.21	1.05	0.87	0.91	1.03	0.73	1.23	1.20	1.11	1.09
HP Silverlink	1.38	1.77	1.82	2.95	1.29	1.55	2.10	1.44	1.91	1.53	2.53	1.95	1.43	1.82
HT c2c Rail	0.40	0.81	0.49	0.71	0.71	0.84	1.08	0.97	0.82	0.99	1.17	0.45	0.52	0.76
HU South Eastern Trains	1.53	1.50	1.63	1.60	1.16	1.28	2.07	1.94	3.79	1.56	3.16	1.97	1.50	1.90
HV Gatwick Express	0.74	0.97	0.76	1.15	1.21	1.32	1.00	1.63	2.11	1.37	1.98	1.75	1.51	1.33
HW Southern Trains	1.13	1.27	1.30	1.94	1.56	1.66	1.96	1.79	3.04	1.99	3.76	2.35	1.52	1.94
HY South West Trains	0.90	1.10	1.46	1.62	1.48	0.92	1.38	2.47	2.79	1.73	2.66	1.34	1.12	1.61
GA Eurostar (UK)	2.18	4.20	2.84	1.73	1.82	0.65	0.48	0.95	1.79	0.54	1.38	2.35	1.47	1.74
PF Hull Trains	0.96	0.93	1.01	2.64	1.99	1.12	1.11	1.35	1.75	1.46	2.17	2.07	1.95	1.59
PG Nexus	0.33	0.15	0.47	0.27	0.40	0.68	0.32	0.38	0.44	0.20	0.19	0.29	0.53	0.36
Total	**1.43**	**1.54**	**1.64**	**2.28**	**1.72**	**1.71**	**1.77**	**2.20**	**2.71**	**1.86**	**2.61**	**1.83**	**1.60**	**1.91**
Application freight operators														
WA English Welsh and Scottish Railway	3.59	4.19	4.29	5.30	4.74	4.74	4.27	4.66	5.08	3.97	5.31	4.41	4.06	4.51
DB Freightliner Ltd	3.98	3.87	3.69	5.68	3.83	6.57	3.82	4.25	5.92	5.40	6.18	4.70	3.50	4.71
D2 Freightliner Heavy Haul	5.13	4.97	5.63	8.67	5.50	5.75	6.32	5.94	5.67	5.44	7.84	5.45	5.72	6.00
PE GB Railfreight	2.10	3.25	2.94	3.94	3.50	4.22	3.17	3.02	4.51	4.32	4.96	2.70	3.37	3.56
XH Direct Rail Services	2.32	3.30	2.30	1.87	1.41	2.13	2.08	2.70	4.50	3.06	5.21	2.26	2.28	2.76
Total	**3.75**	**4.17**	**4.22**	**5.55**	**4.46**	**5.08**	**4.27**	**4.59**	**5.26**	**4.41**	**5.75**	**4.44**	**4.07**	**4.61**

Table 18 Delay minutes to all trains split by route and by four-weekly period – 2006/07

Route	Western	LNE	LNW	Scotland	Kent	Wessex	Sussex	Anglia	Network Total
P1	102,129	148,363	161,055	55,224	40,541	33,868	27,797	63,201	632,178
P2	111,630	156,559	187,029	51,729	41,911	40,908	28,954	60,602	679,322
P3	116,414	177,259	181,811	47,694	48,032	52,055	26,991	64,320	714,576
P4	145,482	259,309	287,278	51,465	43,020	60,834	45,833	89,928	983,149
P5	128,310	194,695	185,562	42,140	32,317	55,481	38,285	68,625	745,415
P6	130,002	186,719	200,658	45,135	33,609	36,002	40,326	88,930	761,381
P7	93,865	194,331	195,197	55,709	56,355	50,869	39,698	71,457	757,481
P8	129,657	232,174	225,831	70,554	56,155	88,753	41,590	70,664	915,378
P9	173,405	249,844	255,609	77,378	93,075	102,054	67,300	91,357	1,110,022
P10	89,702	150,087	163,401	83,939	34,419	53,467	42,573	71,622	689,210
P11	173,045	219,328	268,482	66,397	84,694	95,427	74,820	96,204	1,078,397
P12	119,146	182,919	193,331	53,728	53,171	48,982	54,567	70,554	776,398
P13	111,633	168,839	169,390	48,499	38,486	43,024	37,483	70,955	688,309
Year total	1,624,420	2,520,426	2,674,634	749,591	655,785	761,724	566,217	978,419	10,531,216

Note:
P1 Saturday 01 April 2006 − Saturday 29 April 2006
P2 Sunday 30 April 2006 − Saturday 27 May 2006
P3 Sunday 28 May – Saturday 24 June 2006
P4 Sunday 25 June – Saturday 22 July 2006
P5 Sunday 23 July – Saturday 19 August 2006
P6 Sunday 20 August – Saturday 16 September 2006
P7 Sunday 17 September – Saturday 14 October 2006
P8 Sunday 15 October – Sunday 11 November 2006
P9 Sunday 12 November 2006 – Saturday 09 December 2006
P10 Sunday 10 December 2006 – Saturday 06 January 2007
P11 Sunday 07 January – Saturday 03 February 2007
P12 Sunday 04 February – Saturday 03 March 2007
P13 Sunday 04 March − Monday 31 March 2007

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 passenger and freight trains by summarised category groups – trends

Category group[1]	2002/03 Total delay minutes	2003/04 Total delay minutes	2004/05 Total delay minutes	2005/06 Total delay minutes	2006/07 Total delay minutes
Track defects and TSRs[2]	2,514,840	2,128,394	1,399,184	1,505,947	1,281,003
Other asset defects[3]	4,656,471	4,510,007	3,667,027	3,388,263	3,344,609
Network management/other[4]	4,041,872	3,884,869	3,601,440	3,124,193	2,844,547
Autumn leaf fall and adhesion[5]	529,550	469,113	287,282	313,941	231,860
Severe weather/structures[6]	1,042,184	737,445	796,378	458,122	1,002,044
External factors[7]	1,881,478	1,943,899	1,617,636	1,633,065	1,787,843
Total minutes	14,666,395	13,673,727	11,368,947	10,423,531	10,491,906
Train km (millions)	468.47	478.30	474.35	484.25	484.38

Table 20 Network delays to passenger and freight trains by summarised category groups – trends

Category group[1]	2002/03 Delay minutes	2003/04 Delay minutes per 100 train km	2004/05 Delay minutes per 100 train km	2005/06 Delay minutes per 100 train km	2006/07 Delay minutes per 100 train km
Track defects and TSRs[2]	0.54	0.44	0.29	0.31	0.26
Other asset defects[3]	0.99	0.94	0.77	0.70	0.69
Network management/other[4]	0.86	0.81	0.76	0.65	0.59
Autumn leaf fall and adhesion[5]	0.11	0.10	0.06	0.06	0.05
Severe weather/structures[6]	0.22	0.15	0.17	0.09	0.21
External factors[7]	0.40	0.41	0.34	0.34	0.37
Total	3.13	2.86	2.40	2.15	2.17

Notes:

1. Delay totals are based on all delays recorded for attribution of responsibility for 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 failure.
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

Overview

Performance in 2006/07 was characterised by a divergence between the improvement in asset-related and network operations delays and the deterioration in external and weather-related delays. The latter two categories accounted for 25 per cent of total Network Rail delay in 2006/07 (up from 19 per cent the previous year) and the increase in delays in these categories more than offset the improvements in asset and operations performance.

The largest improvements in Network Rail attributed delay minutes in 2006/07 (compared to 2005/06), were in 'Network management/ other' and 'Track defects and TSRs' delay (see tables 19 and 20). However, in percentage terms, autumn delays saw the largest improvement (26 per cent).

At an individual category level (see tables 21 and 22), the most significant improvements (in absolute minutes terms) were as follows:

1. TSRs due to condition of track: 218,569 minutes (39 per cent)
2. Track circuit failures: 167,174 minutes (17 per cent)
3. Train planning delays: 159,834 minutes (26 per cent)

By contrast, the largest increases in delay were in the following categories

1. External weather impact: +524,278 minutes (+157 per cent)
2. External infrastructure damage – vandalism/theft: +166,039 minutes (+49 per cent)

Detailed Results

The detailed results and key influences by category grouping were as follows:

1. Track-related delay (Track defects and TSRs) fell by 224,944 (or 15 per cent). This was almost entirely driven by the reduction in the number and severity of track TSRs. The improvement in overall delay minutes was approximately evenly split between LNE and LNW Routes. However, Scotland experienced the largest percentage improvement (43 per cent), although this was a less significant contribution in overall minute terms, Western experienced the largest minutes deterioration (+26,466 minutes).
2. Points, track-circuits, other signalling and power supplies etc ('Other asset defects') fell by 43,654 minutes (1 per cent). Within this group, improvements included:
   a) a substantial reduction in track circuit failure delays (167,174 minutes), with improvements on all Routes except LNW, and
   b) modest improvements in delays due to signal failures, points failures, level crossings and telephone failures (combined improvement of 72,959 minutes).

   These were largely offset by a deterioration in:
   a) Overhead line/ third rail faults: + 92,250 minutes (+38 per cent), due to a large increase on Anglia Route, and moderate increases on LNE, LNW and Kent.
   b) Signalling system & power supply failures: +65,660 minutes (+18 per cent), with significant increases on both LNE and LNW Routes.
   c) Other categories (including cable faults, other signal equipment failures): and animals on the line): + 38,569 minutes.
3. Network management / other delays fell by 279,646 minutes (9 per cent). Within this group, improvements included:
   a) Train planning delays reduced by 159,834 minutes (26 per cent)
   b) Unexplained, disputes take-back and other commercial reduced by 99,837 minutes (11 per cent)
   c) Other infrastructure categories including possessions management and a range of other miscellaneous infrastructure cause delays reduced by 13,677 minutes (2 per cent)
   d) Operations causes (including train signalling and control) down by 6,298 minutes (1 per cent).
4. Autumn leaf fall and adhesion delays fell by 82,081 minutes (26 per cent). This includes a number of categories of delay including 'Wheel slip due to leaf fall', 'Network Rail share of industry leaf fall/ adhesion delays', and 'Track circuit failures – leaf fall' which all showed improvements in delay.
5. 'Severe weather/ structures'. This category saw an increase in delays of 543,922 minutes, which was primarily due to severe weather. This included:
   a) extreme heat and flooding in summer with periods 4 – 5 accounting for some 175,000 minutes
   b) late autumn weather with Period 9 accounting for around 80,000 minutes
   c) January gales which resulted in severe weather delays of some 315,000 minutes in period 11.
6. 'External factors' delays rose by 154,778. This increase was entirely attributable to the increase on LNE Route of 174,043 minutes in 'External infrastructure damage – vandalism/ theft' which has been dominated by the dramatic rise in cable thefts. Delays due to

security alerts were 38,039 minutes lower compared to the previous year which was affected by the July 2005 bombings. Other categories combined were broadly unchanged.

Table 21 National delays to passenger and freight trains by detailed cause category 2006/07 (delay minutes)

No	Category		Passenger trains delay per 100 train km		Freight trains delay per 100 train km		Combined total delay per 100 train km
101	Points failures	653,335	0.15	175,981	0.39	829,316	0.17
102	Problems with trackside signs, TSR boards	35,727	0.01	5,946	0.01	41,673	0.01
103	Level crossing failures	100,373	0.02	15,444	0.03	115,817	0.02
104A	TSRs due to condition of track	172,352	0.04	175,290	0.39	347,642	0.07
104B	Track faults (including broken rails)	730,733	0.17	193,375	0.43	924,108	0.19
104C	Rolling contact fatigue	6,582	0.00	2,671	0.01	9,253	0.00
105	Lineside structure defects (inc. weather impact)	97,756	0.02	46,792	0.10	144,548	0.03
106	Other infrastructure	280,621	0.06	59,958	0.13	340,579	0.07
107A	Possession over-run and related faults	212,648	0.05	69,797	0.15	282,445	0.06
107B	Possession work left incomplete	72,343	0.02	12,916	0.03	85,259	0.02
108	Mishap – infrastructure causes	68,045	0.02	18,662	0.04	86,707	0.02
109	Animals on line	130,767	0.03	21,781	0.05	152,548	0.03
110	External weather impact	729,812	0.17	127,684	0.28	857,496	0.18
111A	Wheel slip due to leaf fall	61,205	0.01	7,593	0.02	68,798	0.01
111B	Vegetation management failure	12,023	0.00	1,033	0.00	13,056	0.00
112	Fires on Network Rail infrastructure	32,196	0.01	1,317	0.00	33,513	0.01
150B	Network Rail share of industry leaf fall/adhesion delays	144,295	0.03	4,662	0.01	148,957	0.03
201	Overhead line/third rail faults	272,120	0.06	64,476	0.14	336,596	0.07
301A	Signal failures	301,763	0.07	43,551	0.10	345,314	0.07
301B	Track circuit failures	716,702	0.16	101,659	0.22	818,361	0.17
302A	Signalling system and power supply failures	348,674	0.08	85,521	0.19	434,195	0.09
302B	Other signal equipment failures	63,326	0.01	14,069	0.03	77,395	0.02
303	Telephone failures	38,904	0.01	6,167	0.01	45,071	0.01
304	Cable faults (signalling and telecoms)	130,739	0.03	44,741	0.10	175,480	0.04
304A	Change of aspects – no fault found	12,331	0.00	2,185	0.00	14,516	0.00
305	Track circuit failures – leaf fall	11,506	0.00	2,599	0.01	14,105	0.00
401	Bridge strikes	227,510	0.05	28,243	0.06	255,753	0.05
402	External infrastructure damage – vandalism/theft	341,481	0.08	162,991	0.36	504,472	0.10
403	External level crossing/road incidents (not bridges)	71,373	0.02	9,484	0.02	80,857	0.02
501	Network Rail operations responsibility	589,108	0.13	120,937	0.27	710,045	0.15
502A	Train planning	284,954	0.06	167,443	0.37	452,397	0.09
502B	Network Rail commercial: other	13,161	0.00	1,899	0.00	15,060	0.00
502C	Network Rail commercial: dispute take-back	375,049	0.09	123,678	0.27	498,727	0.10
503	External fatalities and trespass	530,564	0.12	80,326	0.18	610,890	0.13
504	External police on line/security alerts	27,974	0.01	17,447	0.04	45,421	0.01
505	External fires	79,321	0.02	8,850	0.02	88,171	0.02
506	External other	140,579	0.03	28,187	0.06	168,766	0.03
601	Unexplained	285,749	0.07	32,850	0.07	318,599	0.07
	Total minutes	**8,403,701**	**1.91**	**2,088,205**	**4.61**	**10,491,906**	**2.17**
	Train kilometres	**439,123,839**		**45,258,631**		**484,382,470**	

Table 22 National delays to passenger and freight trains by detailed cause category (delay minutes)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	1,206,543	1,065,887	882,872	834,976	829,316
102	Problems with trackside signs, TSR boards	86,155	72,769	61,106	43,132	41,673
103	Level crossing failures	168,363	142,037	134,181	126,421	115,817
104A	TSRs due to condition of track	1,085,208	809,947	530,427	566,211	347,642
104B	Track faults (including broken rails)	1,178,882	1,244,069	849,711	925,259	924,108
104C	Rolling contact fatigue	250,750	74,378	19,046	14,477	9,253
105	Lineside structure defects 332,341 (inc. weather impact)	274,968	234,619	124,904	144,548	
106	Other infrastructure	582,746	610,463	441,227	386,547	340,579
107A	Possession over-run and related faults	364,411	304,992	305,317	259,164	282,445
107B	Possession work left incomplete	94,410	117,898	95,636	90,826	85,259
108	Mishap – infrastructure causes	53,061	107,970	80,707	72,018	86,707
109	Animals on line	153,377	162,510	148,178	141,102	152,548
110	External weather impact	709,843	462,477	561,759	333,218	857,496
111A	Wheel slip due to leaf fall	113,069	124,301	87,761	96,945	68,798
111B	Vegetation management failure	18,966	12,542	18,734	11,709	13,056
112	Fires on Network Rail infrastructure	60,911	81,642	45,887	41,766	33,513
150	Network Rail share of industry leaf fall/adhesion delays	306,079	305,232	178,960	195,089	148,957
201	Overhead line/third rail faults	350,894	395,062	292,970	244,346	336,596
301A	Signal failures	509,725	510,991	434,036	390,671	345,314
301B	Track circuit failures	1,418,682	1,269,960	1,058,772	985,535	818,361
302A	Signalling system and power supply failures	482,853	572,099	410,155	368,535	434,195
302B	Other signal equipment failures	133,160	130,046	106,218	72,289	77,395
303	Telephone failures	44,014	48,806	42,513	56,409	45,071
304	Cable faults (signalling and telecoms)	146,318	193,616	141,302	155,919	175,480
304A	Change of aspects – no fault found	42,542	18,993	15,830	12,060	14,516
305	Track circuit failures – leaf fall	110,402	39,580	20,561	21,907	14,105
401	Bridge strikes	357,427	335,176	324,015	245,463	255,753
402	External infrastructure damage − vandalism/theft	369,946	341,241	319,781	338,433	504,472
403	External level crossing/road incidents (not bridges)	121,076	123,666	92,057	89,014	80,857
501	Network Rail operations responsibility	996,320	963,008	826,272	716,343	710,045
502A	Train planning	574,950	496,376	646,738	612,231	452,397
502B	Network Rail commercial: other	31,743	22,965	13,074	8,554	15,060
502C	Network Rail commercial: dispute take-back	859,141	756,976	741,959	588,167	498,727
503	External fatalities and trespass	605,212	611,448	554,319	641,675	610,890
504	External police on line/security alerts	38,473	50,776	42,452	83,460	45,421
505	External fires	111,896	124,129	56,553	69,421	88,171
506	External other	216,537	275,821	182,572	123,833	168,766
601	Unexplained	379,969	418,910	370,670	335,502	318,599
	Total minutes	**14,666,395**	**13,673,727**	**11,368,947**	**10,423,531**	**10,491,906**
	Train kilometres	**468,468,498**	**478,301,163**	**474,348,482**	**484,252,823**	**484,382,470**

Table 23 National delays to passenger and freight trains by detailed cause category (delay minutes per 100 train km)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	0.26	0.22	0.19	0.17	0.17
102	Problems with trackside signs, TSR boards	0.02	0.02	0.01	0.01	0.01
103	Level crossing failures	0.04	0.03	0.03	0.03	0.02
104A	TSRs due to condition of track	0.23	0.17	0.11	0.12	0.07
104B	Track faults (including broken rails)	0.25	0.26	0.18	0.19	0.19
104C	Rolling contact fatigue	0.05	0.02	0.00	0.00	0.00
105	Lineside structure defects (inc. weather impact)	0.07	0.06	0.05	0.03	0.03
106	Other infrastructure	0.12	0.13	0.09	0.08	0.07
107A	Possession over-run and related faults	0.08	0.06	0.06	0.05	0.06
107B	Possession work left incomplete	0.02	0.02	0.02	0.02	0.02
108	Mishap–infrastructure causes	0.01	0.02	0.02	0.01	0.02
109	Animals on line	0.03	0.03	0.03	0.03	0.03
110	External weather impact	0.15	0.10	0.12	0.07	0.18
111A	Wheel slip due to leaf fall	0.02	0.03	0.02	0.02	0.01
111B	Vegetation management failure	0.00	0.00	0.00	0.00	0.00
112	Fires on Network Rail infrastructure	0.01	0.02	0.01	0.01	0.01
150	Network Rail share of industry leaf fall/ adhesion delays	0.07	0.06	0.04	0.04	0.03
201	Overhead line/third rail faults	0.07	0.08	0.06	0.05	0.07
301A	Signal failures	0.11	0.11	0.09	0.08	0.07
301B	Track circuit failures	0.30	0.27	0.22	0.20	0.17
302A	Signalling system and power supply failures	0.10	0.12	0.09	0.08	0.09
302B	Other signal equipment failures	0.03	0.03	0.02	0.01	0.02
303	Telephone failures	0.01	0.01	0.01	0.01	0.01
304	Cable faults (signalling and telecoms)	0.03	0.04	0.03	0.03	0.04
304A	Change of aspects – no fault found	0.01	0.00	0.00	0.00	0.00
305	Track circuit failures – leaf fall	0.02	0.01	0.00	0.00	0.00
401	Bridge strikes	0.08	0.07	0.07	0.05	0.05
402	External infrastructure damage –vandalism/theft	0.08	0.07	0.07	0.07	0.10
403	External level crossing/road incidents (not bridges)	0.03	0.03	0.02	0.02	0.02
501	Network Rail operations responsibility	0.21	0.20	0.17	0.15	0.15
502A	Train planning	0.12	0.10	0.14	0.13	0.09
502B	Network Rail commercial: other	0.01	0.00	0.00	0.00	0.00
502C	Network Rail commercial : dispute take-back	0.18	0.16	0.16	0.12	0.10
503	External fatalities and trespass	0.13	0.13	0.12	0.13	0.13
504	External police on line/security alerts	0.01	0.01	0.01	0.02	0.01
505	External fires	0.02	0.03	0.01	0.01	0.02
506	External other	0.05	0.06	0.04	0.03	0.03
601	Unexplained	0.08	0.09	0.08	0.07	0.07
	Total	**3.13**	**2.86**	**2.40**	**2.15**	**2.17**

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 was highest on London North Western (LNW) (2.44 minutes per 100 train km) and lowest on Scotland (1.57 minutes per 100 track km);
- other routes were within two relatively narrow ranges:
  1. LNE, Anglia and Western were in the range 2.20 – 2.33 minutes and
  2. Kent, Sussex and Wessex were in the range 1.79 – 2.01 minutes;
- the impact of track delays was relatively severe on London North Eastern and moderately severe on the London North Western, Western and Anglia routes relative to train kilometres run;
- due to cable thefts, London North Eastern was the Route with the highest share of external caused delay (at 23 per cent of total delays). This compares with a national average of 17 per cent. Scotland route has the lowest share (11 per cent);
- Anglia experienced the highest share of overhead line/third rail delays (10 per cent of route delays), compared to a national average of 3 per cent. These differences partly reflect the nature of infrastructure on these routes (i.e. Western has only minimal electrified routes and thus virtually no delays in this category).

Table 24 Western delays to passenger and freight trains by detailed cause 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	103,007	28,381	131,388	0.19
102	Problems with trackside signs, TSR boards	6,875	664.00	7,539	0.01
103	Level crossing failures	14,235	2,146.00	16,381	0.02
104A	TSRs due to condition of track	25,682	6,840.00	32,522	0.05
104B	Track faults (including broken rails)	135,669	27,308.00	162,977	0.23
104C	Rolling contact fatigue	309	175.00	484	0.00
105	Lineside structure defects (inc. weather impact)	20,383	4,274.00	24,657	0.04
106	Other infrastructure	37,848	8,498.00	46,346	0.07
107A	Possession over-run and related faults	27,849	8,126.00	35,975	0.05
107B	Possession work left incomplete	3,968	974.00	4,942	0.01
108	Mishap – infrastructure causes	6,341	2,956.00	9,297	0.01
109	Animals on line	32,906	4,456.00	37,362	0.05
110	External weather impact	141,720	29,858.00	171,578	0.25
111A	Wheel slip due to leaf fall	6,494	636.00	7,130	0.01
111B	Vegetation management failure	3,247	208.00	3,455	0.00
112	Fires on Network Rail infrastructure	1,160	100.00	1,260	0.00
150	Network Rail share of industry leaf fall/adhesion delays	10,377	403.00	10,780	0.02
201	Overhead line/third rail faults	6,285	438.00	6,723	0.01
301A	Signal failures	37,475	7,034.00	44,509	0.06
301B	Track circuit failures	101,046	20,122.00	121,168	0.17
302A	Signalling system and power supply failures	48,148	10,748.00	58,896	0.08
302B	Other signal equipment failures	16,939	2,340.00	19,279	0.03
303	Telephone failures	12,440	1,423.00	13,863	0.02
304	Cable faults (signalling and telecoms)	36,791	13,206.00	49,997	0.07
304A	Change of aspects – no fault found	2,680	628.00	3,308	0.00
305	Track circuit failures – leaf fall	0	–	0	–
401	Bridge strikes	50,023	7,175.00	57,198	0.08
402	External infrastructure damage – vandalism/theft	39,837	6,543.00	46,380	0.07
403	External level crossing/road incidents (not bridges)	10,065	1,605.00	11,670	0.02
501	Network Rail operations responsibility	76,233	16,640.00	92,873	0.13
502A	Train planning	75,234	34,131.00	109,365	0.16
502B	Network Rail commercial: other	133	117.00	250	0.00
502C	Network Rail commercial: dispute take-back	59,325	33,018.00	92,343	0.13
503	External fatalities and trespass	111,731	16,883.00	128,614	0.18
504	External police on line/security alerts	6,907	893.00	7,800	0.01
505	External fires	8,740	2,211.00	10,951	0.02
506	External other	19,299	2,215.00	21,514	0.03
601	Unexplained	16,643	2,834.00	19,477	0.03
	Total	**1,314,044**	**306,207**	**1,620,251**	**2.33**
	Train kilometres			**69,585,205**	

Table 25 London North Eastern delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	81,524	39,946	121,470	0.11
102	Problems with trackside signs, TSR boards	9,491	2,354.00	11,845	0.01
103	Level crossing failures	27,088	7,920.00	35,008	0.03
104A	TSRs due to condition of track	91,863	127,931.00	219,794	0.20
104B	Track faults (including broken rails)	166,880	86,787.00	253,667	0.23
104C	Rolling contact fatigue	0	11.00	11	0.00
105	Lineside structure defects (inc. weather impact)	17,487	30,809.00	48,296	0.04
106	Other infrastructure	37,735	15,599.00	53,334	0.05
107A	Possession over-run and related faults	31,754	20,037.00	51,791	0.05
107B	Possession work left incomplete	10,243	3,763.00	14,006	0.01
108	Mishap – infrastructure causes	45,997	13,501.00	59,498	0.05
109	Animals on line	25,656	7,147.00	32,803	0.03
110	External weather impact	124,931	33,894.00	158,825	0.15
111A	Wheel slip due to leaf fall	10,453	3,005.00	13,458	0.01
111B	Vegetation management failure	1,461	472.00	1,933	0.00
112	Fires on Network Rail infrastructure	1,353	128.00	1,481	0.00
150	Network Rail share of industry leaf fall /adhesion delays	31,226	1,107.00	32,333	0.03
201	Overhead line/third rail faults	66,995	10,947.00	77,942	0.07
301A	Signal failures	40,513	9,204.00	49,717	0.05
301B	Track circuit failures	52,075	14,340.00	66,415	0.06
302A	Signalling system and power supply failures	79,672	35,837.00	115,509	0.11
302B	Other signal equipment failures	11,944	4,614.00	16,558	0.02
303	Telephone failures	9,134	3,208.00	12,342	0.01
304	Cable faults (signalling and telecoms)	37,098	17,170.00	54,268	0.05
304A	Change of aspects – no fault found	1,582	298.00	1,880	0.00
305	Track circuit failures – leaf fall	8,509	2,440.00	10,949	0.01
401	Bridge strikes	49,726	6,422.00	56,148	0.05
402	External infrastructure damage – vandalism/theft	132,876	125,177.00	258,053	0.24
403	External level crossing/road incidents (not bridges)	27,670	5,050.00	32,720	0.03
501	Network Rail operations responsibility	93,501	34,808.00	128,309	0.12
502A	Train planning	39,014	51,728.00	90,742	0.08
502B	Network Rail commercial: other	4,553	679.00	5,232	0.00
502C	Network Rail commercial: dispute take-back	77,419	40,670.00	118,089	0.11
503	External fatalities and trespass	114,664	29,045.00	143,709	0.13
504	External police on line/security alerts	6,025	788.00	6,813	0.01
505	External fires	15,988	2,989.00	18,977	0.02
506	External other	42,045	13,353.00	55,398	0.05
601	Unexplained	68,471	15,361.00	83,832	0.08
	Total	**1,694,616**	**818,539**	**2,513,155**	**2.30**
	Train kilometres			**109,146,889**	

Table 26 London North Western delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	192,758	68,091	260,849	0.24
102	Problems with trackside signs, TSR boards	10,006	1,680.00	11,686	0.01
103	Level crossing failures	16,607	1,710.00	18,317	0.02
104A	TSRs due to condition of track	46,684	38,270.00	84,954	0.08
104B	Track faults (including broken rails)	165,301	43,163.00	208,464	0.19
104C	Rolling contact fatigue	1,006	723.00	1,729	0.00
105	Lineside structure defects (inc. weather impact)	23,777	8,188.00	31,965	0.03
106	Other infrastructure	88,946	17,411.00	106,357	0.10
107A	Possession over-run and related faults	49,866	22,881.00	72,747	0.07
107B	Possession work left incomplete	19,104	2,949.00	22,053	0.02
108	Mishap – infrastructure causes	2,048	1,218.00	3,266	0.00
109	Animals on line	39,465	6,807.00	46,272	0.04
110	External weather impact	160,461	42,676.00	203,137	0.19
111A	Wheel slip due to leaf fall	14,723	2,178.00	16,901	0.02
111B	Vegetation management failure	3,047	94.00	3,141	0.00
112	Fires on Network Rail infrastructure	2,592	11.00	2,603	0.00
150	Network Rail share of industry leaf fall/ adhesion delays	33,922	1,210.00	35,132	0.03
201	Overhead line/third rail faults	63,452	25,517.00	88,969	0.08
301A	Signal failures	95,292	14,027.00	109,319	0.10
301B	Track circuit failures	262,510	41,330.00	303,840	0.28
302A	Signalling system and power supply failures	86,477	24,948.00	111,425	0.10
302B	Other signal equipment failures	16,148	5,319.00	21,467	0.02
303	Telephone failures	5,596	425.00	6,021	0.01
304	Cable faults (signalling and telecoms)	20,944	10,738.00	31,682	0.03
304A	Change of aspects – no fault found	3,067	1,020.00	4,087	0.00
305	Track circuit failures – leaf fall	0	–	0	–
401	Bridge strikes	45,495	6,916.00	52,411	0.05
402	External infrastructure damage – vandalism/theft	98,097	26,189.00	124,286	0.11
403	External level crossing/road incidents (not bridges)	7,539	532.00	8,071	0.01
501	Network Rail operations responsibility	101,530	36,412.00	137,942	0.13
502A	Train planning	60,544	33,518.00	94,062	0.09
502B	Network Rail commercial: other	4,473	161.00	4,634	0.00
502C	Network Rail commercial: dispute take-back	107,492	28,800.00	136,292	0.13
503	External fatalities and trespass	108,296	15,459.00	123,755	0.11
504	External police on line/security alerts	7,940	692.00	8,632	0.01
505	External fires	17,894	1,570.00	19,464	0.02
506	External other	25,358	2,225.00	27,583	0.03
601	Unexplained	102,224	7,606.00	109,830	0.10
	Total	**2,110,681**	**542,664**	**2,653,345**	**2.44**
	Train kilometres			**108,964,562**	

Table 27 Scotland delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	65,342	17,996	83,338	0.18
102	Problems with trackside signs, TSR boards	2,303	494.00	2,797	0.01
103	Level crossing failures	7,576	1,186.00	8,762	0.02
104A	TSRs due to condition of track	3,296	1,701.00	4,997	0.01
104B	Track faults (including broken rails)	32,308	10,597.00	42,905	0.09
104C	Rolling contact fatigue	322	129.00	451	0.00
105	Lineside structure defects (inc. weather impact)	6,159	1,761.00	7,920	0.02
106	Other infrastructure	15,221	3,981.00	19,202	0.04
107A	Possession over-run and related faults	7,364	3,208.00	10,572	0.02
107B	Possession work left incomplete	4,427	1,480.00	5,907	0.01
108	Mishap – infrastructure causes	853	419.00	1,272	0.00
109	Animals on line	11,077	2,459.00	13,536	0.03
110	External weather impact	58,977	7,917.00	66,894	0.14
111A	Wheel slip due to leaf fall	2,933	442.00	3,375	0.01
111B	Vegetation management failure	1,148	59.00	1,207	0.00
112	Fires on Network Rail infrastructure	0	–	0	–
150	Network Rail share of industry leaf fall/adhesion delays	10,969	860.00	11,829	0.02
201	Overhead line/third rail faults	6,523	2,966.00	9,489	0.02
301A	Signal failures	39,332	6,423.00	45,755	0.10
301B	Track circuit failures	60,753	9,699.00	70,452	0.15
302A	Signalling system and power supply failures	22,761	5,232.00	27,993	0.06
302B	Other signal equipment failures	5,791	349.00	6,140	0.01
303	Telephone failures	2,571	496.00	3,067	0.01
304	Cable faults (signalling and telecoms)	6,957	1,988.00	8,945	0.02
304A	Change of aspects – no fault found	216	24.00	240	0.00
305	Track circuit failures – leaf fall	0	–	0	–
401	Bridge strikes	10,654	2,947.00	13,601	0.03
402	External infrastructure damage – vandalism/theft	13,516	1,910.00	15,426	0.03
403	External level crossing/road incidents (not bridges)	2,318	418.00	2,736	0.01
501	Network Rail operations responsibility	38,128	8,036.00	46,164	0.10
502A	Train planning	33,752	15,820.00	49,572	0.10
502B	Network Rail commercial: other	2,824	535.00	3,359	0.01
502C	Network Rail commercial: dispute take-back	38,551	8,299.00	46,850	0.10
503	External fatalities and trespass	22,839	4,360.00	27,199	0.06
504	External police on line/security alerts	1,337	115.00	1,452	0.00
505	External fires	5,151	551.00	5,702	0.01
506	External other	9,687	6,673.00	16,360	0.03
601	Unexplained	57,791	4,821.00	62,612	0.13
	Total		**611,727**	**136,351**	**748,078**
	Train kilometres			**47,580,081**	

Table 28 Kent delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	46,251	1,644	47,895	0.15
102	Problems with trackside signs, TSR boards	460	78.00	538	0.00
103	Level crossing failures	3,628	206.00	3,834	0.01
104A	TSRs due to condition of track	0	–	0	–
104B	Track faults (including broken rails)	41,061	1,962.00	43,023	0.13
104C	Rolling contact fatigue	186	94.00	280	0.00
105	Lineside structure defects (inc. weather impact)	3,359	102.00	3,461	0.01
106	Other infrastructure	14,817	1,262.00	16,079	0.05
107A	Possession over-run and related faults	15,026	1,328.00	16,354	0.05
107B	Possession work left incomplete	13,119	1,404.00	14,523	0.04
108	Mishap – infrastructure causes	4,674	490.00	5,164	0.02
109	Animals on line	5,993	123.00	6,116	0.02
110	External weather impact	60,337	1,081.00	61,418	0.19
111A	Wheel slip due to leaf fall	8,240	372.00	8,612	0.03
111B	Vegetation management failure	691	22.00	713	0.00
112	Fires on Network Rail infrastructure	4,945	128.00	5,073	0.02
150	Network Rail share of industry leaf fall/adhesion delays	29,780	332.00	30,112	0.09
201	Overhead line/third rail faults	24,531	1,053.00	25,584	0.08
301A	Signal failures	20,545	1,035.00	21,580	0.07
301B	Track circuit failures	58,041	2,672.00	60,713	0.19
302A	Signalling system and power supply failures	34,932	1,383.00	36,315	0.11
302B	Other signal equipment failures	3,138	390.00	3,528	0.01
303	Telephone failures	1,379	28.00	1,407	0.00
304	Cable faults (signalling and telecoms)	6,212	587.00	6,799	0.02
304A	Change of aspects – no fault found	547	12.00	559	0.00
305	Track circuit failures – leaf fall	0	–	0	–
305	Track circuit failures – leaf fall	0	–	0	–
401	Bridge strikes	20,991	793.00	21,784	0.07
402	External infrastructure damage – vandalism/theft	17,782	402.00	18,184	0.06
403	External level crossing/road incidents (not bridges)	2,260	329.00	2,589	0.01
501	Network Rail operations responsibility	77,840	3,485.00	81,325	0.25
502A	Train planning	13,332	5,277.00	18,609	0.06
502B	Network Rail commercial: other	189	–	189	0.00
502C	Network Rail commercial: dispute take-back	27,011	1,683.00	28,694	0.09
503	External fatalities and trespass	28,761	1,917.00	30,678	0.09
504	External police on line/security alerts	288	38.00	326	0.00
505	External fires	7,945	893.00	8,838	0.03
506	External other	16,818	535.00	17,353	0.05
601	Unexplained	5,545	94.00	5,639	0.02
	Total	**620,654**	**33,234**	**653,888**	**2.01**
	Train kilometres			**32,521,143**	

Table 29 Wessex delays to passenger and freight trains by detailed cause 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	52,355	6,071	58,426	0.14
102	Problems with trackside signs, TSR boards	1,548	269.00	1,817	0.00
103	Level crossing failures	10,566	660.00	11,226	0.03
104A	TSRs due to condition of track	0	–	0	–
104B	Track faults (including broken rails)	69,569	8,940.00	78,509	0.18
104C	Rolling contact fatigue	4,550	1,507.00	6,057	0.01
105	Lineside structure defects (inc. weather impact)	2,353	45.00	2,398	0.01
106	Other infrastructure	25,903	4,299.00	30,202	0.07
107A	Possession over-run and related faults	53,811	8,280.00	62,091	0.15
107B	Possession work left incomplete	1,902	282.00	2,184	0.01
108	Mishap – infrastructure causes	3,955	48.00	4,003	0.01
109	Animals on line	4,278	372.00	4,650	0.01
110	External weather impact	67,804	4,347.00	72,151	0.17
111A	Wheel slip due to leaf fall	6,631	237.00	6,868	0.02
111B	Vegetation management failure	1,547	97.00	1,644	0.00
112	Fires on Network Rail infrastructure	9,287	319.00	9,606	0.02
150	Network Rail share of industry leaf fall/adhesion delays	10,710	147.00	10,857	0.03
201	Overhead line/third rail faults	12,854	678.00	13,532	0.03
301A	Signal failures	30,621	2,431.00	33,052	0.08
301B	Track circuit failures	93,403	6,128.00	99,531	0.23
302A	Signalling system and power supply failures	22,867	1,561.00	24,428	0.06
302B	Other signal equipment failures	1,778	86.00	1,864	0.00
303	Telephone failures	1,793	210.00	2,003	0.00
304	Cable faults (signalling and telecoms)	12,053	811.00	12,864	0.03
304A	Change of aspects – no fault found	189	–	189	0.00
305	Track circuit failures – leaf fall	266	3.00	269	0.00
401	Bridge strikes	17,839	1,359.00	19,198	0.05
402	External infrastructure damage – vandalism/theft	13,533	1,125.00	14,658	0.03
403	External level crossing/road incidents (not bridges)	6,805	266.00	7,071	0.02
501	Network Rail operations responsibility	52,731	5,055.00	57,786	0.14
502A	Train planning	24,174	6,096.00	30,270	0.07
502B	Network Rail commercial: other	580	387.00	967	0.00
502C	Network Rail commercial: dispute take-back	18,410	4,040.00	22,450	0.05
503	External fatalities and trespass	34,194	2,789.00	36,983	0.09
504	External police on line/security alerts	128	–	128	0.00
505	External fires	7,011	89.00	7,100	0.02
506	External other	11,590	777.00	12,367	0.03
601	Unexplained	905	285.00	1,190	0.00
	Total	**690,493**	**70,096**	**760,589**	**1.79**
	Train kilometres			**42,594,517**	

Table 30 Sussex delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	35,675	615	36,290	0.12
102	Problems with trackside signs, TSR boards	133	6.00	139	0.00
103	Level crossing failures	4,888	24.00	4,912	0.02
104A	TSRs due to condition of track	0	–	0	–
104B	Track faults (including broken rails)	27,212	350.00	27,562	0.09
104C	Rolling contact fatigue	209	32.00	241	0.00
105	Lineside structure defects (inc. weather impact)	19,557	238.00	19,795	0.07
106	Other infrastructure	21,230	413.00	21,643	0.07
107A	Possession over-run and related faults	4,389	405.00	4,794	0.02
107B	Possession work left incomplete	4,564	37.00	4,601	0.02
108	Mishap – infrastructure causes	3,645	16.00	3,661	0.01
109	Animals on line	4,143	4.00	4,147	0.01
110	External weather impact	56,432	838.00	57,270	0.19
111A	Wheel slip due to leaf fall	5,493	119.00	5,612	0.02
111B	Vegetation management failure	366	–	366	0.00
112	Fires on Network Rail infrastructure	8,119	107.00	8,226	0.03
150	Network Rail share of industry leaf fall/adhesion delays	4,736	48.00	4,784	0.02
201	Overhead line/third rail faults	13,909	657.00	14,566	0.05
301A	Signal failures	9,595	265.00	9,860	0.03
301B	Track circuit failures	34,279	347.00	34,626	0.12
302A	Signalling system and power supply failures	20,811	130.00	20,941	0.07
302B	Other signal equipment failures	1,225	19.00	1,244	0.00
303	Telephone failures	755	–	755	0.00
304	Cable faults (signalling and telecoms)	8,663	59.00	8,722	0.03
304A	Change of aspects – no fault found	1,995	18.00	2,013	0.01
305	Track circuit failures – leaf fall	0	–	0	–
401	Bridge strikes	14,613	114.00	14,727	0.05
402	External infrastructure damage – vandalism/theft	11,076	155.00	11,231	0.04
403	External level crossing/road incidents (not bridges)	3,544	1.00	3,545	0.01
501	Network Rail operations responsibility	85,955	1,960.00	87,915	0.30
502A	Train planning	15,033	837.00	15,870	0.05
502B	Network Rail commercial: other	200	9.00	209	0.00
502C	Network Rail commercial: dispute take-back	33,798	584.00	34,382	0.12
503	External fatalities and trespass	55,277	392.00	55,669	0.19
504	External police on line/security alerts	811	15.00	826	0.00
505	External fires	10,446	119.00	10,565	0.04
506	External other	5,009	53.00	5,062	0.02
601	Unexplained	28,240	252.00	28,492	0.10
	Total	**556,025**	**9,238**	**565,263**	**1.92**
	Train kilometres			**29,487,844**	

Table 31 Anglia delays to passenger and freight trains by detailed cause category 2006/07

No	Category	Passenger minutes	Freight minutes	Combined minutes	Delay per 100 train km
101	Points failures	76,423	13,237	89,660	0.20
102	Problems with trackside signs, TSR boards	4,911	401.00	5,312	0.01
103	Level crossing failures	15,785	1,592.00	17,377	0.04
104A	TSRs due to condition of track	4,827	548.00	5,375	0.01
104B	Track faults (including broken rails)	92,733	14,268.00	107,001	0.24
104C	Rolling contact fatigue	0	–	0	–
105	Lineside structure defects (inc. weather impact)	4,681	1,375.00	6,056	0.01
106	Other infrastructure	38,921	8,495.00	47,416	0.11
107A	Possession over-run and related faults	22,589	5,532.00	28,121	0.06
107B	Possession work left incomplete	15,016	2,027.00	17,043	0.04
108	Mishap – infrastructure causes	532	14.00	546	0.00
109	Animals on line	7,249	413.00	7,662	0.02
110	External weather impact	59,150	7,073.00	66,223	0.15
111A	Wheel slip due to leaf fall	6,238	604.00	6,842	0.02
111B	Vegetation management failure	516	81.00	597	0.00
112	Fires on Network Rail infrastructure	4,740	524.00	5,264	0.01
150	Network Rail share of industry leaf fall/adhesion delays	12,575	555.00	13,130	0.03
201	Overhead line/third rail faults	77,571	22,220.00	99,791	0.22
301A	Signal failures	28,390	3,132.00	31,522	0.07
301B	Track circuit failures	54,595	7,021.00	61,616	0.14
302A	Signalling system and power supply failures	33,006	5,682.00	38,688	0.09
302B	Other signal equipment failures	6,363	952.00	7,315	0.02
303	Telephone failures	5,236	377.00	5,613	0.01
304	Cable faults (signalling and telecoms)	2,021	182.00	2,203	0.00
304A	Change of aspects – no fault found	2,055	185.00	2,240	0.01
305	Track circuit failures – leaf fall	2,731	156.00	2,887	0.01
401	Bridge strikes	18,169	2,517.00	20,686	0.05
402	External infrastructure damage – vandalism/theft	14,764	1,490.00	16,254	0.04
403	External level crossing/road incidents (not bridges)	11,172	1,283.00	12,455	0.03
501	Network Rail operations responsibility	63,190	14,541.00	77,731	0.17
502A	Train planning	23,871	20,036.00	43,907	0.10
502B	Network Rail commercial: other	209	11.00	220	0.00
502C	Network Rail commercial: dispute take-back	13,043	6,584.00	19,627	0.04
503	External fatalities and trespass	54,802	9,481.00	64,283	0.14
504	External police on line/security alerts	4,538	14,906.00	19,444	0.04
505	External fires	6,146	428.00	6,574	0.01
506	External other	10,773	2,356.00	13,129	0.03
601	Unexplained	5,930	1,597.00	7,527	0.02
	Total	**805,461**	**171,876**	**977,337**	**2.20**
	Train kilometres		**44,502,229**		

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.

Commentary

Total infrastructure incidents increased by 3 per cent in 2006/07 and reversed the improvement seen the previous year. Within this total there were significant divergences for individual categories.

After three years of improvements, points failures were up by 4 per cent. By contrast signal failures and track circuit failures continued to improve, falling by 9 per cent and 7 per cent respectively,

Both signalling system and power supply failures and cable faults rose sharply to the highest level seen in the last five years.

The number of track related incidents (categories 104a – c) increased by 9 per cent. A 22 per cent increase in the number of incidents for 'track faults (including broken rails)', was partly offset by a reduction of 21 per cent in the recorded incidents for TSRs due to condition of track.

Network-wide totals

Table 32 Network Infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	10,844	9,802	8,769	8,717	9,079
103	Level crossing failures	3,050	2,794	2,725	2,657	2,365
104A	TSR's due to condition of track	4,078	3,860	3,134	2,800	2,201
104B	Track faults (including broken rails)	6,545	7,450	5,778	6,293	7,681
104C	Gauge corner cracking	640	219	98	71	91
105	Lineside structure defects (including weather impact)	1,067	1,090	840	611	695
106	Other infrastructure	7,027	8,219	7,951	7,960	8,556
108	Mishap - infrastructure causes	203	308	379	468	741
112	Fires starting on Network Rail infrastructure	424	513	282	314	285
201	Overhead line/third rail faults	1,547	1,475	1,616	1,493	1,706
301A	Signal failures	9,160	9,119	8,301	8,141	7,369
301B	Track circuit failures	10,668	9,935	9,232	8,568	7,964
302A	Signalling system and power supply failures	3,494	3,719	3,449	3,272	3,998
302B	Other signal equipment failures	2,591	2,653	2,354	1,735	1,706
303	Telephone failures	1,008	994	1,060	1,067	1,220
304	Cable faults (signalling & comms)	423	535	445	470	628
304A	Change of aspects-no fault found	534	342	274	231	242
401	Bridge strikes	1,912	2,009	1,889	1,593	1,688
	Total above	**65,215**	**65,036**	**58,576**	**56,461**	**58,215**

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 number of bridge strike incidents created for attribution purposes historically tended 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 now been essentially eliminated and this overstatement is estimated at 1 per cent for 2006/07 compared to 15 per cent in 2002/03. The underlying increase in bridge strike incident numbers in 2006/07 was 8 per cent rather than 6 per cent as implied from the figures shown in the table.

The impact in this increase in track fault incidents was also mitigated by a reduction in the average delay minutes per incident to give no change in overall delay minutes. This category includes broken rails (the numbers of which fell), other track faults and precautionary ESRs (Emergency Speed Restrictions).

The number of traction power supply incidents (overhead line/third rail faults) rose by 14 per cent, more than reversing the improvement seen the previous year. The increase for Anglia (+44 per cent) accounted for the majority of the overall increase.

The number of level crossing incidents fell once again this year by 11 per cent.

The underlying number of bridge strike incidents causing delay rose by 8 per cent. The underlying number of incidents was nevertheless in line with the average of the previous 3 years.

Operating routes

Table 33 Western infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	1,530	1,513	1,344	1,316	1,219
103	Level crossing failures	378	362	401	411	307
104A	TSR's due to condition of track	519	433	233	235	389
104B	Track faults (including broken rails)	1,049	982	662	828	1,101
104C	Gauge corner cracking	25	28	17	6	11
105	Lineside structure defects (including weather impact)	108	189	79	112	132
106	Other infrastructure	487	667	704	927	995
108	Mishap – infrastructure causes	49	43	44	39	28
112	Fires starting on Network Rail infrastructure	12	6	5	8	7
201	Overhead line/Third rail faults	15	9	7	11	16
301A	Signal failures	946	876	876	940	752
301B	Track circuit failures	1,337	1,280	1,100	1,090	952
302A	Signalling system and power supply failures	344	440	344	357	518
302B	Other signal equipment failures	462	533	404	316	383
303	Telephone failures	172	184	238	235	305
304	Cable faults (signalling & comms)	36	65	60	56	79
304A	Change of aspects – no fault found	50	52	42	5	43
401	Bridge strikes	304	305	319	282	290
	Total above	**7,823**	**7,967**	**6,879**	**7,174**	**7,527**

Table 34 London North Eastern infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	2,376	2,037	1,697	1,741	1,579
103	Level crossing failures	1,146	899	824	839	807
104A	TSR's due to condition of track	1,950	2,118	1,526	1,354	1,138
104B	Track faults (including broken rails)	1,723	1,911	1,734	1,832	2,230
104C	Gauge corner cracking	161	86	9	7	1
105	Lineside structure defects (including weather impact)	333	403	244	202	194
106	Other infrastructure	1,996	2,400	2,753	1,962	1,880
108	Mishap – infrastructure causes	43	101	218	328	614
112	Fires starting on Network Rail infrastructure	33	50	20	24	37
201	Overhead line/third rail faults	274	342	361	324	332
301A	Signal failures	1,979	1,791	1,819	1,642	1,373
301B	Track circuit failures	2,206	1,577	1,383	1,239	905
302A	Signalling system and power supply failures	971	1,036	764	839	1,227
302B	Other signal equipment failures	802	819	671	498	405
303	Telephone failures	375	350	351	331	368
304	Cable faults (signalling & comms)	119	203	114	171	322
304A	Change of aspects – no fault found	59	47	60	44	47
401	Bridge strikes	391	388	457	343	366
	Total above	**16,937**	**16,558**	**15,005**	**13,720**	**13,825**

Table 35 London North Western infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	2,803	2,757	2,327	2,319	2,748
103	Level crossing failures	385	353	345	355	369
104A	TSR's due to condition of track	1,004	830	950	839	526
104B	Track faults (including broken rails)	1,566	1,904	1,373	1,338	1,385
104C	Gauge Corner Cracking	202	74	29	24	10
105	Lineside structure defects (including weather impact)	268	255	267	138	122
106	Other infrastructure	2,643	2,943	2,427	2,189	2,002
108	Mishap – infrastructure causes	33	63	31	32	30
112	Fires starting on Network Rail infrastructure	76	72	49	52	33
201	Overhead line/third rail faults	414	342	503	440	453
301A	Signal failures	2,473	2,501	2,157	2,199	2,103
301B	Track circuit failures	2,683	2,806	2,686	2,672	2,784
302A	Signalling system and power supply failures	782	865	911	763	856
302B	Other signal equipment failures	446	460	523	330	415
303	Telephone failures	140	112	117	108	143
304	Cable faults (signalling & comms)	158	129	112	103	62
304A	Change of aspects – no fault found	149	118	101	93	58
401	Bridge strikes	558	529	477	388	375
	Total above	**16,783**	**17,113**	**15,385**	**14,382**	**14,474**

Table 36 Scotland infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	1,116	1,048	1,071	1,066	1,261
103	Level crossing failures	237	231	276	231	176
104A	TSR's due to condition of track	194	146	110	148	63
104B	Track faults (including broken rails)	494	417	401	453	374
104C	Gauge corner cracking	159	15	15	5	6
105	Lineside structure defects (including weather impact)	218	139	176	107	38
106	Other infrastructure	333	301	244	309	314
108	Mishap – infrastructure causes	10	12	23	12	11
112	Fires starting on Network Rail infrastructure	2	0	0	1	0
201	Overhead line/third rail faults	287	199	212	167	167
301A	Signal failures	1,304	1,403	1,268	1,334	1,263
301B	Track circuit failures	1,207	1,032	1,046	991	945
302A	Signalling system and power supply failures	325	320	361	336	364
302B	Other signal equipment failures	241	300	291	237	167
303	Telephone failures	137	113	145	133	141
304	Cable faults (signalling & comms)	9	11	26	44	45
304A	Change of aspects – no fault found	30	3	4	6	9
401	Bridge strikes	141	206	146	110	139
	Total above	**6,444**	**5,896**	**5,815**	**5,690**	**5,483**

Table 37 Kent infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	712	578	605	527	498
103	Level crossing failures	119	101	110	121	89
104A	TSR's due to condition of track	1	0	0	0	0
104B	Track faults (including broken rails)	355	392	300	445	525
104C	Gauge corner cracking	25	2	14	7	9
105	Lineside structure defects (including weather impact)	37	19	20	8	28
106	Other infrastructure	253	349	313	532	584
108	Mishap – infrastructure causes	24	19	9	6	13
112	Fires starting on Network Rail infrastructure	65	85	42	59	48
201	Overhead line/third rail faults	115	76	80	57	92
301A	Signal failures	501	625	483	574	447
301B	Track circuit failures	790	787	647	590	595
302A	Signalling system and power supply failures	351	308	244	286	266
302B	Other signal equipment failures	134	149	90	87	93
303	Telephone failures	19	33	28	34	51
304	Cable faults (signalling & comms)	61	49	54	18	34
304A	Change of aspects – no fault found	58	19	21	24	12
401	Bridge strikes	174	131	128	116	137
	Total above	**3,794**	**3,722**	**3,188**	**3,491**	**3,521**

Table 38 Wessex infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	834	629	696	827	796
103	Level crossing failures	214	251	235	242	203
104A	TSR's due to condition of track	0	0	0	0	0
104B	Track faults (including broken rails)	541	816	498	574	1,152
104C	Gauge corner cracking	7	2	8	9	50
105	Lineside structure defects (including weather impact)	46	28	15	6	40
106	Other infrastructure	679	895	640	785	1,172
108	Mishap – infrastructure causes	22	35	15	5	18
112	Fires starting on Network Rail infrastructure	131	183	93	68	71
201	Overhead line/third rail faults	69	90	102	93	104
301A	Signal failures	607	641	658	539	632
301B	Track circuit failures	1,034	1,054	1,176	928	888
302A	Signalling system and power supply failures	196	233	282	222	192
302B	Other signal equipment failures	233	198	154	107	86
303	Telephone failures	34	37	30	58	55
304	Cable faults (signalling & comms)	17	34	41	22	32
304A	Change of aspects – no fault found	87	40	11	4	3
401	Bridge strikes	161	142	120	140	161
	Total above	**4,912**	**5,308**	**4,774**	**4,629**	**5,6551**

Table 39 Sussex infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	581	512	411	299	342
103	Level crossing failures	140	161	131	111	112
104A	TSR's due to condition of track	0	1	10	2	0
104B	Track faults (including broken rails)	152	178	145	193	251
104C	Gauge corner cracking	1	0	2	10	4
105	Lineside structure defects (including weather impact)	9	13	11	1	92
106	Other infrastructure	152	178	208	375	579
108	Mishap – infrastructure causes	10	16	14	30	17
112	Fires starting on Network Rail infrastructure	83	94	64	67	52
201	Overhead line/third rail faults	59	54	57	113	128
301A	Signal failures	494	506	471	324	295
301B	Track circuit failures	490	478	397	394	325
302A	Signalling system and power supply failures	158	200	162	204	233
302B	Other signal equipment failures	133	50	80	68	53
303	Telephone failures	19	22	22	32	19
304	Cable faults (signalling & comms)	13	23	17	40	39
304A	Change of aspects – no fault found	66	15	14	13	37
401	Bridge strikes	68	175	100	74	73
	Total above	**2,628**	**2,676**	**2,316**	**2,350**	**2,651**

Table 40 Anglia infrastructure incidents recorded for delay attribution (number)

No	Category	2002/03	2003/04	2004/05	2005/06	2006/07
101	Points failures	892	728	618	622	636
103	Level crossing failures	431	436	403	347	302
104A	TSR's due to condition of track	410	332	305	222	85
104B	Track faults (including broken rails)	665	850	665	630	663
104C	Gauge corner cracking	60	12	4	3	0
105	Lineside structure defects (including weather impact)	48	44	28	37	49
106	Other infrastructure	484	486	662	881	1,030
108	Mishap – infrastructure causes	12	19	25	16	10
112	Fires starting on Network Rail infrastructure	22	23	9	35	37
201	Overhead line/third rail faults	314	363	294	288	414
301A	Signal failures	856	776	569	589	504
301B	Track circuit failures	921	921	797	664	570
302A	Signalling system and power supply failures	367	317	381	265	342
302B	Other signal equipment failures	140	144	141	92	104
303	Telephone failures	112	143	129	136	138
304	Cable faults (signalling & comms)	10	21	21	16	15
304A	Change of aspects – no fault found	35	48	21	42	33
401	Bridge strikes	115	133	142	140	147
	Total above	**5,894**	**5,796**	**5,214**	**5,025**	**5,079**

Customer satisfaction – passenger and freight operators

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 on the questionnaire is used for this measure (it is a general measure and provides an indication of advocacy for Network Rail) and asks:

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

The respondent chooses an answer from the following list, with a numerical value assigned to the response (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.

As described below, the survey is wider than the above question and has various questions and components to it so that we can better determine our customers' views. This also helps us to focus our work on areas of priority for our customers.

Results

Table 41 Customer satisfaction – passenger operators

Unit of measure	Unit of measure	2005/06	2006/07	Variance
Customer satisfaction	Index -2 to 2	-0.30	-0.14	+0.16

Table 42 Customer satisfaction – freight operators

Unit of measure	Unit of measure	2005/06	2006/07	Variance
Customer satisfaction	Index -2 to 2	-0.99	0.0	+0.99

Commentary

The survey was carried out between mid October and mid November 2006 and represents changes in customers' perceptions (based on interviews with 244 senior managers) in the six months since the last survey. Perceptions of customers' relationship with Network Rail are measured using a four point advocacy scale (+2 to -2 as above), where zero indicates a neutral view of performance.

This latest survey invested in sampling the opinions of a wider cross-section of managers than previously, concentrating the effort here rather than on the driver community.

The survey yielded substantially more detailed material than before, permitting a more specific response for Network Rail teams. In particular the availability of some 3,500 verbatim comments has prompted detailed action plans to address the issues raised. Further, results have been analysed by customer, by Network Rail route and by function, to enable a more widespread understanding than previously.

Analysis of the results indicates that the perceptions of both TOCs and FOCs have improved since the previous survey was completed. Overall perceptions for the TOC community rose from -0.30 to -0.14; this is in line with the general trend of improvements from previous surveys, but still remains negative. Freight customer perceptions had declined across the previous three surveys to -0.99, but the autumn survey saw this trend significantly reversed to reach a neutral score of 0.00.

The survey highlighted a very strong link between improvements in train service performance and customer satisfaction for passenger operators, and there is increasing evidence of strong local working relationships driving favourable opinions. The survey also illustrated that Network Rail needs to continue to increase its understanding of its customers' businesses, to be more pro-active and respond quicker. Overall, all dimensions within the survey have improved, providing the best set of scores since the survey began. However, there is an acknowledgement that much remains to be done and the present levels of satisfaction fall well short of the company's aspirations.

Two-thirds of managers sampled agreed with the view that 'Network Rail is doing its best for the rail industry'.

Since the survey was completed Network Rail has put in place a new structure to manage the relationships with customers and completed the customer service action plan (CS1) which delivered workshops and briefings to over 2,500 managers at over 180 events. The strengthening of teams managing the interface with the freight community will help further build relationships in this area. Going forward, the programme of activities encompassed within the company's 'World class' initiative will provide a widespread response to the very detailed issues raised by customers.

A new measure of overall satisfaction is being developed to provide a more meaningful overall assessment of the different dimensions of satisfaction to replace the 'advocacy' measure.

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. Suppliers are asked 'Which of these best describes how you feel about Network Rail?'

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

I would be critical of Network Rail without being asked (-2)

I would be critical of Network Rail if someone asked my opinion (-1)

I would be neutral about Network Rail if someone asked my opinion (0)

I would speak highly of Network Rail if someone asked my opinion (1)

I think so much of Network Rail 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.

Results

Table 43 Customer satisfaction – passenger operators

Unit of measure	Unit of measure	2005/06	2006/07	Variance
Customer satisfaction	Index -2 to 2	-0.06	+0.33	+0.39

Commentary

This year's survey has shown a rise in satisfaction levels amongst the supplier base and, for the first time, is on the positive side. This is a reflection of the work that has been done by Network Rail in the last year to improve its relationships with suppliers and move to relationships which are more akin to partnerships. This has included setting up 14 key accounts which have a formal management structure.

Doing business with Network Rail

Network Rail aims to respond to anyone wishing to do business with us in a timely, efficient, competent and coordinated manner. To help us achieve this aim, and to ensure that our actions are transparent, we have produced a Code of Practice which sets out what those who express a serious and credible interest in providing or funding railway services can expect from us.

The Code of Practice which can be downloaded from our website (www.networkrail.co.uk) was first approved by the ORR in June 2003. Over the past year 11 further sections of the Code of Practice have been developed. These additional sections have been created to provide prospective customers with specific information about individual business areas within Network Rail.

We recognise that providing excellent customer service must be a core day to day business activity and we believe that the Code of Practice is an important tool in improving overall customer satisfaction. During 2007/08 and in consultation with our stakeholders we will review the terms of our Code of Practice, update it and modify it as necessary.

Joint Performance Process

Introduction

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.

The objective of the JPP is to bring together, through collaborative working, 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 with sub-targets based on delay minutes split by company cause and other key inputs to PPM.

The key output is the production of an annual Joint Performance Improvement Plan (JPIP) against which monitoring and review takes place through the year – a plan, do, review cycle.

The first JPIPs for the year 2005/06 simply combined individual plans from Network Rail and operators with a broad statement of intent to develop more collaborative working. JPIPs compiled for franchised operators since that time have developed this more collaborative theme. This section highlights progress made during 2006/07.

Contractual status

Condition LA of the Network Code formally brought into use the contractual precedent for JPIPs on 27 March 2006, with franchised operators switching from a Local Output Commitment (LOC) approach to a JPP approach effective from 1 April 2006.

Process development

Following a broadly successful conclusion to the 2006/07 JPIP planning round, a thorough review of the main process was undertaken encompassing feedback from all sources both within the overall industry JPP and elsewhere e.g. stakeholder review, internal TOC review processes. Core focus for change was:

- Minimise process change.
- Clarify requirements for compliance with the final words of Condition LA and the background expectations of stakeholders.
- Minimise the need for retraining and enable focus on developing actions and behaviours.
- Seek to reduce the bureaucracy in the process and end products and modestly refocus the balance between local plan ownership and a national consistency and overview.

Outputs

The product of JPP development in 2006/07 has been:

- Delivery of PPM in excess of the plan for the year (88.1 per cent against plan of 87.6 per cent).
- Delivery of PPM in excess of expectations set using delay minute correlations highlighting delivery of non-traditional performance

improvement (timetable adjustments, process management etc.).
- Consolidating our performance improvement ambition; the performance improvement planned in 2007/08 has not been reduced to allow for the out-performance of PPM delivery in 2006/07.
- Increased high level and stakeholder engagement in the JPIP planning part of the process.
- Significantly increased focus on action planning during JPIP development work.

Table 44 is an updated list of TOCs with JPIPs.

Review of Outputs

Although there are successes to celebrate in the 2006/07 development of the JPP, including the final 2007/08 targets, the development of the 2007/08 JPIPs had a number of challenges including:
- A late start to action planning.
- Significant change of people through the process and other priorities e.g. refranchises, reorganisation.
- Network Rail performance deterioration through the planning process.

These problems have already been reviewed by the industry. The key objectives for change are to:
- Create a continuous planning process
- Enable teams to properly deliver the process outputs beyond simple delivery to timescales
- Establish an improved challenge process

Practically, the process going forward is expected to include the following enhancements:
- Better structure to inputs, process and deliverables
- Increased availability of information
- Increased check and review
- More firm linkage between internal processes of industry partners and the JPIP development programme
- Focus on reduction of data and other issues that tend to divert attention from the challenge of performance delivery

It is anticipated that the new process will be launched in September 2007.

Other operators

All substantive operators have the option to move to a JPIP approach under Condition LA. No operators beyond franchised operators had moved to a JPIP approach by 31 March 2007.

In addition to this, performance plans are being jointly developed with freight operators in part to respond to concerns from TOCs with JPIPs. It is not however anticipated that freight operators will opt to move to a formal JPIP approach in the near future.

List of operators with JPIPs

Table 44 Passenger operators with JPIPs

Operator	Type of operator	Lead Network Rail Route	Notes
Arriva Trains Wales	Franchised	Western	
C2C Rail	Franchised	Anglia	
Central Trains	Franchised	LNW	
First Capital Connect	Franchised	LNE	
First Great Western	Franchised	Western	New franchise combining FGW, FGWL, Wessex trains commenced December 2006. JPIP produced was based on the new franchise boundaries
First Scot Rail	Franchised	Scotland	
Gatwick Express	Franchised	Sussex	
Great North Eastern Railway	Franchised	LNE	
Merseyrail Electrics 2002 Ltd	Franchised	LNW	
Midland Mainline	Franchised	LNE	
Northern	Franchised	LNE	
One	Franchised	Anglia	
Silverlink Train Services	Franchised	Anglia	
South Eastern	Franchised	Kent	
Southern	Franchised	Sussex	
Stagecoach South West Trains	Franchised	Wessex	
The Chiltern Railway Co.	Franchised	LNW	
First Transpennine Express	Franchised	LNE	
Virgin Cross Country Trains	Franchised	LNW	
Virgin West Coast Trains	Franchised	LNW	

Table 45 Open Access operators following the JPIPs approach

Eurostar (UK)	Open	Kent	Change to JPIP approach being considered concurrent with opening of CTRL Stage 2 in respect of Eurostar use of Ashford station area and the main CTRL route*
Heathrow Express	Open	Western	
Hull Trains	Open	LNE	Change to JPIP approach proposed for commencement in 2007/8
Nexus	Open	LNE	No specific discussion at present

* Network Rail operates and maintains the CTRL route on behalf of London and Continental Railways (LCR)

Table 45 provides the status for open access operators who followed the JPIP approach. Even though these are not formal JPIPs we have included their status as well.

Route Utilisation Strategies (RUSs)

Network Rail continues to develop RUSs in accordance with its obligations under Licence Condition 7, the regulatory guidelines and the recommendations of the Rail Industry Planning Group.

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 the 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. Updated versions of these documents are intended to be published in Autumn 2007.

A programme showing target establishment dates for each RUS, in accordance with paragraph 3A.2(a) of Licence Condition 7, was drafted, discussed and reviewed during 2005/06 with input from industry parties, Governments and ORR, and was subsequently formally submitted. The programme was approved by ORR on 23 June 2006.

A revised programme was submitted to ORR on 15 March 2007; approval was pending at year end (and has since been received).

Programme and Progress

The position at the end of 2006/7 was:

Table 46

South West Main Line RUS	Established
Cross London RUS	Established
Scotland RUS	Published February 2007, awaiting establishment
Freight RUS	Published March 2007, awaiting establishment
North West RUS	Final strategy to be published May 2007
Greater Anglia RUS	Draft for Consultation to be published in April 2007
East Coast Main Line RUS	Draft for Consultation to be published in June 2007.
South London RUS	In process
Yorkshire and Humberside RUS	In process
Lancashire and Cumbria RUS	In process
Wales RUS	In process
Network RUS	In process
Merseyside RUS	In process
East Midlands RUS	To commence Summer 2007
South Midlands RUS	To commence Summer 2007
West Coast Main Line RUS	To commence Summer 2007
Kent RUS	To commence Summer 2007
Sussex RUS	To commence January 2008
Great Western RUS	To commence January 2008

Inclusion

Network Rail leads and is responsible for the development of Route Utilisation Strategies but the process adopted continues to emphasise the widest possible inclusion of industry and wider stakeholder groups.

Each RUS is overseen by an industry stakeholder management group (SMG) comprising TOCs, FOCs, ATOC, Government(s) and other parties where relevant. During the year it became policy to invite Passenger Focus to become a member of SMGs (London TravelWatch continue to attend as observers where relevant).TfL and PTEs are members of appropriate SMGs.

The practice of organising wider stakeholder group meetings at intervals throughout the development of each RUS has continued and been augmented with the 'Baseline Roadshows', exhibitions of the baseline data displayed for explanation and discussion.

We have also continued the Local and Regional Government Conferences, held six-monthly in Birmingham, during the year. As appreciation of the openness of the process has increased there has been a consequent increase in the requests for individual or bespoke briefings; every effort is made to meet these requests and the RUSs benefit from them.

Reflecting this success, the RUS programme is recognised as a world class transformational workstream within Network Rail.

Section 2 – Network capability

Introduction

This section reports on capability of the network and in particular highlights any changes during the year. The usual four measures are reported:

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

We continue to report on train mileage and have introduced new reporting on the management of congested infrastructure.

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.

We have continued with our routine data cleansing of GEOGIS together with light touch assurance activities to improve data quality. The capability data presented in this section include real changes to the network as well as changes as a result of data cleansing (review and subsequent amendment to data where necessary).

The Infrastructure Capability Programme is reviewing our capability measures, improving data integrity and reviewing how network capability should be published in the future. This has progressed well during the year with all our milestones achieved to date. A full review of data as agreed with the ORR, will be completed by September 2007.

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 47 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 of	March 2007 km of track in each speed band
Up to 35	5,570	4,163	3,821	3,787
40 – 75	16,585	16,927	16,895	16,856
80 – 105	6,994	7,650	7,482	7,488
110 – 125	2,415	2,741	2,907	2,932
Over 125	0	0	0	0
Total	31,564	31,482	31,105	31,063

Table 48 Linespeed capability by operating route (track km)

Speed band (mph) Operating routes	Up to 35	40 – 75	80 – 105	110 – 125	Over 125	Total
London North Eastern	920	3,932	1,368	1,250	0	7,470
London North Western	988	3,955	1,180	969	0	7,092
South East – Anglia	259	1,400	626	0	0	2,285
South East – Kent	196	1,035	530	0	0	1,761
South East – Sussex	113	758	257	0	0	1,128
South East – Wessex	171	1,029	883	0	0	2,083
Western	682	2,379	1,562	492	0	5,115
England & Wales	3,329	14,488	6,406	2,711	0	26,934
Scotland	458	2,368	1,082	221	0	4,129
Network total	3,787	16,856	7,488	2,932	0	31,063

Table 49 Linespeed change: increases

Territory	Operating route	ELR	Track	Start mileage	Length (miles. yds)	Old speed band	New speed band
LNE	LNE	HOS	3352	0.0914	0.0380	new	0 – 35
LNE	LNE	SPC1	1100	0.0492	0.0326	new	0 – 35
LNE	LNE	SPC1	2100	0.0490	0.0328	new	0 – 35
LNE	LNE	SPC1	3601	0.0231	0.0259	new	0 – 35
LNE	LNE	SPC1	3603	0.0222	0.0268	new	0 – 35
LNE	LNE	SPC1	3604	0.0219	0.0273	new	0 – 35
LNE	LNE	SPC1	3605	0.0000	0.0293	new	0 – 35
LNW	LNW	BAG2	1300	49.0618	0.0394	0 – 35	40 – 75
LNW	LNW	BFO	1100	0.0000	1.0506	new	0 – 35
LNW	LNW	BFO	2100	0.0000	1.0506	new	0 – 35
LNW	LNW	BFO	3400	1.0506	0.0554	new	0 – 35
LNW	LNW	BHI	2200	158.1452	0.0218	0 – 35	40 – 75
LNW	LNW	CGJ5	3700	6.0232	0.0265	new	0 – 35
LNW	LNW	CMD2	1100	19.1166	0.0242	0 – 35	40 – 75
LNW	LNW	CMP1	1100	158.0814	4.0594	40 – 75	80 – 105
LNW	LNW	CMP1	1200	159.0880	2.1636	0 – 35	40 – 75
LNW	LNW	CMP1	1500	171.0610	0.1279	0 – 35	40 – 75
LNW	LNW	CMP1	2100	158.0814	4.0594	40 – 75	80 – 105
LNW	LNW	CMP1	2200	159.0880	2.1636	0 – 35	40 – 75
LNW	LNW	DHF	1100	0.1488	1.0084	new	0 – 35
LNW	LNW	DHF	2100	0.1490	1.0081	new	0 – 35
LNW	LNW	HNR	1100	56.0637	6.1255	40 – 75	80 – 105
LNW	LNW	HNR	2100	56.0637	6.1255	40 – 75	80 – 105
LNW	LNW	KMG1	3606	4.1100	0.0510	new	0 – 35
LNW	LNW	KMG2	3625	4.1234	0.0398	new	0 – 35
LNW	LNW	LEC1	1200	27.1364	0.0792	40 – 75	80 – 105
LNW	LNW	LEC1	1200	54.1232	0.0528	40 – 75	80 – 105
LNW	LNW	LEC1	1200	55.1320	0.1077	40 – 75	80 – 105
LNW	LNW	LEC1	2200	27.1518	0.0748	40 – 75	80 – 105
LNW	LNW	LEC1	2200	54.0440	0.1320	40 – 75	80 – 105
LNW	LNW	LEC1	3200	82.0572	0.0594	0 – 35	40 – 75
LNW	LNW	LEC2	1717	97.0417	0.0207	new	0 – 35
LNW	LNW	STY	3200	– 0.0370	0.0281	new	40 – 75
LNW	LNW	WCM1	1100	1.0858	8.0682	80 – 105	110 – 125
LNW	LNW	WCM1	2100	2.0440	7.1100	80 – 105	110 – 125
SCO	SCO	CRE	3300	33.0300	0.0493	new	0 – 35
SCO	SCO	ECM9	3407	0.0250	0.0368	new	40 – 75
SCO	SCO	ECM9	3408	0.0000	0.0426	new	0 – 35
SCO	SCO	ECM9	3409	0.0000	0.0426	new	0 – 35
SCO	SCO	ECM9	3501	0.0186	0.0371	new	0 – 35
SCO	SCO	ECM9	3603	0.0264	0.0216	new	0 – 35
SCO	SCO	ECN1	3615	– 0.0038	0.0354	new	0 – 35
SCO	SCO	ECN2	3600	1.0347	0.0316	new	0 – 35
SCO	SCO	ECN2	3615	0.0316	0.0238	new	0 – 35

Table 49 Linespeed change: increases – continued

Territory	Operating route	ELR	Track	Start mileage	Length (miles. yds)	Old speed band	New speed band
SCO	SCO	INS	3301	0.0200	0.0218	new	0 – 35
SCO	SCO	NDE1	3400	5.0225	0.0272	new	0 – 35
SCO	SCO	NDE1	3906	5.0497	0.0640	new	0 – 35
SCO	SCO	NDE1	3907	5.0240	0.0897	new	0 – 35
SCO	SCO	PMT	1100	23.1340	0.0260	0 – 35	40 – 75
SCO	SCO	WRO	3500	1.0675	0.0492	new	0 – 35
SEA	KE	ESJ	1100	21.0200	1.0387	new	0 – 35
SEA	KE	ESJ	2100	21.0836	1.0090	new	0 – 35
SEA	WE	SDP2	1100	90.0957	0.0821	0 – 35	40 – 75
SEA	WE	SDP2	2100	90.0946	0.0832	0 – 35	40 – 75
SEA	SU	SMS2	1100	9.0198	0.0330	0 – 35	40 – 75
SEA	SU	SMS2	2100	9.0198	0.0330	0 – 35	40 – 75
SEA	KE	TTH	2100	60.0726	0.0242	0 – 35	40 – 75
SEA	WE	WPH2	1100	43.0968	0.1408	0 – 35	40 – 75
SEA	WE	WPH2	2100	37.0557	0.0763	0 – 35	40 – 75
WES	WES	EXR	3100	0.0000	0.0759	new	0 – 35
WES	WES	GAW1	3100	0.0810	0.0404	new	0 – 35
WES	WES	MLN1	1200	55.0704	1.0000	new	40 – 75
WES	WES	MLN1	1200	77.0880	0.1648	new	40 – 75
WES	WES	MLN1	2500	55.0704	0.1056	new	40 – 75
WES	WES	MLN1	2500	56.0000	0.0704	new	0 – 35
WES	WES	SBA2	3100	45.0440	0.0594	40 – 75	80 – 105
WES	WES	SHL	2100	9.0550	0.0440	40 – 75	80 – 105

Table 50 Linespeed change: decreases

Territory	Operating route	ELR	Track	Start mileage	Length (miles. yds)	Old speed band	New speed band
LNE	LNE	BOO	3300	3.0484	2.0902	0 – 35	removed
LNE	LNE	DOW	3853	22.1056	0.0792	0 – 35	removed
LNE	LNE	DOW	3854	22.1210	0.0616	0 – 35	removed
LNE	LNE	DUY	1300	154.1108	0.1387	40 – 75	0 – 35
LNE	LNE	DUY	1301	153.1598	0.1270	40 – 75	0 – 35
LNE	LNE	DUY	1302	154.0199	0.0909	0 – 35	removed
LNE	LNE	DUY	1303	154.0199	0.0665	40 – 75	removed
LNE	LNE	DUY	2802	154.1127	0.1243	0 – 35	removed
LNE	LNE	DUY	3801	154.0986	0.1302	40 – 75	0 – 35
LNE	LNE	HCS	3300	0.0000	0.0264	40 – 75	0 – 35
LNE	LNE	HNB	3302	1.0154	0.0823	0 – 35	removed
LNE	LNE	HOS	3351	0.0662	0.0252	0 – 35	removed
LNE	LNE	HOS	3351	0.1294	0.0451	0 – 35	removed
LNE	LNE	HPW	3100	0.0308	0.0242	0 – 35	removed
LNE	LNE	MJS1	3400	130.0388	0.0381	0 – 35	removed
LNE	LNE	SPC7	1100	126.0594	0.1716	80 – 105	40 – 75
LNE	LNE	TYB1	2100	71.0484	0.1100	40 – 75	0 – 35
LNE	LNE	WLN	3400	33.0000	0.0880	0 – 35	removed
LNE	LNE	WLN	3400	33.0880	4.0223	40 – 75	removed
LNW	LNW	CBC1	2100	63.1232	0.0448	40 – 75	0 – 35
LNW	LNW	CDM2	2100	30.1364	0.0686	40 – 75	0 – 35
LNW	LNW	CMP1	1500	175.0569	0.0484	0 – 35	removed
LNW	LNW	CMP1	2500	176.0492	0.0683	0 – 35	removed
LNW	LNW	HNR	1800	65.1207	0.0433	0 – 35	removed
LNW	LNW	HNR	2300	84.0110	0.0775	0 – 35	removed
LNW	LNW	LEC1	2100	81.1672	0.0220	110 – 125	40 – 75
LNW	LNW	LEC1	2300	82.0272	1.0108	0 – 35	removed
LNW	LNW	LEC1	3200	31.0617	0.0951	80 – 105	40 – 75
LNW	LNW	MJI2	1100	160.0440	2.0016	0 – 35	removed
LNW	LNW	MJI2	2100	160.0440	2.0016	0 – 35	removed
LNW	LNW	NWO	2100	9.1298	0.0210	0 – 35	removed
LNW	LNW	RBS1	2100	83.0638	0.0990	80 – 105	40 – 75
LNW	LNW	WCM1	2100	0.1276	0.0220	80 – 105	40 – 75
SCO	SCO	BID	3400	0.0079	0.0647	0 – 35	removed
SCO	SCO	CWH3	3301	32.0434	0.1666	0 – 35	removed
SCO	SCO	CWH3	3301	33.0434	0.0449	0 – 35	removed
SCO	SCO	CWH3	3302	32.0434	0.1666	0 – 35	removed
SCO	SCO	DFN	3500	53.0186	0.0408	0 – 35	removed
SCO	SCO	ECM8	1100	0.0658	0.0594	40 – 75	removed
SCO	SCO	ECM8	2100	0.0658	0.0388	40 – 75	removed
SCO	SCO	ECM9	3410	0.0250	0.0368	40 – 75	removed
SCO	SCO	ECM9	3420	0.0000	0.0426	0 – 35	removed
SCO	SCO	ECM9	3421	0.0000	0.0426	0 – 35	removed
SCO	SCO	ECN2	3616	0.0316	0.0238	0 – 35	removed
SCO	SCO	EGM4	3615	– 0.0038	0.0354	0 – 35	removed

Table 50 Linespeed change: decreases – continued

Territory	Operating route	ELR	Track	Start mileage	Length (miles. yds)	Old speed band	New speed band
LNW	LNW	FOG	3300	0.0440	0.0270	0 - 35	removed
SCO	SCO	MTL2	3400	5.0198	1.0682	0 - 35	removed
SCO	SCO	MTL2	3500	6.0491	0.0531	0 - 35	removed
SCO	SCO	NBE	3300	25.0191	3.0965	40 - 75	0 - 35
SCO	SCO	NDE1	1300	5.0240	0.0897	0 - 35	removed
SCO	SCO	NDE1	2300	5.0240	0.0897	0 - 35	removed
SEA	AN	CNS	1100	0.1695	0.0315	0 - 35	singled
SEA	AN	DWW2	1100	4.1020	0.0286	40 - 75	removed
SEA	AN	DWW2	1100	4.1298	0.0220	0 - 35	removed
SEA	AN	DWW2	1100	4.1518	0.1562	40 - 75	removed
SEA	AN	DWW2	1100	5.1496	0.0462	40 - 75	removed
SEA	AN	DWW2	1100	6.0198	0.0594	0 - 35	removed
SEA	AN	DWW2	1100	6.0792	0.1034	40 - 75	removed
SEA	AN	DWW2	2100	4.1012	1.0308	40 - 75	removed
SEA	AN	DWW2	2100	5.1496	0.0462	40 - 75	removed
SEA	AN	DWW2	2100	6.0198	0.0594	0 - 35	removed
SEA	AN	DWW2	2100	6.0792	0.1034	40 - 75	removed
SEA	AN	DWW2	3100	7.0080	0.1482	0 - 35	removed
SEA	AN	DWW2	3100	7.1562	0.1518	40 - 75	removed
SEA	AN	DWW2	3300	7.0014	1.0690	0 - 35	removed
SEA	KE	FJS	1100	22.1320	1.0730	40 - 75	removed
SEA	KE	FJS	2100	22.1320	1.0730	40 - 75	removed
SEA	KE	PWS2	1100	31.0506	0.0352	40 - 75	0 - 35
SEA	KE	PWS2	1100	42.0418	0.0264	40 - 75	0 - 35
SEA	KE	SBJ	1100	55.1606	0.1122	80 - 105	40 - 75
SEA	KE	SEJ2	2100	46.1494	0.0266	40 - 75	0 - 35
SEA	WE	WPH2	2100	41.0176	2.0484	80 - 105	40 - 75
SEA	WE	WPH2	2100	43.0660	0.0330	80 - 105	0 - 35
SEA	WE	WPH2	2100	43.0990	0.1452	40 - 75	0 - 35
SEA	WE	WPH2	2200	43.1004	0.0536	40 - 75	0 - 35
WES	WES	BAL	3100	8.0220	0.0220	0 - 35	removed
WES	WES	BAN2	3300	0.0000	0.0799	0 - 35	removed
WES	WES	CWR	3100	1.1078	0.0447	0 - 35	removed
WES	WES	ESB	3100	5.1056	0.0528	0 - 35	removed
WES	WES	MLN1	1100	77.1320	0.1386	110 - 125	80 - 105
WES	WES	MLN1	1300	77.0841	0.1705	0 - 35	removed
WES	WES	MLN1	1502	6.1451	0.0606	0 - 35	removed
WES	WES	MLN1	1503	6.1530	0.0485	0 - 35	removed
WES	WES	MLN3	1600	300.1331	0.0286	0 - 35	removed
WES	WES	NAB	3100	10.0180	0.0548	0 - 35	removed
WES	WES	NAB	3300	10.0286	0.0356	0 - 35	removed
WES	WES	SBK1	3100	146.1551	0.0260	0 - 35	removed
WES	WES	SBK2	3100	0.0000	0.1606	0 - 35	removed
WES	WES	SDI2	2500	9.0601	0.0466	0 - 35	removed
WES	WES	SWA	2300	215.0474	0.0239	0 - 35	removed

Table 50 Linespeed change: decreases – continued

Territory	Operating route	ELR	Track	Start mileage	Length (miles. yds)	Old speed band	New speed band
WES	WES	SWA	2300	215.0729	0.0324	0 - 35	removed
WES	WES	SWM2	1300	190.1503	0.0579	0 - 35	removed
WES	WES	SWM2	1300	198.1469	0.0885	0 - 35	removed
WES	WES	SWM2	1301	198.1597	0.0656	0 - 35	Removed
WES	WES	SWM2	1302	198.1570	0.0650	0 - 35	Removed

Reporting confidence

This data taken from GEOGIS aligns with the Sectional Appendix and has an accuracy well within Band 1 (to or within +/-1 per cent). Although the volume of change is generally insignificant to affect this there are minor shortcomings in the updating procedures and thus Reliability Band B and overall confidence grading of B2 is applicable.

Commentary

The reduction in size of the reported network by 42 track kilometres represents real change combined with ongoing GEOGIS data quality improvement initiatives. The real changes include:

Removals

- 13 km due to closure of the Stratford to North Woolwich branch
- 4 km due to boundary adjustment at Fawkham Junction
- 3 km of track at Margam was out of use
- 3 km due to boundary correction at Ironbridge Gorge

Additions

- 8 km due to the reopening of Bletchley flyover
- 4 km due to the link to Ebsfleet.
- There have been other changes but these are due to data cleansing.

Most of the entries in the above tables represent network size changes, with not many significant speed band changes year-on-year. The notable exceptions include those relating to:

- LNW West Coast Modernisation Programme with 125 mph now enabled over a further 12 km of route north of Carlisle to the border
- Upgrades north of Hanslope Junction towards Northampton
- Upgrades in the Sandbach area due to Wilmslow remodelling
- The Portsmouth area infrastructure project.
- Some of the remaining entries relate to:
- Permanent Speed Restrictions, with the longest being Bathgate to Carmondean Junction
- Condition of track with 30 mph reductions from 40 mph and in the Swindon station area 85 mph instead of 125 mph
- Improvements such as increases from 60 mph 80 mph near Penarth.

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) 3338mm – width of vehicle (w) 2600mm
- W7 (h) 3531mm – (w) 2438mm
- W8 (h) 3618mm – (w) 2600mm
- W9 (h) 3695mm – (w) 2600mm
- W10 (h) 3900mm – (w) 2500mm

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 51 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	March 2007 km of route in each gauge band
W6	5,223	4,955	4,771	4,746
W7	2,284	2,794	2,741	2,720
W8	6,340	5,648	5,504	5,496
W9	2,483	1,714	1,615	1,618
W10 and W6	–	6	6	6
W10 and W8	–	60	73	65
W10 and W9	163	939	1,100	1,138
Total	16,493	16,116	15,810	15,789

Table 52 Gauge capability by operating route

Gauge band	W6	W7	W8	W9	W10 & W6	W10 & W8	W10 & W9	Total
London North Eastern	962	499	1,325	627	–	–	–	3,413
London North Western	893	618	715	261	–	2	831	3,320
South East – Anglia	292	5	532	154	6	63	145	1,197
South East – Kent	490	77	67	184	–	–	–	818
South East – Sussex	300	120	61	32	–	–	–	513
South East – Wessex	549	189	299	5	–	–	–	1,042
Western	1,143	380	1,306	17	–	–	–	2,846
England and Wales	4,629	1,888	4,305	1,280	6	65	976	13,149
Scotland	117	832	1,191	338	–	–	162	2,640
Network total	4,746	2,720	5,496	1,618	6	65	1,138	15,789

Reporting confidence

The data used in this reporting is now drawn directly from the records tracking issued Gauging Certificates maintained by the Track Geometry & Gauging National Specialist Team. It is considered that this data merits a confidence grade of B2.

Commentary

The 21 route km network size reduction represents real change combined with ongoing GEOGIS data quality improvement initiatives. The principal real changes include:

Removals

- 7 km of W6 gauge closure of the Stratford to North Woolwich branch
- 2 km which was unclassified and then treated as W6 boundary adjustment at Fawkham Junction
- 2 km of W6 boundary adjustment at Methil
- 2 km of W8 removal of Sudbrook branch

Additions

- 4 km which was unclassified then treated as W6 including the reopening of Bletchley flyover
- 2 km due to the link to Ebsfleet.

Changes to gauge within the residual data are a combination of network modifications or reassessments and data cleanse.

- The greatest net effect is for Rugby Trent Junction to Stechford with 42 km of W10 & W9 gauge rather than W8.
- Deepcar to Cleethorpes which was subject to some incremental upgrades in 2005/06, has corrected 22 km of previously W7 gauge to W8.
- Reassessment of Haverfordwest to Johnston has 8 km at W7 rather than W8.

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
- RA7 – 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. This measure includes running lines only on Network Rail's infrastructure and excludes sidings and depots.

Results

Table 53 Structures route availability

Route availability band	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	March 2007 km of track in each RA band
RA 1 – 6	2,375	2,529	2,309	2,296
RA 7 – 9	26,297	26,319	25,935	25,928
RA 10	2,585	2,634	2,861	2,839
Total	31,257	31,482	31,105	31,063

Table 54 Structures route availability by operating route

RA bands/ Operating routes	RA 1 – 6	RA 7 – 9	RA 10	Total
London North Eastern	208	7,193	69	7,470
London North Western	12	7,080	–	7,092
South East – Anglia	119	2,166	–	2,285
South East – Kent	57	1,704	–	1,761
South East – Sussex	120	1,008	–	1,128
South East – Wessex	189	1,894	–	2,083
Western	852	4,246	17	5,115
England and Wales	1,557	25,291	86	26,934
Scotland	739	637	2,753	4,129
Network total	2,296	25,928	2,839	31,063

Commentary

The changes in extent of the network reported in the C1 Line Speed Capability tables are also reflected in the C3 measure and lead to a net reduction of 42 track kilometres in network size. This includes the closure of the Stratford to North Woolwich branch with 13 track km (RA7 – 9) and a 4 km boundary adjustment at Fawkham Junction. Additions include the 8 km reopening of Bletchley flyover (RA7 – 9); 4 km link to Ebbsfleet; 2 km at St Pancras station and new platforms at Edinburgh Waverley & Haymarket.

Actual changes in RA also include:

- Park Lane Junction to Newcastle East Junction on LNE Territory with an extra 3 km of RA1 – 6 (previously RA7 – 9) following Network Change
- Halifax Junction to Griffin Wharf on South East Territory with 1 km of RA7 – 9 (previously RA1 – 6).

The remainder of the changes in the C3 measure are a result of data cleansing.

Electrified track capability (C4)

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

- overhead line at 25kV a.c
- overhead line at 1,500V d.c.
- 3rd rail 650/750V d.c.

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.

Results

Table 55 Electrification capability (km of electrified track)

	March 2004	March 2005	March 2006	March 2007
25 kV AC overhead	7,780	7,748	7,882	7,980
Thirdrail 650/ 750V DC	4,483	4,497	4,493	4,484
Dual AC, overhead/thirdrail DC	33	35	39	38
1500V DC overhead	19	39	39	39
Total electrified	12,315	12,319	12,453	12,541
Non-electrified	19,249	19,163	18,652	18,522
Total	31,564	31,482	31,105	31,063

Table 56 Electrification capability by operating route

Electrification capability/Operating route	25 kV AC overhead	3rd rail 650/ 750V DC	Dual AC, overhead/ 3rd rail DC	1500V DC overhead	Total electrified	Non-electrified	Total
London North Eastern	2,378	9	2	39	2,428	5,042	7,470
London North Western	2,788	292	9	–	3,089	4,003	7,092
South East – Anglia	1,449	25	15	–	1,489	796	2,285
South East – Kent	8	1,650	10	–	1,668	93	1,761
South East – Sussex	1	1,033	2	–	1,036	92	1,128
South East – Wessex	–	1,475	–	–	1,475	608	2,083
Western	103	–	–	–	103	5,012	5,115
England and Wales	6,727	4,484	38	39	11,288	15,646	26,934
Scotland	1,253	–	–	–	1,253	2,876	4,129
Network total	7,980	4,484	38	39	12,541	18,522	31,063

Reporting confidence

This data is taken from GEOGIS, which has benefited from extensive assurance activity and associated data cleanse. This activity, partly completed for the 2006 Annual Return includes consideration of contiguity of coding and reference to track (Omnicom) videos and 'drawings'. It has resulted in over 90 km of 25 kV AC electrification being in-filled and accuracy is now within Band 1. However a reliability Band B leads to a confidence grade of B2.

Commentary

The C1 Line Speed Capability tables show where new and removed track has lead to a net reduction of 42 track kilometres in network size. This includes closure of the Stratford to North Woolwich branch with 11 track km of DC thirdrail. With the exception of the Fawkham Junction boundary reassessment no other significant electrified track has actually been removed. The new link to Ebbsfleet is largely not yet coded as electrified, but minor new AC overhead electrification has been built for example by virtue of the revised St Pancras station and new platform at Edinburgh Waverley.

All other changes implicit for the electrification types in the C4 tables are the result of extensive data cleanse activity. Correcting the default GEOGIS coding of 'non-electrified' has thus generally increased capability. Other DC changes include 3 km extra on the Ormskirk line and 2 km at Chandlers Ford. The major increase to AC overhead electrification is dominated by:

- 36 km at Leeds to Skipton;
- 20 km at Wembley Yard;
- 15 km at St Pancras to Bedford;
- 5 km on the East Coast Mainline.

Some wrongly coded AC track has been removed. Notably, 7 km on Thames Haven branch and 4 km near Ripple Lane. There are also some corrections of types, eg. 3 km near Upminster, which is now correctly reported as AC.

Management of Congested Infrastructure

Network Rail will always seek to deliver train operators' aspirations for capacity allocation. However, on occasion we may be constrained in our ability to meet competing demands for such capacity; particularly on locations where network constraints exist or where demands for access to the infrastructure exceeds the existing capacity of that section of the network.

In such cases Regulation 23 of the Railways Infrastructure (Access and Management) Regulations 2005 (the Access and Management Regulations) requires Network Rail to declare these areas of infrastructure to be congested. The Access and Management Regulations set out two situations where we are required to make such a declaration:

1. Where, after the co-ordination of requests for capacity and consultation with the applicants, it is not possible for the infrastructure manager to satisfy requests for infrastructure adequately, the infrastructure manager must declare that element of the infrastructure on which such requests cannot be satisfied to be congested
2. Where, during the preparation of the working timetable for the next timetable period, the infrastructure manager considers that an element of the infrastructure is likely to become congested during the period to which that working timetable relates, he must declare that element of the infrastructure to be congested.

In October 2006, Network Rail published its 2007 Network Statement in which we declared three sections of our infrastructure to be Congested in accordance with the definition set out in the Access and Management Regulations.
These sections are as follows:

- Barassie Junction/ Kilmarnock/ Newton Junction/ Mauchline Junction to Gretna Junction;
- Gospel Oak to Barking; and
- Reading to Gatwick Airport.

Following the making of this declaration, Network Rail undertook capacity analysis studies for each of these sections of our network.These studies sought to identify the reasons for the congestion and the measures which might be taken in the short and medium term to ease that congestion.

The capacity analysis studies were published on 13 April 2007, and were produced following consultation with both the Department for Transport and Transport Scotland.

Network Rail is now producing capacity enhancement plans for each of these sections of our network. The capacity enhancement plan will identify (a) the reasons for the congestion (b) the future likely development of traffic (c) the constraints on infrastructure development and (d) the options and costs for enhancing the capacity, including the potential effect on access charges.

In producing these plans we will consult a range of interested parties including (a) existing users of that infrastructure (b) any new applicants for infrastructure capacity on this route (c) the Office of Rail Regulation (d) the Secretary of State and (e) Scottish Ministers.

We are required to publish these capacity enhancement plans by 12 October 2007 and at least one month before this deadline we will submit a copy of these plans to the Secretary of State and Scottish Ministers for approval.We will then make the final copy of these plans available to all consultees.

Passenger and freight mileage

Passenger train mileage is defined as the number of miles travelled by passenger trains. The passenger trains are derived from PALADIN (the computerised performance system used for recording performance data).

Passenger train miles

There was an increase of 0.37 per cent in total passenger train miles between 2005/06 and 2006/07. The positive growth in passenger train miles has slowed with growth 1.49 per cent lower than between 2004/05 and 2005/06.

Table 57 Train mileage for passenger operators (millions)

Train operator	2004/05	2005/06	2006/07
Arriva Trains Wales	11.9	12.5	13.3
c2c Rail	3.6	3.6	3.6
Central Trains	17.4	17.8	17.7
Chiltern Railways	5.0	5.1	5.4
FGW Link (Inc. Heathrow Connect)	7.9	7.8	5.2
First Capital Connect	0.0	0.0	11.7
First Great Western	10.0	10.4	14.5
Gatwick Express	1.5	1.5	1.5
Great North Eastern Railway	11.2	11.3	11.1
Merseyrail Electrics	3.4	3.4	3.4
Midland Mainline	6.5	6.2	6.2
Northern Rail	25.0	26.0	25.1
One	18.3	18.5	18.9
ScotRail Railways	22.7	23.1	23.0
Silverlink Train Services	5.5	5.5	5.6
South Eastern	17.2	17.2	17.2
South West Trains	22.3	23.1	22.9
Southern (formally South Central)	15.9	16.4	16.7
Thameslink Rail	6.8	6.7	1.1
Transpennine Express	8.8	7.9	8.6
Virgin Trains CrossCountry	16.7	16.8	16.9
Virgin Trains West Coast	11.3	13.3	13.2
Wessex	6.7	6.9	5.0
West Anglia Great Northern Railway	7.2	6.9	1.0
Total Franchised Passenger	262.9	267.8	268.8
	2004/05	2005/06	2006/07
Eurostar (UK)	0.5	0.5	0.6
Heathrow Express	1.0	0.9	0.9
Hull Trains	0.6	0.8	0.8
Nexus	1.4	1.8	1.8
Total passenger (open access)	3.6	4.1	4.1
Total passenger (franchised and open access)	**266.4**	**271.9**	**272.9**

Note: Empty coaching stock movements have been excluded.

Table 58 Train mileage for freight operators ('000s)

Freight operator	2004/05	2005/06	2006/07
Advenza	–	51	73
Direct Rail Services Ltd	802	1,022	1,255
EWS International	1,683	1,702	1,659
EWS Railway Ltd	17,393	18,588	16,855
Freightliner Heavy Haul	2,803	3,310	3,584
Freightliner Ltd	4,739	5,541	5,519
GB Railfreight	505	740	852
Fastline	–	–	95
FM Rail	–	–	20
AMEC	–	–	10
Total	27,925	30,954*	29,922

*This has been re-stated from the 2005/06 Annual Return

National train mileage by freight 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 operators, based on information generated by train reporting systems.

Million GTMs 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.

Freight gross tonne miles and Freight train miles

The freight figures for 2005/06 have been restated to reflect a change to the methodology for calculating the figures. Firstly, the day after the end of period thirteen has been added, which was not previously the case. Secondly, there was a review of the chargeable service groups which also changed the figures. The restatement for 2005/06 ensures that the figures are consistent with 2007/08 and can therefore be compared.

Both gross tonne miles and freight train miles fell marginally between 2004/05 and 2005/06. There were significant decreases in ESI Coal, domestic automotive and European intermodal traffic, but these decreases were offset to some extent by increases in European automotive traffic, in particular.

Table 59 Million GTMs by freight train operators

Freight Operator	2004/05	2005/06	2006/07
Advenza	–	8	12
Direct Rail Services Ltd	497	608	901
EWS International	1,290	1,187	1,157
EWS Railway Ltd	18,268	19,685	18,260
Freightliner Heavy Haul	3,068	3,395	3,851
Freightliner Ltd	4,748	5,223	5,179
GB Railfreight	521	667	828
Fastline	–	–	52
FM Rail	–	–	7
AMEC	–	–	5
Total	28,392	30,773*	30,252

* This has been re-stated from the205/06 Annual Return.

Section 3 - Asset Management

Introduction

This section reports data on the condition and quality of our assets. It provides an indication of our asset stewardship and provides trends over time as well as 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 traction substation
- DC traction substation
- 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 based on an analysis of historical data. These are Network Rail assessments as tolerances were not established by ORR in the ACR 2003. Many of these tolerances are based on an analysis of historical data. However, the ORR has stated that it will take into account statistical variations when assessing performance against regulatory targets.

Number of broken rails (M1)

A broken rail is one which, before removal from the track, has a fracture through the full cross-section, 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 phased implementation of a new system for managing rail defects, including broken rails (see commentary below).

Regulatory target

The regulatory target is to reduce the number of broken rails to no more than 300 per annum by 2005/06 with no increase thereafter. The regulatory target has been met as we had 192 broken rails for 2006/07.

The Business Plan target is 290 and we met this target as well for 2006/07.

Reporting confidence

The procedure for reporting broken rails is proven and robust, and this data justifies an A1 confidence grade. The difficulties surrounding the implementation of a new system for managing rail defects have not impacted on the robustness of this data. The existing interim procedure for collecting, confirming and collating the numbers of broken rails has been in place for two reporting years.

Commentary

Work has continued to reduce the number of broken rails with volumes of re-railing 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.

Initiatives put in place to improve the management of dipped joints and welds have helped to reduce the number of rail breaks. We have also benefited from a relatively mild winter without extremes of temperature.

The final number of broken rails for the year was 192, a significant reduction over the previous year's total of 317. This continues the year on year reduction since 2000.

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 NR/SP/TRK/001 and other Network Rail standards. This measure is reported split between isolated defects (those defects with a length of less than 1 yard, e.g. midrail, welds, isolated wheelburns, etc) and continuous defects (those defects with a length of 1 yard or more, e.g. RCF, wheelburns, hydrogen shatter cracking, vertical longitudinal splits etc).

Table 60 Number of broken rails

Operating Routes	2002/03	2003/4	2004/05	2005/06	2006/07
London North Eastern	119	77	101	98	62
London North Western	120	88	61	52	44
South East – Anglia	31	29	26	23	13
South East – Kent	28	22	19	17	8
South East – Sussex	15	11	9	7	13
South East – Wessex	47	30	43	37	18
Western	44	42	31	37	13
England & Wales	**404**	**299**	**290**	**271**	**171**
Scotland	**40**	**35**	**32**	**46**	**21**
Network total	**444**	**334**	**322**	**317**	**192**
CG	**–**	**A2**	**A1**	**A2**	**A1**
Regulatory Target (Network)	**705**	**675**	**300**	**300**	**300**

Reporting method

This is in accordance with the company procedures for measuring and reporting defective rails, with a minor change to reporting processes to accommodate the difficulties and failure to implement a new system for managing rail defects (see commentary below).

Table 61 Number of isolated rail defects 2006/07

Type of defect	Net data correction	New Defects detected	Weld repairs and defects Removed	Defects remaining
Rail ends	-84	1,563	1,420	788
Welds	-317	3,792	3,747	1,869
Midrail	-1,542	13,973	14,524	12,658
Switches and crossings	-95	2,088	1,831	3,094
Incorrectly classified	-18	16	4	46
Total number	**-2,056**	**21,432**	**21,526**	**18,455**
Confidence grade				**B3**

Table 62 Number of isolated rail defects remaining

Type of defect	2002/03	2003/4	2004/05	2005/06	2006/07
Rail ends	1,196	1,358	1,146	729	788
Welds	2,889	3,735	4,208	2,141	1,869
Midrail	26,460	21,852	19,994	14,751	12,658
Switches and crossings	4,081	4,274	5,259	2,932	3,094
Incorrectly classified	338	82	171	52	46
Total number	**34,964**	**31,301**	**30,778**	**20,605**	**18,455**
CG	**–**	**B2**	**B4**	**B4**	**B3**

Table 63 Isolated rail defects by operating route

Operating routes	Defects discovered 2005/06	Defects removed repaired 2005/06	Defects remaining 2005/06	Defects discovered 2006/07	Defects removed/ repaired 2006/07	Defects remaining 2006/07
London North Eastern	6,114	6,975	2,779	5,117	5,152	2,353
London North Western	9,888	13,847	6,269	5,952	6,460	6,013
South East – Anglia	1,840	1,979	413	2,255	2,122	560
South East – Kent	697	843	110	640	604	146
South East – Sussex	437	434	76	449	423	102
South East – Wessex	587	528	263	922	806	309
Western	6,523	5,484	6,926	3,551	3,415	5,201
England and Wales	**26,086**	**30,090**	**16,836**	**18,886**	**18,982**	**14,684**
Scotland	**4,867**	**6,863**	**3,769**	**2,546**	**2,544**	**3,771**
Network total	**30,953**	**36,953**	**20,605**	**21,432**	**21,526**	**18,455**

Table 64 Lengths of continuous rail defects

	Net data correction	New RCF defects detected	New other defects detected	Defective rail removed/ repaired	Defects remaining at year end
Total length (yards)	-17,788	170,550	280,392	250,932	2,195,541
Total length (km)	-16	156	256	229	2,008

Table 65 Lengths of continuous rail defects remaining

	2002/03	2003/04	2004/05	2005/06	2006/07
Total length (yards)	1,731,185	2,042,032	2,423,367	2,013,319	2,195,541
Total length (km)	1,583	1,867	2,216	1,841	2,008

Table 66 Lengths of continuous rail defects by operating route (yards)

	Defects descovered 2005/06	Defects removed /repaired 2005/06	Defects remaining 2005/06	Defects discovered 2006/07	Defects removed repaired 2006/07	Defects remaining 2006/07
London North Eastern	36,131	81,697	349,502	55,213	24,920	356,968
London North Western	126,774	149,537	334,839	103,810	49,336	387,078
South East - Anglia	24,750	29,269	106,170	39,857	24,874	123,238
South East - Kent	31,939	14,429	176,534	13,302	9,121	181,581
South East - Sussex	36,507	36,375	63,853	43,961	34,470	75,618
South East - Wessex	17,488	10,640	117,049	23,723	9,040	146,500
Western	45,013	55,288	233,725	122,962	67,829	276,139
England & Wales	**318,602**	**377,235**	**1,381,672**	**402,828**	**219,590**	**1,547,122**
Scotland	**47,080**	**165,372**	**631,647**	**48,114**	**31,342**	**648,419**
Network total	**365,682**	**542,607**	**2,013,319**	**450,942**	**250,932**	**2,195,541**

Regulatory Target

There is no regulatory target for this measure.

Reporting confidence

The procedure for reporting defective rails is now well established, and this data justifies a B3 confidence grade. The difficulties surrounding the implementation of a new system for managing rail defects have impacted on the efficiency and robustness of reporting this data. The existing interim procedure for collecting, confirming and collating the numbers of defective rails has been in place for two reporting years.

Commentary

The number of isolated defects generally continues to reduce due to improved data quality and the removal of duplicate and erroneous data. Increases in the number of defects were seen in a number of Areas such as Anglia and Wessex due to localised increases in RCF from the introduction of new vehicles and identification of larger numbers of vertical longitudinal splits on a number of localised routes.

Rail defect reporting continues to be sourced from the pre-existing contractors' databases that were adapted when maintenance transferred in-house in 2004 and now includes some data directly from the new Rail Defect Tracker system. The number of and variations between these databases has continued to cause 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) was developed and partially implemented. Significant data cleanse of the pre-existing contractors' databases was undertaken to facilitate data migration to RDT. Implementation difficulties arose during the year which have led to further work being necessary to provide a purpose built system for managing and reporting rail defects. Therefore, the existing multi-sourced approach, established in 2005/06, has been used to compile these figures for 2006/07. The replacement Rail Defect Management System (RDMS) is currently being developed and is scheduled for prototype completion in October 2007 with roll out nationally

by June 2008. This system will enable a consistent process to capture all isolated and continuous defect data including categorisation of rolling contact fatigue (RCF).

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 re-railed, are included in the 'continuous remaining' figure. Much of this is classified as 'Light' or 'Moderate' RCF which is a condition that requires no remediation or increased minimum action other than preventative cyclic grinding.

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, England and Wales with the business operating routes plus Scotland.

Reporting Method

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 are the subject of 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-dependent target SD values are specified, within Railway Group Standards, to be achieved or bettered by 50% (Good), 90% (Satisfactory or better) and 100% (Poor or better) respectively of recorded track.

The percentages of track across the network meeting these target SD values, and compared against these defining percentages, is shown in the following tables: Table 67 compares 31/3/07 network total condition with that for the previous five years; Table 68 shows the 31/3/07 condition for each operating route, England & Wales, Scotland and network total.

Table 67 Track geometry: Network total standard deviations (%)

	35 mm top (vertical displacement)			35mm alignment (horizontal displacement)			70m top (vertical displacement)			70m alignment (horizontal displacement)			CG
Standard	50	90	100	50	90	100	50	90	100	50	90	100	
Actuals													
31/3/02	62.3	89.4	97.3	72.6	92.9	96.2	62.0	92.4	95.5	80.1	95.9	97.3	
31/3/03	61.9	88.9	97.0	74.7	93.6	96.7	62.2	92.1	95.2	80.9	96.2	97.5	
31/3/04	62.3	89.2	97.0	72.6	92.9	96.5	63.4	92.3	95.3	79.2	95.7	97.2	A2
31/3/05	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
31/3/06	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
31/3/07	70.0	92.3	98.1	79.0	95.0	97.5	72.2	94.7	96.7	82.9	97.3	98.3	A1

Note: A higher per centage indicates better performance.

Table 68 Track geometry: standard deviations 2007 (%)

	35 mm top (vertical displacement)			35mm alignment (horizontal displacement)			70m top (vertical displacement)			70m alignment (horizontal displacement)		
Standard	50	90	100	50	90	100	50	90	100	50	90	100
Actuals:												
London North Eastern	71.3	92.9	98.4	81.0	95.3	97.5	73.5	95.3	97.0	86.3	97.4	98.4
London North Western	70.2	92.7	98.3	81.2	95.7	97.9	70.9	95.3	97.1	81.7	97.7	98.7
South East – Anglia	67.4	90.4	96.9	74.9	93.1	96.5	67.4	89.7	92.6	77.3	94.2	96.2
South East – Kent	64.4	92.0	98.6	74.7	93.3	96.6	60.5	93.6	96.3	75.7	96.2	97.3
South East – Sussex	67.0	89.3	96.9	74.0	92.1	95.9	65.1	92.9	95.8	75.7	95.6	97.1
South East – Wessex	61.0	86.7	96.0	78.8	94.3	97.0	71.7	94.4	96.7	84.3	96.8	98.0
Western	71.0	92.5	98.1	79.4	95.5	98.0	74.5	94.9	96.8	83.5	97.5	98.6
England & Wales	**69.2**	**91.8**	**98.0**	**79.4**	**94.9**	**97.4**	**71.6**	**94.6**	**96.6**	**82.8**	**97.1**	**98.2**
Scotland	**75.0**	**95.1**	**99.1**	**76.7**	**95.4**	**97.9**	**76.6**	**95.6**	**97.3**	**83.4**	**98.2**	**98.9**
Network total	**70.0**	**92.3**	**98.1**	**79.0**	**95.0**	**97.5**	**72.2**	**94.7**	**96.7**	**82.9**	**97.3**	**98.3**

Note: A higher per centage indicates better performance.

Regulatory target

1. To maintain the 2003/04 levels of achievement; no deterioration from this level during the current control period
2. In addition, to reduce as far as reasonably practical the amount of track not achieving the 100 per cent 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.

The track geometry measurement systems which provide the base data used both for the real-time management of the network and also feed into these measures are progressively being improved. In addition, the parameters used and the intervention limits applied are also currently being reviewed for application within the technical standards and policies. This will also provide the opportunity to enhance and focus the track geometry measures to be applied in the next Control Period.

Commentary

Table 67 demonstrates that incremental improvements continue to be sustained across eleven of the twelve values for the overall network, some results now being well in excess of the Group Standard SD target percentages. A small deterioration in the 70m alignment 50 per cent category is therefore considered acceptable.

Route differences are shown in Table 68. As in previous years, a substantial proportion of the network suffered a sharp seasonal deterioration in summer 2006, due to desiccation of clay formations in hot weather, from which it has not completely recovered as at 31 March 2007. This deterioration is permanent and has to be recovered by physical work, which is additional to any routine programme of improvement. It is the nature of track-recording (changes are detected by track-recording vehicles which traverse routes at different frequencies and at different times of the year) that the effects on reported track geometry always lag behind the causes of the change. The affected clay formations are located in the south of the country and explain the deterioration on these routes.

Reported change in the four 100 per cent 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 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 per cent target ('very poor' track geometry) and to the 35 metre parameter maximum values ('super-red' 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 yards length (also possibly to a discrete and immediately actionable fault of the type identified in 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 & Wales, Scotland and network total for 31/3/07 and the four previous years.

Table 69 Poor track geometry (%)

Operating Routes	2002/03	2003/04	2004/05	2005/06	2006/07
London North Eastern	3.39	3.62	2.82	2.71	2.46
London North Western	3.96	3.89	3.19	2.74	2.28
South East – Anglia	5.46	6.15	4.33	3.95	4.32
South East – Kent	4.14	4.57	3.50	3.35	2.94
South East – Sussex	5.10	4.78	3.97	3.92	4.29
South East – Wessex	4.60	4.97	4.07	3.40	3.69
Western	3.46	3.45	2.56	2.28	2.29
England and Wales	**3.93**	**4.07**	**3.17**	**2.87**	**2.73**
Scotland	**2.86**	**2.60**	**2.56**	**2.07**	**1.77**
Network total	**3.79**	**3.87**	**3.09**	**2.77**	**2.60**
Confidence Grade		**A2**	**A1**	**A1**	**A1**

Note: A lower per centage indicates better performance.

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 per cent standard for the four main SD parameters.

Reporting confidence

Poor Track Geometry is reported to A1 confidence limits.

The track geometry measurement systems which provide the base data used both for the real-time management of the network and also for feeding into these measures are progressively being improved. In addition, the parameters used and the intervention limits applied are also currently being reviewed for application within the technical standards and policies. This will provide the opportunity to enhance and focus the track geometry measures to be applied in the next Control Period.

Commentary

Network-wide, PTG continues to show a modest year-on-year improvement which is attributable to effective targeting of maintenance effort and renewals, especially on S&C layouts. However, as explained in the previous section, the seasonal deterioration of PTG in South East territory due to the desiccation of clay formations in hot weather has not been completely recovered by the year end.

Track geometry – speed band data (M3)

Definition

This section presents standard deviation values, in millimetres (mm), 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 each operating route, England and Wales, Scotland and network total.

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 70 displays results for the total network at 31/3/07 with five previous years for comparison. The right-most column displays track kilometres in each linespeed range for 31/3/07. Differences of 0.01 mm or less in overall SD should be regarded with caution, being close to the accuracy limits of the measurement data.
- The 31/03/07 total network data is then split down into each operating route, England & Wales, Scotland and network total. Tables 71, 72, 74, and 75 display the resulting overall standard deviation and Tables 73 and 76 show the track km values.

Results for the total network are displayed in greater detail as standard deviation distribution charts. The charts, preceded by an explanation conclude the M3 information.

Results

Table 70 Track geometry: Network overall standard deviations mm

Parameter	Linespeed range mph	31/3/02	31/3/03	31/3/04	31/3/05	31/3/06	31/3/07	Track km
35m Top	15 - 125	3.031	3.036	3.023	2.933	2.873	2.809	29,637
	15 - 40	4.240	4.243	4.276	4.227	4.160	4.091	3,792
	45 - 70	3.309	3.340	3.338	3.245	3.195	3.117	11,894
	75 - 110	2.513	2.517	2.497	2.395	2.340	2.296	11,706
	115 - 125	1.799	1.819	1.808	1.728	1.678	1.628	2,245
35m Line	15 - 125	2.033	1.965	1.981	1.893	1.841	1.816	29,637
	15 - 40	4.331	4.089	4.082	4.055	3.933	3.847	3,792
	45 - 70	2.061	2.009	2.042	1.944	1.879	1.855	11,894
	75 - 110	1.229	1.224	1.267	1.169	1.141	1.147	11,706
	115 - 125	0.837	0.832	0.895	0.788	0.757	0.749	2,245
70m Top	80 - 125	3.261	3.263	3.208	3.064	2.969	2.916	10,423
	80 - 110	3.363	3.368	3.325	3.188	3.122	3.071	8,177
	115 - 125	2.424	2.482	2.489	2.428	2.347	2.286	2,245
70m Line	80 - 125	2.234	2.191	2.226	2.071	2.030	2.025	10,423
	80 - 110	2.326	2.284	2.326	2.181	2.154	2.159	8,177
	115 - 125	1.478	1.476	1.609	1.488	1.516	1.482	2,245
Confidence Grade				A2	A1	A1	A1	

Note: A lower overall SD indicates a better performance.

Table 71 35m top track geometry summary − overall SDmm

	Linespeed range (mph)				
Operating routes	15 – 125	15 – 40	45 – 70	75 – 110	115 – 125
London North Eastern	2.76	3.99	3.09	2.31	1.59
London North Western	2.84	4.16	3.28	2.20	1.65
South East − Anglia	2.90	4.26	3.06	2.48	No track
South East − Kent	2.99	4.21	3.11	2.45	No track
South East − Sussex	2.93	4.11	3.01	2.61	No track
South East − Wessex	2.91	4.21	3.20	2.52	No track
Western	2.71	4.12	3.10	2.17	1.70
England and Wales	**2.82**	**4.12**	**3.14**	**2.32**	**1.63**
Scotland	**2.73**	**3.95**	**2.95**	**2.15**	**1.58**
Network total	**2.81**	**4.09**	**3.12**	**2.30**	**1.63**

Table 72 35m line track geometry summary − overall SDmm

	Linespeed range (mph)				
Operating routes	**15 – 125**	**15 – 40**	**45 – 70**	**75 – 110**	**115 – 125**
London North Eastern	1.78	3.85	1.81	1.16	0.77
London North Western	1.77	3.76	1.87	1.08	0.71
South East − Anglia	1.96	4.30	1.93	1.27	No track
South East − Kent	1.99	4.34	1.84	1.21	No track
South East − Sussex	2.01	4.64	1.95	1.36	No track
South East − Wessex	1.75	4.08	1.87	1.22	No track
Western	1.75	3.59	1.85	1.05	0.80
England and Wales	**1.81**	**3.88**	**1.86**	**1.15**	**0.75**
Scotland	**1.86**	**3.68**	**1.85**	**1.12**	**0.75**
Network total	**1.82**	**3.85**	**1.86**	**1.15**	**0.75**

Table 73 35m top and line track km in each linespeed range

	Linespeed range (mph)				
Operating routes	**15 – 125**	**15 – 40**	**45 – 70**	**75 – 110**	**115 – 125**
London North Eastern	7,146	903	2,975	2,373	895
London North Western	6,623	801	2,644	2,377	801
South East − Anglia	2,187	267	863	1,057	0
South East − Kent	1,676	206	880	591	0
South East − Sussex	1,079	99	548	431	0
South East − Wessex	2,011	171	769	1,070	0
Western	4,940	750	1,563	2,256	371
England and Wales	**25,661**	**3,197**	**10,242**	**10,155**	**2,068**
Scotland	**3,976**	**594**	**1,652**	**1,552**	**178**
Network total	**29,637**	**3,792**	**11,894**	**11,706**	**2,245**

Table 74 70m top track geometry summary − overall SDmm

	Linespeed range (mph)		
Operating Routes	**80 – 125**	**80 – 110**	**115 – 125**
London North Eastern	2.80	3.09	2.17
London North Western	2.76	2.97	2.38
South East − Anglia	3.38	3.38	No track
South East − Kent	3.46	3.46	No track
South East − Sussex	3.38	3.38	No track
South East − Wessex	3.12	3.12	No track
Western	2.80	2.89	2.34
England and Wales	**2.92**	**3.09**	**2.29**
Scotland	**2.86**	**2.94**	**2.26**
Network total	**2.92**	**3.07**	**2.29**

Table 75 70m line track geometry summary − overall SDmm

	Linespeed range (mph)		
Operating routes	80 – 125	80 – 110	115 – 125
London North Eastern	1.88	2.12	1.35
London North Western	1.91	2.09	1.58
South East – Anglia	2.45	2.45	No track
South East – Kent	2.50	2.50	No track
South East – Sussex	2.49	2.49	No track
South East – Wessex	2.16	2.16	No track
Western	1.91	1.99	1.53
England and Wales	**2.02**	**2.17**	**1.48**
Scotland	**2.03**	**2.09**	**1.55**
Network total	**2.02**	**2.16**	**1.48**

Table 76 70m top and line track km in each linespeed range

	Linespeed range (mph)		
Operating routes	80 – 125	80 – 110	115 – 125
London North Eastern	2,619	1,724	895
London North Western	2,149	1,348	801
South East – Anglia	627	627	0
South East – Kent	524	524	0
South East – Sussex	258	258	0
South East – Wessex	882	882	0
Western	2,061	1,690	371
England and Wales	**9,120**	**7,053**	**2,067**
Scotland	**1,302**	**1,124**	**178**
Network total	**10,422**	**8,177**	**2,245**

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).

The track geometry measurement systems which provide the base data used both for the real-time management of the network and for feeding into these measures are progressively being improved. In addition, the parameters used and the intervention limits applied are also currently being reviewed for application within the technical standards and policies. This will provide the opportunity to enhance and focus the track geometry measures to be applied in the next Control Period.

Commentary

The overall SDs shown in Table 70 reveal a modest improvement when compared to 2005/06, with the minor exceptions of 35m and 70m line in the 75 (80) – 110 mph speed band (explained below). The SD increase in the 70m Line 110 – 125 mph speed band reported last year has been recovered. Further commentary is given in a subsequent sub-section headed ‘Standard deviation distribution charts’.

As explained in the previous sections, the seasonal deterioration of track geometry in South East territory and Western route due to the desiccation of clay formations in hot weather has not been completely recovered by the year end. For the most seriously formation-effected routes, the tables reveal a number of increases (deteriorations) in overall SD compared with the corresponding results for 2005/06.

The extra work required to complete a recovery in track geometry is still in progress at the year end. Whilst lower speed routes in South East territory and Western route have been recovered and improved, SDs on the higher speed routes show deterioration, especially in alignment but to an extent in top also. Access to high speed routes to undertake the considerable amount of recovery work is difficult and this will have an effect on recovery timescales.

For Western route the deteriorations are exclusively in the alignment parameters and most significantly in the 70m category thereof. 70m alignment SDs of 1.99 mm and 1.53 mm for the two speed bands are, however, comfortably within the Good (50 per cent) thresholds of 2.2 mm and 1.8 mm respectively, and trends since November indicate continuing steady recovery.

Scotland has achieved substantial improvements in 70m overall SDs during the course of the year. This must be largely attributed to the implementation of 'Absolute Track Geometry' techniques used in the WCML upgrade carried out in 2005-06, comprising 142 track-km between Gretna and Carstairs South junctions upgraded to 115+ mph, a length increase of 385 per cent compared to 31/3/05 for track in Scotland at this linespeed.

Elsewhere there has generally been improvement or no significant change, with the following exceptions:

LNE route 35m alignment in the 115+ mph linespeed range, deterioration from 0.74 mm to 0.77 mm. In the context of a healthy improvement (1.35 to 1.43) in 70m alignment for this speed range and alignment SD parameters well in excess of company standards, this is considered acceptable.

LNW route 70m alignment in the 115+ mph linespeed range, deterioration from 1.55 mm to 1.58 mm. For similar reasons to the LNE example above, this is not a matter for concern. An SD of 1.58 mm is in any case comfortably within the Good (50 per cent) threshold for 70m alignment.

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 0.1 mm 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 per cent, 90 per cent and 100 per cent SD target values, allowing for the fact that the speed ranges for the graphs are wider than those specified in the company standard. Where necessary for clarity, 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 70 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. Displacement to the left, indicating improvement, is clearly visible for the following curves:
35m top and alignment 15 – 40 mph
35m top 45 – 70 mph and 75 – 110 mph
35m top and alignment115+ mph
70m top 80 – 110 mph
70m top and alignment 115+ mph

For the remaining three curves it is difficult to judge the change (if any) from appearance alone. Reference to Table 70 reveals a small improvement in 35m alignment 45 – 70 mph and very small deteriorations in 35m alignment 75 – 110 mph and 70m alignment 80 – 110 mph. A change in overall SD of 0.01 or less is close to the limits of accuracy of the data and is not 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.

Figure 3 35m Top 15–40 mph

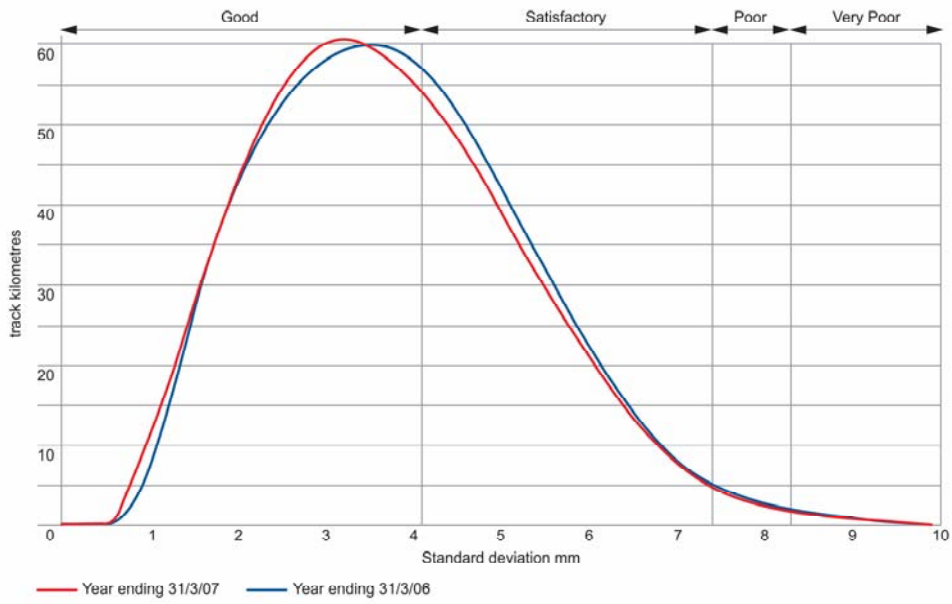


Figure 4 35m Alignment 15–40 mph

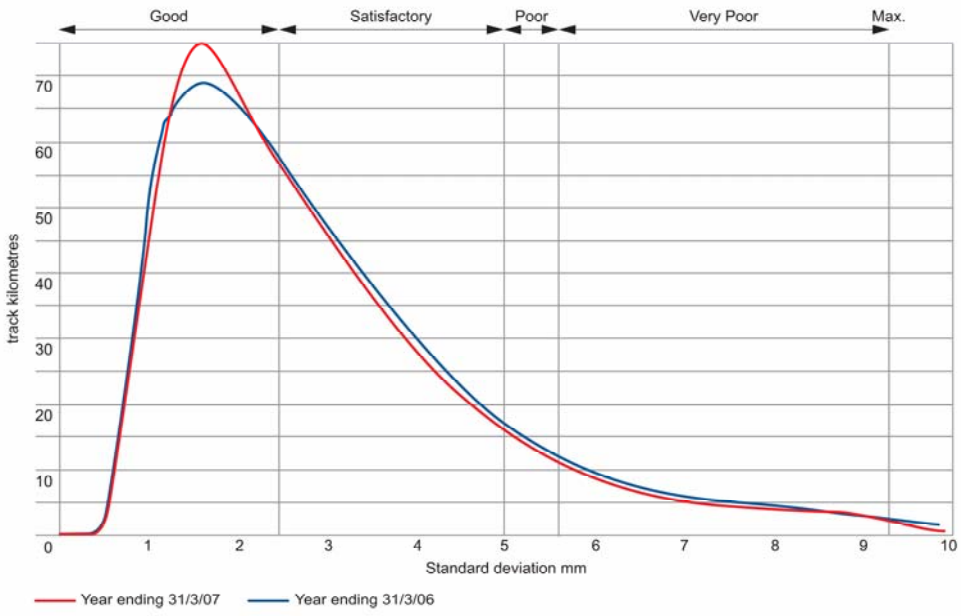


Figure 5 35m Top 45 – 70mph

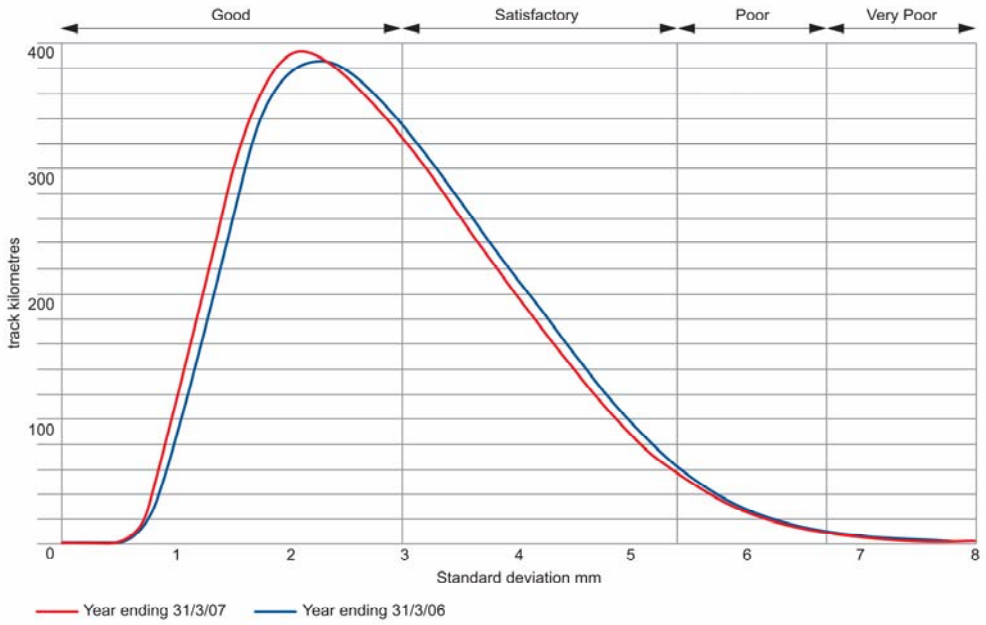


Figure 6 35m Alignment 45−70 mph

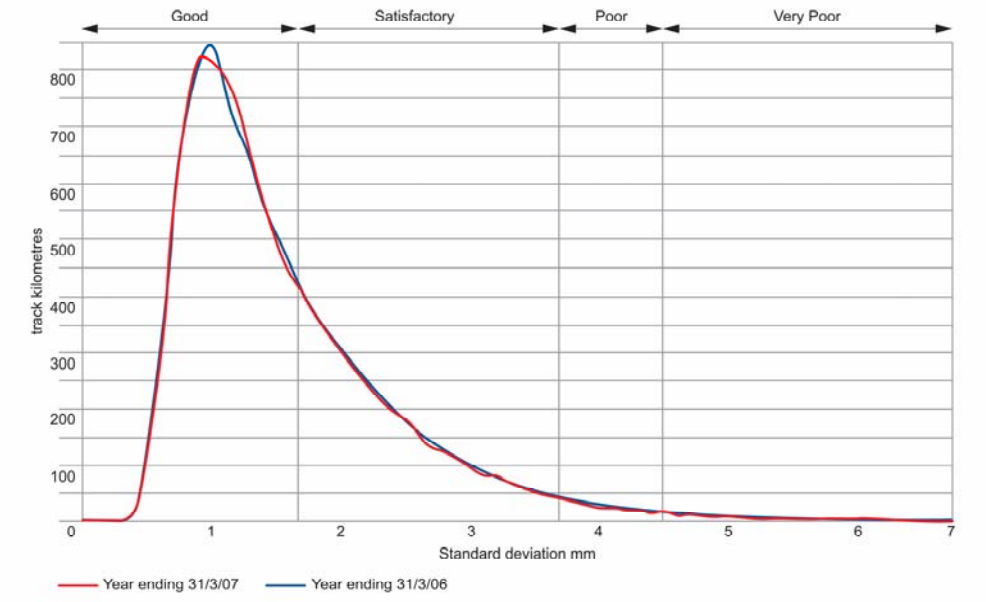


Figure 7 35m Top 75 – 110 mph

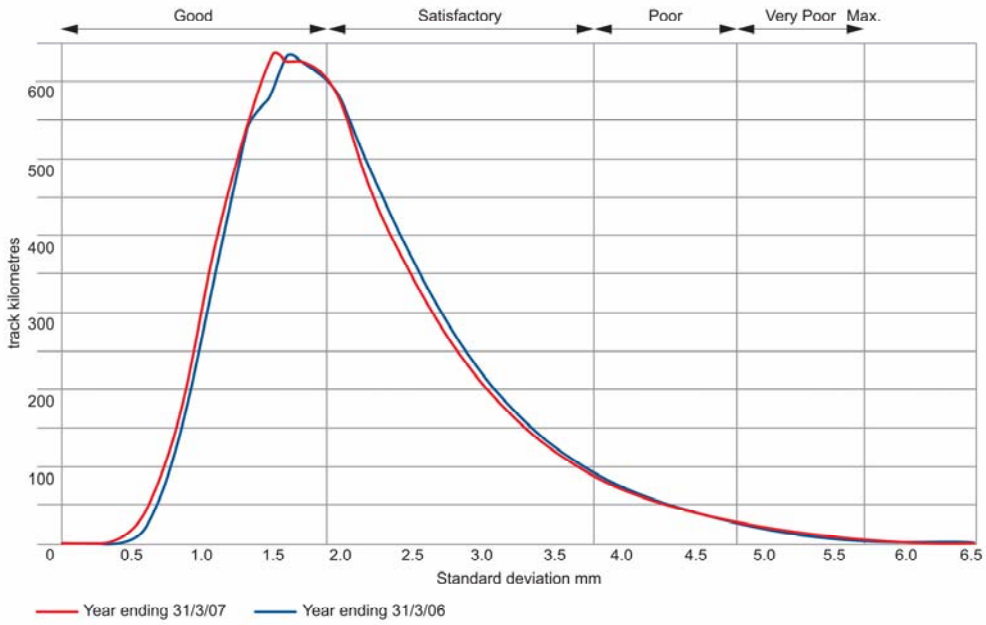


Figure 8 35m Alignment 75 – 110 mph

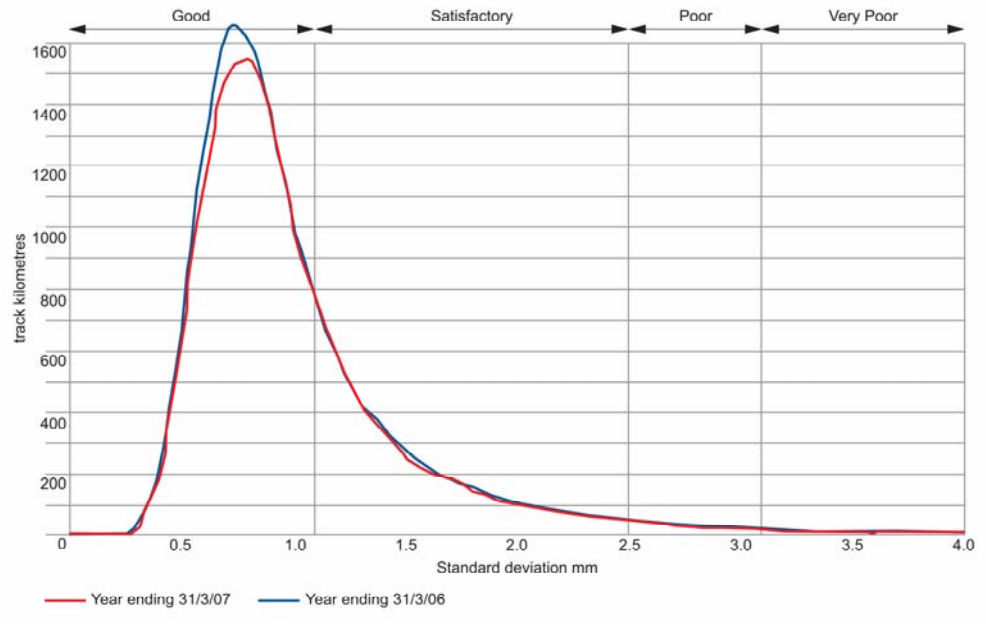


Figure 9 35m Top 115 – 125 mph

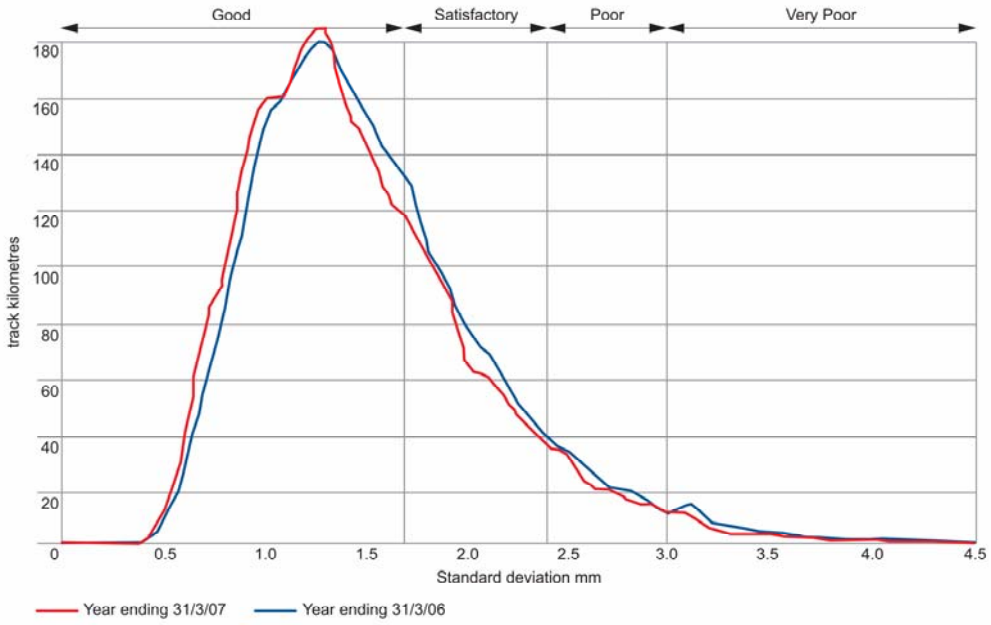


Figure 10 35m Alignment 115 – 125 mph

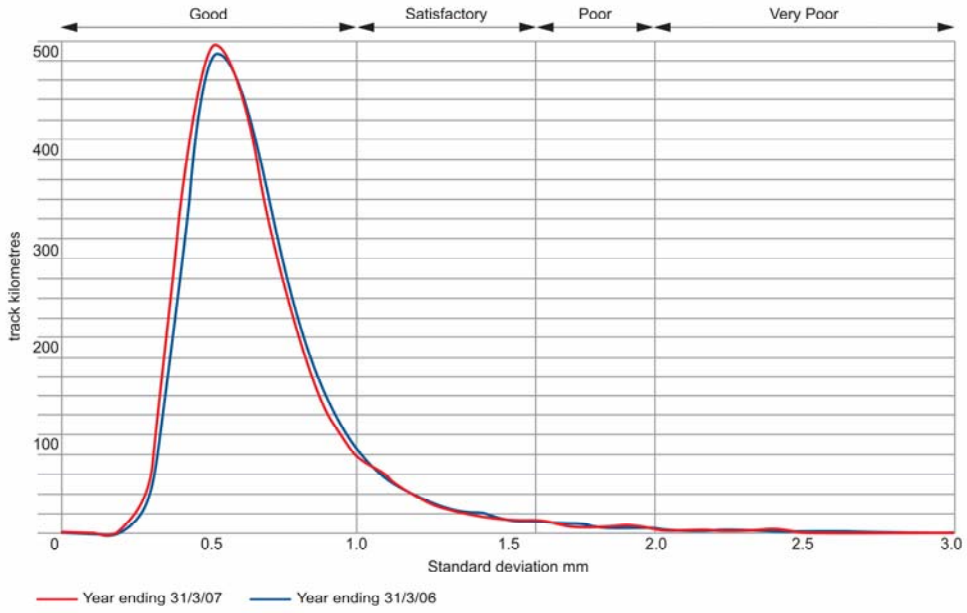


Figure 11 70m Top 80 – 110 mph

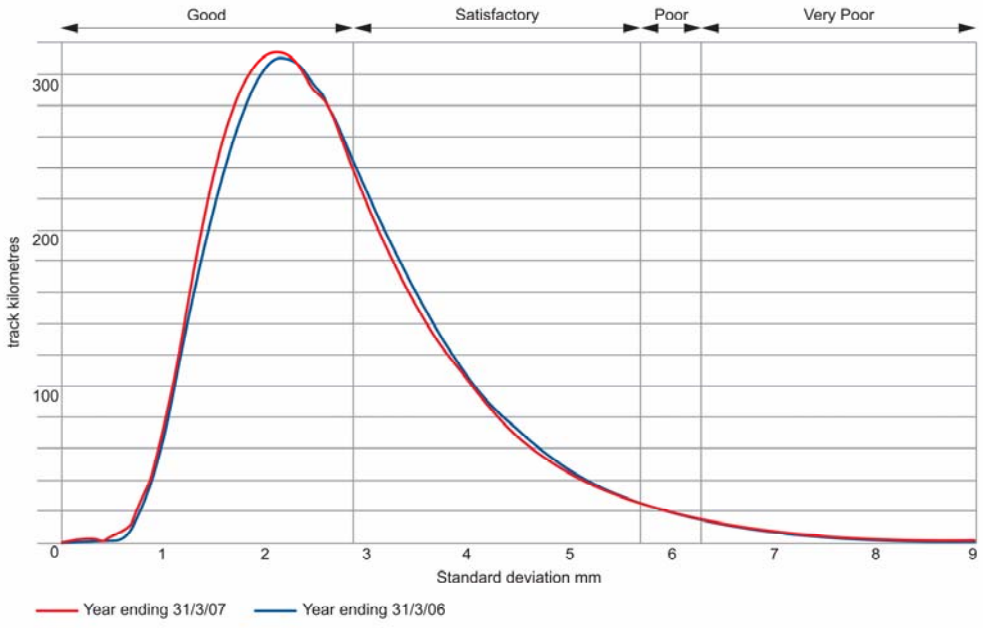


Figure 12 70m Alignment 80 – 110 mph

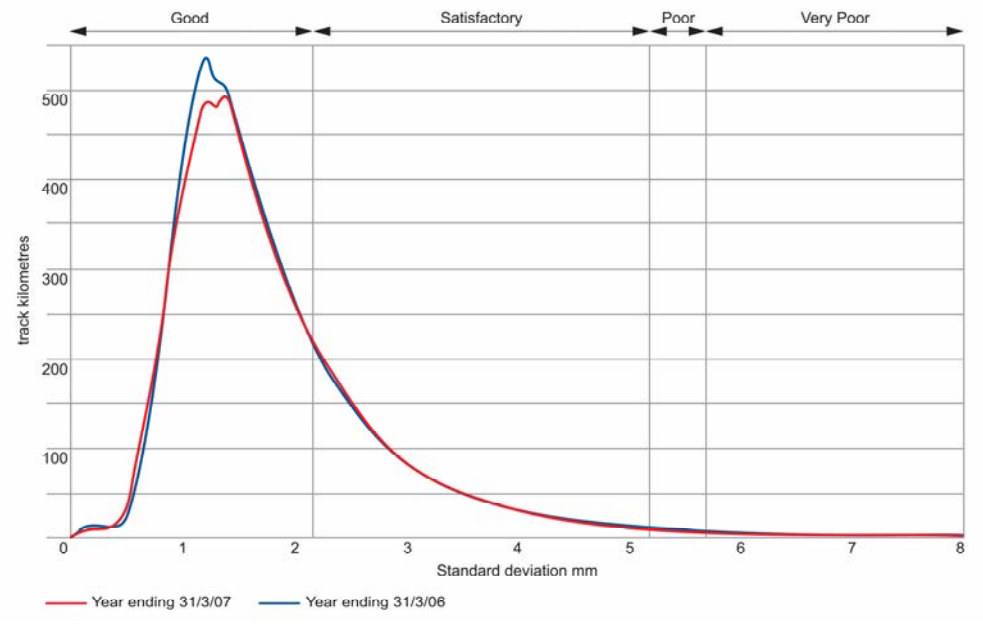


Figure 13 70m Top 115 – 125 mph

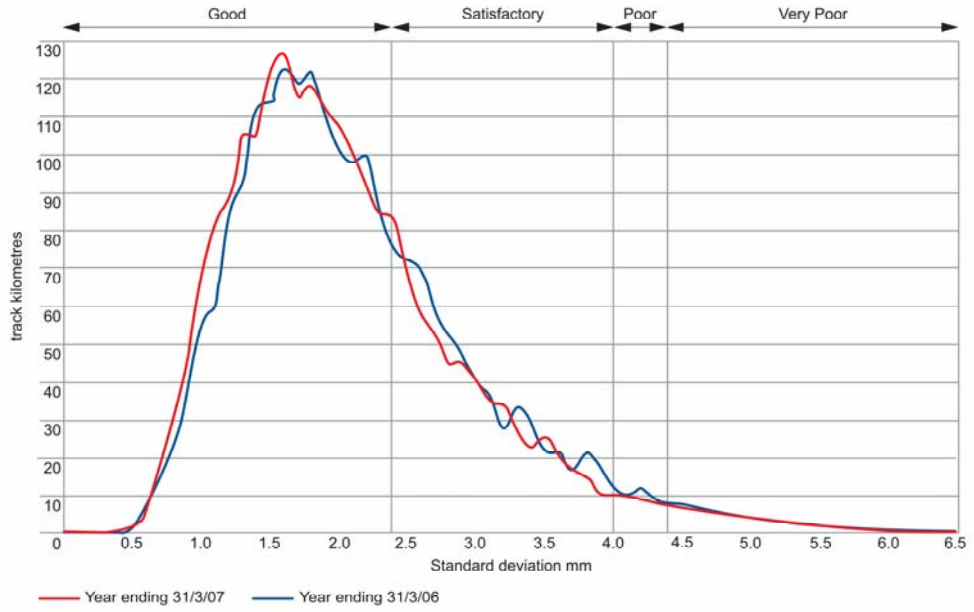
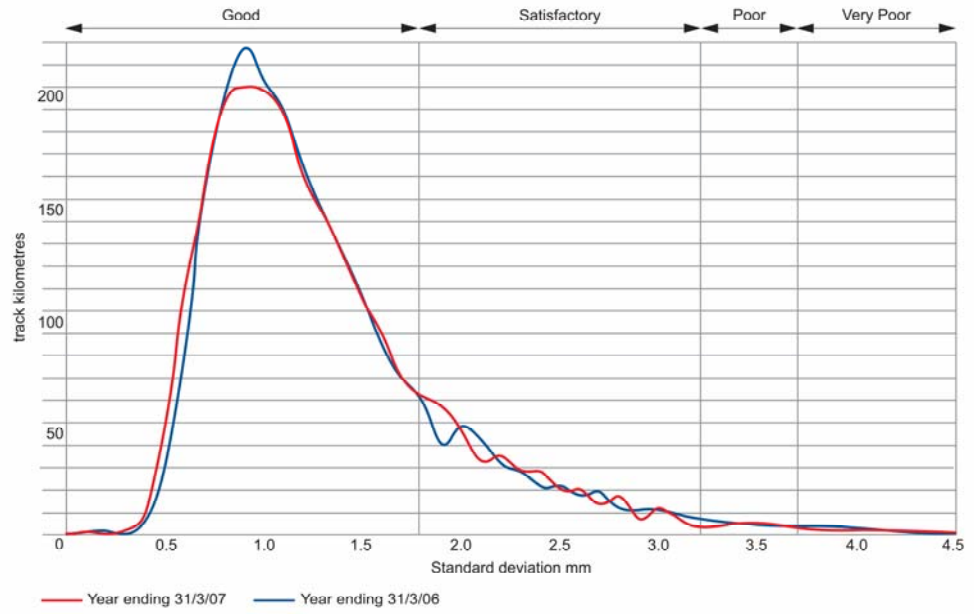


Figure 14 70m Alignment 115 – 125 mph



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 ESR or TSR has been imposed for a duration of 4 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 is within the scope of the measure. The severity score for an individual speed restriction site is calculated using the following formula:

Severity score = LT(1-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

$$\textit{i.e. } F = \frac{\textit{Imposed speed}}{\textit{linespeed}}$$

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

$$F = \left(\frac{\textit{lowest Imposed speed}}{\textit{lowest Linespeed}} + \frac{\textit{highest Imposed speed}}{\textit{highest Linespeed}} \right)^{/2}$$

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 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 its 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 submits 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 and 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.

Results

Table 77 Track temporary speed restrictions

Operating routes	2005/06 TSR sites	2005/06 Severity score	CG	2006/07 TSR sites	2006/07 Severity score	CG
London North Eastern	267	2057		196	1548	
London North Western	245	1349		251	941	
South East – Anglia	30	80		24	34	
South East – Kent	8	16		22	24	
South East – Sussex	5	2		7	10	
South East – Wessex	50	41		58	83	
Western	79	454		70	409	
England and Wales	**684**	**3999**		**628**	**3049**	
Scotland	**83**	**153**		**41**	**84**	
Network total	**767**	**4152**	**B2**	**669**	**3133**	**B2**

Table 78 Structures temporary speed restrictions

Operating routes	2005/06 TSR sites	2005/06 Severity score	CG	2006/07 TSR sites	2006/07 Severity score	CG
London North Eastern	4	11		3	9	
London North Western	6	4		2	6	
South East – Anglia	0	0		0	0	
South East – Kent	0	0		0	0	
South East – Sussex	3	1		0	0	
South East – Wessex	2	0		0	0	
Western	1	0		1	0	
England and Wales	**16**	**16**		**6**	**15**	
Scotland	**4**	**1**		**2**	**0**	
Network total	**20**	**17**	**B2**	**8**	**15**	**B2**

Table 79 Earthworks temporary speed restrictions

Operating routes	2005/06 TSR sites	2005/06 Severity score	CG	2006/07 TSR sites	2006/07 Severity score	CG
London North Eastern	7	27		7	28	
London North Western	3	3		4	4	
South East – Anglia	1	2		3	3	
South East – Kent	0	0		0	0	
South East – Sussex	0	0		2	0	
South East – Wessex	0	0		1	0	
Western	15	84		16	63	
England and Wales	**26**	**116**		**33**	**98**	
Scotland	**2**	**0**		**0**	**0**	
Network total	**28**	**116**	**B2**	**33**	**98**	**B2**

Regulatory target

Whilst the 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', compared with the 2003/04 baseline level of 1,199 TSRs (track plus structures plus earthworks).

We have assumed that for 2006/07 the regulatory and internal target is for a reduction from 2005/06 levels, when there were 815 TSRs due to condition of asset. The 2006/07 total was 710 and so these targets have been met.

In the Business Plan we included a target specifically for structures and earthworks TSRs for 2006/07. This is 68 TSRs. We had 41 structures and earthworks TSRs for 2006/07 and have therefore met this target.

Reporting confidence

Condition of Track − the reporting confidence is at a similar level to the 2005/6 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 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 required 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 check 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 25% 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. In particular, Scotland Route has halved its count and severity score in the last year.

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.

53% of the London North Western severity score arises from multiple TSRs on only two secondary routes: the Bedford to Bletchley line (42%), and the Settle and Carlisle line (11%).

With regard to Structures, the number of TSRs was greatly reduced to just 8, but the severity score was affected by 1 longstanding structure speed on LNE that ran throughout the year, and 1 long speed restriction due to a collapsed culvert on LNW.

Although the number of earthwork caused TSRs increased by 5 to 33, the severity score reduced by 15%; this is a result of the removal of TSRs in a timely manner as well as the location of the TSRs. It is also worth noting that over recent years we have improved our management of earthwork failures such that some are remedied within a 4 week period and are not counted in the number of TSR sites reported.

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), alignment (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 the Operating Routes, England & Wales, Scotland and network total.

Regulatory target

The regulatory target for level 2 exceedences should not exceed 0.9 per track mile during the current control period. The Business Plan target is 0.81 per track mile. For 2006/07 we achievd 0.72 level 2 exceedences per track mile and have met both targets.

Reporting confidence

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

The track geometry measurement systems which provide the base data used both for the real-time management of the network and also feed into these measures are progressively being improved. In addition the parameters used and the intervention limits applied are also currently being reviewed for application within the technical standards and policies.

Results

This will also provide the opportunity to enhance and focus the track geometry measures to be applied in the next Control Period.

Commentary

Overall, level 2 exceedences continue to improve steadily. However, the seasonal deterioration of track geometry in South East territory due to the desiccation of clay formations in hot weather had not completely recovered by the year end. This is reflected in the deterioration in the Sussex and Wessex routes which has offset larger improvements elsewhere in the country.

Gauge faults are now a rare occurrence. Twist, the second primary measure, continues to improve and it is noteworthy that the network numbers have halved since April 1998.

Overall the pattern has been one of steady improvement, responding to rigorous maintenance procedures for the effective treatment of recurring faults and effective targeting of renewals. However LNW, LNE, Kent, Western and Scotland have now achieved a standard from which it will be difficult to make further improvement.

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.

Table 80 Level 2 exceedences per track mile

Operating routes	2002/03	2003/04	2004/05	2005/06	2006/07
London North Eastern	1.11	1.02	0.83	0.75	0.67
London North Western	1.40	1.36	1.10	1.01	0.76
South East – Anglia	1.61	1.77	1.24	1.06	0.93
South East – Kent	0.95	0.86	0.60	0.59	0.49
South East – Sussex	1.37	1.02	0.93	0.80	1.01
South East – Wessex	1.22	1.22	0.95	0.93	0.98
Western	1.08	1.08	0.92	0.75	0.67
England and Wales	**1.23**	**1.19**	**0.95**	**0.85**	**0.74**
Scotland	**0.83**	**0.72**	**0.67**	**0.63**	**0.57**
Network total	**1.17**	**1.13**	**0.91**	**0.82**	**0.72**
Confidence Grade		**A2**	**A1**	**A1**	**A1**

Note: A lower number indicates better performance.

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 addressed.

Results

Table 81 Earthworks failures

Operating routes	2003/04	2004/05	2005/06	2006/07
London North Eastern	3	4	8	11
London North Western	8	21	3	5
South East – Anglia	7	5	2	6
South East – Kent	1	1	1	5
South East – Sussex	0	1	0	10
South East – Wessex	0	0	2	5
Western	21	11	18	37
England and Wales	**40**	**43**	**34**	**79**
Scotland	**7**	**11**	**7**	**11**
Network total	**47**	**54**	**41**	**90**
CG	**AX**	**AX**	**A2**	**A2**

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 earthwork failures. We did not achieve the regulatory target as we had 90 earthwork failures.

Reporting confidence

The 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

The increase in total number of earthwork failures over the last year is mainly accounted for by increases in the number of failures in Western and South East routes. These increases are thought to be due to higher levels of rainfall in southern England compared to previous winters. The actions we are taking to reduce earthwork failures involve an increased focus on earthwork drainage with more resources being provided for drainage inspections and remediation work – this is planned to be continued into the next control period. 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 three slope failures causing derailment in 2006/07. Two of these were passenger trains and one was an engineering train. The two passenger train derailments are subject to RAIB investigation to establish cause.

1. An engineering train derailment occurred on 28 November 2006 at Pewsey in Western Territory due to a cutting failure.
2. A passenger train derailment occurred on 13 January 2007 at Hooley in Sussex due to a cutting failure and tree stump hitting a retaining structure pushing a length of timber onto the track.
3. A passenger train derailment occurred on 15 January 2007 at Kemble in Western Territory due to a cutting failure pushing over a masonary retaining wall onto the track.

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.

Reporting method

The reported measure is presented as a distribution graph (see Figure 3) showing the cumulative number of bridges assessed since 2000 on a 1-100 scale. Additionally, bridge SCMI data is collated into each of the 5 condition grades, and numbers of bridges reported by band.

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).

Results

Figure 15 SCMI Score distribution

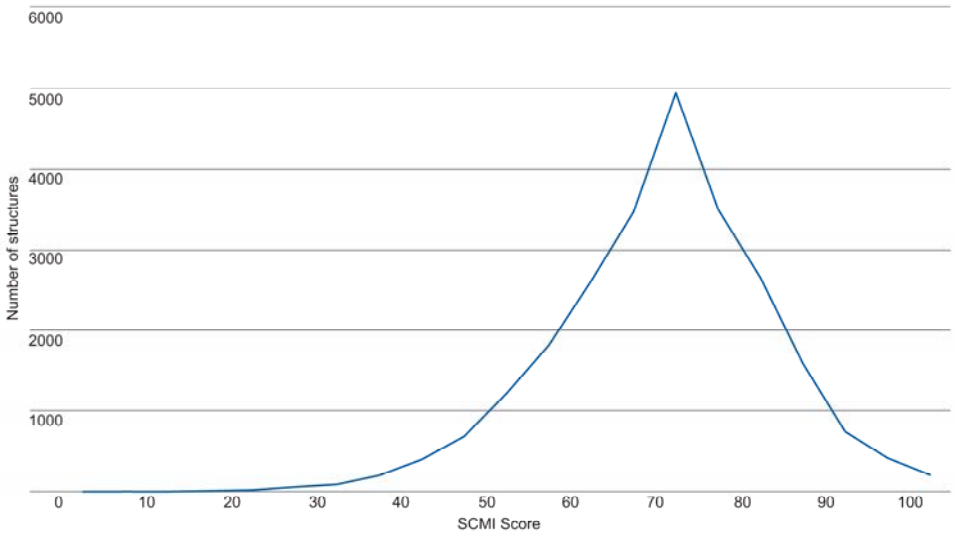


Table 82 Bridge condition index

Bridge condition grade	Equivalent SCMI value	2002/03	2003/04	2004/05	2005/06	2006/07
1	80 – 100	1,015	733	793	855	603
2	60 – 79	2,484	2,067	3,193	3,263	2,582
3	40 – 59	692	789	923	1,217	1,030
4	20 – 39	61	126	90	94	122
5	1 – 19	3	3	5	1	7
Total no. examined		**4,255**	**3,718**	**5,004**	**5,430**	**4,344**
Average condition grade		**2.0**	**2.1**	**2.1**	**2.1**	**2.2**

Table 83 Bridge condition index

Bridge condition grade	Equivalent SCMI value	Adjustments	2005/06	2000/06	CG	Adjustments	2006/07	2000/07	CG
1	80 – 100	-14	855	3,861	B3	-41	603	4,423	B3
2	60 – 79	-85	3,263	12,336	B3	-188	2,582	14,730	B3
3	40 – 59	-15	1,217	4,020	B3	-81	1,030	4,969	B3
4	20 – 39	-4	94	394	B3	-14	122	502	B3
5		0	1	13	B3	0	7	20	B3
Total no. examined		**-99**	**5,430**	**20,624**	**A1**	**-324**	**4,344**	**24,644**	**A1**
Average condition grade			**-118**		**2.0**	**B2**		**2.2**	**2.1B2**

Regulatory target

It has been discussed and agreed with ORR that a full target and tolerance cannot be established until all bridges have undergone SCMI which is anticipated to be 2008/9.

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.

Significant changes since Annual Return 2006

The SCMI tool was updated for use during 2006/7 with additional functionality for importing data and ability to present span data. It should be noted, however, that bridges marked prior to Issue 3 of the SCMI Handbook (August 2004) have not been marked as separate spans but as one single score for the whole bridge. Table 84 gives the 2006/7 results and totals for bridges/bridge spans.

Commentary

Although no national audit of bridges has been undertaken during 2006/7, Lloyd's Register were commissioned to undertake a desk top review of a sample of 41 bridges selected from ones which have undergone a site check by the Structures Examination Contractors. The review found that there is no improvement in the base data compared to previous years but the majority of errors found are easily corrected by ensuring that the SCMI and detailed report are consistent.

The data available for 2006/7 is for 24,644 bridges in all territories and comprises:

- 17,822 underbridges
- 6,691 overbridges
- 131 side bridges.

Signalling failures (M9)

Definition

This measure reports the total number of 'signalling failures' causing train delays of more than 10 minutes per incident.

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. The data is then allocated to the business operating routes and normalised by million train kilometres.

Table 84 Bridge condition index for bridge spans

Bridge condition grade	Equivalent SCMI Value	2006/07	2000/07
1	80 – 100	820	4,406
2	60 – 79	4,285	16,745
3	40 – 59	1,724	5,814
4	20 – 39	160	537
5	7	19	
Total no. examined		**6,996**	**27,521**
Average condition grade		**2.2**	**2.1**

Results

Table 85 Number of signalling failures number

Operating routes	2005/06 No.	No. per million train km	CG	2006/07 No.	No. per million train km	CG
London North Eastern	4,835	44	B3	4,607	41	B3
London North Western	6,146	57	B3	6,554	60	B3
South East – Anglia	1,882	43	B3	1,775	39	B3
South East – Kent	1,509	47	B3	1,341	41	B3
South East – Sussex	846	29	B3	832	28	B3
South East – Wessex	1,938	44	B3	1,816	41	B3
Western	3,368	50	B3	3,082	44	B3
England and Wales	**20,524**	**–**	**B3**	**20,007**	**–**	**B3**
Scotland	**2,843**	**59**	**B3**	**2,697**	**54**	**B3**
Network total	**23,367**	**48**	**B2**	**22,704**	**46**	**B2**
Regulatory target	**28,098**	**59**		**28,098**	**59**	

Regulatory target

The regulatory target is for no deterioration from the 2003/4 level of 28,098 signalling failures (equivalent to 59 per million train km per annum). The Business Plan target for 2006/07 for signalling failures was 22,500. We have therefore met the regulatory target and just missed our Business Plan target as we had 22,704 signalling failures.

Reporting confidence

Train running information is reported in TRUST. All signalling failures are also reported in FMS (Fault management System) and are allocated to the business operating 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.

Commentary

The Network total number of failures fell 3 per cent from the 2005/6 figure and 20 per cent from the 2003/4 baseline figure. At the same time the number of train miles run has increased by 1.6 per cent from 2005/6 and 2.9 per cent from the 2003/4 baseline figures. Within these figures there are variations per route particularly when compared with the baseline values. These figures show a significant and steady improvement since the 2003/4 baseline and a slight improvement over the 2005/6 values.

There was an overall reduction of 4.4 per cent in the number of failures per million train km run from the 2005/6 value with reductions reported on all except one route. LNW was the only route to show an increase of 6.6 per cent over the previous year but still showed a significant improvement of 17 per cent from the baseline value and remains one of the best performing routes over that longer period.

The train mileage run has increased nationally from the previous period by 1.6 per cent ranging from nil on Wessex to 3 per cent in Scotland. The change from the baseline values is nationally 3 per cent higher but ranges from an increase of 10 per cent in Kent, and 7 per cent in Scotland to a reduction of 3 per cent in Sussex and no change in Wessex. This increase in traffic further reduces the opportunity for maintenance to be undertaken and puts pressure on fault repair staff to undertake first aid rather than comprehensive remedial work.

Following the introduction of LED ground signals and the consequent reduction in the number of failures, LED long range signals which give improved performance are now being installed on all new schemes and other sites where significant benefits are expected. The high performance switch system point operating mechanism has been further developed and is also being installed in higher numbers. Both developments have helped reduced the number of failures across the network.

This measure remains comfortably within the ORR set target.

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 has not included level crossings, remote frames or ground frames in the past.

A separate SICA assessment for level crossings was introduced in August 2006. Since then a series of contracts have been let in order that full coverage of Primary SICAs for Level Crossings was complete by the end of the 2006/7 financial year. The results of these SICAs are being used mainly as a priority planning indication for where further Secondary SICAs need to be carried out. The results of the initial Primary SICAs are included in Table 86 below.

Reporting method

This Annual Return has been collated from SICA assessment records stored in the SICA Information System (SIS) which is a new tool introduced in the last two years. This tool stores information from all SICA records in a central repository. This allows improved visibility of the results from SICA surveys, produces up to date SICA assessment schedules for the territory's use and has multiple reporting functions of which the Annual Return is just one.

Results

Table 86 Total number of interlocking areas with a SICA assessment at end of each financial year

Condition grade	Observed nominal residual life (in years)	2002/03	2003/04	2004/05	2005/06	2006/07	CG
1	>20	15	0	5	8	3	B3
2	10 to 20	655	736	782	1,024	965	B3
3	3 to 10	295	559	626	530	520	B3
4	<3	67	98	97	51	20	B3
5	At end of life	0	0	0	0	14	B3
Average condition grade		**2.4**	**2.5**	**2.5**	**2.39**	**2.39**	**B3**
Total number assessed		**1032**	**1393**	**1510**	**1613**	**1522**	**B3**

Table 87 Signalling condition index by territory

Operating routes/ condition grade	1	2	3	4	5	Total 2005/06	CG	1	2	3	4	5	Total 2006/07	CG
London North Eastern	4	323	120	14	0	461	B3	0	314	123	6	1	444	B3
London North Western	0	216	109	7	0	332	B3	0	196	145	2	0	343	B3
South East – Anglia	0	52	77	9	0	138	B3	0	60	26	4	3	93	B3
South East – Kent	0	59	33	2	0	94	B3	0	51	34	2	0	87	B3
South East – Sussex	1	24	29	0	0	54	B3	0	26	29	0	0	55	B3
South East – Wessex	0	44	41	5	0	90	B3	0	43	36	4	0	83	B3
Western	0	212	53	12	0	277	B3	1	143	92	2	9	247	B3
England and Wales	**5**	**930**	**462**	**49**	**0**	**1,446**	**B3**	**1**	**833**	**485**	**20**	**13**	**1,352**	**B3**
Scotland	**3**	**94**	**68**	**2**	**0**	**167**	**B3**	**2**	**132**	**35**	**0**	**1**	**170**	**B3**
Network total	**8**	**1,024**	**530**	**51**	**0**	**1,613**	**B3**	**3**	**965**	**520**	**20**	**14**	**1,522**	**B3**

There are 26 interlockings less than 5 years old which are not required to have SICA assessments and have not been included in the number (1,522) reported above. Therefore the total number of interlockings with a SICA assessment or not required to have one is 1,548. The total interlocking population for total network is 1,660 and the percentage coverage of SICA surveys is 93 per cent.

There are 147 level crossings for which a SICA has yet to be completed. In many cases the survey has been finished but the results provided by the consultant(s) have yet to be accepted by the territory.

Percentage coverage is 91 per cent.

Regulatory target

Network Rail is obliged to ensure that asset condition as defined by the M10 measure does not deteriorate from the 2003/04 baseline condition of 2.5. This year's average is 2.39, representing a slightly lower average interlocking age and thus surpassing the regulatory target.

Reporting confidence

Reporting confidence for this return is stated as B3. The nature of the SICA tool means that an accuracy band better than 3 cannot be realistically achieved. A reliability band of B is given 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

Since the last Annual Return, a major improvement has been achieved with the work to determine the condition of all of Network Rail's signalled level crossings. This information will be of use in determining a renewals work bank as well as demonstrating the way such work affects the overall condition of these assets.

In respect of the interlockings, it can be seen that the 100 per cent coverage of SICA surveys was not achieved as hoped. This is mainly due to the focus on undertaking the Level Crossing SICA reviews.

Table 88 Level crossing condition index by territory

Territory/route	Total LX population	Total LX surveyed	Condition grade 1	2	3	4	5
London North Eastern	644	638	51	536	50	1	0
London North Western	157	51	2	15	25	6	3
South East – Anglia	263	260	1	239	20	0	0
South East – Kent	62	61	0	45	16	0	0
South East – Sussex	67	65	0	50	14	1	0
South East – Wessex	98	96	0	84	12	0	0
Western	225	199	0	150	45	0	4
Scotland	101	100	0	84	16	0	0
Total	**1,617**	**1,470**	**54**	**1,203**	**198**	**8**	**7**

However, despite this, 257 interlocking SICA surveys were achieved in 2006/7 keeping us on track with the programme of work. The reduction in the overall completed surveys (1522 compared to 1613 reported complete in 2005/6) is due to a number of factors. This includes recognition that a number of SSI interlockings had been previously counted as being surveyed on the basis of a summary survey for a group of interlockings. This practice has been changed – such that every interlocking will have its own SICA survey. The affected interlockings are those controlled by the Upminster and Liverpool Street IECCs. All of these interlockings are relatively new in relation to their asset life (up to 15 years old) and as such are not giving major cause for concern, however each will be included in the Territory's program of SICA assessments for 2007/8. Also affecting the numbers are a few interlockings that have been de-commissioned.

The SICA process remains, and will continue to remain, Network Rail's prime tool for assessing the condition of its signalling assets. The results of the SICA surveys from both interlockings and level crossings are now being used to help develop a renewals work bank for all assets – looking forward over the next 40 years – allowing a detailed proposal to be developed as part of Network Rail's plans for CP4.

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 Electrification 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

Table 89 Electrification failures: overhead line

Operating routes	2002/03	2003/04	2004/05	2005/06	CG	2006/07	CG
London North Eastern		21	20	13	B3	16	B2
London North Western		31	28	20	B3	30	B2
South East – Anglia		24	17	10	B3	18	B2
South East – Kent		0	0	0	BX	0	BX
South East – Sussex		–	–	–		–	
South East – Wessex		–	–	–		–	
Western		0	0	0	BX	0	BX
England and Wales		**76**	**65**	**43**	**B3**	**64**	**B2**
Scotland		**3**	**6**	**6**	**BX**	**5**	**BX**
Network total	**102**	**79**	**71**	**49**	**B3**	**69**	**B2**

Regulatory target

The regulatory target is for no deterioration from the number of incidents reported for 2001/02 (107). Our internal target for 2006/07 was 50. We have therefore achieved the regulatory target but just missed our internal target for 2006/07 as we achieved 69.

Reporting Confidence

Overall the confidence level is considered to be B2.

Commentary

Although the 2006/07 network total (69) is higher than in 2005/06 (49), it is 35% lower than the regulatory target of 107 and slightly lower than the 2004/05 figure of 71 incidents.

Relatively favourable weather conditions were one of the factors for the very good result in 2005/06. In 2006/07, the weather conditions, particularly high winds, have had an adverse impact on overhead line failures.

Significant investment is currently underway to deliver campaign changes and wiring renewals on the Anglia route, East Coast Main Line and West Coast Main Line. These investments are expected to deliver reliability improvements on these routes and therefore on the overall network, as these routes are currently experiencing the highest levels of incidents.

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 Electrification 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

Table 90 Electrification failures: conductor rail

Operating routes	2002/03	2003/04	2004/05	2005/06	CG	2006/07	CG
London North Eastern		0	0	0	BX	0	BX
London North Western		2	1	0	BX	1	BX
South East – Anglia		0	0	0	BX	0	BX
South East – Kent		8	4	1	BX	2	BX
South East – Sussex		11	5	3	BX	1	BX
South East – Wessex		12	3	2	BX	7	BX
Western		–	–	–	–	–	–
England and Wales		**33**	**13**	**6**	**–**	**11**	**BX**
Scotland		**–**	**–**	**–**	**–**	**–**	**–**
Network total	**32**	**33**	**13**	**6**	**BX**	**11**	**BX**

Regulatory target

The regulatory target is for no deterioration from the number of incidents reported for 2001/02 (30). Our internal target is 8. We have therefore met the regulatory target but just missed our internal target as we achieved 11.

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 2006/07 network total (11) is 63% lower than the regulatory target of 30. No significant factor has been identified which would explain the increase in incidents compared to the exceptionally low result in 2005/06 (6). It is therefore not expected to represent the start of an adverse trend, but rather the result of the expected variability for such a small data set.

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 91 Electrification condition – AC traction 2000/07 cumulative total

Condition grade	Network	South East	London North East	London North West	Scotland
1	28%	42%	15%	19%	55%
2	56%	47%	60%	65%	45%
3	15%	11%	24%	17%	0%
4	1%	0%	1%	0%	0%
5	0%	0.%	0%	0%	0%
Average condition grade	**1.88**	**1.69**	**2.11**	**1.98**	**1.45**

Table 92 Electrification condition – AC traction 2006/07 year total

Condition grade	Network	South East	London North East	London North West	Scotland
1	18%	13%	6%	30%	25%
2	63%	67%	47%	70%	75%
3	17%	20%	41%	0%	0%
4	2%	0%	6%	0%	0%
5	0%	0%	05	0%	0%
Average condition grade	**2.02**	**2.07**	**2.47**	**1.7**	**1.75**

Reporting confidence

The measure is given a B2 tolerance band as 100 per cent of the assets have been assessed over the past few years and the overall score should be accurate within ±5 per cent taking into account the subjective nature of the condition assessments.

Regulatory Target

The regulatory target is to return to the 2001/02 condition of 2.1. This has been achieved.

Commentary

The M13 measure includes a total of 291 A.C. FSs and TSPs of which a target of 20 per cent (for 2006/07 as agreed with ORR) are assessed and reported upon. In 2006/2007 a total of 60 (21 per cent) FSs and TSPs were assessed and hence the target was met.

The average condition grades have increased nationally and for each of the territories. The results are supported by the recent failings of roof bushings associated with metalclad buildings and the reduced the reliability of oil-filled switchgear. Renewal and enhancement projects are underway to rectify these issues.

Electrification condition – DC traction substations (M14)

Definition

This is a measure of the condition of 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 equipment:

- 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 done through a combination of visual inspections of DC substation buildings and associated equipment 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 93 Electrification condition – DC traction substation 2000/07 cumulative total

Condition grade	Network	South East	London North East	London North West	Scotland
1	47%	50%	50%	2%	n/a
2	43%	41%	33%	64%	n/a
3	10%	10%	17%	16%	n/a
4	0%	0%	0%	0%	n/a
5	0%	0%	0%	0%	n/a
Average condition grade	**1.64**	**1.6**	**1.67**	**1.95**	**n/a**

Table 94 Electrification condition – DC traction substation 2006/07 year total

Condition grade	Network	South East	London North East	London North West	Scotland
1	67%	73%	n/a	11%	n/a
2	27%	26%	n/a	33%	n/a
3	7%	1%	n/a	56%	n/a
4	0%	0%	n/a	0%	n/a
5	0%	0%	n/a	0%	n/a
Average condition grade	**1.40**	**1.28**	**n/a**	**2.44**	**n/a**

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

Reporting confidence

The measure is given a B2 tolerance band as 100 per cent of the assets have been assessed over the past few years and the overall score should be accurate within ±5 per cent taking into account the subjective nature of the condition assessments.

Regulatory target

The regulatory target is to return to the 2001/02 condition of 2.3. This has been achieved.

Commentary

The M14 measure includes a total of 419 traction substations of which a target of 20 per cent (for 2006/07 as agreed with ORR) are to be assessed and reported upon. In 2006/2007 a total of 90 (21 per cent) substations were assessed and hence the target was met. There are no DC substations in Scotland.

The average condition grades have improved by 0.02 nationally and for each of the territories. This result is partly due to the inclusion of four new substations fitted since 2003 which had not previously been assessed.

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 NR/ARM/M15PR.

Results

Table 95 Electrification condition – AC traction contract system

Condition grade	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	2000/06 6-year total contact wire/key components	2000/07 7-year total contact wire/key components	CG
1	35%	39%	39%	38%	38%	
2	55%	53%	53%	54%	54%	
3	10%	9%	8%	7%	7%	
4	0%	0%	0%	0%	0%	
5	0%	0%	0%	0%	0%	
Average condition grade	**1.8**	**1.7**	**1.7**	**1.7**	**1.7**	**B3**
Percentage of assets surveyed	**11%**	**15%**	**17%**	**21%**	**27%**	

Table 96 Electrification condition – AC traction contact system

Condition grade	London North Eastern	London North Western	Scotland	South East	Western
1	36%	28%	57%	42%	80%
2	56%	62%	38%	53%	20%
3	7%	10%	5%	5%	0%
4	0%	0%	0%	0%	0%
5	0%	0%	0%	0%	0%
Average condition grade	**1.7**	**1.8**	**1.5**	**1.6**	**1.2**
Percentage of assets surveyed	**22%**	**34%**	**24%**	**23%**	**11%**

Regulatory target

The regulatory target is to return to the 2001/02 condition i.e a network average of 1.8. This has been achieved.

Reporting confidence

Reporting of M15 – Electrification Condition AC traction contact systems is given a B3 confidence.

Commentary

The method of asset condition inspection has remained unchanged with base data collected via maintenance inspections.

27 per cent of the total asset base has now been assessed.

The additional 6 per cent surveyed this year on LNE, LNW, SE and Scotland territories has not changed the average condition score from 1.7.

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 NR/ARM/M16PR.

Results

Table 97 Electrification condition – DC traction contract system

Condition grade	2000/03 3–year total conductor rail	2000/04 4–year total conductor rail	2000/05 5–year total conductor rail	2000/06 6–year total conductor rail	2000/07 7 – year total conductor rail	CG
1	37%	37%	35%	39%	35%	
2	42%	44%	44%	41%	42%	
3	16%	16%	18%	18%	19%	
4	2%	2%	3%	2%	3%	
5	0%	0%	0%	0%	0%	
Average condition grade	**1.8**	**1.8**	**1.9**	**1.8**	**1.9**	**B3**
Percentage of assets surveyed	**–**	**64%**	**68%**	**69%**	**70%**	

Table 98 Electrification condition − DC traction contact system

Condition grade	London North Western	South East
1	38%	35%
2	33%	42%
3	16%	19%
4	8%	3%
5	4%	0%
Average condition grade	**2.1**	**1.9**
Percentage of assets surveyed	**25%**	**73%**

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

Regulatory target

The regulatory target is to return to the 2001/02 condition ie. a network average of 1.8. This was slightly missed as we achieved 1.9.

Reporting confidence

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

Commentary

70% of the total asset base has now been assessed.

The additional 1% surveyed this year including conductor rail on London North West territory (Merseyrail), has changed the average condition score to 1.9 which remains within the declared tolerance.

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 assets 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 on the next page.

Remaining life as a per centage 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'.

Results

Table 99 Station numbers

		London North Eastern	London North Western	South East Anglia	South East Kent	South East Sussex	South East Wessex	Western	Scotland
A	National hub	5	8	5	2	4	0	3	3
B	Regional hub	9	13	13	5	3	14	5	5
C	Important feeder	26	37	43	33	26	51	22	6
D	Medium, staffed	42	56	28	46	41	36	26	23
E	Small, staffed	53	216	59	60	67	57	58	108
F	Small, unstaffed	245	271	92	36	35	48	274	197
	unclassified		4				1		
	Total	380	605	240	182	176	206	388	343

Table 100 Number of stations in each condition grade

Station category	Year	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total
A – National hub	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
	2006/07	**0**	**26**	**4**	**0**	**0**	**30**
B – Regional hub	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
	2006//07	**0**	**55**	**12**	**0**	**0**	**67**
C – Important feeder	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
	2006/07	**8**	**157**	**78**	**0**	**0**	**244**
D – Medium, staffed	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
	2006/07	**15**	**187**	**96**	**0**	**0**	**298**
E – Small, staffed	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
	2006/07	**34**	**479**	**163**	**2**	**0**	**678**
F – Small, unstaffed	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
	2006/07	**80**	**860**	**251**	**1**	**0**	**1,198**
All stations	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
	2006/07	**137**	**1,764**	**604**	**3**	**0**	**2,508**

There are 2,520 stations in total but the following have not been included:

- One grade 1 station and three grade 2 stations are unclassified with regards to category
- Category C excludes one unclassified survey
- 7 stations have not been surveyed.

Table 101 Condition grade by operating route 2006/7

Operating routes	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total
London North Eastern	40	286	54	0	0	380
London North Western	29	519	56	1	0	605
South East – Anglia	8	215	17	0	0	240
South East – Kent	1	70	110	1	0	182
South East – Sussex	1	52	122	1	0	176
South East – Wessex	0	77	127	0	0	204
Western	1	280	105	0	0	386
England and Wales	**80**	**1,499**	**591**	**3**	**0**	**2,173**
Scotland	**58**	**268**	**14**	**0**	**0**	**340**
Network total	**138**	**1,767**	**605**	**3**	**0**	**2,513**

There are 2,520 stations but the 7 unsurveyed have not been included above.

Scoring scale: Grade 1 is good, grade 5 is poor.

The average condition grade for all stations in 2006/07 is 2.24

Regulatory target

This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels i.e. 2.25. We have achieved this as our condition grade is 2.24.

Reporting confidence

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

Commentary

As the station condition index (M17) is in the process of being amended it was agreed with the ORR that the number of stations to be inspected in 06/07 could be reduced from 20% of each category to the following:

- Category A 2
- Category B 14
- Category C 55
- Category D 55
- Category E 130

No category F stations were required to be inspected. However 70 stations had been inspected prior to this agreement and these stations are included within the report.

The overall score has worsened slightly from the previous year's score of 2.22 to 2.24 but remains within the regulatory target.

Station facility score (M18)

Definition

This measure assesses the level of facilities 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 quinquennial station surveys also provide an additional check to changes in station facilities.

Results

Table 102 Access score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
A – National hub	110.7 (1,057)	112.0 (1,070)	113.4 (1,083)	113.4 (1,083)	114.2 (1,091)
B – Regional hub	101.9 (1,045)	103.2 (1,059)	104.5 (1,072)	104.5 (1,072)	106.7 (1,095)
C – Important feeder	102.8 (2,336)	104.3 (2,369)	104.2 (2,368)	104.6 (2,377)	106.0 (2,408)
D – Medium, staffed	102.5 (2,008)	102.9 (2,016)	103.7 (2,032)	104.2 (2,042)	107.4 (2,103)
E – Small, staffed	101.7 (2,477)	103.6 (2,522)	103.4 (2,518)	106.3 (2,589)	113.1 (2,753)
F – Small, unstaffed	98.5 (3,720)	99.2 (3,745)	100.0 (3,776)	102.4 (3,867)	109.2 (4,123)

Table 103 Comfort and convenience score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
A – National hub	102.2 (5,667)	106.8 (5,924)	106.8 (5,924)	106.8 (5,924)	103.4 (5,734)
B – Regional hub	100.0 (5,678)	100.4 (5,702)	100.3 (5,697)	101.0 (5,736)	100.8 (5,725)
C – Important feeder	99.5 (10,081)	99.4 (10,074)	99.8 (10,115)	100.0 (10,126)	101.0 (10,231)
D – Medium, staffed	101.2 (4,012)	101.8 (4,035)	101.8 (4,036)	102.2 (4,050)	105.0 (4,161)
E – Small, staffed	101.5 (4,763)	103.6 (4,865)	105.0 (4,931)	105.2 (4,938)	109.4 (5,134)
F – Small, unstaffed	97.8 (2,574)	99.3 (2,612)	99.7 (2,623)	101.8 (2,678)	110.2 (2,900)

Table 104 Information and communications score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
A – National hub	106.8 (2,295)	122.6 (2,635)	122.6 (2,635)	123.2 (2,647)	128.2 (2,754)
B – Regional hub	100.3 (1,865)	101.4 (1,886)	101.6 (1,890)	101.7 (1,892)	105.2 (1,957)
C – Important feeder	105.3 (4,005)	107.4 (4,084)	109.5 (4,163)	109.9 (4,178)	112.1 (4,263)
D – Medium, staffed	107.4 (2,941)	109.6 (3,001)	112.0 (3,067)	113.3 (3,102)	115.7 (3,169)
E – Small, staffed	103.7 (2,775)	104.7 (2,801)	106.3 (2,844)	107.4 (2,874)	110.9 (2,969)
F – Small, unstaffed	128.6 (63)	165.3 (81)	177.6 (87)	187.8 (92)	224.4 (109)

Table 105 Integrated transport score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
A – National hub	104.6 (631)	114.1 (688)	114.1 (688)	114.1 (688)	114.9 (693)
B – Regional hub	96.2 (1,022)	97.5 (1,035)	97.8 (1,039)	97.8 (1,039)	97.8 (1,039)
C – Important feeder	99.2 (2,496)	100.0 (2,518)	101.6 (2,557)	101.9 (2,566)	103.5 (2,605)
D – Medium, staffed	102.3 (1,682)	104.3 (1,714)	106.1 (1,744)	106.7 (1,754)	109.4 (1,798)
E – Small, staffed	100.1 (1,374)	101.2 (1,390)	103.1 (1,415)	105.2 (1,444)	112.1 (1,539)
F – Small, unstaffed	98.1 (1,559)	98.2 (1,562)	98.2 (1,562)	99.1 (1,576)	107.0 (1,702)

Table 106 Safety and security score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
A – National hub	111.0 (17,670)	117.2 (18,649)	117.2 (18,649)	117.2 (18,656)	118.2 (18,817)
B – Regional hub	102.8 (12,812)	104.4 (13,012)	104.6 (13,040)	104.6 (13,041)	106.3 (13,241)
C – Important feeder	103.4 (24,388)	107.2 (25,271)	109.1 (25,718)	109.4 (25,806)	110.5 (26,050)
D – Medium, staffed	103.7 (17,852)	104.9 (18,057)	107.3 (18,463)	109.4 (18,821)	113.1 (19,469)
E – Small, staffed	101.1 (21,812)	101.6 (21,921)	102.3 (22,065)	106.8 (23,041)	109.8 (23,688)
F – Small, unstaffed	98.9 (15,398)	99.4 (15,480)	99.8 (15,544)	102.1 (15,911)	110.0 (17,130)

Table 107 Network score

Station category	2002/03	2003/04	2004/05	2005/06	2006/07
Network score	102.7 (178,056)	104.8 (181,778)	105.7 (183,344)	107.0 (185,609)	109.7 (190,269)

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 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 2006

Overall the scores for 2006/07 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 2005/06. The key themes which have contributed to this increase are access, information and communications i.e. provision of customer information systems, and safety and security schemes, i.e. lighting and CCTV, with many of these improvements made at Category E and F stations. This is consistent with Network Rail's continuing commitment to work with our customers in improving passenger facilities at stations.

Commentary

The scores for 2000/2001 are presented as an index of 100 for ease of onward tracking of performance. Scores for 2006-07 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'.

Results

Table 108 Inspections and conditions index

Station category	2001/03 2 year total no of depots in each grade	2001/04 3 year total no of depots in each grade	2001/05 4 year total no of depots	2001/06 5 year total no of depots in each grade	2001/07 6 year total no of depots in each grade
1		2	2	2	2
2	3	17	17	27	38
3	13	15	15	20	35
4	5	5	5	5	6
5	0	0	0	0	0
Total	21	39	39	54	81
Average condition grade	3.04	2.63	2.63	2.58	2.58

Scoring scale: 1 good, 5 poor

Table 109 Light maintenance depot condition assessment in 2006/07

Operating routes/ condition grade	1	2	3	4	5	Total	Average condition grade 2006/7
London North Eastern	0	2	4	0	0	6	2.55
London North Western	0	4	3	0	0	7	2.35
South East – Anglia	0	0	1	1	0	2	3.28
South East – Kent	0	2	1		0	3	2.41
South East – Sussex	0	2	0	0	0	2	2.27
South East – Wessex	0	0	3	0	0	3	2.64
Western	0	0	1	0	0	1	3.22
England and Wales	0	10	13	1	0	24	2.55
Scotland	0	1	2	0	0	3	2.68
Network total	0	11	15	1	0	27	2.56

Regulatory target

This is covered by 'Other asset condition and serviceability' with no deterioration from 2003/04 levels, i.e. 2.7. We have achieved this as the cumulative score is 2.58.

Reporting confidence

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

Commentary

The overall score has been maintained at 2.58. The score reflects the work undertaken on the assets. Inspections are conducted on a rolling five year cycle with the first round almost complete (although this has taken two years longer than planned).

Asset Stewardship Incentive Index (ASII)

Definition

The ASII is a composite measure of overall asset stewardship that provides an incentive (a RAB addition) for Network Rail if asset stewardship improves and the incentive target set in ACR 2003 is achieved. The composite index is an aggregate of seven separate asset measures covering track, signalling, electrification and structures assets. The lower the value of the index, the better the level of asset stewardship.

The results for the year together with values for the incentive target for the end of the control period (2008/09) and the previous year are as follows:

Results

Table 110 Asset stewardship incentive index

Asset measure	Weightings	2005/06 actuals	2006/07 actuals	2008/09 incentive target
Track geometry	20%	0.835	0.806	1.0
Broken rails	15%	317	192	300
Level 2 exceedences	15%	0.820	0.720	0.9
Points/track circuit failures	10%	17,285	17,038	19,360
Signalling failures	20%	23,367	22,704	28,750
Electrification failures	10%	55	80	133
Structures and earthworks temporary speed restrictions	10%	48	40	100
ASII		0.803	0.723	0.90 *

* The incentive is capped such that the maximum payment is made if an index of 0.90 is achieved at the end of the control period.

Results for the year 2006/07 and the previous year along with internal business plan targets (more onerous than the regulatory incentive) are as follows:

Table 111 Results for ASII compared to internal business plan targets

	2005/06 Actual	2005/06 Target	2006/07 Actual	2006/07 Target
ASII	0.803	0.850	0.723	0.780

Regulatory target

The regulatory target is 0.9 and our Business Plan target is 0.81. We have achieved both with 0.723.

Commentary

The year 2006/07 has shown a further reduction in this index with improvements across all contributory indicators, except electrification failures. The most notable improvements are broken rails, track geometry and level 2 exceedences (refer to sections on M1, M3 and M5 in Section 3 for more details). The incentive targets for all contributory measures have been met and we are currently on course to achieving the maximum RAB addition.

Section 4 – Activity Volumes

Introduction

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 structures (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 8 operating routes as the company was not structured this way. Also due to the re-structuring of the company, only historical data for West Coast Route Modernisation and the network totals are included for the years before 2004/05.

Forecasts from the Business Plan for 2006/07 for track activity volumes and signalling renewal volumes are included in the tables. With track activity volumes, a degree of variance from forecasts is expected as details of planned work are refined during the year in response to more detailed site knowledge and engineering priorities being adjusted to focus on key areas for improving asset condition and operational performance.

The tables of renewal activity for structures shown towards the end of this section do not cover all the work we undertake on these assets. This is because a lot of work is carried out via small repairs, rather than as large projects. Thus a relatively large proportion of the overall work is undertaken by lots of small interventions that could include the following: minor repairs, re-painting, removing vegetation (e.g. from brickwork), re-pointing brickwork, welding repairs such as the addition of extra steel plates and other minor works.

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

Table 112 Rail renewed (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 2006/07
WCRM	69	236	132	44	49	10
Non-WCRM						
London North Eastern	–	–	156	185	177	183
London North Western	–	–	141	237	207	189
Anglia	–	–		101	103	108
Kent	–	–	199	58	31	57
Sussex	–	–		27	24	52
Wessex	–	–		76	47	37
Western	–	–	139	265	268	283
England and Wales	–	–	635	949	857	909
Scotland	–	–	49	127	101	109
Network total	1010	1401	816	1120	1007	1028

Sleepers renewed (M21)

Definition

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

Results

Table 113 Sleepers renewed: all types (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 20060/07
WCRM	137	223	152	91	52	7
Non-WCRM						
London North Eastern	–	–	122	130	138	137
London North Western	–	–	91	114	165	146
Anglia	–	–		83	88	79
Kent			151	27	26	33
Sussex				12	18	23
Wessex				52	42	29
Western	–	–	121	177	181	211
England and Wales	–	–	485	595	657	658
Scotland	–	–	33	58	73	73
Network total	666	837	670	744	782	738

Table 114 Concrete sleepers (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	137	190	148	91	7
Non-WCRM					
London North Eastern	–	–	48	58	67
London North Western	–	–	38	41	108
Anglia	–	–		37	
Kent	–	–	125	27	119
Sussex	–	–		12	
Wessex	–	–		48	
Western	–	–	78	138	167
England and Wales	–	–	289	361	461
Scotland	–	–	15	17	47
Network total	367	486	452	469	515

Table 115 Timber sleepers (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	0	0	1	0	0
Non-WCRM					
London North Eastern	–	–	22	16	9
London North Western	–	–	0	11	1
Anglia	–	–		0	
Kent	–	–	4	0	1
Sussex	–	–		0	
Wessex	–	–		0	
Western	–	–	0	7	6
England and Wales	–	–	26	34	17
Scotland	–	–	0	2	1
Network total	37	51	27	36	18

Table 116 Steel sleepers (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	0	33	3	0	0
Non-WCRM					
London North Eastern	–	–	52	58	61
London North Western	–	–	53	60	36
Anglia	–	–		47	
Kent	–	–	22	0	44
Sussex	–	–		0	
Wessex	–	–		3	
Western	–	–	43	32	38
England and Wales	–	–	170	200	179
Scotland	–	–	18	39	25
Network total	263	300	191	239	204

Ballast renewed (M22)

Definition

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

Results

Table 117 Ballast renewed: all types (kilometres)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 2006/07
WCRM	90	205	122	81	60	12
Non-WCRM						
London North Eastern	–	–	129	177	280	256
London North Western	–	–	97	128	206	179
Anglia	–	–		85	89	80
Kent	–	–	158	27	28	35
Sussex	–	–		12	19	23
Wessex	–	–		52	43	29
Western	–	–	143	178	188	162
England and Wales	–	–	527	659	853	764
Scotland	–	–	36	59	73	74
Network total	665	812	685	798	986	850

Table 118 Full ballast renewal by excavation (kilometres)

	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	88	113	81	12
Non-WCRM				
London North Eastern	–	53	68	72
London North Western	–	43	40	89
Anglia	–		33	
Kent	–	126	18	90
Sussex	–		11	
Wessex	–		34	
Western	–	74	86	71
England and Wales	–	296	290	322
Scotland	–	18	20	21
Network total	388	427	391	355

Table 119 Partial reballast-automatic ballast cleaning (kilometres)

	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	84	9	0	0
Non-WCRM				
London North Eastern	–	22	50	123
London North Western	–	1	28	54
Anglia	–		5	
Kent	–	10	2	33
Sussex	–		0	
Wessex	–		3	
Western	–	35	59	54
England and Wales	–	68	147	264
Scotland	–	2	0	28
Network total	122	79	147	292

Table 120 Scarify-reballast with steel sleeper relay (kilometres)

	Actual 2003/04	Actual 2004/05	Actual 2005/06	Actual 2006/07
WCRM	32	0	0	0
Non-WCRM				
London North Eastern	–	54	58	60
London North Western	–	53	61	36
Anglia	–		46	
Kent	–	22	7	44
Sussex	–		2	
Wessex	–		16	
Western	–	34	32	37
England and Wales	–	163	222	177
Scotland	–	16	39	25
Network total	299	179	261	202

Switches and crossings renewed (M25)

Definition

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

The tables include data on the numbers of full renewals, the number of units renewed or recovered and the number where asset life has been extended through partial renewal or reballasting.

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 2006/07 business plan forecast an S&C equivalent counted 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 121 S&C full renewals (number of units)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 2006/07
WCRM	50	138	170	151	24	22
Non-WCRM						
London North Eastern	–	–	56	75	43	47
London North Western	–	–	99	95	139	129
Anglia	–	–		21	14	17
Kent	–	–	92	9	3	
Sussex	–	–		7	5	9
Wessex	–	–		69	69	75
Western	–	–	75	80	67	82
England and Wales	–	–	322	356	340	359
Scotland	–	–	19	13	43	58
Network total	254	373	511	520	407	439

Table 122 S & C abandonment (number of units)

	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 2006/07
WCRM	–	0	0	0	0
Non-WCRM					
London North Eastern	–	0	0	6	11
London North Western	4	7	0	21	20
Anglia	–		0	0	
Kent	–	0	0	0	
Sussex	–		0	2	2
Wessex	–		2	2	
Western	18	6	24	22	29
England and Wales	22	13	26	53	62
Scotland	–	0	0	4	0
Network total	22	13	26	57	62

Table 123 S & C partial renewals/reballasting (number of units)

	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan forecast 2006/07	Actual 2006/07
WCRM	–	46	0	22	0
Non-WCRM			0		
London North Eastern	–	0	3	8	11
London North Western	2	0	0	0	1
Anglia	–	0	0	6	
Kent	–	0	6	6	
Sussex	–	0	5	2	
Wessex	–	0	38	0	
Western	2	2	0	18	6
England and Wales	4	2	52	40	18
Scotland	–	0	0	24	0
Network total	4	48	52	86	18

Note: All figures above are expressed as actual numbers of units. To convert these into equivalent S&C units we use a factor of 1.0 for full renewals, 0.5 for abandonment and 0.33 for partial renewal. Thus the forecast given in the 2006 Business Plan (that excluded WCRM) was 433 equivalent units (383 + 57/2 + 64/3) and the actual volume delivered in 2006/07 (including WCRM) was 476 equivalent units (439 + 62/2 + 18/3).

Signalling renewed (M24)

Definition

This measure reports the total number of signalling equivalent units (SEUs) which were commissioned each year. An SEU is defined as each single trackside output function controlled by the interlocking, including every signal, each controlled point end, plungers, ground frames and any other attribute that requires a particular control function. The measure of SEU also includes level crossings that are renewed as part of a re-signalling scheme. The SEUs recorded do not cover minor works and only include individual schemes with an anticipated forecast cost greater than £5m.

The rules used to count signalling renewals as SEUs are set out in 'Definition of Signalling Units and Volume Reporting', BP001. The weightings specified for different categories of renewal are as follows:

Full renewal – 100 per cent
Interlocking renewal – 45 per cent
Outside equipment renewal – 50 per cent
Control system renewal – 5 per cent
Signalling renewal as part of level crossing renewal – 100 per cent

Results

Table 124 Signalling renewed (SEUs)

	Actual 2002/03	Actual 2003/04	Actual 2004/05	Actual 2005/06	Business Plan 2006/07	Actual 2006/07
WCRM	–	87	1,002	0	0	0
Non-WCRM						
London North Eastern	–	105	246	3	287	250
London North Western	–	86	178	96	131	120
Anglia	–	19	14	1	0	7
Kent	–			63	0	18
Sussex	–	132	104	107	251	0
Wessex	–			0	0	0
Western	–	63	34	7	0	2
England and Wales	–	405	576	277	669	397
Scotland	–	112	100	1	0	4
Network Total	810	604	1,678	278	669	401

Commentary

The most significant reason for the lower volume delivered compared with our plan is due to the delay in completing the Portsmouth re-signalling scheme. On 6 June 2007, ORR concluded that Network Rail was in breach of Condition 7 of its network licence for failures associated with the delivery of the Portsmouth project. In particular ORR determined that we had failed to adequately evaluate the risks of the project overrunning, which put us at risk of failure to meet the reasonable requirements of customers. We are doing everything possible to remedy the situation at Portsmouth and mitigate the impact on passengers, and anticipate restoring full capability in October 2007.

The reasons for the differences (and their SEU values) between what was actually delivered compared to the Business Plan are as follows:

LNE

- Colton/Hambleton/Templehirst interlocking renewal only (-60.2, Business Plan assumed full renewal)
- Lincoln West Holmes (+18.5, additional scheme not in Business Plan)
- Saltmarshe (+3.2, additional scheme)
- Re-signalling at level crossings (+6)
- Brightside (-4, scope efficiency)

LNW

- Mickle Trafford/Mouldsworth (+4.5, additional scheme)
- Glen Parva to Nuneaton (+4 due to enhancements and -20 due to scope efficiency)
- Codsall-Madeley (-3, revised scope)
- Re-signalling at level crossings (+3)

Anglia

- Gunnersbury (+7, additional scheme)

Kent

- Folkestone interlocking (+18, additional scheme)

Sussex

Portsmouth re-signalling (-251, commissioning delayed)

Western

Re-signalling at level crossings (+2)

Scotland

- Glasgow central (+4, additional enhancement)

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

Table 125 Bridge renewals and remediation: number by task category

	Preventative 2006/07	Repair 2006/07	Strengthening 2006/07	Replacement 2006/07	Total 2006/07
WCRM					0
Non-WCRM					
London North Eastern	5	20	2	5	32
London North Western	7	24	21	16	68
Anglia	12	1	3		16
Kent				3	3
Sussex	1		3	2	6
Wessex			4	3	7
Western	1	2		3	6
England and Wales	26	47	33	32	138
Scotland	1	7	3	5	16
Network total	27	54	36	37	154

Table 126 Bridge renewals and remediation: square area of deck replacement (Actual sq m)

	2004/05	2005/06	2006/07
WCRM	0	0	0
Non-WCRM			
London North Eastern	2,299	1,747	824
London North Western	3,202	1,866	6,993
Anglia		0	0
Kent	1,120	98	3,757
Sussex		18	155
Wessex		135	120
Western	630	1,079	218
England and Wales	7,251	4,943	12,067
Scotland	2,971	489	974
Network total	10,222	5,432	13,041

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

Table 127 Bridge renewals and remediation: number by task category

	Preventative 2006/07	Repair 2006/07	Replacement 2006/07	Total 2006/07
WCRM				0
Non-WCRM				
London North Eastern		2	4	6
London North Western			1	1
Anglia		1		1
Kent				0
Sussex				0
Wessex				0
Western		1	1	2
England and Wales		4	6	10
Scotland				0
Network total		4	6	10

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

Table 128 Retaining wall renewed 2006/07 schemes (number)

	Preventative	Repair	Replacement	Total
WCRM				0
Non-WCRM				
London North Eastern		1	1	2
London North Western		1		1
Anglia				0
Kent				0
Sussex				0
Wessex				0
Western		2		2
England and Wales		4	1	5
Scotland		2		2
Network total		6	1	7

Table 129 Retaining wall renewed: area (actual sq m)

	2003/04	2004/05	2005/06	2006/07
WCRM	656	0	0	0
Non-WCRM				
London North Eastern	–	336	200	2240
London North Western	–	99	0	0
Anglia	–		0	0
Kent	–	1,800	800	0
Sussex	–		6	0
Wessex	–		70	0
Western	–	400	940	0
England and Wales	–	2,635	2,016	2,240
Scotland	–	0	0	0
Network total	8,811	2,635	2,016	2,240

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

Table 130 Earthwork renewals (number)

	Preventative 2006/07	Repair 2006/07	Actual 2006/07
WCRM			0
Non-WCRM			
London North Eastern	21	3	24
London North Western	24	1	25
Anglia	1		1
Kent			0
Sussex			0
Wessex			0
Western	3	1	4
England and Wales	49	5	54
Scotland	13	1	14
Network total	62	6	68

Tunnel remediation (M29)

Definition

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

Results

Table 131 Earthwork renewals (number)

	Preventative 2006/07	Repair 2006/07	Actual 2006/07
WCRM			0
Non-WCRM			
London North Eastern		2	2
London North Western		7	7
Anglia			0
Kent		1	1
Sussex			0
Wessex		1	1
Western	1		1
England and Wales	1	11	12
Scotland		7	7
Network total	1	18	19

Composite activity volumes measure

This is a new measure introduced during 2006/07 to provide a more complete picture of all asset renewals. The various types of assets are weighted based on the proportion of expenditure on that asset and then this is expressed as a percentage of the total plan.

In 2006/07, for the first time we published activity volume forecasts in the Business Plan for Civils, Telecoms, Electrification and Plant and machinery as well as for Track and signalling (as in previous years). These are set out in the Business Plan Route Plans. However the measures related to the forecasts for these assets, are slightly different from the structures activity volume measures reported earlier in this section. For this year's Annual Return, we have included a new summary table that lists all the planned activity volumes and the calculation of the new composite measure. This is shown in the table on the next page.

Table 132 Composite activity volume – actual delivered versus planned in 2006/7

	Unit of measure	Baseline unit cost (£k/unit)	Volume	Actuals weighted volumes	% of plan	Budget plan volume	Weighted volumes
Track							
Plain Line	Kms	225.0	2,364	531,882	98	2,418	544,050
S&C	Eq. Units	452.0	451	203,893	104	433	195,716
Total Track				735,775	99		**739,766**
Civils							
Underbridges	Sq m	2.22	67,206	149,278	131	51,457	114,296
Overbridges	Sq m	2.31	5,636	13,011	111	5,088	11,747
Bridgeguard 3	Sq m	3.79	10,844	41,119	188	5,782	21,924
Footbridges	Sq m	5.17	1,694	8,749	132	1,281	6,618
Earthworks	Sq m	0.09	448,443	42,277	163	274,704	25,898
Tunnels	Sq m	0.59	19,089	11,176	165	11,545	6,759
Culverts	sq m	6.05	255	1,544	182	140	847
Coastal & Estuarial defences	L m	1.96	3,212	6,293	227	1,417	2,776
Retaining Walls	Sq m	0.25	2,489	613	313	795	196
Total Civils				274,060	143		191,061
Signalling							
Resignalling	SEUs	267.0	473	126,291	71	663	177,021
Telecoms							
Concentrators Large	No.	897.0	10	8,970	63	16	14,352
Concentrators Small	No.	82.0	31	2,542	76	41	3,362
DOO CCTV Systems	Systems	43.3	203	8,790	82	249	10,782
Voice Recorder	No.	25.9	43	1,114	215	20	518
CIS Systems	No. of Stations	95.8	31	2,970	40	78	7,472
PET Systems	No.	15.1	25	378	45	56	846
Clocks	No.	5.0	2	10	10	20	100
Long Line PA	No. of Stations	30.5	6	183	55	11	336
Total Telecoms				24,956	66		37,767

Table 132 Composite activity volume − actual delivered versus planned in 2006/7 (continued)

	Unit of measure	Baseline unit cost (£k/unit)	Volume	Actuals weighted volumes	% of plan	Budget plan volume	Weighted volumes
Electrification AC							
HV Switchgear	No	100.0	–	0	0	31	3,100
HV Cables	km	205.8	–	0	0	0	0
Booster transformers	No	29.0	28	812	0	0	0
Grid Supply Points	No.	242.7	1	243	50	2	485
OLE re-wiring	Tension length	111.7	203	22,665	157	129	14,403
OLE campaign changes	Tension length	23.3	1,129	26,307	126	894	20,831
OLE Spanwires	No	9.1	308	2,802	90	341	3,102
OLE Structures	No	2.8	24	67	50	48	134
Electrification DC							
HV Switchgear	No	72.8	38	2,767	76	50	3,641
HV Cables	km	205.8	19	3,993	55	35	7,204
LV Switchgear	No	58.3	19	1,107	70	27	1,573
Transformers/Rectifiers	No	257.3	6	1,544	50	12	3,087
Grid Supply Points	No	135.2	–	0	0	2	270
Conductor Rail	km	145.6	25	3,626	166	15	2,184
Total Electrification				65,932	110		60,015
Plant and Machinery							
Points Heating	No.	13.6	527	7,167	65	809	11,000
Total Plant				7,167	65		11,000
Total				**1,234,181**	**101**		**1,216,630**

Note: All figures exclude volumes delivered by the WCRM project and via maintenance work.

Section 5 Safety & Environment

Introduction

This section includes information on the following principal Safety KPIs currently concerning the company:

Workforce safety:

- Accident Frequency Rate

System safety:

- Level crossing misuse
- Infrastructure wrong side failures (hazard ranked 50+)
- Cat A SPADs
- Operating irregularities
- Criminal damage

Workforce safety considers the safety of our people as they carry out their duties and system safety is an indication of the safety of the railway system.

This section also includes an update on investments to enhance Safety and Environmental performance, funded from our Safety Enhancements Fund.

Workforce Safety

Accident Frequency Rate

Definition

All injuries that are statutorily reportable under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations) for all Network Rail staff and contractors working on Network Rail's controlled infrastructure, normalised per 100,000 hours worked. This measure provides information to help monitor and control accidents and injuries to the workforce.

Results

Figure 16 Combined workforce RIDDOR accident frequency rate – national performance

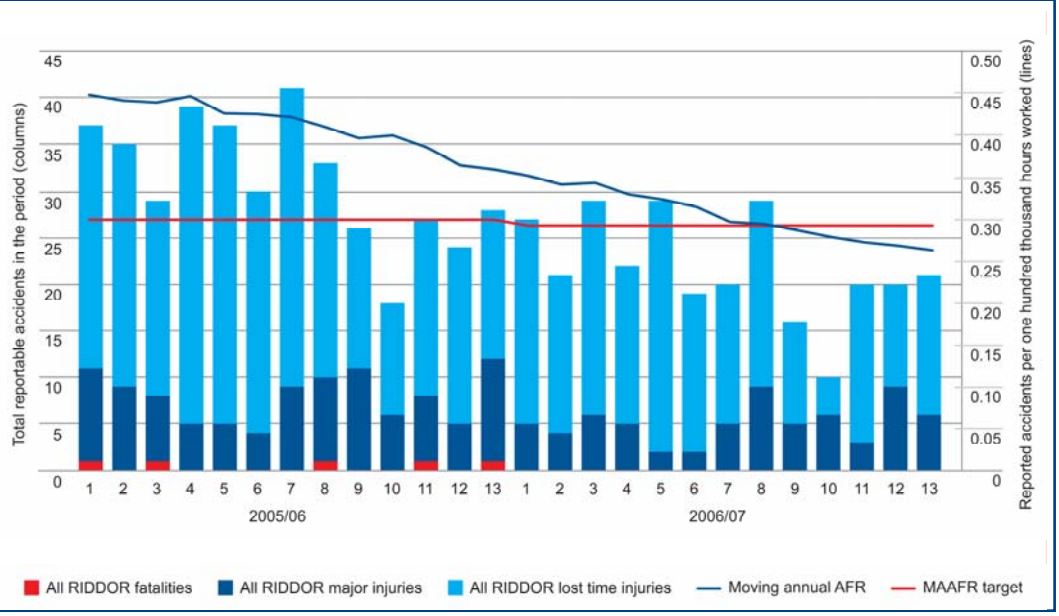


Table 133 Workforce safety

	2004/05	2005/06	2006/07
AFR (MAA)	0.384	0.359	0.263
Fatalities	2	4	0
Major injuries	130	98	69
Lost time injuries	388	301	216

Commentary

The Accident Frequency Rate for Network Rail employees and contractors for 2006/07 was 0.263. This is a 27 per cent reduction over the figure in 2005/06 and continues the downward trend seen over the past two years. These figures compare favourably to the national rate for the UK construction industry which, in 2005/06 stood at approximately 0.435.

During 2006/07 Network Rail`s safety improvement strategy continued to be based upon the successful Safety 365 programme. Safety 365 comprises a number of discrete improvement plans including: process and systems improvement; improved communication and training, competency and leadership development for all staff with safety related roles.

Key Safety 365 deliverables during the year which contributed to the continued reduction of the Accident Frequency Rate were:

- Training for front line managers in enhanced safety leadership skills enabling them to better direct front line activity.
- Gaining better engagement of front line staff with the role they can take in protecting their own safety and that of others through the 'Making a Difference' campaign (a staff coaching and awareness programme).
- The use of targeted nationwide poster and leaflet safety campaigns. These included: slips, trips and falls, drugs and alcohol, lighting on site, manual handling and avoiding infectious diseases.
- Two highly successful DVDs were produced and communicated the importance of safety critical communications and vigilance and adherence to safe systems when working on the track.

To help ensure that safety messages reached front line staff, 8 Safety Trucks visited over 900 work sites nationwide with 20,000 attendees. The safety trucks provide a mobile communication studio.The continuation of the successful '365 day Challenge' also encouraged a number of local safety initiatives and improvements. The challenge is a competition for teams to complete 365 days without a single RIDDOR reportable accident. There has been considerable success – for example, in 2006/07 over 33 per cent of all maintenance teams achieved 365 days and overall some have now reached 730 days.

System Safety

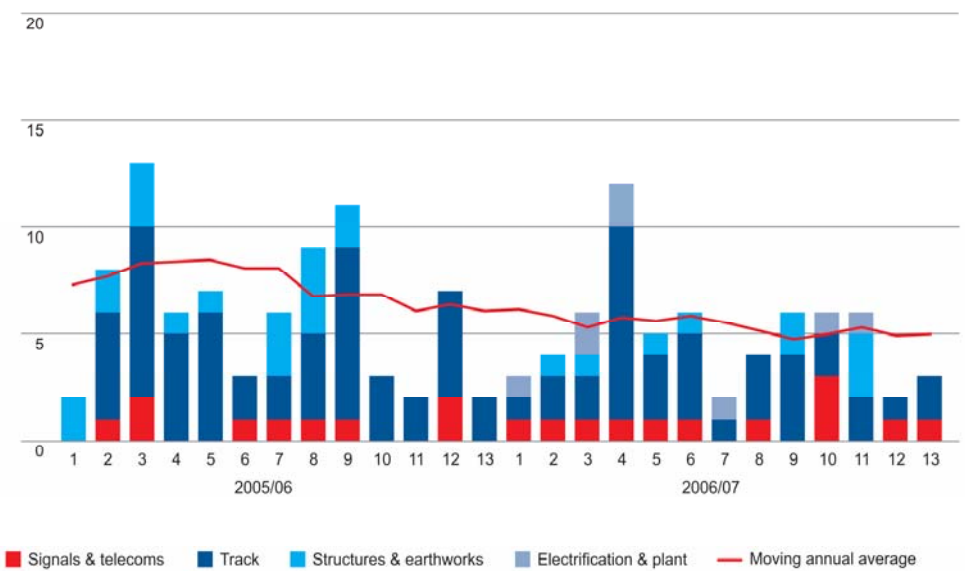
Infrastructure wrong side failures

Definition

Infrastructure wrong side failures hazard ranked 50+.

Results

Figure 17 Infrastructure wrong side failures hazard ranked 50+



The improvement in wrong-side failure rate is a reflection of the general improvement in the asset stewardship incentive index (ASII) which has outperformed the expectations of the 2003 Access Charges Review, in spite of greater volumes of traffic on the network than anticipated.

We are now approaching the end of the second phase of our three-phase transformation programme, which has focused on reducing safety risks, standardising processes and delivering efficiencies by removing unnecessary costs.

The New Measurement Train (NMT) and other train-based measurement technologies have improved detection of potential failures before they become serious from a safety perspective. We have also realised the early opportunities for improvement, such as accelerated re-railing programmes and rail grinding to tackle rolling contact fatigue, and the immediate benefits of bringing maintenance in-house which has allowed us to improve signalling maintenance standards and testing procedures.

The focus is now increasingly on tackling the root causes of long-standing issues that affect asset performance. Components that are not sufficiently reliable are being progressively replaced on a campaign basis.

In 2006/07, we have seen a particularly strong performance in the reduction of broken rails which are at their lowest ever level. A major factor is the mild weather experienced this year, but this is supported by the ongoing impact of improvements due to targeted asset renewal and maintenance.

Level crossing misuse

Definition

This measures all safety related incidents on level crossings. Any occurrence of a train striking a road vehicle on a level crossing is equal to 1 equivalent collision; other events are weighted at 0.1 equivalent collisions.

Results

Figure 18 Level crossing events – national performance

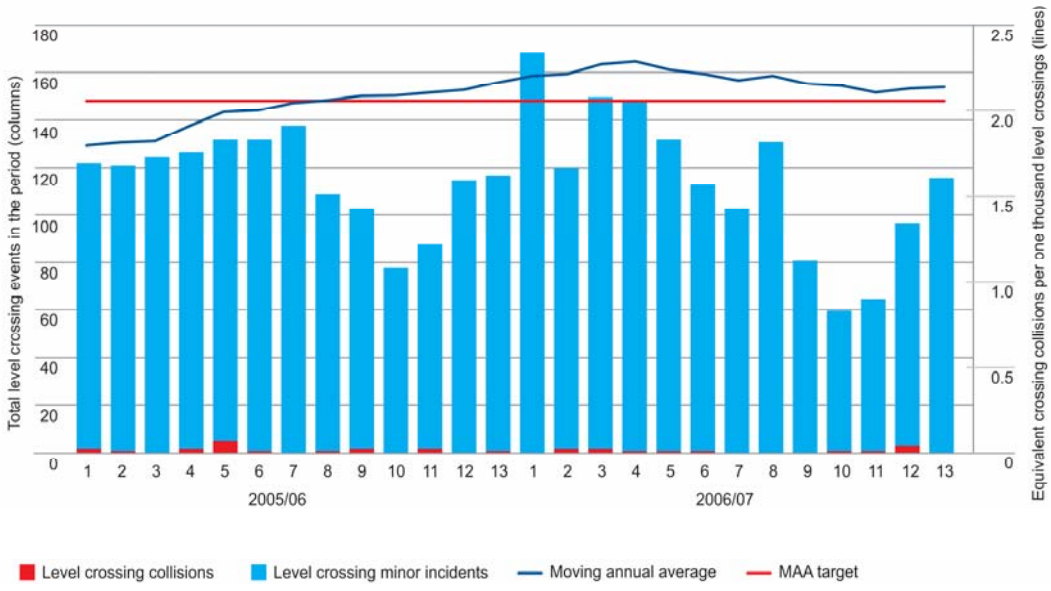


Table 134 Level crossing safety

	2004/05	2005/06	2006/07
Level crossing misuse (MAA)	1.763	2.166	2.138
Collisions	16	17	12
Minor incidents	1,194	1,490	1,473

Commentary

Level crossing misuse continues to constitute the largest single category of train accident risk. In 2006/07 there has been an observable reduction in minor incidents although the number of major incidents still remains typical of previous years.

A key contributor to this reduction in incidents was the 'Don't Run The Risk' public awareness campaign which uses this simple message to convey the danger of misuse to level crossing users both at a national level and also at specific crossing hotspots using a variety of media forms such as television, radio, newspapers, posters and leaflets. In addition, a number of level crossings have been closed or upgraded where practicable and others renewed as part of an ongoing risk based programme.

In addition to future awareness campaigns, a number of other initiatives will be taken further to reduce level crossing risks. These include:

- use of the 'All Level Crossing Risk Model' to gain a greater understanding of which crossings present the greatest risk
- trialling and adoption of successful new technology to improve reliability and safety
- seeking lower cost solutions to facilitate level crossing closure, provide enhanced protection, in locations where previously the amount of investment to attain a similar solution was not considered practicable
- working with the police and Crown Prosecution Service to enforce the law where misuse is deliberate
- utilisation of the recent changes made to road safety legislation to greater co-ordinate the approach to managing risk at the road-rail interface.

Signals passed at danger (SPADs)

Definition

This measure reports all Category A SPADs. This indicates the signals passed while displaying a stop aspect for intrusions into a non permitted route, which can lead to collision, when a stop aspect or indication was displayed correctly in sufficient time for the train to be stopped at the signal.

Results

Figure 19 All category 'A' SPAD's – national performance

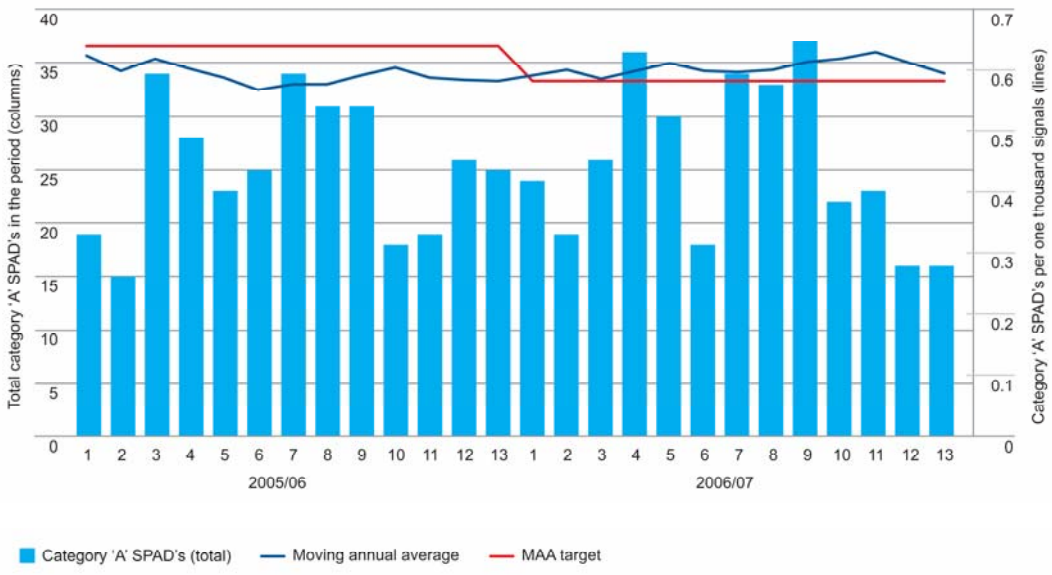


Table 135 Signals passed at danger

	2004/05	2005/06	2006/07
Cat A SPADs/1000 signals	0.659	0.583	0.594
Cat A SPADs	371	328	334

Commentary

Since the introduction of TPWS the Category 'A' SPADs measure continues to remain at its lowest ever level, although the lower target set for 2006/07 has not yet been achieved.

Efforts have continued throughout the year to reduce the number of SPADs in the form of:

- a continued programme of signal overrun risk assessments for existing layouts and implementation of necessary mitigating measures
- introduction of new signalling schemes with improved signal visibility and robust train protection arrangements, designed and installed to the latest standards
- post-incident analysis of all SPAD events and implementation of necessary recommendations
- extensive railhead treatment programme to combat the effects of both weather and leaf fall
- continued discussion/liaison with train operators and industry specialists through the National SPAD Focus Group to share best practice and formulate joint initiatives
- regular meeting of area Operations Risk Reduction and Mitigation (OPSRAM) groups to specifically identify and mitigate location specific risks at working level.

These efforts will continue, in conjunction with additional train operator led initiatives, over the next year where it is anticipated further benefit can be gained in order to attain the target level set.

Operating irregularities

Definition

This is the number of reported irregularities normalised by the number of signals, train miles and track miles.

Results

Figure 20 Operating irregularities (national)

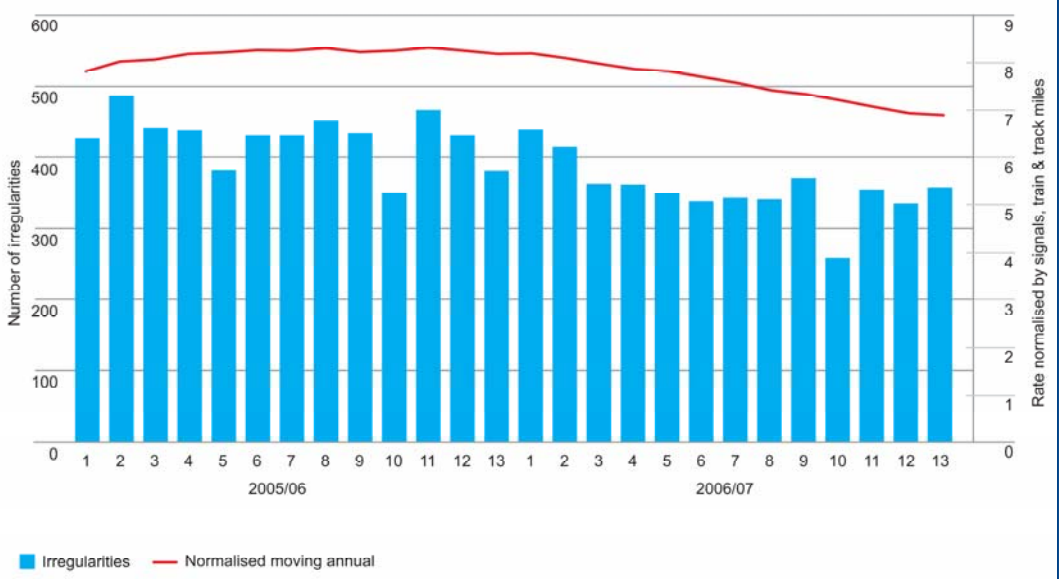


Table 136 Operating irregularities

	2004/05	2005/06	2006/07
Operating irregularities (MAA)	7.74	8.18	6.81
Operating irregularities	5142	5551	4627

Commentary

Throughout 2006/07 the number of reported operating irregularities continually decreased with 15% fewer than in the previous year. This was the result of a number of initiatives including:

- implementation of the 'SAF6' national voice communications training programme to improve quality of communication between key railway posts such as signallers, drivers, contractors and maintenance staff. Over 17,000 staff have been trained to date and a further 50,000 have been targeted over the next 2 years
- implementation of COGNISCO competence testing following completion of the company-wide 'SAF5' safety in the line programme
- improvements to the Safety Management Information System (SMIS) to include more comprehensive reporting and categorisation of operating irregularities. Analysis of this data allows a better understanding of irregular working events such that appropriate mitigations can be applied in the future
- improvements to the existing safety communications monitoring process, technology and management regime.

Criminal damage

Definition

This is the number of malicious acts on or directly affecting Network Rail infrastructure, normalised per 100 route miles.

Results

Figure 21 Criminal damage (malicious acts) – national performance

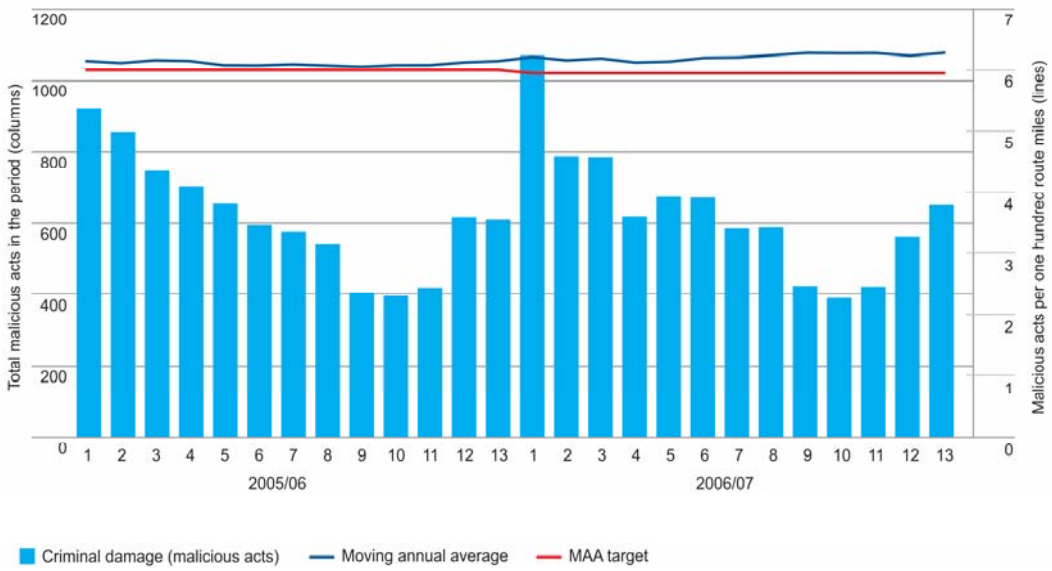


Table 137 Criminal damage

	2004/05	2005/06	2006/07
Malicious acts/100 route miles	6.302	6.154	6.285
Malicious acts	8,376	8,057	8,247

Commentary

The number and seasonal pattern of malicious acts for 2006/07 was typical of previous years despite continued efforts to address these using a combination of public education, law enforcement and improved deterrents such as installation of CCTV cameras at more stations, and crime hotspots, along with continued improvements being made to lineside fencing. The lower target level set for 2006/07 has not yet been reached. A recent development has been the increasing number of cable theft incidents throughout the year. These are thought to be influenced by the significant rise in the price of copper in the past few months. Direct action has been taken to tackle this issue through increased vigilance, increased security and establishing cable theft hotlines.

Efforts will continue in 2007/08 to attain the target level. In particular the ongoing 'No Messin!' campaign will be run in the approach to school holidays, seeking to educate 10 to 16 year olds on the dangers of playing on the railway, placing objects on the line and throwing stones at trains. The CCTV installation programme will also continue along with increased presence of community support police officers at stations.

Safety and environment enhancements

Introduction

Safety and environment (S&E) enhancements are funded from the Safety Enhancements Fund which are currently comprised of the pollution prevention programme at light maintenance depots (LMDs); various environment schemes; and the provision for small safety related projects to achieve particular safety criteria to strategically align the business objectives.

Table 138 Safety and environment enhancement expenditure (£m)

	2006/07 Business plan forecast	2006/07 Actual expenditure	2006/07 Variance
LMD pollution prevention programme	35	24	11
Other S&E Plan schemes	43*	17	26
Total	78	41	37

* This included contingency rather than being a firm plan.

Pollution prevention programme

This national programme of works relates to securing compliance with the Control of Pollution (Oil Storage) Regulations and the Groundwater Regulations. Amalgamation of works at LMDs and over 300 other locations was successfully completed and the remaining works are now scheduled and on target for completion December 2007.

During the past year the following has been achieved:

- delivered a £10m efficiency on the programme
- completed the majority of LMD oil storage works in England and commenced implementation works in Scotland and Wales
- completed implementation work to 240 small sites
- progressed design of Ground Water Regulations (GWR) works at LMDs
- commenced GWR implementation works at 10 LMD sites.

During the coming year we will:

- complete works on all LMD sites in England, Scotland and Wales
- complete works at remaining small site locations
- commence and complete handback of all sites
- close out overall programme.

Other environment schemes

Other environment schemes of note are:

- Contaminated land programme has been brought to a conclusion with final close out to be completed during the early part of 07/08. Operations and Maintenance of effluent treatment plants at 7 sites is being transferred under Territory management.
- Landfill Waste Management sites have continued to be monitored and closed out with plans being prepared to allow surrender of the licences. It is planned to surrender the four licences in the coming year.

Safety schemes

The 2006 Business Plan for safety schemes was based on a small number of specific schemes and a provision for future, as yet unidentified, safety enhancements that were 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 2006 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 the DfT's values for preventing a fatality. Due to the eligibility criteria, it is important to understand that S&E funding is by means of a 'provision' and not budget. During 2006/07 a total of eighty seven enhancements were authorised with a total cost of £44.3m.

The successful enhancements ranged from low cost site specific enhancements (such as a £4k level crossing closure) through to more significant enhancements (such as £9.1m for the derelict buildings national demolition programme). The authorised enhancements were spread in the three broad risk areas as:

Train accident risk – 54 schemes were authorised in 2006/07 for a total cost of £16.5m (comprising of 38 level crossing risk reduction or eradication schemes, six signalling enhancements and ten others).

Other risk to passengers and the public – 12 enhancement schemes were authorised in 2006/07 for a total cost of £12m (comprising programmes of work to reduce child trespass and effects of vandalism).

Workforce safety risk – 21 enhancement schemes were authorised in 2006/07 for a total cost of £15.8m (comprising improved access arrangements and improved fixed installation lighting for maintenance of strategic junctions).

Section 6 – Expenditure and Efficiency

Introduction

This section provides the actual expenditure on renewals, enhancements and maintenance on the network during 2006/07 as compared to the forecasts reported in the Business Plan 2006.

All financial figures are in 2006/07 prices 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 2006 provided together with reconciliations for each of the 26 strategic routes
- reconciliations for expenditure on West Coast Route Modernisation and Central
- a separate page for maintenance expenditure as maintenance on the network is conducted by territory rather than by strategic route.

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 progress in developing our unit cost framework.

Network total expenditure

Table 139 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Maintenance	1,167.0	1,145.6	-21.4
Renewals			
Track	847.3	896.7	49.4
Signalling	456.0	436.2	-19.8
Structures	372.8	377.3	4.5
Electrification	84.0	85.7	1.7
Plant and Machinery	78.1	83.9	5.8
Information Technology	102.4	96.3	-6.1
Telecoms	195.4	181.5	-13.9
Stations	202.5	192.8	-9.7
Depots	13.2	14.7	1.5
Lineside buildings	5.6	33.2	27.7
Other	-18.3	21.3	39.6
Renewals (non-WCRM)	2,339.0	2,419.6	80.6
Renewals (WCRM)	485.8	357.7	-128.1
Enhancements (non-WCRM)	573.1	426.9	-146.2
Enhancements (WCRM)	168.6	141.9	-26.7
Total enhancements	741.7	568.8	-172.9

Commentary

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 following explain the differences between the expenditure figures presented in this Annual Return and those in the Regulatory Accounts:

1. Enhancements − the Annual Return includes £144m of third party funded schemes that are not reported in our accounts. The Annual Return also includes expenditure of £36m that we have excluded from the regulatory accounts because we consider it does not meet the ORR criteria for RAB additions;
2. Renewals − the Annual Return includes expenditure on WCRM power supply points (£13m) to be consistent with the renewals forecast in the 2006 Business Plan.

As reported in the regulatory accounts, total operating expenditure in the year was £1,221m compared with the ACR 2003 Final Determination of £1,163m. Within this total, controllable Opex was £878m compared with the ACR allowance of £917m.

Commentary

The following provides explanations which relate 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 £49.4m track overspend is mainly due to the following items: £12m Plain Line overspend caused by non-delivery of efficiency overlay; £13m of additional volume related works on the Settle & Carlisle lines; Additional costs from TSR removal £14m and additional possession management charge of £4m; There has also been over-delivery of volumes on S&C which has resulted increased cost of £2m

Signalling

The £19.8m underspend was the result of activity efficiency (£29m), scope changes (£1m) and re-scheduled activity (-£10m).

Good progress has continued to be made with delivering the efficiency programme over the past year generating a further £29m of efficiency above the targets in the Business Plan. Unit prices for SEUs delivered have continued to show a decreasing trend consistent with the regulatory efficient challenge. We have also generated significant scope efficiencies notably in the Newport and Glasgow major projects.

We have awarded new contracts for the major and minor works during the year. In South East territory this has been a new contractor which has led to us deciding to defer works until this contractor is in place so as to facilitate the efficiencies arising from this new contract.

There has been deferral of a number of level crossing projects to 2007/08 whilst a centralised development and delivery organisation is created. This will facilitate introduction of standard processes so as to facilitate future unit price reductions. We are also reviewing technology used at level crossings to improve safety at these.

Structures

The variance from the original forecast is due to accelerating works from future years in the control period (£60.4m), additional scope (£15m), both of which are mostly offset by achieving additional efficiencies on the total programme (£32m) and some works being delayed (£38m). At present we are continuing to increase value for money on tendered works due to the current Civil Engineering market.

Plant and machinery

The £5.8m variance is due to increased activity across the overall plant programme of works.

Electrification

The electrification programme has benefited from efficient contracting of works that has led to spend being slightly below business plan.

Information technology

In total IT spend was £6.1m below plan at £96.3m. Changes in scope accounted for a net underspend of £3.4m which included the halting of the IM Transformation activity (£5.2m underspend) following a review of strategy, partially offset by IT costs associated with Atrium (£2.2m overspend) which were not included in the original plan. Deferral attributed to an underspend of £4.0m. The delay in the finalisation of SAF 5 has resulted in deferral for two related IT projects leading to an

underspend of £1.8m with a further £1.9m underspend associated with IT infrastructure projects pending the completion of the IT asset sourcing strategy. Efficiencies delivered a benefit of £1.0m across a number of projects whilst the acceleration of spend on Desktop Technology Refresh resulted in additional spend of £2.2m compared to plan.

Telecoms

The telecoms variance is due to a combination of central provisions not being required and deferral on a number of projects due to scope and technical approval issues.

Stations

Victoria roof and Kings Cross have been deferred this year and this has caused most of the underspend on stations. These works have been partially offset by schemes accelerated from future years, but not all of these works were on Stations.

Depots

The depot spend is slightly higher than budget due to the mix of works changing across the Estates programme as a result of large master plan schemes being deferred (e.g. Victoria roof).

Lineside buidings

The major elements of the variance shown in this asset is due to re-allocation from the 'Other' line as follows: M&ST (£7.0m), Maintenance delivered MDU Renewals (£6.2m). There was also spend on the MDU Stores programme (£5.2m) which was not in the original budget.

Other

The variance is because the forecast included a negative amount to reflect the risk, described in the 2006 Business Plan, that the planned increase in total renewal spend might not be delivered. This overlay applies to all asset categories but was shown in the "other" line in the Plan.

Enhancements

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

Route 1 Kent

Table 140 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	21.6	20.5	-1.1
Signalling	7.4	16.4	9.0
Structures	7.3	18.4	11.1
Electrification	16.9	8.5	-8.4
Plant and machinery	2.3	2.0	-0.3
Information technology	0.0	0.0	0.0
Telecoms	0.6	0.2	-0.4
Stations	15.3	10.0	-5.3
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	71.4	76.0	4.6
Total enhancements	8.5	8.5	0.0

Signalling

The £9m variance is largely due to the acceleration of the Hither Green signalling renewal project partially offset by deferral on other projects as resources were released for Hither Green.

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having initially been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes (£5.5m). Additional costs were incurred on the Martello, Shakespeare and Abbotscliffe Tunnels as a result of the final account settlement (£1.8m). The scope on Ore Tunnel was also redefined after further site investigation revealed more extensive work was required, which caused additional spend of £1.4m. Works completion at Darenth Viaduct which was not originally budgeted rolled into 2006/07 and increased 2006/07 expenditure by £0.9m and increased repair work at Rochester Bridge (which was not in the original budget) added an additional £0.7m variance.

Electrification

The £8.4m variance is largely due to deferral on transformer rectifiers, HV feeder renewals and switchgear renewals arising from equipment problems, possession access issues, scope review and resource constraints (£5.7m). There have also been efficiencies delivered on the MF36 Switchgear project (£2.7m).

Stations

This variance is as a result of the decision to postpone the approval of Victoria Roof Strategic Renewals pending development of the station Masterplan.

Route 2 Brighton Main Line and Sussex

Table 141 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	22.9	21.7	-1.2
Signalling	5.6	6.1	0.5
Structures	14.3	17.7	3.4
Electrification	11.0	6.9	-4.1
Plant and machinery	0.6	0.3	-0.3
Information technology	0.0	0.0	0.0
Telecoms	0.1	0.3	0.2
Stations	9.8	7.5	-2.3
Depots	1.3	0.0	-1.3
Lineside buildings	0.1	1.0	0.9
Other	0.0	0.0	0.0
Total renewals	65.6	61.5	-4.1
Total enhancements	4.3	3.2	-1.1

Signalling

The £0.5m variance is largely due to Moreton level crossing (£0.4m) that was allocated incorrectly to this route in the Business Plan, this should have been South West Main Line (Route 3).

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having been classified as 'Other' in the forecast. The spend was subsequently allocated over a number of sites and apportioned across territory routes. These were partially offset by the River Wey Navigation Bridge project which was incorrectly classified as Route 2 in the forecast whereas the spend was recorded on Route 3.

Electrification

The £4.1m variance is due to deferral on conductor renewals, transformer rectifiers, HV feeder renewals and switchgear renewals arising from equipment problems, possession access issues, scope review and resource constraints.

Stations

The variance is principally due a deferral of work at East Croydon as there was an issue with access to space frame for maintenance and deferring the work will ensure that the scaffolding is erected in order that the painting can be carried out at the best time of year (£0.5m). In Brighton, HVAC renewals and Electrical repairs projects were completed in prior years (£0.4m). There were also efficiencies of £0.2m achieved through negotiation at contract award on the Bexhill Station Canopy replacement project.

Depots

Norwood Depot scheme (NDS) did not proceed resulting in £1.3m less being spent.

Lineside buildings

This variance is due to Clapham Maintenance Delivery Unit (MDU) accommodation (£0.7m) and Tulse Hill MDU Renewal (£0.3m) which were originally included within the depot refurbishment programme and the centrally managed budget respectively under 'Other' in the Forecast.

Enhancements

This variance is due to possession strategy efficiencies on the Battersea Park station improvements (£0.6m), as well as third party delays to the Imperial Wharf new station project (£0.3m) and the deferral of the SDO Balise System programme (£0.3m).

Route 3 South West Main Line

Table 142 Expenditure 2006/07 Prices (£ Million)

	Forecast	Actual	Variance
Renewals			
Track	60.2	57.0	-3.2
Signalling	84.3	105.3	21.0
Structures	4.7	13.3	8.6
Electrification	10.0	5.8	-4.2
Plant and machinery	0.9	0.7	-0.2
Information technology	0.0	0.0	0.0
Telecoms	0.2	0.0	-0.2
Stations	13.5	9.7	-3.8
Depots	0.7	0.0	-0.7
Lineside buildings	0.0	0.9	0.9
Other	0.5	0.0	-0.5
Total renewals	175.1	192.7	17.7
Total enhancements	14.7	6.3	-8.4

Track

There was a general underspend on maintenance delivered renewal throughout the SEA Territory.

Signalling

The £21.0m variance is largely due to the additional costs arising on the Portsmouth resignalling project and acceleration of work on the Basingstoke resignalling project. There was also £0.4m due to Moreton level crossing that was allocated incorrectly to the Brighton Main Line and Sussex (route 2) in the Business Plan.

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes (£4.8m). Expenditure on the River Wey Navigation Bridge (£1.1m) was incorrectly classified as Route 2 in the original forecast and spend was higher than forecast due to the use of Christmas possessions. There was £0.6m more spent at Bookham Tunnel due to additional project completion costs and similarly at Swaythling Road Bridge (£0.5m) due to finalisation of works budgeted in 2005/06.

Electrification

The £4.2m variance is largely due to deferral on conductor rail renewals and switchgear renewals caused by delayed delivery of equipment and internal resource constraints. There have also been efficiencies delivered on the DC switchgear renewals project (£0.8m).

Stations

This variance includes deferral at Byfleet & New Haw platform rebuild due to remit timings (£0.6m); delays at Ryde Esplanade footbridge due to the fact that there was no footbridge at site (£0.4m), delays due to a third party at Waterloo Spur Road repairs (£0.6m), deferral of Twickenham on the renewal of platform lighting due to the excessive costs of removing asbestos (£0.4m), deferral at Clapham Junction (£0.8m) due to pending clarification of the interface with the major development at Clapham and various deferrals of platform and car park lighting schemes.

Depots

Bournemouth Light Maintenance Depot (LMD) renewal of yard lighting (£0.7m) slipped into 2007/08 due to a review of future usage of the yard.

Lineside buildings

Wessex Area MDU renewals (£0.5m) and Wimbledon MDU renewal (£0.4m) were originally classified as 'Other' under this route.

Other

Wessex Area MDU renewals (£0.5m variance) was originally allocated to Lineside buildings.

Enhancements

£3.3m of efficiencies were achieved on Southern Route New Trains Programme (SRNTP) and other minor efficiencies totalled £5.1m.

Route 4 Wessex Routes

Table 143 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	5.8	5.5	-0.3
Signalling	1.8	0.3	-1.5
Structures	2.1	2.8	0.7
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	0.2	0.2
Stations	0.8	0.5	-0.3
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	10.5	9.3	-1.2
Total enhancements	0.0	0.2	0.2

Signalling

The £1.5m variance is largely due to deferral on Axminster, Sherbourne and Dean & Dean Hill level crossings (£1.0m) following the changeover to the new framework contractor and also resource constraints.

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes.

Route 5 West Anglia

Table 144 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	23.4	22.2	-1.2
Signalling	8.4	2.0	-6.4
Structures	5.3	6.7	1.4
Electrification	0.2	0.0	-0.2
Plant and machinery	1.2	1.1	-0.1
Information technology	0.0	0.0	0.0
Telecoms	0.5	0.9	0.4
Stations	4.0	6.6	2.6
Depots	1.1	0.8	-0.3
Lineside buildings	0.4	0.0	-0.4
Other	0.0	0.0	0.0
Total renewals	44.4	40.3	-4.2
Total enhancements	0.6	0.4	-0.2

Signalling

The £6.4m variance is due to delays following the changeover to the new framework contractor on level crossings and minor works projects, including Duxford & Hinxton (£1.0m). There is also deferral on the Norwich-Ely pole route (£1.0m) whilst the scope is being reviewed.

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having been classified as 'Other' in the forecast. This spend was allocated over a number of sites and apportioned across territory routes.

Stations

The variance is due to various works bought forward from the 2007/08 plan.

Depots

This variance is due to delays of clearance of uncontaminated spoil at Whitemoor (£0.2m).

Route 6 North London Line and Thameside

Table 145 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	26.5	25.1	-1.4
Signalling	0.5	0.6	0.1
Structures	7.9	11.2	3.3
Electrification	4.8	6.8	2.0
Plant and machinery	0.0	0.1	0.1
Information technology	0.0	0.0	0.0
Telecoms	0.1	0.0	-0.1
Stations	1.3	1.6	0.3
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	41.1	45.4	4.3
Total enhancements	0.7	2.5	1.8

Structures

This variance is largely due to minor, reactive, emergency and vegetation clearance schemes having been classified as 'Other' in the forecast. This spend was allocated over a number of sites and apportioned across territory routes.

Electrification

The £2.0m variance is due to additional contact wire renewals undertaken during the Pitsea to Shoeburyness blockade at Christmas 2006.

Enhancements

This variance was due to delays to the third party Coventry Car Park scheme (£1.5m).

Route 7 Great Eastern

Table 146 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	42.6	40.4	-2.2
Signalling	10.7	8.8	-1.9
Structures	12.6	12.8	0.2
Electrification	6.0	7.1	1.1
Plant and machinery	0.9	0.5	-0.4
Information technology	0.0	0.0	0.0
Telecoms	2.7	2.3	-0.4
Stations	3.5	5.4	1.9
Depots	1.1	0.0	-1.1
Lineside buildings	0.1	0.2	0.1
Other	0.0	0.0	0.0
Total renewals	80.2	77.5	-2.8
Total enhancements	2.0	1.1	-0.9

Track

There was a general underspend on maintenance delivered renewal throughout the SEA Territory.

Signalling

The £1.9m variance is largely due to Liverpool Street IECC (£1.2m) and Brundall signalling renewals (£1.0m).

Electrification

The £1.0m variance is largely due to development for the overhead line renewal from Liverpool Street to Chelmsford.

Stations

The £2.1m variance was caused by acceleration of projects from 2007/08, including Forest Gate, Harwich International, Shenfield, Southend Central and Victoria.

Depots

The variance is as a result of projects completed under Stations spend, including Clacton LMD, East Ham LMD, Ilford LMD and Norwich Crown Point.

Lineside buildings

Romford & Colchester MDU Renewal was originally included within 'Other' in the forecast.

Enhancements

£0.9m efficiencies were delivered on various schemes.

Route 8 East Coast Main Line

Table 147 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	77.2	73.4	-3.8
Signalling	10.7	8.3	-2.4
Structures	15.1	18.2	3.1
Electrification	17.5	10.4	-7.1
Plant and machinery	5.0	3.4	-1.6
Information technology	0.0	0.0	0.0
Telecoms	3.5	3.5	0.0
Stations	23.2	15.2	-8.0
Depots	1.1	0.7	-0.4
Lineside buildings	0.0	0.3	0.3
Other	0.0	0.0	0.0
Total renewals	153.1	133.4	-19.7
Total enhancements	35.6	10.4	-25.2

Track

This variance is principally due to a number of renewals being postponed, the most significant of which was Heck to Templehirst.

Signalling

The £2.4m variance is due to deferral of Balne, Moss and Widdrington level crossings (£0.7m) together with more efficient delivery mechanisms being implemented and due to re-phasing of Alnmouth/Tweedmouth panel refurbishment (£0.7m).

Structures

This variance is largely due to minor schemes having been classified as 'Other' in the forecast (£2.8m). This spend was subsequently allocated over a number of sites and apportioned across territory routes. There were also scope changes contributing additional spend at Newgate Street South Embankment (£0.3m) and the arches facing Forth Street (£0.3m), while unbudgeted emergency works to address the bankslip at Berry Lane on ECML totalled £0.4m. Offsetting these amounts was an underspend at River Don (£0.6m) due to an extended tender evaluation process and a delayed award of contract.

Electrification

The £7.0m variance is largely due to efficiencies on catenary renewals and protection relays. There has also been deferral on OLE structures renewals due to delivery issues.

Plant and machinery

The £1.5m variance is largely due to deferral of works at Bounds Green depot (£0.7m) and deferral of the 11k supply renewals project at Leeds (£0.4m).

Telecoms

There was deferral on the Kings Cross concentrator project (£0.8m) due to issues with product approval but this was offset by expenditure on Doncaster concentrator renewal (£0.9m) that was allocated to the Central (Other) route in the business plan.

Stations

The variance is principally due to the deferral of works to maximise delivery efficiencies on the strategic renewals element of the Kings Cross redevelopment project.

Enhancements

The variance is due to the proposed payment to LUL no longer being required on the Kings Cross project (£25.8m).

Route 9 Northeast Routes

Table 148 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	9.8	9.3	-0.5
Signalling	2.3	5.4	3.1
Structures	21.4	30.6	9.2
Electrification	0.3	0.2	-0.1
Plant and machinery	0.1	0.1	0.0
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.8	0.1	-0.7
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	34.6	45.7	11.1
Total enhancements	1.6	2.8	1.2

Signalling

The £3.1m variance is largely due to acceleration of the Cliffe House signalling renewal (£2.7m).

Structures

This variance is largely due to minor schemes having been classified as 'Other' in the forecast (£2.8m). This spend was subsequently allocated over a number of sites and apportioned across territory routes (£4.8m). Newcastle High Level Bridge (£4.1m) was also accelerated from the 2007/08 plan.

Stations

This variance is due to Thornaby Footbridge & Retaining Wall being transferred to the 2007/08 plan to achieve better possession opportunities.

Enhancements

The variance is due to a new project at Heaton Depot CET (£0.5m), as well as work for Brigg Lane freight enhancement (£0.4m) and other schemes totalling £0.3m.

Route 10 North Transpennine, North and West Yorks

Table 149 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	31.0	29.5	-1.6
Signalling	23.5	24.1	0.6
Structures	10.6	11.8	1.2
Electrification	0.3	0.4	0.1
Plant and machinery	0.6	0.4	-0.2
Information technology	0.0	0.0	0.0
Telecoms	0.7	0.5	-0.2
Stations	1.8	2.3	0.5
Depots	0.0	0.8	0.8
Lineside buildings	0.4	0.0	-0.4
Other	0.0	0.0	0.0
Total renewals	68.8	69.8	1.0
Total enhancements	0.9	1.9	1.0

Track

This variance is due to loss of volume as renewals schemes were deferred to later years, the most significant of which were jobs at Wressle & Melton.

Signalling

The £0.6m variance is largely due to additional costs on the Healey Mills renewal project resulting from revised possession access.

Structures

This variance is largely due to minor schemes having been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes.

Depots

The variance was due to works on the Neville Hill LMD heating system which were brought forward from the 2007/08 plan.

Lineside buildings

This variance is due to Goole Swingbridge (£0.4m) being deferred so that it coincides with the planned bridge strengthening works by the Civils team to realise additional efficiencies.

Route 11 South Transpennine, South and Lincs

Table 150 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	32.0	30.4	-1.6
Signalling	15.5	15.4	-0.1
Structures	11.0	17.1	6.1
Electrification	0.0	0.0	0.0
Plant and machinery	1.9	0.5	-1.4
Information technology	0.0	0.0	0.0
Telecoms	0.2	0.1	-0.1
Stations	1.3	0.8	-0.5
Depots	0.0	0.8	0.8
Lineside buildings	0.0	0.1	0.1
Other	0.0	0.0	0.0
Total renewals	62.0	65.2	3.3
Total enhancements	5.1	3.3	-1.8

Track

This variance is due to renewals schemes being deferred to 2007/08, the most significant of which were jobs at Killingholme, Ancaster to Wilsford and Cherry Willingham.

Structures

This variance includes minor schemes which had been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes (£2.6m). There was also a new emergency scheme introduced following a bank slip at Medge Hall which required further spend to ensure completeness of all emergency works totalling £0.9m. This £0.9m was spent to complete phase 2 works at Keadby Drawbridge which was not originally budgeted and £0.7m of additional works as a result of vegetation clearance and design was undertaken at South Forty Foot Drain.

Plant and machinery

The £1.4m variance is due to deferral of the points heating programme whilst efficient contracting arrangements are put in place.

Stations

There was third party deferral for the Spalding Footbridge project due to the rejection of the listed building consent application (£0.7m). This was partly offset by a £0.3m increase in cost on the rebuilding of both platforms at Metheringham.

Depots

The £0.8m variance is due to amounts being initially included in 'Other' in the forecast.

Enhancements

Efficiencies were delivered on the NDS Fleet Main Facility totalling £1.4m, and on other schemes totalling £0.4m.

Route 12 Reading to Penzance

Table 151 Expenditure 2006/07 Prices (£ Million)

	Forecast	Actual	Variance
Renewals			
Track	32.0	38.8	6.8
Signalling	2.2	1.9	-0.3
Structures	8.6	9.6	1.0
Electrification	0.0	0.0	0.0
Plant and machinery	0.9	0.5	-0.4
Information technology	0.0	0.0	0.0
Telecoms	0.5	0.4	-0.1
Stations	1.8	0.1	-1.7
Depots	0.3	0.2	-0.1
Lineside buildings	0.8	0.2	-0.6
Other	0.0	0.0	0.0
Total renewals	47.1	51.7	4.6
Total enhancements	0.9	2.1	1.2

Track

This variance is due to the completion of more S&C units than originally at Lipson Junction and the full delivery of the plain line programme.

Structures

This variance includes reactive earthwork schemes which had been classified as 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes.

Stations

This variance is principally due to deferrals of work. Plymouth Bay Platforms (£0.3m) works were re-prioritised and deferred to 2007/08 as the inspection established that the asset condition was not as poor as previously thought. Penzance Canopy & Platform repairs (£0.3m) were also deferred as possessions were not available until May 2007 and the Newquay Canopy repairs (£0.2m) were also deferred.

Enhancements

This variance is due to spend of £1.3m at Ufton Nervet being reclassified as third party renewals and efficiencies of £0.1m being delivered on other schemes.

Route 13 Great Western Main Line

Table 152 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	104.8	127.2	22.4
Signalling	36.3	30.7	-5.6
Structures	19.1	42.5	23.4
Electrification	0.0	0.0	0.0
Plant and machinery	4.3	3.2	-1.1
Information technology	0.0	0.0	0.0
Telecoms	3.4	2.8	-0.6
Stations	4.1	4.0	-0.1
Depots	0.2	0.4	0.2
Lineside buildings	1.3	0.0	-1.3
Other	0.1	0.0	-0.1
Total renewals	173.5	210.8	37.3
Total enhancements	33.8	28.5	-5.3

Track

This variance is due to the completion of more S&C Units than originally at Bedminster and the full delivery of the plain line programme.

Signalling

The £5.6m variance is partly due to efficiencies on the Port Talbot resignalling project (£1.5m). There is also re-phasing of minor works due to resource constraints and level crossings whilst a more efficient delivery mechanism is implemented. The Berks & Hants aster track circuits project (£1.8m) was allocated incorrectly to South Wales Valley (Route 15) in the business plan.

Structures

The variance was largely caused by expenditure on reactive earthworks (£6.5m), structures minor works (£4.8m), emergency works (£3.1m), bridge infill packages (£1.7m), earthworks scheme development (£0.4m), land purchases of future sites (£0.6m), vegetation clearance (£0.4m) and associated project management services (£1.7m) that were initially allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. In addition to this, additional maintenance activities were undertaken at Flax Bourton Phase 5 (£0.9m); there was a revised estimate with correct volumes which increased costs along with additional scheme development for vegetation clearance at Westerleigh North (£0.5m); and unforeseen ground conditions have resulted in a change of design solution which has increased the cost of the works at Chipping Sodbury East Cutting (£0.8m).

Plant and machinery

The £1.1m variance is largely due to deferral of the points heating programme (£0.6m) whilst scope is resolved and efficient contracting arrangements are put in place. There has also been deferral on the national power supply point project (£0.3m).

Telecoms

This variance is due to delays on Bristol and Swindon concentrators as a result of the complexity of the technical solution and integrating new technology into old.

Lineside buildings

This variance is due to decommissioning of a water treatment plant at Sudbrook Pumping Station. The reduction is appropriate as only development work has taken place this year. Previous pre-feasibility work had identified options, but there are still many risks and issues still to be managed out prior to commencing the preferred option on site.

Enhancements

This variance is principally due to: efficiencies being realised at Heathrow T5 (£3.3m); Paddington LTVA being re-classified to renewals (£2.2m); delays to design and surveys at the new Bristol Parkway platform causing an underspend of £0.9m; Swindon up goods loop project being delayed (£0.7m) and other schemes totalling £0.5m. These were partially offset by £2.4m spend on Newport IDS which was re-classified from renewals.

Route 14 South and Central Wales and Borders

Table 153 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	10.7	13.0	2.3
Signalling	4.9	3.3	-1.6
Structures	6.2	8.2	2.0
Electrification	0.0	0.0	0.0
Plant and machinery	1.3	0.5	-0.8
Information technology	0.0	0.0	0.0
Telecoms	0.1	0.5	0.4
Stations	0.0	0.0	0.0
Depots	0.0	0.5	0.5
Lineside buildings	0.1	0.0	-0.1
Other	0.0	0.0	0.0
Total renewals	23.2	26.0	2.8
Total enhancements	11.5	7.7	-3.8

Track

This variance is due to delivering slightly more S&C renewals than originally planned combined with the full delivery of the plain line programme.

Signalling

The £1.6m variance is due to re-phasing of level crossings whilst a more efficient delivery mechanism is implemented.

Structures

The variance was largely caused by expenditure on reactive earthworks (£0.9m), structures minor works (£0.9m), and emergency civils work (£0.6m), that had all initially been allocated to 'Other' in the forecast, and which were subsequently allocated over a number of sites and apportioned across territory routes. These amounts were partially offset by £0.9m as a result of works on Traeth Bach Viaduct deferred in order to undertake a value for money study to gain a full life cost solution.

Plant and machinery

The £0.8m variance is due to deferral of the points heating programme whilst scope is resolved and efficient contracting arrangements are put in place.

Depots

The variance is largely due to the costs on Shrewsbury MDU accommodation being originally included within 'Other'.

Route 15 South Wales Valleys

Table 154 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	1.3	1.6	0.3
Signalling	6.7	3.1	-3.6
Structures	0.8	0.7	-0.1
Electrification	0.0	0.0	0.0
Plant and machinery	0.1	0.0	-0.1
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.4	0.4	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	9.3	5.8	-3.5
Total enhancements	5.4	5.2	-0.2

Signalling

The £3.6m variance is largely due to the rephasing of South Wales Control Centre (£0.6m) to enable efficient packaging of contracts with Thames Valley Control Centre as well as affecting delays to Cardiff resignalling whilst enhancement options are evaluated (£0.4m). The Berks & Hants aster track circuits project (£1.8m) was also allocated incorrectly to this route in the business plan, this should be Great Western (Route 13).

Route 16 Chilterns

Table 155 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	1.9	2.3	0.4
Signalling	0.1	0.0	-0.1
Structures	5.9	6.8	0.9
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	0.9	0.2	-0.7
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	8.8	9.3	0.5
Total enhancements	73.2	72.5	-0.7

Structures

The £0.9m variance was caused by expenditure on minor works that had initially been allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes.

Stations

The variance is due to deferrals on the Denham platform canopy project to 2008/09 (£0.2m) and the replacement of timber staircases at Great Missenden. Works on Gerrards Cross station footbridge were also removed from the current business plan (£0.2m). Also as the asset condition is better than anticipated, less works have been required.

Route 17 West Midlands

Table 156 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	55.9	55.8	-0.1
Signalling	40.3	47.9	7.6
Structures	5.7	8.7	3.0
Electrification	2.3	3.2	0.9
Plant and machinery	1.5	1.2	-0.3
Information technology	0.0	0.0	0.0
Telecoms	1.0	0.7	-0.3
Stations	3.4	4.4	1.0
Depots	0.7	0.1	-0.6
Lineside buildings	0.3	2.1	1.8
Other	0.0	0.0	0.0
Total renewals	111.3	124.1	12.8
Total enhancements	23.4	15.2	-8.2

Signalling

The £7.6m variance is largely due to re-phasing of the development and early construction works on Leamington resignalling (£6.5m) and West Midlands Management Control Centre (£0.6m) that was allocated to the Central (Other) route in the business plan. There was also rephasing of Water Orton (£0.8m) whilst enhancement options are being considered and at Coventry (£1.0m) due to the rescheduled commissioning date arising from resource constraints.

Structures

This variance is largely due to expenditure on minor works and associated project management costs (£1.3m) being allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. There has also been additional spend of £0.5m on 146 Emscote Road due to extra steelwork and revised traffic management costs and of £0.3m on 149 Coventry Road as a result of increased scope. There was also additional feasibility expenditure on structures totalling £1.1m.

Electrification

The £0.9m variance is largely due to acceleration of overhead structures painting works.

Lineside buildings

This variance is principally due to £1.3m overspend on Coventry & Preston roofworks. Coventry was previously classified under 'Stations', while the work at Preston was rolled over from 2005/06. There was also £0.8m variance on Sandwell & Dudley MDU accommodation which was originally included within 'Other'.

Enhancements

This variance is due to the addition of Coventry PSB Resignalling (a new project of £7.8m) this was offset by the cancellation of Chiltern franchise Moor St re-opening (£9.0m) and third party deferrals and the re-spread of routes on Bridgeguard (£6.9m).

Route 18 West Coast Main Line

Table 157 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	63.0	62.9	-0.1
Signalling	5.1	4.7	-0.4
Structures	11.6	19.7	8.1
Electrification	8.9	13.5	4.6
Plant and machinery	1.7	2.1	0.4
Information technology	0.0	0.0	0.0
Telecoms	0.6	3.3	2.7
Stations	10.0	9.0	-1.0
Depots	0.0	0.0	0.0
Lineside buildings	0.2	1.4	1.2
Other	0.8	0.0	-0.8
Total renewals	101.9	116.6	14.7
Total enhancements	1.7	13.9	12.2

Structures

This variance is partly due to £2.7m of emergency works resulting from the Lambrigg train derailment. Also expenditure on minor works (£2.3m), emergency works (£0.5m) and associated project management (£0.7m) were initially allocated to 'Other' in forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. A £2.3m overspend on Bessie Ghyll Earthworks was caused by the implementation of a new scheme which was not identified in the forecast. Following a risk review, increased design work led to increased costs in crane works and support (£1.4m). These additional spends were partially offset by a £1.0m underspend on Runcorn Viaduct Runcorn Branch due to a change in remit resulting in further monitoring and deferral to 2007/08 and a £0.5m reduction on 1 Highbill Road due to a reduction in scope.

Electrification

The variance is largely due to acceleration of overhead structures painting works.

Telecoms

The variance was due to expenditure on Virgin Customer Information System renewals that was allocated to the Central (Other) route in the Business Plan.

Stations

There was £1.2m additional expenditure on Crewe canopy renewal due to works brought forward from 2007/08 following deferral of major renewals at Kings Cross and Victoria. Inspection by buildings engineers established that Euston strategic renewals did not require further works as the condition was better than anticipated.

Lineside buildings

The £1.2m variance was caused by expenditure on Liverpool Edge Hill MDU accommodation (£0.8m) and Preston Corporation St MDU accommodation (£0.5m) that had originally been included within 'Other'.

Enhancements

This variance was principally caused by the WCRM FLODs project being reclassified as an enhancement (£8.0m); reallocation of Bridgeguard projects between routes (£3.1m); Grayrigg track delivered reclassified from renewals (1.6m); and other schemes totalling £0.6m. The Class 350 Introduction on the West Coast was also reclassified resulting in an underspend of £1.2m.

Route 19 Midlands Main Line and East Midlands

Table 158 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	53.6	51.0	-2.6
Signalling	43.3	30.0	-13.3
Structures	3.3	6.3	3.0
Electrification	3.8	2.1	-1.7
Plant and machinery	2.8	3.7	0.9
Information technology	0.0	0.0	0.0
Telecoms	2.7	0.8	-1.9
Stations	3.1	2.1	-1.0
Depots	0.0	1.3	1.3
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	112.5	97.3	-15.2
Total enhancements	7.1	3.7	-3.4

Signalling

The £13.3m variance is partly due to efficiencies delivered on Glen Parva to Nuneaton resignalling and Trent & Derby PSB concentrator renewals. Also planned works on South Erewash resignalling and East Midlands Control Centre were deferred so as to facilitate delivery of future efficiencies.

Structures

Expenditure on minor works (£1.0m) was allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. A £0.8m overspend on East Midlands Earthworks was due to extra sites having been identified at Sundon and Stewartby. There was also additional spend of £0.3m on Main Street Bridge incurred due to extra training being required.

Electrification

The £1.7m variance is largely due to rephasing of overhead line and protection relay renewals.

Plant and machinery

The £0.9m variance is due to Nottingham Carriage Washer that was excluded from the business plan.

Telecoms

The £1.9m variance is largely due to delays on the First Capital Connect retail telecoms project (£1.1m) whilst the scope was reviewed post introduction of the new franchise.

Stations

Efficiencies were delivered on Flitwick footbridge (£0.3m) and Leagrave footbridge (£0.3m). A £0.5m underspend was caused by delays at Nottingham footbridge with works to be completed in 2007/08. A £0.3m overspend on Derby platforms canopy was due to acceleration of the scheme to outline design.

Enhancements

The £3.4 underspend is due to efficiencies delivered principally on East Midlands Parkway (£1.0) and deferring work on other schemes (£2.4m).

Route 20 North West Urban

Table 159 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	22.3	22.3	0.0
Signalling	6.6	7.1	0.5
Structures	11.1	18.0	6.9
Electrification	3.1	5.1	2.0
Plant and machinery	1.4	1.0	-0.4
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	11.3	15.0	3.7
Depots	0.0	0.0	0.0
Lineside buildings	0.1	0.8	0.7
Other	0.0	0.0	0.0
Total renewals	55.9	69.3	13.4
Total enhancements	14.1	12.7	-1.4

Signalling

The £0.6m variance is due to additional costs on Rainhill signalbox.

Structures

Expenditure on minor works, emergency works and associated project management costs (£3.3m) were initially allocated to 'Other' in the forecast. The removal of the cast iron parapet panels at Salford Central underbridge has caused delays which has increased the AFC (£1.8m) while changes in scope has increased spend at Amberswood (£0.8m) and Rochdale Canal (£0.5m).

Electrification

The £2.0m variance is due to acceleration of switchgear renewals.

Stations

A £4.2m overspend from: Gatley Platform Reconstruction (£1.4m), East Didsbury Platforms (£0.6m), Burnage Platform Renewals (£1.5m) and Mauldeth Road Platforms (£0.7m) was due to taking advantage of unique possession opportunities in 2006/07. This overspend was partially offset by the deferral of the Manchester Victoria roof renewal being deferred to 2007/08 to align with a commercial development review (£1.1m).

Lineside buildings

Kirkham MDU accommodation spend (£0.5m) was previously included within 'Other' while advance works to facilitate future demolition at Old London Road Signal Box asbestos removal totalled £0.2m.

Enhancements

The variance is due to the cancellation of the Partington Branch Reinstatement (£2.9m); delays to the programme at Salford Central (£1.1m); and Liverpool Lime Street (£0.7m). This is partially offset by acceleration on Manchester Airport 3rd Platform (third party scheme) (£0.7m); budget rollover at Allerton Station (£0.6m); and other schemes progressed totalling £2.0m.

Route 21 Merseyrail

Table 160 Expenditure 2006/07 Prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	11.0	11.0	0.0
Signalling	0.0	0.0	0.0
Structures	2.1	2.2	0.1
Electrification	4.9	4.1	-0.8
Plant and machinery	1.4	1.5	0.1
Information technology	0.0	0.0	0.0
Telecoms	1.3	0.3	-1.0
Stations	0.9	0.5	-0.4
Depots	0.8	0.3	-0.5
Lineside buildings	0.0	0.0	0.0
Other	0.0	0.0	0.0
Total renewals	22.4	19.9	-2.5
Total enhancements	4.8	2.7	-2.1

Electrification

This variance is largely due to efficiencies delivered on Liverpool feeder cable renewals.

Telecoms

The £1.0m variance is largely due to the extended development phase of the Sandhills retail telecoms project (£0.9m) whilst an effective technical solution was developed.

Enhancements

The underspend was caused by third party delays on Sandhills Station project (£0.5m) and delays on other schemes totalling £1.7m.

Route 22 North Wales and Borders

Table 161 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	4.3	4.3	0.0
Signalling	4.0	1.9	-2.1
Structures	15.7	6.6	-9.1
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	0.1	0.1
Stations	2.1	1.2	-0.9
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.6	0.6
Other	0.4	0.0	-0.4
Total renewals	26.5	14.7	-11.8
Total enhancements	1.0	3.0	2.0

Signalling

This variance is due to deferral whilst a review of scope is undertaken on various minor works at Holyhead, Bangor and Ellesmere Port. There was also reduced scope of work and efficiencies on the minor works project at Penmaenmawr (£0.6m).

Structures

This variance is mainly due to the budget on LNW minor works (£7.9m) being allocated to route 22 in the forecast. This is incorrect and the spend is allocated over a number of sites and apportioned across territory routes. There was also deferral of work at Boulderstones (£0.6m) with the implementation works and issues with the level of local authority contributions.

Stations

The variance is due to deferral of glazing renewal and stonework repair works at Chester Station and has been re-planned to 2007/08 due to possession availability.

Lineside buildings

The £0.6m variance is due to spend on Llandundno Junction MDU renewal having initially been included within 'Other' in the forecast.

Route 23 North West Rural

Table 162 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	24.0	24.0	0.0
Signalling	9.5	7.7	-1.8
Structures	19.2	22.6	3.4
Electrification	0.0	0.0	0.0
Plant and machinery	0.1	0.0	-0.1
Information technology	0.0	0.0	0.0
Telecoms	0.0	0.0	0.0
Stations	0.0	0.0	0.0
Depots	0.0	0.0	0.0
Lineside buildings	0.0	0.1	0.1
Other	0.0	0.0	0.0
Total renewals	52.8	54.4	1.6
Total enhancements	0.3	1.9	1.6

Signalling

The £1.8m variance is largely due to replanning of Parton signalling works following an embankment slip.

Structures

Expenditure on minor works in 2006/07, emergency works and associated project management costs (£4.1m) were allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. Additional spend was incurred on Ais Gill Viaduct (£0.5m) due to critical strengthening works being required as part of the freight upgrade for the Settle to Carlisle line. There was also additional spend of £0.7m on Eskmeals Viaduct. These amounts were partially offset by re-phasing Levens Viaduct costs (£2.0m) to take the opportunity of delivering the works in one blockage rather than two resulting in additional efficiencies.

Route 24 East of Scotland

Table 163 Expenditure 2006/07 Prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	31.7	39.3	7.6
Signalling	1.7	2.6	0.9
Structures	31.1	44.0	12.9
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	0.5	0.9	0.4
Stations	3.9	3.8	-0.1
Depots	0.0	0.0	0.0
Lineside buildings	0.5	0.0	-0.5
Other	0.0	0.0	0.0
Total renewals	69.7	90.8	21.1
Total enhancements	71.5	64.7	-6.8

Track

This variance is due to completion of more S&C units than originally planned at Grangemouth & Montrose and full delivery of the plain line programme.

Signalling

The variance is largely due to acceleration of the Plean signalling renewal (£0.5m).

Structures

The variance was due to expenditure on weather proofing (£5.7m), minor works, emergency works and associated project management costs of £7.0m that had initially been allocated to 'Other' in the forecast. This spend was subsequently allocated over a number of sites and apportioned across territory routes. A further £0.6m spend was required on Arch Almond Valley Viaduct due to additional scope.

Enhancements

This variance was mainly due to third party delays and TOC compensation savings on Edinburgh Waverley (£14.1m). Additional works were required on Airdrie to Bathgate (£5.5m) and other schemes totalling £1.8m.

Route 25 Highlands

Table 164 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	6.1	7.6	1.5
Signalling	1.8	1.0	-0.8
Structures	5.6	9.9	4.3
Electrification	0.0	0.0	0.0
Plant and machinery	0.2	0.5	0.3
Information technology	0.0	0.0	0.0
Telecoms	1.7	1.7	0.0
Stations	0.3	1.0	0.7
Depots	0.1	0.4	0.3
Lineside buildings	0.3	0.3	0.0
Other	0.0	0.0	0.0
Total renewals	16.1	22.5	6.4
Total enhancements	0.2	0.7	0.5

Signalling

The £0.8m variance is largely due to deferral on various minor works projects due to re-prioritisation of resources to Plean and Management Control Centre projects.

Structures

The variance was mainly due to expenditure on weather proofing (£1.3m), minor works, emergency works and associated project management costs totalling £1.7m that had initially been allocated to 'Other' in the forecast. There was additional spend on rock cutting (de-vegetation at 17 Sites) due to extra work being identified resulted in additional spend of £0.7m.

Depots

This variance is due to Fort William MDU accommodation spend (£0.3m) being originally included within 'Other'.

Route 26 Strathclyde and South West Scotland

Table 165 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	26.1	32.4	6.3
Signalling	14.6	16.7	2.1
Structures	5.4	10.9	5.5
Electrification	14.6	9.5	-5.1
Plant and machinery	0.6	0.9	0.3
Information technology	0.0	0.0	0.0
Telecoms	3.3	2.2	-1.1
Stations	1.9	2.3	0.4
Depots	0.3	0.0	-0.3
Lineside buildings	0.3	1.8	1.5
Other	0.0	0.0	0.0
Total renewals	67.1	76.7	9.6
Total enhancements	13.7	14.2	0.5

Track

This variance is due to delivering slightly more S&C renewals than originally planned combined with the full delivery of the plain line programme.

Signalling

The £2.1m variance is largely due to the South West Scotland Management Control Centre (£2.8m) that was allocated to the Central (Other) in the business plan. This is partially offset by deferral of the Cathcart signalling renewal (£0.6m).

Structures

The variance was mainly due to expenditure on weather proofing (£1.4m), minor works, emergency works and associated project management costs totalling £1.9m that had initially been allocated to 'Other' in the forecast. There was also additional spend on Old Mill Road, Uddingston of £0.5m due to an increase in scope.

Electrification

The £5.1m variance is largely due to efficiencies delivered on Shields-Gourock overhead line renewals, Ayrshire north & south electrics and Glasgow north electrics.

Telecoms

The £1.2m variance is largely due to deferral on DOO works (£1.0m) arising from issues with the infrastructure causing additional work and delays.

Lineside buildings

This variance is due to Cowlairs MDU accommodation (£1.7m) being originally included within 'Other' in the forecast.

Central (Other)

Table 166 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	45.5	68.3	22.8
Signalling	108.4	84.9	-23.5
Structures	109.4	0.0	-109.4
Electrification	-20.6	2.0	22.6
Plant and machinery	48.1	59.5	11.4
Information technology	102.4	96.3	-6.1
Telecoms	171.6	159.8	-11.8
Stations	83.3	89.1	5.8
Depots	5.4	8.4	3.0
Lineside buildings	0.9	23.4	22.5
Other	-20.1	21.3	41.4
Total renewals	634.2	613.0	-21.1
Total enhancements	236.4	137.6	-98.8

Central specific projects

Table 167 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Telecoms − GSM-R/FTN	141.3	145.7	4.4
Enhancements			
Telecoms − GSM-R/FTN	8.7	7.4	-1.3
SRNTP	0.0	0.0	0.0
Pollution prevention at LMDs	35.3	24.3	-11.0
'Access for All' investments	30.3	18.2	-12.1

Signalling

The £23.5m variance is due to re-phasing of work on signalling development projects and efficiencies and re-phasing of minor works projects.

Structures

Business Plan elements for such schemes like minor works, emergency works and associated project management were classed under 'Other'. This was split out and allocated to the specific route where applicable or through allocation across relevant territory routes where cost collection was carried out by territory (e.g project management).

Electrification

The £22.6m variance is largely due to overlays included in this route. This offsets the underspends shown in the routes, notably routes 1, 2, 3 and 8.

Plant and machinery

The variance is due to increased activity across the overall plant programme of works.

Information technology

In total IT spend was £6.1m below plan at £96.3m. Changes in scope accounted for a net underspend of £3.4m which included the halting of the IM Transformation activity (£5.2m underspend) following a review of strategy, partially offset by IT costs associated with Atrium (£2.2m overspend) which were not included in the original plan. Deferral of works led to an underspend of £4.0m. The delay in the finalisation of SAF 5 has resulted in deferral for two related IT projects leading to an underspend of £1.8m with a further £1.9m underspend associated with IT infrastructure projects pending the completion of the IT asset sourcing strategy. Efficiencies delivered a benefit of £1.0m across a number of projects whilst the acceleration of spend on Desktop Technology Refresh resulted in additional spend of £2.2m compared to plan.

Telecoms

The telecoms variance is due to a combination of central provisions not being required and deferral on a number of projects due to scope and technical approval issues.

Stations

The £5.8m overspend was largely due to increase emerging/reactive works which cannot be allocated over routes (£36.4m budgetted versus £45.3m actual).

Depots

The £3m overspend was largely due to increase emerging/reactive works (NDS) which cannot be allocated over routes.

Lineside buildings

The major element of this variance is due to re-allocation from the 'Other' line of: M&ST (£7.0m), maintenance delivered MDU Renewals (£6.2m) and un-budgetted spend in the MDU Stores programme (£5.2m).

Enhancements

The major elements of the underspend are revisions to work scopes on commercial property schemes (£16m), efficiencies and delays on PSU schemes (£17m), re-scheduling of Access for All projects into future years (£12m), efficiencies and reprogramming of Thameslink works into 07/08 (£11m), efficiencies on the Pollution Prevention programme (£11m) an underspend against the general provision for new safety schemes (£26m) and efficiencies and planned deferral on ERTMS of (£8m).

WCRM

Table 168 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Renewals			
Track	130.0	124.5	-5.5
Signalling	183.6	101.4	-82.1
Structures	43.2	34.6	-8.5
Electrification	111.9	91.7	-20.1
Plant and machinery	8.1	-2.3	-10.4
Information technology	0.0	0.0	0.0
Telecoms	9.1	7.7	-1.4
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	485.8	357.7	-128.1
Total enhancements	168.6	141.9	-26.7

Note: The enhancements forecast figure excludes local authority and TENs funding. Routes 1 – 26 exclude all costs from the WCRM project as these costs are specifically separated out and reflected on this page.

Renewals

The WCRM Programme deferred and re-phased significant works in 2006/07 to optimise delivery of the December 2008 timetable change; this had the effect of showing an underspend against the business plan in 2006/07 and consequent budget movements into 2007/08 and 2008/09. Key drivers to this were the re-phasing of the AT Power Supply Upgrade project (ATPSU) into CP4 and CP5 following revised power demands, deferral of Crewe-Weaver to 2007/08 and re-phasing of Rugby/Nuneaton (RuN) as a result of a change to the contracting strategy to gain efficiencies and approvals to signalling design being delayed.

Track

Commissioning delays in the Sandbach-Wilmslow (SWIM) project (new signalling technology, asbestos and ground conditions) have caused a delay to track works in the Stockport area. These works have been re-scheduled for May/June 2007.

Signalling

Four projects contributed to the underspend. The Rugby and Nuneaton projects were combined (RuN) under one management team with a single signalling contract to seek efficiencies. This and delay in obtaining design approvals have led to moving large elements of the delivery schedule into 2007/08 and 2008/09.

The scope associated with the Watford-Wembley signalling renewals project was agreed as longer parts of WCRM outputs.

Works to complete West Midlands re-signalling was deferred to 2007/08, subject to obtaining possessions, and was also impacted by non availability of source records and cancellations.

The financial impact of re-phasing and deferring signalling works was offset, in part, by the Sandbach-Wilmslow (SWIM) project experiencing increased costs to test and commission the new computer based interlocking (CBI) system on that route.

Structures

The variance is driven by the Trent Valley 4 tracking project and the decision to delay contract award on the A38 Bridge contract due to complexity of site works and consequent negotiation with Highways Agency. Other variances were due to adjustments for the close out of various projects.

Electrification

Due to the re-phasing of the ATPSU project works into CP4 and CP5 driven by a revised power demand schedule, this reflects as an underspend against the business plan; costs have been re-phased into future years.

Plant and machinery

Internal transfers of plant and machinery – medium output ballast cleaner (MOBC) and EMSAT machine (measures track geometry) from WCRM to MP&I and Maintenance resulted in a reduction in 2006/07 costs.

Telecoms

The small variance in telecoms is linked to delays in the signalling works within the RuN as the S&T works are planned to be carried out simultaneously.

Enhancements

The Network Rail funded enhancement elements for the major works (RuN and Trent Valley) shows as an underspend due to reasons specified in the previous section. In addition, a further underspend is caused by some third party funding being re-phased into future years as agreements are formalised.

Maintenance expenditure

Table 169 Expenditure 2006/07 prices (£ million)

	Forecast	Actual	Variance
Route delivered maintenance			
London North East	206.4	202.4	-4.0
London North West	236.5	235.1	-1.4
South East Anglia	100.7	100.7	0
South East Kent	64.5	64.5	0
South East Sussex	49.4	47.9	-1.6
South East Wessex	70.5	71.1	0.6
South East – Other	8.2	7.2	-1.0
Western	139.3	137.6	-1.8
England and Wales	875.5	866.4	-9.1
Scotland	86.5	84.3	-2.2
Total Route delivered maintenance	962.0	950.6	-11.4
Centrally managed *	205.0	195.0	-10.0
Total maintenance expenditure	1167.0	1145.6	-21.4

* Includes structures examinations, major items of maintenance plant such as rail grinding and the measurement train, and other HQ managed maintenance activities.

Commentary

Maintenance costs continue to reduce with more maintenance work being delivered for less money. Expenditure has reduced as a result of embedding the more favourable commercial terms established last year. Benefits were felt from enhanced planning and subsequent sharing of overheads as the capital investment portfolio delivered by maintenance increased. Additionally, we continued to release labour and specialist contractors and rely more on our own in-house staff.

Efficiency

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. The determination specified profiles for unit cost efficiency improvement over the control period, adding up to 35 per cent for maintenance and 30 per cent for controllable operating costs (opex) and renewals (excluding WCRM for which specific assumptions were made), equivalent to overall savings of 31 per cent over CP3. The ACR assumed unit cost savings of 8% in 2004/05, 2005/06 and 2006/07 for opex, maintenance and renewals. This section summarises our progress in delivering improvements in efficiency compared to the ACR 2003 targets.

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 three 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 2006/07. For maintenance, we have compared expenditure with the ACR but also taken account of the impact of traffic growth (based on Equated Track Miles (ETMs). For renewals 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. We continue to make good progress on efficiency and to outperform the regulatory assumptions.

Table 170 Overall Efficiency Improvement Assessment

	By end 2005/6		By end 2006/7	
	ACR Assumption (%)	Actual Achieved (%)	ACR Assumption (%)	Actual Achieved (%)
Controllable Opex	15	24	22	25
Maintenance	15	19	22	26
Renewals	15	15	22	23

Operating costs

Table 171 compares total controllable operating costs in 2005/06 and 2006/07 with the levels assumed by the ORR in the ACR 2003 determination. The comparison shows that in 2006/07 controllable opex was 25 per cent lower than the pre-efficient level assumed by ORR and therefore ahead of the 22 per cent ACR assumption (8 per cent per annum). Controllable OPEX in 2006/07 was adversely affected by the increased cost resulting from the Grayrigg derailment, and so shows only a relatively small improvement.

Table 171 Controllable operating cost efficiency improvements

Controllable Opex Nominal prices	ACR pre-efficiency allowance (£m)	Actual Opex (£m)	Variance (£m)	Actual Saving (%)	ACR efficiency assumption (%)
2005/06	1,134	865	-269	24	15
2006/07	1,178	878	-300	25	22

Table 172 Maintenance efficiency improvements

Maintenance Costs Nominal prices	ACR pre-efficiency allowance (£m)	Actual Maintenance (£m)	Variance (£m)	Actual Saving (%)	ACR efficiency assumption (%)
2005/06	1,443	1,192	-251	17	15
2006/07	1,499	1,146	-353	24	22

Maintenance

Table 172 above compares the total level of maintenance expenditure in 2005/06 and 2006/07 with the levels assumed by the ORR in the ACR 2003 determination. The comparison shows that in 2006/07 maintenance expenditure was 24 per cent lower than the pre-efficient level assumed by ORR and therefore ahead of the 22 per cent ACR assumption (8 per cent per annum).

The overall assessment of maintenance efficiency requires costs to be normalised to take account of the volume of traffic and size and complexity of the network, all of which are clearly cost drivers for maintenance expenditure. We therefore believe that the monitoring of efficiency over time should be based on costs per equated track mile (ETM) that takes account of these cost drivers. The main inputs to ETM are track length by type (continuous welded or jointed), numbers of S&C, linespeed and traffic tonnage. Table 173 shows the change in cost per ETM compared to 2005/06 and the change compared to the pre-efficiency allowance assumed by ORR for 2004/05. This shows that the effect of normalising the cost is to increase the overall saving to date to 26 per cent (i.e. outperforming the ACR target of 22 per cent).

We also note that the continuing reductions in infrastructure caused delay minutes and broken rails and further improvements in track geometry measures provide evidence of improvements in the quality of maintenance work that is being undertaken, a key element of the overall improvement in efficiency.

Table 173 Annual changes in maintenance costs per equated track mile

Costs at 2006/07 prices	ACR 2004/05 based on pre efficient allowance	2005/06	2005/07	Variance on 2005/06 actual	Variance on 2004/05 ACR
Maintenance cost (£m)	1,499	1,238	1,146	-7%	-24%
Equated Track Miles (ETM)	21,896	22,599	22,770	1%	4%
Cost per ETM (£k)	68.5	54.8	50.3	-8%	-26%

Unit cost indices

Maintenance

The Maintenance Unit Cost (MUC) framework continued to progress during 2006/07 with particular emphasis on the capture and recording of volume activity data. Information on 18 separate work activities is collected and in total about 53 per cent of maintenance costs are now covered by the MUCs. Obtaining consistent data from across the company has been, and continues to be, a huge challenge and we know that as a result there are data quality issues that we are still working to resolve. This has impacted on the availability of MUCs that can be robustly reported, even after significant outliers have been removed.

To date the methodology we have followed for the MUC framework is a top down basis. Effectively MUCs have been reviewed at Territory and Area level based on the assumption that the engineering definitions and time recording in place for the identified activities had been correctly set and were being followed.

One of the main concerns at the outset of the MUC workstream was the lack of data collection, but since 2004/05 this has significantly improved. However, recently we have identified problems with the way standard jobs (subset of MUCs) are defined, planned and recorded and thus the accuracy and consistency of volumes and work hours.

Work is progressing on planning a network-wide process to achieve consistent understanding of the issues and give further emphasis to the behavioural aspects required for accurate time recording of activities. In conjunction with this a project team has been established and set a target date of 1 April 2008 to roll out a national maintenance labour appropriation system to replace the current time on tools data with the objective of improving the accuracy of the data.

Based on our assessment of the 2006/07 MUC data we believe that nine of the 18 MUCs are reasonably accurate at a network-wide level and so these are being published for the first time in the Annual Return. We want to publish these unit costs as we believe it is an important part of a transparent measurement framework but, as noted above, we recognise that there is still a lot more work to do before we can be fully confident that MUCs are based on consistently prepared data across the network. It is for this reason that the nine network-wide unit costs shown below, although reasonable, are not yet robust enough for rigorous benchmarking.

Table 174 Unit costs for the nine most accurate network-wide MUCs (£)

MUC activity	Unit of measure	Network-wide cost per unit
Rail changing	rail yards	74
Re-sleepering	number	143
S&C unit renewal	number	9,877
Replacement of S&C bearer	number	271
Visual inspection (patrolling)	track miles	40
Manual correction of plain line track geometry	track yards	14
Point end routine maintenance	number	156
Signals routine maintenance	number	108
Track circuits routine maintenance	number	125

A description of each reported MUC activity is:
Rail changing − Rail yards of plain line CWR or jointed rail replaced due to wear, corrosion, damage or defects.

Re-sleepering − Number of sleepers (irrespective of type) replaced.

S&C unit renewal − Number of single half set of switches or crossings (jointed or welded) renewed including associated closure rails.

Replacement of S&C bearers − Number of S&C bearers, irrespective of type and length replaced.

Visual Inspection (Patrolling) − Track miles inspected.

Manual correction of plain line track geometry - Track Yards of manual correction of plain line track geometry.

Points − Number of point ends undergoing routine maintenance.

Signals − Number of Signals undergoing routine maintenance.

Track Circuits − Number of Track Circuits undergoing routine maintenance.

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 therefore provide any indication of efficiency. As in previous years the efficiency assessment draws on two key sources:

- 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; and
- 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

The best overall indicator of efficiency is the budget variance analysis summarised below. Annual budgets are set on the basis of meeting the overall efficiency improvement target of 22 per cent savings for 2006/07 compared to the ACR assumptions. The budgeted saving for most asset categories is more than 22 per cent. However, for track the budget assumed a saving of only 16.4 per cent to reflect the impact of detrimental input prices. During the year changes in project budgets and actual expenditure, 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. These changes are summarised in the next table:

Table 175 Budget financial variance year-end efficiency reconciliation

	Actual expenditure	Budget	Variance	Scope change	Activity efficiency	Rescheduled activity	Core renewals efficiency
Renewals	£m	£m	£m	£m	£m	£m	%
Track	897	847	-49	4	-13	-40	13.9
Structures	377	373	-4	-12	32	-25	26.6
Signalling	436	456	20	1	29	-10	25.8
Electrification	86	84	-2	-1	18	-19	33.7
Plant and machinery	84	78	-6	-24	0	18	
Information technology	96	102	6	6	5	-5	n/a
Telecoms	181	195	14	4	23	-14	32.5
Stations	193	202	10	6	11	-7	35.5
Depots	15	13	-2	8	0	-9	
Other	54	-13	-67	1	0	-68	
Renewals (less WCRM)	2,420	2,339	-81	-7	105	-178	23.0
WCRM	358	485	127	22	13	92	
Total renewals	2,778	2,824	46	15	118	-87	
Total enhancements Inc WCRM	426	590	164	20	31	113	
Total expenditure	3,204	3,414	210	35	149	27	

Note: excludes third party funded schemes

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 from previous years, 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 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 per centage, based upon the sum of budgeted efficiency, scope change and additional activity efficiency. This is only presented for the core renewals activities excluding WCRM and FTN. The overall core renewals efficiency for 2006/07 is 23 per cent, ahead of the regulatory target of 22 per cent.

Unit cost indices

A key element of improving efficiency is reducing the unit costs of specific activities on the network. During 2006/07 we have continued and expanded the implementation of our Cost Analysis Framework (CAF). This aims to 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.

Cost reporting under the CAF framework has covered a total of 43 different repeatable renewals activity types in 2006/07. This includes track unit cost data sourced from an equivalent process validated by the independent reporter. However, in some cases a relatively small number of projects may have been reported against a particular activity type, such that these are not considered representative for reporting within the Annual Return. In addition, some activity types have predominantly included partial renewals activity, such that the unit costs are not comparable between projects. In other cases, although we now have sufficient information to provide a baseline we have not had a historic baseline to compare performance against. In each of these cases, although the full set of information has been made available to ORR and the independent reporter, Halcrow, we have not deemed it appropriate to include it within this Annual Return. Therefore, a total of 17 repeatable activity types are reported in this return, valued at £958m, representing 40 per cent of our total renewals expenditure.

Unit cost improvements in 2006/07 are shown in the table below for those activities for which sufficient cost data had been collected during 2003/04 or subsequently to form a reliable baseline,

and for which sufficient volumes of activity were completed in 2006/07. The actual costs in 2006/07 are expressed as an index (with 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 2006/07. The table also indicates the approximate proportion of total renewals expenditure (less WCRM) for each asset that is covered by the unit cost analysis.

Table 176 Final costs of profiled RWIs per asset as % of total renewals spend and efficiency indices

Asset	Activity type	Activity Costs reported 2006/07(£m)	% reported of each Total Renewals Asset Spend	Unit Cost Index
Structure	701 – Overbridges	10.91		86.7
	702 – Underbridges	61.71		84.0
	703 – Overbridges – Bridguard 3	11.05		62.8
	704 – Footbridges	3.61		93.7
	705 – Tunnels	7.35		69.8
	706 – Culverts	1.18		33.4
	707 – Retaining walls	2.68		27.3
	708 – Earthworks	29.71		72.8
	709 – Coastal– Estuary defences	5.04		83.4
	Total	133.23	35.3	74.7
Signalling	101 – SSI resignalling	50.47		70.1
	103 – Interlocking renewal	9.67		25.9
	108 – Level crossing renewals (ABCL Type)	2.63		76.6
	108 – Level crossing renewals (MCB Type)	4.73		96.8
	108 – Level crossing renewals (AHBC Type)	5.22		60.0
	Total	72.73	16.7	57.5
Telecoms	504 – Small signal box concentrator	3.60		85.4
	Total	3.60	2.0	85.4
Track	401 – Plain Line	542.94	60.6	82.8
	403 – Switches & Crossings	205.20	22.9	89.8
	Total	748.14	83.4	84.6
Overall Renewals (less WCRM) Total		**957.7**	**39.6**	**80.2**

Table 177 Unit cost indices for CP3 to-date compared to 2003/04 benchmark

Index (100 = 2003/4)	2004/05	2005/06	2006/07	2006/07 Total Renewals (less WCRM) Asset Coverage %	Change in index 2006/07 on 2003/04 %	Change in index 2006/07on 2005/06 %
Structures	85.0	77.0	74.7	35.3	25.3	2.9
Track – plain line	94.5	95.7	82.8	60.6	17.2	13.5
Track – S&C	98.1	88.6	89.8	22.9	10.2	-1.3
Track – total	95.6	93.8	84.6	83.4	15.4	9.8
Major signalling	n/a	n/a	57.5	16.7	42.5	
Telecoms	n/a	n/a	85.4	2.0	14.6	
Overall rating			**80.2**	**39.6**	**19.8**	

In the table above, there have been small decreases (improvements in efficiency) to the indices previously reported (in the 2006 Annual Return) for 2004/05 and 2005/06 for Structures activity, because additional activity types have now been included and some outlier projects have been excluded from data as unrepresentative.

Structures renewals have achieved an overall efficiency of 25.3 per cent in 2006/07, ahead of the 22 per cent regulatory targeted efficiency. However year on year improvement compared with 2005/06 is just 2.9 per cent. This largely reflects adverse market conditions, as illustrated by the reported BCIS (Building Cost Information Service) index for 2006/07, which shows tender price inflation exceeding RPI by an average of 3 per cent over the same period. BCIS is used by many of Network Rail's suppliers and central government to provide a background to general level of prices and inflation in the construction industry. In addition, the costs of environmental and legislative compliance have increased significantly during the year.

For plain line track renewals activity, there have been reductions in activity unit costs in 2006/07 compared with 2005/06, for a majority of activity types. This has resulted in a year on year improvement of 13.5 per cent, and an efficiency of 17.2 per cent relative to 2003/04. For S&C there has also been a modest reduction in unit costs for complete renewal, but this has been offset by an increase in unit costs for abandonments and partial renewals, resulting in an overall worsenment of 1.3 per cent in 2006/07 compared to 2005/06. The efficiency relative to 2003/04 is 10.2 per cent. Overall, the track renewals activity efficiency implied is 15.4 per cent compared with 2003/4 and is thus less than the 22 per cent target; detrimental input prices is one of the reasons for this.

Unit costs have been reported against 5 signalling activity types in 2006/07. Just 4 major re-signalling renewals (RWI 101) have been completed in 20066/07, and these have achieved an overall efficiency of 29.9 per cent relative to 2003/4 benchmark. However, many more projects currently in implementation are projected to achieve significantly better efficiency. Interlocking renewals show an efficiency of 74.1 per cent, but the unit rates for the 3 schemes in this category (RWI 103 interlocking renewals) are significantly below the benchmark because they are each internal interlocking renewals only with minimum design and alterations to the external interfaces. Unit costs are also reported for 3 types of level crossing renewals, with efficiency ranging from 3.2 per cent to 40 per cent relative to 2003/04 benchmark. Overall signalling renewals has achieved an efficiency of 42.5 per cent, albeit the reported projects only represent 17 per cent of total renewals expenditure.

Unit costs have been reported against 6 Telecoms activities in 2006/7, but only one of these (small concentrator renewals) has sufficient data to warrant reporting in this return. The implied efficiency for small concentrators is 15 per cent compared with the benchmark 2003/4 rate. This CAF and unit cost analysis is based on the telecoms core renewals and does not include GSM-R/FTN expenditure.

An overall unit cost index performance is also indicated in table 177. This is generated by weighting together the asset indices in proportion to spend. The overall index of 80.2 implies an aggregate unit cost efficiency of 19.8 per cent. However, it should be noted that this is dominated by the track renewals performance, and only represents 40 per cent of renewals expenditure.

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 the table below. 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. These composite rates also allow for certain central overheads, and therefore provide a fuller picture of the overall efficiency improvement.

Table 178 Composite rate measures

Rate at 2006/07 prices	03/04	04/05	05/06	06/07	06/07 saving from 03/04	06/07 saving from 05/06
Plain line (£/metre)	273	253	250	248	9.2%	0.6%
S&C equivalent unit renewal (£k/unit)	593	534	472	479	19.2%	-1.5%
Aggregate efficiency					13.8%	0.2%

The final row above shows the composite rate efficiency aggregated for all track renewals activity, weighted by expenditure. Efficiency relative to 2003/04 is 13.8 per cent, while 2006/07 efficiency relative to 2005/06 is 0.2 per cent. This relatively small improvement in efficiency is primarily due to detrimental input prices, particularly the cost of steel.

A significant amount of track renewals expenditure in 2006/07 has been undertaken which does not contribute directly to measured volumes, such as slab track, spot re-sleepering, depots and drainage. This has had the result of increasing the plain line composite rate considerably, and is the main reason why the efficiency indicated above (9.2 per cent) is significantly poorer than that indicated by plain line unit cost index (17.2 per cent). Conversely for S&C, the composite rate includes abandonments which are highly efficient, resulting in a better efficiency (19.2 per cent) than that indicated by the unit cost index (10.2 per cent).

Comparison of variance analysis and unit costs

The efficiency indicated by the variance analysis for track of 13.9 per cent is below that indicated by the composite unit rate analysis of 15.4 per cent; the latter has been more impacted by changes in work mix.

The efficiency indicated by the variance analysis for structures renewals of 26.6 per cent is greater than that indicated by the unit costs analysis (25.3 per cent), partly reflecting additional scope efficiency. It should be noted that the latter index only covers 35 per cent of structures expenditure, so it is not fully representative.

For signalling renewals, the variance analysis indicates a lower level of efficiency (25.8 per cent) than the unit costs index (42.5 per cent), but the latter is only based upon 17 per cent of signalling expenditure, and may be distorted by performance on relatively few projects. Similarly the comparison of unit costs and variance analysis for telecoms renewals may be misleading in view of the single activity type covered.

Overall, we consider the variance analysis more representative, although the unit cost indices provide a helpful comparison of performance achieved, where the coverage is greater.

The variance analysis table indicates that overall efficiency savings across the entire renewals programme are around 23 per cent, and therefore ahead of the 22 per cent regulatory target for 2006/07.

Section 7 – Financing

Introduction

This section provides further information on the following measures which are also reported in the KPI section:

- Debt to RAB ratio
- RAB adjustment for passenger volume incentive
- RAB adjustment for freight volume incentive
- Expenditure variance.

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 financing. The measures indicate the current position as at the end of the year 2006/07.

Debt to RAB ratio

This financing indicator measures Network Rail's net debt as a per centage 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 debt by the year end RAB and expressing this as a per centage. The company's debt and the RAB used for this calculation aligns with the ORR's definition of Network Rail company debt and RAB as defined by the Regulatory Accounting Guidelines.

Under Licence Condition 29 the company is not to incur financial indebtedness in excess of 100 per cent of the RAB and must take all reasonable endeavours to keep the ratio below 85 per cent.

The debt to RAB ratio at the end of the year was 73.5 per cent against a target of 74.8 per cent. This variance mainly reflects higher than forecast inflation applied to the RAB and also 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 incentive rates multiplied by the growth over and above a baseline level of growth in:

1. actual passenger train miles; and
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; and
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.

Table 179 Debt to rab ratio (%)

	2005/06 Actual	2006/07 Target	2006/07Actual	Variance for 2006/07
Debt to RAB ratio	78.1	74.8	73.5	1.3

Table 180 Volume incentives (£m)

	2004/05	2005/06	2006/07	2007/08	2008/09
Passenger volume incentive	6.8	143.0	209.0	249.2	326.6
Freight volume incentive	2.4	13.7	7.1	11.4	11.9
RAB Adjustment	9.2	156.7	216.1	260.6	338.5

Based on current estimates the volume incentive adjustment will be £338.5m in 2009. The figures for the years 2004/05 – 2007/08 are illustrative and forecast how the incentive moves over time, and gives a useful snapshot for each year of the control period.

The key reasons for the positive value of the RAB addition at the end of 2006/07 was the increase from the 2003/04 baseline in passenger train miles, passenger revenue and freight tonnage.

Expenditure variance

This is the per centage variance of actual expenditure against the company's budgeted expenditure agreed at the start of 2006/07. Expenditure includes controllable and uncontrollable operating costs, maintenance costs, renewals and enhancements costs (excluding third party schemes).

This measure is calculated by dividing the variance between actual and budgeted expenditure against budgeted expenditure and expressing this as a percentage.

As described in more detail in section 6, we spent less than budget for various reasons including: efficiency savings, scope changes and re-phasing work.

Table 181 Expenditure variance

	2006/07 Actual expenditure £m	2006/07 Budget expenditure £m	Variance %
Overall cost	5,570	5,760	-3.3

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 – 5 with the lower the number i.e. closer to 1, the better. The regulatory target is 2.25 for CP3. 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 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Acle	Anglia	1.31	1.31	1.31	1.31	2.00	2.00	2.00
Acton Central	Anglia	2.10	2.10	2.10	2.12	2.12	2.12	2.12
Alresford	Anglia	2.89	2.89	2.89	2.50	2.50	2.50	2.50
Althorne	Anglia	2.14	2.14	2.14	2.14	2.00	2.00	2.00
Angel Road	Anglia	2.11	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	2.45
Audley End Station	Anglia	1.42	1.42	1.42	1.42	1.42	1.42	2.33
Barking	Anglia	1.88	1.88	1.92	1.92	2.09	2.09	2.09
Basildon Station	Anglia	0.00	0.00	2.14	2.13	2.13	2.13	2.13
Battlesbridge	Anglia	0.00	0.00	2.52	2.41	2.41	2.41	2.41
Beccles	Anglia	1.23	1.23	1.23	1.23	1.83	1.83	1.83
Benfleet Station	Anglia	1.88	1.88	1.99	1.99	1.99	1.99	2.20
Berney Arms	Anglia	3.20	3.20	3.20	3.22	3.22	3.22	3.22
Bethnal Green	Anglia	2.19	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	2.14
Bishops Stortford Station	Anglia	2.93	2.93	2.93	2.26	2.26	2.26	2.27
Blackhorse Road	Anglia			1.97	1.97	1.97	1.97	1.97
Braintree	Anglia	1.96	1.96	1.96	1.96	1.95	1.95	1.95
Braintree Freeport	Anglia	0.00	0.00	1.97	1.97	1.89	1.89	1.89
Brampton [Suffolk]	Anglia	2.38	2.38	2.38	2.38	2.38	2.38	2.38
Brandon	Anglia	0.00	0.00	2.83	2.44	2.44	2.44	2.44
Brentwood Station	Anglia	2.20	2.20	2.35	2.35	2.35	2.35	2.20
Brimsdown	Anglia	2.06	2.06	2.06	2.04	2.04	2.04	2.04
Brondesbury	Anglia	1.73	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	1.75
Broxbourne	Anglia	2.01	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	2.09
Brundall	Anglia	2.55	2.55	2.55	2.39	2.39	2.39	2.39
Brundall Gardens	Anglia	2.19	2.19	2.19	2.47	2.47	2.47	2.47
Buckenham	Anglia	1.72	1.72	1.72	1.72	2.38	2.38	2.38
Bures	Anglia	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Burnham-On-Crouch	Anglia			2.07	2.07	2.07	2.07	2.07
Bury St Edmunds Station	Anglia	2.02	2.02	2.02	2.02	2.02	2.02	2.04
Bush Hill Park	Anglia	1.91	1.91	1.91	1.91	1.91	1.91	2.01
Caledonian Road & Barnsbury	Anglia	2.10	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	2.03
Cambridge Heath	Anglia	2.13	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	1.94
Canning Town	Anglia	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cannon Street Station	Anglia	1.96	1.96	1.96	1.73	2.04	2.04	2.02
Canonbury	Anglia	2.45	2.45	2.45	2.45	2.31	2.31	2.31
Cantley	Anglia	2.76	2.76	2.76	2.68	2.68	2.68	2.68
Chadwell Heath	Anglia	2.25	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	1.30
Chalkwell	Anglia			1.94	1.94	1.94	1.94	1.94
Chappel & Wakes Colne	Anglia	2.02	2.02	2.02	2.02	2.04	2.04	2.04
Chelmsford Station	Anglia	1.82	1.82	1.82	1.82	1.82	1.82	2.03

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Cheshunt	Anglia	0.00	0.00	2.16	2.16	2.16	2.16	2.16
Chingford Station	Anglia	1.99	1.99	1.99	2.03	2.03	2.03	2.14
Clacton-On-Sea	Anglia	2.62	2.62	2.62	2.69	2.26	2.26	2.26
Clapton	Anglia	2.20	2.20	2.41	2.41	2.41	2.41	2.41
Colchester North	Anglia	2.02	2.02	2.05	2.05	2.09	2.09	2.09
Colchester Town	Anglia	2.82	2.82	2.82	2.91	2.28	2.28	2.28
Cressing	Anglia	3.16	3.16	3.16	2.48	2.53	2.53	2.53
Cromer	Anglia	2.48	2.48	2.48	1.63	1.63	1.63	1.63
Crouch Hill	Anglia			1.79	1.79	1.79	1.79	1.79
Custom House Station	Anglia	2.30	2.30	2.30	2.30	2.30	2.30	2.12
Dagenham Dock	Anglia	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Dalston Kingsland	Anglia	2.07	2.07	2.07	2.15	2.01	2.01	2.01
Darsham	Anglia	2.15	2.15	2.24	2.24	2.17	2.17	2.17
Derby Road (Ipswich)	Anglia	1.93	1.93	1.93	1.93	1.93	1.93	1.93
Diss	Anglia	2.68	2.68	2.68	2.75	2.75	2.75	2.75
Dovercourt	Anglia	2.78	2.78	2.78	2.86	2.84	2.84	2.84
Downham Market	Anglia	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Dullingham	Anglia	2.24	2.24	2.24	2.40	2.40	2.40	2.40
East Tilbury	Anglia	1.34	1.34	1.34	1.28	1.28	1.28	1.28
Eccles Road	Anglia	2.64	2.64	2.64	2.46	2.46	2.46	2.46
Edmonton Green	Anglia	2.10	2.10	2.19	2.19	2.19	2.19	2.19
Elmswell	Anglia	1.96	1.96	1.96	2.10	2.10	2.10	2.10
Elsenham Station	Anglia	1.94	1.94	1.94	1.94	1.94	1.94	2.58
Ely	Anglia	2.79	2.79	2.85	2.42	2.42	2.42	2.42
Emerson Park	Anglia	1.82	1.82	1.82	1.82	1.82	1.82	1.82
Enfield Lock	Anglia	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Enfield Town	Anglia	2.07	2.07	2.07	2.07	2.07	2.07	2.09
Fambridge	Anglia	1.64	1.64	1.64	1.64	1.64	1.64	1.64
Felixstowe	Anglia	2.05	2.05	2.15	2.15	2.15	2.15	2.15
Fenchurch Street	Anglia	0.00		2.25	2.39	2.17	2.17	2.17
Finchley Road and Frognal	Anglia	2.18	2.18	2.18	2.18	2.18	2.18	2.18
Forest Gate	Anglia	1.90	1.90	1.90	2.31	2.31	2.31	2.31
Foxton	Anglia	3.15	3.15	3.13	2.38	2.38	2.38	2.38
Frinton On Sea	Anglia	2.73	2.73	2.73	2.71	2.71	2.71	2.71
Gidea Station	Anglia	1.93	1.93	1.93	1.93	1.93	1.93	2.10
Goodmayes	Anglia	1.76	1.76	1.76	2.26	2.26	2.26	2.26
Gospel Oak	Anglia	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Grays	Anglia	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Great Bentley	Anglia	2.77	2.77	2.77	2.46	2.46	2.46	2.46
Great Chesterford Station	Anglia	1.82	1.82	1.82	1.82	1.82	1.82	2.49
Great Yarmouth	Anglia	1.92	1.92	1.92	1.92	1.88	1.88	1.88
Gunnersbury	Anglia	1.90	1.90	1.85	1.85	1.85	1.85	1.85
Gunton	Anglia	2.59	2.59	2.59	2.16	2.16	2.16	2.16
Hackney Central	Anglia	2.06	2.06	2.06	2.06	2.07	2.07	2.07
Hackney Downs	Anglia	1.92	1.92	2.00	2.00	1.76	1.76	1.76
Hackney Wick	Anglia	1.95	1.95	2.05	2.05	1.94	1.94	1.94
Haddiscoe	Anglia	2.36	2.36	2.36	2.36	2.12	2.12	2.12
Halesworth	Anglia	1.64	1.64	1.64	1.64	1.73	1.73	1.73

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Hampstead Heath	Anglia	1.80	1.80	2.05	2.05	2.05	2.05	2.05
Harling Road	Anglia	2.57	2.57	2.57	2.39	2.39	2.39	2.39
Harlow Mill	Anglia	0.00	0.00	2.17	2.17	2.01	2.01	2.01
Harlow Town	Anglia	2.01	2.01	2.01	2.01	2.01	2.01	2.01
Harold Wood Station	Anglia	1.97	1.97	1.97	1.97	1.97	1.97	2.08
Harringay Green Lanes	Anglia	0.00	0.00	1.95	1.95	1.95	1.95	1.95
Harwich International Port	Anglia	1.89	1.89	1.95	1.95	1.70	1.70	1.70
Harwich Town	Anglia	2.72	2.72	2.72	2.56	2.56	2.56	2.56
Hatfield Peverel	Anglia	2.86	2.86	2.86	2.38	2.38	2.38	2.38
Hertford East	Anglia	2.40	2.40	2.22	2.22	2.22	2.22	2.22
Highams Park	Anglia	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Highbury & Islington Stn	Anglia	2.34	2.34	2.34	2.34	2.34	2.40	2.31
Hockley	Anglia	2.50	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	2.07
Hoveton & Wroxham	Anglia	1.94	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	2.83
Ilford	Anglia	1.89	1.89	1.89	1.89	1.89	1.89	1.89
Ingatestone Station	Anglia	2.07	2.07	2.07	2.07	2.07	2.07	2.24
Ipswich	Anglia	1.93	1.93	1.93	1.93	1.95	1.95	1.95
Kelvedon	Anglia	1.95	1.95	1.95	1.95	1.91	1.91	1.91
Kennett	Anglia	2.39	2.39	2.39	3.14	3.14	3.14	3.14
Kensal Rise	Anglia	1.95	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	2.15
Kew Gardens	Anglia	2.00	2.00	2.02	2.02	2.02	2.02	2.02
Kings Lynn	Anglia	1.87	1.87	1.87	1.87	1.87	1.87	2.36
Kirby Cross	Anglia	0.00	0.00	2.55	2.39	2.39	2.39	2.39
Laindon	Anglia	1.82	1.82	1.93	1.93	1.93	1.93	1.93
Lakenheath	Anglia	1.57	2.56	1.83	1.97	1.97	1.97	1.97
Leigh on Sea Station	Anglia	1.95	1.95	1.95	1.95	1.95	1.95	2.53
Leyton Midland Road	Anglia	2.80	2.80	2.80	2.00	2.00	2.00	2.00
Leytonstone High Road	Anglia	1.81	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	2.28
Lingwood	Anglia	1.86	1.86	1.86	2.31	2.31	2.31	2.31
Littleport	Anglia	2.04	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	2.04
London Liverpool Street	Anglia	3.13	3.13	2.10	2.10	2.10	2.10	2.10
Lowestoft Station	Anglia	1.34	1.34	1.20	1.24	1.24	1.24	2.20
Manea	Anglia	2.35	2.35	2.35	2.23	2.23	2.23	2.23
Manningtree Station	Anglia	2.13	2.13	2.13	2.13	2.13	2.13	2.39
Manor Park Station	Anglia	2.30	2.30	2.30	2.30	2.30	2.30	2.14
March	Anglia	2.49	2.49	2.49	2.49	2.49	2.49	2.49
Marks Tey Station	Anglia	1.98	1.98	1.98	1.98	1.98	1.98	2.43
Maryland	Anglia	2.23	2.23	2.23	2.23	2.31	2.31	2.31
Meldreth	Anglia	1.77	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	1.89
Mistley	Anglia	2.22	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	2.41
Newmarket	Anglia	2.24	2.24	2.24	2.40	2.40	2.40	2.40

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Newport	Anglia	2.31	2.31	2.31	2.31	2.40	2.40	2.40
North Walsham	Anglia	1.76	1.76	1.83	1.83	1.83	1.83	1.83
North Woolwich	Anglia	0.00	0.00	2.18	2.18	2.18	2.18	2.18
Northumberland Park	Anglia	1.69	1.69	1.99	1.99	1.99	1.99	1.99
Norwich Thorpe	Anglia	0.00	0.00	1.72	1.72	1.72	1.72	1.72
Ockendon Station	Anglia	2.18	2.18	2.18	2.18	2.18	2.18	2.05
Oulton Broad North	Anglia	2.71	2.71	2.71	2.43	2.43	2.43	2.43
Oulton Broad South	Anglia	2.38	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	2.16
Ponders End	Anglia	2.10	2.10	2.15	2.15	2.15	2.15	2.15
Prittlewell	Anglia	2.09	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	2.00
Rainham [Essex]	Anglia	2.00	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	2.27
Rectory Road	Anglia	2.10	2.10	2.32	2.32	2.32	2.32	2.32
Reedham	Anglia	2.50	1.99	2.53	2.37	2.37	2.37	2.37
Rochford	Anglia			1.71	1.71	1.71	1.71	1.71
Romford Station	Anglia	2.01	2.01	2.04	2.04	2.04	2.04	2.14
Roughton Road	Anglia	2.11	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	2.20
Rye House	Anglia	2.50	2.50	2.31	2.31	2.31	2.31	2.31
Salhouse	Anglia	2.37	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	2.12
Saxmundham	Anglia	2.23	2.23	2.23	2.16	2.16	2.16	2.16
Seven Kings	Anglia	2.02	2.02	2.02	2.52	2.52	2.52	2.52
Seven Sisters	Anglia	2.34	2.34	2.47	2.47	1.99	1.99	1.99
Shelford Station	Anglia	1.88	1.88	1.88	1.88	1.88	1.88	2.35
Shenfield	Anglia	2.33	2.33	2.33	2.33	2.33	2.33	2.33
Shepreth	Anglia			2.13	2.13	2.13	2.13	2.13
Sheringham	Anglia	3.00	3.00	3.00	2.39	2.39	2.39	2.39
Shippea Hill	Anglia	2.34	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	2.16
Silver Street	Anglia	1.30	1.30	1.30	1.30	1.34	1.34	1.34
Silvertown And City Airport	Anglia	1.96	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	3.14
South Acton	Anglia	2.00	2.00	1.86	1.86	1.86	1.86	1.86
South Tottenham	Anglia	1.50	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	2.04
Southend Central	Anglia	0.00	0.00	2.27	2.27	2.27	2.27	2.27
Southend East	Anglia	1.99	1.99	1.99	2.01	2.01	2.01	2.01
Southend Victoria	Anglia	2.04	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	1.78
Spooner Row	Anglia	2.60	2.60	2.60	2.89	2.89	2.89	2.89
St Margarets (Hertfordshire)	Anglia	1.90	1.90	2.00	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	2.68
Stamford Hill	Anglia	1.91	1.91	2.82	2.82	2.82	2.82	2.82
Stanford-Le-Hope	Anglia	1.94	1.94	1.94	1.94	1.94	1.94	1.94
Stanstead Mountfitchet	Anglia	1.34	1.34	1.38	1.38	1.38	1.38	1.87

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Stansted Airport	Anglia	2.27	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	2.36
Stowmarket	Anglia	2.03	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	2.34
Sudbury [Suffolk]	Anglia	1.50	1.50	1.55	1.55	1.55	1.55	1.55
Theobalds Grove	Anglia	2.10	2.10	2.10	2.16	2.16	2.16	2.16
Thetford	Anglia	2.18	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	2.06
Thorpe-Le-Soken	Anglia	2.01	2.01	2.05	2.05	2.08	2.08	2.08
Thurston	Anglia	1.71	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	1.26
Tottenham Hale Station	Anglia	2.00	2.00	2.00	2.00	2.00	2.00	2.03
Trimley	Anglia	2.36	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	2.20
Upminster	Anglia	2.38	2.38	2.38	2.38	2.33	2.33	2.33
Upper Holloway	Anglia	2.03	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	2.09
Walthamstow Central	Anglia	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Walthamstow Queens Road St	Anglia	2.36	2.36	2.36	2.36	2.36	2.36	2.44
Walton-On-Naze	Anglia	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Wanstead Park	Anglia	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Ware	Anglia	2.20	2.20	2.17	2.17	2.17	2.17	2.17
Waterbeach	Anglia	2.39	2.39	2.39	2.39	2.24	2.24	2.24
Watlington	Anglia	2.45	2.45	2.45	2.45	2.50	2.50	2.50
Weeley	Anglia	2.11	2.11	2.11	2.11	2.40	2.40	2.40
West Ham	Anglia	1.00	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	1.99
West Horndon	Anglia	2.02	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	2.17
Westcliff	Anglia			1.98	1.98	1.98	1.98	1.98
Westerfield	Anglia	2.07	2.07	2.07	2.10	2.10	2.10	2.10
White Hart Lane	Anglia	1.90	1.90	2.03	2.03	2.03	2.03	2.03
White Notley	Anglia	2.25	2.25	2.22	2.22	2.22	2.22	2.22
Whittlesea	Anglia	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Whittlesford Station	Anglia	1.43	1.43	1.43	1.43	1.43	1.43	2.10
Wickford	Anglia	2.03	2.03	2.18	2.18	2.18	2.18	2.18
Wickham Market	Anglia	2.50	2.50	2.50	2.27	2.27	2.27	2.27
Willesden Junction	Anglia			2.16	2.16	2.16	2.16	2.16
Witham Station	Anglia	2.01	2.01	2.01	2.01	2.01	2.01	2.39
Wivenhoe	Anglia	2.23	2.23	2.23	2.23	2.20	2.20	2.20
Wood Street	Anglia	3.71	3.71	3.71	2.19	2.19	2.19	2.19
Woodbridge	Anglia	2.38	2.38	2.38	2.38	2.17	2.17	2.17
Woodgrange Park	Anglia	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Woodham Ferrers	Anglia			2.38	2.38	2.38	2.38	2.38
Worstead	Anglia	2.85	2.85	2.85	2.18	2.18	2.18	2.18
Wrabness	Anglia	2.26	2.26	2.26	2.46	2.46	2.46	2.46
Wymondham	Anglia	1.64	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	2.09

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Adisham	Kent	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Albany Park Station	Kent	2.48	2.48	2.48	2.48	2.48	2.48	2.90
Appledore Station	Kent	2.66	2.66	2.66	2.66	2.66	2.66	2.97
Ashford International	Kent	1.86	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	3.04
Aylesham	Kent	2.78	2.78	2.78	2.78	2.78	2.78	2.78
Barming	Kent	2.43	2.43	2.43	2.44	2.44	2.44	2.44
Barnehurst	Kent	2.31	2.31	2.37	2.37	2.12	2.12	2.12
Bat & Ball	Kent	2.44	2.44	2.67	2.67	2.67	2.67	2.67
Battle	Kent	2.44	2.44	2.56	2.56	2.56	2.56	2.56
Bearsted	Kent	2.75	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	2.95
Beckenham Junction	Kent	2.54	2.54	2.54	2.82	2.82	2.82	2.82
Bekesbourne Station	Kent	2.34	2.34	2.34	3.02	3.02	3.02	3.02
Bellingham	Kent	2.43	2.43	2.43	2.43	2.43	2.43	2.43
Beltring Station	Kent	2.26	2.26	2.26	2.26	2.26	2.26	2.60
Belvedere	Kent	1.83	1.83	1.96	1.96	1.96	1.96	1.96
Bexley	Kent	2.57	2.57	2.57	2.57	2.31	2.31	2.31
Bexleyheath	Kent	2.43	2.43	2.43	2.43	2.43	2.58	2.58
Bickley	Kent	2.42	2.42	2.42	2.85	2.85	2.95	2.95
Birchington-On-Sea	Kent	2.44	2.44	2.44	2.73	2.73	2.73	2.73
Blackheath	Kent	2.38	2.38	2.38	2.38	2.38	2.50	2.50
Borough Green & Wrotham	Kent	2.38	2.38	2.38	2.38	2.38	2.31	2.31
Brixton	Kent	2.02	2.02	2.02	2.02	2.02	2.02	2.34
Broadstairs	Kent	2.23	2.23	2.23	2.23	2.23	1.61	1.61
Bromley North	Kent	2.43	2.43	2.89	2.89	2.89	2.89	2.89
Bromley South	Kent	2.51	2.51	2.51	2.51	2.26	2.26	2.26
Canterbury East	Kent	2.56	2.56	2.56	2.56	2.26	2.26	2.26
Canterbury West	Kent	2.27	2.27	2.27	3.01	3.01	3.01	3.01
Catford	Kent	2.45	2.45	2.95	2.95	2.95	2.95	2.95
Catford Bridge	Kent	2.42	2.42	2.42	2.42	2.59	2.59	2.59
Charing	Kent	2.46	2.46	2.46	2.46	2.63	2.63	2.63
Charlton	Kent	2.00	2.00	2.17	2.17	2.17	2.17	2.17
Chartham Station	Kent	2.37	2.37	2.37	2.37	2.37	2.37	2.39
Chatham	Kent	2.48	2.48	2.48	2.48	2.48	2.23	2.23
Chelsfield	Kent	2.51	2.51	2.51	2.51	2.51	2.51	2.75
Chestfield And Swalecliffe	Kent	2.56	2.56	2.56	2.91	2.91	2.91	2.91
Chilham Station	Kent	2.91	2.91	2.91	2.91	2.91	2.91	2.26
Chislehurst	Kent	2.47	2.47	2.47	2.85	2.85	2.85	2.85
Clock House	Kent	2.55	2.55	2.96	2.96	2.96	2.96	2.96
Crayford	Kent	1.38	1.38	1.38	1.38	1.38	2.10	2.10
Crofton Park	Kent	2.30	2.30	2.30	2.92	2.92	2.92	2.92
Crowhurst	Kent	2.45	2.45	2.68	2.68	2.68	2.68	2.68
Cuxton	Kent	2.68	2.68	3.00	3.00	3.00	3.00	3.00
Dartford	Kent	2.59	2.59	2.59	2.59	2.51	2.51	2.51
Deal	Kent	2.73	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	2.83
Deptford	Kent	2.42	2.42	2.42	2.54	2.54	2.54	2.54

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Doleham Station	Kent	2.37	2.37	2.37	2.37	2.37	2.37	2.50
Dover Priory	Kent	2.48	2.48	2.48	2.48	2.25	2.25	2.25
Dumpton Park	Kent	2.23	2.23	2.23	2.23	2.34	2.34	2.34
Dunton Green	Kent	2.80	2.80	2.80	2.80	3.05	3.05	2.68
East Farleigh station	Kent	2.46	2.46	2.46	3.05	3.05	3.05	2.71
East Malling	Kent	2.50	2.50	2.53	2.53	2.44	2.44	2.44
Eden Park	Kent	2.43	2.43	2.43	2.43	2.86	2.86	2.86
Edenbridge	Kent	2.75	2.75	2.87	2.87	2.87	2.87	2.87
Elmers End	Kent	2.63	2.63	2.63	2.63	2.63	2.38	2.38
Elmstead Woods	Kent	2.55	2.55	2.55	2.82	2.82	2.82	2.82
Eltham Station	Kent	2.40	2.40	2.40	2.40	2.40	2.40	2.47
Erith	Kent	2.44	2.44	2.44	2.44	2.46	2.46	2.46
Etchingham	Kent	2.73	2.73	2.94	2.94	2.65	2.65	2.65
Eynsford	Kent	1.97	1.97	1.97	1.97	2.38	2.38	2.38
Falconwood	Kent	2.48	2.48	2.48	2.48	2.65	2.65	2.65
Farningham Road	Kent	2.60	2.60	2.60	2.60	2.60	2.60	2.68
Faversham	Kent	2.30	2.30	2.30	2.30	2.26	2.26	2.26
Folkestone Central Station	Kent	2.28	2.28	2.28	2.28	2.28	2.28	2.15
Folkestone Harbour	Kent	3.00	3.00	3.00	3.26	3.26	3.26	3.26
Folkestone West	Kent	2.41	2.41	2.41	2.41	2.41	2.41	2.53
Frant	Kent	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Gillingham	Kent	2.54	2.54	2.54	2.54	2.54	2.40	2.40
Godstone	Kent	2.73	2.73	3.28	3.28	3.28	3.28	3.28
Gravesend	Kent	2.35	2.35	2.35	2.35	2.35	2.35	2.32
Greenhithe	Kent	2.00	2.00	2.00	2.00	2.27	2.27	2.27
Greenwich	Kent	2.28	2.28	2.28	2.38	2.38	2.38	2.38
Grove Park	Kent	2.42	2.42	2.42	2.89	2.89	2.89	2.89
Halling	Kent	2.41	2.41	2.41	2.20	2.20	2.20	2.20
Ham Street	Kent	2.56	2.56	2.56	2.56	2.56	2.56	2.81
Harrietsham	Kent	2.51	2.51	2.51	2.51	2.62	2.62	2.62
Hastings	Kent	0.00				0.00	1.37	1.37
Hayes	Kent	2.68	2.68	2.68	2.68	2.68	2.65	2.65
Headcorn	Kent	2.38	2.38	2.55	2.55	2.55	2.55	2.55
Herne Bay Station	Kent	2.39	2.39	2.39	2.79	2.79	2.79	2.79
Herne Hill	Kent	2.56	2.56	2.56	2.56	2.56	2.56	2.83
High Brooms	Kent	2.41	2.41	2.41	2.41	2.41	2.22	2.22
Higham	Kent	2.34	2.34	2.34	2.80	2.80	2.80	2.80
Hildenborough	Kent	2.37	2.37	2.37	2.37	2.37	2.35	2.35
Hither Green	Kent	2.44	2.44	2.44	2.44	2.44	2.44	2.81
Hollingbourne	Kent	2.96	2.96	2.96	2.96	2.45	2.45	2.45
Kearsney	Kent	2.66	2.66	2.66	2.66	2.66	2.60	2.60
Kemsing	Kent	2.50	2.50	2.66	2.66	2.66	2.66	2.66
Kemsley	Kent	2.87	2.87	2.50	2.50	2.50	2.50	2.50
Kent House	Kent	2.54	2.54	2.54	2.54	2.54	2.86	2.86
Kidbrooke	Kent	2.49	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	2.86
Ladywell	Kent	2.46	2.46	2.46	2.46	2.46	2.51	2.51
Lee	Kent	2.16	2.16	2.16	2.16	2.16	2.20	2.20

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Lenham	Kent	2.62	2.62	2.62	2.62	2.58	2.58	2.58
Lewisham	Kent	2.43	2.43	2.43	2.43	2.50	2.50	2.50
London Bridge	Kent	2.11	2.11	3.09	2.91	2.65	2.65	2.65
London Waterloo	Kent	2.78	2.78	2.63	2.38	2.22	2.22	2.22
Longfield	Kent	2.36	2.36	2.36	2.36	2.36	2.36	2.39
Lower Sydenham	Kent	2.48	2.48	2.48	2.48	2.48	2.48	2.26
Maidstone Barracks Station	Kent	2.24	2.24	2.24	2.61	2.61	2.61	2.61
Maidstone East	Kent	2.51	2.51	2.51	2.51	2.65	2.65	2.65
Maidstone West Station	Kent	2.53	2.53	2.53	2.53	2.53	2.53	2.55
Marden	Kent	2.51	2.51	2.51	2.51	2.53	2.53	2.53
Margate	Kent	2.29	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	4.35
Meopham Station	Kent	2.47	2.47	2.47	2.47	2.47	2.47	2.75
Minster Station	Kent	2.26	2.26	2.26	2.26	2.26	2.26	2.73
Mottingham	Kent	2.51	2.51	2.51	2.51	2.51	2.53	2.53
New Beckenham	Kent	2.38	2.38	2.38	2.38	2.38	2.22	2.22
New Cross	Kent	2.38	2.38	2.65	2.65	2.65	2.65	2.65
New Eltham	Kent	2.28	2.28	2.29	2.29	2.29	2.29	2.28
New Hythe	Kent	2.77	2.77	2.77	3.44	3.44	3.44	3.44
Newington Station	Kent	2.80	2.80	2.80	2.80	2.80	2.80	2.94
Northfleet Station	Kent	2.73	2.73	2.73	3.05	3.05	3.05	3.05
Nunhead	Kent	2.55	2.55	2.94	2.94	2.94	2.94	2.94
Nutfield	Kent	2.93	2.93	2.93	2.93	2.65	2.65	2.65
Ore Station	Kent	2.70	2.70	2.70	2.70	2.70	2.70	2.62
Orpington	Kent	2.49	2.49	2.49	2.49	2.23	2.23	2.23
Otford	Kent	0.00				2.26	2.26	2.26
Paddock Wood	Kent	2.46	2.46	2.46	2.46	2.65	2.65	2.65
Peckham Rye	Kent	2.60	2.60	2.60	2.60	2.89	2.89	2.89
Penge East	Kent	2.46	2.46	2.46	2.46	2.46	2.42	2.42
Penshurst	Kent	2.65	2.65	2.87	2.87	2.87	2.87	2.87
Petts Wood Station	Kent	2.46	2.46	2.46	2.46	2.46	2.46	2.63
Pluckley	Kent	2.46	2.46	2.94	2.94	2.94	2.94	2.94
Plumstead	Kent	2.00	2.00	2.06	2.06	2.06	2.06	2.06
Queenborough	Kent	2.72	2.72	2.72	2.72	2.72	2.50	2.50
Rainham (Kent)	Kent	2.38	2.38	2.38	2.38	2.04	2.04	2.04
Ramsgate	Kent	2.80	2.80	2.80	2.80	2.80	2.80	2.80
Ravensbourne	Kent	2.58	2.58	2.58	2.77	2.77	2.77	2.77
Robertsbridge	Kent	2.46	2.46	3.21	3.21	3.21	3.21	3.21
Rochester	Kent	2.58	2.58	2.58	2.58	2.42	2.42	2.42
Rye Station	Kent	2.62	2.62	2.62	2.62	2.62	2.62	2.77
Sandling Station	Kent	2.43	2.43	2.43	2.43	2.43	2.43	2.31
Sandwich	Kent	2.88	2.88	2.98	2.98	2.98	2.98	2.98
Selling Station	Kent	2.50	2.50	2.50	2.50	2.50	2.50	3.00
Sevenoaks	Kent	2.41	2.41	2.41	2.41	2.34	2.34	2.34
Sheerness-On-Sea	Kent	2.58	2.58	2.38	2.38	2.38	2.38	2.38
Shepherdswell	Kent	3.05	3.05	3.05	3.05	3.05	2.83	2.83
Shoreham (Kent)	Kent	2.00	2.00	2.73	2.73	2.73	2.73	2.73
Shortlands	Kent	2.40	2.40	2.40	2.86	2.86	2.86	2.86

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Sidcup	Kent	2.26	2.26	2.26	2.26	2.29	2.29	2.29
Sittingbourne	Kent	2.44	2.44	2.44	2.44	2.37	2.37	2.37
Slade Green Station	Kent	2.49	2.49	2.49	2.49	2.49	2.49	2.58
Snodland	Kent	2.24	2.24	2.24	2.60	2.60	2.60	2.60
St Johns	Kent	2.46	2.46	3.01	3.01	3.01	3.01	3.01
St. Mary Cray	Kent	2.52	2.52	2.52	2.52	2.52	2.48	2.48
Staplehurst	Kent	2.41	2.41	2.60	2.60	2.60	1.98	1.98
Stone Crossing	Kent	2.34	2.34	2.34	2.78	2.78	2.78	2.78
Stonegate	Kent	2.32	2.32	2.95	2.95	2.55	2.55	2.55
Strood	Kent	2.61	2.61	2.61	2.61	2.22	2.22	2.22
Sturry	Kent	2.53	2.53	2.53	2.53	2.53	2.53	2.81
Sundridge Park	Kent	2.44	2.44	2.44	2.44	2.96	2.96	2.96
Swale	Kent	2.41	2.41	2.65	2.65	2.65	2.65	2.65
Swanley	Kent	2.57	2.57	2.57	2.57	2.57	2.57	2.87
Swanscombe Station	Kent	2.33	2.33	2.25	2.73	2.73	2.73	2.73
Sydenham Hill	Kent	1.99	1.99	1.99	2.48	2.48	2.48	2.48
Teynham	Kent	2.49	2.49	2.49	2.49	2.49	2.41	2.41
Three Oaks	Kent	2.43	2.43	2.43	2.43	2.43	2.43	2.36
Tonbridge	Kent	2.75	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	2.75
Wadhurst	Kent	2.43	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	2.80
Wateringbury Station	Kent	2.72	2.72	2.72	2.72	2.72	2.72	2.62
Waterloo East	Kent	1.64	1.64	2.33	2.33	2.33	2.33	2.33
Welling	Kent	2.46	2.46	2.46	2.46	2.66	2.66	2.66
West Dulwich	Kent	2.47	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	2.57
West St Leonards	Kent	2.42	2.42	3.08	3.08	3.08	3.08	3.08
West Wickham	Kent	2.66	2.66	2.66	2.66	2.66	2.60	2.60
Westcombe Park	Kent	2.42	2.42	2.42	2.49	2.49	2.49	2.49
Westenhanger Station	Kent	2.41	2.41	2.41	2.41	2.41	2.41	1.72
Whitstable Station	Kent	2.46	2.46	2.46	3.00	3.00	3.00	3.00
Winchelsea	Kent	2.30	2.30	2.30	2.30	2.30	2.30	2.03
Woolwich Arsenal	Kent	2.01	2.01	2.01	2.01	2.22	2.22	2.22
Woolwich Dockyard	Kent	1.93	1.93	1.93	2.21	2.21	2.21	2.21
Wye	Kent	2.62	2.62	2.62	2.72	2.72	2.72	2.72
Yalding Station	Kent	2.75	2.75	2.75	2.69	2.69	2.69	2.69
Acklington	LNE	1.95	1.95	1.95	1.95	1.52	1.52	1.52
Adwick	LNE	1.60	1.60	2.09	2.09	2.09	2.09	2.09
Alexandra Palace Station	LNE	2.53	2.53	2.53	2.18	2.18	2.29	2.29
Alfreton	LNE	1.29	1.29	1.32	1.64	1.64	1.64	1.64
Allens West	LNE	1.99	1.99	1.99	2.56	2.56	2.56	2.56
Alnmouth	LNE	2.08	2.08	2.08	2.08	1.33	1.33	1.33
Althorpe	LNE	2.50	2.50	2.50	2.71	2.71	2.71	2.71
Ambergate	LNE	2.43	2.43	2.43	2.43	2.43	2.00	2.00
Ancaster	LNE	2.16	2.16	2.60	2.60	2.60	2.60	2.60
Arlesey Station	LNE	2.00	2.00	2.00	2.00	2.00	1.85	1.85
Arram Passenger Station	LNE	2.14	2.14	2.14	2.14	2.14	2.18	2.18

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Ashwell And Morden	LNE	2.34	2.34	2.34	2.34	2.34	2.34	2.41
Aslockton	LNE	1.15	1.15	1.23	1.23	1.23	1.23	1.23
Attenborough	LNE	1.43	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	1.31
Baldock Station	LNE	2.06	2.06	2.06	2.06	2.06	2.06	2.26
Bardon Mill	LNE	2.40	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	1.54
Barnsley Exchange	LNE	1.10	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	2.48
Barrow On Soar	LNE	2.11	2.11	2.11	2.11	2.11	2.41	2.41
Barton On Humber	LNE	2.35	2.35	2.35	2.35	1.11	1.11	1.11
Batley	LNE	2.00	2.00	2.00	2.19	2.19	2.19	2.19
Battersby	LNE	2.45	2.45	2.24	2.24	2.24	2.24	2.24
Bayford Passenger Station	LNE	2.83	2.83	2.83	1.96	1.96	1.94	1.94
Bedford	LNE	1.67	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	1.21
Belper	LNE	1.80	1.80	2.28	2.28	2.28	2.28	2.28
Bempton Station	LNE	1.72	1.72	1.72	1.72	1.72	1.73	1.73
Ben Rhydding	LNE	2.21	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	1.64
Berry Brow	LNE	2.29	2.29	2.29	2.29	2.29	2.29	2.29
Berwick-Upon-Tweed PassengerStation	LNE	2.14	2.14	2.14	2.14	2.14	2.14	2.47
Beverley	LNE	2.26	2.26	2.26	2.26	1.70	1.70	1.70
Biggleswade Passenger Station	LNE	2.06	2.06	2.06	2.06	2.06	2.16	2.16
Billingham	LNE	2.17	2.17	2.40	2.40	2.40	2.40	2.40
Bingham	LNE	1.28	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	2.61
Bishop Auckland	LNE	1.85	1.85	1.85	1.93	1.93	1.93	1.93
Blaydon	LNE	2.27	2.27	2.27	2.24	2.24	2.24	2.24
Bleasby	LNE	1.33	1.33	1.77	1.77	1.77	1.77	1.77
Blythe Bridge	LNE	2.82	2.82	2.82	2.42	2.42	2.42	2.42
Bolton On Dearne	LNE	2.44	2.44	2.44	2.34	2.01	2.01	2.01
Boston Station	LNE	2.56	2.56	2.56	2.56	2.56	2.56	2.49
Bottesford	LNE	2.23	2.23	2.23	2.23	2.23	2.58	2.58
Bowes Park Station	LNE	2.15	2.15	2.15	2.15	2.15	2.44	2.44
Bradford Forster Square	LNE	1.00	1.00	1.03	1.03	1.03	1.03	1.03
Bradford Interchange Station	LNE	1.20	1.20	1.20	1.20	1.20	1.20	2.71
Bramley	LNE	1.30	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	2.28
Bridlington	LNE	2.43	2.43	2.43	2.43	1.65	1.65	1.65
Brigg	LNE	2.67	2.67	2.67	2.66	1.76	1.76	1.76
Brighouse	LNE	0.00		1.36	1.36	1.36	1.36	1.36
British Steel Redcar	LNE	2.69	2.69	2.36	2.36	2.36	2.36	2.36
Brockholes	LNE	2.64	2.64	2.52	2.52	2.52	2.52	2.52
Brookmans Park Station	LNE	2.53	2.53	2.53	2.07	2.07	2.11	2.11
Broomfleet	LNE	2.25	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	1.40
Bulwell	LNE	1.77	1.77	1.77	1.77	1.77	1.77	1.77

Appendix 50 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Burley Park	LNE	1.60	1.60	3.00	1.99	1.99	1.99	1.99
Burley-In-Wharfdale	LNE	2.10	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	1.36
Burton-On-Trent	LNE	1.24	1.24	1.60	1.60	1.60	1.60	1.60
Carlton	LNE	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Castleford Central	LNE	1.90	1.90	1.90	2.22	2.22	2.22	2.22
Castleton Moor	LNE	2.67	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	1.76
Chapeltown	LNE	2.34	2.34	2.34	2.34	2.34	2.34	2.34
Chathill	LNE	2.37	2.37	2.37	2.46	2.46	2.46	2.46
Chesterfield Station	LNE	2.48	2.48	1.36	1.36	1.37	1.13	1.13
Chester-Le-Street Station	LNE	1.69	1.69	1.69	1.69	1.69	1.62	1.62
Church Fenton Station	LNE	1.90	1.90	1.98	1.98	1.98	1.94	1.94
Cleethorpes Station	LNE	2.39	2.39	2.39	2.39	2.39	2.39	2.38
Collingham	LNE	1.42	1.42	1.95	1.95	1.95	1.95	1.95
Commondale	LNE	2.28	2.28	2.28	2.45	2.45	2.45	2.45
Conisbrough	LNE	1.55	1.55	1.80	1.80	1.80	1.80	1.80
Cononley	LNE	2.30	2.30	2.33	2.33	2.33	2.33	2.33
Corbridge	LNE	2.25	2.25	2.25	2.10	2.10	2.10	2.10
Cottingham	LNE	2.20	2.20	2.45	2.45	2.45	2.45	2.45
Cottingley	LNE	3.10	3.10	3.10	2.26	2.26	2.26	2.26
Cramlington	LNE	2.29	2.29	2.29	2.29	1.66	1.66	1.66
Creswell	LNE	0.00		1.88	1.88	1.88	1.88	1.88
Crews Hill Station	LNE	2.04	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	2.03
Cromford	LNE	2.92	2.92	2.92	2.92	2.92	2.20	2.20
Crossflatts Station	LNE	1.90	1.90	1.90	1.90	1.90	1.37	1.37
Crossgates	LNE	1.50	1.50	3.13	3.13	3.13	3.13	3.13
Crowle Station	LNE	1.99	1.99	1.99	1.99	1.99	1.79	1.79
Cuffley Station	LNE	2.02	2.02	2.02	2.02	2.02	2.09	2.09
Danby	LNE	2.50	2.50	2.50	2.48	2.48	2.48	2.48
Darlington Station	LNE	2.34	2.34	2.34	2.34	2.34	2.34	2.55
Darnall	LNE	2.24	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	1.70
Deighton	LNE	2.71	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	2.22
Derby	LNE	1.41	1.41	1.61	1.61	1.61	1.61	1.61
Dewsbury Station	LNE	3.00	3.00	3.00	3.00	1.44	1.00	1.00
Dinsdale	LNE	2.84	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	1.53
Doncaster Station	LNE	1.88	1.88	1.88	1.73	1.52	1.68	1.68
Dore	LNE	2.00	2.00	2.00	2.00	1.68	1.68	1.68
Drayton Park Station	LNE	2.08	2.08	2.08	2.08	2.08	2.10	2.10
Driffield	LNE	2.20	2.20	2.54	2.54	2.54	2.54	2.54
Dronfield	LNE	2.30	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	2.12
Dunston	LNE	2.21	2.21	2.48	2.48	2.48	2.48	2.48
Durham	LNE	2.37	2.37	2.37	2.39	1.57	1.57	1.57

Appendix 51 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Eaglescliffe	LNE	2.49	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	1.31
Eastrington	LNE	2.40	2.40	2.42	2.42	1.23	1.23	1.23
Egton	LNE	2.48	2.48	2.48	2.31	2.31	2.31	2.31
Elsecar	LNE	2.30	2.30	2.30	2.24	1.61	1.61	1.61
Elstree & Borehamwood	LNE	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Elton & Orston	LNE	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Enfield Chase Station	LNE	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Essex Road Passenger Station	LNE	2.26	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	2.08
Featherstone	LNE	2.15	2.15	2.15	2.36	2.36	2.36	2.36
Ferriby	LNE	2.39	2.39	2.39	2.49	1.98	1.98	1.98
Filey	LNE	2.43	2.43	2.43	2.43	2.43	2.43	2.43
Finsbury Park Station	LNE	2.17	2.17	2.17	2.17	2.17	2.14	2.14
Fiskerton	LNE	1.00	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	2.30
Flitwick	LNE	2.07	2.07	2.07	2.09	2.09	2.09	2.09
Frizinghall	LNE	2.10	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	3.43
Gainsborough Lea Road	LNE	1.86	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	2.36
Gargrave	LNE	1.30	1.30	1.30	1.95	1.95	1.95	1.95
Gilberdyke	LNE	2.35	2.35	2.37	2.37	2.37	2.37	2.37
Glaisdale	LNE	2.40	2.40	2.56	2.56	2.56	2.56	2.56
Goldthorpe	LNE	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Goole Station	LNE	2.12	2.12	2.12	2.12	2.12	2.12	2.24
Gordon Hill Passenger Station	LNE	2.04	2.04	2.04	2.04	1.93	2.03	2.03
Goxhill	LNE	2.22	2.22	2.22	2.14	1.12	1.12	1.12
Grange Park Station	LNE	2.22	2.22	2.22	2.22	2.22	2.10	2.10
Grantham Station	LNE	2.19	2.19	2.23	2.23	2.00	2.23	2.23
Great Ayton	LNE	2.33	2.33	2.33	2.33	2.33	2.33	2.33
Great Coates Passenger Station	LNE	2.47	2.47	2.47	2.47	2.47	2.09	2.09
Grimsby Docks	LNE	2.35	2.35	2.24	2.24	1.69	1.69	1.69
Grimsby Town	LNE	2.29	2.29	2.58	2.58	2.58	2.58	2.58
Grosmont	LNE	2.86	2.86	2.86	2.53	2.53	2.53	2.53
Guiseley	LNE	2.30	2.30	2.30	2.30	1.47	1.47	1.47
Gypsy Lane	LNE	2.50	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	2.29
Hadley Wood Station	LNE	1.99	1.99	1.99	1.99	1.99	2.27	2.27
Halifax	LNE	0.00		1.95	1.95	1.95	1.95	1.95
Haltwhistle	LNE	2.26	2.26	2.26	1.98	1.98	1.98	1.98
Hammerton	LNE	0.00		1.64	1.64	1.64	1.64	1.64
Harlington	LNE	1.98	1.98	1.98	2.10	2.10	2.10	2.10
Harpenden	LNE	2.18	2.18	2.18	2.18	2.18	2.00	2.00
Harringay Station	LNE	2.37	2.37	2.37	2.37	2.37	2.34	2.34
Harrogate	LNE	2.30	2.30	2.30	2.37	2.37	2.37	2.37
Hartlepool	LNE	2.20	2.20	2.35	2.35	2.35	2.35	2.35
Hatfield & Stainforth	LNE	2.50	2.50	2.10	2.10	2.10	2.10	2.10

Appendix 52 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Hatfield Station	LNE	1.83	1.83	1.83	1.83	1.83	2.07	2.07
Havenhouse	LNE	1.76	1.76	2.35	2.35	2.35	2.35	2.35
Haydon Bridge	LNE	2.08	2.08	2.08	2.17	2.17	2.17	2.17
Headingley	LNE	2.80	2.80	2.80	2.80	1.73	1.73	1.73
Healing	LNE	3.24	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	2.29
Heckington	LNE	1.89	1.89	1.89	2.46	2.46	2.46	2.46
Heighington	LNE	1.61	1.61	1.61	1.86	1.86	1.86	1.86
Hendon	LNE	2.23	2.23	2.23	2.23	2.23	2.10	2.10
Hensall	LNE	1.93	1.93	1.93	1.93	1.93	1.93	1.93
Hertford North Station	LNE	2.12	2.12	2.12	2.12	2.29	2.08	2.08
Hessle	LNE	2.22	2.22	2.22	2.40	2.40	2.40	2.40
Heworth	LNE	2.43	2.43	2.43	2.43	2.43	2.43	2.43
Hexham	LNE	2.15	2.15	2.15	2.08	2.08	2.08	2.08
Highbury & Islington Low Level Stn	LNE	2.32	2.32	2.32	2.32	2.32	2.25	2.25
Hinckley	LNE	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Hitchin Station	LNE	2.59	2.59	2.59	2.59	2.59	2.59	2.55
Honley	LNE	2.54	2.54	2.51	2.51	2.51	2.51	2.51
Hornbeam Park	LNE	2.10	2.10	2.67	2.67	2.67	2.67	2.67
Hornsey Station	LNE	2.54	2.54	2.54	2.54	2.54	2.58	2.58
Horsforth	LNE	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Howden	LNE	3.30	3.30	2.97	2.97	2.97	2.97	2.97
Hubberts Bridge	LNE	2.67	2.67	2.67	2.67	2.67	2.67	2.67
Hucknal	LNE	1.52	1.52	1.52	1.08	1.08	1.08	1.08
Huddersfield	LNE	2.20	2.20	2.38	2.38	2.38	2.38	2.38
Hull Station	LNE	2.76	2.76	2.76	2.47	2.47	2.17	2.17
Hunmanby	LNE	1.98	1.98	1.98	1.98	1.61	1.61	1.61
Huntingdon Passenger Station	LNE	2.28	2.28	2.28	2.28	2.28	2.25	2.25
Hutton Cranswick	LNE	2.69	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	2.80
Ilkley	LNE	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Keighly Station	LNE	2.70	2.70	2.70	2.70	2.70	2.70	2.19
Kentish Town	LNE	2.24	2.24	2.27	2.27	2.27	2.27	2.27
Kettering	LNE	1.75	1.75	1.75	1.75	1.75	1.75	2.07
Kildale	LNE	2.30	2.30	2.30	2.79	2.79	2.79	2.79
Kings Cross Thameslink	LNE	2.07	2.07	2.07	2.07	2.07	2.06	2.06
Kirk Sandall	LNE	2.59	2.59	2.59	2.59	1.57	1.57	1.57
Kirkby in Ashfield	LNE	1.35	1.35	1.27	1.27	1.27	1.27	1.27
Kirton Lindsey	LNE	3.18	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	2.17	2.17
Kiveton Park	LNE	2.14	2.14	2.09	2.09	2.09	2.09	2.09
Knaresborough Station	LNE	2.40	2.40	2.40	2.49	2.49	1.85	1.85
Knebworth Station	LNE	2.23	2.23	2.23	2.23	2.01	2.21	2.21
Knottingley	LNE	2.41	2.41	2.41	2.42	2.42	2.42	2.42
Langley Mill	LNE	1.75	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	2.00
Leagrave	LNE	2.00	2.00	2.00	2.00	2.00	2.20	2.20
Lealholm	LNE	2.39	2.39	2.39	2.39	2.39	2.39	2.39

Appendix 53 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Leeds City	LNE	3.02	3.02	1.91	1.97	1.97	1.97	1.97
Leicester	LNE	1.55	1.55	1.55	1.55	1.55	1.55	2.00
Letchworth Station	LNE	2.10	2.10	2.10	2.10	2.10	2.10	2.27
Lincoln Central	LNE	1.27	1.27	1.27	2.28	2.28	2.28	2.28
Lockwood	LNE	2.38	2.38	2.38	2.38	2.38	2.38	2.38
London Kings Cross	LNE	2.11	2.11	2.37	2.44	2.44	2.44	2.44
Long Eaton	LNE	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Longbeck	LNE	2.57	2.57	2.57	2.57	2.57	2.57	2.57
Longton	LNE	2.79	2.79	2.79	2.79	2.79	2.34	2.34
Loughborough	LNE	1.91	1.91	1.91	1.91	1.91	1.91	2.16
Lowdham	LNE	1.42	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	2.08
Luton Airport Parkway	LNE	0.00		1.02	1.02	1.02	1.02	1.02
Malton Station	LNE	2.18	2.18	2.18	2.28	2.28	2.28	2.23
Manors	LNE	2.65	2.65	2.65	2.65	1.63	1.63	1.63
Mansfield	LNE	1.10	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	1.35
Market Harborough	LNE	1.99	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	2.46
Marske	LNE	1.73	1.73	1.73	2.56	2.56	2.56	2.56
Marton	LNE	2.61	2.61	3.06	3.06	3.06	3.06	3.06
Matlock	LNE	2.75	2.75	2.75	2.21	2.21	2.21	2.21
Matlock Bath	LNE	2.47	2.47	2.47	2.47	2.47	2.40	2.40
Meadowhall	LNE	1.35	1.35	1.46	1.46	1.46	1.46	1.46
Melton Mowbray	LNE	3.90	3.90	3.90	3.90	3.90	2.47	2.47
Menston	LNE	2.50	2.50	2.50	2.33	2.33	2.33	2.33
Metheringham	LNE	1.38	1.38	2.14	2.14	2.14	2.14	2.14
Metrocentre	LNE	2.08	2.08	2.42	2.42	2.42	2.42	2.42
Mexborough	LNE	2.19	2.19	1.90	1.90	1.90	1.90	1.90
Micklefield	LNE	1.30	1.30	1.30	2.09	2.09	2.09	2.09
Middlesbrough Station	LNE	2.48	2.48	2.48	2.48	2.48	2.48	2.27
Mill Hill Broadway	LNE	2.63	2.63	2.63	2.63	2.63	2.41	2.41
Mirfield	LNE	1.00	1.00	2.44	2.44	2.44	2.44	2.44
Moorgate (Sub-Surface) Station	LNE	2.22	2.22	2.22	2.22	2.22	2.22	2.22
Moorthorpe Station	LNE	2.41	2.41	2.41	2.41	2.41	1.49	1.49
Morley	LNE	2.04	2.04	2.04	2.04	2.26	2.26	2.26
Morpeth	LNE	2.22	2.22	2.22	2.19	2.19	2.19	2.19
Mytholmroyd	LNE	2.19	2.19	2.89	2.89	2.89	2.89	2.89
Nafferton	LNE	2.25	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	1.87
Netherfield	LNE	1.13	1.13	1.13	1.91	1.91	1.91	1.91
New Barnet Station	LNE	2.40	2.40	2.40	2.40	2.40	2.20	2.20
New Clee	LNE	2.47	2.47	2.33	2.33	2.33	2.33	2.33
New Holland	LNE	2.68	2.68	2.68	2.68	2.68	2.68	2.68
New Pudsey	LNE	2.01	2.01	2.01	2.01	2.01	2.01	2.01
New Southgate Station	LNE	2.41	2.41	2.41	2.41	2.41	2.33	2.33
Newark Castle	LNE	1.26	1.26	1.55	1.55	1.55	1.55	1.55
Newark North Gate	LNE	2.15	2.15	2.20	2.20	2.20	2.20	2.20

Appendix 54 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Newcastle Station	LNE	2.64	2.64	2.43	2.43	2.43	2.33	2.33
Newstead	LNE	1.31	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	2.80
Normanton	LNE	2.44	2.44	2.44	2.44	2.44	2.44	2.44
North Road [Darlington]	LNE	2.22	2.22	2.22	2.22	2.22	2.22	2.22
Northallerton	LNE	2.24	2.24	2.22	2.22	2.22	2.22	2.22
Nottingham	LNE	2.30	2.30	2.30	2.03	2.03	2.03	2.03
Nunthorpe	LNE	2.43	2.43	2.43	2.13	2.13	2.13	2.13
Oakham	LNE	2.03	2.03	2.03	2.03	2.03	2.25	2.25
Oakleigh Park Station	LNE	2.56	2.56	2.56	2.56	2.56	2.53	2.53
Old Street Station	LNE	2.45	2.45	2.45	2.45	2.45	2.26	2.26
Outwood	LNE	1.60	1.60	2.27	2.27	2.27	2.27	2.27
Palmers Green Station	LNE	2.24	2.24	2.24	2.24	2.24	2.22	2.22
Pannal	LNE	1.60	1.60	1.60	1.60	1.55	1.55	1.55
Peartree	LNE	2.15	2.15	2.15	2.15	2.15	2.50	2.50
Pegswood	LNE	2.48	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	1.30
Peterborough Station	LNE	2.22	2.22	2.22	2.22	2.22	2.22	2.25
Pontefract Baghill	LNE	3.00	3.00	3.00	2.35	2.35	2.35	2.35
Pontefract Monkhill	LNE	2.29	2.29	2.29	2.27	2.27	2.27	2.27
Pontefract Tanshelf	LNE	1.60	1.60	2.36	2.36	2.36	2.36	2.36
Poppleton	LNE	1.70	1.70	1.70	1.70	1.70	1.70	1.70
Potters Bar Station	LNE	2.50	2.50	2.50	2.50	2.50	2.54	2.54
Prudhoe	LNE	2.71	2.71	2.71	2.20	2.20	2.20	2.20
Radcliffe (Nottinghamshire)	LNE	1.38	1.38	2.13	2.13	2.13	2.13	2.13
Radlett	LNE	2.13	2.13	2.13	2.13	2.13	2.25	2.25
Rauceby	LNE	2.59	2.59	2.74	2.74	2.74	2.74	2.74
Ravensthorpe	LNE	2.90	2.90	2.90	2.49	2.49	2.49	2.49
Rawcliffe	LNE	2.40	2.40	2.40	2.60	2.60	2.60	2.60
Redcar Central	LNE	2.06	2.06	2.06	2.11	2.11	2.11	2.11
Redcar East	LNE	2.43	2.43	2.43	2.43	2.43	2.43	2.43
Retford High Level Station	LNE						2.33	2.33
Retford Low Level Station	LNE						2.32	2.32
Riding Mill	LNE	2.41	2.41	2.41	2.15	2.15	2.15	2.15
Rolleston	LNE	1.28	1.28	1.28	1.96	1.96	1.96	1.96
Rotherham Central	LNE	2.14	2.14	2.12	2.12	2.12	2.12	2.12
Royston Station (Herts)	LNE	2.24	2.24	2.24	2.24	1.79	2.20	2.20
Ruskington	LNE	1.81	1.81	1.81	2.16	2.16	2.16	2.16
Ruswarp Station	LNE	2.31	2.31	2.31	2.31	2.31	1.21	1.21
Saltaire	LNE	2.14	2.14	1.98	1.98	1.98	1.98	1.98
Saltburn	LNE	2.43	2.43	2.43	2.61	2.61	2.61	2.61
Saltmarshe	LNE	2.06	2.06	2.06	2.25	2.25	2.25	2.25
Sandal & Agbrigg	LNE	1.30	1.30	1.30	1.30	1.60	1.60	1.60
Sandy Passenger Station	LNE	2.42	2.42	2.42	2.42	2.42	2.18	2.18
Saxilby	LNE	1.38	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	2.72
Scunthorpe Station	LNE	2.32	2.32	2.32	2.32	2.32	2.32	2.21
Seaham	LNE	2.18	2.18	2.18	2.25	2.25	2.25	2.25

Appendix 55 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Seamer	LNE	2.01	2.01	2.07	2.07	2.07	2.07	2.07
Seaton Carew	LNE	2.43	2.43	2.36	2.36	2.36	2.36	2.36
Selby Station	LNE	2.15	2.15	2.15	2.33	2.33	2.33	2.24
Sheffield	LNE	2.11	2.11	2.64	2.64	2.64	2.64	2.64
Shepley	LNE	2.19	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	2.65
Shildon	LNE	2.20	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	1.63
Shirebrook	LNE	1.90	1.90	1.93	1.93	1.93	1.93	1.93
Shireoaks	LNE	2.89	2.89	2.89	1.80	1.80	1.80	1.80
Sileby	LNE	1.73	1.73	1.73	1.81	1.81	1.81	1.81
Silkstone Common	LNE	1.70	1.70	1.70	1.79	1.70	1.70	1.70
Skegness Station	LNE	1.67	1.67	1.67	1.67	1.67	1.67	2.17
Skipton Station	LNE	2.10	2.10	2.10	2.10	2.10	2.10	2.46
Slaithwaite	LNE	2.80	2.80	2.07	2.07	2.07	2.07	2.07
Sleaford	LNE	2.55	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	2.89
Snaith	LNE	2.33	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	2.85
South Elmsall	LNE	1.80	1.80	1.80	2.28	2.28	2.28	2.28
South Milford	LNE	1.70	1.70	1.70	2.25	2.25	2.25	2.25
South Wigston	LNE	3.03	3.03	3.03	3.03	3.03	2.32	2.32
Sowerby Bridge	LNE	3.09	3.09	3.09	2.14	2.14	2.14	2.14
Spalding Station	LNE	1.44	1.44	1.47	1.47	1.47	1.47	2.55
Spondon	LNE	1.39	1.39	1.47	1.46	1.46	1.46	1.46
St Albans	LNE	2.08	2.08	2.06	2.06	2.06	2.06	2.06
St Neots Station	LNE	2.07	2.07	2.07	2.07	2.07	1.97	1.97
Stallingborough	LNE	2.56	2.56	2.56	2.57	2.57	2.57	2.57
Stamford	LNE	2.59	2.59	2.59	2.59	2.59	2.18	2.18
Starbeck	LNE	2.80	2.80	2.80	2.44	2.44	2.44	2.44
Steeton & Silsden	LNE	2.10	2.10	2.50	2.50	2.50	2.50	2.50
Stevenage Station	LNE	2.52	2.52	2.52	2.52	2.52	2.48	2.48
Stocksfield	LNE	2.13	2.13	2.13	2.13	2.13	2.13	2.13
Stocksmoor Station	LNE	2.57	2.57	2.57	2.57	2.57	2.40	2.40
Stockton	LNE	2.38	2.38	2.38	2.42	2.42	2.42	2.42
Streethouse	LNE	1.50	1.50	1.50	1.53	1.53	1.53	1.53
Sunderland Station	LNE	2.28	2.28	2.28	2.28	2.28	2.28	2.65
Sutton Parkway	LNE	1.20	1.20	1.20	1.55	1.55	1.55	1.55
Swinderby	LNE	1.50	1.50	1.56	2.28	2.28	2.28	2.28
Swineshead	LNE	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Swinton Town Station	LNE	2.01	2.01	2.01	2.01	2.01	2.00	2.00
Syston	LNE	2.17	2.17	2.17	2.17	2.17	2.32	2.32
Tees-Side Airport	LNE	2.65	2.65	2.65	2.65	1.87	1.87	1.87
Thirsk	LNE	1.46	1.46	1.46	1.46	1.57	1.57	1.57
Thornaby	LNE	3.03	3.03	3.03	1.68	1.68	1.68	1.68
Thorne North Station	LNE	2.03	2.03	2.03	2.03	2.03	2.03	2.10
Thorne South	LNE	2.36	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	1.95

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Thorpe Culvert	LNE	2.43	2.43	2.38	2.38	2.38	2.38	2.38
Thurgarton	LNE	1.10	1.10	1.95	1.95	1.95	1.95	1.95
Thurnscoe	LNE	2.28	2.28	2.28	2.25	2.25	2.25	2.25
Tutbury & Hatton	LNE	3.00	3.00	3.00	3.00	3.00	2.20	2.20
Ulceby	LNE	2.38	2.38	2.50	2.50	1.64	1.64	1.64
Ulleskelf	LNE	1.00	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	2.03
Wainfleet	LNE	0.00		1.61	1.61	1.49	1.49	1.49
Wakefield Kirkgate	LNE	3.30	3.30	3.30	2.88	2.88	2.88	2.88
Wakefield Westgate	LNE	2.80	2.80	2.80	2.81	2.81	2.81	2.81
Watton At Stone Station	LNE	2.14	2.14	2.14	2.14	2.14	2.12	2.12
Weeton	LNE	3.00	3.00	2.73	2.73	2.73	2.73	2.73
Welham Green Station	LNE	2.34	2.34	2.34	2.34	2.34	2.22	2.22
Wellingborough	LNE	2.00	2.00	2.00	1.98	1.98	1.98	1.98
Welwyn Garden City Station	LNE	2.00	2.00	2.00	2.00	2.00	2.09	2.09
Welwyn North Station	LNE	2.39	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	2.11
Wetherall	LNE	2.59	2.59	2.59	2.59	2.59	2.59	2.59
Whatstandwell	LNE	2.19	2.19	1.93	1.93	1.93	1.93	1.93
Whitby	LNE	2.04	2.04	2.04	2.35	2.35	2.35	2.35
Whitley Bridge	LNE	2.50	2.50	2.50	2.41	2.41	2.41	2.41
Whitwell	LNE	0.00		1.91	1.91	1.91	1.91	1.91
Widdrington	LNE	2.27	2.27	2.78	2.78	2.78	2.78	2.78
Willington Staton	LNE	2.39	2.39	2.39	1.88	1.88	1.88	1.88
Winchmore Hill Station	LNE	1.67	1.67	1.67	1.67	1.67	2.13	2.13
Wombwell	LNE	2.08	2.08	2.08	2.08	2.08	2.08	2.08
Woodhouse	LNE	2.75	2.75	2.16	2.16	2.16	2.16	2.16
Woodlesford Station	LNE	1.00	1.00	1.00	1.00	1.00	1.27	1.27
Worksop Station	LNE	2.36	2.36	2.36	2.36	2.36	2.36	2.33
Wressle	LNE	2.84	2.84	2.88	2.88	2.17	2.17	2.17
Wylam	LNE	2.72	2.72	2.72	2.31	2.31	2.31	2.31
Yarm	LNE	1.92	1.92	1.92	2.16	2.16	2.16	2.16
York Station	LNE	2.50	2.50	2.50	2.50	2.50	1.66	1.66
Abergele & Pensarn	LNW	2.84	2.84	2.84	2.84	2.84	2.00	2.00
Accrington	LNW	2.88	2.88	2.88	2.21	2.21	2.21	2.21
Acocks Green	LNW	1.77	1.77	1.77	1.77	1.77	1.77	1.77
Acton Bridge	LNW	2.34	2.34	2.34	2.34	2.40	2.40	2.40
Adderley Park	LNW	1.99	1.99	1.99	1.99	1.99	1.99	1.99
Adlington (Cheshire)	LNW	2.12	2.12	2.12	2.12	2.12	2.12	2.12
Adlington (lancs)	LNW	2.10	2.10	2.10	2.10	2.10	2.14	2.20
Aigburth	LNW	2.41	2.41	2.41	2.41	2.12	2.12	2.12
Ainsdale	LNW	2.02	2.02	2.02	2.07	2.07	2.07	2.07
Aintree	LNW	2.37	2.37	1.44	1.44	1.44	1.44	1.44
Albrighton	LNW	2.77	2.77	2.90	2.90	2.90	2.90	2.90
Alderley Edge	LNW	1.99	1.99	1.99	1.99	1.99	1.99	2.30
Allerton	LNW	2.34	2.34	2.34	2.34	2.13	2.13	2.13
Alsager	LNW	2.56	2.56	2.56	2.56	2.56	2.17	2.17
Altrincham	LNW	2.20	2.20	2.20	2.20	2.20	2.20	2.20

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Alvechurch	LNW	2.54	2.54	2.54	1.70	1.70	1.70	1.70
Ansdell & Fairhaven	LNW	2.81	2.81	2.81	2.81	2.31	2.31	2.31
Appleby In Westmorland	LNW	2.34	2.34	2.34	2.34	2.18	2.18	2.18
Appley Bridge	LNW	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Apsley	LNW	2.24	2.24	2.24	2.07	2.07	2.07	2.07
Ardwick	LNW	2.04	2.04	2.04	2.04	2.04	2.04	2.20
Armathwaite	LNW	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Arnside	LNW	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Ashburys	LNW	1.99	1.99	1.99	2.03	2.03	2.03	2.03
Ashley	LNW	2.44	2.44	2.44	2.44	2.29	2.29	2.29
Ashton Under Lyne	LNW	2.75	2.75	2.75	2.75	2.75	1.45	1.45
Askam	LNW	3.14	3.14	3.14	3.14	2.26	2.26	2.26
Aspatria	LNW	1.98	1.98	2.23	2.23	2.23	2.23	2.23
Aspley Guise	LNW	2.23	2.23	2.23	2.23	2.23	2.11	2.11
Aston	LNW	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Atherstone	LNW	2.47	2.47	2.44	2.44	2.44	2.44	2.44
Atherton	LNW	2.36	2.36	2.36	2.36	2.36	2.36	2.36
Aughton Park	LNW	2.05	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	1.99
Bache	LNW	1.97	1.97	1.97	1.97	1.97	1.97	2.21
Bamber Bridge	LNW	2.45	2.45	2.45	2.10	2.10	2.10	2.10
Bamford	LNW	2.40	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	1.45
Bangor	LNW	2.10	2.10	2.10	2.10	2.10	2.04	2.04
Bank Hall	LNW	2.15	2.15	2.15	2.15	2.15	2.15	2.11
Bare Lane	LNW	2.23	2.23	2.04	2.04	2.04	2.04	2.04
Barlaston	LNW	2.86	2.86	2.86	2.86	2.86	2.00	2.00
Barnt Green	LNW	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Barrow	LNW	2.17	2.17	2.17	2.17	2.17	2.17	2.08
Beaconsfield	LNW	2.06	2.06	2.06	2.06	2.08	2.08	2.08
Bearley	LNW	3.33	3.33	3.33	3.33	3.33	1.57	1.57
Bebington	LNW	2.25	2.25	2.25	2.25	2.25	2.25	2.10
Bedford St Johns	LNW	1.67	1.67	1.67	2.20	2.20	2.22	2.22
Bedworth	LNW	1.91	1.91	2.37	2.37	2.81	2.81	2.81
Belle Vue Station	LNW	2.48	2.48	1.98	1.98	1.98	1.98	2.53
Bentham	LNW	2.57	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	1.97
Berkswell	LNW	1.63	1.63	1.63	1.63	1.63	1.63	2.13
Bescar Lane	LNW	2.55	2.55	2.55	2.25	2.25	2.25	2.25
Bescot	LNW	1.26	1.26	1.26	1.26	1.26	1.26	2.03
Betws-Y-Coed	LNW	2.31	2.31	2.31	2.31	2.33	2.33	2.33
Bicester North	LNW	2.03	2.03	2.03	1.82	1.82	1.82	1.82
Bidston	LNW	3.17	3.17	3.17	3.17	3.17	2.35	2.35
Bilbrook	LNW	1.52	1.52	1.52	1.52	2.14	2.14	2.14
Birchwood	LNW	2.01	2.01	2.01	2.01	2.01	2.01	2.02
Birkdale	LNW	2.35	2.35	2.35	2.14	2.14	2.14	2.14
Birkenhead Central	LNW	2.35	2.35	2.35	2.35	2.12	2.12	2.12
Birkenhead North	LNW	2.24	2.24	2.24	2.24	2.24	2.24	2.24

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Birkenhead Park	LNW	2.04	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	2.06
Birmingham Moor Street	LNW	1.83	1.83	1.83	1.83	1.83	1.83	1.98
Birmingham New Street	LNW	1.81	1.81	1.77	1.70	1.70	1.70	1.70
Birmingham Snow Hill	LNW	1.78	1.78	1.78	1.78	1.78	1.78	2.12
Blackburn	LNW	2.83	2.83	2.83	2.83	2.83	2.01	2.01
Blackpool North	LNW	2.37	2.37	2.17	2.17	2.17	2.17	2.17
Blackpool Pleasure Beach	LNW	2.84	2.84	2.84	2.27	2.27	2.27	2.27
Blackpool South	LNW	2.39	2.39	2.39	2.00	2.00	2.00	2.00
Blackrod	LNW	1.97	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	2.03
Blake Street	LNW	1.81	1.81	1.69	1.69	1.69	1.69	1.69
Blakedown	LNW	1.83	1.83	1.83	1.83	2.57	2.57	2.57
Bletchley	LNW	2.15	2.15	1.90	1.90	1.90	1.90	1.90
Bloxwich	LNW	2.47	2.47	2.47	2.49	2.22	2.22	2.22
Bloxwich North	LNW	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Blundellsands & Crosby	LNW	2.53	2.53	2.53	2.53	2.18	2.18	2.18
Bodorgan	LNW	2.54	2.54	2.50	2.50	2.50	2.00	2.00
Bolton	LNW	2.20	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	2.02
Bootle New Strand	LNW	1.97	1.97	1.97	1.97	1.68	1.68	1.68
Bootle Oriel Road	LNW	2.20	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	2.28
Bournville	LNW	1.96	1.96	1.96	1.96	1.96	1.96	2.06
Bow Brickhill	LNW	1.67	1.67	1.67	1.67	1.67	2.40	2.40
Bramhall	LNW	2.33	2.33	1.54	1.54	1.54	1.54	1.54
Braystones	LNW	2.48	2.48	2.04	2.04	2.04	2.04	2.04
Bredbury	LNW	2.31	2.31	2.31	2.31	2.16	2.16	2.16
Bricket Wood	LNW	1.84	1.84	1.84	2.43	2.43	2.43	2.43
Brierfields	LNW	2.60	2.60	2.05	2.05	2.05	1.78	1.78
Brinnington	LNW	2.22	2.22	2.22	2.22	2.28	2.28	2.28
Broad Green	LNW	2.27	2.27	2.27	2.06	2.06	2.06	2.06
Broadbottom	LNW	2.15	2.15	2.15	2.15	2.61	2.61	2.61
Bromborough	LNW	2.09	2.09	2.09	2.05	2.05	2.05	2.05
Bromborough Rake	LNW	2.09	2.09	2.09	2.09	2.09	2.09	2.06
Bromley Cross	LNW	2.31	2.31	2.31	2.10	2.10	2.10	2.10
Brunswick	LNW	1.00	1.00	1.00	1.00	1.07	1.07	1.07
Bryn	LNW	2.71	2.71	2.72	2.72	2.72	2.02	2.02
Buckley	LNW	2.30	2.30	2.13	2.13	2.13	2.13	2.13
Burnage	LNW	2.20	2.20	2.20	2.20	2.13	2.13	2.13
Burneside	LNW	2.23	2.23	2.23	2.15	2.15	2.15	2.15
Burnley Barracks	LNW	3.10	3.10	3.10	2.06	1.79	1.79	1.79
Burnley Central	LNW	2.80	2.80	2.80	2.80	2.80	2.41	2.41
Burnley Manchester Rd	LNW	1.96	1.96	1.96	2.07	2.07	2.07	2.07
Burscough Bridge	LNW	1.80	1.80	1.51	1.51	1.51	1.51	2.18
Burscough Junction	LNW	1.94	1.94	1.94	1.94	1.94	1.94	2.53
Bushey	LNW	2.32	2.32	2.00	2.00	2.00	2.00	2.00
Butlers Lane	LNW	1.33	1.33	1.34	1.34	1.34	1.34	1.34

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Buxton	LNW	2.61	2.61	2.61	2.61	2.16	2.16	2.16
Caergwrle	LNW	2.21	2.21	2.21	2.21	2.21	2.21	2.21
Canley	LNW	1.24	1.24	1.24	1.24	1.24	1.24	1.24
Cannock	LNW	1.95	1.95	2.23	2.23	2.23	2.23	2.23
Capenhurst	LNW	2.13	2.13	2.13	2.11	2.11	2.11	2.11
Cark and Cartmel	LNW	2.23	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	2.17
Carnforth	LNW	1.99	1.99	1.99	1.99	1.99	1.99	2.32
Carpenders Park	LNW	2.48	2.48	2.48	2.04	2.04	2.04	2.04
Castleton	LNW	2.19	2.19	2.19	2.19	2.19	2.19	2.34
Cefn-Y-Bedd	LNW	3.00	3.00	1.95	1.95	1.95	2.20	2.20
Chapel-en-le-Frith	LNW	3.20	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	2.01
Cheadle Hulme Station	LNW	2.08	2.08	2.07	2.07	2.07	2.07	2.19
Cheddington	LNW	2.12	2.12	2.12	2.03	2.03	2.03	2.03
Chelford	LNW	2.18	2.18	2.18	2.18	2.18	2.18	2.25
Cherry Tree	LNW	2.49	2.49	2.49	2.14	2.14	2.14	2.14
Chester Midland	LNW	2.42	2.42	2.42	2.42	2.17	2.17	2.17
Chester Road	LNW	1.30	1.30	1.30	1.30	2.12	2.12	2.12
Chinley Station	LNW	2.07	2.07	2.07	2.07	2.07	2.07	2.15
Chorley	LNW	2.04	2.04	2.04	2.04	2.04	2.04	2.05
Church & Oswaldtwistle	LNW	2.11	2.11	2.11	2.18	2.18	2.18	2.18
Clapham	LNW	2.45	2.45	2.38	2.38	2.38	2.38	2.09
Claverdon	LNW	2.90	2.90	2.90	2.90	2.90	2.07	2.07
Clifton	LNW	3.39	3.39	3.39	2.16	2.16	2.16	2.16
Clitheroe	LNW	1.51	1.51	1.51	2.00	2.00	2.00	2.00
Codsall	LNW	2.73	2.73	2.42	2.42	2.42	2.42	2.42
Colne	LNW	2.11	2.11	2.11	2.11	2.11	2.11	2.64
Colwyn Bay	LNW	2.19	2.19	2.06	2.06	2.06	2.06	2.06
Congleton station	LNW	2.16	2.16	2.11	2.11	2.11	2.11	2.14
Conway Park	LNW	1.08	1.08	1.08	1.08	1.15	1.15	1.15
Conwy	LNW	2.02	2.02	2.17	2.17	2.17	2.17	2.60
Corkickle	LNW	2.86	2.86	2.86	2.86	2.86	2.69	2.69
Coseley	LNW	1.32	1.32	1.32	1.32	1.32	1.32	1.97
Cosford	LNW	2.63	2.63	2.63	2.63	2.87	2.87	2.87
Coventry	LNW	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Cradley Heath	LNW	1.57	1.57	1.58	1.75	1.75	1.75	1.75
Cressington Station	LNW	2.19	2.19	2.18	2.18	2.18	2.18	2.03
Crewe	LNW	2.18	2.18	2.18	2.18	2.82	2.82	2.82
Croston	LNW	2.41	2.41	2.41	2.41	2.41	2.41	2.47
Cuddington	LNW	2.78	2.78	2.78	2.50	2.50	2.50	2.50
Daisy Hill	LNW	2.61	2.61	2.61	2.61	2.61	2.17	2.17
Dalston	LNW	0.00				2.02	2.02	2.02
Dalton in Furness	LNW	2.23	2.23	2.23	2.23	2.23	2.23	2.57
Danzey	LNW	1.86	1.86	1.86	1.86	2.65	2.65	2.65
Darwen	LNW	2.28	2.28	2.28	2.28	2.28	2.28	2.39
Davenport Station	LNW	2.19	2.19	2.19	2.19	2.19	2.19	2.45
Dean Lane	LNW	2.88	2.88	2.88	2.88	2.88	2.88	2.88

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Deansgate	LNW	2.10	2.10	2.10	2.10	2.21	2.21	2.21
Deganwy	LNW	2.09	2.09	2.13	2.13	2.13	2.13	2.25
Delamere	LNW	1.82	1.82	1.82	2.24	2.24	2.24	2.24
Denham	LNW	2.24	2.24	2.21	2.21	2.21	2.21	2.21
Denham Golf	LNW	2.33	2.33	2.33	2.33	2.33	2.93	2.93
Dent	LNW	2.27	2.27	2.27	2.27	2.27	2.27	2.27
Denton	LNW	3.06	3.06	3.06	3.06	3.06	2.82	2.82
Derker	LNW	2.49	2.49	2.49	2.49	2.49	2.49	2.44
Dinting	LNW	2.10	2.10	2.10	2.10	2.36	2.36	2.36
Disley	LNW	2.02	2.02	2.03	2.03	2.03	2.03	2.11
Dolgarrog	LNW	2.23	2.23	2.23	2.23	2.23	2.23	2.23
Dolwyddelan	LNW	2.28	2.28	2.40	2.40	2.40	2.40	2.40
Dorridge	LNW	2.36	2.36	2.36	2.36	2.36	2.36	2.02
Dove Holes	LNW	3.02	3.02	3.02	3.02	3.02	2.45	2.45
Drigg	LNW	3.26	3.26	3.26	3.26	3.26	2.05	2.05
Duddeston	LNW	1.77	1.77	1.77	1.77	1.77	1.77	2.03
Dudley Port	LNW	1.75	1.75	1.75	1.75	1.75	1.75	2.06
Earlstown	LNW	2.98	2.98	2.98	2.98	2.22	2.22	2.22
Earlswood	LNW	2.35	2.35	2.35	2.35	2.65	2.65	2.65
East Didsbury	LNW	3.12	3.12	3.12	3.12	3.12	2.26	2.26
Eastham Rake	LNW	1.17	1.17	1.33	1.41	1.41	1.41	1.41
Eccles	LNW	2.90	2.90	2.10	2.10	2.10	2.13	2.13
Eccleston Park	LNW	2.20	2.20	2.08	2.08	2.08	2.08	2.13
Edale	LNW	2.68	2.68	2.68	2.01	2.01	2.01	2.01
Edge Hill	LNW	2.48	2.48	2.48	2.02	2.02	2.02	2.02
Ellesmere Port	LNW	2.03	2.03	2.03	2.00	2.00	2.00	2.00
Entwhistle	LNW	2.05	2.05	2.05	2.05	2.05	2.05	2.58
Erdington	LNW	1.74	1.74	1.26	1.26	1.26	1.26	1.26
Euxton Balshaw Ln	LNW	0.00		1.89	1.89	1.89	1.00	1.00
Failsworth	LNW	2.78	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	2.14
Farnworth	LNW	2.10	2.10	2.10	2.25	2.25	2.25	2.25
Fazackerley	LNW	1.85	1.85	1.85	1.85	1.85	1.85	2.04
Fenny Stratford	LNW	1.83	1.83	1.83	1.83	1.83	2.23	2.23
Five Ways	LNW	1.60	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	2.14
Flint	LNW	2.96	2.96	2.96	2.96	2.96	1.96	1.96
Flixton	LNW	2.14	2.14	2.14	2.01	2.01	2.01	2.01
Flowery Field Station	LNW	2.00	2.00	2.00	2.00	2.00	2.00	2.04
Formby	LNW	2.17	2.17	2.15	2.15	2.15	2.15	2.15
Four Oaks	LNW	1.96	1.96	1.93	1.93	1.93	1.93	1.93
Foxfield	LNW	3.10	3.10	1.92	1.92	1.92	2.00	2.00
Freshfield	LNW	1.99	1.99	1.99	2.10	2.10	2.10	2.10
Frodsham	LNW	3.80	3.80	2.00	2.04	2.04	2.04	2.04
Furness Vale	LNW	2.92	2.92	2.92	2.92	2.92	2.08	2.08
Garsdale	LNW	2.78	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	2.03
Garston [Merseyside]	LNW	2.20	2.20	2.04	2.04	2.04	2.04	2.04

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Garswood	LNW	3.35	3.35	3.35	3.35	2.03	2.03	2.03
Gathurst	LNW	2.16	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	2.30
Gerrards Cross	LNW	2.25	2.25	2.25	2.25	2.25	2.12	2.12
Giggleswick	LNW	2.03	2.03	2.06	2.06	2.06	2.06	2.05
Glan Conwy	LNW	2.30	2.30	2.13	2.13	2.13	2.13	2.13
Glazebrook	LNW	2.01	2.01	2.01	2.07	2.07	2.07	2.07
Glossop	LNW	2.97	2.97	2.97	2.97	2.52	2.52	2.52
Godley Station	LNW	2.17	2.17	2.17	2.17	2.17	2.17	2.36
Goostrey	LNW	2.10	2.10	2.14	2.14	2.14	2.14	2.14
Gorton	LNW	2.33	2.33	2.33	2.13	2.13	2.13	2.13
Grange Over Sands	LNW	3.00	3.00	3.00	3.00	3.00	2.02	2.02
Gravelly Hill	LNW	1.96	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	2.36
Green Lane	LNW	2.40	2.40	1.92	1.92	1.92	1.92	1.92
Green Road	LNW	2.12	2.12	2.12	2.12	2.12	2.12	2.30
Greenbank	LNW	2.41	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	2.05
Grindleford	LNW	2.40	2.40	2.36	2.36	2.36	2.36	2.37
Guide Bridge	LNW	2.36	2.36	2.30	2.30	2.30	2.30	2.30
Gwersyllt	LNW	2.31	2.31	2.31	2.04	2.04	2.04	2.04
Haddenham & Thame Parkway	LNW	1.74	1.74	1.74	1.74	1.99	1.99	1.99
Hadfield	LNW	2.66	2.66	2.18	2.18	2.18	2.12	2.12
Hagfold	LNW	2.32	2.32	2.32	2.32	2.29	2.29	2.29
Hagley	LNW	1.33	1.33	1.33	1.33	2.15	2.15	2.15
Hale	LNW	2.27	2.27	2.27	2.27	2.29	2.29	2.29
Halewood	LNW	2.29	2.29	2.29	2.05	2.05	2.05	2.05
Hall Green	LNW	2.00	2.27	2.51	2.51	2.51	2.51	2.51
Hall i' th' Wood	LNW	2.43	2.43	2.43	2.43	2.43	2.43	2.43
Hall Road	LNW	2.43	2.43	2.43	2.02	2.02	2.02	2.02
Hamilton Square	LNW	2.44	2.44	2.44	2.44	2.44	2.44	2.44
Hampton In Arden	LNW	2.23	2.23	2.23	2.23	2.12	2.12	2.12
Hamstead	LNW	1.56	1.56	1.56	1.56	1.56	1.56	2.17
Handforth	LNW	2.10	2.10	1.28	1.28	1.28	1.28	1.28
Hapton	LNW	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Harlesden	LNW	2.17	2.17	2.17	2.06	2.06	2.06	2.06
Harrington	LNW	2.21	2.21	2.21	2.21	2.24	2.24	2.24
Harrow & Wealdstone	LNW	2.41	2.41	2.41	2.41	2.41	2.22	2.22
Hartford	LNW	1.98	1.98	1.98	1.98	1.98	1.98	2.08
Hartlebury	LNW	1.00	1.00	1.08	1.08	1.08	1.08	1.08
Hatch End	LNW	2.29	2.29	2.29	2.29	2.29	2.29	2.06
Hathersage	LNW	2.12	2.12	2.12	2.12	2.12	2.12	2.12
Hattersley	LNW	2.10	2.10	2.10	2.10	2.19	2.19	2.19
Hatton	LNW	1.53	1.53	1.53	1.53	1.53	1.53	1.53
Hawarden	LNW	2.65	2.65	2.65	2.05	2.05	2.05	2.05
Hawarden Bridge	LNW	2.71	2.71	2.71	2.71	2.23	2.23	2.23
Hazel Grove	LNW	1.20	1.20	2.17	2.17	2.17	2.17	2.20
Headstone Lane	LNW	2.03	2.03	2.03	2.03	2.03	2.03	2.01

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Heald Green	LNW	3.09	3.09	3.09	3.09	2.35	2.35	2.35
Heaton Chapel	LNW	1.90	1.90	1.90	1.90	2.41	2.41	2.41
Hednesford	LNW	1.93	1.93	1.86	1.86	1.86	1.86	1.86
Hellifield	LNW	2.26	2.26	2.26	2.26	2.26	2.26	2.26
Helsby	LNW	2.07	2.07	2.07	2.00	2.00	2.00	2.00
Hemel Hempstead	LNW	2.12	2.12	2.13	2.13	2.13	2.13	2.13
Henley In Arden	LNW	3.36	3.36	3.36	3.41	3.41	3.41	3.41
Heswall	LNW	2.34	2.34	2.34	2.34	2.34	2.34	2.34
Heyford	LNW	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Heysham	LNW	2.80	2.80	2.48	2.48	2.48	2.21	2.21
High Wycombe	LNW	2.14	2.14	2.14	2.14	2.14	1.99	1.99
Hightown	LNW	2.57	2.57	2.12	2.12	2.12	2.18	2.18
Hill Side	LNW	2.06	2.06	2.06	2.11	2.11	2.11	2.11
Hindley	LNW	2.32	2.32	2.32	2.32	2.26	2.26	2.26
Hollinwood	LNW	2.34	2.34	2.34	2.05	2.05	2.05	2.05
Holmes Chapel	LNW	2.30	2.30	2.15	2.15	2.15	2.15	2.16
Holyhead	LNW	2.13	2.13	2.09	2.09	2.09	2.09	2.09
Hooton	LNW	2.06	2.06	2.06	2.05	2.05	2.05	2.05
Hope	LNW	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Hope	LNW	2.37	2.37	2.37	2.37	1.89	1.89	2.03
Horton in Ribblesdale	LNW	2.56	2.56	2.56	2.56	2.56	2.56	2.56
Hoscar	LNW	2.64	2.64	2.64	2.64	2.64	2.05	2.05
Hough Green	LNW	3.18	3.18	3.18	2.04	2.04	2.04	2.04
How Wood	LNW	1.75	1.75	1.75	1.75	2.46	2.46	2.46
Hoylake	LNW	2.18	2.18	2.18	2.01	2.01	2.01	2.01
Humphrey Park	LNW	2.08	2.08	2.08	2.08	2.08	2.08	2.27
Huncoat	LNW	1.20	1.20	1.20	2.15	2.15	2.15	2.15
Hunts Cross	LNW	2.08	2.08	2.08	2.08	2.08	2.08	1.97
Huyton	LNW	2.15	2.15	2.15	2.15	2.04	2.04	2.04
Hyde Central	LNW	2.30	2.30	2.30	2.30	2.56	2.56	2.56
Hyde North	LNW	3.65	3.65	3.65	3.65	3.65	2.33	2.33
Ince & Elton	LNW	2.57	2.57	2.08	2.08	2.11	2.22	2.22
Ince [Manchester]	LNW	3.65	3.65	2.00	2.00	2.00	2.00	2.00
Irlam	LNW	2.30	2.30	1.96	1.96	1.96	1.96	2.51
Jewellery Quarter	LNW	1.01	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	2.07
Kempston Hardwick	LNW	1.67	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	1.87
Kensal Green	LNW	1.80	1.80	1.80	1.91	1.91	1.91	1.91
Kenton	LNW	2.05	2.05	2.05	2.05	2.05	2.31	2.31
Kents Bank	LNW	2.00	2.00	2.00	2.00	2.00	2.00	2.04
Kidderminster	LNW	1.85	1.85	1.85	1.81	1.81	1.81	1.81
Kidsgrove	LNW	3.11	3.11	3.11	3.11	2.51	2.51	2.51
Kilburn High Road	LNW	1.81	1.81	1.81	2.02	2.02	2.02	2.02
Kings Langley	LNW	2.01	2.01	2.01	2.01	2.11	2.11	2.11
Kings Norton	LNW	2.16	2.16	2.16	2.16	2.16	2.16	2.15
Kings Sutton	LNW	2.18	2.18	2.18	2.18	2.18	2.18	2.43
Kirkby	LNW	2.06	2.06	2.06	2.06	2.07	2.07	2.07

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Kirkby in Furness	LNW	1.88	1.88	2.01	2.01	2.01	2.01	2.31
Kirkby Stephen	LNW	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Kirkdale	LNW	1.18	1.18	1.65	1.65	1.65	1.65	1.65
Kirkham & Wesham	LNW	2.49	2.49	2.49	2.23	2.23	2.23	2.23
Knutsford	LNW	2.38	2.38	2.38	2.38	2.07	2.07	2.07
Lancaster	LNW	2.11	2.11	1.94	1.94	1.94	1.94	1.94
Landywood	LNW	2.02	2.02	2.02	2.16	2.12	2.12	2.12
Langho	LNW	1.68	1.68	1.68	1.68	2.15	2.15	2.15
Langley Green	LNW	1.19	1.19	1.20	1.20	1.20	1.20	1.20
Langwathby	LNW	1.51	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	2.30
Layton	LNW	2.36	2.36	2.36	2.26	2.26	2.26	2.26
Lazonby & Kirkoswald	LNW	1.66	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	2.00
Lea Hall	LNW	1.34	1.34	1.34	1.34	1.34	1.34	2.01
Leamington Spa	LNW	1.81	1.81	1.81	1.81	1.81	1.81	2.26
Leasowe	LNW	2.14	2.14	2.00	2.00	2.00	2.00	2.05
Leighton Buzzard	LNW	2.00	2.00	1.84	1.84	1.84	1.84	1.84
Levenshulme	LNW	2.19	2.19	2.19	2.19	2.19	2.19	2.19
Leyland	LNW	2.29	2.29	2.29	2.29	2.29	2.29	2.04
Lidlington	LNW	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Litchfield City	LNW	2.99	2.05	2.53	2.53	2.53	2.61	2.61
Litchfield Trent Valley (Combined)	LNW	2.91	2.91	2.91	2.61	2.61	2.25	2.25
Little Kimble	LNW	2.75	2.75	2.75	2.75	2.64	2.64	2.64
Little Sutton	LNW	2.30	2.30	2.06	2.06	2.06	2.06	2.06
Littleborough	LNW	2.13	2.13	2.06	2.06	2.06	2.06	2.03
Liverpool Central	LNW	2.31	2.31	2.31	2.31	2.31	1.97	1.97
Liverpool James Street	LNW	2.30	2.30	2.30	2.30	2.30	2.30	2.21
Liverpool Lime Street	LNW	2.55	2.55	2.55	2.55	2.42	2.42	2.42
Liverpool Lime Street (Low Level)	LNW	0.00		2.90	2.90	2.90	2.04	2.04
Liverpool Sandhills	LNW	2.21	2.21	2.21	2.21	1.96	1.96	1.96
Liverpool South Parkway (New)	LNW							
Llandudno	LNW	2.27	2.27	2.09	2.09	2.09	2.09	2.15
Llandudno Junction	LNW	2.23	2.23	2.23	2.23	2.04	2.04	2.04
Llanfairfechan	LNW	2.19	2.19	2.19	2.19	2.04	2.04	2.04
Llanfairpwll	LNW	2.22	2.22	2.22	2.22	2.22	2.22	2.45
Llanwrst	LNW	2.11	2.11	2.11	2.11	2.00	2.00	2.00
London Euston	LNW	2.40	2.40	2.64	2.29	2.29	2.29	2.29
London Marylebone	LNW	2.03	2.03	2.03	2.03	2.03	2.53	2.53
Long Buckby	LNW	2.13	2.13	2.13	2.16	2.16	2.16	2.16
Long Preston	LNW	2.33	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	1.83
Longport	LNW	3.23	3.23	3.23	3.23	2.57	2.57	2.57
Lostock	LNW	2.10	2.10	2.10	2.32	2.32	2.32	2.32
Lostock Gralam	LNW	3.68	3.68	2.00	3.68	3.68	2.33	2.33
Lostock Hall	LNW	2.39	2.39	2.39	2.24	2.24	2.24	2.24
Lye	LNW	1.82	1.82	1.82	1.82	2.48	2.48	2.48
Lytham	LNW	2.47	2.47	2.47	2.47	2.47	2.47	2.47

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Macclesfield	LNW	2.29	2.29	2.29	2.29	2.29	2.29	2.79
Maghull Station	LNW	1.87	1.87	1.79	1.79	1.79	1.79	1.99
Manchester Airport	LNW	1.61	1.61	1.61	1.61	2.03	2.03	2.03
Manchester Oxford Road	LNW	2.21	2.21	2.01	2.01	2.01	2.01	2.01
Manchester Piccadilly	LNW	0.00	2.00	1.50	2.80	1.69	1.69	1.69
Manchester United Halt	LNW	2.17	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	1.97
Manor Road	LNW	2.07	2.07	2.07	2.08	2.08	2.08	2.08
Marple	LNW	2.07	2.07	2.07	2.07	2.26	2.26	2.26
Marsden	LNW	2.36	2.36	2.36	1.95	1.95	1.95	1.95
Marston Green	LNW	1.39	1.39	1.39	1.39	1.39	1.39	1.39
Maryport	LNW	1.88	1.88	2.00	2.00	2.00	2.00	2.00
Mauldeth Road	LNW	3.04	3.04	3.04	3.04	3.04	2.98	2.98
Meols	LNW	2.18	2.18	2.18	2.36	2.36	2.36	2.36
Meols Cop	LNW	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Middlewood	LNW	2.75	2.75	2.75	2.75	2.75	2.75	2.75
Mill Hill [Lancashire]	LNW	3.03	3.03	3.03	2.03	2.03	2.03	2.03
Millbrook	LNW	1.00	1.00	1.00	1.10	1.10	2.34	2.34
Millom	LNW	1.88	1.88	2.00	2.00	2.00	2.00	2.15
Mills Hill	LNW	2.46	2.46	2.46	2.10	2.10	2.10	2.10
Milnrow	LNW	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Milton Keynes Central	LNW	2.00	2.00	1.93	1.93	1.93	1.93	1.93
Mobberley	LNW	2.70	2.70	2.70	2.35	2.35	2.35	2.35
Monks Risborough	LNW	2.40	2.40	2.00	2.00	2.00	2.00	2.00
Moorfields	LNW	2.48	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	2.46
Morecambe	LNW	2.05	2.05	2.05	2.05	2.05	2.05	2.02
Moreton [Merseyside]	LNW	2.13	2.13	2.11	2.11	2.11	2.11	2.11
Moses Gate	LNW	2.70	2.70	2.70	2.00	2.00	2.00	2.00
Moss Side (Lanc)	LNW	2.58	2.58	2.58	2.42	2.42	2.42	2.42
Mossley	LNW	2.34	2.34	2.34	2.05	2.05	2.05	2.05
Mossley Hill	LNW	2.25	2.25	2.25	2.01	2.01	2.01	2.01
Moston	LNW	2.66	2.66	2.66	2.23	2.23	2.23	2.23
Mouldsworth	LNW	2.30	2.30	2.30	2.49	2.49	2.49	2.49
Navigation Road	LNW	2.05	2.05	2.05	2.05	2.05	2.05	2.12
Nelson	LNW	3.10	3.10	3.10	3.10	3.10	2.63	2.63
Neston	LNW	1.69	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	2.45
New Brighton	LNW	2.25	2.25	2.25	2.25	2.25	2.25	2.41
New Hey	LNW	2.00	2.00	2.00	2.00	2.00	2.00	2.50
New Lane	LNW	2.64	2.64	2.64	2.28	2.28	2.28	2.28
New Mills Central	LNW	2.15	2.15	2.15	2.08	2.08	2.08	2.08
New Mills Newtown	LNW	2.74	2.74	2.74	2.74	2.74	2.05	2.27
Newton For Hyde	LNW	2.25	2.25	2.33	2.33	2.33	2.33	2.33
Newton-le-Willows	LNW	2.40	2.40	2.27	2.27	2.27	2.27	2.27
North Llanwrst	LNW	2.76	2.76	2.76	2.76	2.76	2.10	2.10
North Wembley	LNW	2.07	2.07	2.07	2.16	2.16	2.16	2.16
Northampton	LNW	2.00	2.00	2.00	1.95	1.95	1.95	1.95

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Northfield	LNW	1.28	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	2.00
Northwich	LNW	2.41	2.41	2.41	2.41	2.21	2.21	2.44
Norton Bridge	LNW	3.18	3.18	3.18	3.18	2.51	2.51	2.51
Nuneaton Station	LNW	1.79	1.79	1.66	1.66	1.66	1.66	2.14
Oakengates	LNW	1.81	1.81	1.91	1.91	1.91	1.91	2.25
Old Hill	LNW	1.84	1.84	2.07	2.07	2.15	2.15	2.15
Old Roan	LNW	2.16	2.16	2.16	1.00	1.00	1.00	1.00
Oldham Mumps	LNW	2.58	2.58	2.58	2.58	2.58	2.22	2.22
Oldham Werneth	LNW	2.74	2.74	2.74	2.74	2.74	2.00	2.00
Olton	LNW	1.36	1.36	1.36	1.36	1.36	1.36	2.00
Ormskirk	LNW	2.04	2.04	2.10	2.10	2.10	2.10	2.25
Orrell	LNW	2.47	2.47	2.47	2.47	2.18	2.18	2.18
Orrell Park	LNW	2.13	2.13	2.07	2.07	2.07	2.07	2.07
Overpool	LNW	2.11	2.11	2.11	2.00	2.00	2.00	2.00
Oxenholme	LNW	2.69	2.69	2.69	2.69	2.17	2.17	2.17
Padgate	LNW	2.18	2.18	2.18	2.07	2.07	2.07	2.07
Parbold Station	LNW	2.27	2.27	2.51	2.51	2.51	2.51	1.93
Park Street	LNW	1.73	1.73	1.73	2.07	2.07	2.07	2.07
Parton	LNW	2.22	2.22	2.22	2.22	2.73	2.73	2.73
Patricroft	LNW	2.50	2.50	2.50	2.50	2.12	2.12	2.12
Pemberton	LNW	2.30	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	2.14
Penmaenmawr	LNW	2.24	2.24	2.26	2.26	2.26	2.26	2.29
Penrith	LNW	2.67	2.67	2.67	2.39	2.39	2.39	2.39
Penyfford	LNW	1.96	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	2.05
Pleasington	LNW	2.60	2.60	2.60	2.04	2.04	2.04	2.04
Plumley	LNW	2.24	2.24	2.24	2.41	2.41	2.41	2.41
Polesworth	LNW	2.65	2.65	2.79	2.79	2.79	3.59	3.59
Pont-y-Pant	LNW	2.22	2.22	2.24	2.24	2.24	2.24	2.24
Port Sunlight	LNW	2.14	2.14	2.14	2.14	2.14	2.14	2.13
Poulton-Le-Fylde	LNW	2.63	2.63	2.32	2.32	2.32	2.00	2.00
Poynton Passenger Station	LNW	2.25	2.25	2.24	2.24	2.24	2.24	2.00
Prescot	LNW	3.13	3.13	3.13	3.13	3.13	2.14	2.38
Prestatyn	LNW	2.96	2.96	2.96	2.96	2.96	2.02	2.02
Prestbury	LNW	2.35	2.35	2.29	2.29	2.29	2.29	2.29
Preston	LNW	2.43	2.43	2.43	2.43	2.44	2.44	2.44
Princes Risborough	LNW	1.77	1.77	1.77	1.77	1.77	2.01	2.01
Queens Park	LNW	1.80	1.80	1.80	1.80	2.20	2.20	2.20
Rainford	LNW	2.79	2.79	2.58	2.58	2.58	2.58	2.58
Rainhill	LNW	2.27	2.27	2.27	2.27	2.27	2.27	2.10
Ramgrave & Wiltshire	LNW	1.43	1.43	1.43	2.05	2.05	2.05	2.05
Ravenglass for Eskdale	LNW	2.25	2.25	2.46	2.46	2.46	2.46	2.46
Reddish North Station	LNW	2.11	2.11	2.18	2.18	2.18	2.18	2.12
Reddish South	LNW	3.88	3.88	3.88	3.88	3.88	3.16	3.16
Redditch	LNW	1.66	1.66	1.66	1.66	1.66	1.54	1.54
Rhosneigr	LNW	2.34	2.34	2.34	2.34	2.34	2.34	2.34

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Rhyl	LNW	2.19	2.19	1.92	1.92	1.92	1.92	2.14
Ribblehead	LNW	2.00	2.00	2.00	2.00	2.00	2.00	2.08
Rice Lane Station	LNW	2.14	2.14	2.04	2.04	2.04	2.04	2.08
Ridgmont	LNW	1.99	1.99	1.99	1.99	1.99	2.38	2.38
Rishton	LNW	2.99	2.99	2.99	2.38	2.38	2.38	2.38
Roby	LNW	2.28	2.28	2.28	2.03	2.03	2.03	2.03
Rochdale	LNW	2.26	2.26	2.26	2.26	2.26	2.04	2.04
Rock Ferry	LNW	2.24	2.24	2.24	2.24	2.07	2.07	2.07
Roman Bridge	LNW	2.27	2.27	2.21	2.21	2.21	2.21	2.40
Romiley	LNW	2.43	2.43	2.43	2.43	2.16	2.16	2.16
Roose	LNW	2.99	2.99	2.99	2.99	2.99	2.28	2.28
Rose Grove	LNW	2.40	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	2.00
Rowley Regis	LNW	1.57	1.57	2.28	2.28	2.24	2.24	2.24
Rufford	LNW	2.09	2.09	2.09	2.17	2.17	2.17	2.17
Rugby	LNW	2.83	2.83	2.83	2.83	2.83	2.41	2.41
Rugeley	LNW	1.06	1.06	1.06	1.27	1.27	1.27	1.27
Rugeley Trent Valley	LNW	1.99	1.99	1.99	1.99	1.99	2.06	2.06
Runcorn	LNW	2.06	2.06	2.06	2.06	2.06	2.06	1.92
Runcorn East	LNW	2.33	2.33	2.13	2.13	2.13	2.13	2.09
Ryder Brow	LNW	2.75	2.75	2.75	2.75	2.75	1.91	1.91
Salford Central	LNW	0.00		2.09	2.09	2.09	2.09	2.09
Salford Cresent	LNW	1.91	1.91	2.00	2.00	2.00	2.00	1.88
Salwick	LNW	2.70	2.70	2.70	2.38	2.38	2.38	2.38
Sandbach	LNW	2.92	2.92	2.92	2.92	2.36	2.36	2.36
Sandwell and Dudley	LNW	1.05	1.05	1.05	1.05	1.05	1.05	2.02
Sankey	LNW	2.21	2.21	2.21	2.21	2.66	2.66	2.66
Saunderton	LNW	2.29	2.29	2.29	2.29	2.29	2.29	2.29
Seaforth & Litherland	LNW	2.62	2.62	1.84	1.84	1.84	2.05	2.05
Seascale	LNW	3.30	3.30	2.03	2.03	2.03	2.22	2.22
Seer Green &Jordans	LNW	2.35	2.35	2.35	2.35	2.35	2.13	2.13
Sellafield	LNW	3.08	3.08	1.95	1.95	1.95	2.01	2.01
Selly Oak	LNW	1.42	1.42	1.42	1.42	1.42	1.42	1.42
Settle	LNW	2.23	2.23	2.01	2.01	2.01	2.01	2.01
Shaw & Crompton	LNW	2.23	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	1.92
Shifnal	LNW	2.81	2.81	2.81	2.30	2.03	2.03	2.03
Shirley	LNW	2.08	2.08	2.08	2.08	2.08	2.27	2.27
Shotton [High Level]	LNW	2.30	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	2.57	2.57
Silecroft	LNW	2.03	2.03	2.03	2.03	1.98	1.98	1.98
Silverdale	LNW	3.01	3.01	3.01	3.01	3.01	3.01	3.01
Small Heath	LNW	2.28	2.28	2.28	2.28	2.48	2.48	2.48
Smethwick Galton Bridge	LNW	1.15	1.15	1.15	1.11	1.11	1.11	1.11
Smethwick Rolfe Street	LNW	1.15	1.15	1.15	1.15	1.15	1.15	2.20
Smithy Bridge	LNW	2.68	2.68	2.68	2.68	2.68	2.68	2.68
Solihull	LNW	2.01	2.01	2.02	2.02	2.02	2.02	1.98
South Hampstead	LNW	1.73	1.73	1.73	1.93	1.93	1.93	1.93

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
South Kenton	LNW	1.79	1.79	1.79	1.79	2.42	2.42	2.42
South Ruislip	LNW	2.00	2.00	2.00	2.00	2.00	2.19	2.19
Southport	LNW	2.16	2.16	2.16	2.16	2.19	2.19	2.19
Spital	LNW	2.06	2.06	2.06	2.07	2.07	2.07	2.07
Spring Road	LNW	2.58	2.58	2.58	2.58	2.58	2.27	2.27
Squires Gate	LNW	2.50	2.50	2.50	1.93	1.93	1.93	1.93
St Albans Abbey	LNW	1.96	1.96	1.96	2.30	2.30	2.30	2.30
St Annes On Sea	LNW	2.04	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	2.59
St Helens Central	LNW	2.21	2.21	2.14	2.14	2.14	2.14	2.14
St Helens Junction	LNW	2.05	2.05	2.12	2.12	2.12	2.12	2.12
St Michaels	LNW	2.41	2.41	2.12	2.12	2.12	2.12	2.12
Stafford	LNW	2.23	2.23	2.23	2.23	2.23	2.23	2.16
Stalybridge	LNW	2.45	2.45	2.45	2.45	2.45	2.45	2.45
Stanlow And Thornton	LNW	2.44	2.44	2.44	2.44	2.44	2.44	2.44
Stavely	LNW	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Stechford	LNW	2.18	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	1.84
Stockport	LNW	2.12	2.12	2.12	2.12	2.09	2.09	2.09
Stoke Manderville	LNW	2.11	2.11	1.77	1.77	1.77	1.77	1.77
Stoke on Trent	LNW	1.96	1.96	1.96	1.96	1.96	1.96	2.78
Stone Station	LNW	1.56	1.56	1.56	1.56	1.56	1.56	2.35
Stonebridge Park	LNW	1.53	1.53	1.53	1.53	1.53	1.53	2.05
Stourbridge Junction	LNW	1.67	1.67	1.67	1.86	1.86	1.86	1.86
Stourbridge Town	LNW	1.22	1.22	1.22	1.22	1.99	1.99	1.99
Stratford Upon Avon	LNW	2.83	2.83	2.57	2.57	2.57	2.04	2.04
Strines	LNW	3.00	3.00	2.93	2.11	2.11	2.11	2.11
Styal	LNW	2.89	2.89	2.89	2.89	2.89	2.89	2.89
Sudbury & Harrow Rd	LNW	2.31	2.31	2.31	2.31	2.43	2.43	2.43
Sudbury Hill Harrow	LNW	2.12	2.12	2.12	2.12	2.12	2.10	2.10
Sutton Coldfield	LNW	2.04	2.04	2.04	2.04	2.10	2.10	2.10
Swinton	LNW	2.29	2.29	2.29	2.29	2.24	2.24	2.24
Tal-Y-Cafn	LNW	2.79	2.79	2.02	2.02	2.02	2.14	2.14
Tamebridge Parkway	LNW	1.05	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	2.25
Telford Central	LNW	1.79	1.79	1.79	1.87	1.87	1.87	2.02
Thatto Heath	LNW	1.90	1.90	2.08	2.08	2.08	2.08	2.12
The Hawthorns	LNW	1.01	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	2.87
Tile Hill	LNW	1.16	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	2.21
Todmorden	LNW	2.19	2.19	2.19	2.19	2.19	2.19	2.19
Town Green	LNW	2.21	2.21	2.21	2.06	2.06	2.06	2.06
Trafford Park	LNW	1.70	1.70	2.11	2.11	2.11	2.11	2.11
Tring	LNW	2.07	2.07	2.12	2.12	2.12	2.12	2.12
Ty Croes	LNW	2.20	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	1.40
Ulverston	LNW	2.97	2.97	2.97	2.97	2.97	2.06	2.06

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
University	LNW	1.65	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	2.48
Upton	LNW	2.55	2.55	2.55	2.55	2.55	2.65	2.65
Urmston	LNW	2.06	2.06	1.92	1.92	1.92	1.92	1.92
Valley	LNW	2.20	2.20	2.17	2.17	2.17	2.17	2.17
Walkden	LNW	2.82	2.82	2.82	2.82	2.82	2.04	2.04
Wallasey Grove Road	LNW	2.99	2.99	2.99	2.30	2.30	2.30	2.30
Wallasey Village	LNW	2.26	2.26	2.26	2.14	2.14	2.14	2.14
Walsall	LNW	1.48	1.48	1.47	1.47	1.47	1.47	1.47
Walsden	LNW	2.35	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	2.01
Warrington Bank Quay	LNW	1.90	1.90	1.90	1.90	2.08	2.08	2.08
Warrington Central	LNW	2.08	2.08	2.08	2.08	2.10	2.10	2.10
Warwick	LNW	1.64	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	2.81
Waterloo [Merseyside]	LNW	2.24	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	2.04
Watford Junction	LNW	2.11	2.11	1.64	1.64	1.64	1.64	1.64
Watford North	LNW	2.00	2.00	1.97	1.97	1.97	1.97	1.97
Wavertree Technology Park	LNW	0.00		1.00	1.00	1.00	1.00	1.00
Wedgwood	LNW	3.25	3.25	3.25	3.25	3.25	1.94	1.94
Wellington	LNW	1.98	1.98	1.98	1.98	2.16	2.16	2.16
Wembley Central	LNW	2.17	2.17	2.04	2.04	2.04	2.04	2.04
Wembley Stadium	LNW	0.00		2.60	2.60	2.60	2.00	2.00
Wendover	LNW	2.00	2.00	2.00	1.91	1.91	1.91	1.91
Wennington	LNW	1.92	1.92	1.92	1.92	1.92	1.92	2.08
West Allerton	LNW	2.36	2.36	2.36	2.05	2.05	2.05	2.05
West Houghton	LNW	2.88	2.88	2.88	2.88	2.12	2.12	2.12
West Kirby	LNW	1.95	1.95	1.95	1.95	1.95	1.95	2.03
West Ruislip	LNW	2.49	2.49	2.49	2.49	2.49	1.94	1.94
Whaley Bridge	LNW	2.03	2.03	2.03	2.03	2.08	2.08	2.08
Whalley	LNW	1.79	1.79	1.79	2.10	2.10	2.10	2.10
Whiston	LNW	3.04	3.04	3.04	2.06	2.06	2.06	2.06
Whitehaven	LNW	2.11	2.11	2.11	2.11	2.12	2.12	2.12
Whitlocks End	LNW	2.75	2.75	2.75	2.75	2.44	2.44	2.44
Widnes	LNW	2.03	2.03	2.03	2.02	2.02	2.02	2.02
Widney Manor	LNW	1.15	1.15	1.15	1.15	1.15	2.00	2.06
Wigan North Western	LNW	2.52	2.52	2.52	2.52	2.17	2.17	2.17
Wigan Wallgate	LNW	2.57	2.57	2.57	2.57	1.98	1.98	1.98
Wigton	LNW	2.18	2.18	2.00	2.00	2.00	2.00	2.00
Willesden Junction	LNW	2.06	2.06	2.06	1.90	1.90	1.90	1.90
Wilmcote	LNW	1.98	1.98	1.98	1.98	2.61	2.61	2.61
Wilmslow	LNW	3.03	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	2.41
Windermere	LNW	1.96	1.96	2.04	2.04	2.04	2.04	2.04
Winsford	LNW	2.15	2.15	2.06	2.06	2.06	2.06	2.06
Witton	LNW	1.92	1.92	1.92	1.92	1.92	2.25	2.25
Woburn Sands	LNW	1.94	1.94	2.03	2.03	2.03	2.41	2.41

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Wolverhampton	LNW	2.15	2.15	2.15	2.15	2.15	2.15	2.10
Wolverton	LNW	2.00	2.00	2.51	2.51	2.51	2.30	2.30
Wood End	LNW	2.82	2.82	2.82	2.58	2.32	2.32	2.32
Woodley	LNW	2.15	2.15	2.38	2.38	2.38	2.38	2.38
Woodsmoor	LNW	0.00				0.00	2.17	2.17
Wootton Wawen	LNW	2.10	2.10	2.10	2.48	2.48	2.48	2.48
Workington	LNW	2.44	2.44	2.44	2.44	2.37	2.37	2.37
Wrexham	LNW	2.78	2.78	2.78	2.78	2.78	2.03	2.03
Wrexham Central	LNW	1.15	1.15	1.15	1.06	1.33	1.33	1.33
Wylde Green	LNW	1.84	1.84	1.84	1.84	2.14	2.14	2.14
Wythall	LNW	2.04	2.04	2.04	2.25	2.25	2.25	2.25
Yardley Wood	LNW	2.21	2.21	2.21	2.21	2.07	2.07	2.07
Aberdeen Station	SCT	2.51	2.51	2.6	2.55	2.55	2.55	2.16
Aberdour	SCT	2.12	2.12	2.1	2.12	1.11	1.11	1.11
Achanalt	SCT	2.08	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	2.03
Achnashellach	SCT	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Addiewell	SCT	2.44	2.44	2.7	2.68	2.68	2.68	2.68
Airbles	SCT	1.94	2.63	2.14	2.14	2.14	2.14	2.14
Airdrie	SCT	2.26	2.26	2.32	2.32	2.32	2.32	2.32
Alexandra Parade	SCT	2.93	2.93	2.72	2.31	2.31	2.31	2.31
Alexandria	SCT	2.15	2.15	2.03	2.10	2.10	2.10	2.10
Alness	SCT	2.59	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	2.42
Annan	SCT	2.00	2.00	2.22	2.15	2.15	2.15	2.15
Anniesland	SCT	2.21	2.93	2.18	2.14	2.14	2.14	2.14
Arbroath	SCT	2.23	2.23	2.3	2.34	1.42	1.42	1.42
Ardgay	SCT	2.52	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	1.22
Ardrossan Harbour	SCT	2.17	2.17	2.17	2.14	2.14	2.14	2.14
Ardrossan South Beach	SCT	2.21	2.21	2.21	2.14	2.14	2.14	2.14
Ardrossan Town	SCT	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Arisaig	SCT	2.32	2.32	2.32	2.32	2.32	2.85	2.85
Arrochar & Tarbet	SCT	3.00	3.00	2.14	2.14	1.20	1.20	1.20
Ashfield	SCT	2.17	2.17	2.06	2.06	2.00	2.00	2.00
Attadale	SCT	2.00	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	2.12
Aviemore	SCT	1.47	1.47	1.47	1.47	1.47	1.67	1.67
Ayr Station	SCT	2.38	2.38	2.38	2.40	2.40	2.40	2.27
Baillieston	SCT	2.04	2.04	2.10	2.10	2.10	2.10	2.10
Balloch	SCT	2.07	2.07	2.20	2.22	2.22	2.22	2.22
Balmossie Halt	SCT	2.43	2.43	2.8	2.81	1.90	1.90	1.90
Banavie	SCT	2.13	2.13	2.13	2.13	2.13	1.86	1.86
Barassie	SCT	2.17	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	2.17
Barnhill	SCT	2.21	2.21	2.24	2.24	2.24	2.24	2.24
Barrhead	SCT	3.00	3.00	2.30	2.30	2.30	2.30	2.30
Barrhill Passenger Station	SCT	1.93	1.93	1.93	1.84	1.84	1.84	2.01

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Barry Links	SCT	2.76	2.76	2.5	2.49	1.33	1.33	1.33
Bathgate	SCT	2.07	2.07	2.07	2.07	1.90	1.90	1.90
Bearsden	SCT	2.21	2.21	2.18	2.17	2.17	2.17	2.17
Beasdale	SCT	2.10	2.10	2.10	2.10	2.10	2.05	2.05
Beauly	SCT	0.00		1.00	1.00	1.00	1.33	1.33
Bellgrove	SCT	3.00	3.00	3.00	2.20	2.20	2.20	2.20
Bellshill Station	SCT	3.01	3.01	2.48	2.48	2.48	2.48	2.14
Bishopbriggs	SCT	1.47	1.47	1.6	1.62	1.19	1.19	1.92
Bishopton	SCT	2.00	2.00	2.00	2.00	2.00	2.05	2.05
Blair Atholl	SCT	2.05	2.05	2.05	2.05	2.05	1.97	1.97
Blairhill	SCT	2.19	2.19	2.19	2.17	2.17	2.17	2.17
Blantyre Station	SCT	1.91	2.72	2.14	2.14	2.14	2.14	2.14
Bogston	SCT	2.69	2.69	2.69	2.69	2.69	2.04	2.04
Bowling	SCT	2.90	2.68	2.16	2.35	2.35	2.35	2.35
Branchton	SCT	2.45	2.45	2.45	2.45	2.45	2.16	2.16
Breich	SCT	2.50	2.50	2.6	2.60	2.60	2.60	2.60
Bridge Of Allan	SCT	2.69	2.69	2.69	2.69	2.69	2.00	2.00
Bridge Of Orchy	SCT	2.72	2.72	2.72	2.72	1.12	1.12	1.12
Brora	SCT	2.29	2.29	2.32	2.32	2.32	2.32	2.32
Broughty Ferry	SCT	1.54	1.54	2.1	2.10	1.37	1.37	1.37
Brunstane	SCT	0.00		1.00	1.00	1.00	1.00	1.00
Burnside	SCT	2.19	2.19	2.17	2.17	2.17	2.13	2.13
Burntisland	SCT	2.21	2.21	2.2	2.22	1.41	1.41	1.41
Busby	SCT	2.38	2.38	2.02	2.02	1.90	1.90	1.90
Cambuslang Station	SCT	2.25	2.25	2.24	2.24	2.24	2.24	2.36
Camelon	SCT	2.34	2.26	2.2	2.19	2.19	1.89	1.89
Cardenden	SCT	2.22	2.22	2.2	2.24	1.33	1.33	1.33
Cardonald	SCT	2.13	2.13	2.13	2.18	2.18	2.18	2.18
Cardross	SCT	2.23	2.72	2.07	2.07	2.07	2.07	2.07
Carfin	SCT	1.83	1.83	1.83	1.83	1.83	2.10	2.10
Carluke	SCT	1.80	2.80	2.08	2.08	2.08	2.08	2.08
Carmyle	SCT	2.16	2.16	2.13	2.13	2.13	2.13	2.13
Carnoustie	SCT	2.22	2.22	2.6	2.57	1.44	1.44	1.44
Carnoustie Golf Street	SCT	3.02	3.02	1.6	1.63	1.22	1.22	1.22
Carntyne	SCT	2.39	2.39	2.20	2.20	2.20	2.20	2.20
Carrbridge	SCT	2.23	2.23	2.23	2.23	2.23	2.42	2.42
Carstairs Station	SCT	1.22	1.22	1.29	1.29	1.29	1.29	1.84
Cartsdyke	SCT	2.00	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	2.04
Charing Cross	SCT	1.67	1.67	1.67	2.00	2.00	2.00	2.00
Clarkston	SCT	2.23	2.23	2.19	2.19	2.08	2.08	2.08
Cleland	SCT	2.28	2.28	2.28	2.28	2.28	2.20	2.20
Clydebank Central	SCT	2.11	2.11	2.15	2.20	2.20	2.20	2.20
Coatbridge Central	SCT	2.16	2.16	2.16	2.16	2.16	2.18	2.18
Coatbridge Sunnyside	SCT	1.80	2.89	2.24	2.33	2.33	2.33	2.33
Coatdyke	SCT	2.75	2.99	2.55	2.25	2.25	2.25	2.25
Connel Ferry	SCT	2.43	2.43	2.43	2.43	1.18	1.18	1.18
Corkerhill	SCT	2.32	2.30	2.25	2.25	1.50	1.50	1.50

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Corpach	SCT	2.07	2.07	2.07	2.07	2.07	2.00	2.00
Corrour	SCT	2.95	2.95	2.95	2.95	1.50	1.50	1.50
Cowdenbeath	SCT	2.12	2.12	2.2	2.21	1.67	1.67	1.67
Craigendoran	SCT	2.04	2.04	2.00	2.00	1.81	1.81	1.81
Crianlarich	SCT	2.11	2.11	1.67	1.67	1.70	1.70	1.70
Croftfoot	SCT	2.19	2.19	2.18	2.18	2.18	2.07	2.07
Crookston	SCT	2.00	2.00	2.25	2.25	1.13	1.13	1.13
Crosshill	SCT	2.15	2.15	2.07	2.07	2.07	2.14	2.14
Crossmyloof	SCT	2.39	2.39	2.39	2.39	2.39	2.04	2.04
Croy Station	SCT	1.35	1.35	1.4	1.40	1.35	1.35	1.78
Culrain	SCT	2.26	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	1.99
Cupar	SCT	2.05	2.05	2.05	2.05	1.53	1.53	1.53
Curriehill	SCT	2.01	2.01	2.0	2.02	2.02	2.02	2.02
Dalgety Bay Halt	SCT	1.01	1.01	1.2	1.18	1.07	1.07	1.07
Dalmally	SCT	2.42	2.42	2.42	2.42	1.13	1.13	1.13
Dalmarnock Station	SCT	2.16	2.16	2.25	2.25	2.25	2.25	2.22
Dalmeny	SCT	2.34	2.34	2.4	2.37	1.48	1.48	1.48
Dalmuir Park	SCT	2.23	2.23	2.10	2.14	2.14	2.14	2.14
Dalreoch	SCT	2.10	2.10	2.14	2.14	1.96	1.96	1.96
Dalry	SCT	2.10	2.10	2.10	2.07	2.07	2.07	2.07
Dalwhinnie	SCT	2.36	2.36	2.36	2.36	2.36	2.09	2.09
Dingwall	SCT	2.10	2.10	2.10	2.10	2.10	2.22	2.22
Drem	SCT	2.11	2.11	2.2	2.20	1.36	1.36	1.36
Drumchapel	SCT	2.18	2.18	2.06	2.06	2.06	2.06	2.06
Drumfrochar	SCT	1.20	1.20	1.20	1.20	1.20	1.89	1.89
Drumgelloch	SCT	2.26	2.26	2.35	2.34	2.34	2.34	2.34
Drumry	SCT	2.20	2.20	2.12	2.05	2.05	2.05	2.05
Duirinish	SCT	2.30	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	2.17
Dumbarton Central Station	SCT	2.37	2.37	2.53	2.58	2.58	2.58	2.53
Dumbarton East	SCT	3.37	2.66	2.01	2.22	2.22	2.22	2.22
Dumbreck	SCT	2.06	2.06	2.01	2.01	1.30	1.30	1.30
Dumfries	SCT	2.00	2.00	2.18	2.20	2.20	2.20	2.20
Dunbar Station	SCT	1.86	1.86	1.86	1.86	1.04	1.04	1.93
Dunblane	SCT	2.33	2.33	2.3	2.34	2.34	2.26	2.26
Duncraig	SCT	2.19	2.19	2.19	2.19	2.19	2.19	2.19
Dundee Tay Bridge	SCT	2.46	2.46	2.5	2.47	2.47	2.28	2.28
Dunfermline	SCT	2.08	2.08	2.1	2.12	1.46	1.46	1.46
Dunfermline Queen Margaret	SCT	1.13	1.13	1.1	1.14	1.00	1.00	1.00
Dunkeld & Birnam	SCT	2.41	2.41	2.3	2.31	2.31	2.30	2.30
Dunlop	SCT	2.18	2.18	2.18	2.03	2.03	2.03	2.03
Dunrobin	SCT	2.47	2.47	2.47	2.47	2.47	2.47	2.47
Dyce	SCT	1.95	1.95	1.8	1.83	1.83	1.83	1.83
East Kilbride	SCT	2.15	2.15	2.18	2.18	1.94	1.94	1.94
Easterhouse	SCT	2.89	2.82	2.30	2.22	2.22	2.22	2.22
Edinburgh Haymarket	SCT	2.31	2.31	2.5	2.46	2.46	2.46	2.46
Edinburgh Waverley	SCT	2.20	2.20	2.09	2.05	2.05	2.05	2.05

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Elgin	SCT	2.08	2.08	2.1	2.08	2.08	1.94	1.94
Fairlie	SCT	2.16	2.16	2.16	2.05	2.05	2.05	2.05
Falkirk Grahamston	SCT	2.80	2.77	2.86	2.86	2.86	2.18	2.18
Falkirk High	SCT	2.18	2.18	2.2	2.21	1.64	1.64	1.64
Falls Of Cruachan	SCT	2.46	2.46	2.5	2.46	1.08	1.08	1.08
Fauldhouse	SCT	2.52	2.52	2.49	2.49	2.49	1.88	1.88
Fearn	SCT	2.33	2.33	2.3	2.33	2.33	2.33	2.33
Finnieston Exhibition Centre	SCT	2.16	2.16	2.18	2.18	2.18	2.18	2.18
Forres	SCT	2.27	2.27	2.49	2.49	2.49	2.49	2.49
Forsinard	SCT	2.76	2.76	2.8	2.76	2.76	2.76	2.76
Fort Matilda	SCT	2.28	2.28	2.28	2.28	2.28	2.17	2.17
Fort William	SCT	2.25	2.25	2.25	2.25	1.99	1.99	1.99
Garelochhead	SCT	2.42	2.42	2.42	2.42	1.80	1.80	1.80
Garrowhill	SCT	2.98	2.98	2.98	2.18	2.18	2.18	2.18
Garscadden	SCT	2.16	2.16	2.17	2.22	2.22	2.22	2.22
Gartcosh	SCT							0.00
Garve	SCT	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Georgemas Junction	SCT	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Giffnock	SCT	1.79	2.74	2.16	2.16	2.17	2.17	2.17
Gilshochill	SCT	2.22	2.22	2.06	2.06	2.00	2.00	2.00
Girvan Station	SCT	2.29	2.29	2.29	2.27	2.27	2.27	2.28
Glasgow Anderston Station	SCT	2.18	2.18	2.19	2.19	2.19	2.19	2.07
Glasgow Argyle St Station	SCT	2.29	2.29	2.23	2.23	2.23	2.23	2.03
Glasgow Bridgeton Station	SCT	2.17	2.17	2.18	2.18	2.18	2.18	2.15
Glasgow Central	SCT	2.83	2.83	2.12	2.12	2.12	2.12	2.12
Glasgow Central Station low level	SCT	2.25	2.25	2.29	2.29	2.29	2.29	2.08
Glasgow Exhibition Centre Station	SCT							2.22
Gleneagles	SCT	2.84	2.84	2.84	2.84	2.84	2.59	2.59
Glenfinnan	SCT	2.08	2.08	2.08	2.08	2.08	2.25	2.25
Glengarnock	SCT	2.10	2.10	2.10	2.13	2.13	2.13	2.13
Glenrothes & Thornton	SCT	2.30	2.30	2.44	2.44	1.26	1.26	1.26
Golspie	SCT	2.18	2.18	2.2	2.18	2.18	2.18	2.18
Gourock	SCT	2.60	2.60	2.60	2.60	2.60	2.50	2.50
Greenfaulds	SCT	2.07	2.07	2.07	2.07	2.07	2.00	2.00
Greenock Central	SCT	1.37	2.29	1.96	1.96	1.96	1.94	1.94
Greenock West	SCT	1.59	1.59	1.59	1.59	1.59	1.92	1.92
Gretna Green	SCT	2.26	2.26	2.26	2.33	2.33	2.33	2.33
Hairmyres	SCT	2.18	2.18	2.18	2.18	1.68	1.68	1.68
Hamilton Central Station	SCT	2.11	2.81	2.21	2.21	2.21	2.21	2.29
Hamilton West Station	SCT	2.35	2.35	2.16	2.16	2.16	2.16	2.30
Hartwood	SCT	2.19	2.19	2.19	2.19	2.19	2.15	2.15
Hawkhead	SCT	2.22	2.22	2.19	2.19	1.49	1.49	1.49
Helensburgh Central	SCT	2.22	2.22	2.19	2.15	2.15	2.15	2.15
Helensburgh Upper	SCT	2.57	2.57	2.57	2.36	2.36	2.36	2.36
Helmsdale	SCT	2.39	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	2.29
Hillfoot	SCT	2.18	2.18	2.33	2.27	2.27	2.27	2.27
Hillington East	SCT	2.16	2.16	2.16	2.08	2.08	2.08	2.08

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Hillington West	SCT	2.33	2.33	2.33	2.37	2.37	2.37	2.37
Holytown	SCT	2.42	2.42	2.42	2.42	2.42	2.20	2.20
Howwood	SCT	2.00	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	1.16
Hyndland	SCT	3.04	3.04	3.04	2.09	2.09	2.09	2.09
Ibm Halt	SCT	1.97	1.97	1.97	1.97	1.97	1.90	1.90
Insch	SCT	1.49	1.49	1.37	1.37	1.37	1.37	1.37
Invergordon	SCT	2.57	2.57	2.6	2.57	2.57	2.57	2.57
Invergowrie	SCT	2.76	2.76	2.89	2.89	1.74	1.74	1.74
Inverkeithing	SCT	2.14	2.14	2.1	2.15	1.37	1.37	1.37
Inverkip	SCT	2.09	2.09	2.1	2.09	2.09	2.01	2.01
Inverness	SCT	2.16	2.16	2.16	2.16	2.16	2.00	2.00
Invershin	SCT	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Inverurie Station	SCT	1.97	1.97	1.97	1.97	1.97	1.97	2.09
Irvine Station	SCT	2.09	2.09	2.09	2.17	2.17	2.17	2.13
Johnstone	SCT	2.11	2.11	2.11	2.13	2.13	2.13	2.13
Jordanhill	SCT	2.26	2.26	2.07	2.02	2.02	2.02	2.02
Keith	SCT	1.88	1.88	2.02	2.02	2.02	1.90	1.90
Kelvindale	SCT							0.00
Kennishead	SCT	2.40	2.40	2.4	2.40	2.40	2.51	2.51
Kildonan	SCT	2.61	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	2.03
Kilmaurs	SCT	2.31	2.31	2.31	2.23	2.23	2.23	2.23
Kilpatrick	SCT	2.11	2.11	2.21	2.49	2.49	2.49	2.49
Kilwinning	SCT	2.28	2.28	2.28	2.32	2.32	2.32	2.32
Kinbrace	SCT	2.75	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	1.22
Kings Park	SCT	2.90	2.16	2.1	2.10	2.10	2.05	2.05
Kingsknowe	SCT	2.26	2.26	2.03	2.03	2.03	2.03	2.03
Kingussie	SCT	2.00	2.00	2.0	2.00	2.00	2.03	2.03
Kirkcaldy	SCT	2.05	2.05	2.03	2.03	1.44	1.44	1.44
Kirkconnel	SCT	3.00	3.00	2.3	2.23	2.23	2.23	2.23
Kirkhill	SCT	2.33	2.33	2.20	2.20	2.20	2.00	2.00
Kirknewton	SCT	3.19	3.19	2.22	2.22	2.22	2.22	2.22
Kirkwood	SCT	2.00	2.00	2.1	2.06	2.06	2.06	2.06
Kyle of Lochalsh	SCT	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Ladybank	SCT	2.28	2.28	2.35	2.35	1.17	1.17	1.17
Lairg	SCT	2.25	2.25	2.3	2.25	2.25	2.25	2.25
Lanark Station	SCT	1.57	2.46	2.26	2.26	2.26	2.26	2.24
Langbank	SCT	2.49	2.49	2.49	2.49	2.49	2.46	2.46
Langside	SCT	2.60	2.75	2.65	2.65	2.65	2.18	2.18
Larbert	SCT	2.09	2.09	2.09	2.09	2.09	2.15	2.15
Largs	SCT	1.43	1.43	1.43	1.51	1.51	1.51	1.51
Lenzie	SCT	2.00		2.22	2.22	1.39	1.39	1.39
Leuchars	SCT	2.09	2.09	2.1	2.14	1.14	1.14	1.14
Linlithgow	SCT	2.37	2.37	2.4	2.35	1.59	1.59	1.59
Livingston North	SCT	2.26	2.26	2.3	2.33	1.94	1.94	1.94
Livingston South	SCT	2.30	2.30	2.5	2.53	2.53	2.53	2.53

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Loch Awe	SCT	2.47	2.47	2.5	2.47	1.18	1.18	1.18
Lochailort	SCT	2.23	2.23	2.23	2.23	2.23	2.19	2.19
Locheil Outward Bound	SCT	2.00	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	2.14
Lochgelly	SCT	2.17	2.17	2.16	2.16	1.30	1.30	1.30
Lochluichart	SCT	1.99	1.99	2.0	1.99	1.99	1.99	1.99
Lochwinnoch	SCT	2.04	2.04	2.04	2.02	2.02	2.02	2.02
Lockerbie Station	SCT	2.05	2.05	2.18	2.18	2.18	2.18	2.38
Longniddry	SCT	2.40	2.40	2.25	2.25	1.24	1.24	1.24
Mallaig	SCT	2.07	2.07	2.1	2.07	2.07	2.20	2.20
Markinch	SCT	2.22	2.22	2.23	2.23	1.41	1.41	1.41
Maryhill	SCT	2.33	2.33	2.1	2.13	2.13	2.13	2.13
Maxwell Park	SCT	2.71	2.71	2.14	2.14	2.14	2.16	2.16
Maybole	SCT	2.35	2.35	2.35	2.42	2.42	2.42	2.42
Milliken Park	SCT	2.13	2.13	2.13	2.09	2.09	2.09	2.09
Milngavie	SCT	2.02	2.02	2.02	2.04	2.04	2.04	2.04
Monifieth	SCT	2.36	2.36	2.36	2.36	1.42	1.42	1.42
Montrose	SCT	2.07	2.07	2.07	2.07	1.40	1.40	1.40
Morar	SCT	2.20	2.20	2.20	2.20	2.20	1.99	1.99
Mosspark	SCT	2.11	2.11	2.11	2.11	1.25	1.25	1.25
Motherwell Station	SCT	2.29	2.29	2.29	2.29	2.29	2.29	2.09
Mount Florida	SCT	2.20	2.20	2.15	2.15	2.15	2.16	2.16
Mount Vernon	SCT	2.00	2.00	2.09	2.09	2.09	2.09	2.09
Muir Of Ord	SCT	2.28	2.28	2.28	2.28	2.28	1.74	1.74
Muirend	SCT	1.92	2.16	2.20	2.20	2.20	2.16	2.16
Musselburgh	SCT	2.01	2.01	2.01	2.01	1.33	1.33	1.33
Nairn	SCT	1.66	1.66	1.7	1.66	1.66	1.87	1.87
Neilston	SCT	2.14	2.14	2.18	2.18	2.18	2.16	2.16
New Cumnock	SCT	2.11	2.11	2.11	2.06	2.06	2.06	2.06
Newcraighall	SCT	0.00		1.00	1.00	1.00	1.00	1.00
Newton	SCT	2.25	2.25	2.31	2.31	2.31	2.01	2.01
Newton On Ayr	SCT	2.56	2.56	2.56	2.24	2.24	2.24	2.24
Newtonmore	SCT	2.30	2.30	2.30	2.30	2.30	2.10	2.10
Nitshill	SCT	2.59	2.59	2.59	1.82	1.82	1.82	1.82
North Berwick	SCT	2.02	2.02	2.07	2.07	1.27	1.27	1.27
North Queensferry	SCT	2.28	2.28	2.4	2.39	1.52	1.52	1.52
Oban	SCT	2.58	2.58	2.6	2.58	1.97	1.97	1.97
Paisley Canal	SCT	1.98	1.98	1.96	1.96	1.11	1.11	1.11
Paisley Gilmour St	SCT	2.53	2.53	2.53	2.41	2.41	2.41	2.41
Paisley St James	SCT	2.33	2.33	2.33	2.33	2.33	2.19	2.19
Park	SCT	0.00	0.00	0.00		1.00	1.00	1.00
Partick	SCT	2.22	2.22	2.16	2.22	2.22	2.22	2.22
Patterton	SCT	1.92	2.23	2.05	2.05	2.05	2.02	2.02
Perth	SCT	2.69	2.69	2.69	2.69	2.69	2.34	2.34
Pitlochry	SCT	2.54	2.54	2.54	2.54	2.54	2.25	2.25
Plockton	SCT	2.13	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	2.20
Pollokshaws West	SCT	2.21	2.21	2.4	2.40	2.40	2.07	2.07

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Pollokshields East	SCT	2.23	2.23	2.05	2.05	2.05	2.10	2.10
Pollokshields West	SCT	2.40	2.40	2.08	2.08	2.08	2.07	2.07
Polmont	SCT	2.15	2.15	2.2	2.22	1.46	1.46	1.46
Port Glasgow	SCT	1.47	1.47	1.47	1.47	1.47	1.50	1.50
Portlethen	SCT	2.17	2.17	2.3	2.25	1.27	1.27	1.27
Possilpark & Parkhouse	SCT	2.14	2.14	2.06	2.06	2.00	2.00	2.00
Prestonpans	SCT	2.17	2.17	2.17	2.17	1.21	1.21	1.21
Prestwick International	SCT							0.00
Prestwick Town Station	SCT	1.99	1.99	1.99	2.14	2.14	2.14	2.13
Priesthill & Darnley	SCT	2.24	2.24	2.24	2.00	2.00	2.00	2.00
Queen St High Level	SCT	2.48	2.48	2.48	2.50	2.50	2.50	2.50
Queen St Low Level	SCT	2.20	2.20	2.24	2.16	2.16	2.16	2.16
Queens Park	SCT	2.32	2.32	2.09	2.09	2.09	2.10	2.10
Rannoch	SCT	2.45	2.45	2.45	2.45	1.31	1.31	1.31
Renton	SCT	2.03	2.03	2.00	2.03	2.03	2.03	2.03
Rogart	SCT	2.23	2.23	2.23	2.23	2.23	2.23	2.23
Rosyth Halt	SCT	2.12	2.12	2.2	2.20	1.17	1.17	1.17
Roy Bridge	SCT	2.16	2.16	2.16	2.16	1.25	1.25	1.25
Rutherglen Station	SCT	2.28	2.28	2.30	2.30	2.30	2.30	2.35
Saltcoats	SCT	2.14	2.14	2.14	2.22	2.22	2.22	2.22
Sanquhar	SCT	2.00	2.00	2.04	1.96	1.96	1.96	1.96
Scotscalder	SCT	2.25	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	2.20
Shawlands	SCT	2.65	2.65	2.39	2.39	2.39	2.15	2.15
Shettleston	SCT	2.14	2.14	2.28	2.23	2.23	2.23	2.23
Shieldmuir	SCT	2.17	2.17	2.05	2.05	2.05	2.05	2.05
Shotts	SCT	2.24	2.24	2.24	2.24	2.24	2.12	2.12
Singer	SCT	2.08	2.08	2.14	2.25	2.25	2.25	2.25
Slateford	SCT	2.37	2.37	2.4	2.40	2.40	2.40	2.40
South Gyle	SCT	2.42	2.42	2.6	2.59	1.54	1.54	1.54
Spean Bridge	SCT	2.41	2.41	2.41	2.41	1.12	1.12	1.12
Springburn	SCT	2.37	2.37	2.32	2.39	2.39	2.39	2.39
Springfield	SCT	2.55	2.55	2.4	2.42	1.46	1.46	1.46
Stepps	SCT	2.05	2.05	2.05	2.05	2.05	2.00	2.00
Stevenston	SCT	2.22	2.22	2.22	2.09	2.09	2.09	2.09
Stewarton	SCT	2.38	2.38	2.39	2.37	2.37	2.37	2.37
Stirling	SCT	3.00	3.00	3.00	3.00	3.00	2.05	2.05
Stonehaven	SCT	1.68	1.68	1.68	1.68	1.17	1.17	1.17
Stranraer Harbour	SCT	2.26	2.26	2.26	2.40	2.40	2.40	2.40
Strathcarron	SCT	2.27	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	2.18
Summerston	SCT	2.31	2.31	2.19	2.19	2.00	2.00	2.00
Tain	SCT	2.18	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	1.00
Thornliebank	SCT	2.48	2.48	2.48	2.48	2.03	2.03	2.03
Thorntonhall	SCT	2.54	2.54	2.13	2.13	1.80	1.80	1.80
Thurso	SCT	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Troon Passenger Station	SCT	2.35	2.35	2.35	2.38	2.38	2.38	2.27

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Tulloch	SCT	2.19	2.19	2.19	2.19	1.86	1.86	1.86
Tyndrum Lower	SCT	2.60	2.60	2.60	2.60	1.37	1.37	1.37
Tyndrum Upper	SCT	2.25	2.25	2.25	2.25	1.99	1.99	1.99
Uddingston Station	SCT	2.45	2.45	2.46	2.46	2.46	2.46	2.23
Uphall	SCT	2.31	2.31	2.4	2.36	1.95	1.95	1.95
Wallyford	SCT	2.09	2.09	2.1	2.15	1.22	1.22	1.22
Wemyss Bay	SCT	2.30	2.30	2.30	2.30	2.30	2.34	2.34
West Calder	SCT	2.19	2.19	2.1	2.14	2.14	2.14	2.14
West Kilbride	SCT	2.07	2.07	2.07	2.17	2.17	2.17	2.17
Westerhailes	SCT	2.26	2.26	2.1	2.14	2.14	2.14	2.14
Westerton	SCT	2.18	2.18	2.01	1.99	1.99	1.99	1.99
Whifflet	SCT	2.01	2.01	2.07	2.07	2.07	2.04	2.04
Whinhill	SCT	2.55	2.55	2.55	2.55	2.55	2.35	2.35
Whitecraigs	SCT	2.37	2.37	2.36	2.36	2.36	2.09	2.09
Wick	SCT	2.07	2.07	2.07	2.07	2.07	2.07	2.07
Williamwood	SCT	2.10	2.10	2.25	2.25	2.25	2.07	2.07
Wishaw Station	SCT	2.06	2.06	1.42	1.42	1.42	1.42	2.01
Woodhall	SCT	2.40	2.40	2.40	2.40	2.40	2.13	2.13
Yoker	SCT	2.21	2.21	2.43	2.28	2.28	2.28	2.28
Aldrington	Sussex	2.33	2.33	2.33	2.33	2.33	2.45	2.45
Amberley Station	Sussex	2.48	2.48	2.48	2.94	2.94	2.94	2.93
Anerley	Sussex	2.14	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	2.34
Arundel Station	Sussex	2.59	2.59	3.55	3.55	3.55	3.55	2.58
Ashford (Surrey)	Sussex	2.48	2.48	2.81	2.82	2.82	2.82	2.82
Ashtead	Sussex	2.21	2.21	2.21	2.21	2.16	2.16	2.16
Ashurst	Sussex	2.52	2.52	2.65	2.65	2.65	2.65	2.65
Balcombe	Sussex	2.43	2.43	2.43	2.43	3.02	3.02	3.02
Balham	Sussex	2.00	2.00	2.00	2.78	2.78	2.78	2.78
Banstead	Sussex	2.42	2.42	2.42	2.42	2.42	2.42	2.93
Barnham	Sussex	2.53	2.53	2.94	2.94	2.94	2.94	2.94
Battersea Park	Sussex	2.23	2.23	2.23	2.88	2.88	2.88	2.88
Belmont	Sussex	2.26	2.26	2.26	2.26	2.26	2.26	2.56
Berwick	Sussex	2.60	2.60	3.61	3.61	3.61	3.61	3.61
Bexhill	Sussex	2.11	2.11	3.28	3.28	3.28	2.11	2.11
Billingshurst	Sussex	2.52	2.52	2.90	2.90	2.90	2.90	2.90
Birkbeck Station	Sussex	2.18	2.18	2.18	2.18	2.18	2.18	2.45
Bishopstone	Sussex	2.67	2.67	2.67	2.67	2.67	2.67	2.97
Blackfriars Station	Sussex	1.74	1.74	1.74	1.74	1.74	1.74	1.71
Bognor Regis	Sussex	2.26	2.26	2.26	2.26	2.26	2.58	2.58
Bosham	Sussex	2.51	2.51	3.00	3.00	3.00	3.00	3.00
Boxhill & Westhumble	Sussex	2.41	2.41	2.41	2.41	2.41	2.62	2.62
Brighton	Sussex	2.51	2.51	2.51	2.51	2.51	2.40	2.40
Brockley	Sussex	2.11	2.11	2.58	2.58	2.58	2.58	2.58
Burgess Hill	Sussex	2.37	2.37	3.22	3.22	3.22	3.22	3.22
Buxted	Sussex	2.43	2.43	2.43	2.43	2.43	2.43	2.73
Carshalton	Sussex	2.43	2.43	2.43	2.43	2.28	2.28	2.28
Carshalton Beeches	Sussex	2.40	2.40	2.40	2.74	2.74	2.74	2.74

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Caterham	Sussex	2.50	2.50	2.50	2.50	2.51	2.51	2.51
Cheam	Sussex	2.36	2.36	2.97	2.97	2.97	2.97	2.97
Chichester	Sussex	2.53	2.53	2.53	2.98	2.98	2.98	2.98
Chipstead	Sussex	2.22	2.22	2.22	2.22	2.22	2.22	2.64
Christs Hospital	Sussex	2.36	2.36	2.36	2.36	2.36	2.84	2.84
City Thameslink Station	Sussex	1.41	1.41	1.41	1.41	1.41	1.41	1.67
Clapham High Street	Sussex	2.08	2.08	1.93	1.93	1.93	1.93	1.93
Collington	Sussex	2.36	2.36	3.30	3.30	2.73	2.73	2.73
Cooden Beach	Sussex	2.37	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	2.84
Coulsdon South	Sussex	2.53	2.53	2.53	2.53	2.53	2.71	2.71
Cowden	Sussex	2.55	2.55	2.55	3.23	3.23	3.23	3.23
Crawley	Sussex	2.49	2.49	2.49	2.49	2.68	2.68	2.68
Crowborough	Sussex	2.35	2.35	2.35	3.10	3.10	3.10	3.10
Crystal Palace	Sussex	2.48	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	2.58
Dormans	Sussex	2.62	2.62	2.62	2.62	2.62	2.71	2.71
Durrington-On-Sea	Sussex	2.48	2.48	2.48	2.48	2.48	2.48	2.48
Earlswood	Sussex	2.71	2.71	2.71	2.71	2.71	2.71	2.71
East Croydon	Sussex	1.98	1.98	1.98	1.98	1.98	2.22	2.18
East Dulwich	Sussex	2.11	2.11	2.11	2.28	2.28	2.28	2.28
East Grinstead Station	Sussex	2.51	2.51	2.51	2.51	2.51	2.51	2.72
East Worthing	Sussex	2.84	2.84	2.84	2.84	2.84	2.84	2.84
Eastbourne Station	Sussex	1.95	1.95	1.95	1.95	1.95	2.48	2.24
Edenbridge Town	Sussex	2.45	2.45	2.45	3.13	3.13	3.13	3.13
Elephant & Castle	Sussex	2.02	2.02	2.02	2.02	2.16	2.16	2.16
Emsworth	Sussex	2.53	2.53	2.86	2.86	2.86	2.86	2.86
Epsom	Sussex	2.52	2.52	2.52	2.84	2.84	2.84	2.84
Epsom Downs	Sussex	2.20	2.20	2.20	2.20	2.20	2.20	2.71
Eridge Station	Sussex	2.71	2.71	2.71	3.46	3.46	3.46	3.46
Ewell East	Sussex	2.56	2.56	2.56	2.56	2.26	2.26	2.26
Falmer	Sussex	2.48	2.48	2.48	2.48	2.68	2.68	2.68
Faygate	Sussex	2.63	2.63	2.63	2.63	2.63	1.77	1.77
Fishbourne	Sussex	2.56	2.56	2.56	2.56	2.56	2.77	2.77
Fishergate	Sussex	2.54	2.54	2.54	2.54	2.35	2.35	2.35
Ford	Sussex	2.50	2.50	2.65	2.65	2.65	2.65	2.65
Forest Hill	Sussex	2.04	2.04	2.30	2.30	2.30	2.30	2.30
Gatwick Airport	Sussex	2.00	2.00	2.57	2.53	2.48	2.48	2.48
Gipsy Hill	Sussex	2.05	2.05	2.62	2.62	2.62	2.62	2.62
Glynde	Sussex	3.44	3.44	3.45	3.45	3.45	3.45	3.45
Goring By Sea	Sussex	2.52	2.52	2.52	2.52	2.52	2.78	2.78
Hackbridge	Sussex	2.18	2.18	2.18	2.18	2.24	2.24	2.24
Hampden Park	Sussex	2.45	2.45	2.45	3.30	3.30	3.30	3.30
Hassocks	Sussex	2.40	2.40	3.26	3.26	3.26	2.93	2.93
Haydons Road	Sussex	2.44	2.44	2.44	2.30	2.30	2.61	2.61
Haywards Heath	Sussex	2.44	2.44	2.44	2.66	2.66	2.66	2.66
Hever	Sussex	2.27	2.27	2.27	3.02	3.02	3.02	3.02
Holmwood	Sussex	2.70	2.70	2.70	2.70	2.70	2.77	2.77

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Honor Oak Park	Sussex	2.02	2.02	2.52	2.52	2.52	2.52	2.52
Horley	Sussex	2.50	2.50	2.89	2.89	2.89	2.81	2.81
Horsham	Sussex	2.62	2.62	2.62	2.62	2.71	2.71	2.71
Hove	Sussex	2.50	2.50	2.50	2.50	2.72	2.72	2.72
Hurst Green	Sussex	2.40	2.40	2.40	2.89	2.89	2.89	2.89
Ifield	Sussex	2.52	2.52	2.52	2.52	2.79	2.79	2.79
Kenley	Sussex	2.49	2.49	2.49	2.49	2.26	2.26	2.26
Kensington Olympia	Sussex	2.43	2.43	2.43	2.43	2.43	2.43	2.34
Kingswood	Sussex	2.57	2.57	2.57	2.57	2.57	2.57	2.97
Lancing	Sussex	2.30	2.30	2.30	2.30	2.30	2.48	2.48
Leatherhead	Sussex	2.49	2.49	2.49	2.92	2.92	2.92	2.92
Leigh (Kent)	Sussex	2.54	2.54	3.06	3.06	3.06	3.06	3.06
Lewes	Sussex	2.13	2.13	2.13	2.13	2.13	2.31	2.31
Lingfield	Sussex	2.48	2.48	2.48	2.48	2.52	2.52	2.52
Littlehampton	Sussex	2.49	2.49	2.63	2.63	2.63	2.63	2.63
Littlehaven	Sussex	2.59	2.59	2.59	2.58	2.58	2.58	2.58
London Charing Cross	Sussex	2.40	2.40	2.17	2.17	2.17	2.17	2.17
London Road Brighton	Sussex	2.52	2.52	2.52	2.52	2.52	2.52	2.06
London Victoria	Sussex	2.70	2.70	2.56	2.54	2.45	2.45	2.45
Loughborough Junction	Sussex	2.46	2.46	2.46	2.46	2.46	2.46	2.78
Maze Hill	Sussex	2.37	2.37	2.37	2.51	2.51	2.51	2.51
Merstham	Sussex	2.51	2.51	2.51	3.08	3.08	3.08	3.08
Mitcham Junction	Sussex	2.22	2.22	2.86	2.86	2.86	2.86	2.86
Morden South	Sussex	2.15	2.15	2.15	2.81	2.81	2.81	2.81
Moulsecoomb	Sussex	2.44	2.44	3.00	3.00	3.00	3.00	3.00
New Cross Gate	Sussex	2.01	2.01	2.28	2.28	2.28	2.28	2.28
Newhaven Harbour	Sussex	2.83	2.83	2.83	2.83	2.83	2.83	2.76
Newhaven Marine Station	Sussex							3.58
Newhaven Town	Sussex	2.56	2.56	2.56	2.56	2.56	2.56	2.90
Norbury	Sussex	2.33	2.33	2.33	2.23	2.23	2.23	2.23
Normans Bay	Sussex	2.38	2.38	2.38	2.38	2.38	2.38	2.62
North Dulwich	Sussex	2.11	2.11	2.11	2.11	1.92	1.92	1.92
Norwood Junction	Sussex	2.07	2.07	2.62	2.62	2.62	2.62	2.62
Nutbourne	Sussex	2.62	2.62	2.62	2.62	2.55	2.55	2.55
Ockley	Sussex	2.43	2.43	2.43	2.43	2.43	2.74	2.74
Oxted	Sussex	2.49	2.49	2.49	2.95	2.95	2.95	2.95
Penge West	Sussex	2.14	2.14	2.65	2.65	2.65	2.65	2.65
Pevensey and Westham	Sussex	2.41	2.41	2.41	2.41	2.41	2.41	2.76
Pevensey Bay	Sussex	2.63	2.63	2.63	2.63	2.63	2.63	2.52
Plumpton	Sussex	2.53	2.53	2.92	2.92	2.92	2.92	2.92
Polegate	Sussex	2.47	2.47	3.08	3.08	3.08	3.08	3.08
Portslade	Sussex	2.36	2.36	2.36	2.36	2.36	2.73	2.73
Preston Park	Sussex	2.38	2.38	3.28	3.28	3.28	3.28	3.28
Pulborough	Sussex	2.48	2.48	2.48	2.98	2.98	2.98	2.98
Purley	Sussex	2.54	2.54	2.54	2.54	2.54	2.82	2.82
Purley Oaks	Sussex	2.23	2.23	2.23	2.23	2.23	2.23	2.98
Queens Rd, Peckham	Sussex	2.37	2.37	2.37	2.41	2.41	2.41	2.41
Redhill	Sussex	2.51	2.51	2.51	2.51	2.51	2.68	2.68

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Reedham	Sussex	2.53	2.53	2.53	2.53	2.53	2.53	2.82
Riddlesdown	Sussex	2.47	2.47	2.47	2.47	2.25	2.25	2.25
Salfords	Sussex	2.56	2.56	2.56	3.04	3.04	3.04	3.04
Sanderstead	Sussex	2.49	2.49	2.49	2.49	2.13	2.13	2.13
Seaford	Sussex	2.47	2.47	3.19	3.19	3.19	3.19	3.19
Selhurst	Sussex	2.60	2.60	2.60	2.60	2.60	2.60	2.99
Shoreham By Sea	Sussex	2.51	2.51	2.51	2.51	2.51	2.57	2.57
Smitham	Sussex	2.50	2.50	2.50	2.50	2.50	2.50	3.10
Snowdown	Sussex	2.95	2.95	2.93	2.93	2.40	2.40	2.40
Sole Street	Sussex	2.44	2.44	2.44	2.44	2.44	2.44	2.90
South Bermondsey	Sussex	2.02	2.02	2.49	2.49	2.49	2.49	2.49
South Croydon	Sussex	2.09	2.09	2.09	2.09	2.09	2.44	2.44
South Merton	Sussex	2.16	2.16	2.16	2.79	2.79	2.79	2.79
Southbourne	Sussex	2.37	2.37	2.37	2.37	2.58	2.58	2.58
Southease	Sussex	2.58	2.58	2.58	2.58	2.94	2.94	2.94
Southwick	Sussex	2.61	2.61	2.61	2.61	2.61	2.94	2.94
St Helier	Sussex	2.08	2.08	2.08	2.79	2.79	2.79	2.79
St Leonards Warrior Square	Sussex	2.20	2.20	2.62	2.62	2.62	2.62	2.62
Streatham	Sussex	2.45	2.45	2.45	2.85	2.85	2.85	2.85
Streatham Common	Sussex	2.07	2.07	2.07	2.07	2.33	2.33	2.33
Streatham Hill	Sussex	2.13	2.13	2.13	2.13	2.47	2.47	2.47
Sutton	Sussex	2.59	2.59	2.59	2.59	2.59	2.69	2.69
Sutton Common	Sussex	2.11	2.11	2.11	2.11	2.21	2.21	2.21
Sydenham	Sussex	2.06	2.06	2.36	2.36	2.36	2.36	2.36
Tadworth	Sussex	2.40	2.40	2.40	2.40	2.40	2.40	3.02
Tattenham Corner	Sussex	2.44	2.44	2.44	2.44	2.44	2.44	2.94
Thornton Heath	Sussex	2.45	2.45	2.45	2.60	2.60	2.60	2.60
Three Bridges	Sussex	2.73	2.73	2.73	2.67	2.67	2.67	2.67
Tooting	Sussex	1.50	1.50	1.50	2.11	2.11	2.11	2.11
Tulse Hill	Sussex	2.35	2.35	2.35	2.35	2.26	2.26	2.26
Uckfield Station	Sussex	2.40	2.40	2.40	2.40	2.40	2.40	2.82
Upper Warlingham	Sussex	2.53	2.53	2.53	2.53	2.17	2.17	2.17
Waddon	Sussex	2.45	2.45	2.45	2.87	2.87	2.87	2.87
Wallington	Sussex	2.36	2.36	2.36	2.74	2.74	2.74	2.74
Wandsworth Common	Sussex	2.02	2.02	2.02	2.71	2.71	2.71	2.71
Wandsworth Road	Sussex	2.40	2.40	2.51	2.51	2.51	2.51	2.51
Warblington	Sussex	3.64	3.64	3.64	3.64	2.94	2.94	2.94
Warnham	Sussex	2.77	2.77	2.77	2.77	2.77	2.53	2.53
West Brompton	Sussex			1.00	1.00	1.00	1.00	1.00
West Croydon	Sussex	2.34	2.34	2.34	2.34	2.34	2.66	2.66
West Norwood	Sussex	2.50	2.50	2.50	2.50	2.50	2.74	2.74
West Sutton	Sussex	2.40	2.40	2.40	2.69	2.69	2.69	2.69
West Worthing	Sussex	2.47	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	2.60
Whyteleafe	Sussex	2.41	2.41	2.41	2.41	2.27	2.27	2.27
Whyteleafe South	Sussex	2.46	2.46	2.46	2.46	2.13	2.13	2.13
Wimbledon Chase	Sussex	2.40	2.40	2.40	2.83	2.83	2.83	2.83
Wivelsfield	Sussex	2.22	2.22	2.40	2.40	2.40	2.40	2.40

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Woldingham	Sussex	2.48	2.48	2.48	2.48	2.29	2.29	2.29
Woodmansterne	Sussex	2.45	2.45	2.45	2.45	2.45	2.45	2.98
Worthing	Sussex	2.48	2.48	2.48	2.48	2.74	2.74	2.74
Addlestone	Wessex	2.37	2.37	2.37	2.37	2.60	2.60	2.60
Aldershot	Wessex	2.15	2.15	2.15	2.15	2.15	2.49	2.49
Alton	Wessex	2.58	2.58	2.58	2.58	2.81	2.81	2.81
Andover	Wessex	2.05	2.05	2.35	2.40	2.40	2.40	2.40
Ascot	Wessex	2.40	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	2.29
Ash Vale	Wessex	2.44	2.44	2.44	2.44	2.44	2.51	2.51
Ashurst (New Forest)	Wessex	2.26	2.26	2.26	2.26	2.31	2.31	2.31
Axminster	Wessex	2.55	2.55	2.40	2.38	2.38	2.38	2.38
Bagshot	Wessex	2.09	2.09	2.09	2.09	2.09	2.10	2.10
Barnes Bridge Station	Wessex	1.71	1.71	1.15	1.99	1.99	1.99	1.99
Barnes Station	Wessex	2.45	2.45	2.77	2.79	2.79	2.79	2.79
Basingstoke	Wessex	2.22	2.22	2.22	2.22	2.22	2.38	2.38
Beaulieu Road	Wessex	2.46	2.46	2.46	2.46	2.94	2.94	2.94
Bedhampton	Wessex	2.41	2.41	2.41	2.41	2.98	2.98	2.98
Bentley	Wessex	2.45	2.45	2.45	2.45	2.45	2.60	2.60
Berrylands	Wessex	2.45	2.45	2.74	2.85	2.85	2.85	2.85
Betchworth	Wessex	2.68	2.68	2.68	2.68	2.68	2.85	2.85
Bitterne	Wessex	2.16	2.16	2.16	2.16	2.97	2.97	2.97
Blackwater	Wessex	2.65	2.65	2.65	2.65	2.65	3.07	3.07
Bookham	Wessex	2.39	2.39	2.39	2.39	2.39	2.39	2.94
Botley	Wessex	1.97	1.97	1.97	1.97	2.56	2.56	2.56
Bournemouth	Wessex	2.37	2.37	2.37	2.37	2.10	2.10	2.10
Bracknell	Wessex	2.40	2.40	2.40	2.40	2.40	2.40	2.40
Brading Station	Wessex	2.41	2.41	2.41	2.41	2.41	1.91	1.81
Bramley	Wessex	2.33	2.33	2.33	2.33	2.33	2.33	2.67
Branksome	Wessex	2.46	2.46	2.46	2.46	2.90	2.90	2.90
Brentford	Wessex	2.04	2.04	1.52	2.51	2.51	2.51	2.51
Brockenhurst	Wessex	2.60	2.60	2.60	2.60	2.44	2.44	2.44
Brookwood	Wessex	2.32	2.32	2.32	2.32	2.32	2.44	2.44
Burseldon	Wessex	2.21	2.21	2.21	2.21	2.44	2.44	2.44
Byfleet & New Haw	Wessex	2.12	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	2.66
Chandlers Ford	Wessex						0.00	0.00
Chertsey	Wessex	2.55	2.55	2.55	2.55	2.91	2.91	2.91
Chessington North	Wessex	2.52	2.52	2.52	2.52	2.52	2.98	2.98
Chessington South	Wessex	2.46	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	2.69
Chilworth	Wessex	2.81	2.81	2.81	2.81	2.81	2.71	2.71
Chiswick	Wessex	2.36	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	2.87
Clandon Station	Wessex	2.62	2.62	2.62	2.62	2.62	2.62	2.70
Clapham Junction	Wessex	2.39	2.39	2.39	2.39	2.39	2.35	2.35
Claygate	Wessex	2.38	2.38	2.38	2.76	2.76	2.76	2.76
Cobham Station	Wessex	2.58	2.58	2.58	2.58	2.58	2.58	2.94

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Cosham	Wessex	2.42	2.42	2.42	2.42	2.42	2.42	2.65
Crewekerne Station	Wessex	2.69	2.69	2.76	2.70	2.70	2.70	2.70
Crowthorne	Wessex	2.62	2.62	2.62	2.62	2.62	2.52	2.52
Datchet	Wessex	2.24	2.24	2.11	2.23	2.23	2.23	2.23
Dean	Wessex	2.33	2.33	2.33	2.33	2.86	2.86	2.86
Dorchester South	Wessex	2.35	2.35	2.88	2.45	2.45	2.45	2.45
Dorchester West	Wessex	2.68	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	2.79
Dorking West	Wessex	2.71	2.71	2.71	2.71	2.71	2.73	2.73
Dunbridge Station	Wessex	2.03	2.03	2.03	2.15	2.15	2.15	2.15
Earley	Wessex	2.29	2.29	2.34	2.34	2.34	2.55	2.55
Earlsfield	Wessex	2.41	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	2.51
Effingham Junction	Wessex	2.70	2.70	2.70	2.70	2.70	2.70	3.11
Egham	Wessex	2.14	2.14	2.33	2.33	2.33	2.33	2.33
Esher	Wessex	2.13	2.13	2.13	2.13	2.30	2.30	2.30
Ewell West Station	Wessex	2.44	2.44	2.44	2.44	2.44	2.44	2.94
Fareham Station	Wessex	2.02	2.02	2.02	2.02	2.02	2.02	2.39
Farnborough	Wessex	2.52	2.52	2.52	2.52	2.72	2.72	2.72
Farnborough North	Wessex	2.96	2.96	2.96	2.96	2.96	2.15	2.15
Farncombe	Wessex	2.58	2.58	2.58	2.58	2.58	2.58	2.98
Farnham	Wessex	2.24	2.24	2.24	2.24	2.24	2.41	2.41
Feltham	Wessex	2.26	2.26	1.93	1.93	1.93	1.93	1.93
Feniton	Wessex	2.69	2.69	2.69	2.69	2.33	2.33	2.33
Fleet	Wessex	2.45	2.45	2.45	2.45	2.45	2.54	2.54
Fratton Station	Wessex	2.50	2.50	2.50	2.50	2.50	2.50	2.88
Frimley	Wessex	2.43	2.43	2.43	2.43	2.43	2.52	2.52
Fulwell	Wessex	2.56	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	2.09
Godalming	Wessex	2.49	2.49	2.49	2.49	2.49	2.49	2.93
Gomshall Station	Wessex	3.21	3.21	2.78	2.76	2.76	2.76	2.76
Grateley	Wessex	2.13	2.13	2.32	2.60	2.60	2.60	2.60
Guildford	Wessex	2.05	2.05	2.05	2.05	2.05	2.32	2.32
Hamble	Wessex	2.19	2.19	2.19	2.19	2.65	2.65	2.65
Hampton	Wessex	2.61	2.61	2.61	2.61	2.74	2.74	2.74
Hampton Court	Wessex	2.97	2.97	3.28	3.27	3.27	3.27	3.27
Hampton Wick	Wessex	1.73	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	3.20
Haslemere	Wessex	2.05	2.05	2.05	2.05	2.05	2.05	2.25
Havant	Wessex	2.39	2.39	2.39	2.39	2.39	2.39	2.58
Hedge End	Wessex	2.03	2.03	2.03	2.03	2.06	2.06	2.06
Hersham	Wessex	2.52	2.52	2.52	2.52	2.52	2.52	2.52
Hilsea Station	Wessex	2.40	2.40	2.40	2.40	2.40	2.40	3.08
Hinchley Wood	Wessex	2.61	2.61	2.61	2.61	2.61	2.61	3.00
Hinton Admiral	Wessex	2.70	2.70	2.70	2.70	2.62	2.62	2.62
Holton Heath	Wessex	2.67	2.67	2.67	2.67	2.67	2.50	2.50
Honiton	Wessex	2.32	2.32	2.44	2.44	2.44	2.44	2.44
Hook	Wessex	2.40	2.40	2.40	2.40	2.40	2.51	2.51

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Horsley	Wessex	2.62	2.62	2.62	3.19	3.19	3.19	3.19
Hounslow	Wessex	2.52	2.52	2.52	2.52	2.52	2.52	2.52
Isleworth	Wessex	2.81	2.81	2.81	2.81	2.54	2.54	2.54
Kempton Park	Wessex					2.54	2.54	2.54
Kew Bridge	Wessex	3.01	3.01	3.01	3.01	2.71	2.71	2.71
Kingston	Wessex	2.53	2.53	2.53	2.53	2.53	2.53	2.53
Lake Station	Wessex	2.44	2.44	2.44	2.44	2.44	2.44	2.66
Liphook Station	Wessex	2.61	2.61	2.61	2.61	2.61	2.61	2.77
Liss Station	Wessex	2.51	2.51	2.51	2.51	2.51	2.51	2.78
London Road Guildford	Wessex	2.58	2.58	2.58	2.58	2.58	2.58	2.82
Longcross	Wessex	2.82	2.82	3.44	3.37	3.37	3.37	3.37
Lymington Pier	Wessex	2.21	2.21	2.21	2.21	2.21	2.11	2.11
Lymington Town	Wessex	2.48	2.48	2.48	2.48	2.48	2.72	2.72
Maiden Newton	Wessex	3.00	3.00	2.94	2.57	2.57	2.57	2.57
Malden Manor	Wessex	2.55	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	2.22
Micheldever	Wessex	2.23	2.23	2.23	2.23	2.23	2.30	2.30
Milford	Wessex	2.59	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	2.48
Moreton	Wessex	2.23	2.23	2.67	2.78	2.78	2.78	2.78
Mortimer	Wessex	2.42	2.42	2.42	2.42	2.66	2.66	2.66
Mortlake	Wessex	2.67	2.67	2.70	2.71	2.71	2.71	2.71
Motspur Park	Wessex	2.37	2.37	2.40	2.40	2.40	2.40	2.40
Netley	Wessex	2.57	2.57	2.57	2.57	2.71	2.71	2.71
New Malden	Wessex	2.48	2.48	2.48	2.48	2.90	2.90	2.90
New Milton	Wessex	2.64	2.64	2.64	2.64	2.94	2.94	2.94
Norbiton	Wessex	2.24	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	2.38
North Sheen Station	Wessex	2.38	2.38	2.95	2.74	2.74	2.74	2.74
Overton	Wessex	2.13	2.13	2.21	2.01	2.01	2.01	2.01
Oxshott	Wessex	2.31	2.31	2.89	2.70	2.70	2.70	2.70
Parkstone	Wessex	2.54	2.54	2.54	2.54	2.97	2.97	2.97
Petersfield	Wessex	2.15	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	2.98
Poole Station	Wessex	2.44	2.44	2.44	2.44	2.44	2.44	2.31
Portchester	Wessex	2.58	2.58	2.58	2.58	2.58	2.58	2.58
Portsmouth & Southsea	Wessex	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Portsmouth Harbour	Wessex					0.00	0.00	0.00
Putney	Wessex	2.30	2.30	2.30	2.30	2.30	2.50	2.50
Queenstown Road	Wessex	2.51	2.51	2.51	2.51	2.51	2.65	2.65
Raynes Park	Wessex	2.26	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	2.92
Reigate	Wessex	2.68	2.68	2.68	2.68	2.68	2.95	2.95
Richmond	Wessex	2.49	2.49	2.77	2.77	2.77	2.77	2.77
Romsey	Wessex	2.07	2.07	2.07	2.07	2.55	2.55	2.55
Rowlands Castle	Wessex	1.92	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	2.34
Ryde Pier Head	Wessex	2.18	2.18	2.18	2.18	2.18	3.09	3.01

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Ryde St. Johns	Wessex	2.48	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	2.00
Sandhurst	Wessex	2.49	2.49	2.49	2.49	2.81	2.81	2.81
Sandown	Wessex	2.73	2.73	2.73	2.73	2.73	2.99	2.99
Shalford	Wessex	2.65	2.65	2.65	2.65	2.65	2.57	2.57
Shanklin	Wessex	2.44	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	2.74
Shepperton	Wessex	2.15	2.15	2.15	2.15	2.15	2.15	2.15
Sherborne Station	Wessex	1.98	1.98	1.98	1.98	1.98	1.98	2.60
Sholing	Wessex	2.54	2.54	2.54	2.54	2.62	2.62	2.62
Smallbrook Junction	Wessex	2.38	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	2.25
Southampton Parkway	Wessex	2.07	2.07	2.07	2.07	2.22	2.22	2.22
St Margarets	Wessex	2.19	2.19	2.42	2.42	2.42	2.42	2.42
St. Denys	Wessex	2.46	2.46	2.46	2.46	2.99	2.99	2.99
Staines	Wessex	2.23	2.23	2.54	2.54	2.54	2.54	2.54
Stoneleigh	Wessex	2.83	2.83	2.83	2.83	2.83	2.83	2.83
Strawbery Hill	Wessex	2.62	2.62	2.62	2.62	2.62	2.66	2.66
Sunbury Station	Wessex	2.72	2.72	2.72	2.72	2.72	2.72	2.82
Sunningdale	Wessex	2.53	2.53	2.53	2.53	2.77	2.77	2.77
Sunnymeads	Wessex	3.19	3.19	3.01	3.02	3.02	3.02	3.02
Surbiton	Wessex	2.45	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	2.00
Sway	Wessex	2.45	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	2.81
Syon Lane	Wessex	2.32	2.32	2.85	2.85	2.85	2.39	2.39
Teddington Station	Wessex	2.33	2.33	2.33	2.33	2.33	2.84	2.69
Templecombe Station	Wessex	2.49	2.49	2.49	2.49	2.49	2.49	2.26
Thames Ditton	Wessex	2.38	2.38	2.61	2.61	2.61	3.00	3.00
Thornford	Wessex	3.06	3.06	3.06	3.06	3.06	2.61	2.61
Tisbury Station	Wessex	2.47	2.47	2.47	2.47	2.47	2.47	2.64
Tolworth	Wessex	2.60	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	2.51
Twickenham	Wessex	2.45	2.45	2.69	2.69	2.69	2.69	2.69
Upper Halliford	Wessex	2.07	2.07	2.07	2.07	2.07	2.22	2.22
Upwey Station	Wessex	2.51	2.51	2.51	2.51	2.51	2.51	2.42
Vauxhall	Wessex	2.40	2.40	2.00	2.00	2.00	2.00	2.09
Virginia Water	Wessex	2.40	2.40	2.40	2.40	2.40	2.40	2.88
Walton on Thames	Wessex	2.33	2.33	2.33	2.33	2.33	2.33	2.97
Wanborough	Wessex	3.45	3.45	2.81	2.81	2.81	2.81	2.44
Wandsworth Town	Wessex	2.36	2.36	2.36	2.36	2.36	2.28	2.28
Wareham Station	Wessex	2.51	2.51	2.51	2.51	2.51	2.51	2.62
West Byfleet Station	Wessex	2.61	2.61	2.61	2.61	2.61	2.61	3.04
Weybridge	Wessex	2.70	2.70	2.70	2.63	2.63	2.63	2.63
Weymouth Station	Wessex	2.46	2.46	2.46	2.46	2.46	2.46	2.53
Whimple Station	Wessex	2.55	2.55	2.55	2.55	2.55	2.55	2.49
Whitchurch	Wessex	2.52	2.52	2.52	2.52	2.52	2.52	2.90
Whitton	Wessex	2.59	2.59	2.87	2.87	2.87	2.87	2.87

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Wimbledon	Wessex	2.47	2.47	2.47	2.47	2.47	2.63	2.63
Winchester	Wessex	2.15	2.15	2.15	2.15	2.15	2.00	2.00
Winchfield	Wessex	2.16	2.16	2.16	2.16	2.16	2.31	2.31
Windsor and Eton Riverside	Wessex	2.33	2.33	2.33	2.33	2.33	2.33	3.00
Winnersh	Wessex	2.41	2.41	2.41	2.41	2.41	2.41	2.41
Winnersh Triangle	Wessex	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Witley Station	Wessex	2.75	2.75	2.75	2.75	2.75	2.75	2.78
Woking	Wessex	2.34	2.34	2.34	2.34	2.34	2.51	2.51
Wokingham	Wessex	2.51	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	2.58
Woolston	Wessex	2.35	2.35	2.35	2.35	2.35	2.17	2.17
Worcester Park	Wessex	2.46	2.46	2.90	2.90	2.90	2.90	2.90
Worplesdon	Wessex	2.15	2.15	2.15	2.15	2.15	2.29	2.29
Wraysbury	Wessex	2.49	2.49	2.49	2.49	2.45	2.45	2.45
Yeovil Junction	Wessex	2.53	2.53	2.53	2.95	2.95	2.95	2.95
Yeovil Pen Mill	Wessex	2.51	2.51	2.51	2.78	2.78	2.78	2.78
Yetminster Station	Wessex	2.66	2.66	2.66	3.01	3.01	3.01	3.01
Aber Station	Western	1.98	2.17	2.04	2.04	2.42	2.42	2.42
Abercynon North	Western	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Abercynon South Station	Western	1.90	1.90	1.90	1.90	2.30	2.30	2.30
Aberdare	Western	2.06	2.06	2.06	2.06	2.06	2.03	2.03
Aberdovey	Western	1.66	1.66	1.66	1.77	1.77	1.77	1.77
Aberech	Western	1.80	1.80	1.80	2.22	2.22	2.22	2.22
Abergavenny	Western	2.05	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	1.85
Acton Mainline	Western	1.91	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	1.98
Ammanford	Western	2.25	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	2.53
Ascott-Under-Wychwood	Western	2.50	2.50	2.50	2.50	3.13	3.13	3.13
Ashchurch for Tewksbury	Western	2.00	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	1.83
Avonmouth	Western	3.03	3.03	2.13	2.13	2.71	2.71	2.71
Baglan	Western					0.00	2.19	2.19
Bargoed	Western	2.03	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	1.96
Barnstaple Station	Western	2.20	2.20	2.20	1.89	1.89	1.89	3.09
Barry (Town)	Western	1.94	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	2.29
Barry Island	Western	2.00	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	2.79
Bedminster	Western	2.24	2.24	2.24	1.96	1.96	2.75	2.75
Bedwyn	Western	2.10	2.10	2.12	2.12	2.12	3.03	3.03
Bere Alston	Western	2.16	2.16	2.16	2.16	2.16	3.35	3.35
Bere Ferrers	Western	2.16	2.16	2.16	2.16	2.16	2.06	2.06
Bicester Station	Western	2.46	2.46	2.46	2.46	2.77	2.77	2.77
Birchgrove Station	Western	2.03	2.03	2.01	2.01	2.34	2.34	2.34
Bodmin Parkway	Western	2.23	2.23	2.23	2.20	2.20	2.20	2.20

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Borth	Western	2.12	2.12	2.12	1.82	1.82	1.82	1.82
Bourne End	Western	1.95	1.95	1.95	1.95	1.95	2.88	2.88
Bradford on Avon	Western	2.21	2.21	2.26	2.26	2.48	2.48	2.48
Bridgend	Western	2.09	2.09	2.09	2.09	2.09	2.09	2.09
Bridgwater Station	Western	2.30	2.30	2.30	2.30	2.30	2.30	2.39
Bristol Parkway	Western	2.10	2.10	2.10	1.20	1.20	1.20	2.03
Bristol Temple Meads	Western	2.90	2.90	2.05	2.05	2.05	2.05	2.05
Brithdir	Western	1.80	1.80	1.80	1.80	1.99	1.99	1.99
Briton Ferry	Western	2.00	2.00	2.00	2.00	2.00	2.60	2.60
Bromsgrove	Western	2.00	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	2.00
Bruton	Western	2.88	2.88	2.88	2.17	2.17	2.17	2.17
Bucknell	Western	2.00	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	2.61
Builth Road	Western	2.08	2.08	2.08	2.08	2.08	2.08	2.08
Burnham Station	Western	2.10	2.10	2.74	2.74	2.74	2.74	2.46
Butlins Penychain	Western	1.56	1.56	1.56	1.65	1.65	1.65	1.65
Bynea	Western	2.30	2.30	2.30	2.30	2.30	2.86	2.86
Cadoxton	Western	1.94	1.94	1.94	1.94	1.94	1.94	1.94
Caerphilly Station	Western	2.04	2.68	2.14	2.14	2.18	2.18	2.18
Caersws	Western	2.08	2.08	2.08	1.99	1.99	1.99	1.99
Caldicot Station	Western	2.03	2.03	2.03	2.03	1.98	1.98	1.98
Calstock	Western	2.24	2.24	2.24	2.24	2.24	2.33	2.33
Cam & Dursley Station	Western	2.05	2.05	2.05	2.05	2.57	2.57	2.57
Camborne Station	Western	2.30	2.30	2.30	2.24	2.24	2.24	2.13
Carbis Bay	Western	2.05	2.05	2.05	2.05	3.01	3.01	3.01
Cardiff Bay Station	Western	2.00	2.00	2.19	2.19	2.07	2.07	2.07
Cardiff Central	Western	2.16	2.16	2.16	2.15	2.15	2.15	2.15
Cardiff Queen Street	Western	2.05	2.05	2.05	2.05	2.05	2.05	2.05
Carmarthen Station	Western	2.08	2.08	2.08	2.08	2.22	2.22	2.22
Castle Bar Park	Western	2.09	2.09	2.09	2.09	2.39	2.39	2.39
Castle Cary	Western	2.30	2.30	2.15	2.15	2.52	2.52	2.52
Cathays	Western	2.88	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	2.06
Chapleton	Western	2.40	2.40	2.40	2.35	2.35	2.35	2.35
Charlbury	Western	2.04	2.04	2.04	2.56	2.56	2.56	2.56
Cheltenham	Western	2.48	2.48	2.48	2.28	2.28	2.28	2.28
Chepstow	Western	2.00	2.00	2.00	2.00	2.75	2.75	2.75
Chippenham	Western	2.66	2.66	2.05	2.05	2.05	2.64	2.64
Chirk	Western	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Cholsey Station	Western	2.10	2.10	2.80	2.80	2.80	2.80	2.54
Church Stretton	Western	2.10	2.10	2.10	1.77	1.77	1.77	1.77
Cilmeri	Western	2.00	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	2.58
Clifton Down	Western	2.20	2.20	2.53	2.38	2.38	2.38	2.38
Clunderwen	Western	1.78	1.78	1.78	1.78	1.78	3.27	3.27
Cogan	Western	2.00	2.00	2.00	2.00	2.00	2.01	2.01
Colwall Station	Western	2.41	2.41	2.41	2.41	2.09	2.09	2.09

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Combe	Western	2.37	2.37	2.37	2.20	2.20	2.20	2.20
Cookham	Western	1.50	1.50	1.50	1.50	1.50	2.89	2.89
Coombe Halt	Western	2.17	2.17	2.17	1.78	1.78	1.78	1.78
Copplestone	Western	2.70	2.70	2.70	2.12	2.12	2.12	2.12
Coryton	Western	2.21	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	2.58
Crediton	Western	2.47	2.47	2.47	2.36	2.36	2.36	2.36
Criccieth	Western	1.82	1.82	1.82	2.34	2.34	2.34	2.34
Culham	Western	2.70	2.70	2.70	2.28	2.28	2.28	2.28
Cwmbach	Western	3.17	3.17	3.17	3.17	3.17	2.12	2.12
Cwmbran	Western	2.65	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	2.00
Danescourt Station	Western	3.19	2.27	2.20	2.20	2.25	2.25	2.25
Dawlish Station	Western	2.45	2.45	2.45	2.45	2.45	2.45	2.21
Dawlish Warren	Western	2.07	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	2.55
Didcot Parkway	Western	1.80	1.80	2.21	2.21	2.21	2.21	2.21
Digby & Sowton	Western	2.20	2.20	2.20	2.20	2.43	2.43	2.43
Dilton Marsh	Western	1.45	1.45	1.45	1.45	1.45	2.44	2.44
Dinas Powys	Western	2.04	2.04	2.04	2.04	2.04	2.26	2.26
Dinas Rhondda	Western	1.81	1.81	1.81	1.81	1.81	2.00	2.00
Dingle Road	Western		1.81	1.81	1.81	1.81	1.81	1.81
Dockyard	Western	2.76	2.76	2.76	2.19	2.19	2.19	2.19
Dolau	Western	2.00	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	1.54
Drayton Green	Western	2.11	2.11	2.11	2.11	2.51	2.51	2.51
Droitwich Spa	Western	2.10	2.10	2.10	2.10	2.10	2.10	2.33
Dyffryn Ardudwy	Western	1.40	1.40	1.40	2.01	2.01	2.01	2.01
Ealing Broadway Station	Western	2.39	2.39	2.39	2.39	2.39	2.39	2.05
Eastbrook	Western	2.16	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	2.30
Evesham	Western	2.07	2.07	2.07	2.31	2.31	2.31	2.31
Exeter Central	Western					2.03	2.03	2.03
Exeter St Davids	Western	2.51	2.51	2.10	2.10	2.10	2.10	2.10
Exeter St Thomas	Western	2.39	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	2.19
Exton	Western	3.20	3.20	3.20	3.20	1.89	1.89	1.89
Fairbourne	Western	1.42	1.42	1.42	1.73	1.73	1.73	1.73
Fairwater Station	Western	2.36	2.36	2.36	2.36	2.49	2.49	2.49
Falmouth Docks	Western	2.50	2.50	2.50	2.50	2.50	2.91	2.91
Falmouth Town	Western	2.00	2.00	2.00	1.92	1.92	1.92	1.92
Fernhill	Western	2.87	2.87	2.87	2.87	2.87	2.16	2.16
Ferryside	Western	1.70	1.70	1.70	1.70	1.70	2.50	2.50
Ffairfach	Western	2.00	2.00	2.00	2.30	2.30	2.30	2.30
Filton Abbey Wood	Western	1.80	1.80	1.80	1.90	1.90	1.90	1.90
Finstock	Western	2.33	2.33	2.33	2.24	2.24	2.24	2.24
Fishguard Harbour	Western	2.15	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	3.10

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Frome	Western	2.25	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	3.03
Garth	Western	2.00	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	2.29
Gilfach Fargoed Station	Western	2.28	2.28	2.74	2.74	2.94	2.94	2.94
Gloucester	Western	2.20	2.20	2.20	2.20	2.20	2.35	2.35
Gobowen	Western	1.98	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	2.67
Gowerton	Western	2.00	2.00	2.00	2.00	2.00	2.48	2.48
Grangetown	Western	2.10	2.10	2.10	2.10	2.10	2.51	2.51
Great Malvern Station	Western	2.10	2.10	2.10	2.10	2.27	2.27	2.27
Gunnislake	Western	2.00	2.00	2.00	2.00	2.00	2.11	2.11
Hanborough	Western	2.41	2.41	2.41	1.37	1.37	1.37	1.37
Hanwell Station	Western	2.31	2.31	2.64	2.64	2.64	2.64	2.19
Harlech	Western	1.63	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	1.92
Hayes and Harlington	Western	2.18	2.18	2.37	2.37	2.37	2.37	2.37
Hayle	Western	2.05	2.05	2.51	2.51	2.51	2.51	2.51
Heath High Station	Western	2.09	2.09	2.09	2.09	2.60	2.60	2.60
Heath Low Level Station	Western	2.83	2.42	2.30	2.30	2.38	2.38	2.38
Hengoed Station	Western	2.16	2.16	2.16	2.16	1.87	1.87	1.87
Henley	Western	2.00	2.00	2.00	2.00	2.00	2.56	2.56
Hereford	Western	2.01	2.01	2.01	2.01	2.01	2.42	2.42
Highbridge & Burnham-On-Sea	Western	2.90	2.90	2.90	2.66	2.66	2.66	2.66
Honeybourne Station	Western	2.37	2.37	2.37	2.37	2.24	2.24	2.24
Hopton Heath	Western	2.32	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	2.66
Islip Station	Western	2.00	2.00	2.00	2.00	2.40	2.40	2.40
Iver	Western	2.43	2.43	2.53	2.43	2.43	2.43	2.43
Ivybridge	Western	2.00	2.00	1.84	1.84	1.84	1.84	1.84
Johnston	Western	1.70	1.70	1.70	1.70	1.70	2.74	2.74
Kemble Station	Western	2.30	2.30	2.30	2.30	2.30	2.30	2.64
Keyham	Western	2.56	2.56	2.56	2.34	2.34	2.34	2.34
Keynsham	Western	2.62	2.62	2.05	2.05	2.05	2.05	2.05
Kidwelly	Western	1.78	1.78	1.78	1.78	1.78	2.77	2.77
Kilgetty	Western	1.71	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	2.71
Kings Nympton	Western	3.30	3.30	3.30	2.75	2.75	2.75	2.75
Kintbury	Western	2.39	2.39	2.39	2.39	2.39	3.04	3.04
Knighton Station	Western	2.07	2.07	2.07	2.07	2.11	2.11	2.11
Knucklas	Western	2.00	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	2.00
Langley	Western	2.00	2.00	2.53	2.53	2.53	2.53	2.53
Lapford	Western	2.36	2.36	2.36	2.31	2.31	2.31	2.31
Lawrence Hill	Western	2.15	2.15	1.84	2.24	2.24	2.24	2.24
Ledbury	Western	2.04	2.04	2.04	2.31	2.31	2.31	2.31
Lelant Slatings	Western	2.08	2.08	2.08	2.08	2.16	2.16	2.16
Lelant Station	Western	2.06	2.06	2.06	2.06	2.27	2.27	2.27

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Leominster	Western	1.96	1.96	1.96	2.00	2.00	2.24	2.24
Liskeard	Western	2.61	2.61	2.61	2.61	2.61	2.61	2.61
Lisvane & Thornhill	Western	2.00	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	1.90
Llanbedr	Western	1.25	1.25	1.25	2.29	2.29	2.29	2.29
Llanbister Road	Western	2.00	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	1.99
Llandaf	Western	2.92	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	1.87
Llandecwyn	Western	1.46	1.46	1.46	1.97	1.97	1.97	1.97
Llandeilo	Western	3.11	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	2.00
Llandrindod Wells	Western	2.00	2.00	2.00	1.95	2.47	2.47	2.47
Llandybie	Western	2.02	2.02	2.02	2.02	2.02	2.02	2.02
Llanelli	Western	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Llangadog	Western	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Llangammarch	Western	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Llangennech	Western	2.17	2.17	2.17	2.17	2.17	2.51	2.51
Llangynllo	Western	2.00	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	2.07
Llansamlet	Western	2.00	2.00	2.00	2.00	2.00	2.27	2.27
Llantwit Major	Western							0.00
Llanwrda	Western	2.00	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	2.57
Llwyngwril	Western	2.23	2.23	2.23	1.61	1.61	1.61	1.61
Llwynypia	Western	2.10	2.10	2.10	2.10	2.10	2.20	2.20
London Paddington	Western	3.12	3.12	2.35	2.40	2.40	2.40	2.40
Looe	Western	2.17	2.17	2.17	2.24	2.24	2.24	2.24
Lostwithiel	Western	2.67	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	2.10
Luxulyan	Western	2.08	2.08	2.08	2.08	2.61	2.61	2.61
Lydney	Western	2.09	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	1.99
Lympstone Village	Western	2.70	2.70	2.70	2.70	2.02	2.02	2.02
Machynlleth	Western	1.70	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	2.14
Maesteg (Ewenny Road)	Western	2.14	2.14	2.14	2.14	2.14	2.14	2.14
Maidenhead Station	Western	2.20	2.20	2.62	2.62	2.62	2.62	2.03
Malvern Link	Western	2.09	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	2.00
Marlow	Western	2.19	2.19	2.19	2.19	2.19	2.71	2.71
Melksham	Western	2.25	2.25	2.25	2.25	2.25	2.86	2.86
Menheniot	Western	3.14	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	2.01
Merthyr Vale Station	Western	2.86	2.86	2.86	2.86	2.12	2.12	2.12
Midgham	Western	2.17	2.17	2.22	2.22	2.22	2.78	2.78
Milford Haven	Western	2.00	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	2.01

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Montpelier	Western	1.48	1.48	2.45	2.35	2.35	2.35	2.35
Morchard Road	Western	2.22	2.22	2.22	1.87	1.87	1.87	1.87
Moreton in the Marsh	Western	2.10	2.10	2.10	2.88	2.88	2.88	2.88
Morfa Mawddach	Western	1.54	1.54	1.54	1.75	1.75	1.75	1.75
Mountain Ash	Western	2.78	2.78	2.78	2.78	2.78	2.78	2.78
Nailsea & Backwell	Western	2.43	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	2.13
Narberth	Western	1.67	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	2.11
Newbury Racecourse	Western	2.00	2.00	2.06	2.06	2.06	2.06	2.06
Newbury Station	Western	2.19	2.19	2.32	2.32	2.32	2.32	2.68
Newport	Western	2.17	2.17	2.17	2.30	2.30	2.30	2.30
Newquay Station	Western	2.30	2.30	2.30	2.30	2.61	2.61	2.61
Newton Abbot	Western	1.90	1.90	2.26	2.26	2.07	2.07	2.07
Newton St Cyres	Western	2.00	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	2.06
Ninian Park	Western	2.00	2.00	2.05	2.05	2.22	2.22	2.22
Oldfield Park	Western	1.88	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	2.65
Paignton	Western	2.99	2.99	2.99	2.60	2.60	2.60	2.60
Pangbourne	Western	2.30	2.30	2.72	2.72	2.72	2.72	2.72
Pantyffynnon	Western	3.44	3.44	3.44	2.92	2.92	2.92	2.92
Par	Western	2.24	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	2.30
Patchway	Western	3.20	3.20	2.19	2.06	2.06	2.06	2.06
Pembrey & Burry Port	Western	1.70	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	2.00
Pembroke Dock	Western	1.78	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	1.89
Penarth	Western	1.96	1.96	1.96	1.96	1.96	2.06	2.06
Pencoed	Western	2.22	2.22	2.22	2.22	2.22	2.87	2.87
Pengam Station	Western	2.01	2.13	2.39	2.39	2.51	2.51	2.51
Penhelig	Western	1.42	1.42	1.42	1.64	1.64	1.64	1.64
Penmere	Western	2.23	2.23	2.23	2.23	2.23	2.29	2.29
Penrhiwceiber	Western	2.10	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	1.85
Penryn	Western	2.00	2.00	2.00	2.00	2.00	2.49	2.49
Pensarn	Western	1.31	1.31	1.31	1.94	1.94	1.94	1.94
Pentrebach	Western	2.43	2.43	2.43	2.43	2.55	2.55	2.55
Pen-Y-Bont	Western	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Penzance Station	Western	2.85	2.85	2.15	2.13	2.13	2.13	2.46
Perrannwell	Western	2.06	2.06	2.06	2.06	2.06	2.48	2.48
Pershore Station	Western	2.30	2.30	2.30	2.30	2.27	2.27	2.27
Pewsey	Western	2.18	2.18	2.70	2.70	2.34	2.34	2.34
Pilning	Western	3.62	3.62	2.30	2.87	2.87	2.87	2.87
Pinhoe	Western	2.62	2.62	2.62	2.85	2.85	2.85	2.85
Plymouth Station	Western	2.58	2.58	2.07	2.07	2.07	2.07	2.03
Polsloe Bridge Station	Western	4.00	4.00	4.00	4.00	2.19	2.19	2.19

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Pontarddulais	Western	2.00	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	2.41
Pontyclun	Western	2.00	2.00	2.00	2.00	2.00	2.18	2.18
Pontypool & New Inn	Western	2.07	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	2.72
Port Talbot Parkway	Western	2.09	2.09	2.09	2.09	2.09	2.36	2.36
Porth	Western	2.16	2.16	2.16	2.16	2.16	2.04	2.04
Porthmadog	Western	1.23	1.23	1.23	2.02	2.02	2.02	2.02
Portsmouth Arms	Western	3.10	3.10	3.10	2.49	2.49	2.49	2.49
Prees	Western	1.84	1.84	1.84	2.13	2.13	2.13	2.13
Pwllheli	Western	1.80	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	2.64
Quakers Yard	Western	2.77	2.77	2.77	2.77	2.14	2.14	2.14
Quintel Downs Station	Western	2.00	2.00	2.00	2.00	2.27	2.27	2.27
Radley	Western	2.13	2.13	2.13	2.51	2.51	2.51	2.51
Radyr	Western	2.82	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	2.56
Reading West	Western	2.20	2.20	2.20	2.66	2.66	2.66	2.66
Redland	Western	2.20	2.20	2.25	1.92	1.92	1.92	1.92
Redruth	Western	2.22	2.22	2.22	2.18	2.18	2.18	2.18
Rhiwbina	Western	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Rhoose – Cardiff international	Western							0.00
Rhymney Station	Western	2.94	2.94	2.94	2.94	2.52	2.52	2.52
Roche	Western	2.00	2.00	2.00	2.00	2.63	2.63	2.63
Ruabon	Western	2.36	2.36	2.36	1.98	1.98	2.42	2.42
Saltash	Western	2.16	2.16	2.16	2.16	2.16	2.16	2.16
Sandplace Halt	Western	2.03	2.03	2.03	1.62	1.62	1.62	1.62
Sarn	Western	2.00	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	2.00
Sea Mills	Western	2.08	2.08	2.29	2.89	2.89	2.89	2.89
Severn Beach	Western	2.08	2.08	2.08	1.78	1.78	1.78	1.78
Severn Tunnel Junction	Western	2.68	2.68	2.68	2.68	2.68	2.68	2.68
Shiplake Station	Western	2.03	2.03	2.03	2.03	2.49	2.49	2.49
Shipton	Western	2.43	2.43	2.43	1.96	1.96	1.96	1.96
Shirehampton	Western	1.34	1.34	1.83	1.68	1.68	1.68	1.68
Shrewsbury	Western	2.06	2.06	2.06	2.11	2.11	2.11	2.11
Skewen	Western	2.19	2.19	2.19	2.19	2.19	2.46	2.46
Slough	Western	2.10	2.10	2.59	2.59	2.59	2.59	2.59
South Greenford	Western	2.27	2.27	2.27	2.27	2.41	2.41	2.41
Southall	Western	1.94	2.24	2.28	2.28	2.28	2.28	2.28
St Andrews Road	Western	1.67	1.67	1.67	1.74	1.74	1.74	1.74
St Austell	Western	2.00	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	1.96
St Columb Road	Western	2.20	2.20	2.20	2.20	2.07	2.07	2.07
St Germans	Western	2.57	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	1.95
St James Park	Western	1.90	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	1.93

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
St. Budeaux Victoria Road	Western	2.14	2.14	2.14	2.14	2.14	2.42	2.42
St. Erth Station	Western	2.30	2.30	2.57	2.57	2.57	2.57	2.41
Stapleton Road	Western	2.40	2.40	2.30	2.10	2.10	2.10	2.10
Starcross	Western	2.36	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	2.50
Stroud	Western	2.19	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	2.63
Swansea Station	Western	2.37	2.37	2.61	2.61	2.32	2.32	2.32
Swindon	Western	2.74	2.74	2.08	1.73	1.73	2.39	2.39
Tackley Halt	Western	2.00	2.00	2.00	2.00	2.57	2.57	2.57
Taffs Well	Western	2.05	2.05	2.05	2.05	2.48	2.48	2.48
Talsarnau	Western	1.53	1.53	1.53	1.97	1.97	1.97	1.97
Talybont	Western	2.02	2.02	2.02	2.00	2.00	2.00	2.00
Taplow	Western	2.33	2.33	2.73	2.73	2.73	2.72	2.72
Taunton Station	Western	2.31	2.31	2.10	2.10	2.13	2.13	2.13
Teignmouth Station	Western	2.13	2.13	2.13	2.13	2.13	2.13	2.20
Tenby	Western	1.92	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	2.05
Theale Station	Western	2.50	2.50	2.22	2.22	2.22	2.22	2.53
Tilehurst	Western	2.22	2.22	2.56	2.56	2.56	2.56	2.56
Tir-Phil	Western	2.04	3.09	2.18	2.18	2.43	2.43	2.43
Tiverton Parkway Station	Western	1.61	2.37	1.50	1.50	1.50	1.50	1.93
Ton Pentre	Western	1.93	1.93	1.93	1.93	1.93	2.19	2.19
Tondu	Western	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Tonfanau	Western	0.00			1.70	1.70	1.70	1.70
Tonypandy	Western	1.84	1.84	1.84	1.84	1.84	2.28	2.28
Topsham	Western	2.64	2.64	2.64	2.36	1.83	1.83	1.83
Torquay	Western	2.40	2.40	2.40	2.73	2.73	2.73	2.73
Torre	Western	2.28	2.28	2.28	2.76	2.76	2.76	2.76
Totnes	Western	2.32	2.32	2.15	2.15	2.15	2.27	2.27
Trefforest	Western	1.98	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	2.69
Trehafod	Western	2.82	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	2.14
Treorchy	Western	1.95	1.95	1.95	1.95	1.95	2.13	2.13
Troed-y-Rhiw Station	Western	1.85	1.85	1.85	1.85	2.19	2.19	2.19
Trowbridge Station	Western	1.80	1.80	1.80	1.80	1.80	1.80	1.90
Truro	Western	2.38	2.38	2.44	2.44	2.44	2.44	2.44
Twyford Station	Western	2.00	2.00	2.53	2.53	2.53	2.53	2.61
Ty Glas Station	Western	2.03	2.03	1.77	1.77	2.46	2.46	2.46
Tygwyn	Western	1.44	1.44	1.44	2.42	2.42	2.42	2.42
Tywyn	Western	2.30	2.30	2.30	1.60	1.60	1.60	1.60
Umberleigh	Western	3.10	3.10	3.10	2.08	2.08	2.08	2.08
Wargrave	Western	2.13	2.13	2.13	2.13	2.13	3.09	3.09
Warminster	Western	2.10	2.10	2.10	2.10	2.10	2.83	2.83
Waun Gron Park Station	Western	2.00	2.00	2.00	2.00	2.24	2.24	2.24
Welshpool	Western	1.59	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	2.40

Appendix 1 List of station condition

Station name	Route	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
West Drayton	Western	2.20	2.20	2.73	2.73	2.73	2.73	2.73
West Ealing	Western	2.03	2.03	2.30	2.30	2.30	2.30	2.30
Westbury	Western	2.40	2.40	2.40	2.40	2.40	2.79	2.79
Weston Milton	Western	2.36	2.36	2.45	2.75	2.75	2.75	2.75
Weston-super-Mare	Western	2.15	2.15	2.05	2.03	2.03	2.03	2.03
Whitchurch (Salop)	Western	2.19	2.19	2.19	2.41	2.41	2.41	2.41
Whitchurch Station	Western	2.00	2.00	2.00	2.00	2.73	2.73	2.73
Whitland	Western	2.18	2.18	2.18	2.18	2.18	1.91	1.91
Wildmill	Western	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Windsor & Eton Central	Western	2.05	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	2.10
Worcester Shrub Hill	Western	2.58	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	2.30
Wrenbury	Western	2.13	2.13	2.13	1.69	1.69	1.69	1.69
Yate Station	Western	2.86	2.86	2.86	2.86	2.66	2.66	2.66
Yatton	Western	2.23	2.23	2.23	2.64	2.64	2.64	2.64
Yeoford	Western	2.05	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	2.19
Yorton	Western	2.12	2.12	2.12	2.62	2.62	2.62	2.62
Ystrad Mynach Station	Western	2.14	2.68	2.74	2.74	2.51	2.51	2.51
Ystrad Rhondda	Western	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Appendix 2 Depot condition

The following table provides a list of all depots and their condition grades each year. The grading system is from 1 – 5 with the lower the number i.e. closer to 1, the better. The regulatory target is 2.7 for CP3. The condition score is an average 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.

Appendix 2 Depot condition

Location (also includes depot code)	Territory	Average Score 2001/02	Average Score 2001/03	Average Score 2001/04	Average Score 2001/05	Average Score 2001/06	Average Score 2001/07
Cambridge (CAM).	Anglia			2.37	2.37	2.37	2.37
Clacton (CLA).	Anglia						3.83
Colchester (COL).	Anglia			2.82	2.82	2.82	2.82
London Chingford (CHI).	Anglia					2.79	2.79
London East Ham (EAH).	Anglia	3.60	3.60	3.60	3.60	3.60	3.56
London Ilford (ILF).	Anglia	3.54	3.54	3.54	3.54	3.54	3.54
Norwich Crown Point (NCP).	Anglia	3.10	3.10	3.10	3.10	3.10	3.10
Shoeburyness (SHO).	Anglia					2.74	2.74
Southend (SOU).	Anglia						2.72
Gillingham (GIL).	Kent						2.69
London Grove Park (GRP).	Kent					2.21	2.21
London Orpington (ORP).	Kent						2.14
London Slade Green (SLG).	Kent					2.13	2.13
Ramsgate (RAM).	Kent						2.42
St. Leonard's (SLE).	Kent			1.72	1.72	1.72	1.72
Bedford Midland (BEM).	London North East	3.08	3.08	3.08	3.08	3.08	3.08
Derby Etche's Park (DEP).	London North East	3.10	3.10	3.10	3.10	3.10	3.10
Hull Botanic Gardens (HBG).	London North East			2.44	2.44	2.44	2.44
Leeds Neville Hill - MML (LNM).	London North East	3.28	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	3.33
Letchworth (LET).	London North East					1.7	2.52
London Bound's Green (BOG).	London North East						1.87
London Ferme Park (FEP).	London North East						2.83
London Hornsey (HOR).	London North East	2.70	2.70	2.70	2.70	2.70	2.70
Newcastle Upon Tyne Heaton (NEH).	London North East						2.31
Nottingham, Eastcroft (NOE).	London North East	2.16	2.16	2.16	2.16	2.16	2.16
Peterborough (PET).	London North East						0.00
Sheffield (SHE).	London North East						2.94
Skipton (SKI).	London North East			1.35	1.35	1.35	1.35
Welwyn Garden City (WGC).	London North East						2.80
Aylesbury (AYL).	London North West			1.49	1.49	1.49	1.49
Barrow- in - Furness (BIF).	London North West	3.70	3.70	3.70	3.70	3.70	3.70
Birkenhead North (BKN).	London North West	2.63	2.63	2.63	2.63	2.63	2.63
Birkinheath Central (BKC).	London North West						0.00
Birmingham Soho (BIS).	London North West			1.94	1.94	1.94	1.94
Birmingham Tyseley (BIT).	London North West	2.73	2.73	2.73	2.73	2.73	2.73
Blackpool North (BLN).	London North West			2.20	2.20	2.20	2.20
Bletchley (BLE).	London North West					2.43	2.43
Holyhead (HOL).	London North West			2.65	2.65	2.65	2.65
Liverpool Edge Hill (LEH).	London North West						2.60
Liverpool Hall Road (LHR).	London North West						0.00
Liverpool Kirkdale (LKD).	London North West						1.71
London Camden Primrose Hill (CAP).	London North West						2.52
London Wembley Central (WEC).	London North West			2.20	2.20	2.20	2.20
London Willesden (WIL).	London North West	2.90	2.90	2.90	2.90	2.90	2.90
Manchester Longsight (MAL).	London North West						2.08
Manchester Newton Heath (MNH).	London North West	3.60	3.60	3.60	3.60	3.60	3.60

Appendix 2 Depot condition

Location (also includes depot code)	Territory	Average Score 2001/02	Average Score 2001/03	Average Score 2001/04	Average Score 2001/05	Average Score 2001/06	Average Score 2001/07
Shrewsbury Abbey Foregate (SAF).	London North West						3.22
Watford Junction (WAJ).	London North West						3.00
Wolverhampton Oxley (WOO).	London North West						2.08
Aberdeen Clayhills (ABC).	Scotland			2.50	2.50	2.50	2.50
Ayr- Townhead (AYR).	Scotland						2.30
Edinburgh Craigentinny/ Portobello (EDC).	Scotland	2.94	2.94	2.94	2.94	2.94	2.94
Edinburgh Haymarket (EDH).	Scotland	2.40	2.40	2.40	2.40	2.40	2.40
Glasgow Cokerhill (GLC).	Scotland						2.56
Glasgow Shields (GLS).	Scotland	2.56	2.56	2.56	2.56	2.56	2.56
Glasgow Yoker (GLY).	Scotland			1.98	1.98	1.98	1.98
Inverness (INV).	Scotland	2.70	2.70	2.70	2.70	2.70	2.70
Perth (PER).	Scotland						3.19
Brighton (BRI).	Sussex	3.10	3.10	3.10	3.10	3.10	3.10
Eastbourne (EAS).	Sussex						2.35
Littlehampton (LIT).	Sussex						2.19
London Selhurst (SEL).	Sussex			2.17	2.17	2.17	2.17
London Streatham Hill (STR).	Sussex		2.50	2.50	2.50	2.50	2.50
London Victoria (VIC).	Sussex	4.18	4.18	4.18	4.18	4.18	4.18
Bournemouth West (BOW).	Wessex					2.46	2.46
Fratton (FRA).	Wessex						2.57
London Clapham Junction (CLJ).	Wessex						2.53
London Stewart's Lane (STL).	Wessex					2.44	2.44
London Strawberry Hill (STH).	Wessex						2.83
London Wimbledon (WIM).	Wessex					2.32	2.32
Ryde	Wessex					2.69	2.69
Salisbury (SAL).	Wessex			2.02	2.02	2.02	2.02
Bristol St. Phillips Marsh (BSP).	Western					2.15	2.15
Cardiff Canton (CAC).	Western			2.34	2.34	2.34	2.34
Exeter St. David's (ESD).	Western			2.01	2.01	2.01	2.01
London Kensal Green (KEG).	Western					3.11	3.11
London Old Oak Common (OOC).	Western					1.88	1.88
Penzance Long Rock (PEN).	Western					2.41	2.41
Plymouth Laira (PLY).	Western			2.37	2.37	2.37	2.37
Reading (REA).	Western					2.30	2.30
Swansea High Street (SWH).	Western					2.36	2.36
Swansea Landore (SWL).	Western					2.97	2.97
Worcester Shrub Hill (WSH).	Western			2.05	2.05	2.05	2.05

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Network Rail
40 Melton Street
London NW1 2EE

Tel: 020 7557 8000

www.networkrail.co.uk

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