Passenger and Freight Rail Performance 2017-18 Q1 Statistical Release

Publication date: 21 September 2017

Next publication date: 7 December 2017

Background

This release contains information on passenger and freight rail performance in Great Britain with the latest quarterly data referring to April, May and June 2017.

All data in this release are sourced from Network Rail. Passenger performance is assessed using two measures: **Public Performance Measure (PPM)** and **Cancellations and Significant Lateness (CaSL)**.

In addition to the PPM and CaSL data in this release, **delay minute data** are published quarterly on the Data Portal.

The **Freight Delivery Metric (FDM)** is the primary measure of freight performance in Great Britain.

Contents

Nationally, 88.0% of trains were on time in the year ending Q1 of 2017-18 (**Public Performance Measure** (**PPM**) **moving annual average** (**MAA**)).

The MAA for the **London and South East** sector is 85.9%. **Govia Thameslink Railway** (**GTR**) performance improved by 8.3 pp in Q1. However, the 84.4% recorded by GTR was still 1.6 pp lower than the 86.0% recorded in 2015-16 Q1.

PPM MAA – 2017-18 Q1		Compared with 2016-17 Q1
National (GB)	88.0%	↓ -0.5 pp
Regional and Scotland	91.2%	↑ 0.2 pp
London and South East	85.9%	↓ -1.0 pp
Long Distance	87.5%	→ 0.0 pp

The proportion of trains **cancelled or significantly late** (**CaSL**) in the year ending Q1 of 2017-18 was 3.6%. The **London and South East sector** ended Q1 with a CaSL MAA of 4.4%. This is up 0.5 pp compared with the previous year.

CaSL MAA – 2017-18 Q1		Compared with 2016-17 Q1
National (GB)	3.6%	↑ 0.3 pp
Regional and Scotland	2.3%	↑ 0.1 pp
London and South East	4.4%	↑ 0.5 pp
Long Distance	4.7%	↓ -0.1 pp

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Public Performance Measure (PPM) and Cancellations and Significant Lateness (CaSL)

This release contains information on passenger and freight rail performance in Great Britain since 1997-98. The latest data in this release refer to Q1 of 2017-18 (1 April to 30 June 2017).

Punctuality (PPM) and unreliability (CaSL) are judged against what is known as the plan of the day. The operator and Network Rail confirm this at 22:00 on the previous evening. Trains removed from the railway systems before this time are excluded from the PPM and CaSL calculations.

For further information on the collection of this data, please refer to Annex 2.

Public Performance Measure (PPM) measures **punctuality**. It is the proportion of trains that arrive at their final destination on time. On time is defined as arriving at the destination within five minutes of the planned timetable for London and South East, Regional and Scotland operators, or within ten minutes for the Long Distance operators. The **moving annual average (MAA)** reflects the proportion of trains on time in the past 12 months. In Q4, the MAA also represents the PPM for the financial year. A higher score indicates higher performance.

Cancellations and significant lateness (CaSL) measures **unreliability**. It captures the percentage of trains that have caused significant disruption to at least some passengers. The **moving annual average (MAA)** reflects the proportion of trains cancelled or significantly late in the past 12 months. In Q4, the MAA also represents the CaSL for the financial year. A lower score indicates higher performance.

A train is considered to be **significantly late** if it calls at all booked stations, completes its entire booked journey and arrives between 30 and 119 minutes after the scheduled arrival time at the final destination.

A train is considered to be a **part cancellation** if it covers more than half the scheduled mileage and either failed to run the whole journey or failed to stop at any station on the way. Trains completing their scheduled journey but arriving at their final destination late by 120 minutes or more also count as part cancellations.

A train is considered to be a **full cancellation** if it covers less than half the scheduled mileage, or does not run at all.

Delay Minutes, PPM Failures and CaSL Failures

Delay incidents producing **three or more minutes** of delay on Britain's railways are attributed to either Network Rail or a train operator. As well as infrastructure and operational delays such as signal failures and overrunning engineering works, delays caused by external factors such as severe weather, vandalism, cable theft and trespass are also attributed to Network Rail. This is because they are considered best placed to mitigate for such incidents.

A **PPM failure** is when a passenger train does not arrive at its final destination within five minutes of its scheduled arrival time (within ten minutes for Long Distance services). Delay minutes are used to apportion responsibility for PPM failures and can be split between multiple causes of delay. It is not possible to attribute every part of every PPM failure to specific delay minutes. These components of PPM failures remain unmapped.

A **CaSL failure** is when a passenger train does not arrive at its final destination within 30 minutes of its scheduled arrival time and/or is cancelled either in full or in part. Delay minutes and other intelligence are used to apportion responsibility for CaSL failures and can be split between multiple causes of delay. It is not possible to attribute every part of every CaSL failure to specific delay minutes. These components of CaSL failures remain unmapped.

We currently publish limited Network Rail caused delay minute data on Table 3.46 of the Data Portal. Further delay minute, PPM failure and CaSL failure data are published on the ORR website. These tables are updated twice a year in November and April.

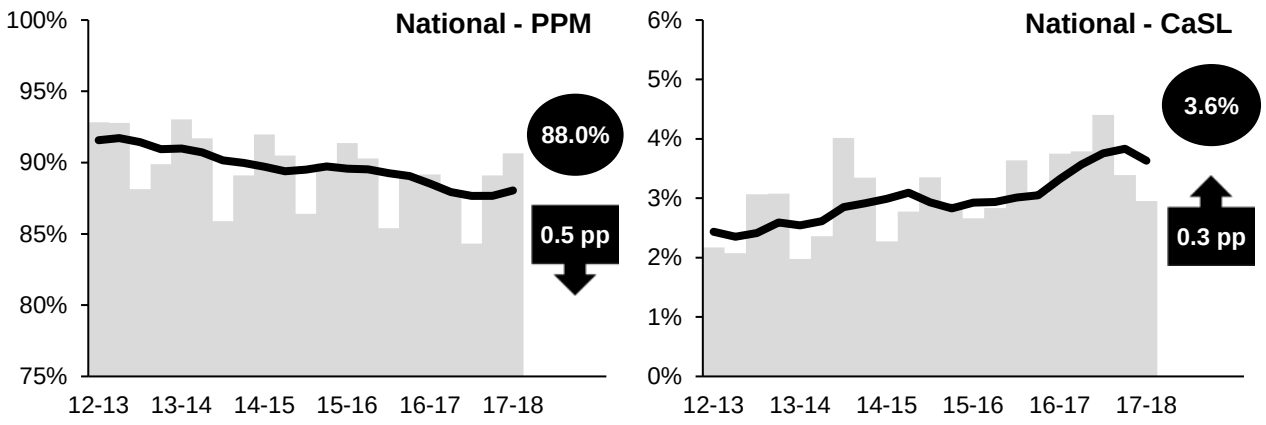
Network Rail attributed delays are also available in the Annual Return which reports Network Rail achievements, developments and challenges for each financial year and the historical record of Network Rail stewardship on the Network Rail website.

1. National Performance

National punctuality in Q1 of 2017-18 was 90.7%. This was up 1.5 pp compared with Q1 last year. The MAA ended 2017-18 Q1 at 88.0%. This is down 0.5 pp compared with a year ago. National unreliability was 3.0% in Q1. This was down 0.8 pp compared with 2016-17 Q1. The MAA stands at 3.6%, which is up 0.3 pp compared with a year ago. This means that whilst performance in Q1 improved compared with last year, performance in the last year deteriorated compared with the year ending 2016-17 Q1.

Of the 1.5 pp year-on-year increase in national punctuality in Q1, 1.3 pp was due to the improvement in the performance of Govia Thameslink Railway. Of the 0.5 pp year-on-year fall in the punctuality MAA, 0.3 pp was due to the deterioration in the performance of Govia Thameslink Railway. For more information on these calculations, please refer to Annex 5.

Figure 1.01: PPM and CaSL, National (Great Britain), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



European Comparisons

Comparisons with railways in the rest of Europe are available for the 2014 calendar year. For trains in the Regional and Scotland sector and LSE sector combined, 89.8% of services arrived within five minutes of their scheduled arrival time at their final destination. This ranked Britain 18th best out of 23 countries[1]. With 91.0% of long distance services arriving at their final destination within 15 minutes of their scheduled arrival time, Britain ranks 9th best out of 22 countries. For trains in the Regional and Scotland sector and LSE sector combined, 2.6% of services were cancelled (including part cancellations). This ranks Britain 17th best out of 20 countries. With 3.1% of long distance services cancelled, Britain ranks 16th best out of 19 countries.

[1] European Commission (2016), pages 130-132 (punctuality), Pages 132-133 (cancellations)

2. London and South East Performance

The London and South East sector is mostly composed of services to and from London termini. It includes some services outside of London such as the Govia Thameslink Railway services along the Sussex coast, while some of the operators in the sector also have other services in the Regional and Long Distance sectors (e.g. London Midland and Greater Anglia).

Peak PPM measures **punctuality** in the morning and evening peaks. Train services arriving into London termini between 07:00 and 09:59 in the morning and departing London termini between 16:00 and 18:59 in the evening are classified as peak services. All peak services are in the London and South East sector and therefore have a five-minute threshold for PPM. The **moving annual average (MAA)** reflects the proportion of peak time trains on time in the past 12 months. In Q4, the MAA also represents the Peak PPM for the financial year. A higher score indicates higher performance.

2017-18 Quarter 1 Headlines:

- The punctuality MAA for the LSE sector ended the quarter at 85.9% (down 1.0 pp compared with 2016-17 Q1).
- The lowest c2c Q1 punctuality (95.4%) since 2008-09 (94.8%) with train crew caused PPM failures in the quarter increasing by 112% year-on-year.
- The lowest Chiltern Railways Q1 punctuality (92.6%) since 2003-04 (90.9%) with fleet caused PPM failures in the quarter increasing by 63% year-on-year.
- A 4.0 pp year-on-year reduction in the proportion of Govia Thameslink Railway services cancelled or significantly late in 2017-18 Q1 (5.3%).
- The lowest punctuality MAA recorded by GWR LSE services (88.0%) since 2008-09 Q1 (87.1%). Network Rail caused PPM failures were up 32% year-on-year.
- A 3.0 pp year-on-year reduction in the punctuality of London Midland LSE services in 2017-18 Q1 (85.2%). Signal related PPM failures were up 55% this quarter.
- The lowest South West Trains Q1 punctuality (89.1%) since 2004-05 (79.0%) with infrastructure related PPM failures increasing by 49% year-on-year.
- The highest Southeastern Q1 punctuality (92.4%) since 2013-14 (93.9%) with infrastructure related PPM failures decreasing by 37% year-on-year.

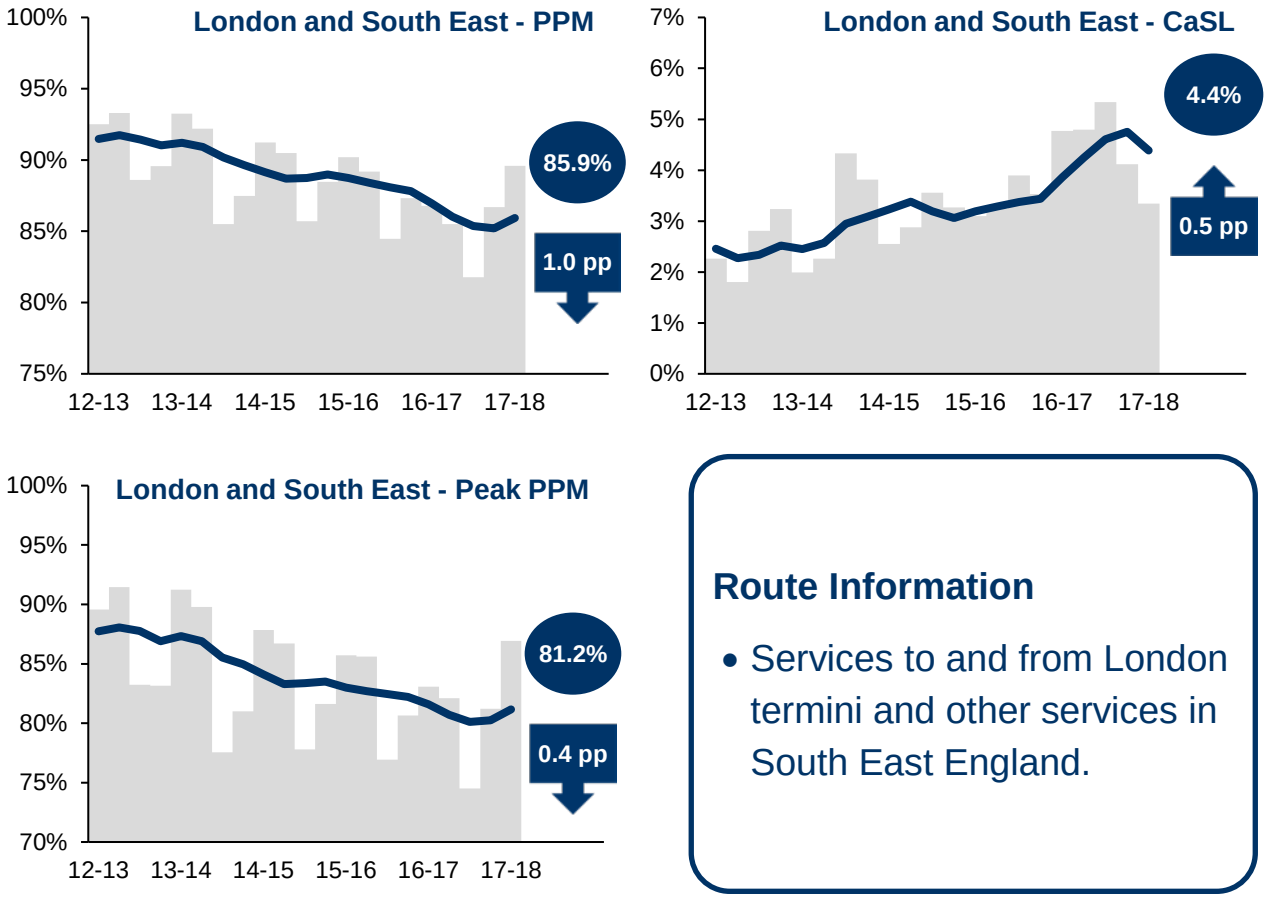
All London and South East Operators

Punctuality (PPM) in the London and South East sector as a whole was 89.6% in Q1 of 2017-18. While this was up 2.8 pp compared with Q1 last year, it is still the second lowest Q1 punctuality in this sector in the last 12 years. The MAA improved by 0.7 pp compared with the end of 2016-17. However, the current MAA of 85.9% is still 1.0 pp lower than it was one year ago.

Peak service punctuality for the London and South East sector improved in Q1. The 86.9% recorded in Q1 of 2017-18 was up 3.8 pp compared with the same quarter last year. Nevertheless, the MAA (81.2%) is still down 0.4 pp compared with a year ago.

For Q1 of 2017-18, unreliability (CaSL) was 3.3% in the London and South East sector. This was down 1.4 pp compared with the same quarter the previous year. However, it is still the second highest Q1 unreliability in this sector since the time series began in 1997-98. The MAA stands at 4.4%. While this is down 0.4 pp compared with the end of 2016-17, it is 0.5 pp higher than it was one year ago.

Figure 2.01: PPM, Peak PPM and CaSL, London and South East Sector, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services to and from London termini and other services in South East England.

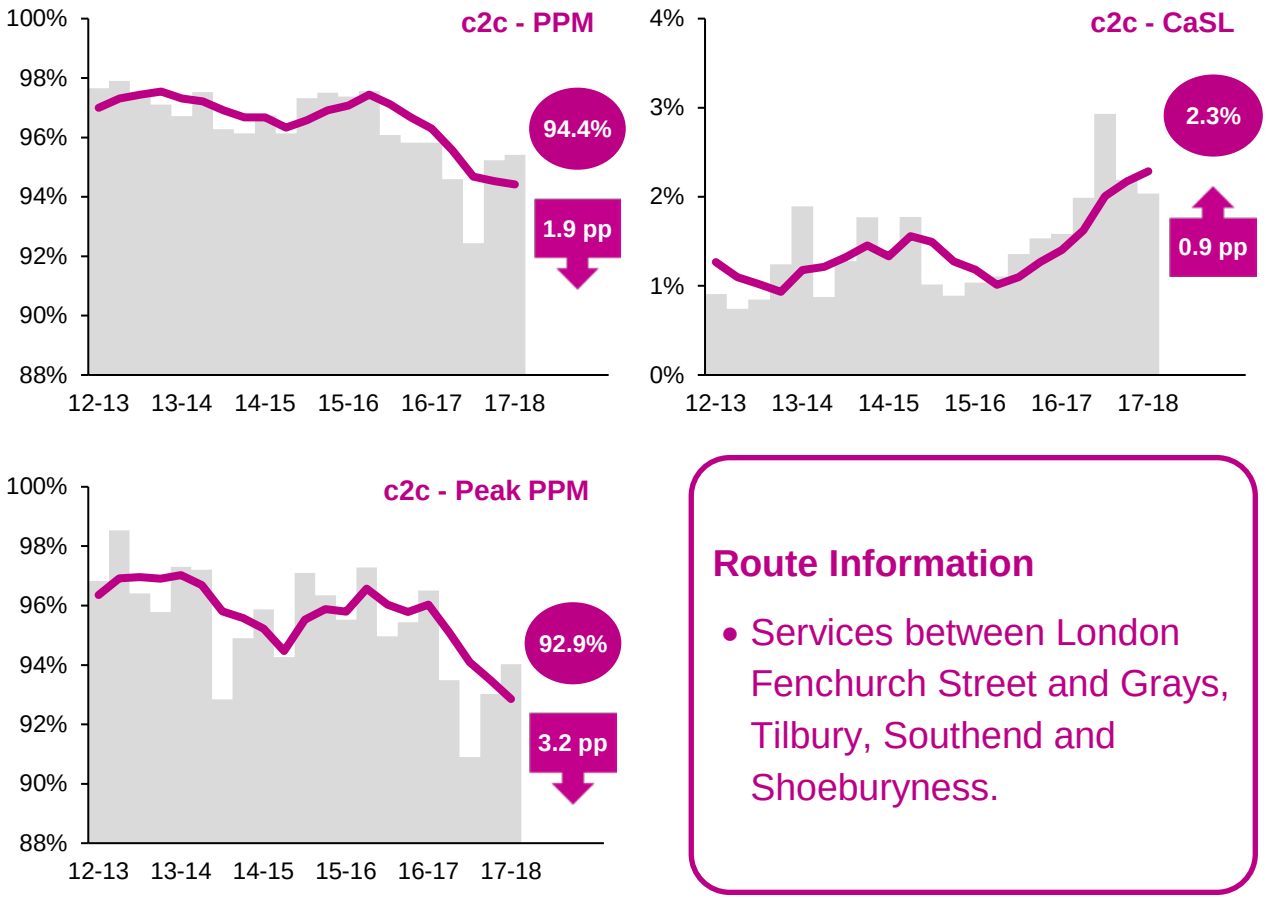
c2c

Punctuality for c2c was 95.4% in Q1. Down 0.4 pp compared with Q1 in 2016-17, this is the lowest Q1 punctuality since 2008-09 (94.8%). The MAA stands at 94.4%, which is the lowest it has been since 2007-08 Q2 (94.2%). Punctuality in the peak also continued to decline. The MAA ended 2017-18 Q1 at 92.9%, which is the lowest it has been since 2004-05 Q4 (92.7%).

Unreliability in Q1 was 2.0%. Up 0.5 pp compared with the same quarter last year, this is the highest Q1 unreliability since 2008-09 (2.4%). The MAA stands at 2.3%, the highest it has been since 2008-09 Q1 (2.4%).

PPM failures attributed to Network Rail were down 15% in Q1 of 2017-18 compared with 2016-17 Q1. Most of this decrease was accounted for by better weather. The 95 PPM failures relating to signal problems in Q1 was up 42% compared with the same quarter the previous year. CaSL failures caused by c2c increased by 92%. In particular, there were 193 CaSL failures attributed to train crew problems in Q1. This was more than double the number recorded in Q1 of 2016-17.

Figure 2.02: PPM, Peak PPM and CaSL, c2c, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London Fenchurch Street and Grays, Tilbury, Southend and Shoeburyness.

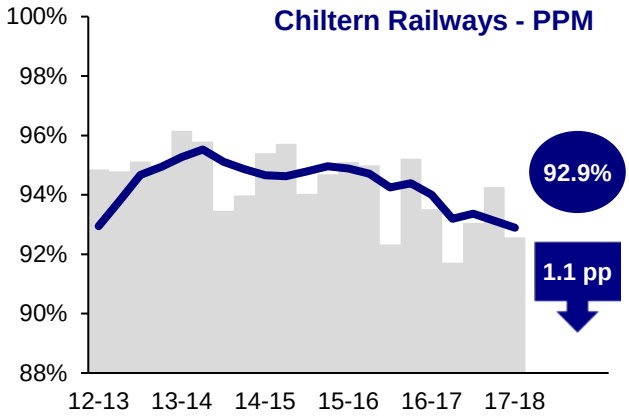
Chiltern Railways

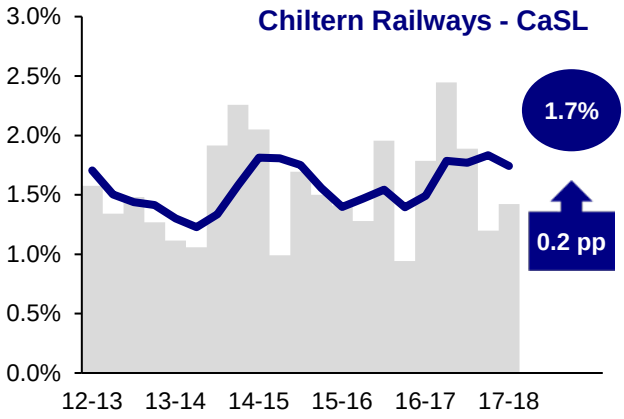
Chiltern Railways recorded a punctuality of 92.6% in Q1. This was 1.0 pp lower compared with Q1 in 2016-17 and is the lowest Q1 punctuality since 2003-04 (90.9%). The MAA stands at 92.9%, which is the lowest it has been since 2011-12 Q3 (92.7%). Punctuality in the peak also continued to decline. The MAA ended 2017-18 Q1 at 89.2%, which is the lowest it has been since 2003-04 Q4 (88.1%).

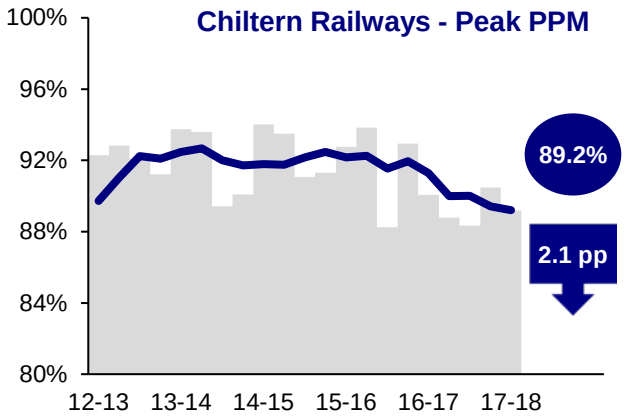
Reliability improved with 1.4% of trains cancelled or significantly late in 2017-18 Q1. This was down 0.4 pp compared with the same quarter the previous year. However, the MAA (1.7%) is still 0.2 pp higher than where it was a year ago.

Aside from the improved weather, there was a 40% year-on-year reduction in PPM failures attributed to track faults in Q1 of 2017-18. However, PPM failures caused by points (up 28%) and signal related failures (up 29%) increased in Q1 compared with the same quarter the previous year. CaSL failures caused by Chiltern Railways increased by 47%. In particular, there were 146 CaSL failures attributed to fleet problems in Q1. This was up 72% compared with the number recorded in Q1 of 2016-17.

Figure 2.03: PPM, Peak PPM and CaSL, Chiltern Railways, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)







Route Information

- Services between London Marylebone and High Wycombe, Aylesbury, Oxford, Banbury, Birmingham and Kidderminster.
- Services between Leamington and Birmingham and Stratford-upon-Avon.

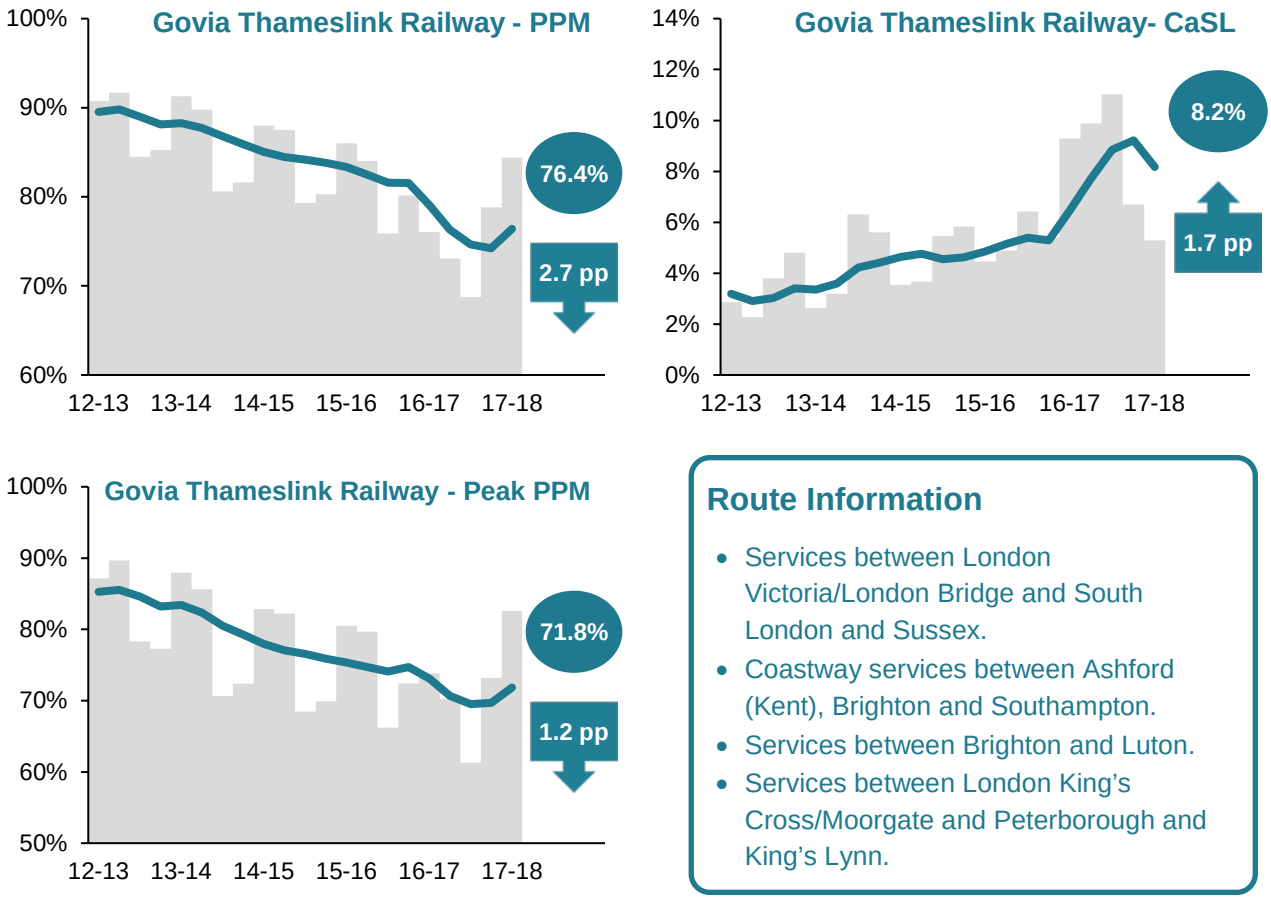
Govia Thameslink Railway

GTR recorded a punctuality of 84.4% in Q1. While this was 8.3 pp higher compared with Q1 in 2016-17, this was still 1.6 pp lower than 2015-16 Q1 (86.0%). The MAA stands at 76.4% which is 2.7 pp lower compared with a year ago. Punctuality in the peak for the year ending 2017-18 Q1 was 71.8%.

GTR operated a similar number of services this quarter as they did in Q1 of 2016-17. Reliability improved with 5.3% of trains cancelled or significantly late. This was a year-on-year fall of 4.0 pp. Of this, 3.4 pp was accounted for by a decline in full cancellations. Nevertheless, the MAA (8.2%) is still 1.7 pp higher than where it was a year ago.

Train crew PPM failures in Q1 were down 72% year-on-year. There was also a 38% reduction in the number of PPM failures that were unexplained. PPM failures due to track faults, however, were up 31% compared with Q1 in 2016-17. For example, a track fault near Brighton resulted in 3,300 delay minutes to all operators. There were also two large external incidents this quarter: an embankment fire near Redhill (8,000 delay minutes to all operators) and a bridge strike at Coulsdon South (5,500 delay minutes to all operators).

Figure 2.04: PPM, Peak PPM and CaSL, Govia Thameslink Railway, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Ashford (Kent), Brighton and Southampton.
- Services between Brighton and Luton.
- Services between London King's Cross/Moorgate and Peterborough and King's Lynn.

Thameslink, Southern and Great Northern

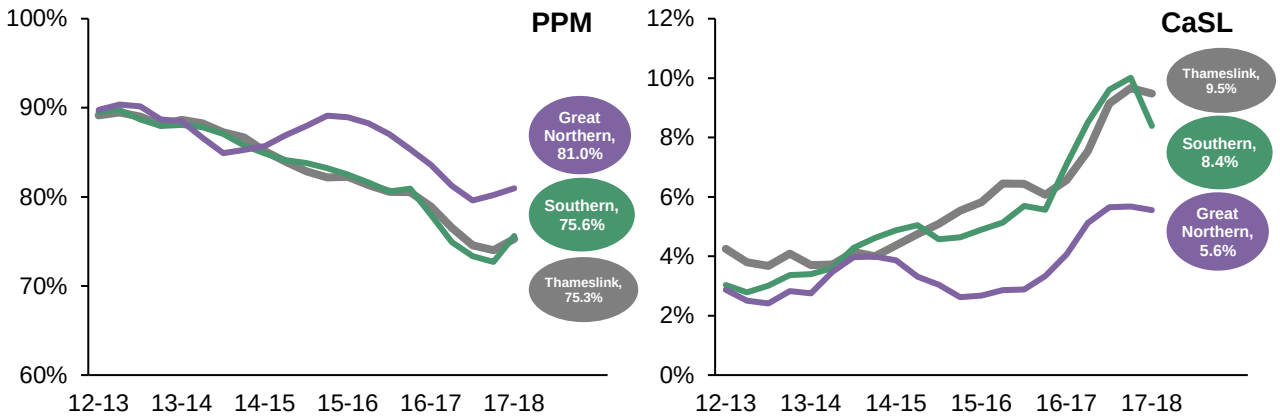
On 26 July 2015, the Thameslink, Southern and Great Northern franchise began operation as Govia Thameslink Railway (GTR). At the end of 2017-18 Q1, the MAAs for punctuality for the three sub operators were:

- Southern: 75.6% (down 2.4 pp on 2016-17 Q1).
- Thameslink: 75.3% (down 3.6 pp on 2016-17 Q1).
- Great Northern: 81.0% (down 2.7 pp on 2016-17 Q1).

At the end of 2017-18 Q1, the MAAs for unreliability for the sub operators were:

- Southern: 8.4% (up 1.3 pp on 2016-17 Q1).
- Thameslink: 9.5% (up 2.9 pp on 2016-17 Q1).
- Great Northern: 5.6% (up 1.5 pp on 2016-17 Q1).

Figure 2.05: PPM and CaSL, Thameslink, Southern and Great Northern, 2012-13 Q1 to 2017-18 Q1 (figure shown is for 2017-18 Q1 MAA)



Route Information - Thameslink

- Services between Brighton/Wimbledon and Bedford/Luton via London Blackfriars.

Route Information - Southern

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Brighton and Lewes, Seaford, Ore and Ashford (Kent).
- Coastway services between Brighton and Hove, Worthing, Portsmouth, Southampton and between Littlehampton and Bognor Regis and Portsmouth.

Route Information – Great Northern

- Services between London King's Cross/Moorgate and Peterborough and King's Lynn.

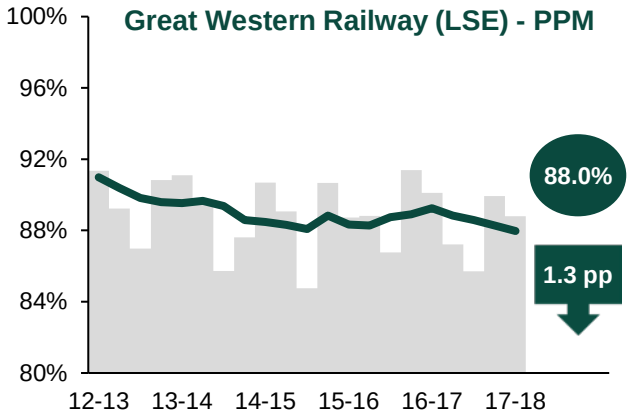
Great Western Railway (LSE Services)

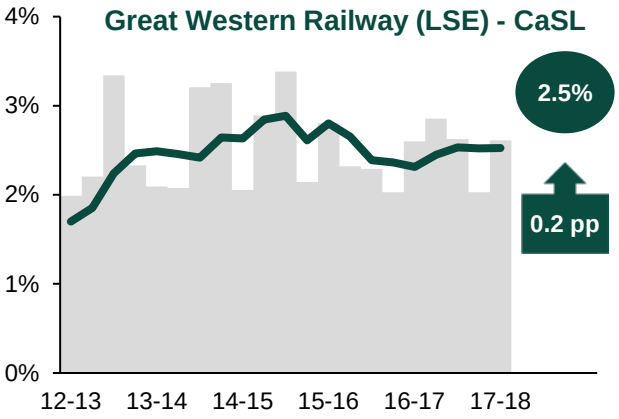
For services in the London and South East sector, GWR recorded a punctuality of 88.8% in Q1. This was 1.3 pp lower compared with Q1 in 2016-17. The MAA stands at 88.0%, which is the lowest it has been since 2008-09 Q1 (87.1%). Punctuality in the peak also continued to decline. The MAA ended 2017-18 Q1 at 79.9%, which is the lowest it has been since 2008-09 Q2 (79.7%).

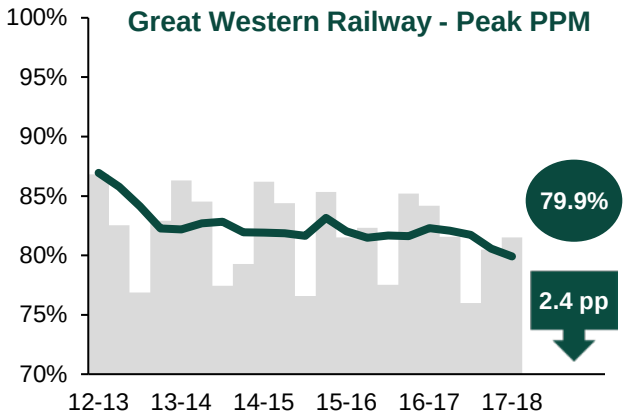
In 2017-18 Q1, 2.6% of trains were cancelled or significantly late. This was the same as Q1 in 2016-17. The MAA (2.5%) is 0.2 pp higher than it was a year ago.

For the whole of GWR (including delays to regional and long distance services), Network Rail caused PPM failures were 32% higher in Q1 of 2017-18 compared with the same quarter the previous year. PPM failures caused by points failures were up 59% and track fault PPM failures were up 220%. In Q1, PPM failures attributed to GWR were up 23% year-on-year. There were a number of incidents in the Thames Valley which caused significant delay including a bird strike at West Ealing (6,600 delay minutes to all operators) and an engineering over-run at Reading (2,500 delay minutes to all operators).

Figure 2.06: PPM, Peak PPM and CaSL, Great Western Railway (LSE Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)







Route Information (Cross-Sector Operator)

- Services between London Paddington and Heathrow Airport (stopping service), Reading and Oxford.
- Branch lines to Greenford, Windsor, Marlow and Henley
- Services between Reading and Basingstoke and Gatwick Airport.

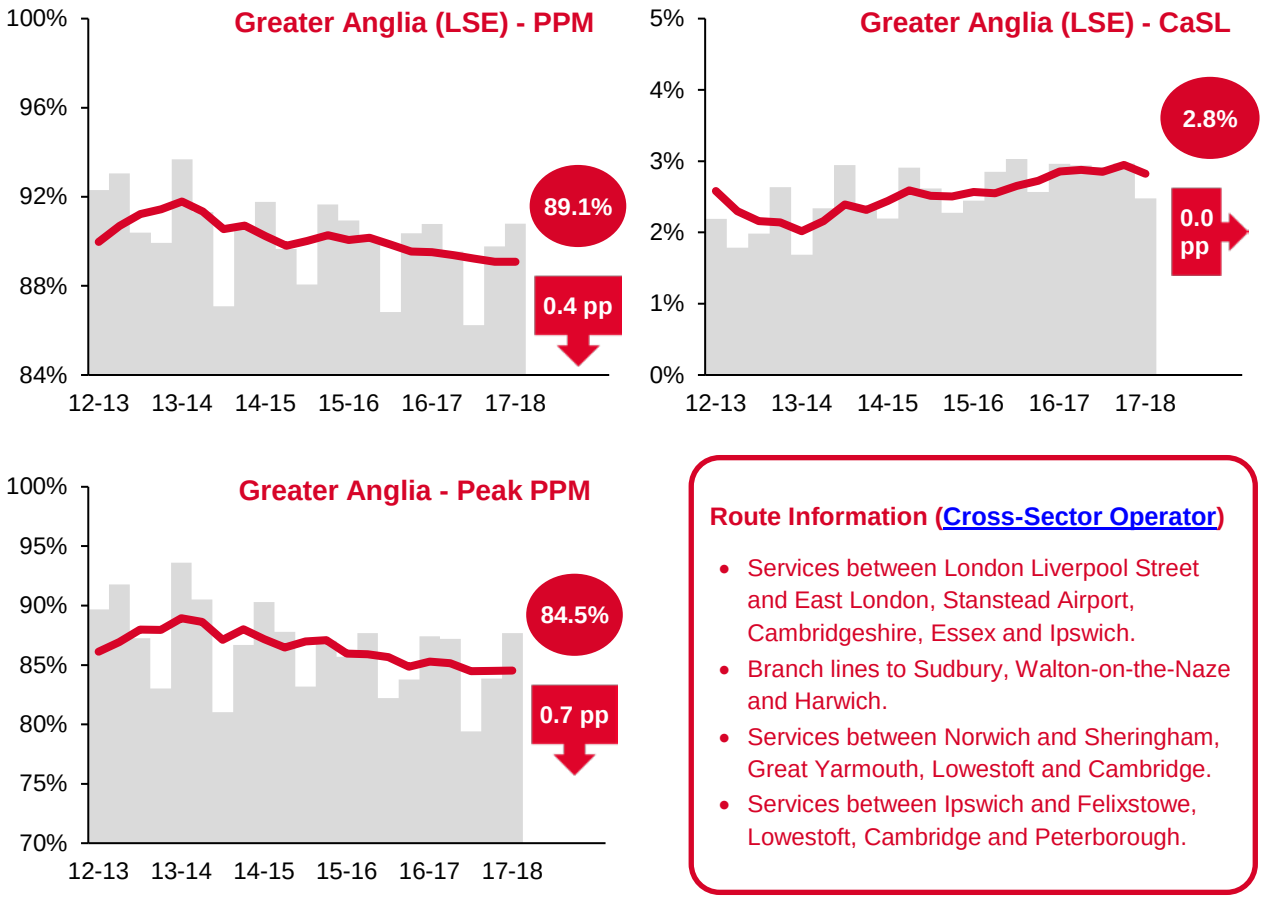
Greater Anglia (LSE Services)

For services in the London and South East sector, Greater Anglia recorded a punctuality of 90.8% in Q1. This was the same as Q1 in 2016-17. The MAA for punctuality stands at 89.1% and the MAA for peak punctuality ended 2017-18 Q1 at 84.5%.

In 2017-18 Q1, 2.5% of trains were cancelled or significantly late. This was 0.5 pp lower than Q1 in 2016-17. However, it was still the second highest Q1 figure since 2006-07 (2.8%). The MAA (2.8%) was down slightly compared with a year ago.

For the whole of Greater Anglia (including delays to long distance services), PPM failures due to weather were down 66% year-on-year. However, timetable planning PPM failures were up 260% and engineering over-runs caused 150% more PPM failures this quarter compared with the same quarter the previous year. PPM failures caused by Greater Anglia this quarter were down 12% year-on-year. There were a number of incidents in the London area which caused significant delay. These included a signal failure at Shenfield (5,200 delay minutes to all operators) and flooding between Forest Gate and Ilford (3,400 delay minutes to all operators).

Figure 2.07: PPM, Peak PPM and CaSL, Greater Anglia (LSE Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between London Liverpool Street and East London, Stanstead Airport, Cambridgeshire, Essex and Ipswich.
- Branch lines to Sudbury, Walton-on-the-Naze and Harwich.
- Services between Norwich and Sheringham, Great Yarmouth, Lowestoft and Cambridge.
- Services between Ipswich and Felixstowe, Lowestoft, Cambridge and Peterborough.

Heathrow Express

Heathrow Express recorded a punctuality of 90.5% in Q1. This was up 1.0 pp compared with Q1 in 2016-17. The MAA for punctuality stands at 90.0%. This is down 0.9 pp compared with a year ago.

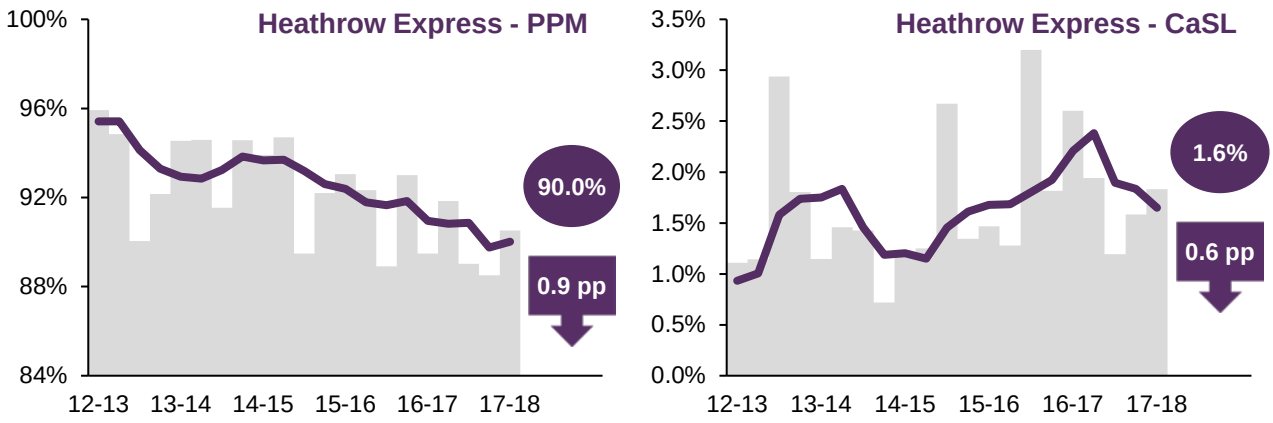
In 2017-18 Q1, 1.8% of trains were cancelled or significantly late. This was 0.8 pp lower than Q1 in 2016-17. While this is still the second highest Q1 figure since the time series began in 2004-05, the MAA (1.6%) is down 0.6 pp compared with a year ago and the lowest it has been since Q4 of 2014-15.

PPM failures resulting from external incidents increased by 187% in Q1 compared with the same quarter the previous year. Track faults generated 62 PPM failures this quarter, up from three in 2016-17 Q1. However, signal related PPM failures were down 57%.

Heathrow Express were attributed 19% more PPM failures this quarter compared with Q1 last year. External incidents attributed to Heathrow Express generated 140% more PPM failures, while train crew caused PPM failures almost doubled compared with Q1 of 2016-17. Performance also improved relative to Q1 of 2016-17 as a last year's Q1 figures included the impact of the derailment of a GWR train at Paddington.

There were a number of incidents in the Thames Valley which caused significant delay. These included a bird strike at West Ealing (6,600 delay minutes to all operators) and signal system failure at Ealing Broadway (2,400 delay minutes to all operators).

Figure 2.08: PPM and CaSL, Heathrow Express, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information – Heathrow Express

- Services between London Paddington and Heathrow Airport.

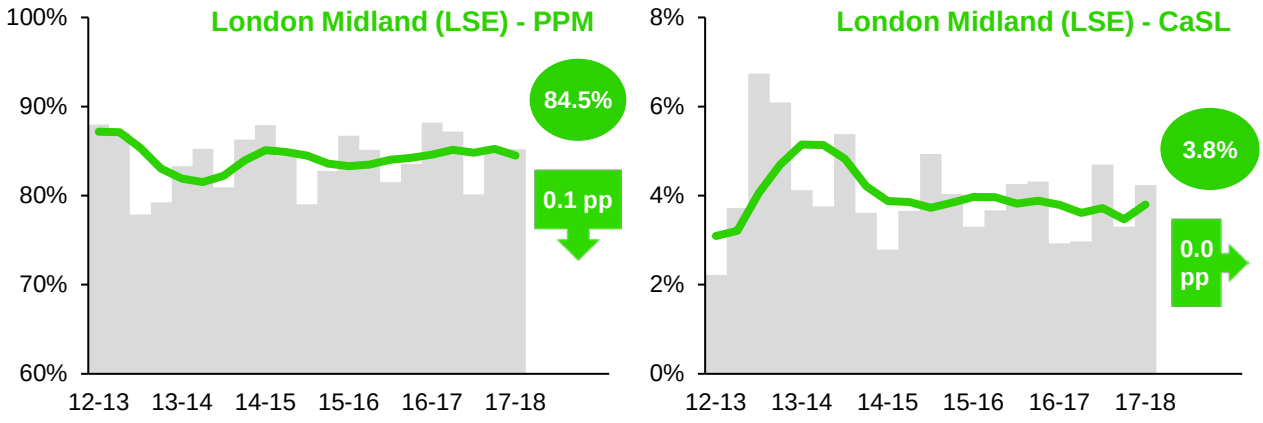
London Midland (LSE Services)

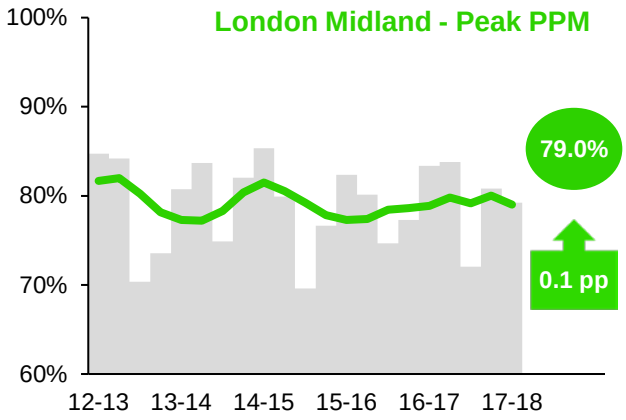
For services in the London and South East sector, London Midland recorded a punctuality of 85.2% in Q1. This was 3.0 pp lower than Q1 in 2016-17 and the second lowest Q1 since the time series began in 2004-05 (the lowest being 83.3% in 2013-14). The MAA for punctuality stands at 84.5% and the MAA for peak punctuality stands at 79.0%.

In 2017-18 Q1, 4.2% of trains were cancelled or significantly late. This was 1.3 pp higher than Q1 in 2016-17. This was the highest Q1 figure since 2008-09 (4.3%). The MAA (3.8%) is the same as it was a year ago.

For the whole of London Midland (including delays to regional services), CaSL failures due to weather were down 88% year-on-year. However, signal related CaSL failures were up 149%, while trespass and fatality CaSL failures were up 65%. For example, a cable fire near Euston resulted 9,500 delay minutes to all operators while a trespass incident near Rugby caused 14,300 delay minutes to all operators. CaSL failures caused by London Midland this quarter were down 14% year-on-year.

Figure 2.09: PPM, Peak PPM and CaSL, London Midland (LSE Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)





Route Information (Cross-Sector Operator)

- Services between London Euston and Watford, Milton Keynes, Northampton, Birmingham, Staffordshire and Crewe.
- Services between Watford and St Albans, Bletchley and Bedford.

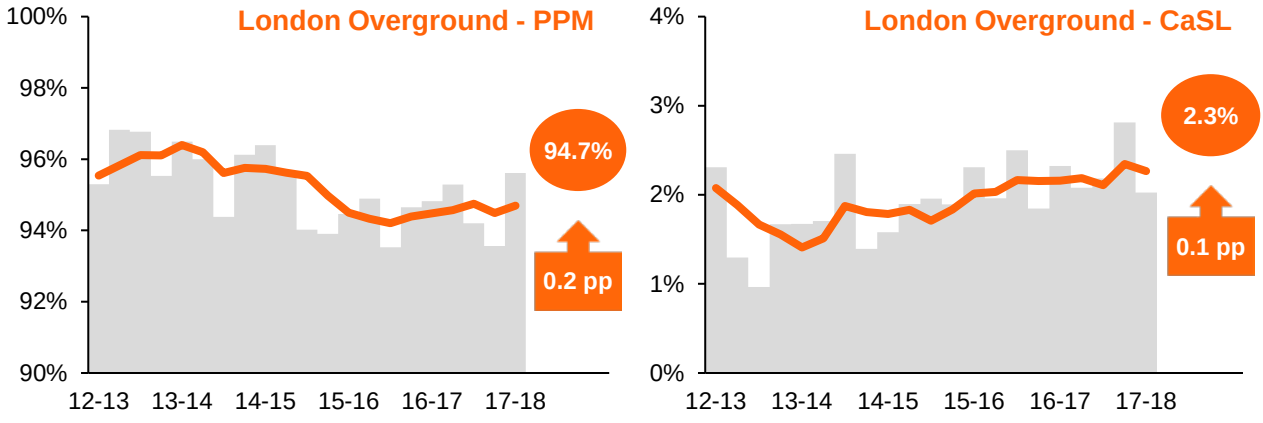
London Overground

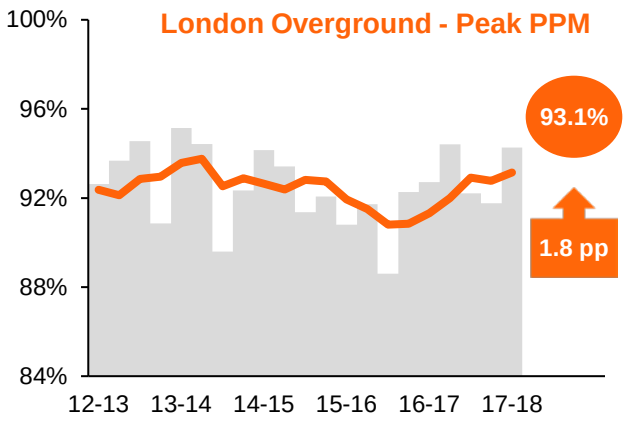
London Overground recorded a punctuality of 95.6% in Q1. This was up 0.8 pp compared with Q1 in 2016-17. The MAA stands at 94.7%. Punctuality in the peak has improved recently. The MAA ended 2017-18 Q1 at 93.1%, which is the highest it has been since 2013-14 Q2 (93.8%).

Reliability improved with 2.0% of trains cancelled or significantly late in 2017-18 Q1. This was down 0.3 pp compared with the same quarter the previous year. However, the MAA (2.3%) is still 0.1 pp higher than it was a year ago.

There was a 26% year-on-year reduction in PPM failures attributed to network management delays in Q1 of 2017-18. Furthermore, PPM failures due to overhead line equipment and third rail faults were down 91%. However, PPM failures caused by track faults (up 31%), points failures (up 37%), and signal related failures (up 98%) increased in Q1 compared with the same quarter the previous year. PPM failures caused by London Overground were the same as last year. London Overground CaSL failures were up 10% mainly due to an increase in external incidents attributed to the TOC.

Figure 2.10: PPM, Peak PPM and CaSL, London Overground, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)





Route Information

- Services between London Euston and Watford Junction
- Services between London Liverpool Street and Cheshunt and Chingford.
- Services between Highbury and Islington and West Croydon/Crystal Palace, between Dalston Junction and New Cross/Clapham Junction, and between Stratford and Clapham Junction/Richmond.
- Services between Romford and Upminster.

South West Trains

South West Trains – which became South Western Railway in Q2 of 2017-18 – recorded a punctuality of 89.1% in Q1. This was down 0.6 pp compared with Q1 in 2016-17 and is the lowest Q1 since 2004-05 (79.0%). The MAA stands at 87.0% which is the lowest it has been since 2005-06 Q1 (85.0%). The Peak MAA ended 2017-18 Q1 at 81.7%, which is the lowest it has been since 2005-06 Q1 (81.4%).

Partly due to improved weather, reliability improved with 3.3% of trains cancelled or significantly late in 2017-18 Q1. This was down 0.4 pp compared with the same quarter the previous year. However, the MAA (3.4%) is still 0.4 pp higher than it was a year ago.

PPM failures due to fatalities and trespass increased by 35% year-on-year. A fatality at Clapham Junction caused 9.200 delay minutes to all operators. Furthermore, PPM failures due to third rail faults (up 236%), track faults (up 144%), signal related failures (up 30%) and points failures (up 21%) all increased in Q1 compared with the same quarter the previous year. While train crew PPM failures were down 12% year-on-year, PPM failures due to operations (up 636%) and fleet problems (up 13%) both increased.

Figure 2.11: PPM, Peak PPM and CaSL, South West Trains, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)

Route Information

- Services between London Waterloo and South West London, Surrey, Portsmouth, Southampton, Poole and Weymouth.
- Services between London Waterloo and Basingstoke, Salisbury, Exeter and Bristol.
- Services between London Waterloo and Ascot, Reading and Windsor.
- Services on the Isle of Wight and services between Brockenhurst and Lymington.

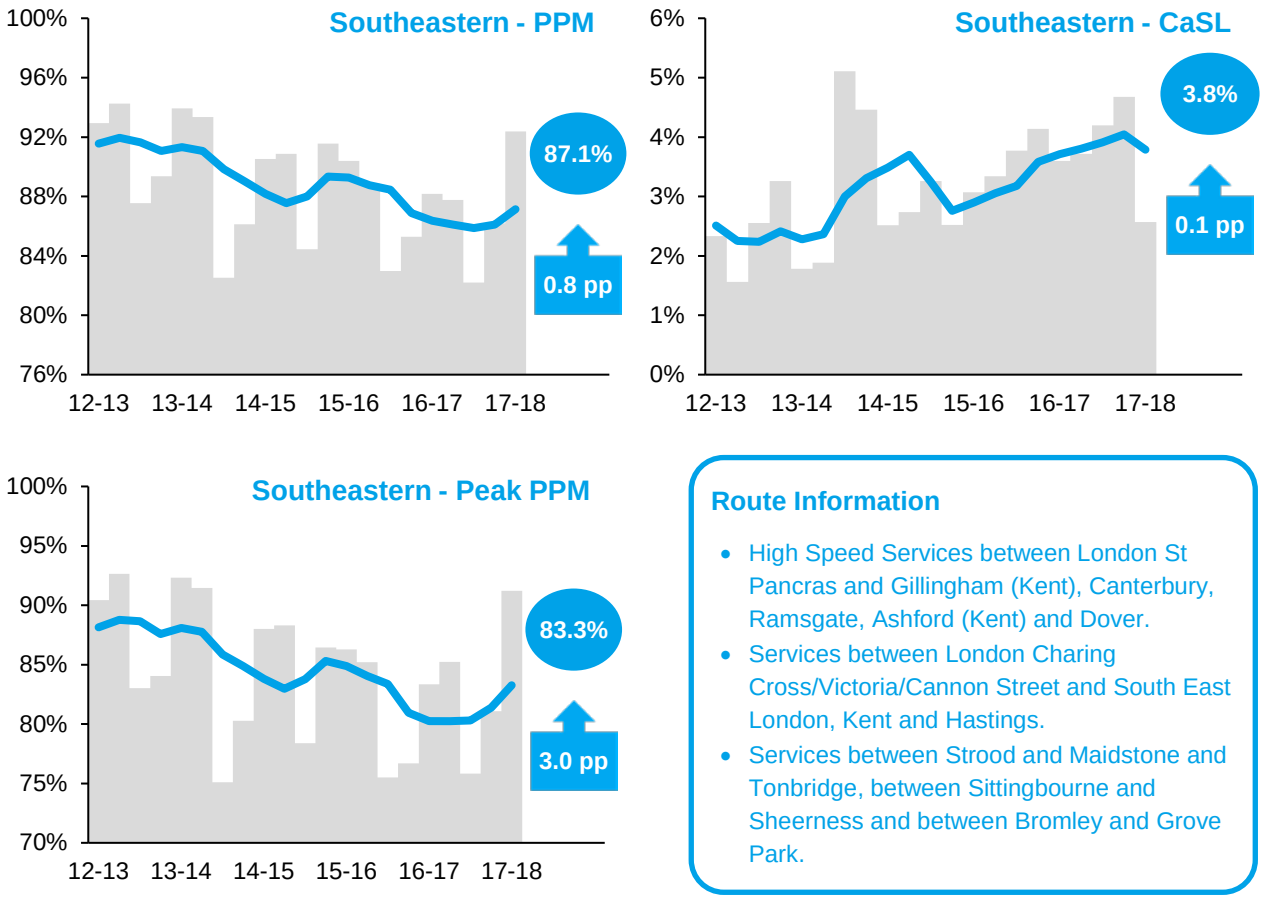
Southeastern

Southeastern recorded a punctuality of 92.4% in Q1. This was up 4.2 pp compared with Q1 in 2016-17 and is the highest Q1 score since 2013-14 (93.9%). The MAA stands at 87.1% which is up 0.8 pp compared with a year ago. Peak punctuality in Q1 (91.2%) was up 7.9 pp year-on-year. The Peak MAA ended 2017-18 Q1 at 83.3%.

Reliability improved with 2.6% of trains cancelled or significantly late in 2017-18 Q1. This was down 1.0 pp compared with the same quarter the previous year. However, the MAA (3.8%) is still 0.1 pp higher than it was a year ago.

As well as the improved weather in Q1 this year, there were fewer PPM failures due to engineering works (down 73%), track failures (down 52%), signal related failures (down 39%) and points failures (down 17%). PPM failures attributed to Southeastern in Q1 were down 20% year-on-year. This included a decrease in PPM failures due to train crew (down 20%) and fleet failures (down 32%).

Figure 2.12: PPM, Peak PPM and CaSL, Southeastern, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- High Speed Services between London St Pancras and Gillingham (Kent), Canterbury, Ramsgate, Ashford (Kent) and Dover.
- Services between London Charing Cross/Victoria/Cannon Street and South East London, Kent and Hastings.
- Services between Strood and Maidstone and Tonbridge, between Sittingbourne and Sheerness and between Bromley and Grove Park.

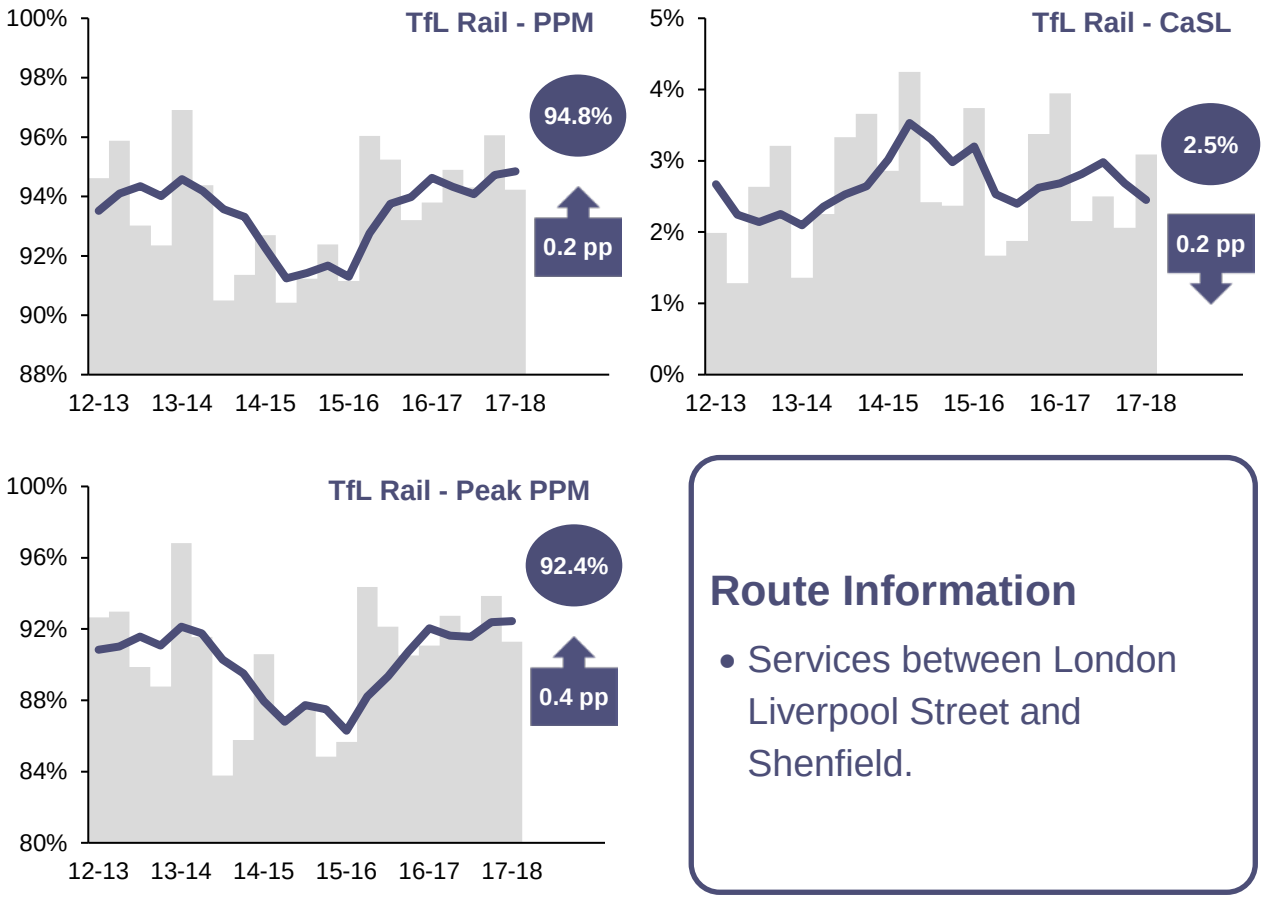
TfL Rail

TfL Rail recorded a punctuality of 94.2% in Q1. This was up 0.4 pp compared with Q1 in 2016-17 and is the highest Q1 score since 2013-14 (96.9%). The MAA stands at 94.8% which is up 0.2 pp compared with a year ago. The Peak MAA ended 2017-18 Q1 at 92.4%, which is the highest it has been since the time series began in 2010-11.

Reliability improved with 3.1% of trains cancelled or significantly late in 2017-18 Q1. This was down 0.9 pp compared with the same quarter the previous year. The MAA ended this quarter at 2.5% which is 0.2 pp lower than it was a year ago.

TfL Rail benefitted from improved weather in Q1. The 12 PPM failures attributed to weather in 2017-18 Q1 was down 97% compared with 2016-17 Q1. However, PPM failures attributed to signal related failures increased year-on-year by 356% in Q1. PPM failures due to TfL Rail fleet problems decreased year-on-year by 2%. However, CaSL failures associated with the same cause of delay increased by 18%.

Figure 2.13: PPM, Peak PPM and CaSL, TfL Rail, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London Liverpool Street and Shenfield.

3. Regional and Scotland Performance

The Regional sector is composed of services outside of London and South East and that are not classified as long distance services. The train operators in this sector include Arriva Trains Wales, East Midlands Trains, Great Western Railway, London Midland, Northern and Merseyrail. The ScotRail franchise is let by Transport Scotland; the figures for which are included in this section.

2017-18 Quarter 1 Headlines:

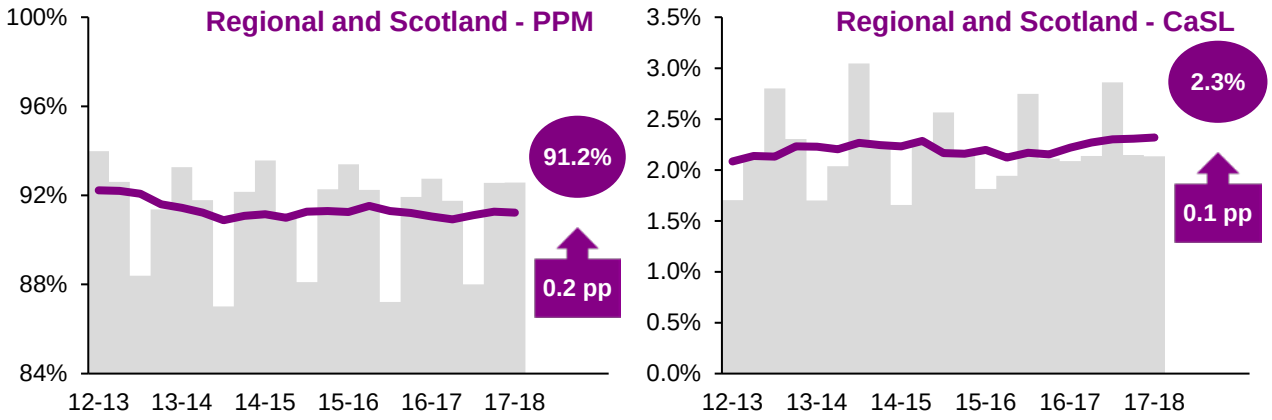
- The punctuality MAA for the Regional and Scotland sector ended the quarter at 91.2% (up 0.2 pp compared with 2016-17 Q1).
- The number of ATW services cancelled or significantly late in the year ending 2017-18 Q1 was 3.0%. This is up 0.3 pp compared with the previous year.
- The lowest MAA for cancellations and significant lateness recorded by East Midlands Trains Regional services (1.4%) since the times series began in 2004-05. CaSL failures attributed to infrastructure problems in Q1 were down 27% year-on-year.
- The lowest Q1 punctuality recorded by GWR Regional services (89.7%) since 2008-09 (88.3%) with Network Rail caused PPM failures up 32% year-on-year.
- The highest Q1 punctuality recorded by London Midland Regional services (92.7%) since 2011-12 (93.2%) with London Midland caused PPM failures down 13%.
- The lowest MAA for cancellations and significant lateness recorded by Merseyrail (1.7%) since the times series began in 1997-98.
- The lowest Q1 punctuality recorded by Northern services (91.4%) since the time series began in 2009-10 with Network Rail caused PPM failures up 18% year-on-year.
- The punctuality MAA for ScotRail ended the quarter at 90.5% (up 0.4 pp compared with 2016-17 Q1).

All Regional and Scotland Operators

Punctuality in the Regional and Scotland sector as a whole was 92.6% in Q1 of 2017-18. This was down 0.2 pp compared with Q1 last year. The MAA ended 2017-18 Q1 at 91.2%. This is up 0.2 pp compared with a year ago.

For Q1 of 2017-18, unreliability was 2.1% in the Regional and Scotland sector. This was the same as 2016-17 Q1 and the highest Q1 score since 2007-08 (2.8%). The MAA stands at 2.3%. This is the highest it has been since Q3 of 2011-12 (2.3%).

Figure 3.01: PPM and CaSL, Regional and Scotland Sector, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Rural services outside of London and the South East of England.
- Non-Long Distance services within and between metropolitan areas such as Bristol, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.
- Services provided by Arriva Trains Wales and ScotRail.

Arriva Trains Wales

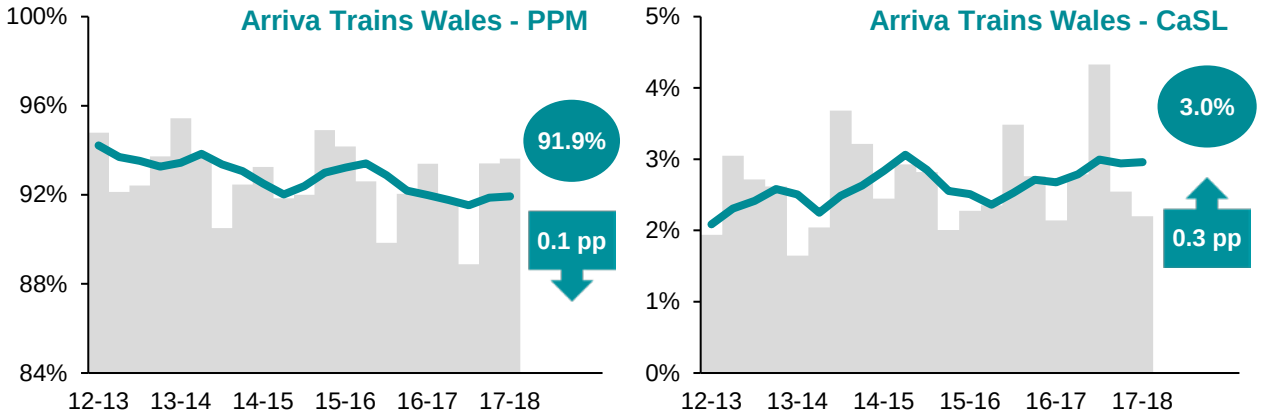
ATW recorded a punctuality of 93.6% in Q1. This was up 0.2 pp compared with Q1 in 2016-17. The MAA stands at 91.9% which is down 0.1 pp compared with a year ago.

In 2017-18 Q1, 2.2% of trains were cancelled or significantly late. This was up 0.1 pp compared with the same quarter the previous year. The MAA ended this quarter at 3.0% which is 0.3 pp higher than it was a year ago.

CaSL failures attributed to Network Rail were up 16% in Q1 of 2017-18 compared with the same quarter the previous year. CaSL failures attributed to points failures in 2017-18 Q1 were up more than 200% compared with the same quarter the previous year. A points failure near Penarth resulted in 113 cancellations for all operators. CaSL failures due to track faults also increased by 49%.

CaSL failures attributed to ATW were down 6% in Q1 this year compared with the same quarter the previous year. Train crew and station CaSL failures were down 63% and 57% respectively. However, CaSL failures due to fleet problems (up 23%) and operations (up 99%) both increased.

Figure 3.02: PPM and CaSL, Arriva Trains Wales, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between Birmingham and Shrewsbury, Aberystwyth, Pwllheli, Chester and Holyhead.
- Services between Swansea and Shrewsbury (via the Heart of Wales line) and Holyhead, between Fishguard and Manchester Piccadilly and between Maesteg and Cheltenham.
- Services between Holyhead and Manchester, Chester and Crewe, between Llandudno and Manchester Airport, between Llandudno and Blaenau Ffestiniog, and between Wrexham and Bidston.
- Services between Cardiff and the Valleys.

East Midlands Trains (Regional Services)

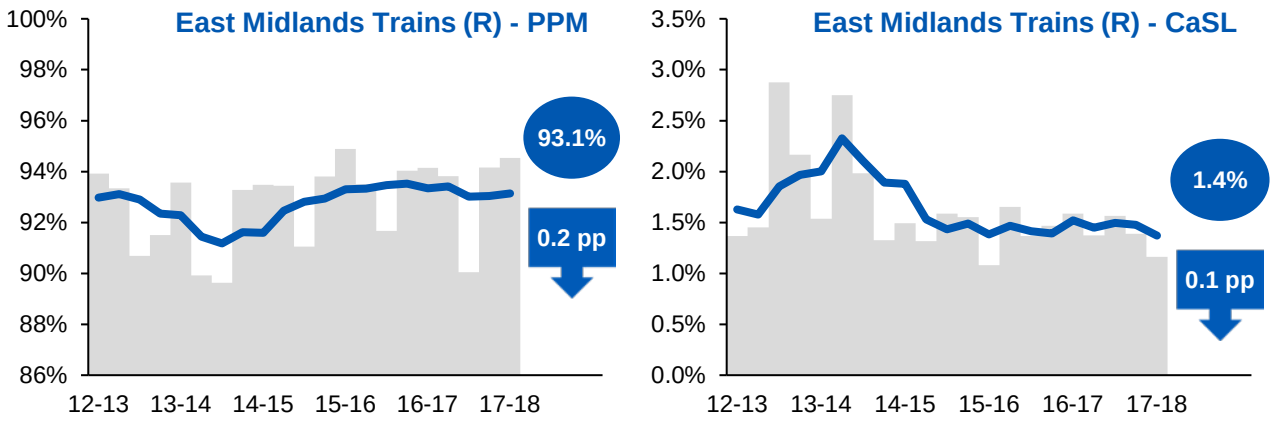
For services in the Regional sector, East Midlands Trains recorded a punctuality of 94.5% in Q1. This was up 0.4 pp compared with Q1 in 2016-17 and is the second highest Q1 score recorded since the time series began in 2004-05 (the highest was 94.9% in 2015-16). The MAA stands at 93.1% which is down 0.2 pp compared with a year ago.

In 2017-18 Q1, 1.2% of trains were cancelled or significantly late. This was down 0.4 pp compared with the same quarter the previous year. The MAA ended this quarter at 1.4% which is 0.1 pp lower than it was a year ago and is the lowest it has been since the time series began in 2004-05.

For the whole of East Midlands Trains (including delays to long distance services), PPM failures attributed to Network Rail were down 12% year-on-year. PPM failures due to external incidents were down 9% and signal related PPM failures were down 39%.

PPM failures caused by East Midlands Trains were down 1% in Q1 of 2017-18 compared with the same quarter the previous year. Fleet caused PPM failures were down 10% and there was also a fall of 8% in PPM failures caused by station delays. However, PPM failures due to external incidents attributed to East Midlands Trains increased by 67%.

Figure 3.03: PPM and CaSL, East Midlands Trains (Regional Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between Nottingham and Worksop, Matlock and Skegness.
- Services between Derby and Crewe.
- Services between Newark and Cleethorpes.
- Services between Peterborough and Doncaster (via Lincoln).
- Services between Leicester and Lincoln.

Great Western Railway (Regional Services)

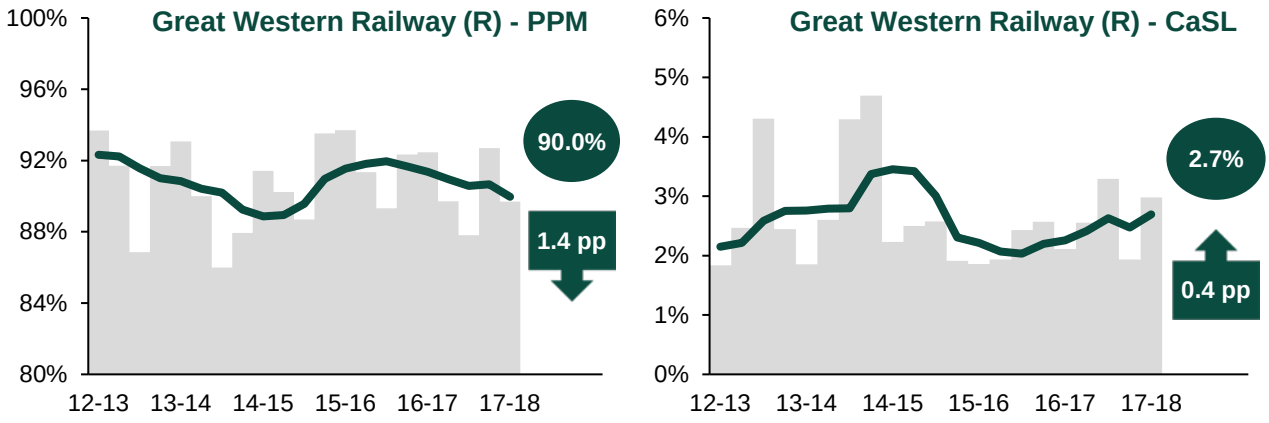
For services in the Regional sector, GWR recorded a punctuality of 89.7% in Q1. This was down 2.8 pp compared with Q1 in 2016-17 and is the lowest Q1 score recorded since 2008-09 (88.3%). The MAA stands at 90.0% which is down 1.4 pp compared with a year ago.

In 2017-18 Q1, 3.0% of trains were cancelled or significantly late. This was up 0.9 pp compared with the same quarter the previous year. This is the highest Q1 score recorded since 2007-08 (4.5%). The MAA ended this quarter at 2.7% which is 0.4 pp higher than it was a year ago.

For the whole of GWR (including delays to LSE and long distance services), Network Rail caused PPM failures were 32% higher in Q1 of 2017-18 compared with the same quarter the previous year. PPM failures caused by points failures were up 59% and unexplained PPM failures were up 55%.Track fault PPM failures were up 220%. In Q1, PPM failures attributed to GWR were up 23% year-on-year.

There was one incident in Q1 which generated significant delay to GWR Regional services. A track fault near Bristol resulted in an emergency speed restriction which generated 7,700 delay minutes to all operators.

Figure 3.04: PPM and CaSL, Great Western Railway (Regional Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between Bristol and Severn Beach and Cardiff.
- Services between Gloucester and Swindon and Weymouth.
- Services between Portsmouth and Cardiff.
- Services between Exeter and Paignton, Exmouth and Barnstaple.
- Services between Par and Newquay, Liskeard and Looe, Truro and Falmouth, St Erth and St Ives and Plymouth and Gunnislake.

London Midland (Regional Services)

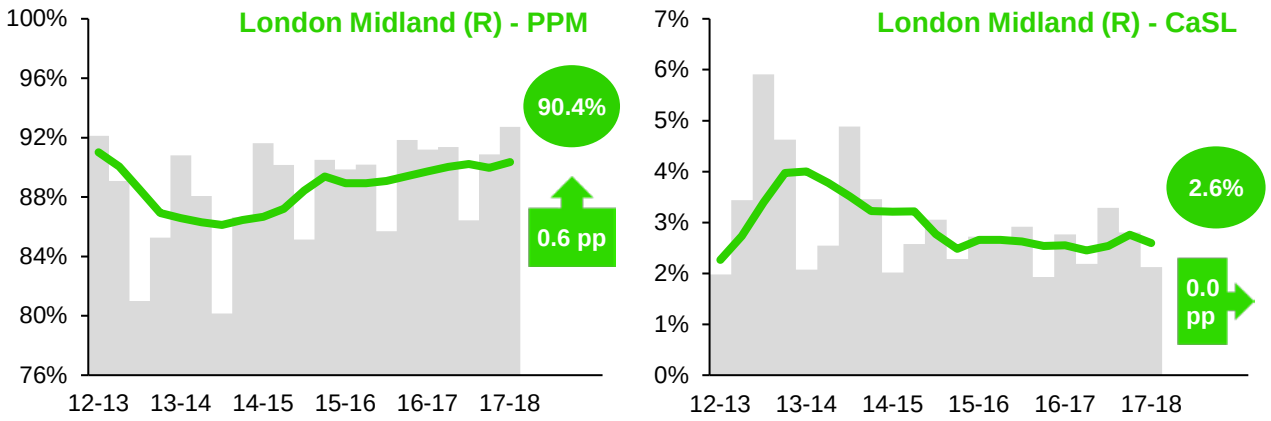
For services in the Regional sector, London Midland recorded a punctuality of 92.7% in Q1. This was up 1.5 pp compared with Q1 in 2016-17 and is the highest Q1 score recorded since 2011-12 (93.2%). The MAA stands at 90.4% which is up 0.6 pp compared with a year ago and the highest it has been since Q1 of 2012-13 (91.0%).

In 2017-18 Q1, 2.1% of trains were cancelled or significantly late. This was down 0.6 pp compared with the same quarter the previous year. The MAA ended this quarter at 2.6% which is the same as it was a year ago.

For the whole of London Midland (including delays to LSE services), PPM failures due to weather were down 53% year-on-year. However, signal related PPM failures were up 55%, while trespass and fatality PPM failures were up 21%. PPM failures caused by London Midland this quarter were down 13% year-on-year.

Two incidents generated significant delay for London Midland Regional services in Q1. A trespasser on the line near Birmingham New Street caused 2,200 delay minutes to all operators and a signal failure at Smethwick generated 2,200 delay minutes to all operators.

Figure 3.05: PPM and CaSL, London Midland (Regional Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between Birmingham and Liverpool, Shrewsbury, Hereford, Rugeley and Walsall.
- Services between Lichfield and Redditch.
- Services between Walsall and Wolverhampton.
- Services between Stratford-upon-Avon and Stourbridge and services between Dorridge and Kidderminster and Worcester.
- Services between Nuneaton and Coventry.

Merseyrail

Merseyrail recorded a punctuality of 96.6% in Q1. This was up 0.2 pp compared with Q1 in 2016-17. The MAA stands at 95.9% which is up 0.7 pp compared with a year ago and is the highest it has been since Q2 of 2010-11 (96.2%).

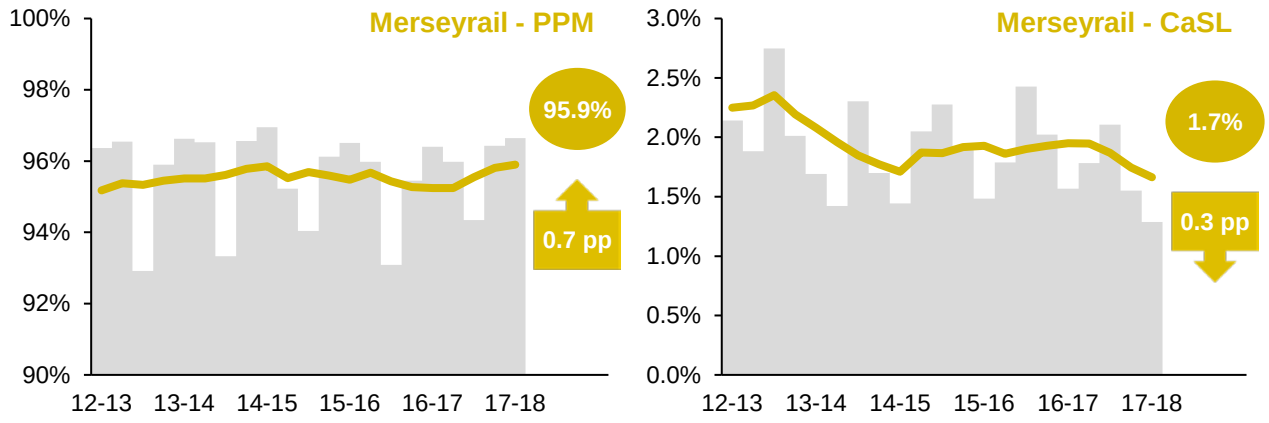
In 2017-18 Q1, 1.3% of trains were cancelled or significantly late. This was down 0.3 pp compared with the same quarter the previous year and the lowest Q1 score since the time series began in 1997-98. The MAA ended this quarter at 1.7% which is 0.3 pp lower than it was a year ago and the lowest it has been since the time series began in 1997-98.

Between December 2016 and June 2017, trains were not always able to run between Liverpool and the Wirral due to engineering works. When the line was closed, more trains travelling shorter distances were required to run either side of the River Mersey. This may have benefitted performance in Q1 and the increased number of trains will give Q1 more weight to the MAA calculation for the rest of 2017-18.

Adjusting for the number of trains planned, PPM failures attributed to Network Rail increased by 2% in 2017-18 Q1 compared with the same quarter the previous year. PPM failures caused by points failures were up 357% and unexplained PPM failures increased by 22%.

PPM failures caused by Merseyrail in the quarter were down 14% year-on-year. Fleet failure PPM failures were down 35% while PPM failures attributed to external causes were down 32%. However, train crew PPM failures increased by 35%.

Figure 3.06: PPM and CaSL, Merseyrail, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between Liverpool and Birkenhead, New Brighton, West Kirby, Chester, Ellesmere Port, Southport, Ormskirk, Kirkby and Hunts Cross.

Northern

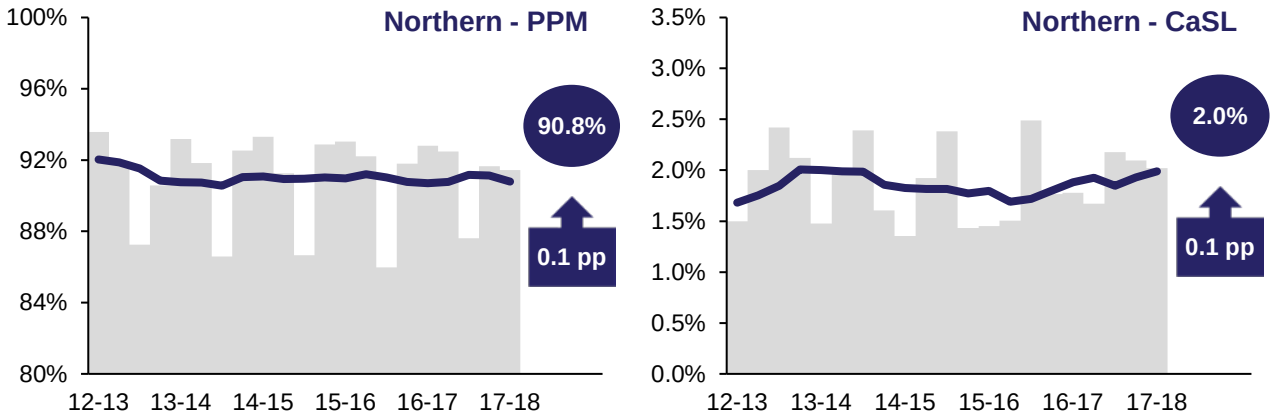
Northern recorded a punctuality of 91.4% in Q1. This was down 1.4 pp compared with Q1 in 2016-17 and was the lowest Q1 figure since the time series began in 2009-10. The MAA stands at 90.8% which is up 0.1 pp compared with a year ago.

In 2017-18 Q1, 2.0% of trains were cancelled or significantly late. This was up 0.2 pp compared with the same quarter the previous year and the highest Q1 score since the time series began in 2009-10. The MAA ended this quarter at 2.0% which is 0.1 pp higher than it was a year ago and the highest it has been since Q1 of 2013-14 (2.0%).

PPM failures attributed to Network Rail increased by 18% in 2017-18 Q1 compared with the same quarter the previous year. PPM failures caused by trespass and fatalities increased by 33%. For example, a fatality at Gorton resulted in 2,700 delay minutes to all operators while a trespasser at Huddersfield caused 2,200 delay minutes to all operators. Track fault PPM failures increased by 45% and signal related PPM failures increased by 18%. Two signal faults near Manchester Piccadilly caused a total of 10,000 delay minutes to all operators.

While train crew PPM failures were down 9% year-on-year in Q1, PPM failures due to train operation problems and station delays increased by 15%. Furthermore, external incidents attributed to Northern generated 133% more PPM failures in Q1 this year compared with the same quarter the previous year. PPM failures caused by other operators were up 28% year-on-year in Q1.

Figure 3.07: PPM and CaSL, Northern, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Local services in and around the cities of Leeds, Liverpool, Manchester, Newcastle-upon-Tyne and Sheffield and local services in counties such as Cheshire, Cumbria, Lancashire, Merseyside, Durham, Northumberland and Yorkshire.

ScotRail

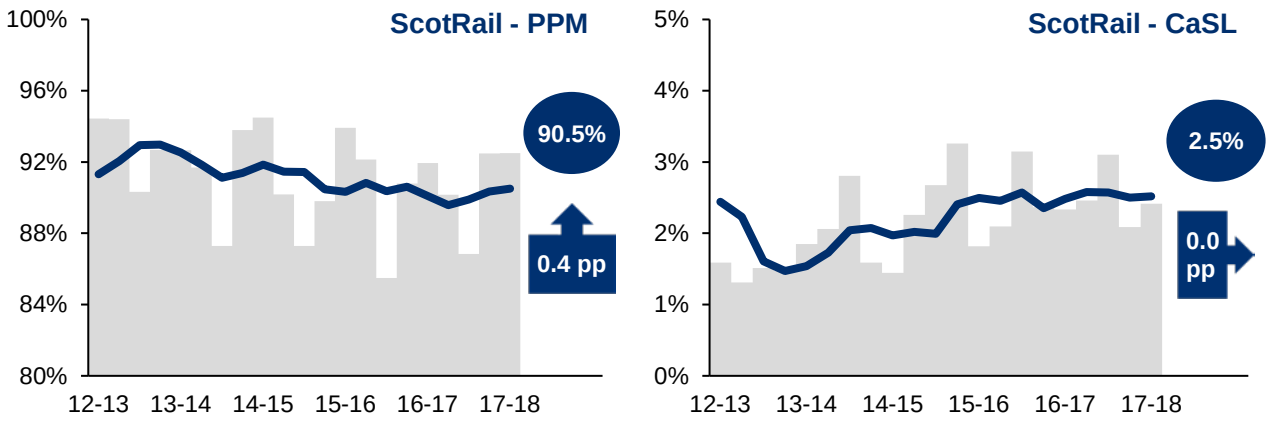
ScotRail recorded a punctuality of 92.5% in Q1. This was up 0.6 pp compared with Q1 in 2016-17. The MAA stands at 90.5% which is up 0.4 pp compared with a year ago.

In 2017-18 Q1, 2.4% of trains were cancelled or significantly late. This was up 0.1 pp compared with the same quarter the previous year and the highest Q1 score since 2011-12 (2.6%). The MAA ended this quarter at 2.5% which is the same as it was a year ago.

PPM failures attributed to Network Rail increased by 6% in 2017-18 Q1 compared with the same quarter the previous year. Uninvestigated PPM failures increased by 631% and PPM failures caused by faults with overhead line equipment increased by 119%. Faults with the overhead lines near Motherwell and Prestonpans resulted in a total of 6,300 delay minutes to all operators. However, PPM failures due to track faults (down 29%), signal related problems (down 23%) and points failures (down 10%) all decreased year-on-year.

ScotRail PPM failures were down 10% in Q1 this year compared with the same quarter the previous year. Train crew caused PPM failures fell 39% year-on-year.

Figure 3.08: PPM and CaSL, ScotRail, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Local services in and around Edinburgh.
- Local services in and around Glasgow.
- Services between Glasgow and Oban, Fort William and Mallaig.
- Services between Glasgow and Ayr, Stranraer, Dumfries, Carlisle and Newcastle.
- Services between Glasgow and Edinburgh and Stirling, Perth, Dundee, Aberdeen and Inverness.
- Services between Inverness and Thurso/Wick and Kyle of Lochalsh.

4. Long Distance Performance

The Long Distance sector is composed of high speed inter city services. The train operators in this sector include CrossCountry, East Midlands Trains, Grand Central, Great Western Railway, Greater Anglia, Hull Trains, TransPennine Express, Virgin Trains East Coast and Virgin Trains West Coast. For PPM purposes, these services have a threshold of 10 minutes at their final destination.

The Caledonian Sleeper franchise is let by Transport Scotland. It is not officially part of the Long Distance sector and is not included in the overall figures presented below. However, as their services are measured against a threshold of 10 minutes for the purpose of PPM, the figures for Caledonian Sleeper are presented at the end of this section.

2017-18 Quarter 1 Headlines:

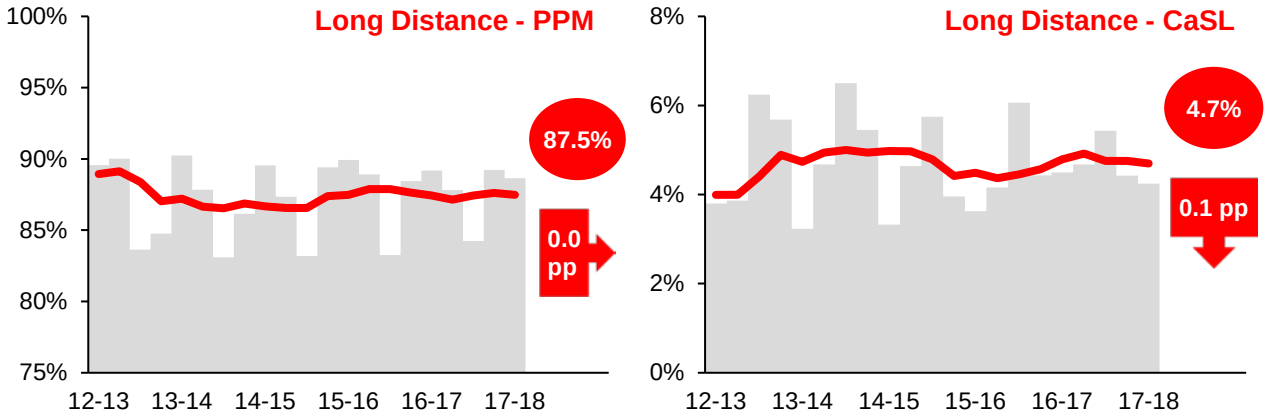
- The punctuality MAA for the Long Distance sector ended the quarter at 87.5% (the same as 2016-17 Q1).
- The lowest Q1 punctuality recorded by CrossCountry services (90.1%) since 2012-13 (89.1%) with CrossCountry caused PPM failures up 27% year-on-year.
- The lowest Q1 punctuality recorded by GWR Long Distance services (82.4%) since 2007-08 (77.5%) with Network Rail caused PPM failures up 32% year-on-year and GWR caused PPM failures up 23% year-on-year.
- The lowest Q1 punctuality recorded by Hull Trains services (83.2%) since 2012-13 (81.1%) with Hull Trains caused PPM failures up 191% year-on-year.
- The lowest Q1 percentage of TPE services cancelled or significantly late (4.2%) since 2013-14 (3.1%). CaSL failures caused by TPE were down 23% year-on-year.
- The punctuality MAA for the Virgin Trains East Coast services ended the quarter at 83.7% (down 0.5 pp compared with 2016-17 Q1).
- The punctuality MAA for the Virgin Trains West Coast services ended the quarter at 88.9% (up 2.4 pp compared with 2016-17 Q1).
- The highest Q1 percentage of Caledonian Sleeper services cancelled or significantly late (10.6%) since the time series began in 2011-12. CaSL failures caused by fleet problems increased from 12 in 2016-17 Q1 to 21 in 2017-18 Q1.

All Long Distance Operators

Punctuality in the Long Distance sector as a whole[2] was 88.7% in Q1 of 2017-18. This was down 0.5 pp compared with Q1 last year and was the lowest Q1 score since 2008-09 (88.1%). The MAA ended 2017-18 Q1 at 87.5%. This is the same as compared with a year ago.

For Q1 of 2017-18, unreliability was 4.2% in the Long Distance sector. This was down 0.3 pp compared with the same quarter the previous year. The MAA stands at 4.7% which 0.1 pp lower than it was a year ago.

Figure 4.01: PPM and CaSL, Long Distance Sector, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Long distance services between metropolitan areas such as London, Bristol, Norwich, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.

[2] The Long Distance sector figures do not include Caledonian Sleeper.

CrossCountry

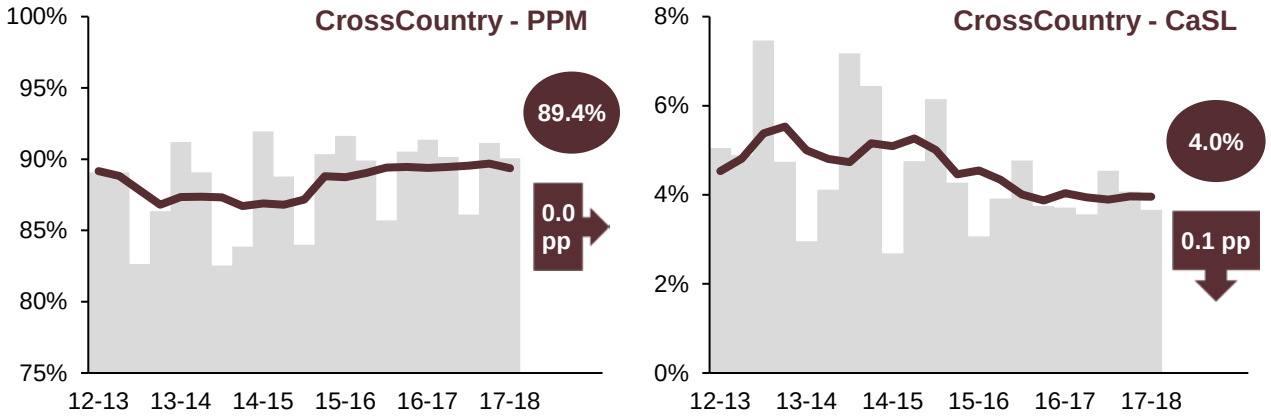
CrossCountry recorded a punctuality of 90.1% in Q1. This was down 1.3 pp compared with Q1 in 2016-17 and is the lowest Q1 score since 2012-13 (89.1%). The MAA stands at 89.4% which is the same as it was a year ago.

In 2017-18 Q1, 3.7% of trains were cancelled or significantly late which is the same as Q1 the previous year. The MAA ended this quarter at 4.0% which is 0.1 pp lower than it was a year ago.

PPM failures attributed to Network Rail were up 4% year-on-year. Signal related PPM failures (up 33%), network management PPM failures (up 51%) and track fault PPM failures (up 53%) all increased in Q1 compared with the same quarter the previous year. However, PPM failures due to points failures were down 19% and PPM failures due to external incidents were down 15%.

PPM failures caused by CrossCountry were up 27% in Q1 of 2017-18 compared with the same quarter the previous year. Train crew caused PPM failures increased by 45% and fleet problems resulted in 43% more PPM failures.

Figure 4.02: PPM and CaSL, CrossCountry, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between Plymouth and Glasgow/Edinburgh.
- Services between Southampton and Newcastle-upon-Tyne.
- Services between Manchester and Bristol and Bournemouth.
- Services between Cardiff and Nottingham.
- Services between Birmingham and Stanstead and Leicester.

East Midlands Trains (Long Distance Services)

For services in the Long Distance sector, East Midlands Trains recorded a punctuality of 92.3% in Q1. This was up 0.9 pp compared with Q1 in 2016-17. The MAA stands at 90.9% which is down 0.1 pp compared with a year ago.

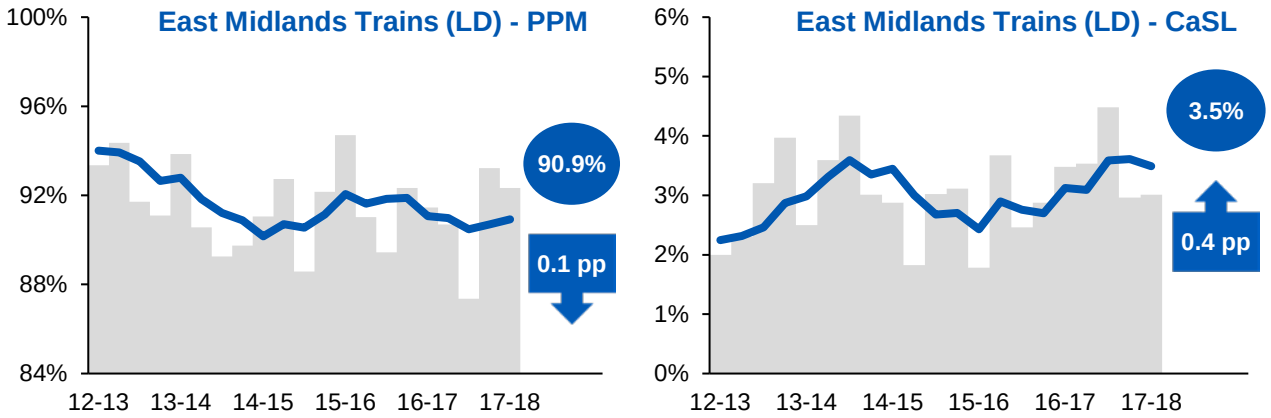
In 2017-18 Q1, 3.0% of trains were cancelled or significantly late. This was up 0.5 pp compared with the same quarter the previous year. The MAA ended this quarter at 3.5% which is 0.4 pp higher than it was a year ago.

For the whole of East Midlands Trains (including delays to regional services), PPM failures attributed to Network Rail were down 12% year-on-year. PPM failures due to external incidents were down 9% and signal related PPM failures were down 39%.

PPM failures caused by East Midlands Trains were down 1% in Q1 of 2017-18 compared with the same quarter the previous year. Fleet caused PPM failures were down 10% and there was also a fall of 8% in PPM failures caused by station delays. However, PPM failures due to external incidents attributed to East Midlands Trains increased by 67%.

A number of incidents on the Midland Mainline between London St Pancras and Luton generated significant delay this quarter. A power failure at Harpenden (5,300 delay minutes to all operators), a tree on the line near St Albans (4,500 delay minutes to all operators) and a line side fire near Hendon (3,500 delay minutes to all operators).

Figure 4.03: PPM and CaSL, East Midlands Trains (Long Distance Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between London St Pancras and Corby, Melton Mowbray, Lincoln, Nottingham, Derby, Sheffield and Leeds.
- Services between Norwich and Liverpool.

Grand Central

Grand Central recorded a punctuality of 88.0% in Q1. This was up 1.1 pp compared with Q1 in 2016-17. The MAA stands at 85.3% which is down 0.5 pp compared with a year ago.

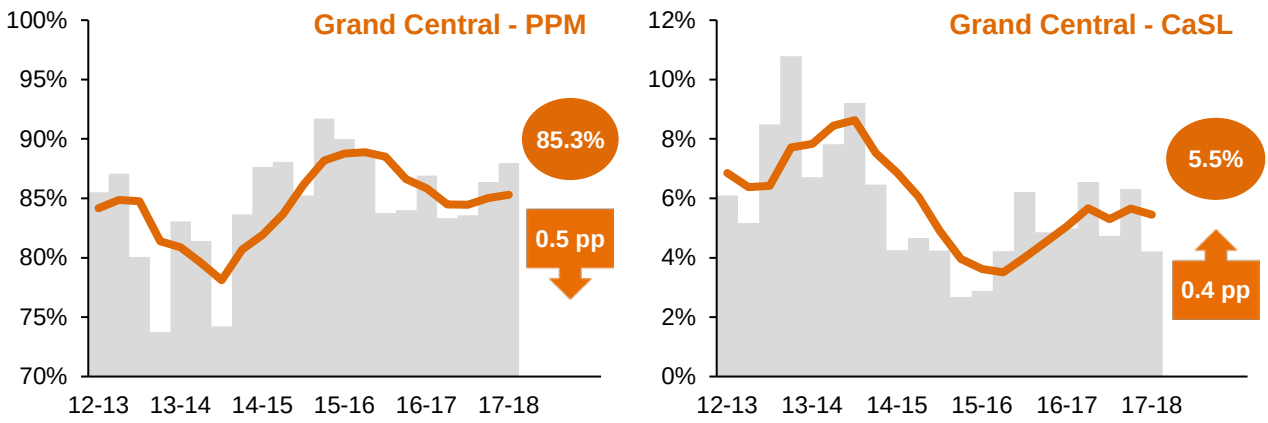
In 2017-18 Q1, 4.2% of trains were cancelled or significantly late. This was down 0.8 pp compared with the same quarter the previous year. The MAA ended this quarter at 5.5% which is 0.4 pp higher than it was a year ago.

PPM failures attributed to Network Rail were down 34% year-on-year. PPM failures due to external incidents were down 51%, signal related PPM failures were down 54% and overhead line equipment PPM failures were down 69%.

PPM failures caused by Grand Central were up 83% in Q1 of 2017-18 compared with the same quarter the previous year. Most of this increase was accounted for by an increase in fleet caused PPM failures which were up 57%. PPM failures caused by other operators also increased by 22%.

There were a number of incidents on the East Coast Mainline that generated significant delay this quarter. For all operators, a dewirement of a Virgin Trains East Coast train near Doncaster resulted in 11,600 delay minutes of delay and 230 cancellations. A track fault near Grantham caused 4,000 delay minutes to all operators and a trespasser near Stevenage resulted in 3,500 delay minutes to all operators.

Figure 4.04: PPM and CaSL, Grand Central, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London King's Cross and Sunderland and Bradford.

Great Western Railway (Long Distance Services)

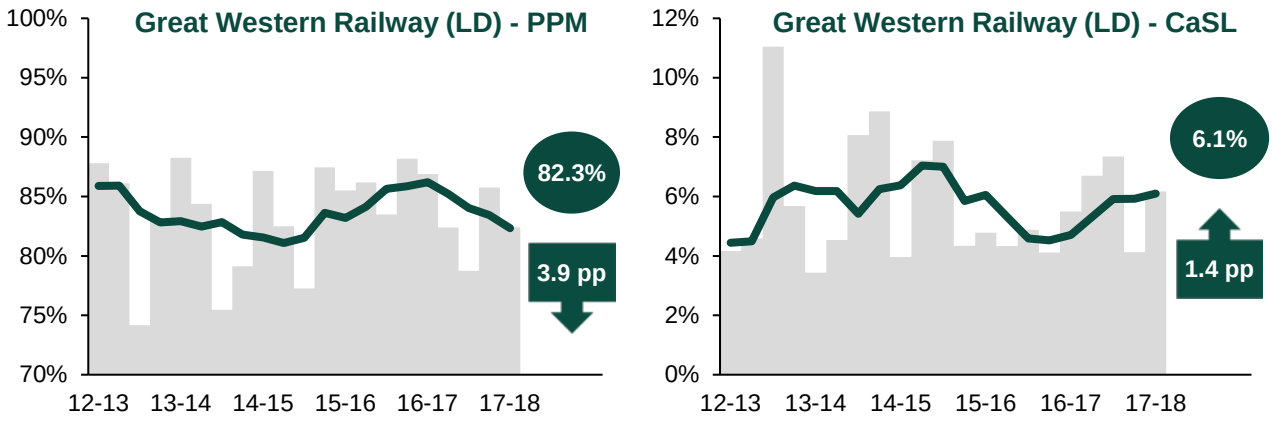
For services in the Long Distance sector, GWR recorded a punctuality of 82.4% in Q1. This was down 4.5 pp compared with Q1 in 2016-17 and is the lowest Q1 score recorded since 2007-08 (77.5%). The MAA stands at 82.3% which is down 3.9 pp compared with a year ago.

In 2017-18 Q1, 6.2% of trains were cancelled or significantly late. This was up 0.7 pp compared with the same quarter the previous year and is the highest Q1 score recorded since 2007-08 (8.4%). The MAA ended this quarter at 6.1% which is 1.4 pp higher than it was a year ago.

For the whole of GWR (including delays to LSE and regional services), Network Rail caused PPM failures were 32% higher in Q1 of 2017-18 compared with the same quarter the previous year. PPM failures caused by points failures were up 59% and unexplained PPM failures were up 55%.Track fault PPM failures were up 220%. In Q1, PPM failures attributed to GWR were up 23% year-on-year.

There were a number of incidents on the Great Western Main Line which affected performance of Long Distance services this quarter. A track fault near Bristol resulted in an emergency speed restriction which generated 7,700 delay minutes to all operators. A signal failure near Swindon caused 3,600 delay minutes to all operators and an engineering over-run at Reading resulted in 2,500 delay minutes to all operators.

Figure 4.05: PPM and CaSL, Great Western Railway (Long Distance Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between London Paddington and Westbury, Taunton, Exeter, Paignton, Plymouth and Penzance.
- Services between London Paddington and Swindon, Bristol, Cardiff, Swansea and Carmarthen.
- Services between London Paddington and Worcester, Hereford and Cheltenham.

Greater Anglia (Long Distance Services)

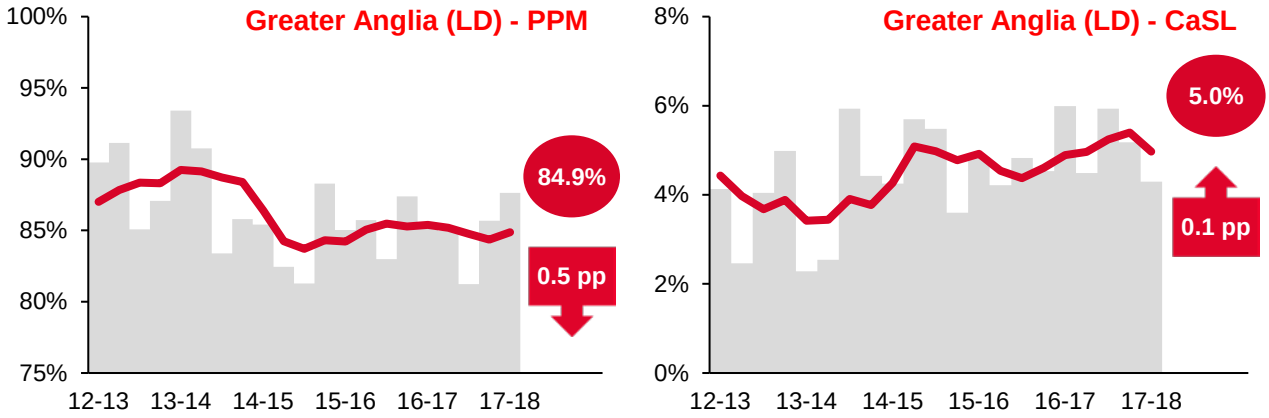
For services in the Long Distance sector, Greater Anglia recorded a punctuality of 87.6% in Q1. This was up 2.1 pp compared with Q1 in 2016-17. The MAA stands at 84.9% which is down 0.5 pp compared with a year ago.

In 2017-18 Q1, 4.3% of trains were cancelled or significantly late. This was down 1.7 pp compared with the same quarter the previous year. The MAA ended this quarter at 5.0% which is 0.1 pp higher than it was a year ago.

For the whole of Greater Anglia (including delays to LSE services), PPM failures due to weather were down 66% year-on-year. However, timetable planning PPM failures were up 260% and engineering over-runs caused 150% more PPM failures this quarter compared with the same quarter the previous year. PPM failures caused by Greater Anglia this quarter were down 12% year-on-year.

There were a number of incidents in the London area which caused significant delay. These included a signal failure at Shenfield (5,200 delay minutes to all operators) and flooding between Forest Gate and Ilford (3,400 delay minutes to all operators).

Figure 4.06: PPM and CaSL, Greater Anglia (Long Distance Services), 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information (Cross-Sector Operator)

- Services between London Liverpool Street and Norwich.

Hull Trains

Hull Trains recorded a punctuality of 83.2% in Q1. This was down 2.3 pp compared with Q1 in 2016-17 and is the lowest Q1 score since 2012-13 (81.1%). The MAA stands at 81.2% which is down 3.0 pp compared with a year ago.

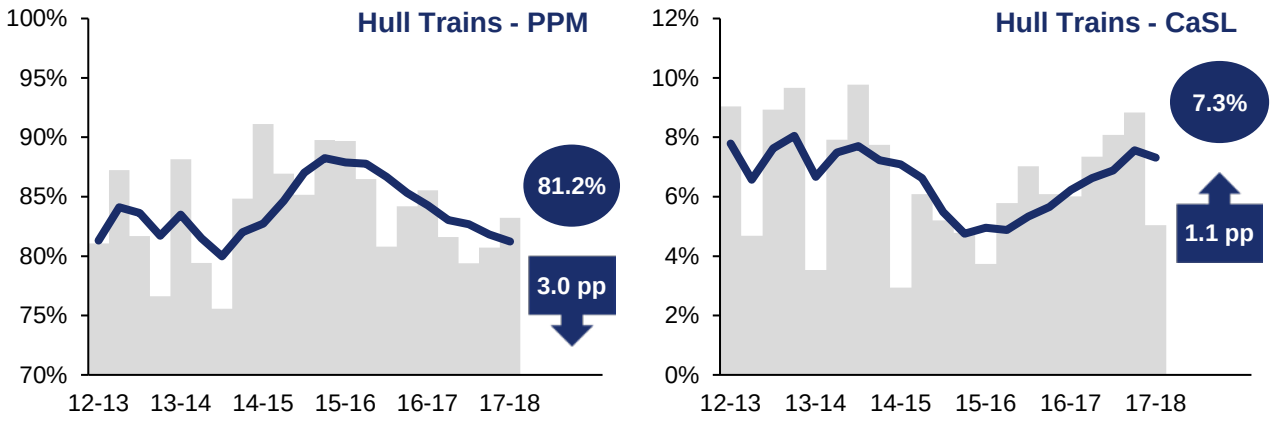
In 2017-18 Q1, 5.0% of trains were cancelled or significantly late. This was down 1.0 pp compared with the same quarter the previous year. The MAA ended this quarter at 7.3% which is 1.1 pp higher than it was a year ago.

PPM failures attributed to Network Rail were up 3% year-on-year. PPM failures due to external incidents were down 50% and overhead line equipment PPM failures were down 73%. However, signal related PPM failures were up 47% and track fault PPM failures were up 145%.

PPM failures caused by Hull Trains were up 191% in Q1 of 2017-18 compared with the same quarter the previous year. Most of this increase was accounted for by an increase in fleet caused PPM failures (up 210%) and train crew problems (up 147%). PPM failures caused by other operators also increased by 191%.

There were a number of incidents on the East Coast Mainline that generated significant delay this quarter. For all operators, a dewirement of a Virgin Trains East Coast train near Doncaster resulted in 11,600 delay minutes of delay and 230 cancellations. A track fault near Grantham caused 4,000 delay minutes to all operators and a trespasser near Stevenage resulted in 3,500 delay minutes to all operators.

Figure 4.07: PPM and CaSL, Hull Trains, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London King's Cross and Selby, Hull and Beverley.

TransPennine Express

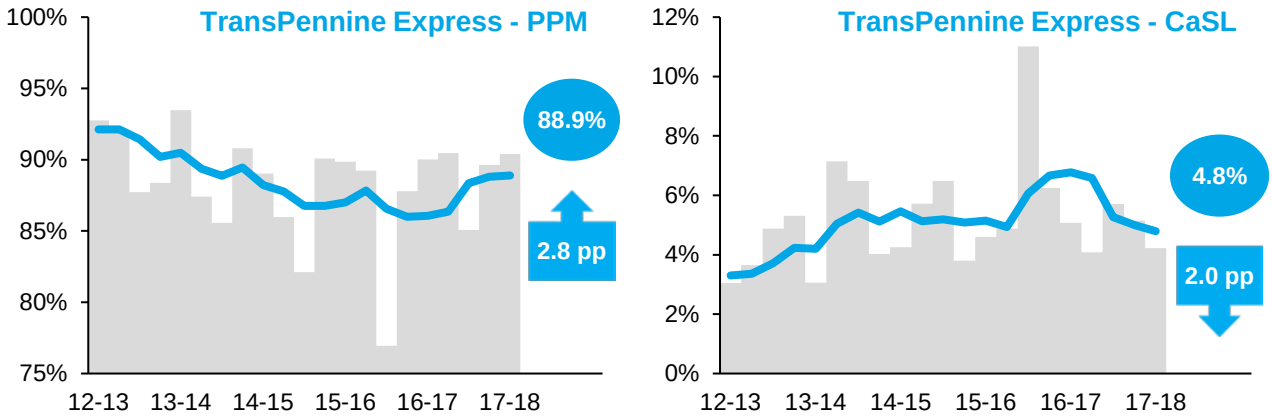
TPE recorded a punctuality of 90.4% in Q1. This was up 0.4 pp compared with Q1 in 2016-17. The MAA stands at 88.9% which is up 2.8 pp compared with a year ago and is the highest it has been since Q4 of 2013-14 (89.5%).

In 2017-18 Q1, 4.2% of trains were cancelled or significantly late. This was down 0.8 pp compared with the same quarter the previous year and is the lowest Q1 since 2013-14 (3.1%). The MAA ended this quarter at 4.8% which is 2.0 pp lower than it was a year ago.

PPM failures attributed to Network Rail fell by 5% in 2017-18 Q1 compared with the same quarter the previous year. Network management PPM failures were down 44% and PPM failures caused by points failures fell 13%. However, PPM failures caused by trespass and fatalities increased by 54%. For example, a fatality at Gorton resulted in 2,700 delay minutes to all operators while a trespasser at Huddersfield caused 2,200 delay minutes to all operators. Track fault PPM failures increased by 44% and signal related PPM failures increased by 21%. Two signal faults near Manchester Piccadilly caused a total of 10,000 delay minutes to all operators.

Delays caused by TPE decreased by 11% in Q1 year-on-year. In particular, PPM failures caused by train crew delays were down 42% in Q1 of 2017-18 compared with the same quarter the previous year.

Figure 4.08: PPM and CaSL, TransPennine Express, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between Liverpool and Newcastle-upon-Tyne and Scarborough.
- Services between Manchester Airport and York, Middlesbrough, Hull and Cleethorpes.
- Services between Manchester Airport and Edinburgh and Glasgow.

Virgin Trains East Coast

Virgin Trains East Coast recorded a punctuality of 87.4% in Q1. This was up 2.2 pp compared with Q1 in 2016-17. The MAA stands at 83.7% which is down 0.5 pp compared with a year ago.

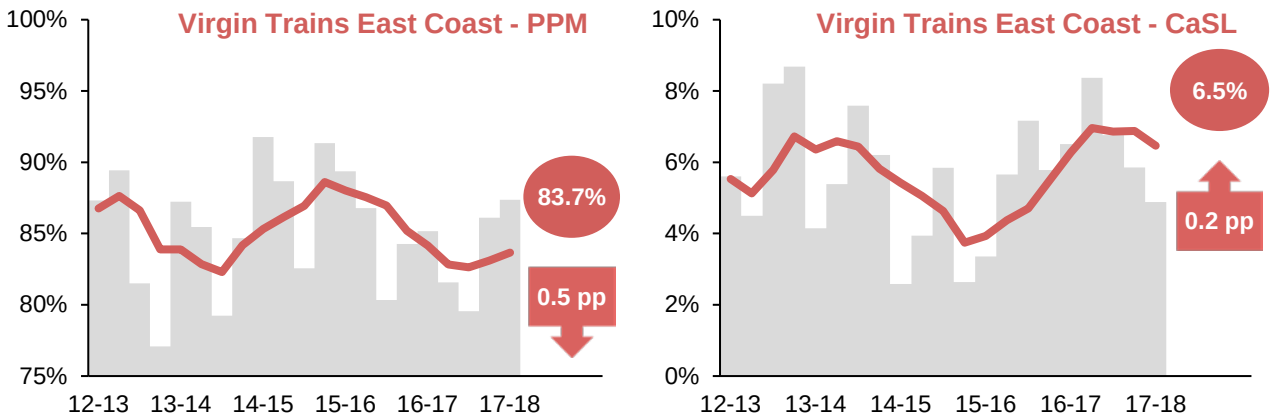
In 2017-18 Q1, 4.9% of trains were cancelled or significantly late. This was down 1.6 pp compared with the same quarter the previous year. The MAA ended this quarter at 6.5% which is 0.2 pp higher than it was a year ago.

PPM failures attributed to Network Rail were down 30% year-on-year. PPM failures due to external incidents were down 52% with less delay generated by lineside fires and fatality and trespass incidents. PPM failures caused by track faults (down 27%), overhead line equipment failures (down 49%) and signal related problems (down 23%) also fell. However, PPM failures caused by network management problems increased by 34%.

PPM failures caused by Virgin Trains East Coast were up 32% in Q1 of 2017-18 compared with the same quarter the previous year. A 27% rise in fleet caused PPM failures accounted for most of the rise but there were also increases in station delays (up 140%) and train crew delays (up 88%).

There were a number of incidents on the East Coast Mainline that generated significant delay this quarter. For all operators, a dewirement of a Virgin Trains East Coast train near Doncaster resulted in 11,600 delay minutes of delay and 230 cancellations. A track fault near Grantham caused 4,000 delay minutes to all operators and a trespasser near Stevenage resulted in 3,500 delay minutes to all operators.

Figure 4.09: PPM and CaSL, Virgin Trains East Coast, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London King's Cross and Newark, Lincoln, Hull, Doncaster, Leeds, Skipton, Bradford, Harrogate, York, Newcastle, Sunderland, Edinburgh, Glasgow, Stirling, Inverness and Aberdeen.

Virgin Trains West Coast

Virgin Trains West Coast recorded a punctuality of 89.0% in Q1. This was down 0.7 pp compared with Q1 in 2016-17. The MAA stands at 88.9% which is up 2.4 pp compared with a year ago.

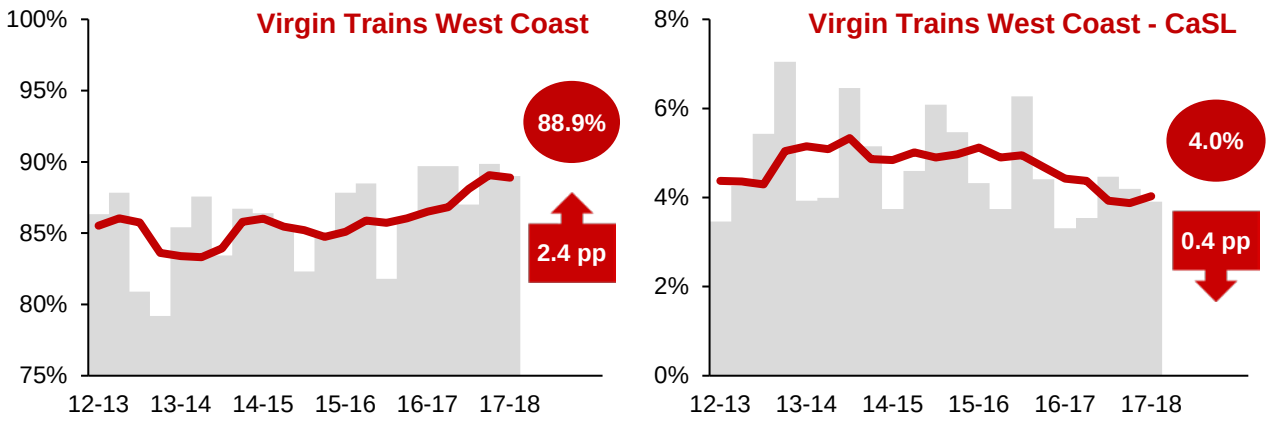
In 2017-18 Q1, 3.9% of trains were cancelled or significantly late. This was up 0.6 pp compared with the same quarter the previous year. The MAA ended this quarter at 4.0% which is 0.4 pp lower than it was a year ago.

PPM failures attributed to Network Rail were the same in Q1 this year as they were in the same quarter the previous year. PPM failures due to signal related failures were up 91%. However, PPM failures due to points failures (down 57%), overhead line equipment failures (down 38%) and network management incidents (down 43%) all fell year-on-year.

PPM failures caused by Virgin Trains West Coast were up 44% in Q1 of 2017-18 compared with the same quarter the previous year. Fleet caused PPM failures were up 24%. Train crew caused PPM failures increased by 73% and there was also a 104% increase in PPM failures due to external incidents attributed to Virgin Trains West Coast.

There were a number of incidents on the West Coast Mainline that generated significant delay this quarter. A trespasser near Rugby caused 14,300 delay minutes to all operators and a cable fire near Euston generated 9,500 delay minutes to all operators. Two signal faults near Manchester Piccadilly caused a total of 10,000 delay minutes to all operators.

Figure 4.10: PPM and CaSL, Virgin Trains West Coast, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London Euston and Birmingham, Wrexham, Chester, Holyhead, Liverpool, Manchester, Blackpool, Edinburgh and Glasgow.

Caledonian Sleeper

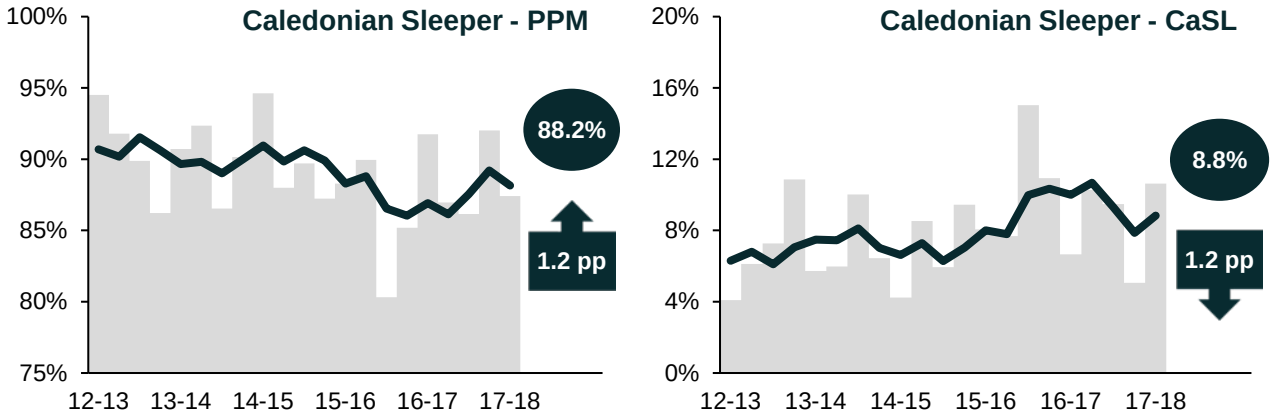
Caledonian Sleeper recorded a punctuality of 87.4% in Q1. This was down 4.3 pp compared with Q1 in 2016-17 and is the lowest Q1 since the time series began in 2011-12. The MAA stands at 88.2% which is up 1.2 pp compared with a year ago.

In 2017-18 Q1, 10.6% of trains were cancelled or significantly late. This was up 4.0 pp compared with the same quarter the previous year and is the highest Q1 figure recorded since the time series began in 2011-12. The MAA ended this quarter at 8.8% which is 1.2 pp lower than it was a year ago.

PPM failures attributed to Network Rail were the same in Q1 as the same quarter the previous year. External incidents caused nine PPM failures this quarter, which was up from one in 2016-17 Q1. However, there were no weather related PPM failures this quarter compared with five in 2016-17 Q1.

CaSL failures caused by Caledonian Sleeper doubled in Q1 of 2017-18 compared with the same quarter the previous year. Most of this was accounted for by fleet caused CaSL failures which increased from 12 in 2016-17 Q1 to 21 in 2017-18 Q1.

Figure 4.11: PPM and CaSL, Caledonian Sleeper, 2012-13 Q1 to 2017-18 Q1 (change shown is for 2017-18 Q1 MAA on 2016-17 Q1 MAA)



Route Information

- Services between London Euston and Watford, Crewe, Preston, Edinburgh, Glasgow, Fort William, Aberdeen and Inverness.

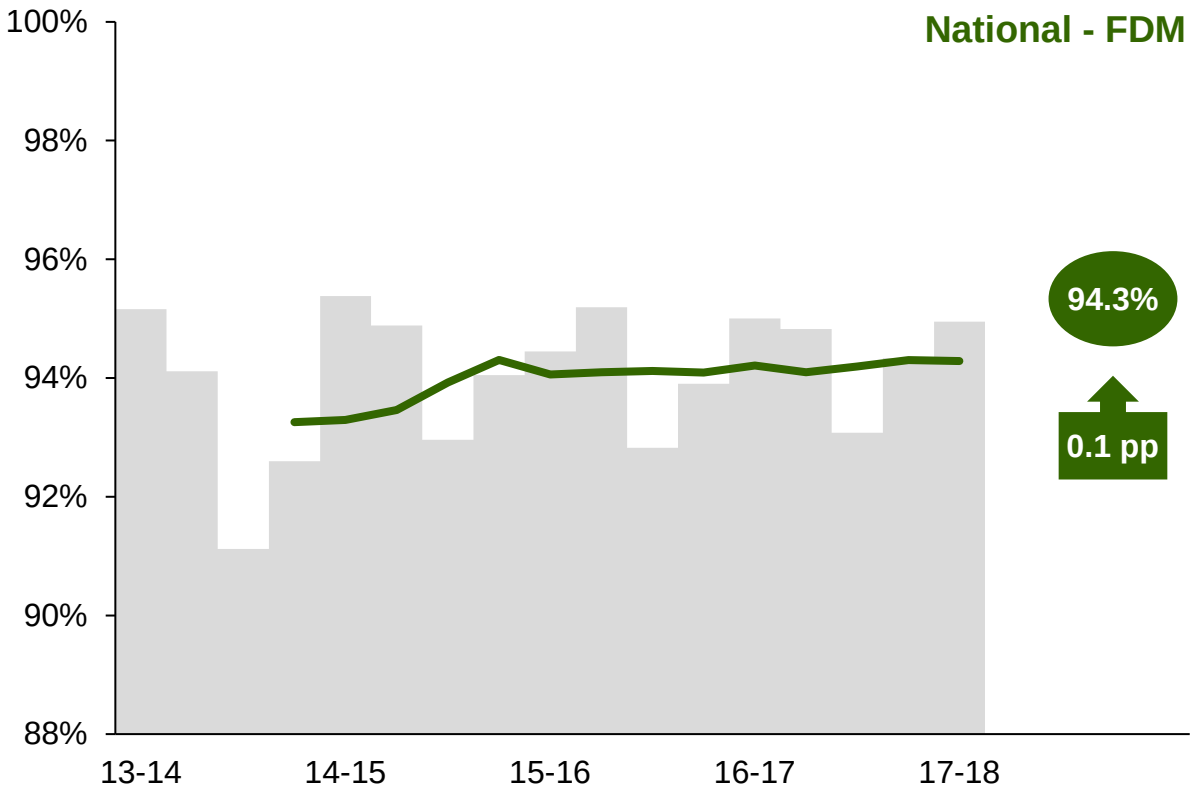
5. Freight Deliver Metric

Freight Delivery Metric (FDM) is the percentage of freight trains that arrived at their destination within 15 minutes of their scheduled arrival time. Freight trains are only considered to have failed FDM where the delay was caused by Network Rail. The **moving annual average (MAA)** reflects the proportion of trains that met FDM in the past 12 months. In Q4, the MAA also represents the PPM for the financial year. A higher score indicates higher performance.

FDM was introduced for CP5 (Control Period 5: 2014-15 – 2018-19), although it has been recorded since the end of the 2012-13. It replaced the **Freight Performance Measure (FPM)** which previously was used to provide an indication of the punctuality of freight journeys.

At 95.0%, FDM was 0.1 pp lower in 2017-18 Q1 than the same quarter the previous year. The FDM MAA ended Q1 at 94.2%, which is up 0.1 pp compared with a year ago.

Figure 5.01: FDM, Great Britain, 2013-14 Q1 to 2017-18 Q1



Annex 1 – List of pre-created reports available on the Data Portal

All data tables can be accessed on the Data Portal free of charge. The data portal provides on screen data reports, as well as the facility to download data in Excel format and print the report. We can provide data in csv format on request.

PPM

- PPM by sector, 1997-98 to 2015-16 (annual) and 1997-98 Q1 to 2017-18 Q1 (quarterly) – Table 3.43;
- PPM (MAA) by sector, 1997-98 Q4 to 2017-18 Q1 (quarterly) – Table 3.42;
- PPM by TOC, 1997-98 Q1 to 2017-18 Q1 (quarterly) – Table 3.44; and
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2016-17 Period 10 (periodic) – Data Portal (Table 3.9 (All TOCs) to Table 3.29 (Caledonian Sleeper))

CaSL

- CaSL by sector, 1997-98 to 2015-16 (annual) and 1997-98 Q1 to 2017-18 Q1 (quarterly) – Table 3.6;
- CaSL (MAA) by sector, 1997-98 Q4 to 2017-18 Q1 (quarterly) – Table 3.5; and
- CaSL by TOC, 1997-98 Q1 to 2017-18 Q1 (quarterly) – Table 3.7
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2016-17 Period 10 (periodic) – Data Portal (Table 3.9 (All TOCs) to Table 3.29 (Caledonian Sleeper))

FDM

- FDM, 2013-14 Q1 to 2017-18 Q1 (quarterly) – Table 3.41

Right Time and Delay Minutes

Right Time performance measures the percentage of trains that arrived at their final destination within one minute of the scheduled arrival time. Unlike PPM, the threshold for Right Time performance is the same for all operators. ORR publishes periodic Right Time data on Table 3.9 of the Data Portal by TOC and sub-operator[3]. The national Right Time score for 2015-16 was 64.4%. This was compared with a national PPM score of 89.1%.

We currently publish limited Network Rail caused delay minute data on Table 3.46 of the Data Portal. Network Rail attributed delays are also available in the Annual Return which reports Network Rail achievements, developments and challenges for each financial year and the historical record of Network Rail stewardship on the Network Rail website.

Revisions: There have been no revisions to the previously published dataset. Further details on historic revisions to the data set can be found at: Revisions Log.

[3] Right Time data for individual TOCs and sub-operators can be accessed via the passenger and freight rail performance page.

Annex 2 – Data Collection, Quality and Targets

Most of the data contained within this release are collected automatically from Network Rail's TRUST System[4]. The latest data for PPM, CaSL and FDM should be treated as provisional, as train operators provide Network Rail with details of cancellations which can be updated over time. These updates are only provided at the TOC level. As such, aggregations of sub-operator data can provide slightly different figures to those published at the operator level.

Network Rail provides data within 21 days of the end of each of the 13 railway reporting periods. The production of the quarterly results discussed in this report requires the periodic data to be split according to the number of days of the period that falls within each quarter. For example, the dates in period 4 cover both Q1 and Q2. When the quarterly data are calculated for 2017-18, 6/28 of the data are assigned to Q3 (covering 25 June to 30 June) and 22/28 of the data are assigned to Q2 (covering 1 July to 22 July).

Further details on railway reporting periods, data collection, the methodology used to calculate the data within this release, and details of which services are included in each sector, please see the accompanying passenger and freight rail performance quality report.

Where possible, Network Rail remaps historical data to match the railway franchises that exist today. Nevertheless, the number of passenger trains planned increased by 29%[5] between 1997-98 and 2015-16. In the same time, the length of route open for passenger traffic has not increased by a significant amount[6]. So the density of trains running on the network is higher now than at the end of the last century. Therefore, the potential for disruption to spread around network has increased, while the ability for services to be recovered has been diminished. Furthermore, twice as many passenger journeys were made in 2015-16 than in 1997-98[7]. This may have increased station dwell times and harmed performance as it takes longer to get passengers on and off trains during peak hours.

[4] Train Running System on TOPs (Total Operation Processing System)

[5] ORR Website – Historic PPM and CaSL

[6] The length of route open to passenger traffic has increased by less than 1% since 2007-08 (Data Portal - Table 2.52: Infrastructure on the railways)

[7] Data Portal - Table 12.5: Passenger journeys by year

Changes to Sector Composition

Some services in North West England transferred from the Long Distance sector to the Regional sector at the start of 2016-17. As a consequence they now have a five-minute threshold for PPM, having previously been timed to ten minutes. To avoid different versions of PPM scores, the historic data for these sectors and the overall national score have not been adjusted to reflect these changes. The year-on-year changes described in this report have also been calculated using the unadjusted historical data. Nevertheless, using disaggregated data it is possible to assess what the effect of these changes would have been on PPM and PPM MAA in 2015-16:

- **National**: Almost no affect with PPM falling marginally from 89.05% to 89.03%.
- **Long Distance**: PPM reduced from 87.64% to 87.35%.
- **Regional and Scotland**: Almost no affect with PPM falling marginally from 91.21% to 91.17%.

Targets

As a regulator we assess Network Rail's success, through regulatory targets, on whether it achieves the outputs, as set out in the determination, and does so whilst meeting all its licence and statutory obligations. Network Rail has regulatory targets for PPM, CaSL and FDM. Further information regarding the performance targets can be accessed on the Network Rail website.

The ORR publicly reports on Network Rail's outputs with respect to the regulated targets via the bi-annual Network Rail Monitor. The time frame of quarterly data in this statistical release differs from the time frame of the railway period data in the Monitor, and therefore figures may differ slightly. The next Monitor covering periods 1 to 7 of 2017-18 is due to be published in November 2017.

Annex 3 – PPM and CaSL by Train Operating Company (TOC)

The data provided in Table 3.44 (PPM by TOC) and Table 3.7 (CaSL by TOC) show the railway as it exists today. That is, historical data are shown for the existing TOCs as far back as data are available. For some TOCs data are available as far back as 1997-98. While comparisons can be made with historical data, it should be noted that the service provided by many operators has changed substantially.

As an example, Virgin Trains West Coast (VTWC) planned to run 55,600 trains in 1997-98. By 2012-13 this figure had almost doubled to reach 110,400. In December 2013, however, VTWC reconfigured their timetable to extend Scotland to Birmingham services to London in place of some Birmingham to London services. A change in service composition such as this would have had an effect on the overall level of performance of the TOC.

A time-series for trains planned, PPM and CaSL is available on the ORR Website that shows the performance of the TOCs that existed at the time.

Cross-Sector Train Operating Companies

Four operators provide services in more than one sector: East Midlands Trains, Great Western Railway, Greater Anglia and London Midland. Performance for the whole of these operators can be viewed in in Table 3.44 (PPM by TOC) and Table 3.7 (CaSL by TOC).

Data for the sectoral components of the TOCs can be accessed via the disaggregated tables: Table 3.15 (East Midlands Trains), Table 3.17 (Great Western Railway), Table 3.20 (Greater Anglia) and Table 3.21 (London Midland). The sectoral components for each operator are comprised of the following sub-operator groups:

East Midlands Trains:

- Long Distance: Long Distance (including Liverpool – Norwich)
- Regional: Regional

Great Western Railway:

- London and South East: London and Thames Valley
- Long Distance: High Speed
- Regional: Regional

Greater Anglia:

- London and South East: GE Outer, Rural, Southend and metro, Stanstead Express, and WA Outer excluding Stanstead Express
- Long Distance: Intercity

London Midland:

- London and South East: LSE
- Regional: Regional

Changes to Train Operating Companies

On 26 July 2015, Southern became part of Govia Thameslink Railway (GTR). Disaggregated PPM and CaSL data for the sub-operators within GTR are still published on the Data Portal. Prior to the merger, GTR consisted of the Great Northern and Thameslink, while Southern was made up of Southern Mainline and Coast, Southern Metro and Gatwick Express.

The new Northern and TransPennine Express (TPE) franchises commenced operation on 1 April 2016. Having previously been operated by Serco-Abellio, the former is now operated by Arriva. The TPE franchise is now solely operated by FirstGroup having previously been run as a joint venture between FirstGroup and Keolis.

Furthermore, services between Manchester Airport and Blackpool North/Barrow-in-Furness and between Oxenholme and Windermere were transferred from TPE to Northern. As described in Annex 2, this has affected the historical PPM scores at the national and sector level. The historic data for Northern and TPE have been remapped to allow like for like comparisons to be made for these TOCs.

On 13 November 2016, operation of the London Overground concession passed from London Overground Rail Operations Limited[8] to Arriva Rail London. The composition of the services is unaffected and the operator will be continued to be referred to as London Overground.

FirstGroup began operating the South Western franchise on 20 August 2017. Stagecoach were still operating the services at the end of 2017-18 Q1 and as such the franchise is referred to in this publication as South West Trains. From 2017-18 Q2 onwards it will be referred to as South Western Railway.

[8] LOROL was a joint venture between Arriva UK Trains and MTR Corporation.

Annex 4 – Statistical Releases

This publication is part of the statistical releases which cover the majority of reports that were previously released through the Data Portal. The statistical releases consist of four annual and four quarterly themed releases:

Annual

- Rail Finance & Rail Fares Index;
- Key Safety Statistics;
- Rail Infrastructure, Assets and Environmental;
- Regional Rail Usage.

Quarterly

- Passenger and Freight Rail Performance;
- Freight Rail Usage;
- Passenger Rail Usage;
- Passenger Rail Service Complaints.

A full list of publication dates for the next twelve months can be found in the release schedule on the ORR website.

National Statistics

The United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is ORR's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

For more details please contact the Statistics Head of Profession Abby Sneade on 020 7282 2022 or contact rail.stats@orr.gsi.gov.uk.

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at DfT Rail Statistics.

Annex 5 – Methodology: Impact of GTR Services

National punctuality improved in Q1 of 2017-18. However, the MAA at the end of Q1 was lower than it was a year ago. As an example, the extent to which performance of GTR services contributed to the improvement in the quarterly punctuality was estimated using the calculations set out below and in the table A. Table B shows the results of these calculations for punctuality (PPM), unreliability (CaSL) and the MAAs in 2017-18 Q1.

GTR services were separated from the rest of the operators in Great Britain and for both groups a "stand still" number of trains meeting PPM was calculated by multiplying the PPM for 2016-17 Q1 with the trains planned for 2017-18 Q1. This is to account for the changes in trains planned by GTR and the rest of the operators. The difference between the stand still figure and the actual number of trains that met PPM provides the contribution of each part to the overall change in performance. For the quarterly PPM, the 23,966 fewer GTR PPM failures represent 88.4% of the total reduction in PPM failures.

Table A: PPM, National (excluding GTR) and GTR, 2016-17 Q1 and 2017-18 Q1

	National			GTR		
PPM	**Trains Planned**	**Met PPM**	**PPM**	**Trains Planned**	**Met PPM**	**PPM**
2016-17 Q1	1,552,470	1,421,959	91.6%	285,950	217,487	76.1%
2017-18 Q1	1,570,579	1,441,686	91.8%	287,280	242,465	84.4%
Change	18,108	19,726	0.2 pp	1,330	24,978	8.3 pp
To stand still		1,438,545			218,498	
Extra Failures		-3,140			-23,966	
Extra Failures (share)		11.6%			88.4%	
PPM Change (pp)		0.2			1.3	

Table B: Contributions to Q1 PPM and CaSL Changes, National, 2016-17 and 2017-18

		National (except GTR)		GTR	
Type	**Metric**	**% Share**	**PP Change**	**% Share**	**PP Change**
Quarterly	Trains Planned (16-17)	84.5%	-	15.5%	-
	PPM*	11.6%	0.2 pp	88.4%	1.3 pp
	CaSL	22.0%	-0.2 pp	78.0%	-0.6 pp
MAA	Trains Planned (16-17)	85.0%	-	15.0%	-
	PPM	29.1%	-0.1 pp	70.9%	-0.3 pp
	CaSL	25.0%	0.1 pp	75.0%	0.2 pp

This publication is available at orr.gov.uk

Any enquiries regarding this publication should be sent to us at orr.gov.uk