



Passenger and Freight Rail Performance 2017-18 Q2 Statistical Release

Publication date: 7 December 2017

Next publication date: 22 February 2017

Background

This release contains information on passenger and freight rail performance in Great Britain with the latest quarterly data referring to July, August, September 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

- [National Performance – 4](#)
- [Sector Performance - 5](#)
- [TOC Performance - 8](#)
- [Freight Delivery Metric – 36](#)
- [Annexes – 37](#)

Nationally, 88.4% of trains were on time in the year ending Q2 of 2017-18 (**Public Performance Measure (PPM) moving annual average (MAA)**).

The MAA for the **London and South East** sector was 86.6%. **Govia Thameslink Railway (GTR)** performance was 83.0% in Q2, 9.9 pp higher than Q2 in 2016-17. However, this was still 1.1 pp lower than what was achieved in 2015-16 Q2.

PPM MAA - 2017-18 Q2

		Compared with 2016-17 Q2	
National (GB)	88.4%	↑	0.5 pp
Regional and Scotland	91.2%	↑	0.3 pp
London and South East	86.6%	↑	0.6 pp
Long Distance	87.7%	↑	0.6 pp

The proportion of trains **Cancelled or Significantly Late (CaSL)** in the year ending 2017-18 Q2 was 3.5% (**CaSL MAA**). The **London and South East** sector recorded its second highest Q2 CaSL rate (3.9%) since the time series began in 1997-98 (after 2016-17 – 4.8%).

CaSL MAA - 2017-18 Q2

		Compared with 2016-17 Q2	
National (GB)	3.5%	↓	-0.1 pp
Regional and Scotland	2.3%	↑	0.1 pp
London and South East	4.2%	↓	-0.1 pp
Long Distance	4.6%	↓	-0.3 pp

Responsible Statistician: Abby Sneade (Tel: 020 7282 2022)

Author: Valerian Langton

Public Enquiries: Email: Rail.Stats@orr.gsi.gov.uk **Media Enquiries:** Tel: 020 7282 2094

Website: <http://orr.gov.uk/statistics/published-stats/statistical-releases>

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 Q2 of 2017-18 (1 July to 30 September 2017).

Punctuality (PPM) and Reliability (CaSL) are judged against what is known as the plan of the day. The train 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) is a measure of **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.

Cancellations and Significant Lateness (CaSL) is a measure of **Reliability**. 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.

A train that fails CaSL also fails PPM.

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

Overall, the punctuality of GB rail services has improved in the second quarter of 2017-18, compared with both the same quarter a year earlier, and with the year ending Q2 2016-17. The reliability of GB rail services has also improved, with the proportion of trains cancelled or seriously delayed falling from 3.8% to 3.3% compared with the same quarter a year earlier.

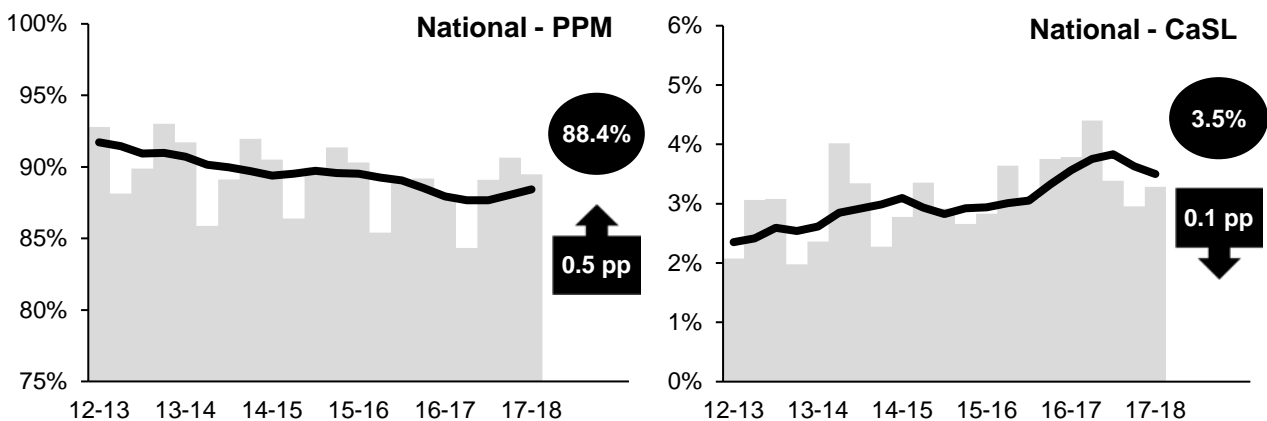
There was considerably less weather related disruption across the majority of train operating companies in Q2 of 2017-18 compared with Q2 of 2016-17.

National Punctuality (PPM) in Q2 was 89.5%. This was up 1.5 pp compared with Q2 in 2016-17. The MAA stands at 88.4%, up 0.5 pp compared with Q2 in 2016-17.

National Reliability (CaSL) in Q2 was 3.3%. This was down 0.5 pp compared with Q2 in 2016-17. The MAA stands at 3.5%, down 0.1 pp compared with Q2 in 2016-17.

Of the 1.5 pp year-on-year increase in national punctuality in Q2, 1.4 pp was due to the improvement in the performance of [Govia Thameslink Railway](#). Of the 0.5 pp year-on-year increase in the punctuality MAA, 0.4 pp was due Govia Thameslink Railway. For more information on these calculations, please refer to [Annex 5](#).

Figure 1.01: PPM and CaSL, National, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



2. Sector Performance

London and South East Sector

2017-18 Quarter 2 Headlines:

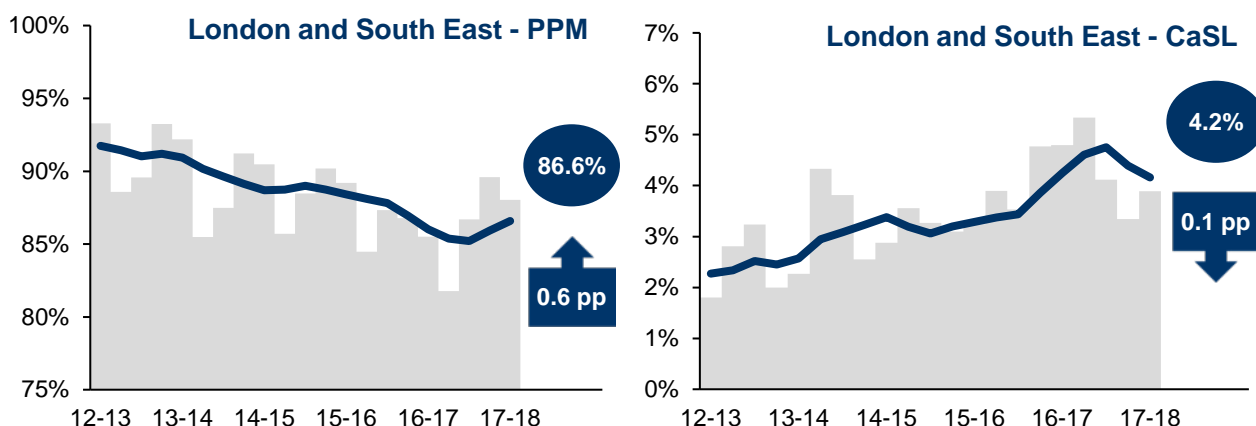
- The lowest South Western Railway Q2 punctuality (83.1%) since 2004-05, with a derailment at Waterloo causing 26,300 delay minutes to all operators.
- The highest (worst) c2c Q2 reliability (2.0%) since 2007-08, with Train crew caused CaSL failures increasing nearly 400% year-on-year.
- An improvement of 9.9 pp in Q2 punctuality for Govia Thameslink Railway (83.0%), with PPM failures due to Train crew decreasing by 50%.
- The lowest Great Western Railway LSE sector Q2 punctuality MAA (88.0%) since 2007-08.

Performance

Punctuality (PPM) in the London and South East sector in Q2 was 88.0%. Up 2.5 pp compared with Q2 in 2016-17, it is still the second lowest Q2 punctuality in this sector in the last 13 years. The MAA stands at 86.6%, up 0.6 pp compared with Q2 in 2016-17.

Reliability (CaSL) in the London and South East sector in Q2 was 3.9%. Down 0.9 pp compared with the Q2 in 2016-17, it is still the second highest (worst) Q2 reliability in this sector in the last 14 years. The MAA stands at 4.2%, down 0.1 pp compared with Q2 in 2016-17.

Figure 2.01: PPM and CaSL, London and South East Sector, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information

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

Regional and Scotland Sector

2017-18 Quarter 2 Headlines:

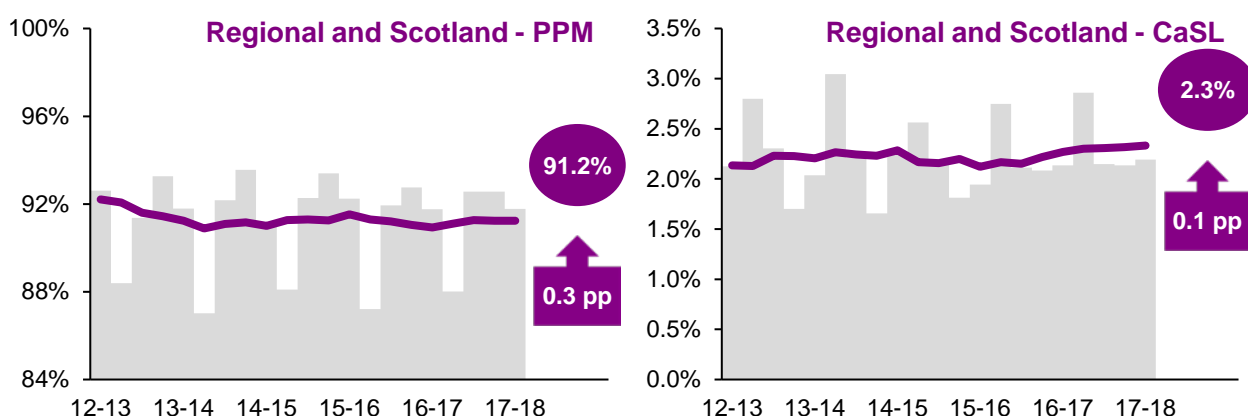
- The lowest Merseyrail Q2 punctuality (93.5%) since 2006-07, with Train crew caused PPM failures increasing by 108% year-on-year.
- The lowest Northern Q2 punctuality (91.0%) since the time series began in 2009-10, with Northern caused PPM failures up 22% year-on-year.
- The highest ScotRail Q2 punctuality (92.6%) since 2012-13, with Network Rail caused PPM failures decreasing by 23% year-on-year.
- The highest London Midland Q2 punctuality MAA (90.5%) since 2011-12.

Performance

Punctuality (PPM) in the Regional and Scotland sector in Q2 was 91.8%. This was the same as Q2 in 2016-17. The MAA stands at 91.2%, up 0.3 pp compared with Q2 in 2016-17.

Reliability (CaSL) in the Regional and Scotland sector in Q2 was 2.2%. Up 0.1 pp compared with Q2 in 2016-17. The MAA stands at 2.3%, up 0.1 pp compared with Q2 in 2016-17, and the highest (worst) it has been since 2011-12 Q3.

Figure 2.02: PPM and CaSL, Regional and Scotland Sector, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



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.

Long Distance Sector

2017-18 Quarter 2 Headlines:

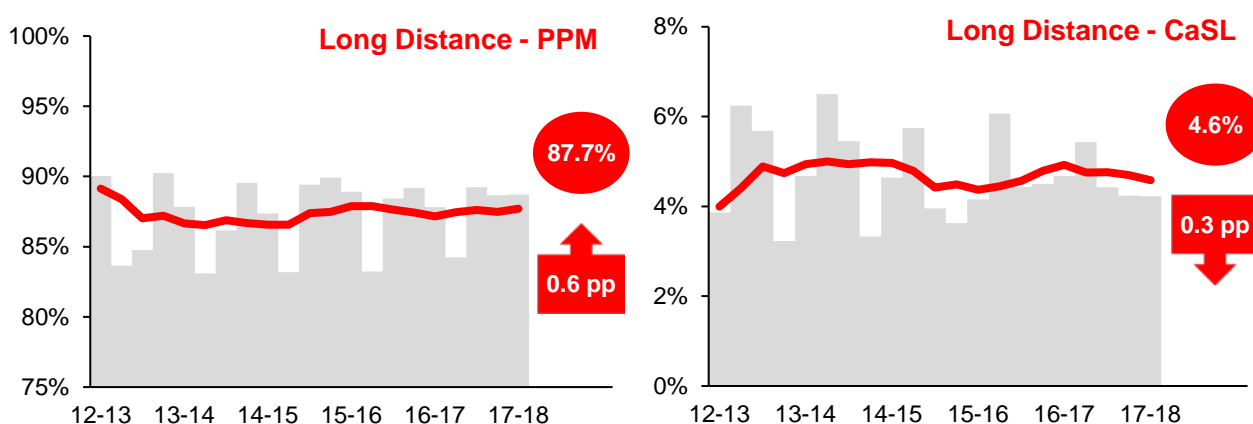
- Virgin Trains East Coast Q2 punctuality (86.5%) is up 4.9 pp compared with Q2 in 2016-17, with Network Rail caused PPM failures down 33% year-on-year.
- The highest (worst) Virgin Trains West Coast Q2 reliability (5.0%) since 2008-09, with Network Rail caused CaSL failures up 37% year-on-year.
- The lowest (best) Hull Trains Q2 reliability (4.3%) since the time series began in 2006-07, with Network Rail caused CaSL failures down 66% year-on-year.
- The lowest (best) CrossCountry Q2 reliability (3.2%) since the time series began in 2004-05, with decreases in points failures and track circuit failures.

Performance

Punctuality (PPM) in the Long Distance sector (figures do not include Caledonian Sleeper) in Q2 was 88.7%. Up 0.9 pp compared with Q2 in 2016-17. The MAA stands at 87.7%, up 0.6 pp compared with Q2 in 2016-17.

Reliability (CaSL) in the Long Distance sector in Q2 was 4.2%. Down 0.4 pp compared with Q2 in 2016-17. The MAA stands at 4.6%, down 0.3 pp compared with Q2 in 2016-17.

Figure 2.03: PPM and CaSL, Long Distance Sector, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information

- Long distance services between metropolitan areas such as London, Bristol, Norwich, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.
- 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. It has an entry at the end of section 3.

3. TOC Performance

Arriva Trains Wales

Punctuality (PPM) in Q2 was 93.0%. Up 1.2 pp compared with Q2 in 2016-17. The MAA stands at 92.2%, up 0.5 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.3%. Down 0.5 pp compared with Q2 in 2016-17. The MAA stands at 2.8%, the same as Q2 in 2016-17.

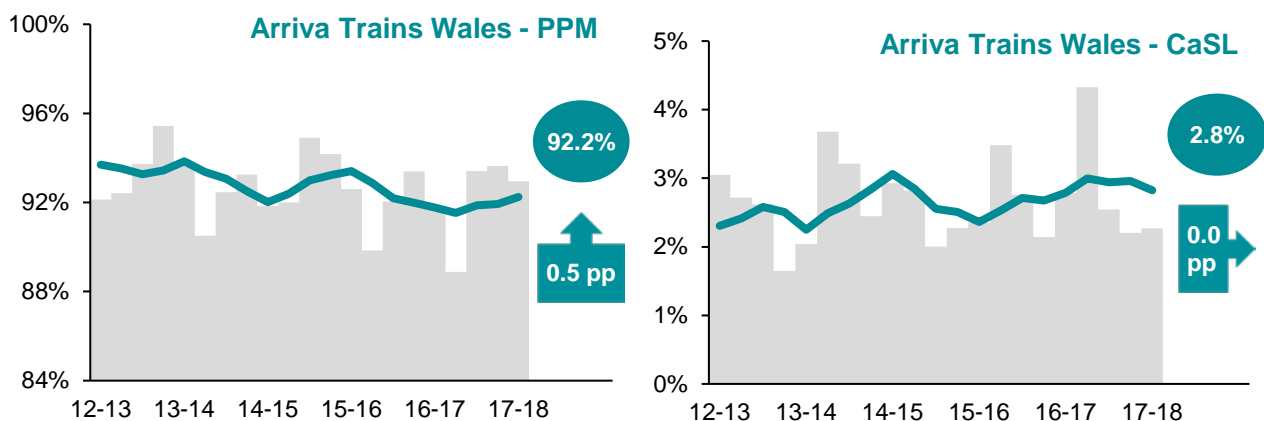
PPM failures attributed to Network Rail decreased by 7% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 75% in PPM failures caused by Signalling and Power Supply failures. Weather related failures were also down 27%.

PPM failures attributed to ATW decreased by 23% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 40% in Station related PPM failures.

CaSL failures attributed to ATW decreased 24% in Q2 of 2017-18 compared with Q2 in 2016-17. Train Crew caused CaSL failures were down 69%, however Fleet caused CaSL failures were up 11%.

An object on the line between Cardiff and Marshfield caused 8,700 delay minutes to all operators.

Figure 3.01: PPM and CaSL, Arriva Trains Wales, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

- 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.

c2c

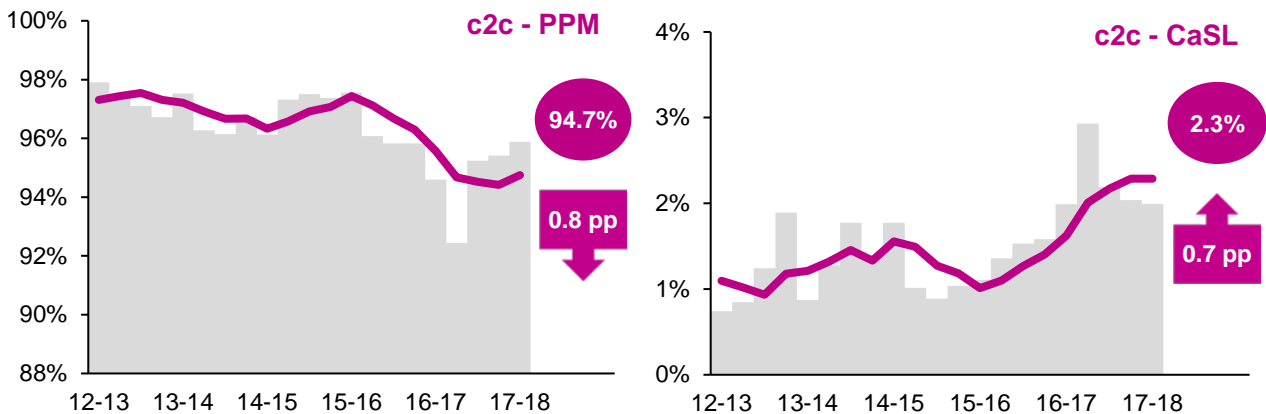
Punctuality (PPM) in Q2 was 95.9%. Up 1.3 pp compared with Q2 in 2016-17, this is still the second lowest Q2 punctuality since 2007-08. The MAA stands at 94.7%, down 0.8 pp compared to Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.0%. The same as Q2 in 2016-17, this is the highest (worst) Q2 reliability since 2007-08. The MAA stands at 2.3%, up 0.7 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased 44% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mostly due to a decrease in PPM failures caused by Network Rail's management of the network (down 79%), and Track failures (down 72%).

CaSL failures attributed to c2c increased by 46% in Q2 of 2017-18 compared with Q2 in 2016-17, with 226 CaSL failures attributed to Train Crew problems in Q2, an increase of nearly 400% on Q2 of 2016-17.

Figure 3.02: PPM and CaSL, c2c, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

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

Chiltern Railways

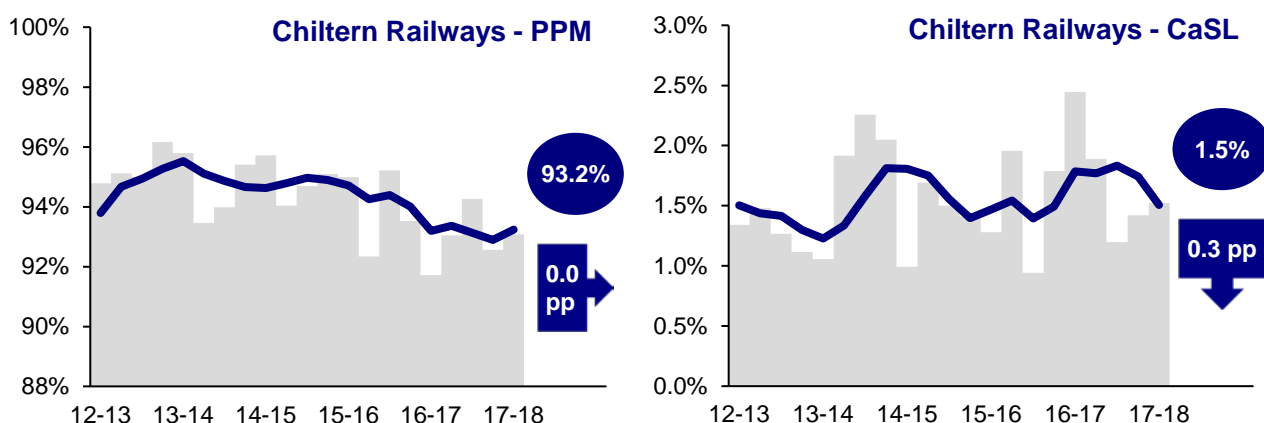
Punctuality (PPM) in Q2 was 93.1%. Up 1.4 pp compared with Q2 in 2016-17. The MAA stands at 93.2%, the same as Q2 in 2016-17.

Reliability (CaSL) in Q2 was 1.5%. Down 0.9 pp compared with Q2 in 2016-17. The MAA stands at 1.5%, down 0.3 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased 42% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in PPM failures caused by Points and Signal failures (down 35%), and Weather related failures (down 76%).

CaSL failures attributed to Network Rail decreased by 64%, mainly due to a large decrease in External incidents such as fatalities and trespass (down 82%), which included a decrease in Fire related failures from 185 CaSL failures in Q2 2016-17 to 0 CaSL failures in Q2 2017-18.

Figure 3.03: PPM and CaSL, Chiltern Railways, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

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

CrossCountry

Punctuality (PPM) in Q2 was 90.9%. Up 0.7 pp compared with Q2 in 2016-17, this is the highest Q2 punctuality since 2010-11. The MAA stands at 89.5%, up 0.1 pp compared with Q2 in 2016-17.

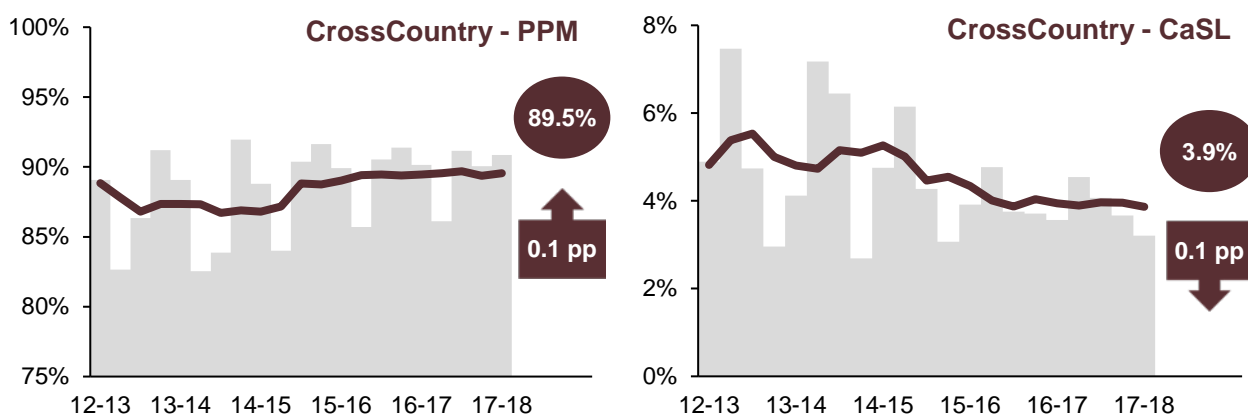
Reliability (CaSL) in Q2 was 3.2%. Down 0.4 pp compared with Q2 in 2016-17, this is the lowest (best) Q2 reliability since the time series began in 2004-05. The MAA stands at 3.9%, down 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 13% in Q2 2017-18 compared with Q2 in 2016-17. Points and Signal failures decreased by 24% (including a decrease of 48% in Track Circuit failures), and Weather related failures (down 76%) decreased in Q2 compared with Q2 in 2016-17.

CaSL failures attributed to other train operating companies increased by 49% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a 69% increase in Fleet caused PPM failures.

CaSL failures attributed to Network Rail decreased by 15% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in CaSL failures caused by Points failures (down 53%), and Track Circuit failures (down 73%).

Figure 3.04: PPM and CaSL, CrossCountry, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

- 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 (Overall)

Punctuality (PPM) in Q2 was 93.9%. Up 1.4 pp compared with Q2 in 2016-17. The MAA stands at 92.5%, up 0.2 pp compared with Q2 in 2016-17.

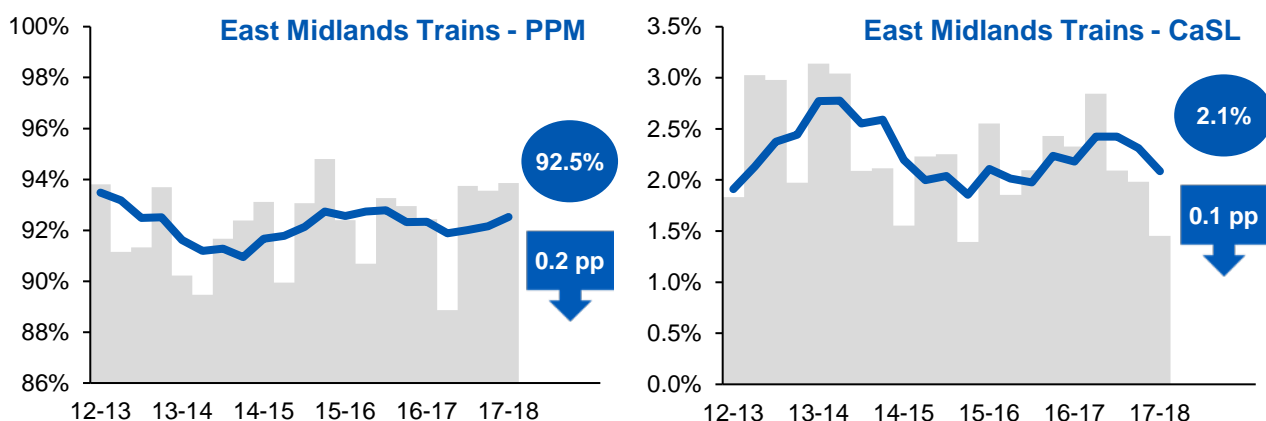
Reliability (CaSL) in Q2 was 1.5%. Down 0.9 pp compared with Q2 in 2016-17, this is the lowest (best) Q2 reliability since the time series began in 2004-05. The MAA stands at 2.1%, down 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 24% in Q2 of 2017-18 compared with Q2 in 2016-17. PPM failures due to External incidents such as fatalities and trespass were down 16% (including a decrease of 32% in Fatalities and Trespass incidents) and Weather related PPM failures were down 82%.

CaSL failures attributed to East Midlands Trains decreased by 19% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in PPM failures caused by Fleet (down 16%), and Train Crew causes (down 32%).

A trespass between West Hampstead and St Albans caused 4,000 delay minutes to all operators.

Figure 3.05: PPM and CaSL, East Midlands Trains, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

- 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.

Route Information (Long Distance)

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

East Midlands Trains (Sector Services)

East Midlands Trains is a cross-sector operator, meaning that it runs trains in multiple sectors: Regional and Long Distance.

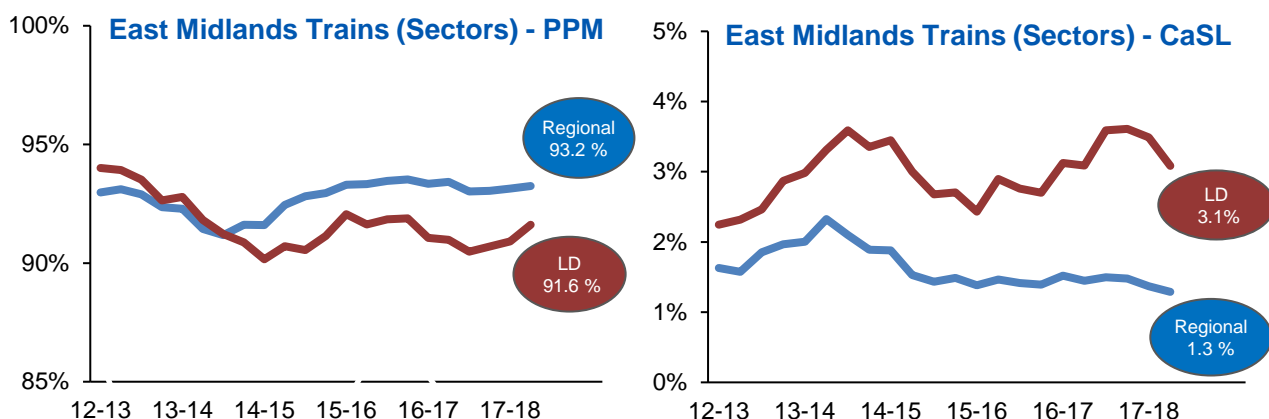
At the end of Q2 in 2017-18, the MAAs for punctuality (PPM) for the two sectors were:

- Regional: 93.2% (down 0.2 pp on 2016-17 Q2).
- Long Distance: 91.6% (up 0.6 pp on 2016-17 Q2).

At the end of Q2 in 2017-18, the MAAs for reliability (CaSL) for the two sectors were:

- Regional: 1.3% (down 0.2 pp on 2016-17 Q2).
- Long Distance: 3.1% (the same as 2016-17 Q2).

Figure 3.06: PPM and CaSL, East Midlands Trains Sectors (Regional/Long Distance), 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Govia Thameslink Railway

Punctuality (PPM) in Q2 was 83.0%. While this was 9.9 pp higher compared with Q2 in 2016-17, this is still 1.1 pp lower than Q2 in 2015-16. The MAA stands at 78.9%, up 2.6 pp compared with Q2 in 2016-17.

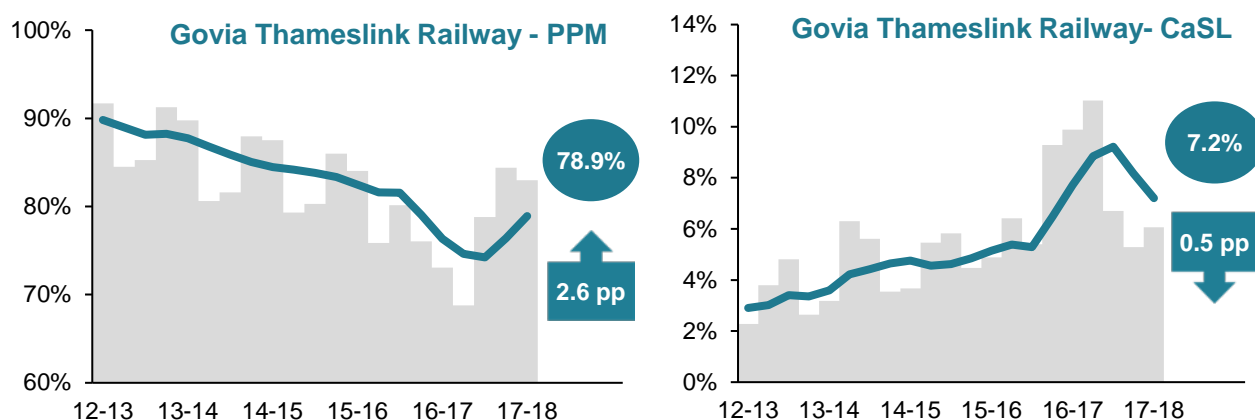
Reliability (CaSL) in Q2 was 6.1%. Down 3.8 pp compared with Q2 in 2016-17. The MAA stands at 7.2%, down 0.5 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 28% in Q2 of 2017-18 compared with Q2 in 2016-17. PPM failures caused by Network Rail's management of the network decreased by 31% and Track caused failures decreased by 48%.

PPM failures attributed to GTR decreased by 39% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 50% in Train Crew caused PPM failures.

There were a number of incidents between Balham and Selhurst which caused considerable delay including: a trespass (8,400 delay minutes to all operators); and fleet delays (6,000 delay minutes to all operators).

Figure 3.07: PPM and CaSL, Govia Thameslink Railway, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Ashford (Kent), Brighton and Southampton.
- Coastway services between Brighton and Hove, Worthing, Portsmouth, Southampton and between Littlehampton and Bognor Regis and Portsmouth.
- Services between Brighton/Wimbledon and Bedford/Luton via London Blackfriars
- 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 franchises began operation as Govia Thameslink Railway (GTR).

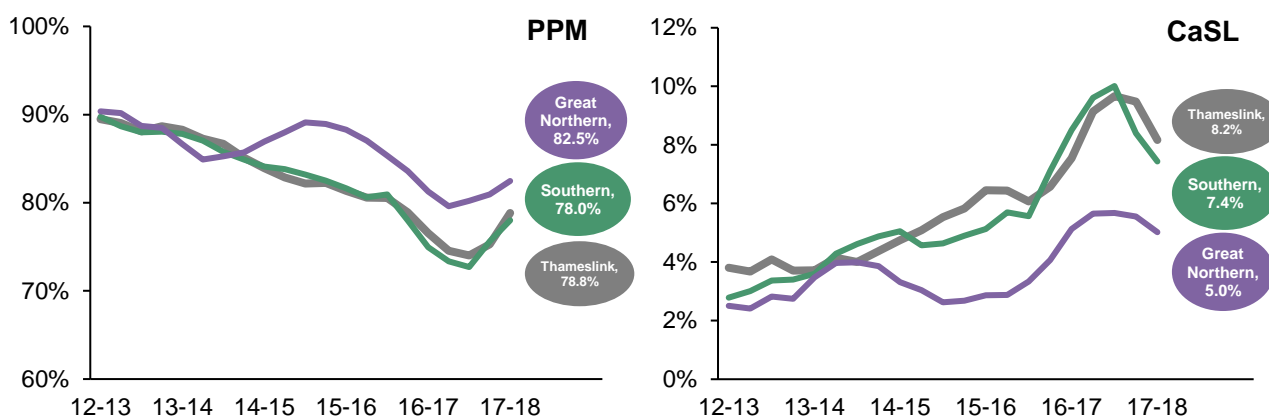
At the end of Q2 in 2017-18, the MAAs for punctuality (PPM) for the sub operators were:

- Southern: 78.0% (up 3.1 pp on 2016-17 Q2).
- Thameslink: 78.8% (up 2.3 pp on 2016-17 Q2).
- Great Northern: 82.5% (up 1.2 pp on 2016-17 Q2).

At the end of Q2 in 2017-18, the MAAs for reliability (CaSL) for the sub operators were:

- Southern: 7.4% (down 1.1 pp on 2016-17 Q2).
- Thameslink: 8.2% (up 0.6 pp on 2016-17 Q2).
- Great Northern: 5.0% (down 0.1 pp on 2016-17 Q2).

Figure 3.08: PPM and CaSL, Thameslink, Southern and Great Northern, 2012-13 Q2 to 2017-18 Q2 (figure shown is for 2017-18 Q2 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.

Grand Central

Punctuality (PPM) in Q2 was 86.0%. Up 2.7 pp compared with Q2 in 2016-17. The MAA stands at 86.0%, up 1.5 pp compared with Q2 in 2016-17.

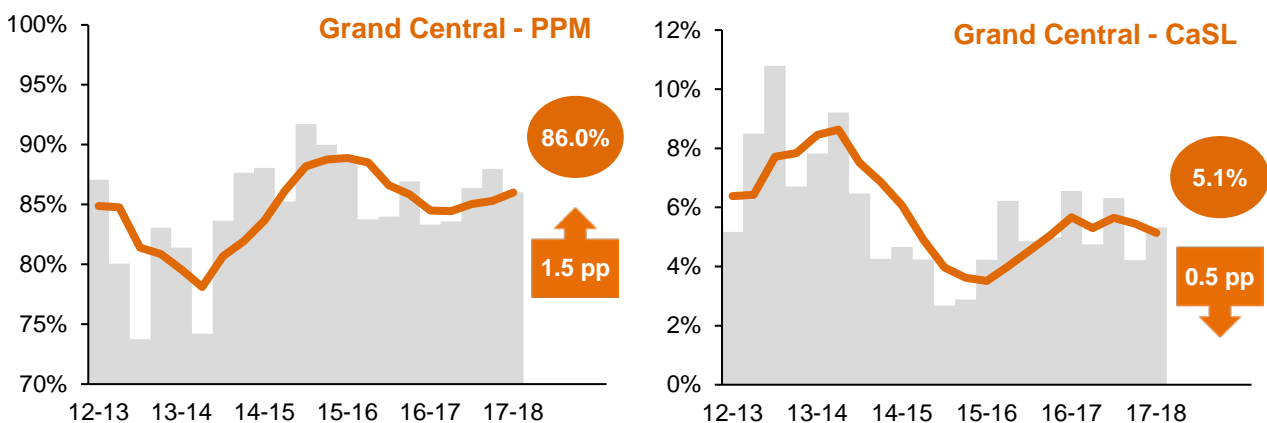
Reliability (CaSL) in Q2 was 5.3%. Down 1.2 pp compared with Q2 in 2016-17. The MAA stands at 5.1%, down 0.5 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail were down 25% in Q2 of 2017-18 compared with Q2 in 2016-17. PPM failures due to Points and Signal failures were down 29%, and PPM failures due to External Fatalities and Trespass were down 32%.

PPM failures caused by other train operating companies were down 33% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 36% in Fleet caused PPM failures.

There were a number of incidents on the East Coast Mainline that caused considerable delay including: Technical fleet delays by Virgin Trains East Coast (6,900 delay minutes to all operations); and a fatality between Huntingdon and Sandy (3,300 delay minutes to all operators).

Figure 3.09: PPM and CaSL, Grand Central, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

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

Great Western Railway (Overall)

Punctuality (PPM) in Q2 was 86.4%. Down 1.0 pp compared with Q2 in 2016-17, and the lowest Q2 punctuality since 2007-08. The MAA stands at 87.6%, down 1.5 pp compared with Q2 in 2016-17.

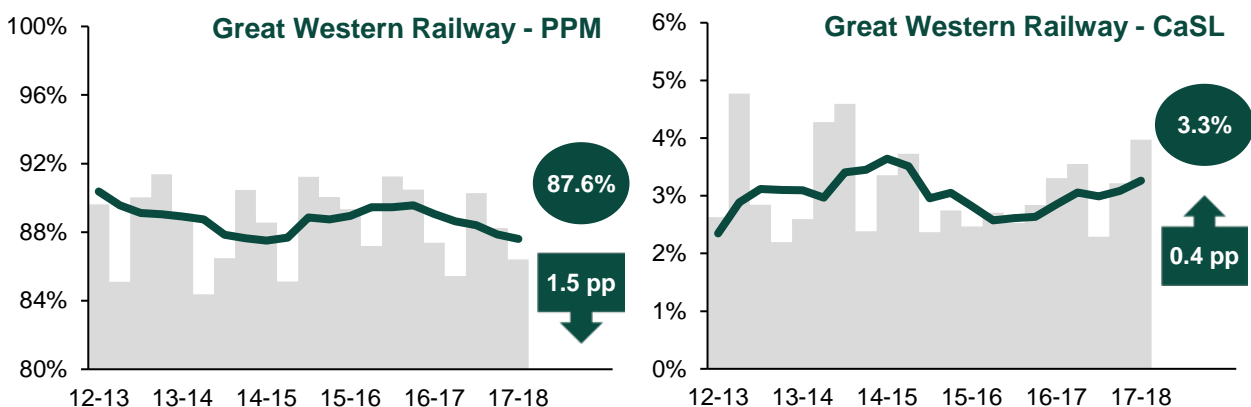
Reliability (CaSL) in Q2 was 4.0%. Up 0.7 pp compared with Q2 in 2016-17, and the highest (worst) Q2 reliability since 2007-08. The MAA stands at 3.3%, up 0.4 pp compared with Q2 in 2016-17.

PPM failures attributed to GWR increased by 58% in Q2 of 2017-18 compared with Q2 in 2016-17. There was an increase of 46% in Fleet caused PPM failures, and an increase of 142% in Train Crew caused PPM failures.

CaSL failures attributed to GWR increased by 92% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to an increase of 247% in Train Crew caused CaSL failures.

There were a number of incidents which caused considerable delay including: Signalling system and Power supply failures at Heathrow Airport Junction (12,200 delay minutes to all operators); and a fatality at Hayes and Harlington (3,200 delay minutes to all operators).

Figure 3.10: PPM and CaSL, Great Western Railway, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

- 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.

Route Information (LSE)

- 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.

Route Information (Long Distance)

- 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.

Great Western Railway (Sector Services)

GWR is a cross-sector operator, meaning that it runs trains in multiple sectors: London and South East, Regional, and Long Distance.

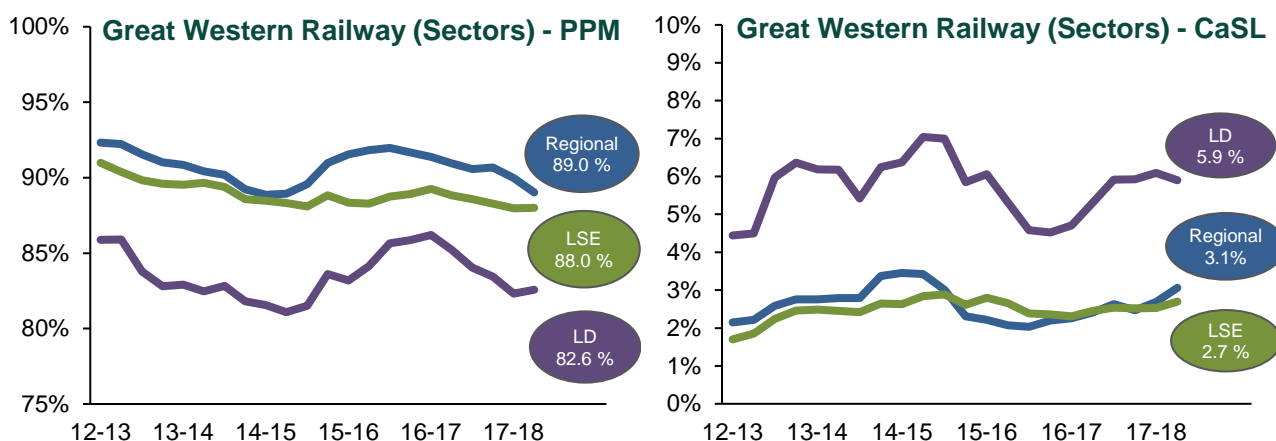
At the end of Q2 in 2017-18, the MAAs for punctuality (PPM) for the three sectors were:

- LSE: 88.0% (down 0.8 pp on 2016-17 Q2).
- Regional: 89.0% (down 1.9 pp on 2016-17 Q2).
- Long Distance: 82.6% (down 2.6 pp on 2016-17 Q2).

At the end of Q2 in 2017-18, the MAAs for reliability (CaSL) for the three sectors were:

- LSE: 2.7% (up 0.2 pp on 2016-17 Q2).
- Regional: 3.1% (up 0.6 pp on 2016-17 Q2).
- Long Distance: 5.9% (up 0.6 pp on 2016-17 Q2).

Figure 3.11: PPM and CaSL, Great Western Railway Sectors (London South East/Regional/Long Distance), 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Greater Anglia (Overall)

Punctuality (PPM) in Q2 was 90.2%. Up 0.9 pp compared with Q2 in 2016-17. The MAA stands at 89.1%, down 0.1 pp compared with Q2 in 2016-17.

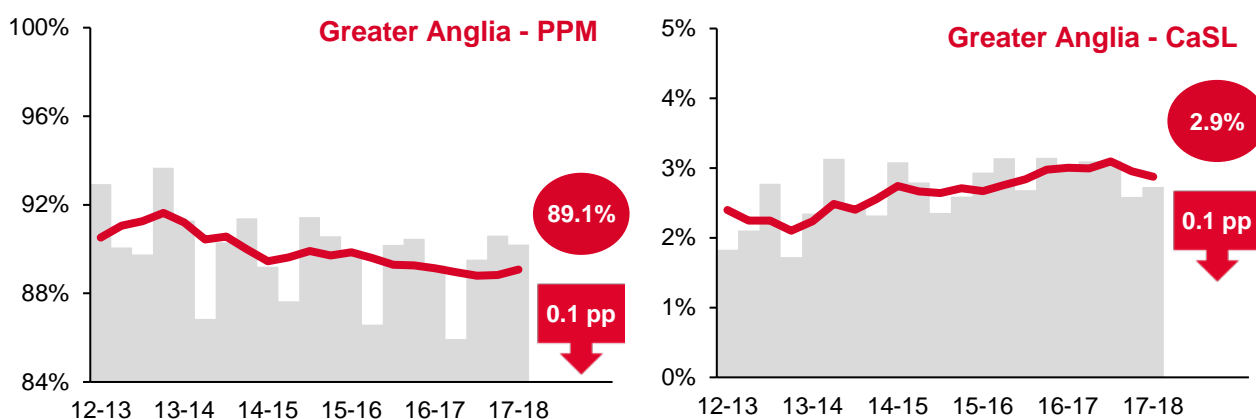
Reliability (CaSL) in Q2 was 2.7%. Down 0.3 pp compared with Q2 in 2016-17. The MAA stands at 2.9%, down 0.1 pp compared with Q2 in 2016-17. This is the second highest (worst) Q2 MAA since the time series began in 2004-05 (after Q2 in 2016-17).

PPM failures attributed to Network Rail decreased by 14% in Q2 of 2017-18 compared with Q2 in 2016-17. Failures relating to Points and Signal failures decreased by 42%, and failures due to Weather decreased by 54%. However, failures due to Network Rail's management of the network increased by 44%.

CaSL failures attributed to Greater Anglia increased by 12%, mainly due to increases in Fleet caused failures (up by 15%), and Train Crew caused failures (up 16%).

There were a number of incidents in the London area which caused considerable delay including: Track faults between Forest Gate and Ilford (5,600 delay minutes to all operators), and a trespass between Shenfield and Chelmsford (4,200 delay minutes to all operators).

Figure 3.12: PPM and CaSL, Greater Anglia, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- 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.

Route Information (Long Distance)

- Services between London Liverpool Street and Norwich.

Greater Anglia (Sector Services)

Greater Anglia is a cross-sector operator, meaning that it runs trains in multiple sectors: London and South East, and Long Distance.

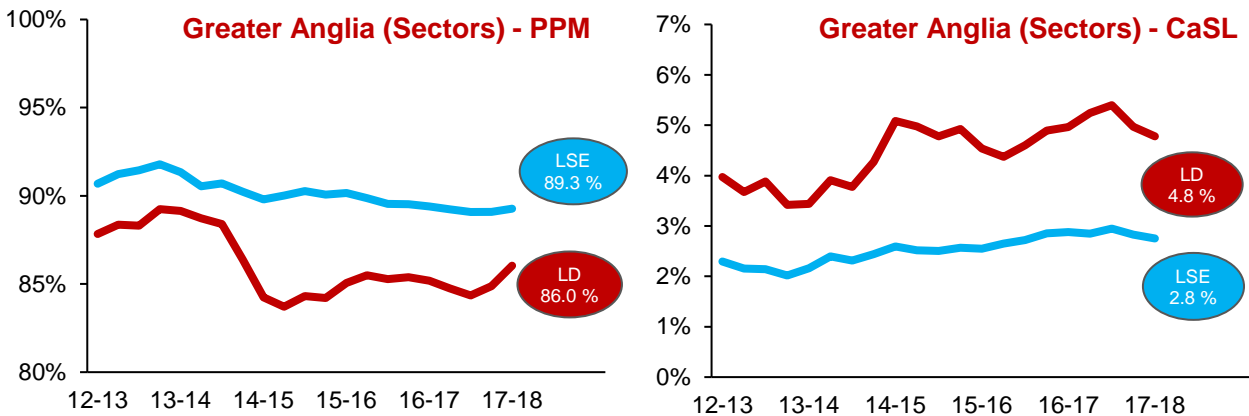
At the end of Q2 in 2017-18, the MAAs for punctuality for the two sectors were:

- LSE: 89.3% (down 0.1 pp on 2016-17 Q2).
- Long Distance: 86.0% (up 0.8 pp on 2016-17 Q2).

At the end of Q2 in 2017-18, the MAAs for reliability for the two sectors were:

- LSE: 2.8% (down 0.1 pp on 2016-17 Q2).
- Long Distance: 4.8% (down 0.2 pp on 2016-17 Q2).

Figure 3.13: PPM and CaSL, Greater Anglia Sectors (London South East/Long Distance), 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Heathrow Express

Punctuality (PPM) in Q2 was 93.3%. Up 1.4 pp compared with Q2 in 2016-17. The MAA stands at 90.4%, down 0.4 pp compared with Q2 in 2016-17, and is the lowest Q2 MAA since 2006-07.

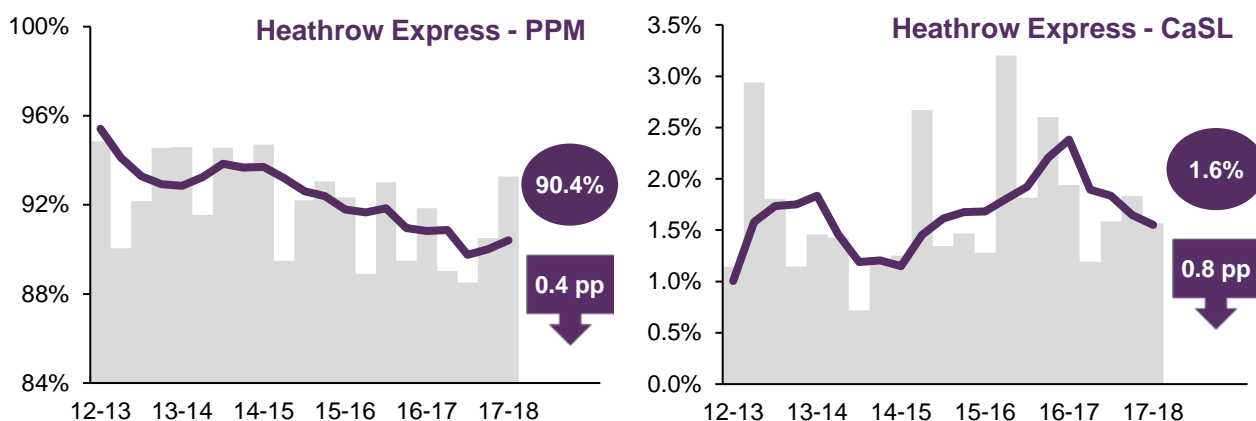
Reliability (CaSL) in Q2 was 1.6%. Down 0.4 pp compared with Q2 in 2016-17, this is still the second highest (worst) Q2 reliability since 2005-6. The MAA stands at 1.6%, down 0.8 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 27% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a 38% decrease in failures relating to Points and Signal failures (including a 53% decrease in Track Circuit failures).

PPM failures attributed to other train operating companies increased by 58%, mainly due to a 62% increase in Fleet related failures.

There were a number of incidents which caused considerable delay including: Signalling system and Power supply failures at Heathrow Airport Junction (12,200 delay minutes to all operators); and a fatality at Hayes and Harlington (3,200 delay minutes to all operators).

Figure 3.14: PPM and CaSL, Heathrow Express, 2012-13 Q1 to 2017-18 Q1 (change shown is MAA for 2017-18 Q1 on 2016-17 Q1)



Route Information (LSE)

- Services between London Paddington and Heathrow Airport.

Hull Trains

Punctuality (PPM) in Q2 was 78.5%. Down 3.1 pp compared with Q2 in 2016-17, this is the lowest Q2 punctuality since 2011-12. The MAA stands at 80.4%, down 2.6 pp compared with Q2 in 2016-17.

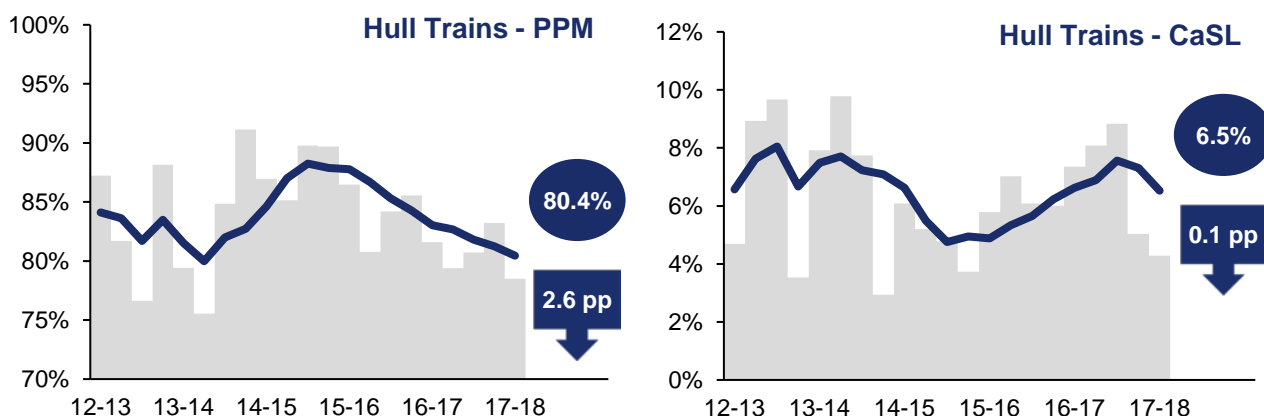
Reliability (CaSL) in Q2 was 4.3%. Down 3.1 pp compared with Q2 in 2016-17, this is the lowest (best) Q2 reliability since the time series began in 2006-07. The MAA stands at 6.5%, down 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Hull Trains increased by 167% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to an increase of 174% in Fleet caused failures.

CaSL failures attributed to Network Rail decreased by 66% in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a 58% decrease in failures caused by External incidents such as fatalities and trespass, and an 90% decrease in Overhead Line equipment failures.

There were a number of incidents on the East Coast Mainline that caused considerable delay including: Technical fleet delays by Virgin Trains East Coast (6,900 delay minutes to all operations); and a fatality between Huntingdon and Sandy (3,300 delay minutes to all operators).

Figure 3.15: PPM and CaSL, Hull Trains, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

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

London Midland (Overall)

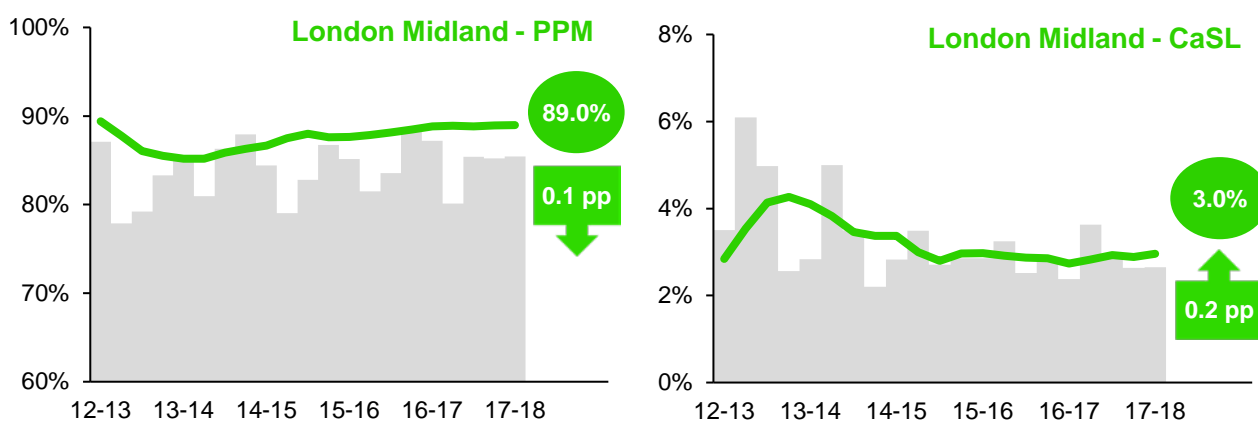
Punctuality (PPM) in Q2 was 90.5%. Up 0.2 pp compared with Q2 in 2016-17, this is the highest Q2 punctuality since 2011-12. The MAA stands at 89.0%, up 0.1 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.6%. Up 0.3 pp compared with Q2 in 2016-17. The MAA stands at 3.0%, up 0.2 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 7% in Q2 of 2017-18 compared with Q2 of 2016-17. PPM failures due to External Fatalities and Trespass increased by 41%, however there were decreases in PPM failures attributed to Weather (down 53%), and Track failures (down 18%).

There were a number of incidents which caused considerable delay including: A fatality at Bletchley (7,700 delay minutes to all operators); a fatality between Bletchley and Milton Keynes (5,800 delay minutes to all operators); a fire between Harrow & Wealdstone and Watford Junction (5,800 delay minutes to all operators); and damage to overhead line equipment between Bourne End and Watford Junction (5,600 delay minutes to all operators).

Figure 3.16: PPM and CaSL, London Midland, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

- 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.

Route Information (LSE)

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

London Midland (Sector Services)

London Midland is a cross-sector operator, meaning that it runs trains in multiple sectors: London and South East, and Regional.

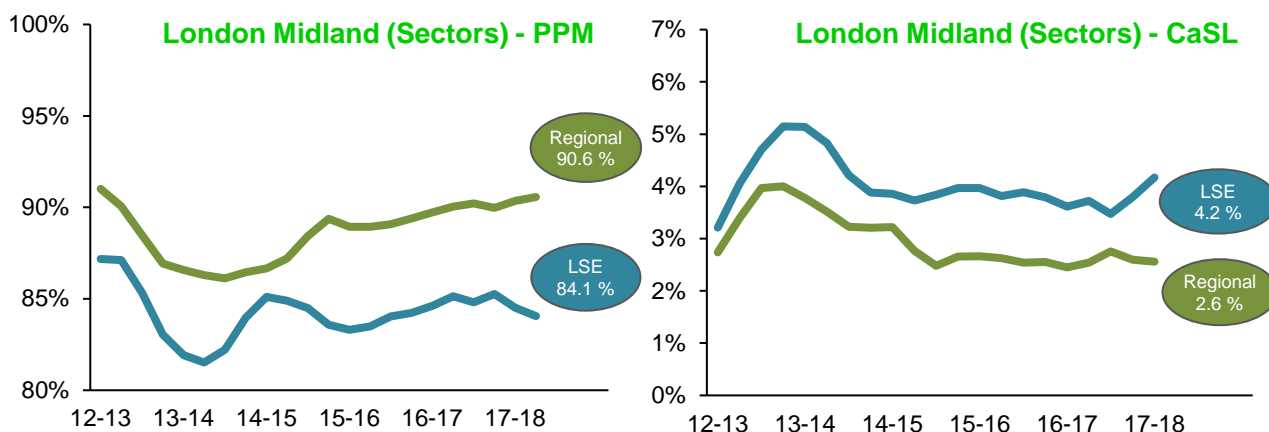
At the end of Q2 in 2017-18, the MAAs for punctuality for the two sectors were:

- LSE: 84.1% (down 1.1 pp on 2016-17 Q2).
- Regional: 90.6% (up 0.5 pp on 2016-17 Q2).

At the end of Q2 in 2017-18, the MAAs for reliability for the two sectors were:

- LSE: 4.2% (up 0.6 pp on 2016-17 Q2).
- Regional: 2.6% (up 0.1 pp on 2016-17 Q2).

Figure 3.17: PPM and CaSL, London Midland Sectors (London South East/Regional), 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



London Overground

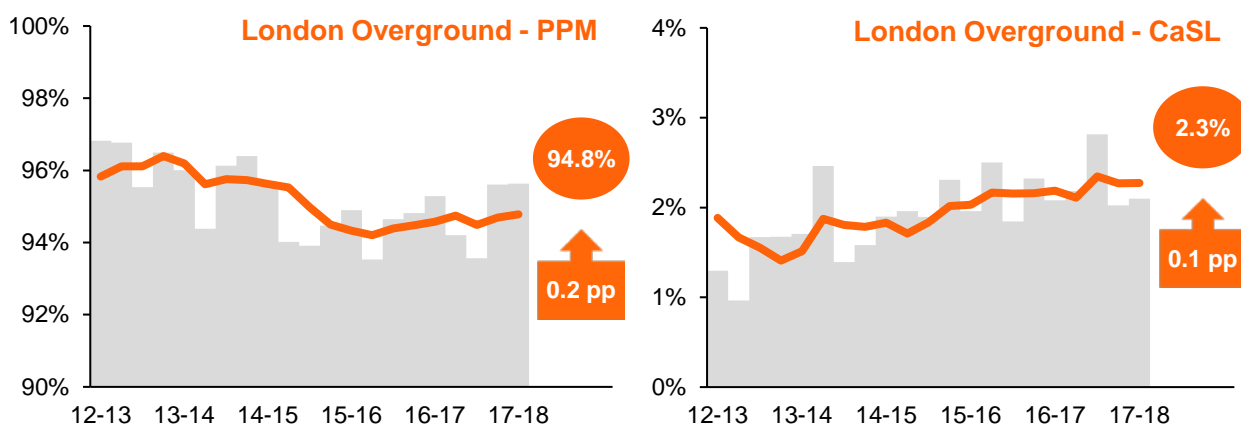
Punctuality (PPM) in Q2 was 95.6%. Up 0.3 pp compared with Q2 in 2016-17. The MAA stands at 94.8%, up 0.2 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.1%. The same as Q2 in 2016-17, this is the highest (worst) Q2 reliability since 2010-11. The MAA stands at 2.3%, up 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 12% in Q2 of 2017-18 compared with Q2 of 2016-17. There were decreases in failures caused by External incidents such as fatalities and trespass (down 24%), Points and Signal failures (down 30%), and Network Rail's management of the network (down 14%). However, there was an increase of 129% in Track caused PPM failures.

CaSL failures attributed to Network Rail decreased by 2% in Q2 of 2017-18 compared with Q2 of 2016-17. CaSL failures attributed to Track failures increased by 324% (from 84 to 355 failures). CaSL failures decreased in those attributed to External incidents such as fatalities and trespass (down 40%), and Points and Signal failures (down 23%).

Figure 3.18: PPM and CaSL, London Overground, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- 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.

Merseyrail

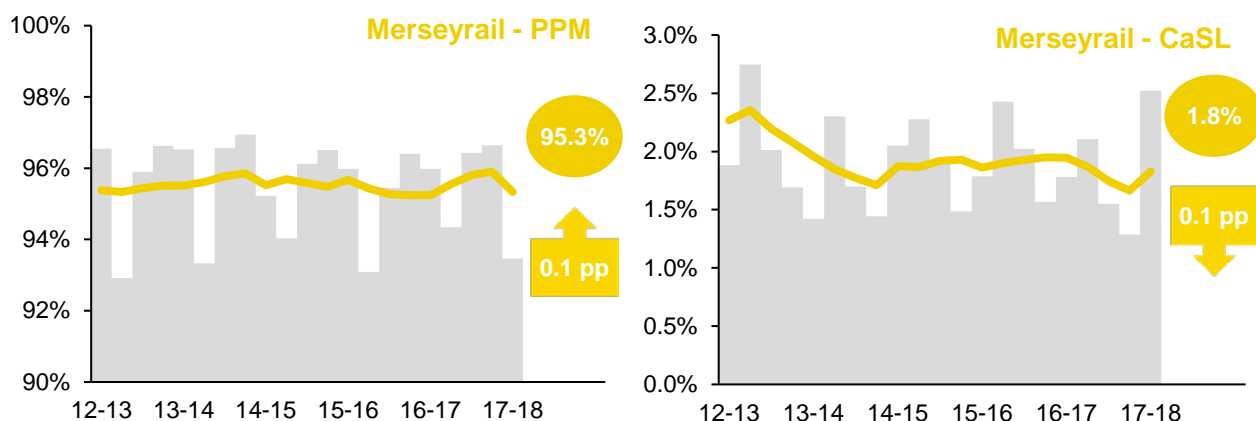
Punctuality (PPM) in Q2 was 93.5%. Down 2.5 pp compared with Q2 in 2016-17, this is the lowest Q2 punctuality since 2006-07. The MAA stands at 95.3%, up 0.1 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.5%. Up 0.7 pp compared with Q2 in 2016-17, this is the highest (worst) Q2 reliability since 2006-07. The MAA stands at 1.8%, down 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail increased by 47% in Q2 of 2017-18 compared with Q2 of 2016-17. This was due to an increase of 61% in PPM failures caused by Network Rail's management of the network, and an increase of 72% in PPM failures caused by Points and Signal failures (which included increases in axle counter failures from 18 to 209 failures, and in track circuit failures from 30 to 148 failures).

PPM failures attributed to Merseyrail increased by 62% in Q2 of 2017-18 compared with Q2 in 2016-17. This was due to increases in PPM failures attributed to Train Crew (up 108%), Train Operations (up 84%), and Station delays (up 395%, from 49 to 241 failures).

Figure 3.19: PPM and CaSL, Merseyrail, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

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

Northern

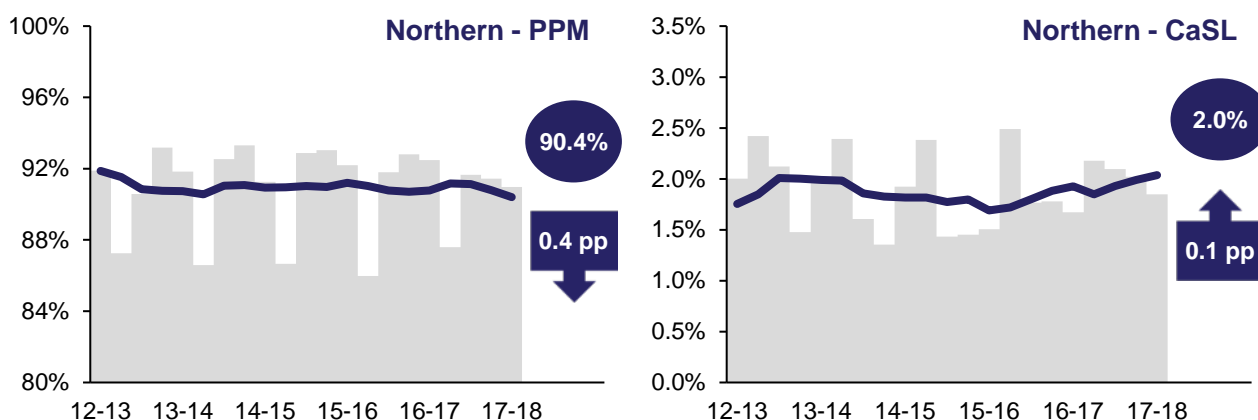
Punctuality (PPM) in Q2 was 91.0%. Down 1.5 pp compared with Q2 in 2016-17, this is the lowest Q2 punctuality since the time series began in 2009-10. The MAA stands at 90.4%, down 0.4 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 1.8%. Up 0.2 pp compared with Q2 in 2016-17. The MAA stands at 2.0%, up 0.1 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail increased by 8% in Q2 of 2017-18 compared with Q2 in 2016-17. PPM failures caused by External incidents such as fatalities and trespass increased by 44%, and PPM failures caused by Network Rail's management of the network increased by 28%.

PPM failures attributed to Northern increased by 22%, including increases in Fleet caused PPM failures (up 17%), and in Station caused PPM failures (up 24%).

Figure 3.20: PPM and CaSL, Northern, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Regional)

- 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

Punctuality (PPM) in Q2 was 92.6%. Up 2.5 pp compared with Q2 in 2016-17. The MAA stands at 91.1%, up 1.5 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.2%. Down 0.3 pp compared with Q2 in 2016-17. The MAA stands at 2.4%, down 0.1 compared with Q2 in 2016-17.

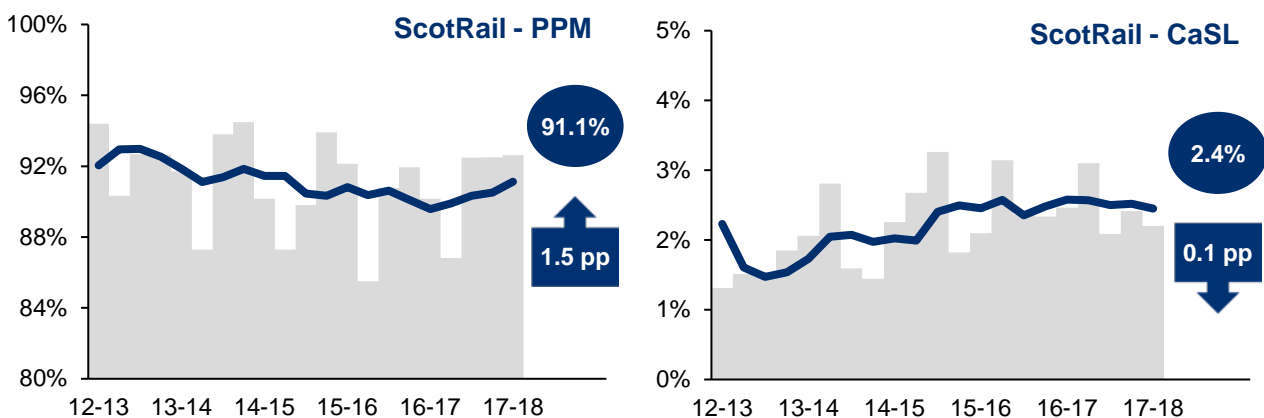
PPM failures attributed to Network Rail decreased by 23% in Q2 2017-18 compared with Q2 in 2016-17. This was mainly due to decreases in PPM failures caused by Network Rail's management of the network (down 30%), and Weather caused PPM failures (down 72%).

PPM failures attributed to ScotRail decreased by 21%, including a decrease of 20% in Fleet caused PPM failures, and a decrease of 40% in Train Crew caused PPM failures.

CaSL failures attributed to other train operating companies increased by 76%, mainly due to an increase of 404% in Train Crew caused CaSL failures (from 32 to 161 CaSL failures).

A signal passed at red between Edinburgh and Haymarket caused 3,900 delay minutes to all operators.

Figure 3.21: PPM and CaSL, ScotRail, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Scotland)

- 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.

South Western Railway

South West Trains became South Western Railway in August of Q2 in 2017-18.

Punctuality (PPM) in Q2 was 83.1%. Down 5.0 pp compared with Q2 in 2016-17, this is the lowest Q2 punctuality since 2004-05. The MAA stands at 85.7%, down 2.8 pp compared with Q2 in 2016-17.

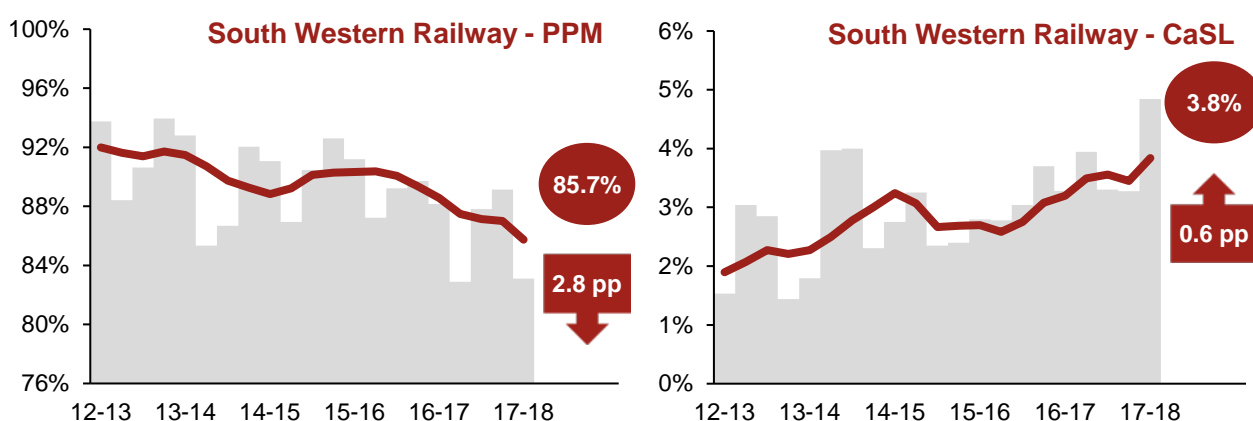
Reliability (CaSL) in Q2 was 4.8%. Up 1.6 pp compared with Q2 in 2016-17, this is the highest (worst) Q2 reliability since the time series began in 1998-99. The MAA stands at 3.8%, up 0.6 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail increased by 57% in Q2 of 2017-18 compared with Q2 in 2016-17. There were increases in PPM failures attributed to Network Rail's management of the network (up 146%), Points failures (up 191%), and Track faults (up 79%).

There were a number of incidents which caused considerable delay including: A derailment at Waterloo (26,300 delay minutes to all operators); Signalling system and Power supply failures between Woking and Weybridge (9,800 delay minutes to all operators); Telecoms failures at Waterloo (8,600 delay minutes to all operators); and Points failures at Waterloo (6,400 delay minutes to all operators).

Q2 also included the three-week engineering works that took place at Waterloo in August, with 33,200 delay minutes related to the engineering works.

Figure 3.22: PPM and CaSL, South Western Railway, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- 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

Punctuality (PPM) in Q2 was 90.6%. Up 2.8 pp compared with Q2 in 2016-17. The MAA stands at 87.9%, up 1.8 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 2.9%. Down 0.9 pp compared with Q2 in 2016-17. The MAA stands at 3.6%, down 0.2 pp compared with Q2 in 2016-17.

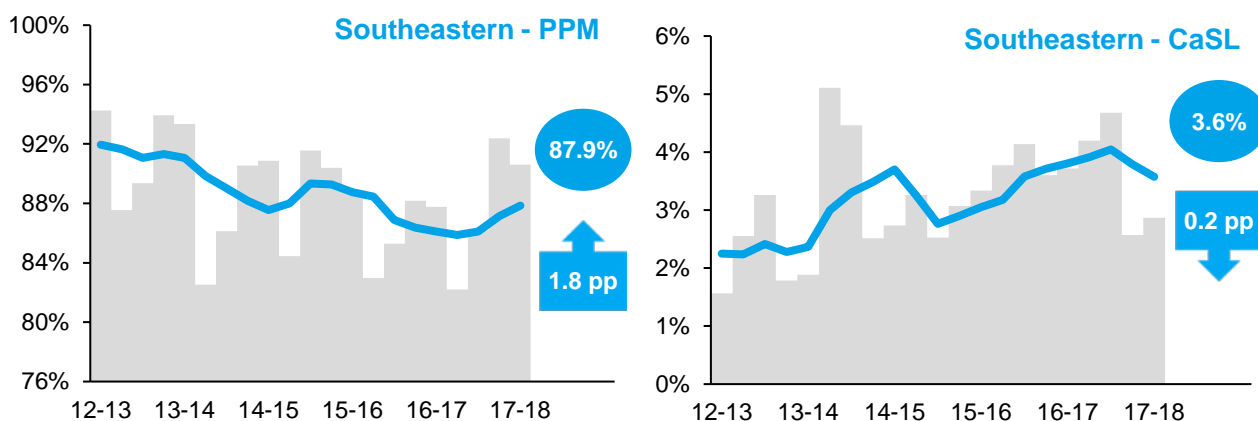
PPM failures attributed to Network Rail decreased by 24% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in PPM failures attributed to Points failures (down 53%), and Track Circuit failures (down 54%). There was however an increase in Track caused PPM failures (up 154%).

PPM failures attributed to Southeastern decreased by 21%. This included a decrease of 44% in Train Crew caused PPM failures.

CaSL failures due to Points and Signal failures decreased by 44% in Q2 of 2017-18 compared with Q2 in 2016-17. This included decreases in CaSL failures attributed to Points failures (down 53%), and Track Circuit failures (down 54%).

There were a number of incidents which caused considerable delay including: Points failures between Grove Park and Hither Green (5,500 delay minutes to all operators); and Track circuit failures between London Bridge and North Kent East Junction (4,800 delay minutes to all operators).

Figure 3.23: PPM and CaSL, Southeastern, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- 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

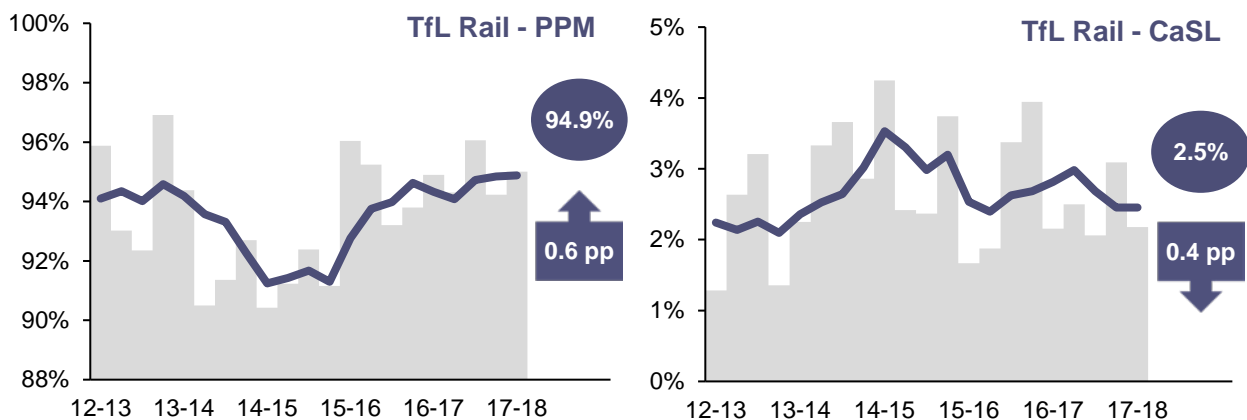
Punctuality (PPM) in Q2 was 95.0%. Up 0.1 pp compared with Q2 in 2016-17. The MAA stands at 94.9%, up 0.6 pp compared with Q2 in 2016-17, and is the highest MAA since the time series began in 2010-11.

Reliability (CaSL) in Q2 was 2.2%. The same as Q2 in 2016-17. The MAA stands at 2.5%, down 0.4 pp compared with Q2 in 2016-17.

PPM failures attributed to TfL Rail increased by 80% in Q2 of 2017-18 compared with Q2 in 2016-17. Fleet caused PPM failures increased by 109% (from 113 to 236 failures), and Train Crew caused PPM failures increased by 438% (from 11 to 57 failures).

PPM failures attributed to Network Rail decreased by 10% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in PPM failures caused by External incidents such as fatalities and trespass (down 31%), and Points and Signal failures (down 44%, including a 76% decrease in Track Circuit failures).

Figure 3,24: PPM and CaSL, TfL Rail, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (LSE)

- Services between London Liverpool Street and Shenfield.

TransPennine Express

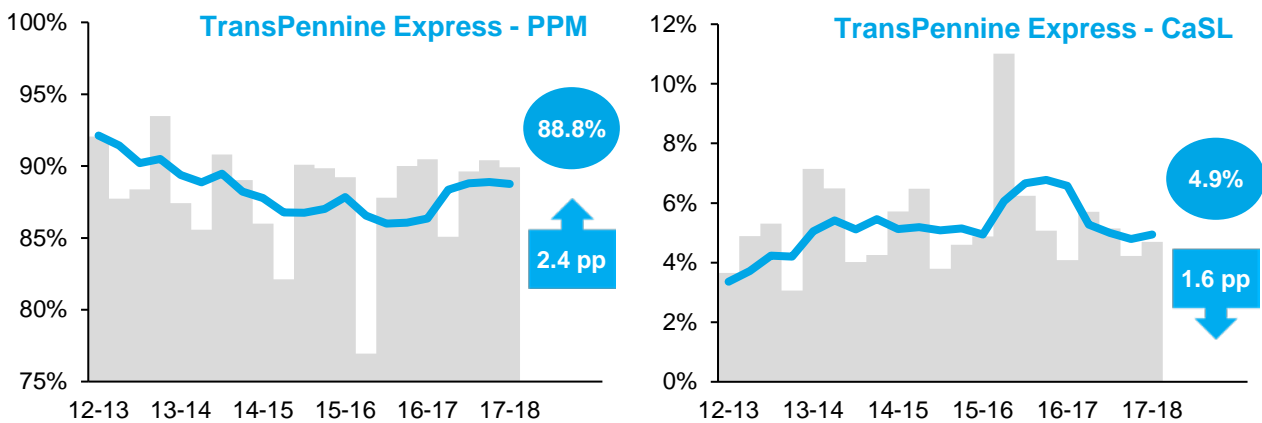
Punctuality (PPM) in Q2 was 89.9%. Down 0.6 pp compared with Q2 in 2016-17. However, the MAA stands at 88.8%, up 2.4 pp compared with Q2 in 2016-17.

Reliability (CaSL) in Q2 was 4.7%. Up 0.6 pp compared with Q2 in 2016-17. The MAA stands at 4.9%, down 1.6 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 10% in Q2 of 2017-18 compared with Q2 in 2016-17. There was an increase in PPM failures caused by External incidents such as fatalities and trespass (up 56%), and decreases in Track caused PPM failures (down 56%) and Weather related PPM failures (down 50%).

PPM failures attributed to TPE increased by 34% in Q2 of 2017-18 compared with Q2 in 2016-17. There were increases in PPM failures caused by Fleet (up 24%), and Train Crew (up 42%).

Figure 3.25: PPM and CaSL, TransPennine Express, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

- 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

Punctuality (PPM) in Q2 was 86.5%. Up 4.9 pp compared with Q2 in 2016-17. The MAA stands at 84.9%, up 2.1 pp compared with Q2 in 2016-17.

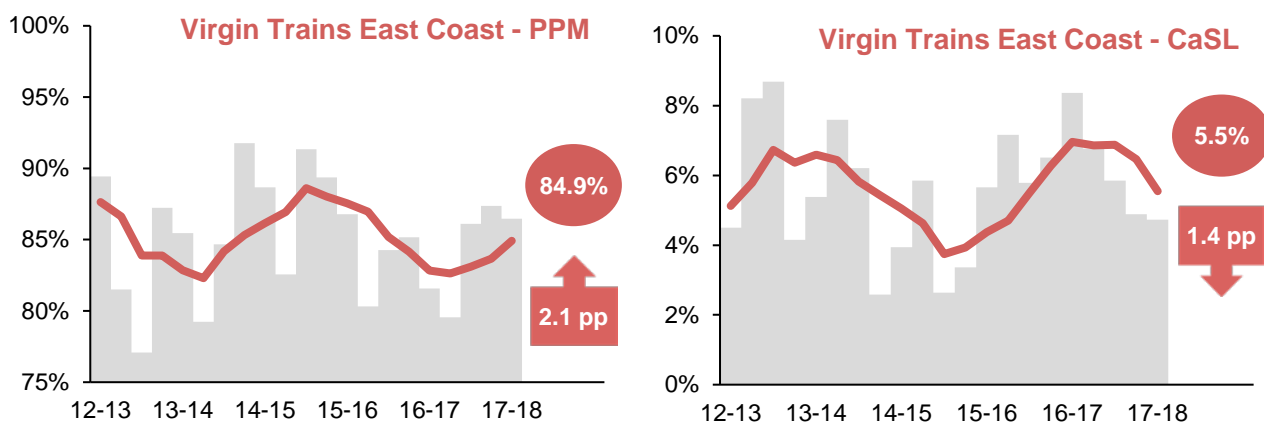
Reliability (CaSL) in Q2 was 4.7%. Down 3.6 pp compared with Q2 in 2016-17. The MAA stands at 5.5%, down 1.4 pp compared with Q2 in 2016-17.

PPM failures attributed to Network Rail decreased by 33% in Q2 of 2017-18 compared with Q2 in 2016-17. There were decreases in PPM failures caused by External incidents such as fatalities and trespass (down 39%), Point and Signal failures (down 29%), and Track failures (down 26%).

PPM failures attributed to Virgin Trains East Coast decreased by 13% in in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 22% in Fleet caused PPM failures.

There were a number of incidents on the East Coast Mainline that caused considerable delay including: Technical fleet delays by Virgin Trains East Coast (6,900 delay minutes to all operations); and a fatality between Huntingdon and Sandy (3,300 delay minutes to all operators).

Figure 3.26: PPM and CaSL, Virgin Trains East Coast, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

- 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

Punctuality (PPM) in Q2 was 87.6%. Down 2.1 pp compared with Q2 in 2016-17. The MAA stands at 88.4%, up 1.5 pp compared with Q2 in 2016-17, and is the third highest MAA since the time series began in 1997-98 (after 2016-17 Q4 and 2017-18 Q1).

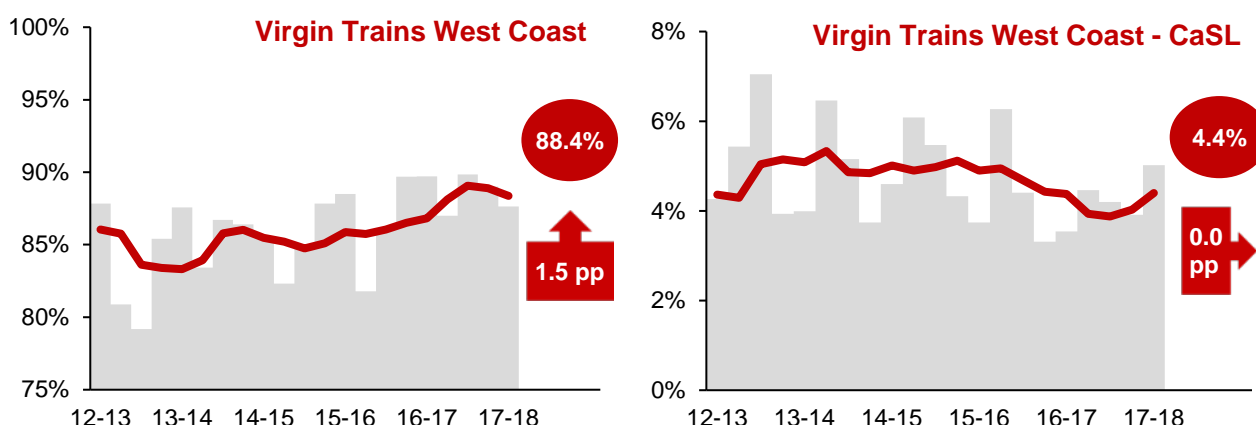
Reliability (CaSL) in Q2 was 5.0%. Up 1.5 pp compared with Q2 in 2016-17, this is the highest (worst) Q2 reliability since 2008-09. However, the MAA stands at 4.4%, the same as Q2 in 2016-17.

PPM failures attributed to Network Rail increased by 12% in Q2 of 2017-18 compared with Q2 in 2016-17. PPM failures caused by External incidents such as fatalities and trespass increased by 380% (from 213 to 1021 failures). However, there was a 90% decrease in Weather related PPM failures.

PPM failures attributed to Virgin Trains West Coast increased by 26% in Q2 of 2017-18 compared with Q2 in 2016-17. Train Crew caused PPM failures increased by 620% (from 32 to 229 failures), however Fleet caused PPM failures decreased by 25% (from 403 to 301 failures).

There were a number of incidents that generated considerable delay including: A fatality at Bletchley (7,700 delay minutes to all operators); a fatality between Bletchley and Milton Keynes (5,800 delay minutes to all operators); a fire between Harrow & Wealdstone and Watford Junction (5,800 delay minutes to all operators); and damage to overhead line equipment between Bourne End and Watford Junction (5,600 delay minutes to all operators).

Figure 3.27: PPM and CaSL, Virgin Trains West Coast, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information (Long Distance)

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

Caledonian Sleeper

Punctuality (PPM) in Q2 was 91.7%. Up 4.7 pp compared with Q2 in 2016-17. The MAA stands at 89.4%, up 3.2 pp compared with Q2 in 2016-17.

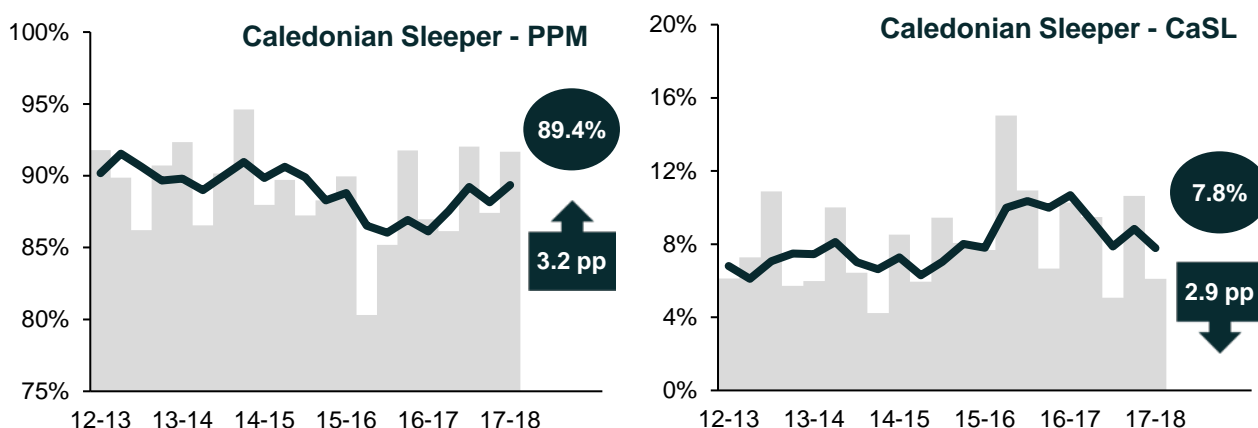
Reliability (CaSL) in Q2 was 6.1%. Down 4.2 pp compared with Q2 in 2016-17. The MAA stands at 7.8%, down 2.9 pp compared with Q2 in 2016-17.

PPM failures attributed to Caledonian Sleeper decreased by 47% (from 40 to 21 failures) in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 67% in Fleet caused PPM failures (from 33 to 11 failures).

PPM failures attributed to Network Rail decreased by 9% (from 24 to 22 failures) in Q2 in 2017-18 compared with in Q2 in 2016-17. There was an increase in PPM failures caused by External incidents such as fatalities and trespass (from 1 to 12), and decreases in Points and Signal failures (from 14 to 6 failures), and PPM failures caused by Network Rail's management of the network (from 7 to 3 failures).

CaSL failures caused by Caledonian Sleeper decreased by 53% (from 31 to 15 failures) in Q2 of 2017-18 compared with Q2 in 2016-17. This was mainly due to a decrease of 65% (from 25 to 9 failures) in Fleet caused CaSL failures.

Figure 3.28: PPM and CaSL, Caledonian Sleeper, 2012-13 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



Route Information

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

4. Freight Delivery Metric



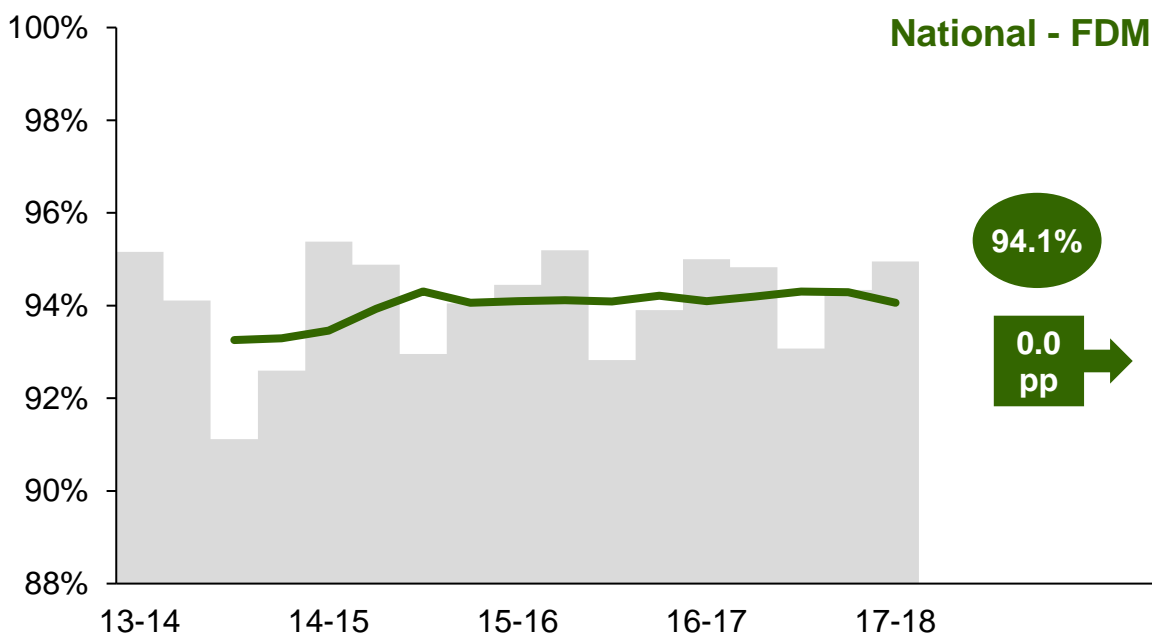
Freight Delivery Metric (FDM) is the percentage of freight trains that arrive at their destination within 15 minutes of their scheduled arrival time. Freight trains are only considered to have failed FDM where the delay was caused by Network Rail. The **moving annual average (MAA)** reflects the proportion 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.

FDM in Q2 was 94.4%, down 0.4 pp compared with Q2 in 2016-17. The FDM MAA stands at 94.1%, the same as Q2 in 2016-17.

Figure 4.01: FDM, National, 2013-14 Q2 to 2017-18 Q2 (change shown is MAA for 2017-18 Q2 on 2016-17 Q2)



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 2016-17 (annual) and 1997-98 Q1 to 2017-18 Q2 (quarterly) – [Table 3.43](#);
- PPM (MAA) by sector, 1997-98 Q4 to 2017-18 Q2 (quarterly) – [Table 3.42](#);
- PPM by TOC, 1997-98 Q1 to 2017-18 Q2 (quarterly) – [Table 3.44](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2017-18 Period 5 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper))

CaSL

- CaSL by sector, 1997-98 to 2016-17 (annual) and 1997-98 Q1 to 2017-18 Q2 (quarterly) – [Table 3.6](#);
- CaSL (MAA) by sector, 1997-98 Q4 to 2017-18 Q2 (quarterly) – [Table 3.5](#)
- CaSL by TOC, 1997-98 Q1 to 2017-18 Q2 (quarterly) – [Table 3.7](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2017-18 Period 5 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper))

FDM

- FDM, 2013-14 Q1 to 2017-18 Q2 (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-operator¹. 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](#).

¹ 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 System². 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 Q1 (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%³ between 1997-98 and 2015-16. In the same time, the length of route open for passenger traffic has not increased by a significant amount⁴. 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 1997-98⁵. This may have increased station dwell times and harmed performance as it takes longer to get passengers on and off trains during peak hours.

² Train Running System on TOPs (Total Operation Processing System)

³ [ORR Website – Historic PPM and CaSL](#)

⁴ 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](#))

⁵ [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 license 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 8 to 13 of 2017-18 is due to be published in July 2018.

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 [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

FirstGroup began operating the South Western franchise on 20 August 2017, now known as South Western Railway. Stagecoach were still operating the services at the end of Q1 in 2017-18 and the franchise was previously referred to in this publication as South West Trains.

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 Limited⁶ to Arriva Rail London. The composition of the services is unaffected and the operator will be continued to be referred to as London Overground.

⁶ 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 Q2 of 2017-18. The MAA at the end of Q2 also improved compared to 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), reliability (CaSL) and the MAAs in 2017-18 Q2.

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 Q2 with the trains planned for 2017-18 Q2. 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 28,399 fewer GTR PPM failures represent 97.6% of the total reduction in PPM failures.

Table A: PPM, National (excluding GTR) and GTR, 2016-17 Q2 and 2017-18 Q2

PPM	National (GB) excluding GTR			GTR		
	Trains Planned	Met PPM	PPM	Trains Planned	Met PPM	PPM
2016-17 Q2	1,575,898	1,428,076	90.6%	274,424	200,540	73.1%
2017-18 Q2	1,579,896	1,432,387	90.7%	287,257	238,317	83.0%
Change	3,997	4,311	0.0 pp	12,834	37,778	9.9 pp
To stand still		1,431,698			209,918	
Extra Failures		-688			-28,399	
Extra Failures (share)		2.4%			97.6%	
PPM Change (pp)		0.0			1.4	

Table B: Contributions to Q2 PPM and CaSL Changes, National, 2016-17 and 2017-18

Type	Metric	National (GB) excluding GTR		GTR	
		% Share	PP Change	% Share	PP Change
Quarterly	Trains Planned (16-17)	84.6%	-	15.4%	-
	PPM*	2.4%	0.0 pp	97.6%	1.4 pp
	CaSL	-7.8%	0.0 pp	107.8%	-0.5 pp
MAA	Trains Planned (16-17)	84.9%	-	15.1%	-
	PPM	8.7%	0.0 pp	91.3%	0.4 pp
	CaSL	-72.0%	0.0 pp	172.0%	-0.1 pp



© Crown copyright 2017

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at orr.gov.uk

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