



Passenger and Freight Rail Performance 2017-18 Q4 Statistical Release

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Background

This release contains information on passenger and freight rail performance in Great Britain with the latest quarterly data referring to January, February, March 2018.

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.

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Nationally, 87.8% of trains were on time in 2017-18 (**Public Performance Measure (PPM) moving annual average (MAA)**).

PPM MAA - 2017-18 Q4

		Compared with 2016-17 Q4
National (GB)	87.8%	↑ 0.1 pp
Regional and Scotland	89.7%	↓ -1.6 pp
London and South East	86.9%	↑ 1.7 pp
Long Distance	85.3%	↓ -2.4 pp

The proportion of trains **Cancelled or Significantly Late (CaSL)** in 2017-18 was 3.9% (**CaSL MAA**).

CaSL MAA - 2017-18 Q4

		Compared with 2016-17 Q4
National (GB)	3.9%	→ 0.0 pp
Regional and Scotland	2.9%	↑ 0.6 pp
London and South East	4.2%	↓ -0.5 pp
Long Distance	5.8%	↑ 1.0 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 Q4 of 2017-18 (1 January to 31 March 2018).

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 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) 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 2017-18, compared with 2016-17, however this is primarily as a result of the improvement in the performance of Govia Thameslink Railway (GTR). The reliability of GB rail services has remained static, with the proportion of trains cancelled or seriously delayed remaining the same as a year earlier.

National Punctuality (PPM) in Q4 was 86.4%. This has worsened by 2.7 pp compared with Q4 in 2016-17. National Punctuality (PPM) in 2017-18 was 87.8%, an improvement of 0.1 pp compared with 2016-17.

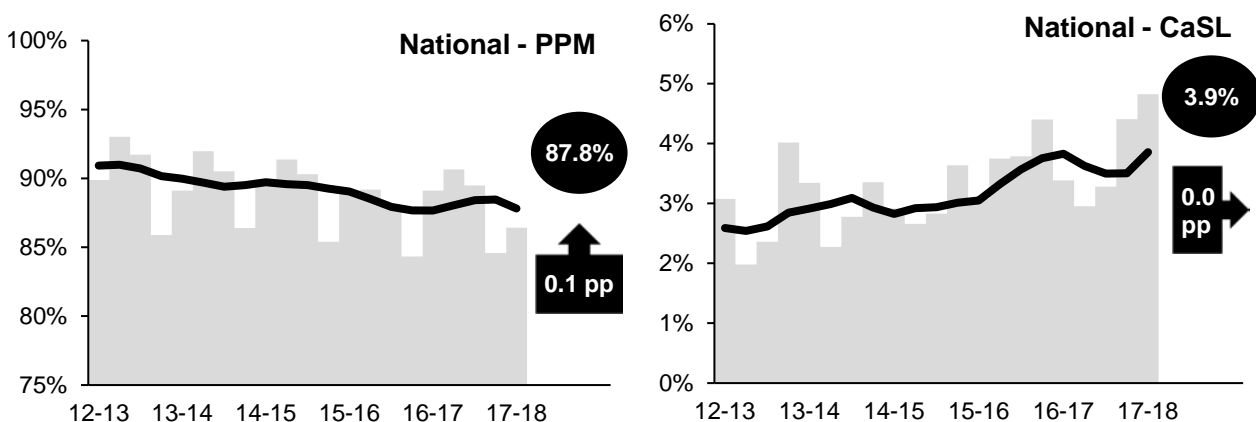
National Reliability (CaSL) in Q4 was 4.8%. This has worsened by 1.4 pp compared with Q4 in 2016-17. National Reliability (CaSL) in 2017-18 was 3.9%, the same as 2016-17.

There was considerably more weather related disruption across the majority of train operating companies in Q4 of 2017-18 compared with Q4 of 2016-17. The storms and snow in February and March 2018 were major contributors to this.

London and the South East was the only sector to see a year-on-year improvement in PPM MAA and CaSL MAA.

The improvement in the punctuality of GTR contributed to the National PPM by 0.4 pp in Q4 of 2017-18. However, the combined punctuality of the other operators decreased by 3.1 pp, leaving an overall decline in the National PPM of 2.7 pp. Likewise, GTR contributed 0.7 pp to the National PPM MAA, and the combined punctuality MAA of the other operators decreased by 0.6 pp, leaving an overall improvement in the National PPM MAA of 0.1 pp. For more information on these calculations, please refer to [Annex 5](#).

Figure 1.01: PPM and CaSL, National, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



2. Sector Performance

London and South East Sector

2017-18 Quarter 4 and Annual Headlines:

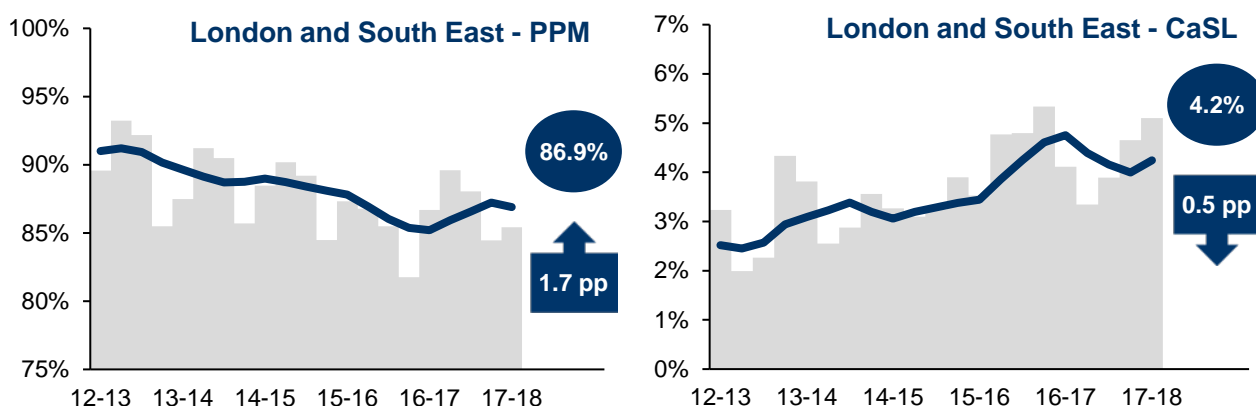
- The highest Govia Thameslink Railway Q4 punctuality (81.1%) for four years.
- Southeastern punctuality (86.3%) improved by 0.1 pp in Q4, the highest Q4 punctuality for three years.
- The lowest Greater Anglia Q4 punctuality (87.0%) since the time series began in 2004-05.
- The lowest South Western Railway Q4 punctuality (81.4%) since 2003-04, with PPM failures attributed to severe weather up by 183% year-on-year.

Performance

Punctuality (PPM) in the London and South East sector in Q4 was 85.4%. This has worsened by 1.3 pp compared with Q4 in 2016-17, and is the lowest Q4 PPM in this sector since 2003-04. Punctuality in 2017-18 was 86.9%, an improvement of 1.7 pp compared with 2016-17.

Reliability (CaSL) in the London and South East sector in Q4 was 5.1%. This has worsened by 1.0 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL in this sector since the time series began in 1997-98. Reliability (CaSL) in 2017-18 was 4.2%, an improvement of 0.5 pp compared with 2016-17.

Figure 2.01: PPM and CaSL, London and South East Sector, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information

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

Regional and Scotland Sector

2017-18 Quarter 4 and Annual Headlines:

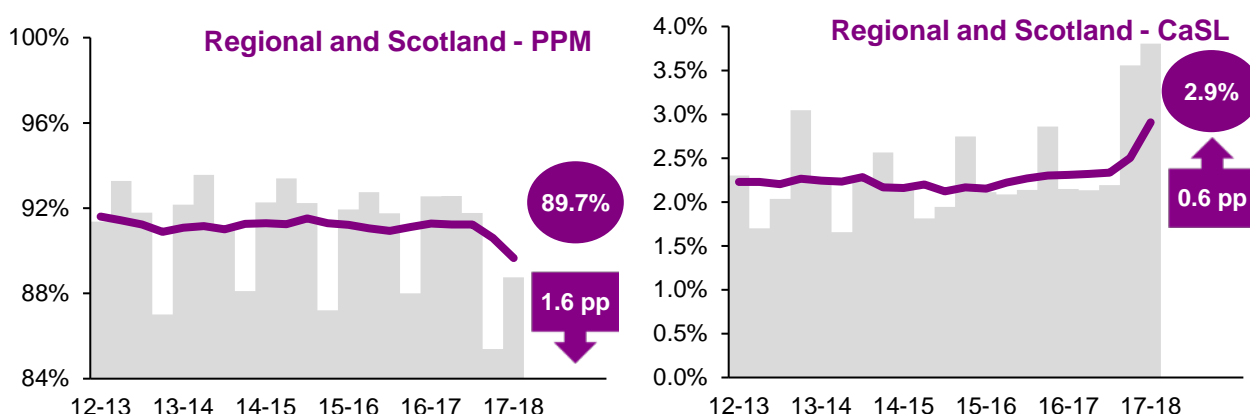
- The highest (worst) Arriva Trains Wales annual reliability (3.0%) since 2006-07.
- The lowest Northern annual punctuality (88.2%) since the time series began in 2009-10, with increases in PPM failures attributed to both Northern and Network Rail.
- The lowest ScotRail Q4 punctuality (88.5%) since 2004-05, and the lowest annual punctuality (89.5%) since 2006-07.
- The highest (worst) West Midlands Trains Q4 reliability (5.1%) since 2008-09.

Performance

Punctuality (PPM) in the Regional and Scotland sector in Q4 was 88.8%. This has worsened by 3.8 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 89.7%, which has worsened by 1.6 pp compared with 2016-17, and is the lowest annual PPM since 2007-08.

Reliability (CaSL) in the Regional and Scotland sector in Q4 was 3.8%. This has worsened by 1.7 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 2.9%, which has worsened by 0.6 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2006-07.

Figure 2.02: PPM and CaSL, Regional and Scotland Sector, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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 4 and Annual Headlines:

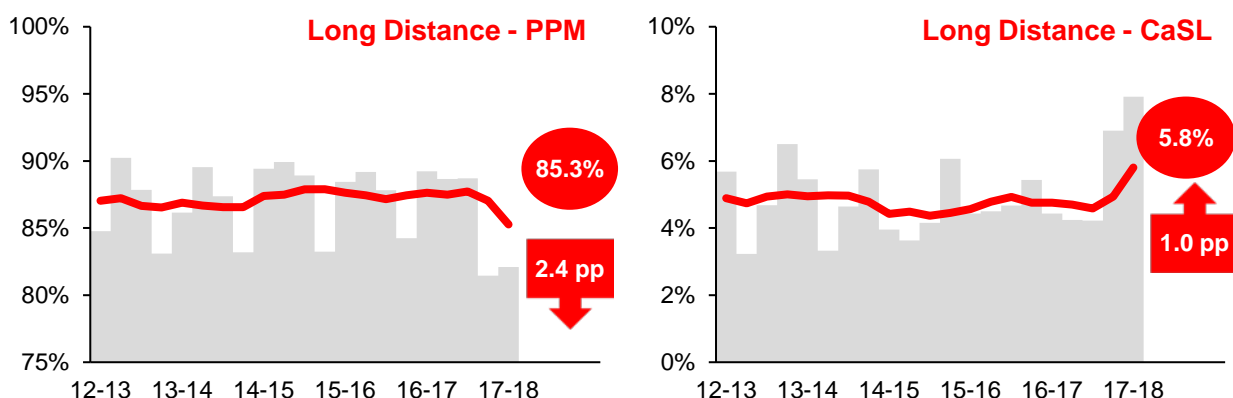
- The lowest Virgin Trains East Coast annual punctuality (81.5%) since 2004-05.
- The highest (worst) Virgin Trains West Coast annual reliability (6.3%) since 2008-09.
- The lowest TransPennine Express Q4 punctuality (83.8%) since the time series began in 2009-10.
- The lowest CrossCountry Q4 reliability (6.6%) since 2006-07, with CaSL failures attributed to severe weather up by 109% year-on-year.

Performance

Punctuality (PPM) in the Long Distance sector (figures do not include Caledonian Sleeper) in Q4 was 82.1%. This has worsened by 7.1 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 85.3%, which has worsened by 2.4 pp compared with 2016-17, and is the lowest annual PPM since 2006-07.

Reliability (CaSL) in the Long Distance sector in Q4 was 7.9%. This has worsened by 3.5 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 5.8%, which has worsened by 1.0 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2006-07.

Figure 2.03: PPM and CaSL, Long Distance Sector, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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

Figure 3.01: PPM MAA by TOC, Great Britain, 2017-18 change on 2016-17

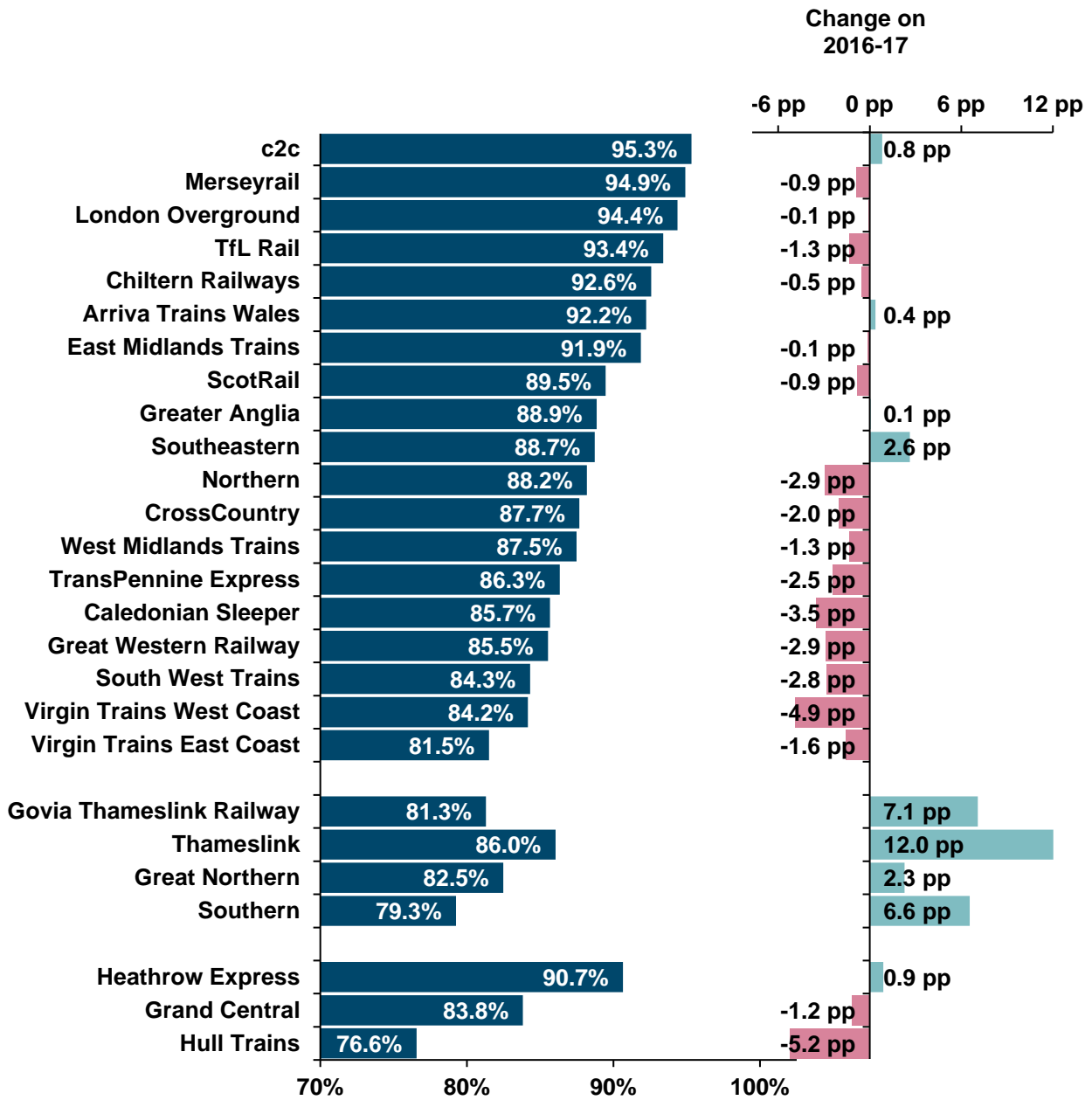
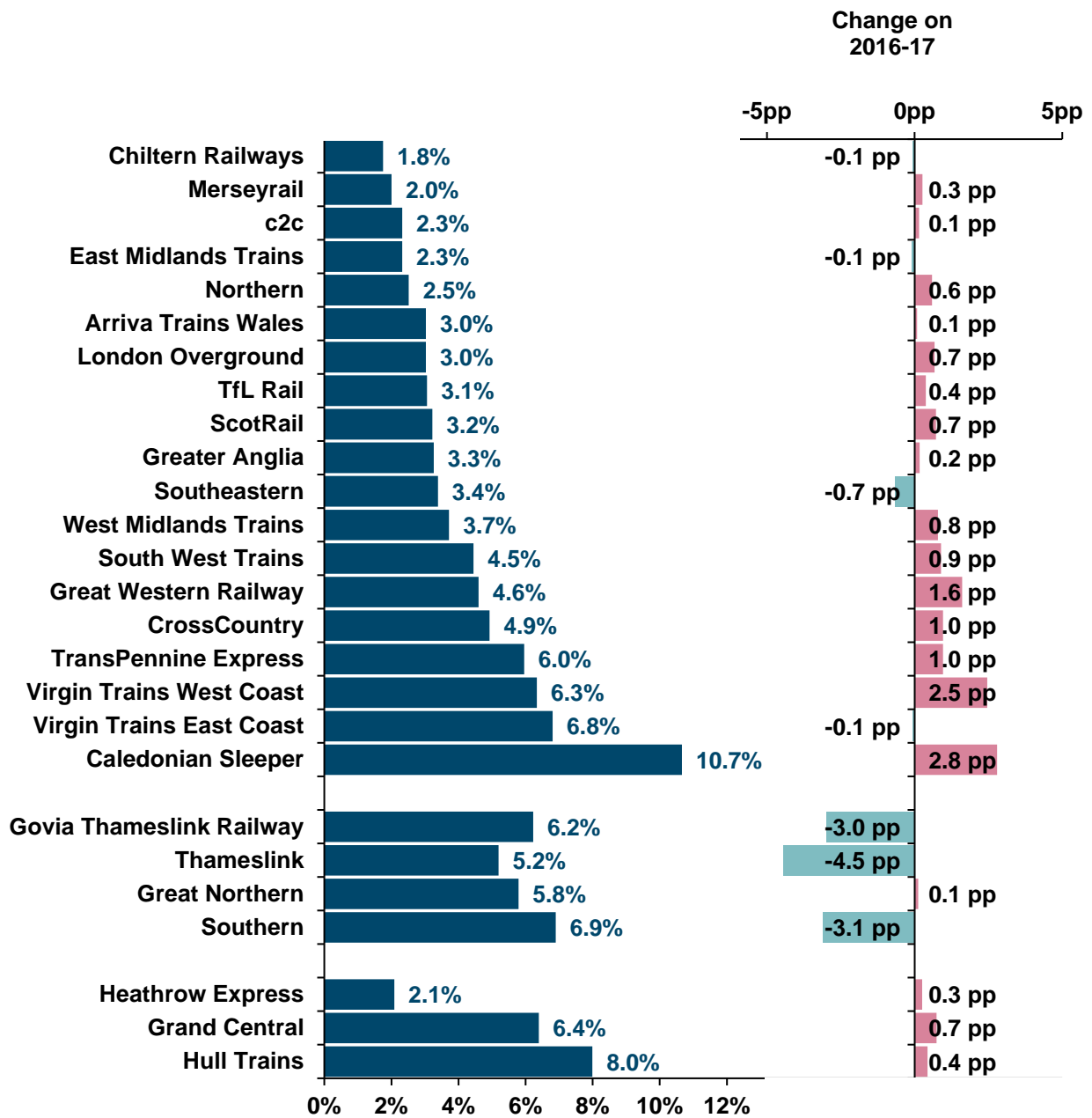


Figure 3.02: CaSL MAA by TOC, Great Britain, 2017-18 change on 2016-17



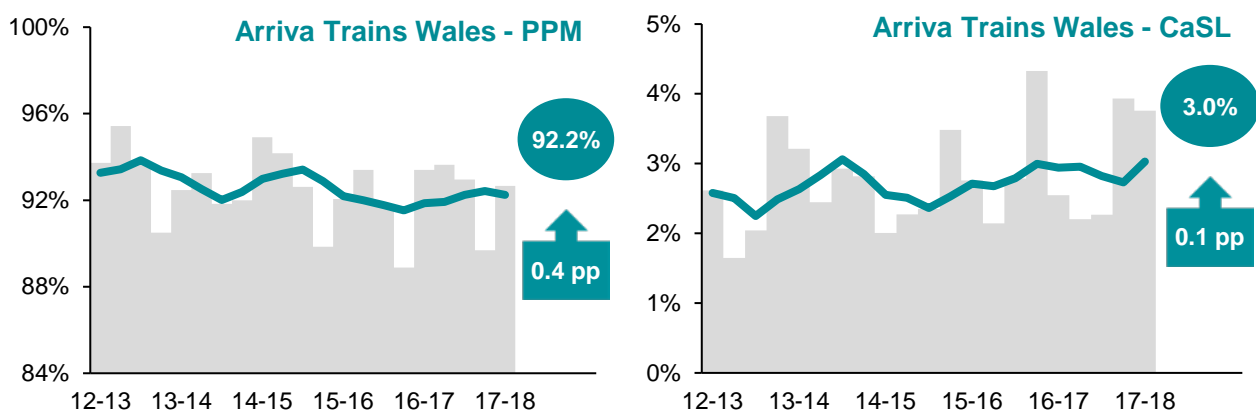
Arriva Trains Wales

Punctuality (PPM) in Q4 was 92.7%. This has worsened by 0.8 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 92.2%, an improvement of 0.4 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 3.8%. This has worsened by 1.2 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL since 2005-06. Reliability (CaSL) in 2017-18 was 3.0%, which has worsened by 0.1 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2006-07.

PPM failures attributed to Network Rail increased by 11% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 227% in PPM failures attributed to Severe weather.

Figure 3.03: PPM and CaSL, Arriva Trains Wales, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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.
- Services between Holyhead and Manchester, Chester and Crewe.
- Services between Cardiff and the Valleys.

c2c

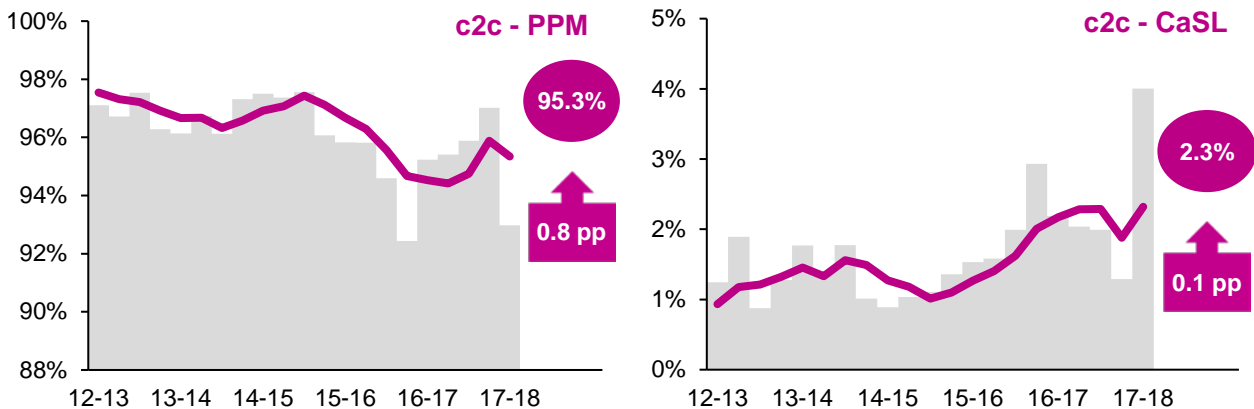
Punctuality (PPM) in Q4 was 93.0%. This has worsened by 2.3 pp compared with Q4 in 2016-17, and is the lowest Q4 PPM since 2005-06. Punctuality in 2017-18 was 95.3%, an improvement of 0.8 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 4.0%. This has worsened by 1.8 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 2.3%, which has worsened by 0.1 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2007-08.

PPM failures attributed to c2c increased by 53% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 218% in PPM failures attributed to Fleet delays.

CaSL failures attributed to c2c increased by 104% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 283% in CaSL failures attributed to Fleet delays.

Figure 3.04: PPM and CaSL, c2c, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

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

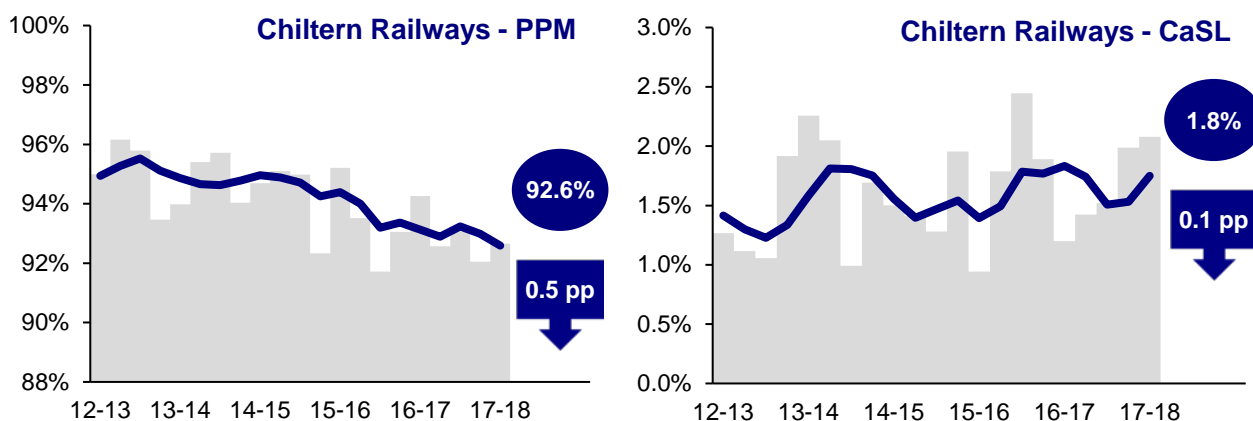
Chiltern Railways

Punctuality (PPM) in Q4 was 92.7%. This has worsened by 1.6 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 92.6%, which has worsened by 0.5 pp compared with 2016-17, and is the lowest annual PPM since 2005-06.

Reliability (CaSL) in Q4 was 2.1%. This has worsened by 0.9 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 1.8%, which has improved by 0.1 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 25% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 91% in PPM failures attributed to Points and Signals failures.

Figure 3.05: PPM and CaSL, Chiltern Railways, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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

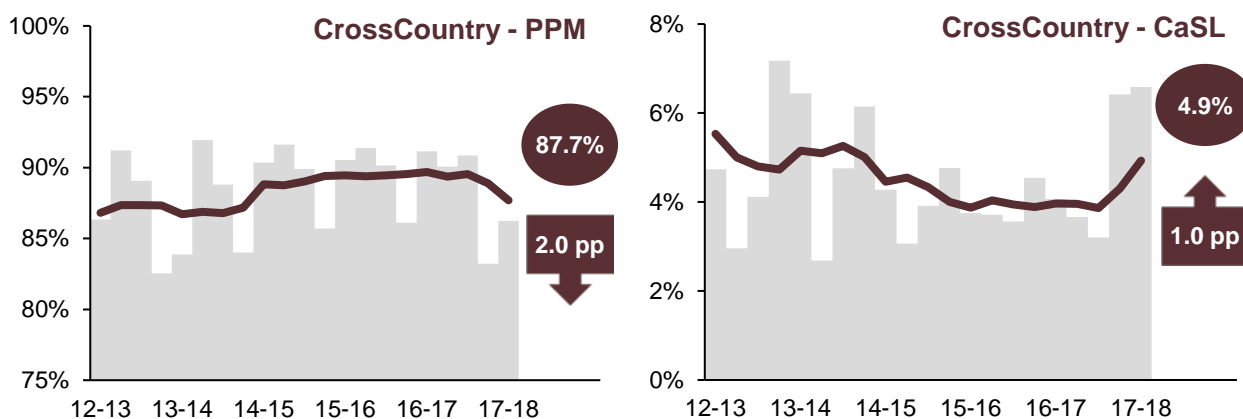
Punctuality (PPM) in Q4 was 86.2%. This has worsened by 4.9 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 87.7%, which has worsened by 2.0 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 6.6%. This has worsened by 2.5 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL since 2006-07. Reliability (CaSL) in 2017-18 was 4.9%, which has worsened by 1.0 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 63% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 111%), and Severe weather (up 109%).

CaSL failures attributed to Network Rail increased by 61% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 104% in CaSL failures attributed to Severe weather.

Figure 3.06: PPM and CaSL, CrossCountry, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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, and between Birmingham and Stansted and Leicester.

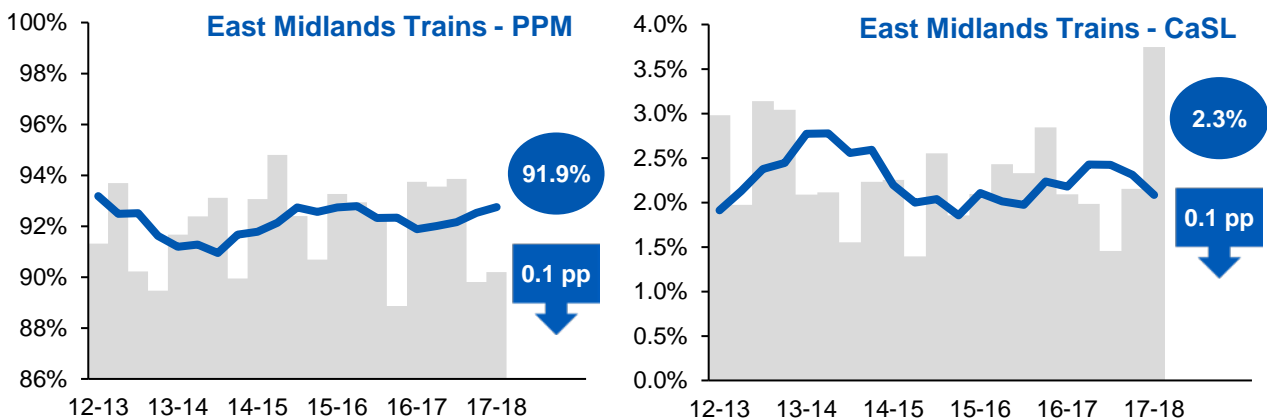
East Midlands Trains

Punctuality (PPM) in Q4 was 90.2%. This has worsened by 3.5 pp compared with Q4 in 2016-17, and is the lowest Q4 PPM since 2007-08. Punctuality in 2017-18 was 91.9%, which has worsened by 0.1 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 3.7%. This has worsened by 1.7 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL since 2007-08. Reliability (CaSL) in 2017-18 was 2.3%, which has improved by 0.1 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 52% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 106% in PPM failures attributed to Network Rail's management of the network.

Figure 3.07: PPM and CaSL, East Midlands Trains, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Regional)

- Local services in the East Midlands and Yorkshire and the Humber

Route Information (Long Distance)

- Services between London St Pancras and East Midlands and Yorkshire and the Humber
- Services between Norwich and Liverpool.

Govia Thameslink Railway

Punctuality (PPM) in Q4 was 81.1%. This has improved by 2.3 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 81.3%, an improvement of 7.1 pp compared with 2016-17, although this is still the second lowest annual PPM since the time series began in 2004-05.

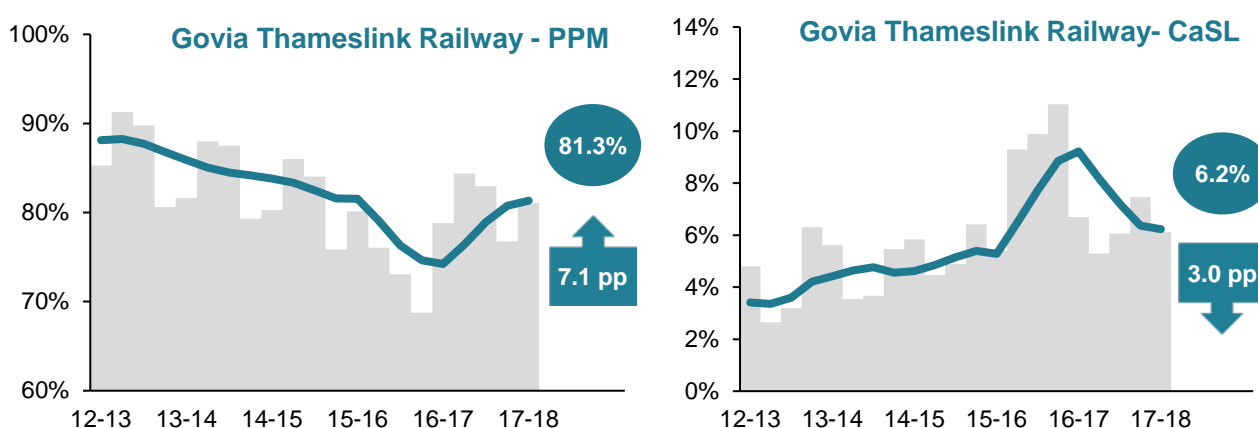
Reliability (CaSL) in Q4 was 6.1%. This has improved by 0.6 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 6.2%, an improvement of 3.0 pp compared with 2016-17, although this is still the second highest (worst) annual CaSL since the time series began in 2004-05.

PPM failures attributed to GTR decreased by 15% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to a decrease of 29% in PPM failures attributed to Train Crew causes.

CaSL failures attributed to GTR decreased by 21% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to a decrease of 47% in CaSL failures attributed to Train Crew causes.

There were a number of incidents which caused considerable delay including: Severe weather at Three Bridges (14,100 delay minutes to all operators); and Track faults at North East Kent Junction, and between Parks Bridge Junction and North East Kent Junction (18,400 delay minutes to all operators).

Figure 3.08: PPM and CaSL, Govia Thameslink Railway, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

- Services between London Victoria/London Bridge and South London and Sussex.
- Coastway services between Ashford (Kent), Brighton and Southampton, and local Coastway services
- 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).

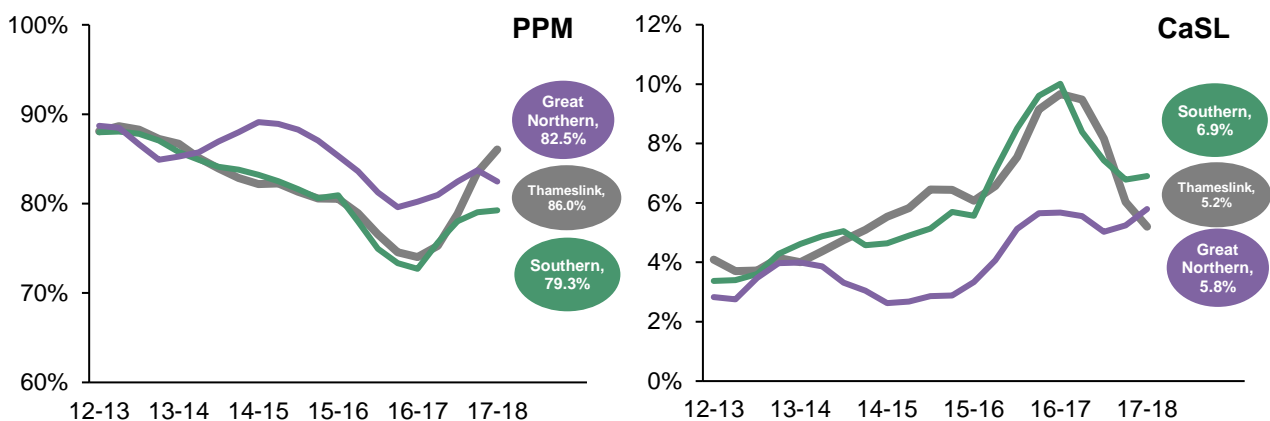
At the end of 2017-18, the MAAs for punctuality (PPM) for the sub operators were:

- Southern: 79.3% (up 6.6 pp on 2016-17).
- Thameslink: 86.0% (up 12.0 pp on 2016-17).
- Great Northern: 82.5% (up 2.3 pp on 2016-17).

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

- Southern: 6.9% (down 3.1 pp on 2016-17).
- Thameslink: 5.2% (down 4.5 pp on 2016-17).
- Great Northern: 5.8% (up 0.1 pp on 2016-17).

Figure 3.09: PPM and CaSL MAA, Southern, Thameslink, and Great Northern, 2012-13 Q4 to 2017-18 Q4



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 - Thameslink

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

Route Information – Great Northern

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

Grand Central

Punctuality (PPM) in Q4 was 78.0%. This has worsened by 8.3 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 83.8%, which has worsened by 1.2 pp compared with 2016-17.

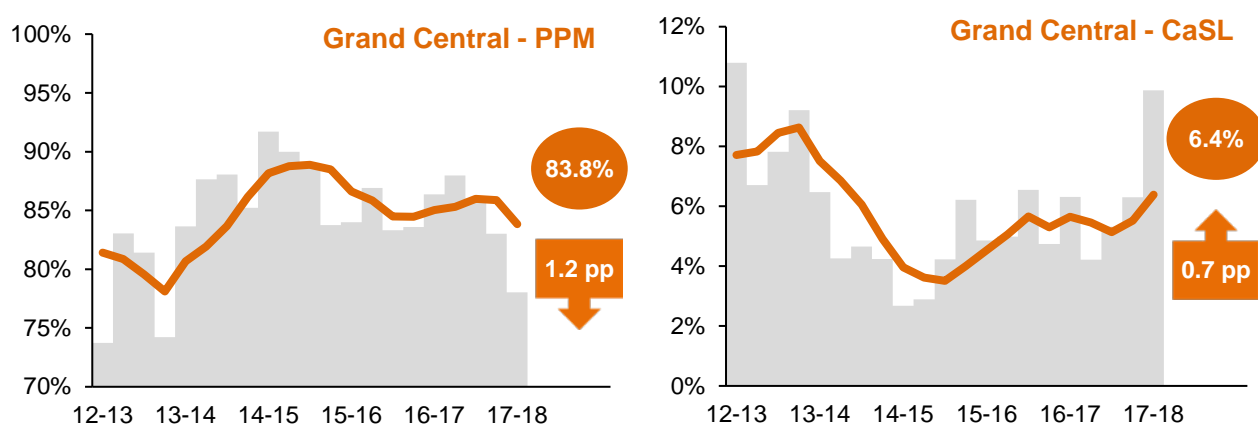
Reliability (CaSL) in Q4 was 9.9%. This has worsened by 3.6 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 6.4%, which has worsened by 0.7 pp compared with 2016-17.

PPM failures attributed to Grand Central increased by 98% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 79% in PPM failures attributed to Fleet delays.

CaSL failures attributed to Grand Central increased by 124% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 102% in PPM failures attributed to Fleet delays.

A Power Supply failure between Finsbury Park and Alexandra Palace caused 7,300 delay minutes to all operators.

Figure 3.10: PPM and CaSL, Grand Central, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Long Distance)

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

Great Western Railway

Punctuality (PPM) in Q4 was 83.9%. This has worsened by 6.4 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 85.5%, which has worsened by 2.9 pp compared with 2016-17, and is the lowest annual PPM since 2007-08.

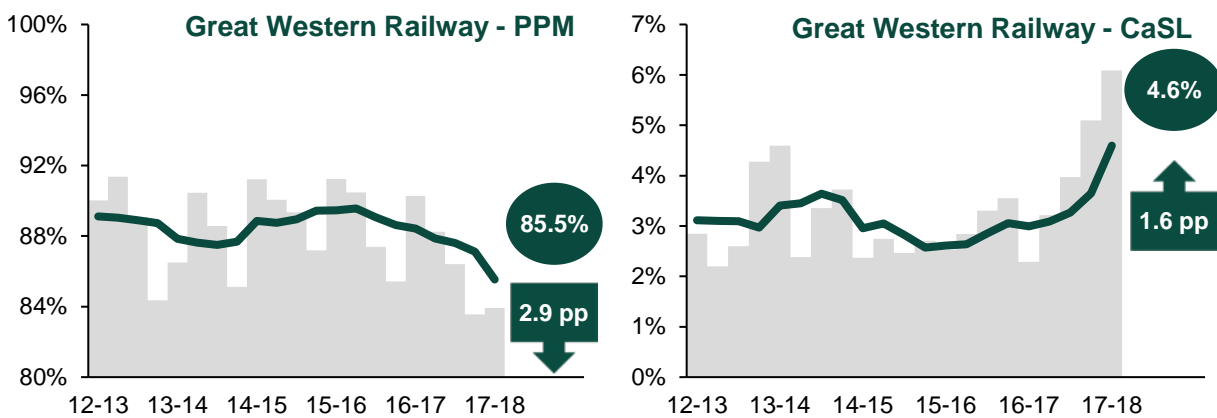
Reliability (CaSL) in Q4 was 6.1%. This has worsened by 3.8 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 4.6%, which has worsened by 1.6 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 1997-98.

PPM failures attributed to GWR increased by 171% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Fleet delays (up 106%), and Train Crew causes (up 348%).

PPM failures attributed to Network Rail increased by 39% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 296% in PPM failures attributed to Severe weather.

Track faults at Oxford, and between Reading and Didcot Parkway, caused 12,200 delay minutes to all operators.

Figure 3.11: PPM and CaSL, Great Western Railway, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Regional)

- Services between Bristol and Cardiff.
- Services between Gloucester and Swindon and Weymouth.
- Services between Portsmouth and Cardiff.
- Services in Devon and Cornwall

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.

Greater Anglia

Punctuality (PPM) in Q4 was 87.0%. This has worsened by 2.5 pp compared with Q4 in 2016-17, and is lowest Q4 PPM since the time series began in 2004-05. Punctuality in 2017-18 was 88.9%, which has improved by 0.1 pp compared with 2016-17.

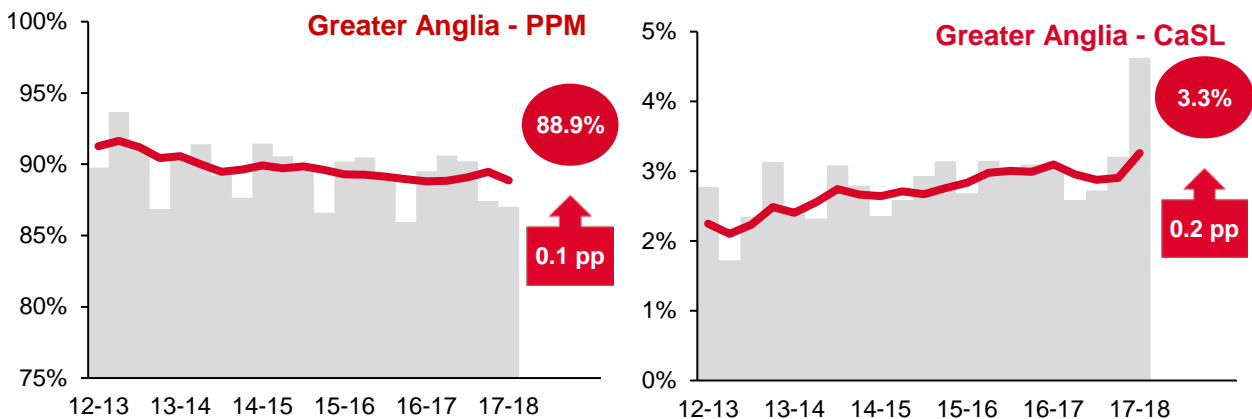
Reliability (CaSL) in Q4 was 4.6%. This has worsened by 1.5 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 3.3%, which has worsened by 0.2 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 2004-05.

PPM failures attributed to Network Rail increased by 12% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 137% in PPM failures attributed to Severe weather.

PPM failures attributed to Greater Anglia increased by 41% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 29% in PPM failures attributed to Fleet delays.

An External level crossing/road incident between Derby Road and Trimley caused 6,900 delay minutes to all operators.

Figure 3.12: PPM and CaSL, Greater Anglia, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

- Services between London Liverpool Street and East London, Stansted Airport, Cambridgeshire, Essex, and Ipswich.
- Local services in Norfolk and Suffolk
- Services between Norwich and Ipswich, and Lowestoft, Cambridge, and Peterborough.

Route Information (Long Distance)

- Services between London Liverpool Street and Norwich

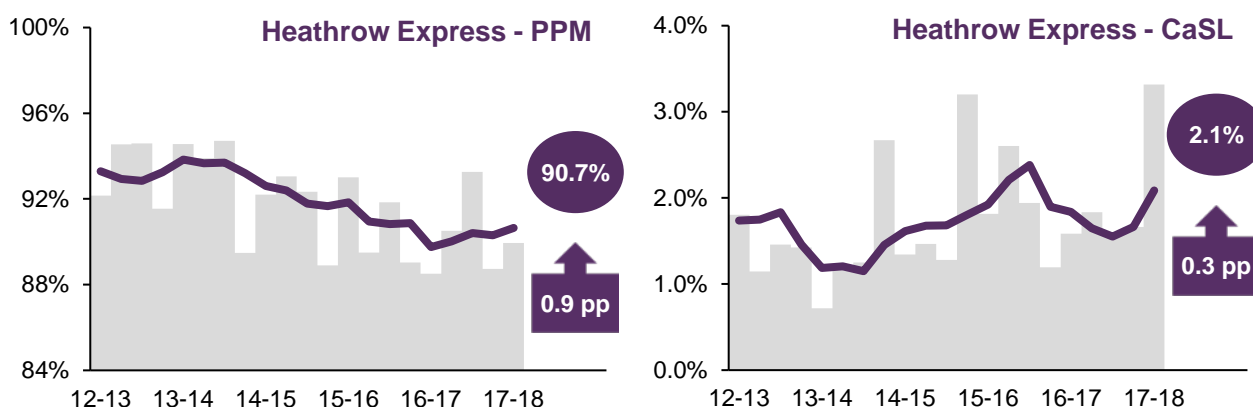
Heathrow Express

Punctuality (PPM) in Q4 was 89.9%. This has worsened by 1.4 pp compared with Q4 in 2016-1. Punctuality in 2017-18 was 90.7%, which has worsened by 0.9 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 3.3%. This has worsened by 1.7 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 2.1%, which has worsened by 0.3 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 2004-05.

PPM failures attributed to Network Rail decreased by 45% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to decreases attributed to Network Rail's management of the network (down 51%), and Points and Signals failures (down 38%).

Figure 3.13: PPM and CaSL, Heathrow Express, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

- Services between London Paddington and Heathrow Airport.

Hull Trains

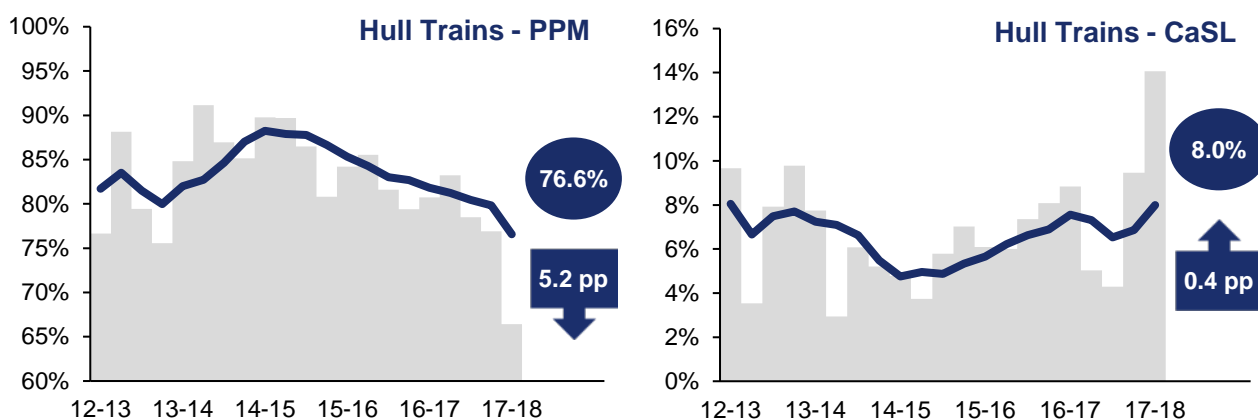
Punctuality (PPM) in Q4 was 66.4%. This has worsened by 14.3 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 76.6%, which has worsened by 5.2 pp compared with 2016-17, and is the lowest annual PPM since the time series began in 2006-07.

Reliability (CaSL) in Q4 was 14.1%. This has worsened by 5.2 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 8.0%, which has worsened by 0.4 pp compared with 2016-17.

PPM failures attributed to Hull Trains increased by 110% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 133% in PPM failures attributed to Fleet delay.

A Power Supply failure between Finsbury Park and Alexandra Palace caused 7,300 delay minutes to all operators.

Figure 3.14: PPM and CaSL, Hull Trains, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Long Distance)

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

London Overground

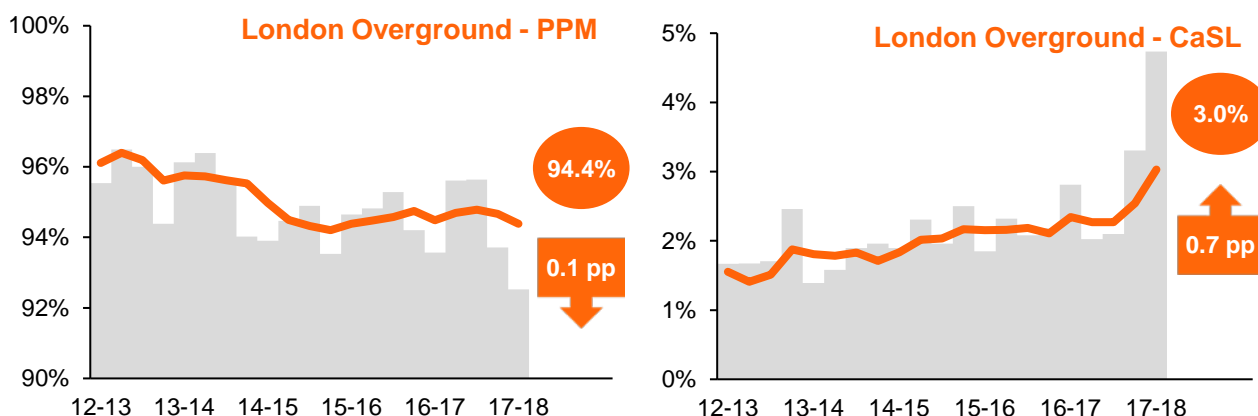
Punctuality (PPM) in Q4 was 92.5%. This has worsened by 1.0 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 94.4%, which has worsened by 0.1 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 4.7%. This has worsened by 1.9 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 3.0%, which has worsened by 0.7 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2007-08.

PPM failures attributed to London Overground increased by 65% in Q4 of 2017-18 compared with Q4 of 2016-17. This was mainly due to an increase of 134% in PPM failures attributed to Fleet delay.

CaSL failures attributed to Network Rail increased by 72% in Q4 of 2017-18 compared with Q4 of 2016-17. This was mainly due to increases in CaSL failures attributed to Network Rail's management of the network (up 99%), and Severe weather (up 152%).

Figure 3.15: PPM and CaSL, London Overground, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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, between Stratford and Clapham Junction/Richmond, and between Romford and Upminster.

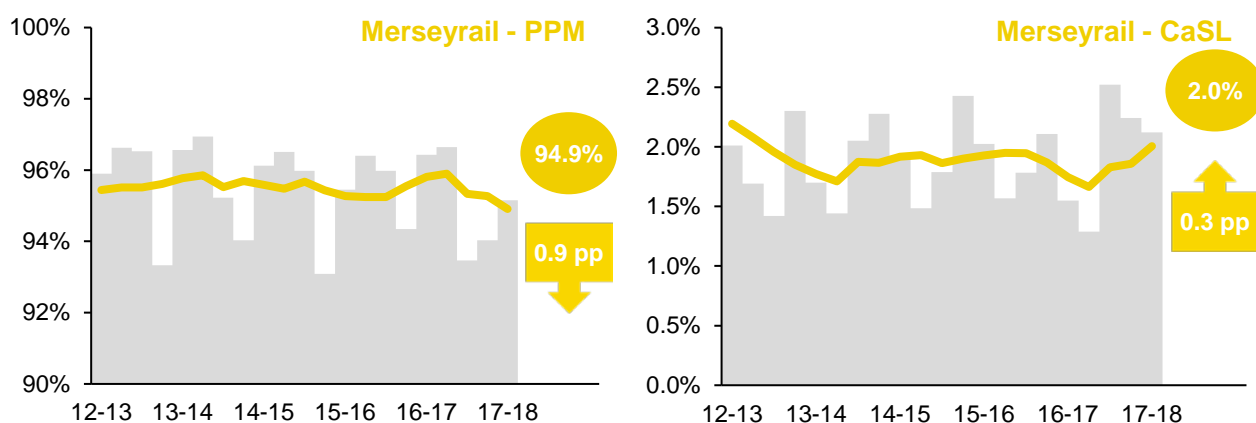
Merseyrail

Punctuality (PPM) in Q4 was 95.2%. This has worsened by 1.3 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 94.9%, which has worsened by 0.9 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 2.1%. This has worsened by 0.6 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 2.0%, which has worsened by 0.3 compared with 2016-17.

CaSL failures attributed to Merseyrail increased by 43% in Q4 of 2017-18 compared with Q4 of 2016-17. This was mainly due to an increase of 47% in CaSL failures attributed to Fleet delay.

Figure 3.16: PPM and CaSL, Merseyrail, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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 Q4 was 87.3%. This has worsened by 4.4 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 88.2%, which has worsened by 2.9 pp compared with 2016-17, and is the lowest annual PPM since the time series began in 2009-10.

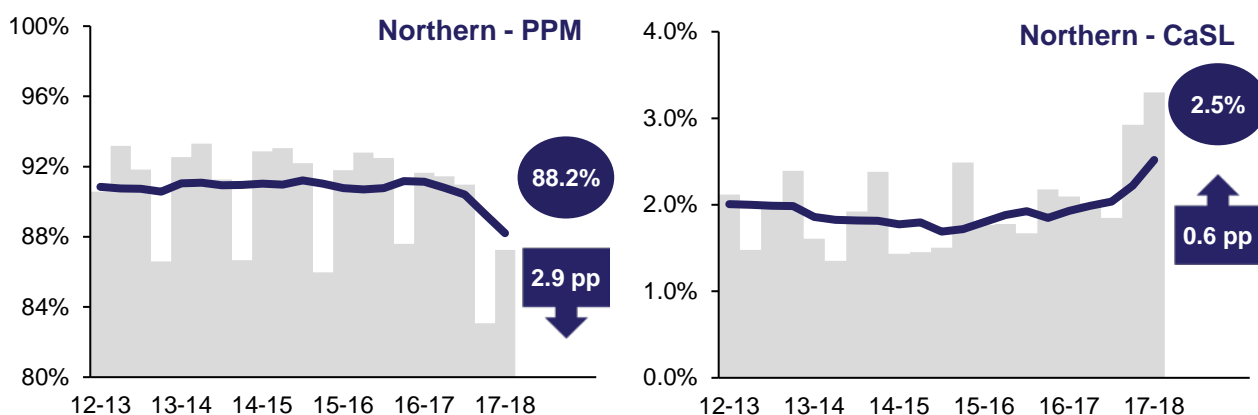
Reliability (CaSL) in Q4 was 3.3%. This has worsened by 1.2 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 2.5%, which has worsened by 0.6 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 2009-10.

PPM failures attributed to Network Rail increased by 48% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 64%), and Severe weather (up 61%).

PPM failures attributed to Northern increased by 55% in Q4 of 2017-18 compared with Q5 in 2016-17. This was mainly due to increases in PPM failures attributed to Fleet delay (up 24%), and Train Crew causes (up 109%).

A Signalling fault between Stockport and Slade Lane Junction caused 7,100 delay minutes to all operators.

Figure 3.17: PPM and CaSL, Northern, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Regional)

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

ScotRail

Punctuality (PPM) in Q4 was 88.5%. This has worsened by 4.0 pp compared with Q4 in 2016-17, and is the lowest Q4 PPM since 2004-05. Punctuality in 2017-18 was 89.5%, which has worsened by 0.9 pp compared with 2016-17, and is the lowest annual PPM since 2006-07.

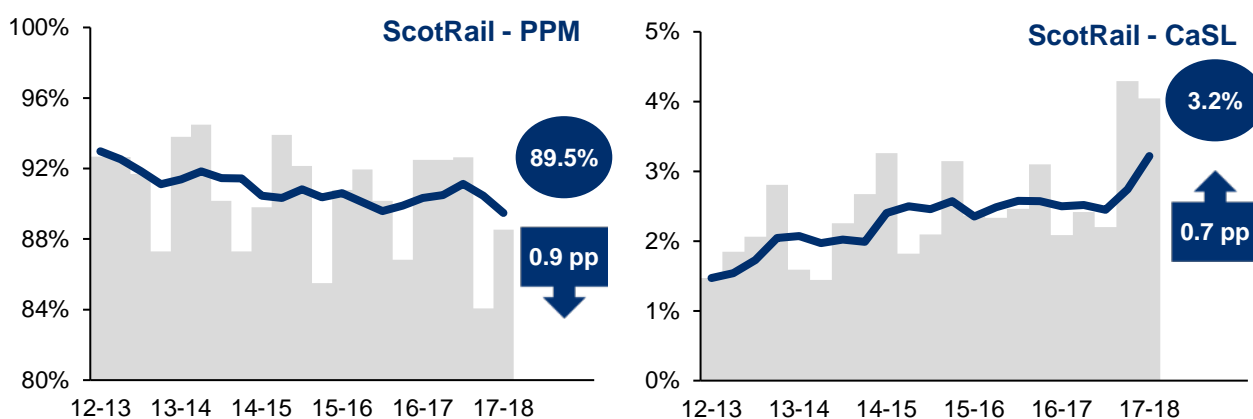
Reliability (CaSL) in Q4 was 4.0%. This has worsened by 2.0 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 3.2%, which has worsened by 0.7 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 98% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 97%), Points and Signals failures (up 42%), and Severe weather (up 570%).

CaSL failures attributed to Network Rail increased by 147% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 980% in CaSL failures attributed to Severe weather.

Severe weather beyond the design capacity of infrastructure affecting Glasgow and Edinburgh caused 17,400 delay minutes to all operators.

Figure 3.18: PPM and CaSL, ScotRail, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Scotland)

- Local services in and around Edinburgh and 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

Punctuality (PPM) in Q4 was 81.4%. This has worsened by 6.4 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 84.3%, which has worsened by 2.8 pp compared with 2016-17, and is the lowest annual PPM since 2004-05.

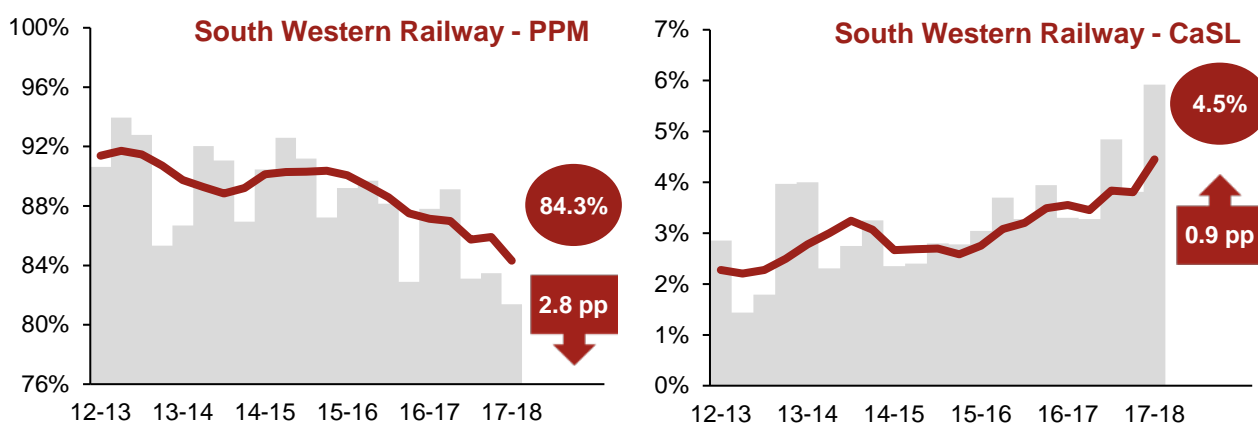
Reliability (CaSL) in Q4 was 5.9%. This has worsened by 2.6 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 4.5%, which has worsened by 0.9 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2000-01.

PPM failures attributed to Network Rail increased by 40% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 54%), Severe weather (up 183%), and Track causes (up 89%).

PPM failures attributed to South Western Railway increase by 87% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Fleet delay (up 134%), and Train Crew causes (up 114%).

There were a number of incidents which caused considerable delay including: External infrastructure damage at Havant (7,400 delay minutes to all operators), and Track faults between Wokingham and Bracknell (5,600 delay minutes to all operators).

Figure 3.19: PPM and CaSL, South Western Railway, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

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

Southeastern

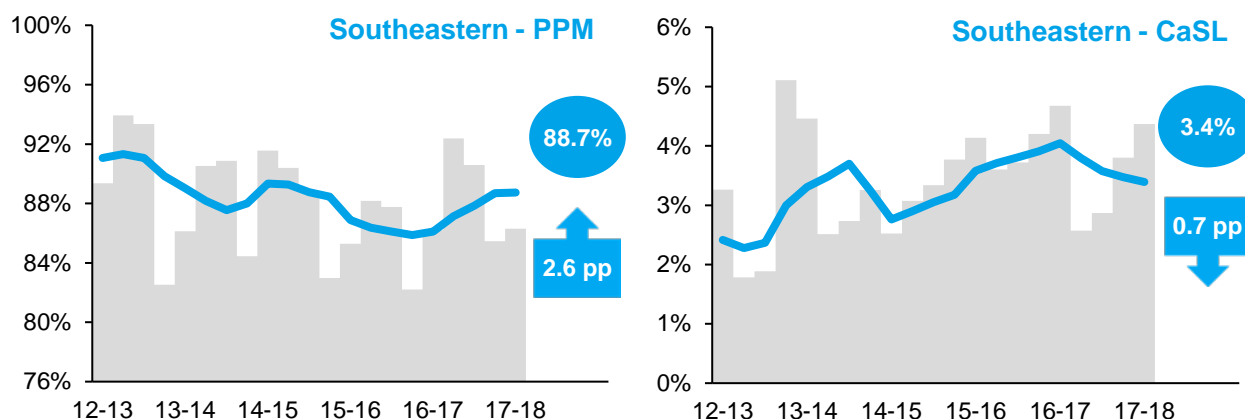
Punctuality (PPM) in Q4 was 86.3%. This has improved by 0.1 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 88.7%, an improvement of 2.6 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 4.4%. This has improved by 0.3 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 3.4%, an improvement of 0.7 pp compared with 2016-17.

PPM failures attributed to other train operators decreased by 72% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to a decrease of 92% in PPM failures attributed to TOC Operations.

There were a number of incidents which caused considerable delay including: Track faults at North East Kent Junction, and between Parks Bridge Junction and North East Kent Junction (18,400 delay minutes to all operators), and Severe weather at Ashford International (5,000 delay minutes to all operators).

Figure 3.20: PPM and CaSL, Southeastern, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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

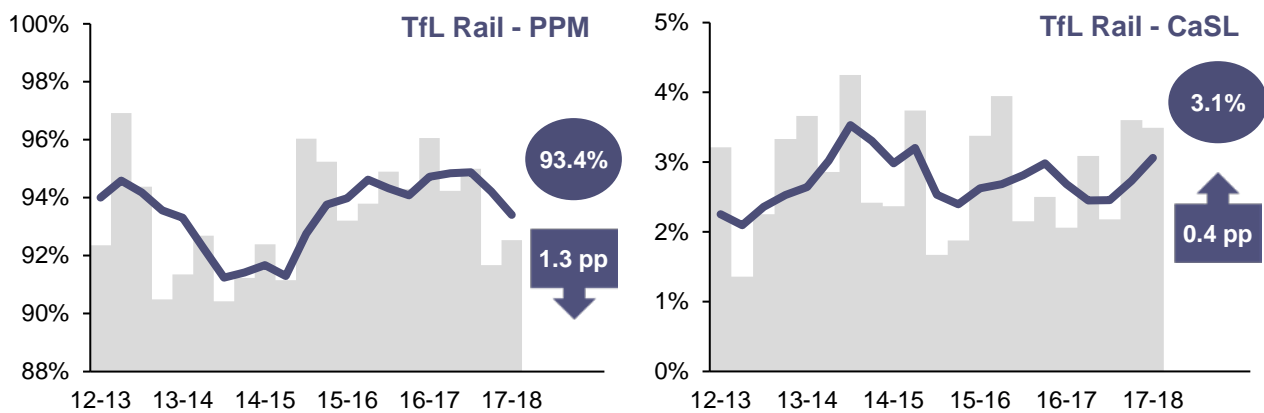
Punctuality (PPM) in Q4 was 92.5%. This has worsened by 3.5 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 93.4%, which has worsened by 1.3 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 3.5%. This has worsened by 1.4 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 3.1%, which has worsened by 0.4 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 2010-11.

PPM failures attributed to TfL Rail increased by 288% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 493% in PPM failures attributed to Fleet delay.

PPM failures attributed to Network Rail increased by 46% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 460% in PPM failures attributed to Severe weather.

Figure 3.21: PPM and CaSL, TfL Rail, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (LSE)

- Services between London Liverpool Street and Shenfield.

TransPennine Express

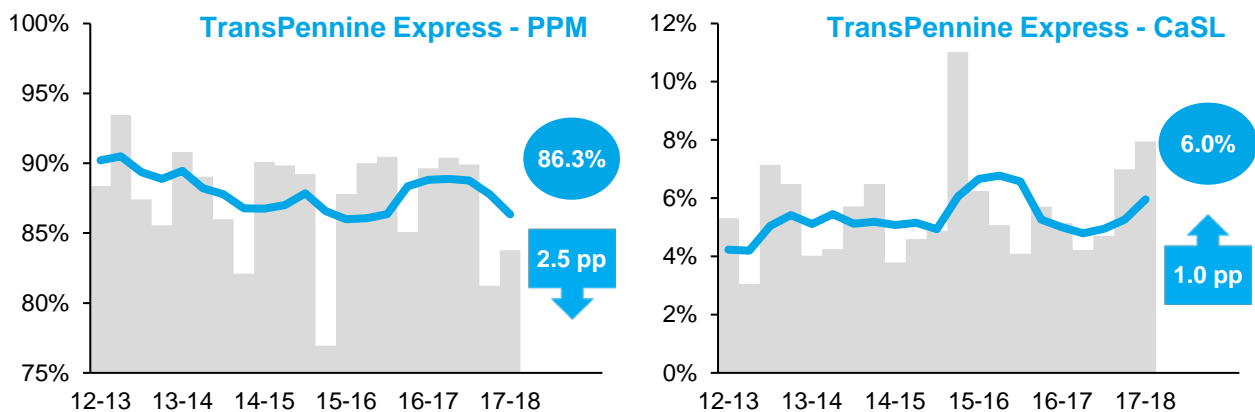
Punctuality (PPM) in Q4 was 83.8%. This has worsened by 5.8 pp compared with Q4 in 2016-17, and is the lowest Q4 PPM since the time series began in 2009-10. Punctuality in 2017-18 was 86.3%, which has worsened by 2.5 pp compared with 2016-17.

Reliability (CaSL) in Q4 was 7.9%. This has worsened by 2.8 pp compared with Q4 in 2016-17, and is the highest Q4 CaSL since the time series began in 2009-10. Reliability (CaSL) in 2017-18 was 6.0%, which has worsened by 1.0 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 56% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Network Rail's management of the network (up 89%), and Track causes (up 252%).

Power faults between Lancaster and Carnforth North Junction caused 14,300 delay minutes to all operators.

Figure 3.22: PPM and CaSL, TransPennine Express, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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 Q4 was 73.8%. This has worsened by 12.3 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 81.5%, which has worsened by 1.6 pp compared with 2016-17, and is the lowest annual PPM since 2004-05.

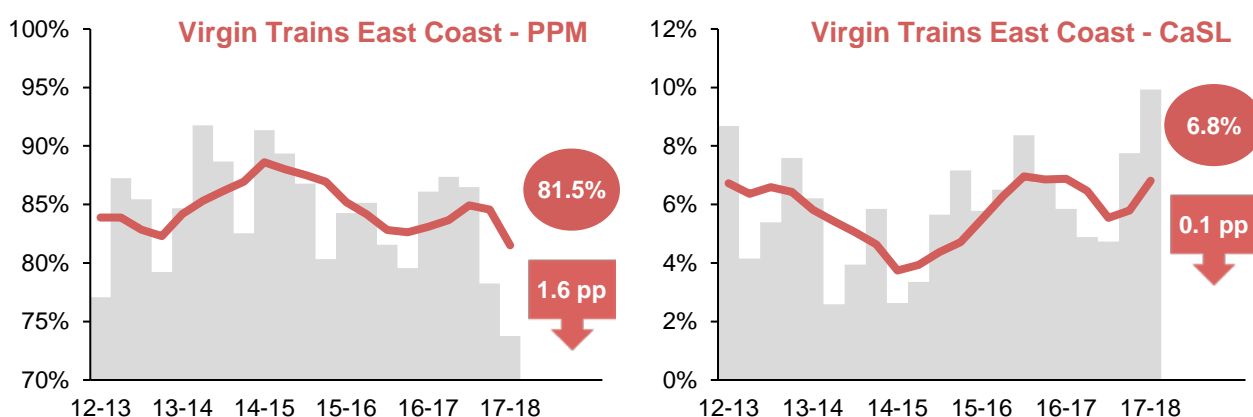
Reliability (CaSL) in Q4 was 9.9%. This has worsened by 4.1 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL since 2001-02. Reliability (CaSL) in 2017-18 was 6.8%, an improvement of 0.1 pp compared with 2016-17.

PPM failures attributed to Network Rail increase by 64% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Points and Signals failures (up 56%), and Track causes (up 152%).

PPM failures attributed to Virgin Trains East Coast increased by 122% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 80% in PPM failures attributed to Fleet delays.

A power fault between Finsbury Park and Alexandra Palace caused 7,300 delay minutes to all operators.

Figure 3.23: PPM and CaSL, Virgin Trains East Coast, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Long Distance)

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

Virgin Trains West Coast

Punctuality (PPM) in Q4 was 81.7%. This has worsened by 8.2 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 84.2%, which has worsened by 4.9 pp compared with 2016-17, and is the lowest annual PPM since 2012-13.

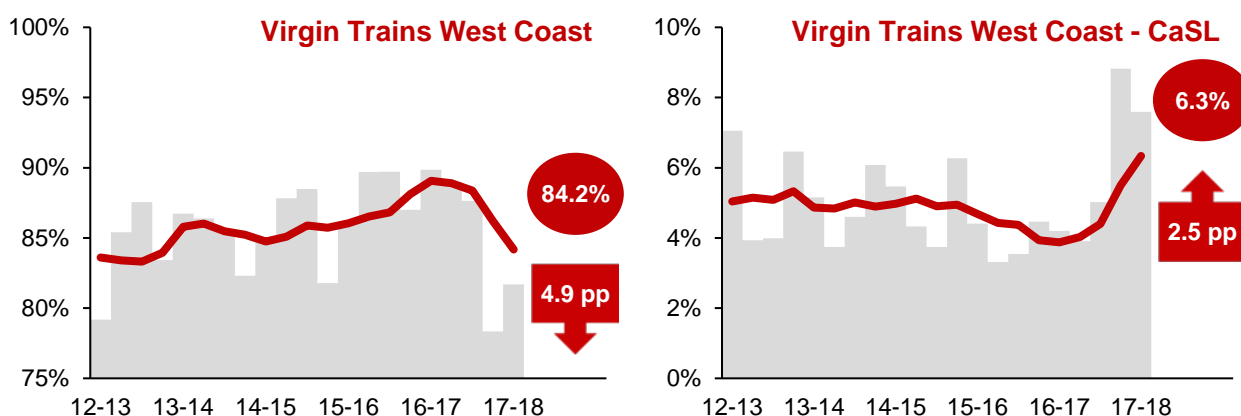
Reliability (CaSL) in Q4 was 7.6%. This has worsened by 3.4 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 6.3%, which has worsened by 2.5 pp compared with 2016-17, and is the highest (worst) annual CaSL since 2008-09.

PPM failures attributed to Network Rail increased by 62% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to increases in PPM failures attributed to Severe weather (up 55%), and Track causes (up 186%).

PPM failures attributed to Virgin Trains West Coast increased by 178% in Q4 of 2017-18 compared with Q4 in 2016-17. This was mainly due to an increase of 258% in PPM failures attributed to Fleet delay.

There were a number of incidents that generated considerable delay including: Signalling System and Power supply failures at Winsford (7,200 delay minutes to all operators), and a Signalling fault between Stockport and Slade Lane Junction (7,100 delay minutes to all operators).

Figure 3.24: PPM and CaSL, Virgin Trains West Coast, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Long Distance)

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

West Midlands Trains

London Midland became West Midlands Trains in December of Q3 of 2017-18.

Punctuality (PPM) in Q4 was 85.6%. This has worsened by 3.9 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 87.5%, which has worsened by 1.3 pp compared with 2016-17.

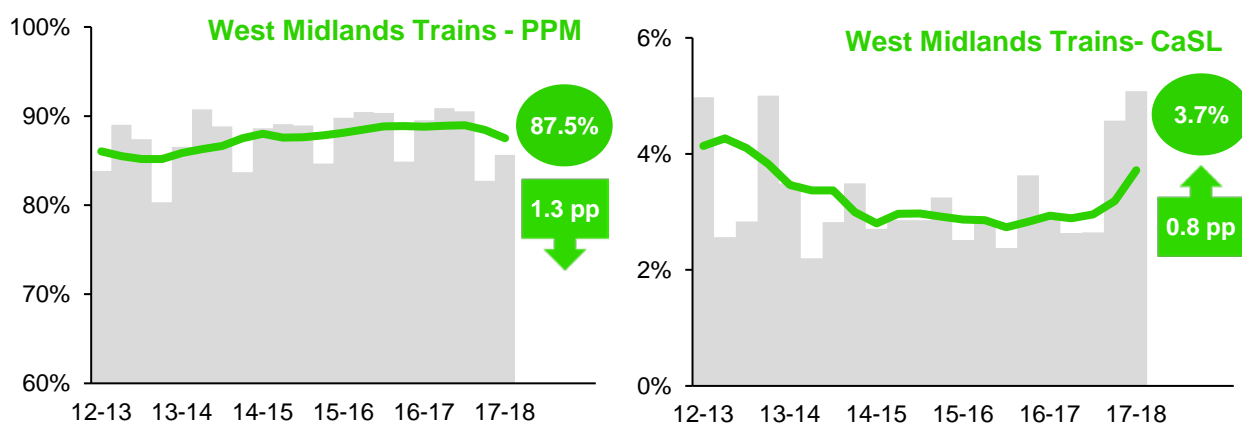
Reliability (CaSL) in Q4 was 5.1%. This has worsened by 2.2 pp compared with Q4 in 2016-17, and is the highest (worst) Q4 CaSL since 2008-09. Reliability (CaSL) in 2017-18 was 3.7%, which has worsened by 0.8 pp compared with 2016-17.

PPM failures attributed to Network Rail increased by 42% in Q4 of 2017-18 compared with Q4 of 2016-17. This was mainly due to increases in PPM failures attributed to Networks Rail's management of the network (up 48%), Severe weather (up 51%), and Track causes (up 129%).

CaSL failures attributed to West Midlands Trains increased by 106% in Q4 of 2017-18 compared with Q4 of 2016-17. This was mainly due to an increase of 306% in CaSL failures attributed to Other external TOC causes.

Signalling System and Power supply failures at Winsford, and between Amington Junction and Lichfield North Junction caused 13,700 delay minutes to all operators.

Figure 3.25: PPM and CaSL, London Midland, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Regional)

- Services between Birmingham and Liverpool, Shrewsbury, Hereford, Rugeley, and Walsall.
- Local services in the West Midlands.

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.

Caledonian Sleeper

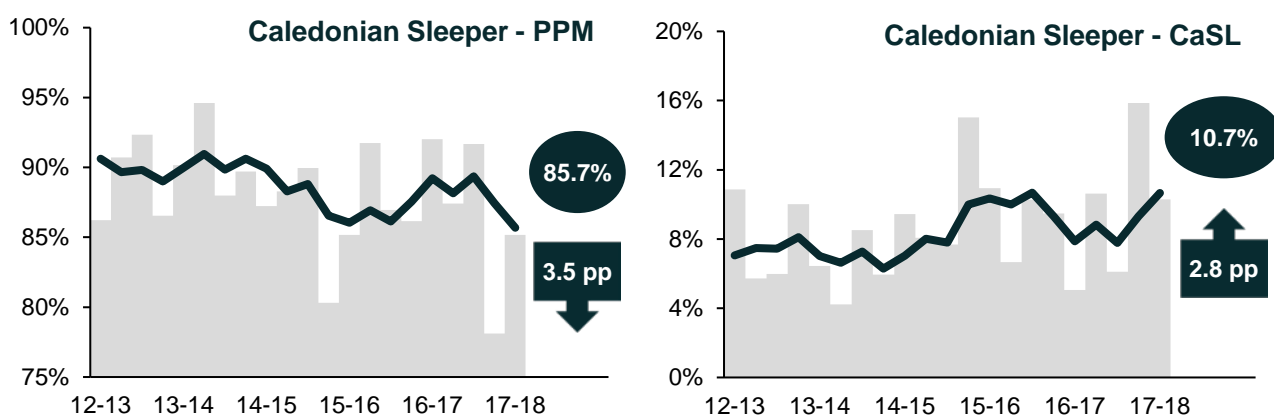
Punctuality (PPM) in Q4 was 85.2%. This has worsened by 6.8 pp compared with Q4 in 2016-17. Punctuality in 2017-18 was 85.7%, which has worsened by 3.5 pp compared with 2016-17, and is the lowest annual PPM since the time series began in 2011-12.

Reliability (CaSL) in Q4 was 10.3%. This has worsened by 5.2 pp compared with Q4 in 2016-17. Reliability (CaSL) in 2017-18 was 10.7%, which has worsened by 2.8 pp compared with 2016-17, and is the highest (worst) annual CaSL since the time series began in 2011-12.

PPM failures attributed to Network Rail increased by 100% (from 19 to 39 PPM failures) in Q4 in 2017-18 compared with in Q4 in 2016-17. This was mainly due to an increase in PPM failures attributed to Severe weather (up from 4 to 19 failures).

PPM failures attributed to Caledonian Sleeper increased by 72% (from 19 to 32 PPM failures) in Q4 in 2017-18 compared with in Q4 in 2016-17. This was mainly due to an increase in PPM failures attributed to Fleet delay (up from 13 to 24 failures).

Figure 3.26: PPM and CaSL, Caledonian Sleeper, 2012-13 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



Route Information (Long Distance)

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

4. Freight Delivery Metric

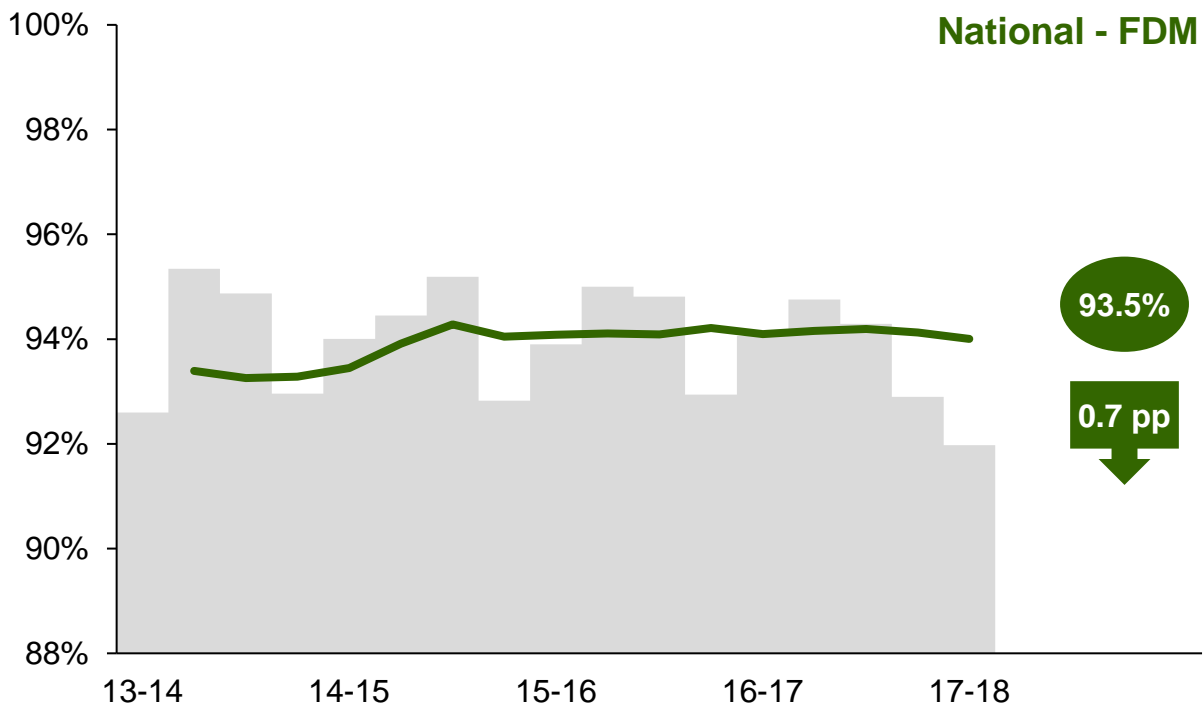
The **Freight Delivery Metric (FDM)** is the percentage of freight trains that arrive at their destination within 15 minutes of their scheduled arrival time. Freight trains are only considered to have failed FDM where the delay was caused by Network Rail. The **moving annual average (MAA)** reflects the proportion of trains that met FDM in the past 12 months. In Q4, the MAA also represents the FDM 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 Q4 was 92.0%. This has worsened by 2.1 pp compared with Q4 in 2016-17. The FDM in 2017-18 was 93.5%, which has worsened by 0.7% compared with 2016-17.

Figure 4.01: FDM, National, 2013-14 Q4 to 2017-18 Q4 (change shown is MAA for 2017-18 on 2016-17)



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 Q4 (quarterly) – [Table 3.43](#);
- PPM (MAA) by sector, 1997-98 Q4 to 2017-18 Q4 (quarterly) – [Table 3.42](#);
- PPM by TOC, 1997-98 Q1 to 2017-18 Q4 (quarterly) – [Table 3.44](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2017-18 Period 13 (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 Q4 (quarterly) – [Table 3.6](#);
- CaSL (MAA) by sector, 1997-98 Q4 to 2017-18 Q4 (quarterly) – [Table 3.5](#)
- CaSL by TOC, 1997-98 Q1 to 2017-18 Q4 (quarterly) – [Table 3.7](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2017-18 Period 13 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper))

FDM

- FDM, 2013-14 Q1 to 2017-18 Q4 (quarterly) – [Table 3.41](#)

Right Time

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%.

Delay Minutes

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](#).

New Performance Measures

A new set of performance measures has been developed by the rail industry to monitor punctuality and reliability of passenger trains: Train Punctuality at recorded station stops, Cancellations, and Severe Disruption. The periodic data are published in the data portal tables [3.65](#), [3.66](#) and [3.67](#).

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 2017-18. 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 2016-17 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 West Midlands Trains. 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

West Midlands Trains:

- London and South East: LSE
- Regional: Regional

Changes to Train Operating Companies

Abellio began operating the West Midlands franchise on 10 December 2017, now known as West Midlands Trains. It was previously operated by Govia, and the franchise was previously referred to in this publication as London Midland.

FirstGroup began operating the South Western franchise on 20 August 2017, now known as South Western Railway. It was previously operated by Stagecoach, and the franchise was previously referred to in this publication as South West Trains.

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.

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 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.

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.

Annex 5 – Methodology: Impact of GTR Services

National punctuality worsened in Q4 of 2017-18. However, the MAA at the end of Q4 improved compared to a year ago. As an example, the extent to which the performance of GTR services contributed to the change in the quarterly punctuality was estimated using the calculations set out below and in table A. Table B shows the results of these calculations for punctuality (PPM), reliability (CaSL) and the MAAs in 2017-18 Q4.

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 Q4 with the trains planned for 2017-18 Q4. 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 6,404 fewer GTR PPM failures represent 13.6% of the total reduction in PPM failures, i.e. if GTR was excluded the National PPM would have decreased by 3.1 percentage points in Q4.

Table A: PPM, National (excluding GTR) and GTR, 2016-17 Q4 and 2017-18 Q4

PPM	National (GB) excluding GTR			GTR		
	Trains Planned	Met PPM	PPM	Trains Planned	Met PPM	PPM
2016-17 Q4	1,537,942	1,398,360	90.9%	271,002	213,552	78.8%
2017-18 Q4	1,518,515	1,327,260	87.4%	282,341	228,892	81.1%
Change	-19,427	-71,100	-3.5 pp	11,339	15,340	2.3 pp
To stand still		1,380,696			222,487	
Extra Failures		53,437			-6,404	
Extra Failures (share)		113.6%			-13.6%	
PPM Change (pp)		-3.1			0.4	

Table B: Contributions to Q4 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 (17-18)	84.3%	-	15.7%	-
	PPM*	113.6%	-3.1 pp	-13.6%	0.4 pp
	CaSL	106.4%	1.5 pp	-6.4%	-0.1 pp
MAA	Trains Planned (17-18)	84.5%	-	15.5%	-
	PPM	-382.2%	-0.6 pp	482.2%	0.7 pp
	CaSL	-4891.7%	-1.2 pp	4991.7%	1.2 pp

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](#).



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