



Passenger and Freight Rail Performance 2018-19 Q4 Statistical Release

Publication date: 24 May 2019

Next publication date: 19 September 2019

Background

This release contains information on passenger and freight rail performance in Great Britain with the latest quarterly data referring to January, February and March 2019.

All data in this release are sourced from Network Rail. Passenger performance is primarily 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 also published on the [Data Portal](#).

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

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Nationally, **86.3%** of trains were on time in 2018-19 (**Public Performance Measure (PPM)**).

PPM - 2018-19

		Compared with 2017-18	
National (GB)	86.3%	↓	-1.5 pp
Regional and Scotland	86.2%	↓	-3.4 pp
London and South East	86.9%	→	0.0 pp
Long Distance	81.3%	↓	-4.0 pp

The proportion of trains **Cancelled or Significantly Late (CaSL)** in 2018-19 was 4.3%.

CaSL - 2018-19

		Compared with 2017-18	
National (GB)	4.3%	↑	0.5 pp
Regional and Scotland	3.6%	↑	0.6 pp
London and South East	4.4%	↑	0.2 pp
Long Distance	7.1%	↑	1.2 pp

The national **Freight Delivery Metric (FDM)** was 94.0% in 2018-19.

Proposed changes to these statistics - please provide us with feedback by 30 June 2019
Please see [Annex 5](#) for more details.

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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 2018-19 Q4 (1 January to 31 March 2019).

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 PPM 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 CaSL 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 one or more scheduled stations 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 minutes are defined as a loss of train time against consecutive timing points. **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 in [Table 3.46](#) on 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 April/May and November/December.

Network Rail attributed delay data 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 Passenger Rail Performance Measures

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

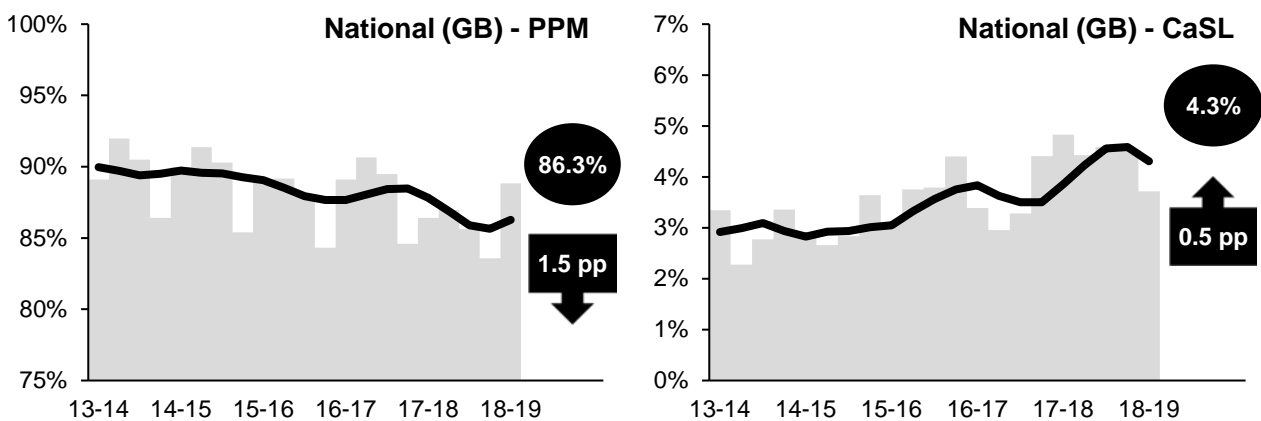
A factsheet with a summary of performance against these measures for the year 2018-19 can be found under *Factsheets* on the statistical release page of the [ORR website](#): **Train punctuality, cancellations, and severe disruption**.

1. National Performance

Overall, the punctuality of GB rail services was 1.5 pp worse in 2018-19 compared with 2017-18. However, punctuality in Q4 of 2018-19 was 2.4 pp better than it was in 2017-18 Q4.

National Reliability (CaSL) in Q4 was 3.7%. This was 1.1 pp lower (i.e. better) than 2017-18 Q4. For 2018-19 as a whole, 4.3% of trains were cancelled and/or significantly late. This was 0.5 pp higher than in 2017-18.

Figure 1.01: PPM and CaSL, National (GB), 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



The Q4 punctuality and reliability of all sectors improved in 2018-19 compared with 2017-18. Some of this improvement can be attributed to the milder winter experienced in much of GB during Q4. For the year as a whole however, all three sectors had worse punctuality and reliability in 2018-19 compared with 2017-18.

The Timetable change in May 2018 caused disruption on the network during Q1, particularly for Northern services. For further information on the disruption caused by the timetable change, please refer to [Annex 3](#). Govia Thameslink Railway was also affected significantly by this change.

The worsening in the punctuality of Northern accounted for 55% of the 1.5 pp decrease in the National PPM MAA in 2018-19. For reliability, Northern accounted for 41% of the 0.5 pp increase in the National CaSL MAA.

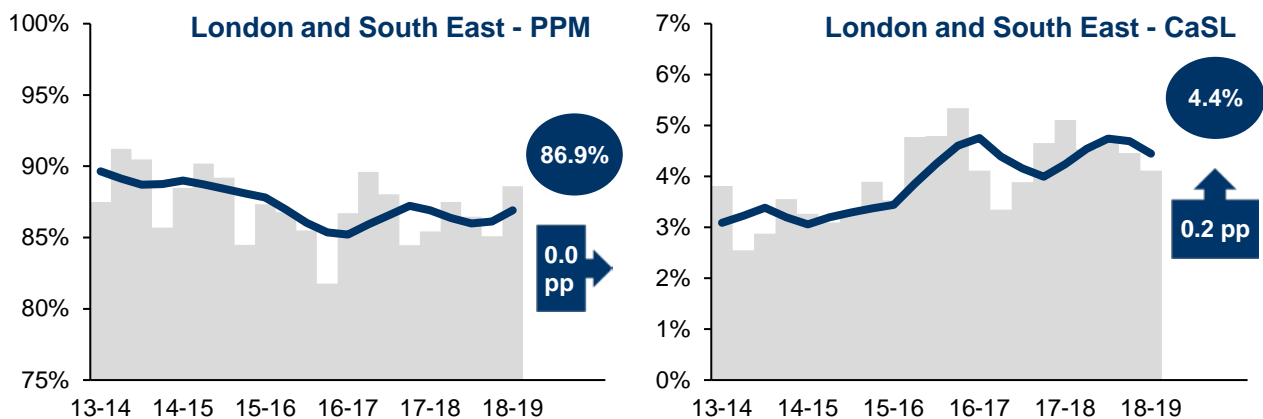
2. Sector Performance

London and South East Sector

Punctuality (PPM) in the London and South East sector in Q4 was 88.6%. This has improved by 3.2 pp compared with 2017-18 Q4. Punctuality in 2018-19 was 86.9%, which was the same as in 2017-18.

Reliability (CaSL) in the London and South East sector in Q4 was 4.1%. This was 1.0 pp better than in 2017-18 Q4. Reliability in 2018-19 was 4.4%, which was 0.2 pp worse than it was in 2017-18.

Figure 2.01: PPM and CaSL, London and South East Sector, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



2018-19 Quarter 4 London and South East Train Operator Headlines:

- The highest [Govia Thameslink Railway](#) Q4 punctuality (85.7%) since 2011-12, with PPM failures due to track faults down 40% year-on-year.
- The lowest (best) [TfL Rail](#) Q4 reliability (2.0%) since 2010-11.
- The second highest (worst) [Greater Anglia](#) Q4 reliability (3.3%) since 2004-05. Delays due to problems with the overhead line equipment increased this quarter.
- The second highest (worst) [Southeastern](#) reliability moving annual average (3.9%) since 2001-02 Q2, with an increase in trespass and fatality incidents.

Route Information

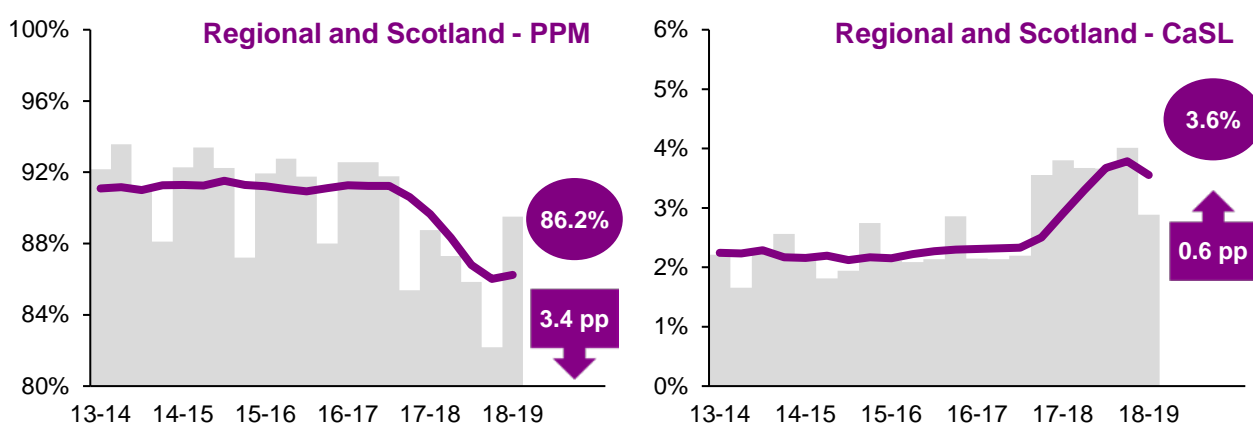
- Services to and from London termini and other services in South East England.

Regional and Scotland Sector

Punctuality (PPM) in the Regional and Scotland sector in Q4 was 89.5%. This was 0.8 pp better than in 2017-18 Q4. Punctuality in 2018-19 was 86.2%, which was down 3.4 pp compared with 2017-18.

Reliability (CaSL) in the Regional and Scotland sector in Q4 was 2.9%. This was 0.9 pp better than in 2017-18 Q4. Reliability in 2018-19 was 3.6%, which was 0.6 pp worse than in 2017-18.

Figure 2.02: PPM and CaSL, Regional and Scotland Sector, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



2018-19 Quarter 4 Regional and Scotland Operator Headlines:

- A 0.6 pp improvement in [Merseyrail](#) Q4 punctuality (95.8%) with PPM failures due to the train operator falling 29% compared with 2017-18 Q4.
- A 3.7 pp improvement in [West Midlands Trains](#) Q4 punctuality (89.4%). This was mainly due to milder weather this winter.
- A 1.0 pp improvement in [Transport for Wales Rail](#) Q4 punctuality (93.7%). This was mainly due to milder weather this winter.
- The lowest [Northern](#) Q4 punctuality (86.5%) since the time series began in 2009-10, with PPM failures attributed to signal operations delays up by 82% year-on-year.

Route Information

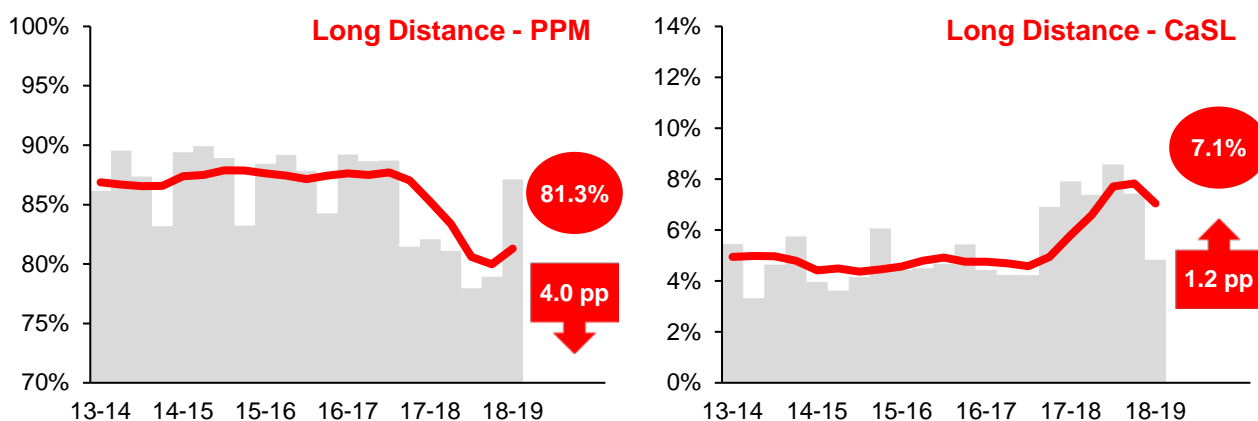
- Rural services outside of London and the South East of England.
- Non-Long Distance services within and between metropolitan areas such as Bristol, Birmingham, Manchester, Liverpool, Sheffield, Leeds and Newcastle-upon-Tyne.
- Services provided by Transport for Wales Rail and ScotRail.

Long Distance Sector

Punctuality (PPM) in the Long Distance sector (figures do not include Caledonian Sleeper) in Q4 was 87.1%. This was 5.0 pp better than in 2017-18 Q4. Punctuality in 2018-19 was 81.3%, which was down 4.0 pp compared with 2017-18.

Reliability (CaSL) in the Long Distance sector in Q4 was 4.8%. This was 3.1 pp better than in 2017-18 Q4. Reliability in 2018-19 was 7.1%, which was 1.2 pp worse than in 2017-18.

Figure 2.03: PPM and CaSL, Long Distance Sector, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



2018-19 Quarter 4 Long Distance Operator Headlines:

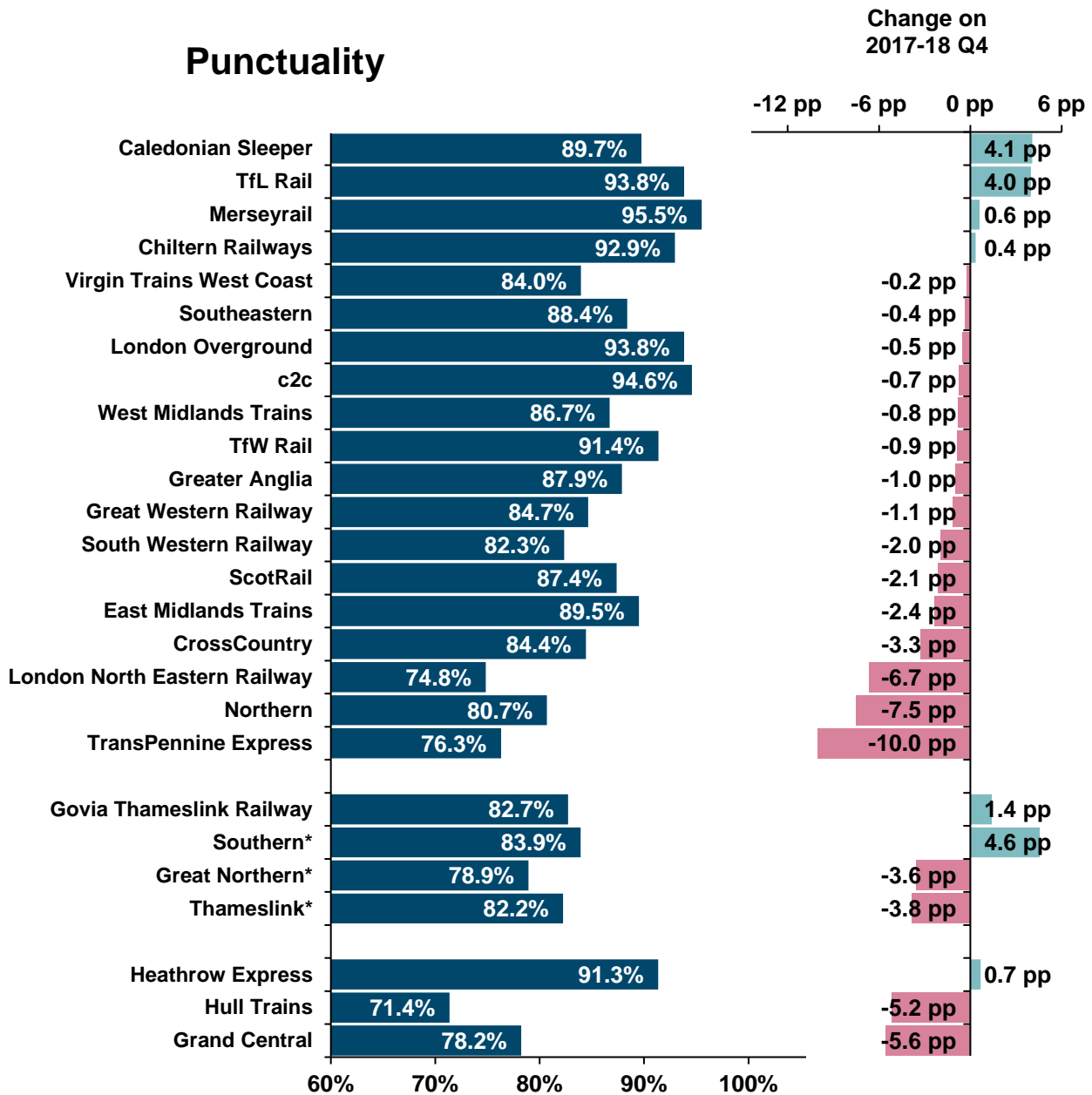
- A 3.3 pp improvement in [Great Western Railway](#) Q4 reliability (2.7%). CaSL failures due to track faults fell 60% year-on-year.
- A 2.8 pp improvement in [CrossCountry](#) Q4 reliability (3.8%). CaSL failures due to the train operator fell by 36% this quarter.
- A 1.6 pp improvement in [East Midlands Trains](#) Q4 punctuality (91.8%). This was mainly due to milder weather this winter.
- The second highest (worst) [TransPennine Express](#) Q4 reliability (6.4%) since the time series began in 2009-10. Train operator caused CaSL failures were up 50% this quarter.

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.

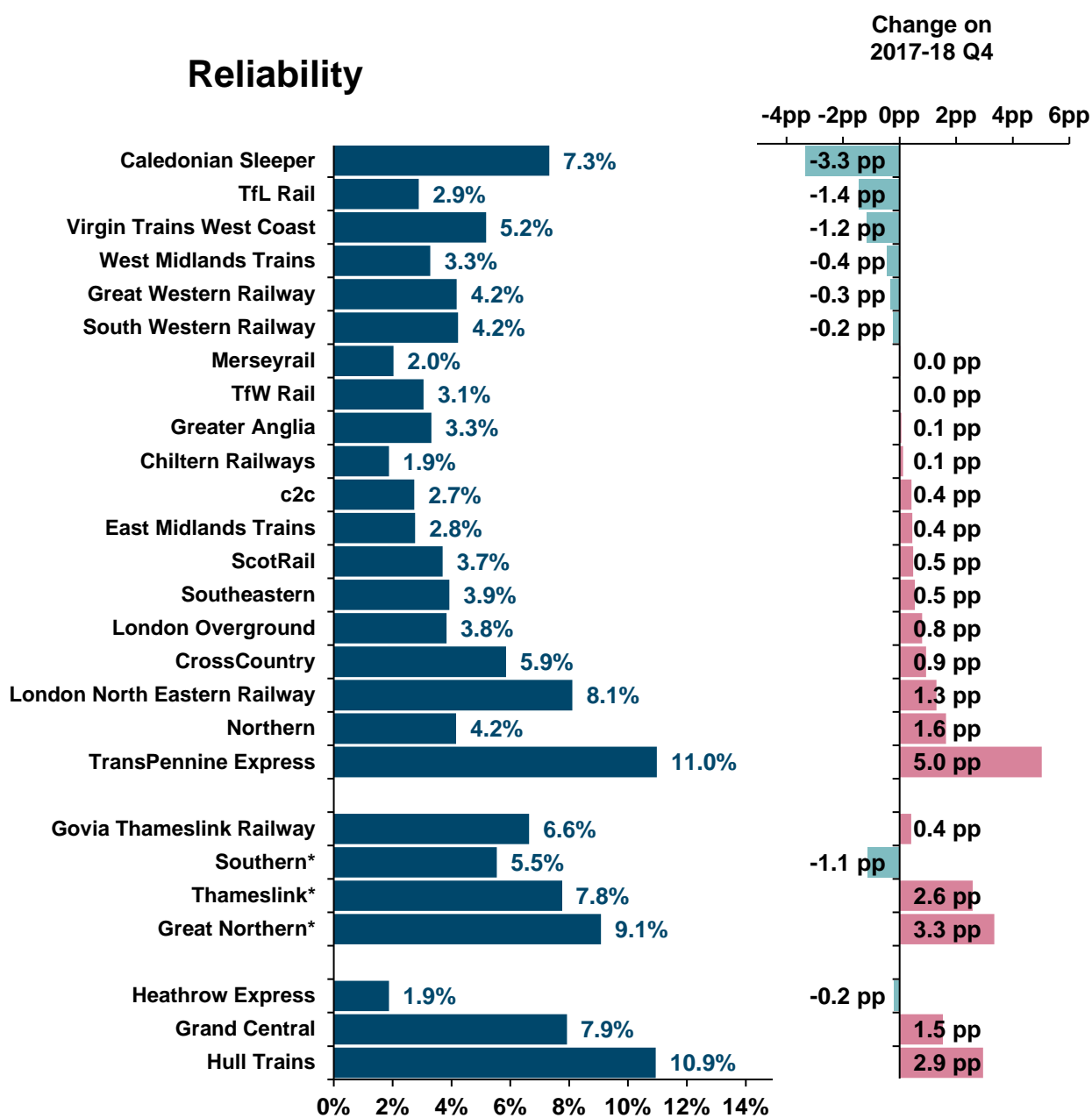
3. TOC Performance

Figure 3.01: PPM MAA by TOC, Great Britain, 2018-19 Q4 change on 2017-18 Q4



*Thameslink, Great Northern, Southern are sub-operators of Govia Thameslink Railway

Figure 3.02: CaSL MAA by TOC, Great Britain, 2018-19 Q4 change on 2017-18 Q4



*Thameslink, Great Northern, Southern are sub-operators of Govia Thameslink Railway

c2c

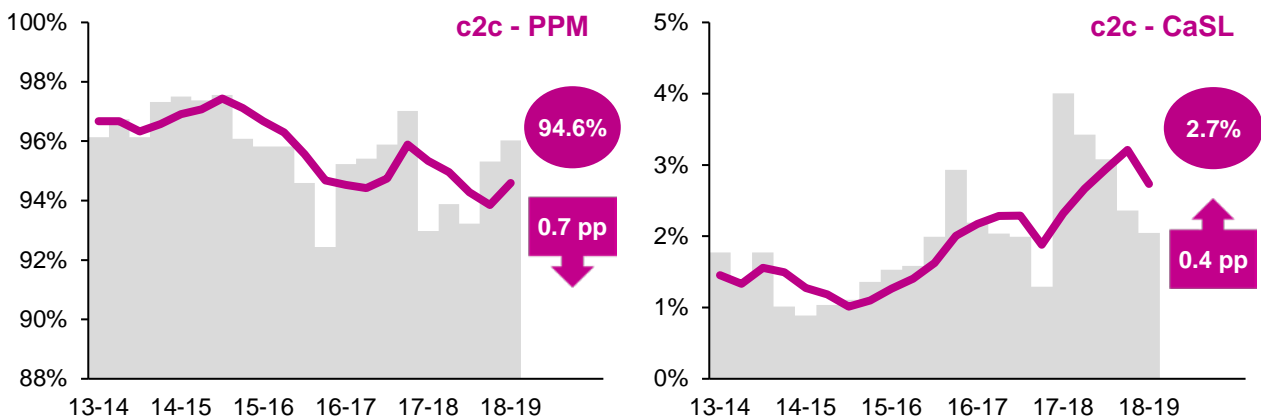
Punctuality (PPM) in Q4 was 96.0%. This was 3.0pp better than last year. Punctuality in 2018-19 was 94.6%, which was 0.7 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 2.0%. This was 2.0 pp better than in 2017-18 Q4. Reliability in 2018-19 was 2.7%, which was 0.4 pp worse than in 2017-18.

Overall, CaSL failures attributed to Network Rail fell 41% in 2018-19 Q4 compared with the same quarter a year earlier. CaSL failures due to signal failures decreased from 76 in 2017-18 Q4 to three in 2018-19 Q4, while bad weather resulted in 30 CaSL failures this quarter compared with 289 a year earlier. Track faults, however, resulted in 113 CaSL failures in 2018-19 Q4, which was up from eight in 2017-18 Q4, and a rodent damaged cable at Leigh-on-Sea caused 102 cancellations.

CaSL failures attributed to c2c were down 63% in 2018-19 Q4 compared with 2017-18 Q4. CaSL failures due to fleet faults (down 73%) and train crew problems (down 36%) were down this quarter compared with a year earlier. However, a broken down freight train near Barking meant that CaSL failures due to other operators increased from 13 in 2017-18 Q4 to 42 in 2018-19 Q4.

Figure 3.03: PPM and CaSL, c2c, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (LSE)

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

Caledonian Sleeper

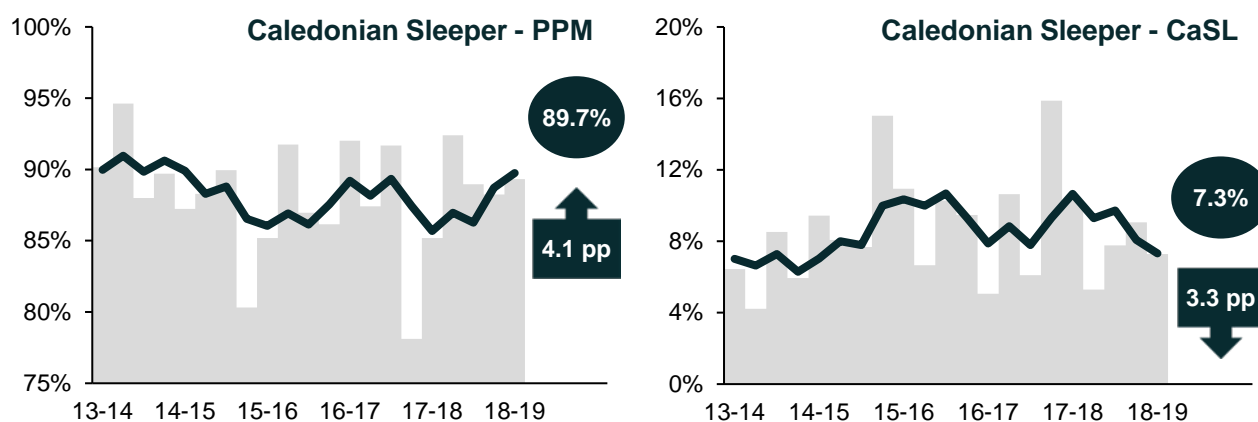
Punctuality (PPM) in Q4 was 89.3%. This was 4.1 pp better than in 2017-18 Q4. The MAA stands at 89.7%, which has improved by 4.1 pp compared with a year ago.

Reliability (CaSL) in Q4 was 7.3%. This was 3.0 pp better than in 2017-18 Q4. The MAA stands at 7.3%, which has improved by 3.3 pp since 2017-18 Q4.

PPM failures attributed to Network Rail decreased by 55% (from 39 to 18 PPM failures) in 2018-19 Q4 compared with 2017-18 Q4. This was due to a decrease in PPM failures attributed to overhead line equipment failures (down from eight to three) and bad weather (down from 19 to four).

PPM failures attributed to Caledonian Sleeper decreased from 32 in 2017-18 Q4 to 29 in 2018-19 Q4. PPM failures due to fleet failures fell from 24 to 17; however, there were 10 operational PPM failures compared with one in 2017-18 Q4. PPM failures due to other operators increased from eight to 10.

Figure 3.04: PPM and CaSL, Caledonian Sleeper, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (Long Distance)

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

Chiltern Railways

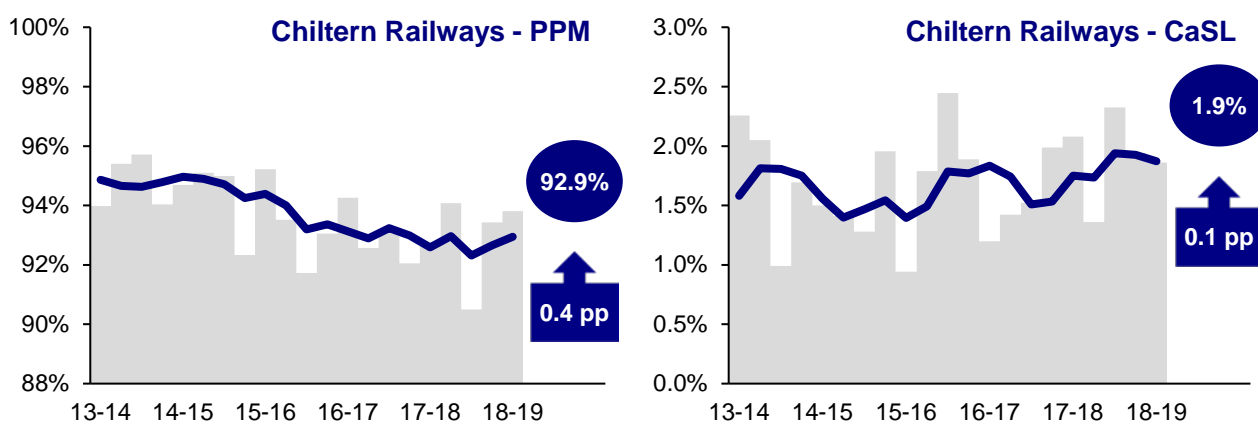
Punctuality (PPM) in Q4 was 93.8%. This was 1.1 pp better than a year earlier. Punctuality in 2018-19 was 92.9%, which was 0.4 pp better than in 2017-18.

Reliability (CaSL) in Q4 was 1.9%. This was 0.2 pp better than Q4 last year. Reliability in 2018-19 was 1.9%, which was 0.1 pp worse than in 2017-18.

PPM failures attributed to Network Rail decreased by 10% in 2018-19 Q4 compared with 2017-18 Q4. Bad weather caused nine PPM failures this quarter, which was down from 192 a year earlier. PPM failures due to signal failures (down 40%) also fell this quarter. Fatalities at High Wycombe and Banbury resulted in 4,500 delay minutes to all operators and contributed to the 43% increase in Chiltern PPM failures attributed to fatality and trespass incidents.

PPM failures attributed to Chiltern Railways were down 21% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to external causes attributed to the operator were down 60%. Station delays (down 22%) and fleet failures (down 17%) also resulted in fewer PPM failures this quarter. PPM failures attributed to other operators fell by 18% in 2018-19 Q4.

Figure 3.05: PPM and CaSL, Chiltern Railways, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

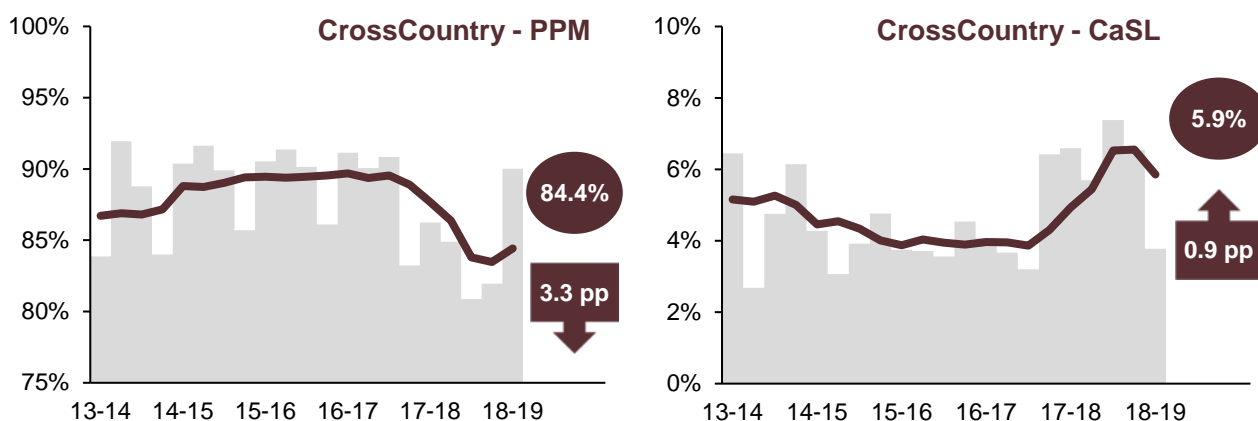
Punctuality (PPM) in Q4 was 90.0%. This was 3.8 pp better than in 2017-18 Q4. Punctuality in 2018-19 was 84.4%, which was 3.3 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 3.8%. This was 2.8 pp better than in 2017-18 Q4 and is the second lowest Q4 CaSL since the time series began in 2004-05. Reliability in 2018-19 was 5.9%, which was 0.9 pp worse than in 2017-18.

Network Rail attributed CaSL failures decreased by 45% in 2018-19 Q4 compared with 2017-18 Q4. There were 37 weather related PPM failures this quarter compared with 459 last year. PPM failures due to network management and other delays decreased by 78%, while PPM failures due to track faults decreased by 59%. Fatality and trespass incidents resulted in 68% more CaSL failures in 2018-19 Q4 compared with 2017-18 Q4.

CaSL failures attributed to CrossCountry fell by 36% in 2018-19 Q4 compared with 2017-18 Q4. Fleet caused CaSL failures were down 12% and CaSL failures due to operational delays were down 66% compared with a year earlier. CaSL failures due to external causes attributed to the operator were down 67% and CaSL failures due to train crew problems were down 10%. CaSL failures due to other operators fell by 29%.

Figure 3.06: PPM and CaSL, CrossCountry, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

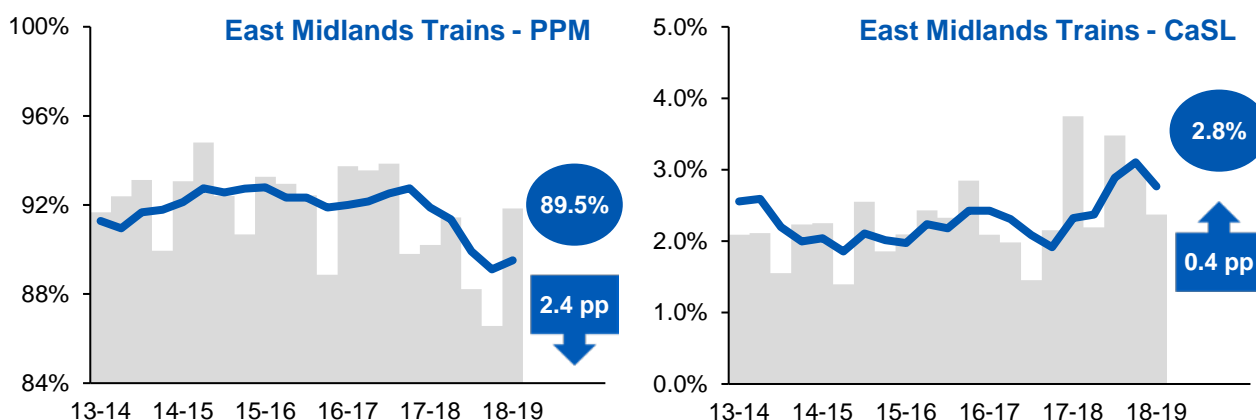
Punctuality (PPM) in Q4 was 91.8%. This was 1.6 pp better than in 2017-18 Q4. Punctuality in 2018-19 was 89.5%, which was down 2.4 pp compared with 2017-18.

Reliability (CaSL) in Q4 was 2.4%. This was 1.4 pp better than in 2017-18 Q4. Reliability in 2018-19 was 2.8%, which was 0.4 pp worse compared with 2017-18.

PPM failures attributed to Network Rail fell by 16% this quarter. There were 77 PPM failures attributed to bad weather in 2018-19 Q4 compared with 462 in 2017-18 Q4. However, fatality and trespass caused PPM failures were up 51% in Q4 compared with a year earlier. PPM failures due to signal failures increased by 18%. For example, a signal failure at Derby resulted in 7,300 delay minutes to all operators. Track faults caused 74% more PPM failures this quarter. Faults near West Hampstead and Leicester resulted in 7,500 delay minutes to all operators.

PPM failures attributed to East Midlands Trains fell by 18% in 2018-19 Q4 compared with 2017-18 Q4. Station caused PPM failures were down 63% and PPM failures due to external causes attributed to the operator were down 29%. PPM failures due to delays caused by other operators fell by 16%.

Figure 3.07: PPM and CaSL, East Midlands Trains, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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 85.7%. This was 4.6 pp better than in 2017-18 Q4, and is the highest Q4 PPM since 2011-12. Punctuality in 2018-19 was 82.7%, which was 1.4% better than in 2017-18.

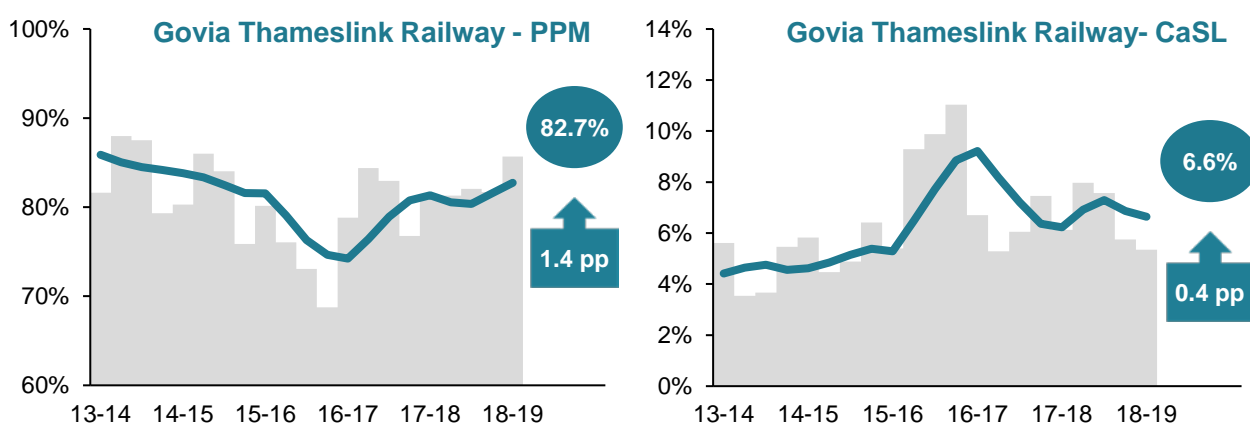
Reliability (CaSL) in Q4 was 5.3%. This was 0.8 pp better than in 2017-18 Q4. Reliability in 2018-19 was 6.6%, which was 0.4 pp worse than in 2017-18.

The amount of PPM failures that were uninvestigated or unexplained fell by 53% in 2018-19 Q4 compared with 2017-18 Q4. This improvement in the delay attribution process does reduce the comparability of other delay categories between the two quarters.

Nevertheless, PPM failures attributed to bad weather (down 74%), track faults (down 42%) and signalling operational delays (down 24%) all fell this quarter. Conversely, PPM failures due to signal failures more than doubled this quarter compared with 2017-18 Q4. In addition, vegetation on the roof of a train resulted in the overhead line equipment failing at Farringdon leading to 7,000 delay minutes and 591 cancellations to all operators.

PPM failures attributed to Govia Thameslink Railway fell 18% in 2018-19 Q4 compared with 2017-18 Q4. There were reductions in PPM failures due to station delays (down 57%) and fleet failures (down 31%). PPM failures attributed to other operators increased by 1% compared with 2017-18 Q4.

Figure 3.08: PPM and CaSL, Govia Thameslink Railway, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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).

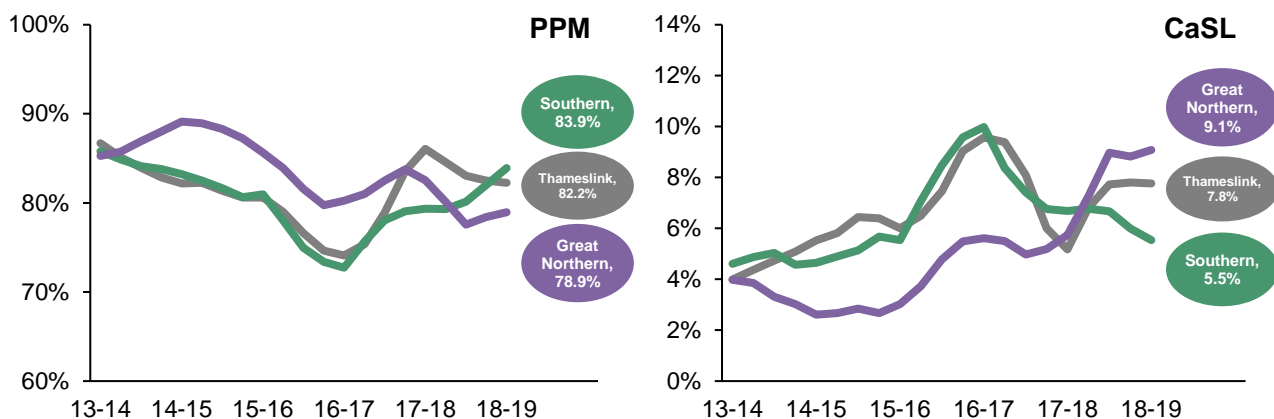
At the end of 2018-19 Q4, the MAAs for punctuality (PPM) for the sub operators were:

- Southern: 83.9% (up 4.6 pp on 2017-18 Q4).
- Thameslink: 82.2% (down 3.8 pp on 2017-18 Q4).
- Great Northern: 78.9% (down 3.6 pp on 2017-18 Q4).

At the end of 2018-19 Q4, the MAAs for reliability (CaSL) for the sub operators were:

- Southern: 5.5% (down 1.1 pp on 2017-18 Q4).
- Thameslink: 7.8% (up 2.6 pp on 2017-18 Q4).
- Great Northern: 9.1% (up 3.3 pp on 2017-18 Q4).

Figure 3.09: PPM and CaSL MAA, Southern, Thameslink, and Great Northern, 2013-14 Q4 to 2018-19 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

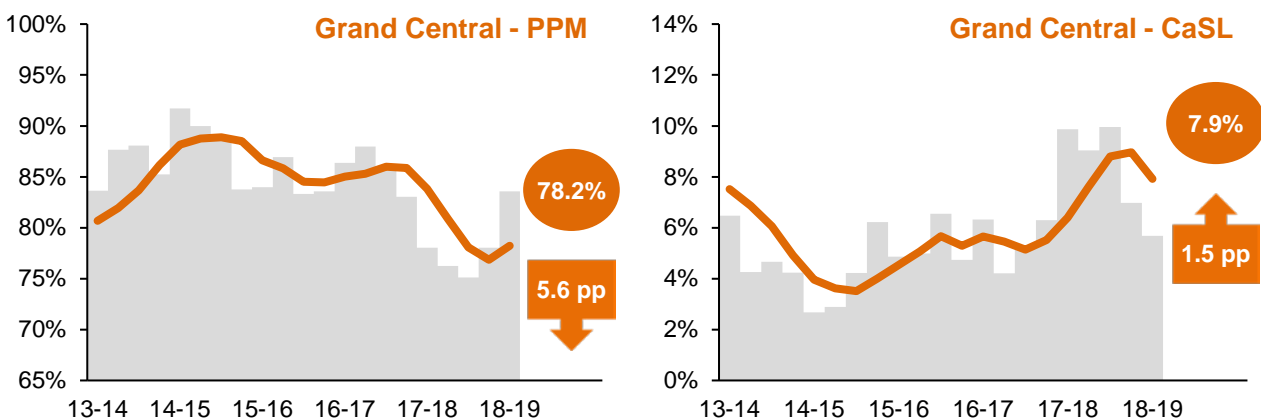
Punctuality (PPM) in Q4 was 83.6%. This was 5.5 pp better than in 2017-18 Q4. Punctuality in 2018-19 was 78.2%, which was 5.6 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 5.7%. This was 4.2 pp better than in 2017-18 Q4. Reliability in 2018-19 was 7.9%, which was 1.5 pp worse than last year.

PPM failures attributed to Network Rail decreased from 168 in 2017-18 Q4 to 130 in 2018-19 Q4. There were eight PPM failures due to bad weather this quarter compared with 19 a year ago. PPM failures due to overhead line equipment faults fell from 18 in 2017-18 Q4 to five in 2018-19 Q4. Track faults resulted in seven PPM failures compared to 28 in 2017-18 Q4.

There were 54 PPM failures attributed to Grand Central in 2018-19 Q4, which was down from 97 in 2017-18 Q4. Fleet failures fell 42% this quarter, while other PPM failures attributed to Grand Central fell 48%. PPM failures caused by other TOCs increased by 4%.

Figure 3.10: PPM and CaSL, Grand Central, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (Long Distance)

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

Great Western Railway

Punctuality (PPM) in Q4 was 90.6%. This was 6.5 pp better than in 2017-18 Q4.

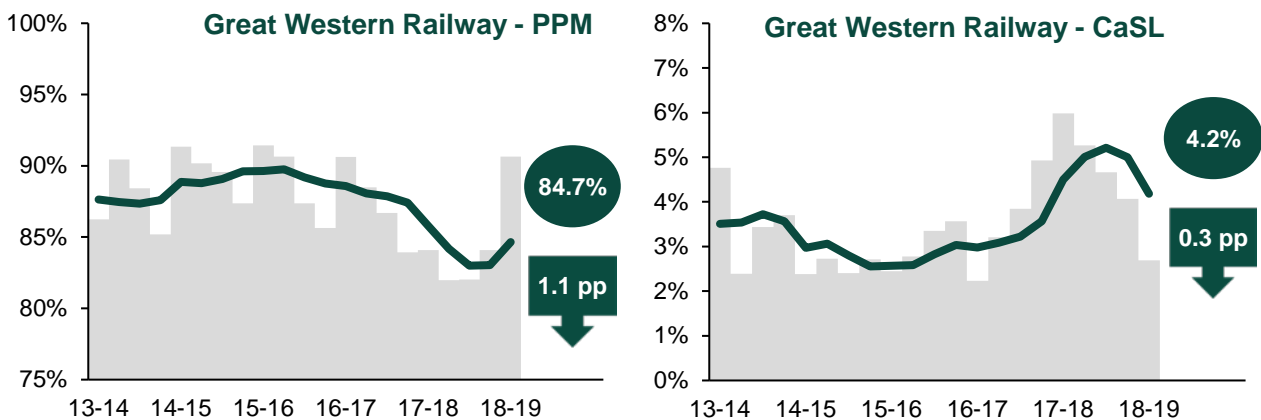
Punctuality in 2018-19 was 84.7%, which was 1.1 pp lower than in 2017-18.

Reliability (CaSL) in Q4 was 2.7%. This was 3.3 pp better than in 2017-18 Q4. Reliability was 4.2% in 2018-19, which was 0.3 pp better than in 2017-18.

CaSL failures attributed to Network Rail fell 48% in 2018-19 Q4 compared with 2017-18 Q4. There were 188 CaSL failures due to bad weather this quarter, down from 1,300 a year ago. CaSL failures due to track faults (down 60%), signal failures (down 19%) and points failures (down 14%) also fell this quarter.

CaSL failures attributed to Great Western Railway decreased by 66% in 2018-19 Q4. There were reductions in CaSL failures due to train crew problems (down 82%), fleet failures (down 46%) and external causes attributed to the operator (down 75%). CaSL failures caused by other operators fell 76% this quarter.

Figure 3.11: PPM and CaSL, Great Western Railway, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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 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

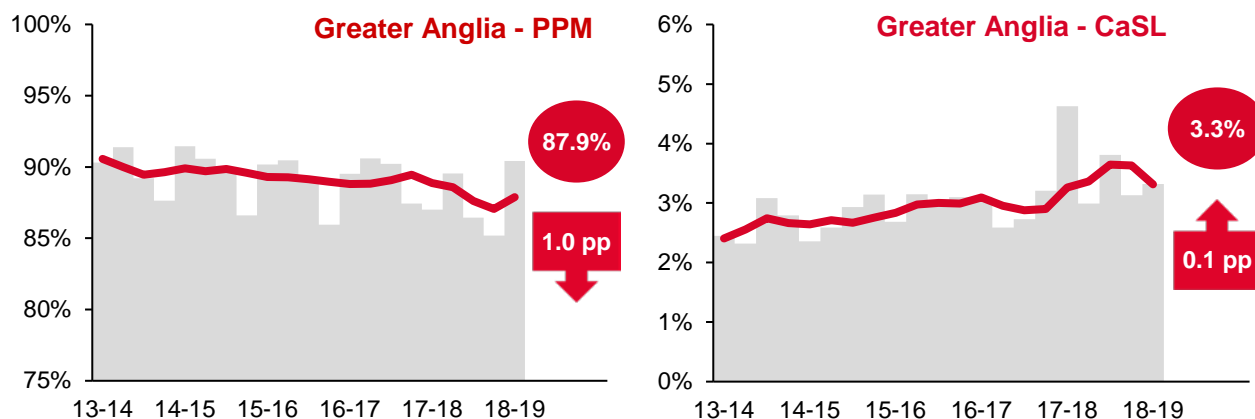
Punctuality (PPM) in Q4 was 90.4%. This was 3.4 pp better than in 2017-18 Q4. Punctuality was 87.9% in 2018-19, which was 1.0 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 3.3%. While this was 1.3 pp better than in 2017-18 Q4, it is still the second worst Q4 CaSL since the time series began in 2004-05. Reliability in 2018-19 was 3.3%, which was 0.1 pp worse than in 2017-18.

CaSL failures attributed to Network Rail decreased by a quarter in 2018-19 Q4 compared with 2017-18 Q4. CaSL failures due to bad weather decreased by 66% this quarter, while CaSL failures due to signal failures (down 56%) and track faults (down 31%) also fell. However, problems with the overhead line equipment resulted in 310 PPM failures in 2018-19 Q4 compared with 51 a year ago. Faults near Ilford and Bethnal Green resulted in a combined 10,700 delay minutes and 379 cancellations to all operators.

CaSL failures attributed to Greater Anglia fell by a third in 2018-19 Q4. This was driven by a decrease in PPM failures attributed to train crew (down 50%) and external causes attributed to the operator (down 76%). PPM failures due to other operators increased by 45%.

Figure 3.12: PPM and CaSL, Greater Anglia, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

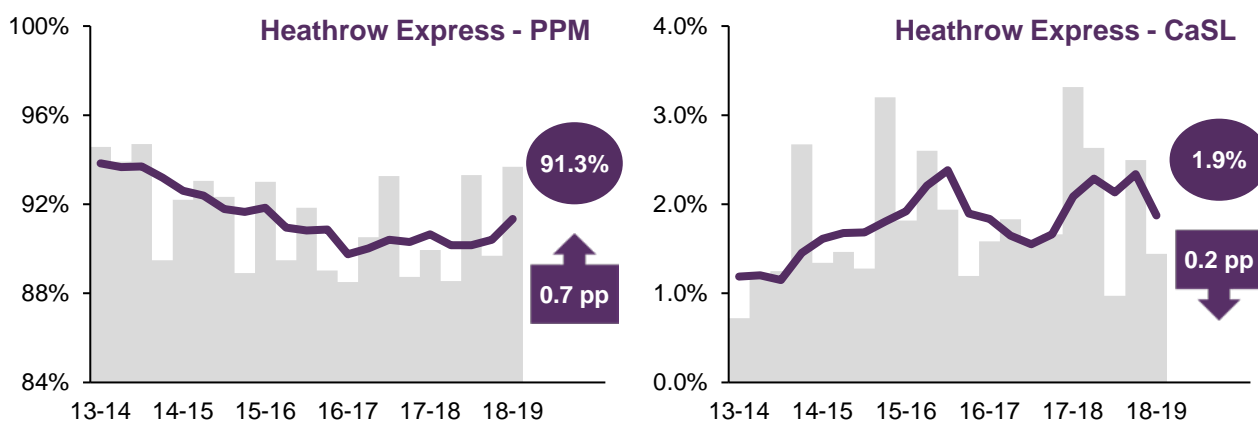
Punctuality (PPM) in Q4 was 93.7%, which was 3.7 pp better than in 2017-18 Q4 and is the highest Q4 PPM since 2013-14. Punctuality in 2018-19 was 91.3%, which was 0.7% better than in 2017-18.

Reliability (CaSL) in Q4 was 1.4%, which was 1.9 pp better than in 2017-18 Q4. Reliability in 2018-19 was 1.9%, which was 0.2 pp better than in 2019-20.

CaSL failures attributed to Network Rail increased 61% in 2018-19 Q4 compared with 2017-18 Q4. Signal failures resulted in 35 CaSL failures this quarter, which is up from nine a year ago. There were 12 CaSL failures attributed to bad weather this quarter, up from one in 2017-18 Q4.

There were 72 CaSL failures attributed to Heathrow Express this quarter, down from 345 in 2017-18 Q4. This was driven by a decrease in CaSL failures attributed to fleet (down 80%) and external causes attributed to the operator (down 95%). CaSL failures due to other operators fell from 19 in 2017-18 Q4 to 13 in 2018-19 Q4.

Figure 3.13: PPM and CaSL, Heathrow Express, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (LSE)

- Services between London Paddington and Heathrow Airport.

Hull Trains

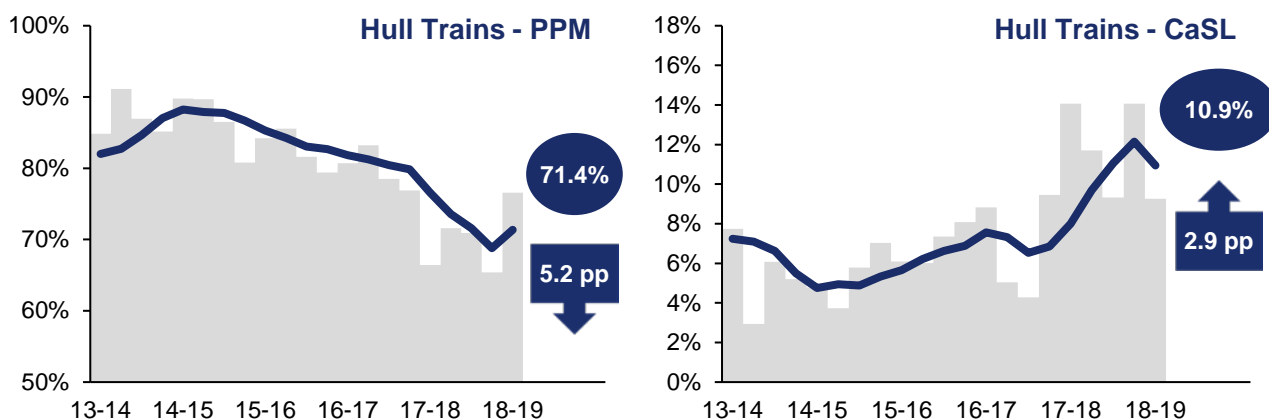
Punctuality (PPM) in Q4 was 76.6%. While this was 10.2 pp better than in 2017-18 Q4, it is the second worst Q4 PPM since the time series began in 2006-07. Punctuality in 2018-19 was 71.4%, which was 5.2 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 9.3%, which was 4.8 pp better than in 2017-18 Q4. Reliability in 2018-19 was 10.9%, which was 2.9 pp worse than in 2017-18.

There were 127 PPM failures attributed to Network Rail in 2018-19 Q4; down from 157 in 2017-18 Q4. Track faults resulted in 11 PPM failures this quarter compared with 36 in 2017-18 Q4.

PPM failures attributed to Hull Trains decreased from 112 in 2017-18 Q4 to 75 in 2018-19 Q4. Operations delays resulted in seven PPM failures (25 in 2017-18 Q4), while there were 68 PPM failures due to other causes (86 in 2017-18 Q4).

Figure 3.14: PPM and CaSL, Hull Trains, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (Long Distance)

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

London North Eastern Railway

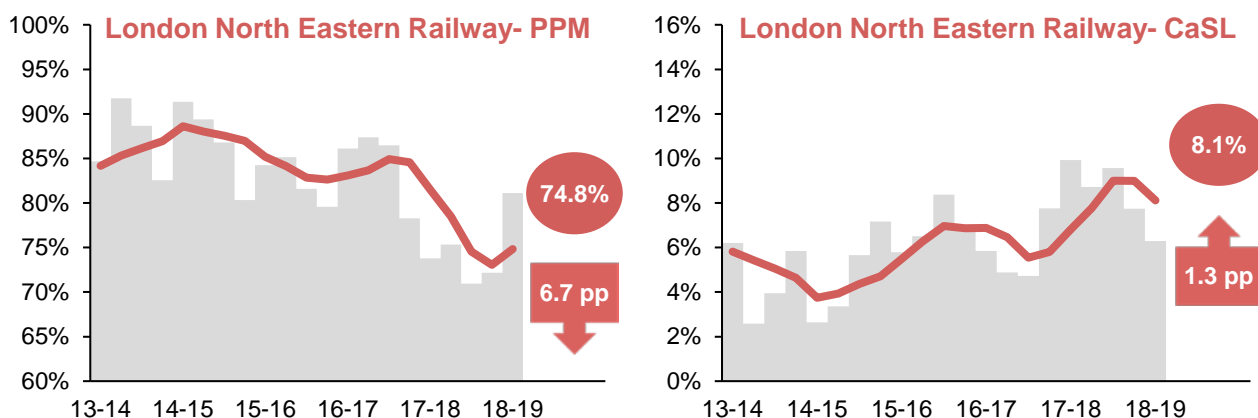
Punctuality (PPM) in Q4 was 81.1%. This was 7.3 pp better when compared with 2017-18 Q4. Punctuality in 2018-19 was 74.8%, which was 6.7 pp worse than in 2017-18.

Reliability (CaSL) in Q4 was 6.3%. This was 3.6 pp better than in 2017-18 Q4. Reliability in 2018-19 was 8.1%, which was 1.3 pp worse than in 2017-18.

PPM failures attributed to Network Rail decreased by 34% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to over-running engineering works (down 87%), overhead line equipment failures (down 69%), track faults (down 67%) and bad weather (down 45%) all contributed to the decrease.

There was an 18% decrease in PPM failures attributed to London North Eastern Railway. PPM failures due to external delays attributed to the operator (down 69%), station delays (down 52%) and operational delays (down 79%) were the main drivers of this decrease. PPM failures due to fleet failures increased by 5% this quarter. Three such incidents in March resulted in 9,800 delay minutes to all operators. PPM failures due to other operators fell by 31%, much of which came from improvements in performance by Govia Thameslink Railway.

Figure 3.15: PPM and CaSL, London North Eastern Railway, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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.

London Overground

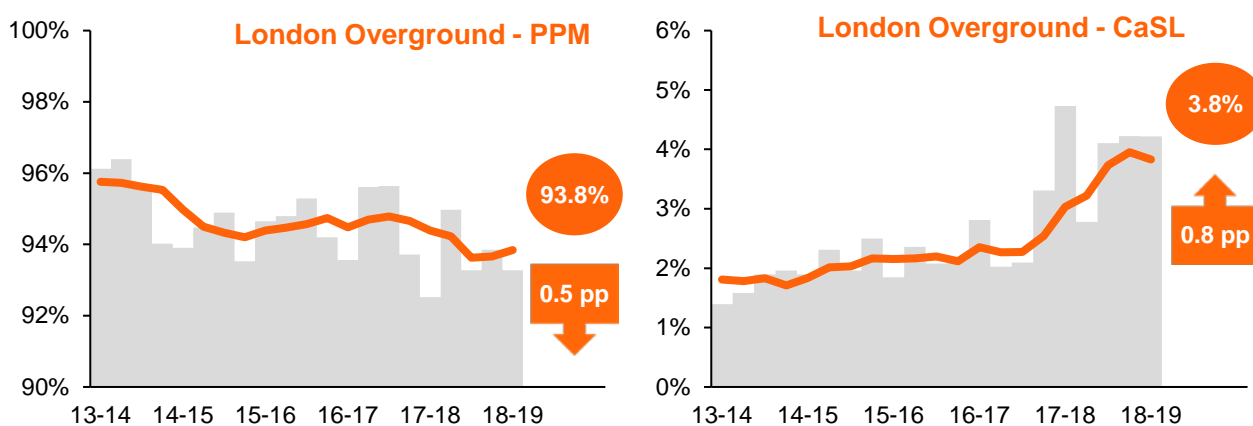
Punctuality (PPM) in Q4 was 93.3%. This was 0.8 pp better than in 2017-18 Q4. The MAA stands at 93.8%, which has worsened by 0.5 pp compared with a year ago.

Reliability (CaSL) in Q4 was 4.2%. This was 0.5 pp better than in 2017-18 Q4. The MAA stands at 3.8%, which has worsened by 0.8 pp compared with a year earlier.

CaSL failures attributed to Network Rail fell 25% in 2018-19 Q4 compared with 2017-18 Q4. Only 12 CaSL failures this quarter were attributed to infrastructure mishaps (242 in 2017-18 Q4). There were also falls in CaSL failures due to bad weather (down 70%) and track faults (down 75%). However, CaSL failures due to signal failures (up 136%), overhead line equipment faults (up 593%) and fatality and trespass incidents (up 86%) all increased this quarter.

CaSL failures attributed to London Overground increased by 10% in 2018-19 Q4 compared with 2017-18 Q4. Train crew caused CaSL failures more than doubled and CaSL failures due station delays resulted in 72% more CaSL failures this quarter compared with 2017-18 Q4. Fleet caused CaSL failures, however, fell 11%. CaSL Failures caused by other operators increased by 45%. A broken down freight train on the Gospel Oak to Barking line resulted in 2,000 delay minutes and 24 cancellations to all operators.

Figure 3.16: PPM and CaSL, London Overground, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

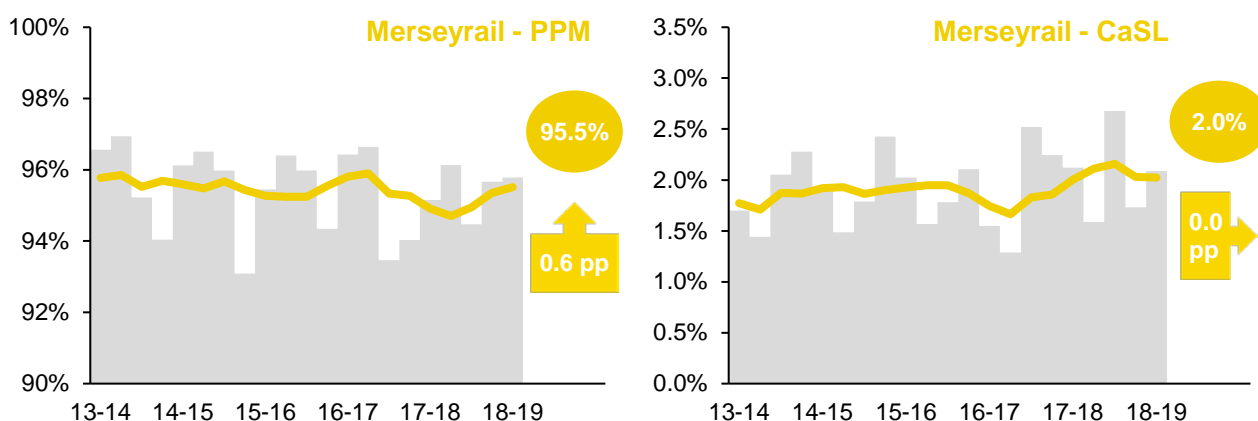
Punctuality (PPM) in Q4 was 95.8%. This was 0.6 pp better than in 2017-18 Q4. The MAA stands at 95.5%, which has improved by 0.6 pp compared with a year ago.

Reliability (CaSL) in Q4 was 2.1%. This was slightly better than in 2017-18 Q4. The MAA stands at 2.0%, which was similar to 2017-18 Q4.

PPM failures attributed to Network Rail were up 14% in 2018-19 Q4 compared with 2017-18 Q4. The number of PPM failures that were uninvestigated or unexplained fell from 304 in 2017-18 Q4 to 85 in 2018-19 Q4. PPM failures due to fatality and trespass incidents more than trebled from 77 to 236, while fires starting on Network Rail infrastructure caused 164 PPM failures this quarter compared with 43 in 2017-18 Q4. PPM failures due to bad weather also doubled this quarter.

PPM failures attributed to Merseyrail fell by 29% between 2017-18 Q4 and 2018-19 Q4. Train crew (down 25%), external delays attributed to the operator (down 28%) and fleet failures (down 28%) contributed to this decrease. There were 101 PPM failures due to other operators this quarter compared with 31 in 2017-18 Q4.

Figure 3.17: PPM and CaSL, Merseyrail, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (Regional)

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

Northern

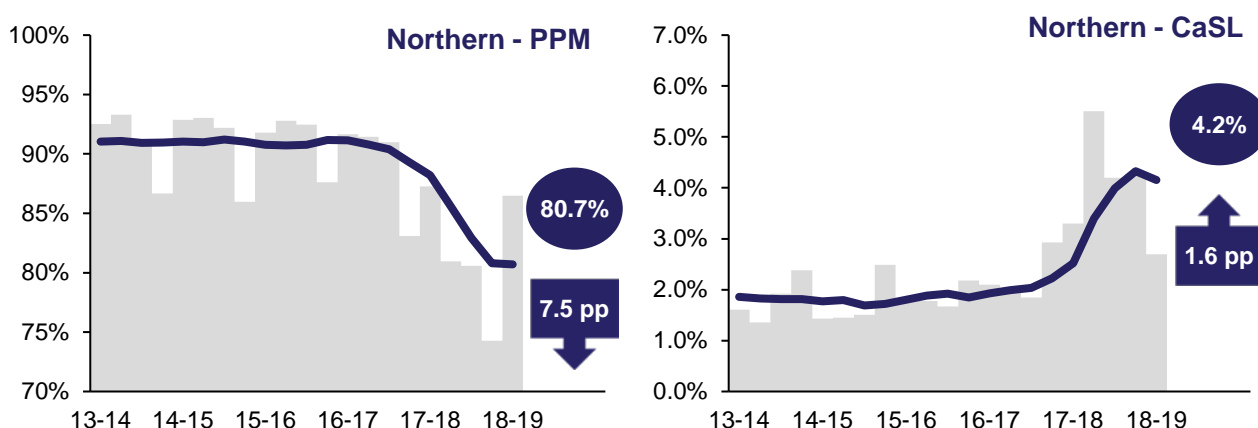
Punctuality (PPM) in Q4 was 86.5%. This was 0.8 pp worse than in 2017-18 Q4, and is the lowest Q4 PPM since the time series began in 2009-10. The MAA stands at 80.7%, which has worsened by 7.5 pp compared with a year ago, and is the lowest it has been since the time series began in 2009-10.

Reliability (CaSL) in Q4 was 2.7%. This was 0.6 pp better than in 2017-18 Q4. The MAA stands at 4.2%, which has worsened by 1.6 pp compared with a year ago.

Despite a 43% increase in the amount of PPM failures that were unexplained or uninvestigated, other PPM failures attributed to Network Rail increased by 10% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to signal operations (up 82%), speed restrictions (up 85%) and fatality and trespass incidents (up 47%) all increased this quarter. PPM failures due to bad weather, however, fell by 57% this quarter.

PPM failures attributed to Northern increased by 6% between 2017-18 Q4 and 2018-19 Q4. Fleet failures (up 34%), operational delays (up 24%) and station delays (up 15%) resulted in more PPM failures this quarter. However, external causes attributed to the operator caused 51% fewer PPM failures. PPM failures due to other operators increased by 43% with 41% of this increase accounted for by delays caused by TransPennine Express.

Figure 3.18: PPM and CaSL, Northern, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

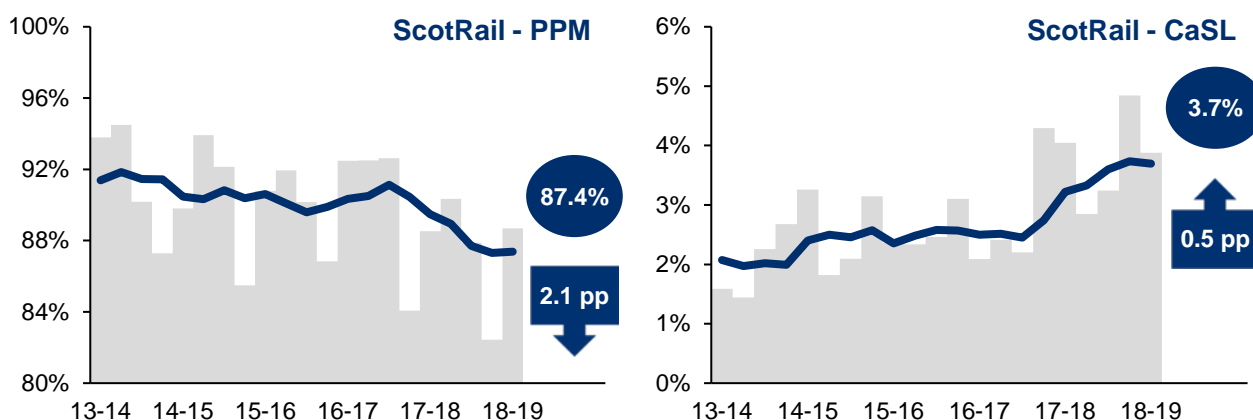
Punctuality (PPM) in Q4 was 88.7%. This was 0.2 pp better than in 2017-18 Q4. The MAA stands at 87.4%, which has worsened by 2.1 pp compared with a year ago.

Reliability (CaSL) in Q4 was 3.9%. This was 0.2 pp better than in 2017-18 Q4. The MAA stands at 3.7%, which has worsened by 0.5 pp compared with a year earlier.

PPM failures due to unexplained and uninvestigated delays fell by 33% in 2018-19 Q4 compared with 2017-18 Q4. Other PPM failures attributed to Network Rail decreased by 21%. There were 2,900 PPM failures caused by bad weather in 2017-18 Q4 and this fell to 708 this quarter. There was also a 33% fall in PPM failures attributed to overhead line equipment faults. Signalling operations, however, resulted in 37% more PPM failures this quarter compared with 2017-18 Q4.

PPM failures attributed to ScotRail increased by 65% in 2018-19 Q4 compared with 2017-18 Q4. Fleet caused PPM failures increased by 87%. Three failures to trains in the Haymarket area in January and February resulted in 8,100 delay minutes to all operators. Traincrew problems resulted in 2,900 PPM failures, up from 800 in 2017-18 Q4. PPM failures attributed to other operators fell by 5%.

Figure 3.19: PPM and CaSL, ScotRail, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

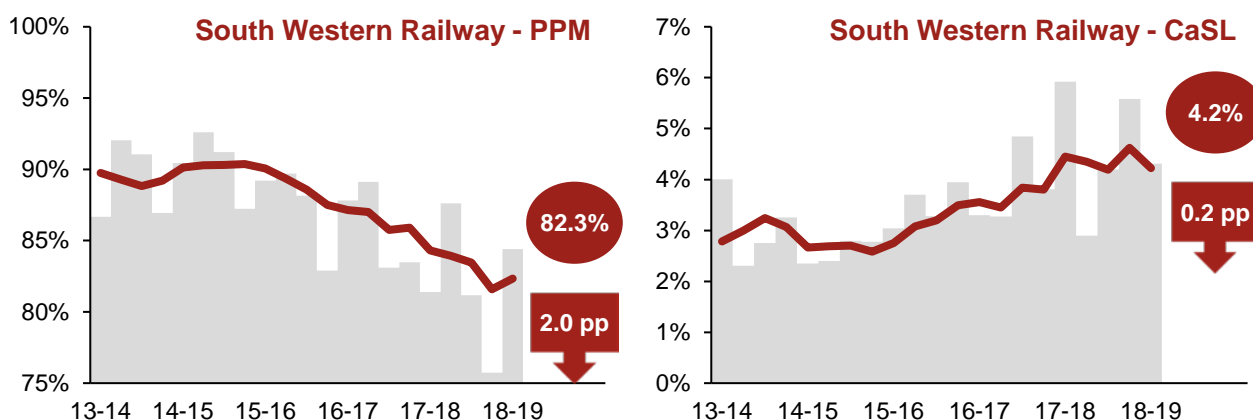
Punctuality (PPM) in Q4 was 84.4%. This was 3.0 pp better than in 2017-18 Q4. The MAA stands at 82.3%, which has worsened by 2.0 pp compared with a year ago.

Reliability (CaSL) in Q4 was 4.3%. This was 1.6 pp better than in 2017-18 Q4. The MAA stands at 4.2%, which has improved by 0.2 pp compared with a year earlier.

CaSL failures attributed to Network Rail decreased by 16% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to bad weather (down 68%), track faults (down 59%) and signal failures (down 33%) all fell this quarter. However, fatality and trespass incidents caused 843 CaSL failures this quarter, compared with 238 a year ago. Fatalities at New Malden and Woking in February and March resulted in a total of 228 cancellations and 17,800 delay minutes to all operators.

CaSL failures attributed to South Western Railway decreased by 38% in 2018-19 Q4 compared with 2017-18 Q4. CaSL failures due to fleet (down 53%), train crew (down 28%) and operational delays (down 57%) fell this quarter. Nevertheless, a broken down train between New Malden and Surbiton in February resulted in 11,500 delay minutes to all operators. CaSL failures due to other operators increased by 6% this quarter.

Figure 3.20: PPM and CaSL, South Western Railway, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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

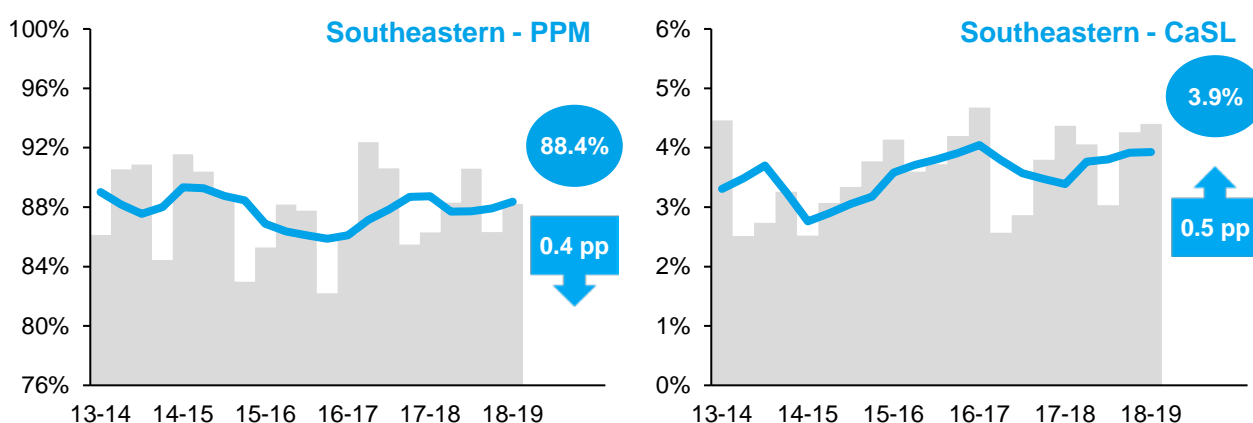
Punctuality (PPM) in Q4 was 88.2%. This was 1.9 pp better than in 2017-18 Q4. The MAA stands at 88.4%, which has worsened by 0.4 pp compared with a year ago.

Reliability (CaSL) in Q4 was 4.4%, which was slightly worse than in 2017-18 Q4. The MAA stands at 3.9%, which has worsened by 0.5 pp compared with a year earlier and is the second highest quarterly MAA since 2001-02 Q2.

CaSL failures attributed to Network Rail increased by 15% in 2018-19 Q4 compared with 2017-18 Q4. This was despite CaSL failures due to bad weather falling 60%. CaSL failures due to fatalities and trespass incidents doubled this quarter. A fatality at Dartford in February resulted in 207 cancellations to all operators, whilst vandalism at Gravesend in March resulted in 202 cancellations. CaSL failures due to signal failures were up 66%. Two such signal failures at Lewisham in January resulted in 300 cancellations. Finally, a landslip at Barnehurst resulted in 209 cancellations.

CaSL failures attributed to Southeastern decreased by 16% this quarter. A 42% decrease in fleet caused CaSL failures was offset by a 48% increase in external incidents attributed to the operator. CaSL failures caused by other operators increased by 67%, but the overall impact of operators remains small.

Figure 3.21: PPM and CaSL, Southeastern, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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.

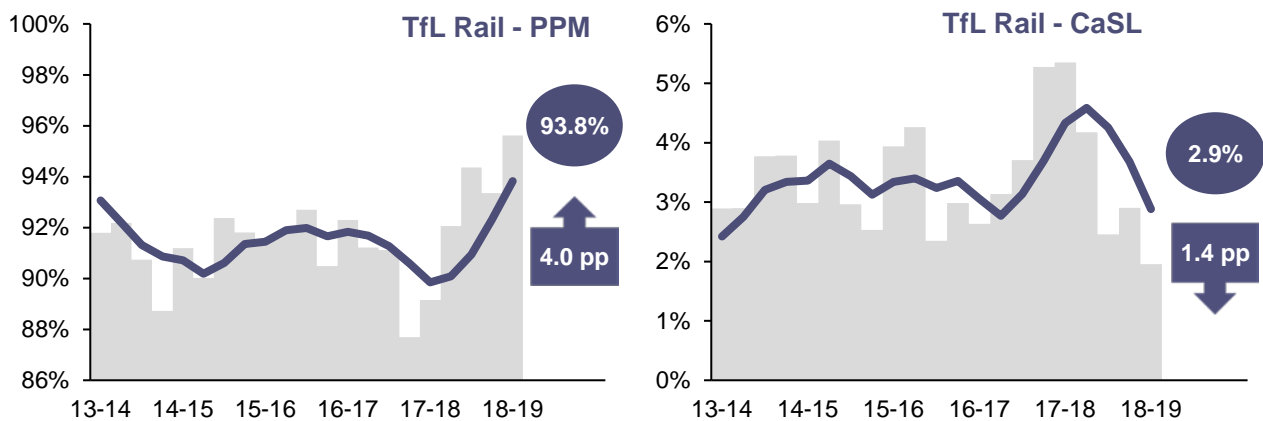
TfL Rail

Punctuality (PPM) in Q4 was 95.6%. This was 6.5 pp better than in 2017-18 Q4, and is the best Q4 PPM since the time series began in 2010-11. The MAA stands at 93.8%, which has improved by 4.0 pp compared with a year ago and is the highest it has been since 2012-13 Q2.

Reliability (CaSL) in Q4 was 2.0%. This was 3.4 pp better than in 2017-18 Q4 and the best (lowest) Q4 CaSL since 2010-11. The MAA stands at 2.9%, which is down 1.4 pp compared with 2017-18 Q4.

Due to the transfer of Heathrow Connect services to TfL Rail in May 2018, it is not possible to assess changes in PPM failures by cause of delay, as the data have not been remapped to match the franchise that exists today.

Figure 3.22: PPM and CaSL, TfL Rail, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (LSE)

- Services between London Liverpool Street and Shenfield.
- Services between London Paddington and Heathrow Airport.

TfW Rail

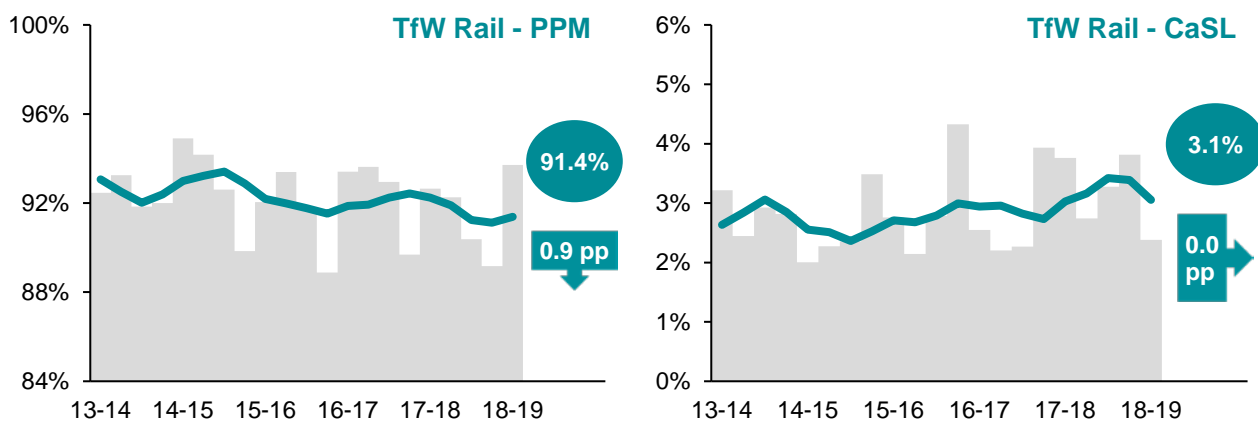
Punctuality (PPM) in Q4 was 93.7%. This was 1.0 pp better than in 2017-18 Q4. The MAA stands at 91.4%, which is down 0.9 pp compared with a year ago.

Reliability (CaSL) in Q4 was 2.4%. This was 1.4 pp better than in 2017-18 Q4. The MAA stands at 3.1%, which has slightly worsened compared with 2017-18 Q4.

PPM failures attributed to Network Rail fell 22% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to bad weather fell by 70%, while PPM failures due to fatality and trespass incidents fell 19%. However, signal failures resulted in 57% more PPM failures this quarter.

PPM failures attributed to TfW Rail decreased by 7% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures attributed to operations fell by 64% this quarter; however, PPM failures due to train crew problems increased by 27%. PPM failures due to other operators increased by 31%.

Figure 3.23: PPM and CaSL, TfW Rail, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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.

TransPennine Express

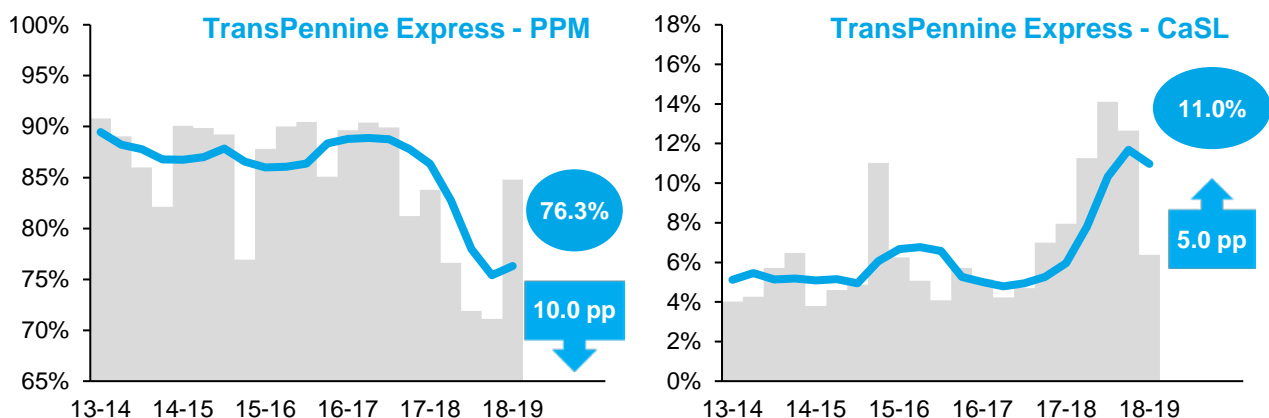
Punctuality (PPM) in Q4 was 84.8%. This was 1.0 pp better than in 2017-18 Q4, but still the second lowest Q4 PPM since the time series began in 2009-10. The MAA stands at 76.3%, which has worsened by 10.0 pp compared with a year ago.

Reliability (CaSL) in Q4 was 6.4%. This was 1.6 pp better than in 2017-18 Q4, but still the second highest Q4 CaSL since the time series began in 2009-10. The MAA stands at 11.0%, which has worsened by 5.0 pp since 2017-18 Q4.

The number of services operated by TransPennine Express has increased during 2018-19. Despite this, there was a 40% fall in CaSL failures attributed to bad weather and 47% fall in CaSL failures due to track faults in 2018-19 Q4. However, CaSL failures due to fatality and trespass incidents increased from 54 in 2017-18 Q4 to 232 in 2018-19 Q4. Incidents this quarter near Durham, Mirfield, Darlington and Dewsbury resulted in 161 cancellations to all operators.

CaSL failures attributed to TransPennine Express increased by 50% between 2017-18 Q4 and 2018-19 Q4. Train crew caused CaSL failures increased by 131%, whilst fleet CaSL failures increased by 109%. CaSL failures caused by other operators increased by 10%.

Figure 3.24: PPM and CaSL, TransPennine Express, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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 West Coast

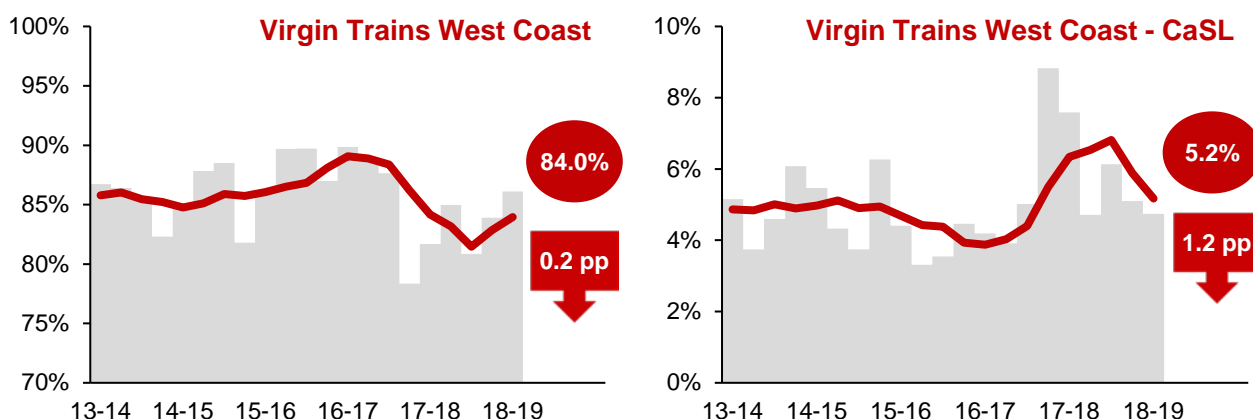
Punctuality (PPM) in Q4 was 86.1%. This was 4.4 pp better than in 2017-18 Q4. The MAA stands at 84.0%, which has worsened by 0.2 pp compared with a year ago.

Reliability (CaSL) in Q4 was 4.7%. This was 2.9 pp better than in 2017-18 Q4. The MAA stands at 5.2%, which has worsened by 1.2 pp compared with a year ago.

CaSL failures attributed to Network Rail decreased by 21% in 2018-19 Q4 compared with Q4 in 2017-18. CaSL failures due to bad weather (down 84%), trespass and fatality incidents (down 29%) and track faults (down 38%) all fell this quarter. However, overhead line equipment faults caused 68% more CaSL failures including 38 cancellations to all operators resulting from a fault near Lichfield in January. A further 87 cancellations occurred in February when a vehicle struck a bridge near Stafford.

CaSL failures attributed to Virgin Trains West Coast decreased by 70% in 2018-19 Q4 compared with 2017-18 Q4. Most of this was due to a 72% reduction in fleet caused CaSL failures. CaSL failures due to other operators fell by 38%.

Figure 3.25: PPM and CaSL, Virgin Trains West Coast, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



Route Information (Long Distance)

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

West Midlands Trains

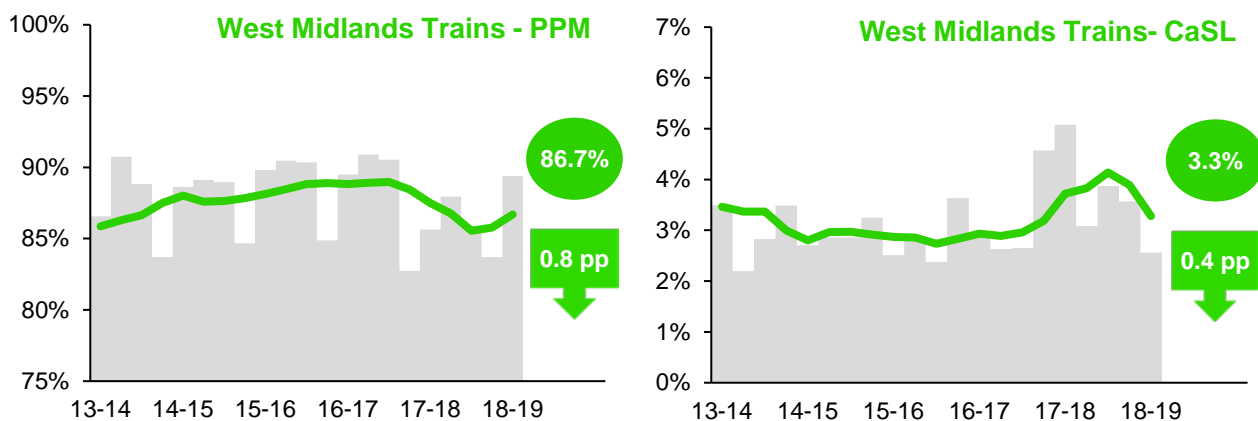
Punctuality (PPM) in Q4 was 89.4%. This was 3.7 pp better than in 2017-18 Q4. The MAA stands at 86.7%, which has worsened by 0.8 pp since 2017-18 Q4.

Reliability (CaSL) in Q4 was 2.6%. This was 2.5 pp better than in 2017-18 Q4. The MAA stands at 3.3%, which has improved by 0.4 pp compared with a year ago.

PPM failures attributed to Network Rail decreased by 21% in 2018-19 Q4 compared with Q4 in 2017-18. This included a 21% fall in unexplained and uninvestigated PPM failures, while PPM failures due to bad weather fell from 1,825 in 2017-18 Q4 to 203 in 2018-19 Q4. Signal failures (up 28%) and overhead line equipment failures (up 56%) caused more PPM failures this quarter. An overhead line fault near Lichfield in January resulted in 11,600 delay minutes to all operators, whilst 18,600 delay minutes were accrued in February by a vehicle hitting a bridge near Stafford.

PPM failures attributed to West Midlands Trains decreased by 28% in 2018-19 Q4 compared with 2017-18 Q4. PPM failures due to fleet (down 28%), train crew (down 16%) and external causes attributed to the operator (down 49%) decreased this quarter. PPM failures attributed to other operators decreased by 30%.

Figure 3.26: PPM and CaSL, West Midlands Trains, 2013-14 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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.

4. Freight Delivery Metric

FDM will be moving to the Freight Usage and Performance Release from 2019-20 Q1.

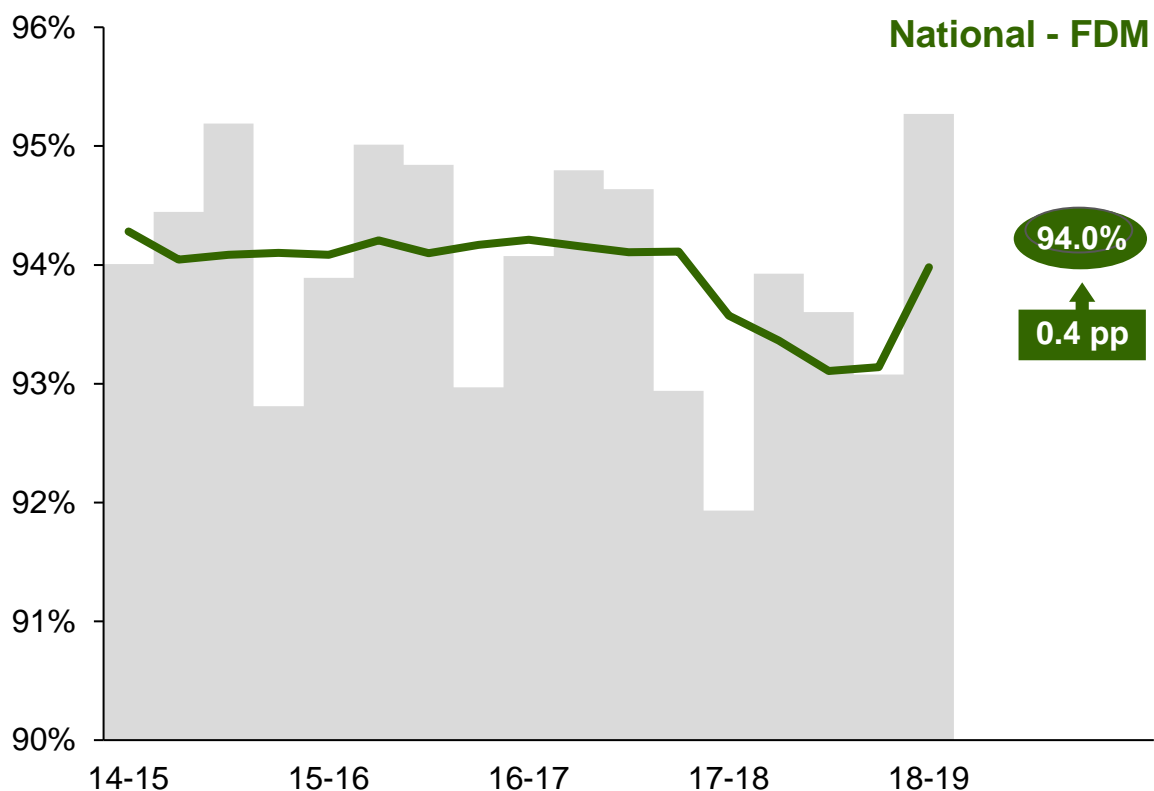
The **Freight Delivery Metric (FDM)** is the percentage of freight trains that arrive at their destination within 15 minutes of their scheduled arrival time. Freight trains are only considered to have failed FDM where the delay was caused by Network Rail. The **moving annual average (MAA)** reflects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

FDM in Q4 was 95.3%. This was 3.3 pp better than in 2017-18 Q4. The MAA stands at 94.0%, which has improved by 0.4 pp since 2017-18 Q4.

Figure 4.01: FDM, National, 2014-15 Q4 to 2018-19 Q4 (change shown is MAA for 2018-19 Q4 on 2017-18 Q4)



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 2017-18 (annual) and 1997-98 Q1 to 2018-19 Q4 (quarterly) – [Table 3.43](#);
- PPM (MAA) by sector, 1997-98 Q4 to 2018-19 Q4 (quarterly) – [Table 3.42](#);
- PPM by TOC, 1997-98 Q1 to 2018-19 Q4 (quarterly) – [Table 3.44](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2018-19 Period 13 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper))

CaSL

- CaSL by sector, 1997-98 to 2017-18 (annual) and 1997-98 Q1 to 2018-19 Q4 (quarterly) – [Table 3.6](#);
- CaSL (MAA) by sector, 1997-98 Q4 to 2018-19 Q4 (quarterly) – [Table 3.5](#)
- CaSL by TOC, 1997-98 Q1 to 2018-19 Q4 (quarterly) – [Table 3.7](#)
- Disaggregated PPM at sub-operator level, 2010-11 Period 1 to 2018-19 Period 13 (periodic) – [Data Portal](#) ([Table 3.9](#) (All TOCs) to [Table 3.29](#) (Caledonian Sleeper))

FDM

- FDM, 2013-14 Q1 to 2018-19 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 2018-19 was 61.4%. This compares with a national PPM score of 86.3%.

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 Network Rail's Annual Return on the [Network Rail website](#). This reports Network Rail achievements, developments, and challenges for each financial year and the historical record of Network Rail stewardship.

Revisions

There have been no revisions to the previously published dataset. Further details on historic revisions to the data set can be found on the [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, Targets and European Comparisons

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 2018-19, 7/28 of the data are assigned to Q1 (covering 24 June to 30 June) and 21/28 of the data are assigned to Q2 (covering 1 July to 21 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 2017-18 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 most recent Monitor covering periods 1 to 7 of 2018-19 was published on 29 November 2018.

European Comparisons

[Comparisons with railways in the rest of Europe](#) are available for the calendar years 2014 to 2016. For trains in Scotland and the Regional and London and South East sectors, 87.8% of services in 2016 arrived within five minutes of their scheduled arrival time at their final destination. This ranks Britain 19th out of 25 countries. For long distance services, 77.5% arrived within five minutes of their scheduled arrival time at their final destination. This ranks Britain 15th out of 23 countries.

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](#) (West Midlands Trains). 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, Stansted Express, and WA Outer excluding Stansted Express
- Long Distance: Intercity

West Midlands Trains:

- London and South East: LSE
- Regional: Regional

Changes to Train Operating Companies

Transport for Wales Rail (TfW Rail), which is operated by Keolis Amey Operations, replaced Arriva Trains Wales as the operator of the Wales & Borders franchise on 14 October 2018.

TfL Rail took over the Paddington to Hayes & Harlington and Heathrow Airport routes from Great Western Railway on 20 May 2018 in preparation for the linking up of Crossrail. This means that from 20 May TfL Rail operated more trains and Great Western Railway operated fewer.

London North Eastern Railway began operating the East Coast franchise on 24 June 2018. It was previously operated by Stagecoach and Virgin, and was previously referred to in this publication as Virgin Trains East Coast. London North Eastern Railway is owned by the Department for Transport (DfT) and is operated by the DfT's operator of last resort, a consortium of Arup Group, Ernst & Young, and SNC-Lavalin Rail & Transit.

Timetable change 20 May 2018

Twice every year, in May and December, a new system-wide timetable is produced for the railway network. In May 2018 on some routes and for some operators this change caused disruption, in particular for Govia Thameslink Railway, Northern, and TransPennine Express. This timetable change occurred halfway through Q1 (which covers April, May, June), and so will have had an impact on the PPM and CaSL figures for that quarter.

The ORR conducted an inquiry into the disruption caused by the timetable change. The [final report](#) was published on 20 September 2018.

Annex 4 – Statistical Releases

This publication is part of ORR's [National Statistics](#) accredited statistical releases which consist of annual and quarterly themed releases:

Annual

- Rail Finance
- Rail Fares Index;
- Rail Safety Statistics;
- Rail Infrastructure, Assets and Environmental;
- Regional Rail Usage;
- *Estimates of Station Usage (not National Statistics).*

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 Lyndsey Melbourne on 020 7282 3978 or contact rail.stats@orr.gov.uk.

The Department for Transport (DfT) also publishes a range of rail statistics which can be found at [DfT Rail Statistics](#). For example, Rail passenger numbers and overcrowding on weekdays in major cities.

Transport Focus publish the [National Rail Passenger Survey](#) (NRPS).

Annex 5 – Proposed changes to rail performance statistics – please give us your feedback

We are proposing to make a number of changes to our rail performance statistics, including changes to the content of this statistical release and associated data tables. Our proposals are set out below.

The reason for these changes is to reflect a new set of punctuality and reliability performance measures developed by the rail industry to improve rail performance and therefore increase customer satisfaction⁶.

ORR has been publishing the outputs of some of these new performance measures in a Factsheet. The latest 2018-19 factsheet can be found under *Factsheets* on the statistical release page of the [ORR website](#). ORR also publishes data tables on the following new measures periodically: **Train Punctuality at recorded station stops** ([Table 3.65](#)), **Cancellations** ([Table 3.66](#)), and **Severe Disruption** ([Table 3.67](#)).

Proposals

In the next rail performance quarterly statistical release, 2019-20 Q1 (April to June 2019), on 19 September 2019, we propose to include:

1. **Train punctuality at recorded station stops** - quarterly 'On Time', 'Time to 3' and 'Time to 15' by train operating company (TOC) and sector;
2. **Train cancellations** – quarterly by TOC, sector and cause;
3. **Public Performance Measure (PPM)** – quarterly by TOC and sector.

We propose to make changes to the following content in the statistical release:

4. Cancelled and Significantly Lateness (CaSL) – This will be replaced by statistics on the new train cancellations measure.
5. Freight Delivery Metric (FDM) – national. These statistics will be moved to our (renamed) *Freight usage and performance* release from 2019-20 Q1.

To complement the above changes to the statistical release, we propose the following changes to [published data portal tables](#):

6. Introduce new tables on train punctuality at recorded station stops (quarterly by TOC and sector), On Time at recorded stops (periodic by station), train cancellations (quarterly and periodic by TOC, sector and cause), FDM-Route (periodic by Route) and Consistent Rail Measure – (Passenger) Performance (CRM-P) (periodic by Route).
7. Discontinue and archive quarterly CaSL tables, 3 temporary speed restriction tables, and some previously discontinued tables.
8. Combine the content in a number of tables e.g. for PPM and CaSL.

⁶ <https://www.raildeliverygroup.com/media-centre/press-releases/2019/469775562-2019-03-22.html>

Further details regarding proposed changes to published data tables can be found [here](#).

Once future changes to Network Rail Routes and Regions have been fully worked through, we will review and make the necessary changes to the format and content of some of the data portal tables.

Questions for feedback

Please provide us with any feedback on the proposed changes to the rail performance statistics (in the release and associated tables). In particular, we would welcome feedback in response to the following questions:

- a) Do the rail performance measures which we are proposing to include in the 2019-20 Q1 statistical release meet your needs? Are there any other measures you would like us to include?
- b) Are the proposed levels of disaggregation for each measure at an appropriate level e.g. by TOC? If not, what level would be appropriate?
- c) TOC analysis – Do you find the TOC level analysis and supporting commentary in the current quarterly rail performance release (pages 10 to 33) useful? Would you value the presentation of this information in a more interactive format e.g. PowerBI, outside of the release? If the current level of detailed TOC analysis commentary was provided on an annual (rather than quarterly) basis, would this continue to meet your needs?
- d) Do you have any objections to the content we are proposing to remove from the statistical release and/ or associated data tables (e.g. quarterly CaSL statistics)? If so, please explain why e.g. how you currently use the data.
- e) Do you have any views on our proposal to move the freight performance content in this release (page 34) to our (renamed) *Freight usage and performance* release?

Please send your feedback to rail.stats@orr.gov.uk by **30 June 2019**.



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