

2019/20 National Data Quality Results

October 2020



INTRODUCTION

This report provides a summary of national data quality as at the end of the 2019/20 financial year. The Data Quality Framework (DQF) developed by the Road Efficiency Group (REG) has been used as the basis for the analysis.

The results presented are based on the 2019/20 DQF metrics and have been analysed in terms of the financial year and trends since 2017/18.

A summary of the annual RCA results are available on the REG website and individual RCA metric results can be accessed via the RCA via the ONRC Performance Measure Reporting Tool (PMRT).

THE 2019/20 DATA QUALITY FRAMEWORK

The 2019/20 DQF combines the previously separate ONRC and asset management reports into a single asset management report of 62 active metrics spread across the three data quality dimensions, three importance levels and six data categories, including an overall Score.

Several changes have been made to the DQF in 2019/20 in response to feedback received from the sector. These are detailed on the [data quality project webpages](#) and the [online metric library](#).

Data quality has been analysed against the DQF through both a primary quality dimension and data category lens. The current suite of metrics for 2019/20 are the basis for the reported results, including the results for prior financial years, which will be different to the previously released annual results.

RESULTS

The table below shows the annual data quality results for all RCA's. The values reported are the percentage of metrics achieving the expected standard by year.

	2017/18	2018/19	2019/20	Last year change
All dimensions	57	64	67	3
Accuracy	60	66	68	2
Completeness	57	68	72	4
Timeliness	50	56	57	1

There has been an overall improvement in the sector's data quality over the reported period, however the gains in the last 12 months have been notably smaller than prior years. Between 23 March and 13 May 2020, the national COVID-19 alert system levels 3 and 4 restricted field activities, which will have impacted on some RCA condition and demand results. Nevertheless, there is still a significant opportunity for improvement in the metrics testing the quality dimension of timeliness.

KEY POINTS

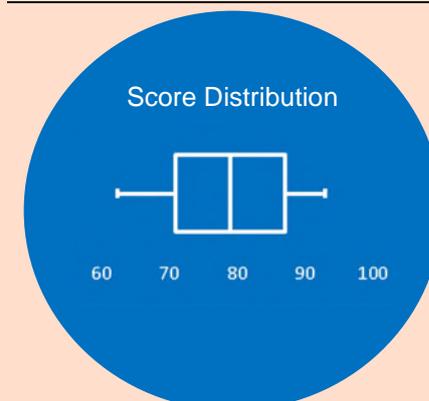
Annual Results 2019/20:

- ✓ Overall, the sector's data quality has improved, particularly for the completeness quality dimension.
- ✓ The level of improvement in the last 12 months is less than that achieved in the previous periods.
- ✓ The national COVID-19 alert system levels 3 and 4 restricted field activities during March – May 20, will have affected some RCA condition and demand results.
- ✓ There has been little improvement in the results by the bottom 10% of RCAs.

2019/20 Asset Management



Overall Asset Management "Score"

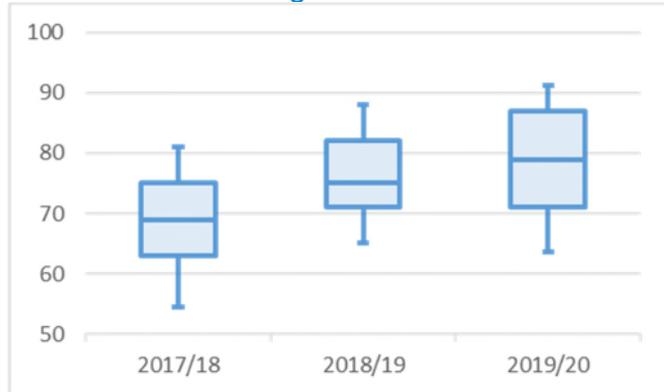


Overall, the sector's data quality continued to show improvement, however the gains in 2019/20 are notably smaller than prior years.

Asset Management Results by Dimension



Overall Asset Management Score Distribution



OBSERVATIONS

The following high-level observations are made:

- Overall, there has been a continued improving trend of metric results at the expected standard
- The level of improvement in the last 12 months has been smaller than prior years, particularly for the accuracy and timeliness data quality dimensions
- The proportion of metrics with potentially major issues increased in the last 12 months for the timeliness

CONCLUSION

The 2019/20 data quality results show the sector has achieved a small overall improvement, which is notably less than that achieved in previous periods. Between 23 March and 13 May 2020, the national COVID-19 alert system levels 3 and 4 restricted field activities, which will have impacted some RCA condition and demand results.

A large middle bunch of RCAs have shown a favourable result improvement, which has been offset by limited improvement by the high and low performing RCA's, that have hardly improved.

There is still opportunity for improvement to timeliness, and Asset Inventory and Maintenance Activity data.

REFERENCES

[Data quality framework overview](#)

[Understanding the data quality results overview](#)

[Overall asset management score calculation](#)

[Online metric library](#)

Overall, the sector's data quality has shown a small improvement in the last 12 months. There is still significant opportunity for improvement in timeliness. The distribution of the overall 'Score' results indicates there has been little improvement in the bottom 25% of RCAs.

AREAS OF IMPROVEMENT

Quality Dimension	Achievement	Indicator
Accuracy	Improved results in 2019/20.	🟢
Completeness	The greatest improvement in 2019/20 is in this dimension.	🟢
Timeliness	Marginal improvement in 2019/20 following a reasonable improvement in 2018/19. This dimension has the least results at the expected standard.	🔴
Data Category	Achievement	Indicator
Network	Results have further improved over the last 12 months.	🟢
Asset Inventory	Results have improved again in 2019/20. However, a quarter of RCAs potentially have major data issues.	🔴
Maintenance Activity	No change in overall results over the last 12 months.	🟡
Condition	A large proportion of results are at the expected standard. Annual variations may be linked to survey frequency and coverage, affected by Covid-19.	🟢
Demand/Use	A small improvement in results in 2019/20 with less metric potentially having major issues.	🟡
Crash	Results show a large proportion at the expected standard and a further improvement on the 2018/29 result	🟢