Doncaster Council
Data Quality Strategy
2016/17 - 2020/21

Better Data, Better Services

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Better Data, Better Services

1.0   Good data quality is essential to ensuring that the Council can maximise capacity, intelligence and performance, supporting services and the people it serves. The impact and future delivery of services is based on information from many different sources and good data quality will support high quality intelligence to inform decision making.

The Purpose and Scope of this Strategy

1.1   This four year Strategy is the high level document setting out the principles of data quality. It also states how we intend to improve the quality of information throughout the council to support the delivery of the priorities within the Borough Strategy and the Corporate Plan and intends to:

- Establish the methods that data quality will be assessed

- Enable high standards of data quality to be achieved

- Ensure that all employee's and members understand their contribution to, responsibilities and necessity of good data quality

1.2   The scope of this strategy includes:

- All manual and electronic systems where personal or sensitive data is recorded

- All systems and data informing Statistical Returns

- All systems and data used to calculate Key Performance Indicators

1.3   It does not include:

- The performance management of the priorities within the Borough Strategy and the Corporate Plan

The Importance of Data Quality

1.4   High quality data produced at the right time will create a 'no surprise' intelligent performance culture enabling the Council to make well informed decisions which takes account of and embraces risk, manages services effectively and accurately reports its achievements.

1.5   What this looks like is data that is complete, accurate, valid, reliable, timely and relevant (see 'The Six Principles of Data Quality' section 5.1). The data in our systems needs to have the key pieces of information that helps us deliver services in the most efficient way. The records contained within the council systems need to meet sufficient data quality standards so that the council can make the best use of the information available. An example would be:

- Consistent address format across systems – allows us to match records and helps us to join up services for residents. Incorrect address records make it difficult for us to confirm where individuals are living and the services that they receive.

1.6 Data Quality is important to the Council to support:

- Accurate and timely information to manage services and accountability

- Reduce the need to review or correct information which impacts on customers

- Good information to manage service effectiveness

- Business decisions that ensures the best use of resources in the delivery of services

- Consistent insight through business intelligence

1.7 Data Quality Outcomes:

- Decide how services need to be changed and improved

- Allocate resources to where they will provide the greatest benefit

- Formulate strategies and policies to improve service delivery

- Integral to a 'Commissioning Council' where services are commissioned in a way which benefits not just the users of services but other residents as well

- Give residents the confidence that we are providing value for money

- Demonstrate excellent performance

- Meet requirements of the Code of Recommended Practice for Local Authorities on Data transparency

Information Governance

2.0   This strategy does not impose new obligations, but reflects current legislation, regulations and policies. It is informed by:

Information Security

2.1   Information security is the responsibility of everyone regardless of whether they are employed by a public authority, voluntary agency or business. Principle 7 of the Data Protection Act 1998 specifically states that 'appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data'.

2.2   It is the responsibility of all staff handling personal data to ensure they are familiar with and follow the processes and procedures implemented within their agency regarding information security.

2.3   Information security not only refers to the responsibilities relating to personal data but includes; non-personal data such as commercially sensitive and business sensitive information that also requires protection. It also covers the principles of ensuring that business systems and networks are protected against computer viruses.

Information Sharing

2.4   The Data Protection Act 1998 regulates the holding and processing of personal data i.e. information relating to living individuals. Data controllers must comply with the eight data protection principles which together form a framework for the proper handling of personal data.

2.5   Since April 2010 the Information Commissioner has had new powers to impose significant fines on businesses that have seriously breached the data protection principles; this includes illegal sharing of personal data. It is, therefore, imperative that data sharing protocols are implemented where necessary.

2.6   The Team Doncaster - Tier 1 Information Sharing protocol (Partnership Data Sharing Strategy) has been developed to establish a framework for sharing information.

Records Retention

2.7   Section 46 of the Freedom of Information Act 2000 and Principle 5 of the Data Protection Act 1998 puts a legal responsibility on the Council to have mechanisms in place to manage its records. This includes ensuring that information is disposed of when it is right and legal to do so, which is achieved by embedding an effective Data Retention Policy and an associated Retention Schedule.

Information Governance Standards

2.8   The Information Governance Toolkit is commissioned by the Department of Health Policy. It is an online system that draws together the legal rules and central guidance and presents them in in a single standard as a set of information governance requirements against which assessments can be made. The organisations, including councils, which are in scope, are required to carry out self-assessments of their compliance against the IG requirements. It also allows members of the public to view participating organisations' IG Toolkit assessments.

2.9   Once Doncaster has achieved the Level 2 standard required by the toolkit the council will be able to receive public health data from HSCIC. The council will also be able to share more data with NHS organisations, to support integrated health and social care commissioning.

Further Guidance

2.10   Further related guidance is available through the Councils Policies including:

- Information Management Strategy
- Technical Security Policy
- Data Retention and Disposal Policy

2.11   A suite of e-Learning modules, some of which are mandatory, are also available covering Introduction to the Data Protection Act; Data Protection Awareness; Records Management and Information Governance

Quality Data – Everyone's Responsibility

3.0 Consistent high quality data is reliant on embedding behaviour and culture within the organization in which all members of staff are aware of their roles and responsibilities.

3.1 Every person working in the council has a duty to support good quality data in the following ways: -

- To record information as they receive it;
- To check that it is fully recorded without errors in the correct format; and
- To ensure that they are aware of all data procedures and standards relevant to their work.

Key Roles & Responsibilities

3.2 Within the council, roles and responsibilities for ensuring data quality have been assigned as follows:

3.3 **All Staff within the Council**

- To complete the appropriate eLearning modules
- To ensure that information collected recorded and produced is of an appropriate high quality
- To apply corporate data quality standards consistently

3.4 **People Managers**

- To ensure that all staff are aware of their responsibilities in respect of data quality and to ensure that policies and procedures are in place and followed rigorously and that appropriate training is undertaken.

3.5 **Senior Leadership Team**

- To communicate the high importance of data quality across the organisation
- Co-ordinating the corporate reporting process across their service area(s)

3.6 **Heads of Service/Information Asset Owners**

- To prioritise support for business critical systems and data requiring quality assurance
- To ensure that identified data quality problems are resourced and solved
- Responsible for the completion of the Self-Assessment Tool for all statutory returns which will link to systems in their areas

3.7 **Performance PI Owners/Returns Co-ordinators**

- General information on key PIs, including ownership and deadlines

- To understand the definition of the returns and measures for which they have responsibility
- To collect data according to definitions and report it on time
- To complete data quality self-assessments for all statutory returns and address areas of weakness

3.8 Strategy & Performance Unit

- To support and challenge across the council in measuring, recording, reporting and interpreting performance data
- To liaise with PI Owners and Return Co-ordinators in meeting self-assessment requirements
- Communicating, across the council, messages relating to data quality as it affect service performance and improvement.
- Co-ordinating the delivery and refresh of the Data Action plan.

3.9 Information Governance Team

- Are responsible for information management policy and strategy and records managements – paper as well as data and systems information

3.10 ICT

- To advise on data security, integrity and legality
- To ensure that procurement of systems includes data quality standards
- Specify the technical set-up of all business systems to ensure they all link up with the required datasets that will ensure quality including land and property gazetteer
- Ensure data is technically stored and organised as required
- Responsible for all electronic data security

3.11 Internal Audit

- To carry out a programme of independent audit on a selection of "at-risk" PIs, Returns and systems to test and challenge arrangements, based upon the results of individual data quality self-assessments

3.12 Senior Information Risk Owner (SIRO)

- Responsible for the information risk profile of the organisation
- Responsible for the identifying risks relating to data and information for the organisation
- Responsible for appropriate mitigations so that the risks can be accepted
- All data quality concerns or issues with potential solutions should be reported to the SIRO Board for awareness, consideration and agreement.

3.13 Business Analyst Support

- To support the quality assurance of systems and data

Existing Problems Surrounding Data Quality

- Data is not always being recorded as it is received;
- Data is not always being recorded without errors,
- Data is not always recorded in the correct format; and
- Data that is being used for the same purpose is not always being stored consistently.
- Data is manipulated outside of collection systems e.g. in spread-sheets

Impacts

4.1   Poor data quality is not acceptable due to the impacts which could arise from the use of unreliable customer and/or performance information, including:

- Mistakes/delays in providing services
- Inaccuracies leading to customer dissatisfaction
- Failure to spot and address performance concerns
- Unnecessary costs
- Poor quality business intelligence

Benefits

4.2   Despite data quality processes being in place, it is clear from what has been stated above, that these are not yet fully effective within the council. This strategy aims to put data quality at the heart of managing our performance effectively by embedding activity which changes behaviours and culture. The benefits of doing so will include:

- Officer time currently used to validate large amounts of data could be saved and used instead to deliver and improve services;
- Officers will have a clearer understanding of the benefits of good data quality and the impacts of poor data quality
- Managers will make decisions using more reliable data, increasing the likelihood that good quality decisions will be taken on behalf of the people of Doncaster;
- Performance information provided to government will give a more accurate reflection on the performance of the council.
- Improved outcomes
- Informed service transformation and improvement
- Better measurement of the effectiveness of strategies
- Better business intelligence

Our Commitment to Data Quality

5.0 **"Data should be right, first time, on time"**

The Six Principles of Data Quality

5.1   As a council we are committed to six basic elements within this Strategy to ensure that the data that we produce can be recognised as 'Quality' data. These are as follows:

Complete	Data gives you the whole picture. Incomplete data may be acceptable if you have a representative sample. We cannot afford to omit some of the users of a service.
Accurate	Data is error-free to present an honest reflection of performance and enable informed decision-making at all levels. We can't deliver services to someone whose address is out of date because they've moved.
Valid	Data conform to a clear and unambiguous definition. Addresses are taken from a single address list and have a common format.
Reliable	Data have trusted sources and consistent collection methods. Managers and stakeholders alike should be confident that changes in data reflect real changes in what is being measured not random fluctuation or variations in data collection methods. We must make sure that we provide the right services to people who need them most.
Timely	Data must be available for intended use when needed, soon after collection. Other staff may need to use the information we record, particularly when delivering complex services.
Relevant	Data must apply to the context in which they will be used. We do not need to record everything about a service user only that which will enable us, or others, to deliver an excellent service.

What needs to be in place for Doncaster?

5.2   In order for the six principles of data quality to be met, as a Local Authority we must:

- Create a 'right first time' culture
- Better ownership and chains of responsibility
- Use information in a timely and effective manner
- Measure the things that matter
- Target support where it is most needed
- Continually test, challenge and review

5.3   To do this we need to ensure that: -

✓ • Effective systems, policies and procedures need to be in place to ensure the highest possible data quality.

✓ • The right people with the right skills are in place to ensure timely and accurate performance information

✓ • Arrangements are made at senior level to secure the quality of data.

✓ • Staff are clear as to their responsibilities towards data collection, distribution and quality.

✓ • Controls are in place to ensure that we meet what is expected of us.

✓ • Data is stored, used and shared in accordance with all relevant laws, including the Data Protection Act and the Freedom of Information Act.

How will we do this?

5.4 **Policy Sign off -** To strengthen the Councils management of key governance policies the Corporate Governance Group has agreed a list to be managed via the Councils performance management system. The Data Quality Strategy will be included in this list, and the Chief Executive, Directors and Heads of Service and people mangers will be required to sign it off. In signing off the policy each person is confirming that they agree to adhere to the new strategy and embed the activity defined within. Monitoring of compliance to policy sign off is incorporated into the completion of the Annual Governance Statement.

5.5 **The Quarterly and Annual Performance Cycle** - Data quality has been identified as a strategic risk, in that failure to improve Data Quality will prevent us from ensuring that data relating to key Council and Borough priorities is robust and valid. The level of risk and progress against agreed actions are reviewed as part of the Council's Performance Management Framework and recorded on the performance management system.

5.6 **A Data Quality Action Plan** - A data quality action plan (section 6.) outlines the activities that will take place to improve the council's arrangements to secure better quality data. This plan will be reviewed and refreshed in consultation on an annual basis. Key activities include:

- Development and implementation of Data Quality eLearning module

- Develop data quality standards - The use of data standards within systems can greatly improve data quality. These can be incorporated into existing or as new systems are procured using either electronic selection lists or manually generated lists for example on data collection forms. Either method requires that the lists must be generated from national or locally agreed definitions and must be controlled, maintained and updated through strict agreed procedures.

- Identification of master datasets that will be authoritative for the Council.

- "Golden Record" - Items such as Unique Reference Numbers (URN) and Date of Birth are essential to ensure that service users are identified correctly. Other items such as address, ethnicity, disability etc. to enable the Council to develop a single customer record.

5.7 **Data Quality Self-Assessments** - The self-assessment tool is designed to facilitate making an assessment of the quality of the data that is currently held and used to produce statistical returns. Metropolitan Councils are currently required to submit around 160 data returns to government, some of which are submitted quarterly or monthly. The returns are also the source of some of the Councils' key PI's.

5.8 In order to prioritise assessment of the Councils data quality, it is proposed that:

- In the first instance there will be an assessment of data collections that have known data quality issues linked to the council's key systems and data collections that have key performance indicators calculated from them. Assessments will be rolled out to assess all other data collections by all Heads of Services once the assessment process is embedded for the priority collections and services;

- This will take the form of a self-assessment process that will be developed and implemented using a Data Quality Assessment Tool. As criteria are assessed, a data quality score will be calculated – such as the higher the score the higher the likelihood of poor quality data. An overall data quality score will be calculated and displayed.

- Data quality assessment will be a continual process with the first assessments taking place in Q1 each year, rather than at the end of Q4 as previous assessments have been carried out. By identifying risks to the quality of Statutory Returns and systems data at the beginning of the annual collection period, action can be taken to address risks as the data is collected, rather than finding out the data is flawed at the end of the collection period, when it is too late to address issues.

- Be repeated, on a Quarterly basis, for any criterion that scored amber or red data quality ratings in the preceding Quarters. These will need to have action plans developed, to address the issues that make the data quality risk score high.

5.9　　**A Systems Approach to Quality Assurance** - The process for tackling data quality issues can be represented as an iterative cycle of activities. The model describes these activities to facilitate the review of current systems and prioritise for analysis,　　cleansing, establishing validation and monitoring.

5.10　　It is expected that Heads of Service and Information Asset Owners will lead in this systems approach, incorporating self-assessments scores, business knowledge and evidence based on existing validation reports. They will be responsible for scoping the planned activity and expected outcomes and measurements and co-ordinating the required resources.

Systems Approach to Quality Assurance

Discovery
- Identify key systems, in scope datasets
- Test against agreed standards including: "Golden Record"; mandatory fields, reporting requirements, data sharing requirements, duplicate/orphaned/incomplete/ missing records
- Investigate and assess effectiveness of current data quality validation
- Assign current data quality score (such as completion of Self-Assessment Tool)
- Identify source/cause of poor data quality

Analysis
- Assess the level of risk and impact on the business
- Assessment against statutory requirments (Data Protection, Single Data List, service specific legisation and guidance)
- Assessment against business rules and service processes
- Consider the options to address the issues

Cleansing
- Clearly identify and implement required activity to improve data quality at source, such as:
- staff training and development
- development of validation reports
- system amendments and development
- complete data repairs

Validation
- Confirm that cleansing activity has improved data quality as expected
- Establish regular validation process

Monitoring
- Reassess against Discovery & Analysis criteria
- Complete/Update Self-Assessment

Data Quality Action Plan 2016/17

6.0 A series of actions have been devised to improve the council's Data Quality arrangements during 2016/17.

6.1 There is an expectation that the Senior Leadership Team, Heads of Service and all People Managers will have a significant role in embedding the strategy and the delivery of the activity within the plan.

6.2 All staff will need to ensure that they understand what is meant by good data quality and how they contribute to it and apply the principles in their day to day work.

6.3 We will know that quality has improved when:

- Better ownership and chains of responsibility can be measured from the policy sign off and completion of eLearning module
- Targeting support where it is needed most through the systems approach improves quality assurance and scoring
- Continued testing, challenge and review from the complete self-assessments indicates progress

6.4 This action plan will be reviewed every quarter in order to ensure that continual improvements in the quality of our data is sought and the action plan will be refreshed on an annual basis throughout the four year strategy.

6.5 The level of risk and progress against agreed actions will be reviewed as part of the Council's Performance Management Framework and reported against the Data Quality Strategic Risk.

6.6 The Action Plan will be monitored via regular reporting to the Business Intelligence Board.

Policy Sign Off		
Action	**Complete By**	**Lead(S)**
Notification of Data Quality policy sign of via the Councils Performance Management system	**End of October 2016**	**Strategy & Performance Unit**
Policy sign off	**End of March 2017**	**All Managers**
Development and completion of Data Quality eLearning module	**End of December 2016**	**Strategy & Performance Unit/ All staff**

Data Quality Self-Assessment		
Action	**Complete By**	**Lead(S)**
Review and strengthen the data quality assessment process and tool	**End of November 2016**	**Strategy & Performance Unit**
Actively promote and deliver Data Quality self-assessment training to all Heads of Service/Information Asset Owners/PI Owners & statutory return co-ordinators on: • Their responsibilities in meeting self-assessment requirements and how to use the self-assessment tool • Action plan requirements for those that are assessed at risk	**End of February 2017**	**Strategy & Performance Unit/ Heads of Service /Information Asset Owners/ PI Owners & Returns Co-ordinators**
Complete self-assessments for all statutory returns	**End of March 2017**	**Heads of Service**
Action plans to be completed for all key measures/ returns that have been assessed as at risk	**End of April 2017**	**Heads of Service**
Review self-assessments to be carried out for all key measures/returns that have been assessed as at risk	**Quarterly From June 2017**	**Heads of Service**
Review of action plans to be carried out for all key performance measures/returns that have been assessed as at risk	**Quarterly From June 2017**	**Heads of Service**
Information governance and quality assurance of systems and data		
Action	**Complete By**	**Lead(S)**
Update the Information Asset Register and record of Business System Owners	**End of October 2016**	**Information Asset Owners**
Develop data quality standards to be adopted by the council	**End of November 2016**	**ICT/Strategy & Performance Unit**
Promote and implement the LLPG as the default look up for address data as part of the data quality standards	**End of March 2017**	**ICT/Information Asset Owners**
Identification of master data "sets" that will be authoritative for the Council	**End of October 2016**	**ICT/Information Asset Owners**
Implementation of the single customer record as the "Golden Record" across key council systems	**End of March 2017**	**ICT/Information Asset Owners**
Complete and show compliance to Level 2 of the IG Toolkit • Develop plan for year on year improvement	**End of March 2017**	**Customer Services (Data Protection Officer)**
Using systems approach to quality assurance identify current systems and prioritise for analysis, cleansing, establishing validation and monitoring via the model (section 5.9 - 5.10) Progress quality assurance activity, completing dependant on scope and scale	**End of November 2016** **End of March 2017**	**Heads of Service /Information Asset Owners**

Data Quality Audit		
Action	**Complete By**	**Lead**
Undertake detailed audit testing of measures/ returns that score well or poorly against the Data Quality self-assessment and present results to Governance Group and Audit Committee.	**End of March 2017**	**Internal Audit and Information Asset Owners**
Target Data Quality support to service areas that score poorly against the Data Quality self-assessment	**End of March 2017**	**Internal Audit and Information Asset Owners**
Supporting The Decision Making Process		
Action	**Complete By**	**Lead**
Work Data Quality self-assessment information into Quarterly Performance reports to support use of data	**Quarterly From Quarter 4 (16/17)**	**Strategy & Performance Unit**
Emphasise Data Quality in Directorate Challenge meetings using the results of DQ self-assessments	**Quarterly From Quarter 4 (16/17)**	**Strategy & Performance Unit**
Review of the Action Plan for 2017/2018	**End March 2017**	**Business Intelligence Board**