Harrogate BOROUGH COUNCIL

Working for you

DATA QUALITY STRATEGY

June 2008

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1. INTRODUCTION

1.1 The purpose of this strategy is to outline how the Council aims to improve its approach to data quality.

1.2 The Council has always been committed to producing accurate, timely and relevant performance information. This strategy will ensure a consistent, corporate approach to data quality across the Authority.

1.3 The data quality strategy also aims to standardise the Council's approach to the calculating and collating of data on the diverse number and range of PIs, both national and local, used by the Council.

1.4 This strategy outlines the principles that underpin good data quality and the Council's approach to those principles. Although it refers to PI data in detail, the strategy should be applied to all council-owned data.

2. BACKGROUND INFORMATION

2.1 In January 2004, the Council was assessed as a "Fair" performing council following a **Comprehensive Performance Assessment (**CPA) Corporate Assessment by the Audit Commission. The Audit Commission's CPA framework puts considerable emphasis on performance data to decide the overall performance category of the Council. In order for the CPA rating to be valid it must be based on accurate and reliable performance data.

2.2 The CPA methodology for service assessments is now less dependent on on-site inspections and audit activity and more dependent on the effective use of performance information.

2.3 The Audit Commission also assesses the management arrangements for data quality as part of its annual audit and value for money assessment.

2.4 In June 2006, the Council adopted the following commitment to data quality:

The Council is committed to achieving high quality, timely and accurate data to inform the Strategic Plan and other corporate documents, reports, etc. To help meet this commitment, it is using the Covalent Performance Management Information System to capture, monitor and report performance data at all levels in the organisation.

Information and training on user roles, responsibilities and procedures on the management of data quality, have been used to sustain and enhance the Authority's culture on data management.

2.5 In addition, the Council's policy on data quality was set out and agreed in June 2006 and was made available to staff via the 'Users Permissions and Guidelines' leaflet for Harrogate's Covalent users.

2.6 The Council defines good quality data as data that is:

- **Accurate** – the data should display a reliable picture of performance in order to ensure informed-decision making
- **Reliable** – the data should be collected and analysed via a standard process
- **Relevant** – the data should be regularly reviewed to ensure that it is always relevant to the Council's corporate priorities
- **Valid** – data should be validated before it is submitted for decision-making processes
- **Timely** -the data should be made readily available as quickly as possible in order that decisions are based on current data. It is sometimes better to accept a degree of inaccuracy in favour of speed of data.

3. THE PRINCIPLES OF DATA QUALITY

3.1 The principles of data quality are outlined below:

Awareness – everyone recognises the need for good data quality and how they can contribute.

Definitions – everyone knows which PIs are produced from the performance information they provide and how those PIs are defined.

Input – there are controls over input, especially that the information is put into the database on an ongoing timely basis; rather than be stored up to input later.

Verification – there are verification procedures in place as close to the point of input as possible.

Systems – are fit for purpose and staff have the expertise to get the best out of them.

Output – performance indicators are extracted regularly and efficiently and communicated quickly.

Presentation – annual performance indicators are presented, with conclusive evidence, in such a way as to give an easily understood and accurate picture of our performance to officers, Members, external inspectorates and the public.

4. AWARENESS

4.1 Data quality is the responsibility of every member of staff, whether they are inputting, extracting or analysing data from any of the Council's information systems. Each member of staff should be aware of their responsibility in relation to data quality.

4.2 Some officers will play a greater role in data quality than others. These officers will usually be responsible for data quality on a specific system. However, it should be emphasised that all members of staff have responsibility for data quality.

4.3 Appendix I details the roles of responsibility for data quality.

4.4 It is important that all officers know how their day-to-day jobs contributes towards the production of performance indicators. All staff should be aware of the importance of these indicators and how any errors in calculations can impact on performance monitoring.

5. DEFINITIONS

5.1 All officers should have an understanding of any PIs affected by the data they contribute. The officer responsible for calculating the PI and their Head of Service must read and keep a copy of the official guidance. They must understand the numerator and denominator. The National Indicators have set definitions, these are stored against each PI on the Council's Covalent performance management system.

5.2 Local PIs must be clearly defined by the Head of Service. The definition and calculation for these local PIs needs to be stored on Covalent.

5.3 The Covalent system identifies the named officer responsible for collecting and reporting the performance information (shown as 'assigned to' on the system) for each PI. It is the responsibility of these officers to follow the guidance. Any amendments to the guidance will be disseminated via the Performance Manager. Covalent will be updated with the amendments via the software provider.

6. INPUT

6.1 Officers will be given adequate training on data systems prior to using them. System-generated figures are only as good as what is inputted into them. The aim should be 100% accurate, 100% of the time. Clear guidelines and procedures should be produced for officers for all systems.

6.2 Data should be entered on an ongoing basis, ie weekly data should be inputted on a weekly basis and not a monthly basis. This reduces the error rate and the need for complex verification procedures.

6.3 Controls should be in place to avoid double-counting. These should be specific for each system, in particular where more than one person inputs data. An example of this type of control is a clear division of responsibility, indicating who is responsible for each part of the data entry process.

6.4 Systems must record all relevant information. Each system needs to be evaluated to determine whether any other controls are necessary. For example, is there any possibility that a case could exist without it being recorded on the current system.

6.5 Data should be inputted onto one system only. If an officer is entering the same data into a number of Excel workbooks, the workbooks should be linked. This not only saves officer time but decreases the chance of errors.

7. VERIFICATION

7.1 Data verification is the responsibility of the relevant service department (see Appendix I). Advice and guidance is available from the Performance Manager.

7.2 Data requirement should be designed along the principle of 'getting it right the first time'. This avoids waste both in terms of officer time and money spent on cleansing data, interfacing between different information systems, maintaining multiple databases and outdated systems, maintaining multiple databases and outdated systems.

7.3 The Council has a number of robust information systems, nevertheless even these have possibilities for errors in data entry. The frequency of verification checks for these systems need to be aligned with the frequency for data reporting.

7.4 It is impractical to test the quality of all data. Instead, verification checks on a sample of the data should be undertaken.

7.5 A simple verification process may be to review of a sample of recent data against expectations, or a reconciliation of system-produced data with manual records if appropriate. Some systems may require more checks such as:

- data cleansing, e.g. to remove duplicate records or to complete missing information
- sample checks to eliminate reoccurrence of a specific error, eg checking one field of data that is pivotal for a PI against documentation, for a sample of cases
- test run of report output, to check the integrity of the query being used to extract the data
- spot checks, e.g. on external contractor information

7.6 Data that is provided from external sources also needs to be checked. A number of PIs are calculated by information provided by contractors. The

Council should work alongside contractors to ensure the data is correct.

7.7 A requirement to provide timely and accurate performance information should be made clear when entering into new contracts. Likewise, the contractor must be clear of their responsibility for data quality and how we will check their data.

7.8 There may be some problems in amending existing contracts to emphasise the commitment to data quality. In these cases the data should be regarded as high risk data and batch checks on this type of data should be signed off by the relevant officer.

7.9 Some performance indicators are provided directly by external agencies e.g. crime statistics. The Council should work with these agencies constructively wherever possible to provide assurance on data qualities and resolve any problems identified.

7.10 Internal Audit will independently check compliance with the management arrangements set out in the Strategy to ensure the Council meets legal requirements and conforms to good practice. This will involve selecting a sample of PIs to verify the definitions have been interpreted correctly and that the PIs have been calculated correctly.

8. SYSTEMS

8.1 Each system will have a named data quality lead officer responsible for data quality issues. These officers will have the following responsibilities:

- ensuring users are adequately trained, if appropriate this should include a formal training programme which is periodically evaluated and adapted to respond to changing needs
- there is security for accessing and amending the data if periodic tests of the integrity of the data are undertaken
- information management support is available to users
- system upgrades are made where necessary (including to accommodate amendments to PI definitions)
- the system meets the managers information needs
- the system can produce adequate audit trails
- actions recommended by external audit are implemented
- a set of written procedures, i.e. a user guide, exists for the purposes of extracting performance information
- a business continuity plan for the system exists to protect vital records and data

8.2 A named substitute officer will be nominated to deputise for the data quality

lead officer in his/her absence. Written procedures should be provided by the data quality lead so that someone can stand in hi/her absence to prevent a delay in performance information being made available.

8.3 Some of the Council's data systems may be considered to be 'high risk', ie:

- they contain a high volume of data/transactions
- technically complex PI definition/guidance
- inexperienced staff involved in the production of PI data
- systems being used to produce a new PI
- known gaps in the control environment

8.4 It is the responsibility of the data quality lead officer in each department to carry out a risk assessment on the departmental systems. The assessments must be sent to the Performance Manager for approval.

8.5 The departmental risk assessments will be co-ordinated by the Performance Manager. A co-ordinated programme of improvement will be put together into a System Improvement Plan, in consultation with internal audit, to focus on the high risk systems.

8.6 The responsibility for delivering the System Improvement Plan will lie with the department but support will be available from the Performance Manager. The following actions will need to be taken for high risk systems:

- analysis of the control environment
- identification of gaps
- design and additional costs and procedures to address gaps
- preparation of an action plan
- monitoring of the implementation of the action plan

9. OUTPUT

9.1 Performance data should be timely and accurate. In order for performance data to be acted upon quickly by both Directors and Members, the data has to be presented to the final CMT meeting of the month following the quarter end, i.e. July for the first quarter etc.

9.2 The data has to be available quickly to give an accurate and timely indication of performance. The aim of the quarterly performance reports are to identify where performance is on target and to identify areas where improvements need to be made.

9.3 It is important that Heads of Service are satisfied that the data being presented to CMT and Members is accurate. Therefore, only Heads of

Service are able to 'activate' the national PI data on the Covalent system.

9.4 All performance reports should include a 'health warning' stating that the data is only accurate at the date of the report.

10. PRESENTATION

10.1 The reporting of accurate and timely performance information leads to good decision-making and improved performance. The national PI performance data is audited by an external body (the Audit Commission) and published nationally.

10.2 During external audits, there should always be at least one other service officer available to provide advice and information on the PI to the external auditors in the absence of the lead officer.

10.3 All year-end national PI submissions to the Performance Manager have to be submitted via Covalent, include working papers, and be signed off by the relevant Head of Service.

11. DATA SHARING

11.1 Performance data may only be shared with partners/the public after the data has been presented to Cabinet, Cabinet Member, appropriate Committee or after prior formal agreement with the portfolio owner has been reached.

11.2 Protocols for data sharing within partnerships should be defined at the start of any partnership work.

12. THE COUNCIL'S COMMITMENT TO DATA QUALITY

12.1 All those involved in the production of performance information as defined in this strategy should adhere to the principles of data quality. The Council is committed to ensuring that the data it provides to internal and external stakeholders is:-

- Accurate
- Valid
- Reliable
- Timely
- Relevant
- Complete

The principles of data quality ensure that the Council can carry out this commitment.

12.2 The Council's commitment to data quality is published in all of its key plans and strategies.

13. ROLES

13.1 Responsibility for delivering the Strategy is shared between a number of individuals and Groups:-

Cabinet
Is responsible for monitoring policy and monitoring the performance of the Council against its corporate objectives and targets

CMT
Has the responsibility of validating and endorsing the data and monitoring performance process and actions

Heads of Service
Responsible for setting the appropriate targets and indicators and ensuring the data is timely and accurate

Strategic Policy Officer
Has corporate responsibility for data quality and compliance with national and council standards

Performance Manager
Is responsible for the management of the Strategy and producing corporate reports and analysis

Business Support Managers
Responsible for applying the Strategy and ensuring compliance within their departments. Support to Directors and Heads of Service

Overview and Scrutiny Performance Panel
Has the overall responsibility for non-executive Members, input and comment on the performance of the Council

Officers
In addition to the specific responsibilities outlined above, it is the responsibility of all Officers to ensure the principles of the Data Quality Strategy are followed in carrying out their duties.

13.2 Appendix I sets out these roles in more detail.

Appendix I - Matrix of Data Quality Responsibilities

All with responsibility for Calculating PIs	Departmental data quality leads	Head of Service	Departments (Directors)	DCPI (Performance Manager)	Internal Audit	Strategic Policy Officer
Knowledge of relevant PI definitions and guidance Input accurate information Up-to-date record keeping (not entered in a block)	Maintain a robust control environment Identify and rectify gaps in control environment (calling on support from IA/DCPI as necessary) Training/guidance Provide information to Performance Manager so central record is kept	Responsible for ensuring the data contained in Covalent is accurate for their service	Overall responsibility for the reliability of performance information presented at CMT	Maintain list of DQ actions Co-ordinate risk assessment of systems, liaising with IA and DQ leads Co-ordinate programme of systems work, liaising with IA and DQ leads Checking that proposed improvements have been implemented Communicating the commitment to DQ Reporting progress on DQ to CMT/Performance Panel	Test compliance with the strategy Independently checks a sample of PIs to ensure they are accurate Makes recommendations to improve arrangements where appropriate	Responsible for data quality corporately