

South Cambridgeshire District Council  
Data Quality Audit Report 2006/07

December 2007

The Corporate Governance Committee  
South Cambridgeshire District Council  
South Cambridgeshire Hall  
Cambourne Business Park  
Cambourne  
Cambridge CB23 6EA

20 December 2007

Dear Sirs

## **SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL - DATA QUALITY AUDIT REPORT 2006/07**

This Data Quality Audit Report 2006/07 has been prepared in order to record the key matters arising from our audit. We have discussed our report with Greg Harlock, Chief Executive and Ian Salter, Performance Improvement Officer, who confirm its factual accuracy, although the views expressed are those of Grant Thornton. The scope and objectives of this report are further detailed in Section 2.

We would like to take this opportunity to thank Ian Salter, Performance Improvement Officer and other ~~officers staff and directors~~ for the co-operation and assistance afforded to us during the course of our audit.

Yours faithfully

Grant Thornton UK LLP

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# 1 Background

Public bodies are accountable for the public money they spend: they must manage competing claims on resources to meet the needs of the communities they serve, and plan for the future. The financial and performance information they use to account for their activities, both internally and externally, to their users, partners, commissioners, government departments and regulators, must be appropriate for these purposes, providing the level of accuracy, reliability and consistency required.

Considerable weight is attached to published performance indicators as the basis for reducing the burden of regulation and awarding freedoms and flexibilities. This has made reliable performance information, and the quality of the underlying data, significantly more important. Regulators and government departments need to be assured that reported information reflects actual performance. This will provide confidence that they are focusing on the key areas for improvement.

Auditors' work on data quality and performance information supports the Commission's reliance on performance indicators in its service assessments for comprehensive performance assessment (CPA). This delivers the commitment to reduce significantly the level of service inspection required.

Introducing the comprehensive area assessment (CAA) framework from 2009 will make reliable performance information more important. The CAA will place greater emphasis on assessments that are proportional to risk. Councils will also be required to use information to reshape services, and to account to the public for performance.

The responsibility for securing the quality of the data underpinning performance information can only rest with the bodies that collect and use the data. Producing data which is fit for purpose should not be an end in itself, but an integral part of a body's operational, performance management, and governance arrangements. Organisations that put data quality at the heart of their performance management systems are most likely to be actively managing data in their day-to-day business, and turning that data into reliable information.

This is the second year in which we have undertaken work on data quality in local government. Our work is complemented by the Audit Commission's paper, *Improving information to support decision making: standards for better quality data*. This paper sets out standards, for adoption on a voluntary basis, to support improvement in data quality.

The expected impact of our work on data quality is that it will drive improvement in the quality of local government performance information, leading to greater confidence in the supporting data on which performance assessments are based.

## 2 Scope and objectives

The Audit Commission has developed a three-stage approach to the review of data quality comprising:

All three stages of the review have been carried out at this Council.

**Table 1**

Stage 1	<b>Management arrangements</b> A review to determine whether proper corporate management arrangements for data quality are in place, and whether these are being applied in practice. The findings contribute to the auditor's conclusion under the Code of Audit Practice on the Council's arrangements to secure value for money (the VFM conclusion).
Stage 2	<b>Analytical review</b> An analytical review of 2006/07 BVPI and non-BVPI data, and selection of a sample for testing based on risk assessment.
Stage 3	<b>Data quality spot checks</b> In-depth review of a sample of 2006/07 PIs all of which come from a list of specified BVPIs and non-BVPIs used in CPA, to determine whether arrangements to secure data quality are delivering accurate, timely and accessible information in practice.

## 3 Conclusions

### Stage 1 – Management arrangements

The Council's overall management arrangements for ensuring data quality are currently adequate, although there is momentum for improvement through the Council's Improvement planning process. The Council has had a long-term focus on improving data quality, which it is looking to continue in the future. The Council's main strengths include:

- Responsibility for data quality is clearly defined at the Council, both at the strategic and operational levels;
- All staff are able to access operational procedures and guidance on the intranet. If needed, the Performance Improvement Officer can help support staff on the use of the performance management system;
- Corporate systems for the collection, recording, analysis and reporting of performance data are in place and are used for the day-to-day management of services as well as corporate reporting; and
- The Council have a commitment to improve data quality, which is defined within the Annual Performance Plan.

Areas in which the Council can improve include the following:

- No formal data quality strategy or associated delivery plan is in place although these are under development;
- There are no formal data quality protocols in place for sharing data with third parties;
- Some errors have been noted in the Stage 3 audit; and
- The importance of data quality is not embedded into corporate training arrangements.

### **Stage 2 – Analytical review**

Our analytical review work at stage 2 identified that the PI values reviewed fell within expected ranges. These results were reflected within the risk assessment completed to select the indicators for the Stage 3 audit.

### **Stage 3 – Data quality spot checks**

Our review and spot checks of BVPI 212 and the Percentage of planned to responsive repairs indicator found that both these PIs were fairly stated, with a minor amendment to the latter indicator to reclassify some items of planned expenditure from responsive repair expenditure.

We are pleased to note that the Council's arrangements for securing good data quality have improved in the year, and that the Council has plans in place to further improve these arrangements.

An action plan has been agreed with the Council (see Appendix) to address the issues arising from this review.



## 4 Management arrangements (Stage 1)

Overall, the Council's corporate arrangements for data quality are performing well.

### **Governance and leadership**

The Council has made progress in the following areas:

Responsibility for data quality is clearly defined:

- Strategic responsibility for data quality lies with the Chief Executive;
- Operational responsibility lies with the Corporate Managers, who delegate this responsibility to PI owners. The Performance Improvement Officer is available to provide help and support.
- Data Quality issues are considered by departmental managers; and
- Commitment to data quality is included in the Best Value Performance Plan. This commitment is actively promoted to officers.

The Council has clear and documented data quality objectives:

- Corporate objectives for data quality have not yet been formally defined, but departments do get messages on data quality from the Performance Improvement Officer; and
- There is no formal plan for improving data quality, but there is evidence that work is being undertaken and has been undertaken to improve data quality.

The Council has effective arrangements in place for monitoring and review of data quality:

- Data quality is considered within the risk register and risk monitoring arrangements for the ICT department.

However;

- No reports on data quality have been made to the Corporate Governance Committee, who are the member group charged with governance or to the senior management team;

- Evidence that accountability for data is clearly and formally defined for all staff with responsibility and accountability for data quality is not in place;
- No formal strategy for data quality has been in place in the 2006/07 financial year;
- No formal data quality improvement plans are in place; and
- Data quality considerations within risk management are limited to the IT department risk register.

We have raised a number of recommendations in the action plan in the Appendix, which are designed to help the Council progress to the next level within the data quality assessment.

## Policies

The Council has made progress in the following areas:

Organisational policy for data quality has been defined and is supported by a current set of operational procedures and guidance.

- Procedure documents have been noted in place for the systems of the Council;

- These procedure notes are in place to ensure that the systems operate as defined. Part of these procedures relate to the need to provide data in accordance with statutory requirements;
- All staff are able to access operational procedures and guidance on the intranet. If needed, the Performance Improvement Officer can help support staff on the use of the performance management system; and
- The Performance Improvement Officer provides updates to PI owners on a regular basis, on the basis of when updates are received, rather than on a structured basis.

Policies and procedures are followed by staff and applied consistently throughout the organisation:

- All relevant staff are able to access guidance as it is uploaded onto PIMMS, and is available on the Council's intranet; and
- E-mail evidence is available to suggest that the Performance team notify staff of changes to guidance on use of PIMMS, and on PIs on a timely basis.

However:

- No separate data quality policy is in place at the corporate level; and
- Responsibility for data quality lies with PI owners. There is no integrated mechanism to co-ordinate this across departments.

We have raised a number of recommendations in the action plan in the Appendix, which are designed to help the Council progress to the next level within the data quality assessment.

### Systems and processes

The Council has made progress in the following areas:

There are appropriate systems in place for the collection, recording, analysis and reporting of the data used to monitor performance:

- Some controls in place over the PIMMS system, but audit trails are held off the system: and
- The Council employs a 'right first time' methodology in the production of data.

The Council has controls in place to ensure that information systems produce the quality of data needed to report on performance and to keep senior management aware of necessary action in relation to data quality:

- The PIMMS system has some data checking controls in place, especially over missing and unauthorised data changes.

Security arrangements for performance information systems are robust, and a business continuity plan is in place:

- There are security arrangements in place over business critical systems, as well as the Performance systems. The IT function is based on site,

and there are adequate arrangements in place for the protection and security of data. These are detailed in the business continuity documents above, which are available on the Council's intranet.

Standards are specified for shared data or data supplied by third parties:

- The Council can identify instances of data sharing from information stored on PIMMS.

However:

- Systems from different departments are not linked for reporting corporate performance information;
- No formal mapping or annual review of controls has been completed in 2006/07;
- No evidence of reporting of system testing to senior management; and
- No formal requirements for the specification of data quality or processes in place to verify third party data, even on a sample basis, have been undertaken. Reliance is placed on external audit, but this happens after publication, and due to changed audit requirements of data may not be appropriate for the purpose of specific data checks.

We have raised a number of recommendations in the action plan in the Appendix, which are designed to help the Council progress to the next level within the data quality assessment.

### **People and skills**

The Council has made progress in the following areas:

The Council has communicated clearly the responsibilities of staff, where applicable, for achieving data quality:

- There is a variety of guidance available to staff on data recording available on the PIMMS system; and
- Responsibility for data quality has been assigned and features in job descriptions and appraisals.

The Council has arrangements in place to ensure that officers with data quality responsibility have the necessary skills:

- Training is available on an ad-hoc basis on the use of PIMMS, which would cover data quality issues.

However:

- No data quality champion network is in place; and
- There is no formal programme of data quality training.

We have raised a number of recommendations in the action plan in the Appendix, which are designed to help the Council progress to the next level within the data quality assessment.

### **Data use and reporting**

The Council has made progress in the following areas:

The Council has put in place arrangements that are focused on ensuring that data supporting performance information is also used to manage and improve the delivery of services:

- Performance information is exclusively held on PIMMS. Therefore corporate performance information is derived from the same data as that used in the day-to-day management of services;
- Performance information is used to identify deviations from planned performance; and
- There are clear targets for performance measures.

The Council has effective validation procedures in place to ensure the accuracy of data used in reported performance indicators:

- A review of the audit trails noted that the audit trails were complete; and

- Data is subject to service-level checks before submission to members. Senior management, portfolio holders and full Council approve service plans and the corporate plan before publication.

However:

- The timeliness of some of these reports (e.g. Q1 report was presented in September and Q2 in January), suggest that any action taken by members based on this information would not be timely;
- Some errors in definition noted in reviewing audit data trails (e.g. BV 84, percentage of planned to responsive repairs) and it was noted that the sign-off measures on PIMMS do not extend to all other data returns.

We have raised a number of recommendations in the action plan in the Appendix, which are designed to help the Council progress to the next level within the data quality assessment.

## 5 Analytical review (Stage 2)

An analytical review of the Audit Commission's specified BVPIs and non-BVPIs was carried out. All PIs were within the plausible and permissible values defined by the Audit Commission; therefore no concerns were noted at Stage 2 with regard to whether or not these specified indicators were fairly stated.

## 6 Data quality spot checks (Stage 3)

A number of PIs were reviewed using a series of detailed spot checks and audit tests. Our findings are shown below.

**Table 1**

<b>Performance indicator</b>	<b>Assessment</b>
<b>Housing</b> Percentage of planned to responsive repairs BVPI 212	Indicator amended Fairly stated

We are pleased to note that the audit of BVPI 212 demonstrated that the system in place to generate the data to calculate this indicator is sound, and that Council officers have accurately calculated the outturn of this indicator.

The impact of the amendment to the percentage of planned to responsive repairs indicator was to change the outturn of this indicator from 24% to 23%. The amendment was due to a reclassification of responsive repairs to planned repairs identified during the audit.

We have made one recommendation in the Appendix in respect of the percentage of planned to responsive repairs indicator.

## Action Plan

This action plan includes recommendations intended to assist the Council in achieving sufficient improvements to demonstrate compliance with the requirements of the next level within the Data Quality Overall Management Arrangements framework. Also the plan includes recommendations around those criteria considered as Level 4 within the framework. Where recommendations have been made relating to achieving Level 4 the Council should consider the costs and benefits of implementing procedures. Our priority system grades the most significant recommendations as priority 1.

Ref	Recommendation	Pty	Management response	Responsibility	Timescale
<b>KLOE 1.1 Responsibility for data quality is clearly defined</b>					
1	The Council should report the findings of data quality reviews to the senior management team and the Corporate Governance Panel, during the year as well as at the end of the year.	2	The F&SS Corporate Manager will require Internal Audit to carry out a programme of data quality reviews. The F&SS Corporate Manager, with the support of the Performance Improvement Officer, will identify the PIs/Measures to be subject to programmed review. The results of those reviews, with recommendations for improvement, will be reported by P.P&P to EMT as they are completed.	F&SS Corporate Manager for commissioning Internal Audit work and Performance Improvement Officer to assist with identification of programme.	Programme identified by March 2008 for review in 2008/09
2	The Council should formally define responsibility and accountability for data quality.	2	As stated in section 4 "Strategic responsibility for data quality lies with the Chief Executive."	Chief Executive	December 2007 – in this response



<b>KLOE 1.2 The body has clear data quality objectives</b>					
3	A formal strategy for data quality should be developed approved by members. This strategy should cover all departments and functions, and be reflected in the corporate plan.	1	Draft data quality strategy ready for agreement by EMT and Cabinet.	Performance Improvement Officer	February 2008 – Cabinet approval.
4	The data quality strategy should have an associated delivery plan, with clearly identified actions, responsibilities and timescales to support improvement.	2	The data quality action plan is at Appendix 2 of the draft data quality strategy.	Performance Improvement Officer	February 2008 – Cabinet approval.
<b>KLOE 1.3 Arrangements for monitoring and securing data quality</b>					
5	The Council should formally consider the risks of poor quality data within its risk management processes.	2	The Finance Project Officer, with responsibility for coordinating our approach to Risk, will put this on the EMT agenda for formal consideration in February 2008.	Finance Project Officer	February 2008
<b>KLOE 2.1: Policy for data quality</b>					
6	A comprehensive data quality policy that covers data collection, recording, analysis and reporting and meets any relevant national standards and requirements should be implemented. The data quality policy should also define local practices and monitoring arrangements and be implemented in all business areas.	2	A data quality policy will be developed and implemented ready for 2007/08.	Performance Improvement Officer	By March 2008

7	Data quality policy and procedures should be revised at least annually and updated as required.	2	It will be reviewed at least annually.	Performance Improvement Officer	March 2009
<b>KLOE 2.2: Policies and procedures are followed by staff and applied consistently throughout the Council</b>					
8	Each department should be assigned a data quality champion. The data quality champion regularly reviews and reports on compliance with the relevant policies and procedures and can demonstrate that they have improved data quality arrangements.	3	<p>The Data Quality Strategy will identify that each Corporate Manager is responsible for operational data quality in their areas.</p> <p>PI Owners already have clear accountability for the quality of data they publish but, during the launch of the new performance management system, this responsibility will be reinforced.</p>	Performance Improvement Officer	By March 2008
<b>KLOE 3.1: Performance systems</b>					
9	The Council should review the links between the systems for generating performance data and the performance management system to see how the links between the two can become more automated. This should reduce the potential for human error in calculating PI outturns.	3	A review will take place with the implementation of the performance management system, which allows for electronic links. The review will not assume electronic links are the preferred option. It important to ensure that published data has been checked by the PI/Measure Owner prior to publication.	Performance Improvement Officer	Initial review March 2008 and then ongoing as required

<b>KLOE 3.2: Performance system controls</b>					
10	As part of the Council's procurement of a new performance management system, consideration should be given to purchasing a system with automated controls.	2	The preferred product can provide 'automated controls' and these will be used wherever practicable and possible.	Performance Improvement Officer	Preferred product purchased in February 2008
<b>KLOE 3.3: Performance systems security processes</b>					
11	The results of the reviews of controls within the performance management system should be reported to senior management and members.	2	This amount of detail (i.e. "the results of the reviews of controls") feels like an operational issue that should not go to Members. Members will be fully briefed on the benefits of the new product and those benefits will include the use of automated controls, where these will help improve data quality.	Performance Improvement Officer	By March 2008
<b>KLOE 3.4: Data sharing</b>					
12	Instances of internal data sharing should be identified and a protocol developed and put in place for the use of this data.	2	A protocol will be introduced.	Performance Improvement Officer	By March 2008
13	Processes should be developed to verify data from third parties.	2	A protocol will be developed for sharing of information between 3 <sup>rd</sup> parties, notably LAA/LSP partners.	Strategic Partnerships Officer	By July 2008

14	A formal set of quality requirements should be applied to all data used by the organisation which is shared externally, or which is provided by a third-party organisation. These quality requirements could be in the form of a data sharing protocol, contract or service level agreement.	2	# numbers 12 and 13 refer	Performance Improvement Officer	Starting in March 2008 and ongoing
<b>KLOE 4.1: Communication of data quality responsibilities</b>					
15	A mechanism should be put in place to pro-actively feedback results of performance against data quality targets, both at a Council-wide level and at the individual officer level.	2	Internal Audit results will be fed back to Corporate Managers (# 8 refers) and PI Owners.	Performance Improvement Officer	From March 2008
<b>KLOE 4.2: Data Quality training</b>					
16	A formal programme of data quality training should be implemented.	2	A programme will be developed, as part of the implementation of the new performance management system.	Performance Improvement Officer	From March 2008 and ongoing

KLOE 5.2: System of internal control and validation					
18	A risk based corporate data checking process should be implemented to ensure that definitions are complied with in calculating performance data.	2	# 1 refers	F&SS Corporate Manager for commissioning Internal Audit work and Performance Improvement Officer to assist with identification of programme.	Programme identified by March 2008 for review in 2008/09
19	The Council should include all data returns within its performance management framework to ensure that data returns are submitted on time to the relevant government department.	1	A list of all external data returns is currently being compiled. The new performance management system will be used to monitor timely submission of all returns	Performance Improvement Officer	March 2008
Stage 3 audit					
20	In calculating the percentage of planned to responsive repairs indicator, repairs expenditure should be reviewed to ensure that the different types of repairs expenditure have been classified appropriately.	1	This has been reviewed.	Housing Asset and Investment Manager	December 2007