

Audit Detailed Report

08/12/2006

Last saved: 17/09/2007 14:05:00

Review of Activity Based Costing

Humberside Police Authority

Audit 2005/2006

External audit is an essential element in the process of accountability for public money and makes an important contribution to the stewardship of public resources and the corporate governance of public services.

Audit in the public sector is underpinned by three fundamental principles:

- auditors are appointed independently from the bodies being audited;
- the scope of auditors' work is extended to cover not only the audit of financial statements but also value for money and the conduct of public business; and
- auditors may report aspects of their work widely to the public and other key stakeholders.

The duties and powers of auditors appointed by the Audit Commission are set out in the Audit Commission Act 1998 and the Local Government Act 1999 and the Commission's statutory Code of Audit Practice. Under the Code of Audit Practice, appointed auditors are also required to comply with the current professional standards issued by the independent Auditing Practices Board.

Appointed auditors act quite separately from the Commission and in meeting their statutory responsibilities are required to exercise their professional judgement independently of both the Commission and the audited body.

Status of our reports to the Authority

The Statement of Responsibilities of Auditors and Audited Bodies issued by the Audit Commission explains the respective responsibilities of auditors and of the audited body. Reports prepared by appointed auditors are addressed to members or officers. They are prepared for the sole use of the audited body. Auditors accept no responsibility to:

- any member or officer in their individual capacity; or
- any third party.

Copies of this report

If you require further copies of this report, or a copy in large print, in Braille, on tape, or in a language other than English, please call 0845 056 0566.

© Audit Commission 2006

For further information on the work of the Commission please contact:

Audit Commission, 1st Floor, Millbank Tower, Millbank, London SW1P 4HQ

Tel: 020 7828 1212 Fax: 020 7976 6187 Textphone (minicom): 020 7630 0421

www.audit-commission.gov.uk

File classification: NOT PROTECTIVELY MARKED - NO DESCRIPTOR

Contents

Introduction	4
Overall assessment and key messages	5
Background	6
Audit approach	7
Main conclusions	7
Recommendations	11
Appendix 1 – Summary of results	12
Key messages	12
Appendix 2 – Detailed findings	14
Appendix 3 – Action plan	21

DRAFT

Introduction

- 1 This report presents the results of the 2005/06 review of Activity Based Costing (ABC) at Humberside Police Authority. This work was conducted during the period November 2005 to February 2006.
- 2 The purpose of the review was to assess the implementation of ABC by considering whether there are systems and processes in place that have resulted in an accurate submission of the costing data to the Home Office. Auditors undertook a programme of work to assess the management arrangements in the Authority and Force to deliver ABC, and reviewed the costing model's compliance with the Manual of Guidance.
- 3 This is the third year that the Audit Commission has been involved in reviewing ABC in all police authorities and forces. This study has been undertaken in partnership with the Police Standards Unit (PSU) of the Home Office, which has established a programme of review for key police performance data used in the Police Performance Assessment Framework (PPAF).
- 4 Last year the Commission prepared a summary of national findings on progress towards implementing ABC. The summary reported that for just over half of forces and authorities (52 per cent) there were no issues that materially affected the accuracy of the ABC submission made in July 2004. There were a small number of forces (9 per cent) where despite reliable systems and processes, there were some weaknesses that may have affected the accuracy of the submission. Finally, some 39 per cent of forces were assessed as having some weaknesses in both the accuracy of the data submitted for 2003/04 and the underlying systems and processes in place that require management action to ensure the accuracy and reliability of submissions in future years.
- 5 The Commission will produce a further report on ABC in June 2006.

Overall assessment and key messages

- 6 We have assessed the ABC costing submission, data quality and management arrangements and utilisation at Humberside Police Authority as 'Fair' (see Table 1).
- 7 There are some weaknesses in the systems and processes in place that require management action although these have not materially affected the accuracy or reliability of the ABC submission for 2004/05.

Table 1 ABC assessment 2005/06

Quality of data	Excellent				
	Good				
	Fair				
	Poor				
		Poor	Fair	Good	Excellent
		Management arrangements and utilisation			

Source: Audit Commission

- 8 The Force has followed national guidance for ABC costing and has good management arrangements in place to ensure the completeness of activity data which underpins the costing model. A number of refinements have been incorporated from the previous year's submission, including better checking and accountability mechanisms for the collection of activity data, more accurate capture of major incidents and some improvement in management information from specialist departments.

- 9 The Force has historically focused on activity sampling and the development of the costing model is hampered by a lack of support to the finance department when building the set of management information and activity data for support costs and units not suitable for activity sampling as part of the main survey. This has led to known weaknesses in management information not being addressed effectively in a number of departments/units. It has also resulted in a reliance on the software supplier to build the costing model. The initial submission contained a number of errors that should have been picked up with more comprehensive validation prior to submission. A number of amendments have been made and a second submission was made. The results now look more reasonable.
- 10 There are a number of issues that need to be addressed. These include:
 - incorporation of training costs as per the National Training Model; and
 - better apportionment of costs for prisoner handling, criminal justice and crime management.
- 11 In addition to these practical refinements, the Force and Authority need to review the current use of the costed data and ensure that any weaknesses in the approach are resolved in order to increase confidence in this aspect of the model. In other forces the establishment of an ABC Board has driven collaborative effort that has resulted in renewed interest and confidence in the data and allows for closer involvement and scrutiny from the Authority. In Humberside, the activity data is very well utilised and is being incorporated in performance management but the use of the costed data lags far behind. The linkage between front line activity and associated overheads needs to be understood to make the very best use of the information and to maximise efficiency.
- 12 The detail supporting these assessments is provided in Appendices 1 and 2 to this report.

Background

- 13 Humberside Police Authority has been at the forefront in developments in Activity Based Costing. It has led on activity analysis nationally. The National ABC guide is a development of a guide developed primarily by Humberside and two other forces (Bedfordshire and Cleveland).
- 14 This is clearly reflected in the delivery of activity sampling but the move to the full costing model has been more problematic.
- 15 Based on the 2003/04 return, we assessed the Authority as 'Good' for quality of data and 'Excellent' for systems and arrangements. This follows on from a 'Green' assessment in the 2002/03 assessment of ABC project plans.
- 16 Only one recommendation was made last year.

Audit approach

- 17 The approach for the 2005/06 reviews has included the following elements:
 - **follow-up:** of the reviews undertaken in 2003 and 2004, and the resulting recommendations;
 - **costing model:** comprising review and testing of compliance with the manual of guidance;
 - **management arrangements:** covering activity sampling, high level reasonableness reviews and four key themes to assess how embedded ABC is in the force and the role of the police authority; and
 - **utilisation of ABC information:** covering how the force and the police authority are using the ABC information to inform decision making.
- 18 Each element has been applied on a proportionate basis, depending on the results of the previous ABC reviews at the authority and force in 2004. This means that where a 'good' assessment had previously been achieved, there has been a limited level of review by the auditor this year. .
- 19 Where possible, auditors have drawn on any relevant findings in the HMIC baseline assessment for the force and with their work on crime data to avoid any possible duplication.

Main conclusions

- 20 This section of the report summarises our conclusions in each aspect of the review. Further detail supporting these conclusions, with the agreed action plan, is provided in the appendices to the report.

Progress since previous ABC reviews

- 21 Our initial 2003 review assessed the Force plans to implement ABC. This was assessed 'Green' and no recommendations were made.
- 22 Our 2004 review made one recommendation namely:
 - Investigate the feasibility of conducting activity card checks using the new incident management system as an alternative or in support of pocket book checks.
- 23 This recommendation was fully implemented. The Force responded positively to all emerging issues last year and had improvement plans in place that limited the need for recommendations to be made.

Management arrangements and utilisation

- 24 We have assessed management arrangements and utilisation as 'Fair (see table 2). Despite having good activity analysis arrangements the Force and Authority have yet to develop the use of the full costed return beyond the annual submission to the Home Office.

Table 2 Management arrangements and utilisation conclusion 2005/06

	Poor	Fair	Good	Excellent
Humberside Police Authority				

Source: Audit Commission

- 25 The performance and finance teams are not working together as closely as they could and this has left finance to ensure that the costing model is populated with specialist section activity data (where not sampled) and other cost drivers in isolation. A lot of this work required a detailed understanding of both the ABC Manual of Guidance and knowledge of police working practice. As a result there is less confidence in this data and this is a barrier to its use.
- 26 In order to improve this process the finance team needs more assistance from some of the specialist departments and the performance element of ABC delivery. A number of departments and functions are apportioned using historic estimates or a very simplistic four-way split. There is no evidence that individual teams and departments are being held accountable for the supply and quality of this information. The adoption of the National Training Model has not gone to plan this year and the lack of management data on the split between crime and non-crime-related custody and case file costs is very unusual.
- 27 The management arrangements in place to deliver accurate activity analysis are very good and, with over nine years of activity surveys, well embedded. Our recommendation to expand checking of activity cards to first line supervisors was fully implemented. Officers interviewed were now much more aware of the need to complete forms correctly and that they could be subject to checking. In addition to this, we found good management arrangements in place to ensure that cards were issued and returned promptly and that they were completed correctly (proper use of codes, completeness etc.). This was reflected in the low rejection and very high levels of validation. There was clear evidence of training and awareness sessions that emphasised the importance of the activity sampling exercise.

- 28 Application of ABC remains exclusively limited to the use of the activity data. The Force has a long track record of activity sampling and this is used in reporting and initiatives. The costed return is provided to the Home Office but has not been used to any extent within the Force.
- 29 The activity data is made available on APRAISE software and the Force has an unlimited licence, so any department or unit can have direct access.
- 30 Presentations are used to prompt further exploration and improvement activity. A growing number of uses have been found for the activity data. The involvement of the PSU has led to a number major change in Force and divisional structures, policies and priorities. The activity data is used extensively as part of options appraisal and evaluation. It is well integrated with other management data.
- 31 The Force is active in regional and national discussions around the use of the data and has developed analysis tools for use nationally.
- 32 The Force and Authority need to work together to build greater ownership of ABC across the Force. If this is successful and resources are applied to developing the accuracy of the costing model then confidence will grow it will become a useful addition to the activity data currently in use.

Costing model

- 33 We have assessed data quality as 'Fair' (see table 3). This is based on an assessment of 'Fair' for compliance of the costing model with Manual of Guidance, and 'Good' for compliance with sampling guidance.

Table 3 Data Quality 2005/06

	Poor	Fair	Good	Excellent
Humberside Police Authority				

Source: Audit Commission

- 34 We identified a number of significant issues with the original submission but the overall standard of the final return has improved. Basic tests for accuracy identified a few minor errors in the final submission. Allocations across the four Domains and cost categories are now much closer to the norm than the original submission. The Home Office assessment concluded that the final return was average.
- 35 However, a number of Issues remain. These include the allocation of training costs and the simplistic apportionment for a number of units/departments. The reliance on the software consultant to identify and fix known errors means that despite the changes made there is insufficient knowledge to have full confidence in the quality of the return.

- 36 Confidence in the accuracy of the activity data is much higher. The percentages of forms collected increased from 99 per cent to 100 per cent in the 2004/05 campaign. The rejection rate on input remains extremely low (just over 1 percent) due to the high quality of completed cards.

Police Authority role

- 37 We have assessed the Police Authority role in driving forward ABC as 'Fair'. This area was not assessed in 2004 (see table 4).

Table 4 Police authority role 2005/06

	Poor	Fair	Good	Excellent
Humberside Police Authority				

Source: Audit Commission

- 38 There is no clear vision or strategy within the Authority as to how it aims to use ABC data in its role and there is an opportunity for the Authority to contribute to the development of the use of costed data across the Force and within the Authority.
- 39 The Authority has monitored the implementation of ABC for a number of years and receives details of the findings of each activity survey. There is increasing interest in the data as performance monitoring improves within the Force and the Authority.
- 40 Monitoring of the recommendations from our last review has been limited because of the single recommendation.

Recommendations

41 We have made six recommendations which are detailed in the attached action plan (Appendix 3). The key recommendations are:

42

Recommendations	
<i>R1</i>	<i>Continue to monitor the suitability of using the incident management system to check on activity card returns. The use on officers who undertake a significant proportion of response duties will be most successful.</i>
<i>R2</i>	<i>Develop a comprehensive set of validation tests to ensure that errors in software programming are picked up prior to initial submission.</i>
<i>R3</i>	<i>Ensure that the Training department is in a position to provide complete costing in line with the National Training Model.</i>
<i>R4</i>	<i>Establish more accurate apportionment methods for the Crime Management Bureau, criminal justice and prisoner handling.</i>
<i>R5</i>	<i>Develop a clear policy on ABC development defining roles and responsibilities, this should place greater responsibility on specialist department management teams to provide and maintain accurate cost drivers for the ABC model. It should also ensure that there is sufficient expertise in the costing model in order to provide advice and support.</i>
<i>R6</i>	<i>Consider forming an ABC Board with Authority membership to assist in sharing ownership and to allow for input from all parts of the Force.</i>

Appendix 1 – Summary of results

Key messages

- 1 The table below presents the overall messages from the review of Activity Based Costing (ABC) taken in 2005/06.

Table 5 Key messages

Investigation	Conclusion
Authority and Force assessment	There are some weaknesses in the systems and processes in place that require management action although these have not materially affected the accuracy or reliability of the ABC submission for 2004/05.
Authority and Force direction of travel assessment	<ul style="list-style-type: none"> • There has been an improvement in aspects of data quality and management arrangements since last year's review. However we feel that improvements to the costing model are not as strong as anticipated and the detailed analysis available this year has identified a number of issues with the costing model. • Utilisation of ABC data has improved slightly since last year's review but there is little evidence of impact. However the Force has the skills and experience to make an impact nationally.
Key messages	<ul style="list-style-type: none"> • The Force has followed national guidance for ABC costing and has good arrangements in place to ensure the completeness of activity data which underpins the costing model. • A number of small refinements have been incorporated from the previous year's submission and a resubmission of the costed return was made in December 2005 following further refinement. There remains a number of known issues that should be resolved but do not materially affect the return. • Utilisation of ABC remains limited to the activity data. There is effective use of the information at BCU and departmental level with additional surveys used to provide additional detail.

Investigation	Conclusion
	<ul style="list-style-type: none"> • Front line officers are not aware of the benefits that ABC data has driven or contributed to. Despite a clear understanding of the importance the Force places on accurate recording, the lack of use makes it difficult to gain full ownership of the activity sampling process. Despite this, officers reported good controls and effort made in completing activity surveys. • The Authority monitors the delivery of the ABC implementation plan. Members are interested in improving the use of the data in Humberside.
Good practice	<ul style="list-style-type: none"> • Good use of activity data and the use of additional surveys to assist in management decision making and evaluation. • Active use of national data to assist all forces in validation.
Barriers to progress	<ul style="list-style-type: none"> • Lack of understanding of front line officers regarding results and benefits of ABC. • A lack of use of the costed data.

Source: Audit Commission

Appendix 2 – Detailed findings

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
Follow up of 2004 ABC review findings	Good	<p>Our 2004 review made only one recommendation.</p> <p><i>‘Investigate the feasibility of conducting activity card checks using the new incident management system as an alternative or in support of pocket book checks.’</i></p> <p>This was undertaken but has not had the impact that we hoped. The Force was split into a number of local policing teams (LPT’S) and as a result of working practice at the time of the survey there is not sufficient tasking through this system to make it any more effective than pocket books. The Force has restructured since then and we believe the Force should continue to monitor this option as pocket books often do not provide enough information to make checking an effective exercise. Our recent review of crime recording revealed a number of changes to Force structure and incident management practice that makes us confident that for sections of the Force, this approach will prove more effective than pocket books in future surveys.</p>	R1 Continue to monitor the suitability of using the incident management system to check on activity card returns. Its use on officers who undertake a significant proportion of response duties will be most successful.
Compliance of the costing model with manual of guidance	Fair	<p>This area was assessed as ‘Excellent’ in 2004. This was based on an assessment of the approach taken and an assessment of the return against activity data. The availability of cross-force analysis has revealed a number of concerns with the model.</p> <p>We have examined the return for 2004/05 and have noted the following issues.</p> <ul style="list-style-type: none"> • Our initial assessment of this showed that Domain 3 (promoting public safety) was below average and that business support costs are very high. (24 per cent against expected range 10-15 per cent). The second submission now shows 19 per cent. When this is set against a revised range assessment (Home Office analysis) this looks reasonable given some known issues. 	

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
		<ul style="list-style-type: none"> • The model has been built using B-Plan facilities management and there have been a number of errors in the model that could not be picked with the level of knowledge in-force. This demonstrates that the built in validation tests are insufficient to provide confidence in the data. • The Training Model has not been used to populate ABC. For 2004/05 the training department had not collected data in accordance with the training model. Plans for this were agreed but sickness and changes in personnel have resulted in slippage and poor implementation. This has inflated business support costs. • The splits for prisoner handling and criminal justice are based on assumptions made a number of years ago and there is insufficient information on which to split costs accurately over each BCU. • Codes for partnership working have not been populated. This is a long-standing issue where the Force decided that there shouldn't be costs for partnerships but that each partnership meeting must be capable of being costed against the activity associated with the partnership in question. • Crime Management Bureau (CMB) costs are split 25 per cent per BCU. The BCU characteristics do not warrant this simplistic split. <p>The majority of issues raised have been addressed to some extent in the re-submission. The finance ABC lead has worked hard to establish both the cost drivers needed to populate the model and the management information from specialist departments. The issues described above, and the lack of sound validation suggests that there is insufficient support and a lack of direction from the Force to enable the finance lead to manage this task effectively.</p>	<p>R2 Develop a comprehensive set of validation tests to ensure that errors in software programming are picked up prior to initial submission.</p> <p>R3 Ensure that the Training department is in a position to provide complete costing in line with the National Training Model.</p> <p>R4 Establish more accurate apportionment methods for CMB, criminal justice and prisoner handling.</p> <p>R5 Develop a clear policy on ABC development defining roles and responsibilities, this should place greater responsibility on specialist department management teams to provide and maintain accurate cost drivers for the ABC model. It should also ensure that there is sufficient expertise in the costing model in order to provide advice and support.</p>

16 Review of Activity Based Costing | Appendix 2 – Detailed findings

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
		<p>The Force needs to develop a policy and strategy for ABC. Cost drivers from the specialist departments and training should be the responsibility of those departments with advice and support from ABC experts. We feel that the division of tasks between the performance and finance teams is inappropriate. It leaves the finance team applying the model with a limited understanding of operational practice.</p> <p>At the moment the focus is on activity analysis, a method the Force pioneered and has undertaken for nine years. The costing element is not currently used by the Force. In doing this, the Force is missing out on an understanding of the impact of overheads on different activities and the impact of a number of specialist departments.</p>	
<p>Compliance with sampling guidance confirmed by sample testing of activity information sources.</p>	<p>Good</p>	<p>This area was assessed as 'Good' in 2004.</p> <p>The Force has conducted a check of 960 activity cards against the incident management system and pocket book entries. In many cases there was insufficient detail to confirm accuracy because of the limited information contained in pocket books and the LPT structure the Force had in place at the time makes the incident management system not as appropriate as in most other forces.</p> <p>We have examined activity data for a range of teams and ranks to see if there were any discrepancies that could not be explained in terms of the differing characteristics of the four BCU's. We found no anomalies.</p> <p>The 2004/05 activity data was analysed by Humberside and Cleveland forces and this has been shared with all forces and the Audit Commission. This highlights variance across all activity codes and all forces, and provides an excellent method of assessing activity sources.</p> <p>We have examined the management data collected for a number of specialist departments and found the approach and management data to be sound (see exceptions in the section above)</p>	<p>R1 refers.</p>

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
Effectiveness of the Force's internal controls for managing activity sampling.	Good	<p>This area was assessed as 'Good' in 2004.</p> <p>The Force responded quickly and positively to the recommendation made in the last review and has put in place very proficient management arrangements for the running of activity surveys.</p> <p>A project plan is in place and this is regularly updated.</p> <p>In 2004/05, 100 per cent of cards were returned or recovered. This can be attributed to tight monitoring and good training at departmental level. A rigorous validation check is in place and over 98 per cent processed successfully (180 rejected).</p> <p>No issues were identified within focus groups about difficulty in completing the activity sheets and staff were fully aware of the central checks that could be performed. In addition the Force introduced a 10 per cent dip sample by sergeants. They have to indicate on the cards, which ones have been tested and a dip sample of these checks is also undertaken to ensure that sergeants are undertaking the tests properly. We saw examples of this and confirmed that the activity surveys are carried out to a very high standard.</p>	

18 Review of Activity Based Costing | Appendix 2 – Detailed findings

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
<p>Effectiveness of the Force’s high level assessment of the reasonableness of their ABC results</p>	<p>Fair</p>	<p>This area was assessed as ‘Good’ in 2004</p> <p>The Force made use of the revised guidance that gave average costs across domains and was aware of the variation but does not have sufficient knowledge or input into the coding of the B-Plan software and the initial submission contained a number of significant errors.</p> <p>In contrast, the Force has prepared detailed activity analysis of all forces’ returns (activity data) that shows which activities are 5 per cent above or below the mean. This has allowed them to do a reasonably detailed comparison and to seek explanations for any unusual findings. This tool has been shared with other forces and the Audit Commission for use in our initial overview as part of this year’s review.</p> <p>The Force is an active member of the regional practitioners group and takes a lead on activity sampling nationally.</p> <p>Additional samples (detailed below) have helped understand the differences in force practice. For example traffic officers are linked to LPTs and as a result they undertake a wider range of duties than national average.</p>	<p>R2 refers.</p>

20 Review of Activity Based Costing | Appendix 2 – Detailed findings

Theme	Assessment Excellent/ Good/Fair/Poor	Findings/Conclusions	Recommendations
<p>Effective utilisation of Activity Based Costing data.</p>	<p>fair</p>	<p>This area was assessed as ‘Good’ in 2004.</p> <p>This years assessment is restricted to ‘Fair’ because of the lack of use of the costed data.</p> <p>The Force has a long track record of activity sampling and this is used in reporting and initiatives without recourse to costing data. The costed return is provided to the Home Office and has not been used to any extent within the Force.</p> <p>The activity data is made available on APRAISE software and the Force has an unlimited licence, so any department or unit can have direct access.</p> <p>Presentations are contextualised with data on calls for assistance and other changes. For example, the impact of PSU engagement has been recognised in the changes in activity. Other findings include:</p> <ul style="list-style-type: none"> • mapping of demand against resource availability; • changes in time in station; • correlation between workload and patrol time; • activity breakdown for different roles; • Divisional variation. <p>The involvement of the PSU has led to a number major change in Force and Divisional structures, policies and priorities. The activity data is used extensively as part of options appraisal and evaluation. It is well integrated with other management data.</p> <p>The Force is active in regional and national discussions around the use of the data and has developed analysis tools for use nationally, as mentioned above.</p>	<p>See Recommendations 3 & 4</p>

Appendix 3 – Action plan

2

Page no.	Recommendation	Priority 1 = Low 2 = Med 3 = High	Responsibility	Agreed	Comments	Date
Management arrangements and utilisation						
	R1 Continue to monitor the suitability of using the incident management system to check on activity card returns. The use on officers who undertake a significant proportion of response duties will be most successful.	2				
	R2 Develop a comprehensive set of validation tests to ensure that errors in software programming are picked up prior to initial submission.	3				

Page no.	Recommendation	Priority 1 = Low 2 = Med 3 = High	Responsibility	Agreed	Comments	Date
	R3 Ensure that the Training department is in a position to provide complete costing in line with the National Training Model.	3				
	R4 Establish more accurate apportionment methods for CMB, criminal justice and prisoner handling.	3				

Page no.	Recommendation	Priority 1 = Low 2 = Med 3 = High	Responsibility	Agreed	Comments	Date
	R5 Develop a clear policy on ABC development defining roles and responsibilities, this should place greater responsibility on specialist department management teams to provide and maintain accurate cost drivers for the ABC model. It should also ensure that there is sufficient expertise in the costing model in order to provide advice and support.	3				
	R6 Consider forming an ABC Board with Authority membership to assist in sharing ownership and to allow for input from all parts of the Force.	2				