



*High performance. Delivered.*

**Final Report:  
Costing of Community Order Requirements**



• Consulting • Technology • Outsourcing

## Contents

1	Management Summary .....	3
2	Introduction .....	6
2.1	Overview of the community orders study .....	6
2.2	Cost work stream objectives .....	6
3	Methodology .....	7
3.1	Probation areas included within the work stream .....	7
3.2	Costs included within the work stream .....	7
3.3	Cost estimates used within the work stream .....	7
3.4	Requirements included within the work stream .....	8
3.5	Appropriate use of findings .....	8
4	Findings: Average cost per offender commencement .....	10
5	Findings: Cost per breach .....	11
6	Findings: Cost per offender profile .....	12
7	Findings: Variation of costs between probation areas .....	14
7.1	Average cost and number of commencements per staff member .....	14
7.2	Local attitudes to the effectiveness of community order requirements .....	16
7.3	Operational practice .....	16
8	Implications for the efficiency of probation services .....	18
8.1	Identifying and spreading best practice .....	18
8.2	Redesigning and standardising processes .....	19
9	Appendix 1: Summary of cost results for the five probation areas .....	20
10	Appendix 2: Detailed findings of the cost per offender profile .....	22
10.1	Unpaid work .....	22
10.2	Supervision (stand alone) .....	23
10.3	Accredited programmes .....	24
10.4	Specified Activity .....	25
10.5	Mental Health .....	26
10.6	Drug Treatment .....	27
10.7	Alcohol Treatment .....	28
10.8	Curfew .....	28
10.9	Tier 3 and Tier 4 .....	28
11	Appendix 3: Further analysis of cost estimates .....	30
12	Appendix 4: Detailed methods .....	32
12.1	Introduction .....	32
12.2	Costs included within the work stream .....	32
12.3	Costing methodology .....	33
12.4	Benefits and limitation of approach .....	39

## 1 Management Summary

The NAO commissioned Accenture to deliver the costing work stream of a study reviewing the implementation of community order requirements. The analysis produced two core sets of cost estimates based on the following key research questions:

- What are the indicative costs associated with the implementation of different types of community order requirements? This was estimated through an average cost per offender commencement for each community order requirement.
- What are the indicative costs associated with the breach of a community order? This was estimated through a cost for a contested and uncontested breach (including magistrates' court costs).

Probation service cost data was gathered through site visits to five probation areas: Lincolnshire, London, Northumbria, South Wales and Wiltshire. The data gathered included probation service staff costs and excluded probation overheads and external agency costs (e.g. police).

In addition to this the NAO asked Accenture to identify potential explanations for the variation of costs between probation areas and the implications of the findings for the future efficiency of probation services.

### **Average cost per offender commencement**

The supervision requirement has been included within the costs of each of the other community order requirements. Stand alone supervision community orders (i.e. supervision by an offender manager with no other activities) is treated separately. The analysis from this part of the work stream demonstrated:

- Stand alone supervision had the lowest average cost per commencement (£652) across the five areas followed by specified activity (£747) and unpaid work (£779). Probation staff identified that offenders with these requirements tend to be lower risk with fewer behavioural issues therefore requiring less intensive management;
- There were also comparatively higher cost requirements, such as alcohol treatment (£1,670), accredited programmes (£1,791) and drug treatment (£1,923). As expected offender managers highlighted that individuals with these requirements tend to have longer sentences with more intensive support needs; and
- Probation staff identified intensive supervision and difficulties accessing treatment contributing to the highest average cost per commencement of the mental health requirement (£3,703).

This work stream also produced a third set of cost results to provide supporting information for the two core cost estimates. This data measures the costs arising from the operational delivery of community order requirements for specific types of offenders. The results are presented in section 6.

## Cost per breach

Across the five probation areas the evidence demonstrates that:

- The average cost for a complex contested breach case is £640; and
- The average cost for a comparatively simple uncontested breach is £96.

These cost estimates suggest an even split in the costs between magistrates' courts and probation areas. However the proportion of costs incurred by probation areas would increase once overheads are included (e.g. IT and estates costs). Probation areas stand to gain most by improving the efficiency of breach processes given this majority share of costs.

While the cost of breach can be low per event probation staff highlighted that breach activity is undertaken frequently resulting in a high overall cost for this activity. For example probation service officers were estimated to spend between 8 and 17 percent of their time on community order related enforcement. Streamlining breach processes will be critical to limiting the associated costs given the trend of transferring responsibility for breach from probation court staff to offender managers.

## Factors affecting variation in costs

Overall cost per offender commencement is driven primarily by the total cost of staff and the number of commencements during the period examined. The analysis and interviews with probation staff suggest that variation in costs between the five probation areas could potentially be explained by four further factors:

- **Average costs per staff member:** higher average costs per staff member contributed to higher overall costs. These costs varied from £36,443 (London) to £28,958 (Lincolnshire) for the financial year 2007/08. London had comparatively high staff costs even after the removal of the London weighting from the cost model;
- **Number of commencements per staff member:** a lower number of commencements contributed to higher overall costs. For example London (4.3) and Wiltshire (4.4) had a lower number of commencements from January to June 2007 than South Wales (4.7) and Northumbria (5.2);
- **Local attitudes to the effectiveness of different requirements:** probation staff identified that this manifests itself in pre-sentence recommendations and resource allocation to different types of requirements by probation areas, and sentences passed by courts; and
- **Variation in operational practice:** the data and interviews with probation staff suggest that differences in the use of staff grades, the type and duration of activities carried out and the decision regarding which tier offenders are allocated contribute to variation in costs across probation areas.

Probation staff suggested that improved control of the first three factors at a local level would ensure a better match between staff resources and demand for those resources. This could for example be achieved through a better understanding between commissioners, probation areas and courts regarding the effectiveness of different requirements.

---

### **Implications for the efficiency of probation services**

This report highlights a number of key factors which potentially affect probation service costs. While some of these factors are not within the control of probation areas there is an ability to influence operational practice to improve efficiency, for example in the redesign of breach processes. Delivering these types of efficiencies on a broader scale would require the spread of best practice and the redesign of processes locally alongside consideration of financial incentives to ensure continual improvement. Only through a co-ordinated programme led by the National Offender Management Service can substantial change be delivered.

## 2 Introduction

This section summarises the purpose of the NAO study and the costing work stream.

### 2.1 Overview of the community orders study

The National Audit Office (NAO) is currently undertaking a study to assess the effectiveness of the delivery of community orders. Introduced by The Criminal Justice Act in 2003 community orders have enabled courts to sentence an offender to one or more of 12 requirements to suit the nature of the offence committed. The community order sentences are implemented by the 42 probation areas in England and Wales supported by other agencies, such as drug treatment providers. During 2006 58,970 community order sentences were passed.<sup>1</sup> Community orders represent approximately 60 percent of the overall caseload of the five probation areas included in the study.

The NAO study has aimed to identify where the sentencing objectives set out in the Criminal Justice Act 2003 are being achieved and how effectively community orders are being implemented by the National Probation Service. In order to accomplish these objectives the study has comprised the following work streams:

- A literature review;
- A case file review;
- Analysis of national data and review of Probation Inspectorate and other reports;
- Interviews with Probation Area staff and national stakeholders; and
- The identification of the indicative costs of delivering community order requirements.

Accenture was commissioned by the NAO to deliver the costing work stream.

### 2.2 Cost work stream objectives

The key research questions of the costing work stream were:

- What are the indicative costs associated with the implementation of different types of community order requirements?
- What are the indicative costs associated with the breach of a community order?

Section 3 of the report presents a summary of the methodology employed in this work stream while sections 4-6 set out the findings from this review. In addition to the original remit of the project NAO asked Accenture to identify potential explanations for variation of costs between probation areas and the implications of the results for the future efficiency of probation services which are set out in sections 7 and 8. Supporting information is outlined within the appendices, including a tabular summary of the results for the five probation areas, further analysis of the data and a detailed methodology.

<sup>1</sup> Quarterly sentencing statistics (quarter 4 2006). Ministry of Justice  
[http://www.justice.gov.uk/docs/stats\\_sentence\\_2004to2006.xls](http://www.justice.gov.uk/docs/stats_sentence_2004to2006.xls)

### 3 Methodology

This section sets out a summary of the approach adopted for the costing work stream. A full description of the methodology is detailed in appendix 4 including the benefits and limitations of the approach.

#### 3.1 Probation areas included within the work stream

Five probation areas were chosen by the NAO to be included within the study to reflect a variety of characteristics, including performance, rurality and size. These probation areas were Lincolnshire, London, Northumbria, South Wales and Wiltshire. Within London the costing work was carried out with one cluster in order to engage with one group of staff. The Newham, Barking/Dagenham and Havering cluster was selected as this captures a mixture of inner city and suburban boroughs. The results are therefore broadly representative for the probation area as a whole.

#### 3.2 Costs included within the work stream

As specified in the project scope agreed with the NAO the focus of the costing work has been on probation area pay costs. These have been drawn from the 2007/08 national unit costing exercise and comprise 75-80 percent of probation areas budgets. The outputs from this work are therefore estimates of activity costs (pay costs associated with delivery) rather than full unit costs which could not be delivered within the required timescales. Table 1 provides a summary of the costs included and excluded from the work stream.

Costs included	Costs excluded
<ul style="list-style-type: none"> <li>○ Staff salary costs (for staff involved in the delivery of services);</li> <li>○ Staff on costs (employer national insurance and pension contribution); and</li> <li>○ Magistrate court costs.</li> </ul>	<ul style="list-style-type: none"> <li>○ Staff salary costs for non-delivery focused roles (e.g. chief probation officers);</li> <li>○ Pension deficit payments;</li> <li>○ Non-pay costs (contracted support, estates, IT, training and transport); and</li> <li>○ External agency costs (e.g. police).</li> </ul>

**Table 1: Costs included and excluded from the work stream**

In addition to probation area pay related costs magistrates' court costs have been included to support the calculation of the indicative cost of a breach.

#### 3.3 Cost estimates used within the work stream

Our approach comprised two core cost estimates:

1. **Average costs for community order requirements:** we held workshops for managers in each probation area to estimate the proportion of time staff groups contribute towards the delivery of different community order requirements. The

estimates were multiplied by staff group costs to give a total cost for each requirement. The totals were finally divided by the number of offender commencements to produce an annual average cost per offender commencement for 2007/08; and

2. **Cost per breach:** we interviewed frontline staff to identify the tasks, time estimates and staff groups involved in the delivery breach processes. These time estimates were multiplied by a cost per minute for each staff group to produce a cost estimate for a contested and uncontested breach for probation areas. This was then added to cost estimates for magistrates' courts to give a total cost per breach.

In addition we produced a third cost estimate to provide supporting information for the NAO:

3. **Cost per offender profile:** we developed offender profiles with sentences comprising different community order requirements. We then developed time and cost estimates relating to the delivery of probation services for these profiles, using the same process employed for the cost per breach. The costs reflect the resources invested over the duration of the community order for each profile which may be shorter or longer than a year.

We gathered the data for these cost estimates through two methods:

- A data collection exercise for which the five probation areas chosen by the NAO submitted quantitative cost and activity information; and
- Visits to these probation areas during which we ran a series of activity mapping sessions with probation staff to generate qualitative information.

The resulting information was entered into a cost model and the outputs validated with probation areas. This approach has provided the most appropriate balance between robust results and efficient delivery within the eight week time frame specified by the NAO.

### 3.4 Requirements included within the work stream

Table 2 below presents the requirements agreed with the NAO to be included within the average cost and cost per profile work streams.

Requirement	Average cost	Cost per profile	Commentary
Unpaid Work	Yes	Yes	The most common requirement.
Supervision	Yes	Yes	Supervision is included as an integral part of other requirements. Stand alone supervision has been treated separately in the cost range and average cost exercises.
Accredited Programme	Yes	Yes	Costs for the Drink Impaired Driver (DID) programme have been included in the cost per profile exercise as the full range of programmes could not be examined within the timeframe.
Drug Treatment	Yes	Yes	Drug treatment is provided in all areas. However members of the Newham, Barking/Dagenham and



(DRR)			Havering DRR team were not available during the visit and so costs have not been calculated for London.
Specified Activity	Yes	Yes	The most common specified activity (employment training and basic skills) has been used in the cost range exercise.
Alcohol Treatment	Yes	No	Alcohol provision is available in two of the five probation areas. A comparable offender profile could not be agreed by the two areas so this has been removed from cost range exercise.
Mental Health Treatment	Yes	No	A comparable offender profile could not be determined so this has been excluded from the cost range exercise.
Curfew	Yes	No	Contractors commonly manage curfew requirements and so this has been excluded from the cost range exercise.

**Table 2: Summary of the elements of probation services that have been included**

Residence, exclusion, prohibited activity, attendance centre and approved premises requirements are either not employed or the volumes within each probation area are so low to make meaningful analysis problematic. Following consultation with the probation areas it was agreed with NAO to exclude these requirements from the work stream.

### 3.5 Appropriate use of findings

Given our focus on activity costs, the findings from this work can be employed for the following purposes:

- Comparing activity costs across the five probation areas included in the study;
- Identifying causes of variation in costs between these probation areas;
- Providing examples of the profile of resources employed over the lifecycle of a community order;
- Assessing how processes compare in different probation areas and identifying potential improvements in efficiency and effectiveness; and
- Establishing a foundation for the identification of full unit costs at a local level.

However it is not appropriate to use the data contained in this report for the following purposes:

- Providing representative process and cost data for all 42 Probation Areas; or
- Presenting full unit costs for the delivery of community orders (i.e. costs which may be used in comparing probation services against alternative providers).

## 4 Findings: Average cost per offender commencement

The average cost per offender commencement provides a ‘top-down’ understanding of costs through a focus on how staff groups contribute to the delivery of different community order requirements. Table 3 below presents a summary of the volume and average cost per commencement by requirement for the five probation areas.

Requirement	Volume of commencements (January to June 2007) <sup>2</sup>	Average cost per commencement		
		Average across five probation areas	Highest probation area	Lowest probation area
Unpaid Work	4,559	£779	£1,009	£589
Accredited Programmes	1,586	£1,791	£2,353	£1,234
Stand alone supervision	778	£652	£809	£561
Specified Activity	596	£747	£1,725	£304
Drug Treatment	394	£1,923	£2,901	£1,000
Curfew	305	£1,103	£2,039	£609
Alcohol Treatment	82	£1,670	£2,769	£571
Mental Health Treatment	38	£3,703	£5,064	£1,899

**Table 3: Volume and average cost per commencement**

The following observations can be made from these cost estimates:

- Unpaid work is the only high volume and low cost requirement. The specified activity and stand alone supervision requirements had the lowest average cost per offender commencement with mid level volumes of commencements. Probation staff identified that offenders with these three requirements are usually lower risk with fewer behavioural issues and therefore require less intensive management contributing to lower costs;
- Accredited programme and drug treatment requirements were comparatively high cost but with medium to low volumes of commencements. As expected offender managers highlighted that individuals with these requirements tend to have comparatively long sentences with more intensive support needs;
- Mental health is a high cost and low volume requirement. Offender managers identified intensive supervision needs and difficulties in accessing treatment on behalf of offenders contributing to high costs; and
- Cost estimates for the management of curfew requirements fall in the mid range of the results. The involvement of contractors providing electronic monitoring (paid for through a central contract with NOMS) limits the costs for probation areas to the management of offenders with multiple requirements.

<sup>2</sup> Probation areas provided commencement data prior to the site visits.

## 5 Findings: Cost per breach

This section presents the data obtained from probation areas and HM Court Service in relation to the processes and costs associated with breach. This cost measure comprises two examples which provide a range of cost estimates: a relatively straight forward uncontested breach and a more complex contested breach.

Table 4 below outlines the total cost data for a contested and uncontested breach. This table suggests an even split of the costs between magistrates' courts and probation areas. However HM court services have provided a full unit cost and so probation areas will incur an increased proportion of the full costs of breach once overheads are included (e.g. IT and estates costs). Given the majority share of costs probation areas therefore stand to gain more by improving the efficiency of breach processes.

	Average costs across five probation areas			Highest total costs	Lowest total costs
	Probation area costs	Court costs	Total costs		
Contested breach	£321	£320	£640	£839	£493
Uncontested breach	£47	£49	£96	£140	£54

**Table 4: Average contested and uncontested breach costs**

The higher cost of a contested breach can be explained by the additional time involved in the preparation of evidence for, and appearance of witnesses during, the trial. Probation staff suggested that while the proportion of contested breaches is small this has grown in recent years. This growth was attributed to offenders' increasing willingness to challenge the breach and a growing trend in offenders changing their plea at the last minute before the trial. This change in plea still necessitates the same investment of costs however.

The overall proportion of time that staff were estimated to spend on community order enforcement was substantial. Estimates for probation officers ranged from 4 to 16 percent while estimates for probation service officers ranged from 8 to 17 percent. Given the trend of transferring breach responsibility to offender managers the streamlining of these processes will be critical to limiting the costs associated with breach.

## 6 Findings: Cost per offender profile

This section presents cost estimates for a range of individual offenders with different community order requirements. This measure provides a 'bottom-up' understanding of costs through the identification of the operational tasks involved in delivering activities for specific offender profiles.

The majority of the offender profiles comprise sentences of single requirements resulting in mostly lower tier profiles. Profiles for tier 3 and tier 4 offenders with multiple requirements were developed to provide cost estimates for offender management input for higher tiered offenders. A supervision requirement has also been included as an integral part of the sentence for tier 2 profiles and above.

The cost estimates from this exercise are shown below in table 5.

Offender profile	Average across five probation areas	Highest probation area cost	Lowest probation area cost
Tier 4 - Offender Management	£4,204	£4,668	£3,382
Tier 3 - Offender Management	£1,946	£3,137	£1,268
Tier 3 - Drug Treatment	£1,398	£1,832	£1,028
Tier 2 - Unpaid Work	£1,123	£1,354	£874
Tier 3 - Specified Activity	£951	£1,454	£764
Tier 2 - Accredited Programme - DID	£902	£1,141	£704
Tier 2 - Drug Treatment	£784	£1,033	£474
Tier 1 - Accredited Programme - DID	£648	£832	£459
Tier 2 - Specified Activity	£441	£580	£349
Tier 1 - Unpaid Work	£323	£389	£282
Tier 2 - Supervision (stand alone)	£291	£386	£227

**Table 5: Cost per offender profile**

The results of the cost per offender analysis highlight:

- Average costs were low across the five probation areas for the unpaid work tier 1 profile, and the stand alone supervision and specified activity tier 2 profiles. Offenders with these profiles have fewer complex behavioural issues, shorter sentences and therefore require less intensive management;
- The difference between the average cost of the tier 1 unpaid work profile (£323) and tier 2 profile (£1,123) can be explained by the inclusion of supervision in the tier 2 profile and a higher number of hours of unpaid work requiring more input from unpaid work supervisors;
- The difference between the average cost estimates for the tier 1 DID profile (£648) and tier 2 profile (£902) can be explained by the greater amount of offender manager input required for the tier 2 profile. The cost of the delivery of the programme are similar for different tiers of offenders;

- Drug treatment and specified activity cost will rise once external agency costs (e.g. treatment providers) are included. All of the staff costs relating to the unpaid work and accredited programmes profiles are currently incurred by the probation areas and have been included here.
- High costs were associated with the delivery of offender management for the tier 3 (£1,946) and tier 4 (£4,204) profiles. These profiles were designed with probation staff to reflect that offenders in these tiers have longer sentences and comparatively intensive offender management input which contributes to higher costs.

#### **Comparing the cost per commencement and cost per offender profile.**

These cost estimates provide two different measures for understanding the indicative costs associated with the delivery of community orders. The cost per offender is useful for comparing processes between probation areas and identifying potential improvements in operational practice. The average cost per offender is useful as a comprehensive measure for assessing overall differences in costs across requirements because it captures the costs associated with all types of offenders within all tiers. We have therefore recommended that the NAO employ the average cost per commencement measure as the primary cost estimate within the final report.

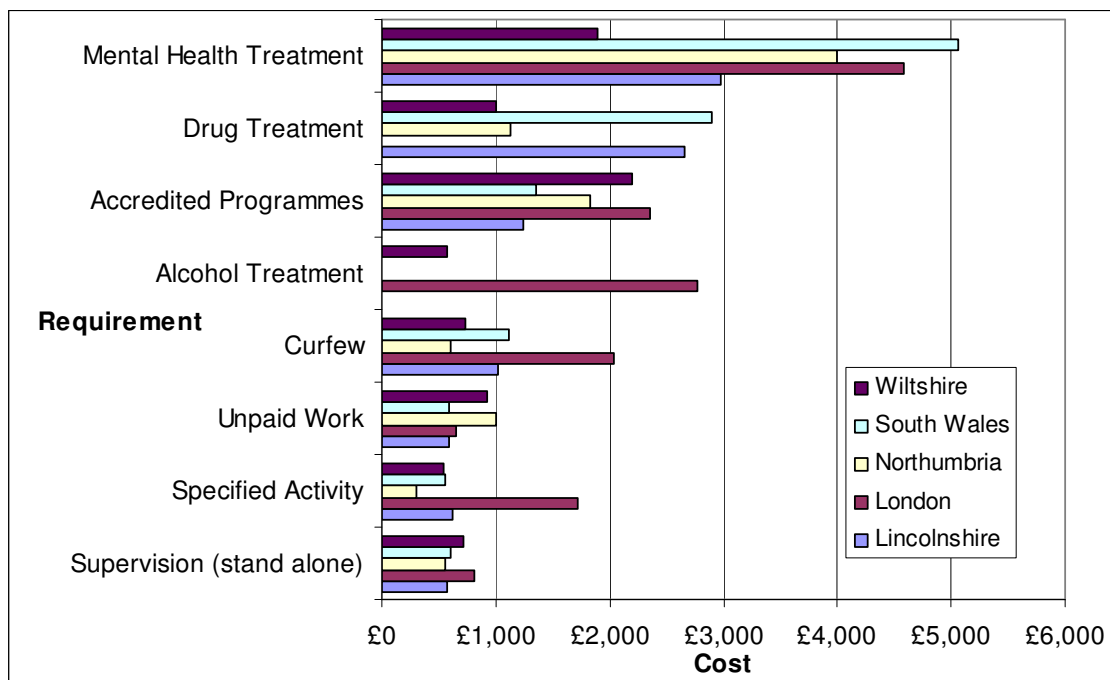
## 7 Findings: Variation of costs between probation areas

This section sets out potential explanations for differences in the cost estimates observed across the five probation areas. These factors were identified during the course of the costing work and include:

- Average cost per staff member;
- Number of commencements per staff member;
- Local attitudes to the effectiveness of different requirements; and
- Operational practice.

### 7.1 Average cost and number of commencements per staff member

Figure 1 below presents the estimates for the cost per offender commencement. This illustrates the variation in costs identified for each requirement by probation area.



**Figure 1: Cost per offender commencement**

This data shows that some probation areas tend to have a higher or lower cost per commencement across requirements. For example, London was the most costly per commencement on average, even allowing for the removal of the London weighting (£3,600 per staff member). The variation between the other four areas was comparatively small.

The overall cost per commencement is driven primarily by the number of commencements for the period analysed and total staff costs. There are two further factors which could potentially help us to understand variation in cost between probation areas:

1. **Average cost per staff member:** the influence of the average cost of the resources employed by probation areas on overall costs; and
2. **Number of commencements per staff member:** the influence of the number of commencements relative to the size of the workforce on overall costs.

Table 6 below summarises these two related factors for the five probation areas.

	Average cost per staff member <sup>3</sup>	Commencements per staff member (January to June 2007)
London	£36,443	4.3
Wiltshire	£32,581	4.4
Northumbria	£30,254	5.2
South Wales	£29,720	4.7
Lincolnshire	£28,958	3.8

**Table 6: Cost per staff member and commencements per staff member**

This table shows that the interaction of these two factors could help to explain higher or lower average costs in each of the probation areas:

- London had a high cost per staff member and slightly lower than average levels of commencements. This contributed to high average costs per commencement;
- Wiltshire had comparatively high cost per staff member and an average level of commencements which is likely to have contributed to slightly higher than average overall costs; and
- There was little difference in costs between the three remaining areas as when the average cost per staff member declined so did the number of commencements relative to the workforce. This is likely to have contributed to a balancing of the overall cost per commencement between these probation areas.

Further analysis of these factors is suggested in the future to understand the causes of variation of costs in greater detail. For example a more detailed consideration of average staff costs by grade.<sup>4</sup>

<sup>3</sup> Staff cost data was provided by the five probation areas for the staff groups included in the exercise for the financial year 2007/08.

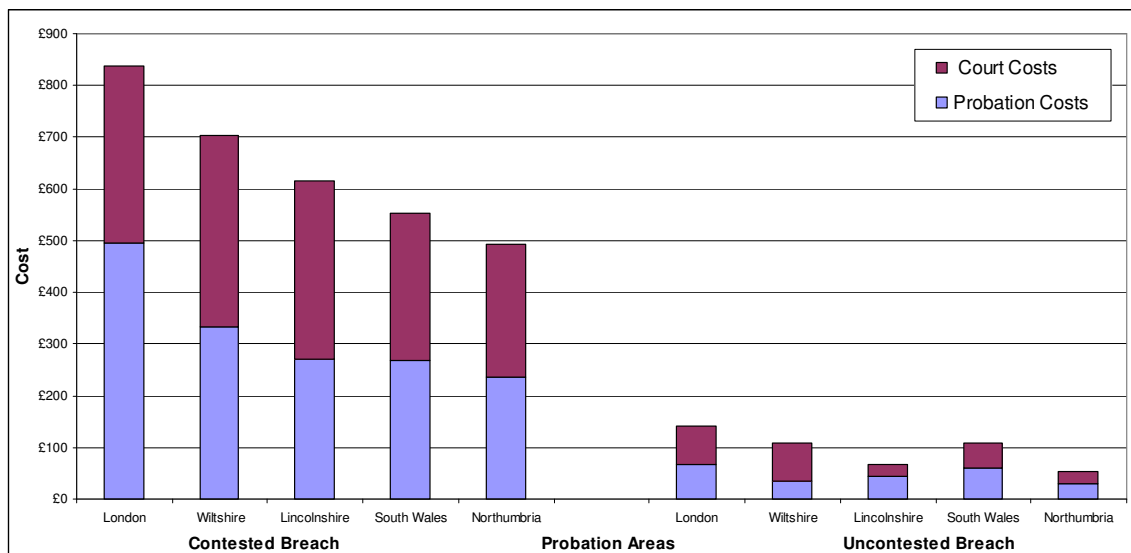
<sup>4</sup> Please note that this analysis has not included all staff groups. See appendix 4 for further details.

## 7.2 Local attitudes to the effectiveness of community order requirements

Interviews with probation staff suggested that variation in cost estimates could in part be explained by local attitudes to the effectiveness of the different types of requirement. This manifests itself in resource allocation and pre-sentence recommendations by probation areas, and sentences passed by courts. Examples were provided which illustrated a lack of a common view as to which are the most effective sentencing options at a local level. The most frequently cited example included waiting lists for accredited programmes resulting from limited probation area resources, high volumes of commencements from courts or target completions rates set by commissioners. Discussions with probation staff revealed that waiting lists were likely to contribute to increased costs due to the intensity of supervision required prior to the commencement of a programme. Waiting lists were also thought to be detrimental to completion rates with a higher proportion of offenders breaching prior to the commencement of programmes. Probation staff highlighted the necessity of developing a shared understanding between probation areas, courts and commissioners regarding the effectiveness and use of community order requirements. This is likely to mitigate the risks relating to higher costs and lower completion rates.

## 7.3 Operational practice

Variation in operational practice was observed in both the cost per breach results and cost per offender profile. Figure 2 below provides the basis for comparing the contested and uncontested costs across the five probation areas.



**Figure 2: Indicative cost estimates of a contested and uncontested breach**

This data suggests that there is a substantial difference in the cost of both types of breach between probation areas. In addition to differences in staff costs this variation can be explained by alternative approaches to operational practice. For example London



tended to have a higher cost for a contested breach due to more time invested by probation court staff in the process than other areas. Conversely probation staff from Northumbria, working in courts in Newcastle, provided time estimates which led to comparatively low costs. This group highlighted that these estimates were driven by the sheer volume of breach activity which limited time available in court for breach hearings and for staff to conduct breach related tasks.

Operational practice was also observed to vary in the cost per offender profile data, presented in figure 3 below.

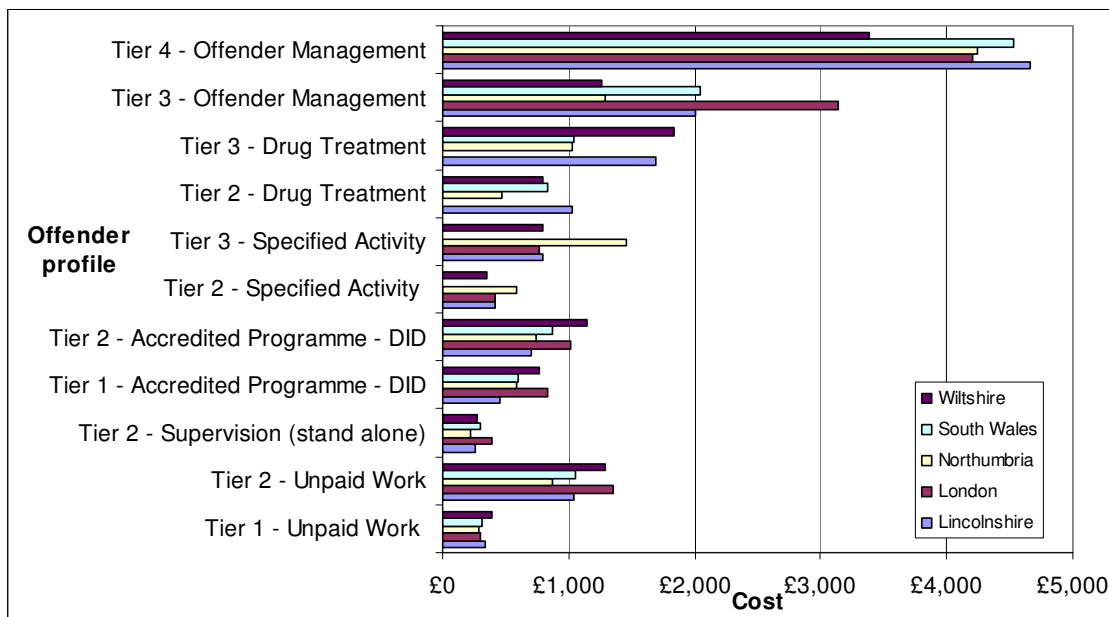


Figure 3: Cost per offender profile by probation area

Analysis of variation in the data, presented in appendix 3, demonstrates:

- The minor variation in the tier 1 and tier 2 profiles can be explained by differences in staff costs and the type and duration of activities carried out by each probation area. For example initial interviews and writing sentence plans;
- Variation in the tier 4 profile was observed to be relatively low compared to the size of the costs. Areas with a higher average cost of a probation officer tended to dedicate less time to supervision resulting in a comparatively lower level of overall variation; and
- Variation between probation areas was observed to be greatest in the tier 3 profiles. Dissimilarities in the costs of these profiles can be attributed to different practices regarding which staff grades manage and supervise the offender profiles and cost differences between these grades.

These observations suggest that differences in the costs between the tiers can be explained by the intensity of support required by the offender, the staff grade utilised to manage the offender, the relative cost of those grades and the duration of the order.

## 8 Implications for the efficiency of probation services

In addition to the core research questions NAO asked Accenture to consider the implications of the costing work for the future operational efficiency of probation services. A review of the cost data demonstrates that there are a number of key factors that can potentially affect costs including:

- Attitudes to the effectiveness of different community order requirements;
- Overall volume of commencements in relation to the workforce;
- The cost of the staff grade mix;
- Local approaches to tiering offenders; and
- Operational practice in the management of offenders.

The evidence presented in this section demonstrates that probation areas have the ability to influence operational practice at a local level to improve efficiency. Delivering these efficiencies on a wider scale will at the very least require the following activities:

- Identifying and spreading best practice nationally; and
- Redesigning and standardising processes locally.

This section sets out how efficiencies in the operational delivery of probation services can be realised.

### 8.1 Identifying and spreading best practice

It was evident from the process mapping workshops that there is no shared understanding of best practice between or, in most instances, within probation areas. Probation staff highlighted examples of core activities completed to the minimum standard which resulted in additional costs later in the community order, arising from error or failure to gather the information originally required. However examples of streamlined processes were also provided, which included:

- **Redesigned induction process:** an induction process which is undertaken on a group basis during which questionnaires are completed and basic skills assessments undertaken. This eliminates two further actions during the commencement of the community order (London);
- **Short form reporting:** the introduction of short form reporting to replace convoluted and lengthy reports to external agencies and at the conclusion of programmes (Northumbria);
- **Local protocols for supervision:** the ability to reduce supervision contacts prior to the 16 week standard at the offender manager's discretion (London); and
- **Court reporting protocols:** agreements that magistrates can only request court reports for offenders with particular characteristics or lengths of sentences which reduces the court reporting burden (South Wales).

Individual offender managers also provided their own examples of improving efficiency, such as text messaging offenders to remind them of appointments and improving their typing speed, which reduced wasted time.

There are likely to be other examples of streamlined practice within other areas which could be shared amongst probation areas. This would create a wider understanding of how processes can be streamlined in order to strike a balance between efficiency and effectiveness.

## 8.2 Redesigning and standardising processes

It was evident from the site visits that the most effort expended by probation areas redesigning and standardising processes at a local level has been conducted in relation to breach due to the frequency of breach events. Examples of this have included:

- **Delegation:** for example quality assurance of breach reports by experienced administrators rather than senior managers (South Wales);
- **Use of technology:** a breach tracker system which requires the user to enter standard information before the breach can be processed (London);
- **Expedited breach process:** a breach process where probation staff have control over booking the court date and issuing the summons thus eliminating two steps from the breach process (Wiltshire); and
- **Co-operation with courts:** For example agreements with magistrates' courts to actively reduce the number of adjournments for legal aid and medical information (London).

This evidence demonstrates that probation areas are capable of effectively remodelling processes locally to deliver efficiencies. Given that community orders were first employed in 2005 amidst a context of a changing model of offender management some efficiencies are likely to be realised as new organisational structures and ways of working bed down. However only through a co-ordinated programme led by the National Offender Management Service with the right incentives for change can sustainable improvement be realised. This would encourage necessary cultural changes highlighted by probation staff during the work stream, such as greater involvement of finance, HR and information staff in the management of probation areas, to support improved operational efficiency.

## 9 Appendix 1 : Summary of cost results for the five probation areas

This appendix provides a summary of all of the cost data for each of the five probation areas. The full set of cost data can be obtained from:

Vikki Jones  
 Audit Manager - National Audit Office  
 Telephone: 020 7798 7347  
 Email: [vikki.jones@nao.gsi.gov.uk](mailto:vikki.jones@nao.gsi.gov.uk).

### Average cost per offender commencement

	Supervision (stand alone)	Specified Activity	Unpaid Work	Curfew	Alcohol Treatment	Accredited Programmes	Drug Treatment	Mental Health Treatment
Lincolnshire	£569	£616	£589	£1,012		£1,234	£2,659	£2,980
London	£809	£1,725	£652	£2,039	£2,769	£2,353		£4,584
Northumbria	£561	£304	£1,009	£609		£1,833	£1,132	£3,987
South Wales	£607	£555	£592	£1,118		£1,345	£2,901	£5,064
Wiltshire	£714	£536	£924	£738	£571	£2,189	£1,000	£1,899

**Table 7: Summary of average cost per offender commencement for the five probation areas**

Alcohol treatment was not provided in three of the probation areas and representatives from the specialist drug rehabilitation requirement team in Newham, Barking/Havering and Dagenham were not available during the London probation area visit. These costs could therefore not be produced.

### Average cost per breach

	Contested breach costs			Uncontested breach		
	Probation Area	Magistrate Court	Total Cost	Probation Area	Magistrate Court	Combined Total
London	£494	£344	£838	£67	£74	£141
Wiltshire	£334	£369	£703	£35	£74	£109
Lincolnshire	£271	£344	£615	£43	£49	£92
South Wales	£269	£285	£554	£60	£25	£85
Northumbria	£237	£256	£493	£29	£25	£54

**Table 8: Average cost per breach for the five probation areas**

### Average cost per offender profile

	Tier 1 - Unpaid Work	Tier 2 - Unpaid Work	Tier 2 - Supervision (stand alone)	Tier 1 - Accredited Prog. (DID)	Tier 2 - Accredited Prog. (DID)	Tier 2 - Specified Activity	Tier 3 - Specified Activity	Tier 2 - Drug Treatment	Tier 3 - Drug Treatment	Tier 3 - Offender Mngt.	Tier 4 - Offender Mngt.
Lincolnshire	£340	£1,045	£262	£459	£704	£413	£799	£1,033	£1,689	£2,001	£4,668
London	£295	£1,354	£386	£832	£1,015	£420	£764			£3,137	£4,201
Northumbria	£282	£874	£227	£581	£736	£580	£1,454	£474	£1,028	£1,283	£4,244
South Wales	£309	£1,055	£303	£604	£877			£833	£1,043	£2,042	£4,527
Wiltshire	£389	£1,285	£278	£767	£1,141	£349	£788	£796	£1,832	£1,268	£3,382

**Table 9: Average cost per offender profile for the five probation areas**

Relevant staff groups for the specified activity requirement were not available in South Wales and representatives from the specialist drug rehabilitation requirement team in Newham, Barking/Havering and Dagenham were not available during the London probation area visit. These costs could therefore not be produced. A comparable offender profile could not be agreed between Wiltshire and London as offenders are sentenced and managed in very different ways as so these costs have not been included.

## 10 Appendix 2: Detailed findings of the cost per offender profile

This appendix presents the findings by individual requirement for the cost per offender profile estimate including a summary of the profiles employed in activity mapping workshops and commentary on the factors affecting variation between probation areas.

Please note that the offender profiles are intended to represent offenders at the upper and lower end of the spectrum for each requirement. Key assumptions were made to ensure comparability across areas which include:

- Offenders complete the order without enforcement action being taken. We have assumed a minimum of 90 percent attendance at supervision appointments. This is the lowest percentage an offender could achieve without breaching; and
- There is no change in the offender's circumstances during the order unless specified and no complications (e.g. arrest during the course of the order).

### 10.1 Unpaid work

#### Profile summary

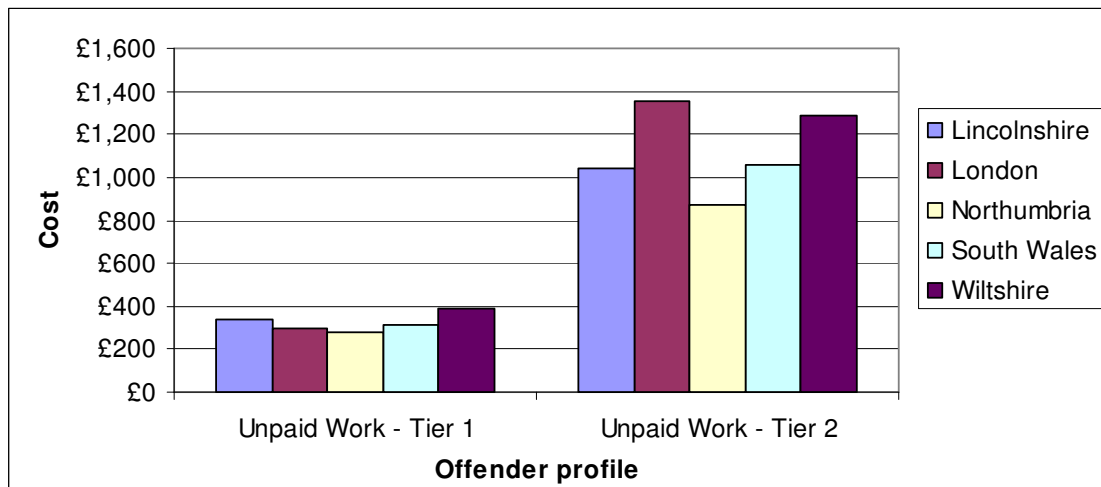
##### Unpaid work – tier 1

- Tier 1 offender
- Sentence of 60 hours of unpaid work
- No previous convictions
- 6 hours minimum unpaid work a week spread over 10 weeks
- Probation staff to include estimate of lower end of travel time if applicable

##### Unpaid work – tier 2

- Tier 2 offender
- Sentence of 200 hours of unpaid work
- 6 hours minimum unpaid work per week
- Includes supervision requirement for duration of unpaid work. Assume minimum of one hour per month support.
- Individual has debt and accommodation issues which require offender manager input
- Probation staff to include estimate of upper end travel time if applicable

Figure 5 outlines the average cost per commencement for the tier 1 and tier 2 offender profiles used in the activity mapping exercise. The tier 2 offender profile was a higher cost due to the longer duration of the sentence highlighted and the inclusion of a supervision requirement.



**Figure 4: Unpaid work cost per offender profile**

As indicated in table 5 there was limited variation between areas for the two unpaid work profiles. This can mainly be attributed to two factors:

- Judgements made regarding how many hours of unpaid work an offender would complete per week. A slightly higher number of hours per week in the tier 2 profile led to a shortening of the sentence and reduction in costs; and
- Assumptions regarding transportation. Offenders in Lincolnshire and Wiltshire were comparatively more costly due to allowances for transportation time. Conversely London allows for a reduction of up to 10% in the sentence if offenders have to travel substantial distances to their unpaid work site.

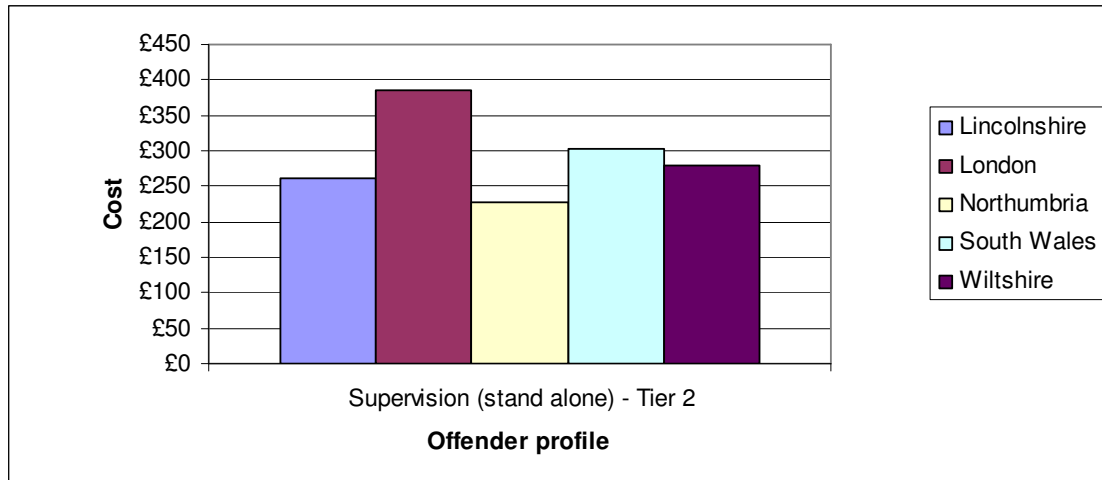
## 10.2 Supervision (stand alone)

### Profile summary

#### Supervision (stand alone) – Tier 2

- Tier 2 offender
- Stand alone supervision requirement
- Sentence lasts 24 weeks
- No complex behavioural needs

Probation staff interviewed predominantly view supervision as an integral part of offender management rather than a separate requirement. It has therefore been incorporated into the offender profiles for tiers 2 and above. Given the number of stand alone supervision requirements it was appropriate to develop an offender profile for a tier 2 case. Figure 6 below outlines the cost estimate data for this profile.



**Figure 5: Supervision cost per offender profile**

A consistent amount of time was identified for the supervision contacts (30 minutes), which comprised the major cost for this profile. Variation can therefore be explained by minor differences in other activities, such as induction and termination, and staff cost differences.

### 10.3 Accredited programmes

#### Profile summary

##### Accredited programme (Drink Impaired Driver) – Tier 1

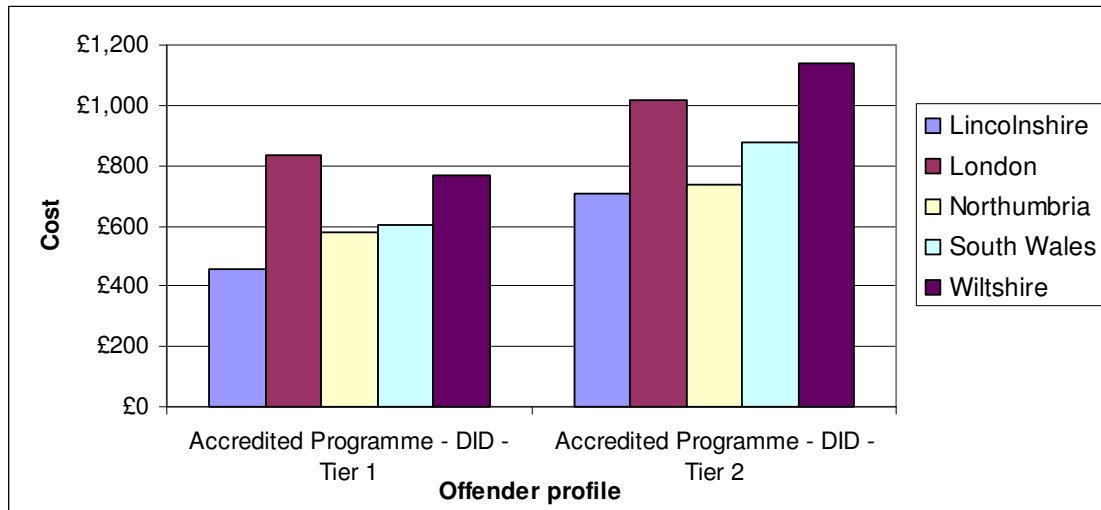
- Tier 1 offender
- First conviction
- Regular attendance with no missed sessions
- Order lasts until programme complete
- Probation staff to identify when the offender is likely to access the programme

##### Accredited programme (Drink Impaired Driver) – Tier 2

- Tier 2 offender
- Habitual drink driver
- Sentence includes supervision for 24 weeks
- Assume two classes missed and catch ups required
- Probation staff to identify when the offender is likely to access the programme

The activity mapping process covered the drink impaired driver (DID) programme in order to provide robust results for the cost per offender profile exercise. Figure 7 below outlines the cost estimates for the DID offender profiles.





**Figure 6: DID accredited programme cost per offender profile**

The DID programme is one of the least resource intensive and shortest of the programmes available in each of the probation areas. However the activity mapping data for the offender profiles demonstrated that programme costs were on average twice as much per week as for those for offender management input during the same period.

A number of the areas visited had substantial waiting lists for programmes. Probation staff highlighted that the attrition rate on programmes was highest prior to enrolment upon the programme. Therefore a probation area with long waiting lists was more likely to have a higher attrition rate which could depress the overall cost per offender commencement. Probation areas currently do not routinely collect and analyse data on waiting lists. Collecting this data would help to create transparency regarding the cost implications of offender access to programmes.

## 10.4 Specified Activity

### Profile summary

#### Specified Activity – Tier 2

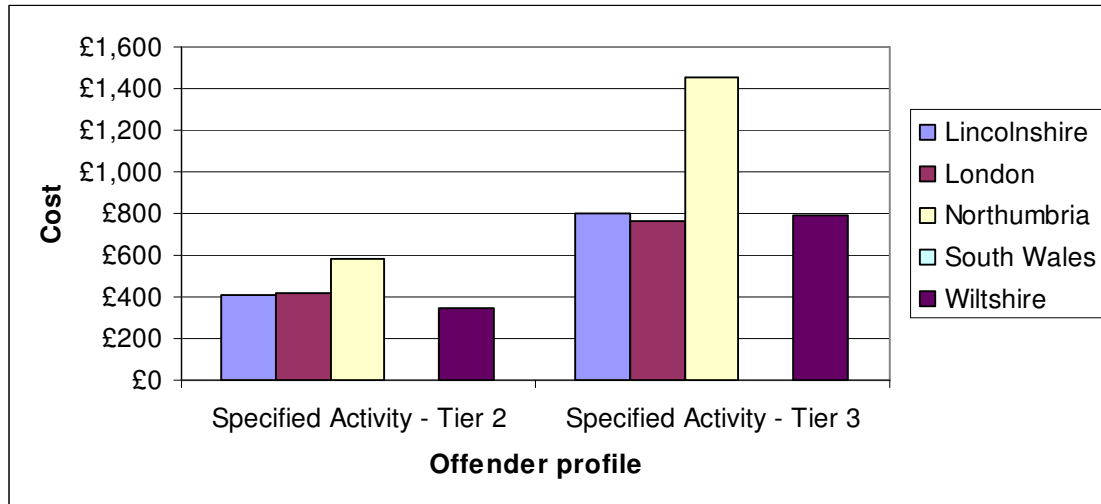
- Tier 2 offender
- 48 weeks supervision with ETE requirement. Where sentences specify the amount of days assume 10 days
- Currently unemployed but has basic skills

#### Specified Activity – Tier 3

- Tier 3 offender
- 72 weeks supervision with ETE requirement. Where sentences specify the amount of days assume 25 days
- Had no regular employment and difficulty in gaining employment due to low literacy

- Accommodation and debt issues which require offender manager input

Employment training and basic skills development is the most common specified activity undertaken in probation areas. The profiles outlined above have therefore comprised this activity in their sentences. The results from the activity mapping are outlined below in figure 8.



**Figure 7: Specified Activity cost per offender profile**

The results demonstrate a substantial difference between the two profiles and between tiers. This can be explained by the variation in the provision of ETE and the extent to which services are provided in-house or contracted to third parties. For example Northumbria provides a comprehensive ETE service that will support an offender for the duration of their sentence. The availability of a co-funding arrangement with the European Social Fund is critical to sustaining this higher level of expenditure. Other areas, such as Lincolnshire, will specify a number of days (sessions) of support that an offender will have as a minimum and provide additional support if required. ETE services are provided in South Wales but an activity mapping session was not able to be scheduled during the visit.

### 10.5 Mental Health

It has not been possible to undertake the activity mapping process for the mental health requirement due to the small volume of offenders and problems encountered in developing an offender profile which could be compared across areas. Offender managers highlighted that a substantial amount of time was spent attempting to access mental health treatment for offenders and dealing with arising issues which made these offenders very costly to manage as highlighted in the average costing exercise. Without treatment the mental health requirement therefore becomes a more costly supervision sentences for probation areas to administer.

## 10.6 Drug Treatment

### Profile summary

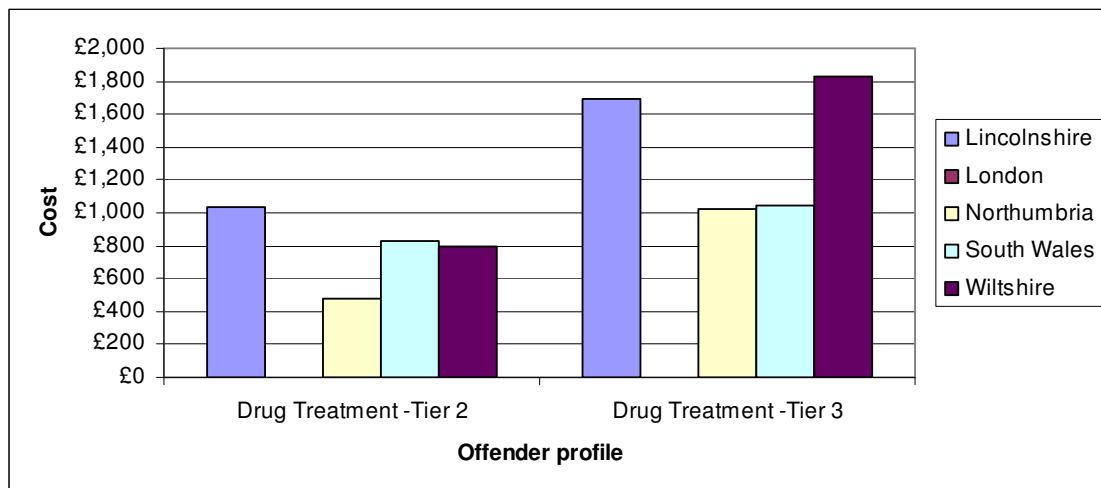
#### Drug Treatment – Tier 2

- Tier 2 offender
- 24 week order with supervision.
- Cocaine addiction

#### Drug Treatment – Tier 3

- Tier 3 offender
- 48 week order with supervision
- Accommodation and debt problems
- Heroin addiction (i.e. complex drug addiction)

Figure 9 below outlines the cost for the tier 2 and tier 3 offender profiles. The difference in cost per offender between Northumbria and other probation areas can be accounted for by both a difference in time estimates of activities undertaken and cost of resources employed. Northumbria's time estimates were based on standardised average timings across all tier 2 offenders. In this instance it is likely that this is an underestimate as an offender with a drug treatment requirement may require more input from offender managers than other tier 2 offenders. Lincolnshire and Wiltshire were more costly on the tier 3 profile due to more time consuming supervision contacts, allowances for travel time and court reporting activities undertaken.



**Figure 8: Drug treatment cost per offender profile**

Offenders with a drug treatment requirement are managed by a specialist team in London who were not available to attend an activity mapping session.

## 10.7 Alcohol Treatment

Alcohol treatment was only available in two of the probation areas visited and within these areas there were a low number of commencements (London - 31 and Wiltshire - 51). The criteria by which offenders were assessed as suitable for treatment and the length of sentence varied between the two areas leading to an inconsistency in the profiles employed in the cost range exercise. It was therefore not felt appropriate to include them in the main analysis.

The Wiltshire profiles were more costly due to the length of the sentences and the involvement of offender managers in some elements of provision, for example running an alcohol education group. Offenders with alcohol problems who were not given an alcohol treatment requirement were commonly sent on this course. In London all treatment provision is outsourced leading to lower offender management costs.

## 10.8 Curfew

The cost per offender profile measure was not used for curfew because the majority of offenders are managed by external contractors. Offender managers will supervise offenders with multiple requirements, including curfew, and may be involved in breach proceedings for offenders with stand alone curfew requirements.

The NAO estimated costs associated with the curfew requirement in its report on electronic monitoring published in February 2006. This report estimated that an average, 90 days on Home Detention Curfew costs £1,300, and an Adult Curfew Order of the same length costs £1,400.

## 10.9 Tier 3 and Tier 4

### Offender management – Tier 3

- Tier 3 offender
- Requirements: Accredited programme (IDAP) and 96 weeks of Supervision
- Progress on programme and no change in circumstances
- Domestic violence offence
- Victim - Partner with two children. Case conference and control groups required.
- Probation staff to identify when the offender is likely to access the programme and split of workload if applicable between PSO and PO

### Offender management - Tier 4

- Tier 4 offender
- Sentence 80 hours unpaid work, specified activity (employment training and basic skills) and supervision for 96 weeks
- Individual is a persistent and prolific offender (PPO). Assume all relevant processes undertaken

The nature of this value for money study has required a focus upon lower tiered offenders with single requirements in combination with supervision. However there is a large group of offenders with multiple requirements in tiers 3 and 4. Additional activity

mapping sessions were therefore undertaken to identify the costs associated with offender management to provide cost estimates for higher tiered offenders. As figure 10 demonstrates these types of offenders are comparatively costly to manage.



**Figure 9: Tier 3 and Tier 4 cost per offender profile**

These high costs can be explained by the following factors:

- **Longer sentences:** tier 3 and 4 offenders will tend to have sentences of between 18 months and 3 years. In these examples we have assumed sentences of two years;
- **Intensive offender management support:** all areas highlighted substantial supervision contact time and in the case of tier 4 offender twice weekly contact for the majority of the order;
- **Greater emphasis on risk assessment and risk management:** this manifests itself in more intensive OASys assessments and more time consuming liaison with external agencies; and
- **Management by probation officers rather than probation service officers:** over the duration of a 24 month order the additional time spent by more expensive resources will result in a significantly higher cost per offender. Probation officer costs are generally 20-25% higher than those of probation service officers. Areas had different interpretations of which staff grade would manage and supervise the tier 3 staff grade leading to variation in costs.

## 11 Appendix 3: Further analysis of cost estimates

This section presents additional analysis undertaken to assess the degree of variation within the cost results. The following two measures were used:

- **Standard deviation:** this is a measure of variation within a data set from its average. The more spread apart the data the higher the variation from the average. This measure assists in the assessment of the degree of variation in the cost of each requirement.
- **Co-efficient of variation:** this represents the ratio of the standard deviation to the average within a data set. It is useful for comparing the degree of variation from one whole data set to another even if they have very different raw values. This measure has been employed to compare variation of cost results across requirements.

Table 10 below presents the data for the average cost per commencement.

Requirement	Standard Deviation	Co-efficient of variation
Unpaid Work	£199	26%
Accredited Programmes	£496	28%
Stand alone supervision	£107	16%
Specified Activity	£559	75%
Drug Treatment	£1218	63%
Curfew	£562	51%
Alcohol Treatment	£1200	72%
Mental Health Treatment	£1274	34%

**Table 10: Analysis of variation in the average cost per commencement**

This data suggests a higher degree of variation amongst more complex requirements. For example London and Wiltshire are the only two probation areas where alcohol treatment is available. The approach to sentencing and the management of offenders with this requirement is very different according to probation staff contributing to different cost estimates and a high degree of variation. By contrast all areas had comparatively similar estimates of the costs involved in stand alone supervision.

Table 11 sets out the data for the analysis of the cost per offender profile.

Offender profile	Standard Deviation	Co-efficient of variation
Tier 4 – Offender Management	£499	12%
Tier 3 – Offender Management	£763	39%
Tier 3 - Drug Treatment	£423	30%
Tier 2 - Unpaid Work	£195	17%
Tier 3 – Specified Activity	£336	35%
Tier 2 - Accredited Programme - DID	£185	21%
Tier 2 - Drug Treatment	£232	30%
Tier 1 - Accredited Programme - DID	£150	23%
Tier 2 – Specified Activity	£98	22%
Tier 1 - Unpaid Work	£43	13%
Tier 2 - Supervision (stand alone)	£60	21%

**Table 11: Analysis of variation in the cost per offender profile**

This data suggests a low degree of variation between the probation areas for the tier 4 and tier 1 and tier 2 unpaid work profiles. The tier 3 profile was the most varied which reflects different operational practices by probation areas. For example there was variation in the use of probation officers and probation service officers to manage offender profile and in the intensity of offender management over the course of the community order.

## 12 Appendix 4: Detailed methods

### 12.1 Introduction

This appendix provides a detailed outline of the methodology employed in the delivery of the costing work stream. The objective of the work stream was to answer the following key research questions:

- What are the indicative costs associated with the implementation of different types of community order requirements?
- What are the indicative costs associated with the breach of a community order?

Following discussion with NAO it was evident that the following additional requirements were critical to delivering the required outputs:

- **A robust study design** which provides a rigour that will instil confidence within the Public Accounts Committee (PAC) and probation areas involved in the study;
- **A realistic approach** that takes account of the complexities of the probation environment in which the collection of cost data is not normal practice; and
- **A rapid review** of evidence and analysis within an eight week timeframe.

### 12.2 Costs included within the work stream

The focus of the work has predominantly been upon pay related costs drawn from the recent 2007/08 national unit costing exercise. These costs comprise 75-80 percent of the five probation areas total budgets. Table 12 below provides an outline of the costs included and excluded from the costing exercise.

Pay costs	Included	Rationale
Salary cost for delivery staff	Yes	It is the largest single cost and can be accurately included. This will include staff delivery time and manager time associated with quality assurance/supervision of delivery.
Staff on costs	Yes	Pension and National Insurance contributions can be accurately and efficiently included within staff costs.
HM Court Service costs	Yes	Included as part of the breach calculation.
Salary and on costs for non-delivery focused roles	No	It is difficult to accurately allocate management time to community orders without looking at other activities which are not within the scope of this study.
Non pay costs	No	As defined in the NAO project scope overheads have been excluded from consideration. These include contracted support, estates, IT, training and transport costs.
External agency costs	No	External agencies (e.g. treatment providers and the police) contribute towards the delivery of community order requirements. These costs have been excluded from the



	exercise given the difficulties in gathering data and the time constraints involved in the project.
--	---

**Table 12: Costs included and excluded from the costing exercise**

Probation area submissions for the national unit costing exercise (2007/08) have been used as the basis for calculating staff costs and staff on costs. The outputs from this work are therefore estimates of activity costs (pay costs associated with delivery) rather than full unit costs.

### 12.3 Costing methodology

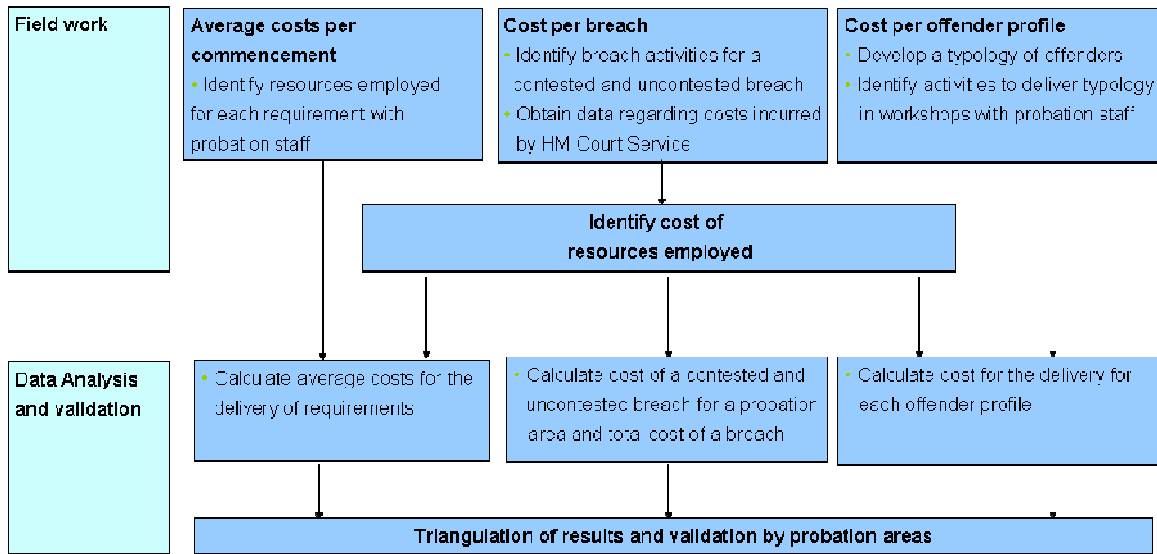
Our approach comprised two core cost estimates:

1. **Average costs for community order requirements:** we held workshops for managers in each probation area to estimate the proportion of time staff groups contribute towards the delivery of different community order requirements. The estimates were multiplied by staff group costs to give a total cost for each requirement. The totals were finally divided by the number of offender commencements to produce an annual average cost per offender commencement for 2007/08. This provided a 'top down' understanding of costs by focusing on the overall resources available for delivery; and
2. **Cost per breach:** we interviewed frontline staff to identify the tasks, time estimates and staff groups involved in the delivery breach processes. These time estimates were multiplied by a cost per minute for each staff group to produce a cost estimate for a contested and uncontested breach for probation areas. This was then added to cost estimates for magistrates' courts to give a total cost per breach.

In addition we produced a third cost estimate to provide supporting information for the NAO:

3. **Cost per offender profile:** we developed offender profiles with sentences comprising different community order requirements. We then developed time and cost estimates relating to the delivery of probation services for these profiles were developed using the same process employed for the cost per breach. The costs reflect the resources invested over the duration of the community order for each profile which may be shorter or longer than a financial year. This approach provided a 'bottom up' understanding of costs by focusing on frontline delivery to produce a cost per offender profile; and

Figure 10 outlines this approach and the relationship between the different elements.



**Figure 10: Outline of overall costing methodology**

The remainder of this section outlines the detailed approach undertaken in the delivery of these elements.

### 12.3.1 Deriving average costs for community requirements

This approach comprises a number of key steps:

- Define the unit and time period of interest;
- Undertake a process of analytical estimation to identify the proportion of resources employed in the delivery of each requirement; and
- Calculate the average cost of each requirement.

#### Define time period and unit of interest

The output from this element of the work is an average cost per offender commencement. We have therefore employed both community order commencement activity data and probation cost data.

As outlined in the previous section we have employed cost data (forecast for 2007-08) submitted for the national unit costing exercise and the most recent six months of commencement data from the period January to June 2007 (which crosses both the financial years of 2006/07 and 2007/08). This cost and activity data are evidently not coterminous. Probation areas have therefore agreed that it is reasonable to assume that the profile of their activity for the first six months of 2007 will be similar to that of the second six months. This has enabled us to calculate the cost of activity from January to June 2007 based on 2007/08 prices. The main benefits of this approach are:

- Ensuring that the results will still be current by the time the NAO report to PAC;
- Employment of the most recent period of data available to ensure a robust process of analytical estimation (see next section for detail); and
- Minimising the data request from probation areas.

### Undertake a process of analytical estimation

There are a number of methodological challenges related to identifying how staff spend their time which we outline in section 12.4.1. In light of these challenges we have employed a process of analytical estimation to provide robust results within the practical constraints of the project. Analytical estimation can be defined as “Judgements by experienced managers based upon their knowledge of the operational environment and informed by the available data.”

This process was developed by the creators of activity based costing (ABC) in response to problems encountered with collecting time data from staff. They revised their approach to incorporate the development of assumptions by managers in relation to how staff groups spend their time on the basis that this was more efficient and as accurate.<sup>5</sup>

The process undertaken within this exercise involved a cross-section of managers within each probation area using community order activity data (January – June 2007) to develop estimates of how staff groups spend their time. This process was conducted during a 2.5 hour workshop and comprised the following four steps:

1. **Identification of the staff groups involved in the delivery of community orders:** staff groups were included within the exercise if they were involved in the delivery of individual cases. Staff groups, such as chief probation officers and corporate support staff, were therefore excluded from the exercise. Frontline staff and groups of managers who undertake quality assurance or field queries or complaints on individual cases were included.
2. **Identification of the proportion of time spent on community orders by staff grade:** the initial discussion focused upon developing agreed estimates of the proportion of time that staff groups spend on the following categories:
  - Offender management (management and monitoring of offenders, assessment and planning, OASys updates after commencement of order, enforcement), supervision and interventions (preparatory work to access interventions and delivery of interventions) and enforcement (including breach) for the delivery of community orders;
  - As above for the delivery of services for other types of offenders; and
  - Overhead time (e.g. internal communications, performance monitoring, organisational management, team meets, personnel management, review of guidelines (e.g. circulars) and managing audit). The default level of overhead time (16%) from the national workforce management tool was used as the starting point for discussion in relation to this area.

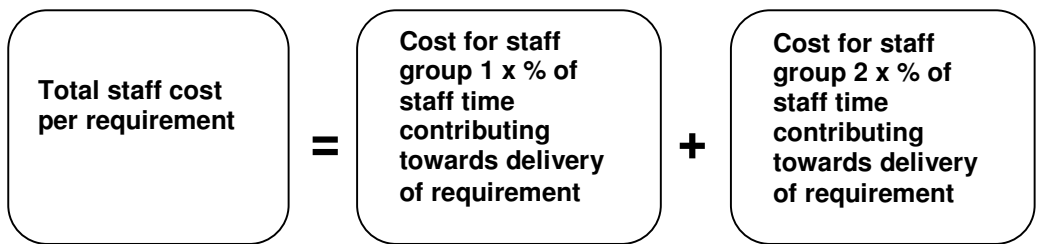
---

<sup>5</sup> Kaplan, Robert, Andresen, Steve, Time Driven Activity Based Costing, Harvard Business School Press (2003).

3. **Identification of time associated with enforcement activity for community orders:** within the proportion of time spent on the delivery of community orders the group was asked to estimate the proportion of time spent on enforcement activity. It has been necessary to split out this time as we are considering breaches separately in the cost per offender profile exercise.
4. **Identification of the proportion of time spent on different types of community requirements:** this was done using a process of relative weighting. In the first instance managers were asked to estimate the relative amounts of time staff spent contributing towards the delivery of different requirements using a scale of 1-10. This scale reflected the relative amount of time spent on each requirement from low (1) to high (10). The group then sense checked the resulting percentages of time. Commencement data by requirement was used to inform discussions during this review.

**Calculate the average cost of each requirement**

Following the workshop the costs associated with delivery of community orders were then calculated in two steps using the total staff grade costs contained in the national unit costing submissions.



NB – The full year staff costs were divided by half to reflect the six month commencement data we examined (January – June 2007).



### 12.3.2 Establishing a cost range for breaches

The second element of the costing methodology involved the identification of a cost range for the processing of a breach. This was obtained through three key activities:

- 1). Identify activities involved in processing a breach;
- 2). Obtain data regarding costs incurred by HM Courts Service; and
- 3). Calculate the cost range for a breach.

We have derived a cost range for breach due to differences in resources invested in a contested breach versus an uncontested breach.

#### **Identify activities involved in processing a breach**

We held a one hour session within each probation area to map the resources to deliver each requirement for both a contested and uncontested breach. This comprised identifying the sequence of activities, the staff grade undertaking each activity, a time estimate for completion and the frequency of repetition. The staff groups involved in these sessions included probation officers, probation service officers, probation court staff, managers and case administrators. The starting point for the activity mapping was the decision by an offender manager that an absence was unacceptable and the end point the conclusion of the follow up activity after the last hearing or trial. These activities were captured in an excel process log in order that they could be fed into the cost model.

#### **Obtain data regarding costs incurred by HM Courts Service**

A cost per hour of magistrate court time in England and Wales for the financial year 2006/2007 was obtained from HM Court Services. This average cost per hour (£295) was derived by taking the total of magistrate courts' direct costs and all administration and overhead costs that can reasonably be attributed to the provision of the magistrates' courts services for the year divided by the total sitting hours available at magistrates' courts in the year. Direct costs included staff costs, accommodation and establishment costs, depreciation and cost of capital.

We have only focused on costs incurred by magistrates' courts as breaches processed by Crown Courts are less frequent and an equivalent cost per hour was not readily available.

#### **Calculate the cost range of a breach**

The cost per minute of court time was then multiplied by time estimates given by probation court staff for the length of time spent on each case in court to give a cost incurred by HM Court Services. This was then added to the cost estimates from probation areas to give an overall cost for an uncontested and a contested breach.

### 12.3.3 Establishing a cost per offender profile

This element of the methodology aimed to establish a cost range for each requirement reflecting the different levels of resources required for each requirement and different types of offenders. This approach comprised the three following steps:

- Development of typology of offenders;
- Undertake activity mapping with probation staff; and
- Calculate cost ranges.

#### **Development of a typology of offenders**

It is evident that there is scope for the use of different probation resources in the completion of each community order both across the requirements and four tiers of the offender management model. During the pilot phase of our methodology we developed a typology of offender profiles to reflect these differences. This typology therefore reflects examples of offenders at the lower end of the resource scale (i.e. shorter sentence, lower tier and no behavioural issues) to the upper end (i.e. longer sentence, higher tier and more intense support requirements).

Given that the vast majority of offenders with one or two requirements (including supervision) tend to fall in tiers 1 and 2 it was felt appropriate to develop profiles for offenders in tiers 3 and 4 with multiple requirements. This typology has been included in appendix 1.

#### **Undertake activity mapping**

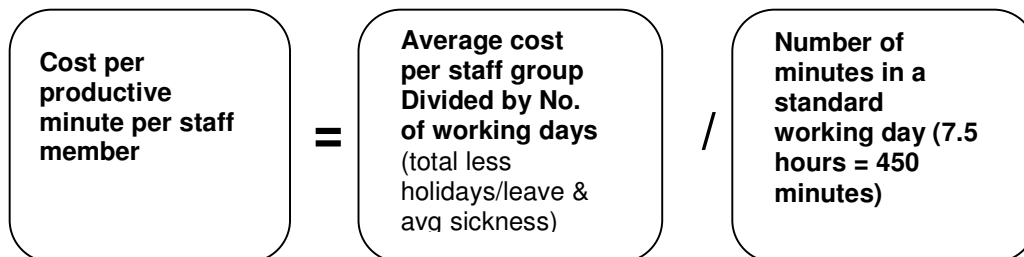
We conducted a series of short sessions to map the resources to deliver each requirement by the probation area for the example offender profiles. This comprised identifying the sequence of activities, the staff grade undertaking each activity, a time estimate for completion and the frequency of repetition. The staff groups involved in these sessions included probation officers, probation service officers, managers and case administrators. Existing generic process maps, developed for the national workforce management tool, were employed to prompt discussion regarding the activities that are carried out. The starting point for the data collection during the sessions was the allocation of the case to an offender manager and concluded with its successful termination. The time period of the requirement was broken down into:

- Commencement of order (assess, induction interview, write sentence plan and assign to interventions as required);
- Offender management to 16 weeks (manage, implement and review);
- Offender management post 16 weeks (manage, implement and review); and
- Completion of order (evaluate).

These activities were captured in an excel process log in order that they could be fed into the cost model.

### Calculate cost ranges

The key output from the cost range exercise is a cost per offender profile. This involved the calculation of a cost per productive minute of staff time outlined below.



This cost per minute was then multiplied by the timings for each of the tasks and added together to give a cost per offender profile.

## 12.4 Benefits and limitation of approach

Our approach has provided the most appropriate balance between robust results and efficient delivery within the eight week time frame specified by NAO. In this section we outline our thoughts on the benefits and limitations of this approach.

### 12.4.1 Deriving average costs for community requirements

There are a number of methodological challenges associated with identifying average costs for community requirements. These include:

- 1). There are a number of requirements which are not normally employed by probation services.** For example while 12 requirements were theoretically available for new orders, between August 2005 and July 2006, half have not been used or have been used very rarely.
- 2). Supervising the implementation of community orders are not the only type of activities probation officers undertake.** For example probation officers also supervise offenders with suspended sentence orders and home detention orders.
- 3). There is no meaningful average for each type of requirement.** While costing a product is relatively straight forward because the unit of interest is constant (e.g. a particular component of a car) requirements vary in relation to the offence committed. Probation officers may spend different amounts of time with offenders who have been given the same requirement. Commencements, unlike tiers, are not mutually exclusive and can be combined in a community order making the identification of the resources invested harder.

These factors have informed our approach. The following advantages are associated with the delivery of our methodology:

- **the research design is nimble:** traditional activity based models are cumbersome because they require extensive resources to interview and survey staff.<sup>6</sup> Given the time constraints of the project a wide ranging survey would be cumbersome and impractical. Our method provides a means of gather data quickly and efficiently;
- **the method is driven by the judgements of managers who understand the operational environment:** analytical estimation provides subjective assessments based upon the facts of the operating environment and the experience of senior management. The method is therefore similar in principle to a time driven activity based costing model; and
- **our approach has achieved buy-in to the findings:** employing professional judgements has enabled buy-in to the process which should facilitate clearance of the draft NAO report.

There are also a number of limitations which include:

- **it is difficult to estimate the reliability of this method:** the major methodological challenge associated with analytical estimation is reliability (i.e. the extent to which a measure will produce consistent results if repeated numerous times). It is, like most costing methods, reliant upon subjective judgements or assumptions. The robustness of deriving cost data based upon subjective assessments of employees filling in timesheets has been called into question<sup>7</sup>. In the same way that a frontline worker may fill in two completely different timesheets for the same week of work senior managers in our exercise may make different estimations of how resources are employed. Each method of estimation is subject to questions regarding its reliability and so this limitation applies equally rather than placing our methodology at a disadvantage;
- **the output is a cost per commencement rather than a cost per completion:** our results reflect the number of offenders commencing community sentences rather than those completing sentences. We could not examine completions because this data is not collected in probation areas, with the exception of offenders with programme requirements. There are therefore a number of limitations with an examination of costs on a commencement basis. For example an area with a high attrition rate for a given requirement may have an artificially depressed cost per commencement. A cost per commencement also reflects the volume of new sentences commenced over the period analysed rather than the total current caseload. We would recommend any future value for money study be based upon a cost per completion which would require a change in the data collected by probation areas; and
- **the findings will not reflect the overall cost of delivering the requirements:** as part of the exercise we excluded overheads incurred by the probation service and costs incurred by other agencies, apart from HM Court Service. For example police time incurred in enforcing exclusions or costs incurred by Primary Care

<sup>6</sup> Kaplan, Robert, Andresen, Steve, Time Driven Activity Based Costing, Harvard Business School Press (2003).

<sup>7</sup> Steven Anderson "Should More Companies Practice their ABCs?", Harvard Business School Press (1997).



Trusts in the provision of mental health treatment. This is appropriate given the constraints of the study and could be explored further in a more substantive review.

#### 12.4.2 Establishing an average cost for breaches

The following advantages are associated with the delivery of this methodology:

- **the method reflects costs incurred beyond the probation service:** the findings reflect inputs from HM Courts Service which have a more advanced understanding costs;
- **our approach has facilitated engagement with frontline staff:** we have effectively engaged probation staff in the identification of the activities involved in processing a breach. The process of validation undertaken with probation areas give the findings greater legitimacy; and
- **the method will facilitate a comparison across probation areas:** this will not only include a comparison of costs but also of process.

There are also a number of limitations which include:

- **we have been supplied with an average magistrate court cost:** this means that regional variation between court costs will not be reflected in the final results; and
- **the findings may not reflect all of the costs associated with a breach:** in addition to excluding probation area overheads there may be other external agency costs which we may not be able to derive within the timeframe. We believe that this is acceptable given the constraints of the project and the likelihood that these will be minor

#### 12.4.3 Establishing a cost per offender profile:

The following benefits are associated with the delivery of this methodology:

- **the method is specific and will therefore deliver robust valid and reliable indicative costs:** this will give a robust cost per profile in each probation area because the focus is upon a specific case rather than a notional 'average' offender;
- **it will facilitate engagement with frontline staff:** because the method is specific it has been easier to engage probation staff in the process of identifying the associated activities in delivering the requirement. Gaining the input of frontline staff was be critical to establishing robust cost ranges; and
- **effective comparisons can be made between probation areas:** due to the specific nature of the method the typology has provided a consistent basis for comparison of relative costs across probation areas.

There are a number of limitations which include:

- **an inability to generalise:** the sample of probation areas included within the study is purposive (i.e. has been chosen because of the range of requirements they deliver, performance they have achieved and location). These findings should not be considered as representative of all 42 probation areas;
- **constraints do not allow for thorough validation:** due to time and resource constraints we have been unable to conduct live case testing. This would involve the review and tracking of specific cases to test whether activities are missing and whether probation staff have accurately described their way of working. In the absence of this the NAO case file review team have reviewed the process logs to provide another tier of validation; and
- **the method is unlikely to provide the full extent of the cost range:** as highlighted previously these cost estimates are based on offender profiles with one or two requirements without complicating factors in order to facilitate an effective comparison across areas.