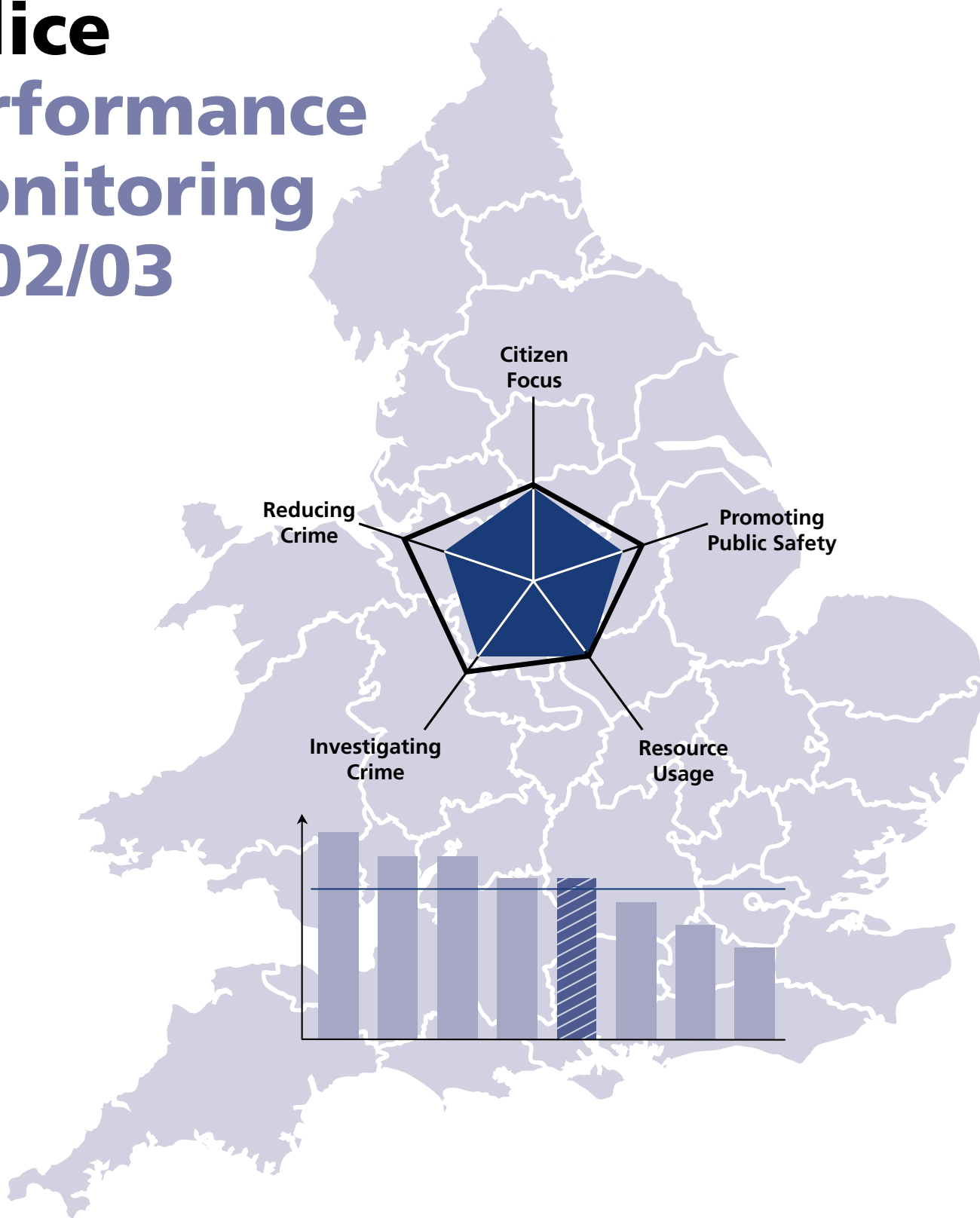




Home Office

BUILDING A SAFE, JUST  
AND TOLERANT SOCIETY

# Police Performance Monitoring 2002/03



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## Foreword



High quality, effective policing, carried out in partnership with local communities, can make a real difference to crime levels and community safety. Assessing performance and driving improvement are crucial to long term and sustainable progress.

In February 2003 the Home Office published comparative performance information about police forces in England and Wales for the first time. The performance monitors presented at that time showed the achievement of each force across a number of areas of policing business in relation to similar forces elsewhere. That first report showed the importance of considering that performance in an appropriate context, rather than making cruder comparisons. The 'balanced scorecard' approach of the performance monitors also made clear that the police should not be judged on crime rates alone, and that other aspects of policing are equally important.

Within the policing community, the publication of these performance monitors helped to sharpen focus on performance and make clear where improvements were needed. We have expanded this second performance monitoring report to provide more detailed information about each force. As well as giving an impression of year-on-year changes, we also present a more detailed breakdown of the comparison of forces with their peers. This gives a better overall impression of performance than the monitor diagrams can do in isolation.

The public will be able to use these reports for judging the relative performance of their local police, providing the basis for an informed assessment of achievement. This will help the public to understand and engage with policing in their area and to hold to account those responsible for the police service they receive.

A handwritten signature in black ink that reads "Hazel Blears". The signature is fluid and cursive, with a long horizontal line extending from the bottom of the name.

**Hazel Blears**

*Minister of State for Crime Reduction, Policing and Community Safety*

## Introduction



The forthcoming National Policing Plan 2004-2007, to be published in November 2003, will describe in more detail the new Policing Performance Assessment Framework (PPAF) – a set of national measures of performance and an associated assessment system. PPAF will enable the systematic identification of variations in performance across all parts of police business. The PPAF is described in more detail in Appendix A.

While that framework is being developed, we still need to assess how well police forces are performing compared with similar forces elsewhere. To this end, an interim assessment framework has been created, against which key areas of policing performance can be measured. Some of this information corresponds to the interim performance measures set out in the National Policing Plan 2003-2006 and the charts in this report are based on those.

Since the PPAF will deliver a more balanced view of policing performance, we have chosen to arrange the performance indicators available to us currently according to the balanced structure that the PPAF will eventually embrace. Although some of the interim indicators we present here will survive into the longer term assessment framework, others will be modified or replaced with improved measures which better capture performance in the area of policing responsibility concerned.

The reports feature monitor diagrams to illustrate the balance of performance for a force. Although the form of the monitor diagrams in particular can initially be unfamiliar, the basic concept is far from difficult to get used to and a lot of information underlies such a simple diagram. Bar charts for each of the areas of policing responsibility are also included, which highlight the spread of performance in a given force's peer group. The introduction of the National Crime Recording Standard (NCRS) in April 2002 means that we can have increased confidence in such peer group comparisons, although further work is continuing to increase the consistency of the data provided by forces in other areas of policing business. The introduction of the NCRS also means that care must be taken when drawing conclusions from changes in performance between 2001/02 and 2002/03, details of which are also provided. It is always important to be aware of the nature of the underlying data when comparing performance. It is also important to remember that variations that are highlighted by the reports should prompt questions as to why there is such variation. Differences in policing practice should not be seen as the only possible cause.

The assessment of performance provided by this publication is also improved through the timely nature of the data (publication brought forward four months compared with the 2001/02 monitoring report), and the revision of the 'most similar force' groupings using 2001 Census data. This provides a more accurate and detailed account of comparative policing performance than has ever been presented in the past.

A handwritten signature in dark ink that reads "Paul Pugh". The signature is written in a cursive style with a large, sweeping flourish at the end.

**Paul Pugh**

*Acting Director, Police Standards Unit*

## Summary

The performance reports contained within this document give a picture of police force performance in numerical terms to the extent that we presently measure it. The performance measures set out here, whilst attempting to capture as much core policing business as possible, can only be the first step in the true assessment of performance. For conclusions to be drawn about performance each report must be taken in context, with an understanding of the limitations and extent of the data as well as a consideration of the less quantifiable measures of performance. Nevertheless, these reports can and should be used to prompt questions about performance variations between force areas and across areas of policing responsibility within force areas.

### **Peer Group Comparisons**

It would be misleading to compare the performance of any given police force against a national average for a given performance measure. This is because force areas vary in their socio-economic, demographic and geographic makeup and we know that (for example) crime rates are dependent on some of these underlying characteristics. For instance, as population density increases, crime rates, in general, also increase. Real performance variations can only be identified if we account for these underlying variations in the performance measures. For this reason, we use specific comparison groups for each force, rather than comparing with all other forces. For each force, a unique set of 'most similar forces' has been identified and the reports are based around these comparators.

Note that these peer groups have been updated recently using 2001 Census data, and consequently we believe that they provide for more accurate peer comparisons than have been possible in the past.

### **Variation Over Time**

The reports also show how the performance of each force has changed between 2001/02 and 2002/03. In some cases these changes are relatively small and/or not statistically significant. Changes in recording practices (via the NCRS) also account for some changes in apparent performance. However the inclusion of this change over time information gives at the very least an impression of 'direction of travel', even if it is not possible to quantify the change with absolute confidence.

## Differences between the 2001/02 and the 2002/03 reports

A number of changes to the style and amount of information presented in these reports have been introduced since the publication in February 2003 of the reports for 2001/02. There have also been important improvements in some of the underlying data and the comparison methods applied.

### **Timeliness**

The reports presented here relate to the 2002/03 financial year. They therefore relate to a relatively recent time period (compared with the 2001/02 reports which were published some ten months after the end of that period).


### **Inclusion of data from two financial years**

One of the main enhancements delivered in this report is the inclusion of data from both 2002/03 and 2001/02, detailed in the data tables.

However, a strong caveat must be applied before any conclusions may be drawn from apparent changes in performance level.

For survey based measures, statistical confidence intervals apply. Surveys produce statistics, which are estimates of the real figure for the population under study. These estimates are always surrounded by a margin of error of plus or minus a given range. A "95 per cent confidence interval" is the range within which you would expect the real figure to lie 19 out of every 20 times. Thus, if a survey estimate is given as "50±2%", this means that we can be confident that the actual value for the population as a whole would lie in the range 48% to 52%.

Confidence intervals can also be constructed for changes in estimates between sweeps of the Crime Survey. Using these intervals, it is possible to say whether we are confident that a given change in a survey measure between two years (sweeps) – 2001/02 and 2002/03 in this case – is statistically significant. In this report changes outside of a 90 per cent confidence interval are marked as "statistically significant" and we can be fairly confident that in these cases there has been a real change in performance. If a change is marked as not statistically significant, we cannot be confident from the survey estimates that a real change has taken place.



For crime based measures (i.e. crime rates and detections per crime), the introduction of the National Crime Recording Standard (NCRS) also affects the interpretation of the year-on-year change (see box on page 8).

### **Revision of 'most similar force' groupings**

Originally devised by Her Majesty's Inspectorate of Constabulary (HMIC) in 1997, the list of forces to which each force can be regarded as most similar (in terms of socio-economic, demographic and geographic characteristics) has been updated in consultation with the Association of Chief Police Officers (ACPO), the Association of Police Authorities (APA) and HMIC. An improved methodology and recently available Census 2001 data were used to draw-up these groups which are unique to each force. More information about how the most similar forces were derived, and why each force has a unique comparator group is given in Appendix B.

It is of note that the revision of the groups led to the conclusion that policing in the City of London could not be accurately compared with other areas. Most similar force group comparisons are therefore not possible for this force. However, a change-over-time assessment is still possible, and the City of London report reflects this.

### **Bar charts to show peer group 'spread'**

The reports have now been expanded to include a breakdown of the monitor diagram that illustrates the 'spread' of performance within the most similar force grouping for the combination of indicators within each arm. These charts usefully show whether all forces in the group have fairly similar performance, or whether there is a wider range of variation. Thus, a force might appear below average on the monitor, but actually still have a very comparable level of performance to the other forces in its group.

### **Future improvements**

Information on resources used, levels of frontline policing and other key areas of policing business may be incorporated in future versions of this report. Once the Policing Performance Assessment Framework is introduced, more sophisticated assessments will certainly reflect these and other aspects of performance.

## The National Crime Recording Standard

In April 2002, all police forces in England and Wales adopted the National Crime Recording Standard (NCRS). It was developed by the Association of Chief Police Officers (ACPO) with assistance from the Home Office in order to promote greater consistency between police forces in the recording of crime and to take a more victim-oriented approach to crime recording. This has led to a greater confidence in the comparability of 2002/03 crime data (although some variation still exists which forces are working to reduce).

For many forces the introduction of the NCRS required a move to recording based more on the victim's perception of a crime occurring rather than the police satisfying themselves that a crime had indeed taken place. The general effect, therefore, of the NCRS is to *increase* the level of recorded crime, i.e. more crimes were recorded (but not necessarily committed) in 2002/03 over 2001/02.

The effects of the NCRS are summarised in the Home Office statistical bulletin 'Crime in England and Wales 2002/03' and covered in depth in two companion volumes, one covering the overall effect nationally, and one giving estimated impacts on a force-by-force basis. The second of these should be used to aid the interpretation of any changes in crime levels between 2001/02 and 2002/03 for a force.

These reports are available on the Home Office website at:  
[www.homeoffice.gov.uk/rds/crimeew0203.html](http://www.homeoffice.gov.uk/rds/crimeew0203.html)

The consequence of the NCRS for the performance reports presented here is that if a measure based on crime levels shows a change between 2001/02 and 2002/03, then at least some of this change is likely to be a result of the new Recording Standard.

The effect of the NCRS on the three crime types considered in this report is that more burglaries, robberies and vehicle thefts were recorded *nationally* in 2002/03 than would have been recorded using 2001/02 recording practices. In general at least part of any increase in crime rates shown here is likely to be a result of the changes in recording practices. **It is important to remember though, that the NCRS has a different impact on different forces, and apparent changes in performance should always be interpreted with this in mind.**

## Makeup of the monitoring reports

The performance monitoring reports have been constructed using key performance indicators referred to in the National Policing Plan 2003–2006. These indicators have been organised into five groups, each containing indicators for a particular area of policing responsibility. Each group of indicators contributes to one of the arms on the monitor chart. A more detailed comparison with the individual most similar force scores for each group of indicators is shown in the related bar chart. For the most part the monitoring reports are based on data from the 2002/03 and 2001/02 financial years. Exceptions to this are noted below.

### Citizen Focus

#### **“Level of public satisfaction with the police as measured by the BCS [British Crime Survey].”**

The reports are based on data from responses to the question “How good a job do the police do?” from the BCS, with the quoted figure being the percentage of respondents saying “Good” or “Excellent”.

Statistical ‘confidence limits’ are reported with the data for this indicator, as it is based on results from sample surveys. (The ‘95% confidence’ limit has been taken.)

**Data sources: 2001/02 figures** – Home Office Statistical Bulletin 01/03, ‘Crime in England and Wales 2001/2002: Supplementary Volume’, Table 8.04; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb103.pdf>. Note that estimates for 2001/02 vary from those previously published due to revisions to the weighting of the data.

**2002/03 figures** – Regional factsheets accompanied the publication of the Home Office Statistical Bulletin 07/03, ‘Crime in England and Wales 2002/2003’, available online at <http://www.homeoffice.gov.uk/rds/crimeew0203.html>.

### Reducing Crime

#### **“Number of burglaries per 1,000 households as measured by recorded crime.”**

#### **“Number of robberies per 1,000 resident population as measured by recorded crime.”**

#### **“Number of vehicle crimes per 1,000 resident population as measured by recorded crime.”**

The reports are based on data taken directly from Home Office statistics, which are based on figures supplied by police forces.

It is of note that these figures vary slightly from numbers that may have been published previously. This is because population estimates are constantly updated. The reports use the

most recent population and household figures that were available at the time of publication (corrected mid-2001 population estimates and 2001 Census household estimates from the Office of National Statistics).

**Data sources: 2001/02 figures** – Home Office Statistical Bulletin 07/02, 'Crime in England and Wales 2001/2002', Tables 4.04 and 7.02; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb702.pdf>. Data also available as Excel tables (which contain some revisions) at <http://www.homeoffice.gov.uk/rds/hosbpubs1.html>. **2002/03 figures** – Home Office Statistical Bulletin 07/03, 'Crime in England and Wales 2002/2003', Tables 4.05, 4.06 and 5.03; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb703.pdf>. Data also available as Excel tables at <http://www.homeoffice.gov.uk/rds/crimeew0203.html>.

## Investigating Crime

**"Progress on Detections and Convictions as measured by BVPI 136a and b."\***

**"Number of offenders brought to justice for the supply of Class A Drugs – as measured by recorded crime statistics..."**

In compiling the reports, for this area the following data was used:

- 'Sanction detections per notifiable offence committed' (as a percentage). A sanction detection is one in which a person was charged, reported for summons, issued with a penalty notice for disorder or cautioned, or the offence was taken into consideration by a court. (\*BVPI136b, now PBV 8b)
- The percentage of notifiable offences for which an offender was brought to justice, i.e. cautioned, issued with a penalty notice, convicted or had the offence taken into consideration by a court. Only provisional data is available for the full 2002/03 financial year and therefore the reports are based on available 2001 and 2002 calendar year data for this indicator (e.g. number of offences brought to justice in 2002 divided by the total number of offences recorded in 2002). (\*BVPI136a, now PBV 8a)
- The number of offenders brought to justice (cautioned or convicted) for Class A drugs supply offences (supply or intent to supply), per 10,000 resident population. Again, this data is not available for the 2002/03 financial year, and 2001 and 2002 calendar year data has been used.

For the purpose of the reports, the conviction of **more** offenders for the supply of Class A drugs was considered to be better performance.

Some forces have a similar or greater rate for offenders brought to justice than for detection. Whilst this may seem counter-intuitive (because one would not expect all detected crimes to result in a conviction in court), this is largely a consequence of current variations in the way in which these data are collected, as well as the fact that the figures refer to slightly differing time periods.

**Data sources: 2001/02 figures** – Home Office Statistical Bulletin 07/02, 'Crime in England and Wales 2001/2002', Table 8.02; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb702.pdf>. Data on offences brought to justice broken down as above was first published in the report 'Police Performance Monitoring 2001/02';

**2002/03 figures** – Home Office Statistical Bulletin 07/03, 'Crime in England and Wales 2002/2003', Table 7.02; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb703.pdf>. 2002 data on offences brought to justice has not been published previously. 2002/03 sanction detection rates for Durham and North Yorkshire have not been published previously.

## Promoting Public Safety

**"Level of fear of crime as measured by BCS." (PBV 9)**

**"Level of feeling of public safety as measured by the BCS." (PBV 10)**

The reports are based on data corresponding to the following BCS results:

Fear of crime:

- "Percentage very worried about burglary"
- "Percentage with high level of worry about car crime"
- "Percentage with high level of worry about violent crime"

Perception of public order:

- "Percentage with high levels of perceived disorder"

Statistical 'confidence limits' are reported with the data for these indicators, as they are based on results from sample surveys. (The '95% confidence' limit has been taken.)

**Data sources: 2001/02 figures** – Home Office Statistical Bulletin 07/02, 'Crime in England and Wales 2001/2002', Table 7.05; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb702.pdf>. Note that estimates for 2001/02 vary from those previously published due to revisions to the weighting of the data. **2002/03 figures** – Home Office Statistical Bulletin 07/03, 'Crime in England and Wales 2002/2003', Table 6.06; <http://www.homeoffice.gov.uk/rds/pdfs2/hosb703.pdf>

## Resource Usage

### **“Number of working days lost through sickness as measured by returns submitted by police forces to HMIC.”**

The reports are based upon data taken directly from HMIC returns for:

- Number of working days lost to sick leave per police officer
- Number of working days lost to sick leave per member of the support staff

**Data sources: 2001/02 figures** – HMCIC Annual Report 2001/2002;

<http://www.homeoffice.gov.uk/hmic/annual.htm>. **2002/03 figures** – previously unpublished.

## Other Key Performance Indicators

The National Policing Plan 2003-2006 puts forward four other indicators as being key – levels of recruitment, efficiency, frontline policing and domestic violence. The recruitment and efficiency measures are reported as successful attainment of a target value. Such ‘yes/no’ measures do not lend themselves to display on a monitor diagram and therefore these indicators have not been included. A measure of ‘frontline policing’ has now been developed. However, data collection only began in April 2003 and therefore information on this indicator is not available for the 2002/03 financial year and therefore for this report. Finally, the indicator on domestic violence is being redeveloped as part of the PPAF programme (see Appendix A) in order to make it comparable across all police forces in England and Wales and therefore data is not available at this time.

## About the monitoring reports

The monitoring report for each police force contains a number of different elements, each of which presents a slightly different view of the force performance.

### **Tabulated performance data**

The reports are based on a set of thirteen 'interim performance indicators' that already exist for important areas of policing activity. These indicators have been grouped together into five areas, each containing similar types of activity and listed in a data table. These indicators – and therefore the reports that are based on them – cannot be taken as complete measures of policing performance. The reports do, however, give a good impression of performance in the key areas that are within the scope of the interim indicators.

As well as setting out the data for the 2002/03 performance of the force, the table also shows how performance has changed since 2001/02. Please note that due to rounding of the crime rates to a single decimal place, the change between 2001/02 and 2002/03 is most accurately portrayed in the percentage change column.

### **Monitor diagrams**

Performance monitors provide a visual representation of the balance of performance across a number of different areas of policing responsibility. The indicators within each of the five areas in the table have been combined to give five performance scores for the force in question for the 2002/03 period.

These scores have been plotted as points along the axes of the monitor. Joining these points by a solid line gives an outline shape which provides a visual representation of the overall performance of the force.

The average performance level of a group of most similar forces in 2002/03 has also been calculated, and the force performance is plotted relative to that. The average itself is represented by the edge of the shaded pentagon and comparison with this shaded area indicates whether the force is performing relatively well or poorly.

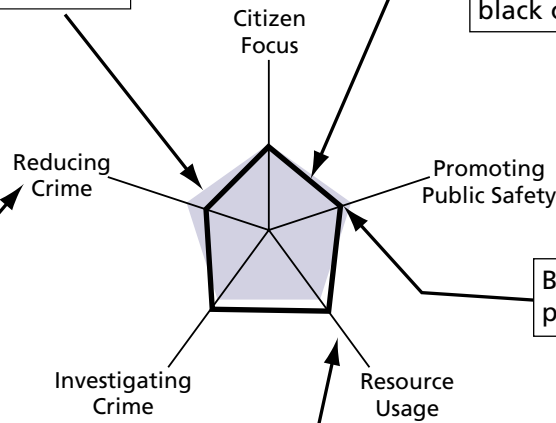
Better performance is always shown further out from the centre of the monitor.

Because each force is compared against a unique set of most similar forces, the monitor for one force cannot be directly compared (in absolute terms) with that for another. See Appendix B for more information about most similar force comparisons.

Plot of the average score (over the most similar forces) is represented as the edge of the light blue area

The performance of the force in question is shown as the black outline shape

Scores within each area of activity are plotted along the five axes



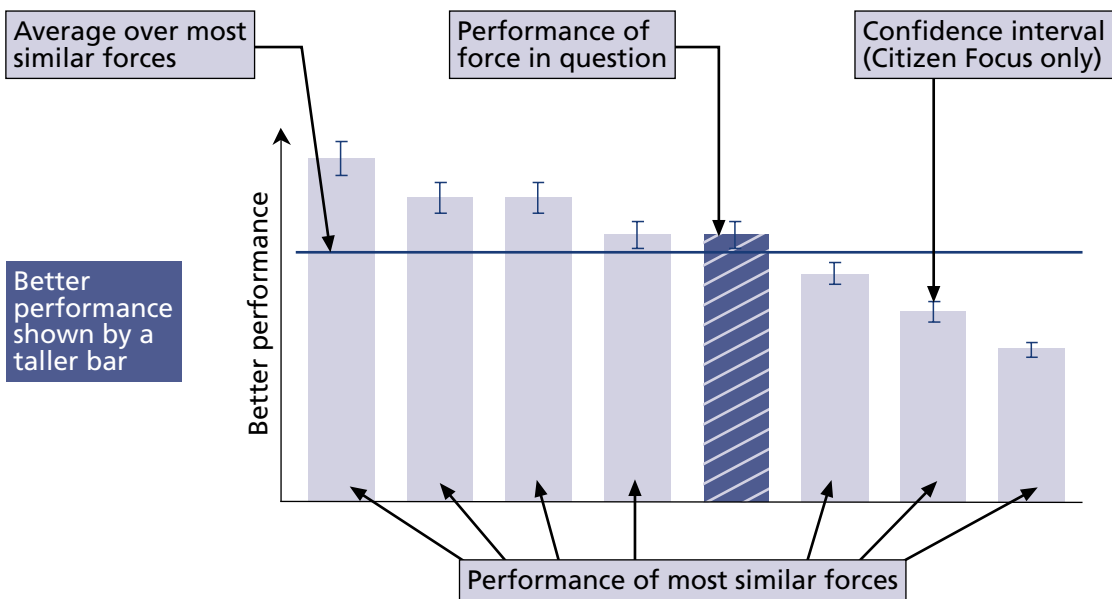
Below average performance

Above average performance

Better performance is shown further out

### Peer group bar charts

The bar charts show how, within each area of policing responsibility, the force compares with the actual performance of the other forces in its group of most similar forces. This gives an impression of the *spread* of performance within the group, which is hidden by comparisons against the average.



Better performance shown by a taller bar

## **Additional information**

These appendices may aid you in understanding some of the background to the performance assessments presented here, and what the future may hold for the assessment of policing performance.

<b>Appendix A: The Policing Performance Assessment Framework</b>	<b>102/103</b>
<b>Appendix B: Use of ‘Most Similar Force’ comparison groups</b>	<b>104/105</b>
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### **Information for Practitioners**

Additional information for practitioners is available on the police reform website. These Technical Annexes are designed to provide information for anyone wishing to replicate the results in this publication or drill-down into the detail of the presentation methods and calculations.

**Technical Annex A: Calculations used to construct the charts**

**Technical Annex B: Summary data tables**

See <http://www.policereform.gov.uk/>

## Appendix A: The Policing Performance Assessment Framework

The Home Office, in partnership with the ACPO, the APA, HMIC and other policing partners, is developing a new, comprehensive approach to the assessment of performance called the Policing Performance Assessment Framework (PPAF). The aim of this work is to provide the policing community and the public with a mechanism for the rigorous and fair assessment of performance within policing. With such a Framework in place, we will be confident that efforts made to improve performance will be directed to the right places, and good practice will be easier to identify and disseminate.

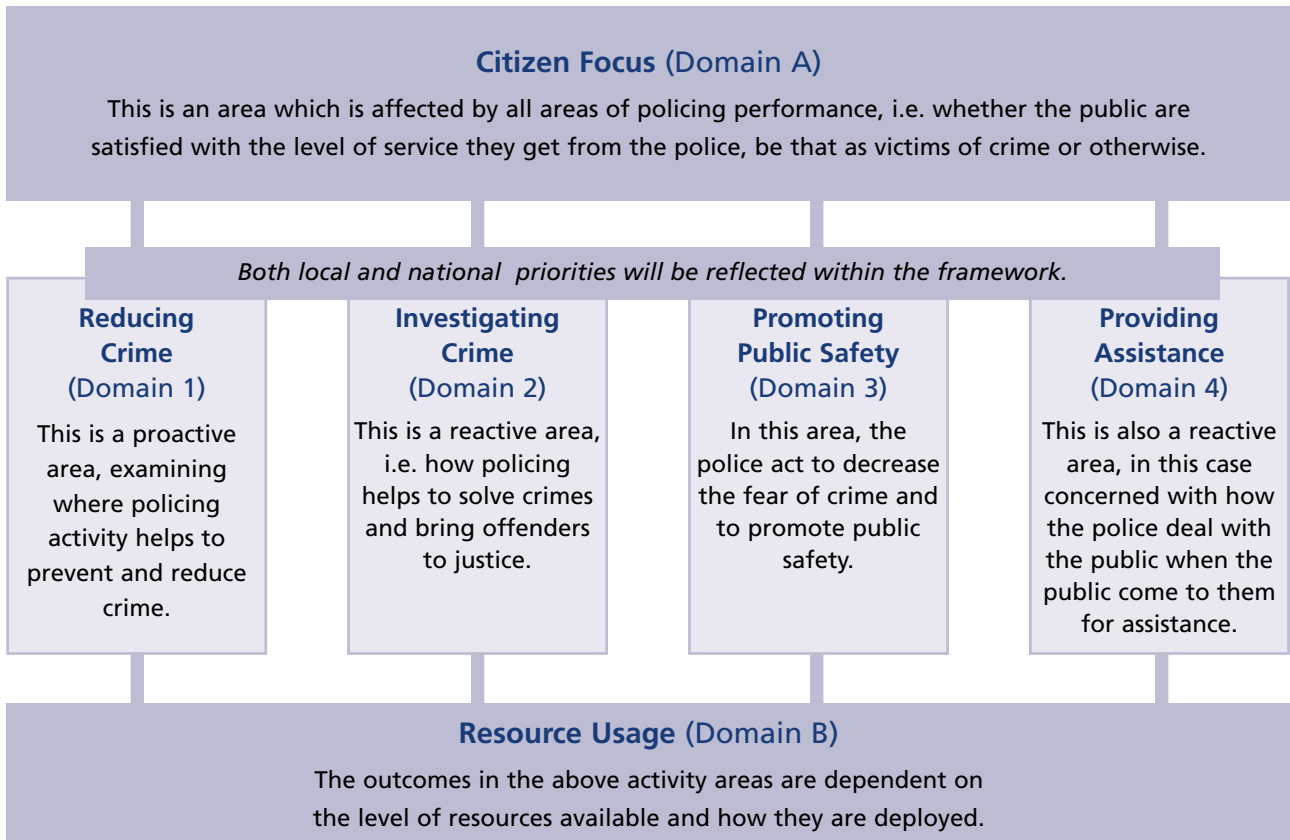
The fundamental principle behind the PPAF programme is that the assessment of policing performance must take into account the full range of activities that the police are asked to undertake. We rely on the police to do far more than simply reduce crime, but ask that they tackle things like anti-social behaviour, provide reassurance and ensure safety at major public events. Beyond that, we expect them to leave us confident that any given incident has been dealt with to our satisfaction, whilst at the same time doing their job efficiently. The PPAF aims to highlight forces who are doing these things well, on top of keeping crime rates low and solving those crimes that do happen.

To achieve this balance in an assessment, policing responsibilities have been divided up into six outcome areas, called "domains". Although the picture is certainly more complicated than this, with activity in one area having secondary effects on the outcomes in another, nevertheless, this breakdown of responsibility provides a useful structure for examining policing performance.

The Framework will be built around core outcome measures which will be well defined and then quality assured to ensure that the data is as reliable as possible. The Framework is also looking to balance local and national priorities within the assessment, so that police forces and authorities are credited for tackling both. PPAF will also examine partnership working, the success of which is fundamental to the delivery of many outcomes usually associated solely with the police. Finally, the PPAF aims to deliver an assessment mechanism and present the results in a way that everyone can understand and agree is fair. (Performance monitoring diagrams may evolve to incorporate the full PPAF structure, although this is dependent on the final nature of the PPAF assessment mechanism.)

## Policing Performance Assessment Framework

### The “domains” of policing



The PPAF is in development, and the first “PPAF performance measures” will be introduced in April 2004. The full assessment framework is on schedule to be in place by April 2005. It will not be until April 2006 that data covering the breadth of policing will have been collected to permit what might be considered a ‘true’ PPAF assessment. However, the development of PPAF has led to the introduction of some improvements already (for example Activity Based Costing in all forces, introduced from April 2003) and it is anticipated that there will be a gradual improvement in the components of policing assessment in the run-up to the Framework being fully established.

The PPAF programme is also providing a route through which all central data requirements can be assessed for their necessity. It is anticipated that on balance the introduction of the PPAF will result in a net *reduction* in the requirement for police forces to collect and submit data for central purposes, thus reducing ‘bureaucracy’.

## Appendix B: Use of 'Most Similar Force' comparison groups

Different forces operate in very different environments and it would be misleading to compare each force against all other forces. This would involve the comparison of very different areas and it is reasonable to expect different levels of performance in areas that are very different in character. (The classic example being the uninformative comparison between largely rural and largely urban forces.)

The solution to this is to only compare areas which appear to be similar. It can be shown that two areas which have very similar geographical, demographic and socio-economic situations have reasonably comparable levels of crime. It is possible to work out how similar two areas are by comparing factors like population density, unemployment level and so on. Variation in the crime rates between areas that are similar in character might therefore be down to other factors, such as the efficiency or working practices of policing.

For each force therefore, it is possible to draw-up a list of other forces that are most similar to that force in terms of factors like population density etc. A paper will be published by the Home Office shortly which will describe in detail the process used to compile these most similar force groupings. However, the following summarises the method used to work out the groupings from a shortlist of relevant factors, and serves to illustrate the important points to take into account when using the most similar force grouping as comparators.

### Determination of similarity between areas

Using a single factor, it is easy to pick-off the most similar areas to any given area. For example if we consider similarity in terms of the percentage of overcrowded households:

Example Area	Area 1	Area 2	Area 3	Area 4
% Overcrowded Households	4%	6%	7%	8%

Area 2 has the most similar percentage of overcrowding to Area 1 (6% is closer to 4% than 7% and 8% are), so the most similar area to Area 1 is Area 2. The most similar percentages of overcrowding to Area 3 (7%) are found in Areas 2 and 4 (6% and 8%, both just 1% different), so Areas 2 and 4 are the most similar to Area 3. And so on.

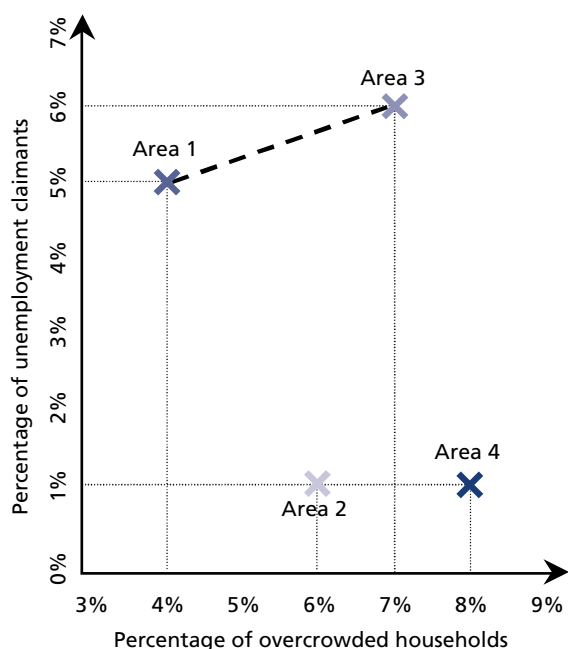
This example also highlights one of the important features of this approach. We are interested in finding the *most similar* areas to each area. In the above, Area 2 is the most similar area to Area 1. However, Area 1 is **not** the most similar area to Area 2, because Area 3 actually has a closer percentage of overcrowded households to Area 2. Thus, whilst Area 2

is in Area 1's similar force group, Area 1 is **not** in Area 2's group. This might seem odd when you are looking at the groups themselves, but by understanding the method used to draw-up the groups, it is entirely sensible.

With two factors, however, the problem becomes more difficult. Although the areas still have the same degree of similarity in terms of the percentage of overcrowded households, a different pattern in terms of the percentage of unemployment claimants can be seen:

Area	Area 1	Area 2	Area 3	Area 4
% Overcrowded Households	4%	6%	7%	8%
<b>% Unemployment Claimants</b>	<b>5%</b>	<b>1%</b>	<b>6%</b>	<b>1%</b>

Area 3 might have a similar percentage of overcrowding to Areas 2 and 4, but it has a very different level of unemployment claimants. Working out which areas are now most similar *on balance* is therefore more complicated. However, we can resolve this by plotting scores for each factor on a two dimensional chart (see picture).



Area 1 is now, on balance, the most similar to Area 3, as shown by the dashed line – the “distance” between Area 3 and Area 1 is less than that between Area 3 and Areas 2 and 4. Although it is impossible to visualise, this method can be extended to compare many more factors at once, and determine how “close” each area is to each and every other area. Once this has been worked-out, we can compile a list of the “closest”, or most similar, areas to each area – i.e. derive a unique list of *Most Similar Forces* for each force.

## Appendix C: Data issues

### **Citizen Focus and Promoting Public Safety**

Statistical 'confidence limits' are reported with the data for these indicators, as they are based on results from sample surveys. The averages taken over the most similar forces for these indicators are not simple number averages of the force figures; rather, they have been calculated specifically for each set of similar forces from the original survey data. Note that the 2001/02 BCS figures published previously were partially provisional and these have been updated for the purposes of this report.

### **Reducing Crime**

Introduction of the National Crime Recording Standard (NCRS) in April 2002 has affected performance data as forces have worked towards achieving compliance. In interpreting the performance reports, it should be borne in mind that there may still be some variation in NCRS compliance between forces but the variation is unlikely to have a major effect on these results.

The average value for each indicator has been calculated by summing the total number of offences across all of the most similar forces and dividing by the sum of the population across the same. Determining the average in this way means that the level of performance experienced by each member of the population is given equal weight.


Note that the reports are based on population and household estimates that were the most up-to-date at time of publication. This means that crime rates may vary slightly from those published previously.

### **Investigating Crime**

PSU is working with ACPO and RDS to ensure that detections are recorded appropriately. In April 2003 the rules for recording detections were clarified to improve consistency.

Data on number of offences brought to justice and the number of offenders brought to justice for the supply of Class A drugs was only available for the calendar year 2002, so this information was used in the absence of 2002/03 financial year data. The corresponding 2001 calendar year data was used for 2001/02 to avoid data overlap.

Note also that the data for the number of offenders brought to justice for the supply of Class A drugs now includes *all* offenders who were convicted of this offence. In the 2001/02



monitoring report, only offenders whose principal offence was the supply of Class A drugs were included.

The average value for each indicator has been calculated by summing the total number of sanction detections or offences brought to justice across all of the most similar forces and dividing by the sum of the offences across the same. Similarly, for the Class A drugs indicator, the average value has been calculated by summing the total number of offenders brought to justice across all of the most similar forces and dividing by the sum of the population across the same

### **Resource Usage**

There are differences at present in the way forces record levels of sickness. New collection methods are being introduced to increase consistency of recording.

### **Missing data**

The analysis was performed despite some missing data, and assumptions were made, as covered below.

Investigating Crime: Data on number of offenders/offences brought to justice is only available London-wide (covering Metropolitan Police and City of London forces). An estimated breakdown of the data between these two forces was made.

Citizen Focus/Promoting Public Safety: BCS data is collected London-wide (covering Metropolitan Police and City of London forces). The same figures have been used for both forces.

## Glossary

<b>ACPO</b>	Association of Chief Police Officers
<b>APA</b>	Association of Police Authorities
<b>BCS</b>	British Crime Survey
<b>BVPI</b>	Best Value Performance Indicator, now “PBV” (see below)
<b>Domain</b>	An area of policing responsibility
<b>HMCIC</b>	Her Majesty’s Chief Inspector of Constabulary
<b>HMIC</b>	Her Majesty’s Inspectorate of Constabulary
<b>Most Similar Forces</b>	Originally developed by HMIC and now revised as part of the PPAF programme, this is a group of forces to which each police force can be compared that have similar demographic breakdowns. See page 102.
<b>NCRS</b>	National Crime Recording Standard
<b>PBV Indicator</b>	“Police Best Value” Indicator
<b>PPAF</b>	Policing Performance Assessment Framework
<b>PSU</b>	Police Standards Unit
<b>RDS</b>	Research, Development and Statistics Directorate (of the Home Office)
<b>Statistically significant change</b>	A change in the value of a survey estimate between two years that we can be confident is genuine, and not simply down to chance variation.

