

# Civil Service Statistics QMI

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# 1 . Methodology background

<b>National Statistic</b>	
<b>Survey name</b>	Annual Civil Service Employment Survey (ACSES)
<b>Frequency</b>	Annual
<b>How compiled</b>	Sample based survey
<b>Geographic coverage</b>	UK
<b>Sample size</b>	500,000
<b>Last revised</b>	24 November 2017

## 2 . Important points about Civil Service statistics

- Civil Service statistics are sourced from the Annual Civil Service Employment Survey (ACSES); ACSES is a complete census of the Civil Service.
- The Civil Service statistical bulletin provides detailed diversity, earnings and geographical information on the make-up and structure of the Civil Service on an annual basis.
- Since 2008, Civil Service statistics contain an overview of Civil Service employment statistics on 31 March of each year; before this data were collected at different reference points throughout the year.
- ACSES was first used to collect Civil Service employment in 2007, with a reference date of 30 September. Prior to this, it was known and published as the Mandate Collection, where data are available back to 1970 and are available from the National Archives website.
- The data counts all home Civil service employees, it excludes Northern Ireland Civil Service, other Crown servants and employees of the wider public sector; there are home Civil Service employees based in Northern Ireland and Overseas.
- We also collect and publish quarterly Civil Service employment statistics as part of the Public Sector Employment (PSE) statistical bulletin; these quarterly statistics should be used when seeking to measure the size of the Civil Service over time.

## 3 . Overview of the output

The Annual Civil Service Employment Survey (ACSES) collects detailed statistics on individuals who work within Civil Service government departments. An Excel spreadsheet, along with a Specification Guide (a document detailing the requirements for the survey), is sent to all Civil Service organisations (approximately 100) across Great Britain. The contributors (for example, Department for Work and Pensions, Home Office, Cabinet Office) each supply a completed Excel file in a predefined format. The Excel files have in-built validation checks to improve the accuracy of response from the government departments. The individual files are then sent back to the Office for National Statistics (ONS) where they are validated, checked and queried by an individual Results Manager from within the Public Sector Employment Results (PSER) team.

Civil Service statistics are used across government and feed into a number of wider publications and outputs. Some government departments use the total figures to facilitate policy making whereas others use specific components of the data collection. Civil Service statistics on a headcount and full-time equivalent (FTE) basis are used by Cabinet Office to monitor changes in Civil Service numbers and form the basis for briefing the Cabinet Secretary. The statistics are also used to monitor equality and diversity issues across the Civil Service. Civil Service Learning use ACSES data to gain a better understanding of the numbers and grades of each professional group in each government department and location and to monitor changes from year to year. You can find further detail on the uses and users of Civil Service Statistics in the Relevance section.

This document contains the following sections:

- Output quality
- About the output
- How the output is created
- Validation and quality assurance
- Concepts and definitions
- Other information, relating to quality trade-offs and user needs, and
- Sources for further information or advice

## **4 . Output quality**

This document provides a range of information that describes the quality of the output and details any points that should be noted when using the output.

We have developed Guidelines for Measuring Statistical Quality; these are based upon the 5 European Statistical System (ESS) quality dimensions. This document addresses these quality dimensions and other important quality characteristics, which are:

- relevance
- timeliness and punctuality
- coherence and comparability
- accuracy
- output quality trade-offs
- assessment of user needs and perceptions
- accessibility and clarity

More information is provided about these quality dimensions in the following sections.

## **5 . About the output**

## Relevance

(The degree to which the statistical outputs meet users' needs.)

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What it measures The survey collects information relating to the sex, ethnic origin, disability status, age, national identity, earnings, profession and regional location of every individual Civil Service employee.

Frequency Annual collection.

Sample size All staff in post at the specified reference date (circa 420,000 civil servants). Includes all civil servants who have left the Civil Service during the 12-month period reference period.

Periods available Previously known and published as the Mandate Collection, data are available back to 1970 and are available from the National Archives website.

Sample frame Complete census of the Civil Service. All Civil Service departments are contacted and asked to complete a return which contains an individual record for each civil servant.

Sample design Census.

Weighting and estimation No weighting or estimation is used on the survey estimates. 100% unit response has been achieved since the ACSES survey commenced in 2007. Statistics are based on actual returns only; no item non-response adjustment is applied.

Imputation No imputation is undertaken.

Outliers No filtering of outliers.

We publish [Civil Service statistics](#) annually on their website. These annual statistics provide regional analyses, and diversity and earnings statistics for the Civil Service population. The statistics provide a deeper look at the characteristics of those in the Civil Service and should be used alongside the statistics produced on a quarterly basis as part of the [Public Sector Employment statistical bulletin](#).

The survey methodology remains broadly similar to the Mandate collection but ACSES offers two important advantages.

## Uniform collection

Previously two collection tools were used. The Mandate collection accounted for approximately 85% of the Civil Service and comprised comprehensive anonymised datasets generally extracted directly from the human resources (HR) systems of government departments and their agencies. For historical reasons, some departments supplied summary tables instead. These were called departmental returns and covered only a limited subset of data. ACSES follows the Mandate model for all departments and agencies.

## Relevance

In consultation with the Cabinet Office and government departments the content of the survey was reviewed. As such, a number of variables were removed from the survey as there was no clearly demonstrated requirement for their collection (for example, marital status) and new information was collected to meet current policy needs (for example, professions). Contents review now takes place at the quarterly cross-government management information working group.

The survey receives a full response from all government departments and agencies.

## Uses and users

Civil Service statistics are used across government and feed into a number of wider publications and outputs. Some government departments use the total figures to facilitate policy making whereas others use specific components of the data collection. The main users are as follows.

### Cabinet Office

Civil Service statistics on a headcount and full-time equivalent (FTE) basis are used to monitor changes in Civil Service numbers and form the basis for briefing the Cabinet Secretary. The statistics are also used to monitor equality and diversity issues across the Civil Service. A core function of the team who use these data is to build, maintain and disseminate a comprehensive and robust evidence base on the Civil Service, supporting the Cabinet Secretary in his duties. It is vitally important that the Cabinet Secretary and the head of the Home Civil Service are able to understand the trends, issues and make-up of those that work across the many separate departments that constitute the Civil Service.

### Civil Service Learning (CSL)

Civil Service Learning use ACSES data to gain a better understanding of the numbers and grades of each professional group in each government department and location and to monitor changes from year to year. The data are also useful as a benchmark for measuring responses to surveys and other research carried out by CSL. The data collected on equality and diversity also provide CSL with useful cross-government indicators.

### Other users

A range of other users use the data collected by ACSES on a regular basis. Recent requests for data have included identifying regional median pay of civil servants, mean pay of profession by age band and using the figures collected on professions to identify skill gaps across the Civil Service. A log of all data requests and responses is kept and maintained by the survey team. These data are also published on our website. Data are also available on an application programming interface (API) on the National Manpower Information Service ([Nomis](#)) website.

## Main definitions

Civil Service statistics follows UK National Accounts concepts and definitions, insofar as a department has to be classified to the Civil Service for it to be eligible for selection.

## Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

Civil Service statistics has consistently met the target publication deadlines.

For more details on related releases, the [GOV.UK National Statistics Release Calendar](#) is available online and provides 12 months' advanced notice of release dates. If there are any changes to the pre-announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the [Code of Practice for Official Statistics](#).

## 6 . How the output is created

### Overview

Once the information supplied by a government department has been confirmed, the data are amalgamated into a larger file (data from all government departments are merged) from which various analyses of the figures are published.

### Response chasing

Due to the nature of the data collection a lot of time is spent response chasing with government departments. In the first instance, the Public Sector Employment Results (PSER) team have to gain a response from a government department. This in itself is time consuming and experience has shown that even though the majority of the return will be from HR records the data supplied are not always accurate. A lot of time is spent validating the data.

### Process decomposition – ACSES

Collection, validation and reporting of the survey is facilitated and controlled by computer software written using the Statistical Analysis Software (SAS) language. The application, referred to as “ACSES”, comprises classic client/server architecture whereby team members initiate various actions by means of the ACSES application installed on their PCs. The primary function of the ACSES application is to reduce the amount of paper reports produced by the original (Mandate) system passed to ONS from the Cabinet Office (CO) whilst at the same time facilitating improved validation, control and presentation of the intermediate validation reports.

### Statistical disclosure control

Statistical disclosure control methodology is applied to Civil Service statistics data. This ensures that information attributable to an individual is not identifiable in any published outputs. The [Code of Practice for Official Statistics](#) and specifically the Principle on Confidentiality set out practices for how we protect data from being disclosed. The Principle includes the statement that our outputs should, “ensure that official statistics do not reveal the identity of an individual or organisation, or any private information relating to them, taking into account other relevant sources of information”. More information can be found in [National Statistician's Guidance: Confidentiality of Official Statistics](#) and also on the [Statistical Disclosure Control Methodology](#) page of our website.

## 7 . Validation and quality assurance

## Accuracy

(The degree of closeness between an estimate and the true value.)

Because the data collection is a census in design and the fact that 100% response is achieved across all government departments and agencies, standard errors are not calculated for the survey estimates.

However, it is still important to be aware of accuracy issues associated with the data collection. Departments are not always able to provide complete information for every variable collected and you should always consider under-coverage when interpreting the statistics, particularly over time. This is especially important as the Mandate collection only accounted for approximately 85% of the Civil Service.

Statistics are published on the sex, ethnicity, disability status, national identity and age of the Civil Service workforce. All diversity statistics relate to civil servants counted on a headcount basis. Employees declared as disabled are presented as a percentage of known disability status. Those employees who have either not responded or actively chosen not to declare their status are excluded from published calculations. The same calculations of known status are used in the presentation of employees national identity and ethnicity tables.

Item-level response and under-coverage, in general, has improved since the first Annual Civil Service Employment Survey (ACSES) collection in 2007. The most recent non-response comparisons are displayed in the table.

### 2016 to 2017 non-response comparison

All employees

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#### Per cent non-response 2016 2017

	2016	2017
Sex	<0.1	0
Age	3.1	<0.1
Responsibility level	14.4	3.3
Disability status	9.0	17.9
Ethnicity	24.9	10.2
National identity	4.0	39.5
Profession	0.2	5.3
Gross Salary		0.1

There are a number of reasons for under-coverage.

## New entrants and self-service

It can take time for HR systems to “catch up” when a new employee joins a government department. Government departments are also increasingly moving to self-service systems, which require individuals to maintain their personal information via an intranet service. While it is the responsibility of departments to review the quality of information held and encourage regular updates, an element of non-response is expected.

## New requirements

ACSES required departments to collect information about the sexual orientation and religion or belief of all civil servants in 2015. As the response rate was below 50%, no results were published on these variables. In 2016, these dimensions have been published by responsibility level. In 2017, organisational level tables were added to the publication.

If a large error is detected with the data, the [Civil Service statistical bulletin](#) and associated data will be revised in line with the [Code of Practice for Official Statistics](#). More information on revisions can be found in the [National Statistician's Guidance: Presentation and Publication of Statistics](#) and the [ONS Statistical Policy on Revisions and Corrections](#).

## Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain for example, geographic level.)

Data are available from the [National Archives](#) website back to 1970.

Following a development programme in 2007, the survey outputs are compiled from a single source, ACSES. Prior to 2007, government departments supplied information either via the Mandate collection or by a paper departmental return. The departmental returns lacked the coverage of the Mandate collection, departments were only required to supply certain fields in the form of summary tables, as such they did not supply individual records for each civil servant. The Mandate collection accounted for approximately 85% of the Civil Service. In contrast the ACSES accounts for 100% of the Civil Service population.

The reference dates for the survey have also changed over time. It is important that you are aware of the reference date for the individual data collections before producing tabular or graphical outputs.

An important measure of quality is the reconciliation between the [Civil Service statistical bulletin](#) and the quarterly [Public Sector Employment statistical bulletin](#). It is important to note that whereas we work with government departments to minimise any differences between the two outputs, they will never be fully resolved.

Differences arise mainly due to timing variation. The quarterly survey is published 11 to 12 weeks after the end of the reference period. As only summary statistics are required, data can often be sourced by departments directly from payroll systems, whereas the Civil Service statistical bulletin is based on information held by HR systems. The timeliness of the survey means that HR systems continue to be updated after the snapshot date whereas payroll systems are static.

This live updating of systems means that there is always the possibility of differences arising before the more comprehensive annual collection is completed.

## 8 . Concepts and definitions

(Concepts and definitions describe the legislation governing the output and a description of the classifications used in the output.)

Headcount statistics are based on the number of employees with an employment contract who are being paid by the organisation. Employees can be permanent, on a fixed-term contract or employed on a casual basis. The self-employed, contract workers and agency workers are excluded. Employees not on the payroll and not being paid during the reference period are also excluded, for example, those on unpaid maternity leave, unpaid sick absence and career breaks.

Excluding lunch breaks, full-time employees are generally those who are contracted to work 37 hours per week (36 hours per week in London for those employed up to 2013. Those employed or promoted after 2013 are required to work 37 hours per week). Part-time employees are those who work less than the normal contracted hours. There are some exceptions to this, such as those employed by National Offender Management Service.

Full-time equivalents are based on converting part-time employees' hours into a full-time employees' equivalent and provides a better indicator of total labour input than a headcount.

Permanent employees are employees with a contract that has no agreed expiry date or a fixed-term contract of more than 12 months. Temporary or casual employees are those with a fixed-term contract of 12 months or less or employed on a casual basis. Temporary employees must be paid through the department's payroll. Employees hired through agencies are not included.

Entrants and leavers are employees entering or leaving the Civil Service in the 12 months' survey reference period of 1 April to 31 March. The figures exclude transfers and loans between departments. Employees leaving on 31 March of a survey reference period are counted as both staff in post and leavers. A number of departments are unable to provide a date of entry for civil servants in their employment. Some departments are also unable to distinguish between those civil servants entering their department for the first time via transfer or loan and those new to the Civil Service. As such, the number of net entrants and leavers will not reconcile with the change in employment between two consecutive survey reference periods.

Gross salary is the annual salary inclusive of basic pay (including consolidated performance pay) and pay-related allowances such as regional and skills allowances. It does not include bonuses. The headline earnings statistics are based on the median rather than the mean. The median is the value below which 50% of employees fall. It is preferred over the mean for earnings data as it is influenced less by extreme values and because of the skewed distribution of earnings data.

Responsibility levels – Since 1 April 1996, all departments and agencies have had delegated responsibility for the pay and grading of their employees, except for those in the Senior Civil Service (SCS). The concept of broad "responsibility levels" is therefore used, in which departmental grades have been assigned to levels broadly equivalent (in terms of pay and job weight) to the former Service-wide grades.

### **Senior management**

SCS – Senior Civil Service

## Other management grades

Grade 6

Grade 7

SEO – Senior Executive Officer

HEO – Higher Executive Officer

EO – Executive Officer

## Administrative grades

AO – Administrative Officer

AA – Administrative Assistant

The professions of civil servants were collected for the first time in 2007. The professions relate to the post occupied by the person and are not dependent on any qualifications the individual may have. The range of professions includes economics, science and engineering, finance, human resources, legal, , tax and so on. Employees can alternatively be assigned to operational delivery (delivering frontline services) or policy delivery (designing or enhancing services to the public). If a post could be considered operational delivery but also matches one of the specific professions, the person is assigned to the specific profession. It should not be assumed that those classified to operational delivery represent the sum of all those delivering frontline services

Regional statistics are presented in the [Civil Service statistical bulletin](#).

More detailed geographical breakdowns are available in the [Civil Service statistical bulletin](#).

## 9 . Other information

### Output quality trade-offs

(Trade-offs are the extent to which different dimensions of quality are balanced against each other.)

The main strength of the Annual Civil Service Employment Survey (ACSES) is that it offers complete coverage of the Civil Service. All government departments and agencies supply data. This is in contrast to the Mandate Collection which only had 85% coverage of the Civil Service (supplemented by departmental returns for main reporting variables).

A limitation of the survey is that change is very difficult to implement and enforce. If a new requirement is made for the survey because of the way the data are supplied, usually from HR records, it often takes a considerable amount of time for departments to ensure that their systems can fully meet the additional demands.

### Assessment of user needs and perceptions

(The processes for finding out about users and uses and their views on the statistical products.)

ACSES is crucial as a tool for the Cabinet Office (CO) to understand the make-up of the Civil Service and to inform policy-making decisions.

ONS, CO and representatives from government departments control the scope of collection by reviewing legislation and user needs via a Cross- Government Human Resources Management Information Working Group.

## 10 . Sources for further information or advice

### Accessibility and clarity

(Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

Our recommended format for accessible content is a combination of HTML webpages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. Our website also offers users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. Available formats for content published on our website but not produced by us, or referenced on the our website but stored elsewhere, may vary. For further information please refer to the contact details at the beginning of this document.

For information regarding conditions of access to data, please refer to the following links:

- [Terms and conditions \(for data on the website\)](#)
- [Accessibility](#)

In addition to this Quality and Methodology Information, basic quality information relevant to each release is available in the background notes of the relevant statistical bulletin ([Civil Service Statistical Bulletin](#)).

The [Civil Service Statistics Statistical Bulletin](#) is published on our website.

[Civil Service Statistics for reference years 2006 to 2017 inclusive](#) are available from our website to download free of charge. Information about staffing in the Civil Service has been collected and published since 1950 and data since 1970 are available to view on the [National Archives](#) website.

Further information and analysis can be obtained from the Public Sector Employment Results team by phoning +44 (0)1633 456741.