Staff Diversity Official Statistics: Background Quality Report September 2023

Introduction

This background quality report assesses the quality of monthly official statistics for the planning Inspectorate using the European Statistics System (ESS) Quality Assurance Framework (QAF). This is the method recommended by the Government Statistical Service (GSS) Quality Strategy. Statistics are of good quality when they are fit for their intended use.

The ESS QAF measures the quality of statistical outputs against the dimensions of
- relevance
- accuracy and reliability
- timeliness
- accessibility and clarity
- comparability and coherence

The GSS also recommends assessment against 3 other principles in the ESS QAF. These are:
- trade-offs between output quality components
- confidentiality and transparency
- balance between performance, cost and respondent burden

These dimensions and principles cross the three pillars of trustworthiness, quality and value in the Code of Practice for Statistics.

This quality assessment covers the annual statistical release which provides summary information and analysis on the diversity of the Planning Inspectorates staff.

These statistics are produced once a year to increase our transparency and accountability to our customers, stakeholders and the wider public, providing reliable information of our staff diversity. It will help them those considering joining the organisation decide "is this the sort of organisation I want to work for?". Over time, routine publication will enable anyone to see what progress has been made in increasing the diversity of the organisation.

These statistics have been published to ensure everyone has equal access to the information and to support the Planning Inspectorate's commitment to release information where possible.

This publication also supports the Inspectorates obligations under the Public Sector Equality Duty to provide information on its workforce identified by the Equality Act 2010.

1

Background and Context

The publication of these statistics supports the Planning Inspectorates People Strategy and specifically the underpinning Equality, Diversity and Inclusion Strategy. The Inspectorate are committed to ensuring that everything done is fair, inclusive and promotes diversity in characteristics and thought. The vision of the ED&I strategy is to better reflect the diverse makeup of customers and ensure that everyone feels more included in the workplace, regardless of their own backgrounds. A diverse workforce that feels valued and included can be more creative and innovative, produce more solutions-focussed outputs, feel a greater sense of community and provide a better customer experience. The Inspectorate has three key people objectives –

- Embedding an Equality, Diversity and Inclusion (EDI) approach to all work;
- Building upon our excellent approach to promote wellbeing at work;
- Ensuring that a fair deal is offered to all the Inspectorate's people.

These statistics help improve transparency on the diversity of staff and allow the Inspectorate to monitor and reflect how well it is progressing with the goal to have a Diverse workforce.

The Planning Inspectorate makes decisions and provides recommendations and advice on a range of land use planning-related issues across England. This is done in a fair, open and timely way.

The Planning Inspectorate deals with planning appeals, national infrastructure planning applications, examinations of local plans and other planning-related and specialist casework in England.

The Planning Inspectorate is an executive agency, sponsored by the Department for Levelling Up, Housing and Communities.

Methodology and Production

The statistics provided in this publication has used data from:
SAP HR – The Human Resources system database used to store all information regarding members of staff. This data source has been used to provide statistics on the demographics and Socio-economic Background of staff employed by the Planning Inspectorate as at 31 March 2023.

In June 2017 the Planning Inspectorate's Human Resources Department moved its data from an older system to the current system (SAP). As a result it is not possible to extract historic data beyond basic counts (e.g. number of staff) from before June 2017.

Chi-Square Test for Independence
The chi-square test for independence has been used in the publication to see if individual characteristics are independent. The test allows us to compare two variables in a contingency table to see if they are related. It tests to see whether distributions of categorical variables differ from each another.

In the analysis conducted, multiple Chi-Square tests were used, as a result there is a chance that a conclusion drawn may not be correct (Type I or Type II Error). The data used may not be representative of the whole population and the random error leads to an erroneous

inference. A Type I Error (false-positive) occurs if we have said that that two characteristics relate when in fact, they are independent. In the analysis we used a 5% significance level, which means that for every 20 tests performed it is more likely than not, that one of these conclusions contains an error. Given that 17 tests have been carried out, it is reasonably likely that there is a false result. There is also a chance of a Type II error where we say that there is not enough statistical evidence to suggest that the two characteristics are related (i.e. they are independent), when in fact they related. As we have high declaration/response rates this limits the likelihood of these errors taking place.

Chi-square requires sufficiently large expected values to produce reliable results. This test was therefore not used for any combination of variables where the expected frequency would have been less than 5.

Cluster Analysis

Additional insight into the relationships between characteristics has been sought out via cluster analysis. K-means clustering is used; an unsupervised machine learning algorithm which groups multivariate data into a pre-specified number of clusters, with the expectation that individuals are within clusters are similar i.e., they share a large number of characteristics. This can be helpful in identifying complex underlying patterns which are not obvious when looking at the characteristics one at a time. Twelve groups are identified. The distribution of salary per group is also investigated,

Linear Regression

To further investigate whether any statistically significant conditional relationships exist between pay and protected characteristics, a log-linear regression is used to model pay as a function of numerous variables.

Two separate regression models are fitted – one accounting for grade and one that doesn't – with the expectation that the model accounting for grade will have a good fit to the data and no protected characteristics will be statistically significant. If any such characteristics are determined to be statistically significant, this will be evidence to suggest that there is a pay disparity within grade that can be predicted using these characteristics.

Aside from the variable *const* (the intercept) all other values can be interpreted as the percentage change in pay, conditional on all other variables. For continuous variables, this is relative to a one-unit increase, for categorical variables, this is relative to the reference cases which in this instance are:

- Sex = Male
- Grade = AA
- Ethnicity = White
- Religion = Atheist/Agnostic
- Disability = None
- Sexual Orientation = Heterosexual
- School Group = State run (non-selective)
- Highest Parental Qualification = No formal qualification

Reference cases have been chosen to either be the majority case or the first in the range where a logical order is present. For example, *male* has been chosen because there are more men than women in the Inspectorate, and *AA* has been chosen because it is first in the non-apprentice grade range.

A limitation to this modelling is that there is currently no temporal component, and the extent to which this conditional pay disparity has changed over time cannot currently be assessed.

A potential next step would be to apply this modelling process to historic (and future) data and measure the change in variable effects over time. Furthermore, a relatively large number of people fall into an 'unknown' category as it is not compulsory to disclose certain characteristics. Some imputation work could be used to potentially overcome this.

Relevance

The Planning Inspectorate has proactively decided to produce these statistics to provide an insight into the demographics of staff working for the Inspectorate. We welcome feedback and will continue to develop the statistic over time to ensure we continue to meet user needs.

The HR team lead the development and implementation workforce policy in the Inspectorate, these statistics enable monitoring in the changes in the make-up of staff in the Inspectorate and support developing appropriate policy responses.

Accuracy and Reliability

The Planning Inspectorate use personal data from the Human Resources system (SAP) to compile these statistics, as the data comes from a live system there are occasions when this data changes. Data used on the publication is based on data recorded in these systems at the time of extraction.

The possible changes that could occur in these statistics include:
- Data entry error – Some data may be entered in a form that is incomplete or in a format that cannot be processed. An example of this is that there are occasionally blank entries or errors in demographic fields.
- In some instances, there is no record of someone's personal characteristic. This can be for several reasons:

    - The Inspectorate has not asked the person about the characteristics, or

    - The Inspectorate has asked, and the person has chosen the option of "prefer not to say", (or similar) or chosen not to answer.

The Inspectorate regularly review the quality of information held and encourage regular updates by their employees, an element of nonresponse can still be expected.

Note that where information is based on self reporting, there is the possibility of mis-reporting (whether accidental or deliberate). While this is considered unlikely to be widespread, where percentages are very low, a small number of individuals would have noticeable impacts on the results. Thus the impact of mis-reporting on these figures could be high.

Non-response can also have an impact on the results presented. If those who responded have different characteristics than those who did not respond then the figures presented could be biased and not represent the diversity of the Inspectorate as a whole, only those who responded.

Response/declaration rates for 2023 were:
- 81% Disability
- 86% Ethnicity
- 75% Religion
- 75% Sexual Orientation
- 72% Education
- 66% Parental Qualifications

Once the Statistics are published, given this is an annual publication, no further revisions will take place. However, if significant revisions to organisations' data are identified after publication, the Head of Profession will make a decision as to the extent that these revisions impact the overall statistics for users. If necessary, a revised bulletin and table revisions may be necessary and an appropriate note placed on the publication website.

Timeliness and Punctuality

These statistics are as of 31st March of each year, this in line with the Annual Civil Service Statistics published by the Office of National Statistics.

The release date for this publication was pre-announced on the Planning Inspectorate's Calendar of Upcoming Releases section of GOV.UK. There is also a 12-month release calendar with a specific release date given at least four weeks in advance where practicable provided on the GOV.UK website.

Accessibility and Clarity

The statistics are published on the GOV.UK website. The publication is available from 0930 hours on the day of release.

Current publications consist of detailed Excel tables of the statistics and a PDF report containing commentary, graphs and tables on trends in the statistics.

Coherence and Comparability

The publication includes trends as at 31st March of each year to allow comparisons over time. If significant changes are observed in the statistics these have been explained. From the 2022 release onwards the sexual orientation response option 'other' has been reported combined with lesbian, gay and bisexual response options to create the LGBO category. This differs from previous years meaning that it is not possible to assess change in LGBO representation from 2021 to 2022.

The publication provides the proportion of staff who have disclosed personal characteristics. As not all characteristics are complete users should consider under-coverage when interpreting the statistics, particularly over time.

The statistics have also been compared to the Civil Service statistics to help put the statistics in context.

Trade-offs between Output Quality Components

Where possible the cost to Government of producing these statistics has minimised by using data already collated for HR delivery purposes. The main sources of data used for compiling these statistics are the Human Resources system, SAP HR, this system is a administrative database, and as such, data quality across fields is of varying quality and completeness.

These statistics are produced once a year using the same reporting period (31st March of each year) as the Annual Civil Service Employment Survey.

Quality Assurance

Data feeding the publications undergoes quality checks to ensure the correct data has been extracted and the appropriate filters have been applied. Subsequently, the layout and presentation of the data in the statistical release is read by multiple members of The Data and Performance team to ensure that the data is presented appropriately to aid interpretation by the user.

Assessment of User Needs and Perceptions

Publication of this report has been to increases our transparency and accountability to our customers, stakeholders and the wider public, providing reliable information of our staff diversity. This report also contributes to the Planning Inspectorate's commitment to release information where possible.

The Planning Inspectorate invite users to provide feedback to any of their publications or reports using the contact information within the publication.

Performance, Cost and Respondent Burden

The production of the annual Official Statistic requires less than one FTE per annum.

The report uses administrative data sources already collected by the Planning Inspectorate. As such, there is no respondent burden, and the main cost is the production of the statistics including quality assurance and data interpretation.

Confidentiality, Transparency and Security

The Data and Performance team involved in the production of this Official Statistic have completed the Government wide Responsible for Information training, annual Data Protection training and they understand their responsibilities under the Data Protection Act and the Official Statistics Code of Practice.

The Data and Performance team adhere to the principles and protocols laid out in the Code of Practice for Statistics and comply with pre-release access arrangements. The Pre-Release Access list for our publications are available on the GOV.UK website.

The tables in the report were scrutinised to ensure individual identities were not revealed inadvertently. Suppression has been applied to ensure individuals were not inadvertently identified dependent on their risk of exposure. Numbers less than five and the corresponding percentages were suppressed and presented as '<5'. Where there was only one cell in a row or column that was less than five, the next smallest number (or numbers where there are tied values) was also suppressed or a range of values were presented so that numbers cannot simply be derived from totals. This is in keeping with the Office for National Statistics (ONS) guidelines.

Contact Details

The Planning Inspectorate welcome feedback on our statistical products. If you have any comments or questions about this publication or about our statistics in general, you can contact us as follows:

Media enquiries 0303 444 5004   email press.office@planninginspectorate.gov.uk

Public enquiries   email statistics@planninginspectorate.gov.uk

Please note we are currently reviewing our statistics with a view to making them as clear and helpful as possible for users. We would be delighted if you could contact us via the address below with any views on this approach; particularly on what content would be most useful and why.

email statistics@planninginspectorate.gov.uk