

Regulatory guidance: Dashboards

This guidance outlines the principles that statistics producers should adopt when developing or using a dashboard to disseminate official statistics and data, in line with the [Code of Practice for Statistics](#).

This guidance should be used alongside the [Government Analysis Function data visualisation: dashboards guidance](#) to guide statistics producers' in the use and development of dashboards within their organisation.

We use the term 'statisticians' or 'analysts' to refer to the teams responsible for producing official statistics outputs.

What is a 'dashboard'?

A dashboard is a visual tool used to share data. Government departments and public bodies often use dashboards to present headline estimates on a specific topic. They help users navigate data efficiently and can also be interactive, providing users with additional functionality to interrogate data sets. Dashboards are typically updated frequently and can be automated to always include the latest statistics.

There are many different types of dashboards. How they are used within official statistics releases varies considerably. We often see dashboards forming part of a statistical release alongside a bulletin or article, giving users bespoke access to data used in the release and helping them visualise trends. Dashboards are also often used to bring multiple sources of data into one place.

When should I use a dashboard?

A dashboard can be a useful communication tool. It can facilitate access to published datasets and statistics at aggregate and granular breakdowns. Understanding how the statistics are used, and by whom, is therefore important.

User needs should be put at the forefront of any decision about whether a dashboard is needed and for how long it will be updated and maintained. Our '[dashboard questions](#)' may help you in considering the value of a dashboard for any statistical output. When using dashboards to disseminate official statistics, organisations should also follow guidance from the Government Statistical Service, such as its [data visualisation: dashboards guidance](#). After answering these questions, you may find you do not need a dashboard. A less complex product may meet user needs.

If a user need for a dashboard is identified, it is important to check that adequate resource is available to develop and maintain it. A dashboard should remain relevant and useful and continually meet user needs. Statistics producers should have processes in place to maintain the quality and value of a dashboard used in an official statistics release. Producers should also have processes in place from the start for archiving content as these will be difficult to implement otherwise.

Can I use a dashboard to release official statistics?

Many producers publish dashboards alongside an official statistics bulletin as an additional tool to support different types of users. In exceptional circumstances, producers may decide to use a dashboard as the sole method for publishing official statistics without being accompanied by a bulletin. The decision to use dashboards as the first release of official statistics requires careful consideration as the dashboard must comply with the Code of Practice for Statistics. This can present some challenges and so this approach is not generally recommended.

When using a dashboard for the first release of official statistics, producers need to consider:

- compliance with accessibility legislation and ensuring the data are equally available to all
- managing any potential technological issues or risks that may undermine orderly release
- orderly release, including adherence to pre-release access protocols and publishing at 9.30am on a weekday unless an exception has been granted
- pre-announcing new data updates of the dashboard through a pre-release calendar at least 4 weeks in advance where possible
- ensuring errors and revisions are handled in line with policy and a record of any impacts are clearly explained to users
- in absence of a statistical bulletin providing sufficient information to users to support interpretation of the statistics including information on insights from the data and the methodology including strengths and limitations

Principles for using dashboards to communicate official statistics

Producers should weigh up the advantages, disadvantages and risks of using a dashboard before developing one.

OSR has developed a set of guiding principles for statistics producers to follow when using a dashboard for official statistics and data so that users can have confidence in the final product. These principles are in line with the standards of Trustworthiness, Quality and Value in the Code of Practice for Statistics.

At a minimum, a dashboard should:

- adhere to accessibility legislation and guidelines, where possible.
- contain clear, visible links to the data source and the producer of the data.
- include appropriate labelling of the statistics' status. For example, if it's an accredited official statistic, the badge should be upfront and visible.
- have clear, concise and prominent information about the strengths and limitations of the statistics. Statisticians/analysts should assess what

information about quality, users need to appropriately interpret the data, taking a layered approach (described on page 6).

- include information about revisions and corrections.
- be coherent with any other products available as part of the statistical release, such as the main statistical bulletin (usually html) and any quality and methodology information. This should include links for users to navigate to the various products.
- contain accurate details of the update schedule, the date of last update and links to other sources where the data may be available in different formats, including archived data.
- come with a plan for maintaining, updating and retiring the dashboard, so that it continues to meet user needs.
- contain the contact details of the relevant producer team.

Trustworthiness – trustworthiness is about the people, systems and processes used for producing the dashboard.

Tips for organisations producing dashboards

- Encourage collaboration between expert teams. Statisticians/analysts should have oversight of the statistical validity of messaging and presentation of official statistics in a dashboard.
- Consider and seek approval for maintenance of the dashboard at the start, thinking about people and technological resources and sustainability until the dashboard is retired.
- Embed processes to manage sign-off and consistency of dashboard standards.
- Release statistics via a dashboard in a transparent and orderly way.
- Manage risks around data sensitivities and disclosure.

Professional capability, collaboration, governance and standards

Developing a dashboard often involves people with different skillsets – each of whom plays an important role relevant to their area of expertise.

As the experts in compiling the statistics, as well as understanding the strengths and limitations of them, statisticians/analysts should have oversight of the statistical validity of the messaging around, and presentation of, official statistics in a dashboard. Dashboard developers and data visualisation teams are technical experts who create dashboards and consider how data are accessed and consumed by different users.

To ensure that the product is of a high standard, it is important for everyone to coordinate efforts in the development and ongoing use of a dashboard.

Governance and sign-off/approval procedures for dashboards should be agreed and should involve seeking the advice/approval from the Head of Profession for Statistics especially in relation to the publication of official statistics. In addition, plans for maintaining a dashboard should be agreed before it is created, so that appropriate technological and financial resources can be put in place for the lifetime of the dashboard.

The Department for Education (DfE) has developed [its own standards and guidance](#) to support publishing dashboards. The explore education statistics service (EES) is the primary route for publishing official statistics. DfE has clear governance in place that outlines responsibilities, governance and the level of approval that is required when developing a public-facing dashboard. This approach ensures consistency across official statistics where a dashboard is used and is a good example for others to follow.

Producers should have processes in place to ensure that there is consistency in the standards used in the development of dashboards for official statistics. Collaboration between organisations is also an essential part of sharing best practice and lessons learned. Producers should make use of networks, such as the GSS presentation champions network, and seek other opportunities to facilitate engagement.

Orderly release

Organisations that release their statistics via a dashboard should commit to doing so in an open and transparent manner that promotes public confidence.

Key points to consider:

- Not updating the dashboard before the statistics publication goes live.
- Differentiating between dashboard functionality/technology updates and data updates is important. Software updates or technology fixes to a dashboard do not need to be pre-announced.
- Any scheduled or unscheduled updates to data contained in the dashboard should be made clear and handled transparently. A notice should be included or linked to within the dashboard that describes the frequency, reason and likely scale and impact of any data changes. Update dates and times should be recorded and refreshed as part of the dashboard's supporting information so that users understand what data points the dashboard is presenting.

Managing risks around data sensitivity

Organisations are expected to securely manage data in ways that are consistent with relevant legislation. This includes the release of data and statistics via a dashboard. Some dashboards may allow users to interrogate data by including individual variables at much lower levels than in published data tables. Producers should consider and mitigate any risks around data sensitivities as part of existing processes. Extra care and additional steps may be required to ensure that data available in a dashboard are not disclosive.

The [Government Data Quality Hub](#), or DQ Hub, [published guidance on anonymisation and data confidentiality](#), which includes relevant links to learn more about statistical control methods and managing the risk of data protection.

The UK Health Security Agency (UKHSA) [public health dashboard](#) presents public health data from across England. It includes clear and helpful information for users in its 'About' menu, including its update schedule and any planned changes. Users can see, via the 'What's new' and 'What's coming' pages, a transparent timeline of any changes or planned changes to the data presented in the dashboard. This includes any changes to metrics included in the dashboards, data issues and any corrections. A 'last updated' date and time stamp are also included at the top of each page. The privacy statement makes it clear that no information that could identify individuals is published on the dashboard. A link is also included containing further information on how UKHSA collects and uses personal data.

Quality – quality is about the data sources and methods used and communicating any limitations of them.

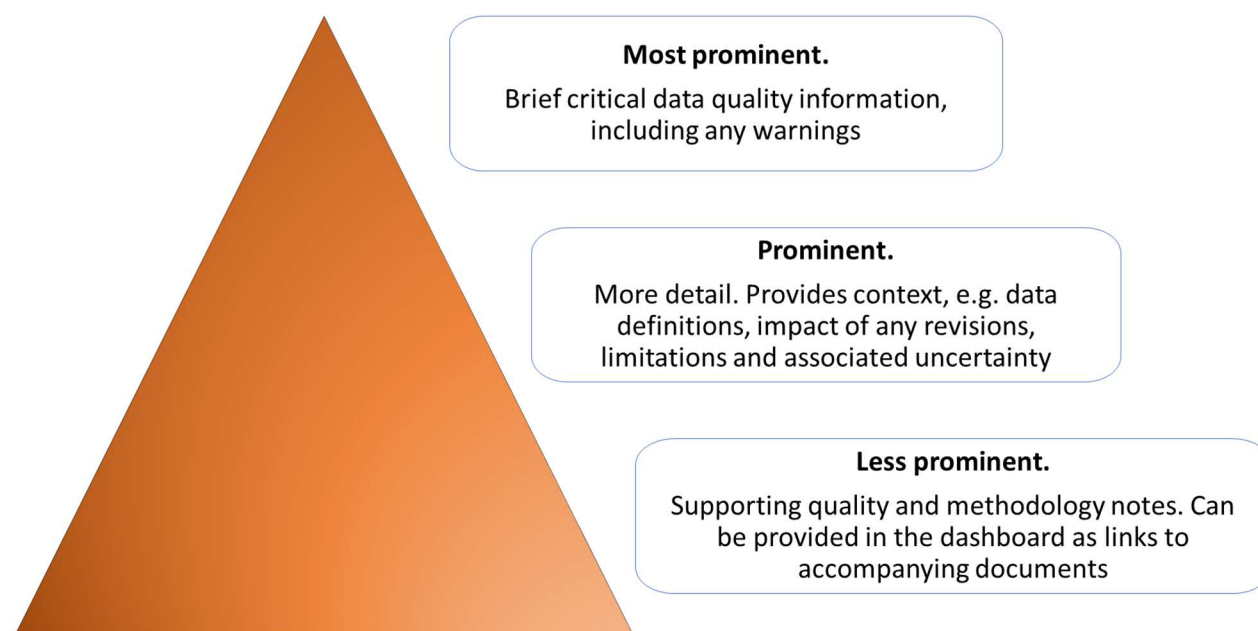
Tips for communicating the quality of statistics

- Consider the context and complexity of the statistics. Is a dashboard the right product to convey the statistical messages? Or is there a risk of misuse?
- Be open about strengths and limitations.
- Use a layered approach:
 1. Critical caveats and quality warnings should be prominent and upfront.
 2. The use of accordions or drop-down boxes can help to communicate important context and definitions.
 3. More detailed quality information can be provided in supporting linked documents.
- Consider how you are communicating uncertainty. Maximise the use of visualisations and use concise and plain English language to describe any limitations.
- Collaborate and seek advice from data visualisation experts. Test with users and periodically review your approach to communicating quality based on that feedback.
- Make it clear if the statistics will be subject to revisions and update users when revisions are made.
- If any errors are identified, these should be corrected, and users should be notified accordingly.

Communicating quality

It is important that users are provided with key information about the quality of the statistics presented in the dashboard to support appropriate use and interpretation.

Visual space can be limited within dashboards, and so there is a balance to consider between the level of information that should be included upfront and not overwhelming the user. Because of this we have developed a three-layered communication framework that we encourage producers to adopt. Each layer is equally important, regardless of prominence.



Producers should outline clearly any limitations, caveats, potential revisions and quality issues with the statistics on the dashboard. Critical caveats and quality warnings should be prominent and upfront. Use concise and plain English language to maximise public understanding of any quality concerns and their impact on how they use the statistics. Caveats such as ‘use with caution’ are not helpful; more detail should be provided, so that users are aware of the exact issue and what that means for their use. For more complex statistics, where the visual space to communicate quality information and software choices are limited, a dashboard may not be the right product.

The [Weekly Deaths dashboard](#) developed by the Office for National Statistics (ONS) is a good example of a considered and layered approach that supports users to understand relevant quality information. A clear and prominent data warning that the statistics are provisional and subject to revisions is provided at the top of the dashboard. The note states that the figures are based on the date a death was registered, which is usually later than the date it occurred. A link to an additional user guide allows users to navigate to further information.

Throughout the dashboard, accordions (drop-down boxes) provide definitions and further explanations, such as ‘What are death registrations?’ and ‘What are expected deaths?’.

Most statistics are subject to a degree of uncertainty, which can affect statistical accuracy and meaning. Therefore, it’s important to ensure that they are communicated effectively, including when data are presented in a dashboard. Our published report, on the [approaches to presenting uncertainty in the statistical](#)

[system](#), can give some useful pointers on how to do this. Visuals and graphics should be used, where possible, to help communicate any uncertainty associated with the statistics.

The Government Data Quality Hub ([DQHub](#)) provides support for the Government Statistical Service and wider Analysis Function on communicating the quality of statistics, including uncertainty. This is centred around the guidance [Communicating quality, uncertainty and change](#). There is also an [uncertainty tool kit for analysts in government](#).

Managing revisions and errors

Dashboards can be a helpful product when timely statistics are needed. By design, dashboards can handle frequent and automated updates efficiently.

For some statistics, revisions are an integral part of the production cycle due to the availability of timelier data or the introduction of new and improved methodologies. It's important to consider how revisions are communicated on a dashboard, particularly where estimates presented change status over time, for example from provisional to updated estimates.

It is important to update users on any identified errors and subsequent corrections. Where any errors are identified, a prominent note should be added to the dashboard, ideally on the initial interface, so that users are informed before interrogating the data at lower levels.

Value – value is about ensuring the data meet user needs

Tips for maximising dashboard value

- Is the dashboard user-driven? Consider how to maintain relevance, taking account of potentially changing user views.
- Think about how the dashboard will communicate insight. If users only access data via the dashboard within a statistical release, what key messages are communicated?
- Have clear and prominent links on the dashboard to ensure coherence with other products.
- Statistics in a dashboard should be equally available to all. Comply with accessibility legislation, where possible. Dashboards should be accompanied by an accessibility statement.
- Have a plan in place from the start for archiving.

Putting user needs at the centre of dashboard development

User views should be at the centre of statistical production. Throughout the process of building and maintaining a dashboard, their needs should be understood, their views sought and acted on, and their use of statistics supported.

A key question that producers should ask themselves before creating a dashboard is: 'Is this what users want or need?'. Producers should look to consult users before a new form of data dissemination, such as a dashboard, is produced, and new products should be tested with a wide range of users, where possible, before they are put into the public domain. This ensures that the product works smoothly from launch and that the intended benefits are maximised.

User views should drive any decisions around the most suitable form of data dissemination. Dashboards should have the contact details of the producer team visible so that users can contact the team to provide feedback on the product. Producers should be responsive to any user requests and feedback to maximise the value of the dashboard. All user feedback should be considered, and producers should inform users as to why suggestions are adopted or not.

The [waiting times dashboard](#) developed by Public Health Scotland (PHS) is an example of a dashboard that puts user needs at the centre of its development to try and maximise the public value of its published statistics. It is aimed specifically at the needs of patients who are waiting for appointments and treatments provided by services within NHS Scotland. To respond to their specific information needs, PHS used feedback from a range of stakeholders, including patients, to develop a new stand-alone website. The site uses a subset of a much larger dataset that is published regularly on national waiting times performance as official statistics. There are limitations on the statistics that the data source can provide. This means the site provides information on the waiting times by specialty for the health board area where the patient is resident but not for the specific conditions or treatments for which they may be waiting to be seen. However, PHS acknowledge this and are transparent in its communication of the limitations. They continue to seek feedback on the site with a view to enhancement.

Dashboards should be reviewed periodically to ensure their continued relevance and value as a statistical product. It's important that dashboards are not left as a legacy tool. Sometimes there is a user need for a dashboard, but there is not sufficient resource to continue it, in which case this should be communicated clearly, and the impact of continuing or discontinuing the dashboard assessed.

Communicating insights and coherence of statistical communication

Statistics should be presented clearly, impartially, explained meaningfully and provide authoritative insights that supports use by all types of users. Because dashboards are a visual tool, there may be less space for commentary about insights. Producers should consider the degree of reliance placed on a dashboard to communicate insight and consider options for including narrative and insightful commentary in other related products, such as a statistical bulletin.

Integrating visualisation into dashboards should be done in a considered manner – being used to enhance the data and make the statistical messages clearer to users. It is important that any visualisations are accurate and do not present a misleading

picture for users. Visualisations that work for the whole population may fail when the user filters down to a small subgroup, so the producer needs to consider this as well.

The [Programme for Government \(PfG\) Wellbeing framework dashboard](#) developed by the Northern Ireland Research and Statistics Agency (NISRA) is a good example of how insights across a range of indicators can be brought together in a visual and engaging way. The dashboard allows politicians, policy makers and the public to assess the state of NI society.

The dashboard received praise from key users and was the winning entry of the 2025 Analysis in Government Communication Award. Communication was carefully considered, using colours and plain language to help users understand statistical trends and key messages.

Coherence of statistical products

Relevant links and navigation between different products should be clear and prominent, for example, by including links on the dashboard to supplementary bulletins, tables, technical notes or quality information. In this way, the ease of navigation, coherence and use of the full range of products are maximised.

If the dashboard is accompanied by other types of data presentation, such as a statistical bulletin or data tables, then additional links and commentary should be added to aid coherence between the products.

The [Net Additional Dwellings dashboard](#), developed by the Ministry of Housing Communities and Local Government (MHCLG), is an interactive tool that presents estimates of changes in the size of the dwelling stock in England. The net additional dwellings release is the primary and most comprehensive measure of housing supply.

The main page provides useful links to the main statistical bulletin, guidance on the statistics and other relevant types of data, such as the dwelling stock and indicators of new supply. Guidance on how to use the dashboard, with short tips on how to filter, drill down and copy the data, is clearly visible. This enables new users and people unfamiliar with using the dashboard to access all its additional benefits and features.

Adherence to accessibility legislation and ensuring equal access

Statistics and data in a public-facing dashboard should be equally available to all. Dashboards should be easily accessible, considering the needs of different users including users with disabilities to determine how the statistics should be presented and released.

A dashboard should adhere to accessibility legislation and standards wherever possible. A dashboard should be accompanied with an accessibility statement detailing the extent of its compliance with accessibility standards – the underlying data should be made available by other means to comply with the Code. Producers

should consider an accessibility audit for new dashboards before they are published, to inform developments and provide clear information for the accessibility statement.

Producers should be aware of the accessibility constraints of the various software packages used to develop dashboards, such as Power BI.

A good example of a [detailed accessibility statement](#) is available on the [Department for Health and Social Care's Health Trends in England dashboard](#). It includes contact details for users to request information presented on the dashboard in a different format, for example an accessible PDF, large print, easy read, audio recording or braille – in addition to a channel for users to report any accessibility problems with the website.

Archiving

Statistics, data and metadata should continue to be publicly available, including when organisational websites are changed, and be archived as required. Any data should remain available, but if data are no longer updated, this should be made clear.

Before a dashboard is archived, a prominent notice should be added that informs users when the dashboard will be archived and from which point the data on it will no longer be updated, for full transparency. There are different ways that data can be archived, and the format does not need to remain the same. A non-proprietary format would more likely ensure future accessibility and useability; for example, it could be a .csv data file or providing links to the source data.

Archiving a dashboard can be quite costly in terms of time and resources, so it is important that archiving is considered in the early stages of any dashboard's development process and is proportionate. A better understanding of how the data are used should help inform decisions around archiving. There should be a plan in place to archive the dashboard when it is decided that there is no longer a user need for it.

The previous UK coronavirus dashboard published by the UK Health Security Agency (UKHSA), now [the UKHSA data dashboard](#), is also a good example of how a dashboard can be archived effectively. It was created during COVID-19 to provide the public with updates on the prevalence of the virus, with daily updates to produce the timeliest data.

Following the decommissioning of the 'COVID-19 in the UK' dashboard, you can now download all the historic data on the [COVID-19 archive data download](#) page. Despite the time and resources needed to accommodate this, data presented in the COVID-19 dashboard were archived onto the national archives' website every day, ensuring that the historic data were available to users after the dashboard was closed.

The [UK Climate Change dashboard](#) provided a variety of estimates on a range of topics including climate and weather, emissions, drivers, impacts, mitigations and adaptations. It uses graphs to visually aid users and provides headline estimates in context with previous years to help users understand the relevance of the data.

The dashboard was archived in February 2024 via The National Archives. There are clear notices that the page has been archived, and a link is provided to the UK Government Web Archive, where users can find previous data. A clear note states that the data are no longer updated, and a variety of links are provided to up-to-date data on the subject.

Users were informed in advance about the retire plans for the dashboard. This gave users time to prepare for the dashboard coming to an end and to put future plans in place.

Regulatory guidance: Dashboard questions. Thinking about Trustworthiness, Quality and Value in the development and use of dashboards

We are seeing an increased use of dashboards in the dissemination of official statistics and data across the Government Statistical Service. In this guide, we provide some questions that analysts producing statistics can use in applying the standards of the [Code of Practice for Statistics](#) – Trustworthiness, Quality and Value – when developing and using a dashboard.

These questions target the most prominent issues and challenges with dashboards, as a form of statistics dissemination, that we collated from our producer engagement. Producers should use these questions to challenge themselves and ensure that any dashboards they produce follow the highest possible standards.

Trustworthiness

Trustworthiness is about the people, systems and processes used for producing the dashboard. Consider:

- Who decides what data are included in the dashboard? Are decisions impartial and free from political or organisational conflicts of interest?
- When will the data first be published and next be updated, and will new data or visualisations be added? Do you have a process in place to notify users of any updates to the dashboard?
- How do you intend to manage errors?
- How are you considering data sensitivities? Where there are multiple, granular visualisations, how are you ensuring that the confidentiality of data is protected?

- What is the status of the statistics? Are they official statistics, accredited official statistics, official statistics in development, or something else? Is it made clear on the dashboard what the status of the statistics is?
- Do you have sufficient resources and skills to be able to build and maintain a dashboard? Do you have plans in place to maintain the functionality of the dashboard and its software throughout its lifespan?
- Have you considered how you will archive the data contained within the dashboard when you decide to retire it?
- What software packages are available and suitable to host the dashboard?
- How can users get in touch if they have any questions?

Quality

Quality is about the data sources and methods used and communicating any limitations of them. Consider:

- What are the data sources underpinning the dashboard? Have you ensured that relevant links are available for users to access other relevant statistical products and supporting information?
- How have you communicated the uncertainty around the statistics? Our published report on the [approaches to presenting uncertainty in the statistical system](#) can give some useful pointers on how to do this.
- How have you assured the quality of the data? If using data from administrative sources, our [Administrative Data Quality Assurance Toolkit](#) may be helpful. Have you provided links to all the relevant quality information on your dashboard?
- What can you tell users about any potential limitations with the data? Is there a risk of misinterpretation? Make sure that users see information that is critical to support their confident use of the statistics.

Value

Value is about ensuring the data meets user needs. Consider:

- Why has the dashboard been created? Is it user-driven?
- What are the questions that the dashboard seeks to answer? How have you engaged with users to understand these questions? (The GSS guidance has some [questions producers can ask users](#) to better understand their need.)
- Is a dashboard the right tool to convey the statistical messages and to provide users with all the relevant information?
- How accessible are the data in the dashboard? Will you be able to meet the government accessibility requirements with the dashboard?
- If the dashboard is not fully accessible, have you considered how the data contained in the dashboard will be equally available to all? Are there other statistical products planned, e.g. bulletins or data tables, as part of a broader communication package, to achieve this? If there are other statistical products, are these linked to from the dashboard?

- Does the dashboard include or signpost to all the relevant data and information?
- Can users easily download and use the data to draw further insights?
- How do you plan to engage with users to ensure that the dashboard meets their needs as they change over time?

We are happy to receive your feedback on this guidance. If you have any comments or suggestions to improve the content, please get in touch at regulation@statistics.gov.uk.