Statistical bulletin

Public service productivity, quarterly, UK: October to December 2025

UK total public service productivity, inputs and output, to provide a short-term, timely indicator of annual productivity estimates. These are official statistics in development.

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Release date:
8 May 2026

Next release:
August 2026

Notice

8 May 2026

Note that this release does not include quarterly and healthcare breakdowns, as we are currently working on improvements to these series to reduce quarter-to-quarter erratic movements seen across early 2025. The aim was to introduce these in this release. However, after further assessment, it was decided that the quarterly paths of current price expenditures should be reviewed alongside corresponding deflators and seasonal adjustment to ensure a more robust and comprehensive quarterly volume path. The aim is to re-introduce these in our next quarterly release in August 2026. Please see Section 2 of the publication for more details.

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1 . Main points

- Annualised total public service productivity (TPSP) UK estimates for 2025 are published for the first time in this release, alongside revised 2024 estimates.
- Annualised TPSP grew 0.6% in 2025, as output growth (1.7%) outpaced inputs growth (1.1%).
- Annualised TPSP growth for 2024 was revised up to 0.4% in 2024 (from 0.0%), mainly because of new data causing a downward revision to inputs.
- In 2025, TPSP was 3.1% lower than the pre-pandemic 2019 level.
- These estimates are official statistics in development and are subject to continuous improvement and revision as more timely data and new sources become available.
- We are not publishing quarterly and healthcare breakdowns in this release while we work with our data suppliers to further develop health inputs data; this will build on improvements to health output estimates, and coherence with National Accounts and our annual Public Service Productivity release.

These are official statistics in development and are subject to revision. Use caution when comparing quarterly estimates in 2024 and 2025 (which are official statistics in development) with earlier annual estimates (which are accredited official statistics), as some sources, methods, and the structure of inputs and output differ. Read more in Section 8: Data sources and quality.

2 . About these estimates

This release does not include quarterly or healthcare breakdowns, as we continue to work on improvements to this series to reduce the quarter-to-quarter erratic movements seen across early 2025. The volatility is caused primarily by inputs, and results in some differences when comparing with estimates published by NHS England.

While there are reasons as to why the Office for National Statistics and NHS England measures may differ (as set out below), the erratic quarter-to-quarter movements indicate that some further assurance is needed to ensure quarterly healthcare productivity during that period provides a good signal of quarter-on-quarter and quarter-on-year movements. This does not affect the use of our annualised estimates for 2024 and 2025, but we do advise caution in using previously published quarterly healthcare estimates until we undertake further work with our data suppliers and re-introduce them.

Reasons why our estimates of healthcare productivity may differ from in-year productivity estimates produced by NHS England:

- we cover a wider range of healthcare services across the whole UK (including spend on primary care services commissioned by Integrated Care Boards (ICBs), for example) whereas the NHS England measure looks specifically at spend by NHS Trusts in England only
- we primarily use data drawn from the central government Online System for Accounting and Reporting (OSCAR) via the National Accounts, while NHS England uses more up-to-date internal data available to it
- we adhere to National Accounts methodology and best practice (for example, deflation, chain-linking aggregation, and seasonal adjustment processes) whereas NHS England uses other approaches (including inflation adjustments and reconciling to published NHS trust accounts)

We continue to work with colleagues at the Department for Health and Social Care, NHS England, and HM Treasury to further minimise differences in coverage and timeliness between our estimates on healthcare inputs. The aim is to re-introduce quarterly and healthcare breakdowns in our next quarterly release this summer.

Methodological differences between the annual and quarterly estimates, and a description of the quarterly data, can be found in our Sources and methods for public service productivity estimates methodology.

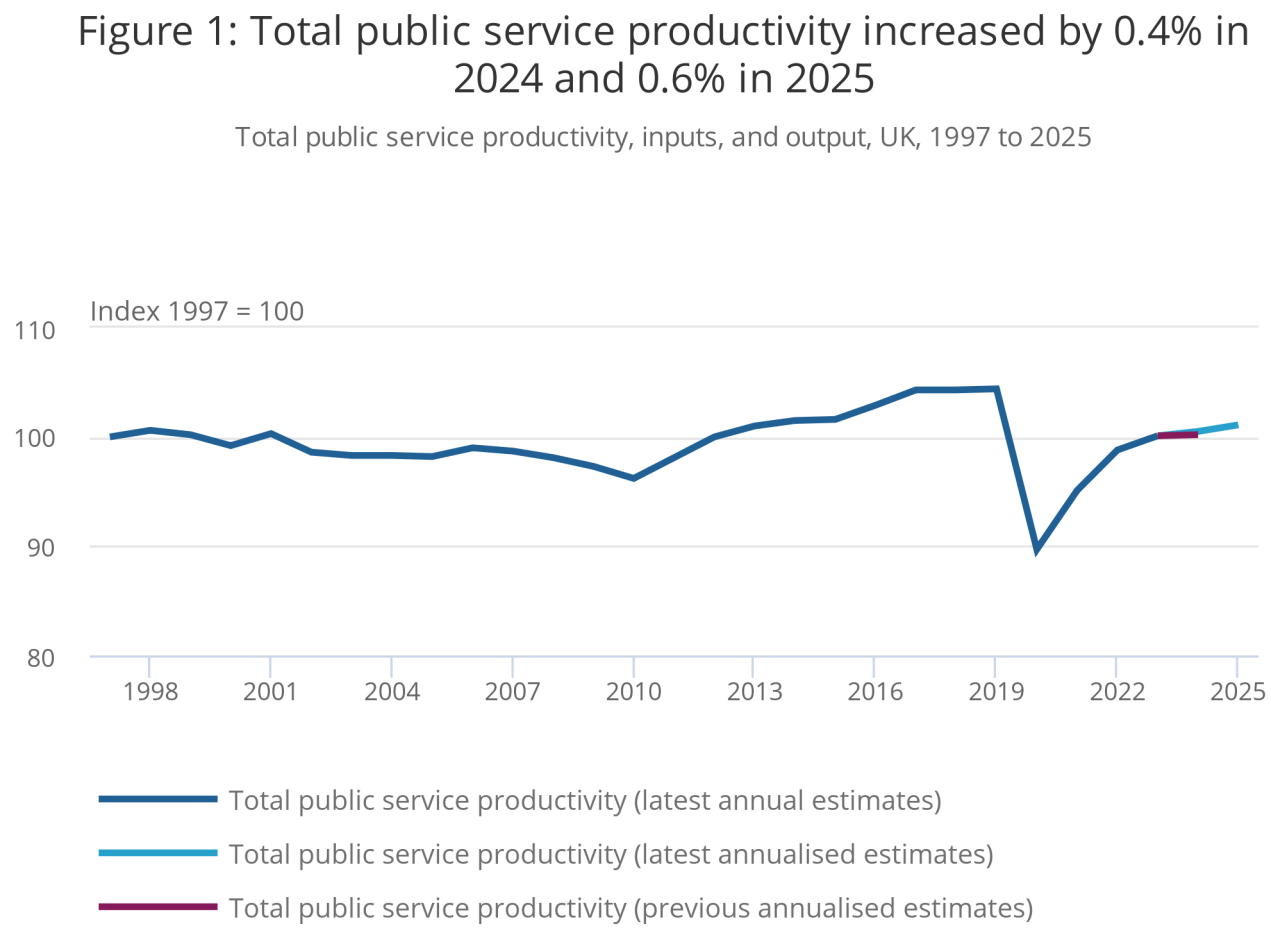
3 . Annualised total public service productivity

This section focuses on the annualised estimates of our quarterly total public service productivity, inputs, and output, which are official statistics in development. The annualised estimates are based on a quarterly annualised growth rate (QAGR) approach, which produces "nowcasted" estimates for 2024 and 2025. Read more on this method in Section 8: Data sources and quality.

Figure 1 combines our accredited annual estimates from 1997 to 2023 with official statistics in development for 2024 and 2025, derived using the QAGR approach.

Figure 1: Total public service productivity increased by 0.4% in 2024 and 0.6% in 2025

Total public service productivity, inputs, and output, UK, 1997 to 2025



Source: Public service productivity from the Office for National Statistics

Notes:

1. Estimates from 1997 to 2023 are annual accredited official statistics.

2. Estimates for 2024 and 2025 are official statistics in development and are annualised quarterly estimates.

The most recent data indicate that total public service productivity (TPSP) has grown for the fifth consecutive year in 2025, following the large fall in productivity in 2020 during the coronavirus (COVID-19) pandemic.

Total public service productivity increased by 0.4% in 2024 and 0.6% in 2025. These growth rates are slightly lower than the average annual growth of 0.7% in the decade to 2019, before the coronavirus pandemic.

Latest estimates suggest slower growth in inputs (1.1%) and output (1.7%) in 2025 compared with 2024. Inputs growth in 2025 was mainly caused by healthcare and social protection. The slowdown in inputs growth in 2025 was mainly caused by weaker growth in labour inputs in health and social protection, and falling real term spend in goods and services across most service areas.

Most services saw growth in output in 2025, except for education which fell slightly. The slowdown in output growth in 2025 was mainly caused by weaker growth in health and education services.

Overall, total public service productivity in 2025 is estimated to be 3.1% below 2019 levels, and growth is slightly weaker compared with pre-2019 trends. Revisions are explained in the next section.

Estimates for 2025 are published for the first time in this release and include more timely expenditure data from devolved administrations not currently available via the National Accounts. Without this improvement, total inputs growth across 2025 would have appeared stronger.

4 . Revisions to total public service productivity

Revisions to annual estimates of productivity, inputs and output up to 2023 were published and explained in our Public service productivity, total, UK, 2023 article. In line with our National Accounts Revisions Policy, this release contains data that are consistent with the UK National Accounts unless otherwise stated. Table 1 compares our latest annualised total public service productivity estimates with previously published annualised estimates.

Table 1: Latest and previously published annualised estimates for total inputs, output and productivity growth

Year	Estimate	Inputs	Output	Productivity	Productivity compared with 2019
2024	Previously published	3.4%	3.5%	0.0%	3.4% lower
2024	Latest	3.0%	3.5%	0.4%	3.7% lower

Source: Public service productivity from the Office for National Statistics

Notes

1. Productivity compared with 2019 looks at annualised quarterly estimates (official statistics in development) with annual 2019 estimates (accredited official statistics).

Total public service productivity for 2024 was revised up, from no growth to 0.4% growth. This is because of downward revisions to inputs growth (from 3.4% to 3.0%) as a result of updated residential care and social work expenditure data from the Ministry of Housing, Communities, and Local Government.

Despite upward revisions to productivity growth in 2024, productivity compared with 2019 is 0.3 percentage points lower than previously published. This is caused by revisions in our annual accredited estimates published in March 2026 that show a slower rate of productivity growth in 2021 and 2022.

5 . Confidence intervals

Confidence intervals (CIs) surrounding our nowcasted total productivity estimates are shown in Tables 2 and 3. These provide a statistical measure of uncertainty attached to these annualised growth estimates, with the interval width determined by historical differences between the growth rates of quarterly and annual estimates. We ignore 2019 to 2023 in our calculation of confidence intervals, as growth during this period is not reflective of historical and underlying differences between our quarterly and annual estimates.

Nowcasted estimates are official statistics in development and should be treated with caution until our 2024 and 2025 annual accredited estimates become available.

Table 2: Nowcast estimates for 2024 and 2025 total public service productivity, inputs and output growth rates, UK

95% Confidence Interval

	Nowcast estimate for	Central estimate	Lower	Upper
Productivity	2024	0.4%	-1.2%	2.0%
	2025	0.6%	-1.6%	2.8%
Inputs	2024	3.0%	1.6%	4.5%
	2025	1.1%	-1.0%	3.2%
Output	2024	3.5%	2.7%	4.3%
	2025	1.7%	0.4%	3.1%

Source: Public service productivity from the Office for National Statistics

Notes

1. We use a quarterly annualised growth rate nowcast. For more details please seeDeveloping nowcast methodologies for public service productivity, UK

Even with these refined confidence intervals, we are unable to say with confidence whether there was growth or contraction in total public service productivity in 2024 and 2025. While some elements of our estimates over this period come with greater certainty, such as current price expenditure from government accounts, other elements cause large confidence intervals. This includes different deflators, time lag in certain sources, and methodological differences between our annual and quarterly datasets.

Table 3: Previously published total public service productivity nowcast estimates compared with annual estimates for 2023

	Annualised estimate (with 95% Confidence Intervals)			Annual estimate
	Lower	Central	Upper	
Productivity	-0.8%	0.8%	2.3%	1.4%
Inputs	-0.4%	1.1%	2.6%	1.1%
Output	1.0%	1.9%	2.7%	2.5%

Source: Public service productivity from the Office for National Statistics

Notes

1. We use a quarterly annualised growth rate nowcast. For more details please see Developing nowcast methodologies for public service productivity, UK,

2. These figures compare 2023 nowcasted estimates (as previously published) with annual accredited official statistics.

This table compares previously published nowcast estimates for 2023 (our official statistics in development) with our recently published annual estimates (our accredited official statistics). The table shows that our annual estimates came within range of our confidence intervals across inputs, output, and productivity estimates. Note that annual estimates include quality adjusted output, hence the larger difference between central annualised estimates and the annual estimate for our outputs compared with inputs.

6 . Data on public service productivity

Public service productivity, quarterly, UK: October to December 2025
Dataset | Released 8 May 2026
UK total public service productivity. Includes estimates of inputs, output, productivity, and revisions. These are official statistics in development.

7 . Glossary

Deflator

A price index used to remove inflation effects from current price estimates of expenditure to provide a volume estimate.

Direct output measurement

Output is estimated using an activity-based index (typically weighted by cost). For example, the number of students in state schools, adjusted for attendance and weighted by the cost of different phases of schooling. This differs from an indirect output measurement, where output is assumed equal to inputs.

Intermediate inputs

Also referred to as "goods and services", or "intermediate consumption" (the National Accounts term). Intermediate inputs include goods and services used up in the provision of a public service, such as utilities, energy, professional services, and medical supplies, among others.

Public services

These are services delivered by or paid for by government (central or local). If paid for by the government, they may be delivered by a private body - for example, the provision of nursery places by the private sector, where these places were funded by the government.

Quality adjustment

A statistical estimate of the change in the quality of a public service, using an appropriate metric, such as safety in prisons as part of the public order and safety adjustment.

Service area

The way we refer to the breakdown of public services into seven areas, closely following standard industrial classification (SIC) codes.

Standard industrial classification

The industrial classification applied to the collection and publication of a wide range of economic statistics.

8 . Data sources and quality

Official statistics in development

These statistics are labelled as "official statistics in development". They are based on information from various quarterly UK National Accounts categories. We are developing how we collect the data and produce the statistics to improve their quality.

Once we have completed the developments, we will review the statistics with the Statistics Head of Profession.

If the statistics meet trustworthiness, quality and value standards based on user feedback, we will remove the "official statistics in development" label to publish under the "official statistics" label.

If they do not meet trustworthiness, quality and value standards, we will further develop them or might stop producing them.

If they were "accredited official statistics" before the start of the developments, we will ask the Office for Statistics Regulation (OSR) to reassess and re-accredit them.

We will inform users of the outcome of our, and any OSR, review and any changes.

Data sources

We use different sources and methods to produce our official statistics in development quarterly statistics and our annual accredited official statistics.

This bulletin uses expenditure data from quarterly UK National Accounts, split into seven categories:

- healthcare
- education
- social protection
- justice and fire
- military defence
- central government services
- local government services

Data sources and methods differ from the annual publication, depending on data availability and appropriateness on a quarterly or annual basis. For example, some inputs measures that are available on an annual basis as direct measures are not available on a quarterly basis. These missing quarterly direct input measures may only be obtainable using indirect measures (deflated expenditure).

Our annual total public service productivity (accredited official statistics) also use different deflators to estimate volumes of inputs other than those used in this release. As such, estimates are not directly comparable between the quarterly and annual publications. Estimates of productivity, inputs and output up to 2023 are reported on an annual basis and use data from our Public service productivity, total, UK, 2023 article. Further information about our annual accredited official statistics can be found in our Public service productivity: total, UK, quality and methodology information (QMI).

Seasonal adjustment

Our quarterly estimates of public service productivity contain systematic calendar related variation therefore for comparability we apply seasonal adjustment. Please see Office for National Statistics seasonal adjustment publication for more information. For our quarterly estimates we use the X11 algorithm in the X-13 ARIMA-SEATS software to perform seasonal adjustment.

Since 2023, the non-seasonally adjusted data on public service productivity, particularly inputs, show a different seasonal pattern than earlier data. This is because of policies and measures adopted by government departments following the coronavirus (COVID-19) pandemic. This new seasonality was not properly captured by the seasonal adjustment model for inputs, which produced estimates that do not appear to fully reflect the current economic scenario. To revise the seasonal adjustment fully requires more quarters of data post-COVID-19 to enable re-estimation of the trend of the new seasonality. For this reason, supported by experts on seasonal adjustment, we previously treated data on healthcare inputs from Quarter 2 2020 until the latest quarter as outliers, reflecting the impact of COVID-19 and subsequent effects.

However, publications after November 2025 just treat Quarter 2 2020 to Quarter 2 2022 as outliers. This reflects advice from time series experts given the current data and length of time series available since 2022. We also apply indirect seasonal adjustment consistent with other areas of National Accounts. This step uses the chain-linking aggregation approach to aggregate the seasonally adjusted service areas and ensures additivity across our service area estimates and the total. These estimates will be subject to continued assessment as new data become available, and as we work to further align ourselves with National Accounts best practice.

Measuring public service productivity

These statistics take no further account of changes to the quality of public services in periods beyond the latest statistics published for 2023 in our annual total public service productivity article, which are accredited official statistics. We incorporate data consistent with the UK National Accounts, unless otherwise specified such as in cases where we have more timely data available to inform our estimates.

These estimates are not a measure of the productivity of an individual worker within the public sector. Instead, they reflect the volume of services delivered to end users, relative to the volume of total inputs required to deliver these services. Productivity will increase when more output is being produced for each unit of inputs used. Estimates of inputs, output, and productivity are given both as growth rates between consecutive periods and as indices, showing the cumulative trend over time.

For total UK public services, estimates of inputs are made up of aggregated series for individual public services, weighted together by their relative share of total expenditure on public services in current price (expenditure weight). Inputs include labour, goods and services, social transfers in kind (STIK), and consumption of fixed capital. Expenditure data, used to estimate most inputs growth, are taken from our GDP quarterly national accounts bulletin.

Output in our productivity estimates reflects total general government final consumption expenditure (GGFCE). The quarterly national accounts produce estimates of government output, based on direct measures where they are available, and indirect measures where they are not.

Our quarterly data do not currently account for staff absenteeism in our labour estimates. However, our annual accredited official statistics estimates do account for this. More information on the differences in method and sources used in our quarterly and annual estimates of public service productivity can be found in our Public service productivity QMI.

Healthcare inputs are calculated as follows. Labour growth is based on our public sector employment data (direct implied expenditure), and deflated bank staff implied expenditure. The volume growth of healthcare labour inputs are then weighted according to its current price expenditure share relative to other health inputs components. Our estimates of intermediate consumption, capital, and STIK are based on national accounts sources and adopt the same aggregation approach. The sum of these components leads to the healthcare inputs volume growth in each period.

Our public service quarterly output volume measure for healthcare is estimated based on the growth in the following types of activities in England, which have timely data collections:

- elective and non-elective treatments
- hospital outpatient first and follow-up appointments
- emergency care
- critical care services
- ambulance attendances
- community health services
- mental health treatments
- community prescribed drugs
- general practitioner (GP) consultations
- dental services
- ophthalmic services
- NHS phone and website services

More information can be found in our Improvements to healthcare volume output in the quarterly national accounts methodology.

Quarterly healthcare output growth is based on available data for a subset of services in England. Because of limited data, these indicators are assumed to reflect overall healthcare trends. Longer-term estimates are adjusted when more complete annual data become available.

Public service productivity uses the expenditure of public services, which defines GGFCE. It includes services where employees are central or local government, as well as publicly funded independent sector providers. This differs from the public sector, which includes public corporations but excludes publicly funded independent sector providers, to avoid double-counting.

Public service productivity is measured differently to labour productivity and multi-factor productivity and is not directly comparable. It reflects the volume of services delivered to end users, relative to the volume of total inputs (which include labour, intermediate consumption, and capital). The measure is dominated by healthcare and education services because of their relative size.

These estimates should be considered a first estimate of public service productivity. The Office for National Statistics, together with HM Treasury and other government departments, will continue to develop and improve its methods, which may lead to revisions of these preliminary estimates.

Annualised estimates

Annualised inputs and output estimates are derived by averaging the non-seasonally adjusted index values across four quarters of a year. These estimates are used to calculate productivity growth rates for 2024 and 2025, which are then applied to 2023 accredited official statistics. This method is used in our Developing nowcast methodologies for public service productivity, UK article.

We also make pre-pandemic annual comparisons, recognising the impact the coronavirus (COVID-19) pandemic had on public services. Inputs rose in 2020, reflecting the extra resources provided to public services to deal with the pandemic. Conversely, output fell in 2020, as many services were delivered in a different way than in 2019, with additional costs and mandatory restrictions present for certain services.

Recommendations from National Statistician's Independent Review of the Measurement of Public Services Productivity

We continue to make incremental improvements to this release and accompanying datasets, in line with recommendations set out in the National Statistician's Independent Review of the Measurement of Public Services Productivity. We have made progress on:

- replacing the current "contribution to growth" compilation method with "chain volume measures", and implementing reconciliation of the quarterly estimates with the annual estimates each year to align with UK National Accounts protocols and improve coherence and understanding for users (see recommendation 18)
- applying the Quarterly cumulative Average Growth Rates (QAGR) method to provide timelier nowcast estimates for annual estimates as further research is undertaken to evaluate the efficacy of alternative methods in the light of the coronavirus pandemic (see recommendation 19)

We will continue to work on remaining recommendations to:

- account for available quality adjustment data and, where this is not possible, keep nowcasting models under annual review to provide the most accurate and timely data possible (see Recommendation 16)
- proceed with best practice improvements to align quarterly and annual production statistics (see Recommendation 20)

Beyond this, we will continually review our data sources and methods to provide the best timely indicator of UK public service productivity.

9 . Related links

Public service productivity: total, UK, 2023
Article | Released 30 March 2026
Updated measures of output, inputs and productivity for UK public services between 1997 and 2023, including service area breakdown, quality adjustment, and latest revisions.

Impact of improved methods on total public service productivity 1997 to 2022
Article | Last revised 16 March 2026
This article presents the improvements to public service productivity measures introduced in the Public Services Productivity Review implemented in March 2026.

National Statistician's Independent Review of the Measurement of Public Services Productivity
Report | 13 March 2025
Review of the measurement of UK Public Services Productivity.

GDP quarterly national accounts, UK - Office for National Statistics
Statistical bulletin | Released 31 March 2026
Revised quarterly estimate of gross domestic product (GDP) for the UK. Uses additional data to provide a more precise indication of economic growth than the first estimate.

Productivity flash estimate and overview, UK - Office for National Statistics
Article | Released 17 February 2026
Productivity flash estimates for Quarter 4 2025, based on the GDP first quarterly estimate and labour market statistics, and productivity overview for Quarter 3 (July to Sept) 2025.

Developing nowcast methodologies for public service productivity, UK
Article | Released 11 December 2024
An overview of the latest experimental methods to produce timelier estimates of annual UK public service productivity. These are official statistics in development.

10 . Cite this statistical bulletin

Office for National Statistics (ONS), released 8 May 2026, ONS website, statistical bulletin, Public service productivity, quarterly, UK: October to December 2025