

Article

# Inflationary pressures faced by public services in England: 2022 to 2023

Potential pressures of rising prices on public services in England, including NHS England, schools, the Ministry of Defence, HM Prisons and Probation Services (England and Wales) and the police, and spend and inflation information on energy, transport, food costs and construction.

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Release date:  
28 April 2022

Next release:  
To be announced

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# 1 . Main points

- More than £1.4 billion is spent on electricity, gas and oil by health, education, defence, prison and probation services, and police annually.
- Defence, prisons and probation services and police reported fuel costs of £212 million.
- Almost £1.8 billion is spent on food and catering by health, education, defence, prison and probation services, and police annually, noting that some school costs are offset by income from school dinners (£94 million).
- More than £5.4 billion is spent annually on construction, building improvement and building maintenance by health, education, defence, prison and probation services and police.
- Departmental annual accounts show that net operating expenditure for 2020 to 2021 was £143.5 billion for health, £73.7 billion for education, £42.1 billion for defence and £5.4 billion for prisons and probation services.

Different public services report expenditure data at varying time periods and geographies, meaning direct comparison is not possible; the most recent 12 months of available data, which included England, have been used to produce this article.

# 2 . Rising prices and inflation rates

Rising prices and increasing inflation rates are causing concern for individuals, business, politicians and policy makers. In October 2021, a House of Commons report on supply chain problems for businesses outlined that the UK's current supply chain issues stemmed from global shortages of materials, energy supplies, workforce and transport. These shortages are occurring at the same time as sharp spikes in demand as the UK and global economy recovers from the economic impact of the coronavirus (COVID-19) pandemic. These supply and demand imbalances are contributing to increases in the costs of goods and services, as are the economic consequences of Russia's invasion of Ukraine in late February 2022 and the ongoing conflict.

Current key risks of inflationary pressures on UK public services are both direct and indirect. For example, higher energy bills can have an impact on public services not only through direct use and energy bills, but also indirectly through inflationary pressures on pay, and on higher prices for third party goods, services and materials.

Between April 2019 and April 2021 inflation, as measured by the Consumer Prices Index (CPI), remained below the government's target rate of 2%. The target was exceeded in May 2021 and every month thereafter. Inflation has increased monthly since September 2021, reaching 6.2% in the most recent figures, published March 2022. Public services' budget allocations for the financial year ending 2023 were set in the October 2021 Autumn Budget and Spending Review (SR21) and were made in cash terms. Inflation assumptions in the SR21 allocations were that CPI inflation would peak at 4.4% in Quarter 2 (Apr to June) 2022, which would be before the majority of the allocations were expected to be spent. The peak inflation rate assumed in the SR21 has already been exceeded, with the most recent CPI release reporting an inflation rate of 7.0% for the end of Quarter 1 (Jan to Mar) 2022.

Expenditure data are available for differing reference periods and geographic areas for each public service. Expenditure data coverage (time and geography) for each public service is:

- health, Apr 20 to Mar 21, England
- education (local authority maintained schools), Apr 20 to Mar 21, England
- education (academies), Sep 19 to Aug 20, England
- defence, Apr 20 to Mar 21, UK
- prison and probation, Oct 19 to Sep 20, England and Wales
- police, Apr 20 to Mar 21, England

Spending during these time periods may not reflect current or future patterns of spending, particularly as each of the above time periods included at least six months where the coronavirus (COVID-19) pandemic will have had an impact on patterns of service use and expenditure. Further information about data sources can be found in the Data sources and quality section.

### 3 . Costs and inflation in key areas of expenditure for public services

#### Energy

The public services analysed spent more than £1.4 billion annually on energy. Energy spend includes gas, electricity and oil. The reporting of energy expenditure varies across services, with health, defence and prisons reporting electricity, gas and oil separately and education and police reporting overall energy expenditure (Table 1). Where fuel type expenditure is separately reported, around 60% of spend is on electricity and 40% is on gas.

Table 1: Public services expenditure on energy  
To the nearest £ million

	Health	Education	Defence	Prisons and probation	Police
<b>Electricity</b>	288	-	161	35	-
<b>Gas</b>	202	-	76	29	-
<b>Oil</b>	5	-	1	-	-
<b>All energy</b>	495	624	238	64	67

Source: See data sources section of the article

Non-domestic energy price increases are not covered by the UK energy price cap set by Ofgem. The latest non-domestic inflation estimates are 26% for electricity and 72% for gas. The extent of public services' exposure to these price increases is unknown. This is because of the use of different energy tariffs and purchase mechanisms across the sector including variable tariffs, fixed tariffs, part variable or part fixed tariffs and the use of a dynamic energy procurement method. It has not been possible to identify the mix of variable and fixed tariffs across services.

## Transport fuel

Transport costs are reported in different ways for each public service, sometimes embedded within a broader transport category but where possible fuel costs have been identified. Transport costs and/or fuel were not identifiable from publicly available data for neither NHS England nor schools.

Fuel costs can include petrol, diesel, and in the case of the Ministry of Defence (MoD), marine and aviation fuels. There is little information available publicly regarding fuel contracts, and organisations may purchase some fuels at retail petrol stations while others may procure their own fuel delivery pumps and associated fuel storage management systems.

The MoD 2020 to 2021 annual accounts reported an estimated expenditure of £290 million on transport fuel. Not all of this expenditure could be identified in the MoD financial transparency dataset for this period, with £165 million of fuel expenditure identifiable, 60% (£99 million) of which was on aviation fuel (Table 2). Aviation fuel inflation, as reported in the International Air Transport Association Jet Fuel Price monitor, was 126% in the year to 1 April 2022.

Table 2: Public services expenditure on transport fuel  
To the nearest £ million

	<b>Defence</b>	<b>Prisons and probation</b>	<b>Police</b>
<b>Aviation fuel</b>	99	-	-
<b>Marine fuel</b>	48	-	-
<b>Diesel fuel</b>	17	-	-
<b>Motor fuel</b>	-	2	46
<b>All transport fuel</b>	164	2	46

Source: See data sources section of the article

In the year to March 2022, annual retail inflation for road fuels and other petroleum products was 27% for unleaded petrol and 34% for diesel. A recent House of Commons research briefing (March 2022) indicated that diesel and petrol prices at the pump fall in line with the price of oil as acquired by the refineries. While prices of fuels may vary by source (retail compared to bulk), all sources are likely to be equally susceptible to inflationary increases.

The extent of public services' exposure to fuel price increases is dependent upon the different fuel contracts and purchase mechanisms used within the sector as well as the possible use of fuel future contracts. The MoD Annual Report and Accounts 2020 to 2021 identifies the use of fuel fixed swap contracts to manage exposure to fluctuations in the market prices of fuel.

## Food

Food costs are reported in different ways for each public service, and sometimes appear within a broader catering category. Where possible, food purchase costs have been identified and presented. For schools, income from school dinners will offset some costs, though this will also need to consider energy and staffing costs, which are not included in the expenditure below.

Table 3: Public services expenditure on food  
To the nearest £ million

	Health	Education	Defence	Prisons and probation	Police
<b>Food (specified)</b>	-	-	21	-	-
<b>Catering (food not specified)</b>	618	1,143	-	3	7
<b>All food</b>	618	1,143	21	3	7

Source: See data sources section of the article

### Notes

1. Health expenditure is for inpatient food services only.

In March 2022, the domestic (CPI) inflation rate for food products was 9.0%. However, public sector organisations may source some of their food supply from wholesale sources where the Producer Price Inflation (PPI) rate may more accurately reflect the likely rate of inflation. In March 2022, the PPI inflation for food products for the domestic market was 6.8%.

## Construction and building maintenance

A significant amount of construction is carried out within the public services, both construction of new buildings, and improvements to existing buildings. There is also expenditure on maintaining the existing building infrastructure. This is a high spend area, which is reported in a variety of ways by different public services, making costs difficult to clarify and inflation hard to estimate. Nevertheless, the size of the expenditure in this area warrants some exploration as the construction industry has been noted to be particularly impacted by rising material costs and supply shortages.

Table 4: Public services expenditure on construction and building maintenance  
To the nearest £ million

	Health	Education	Defence	Prisons and probation	Police
<b>All building costs</b>	3,634	1,031	181	331	294

Source: See data sources section of the article

The most recent construction materials inflation rates show price increases in the year to September 2021 and report increases of 28.1% for wood, 5.0% for non-metallic materials such as glass, bricks and cement, 7.8% for fabricated metal products and 5.5% for electrical equipment such as wiring and lighting.

## Overall expenditure

The outlined expenditure forms part of the net operating expenditure for each of the public services. The services' overall net operating expenditures for the year 2020 to 2021 are presented in Table 5; data for police net operating expenditure were not available.

Table 5: Public services net operating expenditure 2020 to 2021  
To the nearest £ million

	Health	Education	Defence	Prisons and probation	Police
<b>Net operating expenditure</b>	143,497	73,717	42,094	5,364	-

Source: See data sources section of the article

### Notes

1. Health net operating expenditure is for NHS England and includes £20,000 million of COVID-19 revenue funding.
2. Education funding is net operating expenditure for DfE department and agencies.

## 4 . Public services spend data

### [Expenditure by public service and spend category](#)

Dataset | Released 28 April 2022

Summary figures for annual expenditure in key areas by health, education, defence, prisons and police for the most recent data between 2019 and 2021.

### [Consumer price Index \(domestic\) inflation rate for food products \(1988 to 2022\)](#)

Time series | Release date 13 April 2022

Inflation and price indices showing the rate of inflation as is the change in prices for goods and services over time.

### [Producer Price Inflation \(producers\) inflation for food products for the domestic market \(1996 to 2022\)](#)

Time series | Release date 13 April 2022

Inflation and price indices showing the rate of inflation as is the change in prices for goods and services over time.

## 5 . Data sources and quality

### Expenditure data sources

This article contains data from multiple administrative data sources published by public services and government departments. Information about expenditure data was collated using item and supplier descriptions to identify spend on construction, food, energy and transport fuel. Details of items included in each category and links to source datasets are outlined in the dataset in section 4.

The reference periods and geographies for which data is available differs across the public services examined. Details of the data sources can be found in:

- [NHS England data on energy, food and construction expenditure, 2020 to 2021](#)
- [Local Authority maintained schools' data on energy, food and construction expenditure, 2020 to 2021](#)
- [Income and expenditure in academies in England, 2019 to 2020](#)
- [Ministry of Defence data on energy, fuel, food and construction, 2020 to 2021](#)
- [Ministry of Defence - total expenditure on energy and on fuel \(equipment energy\), 2020 to 2021](#)
- [Her Majesty's Prison and Probation Service data on energy, food, fuel and construction, Oct 2019 to Sept 2020](#)
- [Her Majesty's Prison and probation Service - total expenditure on energy, 2020 to 2021](#)

## Police forces in England

Data was provided by the Home Office Commercial using high level aggregated data made available from Bluelight Commercial Ltd. This type of data is in the public domain because of the transparency requirement for each police force to publish spend over a certain threshold. However, there is always likely to be some discrepancy between those figures as the transparency requirement only applies to spend over a certain value and also uses different categorisation frameworks, rules and definitions.

### Police force transparency data, England

- [Avon and Somerset Constabulary](#)
- [Bedfordshire Police](#)
- [Cambridgeshire Constabulary](#)
- [Cheshire Constabulary](#)
- [Cleveland Police](#)
- [Cumbria Constabulary](#)
- [Derbyshire Constabulary](#)
- [Devon and Cornwall Police](#)
- [Dorset Police](#)
- [Durham Constabulary](#)
- [Essex Police](#)
- [Gloucestershire Constabulary](#)
- [Greater Manchester Police](#)
- [Hampshire Constabulary](#)
- [Kent Police](#)
- [Lancashire Constabulary](#)
- [Leicestershire Police](#)

- [Merseyside Police](#)
- [Metropolitan Police Service](#)
- [Norfolk Constabulary](#)
- [Northamptonshire Police](#)
- [Northumbria Police](#)
- [Nottinghamshire Police](#)
- [South Yorkshire Police](#)
- [Suffolk Constabulary](#)
- [Sussex Police](#)
- [Thames Valley Police](#)
- [Warwickshire Police](#)
- [West Mercia Police](#)
- [West Midlands Police](#)
- [West Yorkshire Police](#)

## **Inflation data sources**

- [Quarterly energy prices: UK October to December 2021 and final data for 2021](#)
- [Monthly and annual prices of road fuels and petroleum products](#)
- [IATA jet fuel price index](#)
- [Platts jet fuel microsite](#)



## 6 . Related links

### [Consumer price inflation, UK: March 2022](#)

Office for National Statistics Bulletin | Published April 2022

Price indices, percentage changes, and weights for the different measures of consumer price inflation.

### [UK supply chain problems](#)

House of Commons Library Research briefing | Published October 2021

A research briefing looking at some of the cross-cutting themes causing supply chain disruption in the UK, how UK businesses are being affected, and the Government's response.

### [Petrol and diesel prices \(PDF, 881KB\)](#)

House of Commons Library research briefing | Published April 2022

A research briefing looking at some of the cross-cutting themes causing supply chain disruption in the UK, how UK businesses are being affected, and the Government's response.

### [Price movements in construction materials and plant hire, UK: 2019 to 2021](#)

Article | Release date 20 October 2021

Price changes are provided for construction materials including wood, on metallic products, fabricated metal products and electrical equipment. Annual inflation is calculated from the most recent data available September 2020 to September 2021.