

Cambridge City Council

Cambridge City Portrait

State of the City 2023



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State of the City 2023: Foreword and Introduction

Cambridge City Council commissioned this State of the City report from Cambridge Econometrics in 2022. It is intended to provide a robust, rounded, and data-led overview of what Cambridge is like as a place according to the latest and most meaningful, nationally comparable data available.

The idea evolved out of the concept of a “City Portrait” advocated by Doughnut Economics blended with a range of other evidence-based frameworks. It is a Cambridge-specific synthesis of those models, which looks at our city through the data available for six lenses reflecting economic, social and environmental themes. We have learned about the limits on the data available, particularly for a dynamic city such as Cambridge with high and rapid levels of migration and population churn. So, some of the data sets come with that health warning, although having said that we believe the report brings a rich degree of insight to our understanding of the place.

This State of the City report and its accompanying dashboard will give everyone who is interested in understanding and improving Cambridge a balanced and holistic view of how Cambridge performs through those lenses and how it compares to other cities in England and Wales. By having this shared evidence base available, we hope that the council, local communities, partners and other stakeholders will be able to have a rich, data-informed discussion about key trends affecting the future of Cambridge.

I would like to thank Cambridge Econometrics for their professional and innovative approach, Cambridgeshire & Peterborough Combined Authority for funding this initial project, and all the colleagues, partners and stakeholders who contributed insights and data during the development of the report and the on-line tools.

Reading this report, I have been struck by the complex and nuanced picture of Cambridge it presents. My personal takeaway is that Cambridge is at the heart of a vibrant and high performing knowledge-intensive economic cluster, punching well above its weight on a global stage, and experiencing very rapid growth. The population as a whole is highly skilled and reports high levels of wellbeing.

However, not everyone in the city is engaged in this phenomenon or is experiencing the benefits. Although there are relatively low levels of poverty and deprivation compared to other cities, there is a complex picture of inequalities, including health and educational outcomes, not just income (whilst noting that pay inequality is less pronounced). And we are seeing the signs of environmental stress, including relatively low levels of water and air quality.

But I hope everyone will read the report, and use the dashboard, and the links to more detailed source data, to expand their own understanding of our amazing city. Our intention is for the dashboard to be updated at least annually, and to produce an annual State of the City Report. This way we can observe change over time and use the enhanced understanding this provides to work more collaboratively to make Cambridge “the greatest small city in the world”, for everyone who lives, works studies or visits here.

Andrew Limb, Assistant Chief Executive, Cambridge City Council, June 2023

1 Introduction to the State of the City 2023

1.1 Background and purpose

Cambridge City Council, as part of its *Our Cambridge* Transformation Programme, has commissioned Cambridge Econometrics to help deliver a **City Portrait for Cambridge**, funded by the Cambridgeshire & Peterborough Combined Authority.

The central aim of the City Portrait is the production of annual **“State of the City” report and online dashboard**, which provides an analytical, data-driven picture of Cambridge, to increase awareness of the environmental, social and economic conditions of the City, and better understand the experience of local residents, businesses and nature.

The City Portrait helps to create a shared, high-quality evidence base that provides more detailed, innovative insights into the City, which will enable the Council, local partners and communities to work in a more evidence-based way and help ensure that all the dimensions of an issue are taken into account when making future policy and investment decisions.

The intention is for the State of the City report and accompanying dashboard to become a ‘live’, recurring publication. The dashboard is [accessible online here](#).

1.2 Approach taken

Work to produce the City Portrait started in November 2022. The first stage entailed two interrelated tasks, started with a **“data discovery”** phase, which sought to identify, review and prioritise data

and metrics to ensure they are fit for purpose in a potential “State of the City” report.

Working closely with local data leads and analysts, this phase identified and prioritised data and metrics of interest to Cambridge against key criteria including accessibility, reliability, consistency, coverage and relevance.

Running in parallel to this task was an analytical **“model/framework appraisal”**, which sought to identify and inform a ‘best-fit’ analytical framework for Cambridge which can be used for current and future “State of the City” reporting.

This appraisal entailed an impartial review and appraisal of existing analytical frameworks, including leading, internationally recognised approaches such as Six Capitals, Doughnut Economics, the UN Sustainable Development Goals, and the Legatum Prosperity Index.

The culmination of these two tasks resulted in the development of a novel, tailored analytical framework for Cambridge; **the “Six Lenses”**.

This “Six Lenses” framework and metrics provide a holistic portrayal of environmental, social and economic conditions in the City, by considering the experience and quality of life for key groups in Cambridge, ranging from businesses and workers to wildlife and the environment.

Importantly, the framework and metrics help capture the unique characteristics of the City and the issues that are important to measure and define – helping the Council and partners to better understand where Cambridge is now and how things change over time.

The framework and accompanying metrics went through an extensive period of stakeholder engagement and consultation in early 2023, to further help refine and strengthen the analytical framework and

accompanying data, ensuring it remains fit for purpose and relevant for local users.

This framework has been used to produce the first “**State of the City**” **report for Cambridge**, which is presented here.

1.3 Structure

This “State of the City” report is structured into the following chapters:

- *Foreword and Introduction*: outlines the background and purpose of the report, and introduces the analytical framework and accompanying data and metrics.
- *Environment*: considers the environmental conditions and impact of Cambridge, its progress towards becoming a more sustainable City, and local ecological conditions.
- *Society*: provides analysis looking at the prosperity, wellbeing and inclusiveness of Cambridge, and the experience of different social groups and communities in the City.
- *Economy*: seeks to understand the economic health of Cambridge and the experience and impacts of Cambridge businesses, entrepreneurs, and workers.
- *Appendices*: provides more detailed information on spatial definitions, supporting organisations and a glossary of key terms and abbreviations.

The online dashboard that accompanies this report, which provides an interactive overview of the data and metrics visualised in the report, is [accessible online here](#). The online dashboard is a ‘live’ resource, and will be updated on a regular basis.

1.4 Considerations

This report has been designed as an **engaging, summary storyboard of the environmental, social and economic conditions** in the City i.e. the “State of the City”. It does not seek to provide an exhaustive or highly detailed overview of each and every metric, theme and topic.

Where relevant, signposting to additional, more detailed analysis, data and evidence is provided, whilst all data and metrics visualised in the report are clearly reference, sourced and clarified at the end of each chapter.

When reading this report, users should bear in mind the **potential limitations of such a data-driven exercise**. For instance, the data can only reflect what is being measured, and is dependent on the questions being asked, and the quality of the methods used to collect that data. In addition to this, data is often backward looking, and may have a lag of several years.

Naturally, this has the potential to differ from qualitative information or people’s perceptions or lived experience of Cambridge. The emerging findings from the “State of the City” report have however been extensively tested with and scrutinized by a range of local stakeholders to ensure they provide an accurate and congruent portrayal of conditions in the City.

A full **list of the organisations approached as part of this process** can be found in the Appendices.

2 Introducing the State of the City Framework and Metrics

2.1 The mandate

The development and identification of the “State of the City” framework and metrics had a clear mandate in terms of what it needed to – and is able to – provide.

Be locally relevant and avoid duplicating existing frameworks and analysis.

There are already multiple frameworks that provide detailed evidence and analysis, including comparisons between places, and these can be extremely valuable in situating Cambridge’s performance in a wider context.

However, what is lost in such comparisons is the specificity of place, and the nuances of the Cambridge context – all of which can be crucial in providing relevant, insightful and actionable insights, which ‘speak to the people of the City’.

A ‘best-fit’ framework needs to reflect this - to be sensitive to these local nuances - and should be used as an opportunity to address and overcome shortcomings and gaps in existing frameworks, rather than duplicate or retrofit their approach.

Offer a holistic and accessible ‘snapshot’ for discussing complex issues.

Rather than overwhelm users with detail, a ‘best-fit’ framework for Cambridge needs to engage with a wide range of stakeholders – including non-data users – to give a snapshot of the whole and provide

an overview perspective across economic, environment and social domains.

As multi-domain evidence and analysis is brought together, it invites holistic reflection on the very complex dynamics that underpin their interconnections. In this way, the model aims to help open up discussions about possible transformative pathways for Cambridge.

Create an opportunity for tracking progress, and be sensitive to the available and evolving evidence base.

The data and information used by ‘best-fit’ framework need to be tracked and updated over time, and the model should therefore be sensitive to ensuring time-consistent data are available or can be created. There is no point identifying an analytical model that cannot be supported by accessible or reliable data and evidence. Such data gaps are to be expected, and the model should be leveraged to help create demand for them.

Combine data with local perspectives.

The primary focus of the framework will be to collect, present and analyse indicators to create a holistic snapshot of Cambridge. However, it will be richly enhanced by simultaneously, or subsequently, being adopted, used and supplemented by the work of local stakeholders.

Similarly, the data and evidence presented should, where possible, provide insights not just at the City-level, but for within the City, including its communities and localities, as well as those which lay outside the City’s administrative boundaries, but are a vital part of its fabric.

2.2 Appraisal of existing models and frameworks

As part of the exercise to identify a ‘best-fit’ framework for Cambridge, an independent and impartial review and appraisal of existing analytical

frameworks was undertaken by Cambridge Econometrics, which considered leading, internationally recognised approaches such as:

- [Doughnut Economics](#)
- [Five/Six Capitals Framework](#)
- [Legatum Prosperity Index](#)
- [Thriving Places Index](#)
- [UN Sustainable Development Goals \(SDGs\)](#)

The review critically appraised their strengths and weaknesses, relevance to Cambridge, requirements (including data needs), and ease of producing and updating (looking at global applications and best practice).

It found some of the more holistic frameworks, such as the Doughnut Economics model and UN SDGs, place a commendable emphasis and prioritisation on social and environmental metrics, though their local relevance and feasibility (in terms of data) is not always clear.

Similarly, such frameworks can overlook some benefits of a growth and economic context - such as innovation, productivity and incomes - that may in the long-run lead indirectly to better outcomes in ecological and social wellbeing.

Broader frameworks, such as the Legatum Prosperity Index and Thriving Places Index, collate an extensive range of metrics, which provide useful in a benchmarking and comparator context, though the sheer quantity of data considered raises resourcing and quality concerns.

Such indices can also dilute or overlook local nuances, details and characteristics, and will exclude local data and insights. And the fact

both indices are publicly available, and published on a regular basis, means replicating such an approach would simply be duplicative.

Finally, the Five/Six Capitals approach provides a more balanced, holistic approach than other frameworks, considering a wider range of often overlooked themes (e.g. institutional capital, intangibles) which have strong complementarities and synergies, especially in a local public services context.

Yet the capitals approach lacks a clear set of accompanying metrics, and continues to largely be applied as a theoretical or conceptual framework. Though there has been some application locally, this is often in a local delivery context, rather than as a stand-alone analytical framework.

2.3 Towards a ‘best-fit’ framework: the “Six Lenses”

Despite the respective strengths and weaknesses of each approach, no-one framework clearly or consistently met the required ‘best-fit’ mandate for Cambridge. Informed by this critical review and appraisal of leading analytical frameworks, Cambridge Econometrics identified and recommended a blended ‘best-fit’ framework for Cambridge.

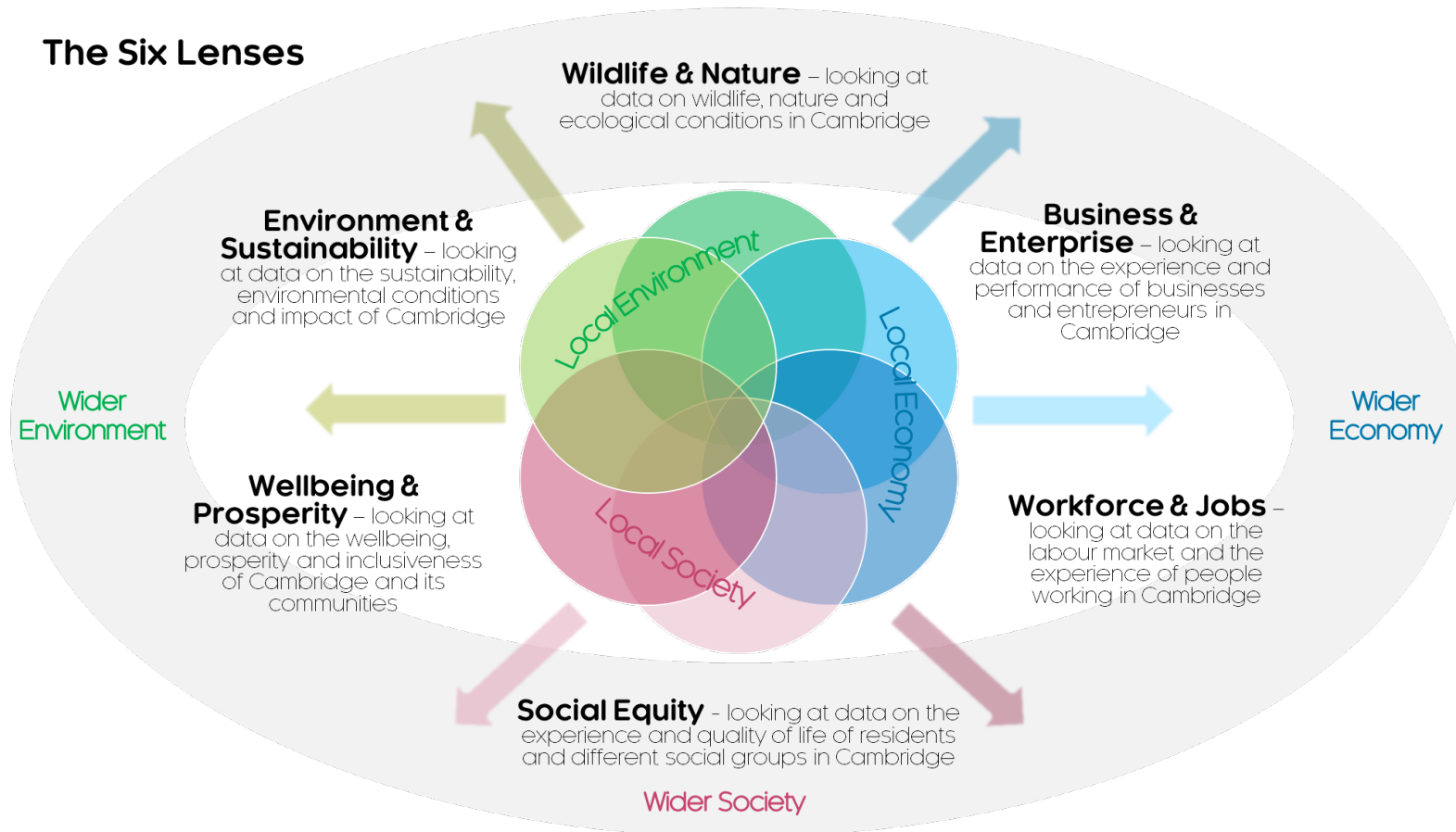
This ‘best-fit’ framework starts with the social and environmental themes of Doughnut Economics and UN SDGs, which can provide a critical avenue to understanding and assessing urgent ecological and social wellbeing and injustices in Cambridge.

It then built on this outlook to incorporate elements of the Six Capitals framework, particularly in terms of capturing the local economic and growth context. Specifically, it attempted to utilise the Six Capitals in a way that “speaks to the people of the City”, rather than as a more delivery/policy-focussed model.

The synergies between these frameworks can be summarised by the “**Six Lenses**”, which when considered together seek to provide a holistic insight/lens into the **environmental, social and economic** conditions in the City - by considering the experience and quality of life for key groups in Cambridge, ranging from businesses and workers to wildlife and the environment.

These “Six Lenses”, presented in the figure below, are:

- **Environment & Sustainability** – looking at the sustainability, environmental conditions and impact of Cambridge
- **Wildlife & Nature** – looking at wildlife, nature and ecological conditions and in Cambridge
- **Wellbeing & Prosperity** – looking at the wellbeing, prosperity and inclusiveness of Cambridge and it’s communities



- **Social Equity** - looking at the experience and quality of life of residents and different social groups in Cambridge
- **Business & Enterprise** – looking the experience and performance of businesses and entrepreneurs in Cambridge
- **Workforce & Jobs** – looking at the labour market and the experience and wellbeing of people working in Cambridge

The overlapping nature of the lenses is intended to emphasise the overlapping nature of the groups and their interests, whilst the outward flows reflect the wider impact and importance of Cambridge, regionally and globally – the impact of Cambridge goes much further than its administrative boundaries.

The “Six Lenses” approach ultimately informs understanding, both now and moving forwards, of key questions such as: **“what’s life like in Cambridge for people, business and nature? And what is Cambridge’s wider impact on the economy, society and environment?”**

The “Six Lenses” framework has undergone an extensive period of stakeholder engagement and feedback – including an online survey and in-person workshops. This was to ensure the proposed framework and accompanying data and metrics reflected the needs and expertise of local stakeholders, and their expert understanding of the topics being considered in a ‘Cambridge context’.

2.4 The “Six Lenses” metrics

As part of the framework review, Cambridge Econometrics went through a comprehensive **“data discovery”** phase which recorded and appraised data and metrics for Cambridge against key criteria including availability, reliability, consistency and relevance.

This helped identify a **‘long-list’ of proposed data and metrics** for the “Six Lenses” framework, which **included more than 150 metrics**, covering thousands of individual data points. These are presented and analysed in this report and accompanying dashboard, and were specifically identified as they can help capture the characteristics of the City and the issues that are important to measure and define.

Importantly, they are of sufficient accessibility, reliability and consistency so that users can better understand where Cambridge is now and how things change over time, and present and report on these annually. These metrics were informed by existing frameworks, and by extensive stakeholder consultation and engagement.

Despite this, a number of data gaps were identified which can limit the full potential of the “Six Lenses” framework. These relate to topics including congestion, inequality, wellbeing, sustainability (notably food-related), and biodiversity. These gaps will help to inform a ‘data wish-list’ which can be used to identify further research needs, and lobby data partners and providers, such as the ONS and Government bodies.

Throughout this report, extensive use is made of ‘per resident’ or ‘per person’ breakdowns for the data. Unless referenced otherwise, these per resident/person estimates have been calculated using the latest Census resident population estimates.¹ All of the data and metrics used

¹ Census estimates of the resident population are available from ONS. Per resident/person estimates between Census years (e.g. 2012-2020) are based on a linear trend of population. Per resident/person estimates for 2022-onwards are based on the latest (2021) Census estimates

in the production of this report and accompanying dashboard are publicly available and have been clearly sourced and labelled. A glossary of key terms, abbreviations and acronyms is provided in the Appendices.

2.5 Benchmarks and spatial definitions

Looking at a single metric in isolation often fails to tell the full story: the use of benchmarks can help provide this contextual understanding. For this study - where available - two **comparator benchmarks** are used (where available):

- the England and Wales average (referred to as the “**national average**”); and to provide like-with-like comparability²
- the average of all cities in England and Wales (referred to as the “**national city average**”)³

To ensure the “State of the City” data and analysis provides relevant, insightful and actionable insights, a more functional spatial definition of Cambridge that ‘speaks to the people of the City’ – in terms of its socio-economic space – has also been produced.

Research has found existing spatial definitions of Cambridge “*focus disproportionately on its jurisdictionally defined cores leaving out not only rapidly developing peripheries but also significant employment areas, or include them in relatively large commuting areas that tend to dilute their impacts.*”⁴

Realistically, the vast majority of data and evidence of interest to this study will be produced primarily (and often exclusively) at a Local

Authority District level, which entails the administrative boundary of Cambridge City Council.

This geography – referred to as “**Cambridge City**” - will therefore be the primary level of detail in which data and evidence will be collected and analysed for this study. The use of this definition also provides additional benefits in terms of accessibility and comparability.

However, where possible and relevant, an alternative definition of Cambridge will be used – referred to as “**Cambridge City & Fringe**” – which broadens the analysis to account for adjacent areas excluded from Cambridge’s administrative boundary, such as Milton, Histon, Orchard Park, Fulbourn, Great and Little Shelford.

This alternative definition will be presented and analysed in conjunction with, rather than in place of, the City’s administrative boundary. The definition of this alternative geography – which has been informed by UKRI commissioned research - is provided in the Appendices.

This report also makes extensive use of ‘**neighbourhood**’-level data, which provide important insights beneath the aggregate City-level, and can be vital for identifying spatial dynamics, inequalities and performance gaps. These areas, covering areas of no more than 6,000 households, are also defined in the Appendices, and are broadly comparable to Cambridge City Council electoral wards,. The ‘neighbourhoods’ considered for Cambridge City here include:

- Kings Hedges
- Arbury
- East Chesterton
- West Chesterton
- Petersfield
- Romsey
- Coleridge
- Cherry Hinton

² On some occasions, particularly for education and health related metrics, only England-level data is available (i.e. excluding Wales). This is clarified in the source and supporting narrative where relevant

³ There are 58 cities in England and Wales (55 in England), defined here using the Centre for Cities Primary Urban Areas definition, the latest iteration of which can be found [here](#)

⁴ Quoted in research produced on behalf of the UKRI available [here](#)

- Eddington & Castle
- East Barnwell & Abbey
- Central & West Cambridge
- Trumpington
- Addenbrooke's & Queen Edith's

And to help summarise Cambridge's performance across lenses and topics, the following criteria has been used to analyse selected key benchmark metrics. This in terms of both **Cambridge's relative and trend performance** for that metric.

Relative performance shows how Cambridge compares to the national average benchmark for that metric (over the latest available year of data) according to the following categories:

- **Magenta – “Above Average”**: Cambridge's value is above the national average. Relative to the national average value, Cambridge's value is 1.06 and above
- **Gray – “Average”**: Cambridge's value is broadly in line with the national average. Relative to the national average value, Cambridge's value is 0.95 to 1.05 (where 1.00 = identical value to the national average)
- **Blue – “Below Average”**: Cambridge's value is below the national average. Relative to the national average value, Cambridge's value is 0.94 and below

And trend performance indicates the recent trend for that metric (over the past 5 years of data, or equivalent available period) according to the following categories:

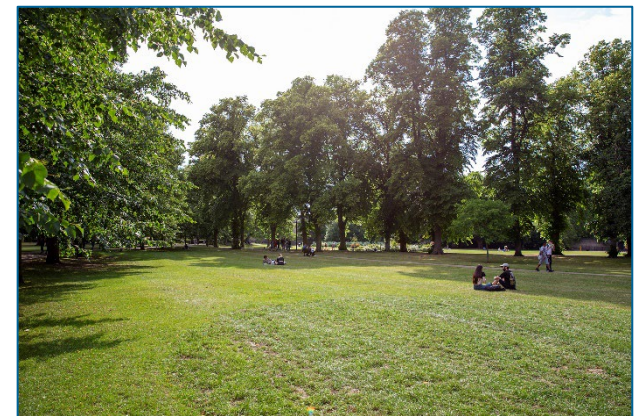
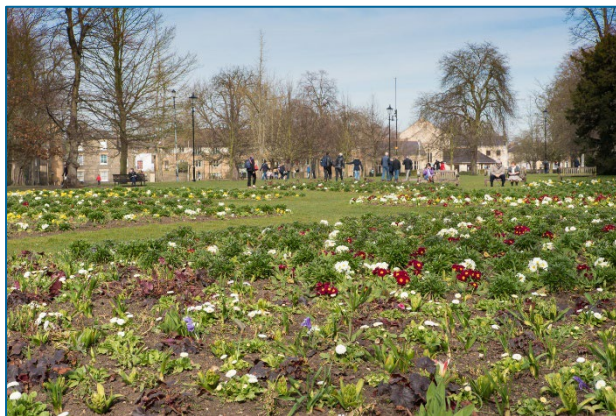
- **Magenta – “Increasing”**: Cambridge's value is trending higher. Relative to its value 5 years ago, Cambridge's value is 1.03 and above

- **Gray – “Stable”**: Cambridge's value is stable. Relative to its value 5 years ago, Cambridge's value is 0.98 to 1.02 (where 1.00 = identical value to 5 years ago)
- **Blue – “Decreasing”**: Cambridge's value is trending lower. Relative to its value 5 years ago, Cambridge's value is 0.97 and below

Such categories can only be estimated for metrics where there is consistent and comparable data available (for both Cambridge and the national average benchmark). City rankings are also provided, where the city with the highest value over the latest available year of data is ranked 1st. Where available, Cambridge City & Fringe values are used to estimate the categories and city rankings.

State of the City 2023: Environment

This chapter considers the environmental conditions and impact of Cambridge, its progress towards becoming a more sustainable City, and local ecological conditions. This is presented through the *Environment & Sustainability* and *Wildlife & Nature* lenses.



3 Environment & Sustainability

3.1 Introduction

The **environment and sustainability lens** seeks to understand the environmental conditions of Cambridge, and the wider environmental impacts and sustainability of the City, particularly in terms of progress towards 'net zero'. Sub-topics considered include:

- **Emissions:** which looks at greenhouse gas emissions, air pollution and related mortality.
- **Climate change:** which looks at climate change-related weather patterns and extreme weather events.
- **Sustainable transport:** which looks at local transport conditions and the uptake, coverage and quality of sustainable transport.
- **Energy efficiency:** which looks at energy consumption, renewable energy and energy poverty.

3.2 Summary

Sources for the below summary are available in the main body of analysis

The analysis shows **Cambridge is making faster progress towards 'net zero'** than benchmarks, whilst greenhouse gas emissions per resident are below average. **Air pollution exposure**, though declining, remains above average, and continues to **impact local mortality rates, especially in more deprived neighbourhoods**.

Climate change presents a growing risk to Cambridge, with a **record number of extreme weather events** occurring in the City in 2022, whilst water levels and air quality have deteriorated, with **only 3 other cities recording more poor air quality days** than Cambridge.

Cambridge residents are **50% more likely to use active travel** than benchmarks, and no other city has a higher uptake of active travel, whilst the **majority of residents can reach essential services within 15-minutes** public transport or walking, although this **not always the case in Cambridge's more deprived** neighbourhoods.

The volume of vehicular **trips into the City is increasing again, but remains below pre-pandemic levels**, whilst vehicle use in the City is becoming greener, with the number of **electric vehicles increasing three-fold** over the past three years. Road casualties are stable and in line with benchmarks, though **72% of casualties in the City are active travel** users.

Energy and fuel **consumption is declining, renewables generation is up, and homes and businesses are becoming more energy efficient** in Cambridge, all significantly ahead of benchmarks. Yet **1 in 10 Cambridge households remain affected by fuel poverty**, though this is below benchmarks.

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3.3 Emissions

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Greenhouse gas emissions (per resident)			43rd (of 58)
Greenhouse gas emissions intensity			53rd (of 58)
Air pollution (average PM2.5 concentration)			29th (of 58)
Mortality share attributable to air pollution			28th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Cambridge continues to make progress towards ‘net zero’

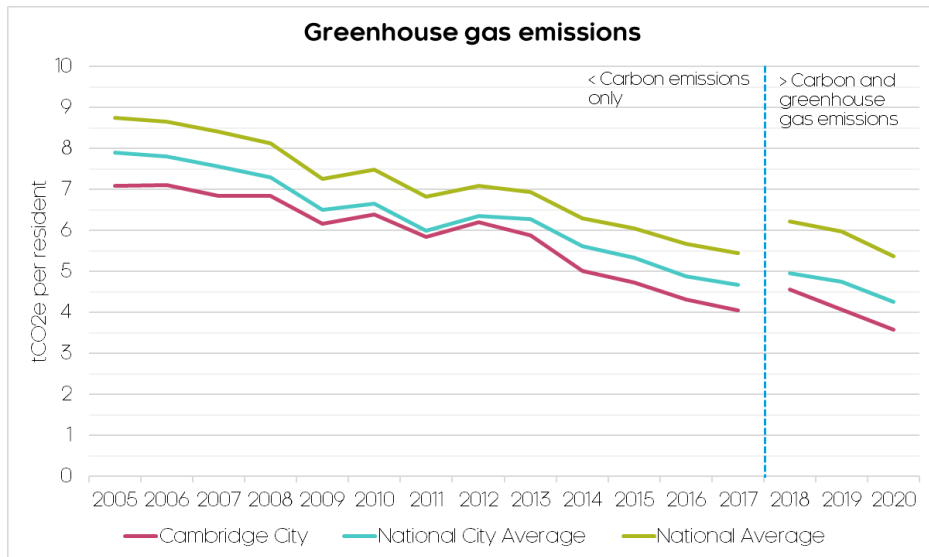


Chart source: BEIS UK local authority and regional greenhouse gas emissions

Total greenhouse gas emissions in Cambridge declined 11% over 2020, and when adjusted for population were below both national (33% lower) and national city (16%) benchmarks.¹ In 2020, Cambridge had the 15th lowest per resident emissions of 58 cities in England and Wales.

And Cambridge’s progress towards ‘net zero’ has also outpaced these benchmarks; over 2010-20, CO2 emissions alone declined by 43%, faster than national (-36%) and national city benchmarks (-38%) – the 5th fastest decline of 58 cities. At its peak in 2011, Cambridge was emitting just 3% less CO2 per resident than the national city average; in 2020, it was 19% lower.

Domestic, public and transport consumption account for the majority of Cambridge’s emissions

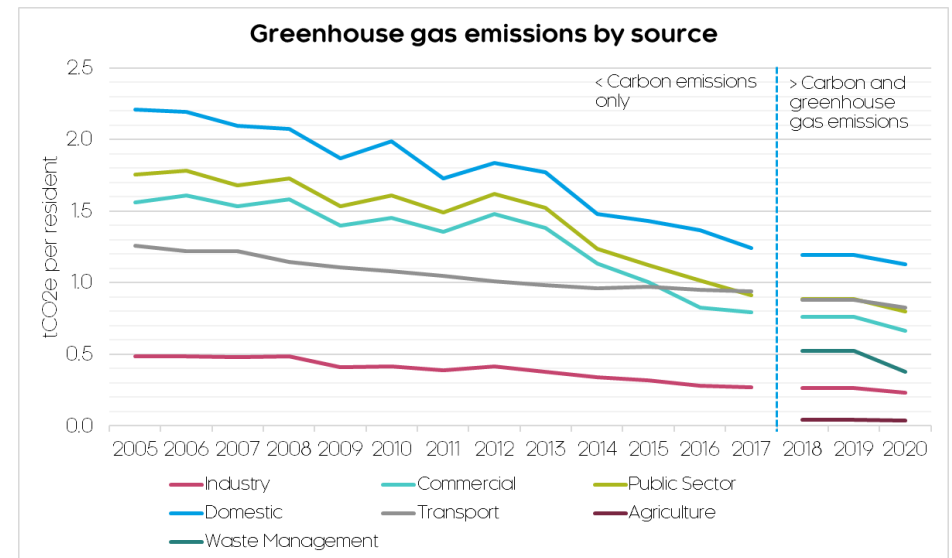


Chart source: BEIS UK local authority and regional greenhouse gas emissions

Collectively, the domestic, public sector and transport consumption categories generated 68% of Cambridge’s greenhouse gas emissions.² On a per resident basis, the public sector, commercial and waste management categories exceeded the national average in Cambridge.

All categories saw CO2 emissions decline by more than 30% over 2010-20, declining fastest for the commercial (-55%, national average -61%), public sector (-50%, national average -48%) and industry (-42%, national average -40%) categories. The fastest decline relative to the national average has been for transport (-31%, national average -19%).

Pursuit of ‘net zero’ has been progressed alongside growing the Cambridge economy

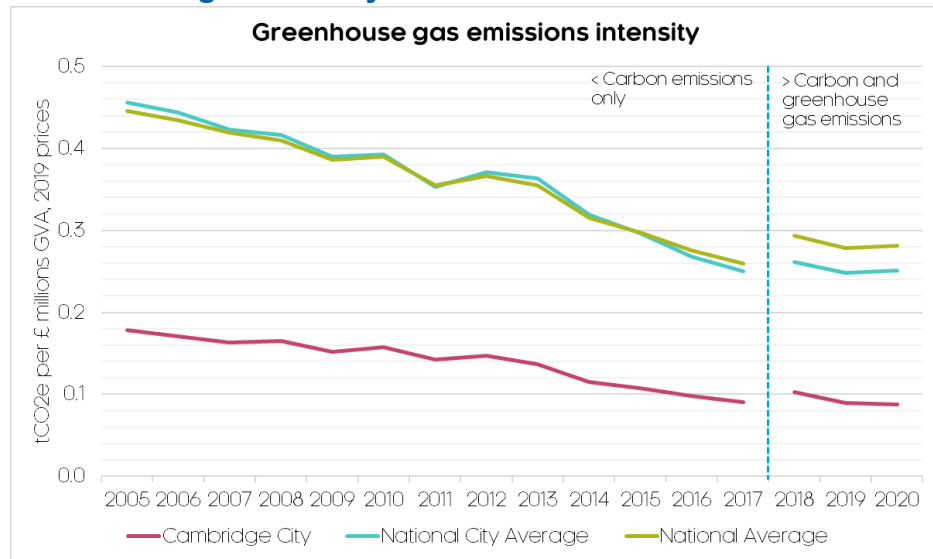


Chart source: BEIS UK local authority and regional greenhouse gas emissions (for emissions) and ONS Regional economic activity by gross domestic product (for GVA)

The growth of the Cambridge economy is becoming increasingly sustainable, with economic growth in the City relatively decoupled from greenhouse gas emissions.³ In 2020, the Cambridge economy

delivered more than three times as much growth relative to greenhouse gas emissions generated, when compared to benchmarks.

Air pollution exposure, though declining, is above benchmarks, and continues to impact local mortality rates

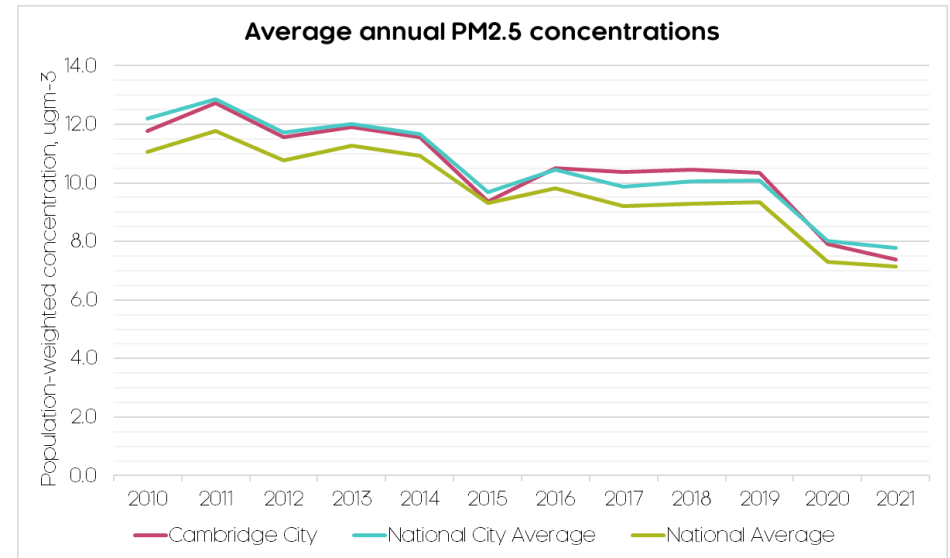


Chart source: DEFRA Modelled background pollution data

Average annual concentrations of PM2.5 in Cambridge, a key determinant of air pollution-related health problems, declined once more in 2021 and continue to diverge from the national city average.⁴ Concentrations also remain below the regulated benchmark of 20 µgm-3, and are lower than 28 other cities nationwide.

There were an estimated 48 mortalities in Cambridge attributable to air pollution exposure (specifically, PM2.5) in 2021, down from 64 in 2018, representing 5.5% of all mortalities in the City.⁵ This mortality share was in line with the national average and marginally below the national

city average (5.7%), and lower than 27 other cities nationwide. This was also a decline on the 7.7% mortality share reported in 2018.

Air pollution exposure was typically higher in Cambridge's more deprived neighbourhoods

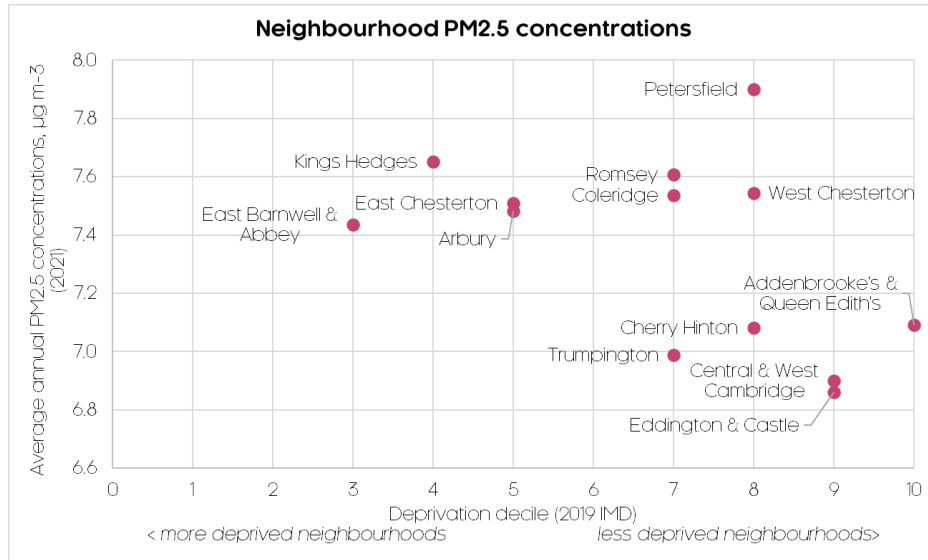


Chart source: DEFRA Modelled background pollution data

Average annual PM2.5 concentrations in 2021 were higher – by up to 5% relative to the City average - in some of Cambridge's more deprived neighbourhoods, such as Kings Hedge's, East Chesterton and Arbury, though the highest concentrations were recorded in Petersfield. Concentrations were on average 9% lower in the City Fringe.⁶

3.4 Climate change

No benchmark metrics reported

Over the past decade, extreme weather events have started to occur more regularly in Cambridge

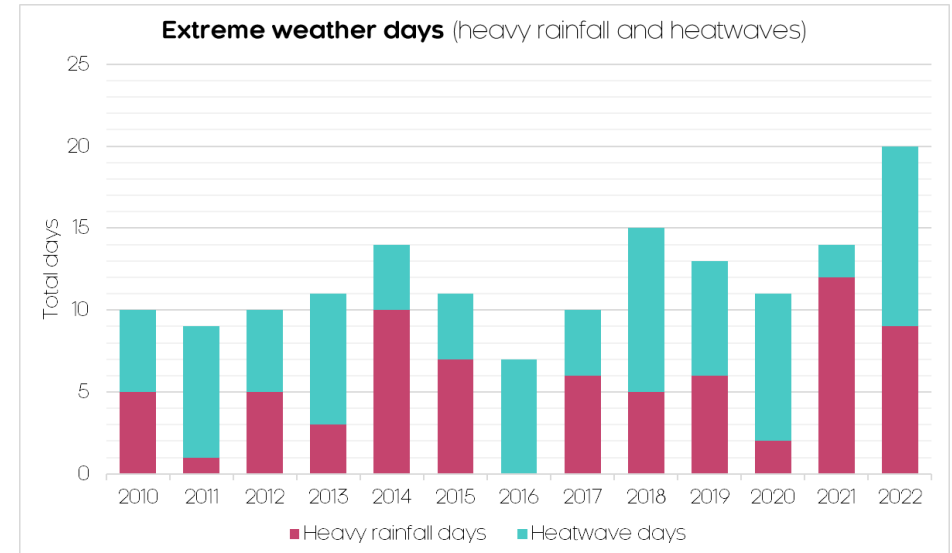


Chart source: University of Cambridge Digital Technology Group

The number of extreme weather days – measured in terms of both excessive rainfall and temperatures – are becoming more widespread in Cambridge, with 20 such days being recorded in 2022, the highest since records began in 2007 and almost double the pre-2022 average of 11 per year.⁷ This data is not however based on official weather observations, although similar trends have been reported nationally.⁸

In July 2019, the highest official temperature on record in the UK (at the time) was recorded at the Botanic Gardens in Cambridge at 38.7°C, and this temperature was exceeded in Cambridge and other places in July 2022.⁹ These peak temperatures – as with other extreme weather events in Cambridge - were in the context of wider national weather extremes.

Water levels in Cambridge have become increasingly strained

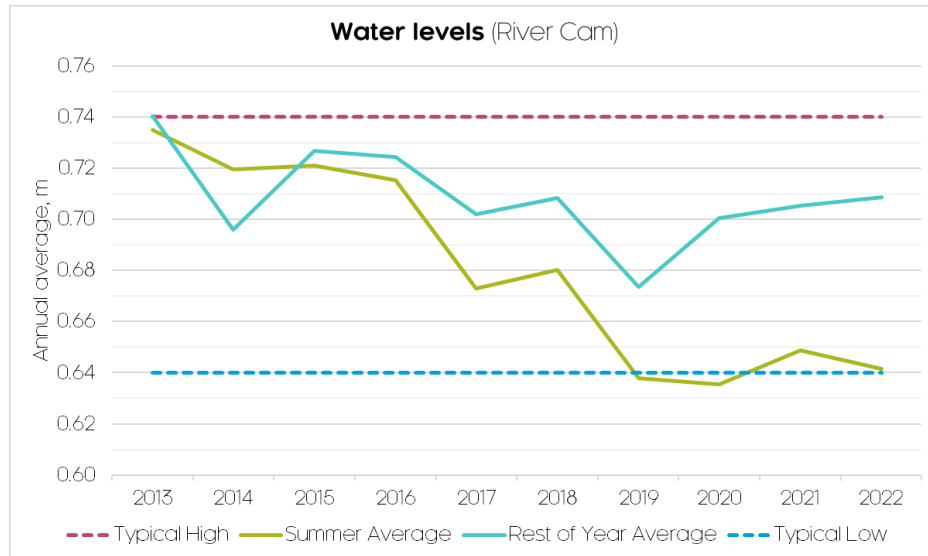


Chart source: DEFRA Data Services Platform (via riverlevels.uk)

Throughout 2022, water levels along the River Cam dropped below their typical low for extended parts of the year.¹⁰ For the fourth consecutive year, the River Cam’s average level during the summer months did not significantly deviate from its typical low, and was on average almost 10cm lower than in 2013.

Days of poor air quality continue to decline, but remain high by national city standards

The number of days Cambridge spent in poor air quality continued to decline in 2022, dropping to 28 days, down from 31 in 2021, according to analysis of Met Office data by the Centre for Cities.¹¹ Despite this, only 3 other cities (London, Southend and Norwich) recorded more poor air quality days than Cambridge in 2022.

3.5 Sustainable transport

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Licensed EV share	Magenta	Magenta	10th (of 58)
EV charging points (per 100 EV's)	Magenta	Magenta	24th (of 58)
KSI casualties (per 1,000 residents)	Magenta	Blue	N/A
Active travel use	Magenta	Blue	1st (of 55)
Active/public transport times to key services	Blue	Magenta	49th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The EV rollout is accelerating in Cambridge

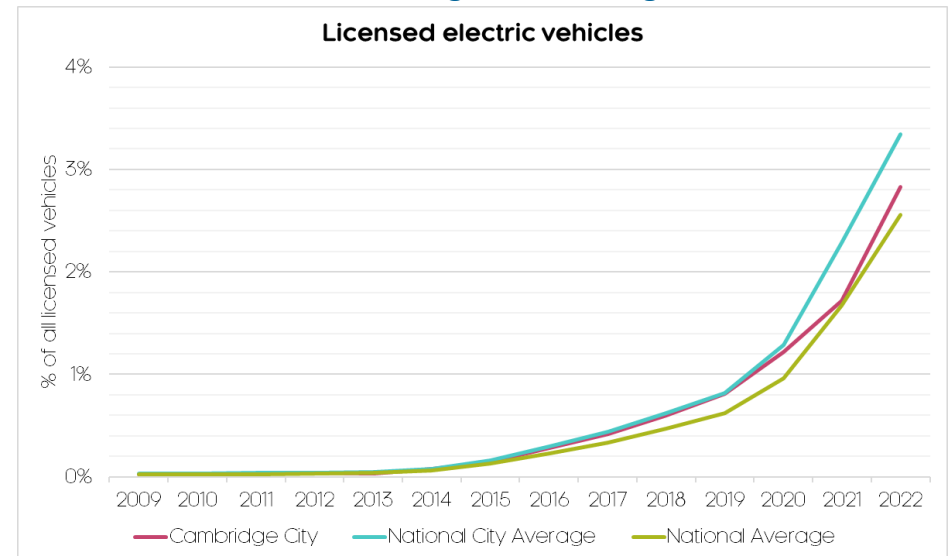


Chart source: DfT Vehicle Licensing statistics

At the end of Q3 2022, 2.8% of all DVLA-licensed vehicles in Cambridge were electric vehicles (EVs), up from 1.7% in 2019.¹² This share exceeded the national average (2.6%) and though below the national city average (3.3%) placed Cambridge 10th out of 58 cities in England and Wales. Over 2019-22, EVs in Cambridge increased 3.5 times over, albeit slower than the benchmarks, which increased 4 times over.

EV infrastructure continues to improve in Cambridge, with 76 charging points available by the end of Q3 2022, close to a three-fold increase on 2019.¹³ Relative to the number of DVLA-licensed EV vehicles, the incidence of charging points is 51% higher in Cambridge than the national city average, with 5 charging points for every 100 EVs in the City.

The number of people killed or seriously injured on Cambridge roads remains below pre-pandemic levels

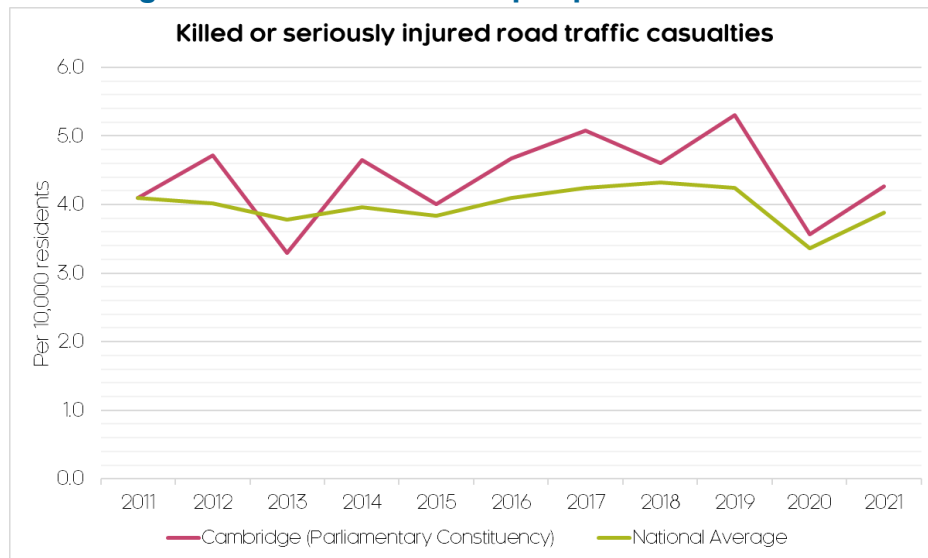


Chart source: DfT Road traffic statistics

In 2021, 57 people were killed or seriously injured (KSI) on roads in Cambridge (Parliamentary Constituency), up from 47 in 2020 but below the high of 69 recorded in 2019.¹⁴ This is equivalent to 4.3 KSI casualties per 10,000 residents, which was above the national average of 3.4.

However, in 2011, relative to its Census workday population (i.e. residents *and* workers), the casualty rate in Cambridge (Parliamentary Constituency) was 3.4, below the national average of 4.1. In 2021, 72% KSI casualties were active travel users, double the national average (36%), reflecting the high uptake of active travel in Cambridge.

The use of active travel is very high in Cambridge, but uptake is below pre-pandemic levels

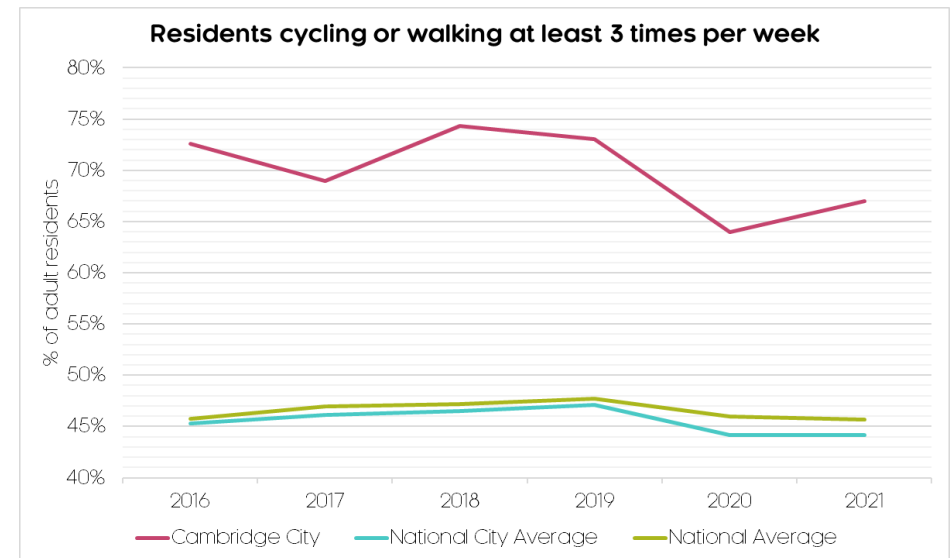


Chart source: DfT Walking and cycling statistics

Some 67% of adults (aged 16+) in Cambridge reported using active travel (walking or cycling) at least 3 times a week in 2021, and on

average Cambridge residents are 1.5 times more likely to use active travel compared to benchmark areas.¹⁵ This was also the highest active travel uptake of any city in England. This proportion does remain slightly below pre-pandemic levels though, with the rate peaking at 74% in 2018, a trend shared with benchmark areas.

Trips into the City increased in 2021, but remained below pre-pandemic levels

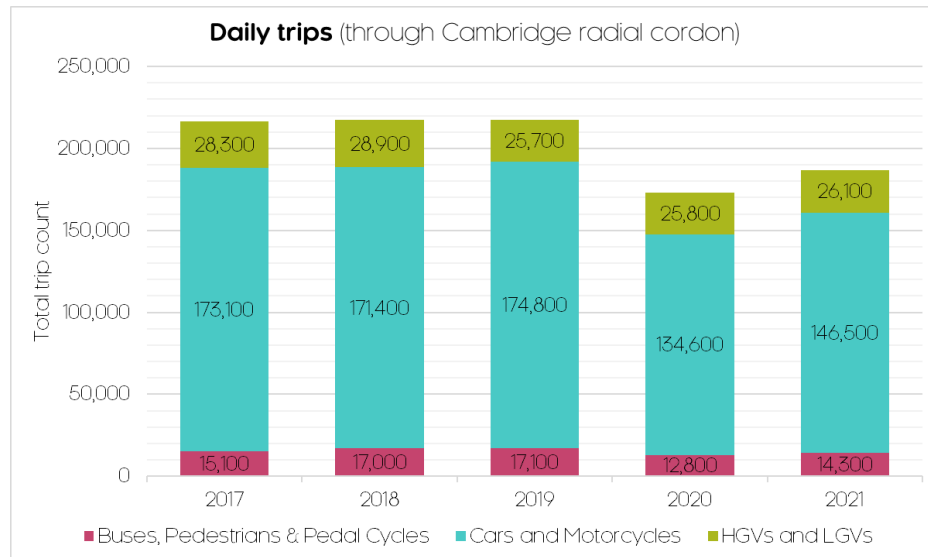


Chart source: CRG Annual Traffic Monitoring Report

The annual snapshot showed daily trips through the Cambridge radial cordon were up 8% in 2021, although were still some 14% below their pre-pandemic peak in 2019.¹⁶ The proportion of trips which were public or active travel – including bus, cycle or walking – increased to 7.7% in 2021, up from 7.0% in 2017. Data only includes those entering and exiting the radial cordon, so will exclude trips travelling within the radial cordon.

Data on the length and congestion of these trips is currently being explored as part of the Greater Cambridge Partnership's Making Connections work.¹⁷ This will include the provision of consistent, accurate and more robust estimates of congestion and delays in Cambridge, which will be incorporated into future State of the City analysis when available.

On average, Cambridge residents live within 15-minutes of essential services by walking or public transport

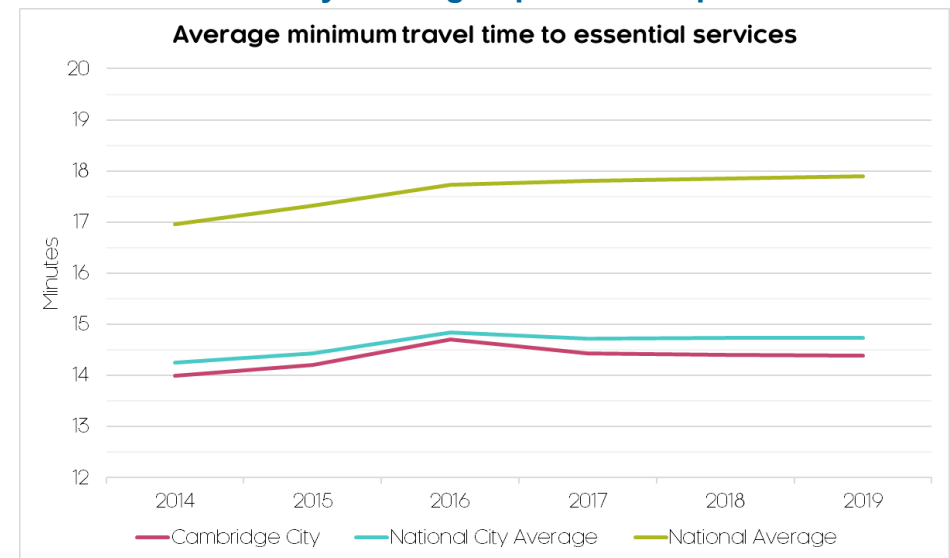


Chart source: DfT Journey time statistics

In 2019, on average, Cambridge City residents lived a *minimum* of 14.4 minutes away from essential services – including work, schools and colleges, GPs and hospitals, and food and retail – by walking or public transport.¹⁸ This was shorter than national (17.9 minutes) and national city benchmarks (14.7 minutes), and the 6th shortest travel time of 55 cities in England.

This was some 1.6 times longer than the minimum travel time taken to reach essential services in the City by car, which stood at an average of 9.2 minutes in 2019. However, both of these measures assume an *average minimum* travel time, and therefore do not account for factors such as congestion, delays, cancellations and other travel-related barriers.

Yet this is less likely for residents in Cambridge’s more deprived neighbourhoods

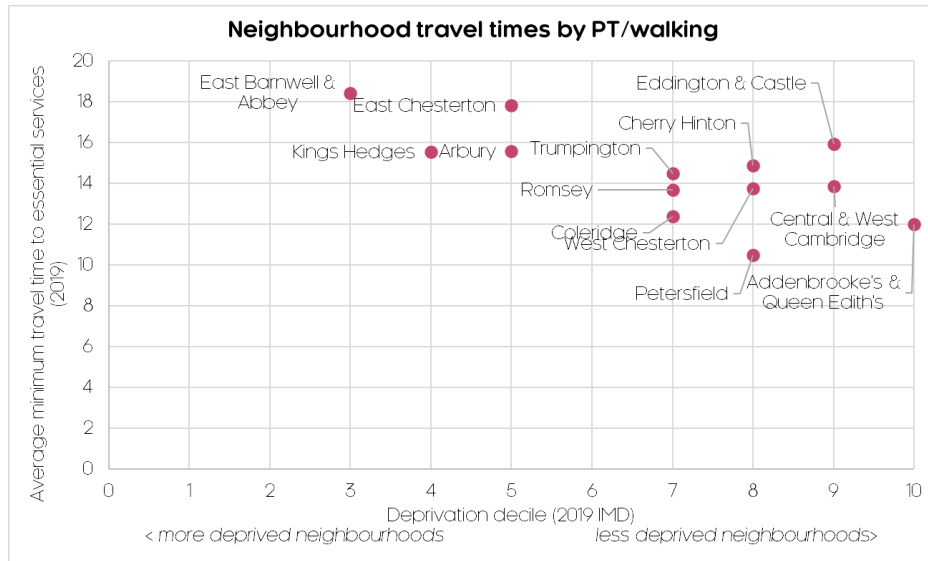


Chart source: DfT Journey time statistics

The coverage and quality of public transport and walking infrastructure and services vary within Cambridge: residents in Cambridge’s least deprived neighbourhood were, on average, a minimum of 12.0 minutes away from essential services using walking or public transport, compared to its more deprived neighbourhood, where the average was

18.4 minutes.¹⁹ For City Fringe residents, the average stood at 25.4 minutes.

3.6 Energy efficiency

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Domestic EPC registrations C+ share			2nd (of 58)
Non-domestic EPC registrations C+ share			29th (of 58)
Solar PV capacity (per 100 sq km)			15th (of 55)
Energy consumption (per 1,000 residents)			44th (of 58)
Fuel poverty rate			40th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Homes and businesses in Cambridge are becoming more energy efficient

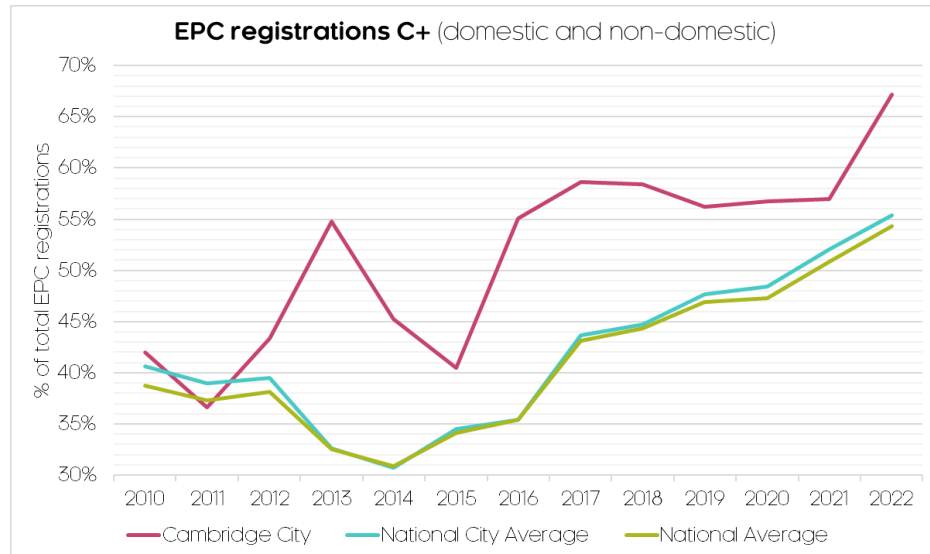


Chart source: DLUHC Live tables on Energy Performance of Buildings Certificates

The proportion of domestic properties in Cambridge registering for an EPC rating of C or above reached a record high of 70% in 2022, a share exceeding benchmarks, and was second only to Milton Keynes out of 58 cities in England and Wales.²⁰ Of the 55,200 domestic properties registered in Cambridge between 2009 and 2022, 52% reported an EPC rating of C or above, above the national average of 41%.

The proportion of non-domestic properties in Cambridge registered for an EPC rating of C or above also reached a record high of 37% in 2022, a rate broadly in line with benchmark areas, and middle ranking compared to other cities. Of the 3,800 non-domestic properties registered in Cambridge between 2009 and 2022, the majority (71%) reported an EPC rating below C.

Within Cambridge, the energy efficiency of domestic properties varied: 84% of properties in Trumpington had achieved a rating of C or above in 2022, in contrast to just 43% in Romsey.²¹ At 72%, Eddington & Castle had the second highest share in the City. Arbury, Cherry Hinton, West Chesterton also had shares below 50%. The ONS reports the age of a property is the most significant factor associated with its energy efficiency.

Renewables capacity continues to increase in the City

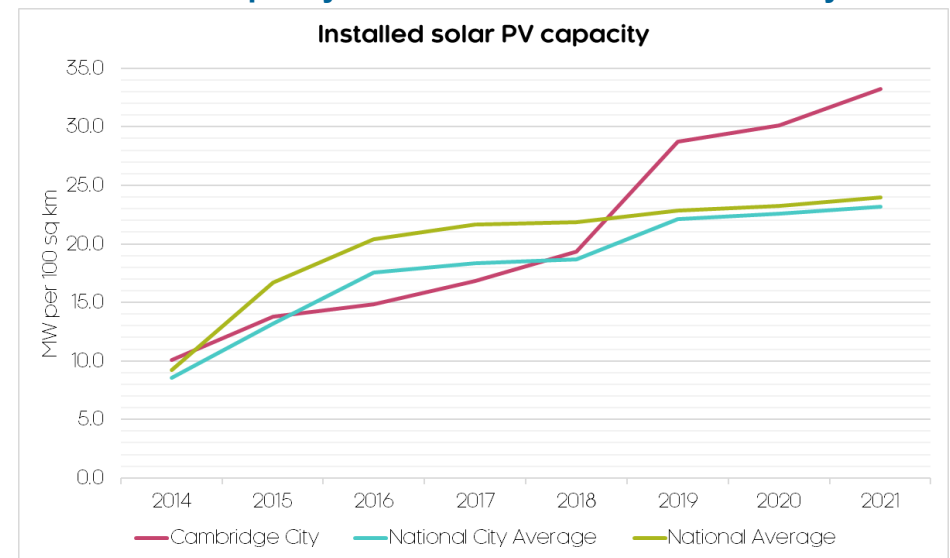


Chart source: BEIS Regional Renewable Statistics

In 2021, the 12.3MW of installed renewable electricity capacity in Cambridge generated 8,776 MWh of electricity.²² The majority of this was derived from Solar PV, which on a MW per 100 sq km basis has increased 3.3 times over in the City since 2014, resulting in Cambridge's Solar PV capacity exceeding benchmark areas, and ranking 15th out of 55 cities in England.

Whilst per resident energy consumption continues to decline

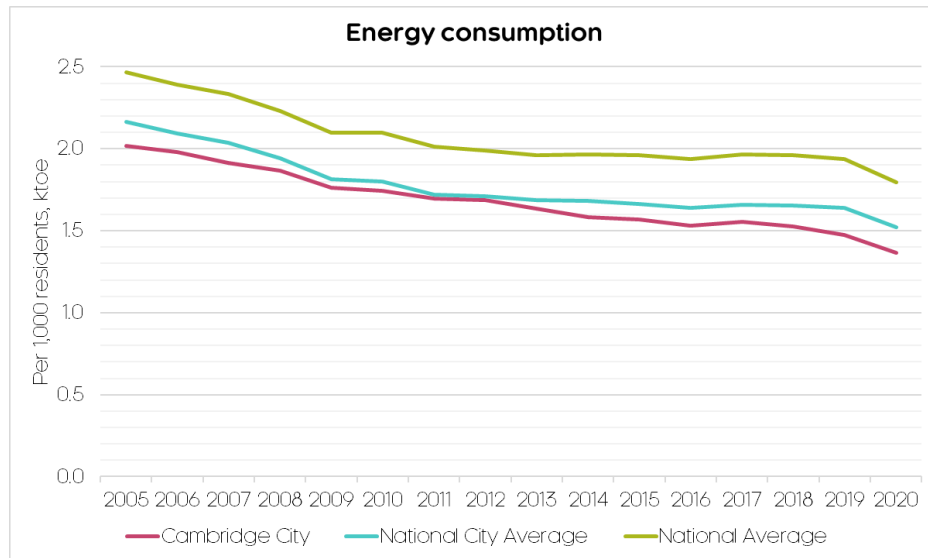


Chart source: BEIS Fuel poverty statistics

In 2020, 196 thousand tonnes of oil equivalent energy - including electricity, gas and fuels – were consumed in Cambridge, which was a drop of 6% on 2019, a decline broadly in line with benchmarks.²³ On a per resident basis, Cambridge consumed less energy than both national (24% lower) and national city (10% lower) benchmarks in 2020, and had the 14th lowest energy consumption of 58 cities in England and Wales.

Per resident energy consumption declined 22% between 2010 and 2020 in Cambridge, faster than benchmarks. In 2011, per resident energy consumption in Cambridge was 1% below the national city average – in 2020, it was 10% lower. With limited energy-intensive industry, 38% of energy consumed in Cambridge is from domestic users, more than twice the national average of 17%.

Rates of fuel poverty in Cambridge have declined, and dropped below benchmarks

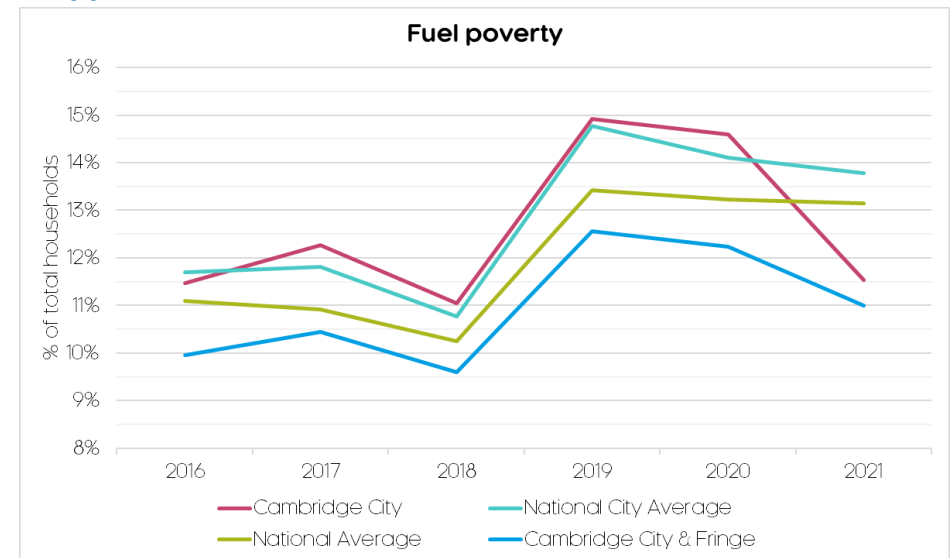


Chart source: BEIS Total final energy consumption at regional and local authority level

In 2021, 11.5% of households in Cambridge were estimated to be fuel poor, a sharp decrease on the 14.6% recorded in 2020.²⁴ When including the City Fringe, this rate declines further to 11.8%. Both rates were lower than national (13.1%) and national city benchmarks (13.8%), with Cambridge having the 15th lowest fuel poverty rate of 55 English cities.

There is significant variation within Cambridge, across local neighbourhoods: in 2021, the highest fuel poverty rates were recorded in Petersfield, at 14.6%, closely followed by Romsey at 14.4%. Trumpington (7.6%) and Cherry Hinton (9.5%) both had rates below 10%. Within the City Fringe, rates averaged 10.1%.

Though more recent data are unavailable, it is likely these rates will have increased over 2022 and 2023, given the accompanying energy and cost of living crisis. The same analysis shows the national fuel poverty rate increased to 13.4% in 2022 and is projected to reach 14.4% in 2023.

4 Wildlife & Nature

4.1 Introduction and summary

The **wildlife and nature lens** seeks to understand the experience of wildlife and nature in Cambridge, and the ecological conditions and biodiversity of the City. Sub-topics considered include:

- **Ecosystems and biodiversity:** which looks at water body quality, tree canopy coverage, biodiversity space and noise pollution.
- **Land use and greenspace:** which looks at land use patterns, greenspace, and access to greenspace.
- **Waste and recycling:** which looks at waste generation, landfill use and recycling rates.

4.2 Summary

Sources for the below summary are available in the main body of analysis

The ecological, chemical and quantitative status of water bodies in Cambridge has deteriorated, with **50% of recent tests achieving a classification of 'poor' or 'fail'**, the worst performance on record, whilst storm overflows have been **discharged into local water bodies for a combined duration of 2,571 hours** over the past three years.

Tree canopy coverage is above benchmarks, with **Cambridge having the 15th highest canopy coverage** of any city nationwide. Actively managed biodiversity space continues to increase, and provides significant value to wildlife, with **Cambridge's biodiversity metric above other local authority areas** in Cambridgeshire. **Noise pollution in Cambridge has now fallen** below benchmarks.

Cambridge is highly urbanised, yet the **majority (56%) of land in the City remains non-developed**, a rate unchanged over the past 5 years. **Greenspace is becoming more prevalent** in Cambridge, and provides significant **economic, social and environmental benefits, collectively valued at £62.5m** per annum.

Greater Cambridge's **waste footprint is smaller than benchmarks**, whilst **almost half of all waste generated locally is recycled or re-used**, with **only 7 other cities having a higher recycling rate** in England, although 59,427 tonnes of waste is still being sent to landfill.

4.3 Ecosystems and biodiversity

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Noise levels (complaints per 1,000 residents)			15th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The ecological, chemical and quantitative status of water bodies in Cambridge has deteriorated

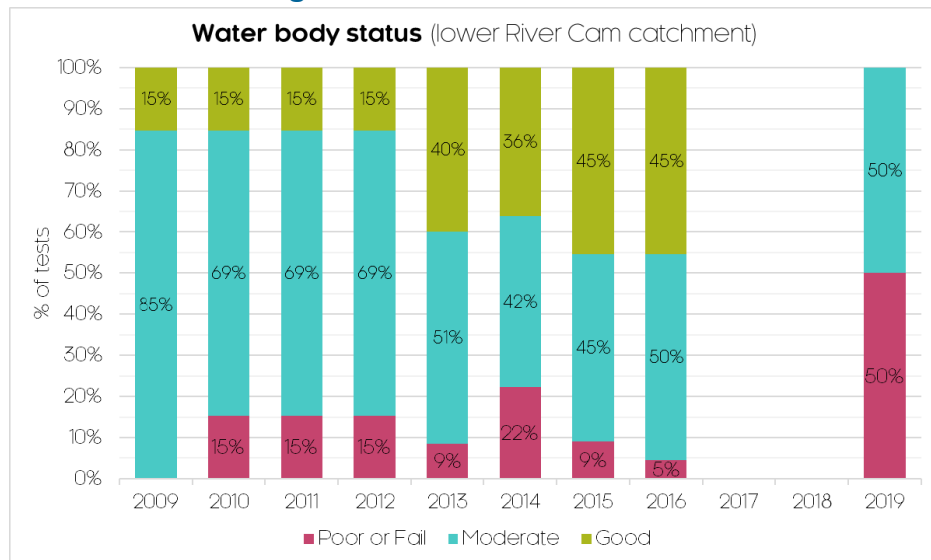


Chart source: Environment Agency Open WIMS data

In 2019, 50% of individual tests for ecological, chemical or quantitative status along the lower River Cam catchment achieved a classification of 'poor' or 'fail', the highest since testing records started in 2009, and more than double the previous high of 22% in 2014.²⁵ And for the first time in a year, no test returned a classification of 'good'.

And specific tests for water quality show the concentration of nutrients including nitrogen, phosphorous and ammonia in the River Cam have generally increased over recent years. In particular, average annual nitrogen and ammonia levels recorded during tests have increased 14% and 12% respectively between 2012 and 2022 along the River Cam.

Storm overflows continue to be discharged into local water bodies

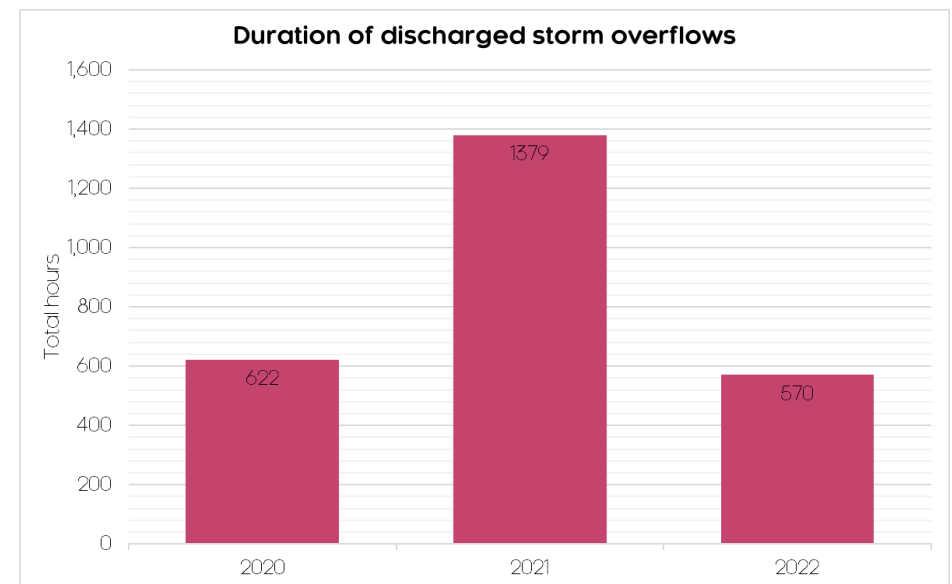


Chart source: Anglian Water Event Duration Monitor (EDM) returns

Official Event Duration Monitor (EDM) returns showed there were 114 instances of storm overflows being discharged into Cam Valley Chalk Streams in 2022, which lasted for a combined duration of 570 hours.²⁶ This was down from the high of 225 incidents recorded in 2021, which lasted for a combined duration of 1,379 hours.

Cambridge's tree canopy coverage remains above benchmarks

In the latest survey (2016), tree canopy coverage – which can help cities adapt to climate change - was estimated at 19% in Cambridge, which was above the national city average 16%, and the 15th highest coverage of 58 cities in England and Wales.²⁷ This was also an increase on the 17% recorded in a 2014 study (although some of the difference between studies may be attributable to different approaches to data collection and processing).²⁸

Actively managed biodiversity space continues to increase, and provides significant value to wildlife

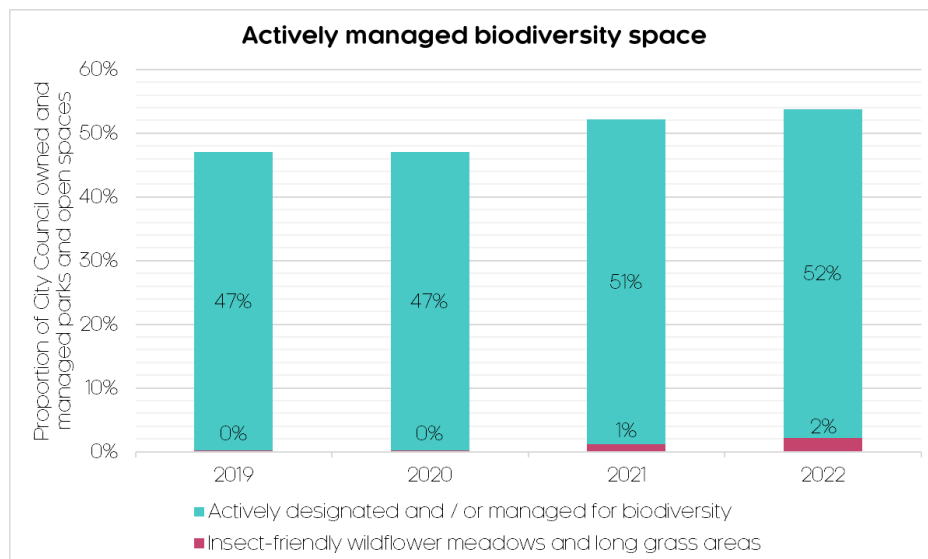


Chart source: Cambridge City Council Corporate Plan Performance Indicators

The majority of City Council owned and managed parks and open spaces are now actively designated and/or managed for biodiversity, reaching 51.2% in 2021/22, up from 46.8% in 2018/19.²⁹ In addition to

this, the proportion allocated for insect-friendly wildflower meadows and long grass areas increased to 2.2% in 2021/22, a ten-fold increase on 2019. The City Council's use of glyphosate-based herbicide has also declined 14% over the same period.

Annual monitoring by the Cambridgeshire and Peterborough Environmental Records Centre also shows the proportion of County and City Wildlife Sites in Cambridge where positive conservation management is being or has been implemented during the last five years stood at 64.3% in 2021/22, a slight decrease on the 65.7% recorded in 2020/21, but up significantly on the 30% recorded in 2008/09.³⁰

Such initiatives provide significant value to local wildlife: research on behalf of the Cambridgeshire and Peterborough Future Parks project found Cambridge's biodiversity metric – a habitat-based approach used to assess an area's value to wildlife – stood at 1,770 units in 2022, which on a per hectare basis (1.47 units), was in line with the Combined Authority average (1.48) and above that recorded in Peterborough, Huntingdonshire and East Cambridgeshire.³¹

Noise levels are decreasing, and have fallen below benchmarks

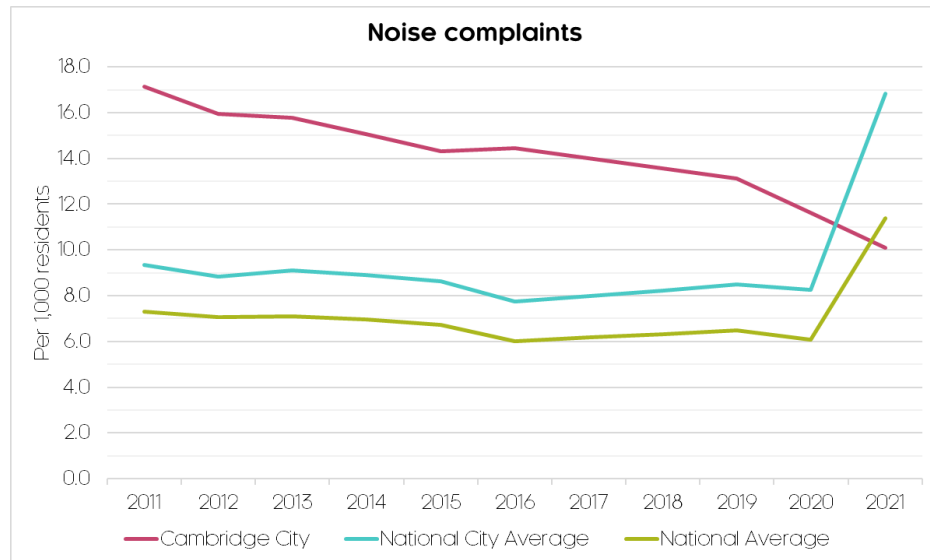


Chart source: OHID Public Health Outcomes Framework

2020/21 saw a record low number of noise complaints recorded in Cambridge, which dropped to 1,500, down from 2,100 in 2010/11.³² On a per resident basis, the incidence of noise complaints are now below benchmark areas, after being twice as high. In contrast to Cambridge, benchmarks saw a significant increase through 2020/21.

4.4 Land use and greenspace

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Greenspace share			30th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The majority of land in Cambridge remains non-developed, a rate unchanged over the past 5 years

Despite its urban status, of the 4,070 hectares comprising the administrative area of Cambridge, the majority (56%) is currently non-developed use, which is unchanged since 2017.³³ This is below both national (91%) and national city benchmarks (77%), which have both experienced a small decline in non-developed land over this period.

Only four other cities in England – Luton, Crawley, Slough and Hull – had a lower proportion land non-developed, although this measure can be highly skewed by city administrative boundaries. For instance, when including the 35,131 hectares of Cambridge’s City Fringe, the non-developed land share increases to 87%.

Greenspace is becoming more prevalent in Cambridge, and provides significant economic, social and environmental benefits

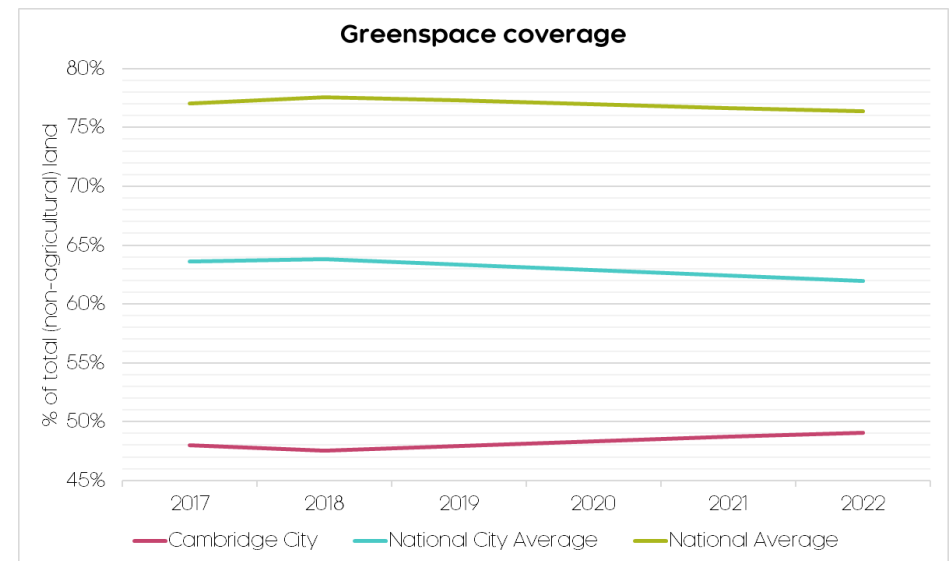


Chart source: DLUHC Live tables on land use

In 2022, greenspace - including both public and private spaces - comprised 49.1% of non-agricultural land in Cambridge, an increase on the 47.6% share in 2018.³⁴ Since 2017, 81.4 hectares of additional greenspace have been provided in the City, in contrast to benchmarks which experienced a decline.

Though Cambridge's greenspace share is below national (76.4%) and national city (62.0%) benchmarks – and was the 4th lowest share out of 55 English cities in 2022 – this can be highly skewed by city administrative boundaries. For instance, when including Cambridge's City Fringe, the greenspace share increases to 59.8%, which would place Cambridge middle-ranking compared to other cities.

And research on behalf of the Cambridgeshire and Peterborough Future Parks project found greenspace provides significant economic, social and environmental benefits to the City, which collectively are valued at £62.5m per annum, the majority of which comes from mental and physical health value outcomes.³⁵

Despite its urban status, in 2022 there were 653.9 hectares of agricultural land in Cambridge, equating to 16.1% of total land. This includes community growing spaces which are helping to provide access to local, sustainably produced food. Over 2021/22, Cambridge Sustainable Food reported 9.4 tonnes of produce was donated by community farmers in the City, including 8 tonnes from local charity CoFarm.³⁶

But access to greenspace varies between neighbourhoods in Cambridge

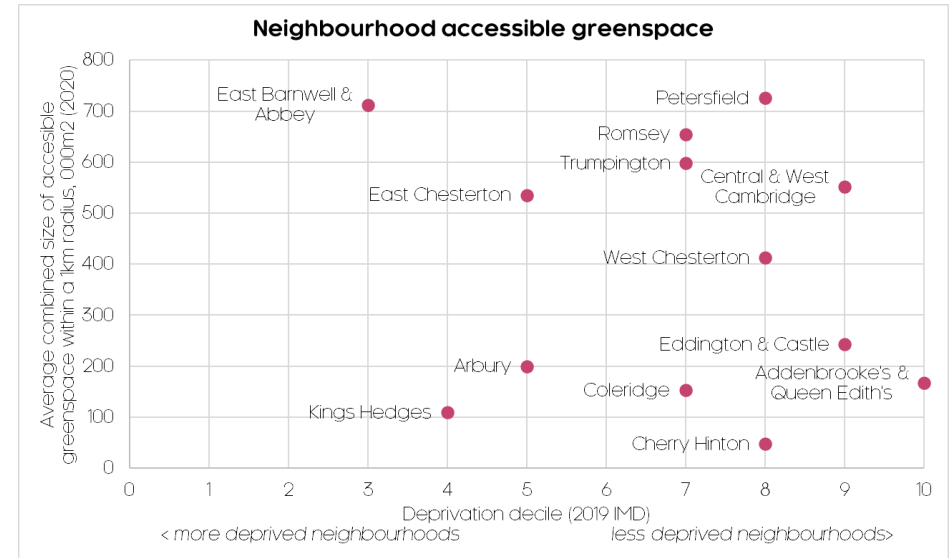


Chart source: ONS Access to public green space

In 2020, the average Cambridge resident had 410,000 m² of accessible greenspace - including parks, public gardens and playing fields - within a 1km radius, above the national average of 399,000 m².³⁷ This rate varied within Cambridge though, from a high of 725,000 m² in Petersfield, to a low of 48,000 m² in Cherry Hinton. Kings Hedges, Arbury, Eddington & Castle, Coleridge and Addenbrooke's & Queen Edith's were also below the national average.

4.5 Waste and recycling

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Waste generated (per 1,000 residents)			N/A
Waste recycling rate			8th (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Greater Cambridge has a lower waste footprint than benchmarks

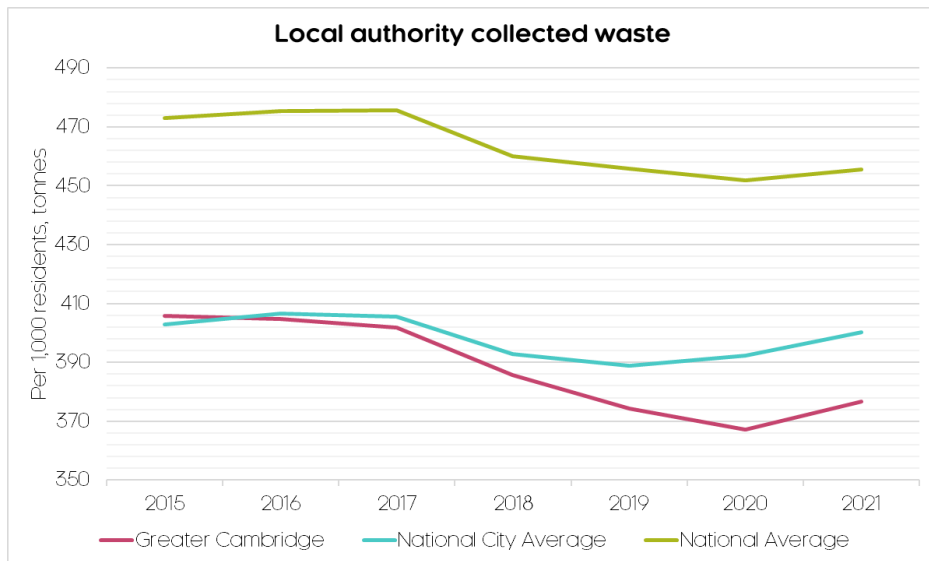


Chart source: DEFRA Local authority collected waste

During 2020/21, when adjusted for population, the waste footprint of Greater Cambridge was below both the national (-17%) and national city (-6%) benchmarks.³⁸ Greater Cambridge’s waste footprint has

declined by 7% since 2014/15, which exceeded both the national (-4%) and national city (-1%) benchmarks.

And a greater proportion of waste is recycled

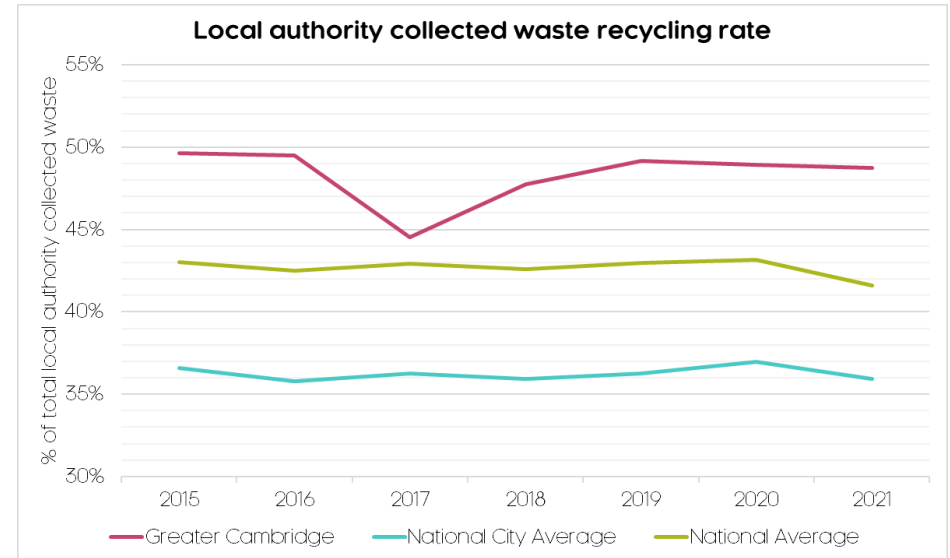


Chart source: DEFRA Local authority collected waste

Of the 115,900 tonnes of waste collected by local authorities in Greater Cambridge during 2020/21, almost half (49%) of this was recycled, composted or re-used, a rate well in excess of benchmarks. Only seven other cities had a higher rate of recycling in England.³⁹ This rate has remained relatively steady over the past 6 years. During 2020/21, 59,427 tonnes of waste in Greater Cambridge was still sent to landfill.

4.6 Sources, clarifications and signposting

Interactive versions of the charts presented here can be viewed on the accompanying online dashboard ([accessible online here](#)).

The following endnotes provide detailed sources, clarifications and signposting for all of the data and evidence presented in the

¹ BEIS UK local authority and regional greenhouse gas emissions *Note: greenhouse gas emissions data only available 2018 onwards. Per person data calculated using Census resident population estimates*

² BEIS UK local authority and regional greenhouse gas emissions *Note: greenhouse gas emissions data only available 2018 onwards. Per person data calculated using Census resident population estimates*

³ BEIS UK local authority and regional greenhouse gas emissions (for emissions) and ONS Regional economic activity by gross domestic product (for GVA) *Note: greenhouse gas emission data only available 2018 onwards. GVA data in real terms (constant 2019 prices, using ONS GVA deflator)*

⁴ DEFRA Modelled background pollution data *Note: annual averages are population-weighted, using Mid-Year Estimates*

⁵ OHID Public Health Outcomes Framework *Note: caution should be urged when interpreting 2020 and 2021 data due to Covid-19 related mortalities*

⁶ DEFRA Modelled background pollution data *Note: annual averages are population-weighted, using Mid-Year Estimates*

⁷ University of Cambridge Digital Technology Group *Note: extreme weather days defined here using Met Office definitions: for excessive rainfall definition see [here](#) and temperature definition see [here](#). Data not strictly comparable with Met Office records*

⁸ See Met Office analysis [here](#)

⁹ See Met Office analysis [here](#)

¹⁰ DEFRA Data Services Platform (via riverlevels.uk) *Note: data refers to observations from River Cam monitoring station at Cambridge Jesus Lock*

¹¹ Centre for Cities Data Tool

¹² DfT Vehicle licensing statistics

¹³ DfT Electric vehicle charging device statistics

Environment chapter. A glossary of key terms and abbreviations can be found in the Appendices.

Readers who are interested in more detail – including definitions and methodologies, additional categorisations and detailed spatial breakdowns – are encouraged to review these sources, which are all publicly available.

¹⁴ DfT Road traffic statistics *Note: Data for the Cambridge Parliamentary Constituency area. Per person data calculated using Census resident population estimates*

¹⁵ DfT Walking and cycling statistics *Note: national data for England only*

¹⁶ CRG Annual Traffic Monitoring Report *Note: data is from a one-day snapshot in October. Definition of radial cordon can be found in the accompanying report*

¹⁷ The ongoing research and analysis from the Making Connections work can be found [here](#)

¹⁸ DfT Journey time statistics *Note: national data for England only*

¹⁹ DfT Journey time statistics

²⁰ DLUHC Live tables on Energy Performance of Buildings Certificates *Note: annual data are a sum of four-quarter*

²¹ ONS Energy efficiency of housing in England and Wales

²² BEIS Regional Renewable Statistics *Note: national data for England only*

²³ BEIS Total final energy consumption at regional and local authority level *Note: Per person data calculated using Census resident population estimates*

²⁴ BEIS Fuel poverty statistics *Note: national data for England only*

²⁵ Environment Agency Open WIMS data *Note: annual data are sum of individual tests during the year. No tests recorded 2017 or 2018. Data relates to tests conducted along the lower River Cam catchment*

²⁶ Anglian Water Event Duration Monitor (EDM) returns *Note: EDM sites include those identified by Friends of the Cam [here](#)*

²⁷ i-Tree Canopy 2017 *Note: city ranking derived using studies spatial definitions which my differ from those used elsewhere in the report*

²⁸ Cambridge City Proximitree Study 2014

²⁹ Cambridge City Council Corporate Plan Performance Indicators *Note: data for financial years*

³⁰ Cambridgeshire and Peterborough Environmental Records Centre Annual Monitoring Report *Note: data for financial years*

³¹ Cambridgeshire and Peterborough Local Nature Recovery Strategy Future Parks project

³² OHID Public Health Outcomes Framework *Note: data for 2017/18 and 2018/19 missing, a linear trend has been used to interpolate data for these years. Data for financial years Per person data calculated using Census resident population estimates*

³³ DLUHC Live tables on land use *Note: national data for England only*

³⁴ DLUHC Live tables on land use *Note: 'Greenspace' is defined here as "any area of vegetated land" using the PHE definition provided [here](#). Data for 2019, 2020 and 2021 are missing, a linear trend has been used to interpolate data for these years. National data for England only*

³⁵ Cambridgeshire and Peterborough Local Nature Recovery Strategy Future Parks project

³⁶ Cambridge Sustainable Food Food Poverty Report

³⁷ ONS Access to public green space *Note: 'accessible greenspace' defined here by ONS as including parks, public gardens and playing fields*

³⁸ DEFRA Local authority collected waste *Note: data available for Greater Cambridge (including the Cambridge and South Cambridgeshire local authority areas). Excludes non-local authority collected waste. Data for financial years. National data for England only. Per person data calculated using Census resident population estimates*

³⁹ DEFRA Local authority collected waste *Note: data available for Greater Cambridge (including the Cambridge and South Cambridgeshire local authority areas). Excludes non-local authority collected waste. Data for financial years. National data for England only. Per person data calculated using Census resident population estimates*

State of the City 2023: Society

This chapter provides analysis looking at the prosperity, wellbeing and inclusiveness of Cambridge, and the experience of different social groups and communities in the City. This is presented through the *Environment & Sustainability* and *Social Equity* lenses.



5 Wellbeing & Prosperity

5.1 Introduction

The **wellbeing & prosperity lens** seeks to understand the wellbeing, prosperity and inclusiveness of Cambridge and its communities, and associated barriers and opportunities. Sub-topics considered include:

- **Cost of living and financial security:** which looks at inflation, food bank use, financial crisis support, and disposable incomes.
- **Workforce participation:** which looks at economic activity and inactivity, reasons for economic inactivity, employment and unemployment, and ‘hidden unemployment’.
- **Community wellbeing and quality of life:** which looks at self-reported measures of wellbeing and quality of life.
- **Deprivation and poverty:** which looks at relative deprivation, in both income and non-income forms, and poverty rates.
- **Housing and homelessness:** which looks at housing, housing delivery, home ownership, homelessness and rough sleeping.
- **Housing costs and affordability:** which looks at housing costs and housing affordability, in terms of both renting and buying.
- **Crime and public safety:** which looks at total crime, the changing severity of crime, and criminal re-offending.

5.2 Summary

Sources for the below summary are available in the main body of analysis

The **cost of living has risen dramatically** in Cambridge, accompanied by an **above average reliance on food banks and charitable crisis**

support. Though Cambridge residents have the **5th highest disposable incomes nationwide**, disposable incomes are **lower in Cambridge’s more deprived neighbourhoods.**

Employment rates in Cambridge are close to record highs, with **8 in 10 residents in work.** Of those out of work, the majority are full-time students, whilst **9 in 10 of those out of work report they do not want to or are unable to work.** 3,000 residents are classified as ‘hidden unemployed’.

Cambridge is the **3rd least deprived city in the country** in relative terms, but performs poorly in terms of crime, housing and living environment deprivation. **Poverty rates are below average, although 1 in 10 children live in poverty,** increasing to **2 in 10 in more deprived neighbourhoods.** **Self-reported wellbeing is above average and improving,** whilst Cambridge has been **ranked in the top 30 cities globally for quality of life.**

The delivery of new homes in Cambridge has outpaced benchmarks; in the last 10 years, Cambridge had the **highest housebuilding rates in the country.** Rates of home ownership are increasing, whilst **more than a third were provided as affordable housing.** Yet **homelessness and rough sleeping remain above average,** and are increasing.

And Cambridge **exhibits significant affordability issues, particularly for low-earners;** in the last 10 years, house prices in Cambridge have increased by 78%, pay by only 23%. Relative to local pay, **only London is less affordable** than Cambridge in terms of buying a home.

Police-recorded **crime rates in Cambridge remain below pre-pandemic levels and are now below the national city average.** The occurrence of some serious crime types has increased though, whilst **criminal re-offending rates are also above average,** and increasing.

5.3 Cost of living and financial security

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Food parcels distributed (per food bank)			N/A
Crisis support (per 1,000 residents)			N/A
Disposable household incomes (per resident)			5th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The cost of living has risen dramatically in Cambridge

The Centre for Cities estimate that inflation - i.e. the change in the price of essentials, including petrol, groceries and energy - in Cambridge rose to 9.4% in the year to March 2023, up from just a 0.6% in March 2021.¹ This increase in inflation, though substantial, was the smallest of any city in England and Wales. Inflation in Cambridge was also below their national city average of 10.4% for March 2023, and the UK average of 10.1%.

Which has been accompanied by a significant increase in food bank use

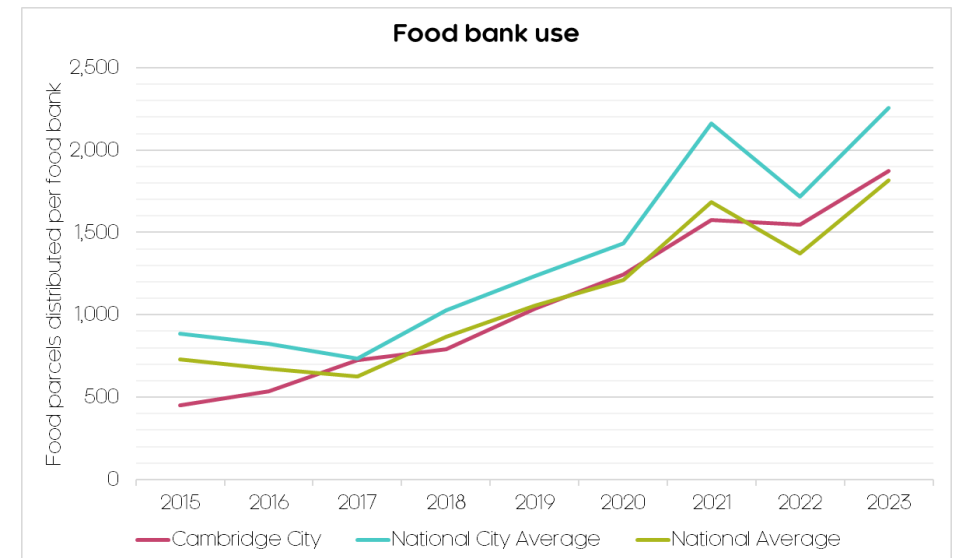


Chart source: Trussell Trust Latest Stats

Over 2022/23, a record 13,121 food parcels were distributed to residents in Cambridge, a large increase on the previous record of 9,467 distributed in 2020/21.² This was some 3.2 times the number distributed in 2014/15, exceeding the 2.8 times increase experienced by benchmark areas.

On average, each food bank in Cambridge distributed 1,874 food parcels, which was above the national food bank average of 1,816, but below the national city food bank average of 2,254, with 25 other cities in England and Wales recording a higher total. In 2014/15, the average food bank in Cambridge distributed only 451 parcels.

In addition to cost-of-living crisis support

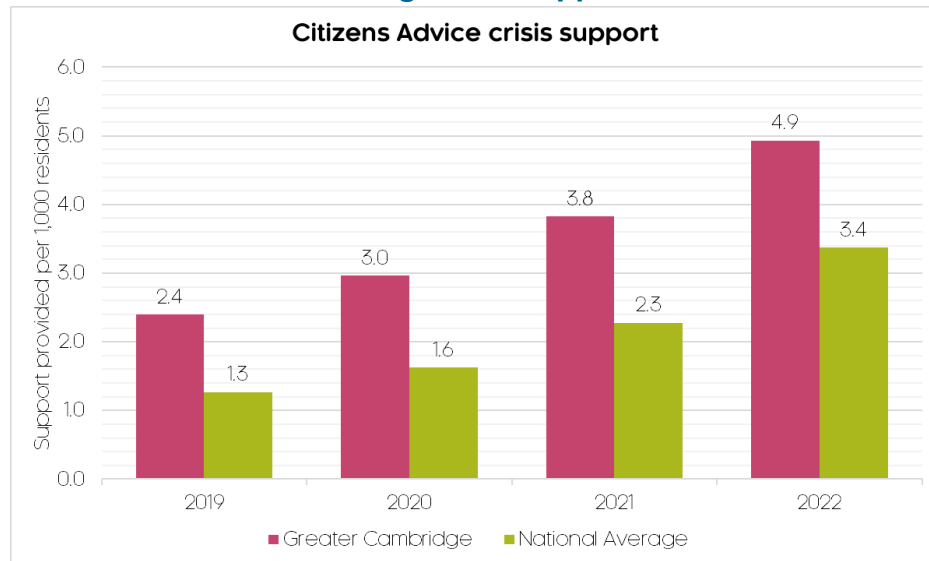


Chart source: Cambridge and District Citizens Advice Cost of Living Data Dashboard

A record 1,517 residents across Greater Cambridge received cost of living ‘crisis support’ from Citizens Advice during 2022, a 29% increase on the 1,177 in 2021, in contrast to the 48% increase observed nationally.³ When adjusted for population, rates of crisis support in Greater Cambridge were 46% above the national average in 2022. Preliminary data shows 2023 has already started on a higher trend than 2022.

Disposable incomes, though higher in Cambridge, were already slowing pre-crisis

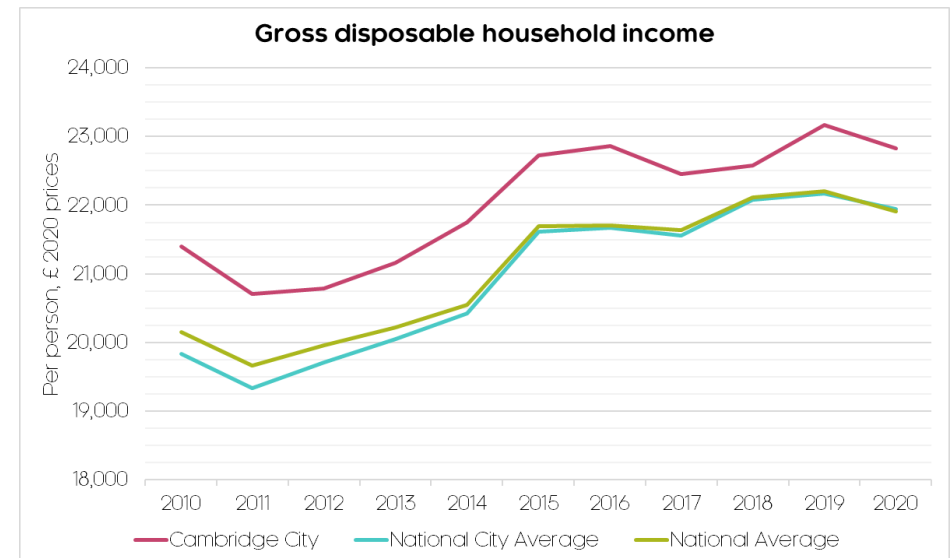


Chart source: ONS Regional gross disposable household income

In 2020, average disposable household incomes in Cambridge were 4% higher than benchmarks, with Cambridge residents having the 5th highest disposable incomes out of 58 cities in England and Wales.⁴ Disposable income *growth* had been slowing though; in real terms in Cambridge, they were only 2% higher than in 2007, in contrast to the national average where they were 6% higher, and ranked Cambridge in the lower quartile of cities nationwide for income growth.

But were increasing faster in Cambridge's more deprived neighbourhoods

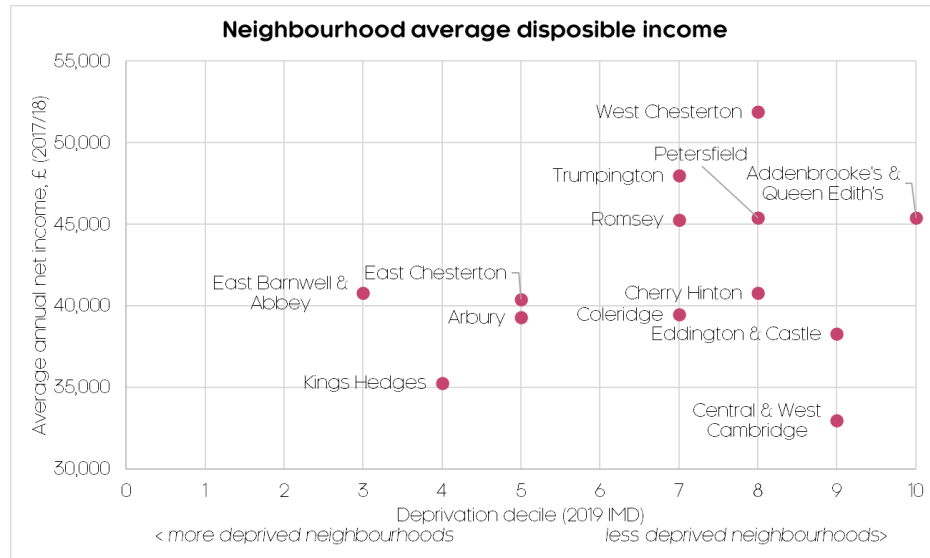


Chart source: ONS Income estimates for small areas

In 2017/18, average disposable household incomes in Cambridge were highest in West Chesterton, Trumpington, Petersfield and Addenbrooke's & Queen Edith's.⁵ Eddington & Castle, Kings Hedges and Central & West Cambridge all had disposable incomes below the City average (the latter, potentially influenced by high student populations, which would bring down the average), whilst across the City Fringe, they were on average 3% lower.

Despite this, since 2011/12, disposable incomes (in real terms) have grown faster in some of Cambridge's more deprived neighbourhoods, such as West Chesterton (+24%), East Barnwell & Abbey (+23%) and Arbury (+20%), whilst growth has been slower in less deprived ones, such as Central & West Cambridge (-2.6%), Addenbrooke's & Queen Edith's and Petersfield (both +9.8%).

As a result, the disposable income gap (i.e. ratio) between Cambridge's least and most deprived neighbourhoods has declined, to a ratio of 1.1 in 2017/18, down from 1.4 in 2015/16. This was also below the national (1.4) and national city (1.6) benchmarks. Of course, this particular measure looks only at the income gaps *between* neighbourhoods, not *within* neighbourhoods.

5.4 Workforce participation

Key benchmark metrics	Relative performance Latest year	Trend performance Over the past 5 years	Latest city rank 1st = highest city value
<i>Source available in below body of analysis</i>			
Economic activity rate			9th (of 58)
Employment rate			10th (of 58)
Unemployment rate (incl. 'hidden unemployed')			57th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Economic activity rates in Cambridge are increasing again, ahead of benchmarks

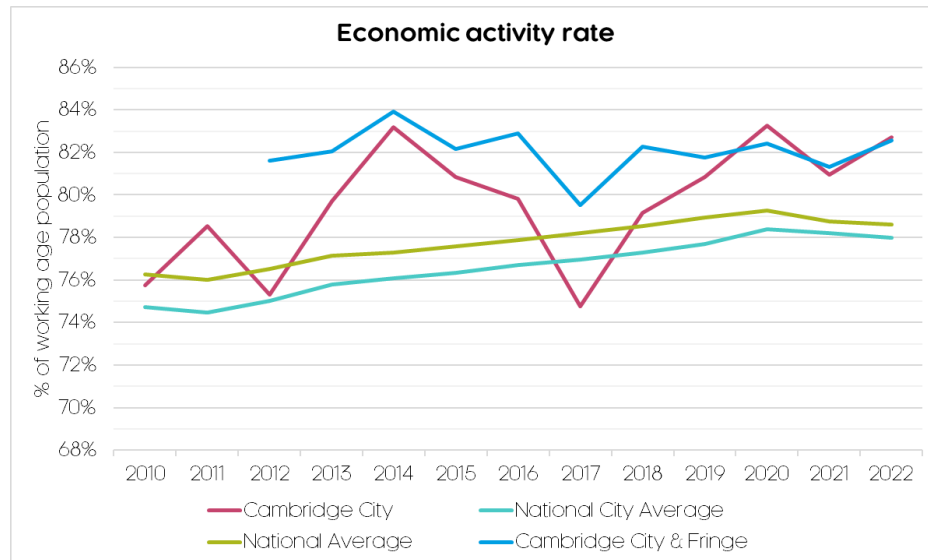


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

After declining to 81.0% in 2021, the proportion of the working age (aged 16-64) population in Cambridge (City & Fringe) in work or actively looking for work increased to an average of 82.7% in 2022.⁶ This was in contrast to benchmark areas, which saw a further decline in rates through 2022, with Cambridge continuing to outperform these areas, and recording the 9th highest economic activity rates of 58 cities in England and Wales.

Reasons for economic inactivity vary, but many report not wanting to work, whilst health-related inactivity remains low

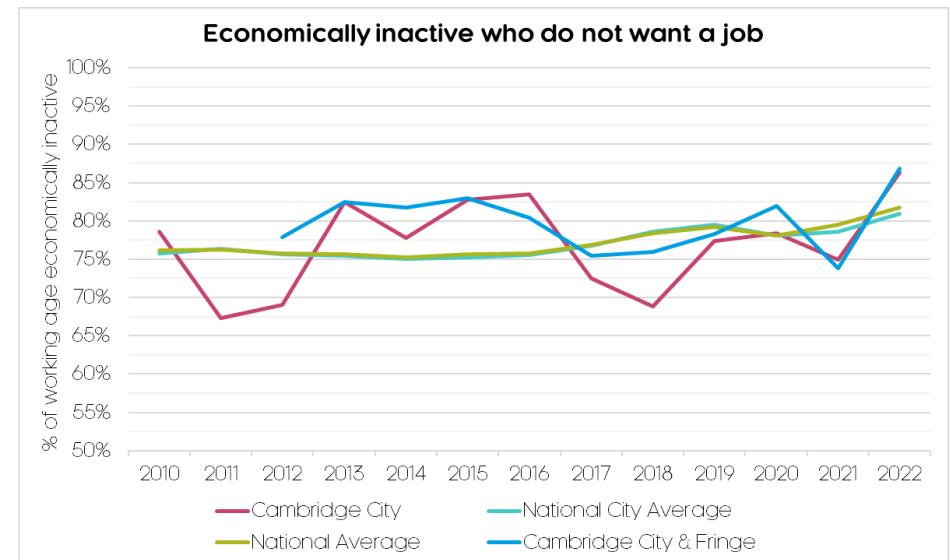


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

Of the 22,900 Cambridge (City & Fringe) residents not in work or actively looking for work, the majority (41%) cited full-time study as the primary reason, well ahead of the national average of 27%.⁷ This was followed by those looking after family or home (including full-time carers) at 21%, in line with the national average of 20%.

During and since the pandemic, nationally there has been a significant rise in health-related economic inactivity.⁸ Yet in Cambridge, the proportion of economically inactive reporting to be sick (temporarily and long-term) averaged just 15.3% in 2022, below the 18.4% recorded in 2019, and almost half the national average of 26.9%, and the lowest of any city in England and Wales.

Regardless of reason, the vast majority (87%) of those economically inactive in Cambridge reported they do not want to or are unable to work. This rate exceeds benchmarks, and is the 8th highest of 58 cities in England and Wales, and is also an increase on the 74% share in 2021. This does mean there are still some 3,000 involuntarily economically inactive residents in Cambridge who would like to and are able to work – regarded as ‘hidden unemployed’.

Employment rates remain close to record highs

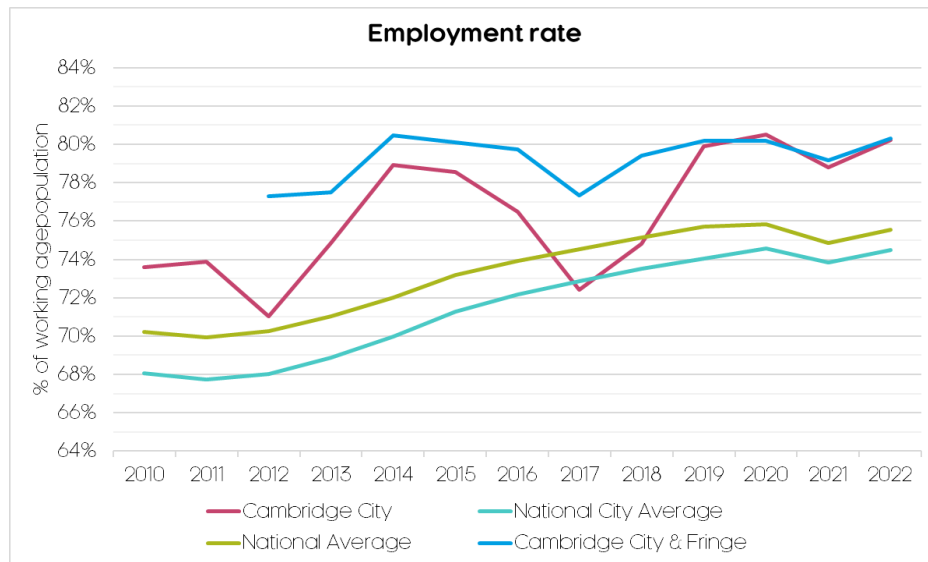


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

The proportion of the working age population in Cambridge reporting to be in work reached 80.3% in 2022, up from 79.2% the previous year, and close to 2020's record high of 80.5%.⁹ This rate was also well ahead of national (75.6%) and national city (74.5%) benchmarks, and a significant improvement on the 70.0% recorded in the City in 2007.

Only 9 cities had a higher employment rate in 2022, and this rate would be even higher if excluding Cambridge's large student population.

Unemployment rates in Cambridge are very low, but double when including 'hidden unemployed'

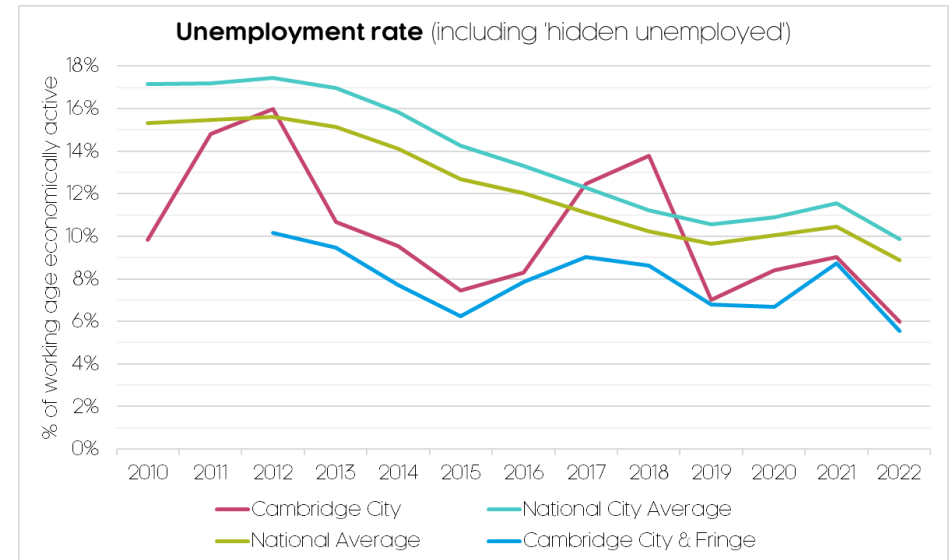


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

Accompanying this are continued low levels of unemployment, which was maintained at 2.7% in 2022 (across the City & Fringe), below national (3.9%) and national city (4.5%) benchmarks.¹⁰ However, this rate more than doubles to 5.5% with the inclusion of involuntarily economically inactive residents i.e. ‘hidden unemployed’¹¹, which also increased much more sharply in 2021, although only one other city had a lower rate.

5.5 Community wellbeing and quality of life

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Life satisfaction (high or very high)			6th (of 58)
Worthwhileness (high or very high)			54th (of 58)
Happiness (high or very high)			1st (of 58)
Anxiety (low or very low)			34th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The majority of Cambridge residents report high or very high levels of wellbeing



Chart source: ONS Personal well-being in the UK

Over 2020-22, on average the majority (some three quarters) of Cambridge adults (aged 16+) reported high or very high levels of life satisfaction, worthwhileness, and happiness, and low or very low levels of anxiety, a rate in excess of benchmark areas, and the 6th highest share of 58 cities in England and Wales.¹²

Relative to the national average, Cambridge residents were 6% more likely to report high or very high levels of life satisfaction, increasing to 12% in terms of happiness – in fact, Cambridge was the happiest city over 2020-22 - although for worthwhileness this was 4% lower. Meanwhile, Cambridge residents were 1% less likely to report low or very low levels of anxiety.

Yet poor mental health presents a significant and costly challenge

The same survey found 23% of Cambridge adults reported high levels of anxiety over 2020-22.¹³ Anxiety is just one of the common mental health disorders that carries an economic and social cost of £105 billion a year in England.¹⁴ Within Cambridgeshire and Peterborough, Cambridge typically exhibits the highest crude rates of suicide, and A&E attendance for deliberate self-harm.¹⁵

Cambridge is in the top 30 cities globally for quality of life, despite a higher cost of living

Research by Numbeo ranked Cambridge globally as the City with the 28th highest quality of life in 2023, up from 52nd in its 2020 ranking.¹⁶ In its 2023 rankings, Edinburgh was the only UK city to rank higher (13th). Numbeo reported Cambridge performed highly against all ranking criteria, except the cost of living and property price to income ratio, where it performed 'moderately'.

Cambridge’s voluntary & community sector plays a vital role in supporting the local quality of life

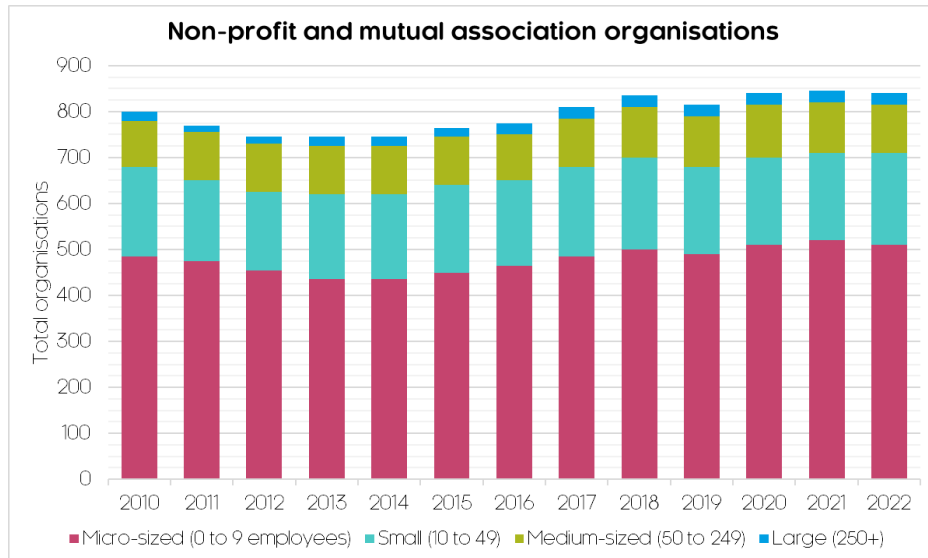


Chart source: ONS UK business; activity, size and location (via nomisweb.co.uk)

In 2022 there were an estimated 840 non-profit and mutual organisations registered across Cambridge (City & Fringe), many of which form part of Cambridge’s active voluntary and community sector.¹⁷ This was an increase on the 745 organisations registered in 2014, and 61% of organisations employ between just zero and nine people.

Cambridge CVS estimate that more than half of local voluntary and community groups run entirely on volunteers, with 80% of the remainder employing less than 5 people.¹⁸ More than half had a turnover of £10,000 or less, with just 15% managing a turnover of £100,000 or more. In 2013, Cambridge CVS estimated that for groups providing services to older people alone, volunteer hours were valued at £1.4m per annum.

5.6 Deprivation and poverty

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Child poverty rate			58th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Cambridge has low levels of relative deprivation

The most recent English indices of deprivation (2019) estimated 4.6% of residents in Cambridge were living in areas ranked as the most deprived 10% nationally, up slightly from 4.1% in 2010 but some way below national (19.9%) and national city benchmarks (19.9%).¹⁹ Only two other cities in England – Crawley and Aldershot – had a lower proportion of residents residing in such areas.

But Cambridge residents are more likely to experience deprivation relating to crime, housing and the environment

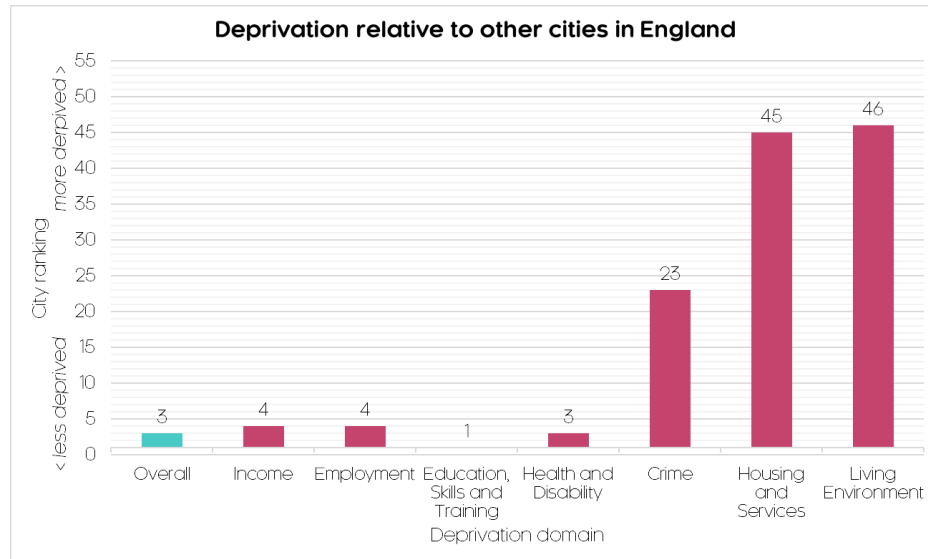


Chart source: MHCLG English indices of deprivation

Seven domains of deprivation are combined to produce the overall English indices of deprivation.²⁰ Relative to other cities in England, Cambridge received its lowest rankings – where 1 equates to the least deprived city in England - across crime (33rd of 55 cities), barriers to housing and services (11th), and living environment (10th) domains. Cambridge was the least deprived city in England in terms of education, and in the top 3 least deprived for all other domains.

And residents in certain neighbourhoods are at a higher risk of deprivation

The 2019 English indices of deprivation showed the most deprived neighbourhoods in Cambridge were East Barnwell & Abbey (which ranked in the 30% most deprived neighbourhoods in England) and

Kings Hedges (40% most deprived).²¹ The least deprived were Addenbrooke's & Queen Edith's, followed by Eddington & Castle and Central & West Cambridge. No neighbourhood in the City Fringe ranked *below* the 20% least deprived nationally.

The indices of deprivation, which is available to a highly detailed spatial level, also showed that *within* Cambridge neighbourhoods there are even smaller pockets – areas covering no more than 1,200 households - that are particularly deprived.²² For instance, parts of the East Barnwell & Abbey neighbourhood have been ranked in the 20% most deprived small areas in England over the past two rankings.

Poverty rates in Cambridge are low, and stable

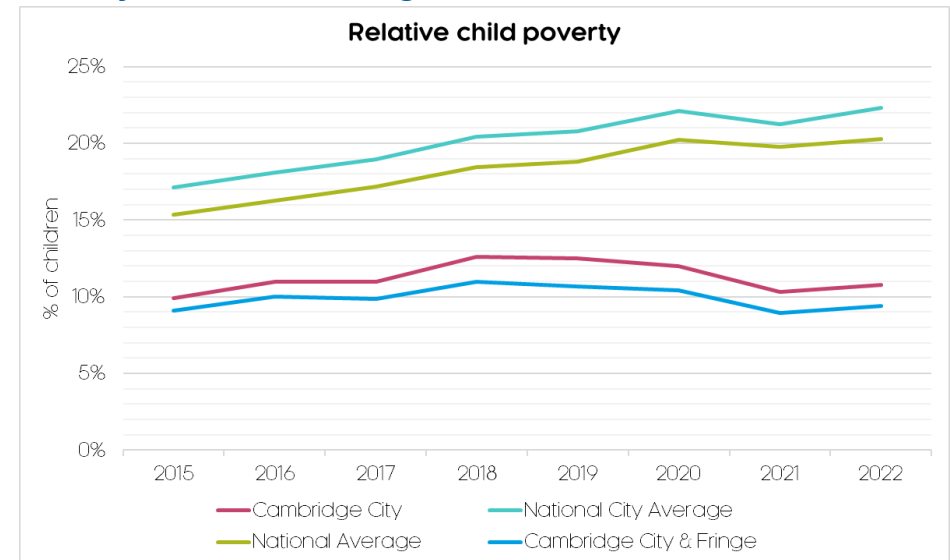


Chart source: DWP Children in low income families

An estimated 1 in 10 children across Cambridge (City & Fringe) – equivalent to 4,200 children - resided in *relative* poverty during 2021/22, half the rate of benchmark areas, where an estimated 2 in 10 children

reside in relative poverty.²³ In fact, during 2021/22 Cambridge had the lowest relative child poverty rate of 58 cities in England and Wales.

After increasing steadily up until 2017/18 – where it reached a peak of 11% - the child poverty rate started to ease in Cambridge, but did experience a small increase over 2020/21 to 2021/22, from 8.9% to 9.4%. It is expected this rate could increase again over 2022/23, with the associated cost of living crisis.

But poverty is highly concentrated in Cambridge’s more deprived neighbourhoods

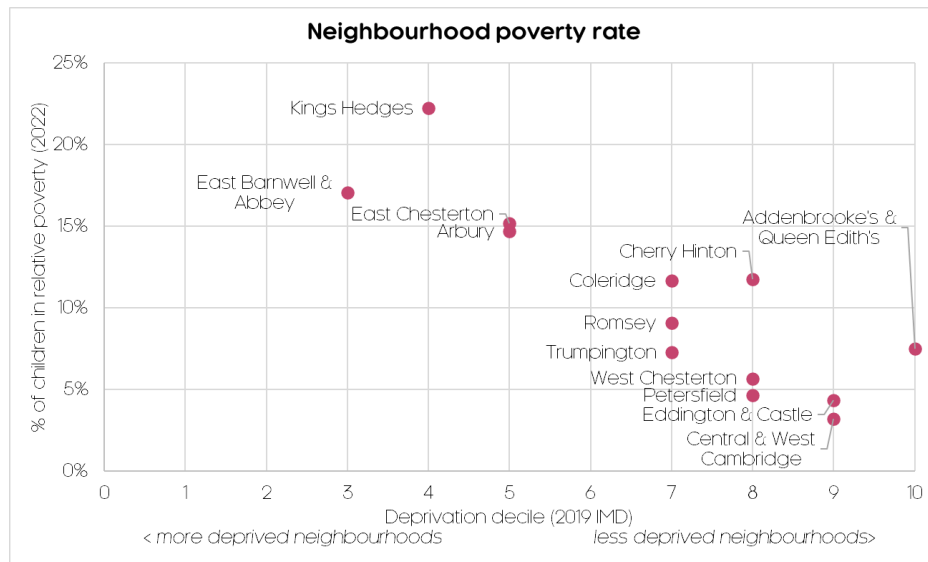


Chart source: DWP Children in low income families

Children in Cambridge’s more deprived neighbourhoods are twice as likely to reside in relative poverty; during 2021/22, an estimated 2 in 10 children in Kings Hedge’s resided in relative poverty, a rate marginally above the national average.²⁴ East Barnwell & Abbey, East Chesterton,

Coleridge and Cherry Hinton also experienced rates above the Cambridge (City & Fringe) average.

Additional, detailed analysis of deprivation and poverty within Cambridge, in both income and non-income forms, can found on the on the councils Mapping Poverty website.

5.7 Housing and homelessness

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Housing delivery (per 1,000 existing homes)	Blue	Blue	23rd (of 55)
Affordable housing delivery (per 1,000 residents)	Magenta	Blue	11th (of 55)
Home ownership rate	Blue	Magenta	53rd (of 55)
Homeless households (per 1,000 households)	Magenta	Magenta	21st (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The number of homes in Cambridge continues to increase, with the supply of new homes outpacing benchmarks

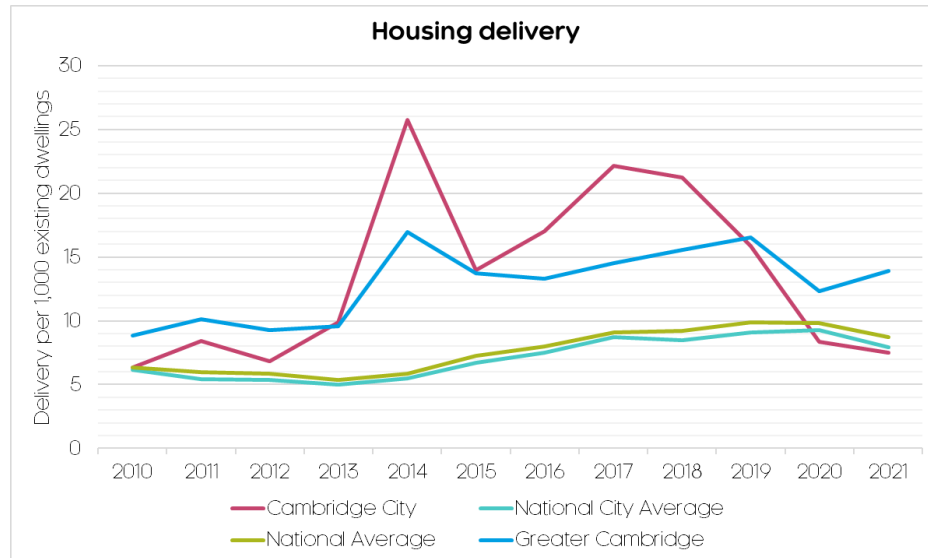


Chart source: DLUHC Live tables on dwelling stock

Between 2010/11 and 2020/21, the number of homes in Cambridge increased by 16.2%, almost double the increase observed across national (8.3%) and national city (7.7%) benchmarks.²⁵ In fact, over this period, the number of homes in the City increased by a greater proportion than any other city in England, with the number of homes in the City standing at 56,100 as of 2020/21.

An estimated 7,800 additional homes were delivered between 2010/11 and 2020/21, with rates of housing supply in Cambridge typically exceeding – often more than double – benchmark areas during this period. More recently, rates of supply in the City have moved in line with benchmarks, as delivery at ‘fringe sites’ moved outside administrative city boundaries.²⁶ Across Greater Cambridge, delivery over 202/21 remained 60% above the national average.

The supply of affordable homes also exceeds benchmarks

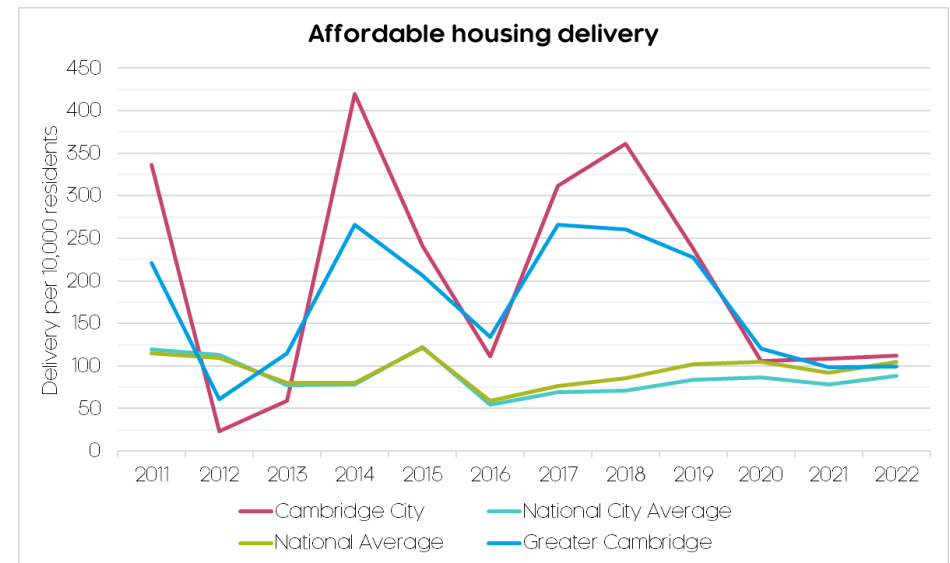


Chart source: DLUHC Live tables on affordable housing supply

Between 2010/11 and 2020/21, 3,100 affordable homes were delivered in Cambridge, which on a per resident basis was more than any other city in England.²⁷ This was also more than double the rate of benchmark areas, though in recent years Cambridge’s (and Greater Cambridge’s) rate of affordable housing delivery has moved closer in line with these benchmarks.

Cambridge's workforce is growing faster than the number of homes though

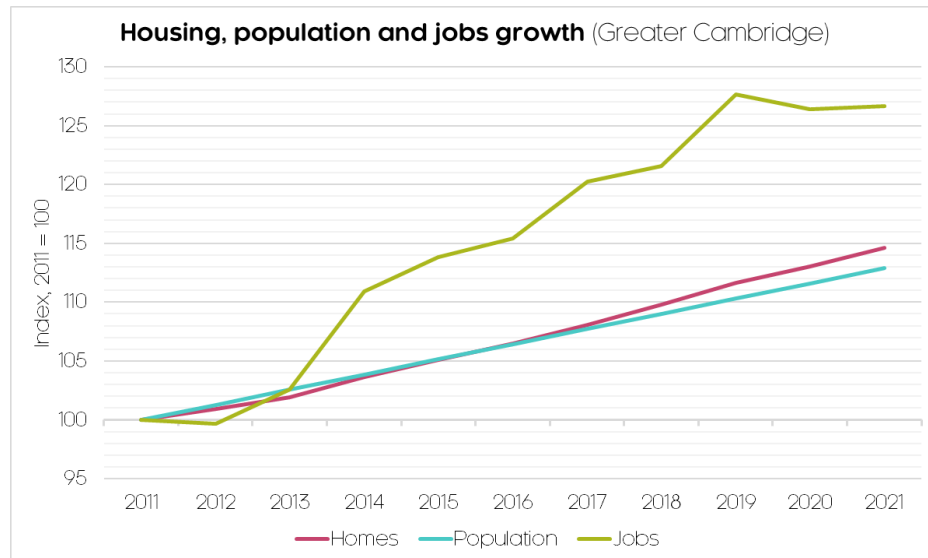


Chart source: DLUHC Live tables on dwelling stock (homes), ONS Employees in the UK (jobs), ONS Census (population). Chart presented as an indices, 2011 = 100

Between 2011 and 2021, the 15% increase in the number homes across Greater Cambridge, though ahead of benchmarks, was less than the 27% increase in jobs observed over the same period.²⁸ Across these three metrics, no other city in the country has recorded faster growth than Cambridge.

In fact, in 2021, across Greater Cambridge the number of jobs relative to the number of homes – at 1.56 – exceeded the national city average of 1.22. This can impact on affordability and commuting, with the 2011 Census showing two-thirds of Cambridge (City & Fringe) workers resided outside the area, and on average travelled the 5th furthest distance to work out of 58 cities in England and Wales.

Home ownership rates are increasing steadily, but remain below benchmarks

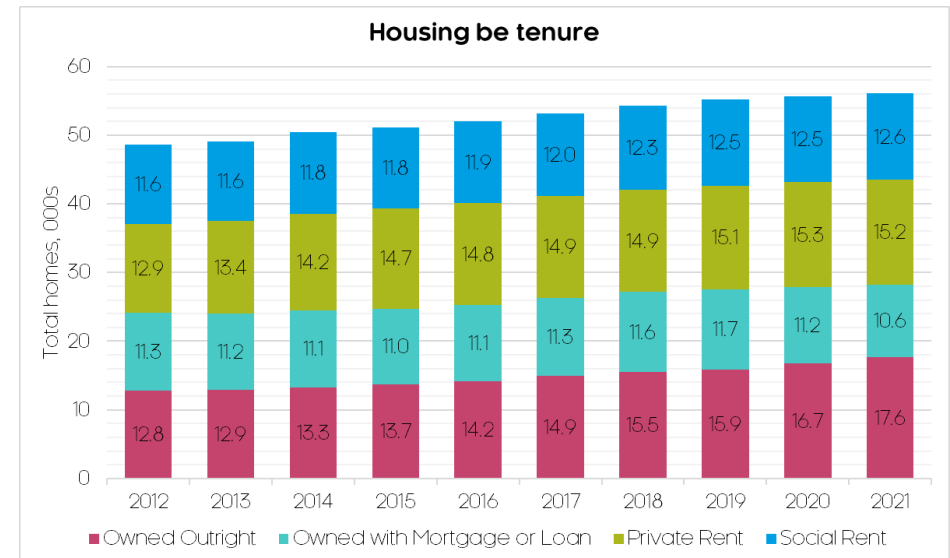


Chart source: ONS Subnational estimates of dwellings by tenure

The proportion of homes in Cambridge that are owned outright or with a mortgage by occupiers increased to 50.4% in 2020/21, up from 48.3% in 2015/16.²⁹ This rate does however lag national (63.5%) and national city (58.9%) benchmarks, though these gaps are slowly closing. Only Oxford and Hull had lower home ownership rates than Cambridge during 2020/21.

Of the remaining homes in Cambridge, 27.1% are privately rented (compared to the national average of 19.5% and national city average of 21.5%), and 22.5% are social rented (national average 16.9%, national city average 19.6%) by occupiers. When looking across the Greater Cambridge geography however, the home ownership rate increases to 61.9%, a similar rate to the national average.

Homelessness prevalence is above benchmarks, and increasing

During 2021/22, 618 households in Cambridge were assessed as homeless or threatened with homelessness, a 3% increase on the 599 assessed in 2020/21.³⁰ This is equivalent to 14.1 cases per 1,000 households in the City, which exceeds national (11.7) and national city (13.5) benchmarks, with Cambridge having the 21st highest number of cases per 1,000 households out of 55 cities in England.

Rough sleeping has increased, and remains above benchmarks

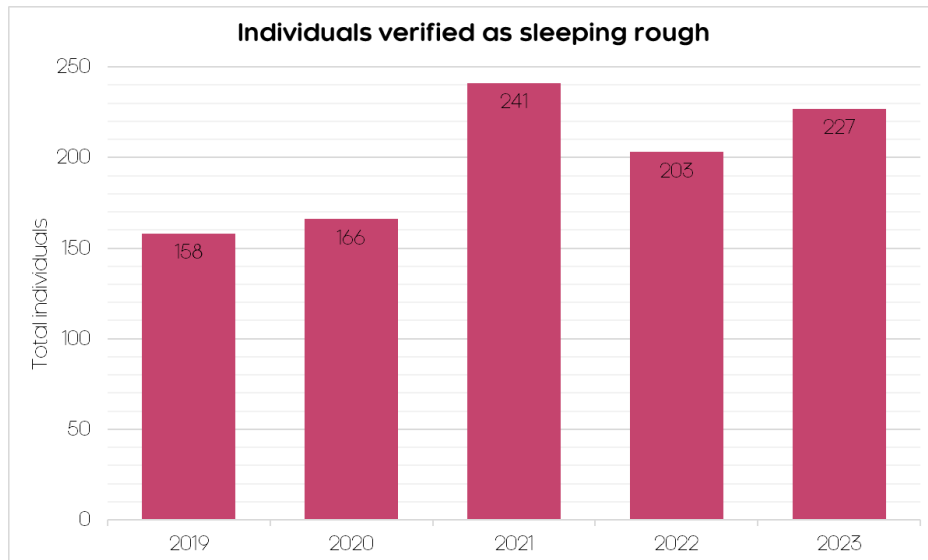


Chart source: Cambridge City Council Housing Advice

The number of individuals verified as sleeping rough in Cambridge throughout the year increased to 227 during 2022/23, up from 203 in the previous year.³¹ According to the alternative autumn ‘snapshot’ rough sleeping data, which uses less representative sample, in 2021 -

when adjusted for population - the incidence of rough sleeping in Cambridge was more than double the national average.³²

5.8 Housing costs and affordability

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Housing affordability ratio			2nd (of 58)
LQ housing affordability ratio			2nd (of 58)
Rental affordability ratio			3rd (of 58)
LQ rental affordability ratio			4th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Buying a home in Cambridge has become increasingly unaffordable

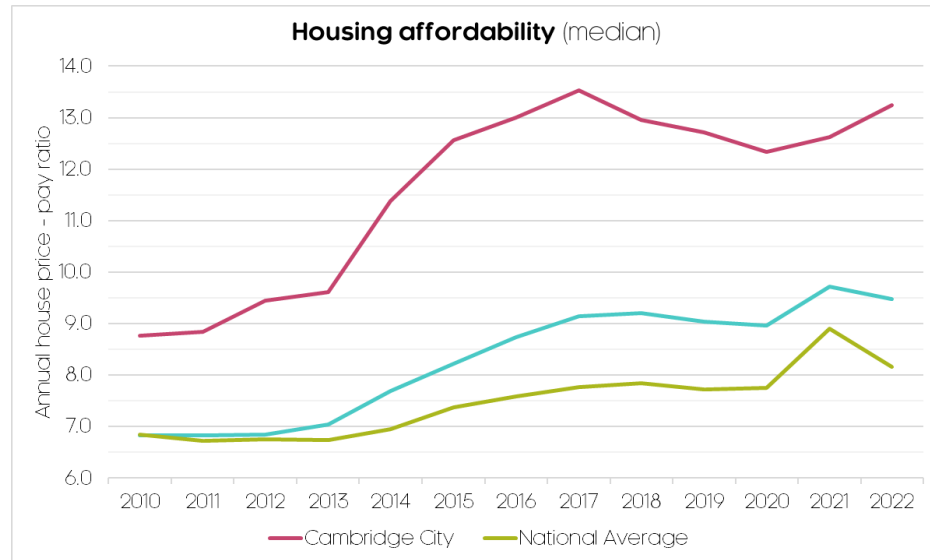


Chart source: ONS Housing affordability in England & Wales

The median price of a home in Cambridge stood at £475,000 in 2022, 76% higher than the national average of £270,000.³³ Between 2012 and 2022, the median price of a home in Cambridge has (in nominal terms i.e. not adjusted for inflation) increased by 73%, well ahead of the national average of 50%. At the same time, median pay in the City has increased by only 23%.

As a result, Cambridge's median housing affordability ratio (which looks at median house prices relative to median pay) has risen over this period, and currently stands at 13.3, well ahead of national (8.2) and national city (9.5) benchmarks, and 2nd only to London out of 58 cities in England and Wales.

Though this is a decline from its peak of 13.5 in 2017, the ratio is almost four times higher than when records started in 1997, when house prices in the City were only 4.4 times local wages. And in contrast to benchmarks, the ratio is increasing (i.e. affordability is declining) again in Cambridge.

Particularly for low-earners

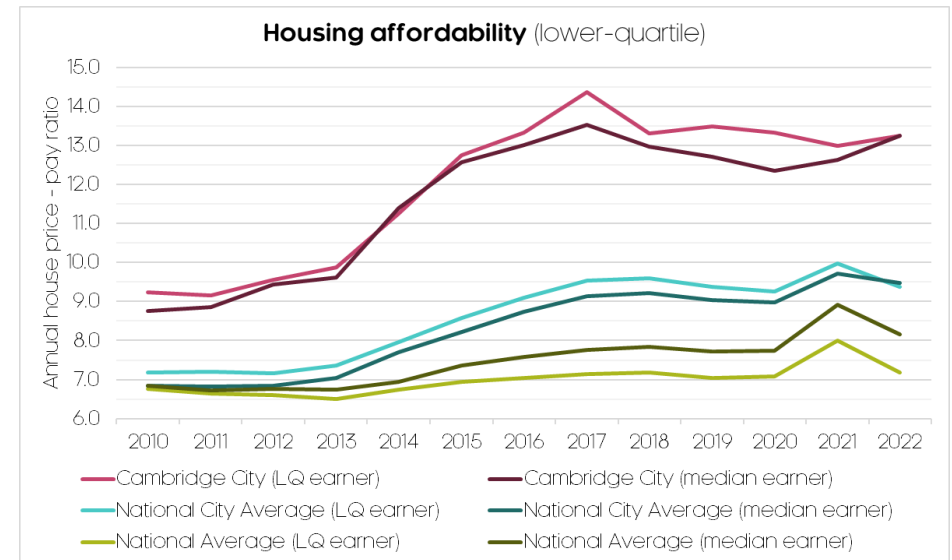


Chart source: ONS Housing affordability in England & Wales

In contrast to the national average, housing has been more unaffordable for low-earners relative to the median buyer in Cambridge; the lower-quartile affordability ratio (which looks at lower-quartile house prices relative to lower-quartile wages) stood at 13.2 in 2022, above the national lower-quartile affordability ratio of 7.2.³⁴ This ratio has declined from its peak of 14.4 in 2017.

The cost of renting privately is also high, particularly for low-earners

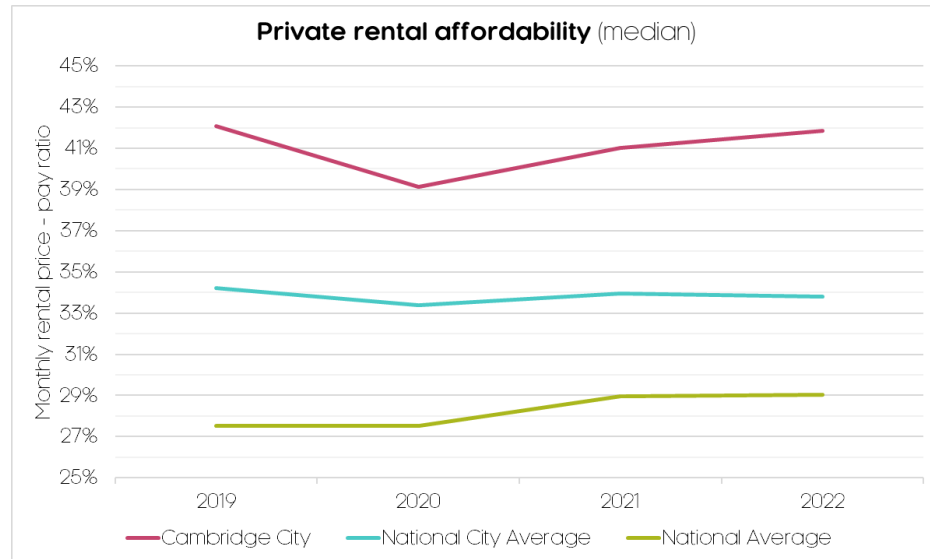


Chart source: ONS Private rental market summary statistics in England (for rental prices) and ONS Housing affordability in England & Wales (for pay)

During 2021/22, median private rental costs averaged £1,250 per calendar month in Cambridge, which was 56% higher than the national average of £800.³⁵ Since 2019, the median rental price Cambridge has increased (in nominal terms) by 4%, which is some way behind the national average of 14%.

Cambridge's private rental affordability ratio (which looks at the burden of rental prices relative to wages) has remained relatively steady over recent years, but exceeds benchmarks; in 2021/22, a worker on median pay in Cambridge could expect to spend 42% of their earnings on renting privately, compared to a national average of 29%.³⁶

This was the 3rd highest private rental affordability ratio out of 55 cities in England – that is, Cambridge is the 3rd least affordable city to privately rent, behind only Brighton and London. And as with housing affordability, this burden is higher for low-earners in Cambridge, with the private rental affordability ratio increasing to 49% for lower-quartile earners in the City, again above the national lower-quartile private rental affordability ratio of 27%.

Housing costs vary within Cambridge

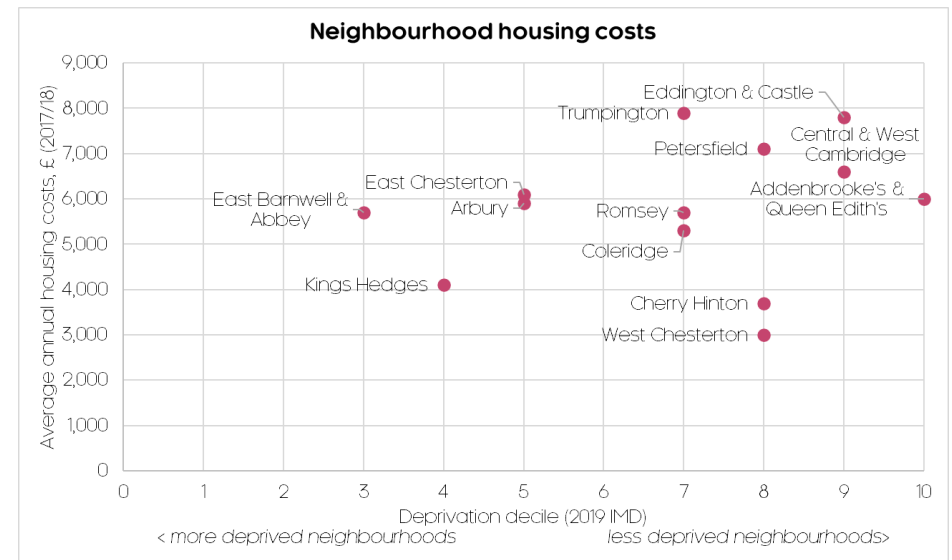


Chart source: ONS Small area income estimates

Over 2017/18, average annual housing costs – including both owning and renting - in Cambridge stood at £6,000, equivalent to 15% of average household disposable incomes.³⁷ The average housing costs varied within the City though, from highs of £7,900 in Trumpington and £7,800 in Eddington & Castle – Cambridge's most expensive neighbourhoods - to £3,700 in Cherry Hinton and £3,000 in West Chesterton – the latter, Cambridge's least expensive neighbourhood.

5.9 Crime and public safety

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Crime rate (per 1,000 residents)			49th (of 58)
Criminal re-offending rate			1st (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Police-recorded crime rates in Cambridge remain below pre-pandemic highs, and are now below the national city average

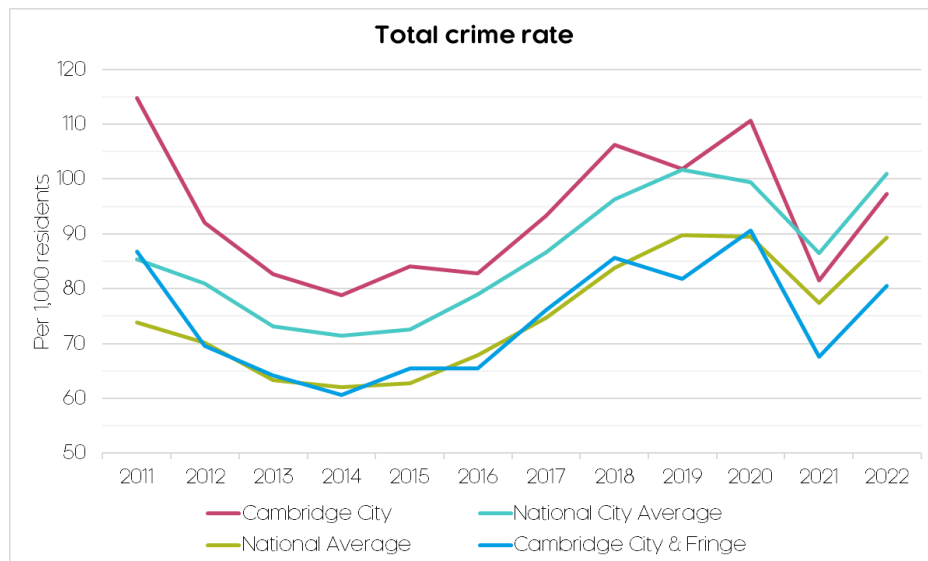


Chart source: ONS Crime in England and Wales

Overall, police-recorded crime is lower than pre-pandemic levels: there were 14,200 police-recorded criminal offences in Cambridge over 2021/22 (year ending March 2022), a 19% increase on the pandemic

low of 11,900 offences recorded in 2020/21.³⁸ This increase was faster than the national average of 15%, though the total crime recorded in was Cambridge still below pre-pandemic totals, with 15,900 offences recorded in 2019-20.

When adjusted for population, Cambridge recorded 97.2 offences per 1,000 residents in 2021-22, which was some 8% higher than the national average, but 4% lower than the national city average: a decade ago, crime rates in the City were 13% above the national city average. Compared to other cities in England Wales, Cambridge's crime rate is middle-ranking, lower than 32 other cities.

Between 2011/12 and 2021/22, Cambridge's crime rate only increased 5%, well below national (+24%) and national city (+27%) benchmarks, was the 14th smallest increase of 58 cities in England and Wales. However, it should be noted that, over such a long timeframe, changes to police-recorded crime do not always confer an actual change in crime, and may instead reflect changes to the way certain crimes are reported and recorded by police forces.

When extending the analysis to include the City Fringe, Cambridge's crime rate declines, averaging 97.2 offences per 1,000 residents over 2021/22, some 10% below the national average - a rate that pre-pandemic it typically matched – and equates to the 10th lowest rate of 58 cities.³⁹ There were 18,600 police-recorded criminal offences across the Cambridge City & Fringe over 2021/22.

The occurrence of some serious crime types has increased, although this partly reflects changing recording practices

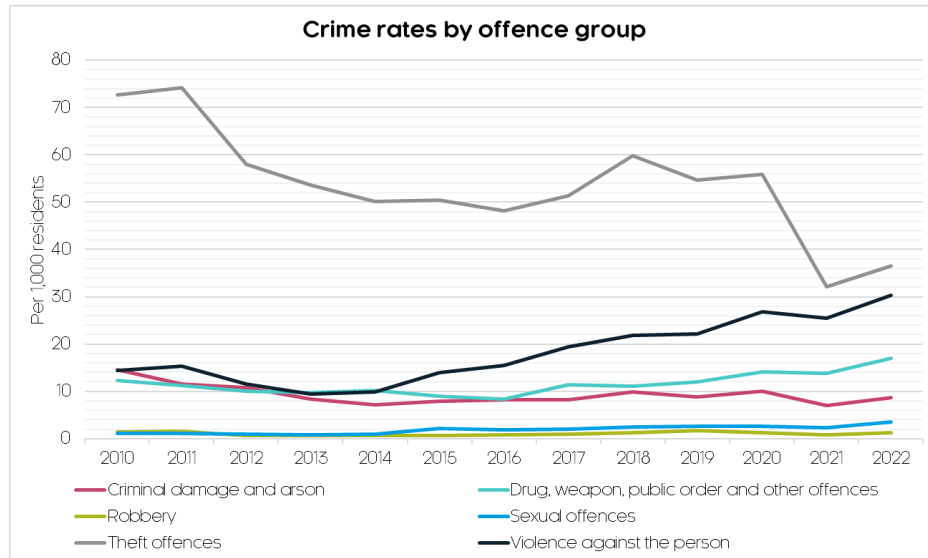


Chart source: ONS Crime in England and Wales

The majority of criminal offences in Cambridge are non-serious: almost a third (27%) of police recorded criminal offences in Cambridge over 2020/21 were ‘low-level’, the highest rate of any city in England and Wales.⁴⁰ Of course, such crimes - including bike theft and shoplifting - though ‘low-level’, can still have a significant economic impact and disrupt people’s daily lives.

There has however been an increase in some severe crime types recorded by police in Cambridge.⁴¹ Crime types that have seen a notable increase in Cambridge between 2010/11 and 2020/21 (on a per 1,000 residents basis) include sexual offences (+194%), violence against the person (+117%), and drug, weapon, public order and other offences (+40%).

However, it is important to note that, particularly over such a long timeframe, changes to police-recorded crime types do not always confer an actual change in that crime type, and may instead reflect changes to the way certain crimes are reported and recorded by police forces.

In particular, ONS analysis found for most police forces such trends “are likely to reflect recent improvements in recording practices, following critical inspections of forces by HMIC published in 2014 which identified that an estimated 1 in 5 offences (19%) that should have been recorded as crimes were not”.⁴²

Re-offending rates in Cambridge are increasing and above benchmarks

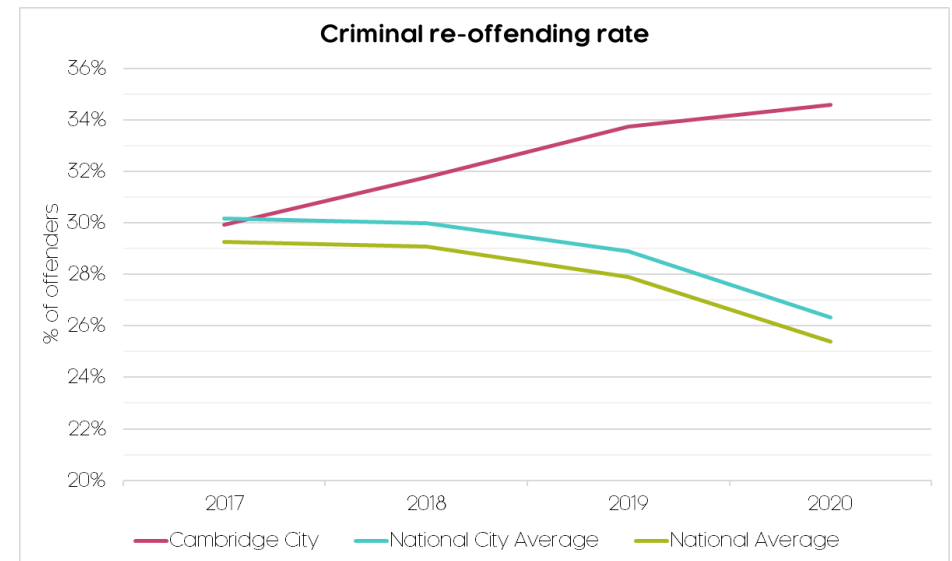


Chart source: OHID Public Health Outcomes Framework

During 2019/20, 34.6% of offenders in Cambridge re-offended. This was an increase on the 29.9% recorded in 2016-17, and ahead of

national (26.3%) and national city (25.4%) benchmarks, and was in fact the highest re-offending rate of 55 cities in England.⁴³ In contrast to benchmarks, Cambridge's re-offending rate has continued to increase, even during the pandemic. The average re-offender in Cambridge committed 5.2 offences in 2019/20, above the national average of 3.8.

Away from the City centre, crime in Cambridge is typically higher in more deprived neighbourhoods

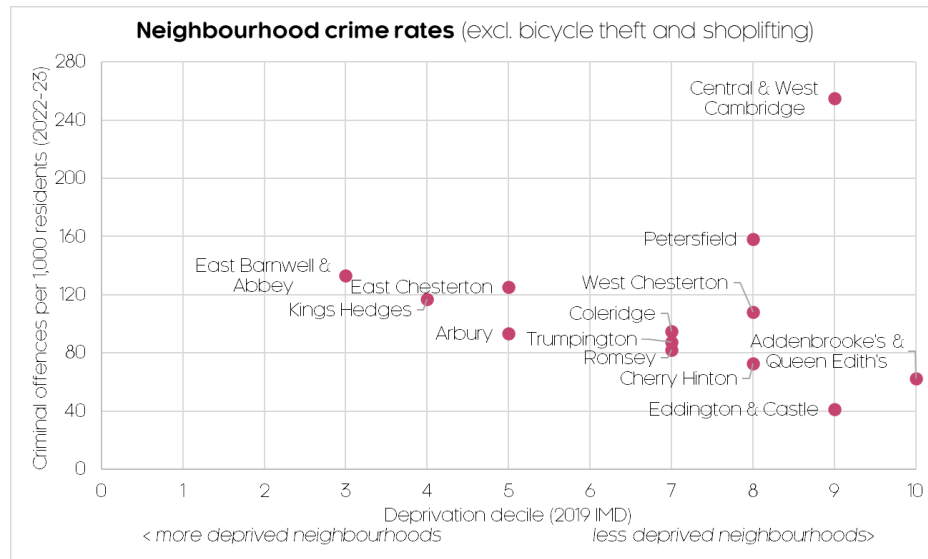


Chart source: Cambridgeshire Constabulary (via data.police.uk)

Even when excluding bicycle theft and shoplifting offences, police recorded crime rates over 2022/23 were highest in Central & West Cambridge (255 crimes per 1,000 residents) and Petersfield (158).⁴⁴ Away from these central neighbourhoods though, crime rates were generally higher – and above the national average – in less deprived neighbourhoods, including East Barnwell & Abbey (133 crimes per 1,000 residents) East Chesterton (125) and Kings Hedges (117).

6 Social Equity

6.1 Introduction

The **social equity lens** seeks to understand the experience of residents and different social groups in Cambridge, and associated inequalities and barriers. Sub-topics considered include:

- **Population and characteristics:** which looks at the size, growth and diversity of the Cambridge population.
- **Social gaps and barriers to equality:** which looks at key income and employment gaps for underrepresented social groups, and barriers to equality.
- **Educational attainment, inequalities and mobility:** which looks at educational attainment, educational inequalities and social mobility, from school years to higher education.
- **Health outcomes and inequalities:** which looks at life expectancies, health outcomes, healthy lifestyles and health inequalities.
- **Discriminatory and youth crime:** looks at discriminatory crime (such as hate crimes and domestic abuse) and youth offending.

6.2 Summary

Sources for the below summary are available in the main body of analysis

Cambridge's **population is the fastest growing of any city** in the country, with 230,800 residents (across the City & Fringe) in 2021. **Cambridge is also more diverse than benchmarks**, with 7 in 10 residents working age, 3 in 10 non-UK born, and 2 in 10 from an ethnic group.

Barriers to income and employment for disadvantaged groups (including women, ethnic groups, and those with disabilities, and the low and unskilled) are generally less prevalent in Cambridge, though some stubborn gaps remains. Residents in Cambridge's more **deprived neighbourhoods are more likely to be unemployed or in low income**.

Income inequality in Cambridge, as measured by the gap between the lowest and highest income residents, is the **2nd highest of 58 cities** in England and Wales, behind only Oxford. **Cambridge and Oxford are the only cities that have seen income inequality worsen** over the period data is available, although data is highly sensitive to the large student populations in these cities.

Educational attainment and progression in Cambridge is high - with **6 in 10 young people attending university** - but **disadvantaged pupils perform below average** - less than 3 in 10 attend university. Cambridge is ranked as the **2nd most highly skilled city** in the country, but in its more **deprived neighbourhoods, almost 3 in 10 residents were low or unskilled**.

Similarly, health outcomes are exceeding benchmarks, with **residents having the highest life expectancy of any city**, despite an unhealthier living environment (crime, air quality, road safety etc.) contributing to health inequalities, with a **12-year life expectancy gap between the most and least deprived neighbourhoods, the largest gaps in the country**.

Discriminatory crime, including **hate crimes and domestic abuse, are trending below the national average** in Cambridge, but **account for a disproportionate share of high harm crime types**. **Youth offending rates are low**, although youth re-offending is above the national average, albeit based on a very small sample size.

6.3 Population and characteristics

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Population share non-UK born			6th (of 58)
Population share from non-White ethnic group			21st (of 58)
Population share working age			2nd (of 58)
Population share with long-term health problem/disability			52nd (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Cambridge's population is the fastest growing of any city in the country

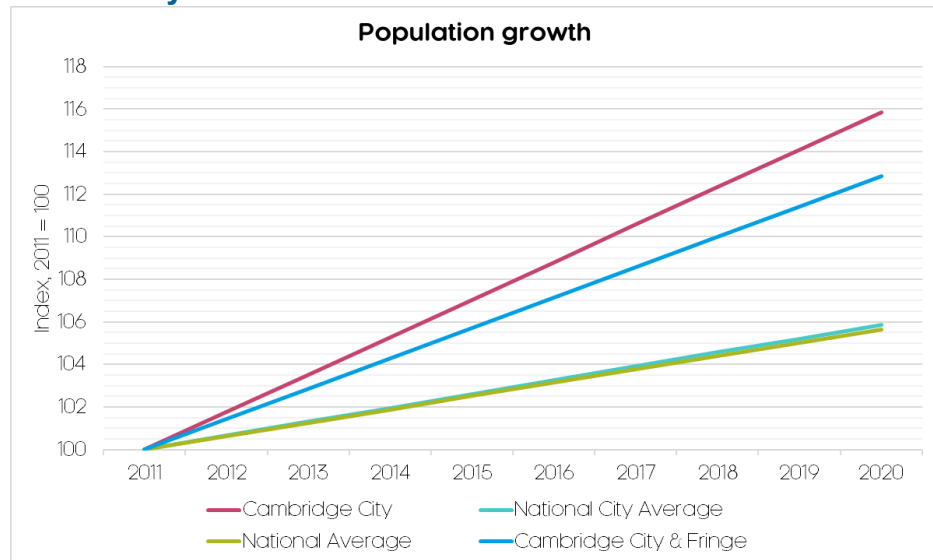


Chart source: ONS Census (chart data presented as an indices, 2011 = 100)

The latest Census estimates showed the Cambridge population reached 145,700 in 2021, increasing to 230,800 when including the City Fringe.⁴⁵ This ranked Cambridge as the 53rd most populated city in the country (out of 58 cities in England and Wales) in 2021, though this rises to 41st when including the City Fringe.

Since 2011, the population of Cambridge has grown significantly faster than – more than double the rate of – benchmarks, with Cambridge's population ranked as the fastest growing of any city in England and Wales. Over 2011-21, the population of Cambridge (City & Fringe) increased by 28,900 people.

Cambridge is more diverse than benchmarks

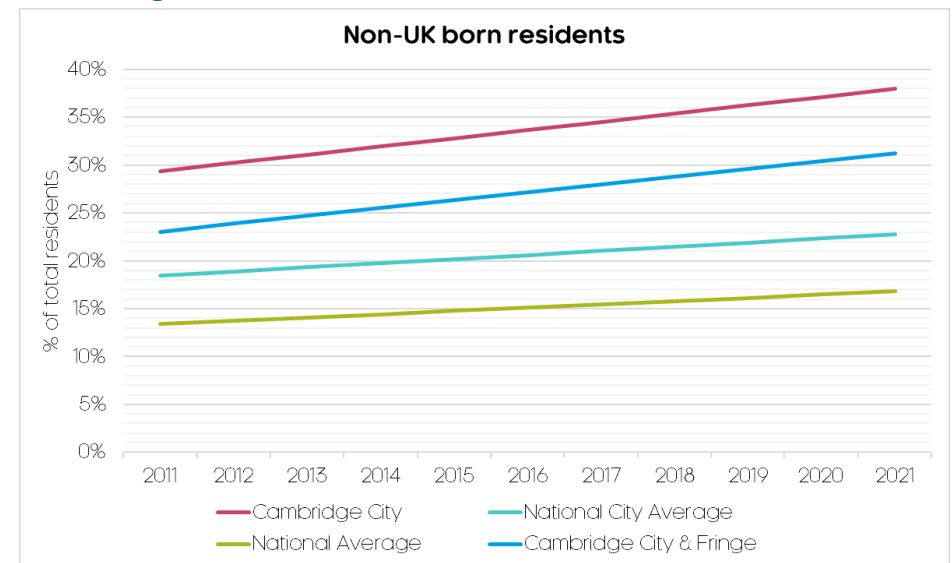


Chart source: ONS Census (via nomisweb.co.uk)

In the 2021 Census, an estimated 72,900 residents - 31% of the population - across Cambridge (City & Fringe) were born outside the UK, up from 23% in 2011, and a rate well in excess of national (17%)

and national city benchmarks (22%) – in fact, only five other cities nationwide have a higher share.⁴⁶ Just under half (48%) of these 71,600 residents were born in Europe.

Similarly, the proportion of the population from a non-White ethnic group (regardless of nationality) stood at 21% in 2021, above the national average (18%), and up from 14% in 2011. Of the 49,100 Cambridge (City & Fringe) residents from a non-White ethnic group in 2021, 57% were Asian, 33% were Other, Mixed or Multiple ethnic groups, and 10% were Black, Caribbean or African.

For the first time, the 2021 Census also allowed adult (aged 16+) respondents to report their sexual orientation; 93% of adult residents across Cambridge (City & Fringe) reported being straight or heterosexual with 7% (equating to 11,700 residents) reporting their orientation as gay, lesbian, bisexual or other, twice the national average, and the 3rd highest of 58 cities in England and Wales.

And has a younger age profile

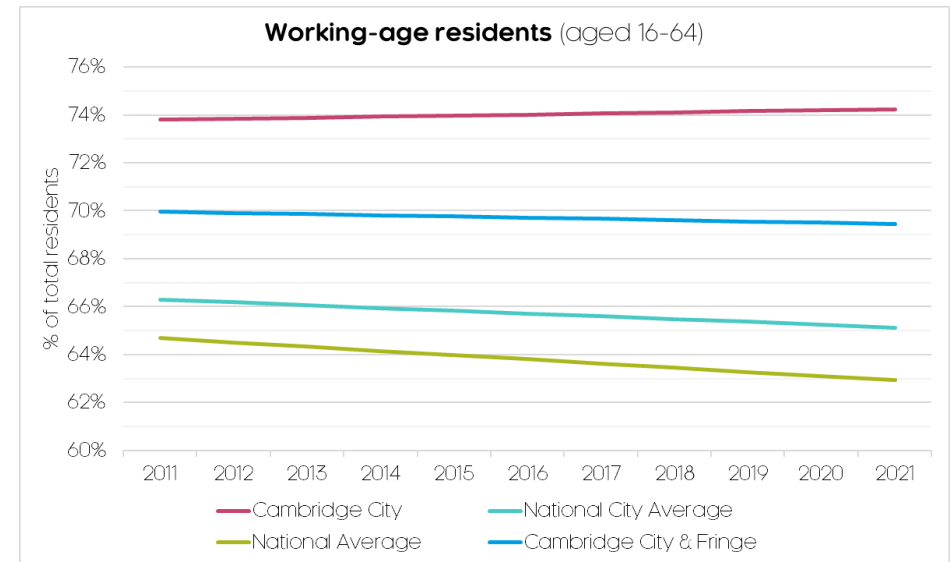


Chart source: ONS Census (via nomisweb.co.uk)

The 2021 Census showed 69% of the Cambridge (City & Fringe) population was of working age (aged 16-64), a share second only to Oxford out of 58 cities in England and Wales.⁴⁷ A large part of this is attributable to Cambridge's large student population – which the Census showed numbered 36,500 full-time students in 2021 - although other working age groups (ages 24-64) are still overrepresented.

In contrast to benchmarks, this share has stayed relatively stable over recent years, and is identical to that recorded 2001. The 2021 Census also showed 15% of the City & Fringe population was of retirement age (aged 64+), in line with the national city average, and up marginally from 14% in 2011.

The number of residents with long-term health problems or a disability is increasing

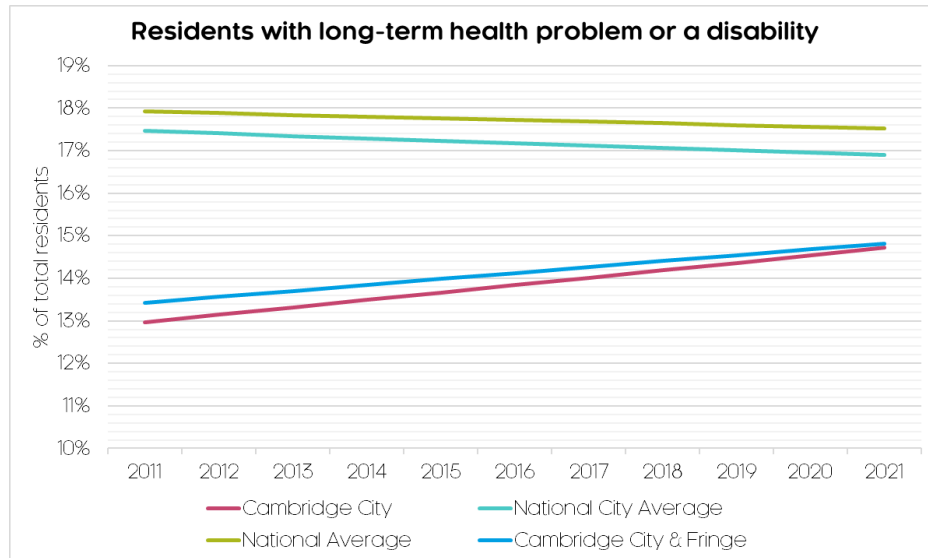


Chart source: ONS Census (via nomisweb.co.uk)

According to the 2021 Census, 15% of Cambridge (City & Fringe) residents reported having a long-term health problem or a disability, a proportion below benchmark areas, although this share has increased over the past decade.⁴⁸ Since 2011, there has been 8,100 additional residents reporting a long-term health problem or a disability.

6.4 Social gaps and barriers to equality

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Gender pay gap	Blue	Magenta	40th (of 58)
Ethnic group employment gap	Blue	Blue	N/A
Disability employment gap	Blue	Blue	N/A
Low and unskilled employment gap	Blue	Blue	N/A
Income inequality (20th-80th percentile ratio)	Magenta	Magenta	2nd (of 55)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Gender employment and income gaps are in line with benchmarks, though progress has slowed

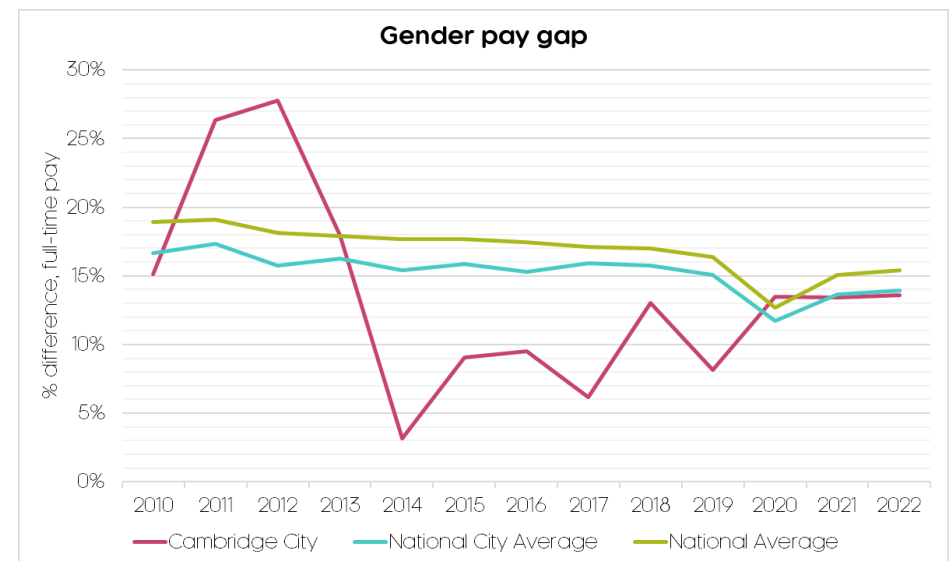


Chart source: ONS Employee earnings in the UK (via nomisweb.co.uk)

The female employment rate in Cambridge (City & Fringe) averaged 73.9% in 2022, above the national average of 72.0%.⁴⁹ However, this was below the male employment rate of 85.8%, meaning females are 14% less likely to be in employment than males, larger than the national average of 9%, and was the 4th consecutive year the gap has widened.

In terms of pay, on a weekly full-time basis, females in Cambridge were paid 14% less than their male counterparts in 2022, a shortfall in line with benchmarks, and the 19th smallest gap of 58 cities in England and Wales.⁵⁰ However, this gap has widened in Cambridge over recent years, up from just 3% in 2014, despite continuing to decline for benchmarks.

Ethnic groups in Cambridge face barriers to work, although these are below benchmarks and declining

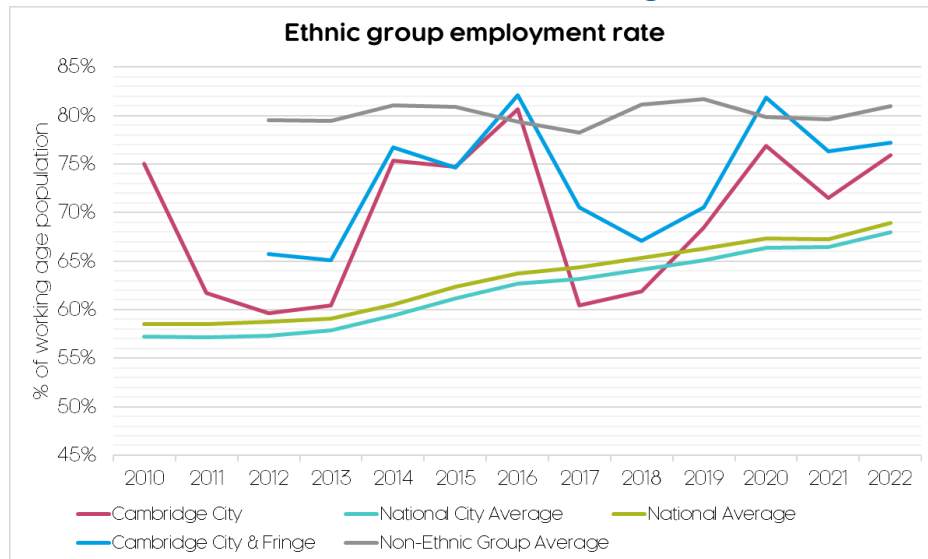


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

Employment rates for ethnic groups in Cambridge (City & Fringe) averaged 77.2% in 2022, above the national average of 68.9%, but below the 81.0% average for the rest of the population.⁵¹ This means ethnic groups in Cambridge are 5% less likely to be in employment than the rest of the population, which is half the national average (10% gap), and a decline on the 17% gap recorded in 2012.

An increasing number of those with a core or work-limiting disability are in work, ahead of benchmarks

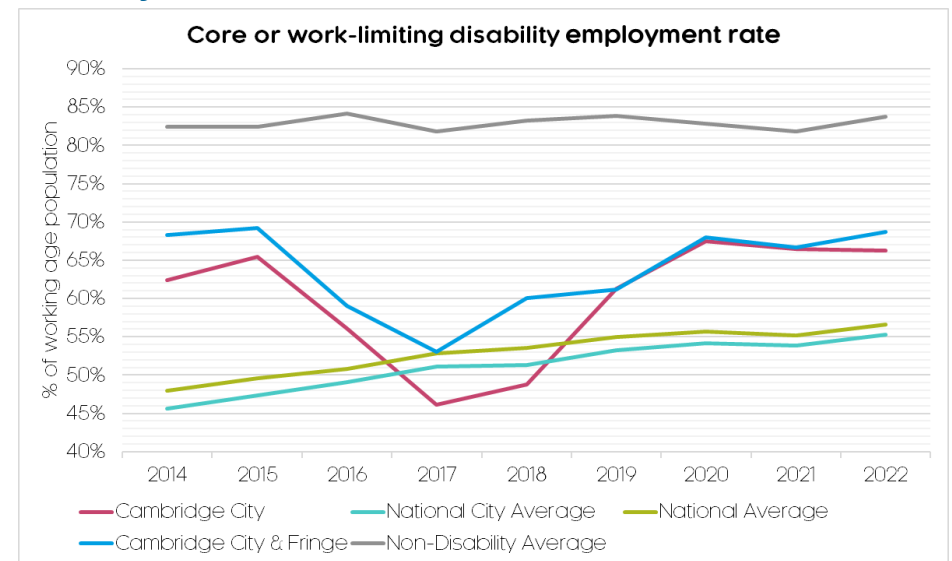


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

The employment rate for those with a core or work-limiting disability in Cambridge (City & Fringe) averaged 68.7% in 2022, above the national average of 56.6%, but below the 83.8% average for the rest of the population.⁵² This means residents with a core or work-limiting disability are 18% less likely to be in employment than the rest of the population,

thought this gap is significantly smaller than the 31% average for benchmark areas.

Barriers to work for low and unskilled residents are declining, and Cambridge outperforms benchmarks

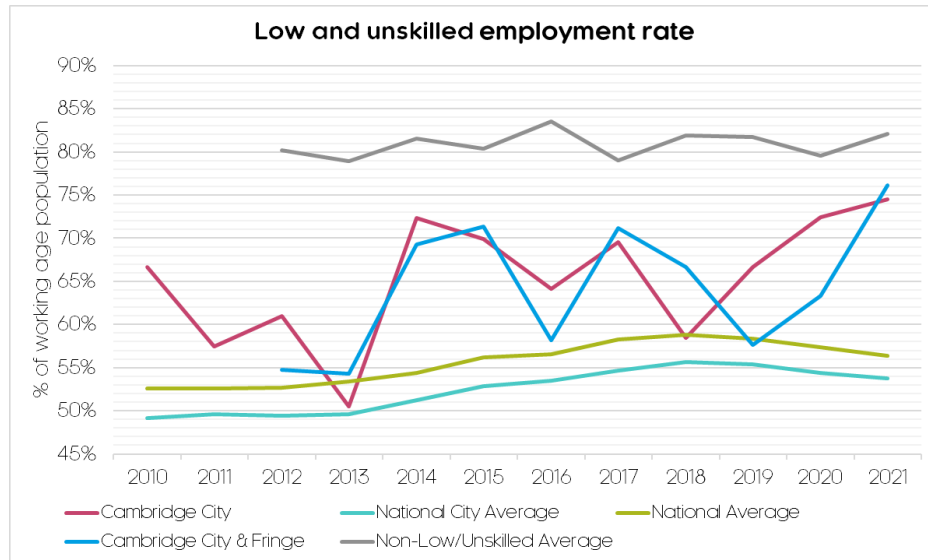


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

Employment rates for low or unskilled residents in Cambridge (City & Fringe) averaged 76.1% in 2022, well ahead of the national average of 56.4%, but below the 82.1% average for the rest of the population. This means low or unskilled residents in Cambridge are 7% less likely to be in employment than the rest of the population, a gap that is closing and significantly smaller than the national average (28%).

Residents in Cambridge’s more deprived neighbourhoods are more likely to be out of work

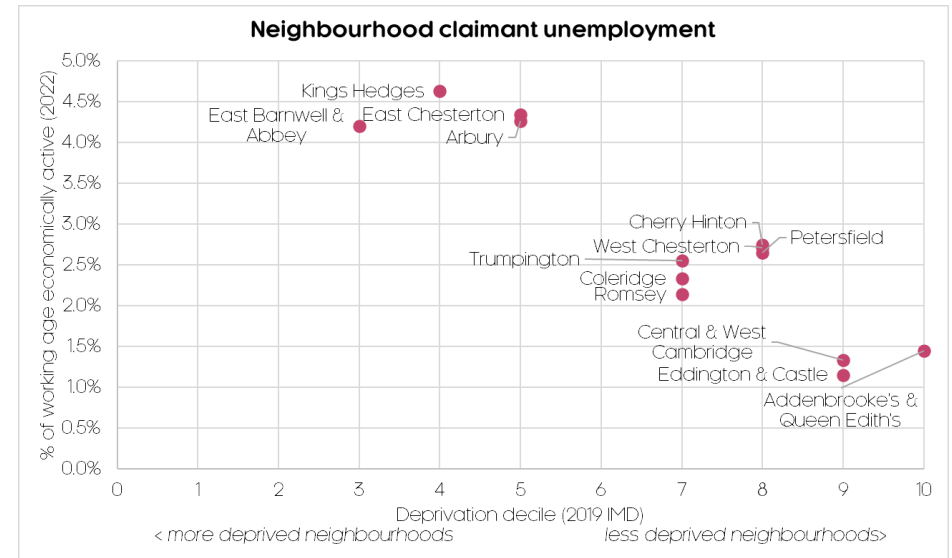


Chart source: DWP Claimant count (for claimants) ONS Census (for economically active)

Claimant unemployment rates in Cambridge (City & Fringe) averaged 2.5% in 2022, half the national average of 5.1%.⁵³ Yet rates varied within Cambridge, with residents in Cambridge’s more deprived neighbourhoods almost three times more likely to be unemployed than residents in its least deprived ones. Over 2022, claimant unemployment rates were highest in Kings Hedges (4.6%), East Chesterton (4.2%) and Arbury (4.2%), though these were all below the national average.

Cambridge has some of the highest income inequality in the country, although data is sensitive to the large student population in the City



Chart source: ONS Admin-based income statistics, data for individuals

Cambridge has previously been ranked by the Centre for Cities as the most unequal city in the UK, based on their estimates of the Gini coefficient using experimental ONS data.⁵⁴ Alternative data from the ONS recently made available (also experimental), shows the gap (i.e. ratio) between the lowest (20th percentile) and highest (80th percentile) income residents is the 2nd largest of 58 cities in England and Wales, behind only Oxford.⁵⁵

The ratio stood at 4.2 in 2017/18, an increase on the 3.9 recorded in 2015/16, and ahead of national (3.0) and national city (3.1) benchmarks. In fact, Cambridge and Oxford were the only cities to experience an increase in the ratio over the period. Of course, such a

ratio is extremely sensitive to its population sample, and for Cambridge (and Oxford) this will include the large student population, which will lower average incomes at lower percentiles, thus inflating the ratio.

And as required by the ONS, when interpreting this data the following should be noted: *“these admin-based income statistics are experimental and should not be used as an indicator of poverty or living standards. Rather they are published to demonstrate the feasibility of producing income statistics using a different methodology to that currently used in the production of income statistics.”* Additionally, the dataset is often updated with a significant lag (currently five years).

6.5 Educational attainment, inequalities and mobility

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Aged 16 (GCSE) attainment			4th (of 55)
FSM/non-FSM aged 16 attainment gap			5th (of 55)
Aged 19 (Level 3) attainment			N/A
FSM/non-FSM aged 19 attainment gap			N/A
Sustained destination aged 18			5th (of 55)
Residents educated to NVQ3+			2nd (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Educational attainment is above benchmarks in Cambridge, but with significant inequalities

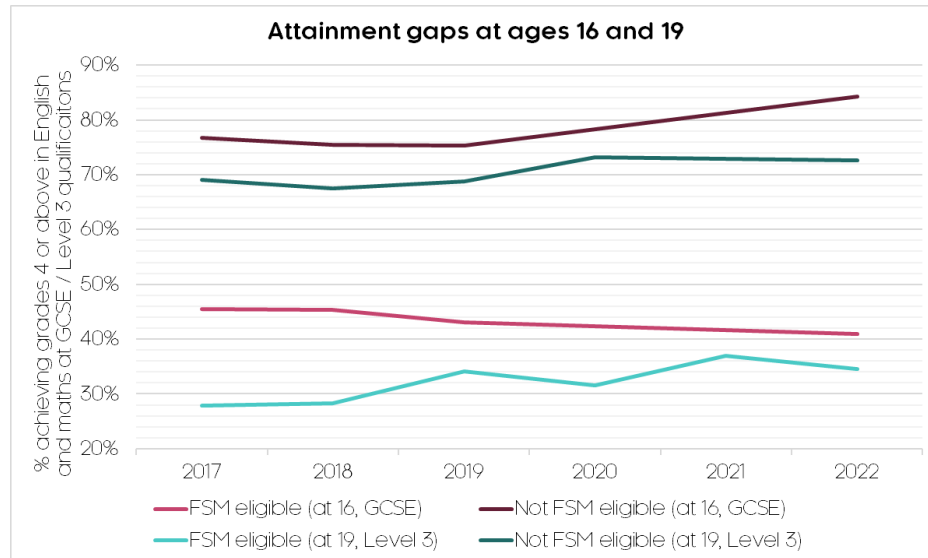


Chart source: DfE Explore education statistics

During the 2021/22 academic year, 76% of pupils aged 16 attending Cambridge City schools achieved grades 4 or above in English and maths at GCSE, which was well in excess of the national average and national city benchmarks of 69%.⁵⁶ This placed Cambridge pupils as the 4th highest achieving out of 55 cities in England.

This performance however masks significant variation and inequality in attainment; for Cambridge pupils receiving free school meals (FSM), this proportion dropped to 45%, which even lagged the national FSM pupil average (47%), with Cambridge exhibiting a much larger – the 5th largest of 55 English cities - and growing attainment gap.

This attainment gap persists post-GCSE in Cambridge: during 2021/22, 73% of 19-year-olds achieved a Level 3 qualification, above the

national average of 64%.⁵⁷ For FSM students however, this rate dropped to 35%, again below the national FSM student average of 40%. Both attainment gaps (at GCSE and post-GCSE) are widening in Cambridge.

Participation rates post-18 are above benchmarks, with the majority entering higher education

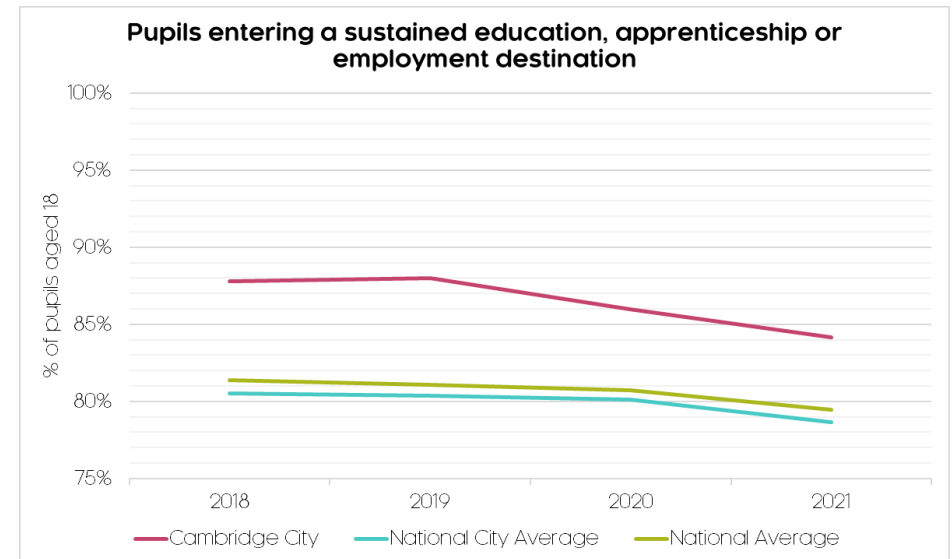


Chart source: DfE Explore education statistics

At the end of the 2020/21 academic year, 84% of those completing their education aged 18 in Cambridge entered a sustained education, apprenticeship or employment destination, above the national average of 79% and the 5th highest share of 55 cities nationwide, although this was the third consecutive year the share declined (from a high of 88% in 2018/19).⁵⁸

The vast majority of those completing their education aged 18 in Cambridge enter higher education, with 59% of those entering a

sustained destination in 2020/21 opting for a higher education destination, well ahead of the national average of 45%, and up from 50% in 2018/19. Of the remaining share, 30% started employment, whilst 11% entered a further education or apprenticeship destination.

And youth unemployment and NEET rates are below benchmarks

At the end of the 2020/21 academic year, 10% of those completing their education aged 18 did not enter a sustained destination, which includes those not in education, employment or training (NEETs), which was a marginal increase on the 8% share recorded in 2018-19.⁵⁹ This was lower than the national average however (which stood at 15%).

During 2022, Cambridge's (City & Fringe) youth (aged 16-24) claimant unemployment rate averaged 2.8%, well below the national average (6.4%), and down from the high of 5.7% in 2021.⁶⁰ At the height of the pandemic though, young people in Cambridge were 1.6 times more likely to experience unemployment than the rest of the population – elsewhere in the country, they were 1.3 times more likely.

Yet there are significant gaps and inequalities in terms of higher education participation

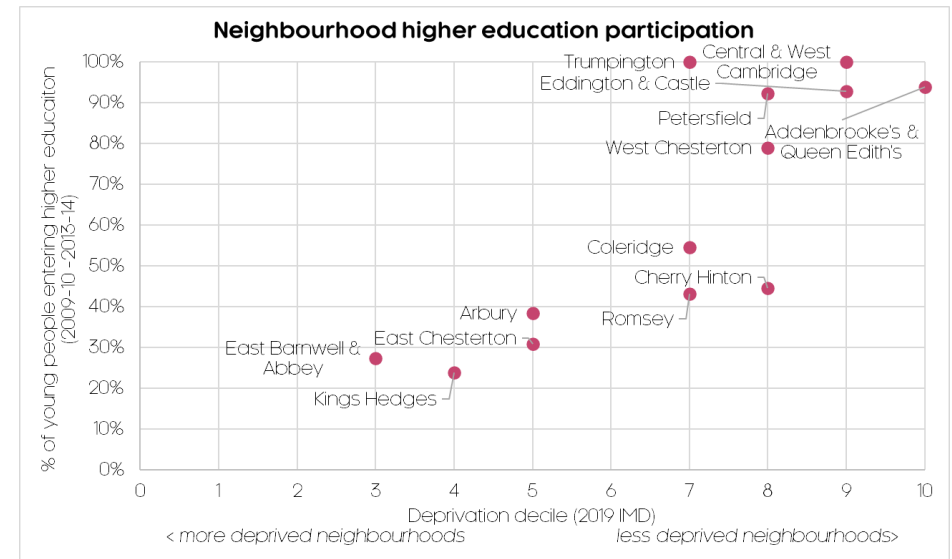


Chart source: Office for Students POLAR4

On average, higher education participation in Cambridge is ahead of benchmarks: longitudinal analysis undertaken by the Office for Students found between the 2009/10 and 2013/14 academic years, 58% of young people in the City entered higher education, well ahead of the national average of 38%.⁶¹

Yet some neighbourhoods in Cambridge had participation rates below this national average, including Kings Hedges (24%), East Chesterton (31%) and East Barnwell & Abbey (27%), which are also three of Cambridge's most deprived neighbourhoods. Participations rates were significantly higher in less deprived neighbourhoods, such as Eddington & Castle, where the rate stood at 93%.

Strong attainment and skilled migration has contributed to Cambridge's highly skilled population

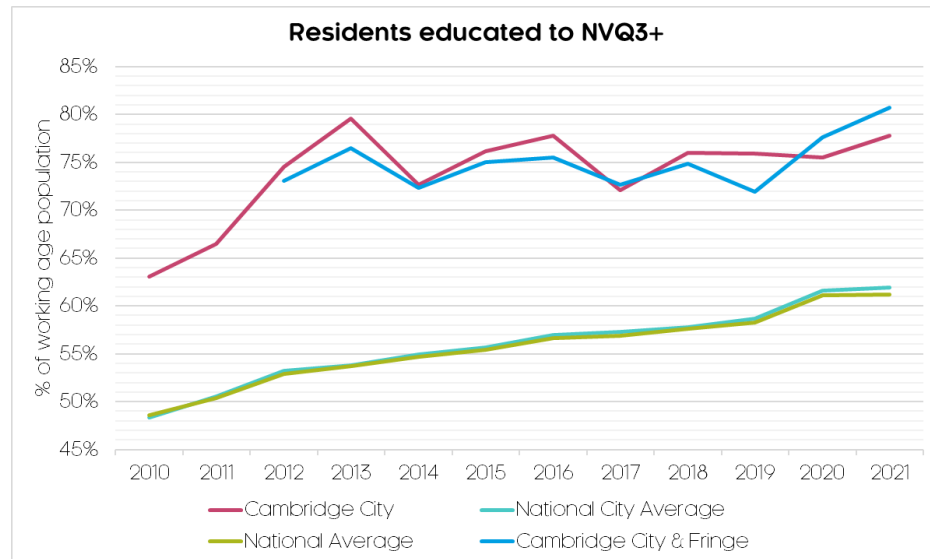


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

During 2021, a record 81% of working age (aged 16-64) Cambridge (City & Fringe) residents were educated to NVQ Level 3 or above, a proportion above benchmark areas (62%), and second only to Oxford out of 58 cities in England and Wales.⁶² This was also an increase on the 73% share recorded in 2012.

In addition to this, the proportion of residents that are low (NVQ Level 1) or unskilled (no formal qualifications) stood at only 5%, half the average for benchmark areas (10%), and behind only Brighton and York out of 58 cities in England and Wales. This share has also halved from the 11% recorded in 2012.

Cambridge's highly skilled population is driven by both strong educational attainment and progression, and high levels of skilled

migration; analysis by the Centre for Cities showed 77% of new residents in Cambridge were educated to NVQ Level 3 or above – a higher share than any other city nationwide – whilst almost 2 in 10 university students stayed in the City following graduation.⁶³

Though Cambridge's more deprived neighbourhoods have a higher proportion of low and unskilled residents

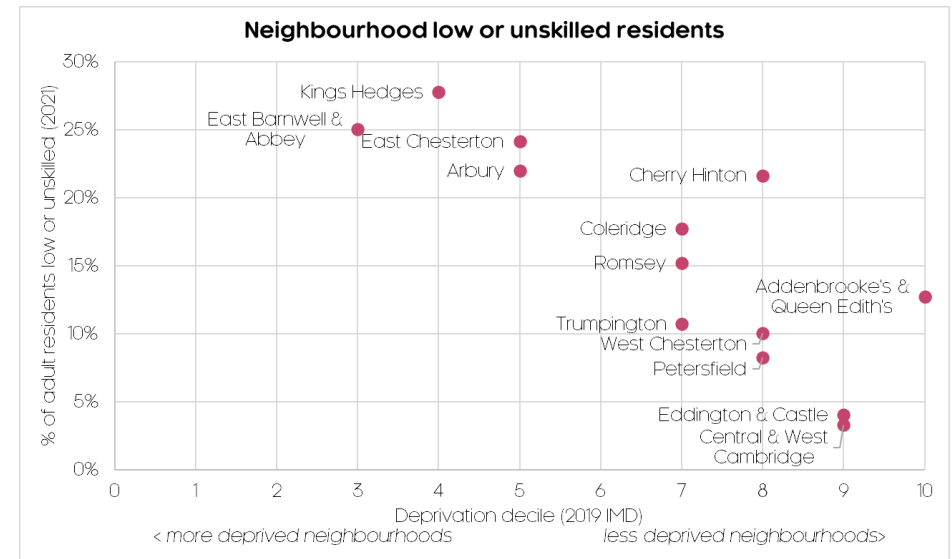


Chart source: ONS Census (via nomisweb.co.uk)

Data from the 2021 Census shows Cambridge's most qualified neighbourhoods included Central & West Cambridge and Eddington & Castle, where more than 9 in 10 residents (aged 16+) were qualified to NVQ Level 3 or above.⁶⁴ Meanwhile, in Kings Hedges and East Barnwell & Abbey - two of Cambridge's most deprived neighbourhoods - almost 3 in 10 residents were low or unskilled.

6.6 Health outcomes and inequalities

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
'Healthy people' health index score			N/A
'Healthy lives' health index score			N/A
'Healthy places' health index score			N/A
Life expectancy inequality (females)			1st (of 58)
Life expectancy inequality (males)			6th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Life expectancies are above average in Cambridge, but progress has slowed

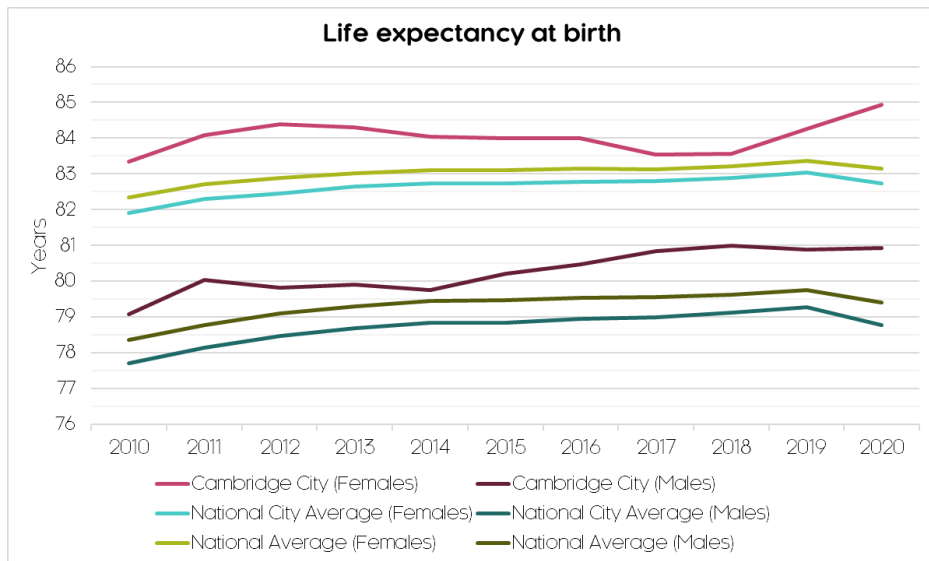


Chart source: OHID Public Health Outcomes Framework

The average life expectancy at birth in Cambridge stood at 84.5 years for females and 80.9 years for males over 2018-20, both of which exceeded benchmarks areas and were in fact – for both males and females – the highest life expectancies recorded by any city in England.⁶⁵

Despite this, Cambridge has not been immune to the national slowdown in life expectancy improvements over the past decade: before 2010-12, life expectancy (for both males and females) improved on average by 0.3 years per annum – since 2010-12, this has averaged only 0.1 years per annum.

Life expectancies in Cambridge’s City Fringe relative to the City average in 2016-2020 were on average 1.3 years higher for males and 0.9 years higher for females.

Health outcomes are high and improving in Cambridge, relative to benchmarks

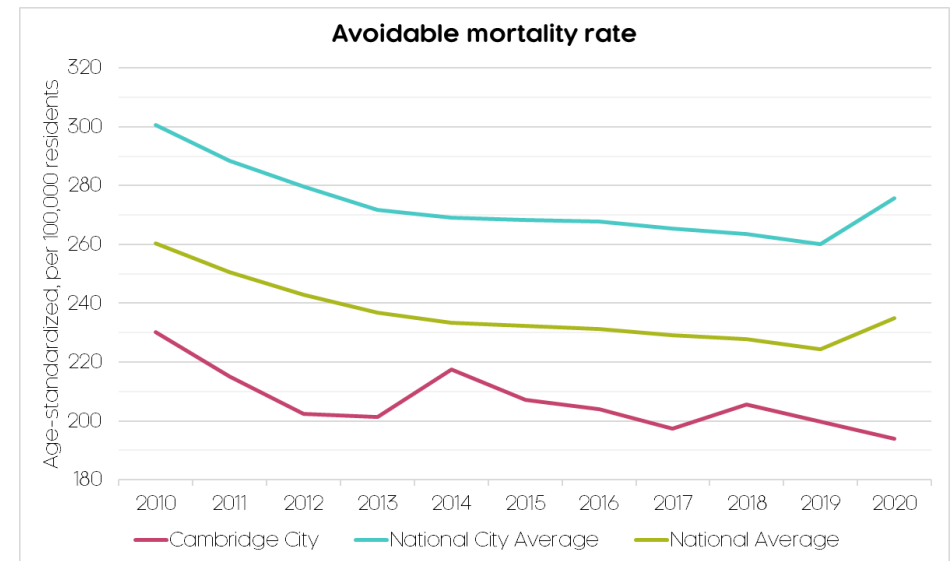


Chart source: OHID Public Health Outcomes Framework

The general health of the population in Cambridge – in terms of mortality rates, avoidable mortality, and the impact of physical and mental health conditions – is improving relative to the national average, according to research by the ONS.⁶⁶ Across a weighted index of priority indicators, Cambridge’s ‘healthy people’ domain score increased to 114.2 in 2020, exceeding the national average, which declined to 95.4.

Cambridge’s strong performance in this domain was attributable to better health outcomes for residents - exceeding the national average - in terms of personal wellbeing, mortality (including avoidable mortality and Covid-19 related mortality), and physical health conditions (particularly cardiovascular and musculoskeletal). Mental health, especially young peoples, was however noted as an area where Cambridge underperformed, in addition to respiratory health conditions.

Residents in Cambridge are also more likely to engage in healthier lifestyles than benchmarks

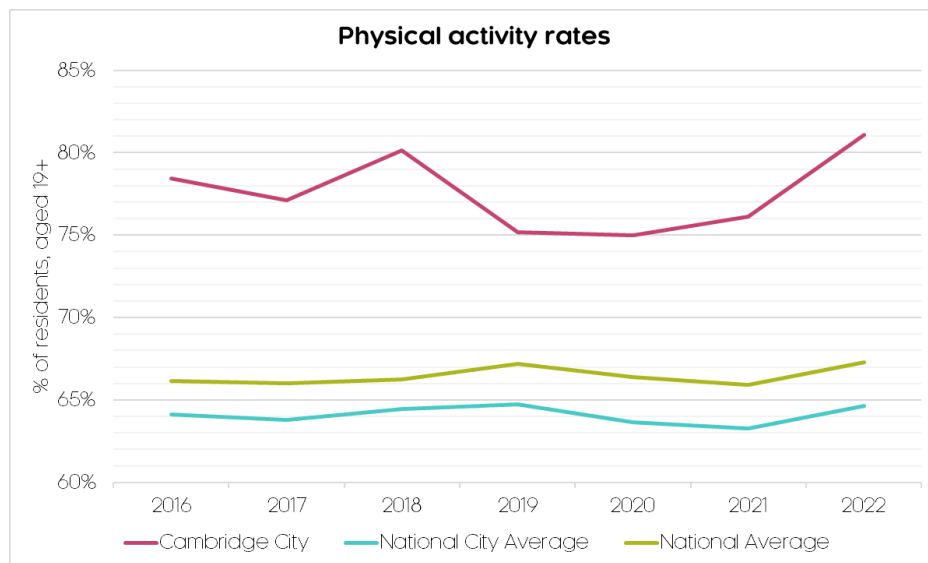


Chart source: OHID Public Health Outcomes Framework

Cambridge residents are also less likely to exhibit risk factors or engage in behaviour that contributes to poor health, according to the same research.⁶⁷ This includes risk and social factors that can be modified or changed by individuals - such as smoking - and social factors that cannot always be controlled. Across a weighted index of priority indicators, Cambridge’s ‘healthy lives’ domain score increased to 110.6 in 2020, well above the national average of 101.4.

The continued strong performance in Cambridge was attributable to an underrepresentation of both physiological (such as high blood pressure and obesity) and behavioural (such as sedentary behaviour, poor diet and smoking) risk factors in local residents. Alcohol and drug misuse were however found to be more prevalent in Cambridge, whilst protective measures (such as cancer screening and child vaccination coverage) also underperformed the national average.

This is despite a challenging, albeit improving, healthy living environment

Although Cambridge outperforms the national average in terms of health outcomes and healthy lifestyle factors, this is despite a challenging healthy living environment, according to the same research.⁶⁸ This includes social and environmental risk factors that affect residents, and can influence health outcomes and risk factors – for instance, crime rates, access to services, living conditions, air pollution etc.

Across a weighted index of priority indicators, Cambridge’s ‘healthy places’ domain score increased to 90.1 in 2020, but this remained well below the national average of 103.4. Though improving, Cambridge’s underperformance was largely driven by higher crime rates and detrimental living conditions (particularly road safety, household overcrowding, and rough sleeping). Cambridge did however perform well for access to services and economic and working conditions.

Despite better health outcomes, significant health inequalities have been observed in the City

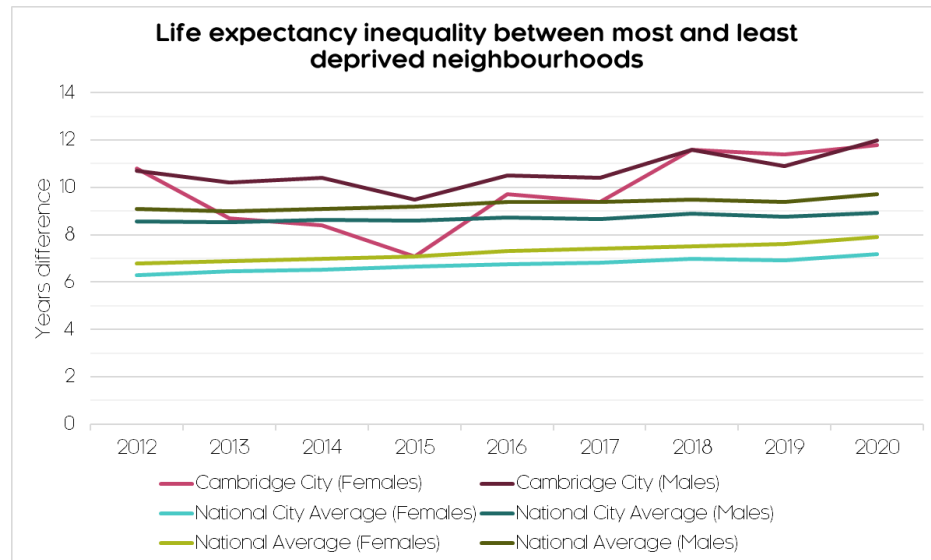


Chart source: OHID Public Health Outcomes Framework

Despite the very high average life expectancies observed in Cambridge, the life expectancy gap between the most and least deprived neighbourhoods in Cambridge in 2018-20 stood at 12.0 years for males and 11.8 years for females, a significantly larger gap than the national average of 9.7 years for males and 7.9 years for females.⁶⁹

These inequalities also exceed the national city average, and for males Cambridge recorded the 6th largest life expectancy inequality out of 55 cities in England – for females, Cambridge’s life expectancy inequality was the largest of any city in England, ahead of cities including Birkenhead, Middlesborough and Blackpool. Over the past decade, these inequalities have continued to widen in Cambridge.

With life expectancies significantly lower in Cambridge’s more deprived neighbourhoods

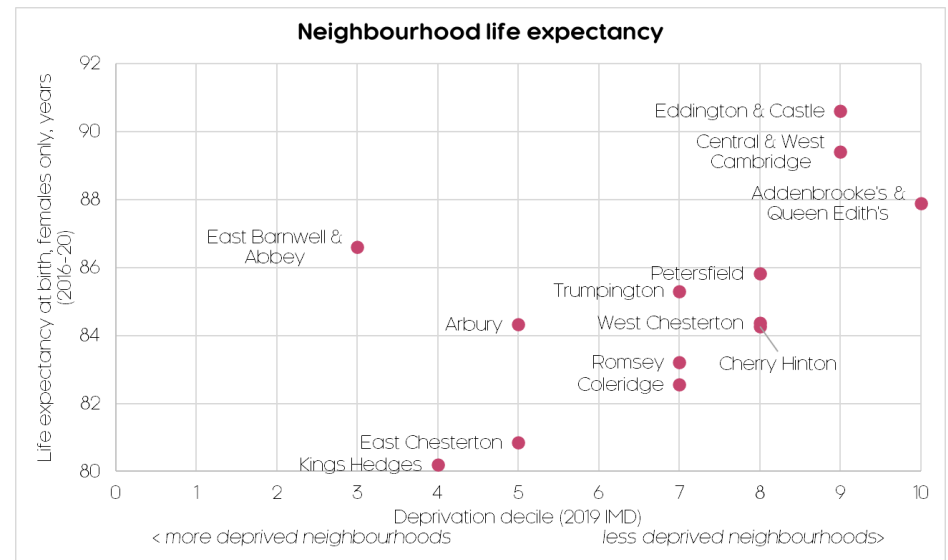


Chart source: OHID Public Health Outcomes Framework

On average over 2016-20, four neighbourhoods in Cambridge exhibited life expectancies below the national average: Kings Hedges and Coleridge underperformed across both male and female life expectancies, whilst East Chesterton underperformed only for males, and Romsey only for females. All neighbourhoods in the City Fringe outperformed the national average.

6.7 Discriminatory and youth crime

No benchmark metrics reported

Police-recorded domestic abuse incidents are decreasing in Cambridge, in contrast to the national average

Analysis presented in the latest Cambridge Community Safety Strategic Assessment showed there were 1,923 police-recorded domestic abuse incidents to the year ending September 2022, a 7% decrease on pre-pandemic levels.⁷⁰ This contrasts with the 13% annual increase observed nationally to the year ending March 2022.⁷¹

Yet 1 in 10 crimes in Cambridge in the year ending September 2022 had a domestic abuse marker. The majority of domestic abuse crimes in Cambridge were violence against the person offences. An increasing number of domestic abuse incidents are also being 'crimed', with 64% of incidents resulting in a crime being recorded in the year ending September 2022, up from 46% in the pre-pandemic year.

Police-recorded hate crime in Cambridge does not reflect the national patterns of increase

The same Assessment found that there were 344 police-recorded hate crime offences in Cambridge in the year ending September 2022, a 12% increase on pre-pandemic levels.⁷² This was below the 46% annual increase observed nationally to the year ending March 2022.⁷³

Hate crimes in Cambridge are typically high harm crime types, with public order offences or violence against the person accounting for the majority. As the Assessment emphasises though, the extent to which trends in police-recorded hate crime relate to improved recording or represent real terms increases is currently unclear and may vary between hate crime strands.

Youth offending in Cambridge and Cambridgeshire is below the national average

Data for Cambridge *and* Cambridgeshire shows the rate of youth offending was half the national average over 2020/21, and has continued to decrease over recent years.⁷⁴ Data presented in the Community Safety Strategic Assessment shows more than half (54%) of young offenders in Cambridge re-offended over 2019/20, above the national average of 33%, although this was based on a very small sample of offenders.⁷⁵

The Community Safety Strategic Assessment highlights the links between youth offending in Cambridge and child exploitation and safeguarding. In particular, the Assessment notes that there is police intelligence showing Cambridge City has been an area of drug importation activity for county lines in recent years, which is linked to child exploitation. Such activity reflects the nature of any City with a large population, good transport links (particularly with large cities such as Birmingham and London) which creates opportunities for drug markets including county lines.

6.8 Sources, clarifications and signposting

Interactive versions of the charts presented here can be viewed on the accompanying online dashboard ([accessible online here](#)).

The following endnotes provide detailed sources, clarifications and signposting for all of the data and evidence presented in the Society

¹ Centre for Cities Cost of Living Tracker *Note: data refers to the CPI measure of inflation*

² Trussell Trust Latest Stats *Note: data for financial years*

³ Cambridge and District Citizens Advice Cost of Living Data Dashboard *Note: 'crisis support' defined here as referrals "to emergency financial support or support in kind". Per person data calculated using Census resident population estimates*

⁴ ONS Regional gross disposable household income *Note: data in real terms (constant 2020 prices, using CPIH). Per person data calculated using Census resident population estimates*

⁵ ONS Income estimates for small areas *Note data in real terms (constant 2018 prices, using CPIH). Data for financial years*

⁶ ONS Annual Population Survey (via [nomisweb.co.uk](#)) *Note: annual data 4-quarter averages*

⁷ ONS Annual Population Survey (via [nomisweb.co.uk](#)) *Note: annual data 4-quarter averages*

⁸ See for instance ONS analysis [here](#)

⁹ ONS Annual Population Survey (via [nomisweb.co.uk](#)) *Note: annual data 4-quarter averages*

¹⁰ ONS Annual Population Survey (via [nomisweb.co.uk](#)) *Note: annual data 4-quarter averages*

¹¹ 'Hidden unemployed' refers to those who are economically inactive and report that they would like to and are able to work

¹² ONS Personal well-being in the UK *Note: data reported here as 2-year averages, due to small sample sizes and year-to-year volatility*

¹³ ONS Personal well-being in the UK *Note: data reported here as 2-year averages, due to small sample sizes and year-to-year volatility*

¹⁴ See research by the Centre for Mental Health [here](#)

¹⁵ OHID Public Health Outcomes Framework

chapter. A glossary of key terms and abbreviations can be found in the Appendices.

Readers who are interested in more detail – including definitions and methodologies, additional categorisations and detailed spatial breakdowns – are encouraged to review these sources, which are all publicly available.

¹⁶ Numbeo Quality of Life Rankings

¹⁷ ONS UK business; activity, size and location (via [nomisweb.co.uk](#)) *Note: refers to local units*

¹⁸ See analysis presented by Cambridgeshire Research Group [here](#)

¹⁹ MHCLG English indices of deprivation *Note: national data for England only. Additional, detailed analysis of deprivation and poverty within Cambridge, in both income and non-income forms, can found on the on the councils Mapping Poverty website [here](#)*

²⁰ MHCLG English indices of deprivation *Note: city rankings relative to the 55 other cities in England. National data for England only*

²¹ MHCLG English indices of deprivation *Note: national data for England only*

²² Within neighbourhood deprivation refers here to LSOA level deprivation. A detailed analysis of LSOA deprivation in Cambridge can be found in the City Councils Mapping poverty analysis [here](#)

²³ DWP Children in low income families *Note: relative poverty definition used here. Absolute poverty figures are also available from the same release. Data for financial years. Additional, detailed analysis of deprivation and poverty within Cambridge, in both income and non-income forms, can found on the on the councils Mapping Poverty website [here](#)*

²⁴ DWP Children in low income families *Note: relative poverty definition used here. Absolute poverty figures are also available from the same release. Data for financial years*

²⁵ DLUHC Live tables on dwelling stock *Note: data for financial years. National data for England only. Additional, detailed analysis of housing and the housing market in Cambridge can found on the on the councils Housing Research website [here](#)*

²⁶ See Greater Cambridge Housing Trajectory for more information

- ²⁷ DLUHC Live tables on affordable housing supply *Note: affordable housing defined here as the sum of social rent, affordable rent, intermediate rent, affordable home ownership, and shared ownership. Data for financial years. National data for England only. Per person data calculated using Census resident population estimates*
- ²⁸ DLUHC Live tables on dwelling stock (homes), ONS Employees in the UK (for jobs), ONS Census (for population) *Note: data for Greater Cambridge*
- ²⁹ ONS Subnational estimates of dwellings by tenure *Note: refers to homes/dwellings, not households. May differ from Census estimates. Affordable dwellings are not identified as a standalone tenure, and will be included all tenure categories. Data for financial years. National data for England only*
- ³⁰ DLUHC Statutory homelessness in England *Data for financial years. National data for England only*
- ³¹ Cambridge City Council Housing Advice
- ³² DLUHC Rough sleeping snapshot in England *Note: national data for England only. Per person data calculated using Census resident population estimates*
- ³³ ONS Housing affordability in England & Wales *Note: as recommended by the ONS, workplace pay is used to calculate the ratio. Data for year ending September. Additional, detailed analysis of housing and the housing market in Cambridge can found on the on the councils Housing Research website [here](#)*
- ³⁴ ONS Housing affordability in England & Wales *Note: LQ = lower-quartile. As recommended by the ONS, workplace pay is used to calculate the ratio. Data for year ending September*
- ³⁵ ONS Private rental market summary statistics in England *Note: data for financial years. National data for England only*
- ³⁶ ONS Private rental market summary statistics in England (for rental prices) and ONS Housing affordability in England & Wales (for pay) *Note: as recommended by the ONS, workplace pay is used to calculate the ratio. National data for England only*
- ³⁷ ONS Small area income estimates *Note: average annual housing costs calculated as the difference between net annual income before and after housing costs. Data for financial years*
- ³⁸ ONS Crime in England and Wales *Note: excludes fraud and computer misuse offences, which are available from ONS Crime Survey for England and Wales. Data for financial years. Per person data calculated using Census resident population estimates. Additional, detailed analysis of crime and crime*

types in Cambridge can be found in the latest Cambridge Community Safety Strategic Assessment

- ³⁹ Neighbourhood i.e. MSOA-level crime data and below available from Cambridgeshire Constabulary (via data.police.uk) *Note: per person data calculated using Census resident population estimates*
- ⁴⁰ ONS Crime in England and Wales *Note: 'low-level' offences defined here by the ONS as bike theft and shoplifting*
- ⁴¹ ONS Crime in England and Wales *Note: data for financial years. Per person data calculated using Census resident population estimates*
- ⁴² See ONS commentary [here](#)
- ⁴³ OHID Public Health Outcomes Framework *Note: data for financial years*
- ⁴⁴ Cambridgeshire Constabulary (via data.police.uk) *Note: data for financial years. Excludes bicycle theft and shoplifting*
- ⁴⁵ ONS Census (via nomisweb.co.uk)
- ⁴⁶ ONS Census (via nomisweb.co.uk)
- ⁴⁷ ONS Census (via nomisweb.co.uk)
- ⁴⁸ ONS Census (via nomisweb.co.uk)
- ⁴⁹ ONS Employee earnings in the UK (via nomisweb.co.uk) *Note: calculated for residents in full-time work only (due to small sample size)*
- ⁵⁰ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*
- ⁵¹ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*
- ⁵² ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*
- ⁵³ DWP Claimant count (for claimants) ONS Census (for economically active) *Note: annual claimant data 12-month averages. Rates calculated using Census resident economically active population estimates*
- ⁵⁴ Centre for Cities Data Tool *Note: city-by-city Gini coefficient last calculated for 2016*
- ⁵⁵ ONS Admin-based income statistics, data for individuals *Note: data is an experimental series. Data for financial years*
- ⁵⁶ DfE Explore education statistics *Note: results for state-funded mainstream schools only, by location of school. Data for academic years*
- ⁵⁷ DfE Explore education statistics *Note: results for state-funded mainstream schools only, by location of school. Data for academic years*
- ⁵⁸ DfE Explore education statistics *Note: results for state-funded mainstream schools only, by location of school. Data for academic years*

⁵⁹ DfE Explore education statistics *Note: results for state-funded mainstream schools only, by location of school. Data for academic years*

⁶⁰ DWP Stat-Xplore *Note: annual claimant data 12-month averages*

⁶¹ Office for Students POLAR4 *Note: data for academic years*

⁶² ONS Annual Population Survey (via nomisweb.co.uk)

⁶³ Centre for Cities The Great British Brain Drain

⁶⁴ ONS Census (via nomisweb.co.uk)

⁶⁵ OHID Public Health Outcomes Framework

⁶⁶ ONS Health Index *Note: in the Health Index, performance is benchmarked relative to the national average in 2015 (which = 100.0) National data for England only*

⁶⁷ ONS Health Index *Note: in the Health Index, performance is benchmarked relative to the national average in 2015 (which = 100.0) National data for England only*

⁶⁸ ONS Health Index *Note: in the Health Index, performance is benchmarked relative to the national average in 2015 (which = 100.0) National data for England only*

⁶⁹ OHID Public Health Outcomes Framework *Note: national data for England only*

⁷⁰ Adapted from data presented in the latest Cambridge Community Safety Strategic Assessment *Note: data for year ending September*

⁷¹ ONS Domestic abuse in England and Wales overview *Note: data for financial years*

⁷² Adapted from data presented in the latest Cambridge Community Safety Strategic Assessment *Note: data for year ending September. A hate crime is defined by the Home Office as “any criminal offence which is perceived, by the victim or any other person, to be motivated by hostility or prejudice towards someone based on a personal characteristic”*

⁷³ Home Office Hate crime, England and Wales *Note: data for financial years*

⁷⁴ Youth Justice Board Youth justice statistics *Note: data for Cambridge and Cambridgeshire. Data for financial years. Per person data calculated using Census resident population estimates*

⁷⁵ Adapted from data presented in the latest Cambridge Community Safety Strategic Assessment *Note: data for financial years*

State of the City 2023: Economy

This chapter seeks to understand the economic health of Cambridge and the experience and impacts of Cambridge businesses, entrepreneurs, and local workers. This is presented through the *Business & Enterprise* and *Workforce & Jobs* lenses.



7 Business & Enterprise

7.1 Introduction and summary

The **business and enterprise lens** seeks to understand the experience and performance of businesses and entrepreneurs in Cambridge. Sub-topics considered here include:

- **Business competitiveness and productivity:** which looks at business growth, profitability, and productivity.
- **Business enterprise:** which looks at start-ups, business resilience and business characteristics.
- **Tourism and visitor spending:** which looks at visitor numbers and spending, footfall and the night-time economy.
- **Business infrastructure and property:** which looks at property availability and quality, property costs, and digital connectivity.
- **Research and innovation:** which looks at the scientific and research workforce, outputs and value.

7.2 Summary

Sources for the below summary are available in the main body of analysis

Pre-pandemic, **Cambridge was the 11th fastest growing city economy** in the country, and despite taking a hit overall during the pandemic, Cambridge's economy has experienced a faster recovery with, **record growth in 2021**, driven by the City's resilient knowledge-intensive industries, which continued to grow even through 2020.

In fact, **Cambridge has some of the highest concentrations of high-growth, knowledge-intensive businesses and spinouts** in the

country, and has been **ranked as the leading scientific and technology cluster globally, generating 1 in 10 UK patents**, with 2 in 10 workers engaged in R&D. Despite this, **Cambridge's productivity growth has ranked in the lower-quartile** of cities.

Start-ups are underrepresented in Cambridge relative to benchmarks, although **Cambridge start-ups are more resilient and more likely to survive** than benchmark areas. The **majority (99.7%) of businesses in Cambridge are SMEs**, and many continue to be independently owned.

Visitors to Cambridge reached record highs pre-pandemic, with 1 in 10 employees directly employed in tourism, whilst visitors, footfall and spending in Cambridge has recovered faster than benchmarks. Cambridge's vibrant **night-time economy accounts for a third of the City's workforce**.

Commercial **floorspace in Cambridge continues to increase**, ahead of benchmarks, although **significant shortages of lab space** have been reported. Commercial **property costs in Cambridge are some of the highest in the country, second only to London**. Digital **connectivity – in terms of coverage and download speeds - is now above and improving faster** than benchmarks.

7.3 Business competitiveness and productivity

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Productivity (GVA per employee)			13th (of 58)
High-growth business share			2nd (of 58)
High-turnover business share			16th (of 58)
Workforce educated to NVQ3+			1st (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

The growth of the Cambridge economy continues to outpace benchmarks

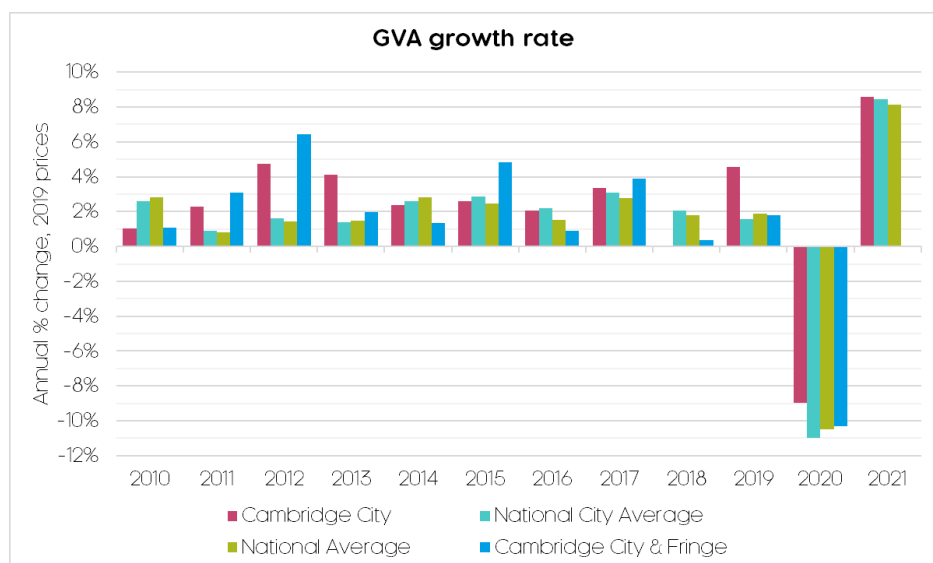


Chart source: ONS Regional economic activity by gross domestic product

The Cambridge economy was valued at £7bn in 2021 (as measured in terms of gross value added – GVA – which is broadly equivalent to gross profits).¹ This places Cambridge as the 33rd largest city economy in England and Wales (out of 58 cities). In 2020, this ranking increased to 18th when including the City Fringe, equivalent to a value of £9.9bn.

Over 2020-21, the Cambridge City economy continued to rebound strongly from the Covid-19 pandemic, growing by 8.6% in real terms (i.e. adjusted for inflation), ahead of national (8.1%) and national city (8.3%) benchmarks. Pre-pandemic (between 2010-19) Cambridge was the 11th fastest growing city economy.

Cambridge’s knowledge industries have been at the forefront of this growth

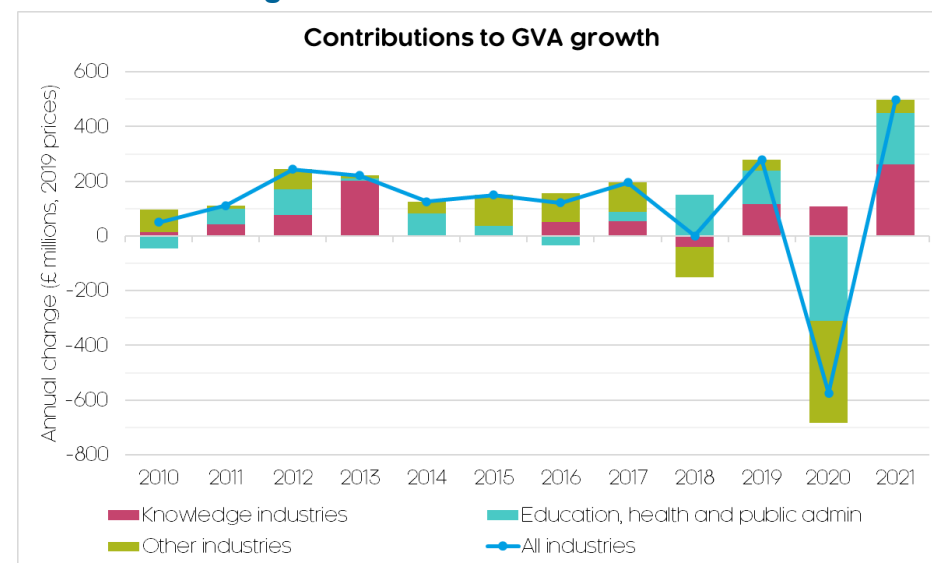


Chart source: ONS Regional economic activity by gross domestic product

In 2021, Cambridge’s knowledge industries² generated 40% of the City’s GVA, an increase from 24% twenty years ago and above the

national average (also 24%).³ Cambridge's knowledge cluster grew strongly during the pandemic, and in 2021 was 16% larger than its pre-pandemic size (in real terms).

Education, health and public administration collectively accounted for a third (32%) of City GVA in 2021 – almost twice the national average (17%). Other industries – including retail, hospitality and business services - represent the remaining share, but in 2021 these industries were still 16% below their pre-pandemic size (in real terms).

A similar trend is observed when looking at corporate turnovers; analysis by Cambridge Ahead found during 2021/2022 knowledge-intensive industries accounted for 71% of corporate turnovers in Cambridge City, an increase from 51% in 2010/11.⁴

Cambridge employees are more productive than benchmarks, but productivity growth is slowing

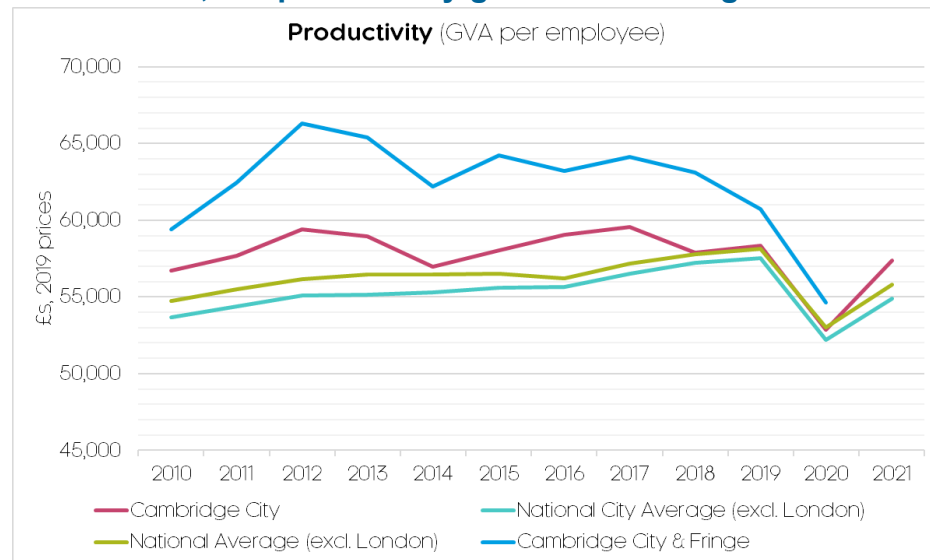


Chart source: ONS Regional economic activity by gross domestic product (for GVA), ONS Employees in the UK (for jobs)

In 2021, the average Cambridge employee was 8% more productive than benchmarks, placing Cambridge as the 13th most productive city in England and Wales (out of 58 cities).⁵ Productivity *growth* is slowing though; pre-pandemic, Cambridge's average annual productivity growth (in real terms) ranked in the lower quartile of cities nationwide.

This trend is replicated even using the more accurate productivity per hour measure.⁶ Poor productivity has been identified as one of the biggest causes of low wage growth in the UK.⁷ The slowdown in Cambridge's productivity growth is being most keenly felt in Cambridge's knowledge industries; in 2010, the average knowledge employee was 28% more productive than the national average - by 2021, this had dropped to 11%.

A similar relationship has been observed nationally, with research finding the UK's knowledge industries - specifically advanced manufacturing and the information and communication sector - are the main source of the slowdown.⁸ Explanations include the difficulty of measuring such industries in real terms, and the structure and supply chains of such industries.

Despite headwinds business revenues have held strong, and the incidence of high-growth, high-performing businesses is above average in Cambridge

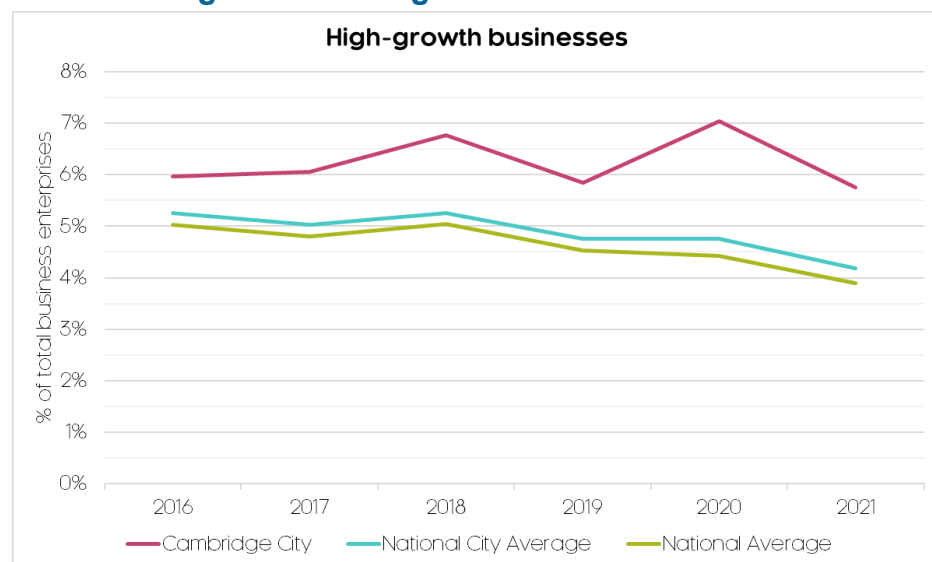


Chart source: ONS Business demography

The turnover of corporate businesses in Cambridge City increased by 10% (in real terms) during 2021/22 – the largest increase since 2018, and twice the Combined Authority average - to a total of £9.7bn.⁹ When including the City Fringe, this increases to £17.1bn, with average turnover of a corporate business standing at £2.3m.

The incidence of high-growth businesses in the City (5.8%) also stood well above benchmark areas in 2021, with Oxford the only city to host more.¹⁰ In 2022, 1 in 10 businesses were high-performing, with turnovers exceeding £1m, a share also above benchmark areas, with two-fifths operating in knowledge industries.¹¹

Research by the Centre for Cities also ranked Cambridge as the City with the most 'new economy' firms per resident in 2022.¹² 'New economy' firms encompass emerging knowledge-intensive sectors like FinTech and advanced manufacturing, and according to the research are at the forefront of new technologies and innovations.

Cambridge businesses have access to a highly skilled workforce

In 2021, 85% of Cambridge (City & Fringe) workforce was educated to NVQ Level 3 or above, above the national average of 66%, and the highest share of 58 cities in England and Wales.¹³ Despite this, shortages are still reported; job vacancies in Cambridge have increased almost three times faster than filled payrolls since 2020¹⁴, whilst a 2019 survey of Cambridgeshire businesses found 34% of vacancies went unfilled due to skills shortages, above the national average of 25%.¹⁵

7.4 Business enterprise

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Business start-up rate			56th (of 58)
Business closure rate			57th (of 58)
Business start-up survival rate			6th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Start-ups are underrepresented in Cambridge relative to benchmarks

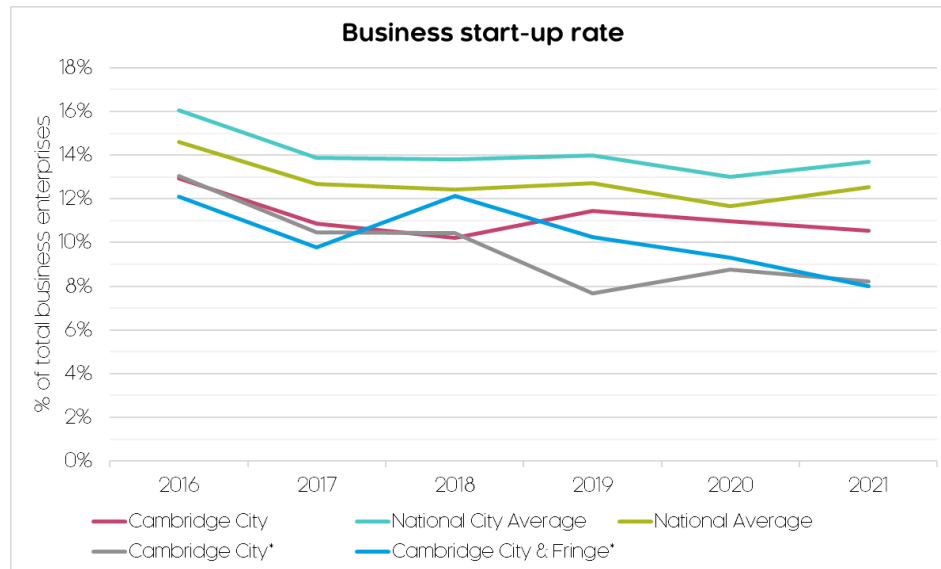


Chart source: ONS Business demography, Cambridge Ahead Cambridge Cluster Insights (*denotes Cambridge Ahead data. Not strictly comparable with ONS data)

In 2021, business start-up rates in Cambridge were almost a third lower than benchmark areas, with only two other cities in England and Wales exhibiting a lower rate.¹⁶ Start-up rates have held relatively steady over recent years, though analysis by Cambridge Ahead (looking at corporate start-ups) shows a stronger decline during and following the pandemic.¹⁷

The same analysis also showed start-up rates are marginally higher for knowledge-intensive industries, which accounted for 1 in 4 Cambridge corporate start-ups. Cambridge is also global leader for university spinouts and start-ups, with analysis by Beauhurst finding Cambridge

registered more than any other university city outside London since 2000.¹⁸

Although Cambridge start-ups are more resilient and more likely to survive

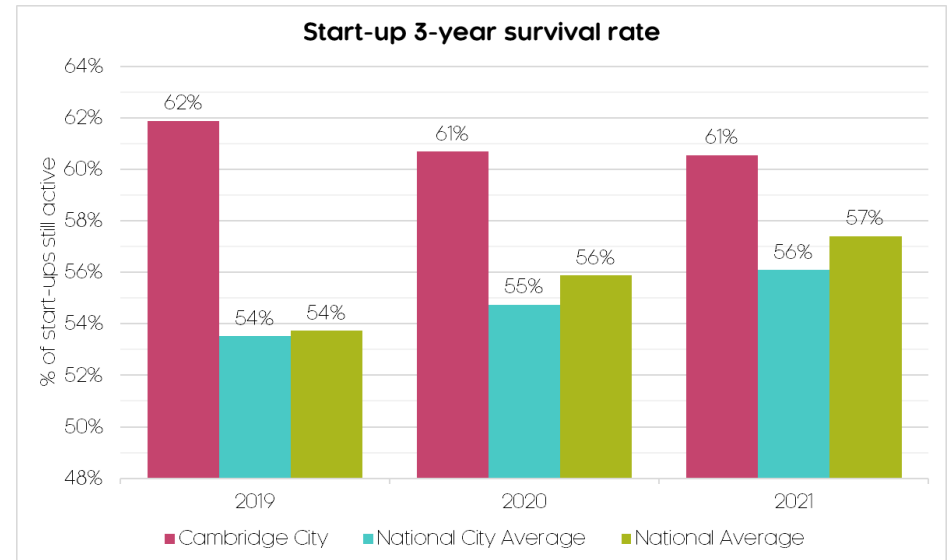


Chart source: ONS Business Demography

In 2021, the business closure rate in Cambridge was significantly (approximately a fifth) lower than benchmarks, with Cambridge having the 2nd lowest business closure rate of all cities nationwide.¹⁹ As a result, even during the pandemic, more businesses were starting-up in Cambridge than closing.

Alongside below-average business closure rates, Cambridge also exhibits much higher start-up survival rates; some two-thirds of Cambridge start-ups are expected to survive up to 3 years, well above benchmark areas, and this rate has remained steady over recent years, even during the pandemic, although benchmarks are closing this gap.

The majority of businesses in Cambridge are SMEs, and many continue to be independently owned

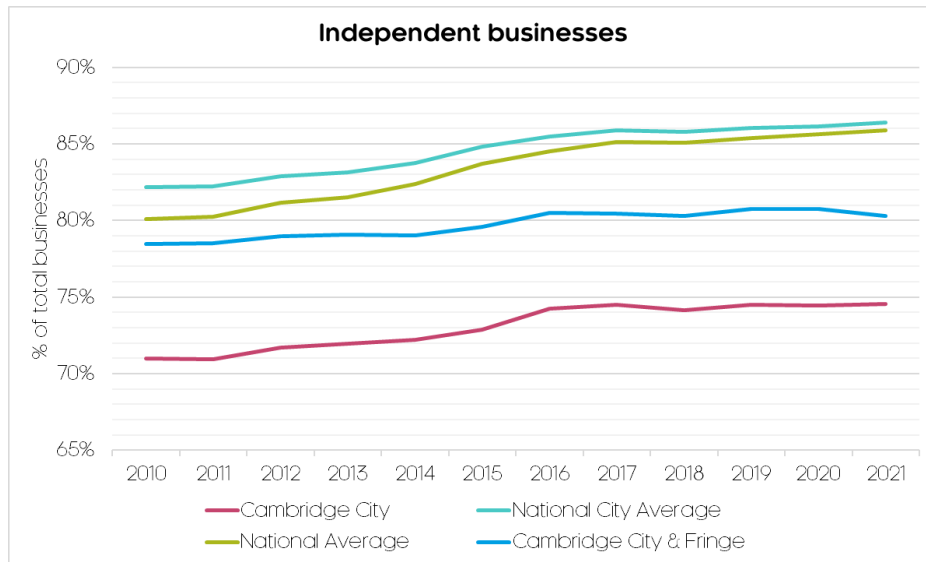


Chart source: ONS UK business; activity, size and location (via nomisweb.co.uk)

Of the 11,620 Cambridge (City & Fringe) businesses active during 2022, 99.4% were small and medium-sized enterprises (SMEs), and a further 80.3% were micro-sized, meaning 9,330 local businesses employed between zero and nine people.²⁰ Knowledge industries accounted for 36% of these businesses, above the national average of 25%.

Additionally, 80% of Cambridge (City & Fringe) businesses were independent, often locally-owned, a rate that is increasing but remains below benchmark areas. This share ranges from 91% for knowledge industries, to 76% for industries such as retail, hospitality and business services.

7.5 Tourism and visitor spending

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Tourism visitors (per 1,000 residents)			N/A
Tourism industries workforce share			13th (of 58)
Night-time economy industries workforce share			4th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Visitors to Cambridge reached record highs pre-pandemic, with 1 in 10 employees directly employed in tourism

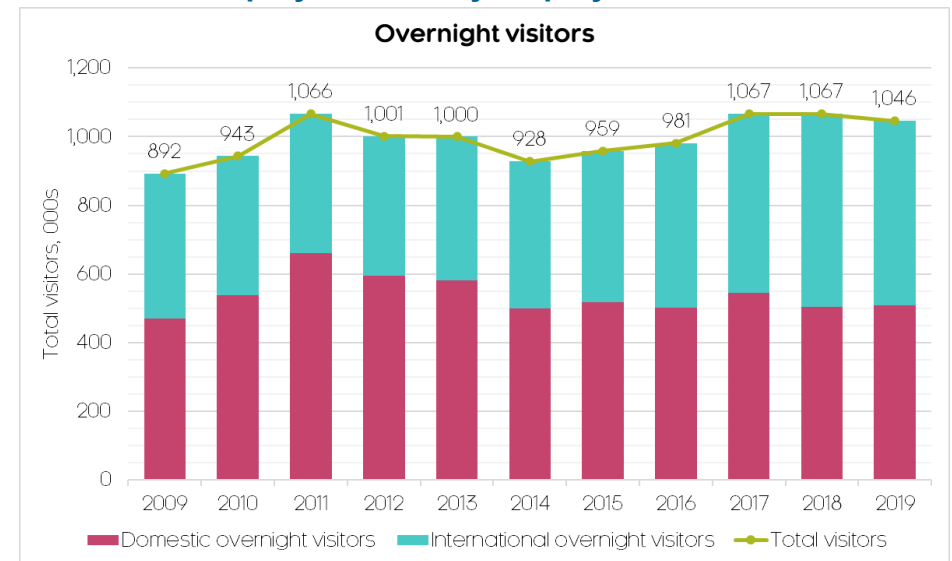


Chart source: Visit Britain Inbound Tourism and Domestic Overnight Tourism

Pre-pandemic, Cambridge welcomed 1.1 million overnight visitors, making it the 13th most visited town or city in England and Wales. More than half (51%) were international – a share almost twice the national average, and second only to London.²¹ Between 2009 and 2019, international visits grew three times faster than domestic visits.

In fact, Cambridge was the 8th most visited town or city by international tourists in 2019. Some 62% of international visitors were from Europe, down from 70% in 2010. In addition to overnight visitors, Cambridge welcomed 6 million domestic day visitors in 2019 – making it the 30th most visited town or city. Collectively, the 6.5 million domestic day and overnight visitors to Cambridge spent some £308 million in 2019.

Complete data is unavailable post-2019, yet early estimates indicate international visitors dropped 82% over 2020 and 2021. Over this same period, there were 1,000 fewer employees employed in tourism industries in Cambridge. In 2021, tourism directly accounted for 12.2% of employees, the 13th highest share of 58 cities in England and Wales.²²

The pandemic saw significant decline in visitors, footfall and spending, though Cambridge's recovery has been strong

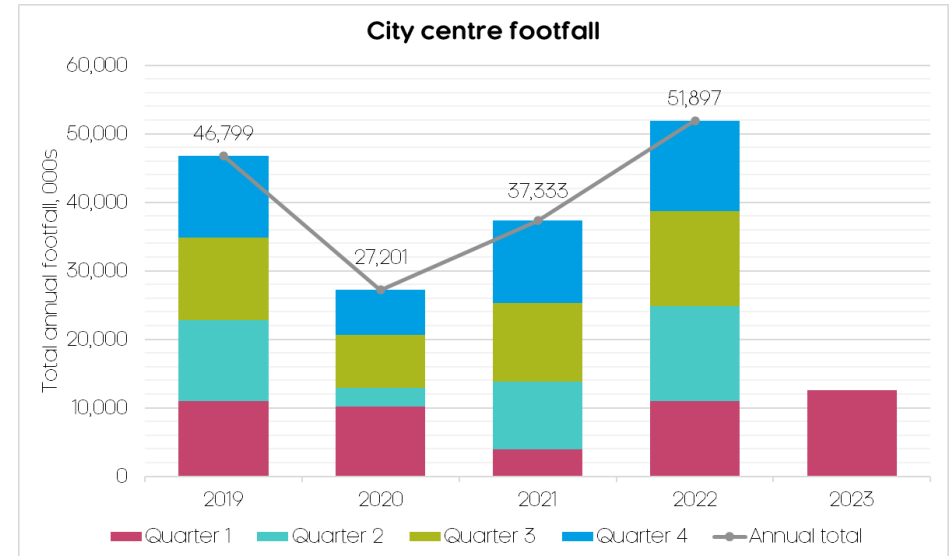


Chart source: Cambridge City BID Monthly Footfall Reports

City centre footfall in Cambridge dropped a substantial 85% in early 2020, but by the end of 2022 had recovered to pre-pandemic totals, and June 2022 saw record levels of footfall in the City.²³ This momentum was carried into 2023, which saw footfall levels exceed pre-pandemic totals in Q1.

Analysis by the Centre for Cities also showed by May 2022 Cambridge's city centre footfall and spending had recovered to pre-pandemic levels, and at a faster rate than benchmarks.²⁴ The same research also found Cambridge's retail vacancy rate after June 2021, averaging 12%, was the 4th lowest of 58 cities in England and Wales.

The night-time economy accounts for a third of Cambridge’s workforce

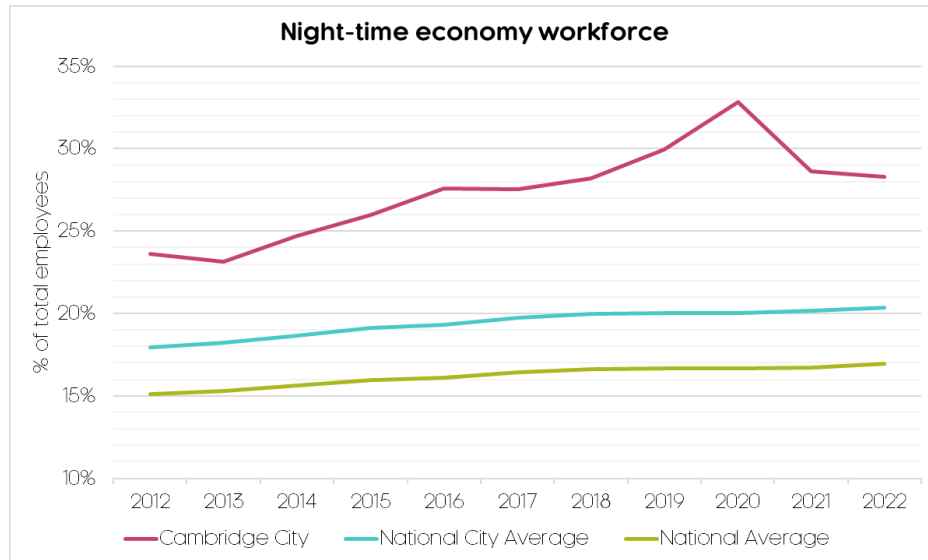


Chart source: ONS The night-time economy

During 2022, an estimated 40,100 employees were employed in night-time economy industries in Cambridge, equivalent to 28% of employees - the fourth highest share of 58 cities in England and Wales.²⁵ Though Cambridge’s night-time economy was one of the fastest growing pre-pandemic, Centre for Cities analysis found by May 2022, night-time visitors were still below pre-pandemic levels, and had recovered at a slower pace than benchmarks.²⁶

7.6 Business infrastructure and property

Key benchmark metrics	Relative performance Latest year	Trend performance Over the past 5 years	Latest city rank 1st = highest city value
New commercial floorspace (per 1,000 m2 existing sq ft)	Blue	Blue	46th (of 58)
Commercial property costs (per sq ft)	Magenta	Magenta	2nd (of 58)
Gigabit broadband coverage	Magenta	Magenta	8th (of 58)
Average broadband download speed	Magenta	Magenta	18th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Commercial floorspace delivery in Cambridge has trended above benchmarks

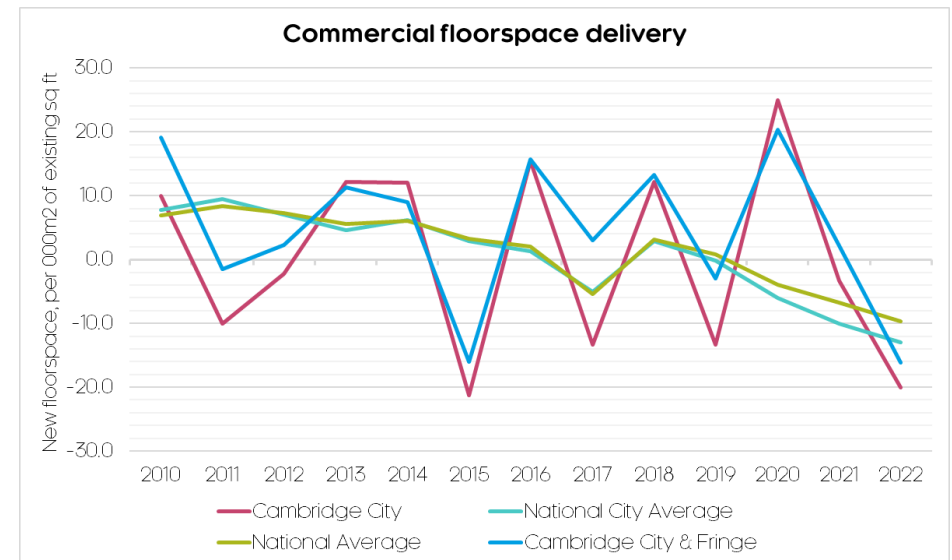


Chart source: VOA Floorspace Statistics

Since 2011/12, commercial (i.e. non-industrial) floorspace – including office, retail and other uses - increased by 4.1% across Cambridge (City & Fringe), the 4th largest increase of 58 cities in England and Wales.²⁷ This was in contrast to national (-1.6%) and national city (-0.5%) benchmarks, which both declined over this period.

This increase has been driven by office and other uses, which both increased by 8.5%, and now collectively account for 51% of all floorspace across Cambridge (City & Fringe). Over the same period, floorspace for retail uses declined by 5.5%, and for industrial uses by 8.9%. More recent trends suggests commercial floorspace delivery has declined since the pandemic, with 19,000 m2 less floorspace across the City & Fringe relative to 2019/20, a trend replicated by benchmarks.

Commercial property costs in Cambridge are some of the highest in the country

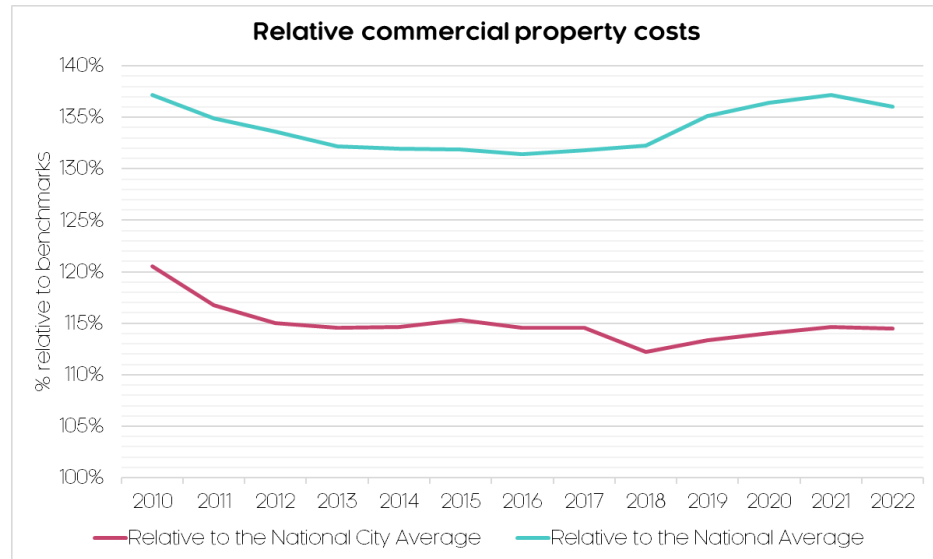


Chart source: VOA Floorspace Statistics

Commercial property costs – proxied by average rateable values - across Cambridge (City & Fringe) averaged 36% above the national average in 2021/22, and 14% above the national city average.²⁸ London is the only other city in England and Wales with higher average property costs.

Relative costs in Cambridge (City & Fringe) are highest for industrial space, which were 46% above the national city average in 2021/22, followed by other uses (35% higher) and retail (26%). Yet for office space, average costs are only 2% higher than the national city average.

Broadband coverage and download speeds outperform benchmarks, and are improving faster

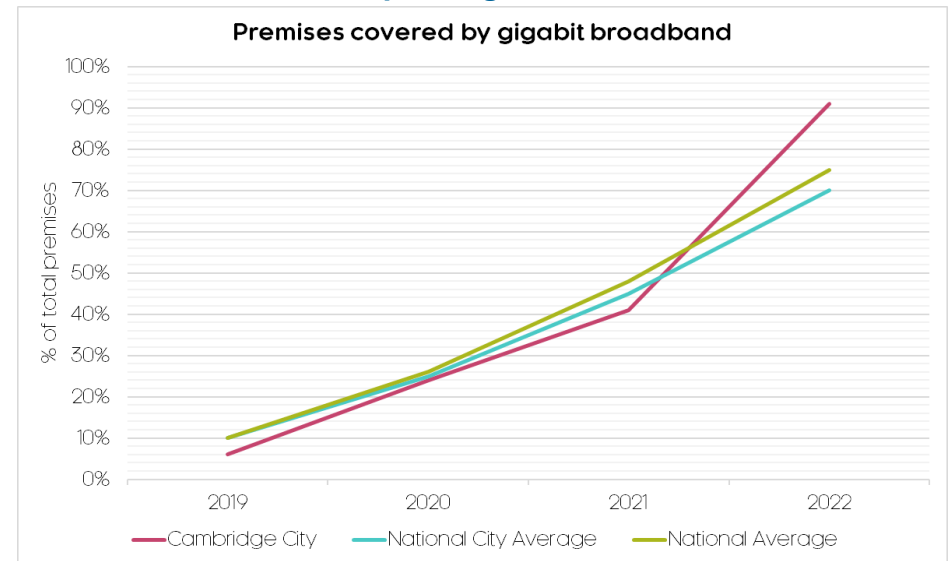


Chart source: Ofcom Connected Nations

The proportion of commercial premises in Cambridge covered by gigabit broadband now surpasses benchmark areas, reaching a record 68% in September 2022, up from just 1% in 2019, and was the 8th

highest coverage out of 58 cities in England and Wales.²⁹ For residential premises, gigabit coverage stood at 92%, also ahead of benchmarks, and is the 6th highest coverage out of 58 cities.

Average download speeds in Cambridge also reached a record high of 135 Mbit/s in September 2022, up from 82 Mbit/s in 2019, and 6% and 20% faster than national city and national benchmarks respectively, although 17 other cities had faster download speeds.

Digital mobile connectivity is also better in Cambridge, with 92% of premises able to receive a 4G connection from all major operators in 2022. Though above the national average (85%) this does lag the national city average (98%). Though official 5G statistics are yet to be published, Cambridge currently has full 5G coverage from 1 major operator, and partial coverage from the remaining 3.³⁰

With coverage high across the City

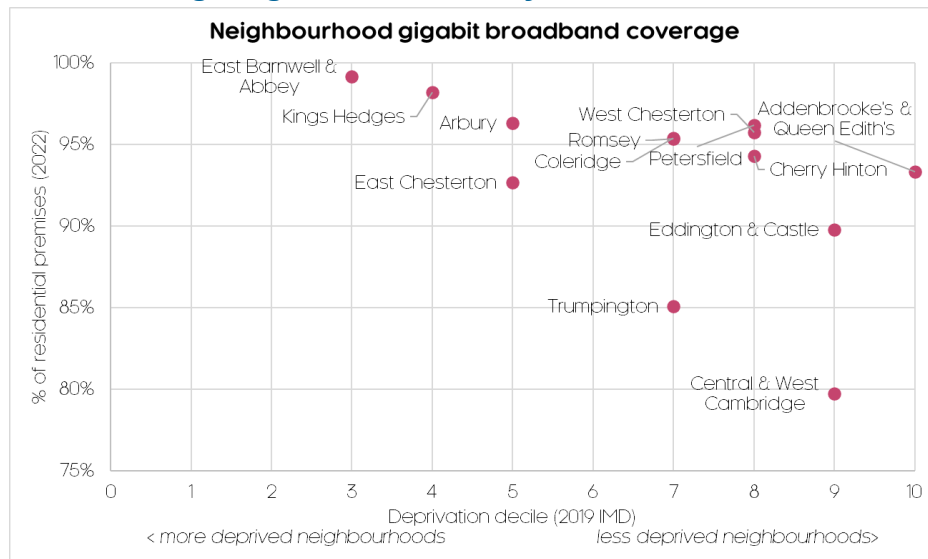


Chart source: Ofcom Connected Nations

As of September 2022, all neighbourhoods in Cambridge had residential gigabit broadband coverage above both national and national city benchmarks. Close to 100% coverage was observed in East Barnwell & Abbey, Kings Hedges, Arbury, West Chesterton and Petersfield. At 80%, Central & West Cambridge had the lowest coverage in the City. Across the City Fringe, the average stood at 69%.

7.7 Research and innovation

Key benchmark metrics	Relative performance Latest year	Trend performance Over the past 5 years	Latest city rank 1st = highest city value
<i>Source available in below body of analysis</i>			
PCT patent filings (per 10,000 residents)			1st (of 58)
Scientific publications (per 10,000 residents)			1st (of 58)
R&D-intensive industries workforce share			1st (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Cambridge continues to be ranked as the globally leading cluster for scientific and research intensity

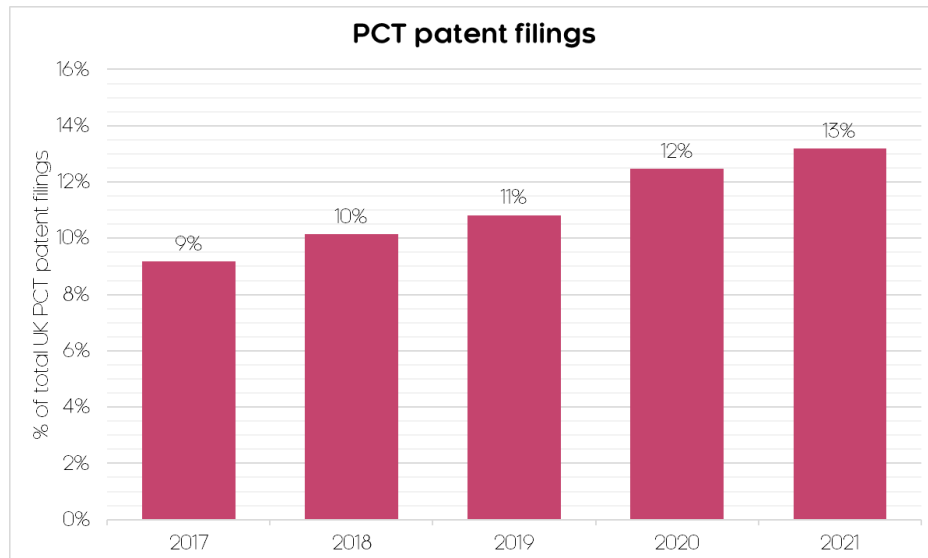


Chart source: WIPO Global Innovation Index

The WIPO's latest ranking of scientific and technology clusters saw Cambridge remain at the top of the global intensity rankings in 2022.³¹ When adjusted for its population size, Cambridge is the most intensive cluster not just in the UK but in the world, outperforming peers including Silicon Valley, Greater Boston and Tokyo.

Over the period 2016-2020, the WIPO recorded more than 3,000 patent filings and 17,700 scientific publications in Cambridge, which in terms of volume was second only to London in the UK. Over this same period, Cambridge accounted for 13.2% of all patent filings in the UK, up from 9.2% over 2013-17. The Centre for Cities has consistently ranked Cambridge as having the highest patent intensity of any city in the country.³²

Cambridge's research and development workforce continues to grow, accounting for 2 in 10 employees

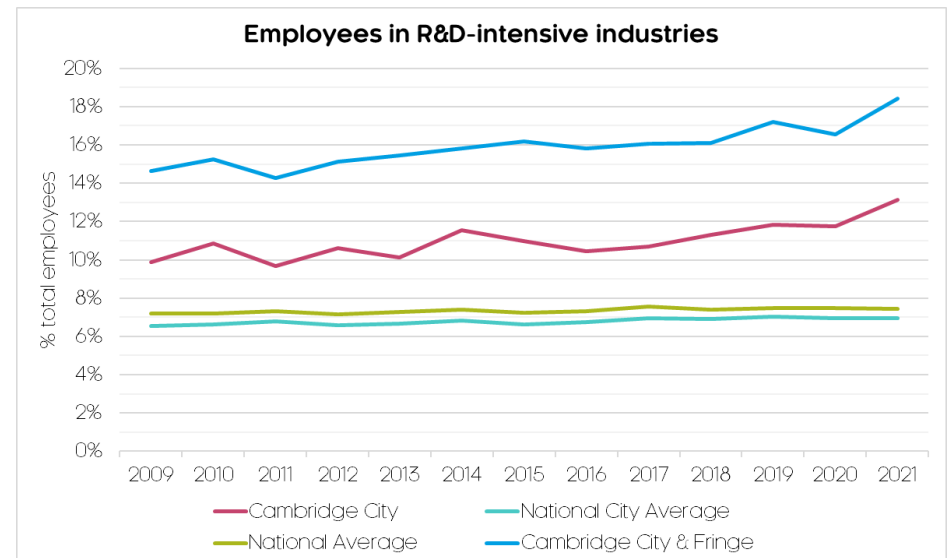


Chart source: ONS Employees in the UK

The proportion of employees working in research and development (R&D)-intensive industries across Cambridge (City & Fringe) stood at 18.4% in 2021, up from 15.2% in 2010, equivalent to 29,500 employees.³³ This share is almost double benchmarks areas, and the highest share of any city nationwide. Between 2011 and 2021, only 3 other cities have experienced a faster increase in R&D-intensive employees.

There is growing demand for research space in Cambridge

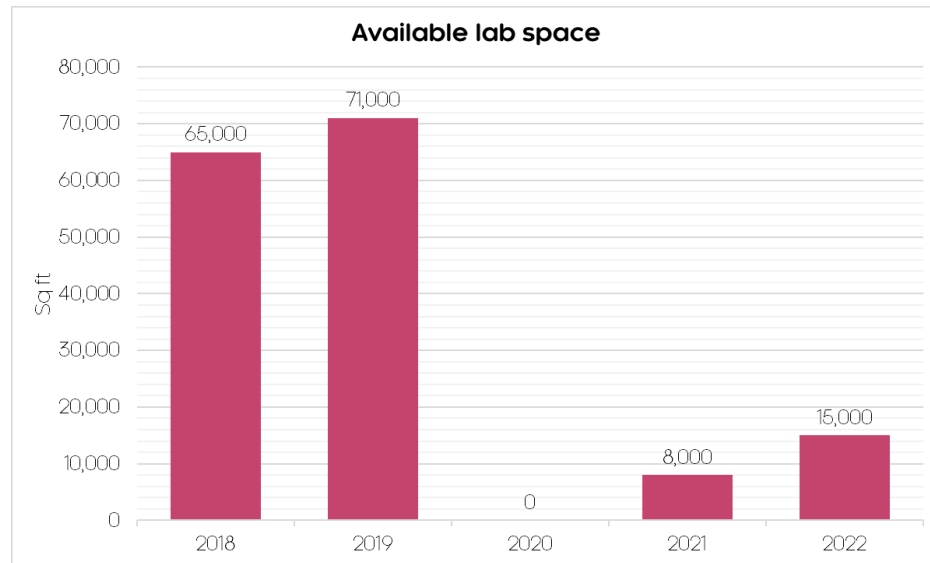


Chart source: Savills Spotlight: Cambridge Offices & Laboratories

Research on behalf of the Greater Cambridge Shared Planning Service reported demand for lab space has reached an all-time high in Greater Cambridge, yet there is a severe shortage of available move in space.³⁴ Savills estimate at the end of 2022 there was only 15,000 sq ft of fitted space available in Cambridge, down from 71,000 sq ft in 2019.³⁵

Cambridge University is at the forefront of the Cambridge scientific and technology cluster

Recent research has shown the total impact of Cambridge University on the UK economy was an estimated £29.8bn in 2020/21.³⁶ The vast majority of this impact (£23.1bn) was from the University's research and knowledge exchange activities, which included commercial companies spun out from, or closely associated with, the University and other commercial activity carried out at the University.

8 Workforce & Jobs

8.1 Introduction

The **workforce & jobs lens** seeks to understand the labour market conditions in Cambridge, and the experience and wellbeing of people working in the City. Sub-topics considered include:

- **Job opportunities:** which looks at job vacancies, jobs growth, homeworking and workplace proximity.
- **Earnings and pay:** which looks at pay levels, pay growth, low pay and pay inequalities.
- **Workforce skills and training:** which looks at workforce training, apprenticeships, and workforce skill levels.
- **Job quality and security:** which looks at working hours, insecure employment, in-work benefit claims and job satisfaction.

8.2 Summary

Sources for the below summary are available in the main body of analysis

Cambridge has a buoyant jobs market, recording **more job vacancies than other city** in 2022, and displayed the **fastest jobs growth in the country** pre-pandemic. This has been driven by Cambridge's **knowledge-intensive industries**, which now directly **account for a third of all jobs**.

This contributes to **above average pay in Cambridge** – the 6th highest in the country - although real terms pay growth has been poor – **full-time workers in Cambridge still earn less in real terms than 15**

years ago. Those in **very low-pay** has seen a **three-fold decrease** over the past 7 years, whilst pay inequality is below benchmarks.

Homeworking is more prevalent in Cambridge – **no city had a greater share of their workforce working from home** during the pandemic - although this varies across the labour market. Cambridge **workers travel further than peers to reach their place of work**, especially those engaged in lower skill, lower paying work.

Workforce training opportunities in Cambridge are in line with benchmarks, although **apprenticeships are less prevalent** in the City. Cambridge's **workforce is the second most highly skilled in the country**, largely reflecting the skills needs of Cambridge's knowledge industries.

Measures of job quality in Cambridge are generally in line with or outperform benchmarks: **working hours are shorter, in-work benefit claims are below average, and job satisfaction is the highest** in the country. However, **1 in 10 workers are employed in 'insecure employment'**, above benchmarks, and the 5th highest share in the country.

8.3 Job opportunities

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Job vacancies (per 1,000 economically active)			1st (of 58)
New employer payrolls (per 1,000 existing payrolls)			6th (of 58)
Homeworking share			1st (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Job vacancies reached record highs in Cambridge in 2022



Chart source: ONS Vacancies and jobs in the UK (for vacancies), ONS Annual Population Survey (for economically active residents)

The number of (online) advertised job vacancies reached record highs in Cambridge in 2022, with an average of 20,300 vacancies sought by local employers, up from 17,900 in 2021.³⁷ Relative to the number of economically active residents, Cambridge exhibited 4 times as many vacancies than benchmarks, and more than any other city nationwide.³⁸

Over 2021 and 2022, information and communication technology roles continued to account for the greatest share of Cambridge job vacancies (17% - double the national average share). Other in demand roles included engineering (10% of all vacancies), healthcare (9%), sales and trading (7%) and legal, human resources and social services (6%).

Cambridge’s job market is fast growing, and proved resilient during the pandemic

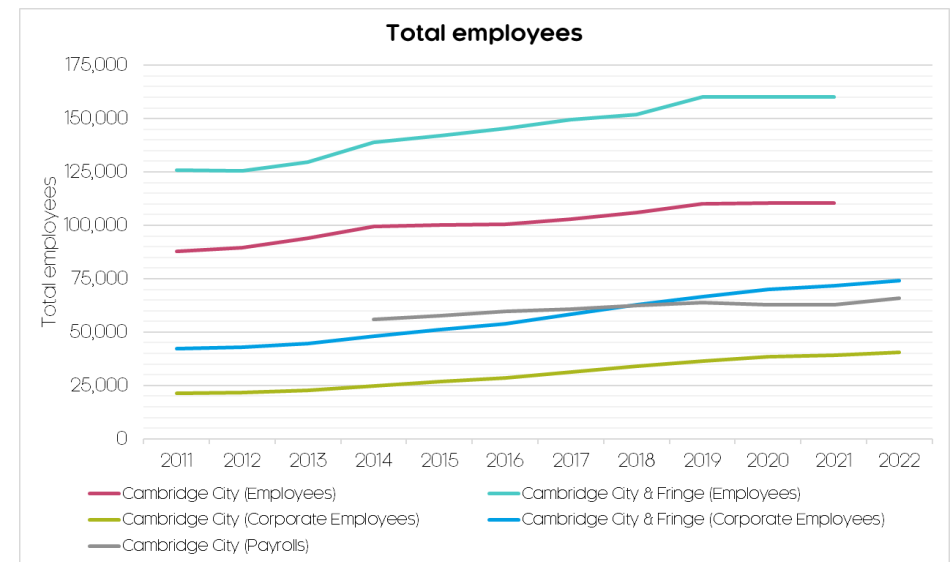


Chart source: ONS Employees in the UK (for employees), Earnings and employment from PAYE Real Time Information (for payrolls), Cambridge Ahead Cambridge Cluster Insights (for corporate employees)

A range of job market metrics show Cambridge is experiencing strong jobs growth.³⁹ Across Cambridge (City & Fringe), the total number of employees was maintained at 160,000 in 2021, identical to pre-pandemic totals. Between 2011 and 2021, Cambridge experienced the fastest jobs growth of any city in England and Wales, averaging 3,400 additional employees per annum.

Other job market metrics suggest this momentum has been maintained; Cambridge’s annual growth in employer payrolls to February 2023 (3.9%) exceeded national (2.1%) and national city (2.4%) benchmarks and was the 3rd fastest growth out of 58 cities in England and Wales. Cambridge Ahead analysis showed Cambridge (City & Fringe) corporate businesses employed a record number of employees during 2021/22.

Knowledge industries have driven Cambridge’s jobs growth, and account for a third of all jobs

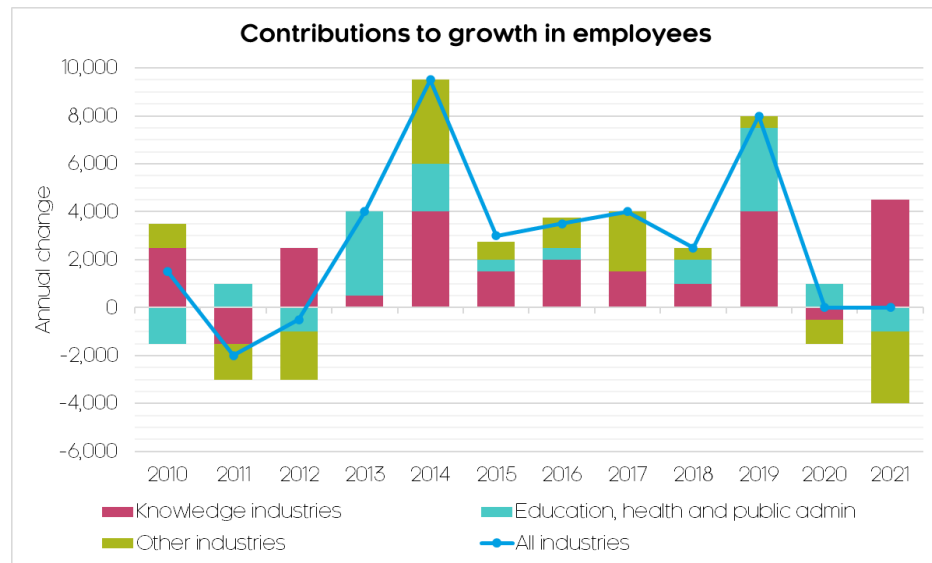


Chart source: ONS Employees in the UK

Over 2011-21, knowledge industries across Cambridge (City & Fringe) added on average 2,100 employees per annum – the fastest growth of knowledge employees of any city in the country.⁴⁰ Education, health and public administration averaged 1,000, and other industries 300. In 2021, the 160,000 employees in Cambridge (City & Fringe) were evenly (at 33% each) spread across these three industry groupings.

Homeworking is more prevalent in Cambridge, although this varies across the workforce

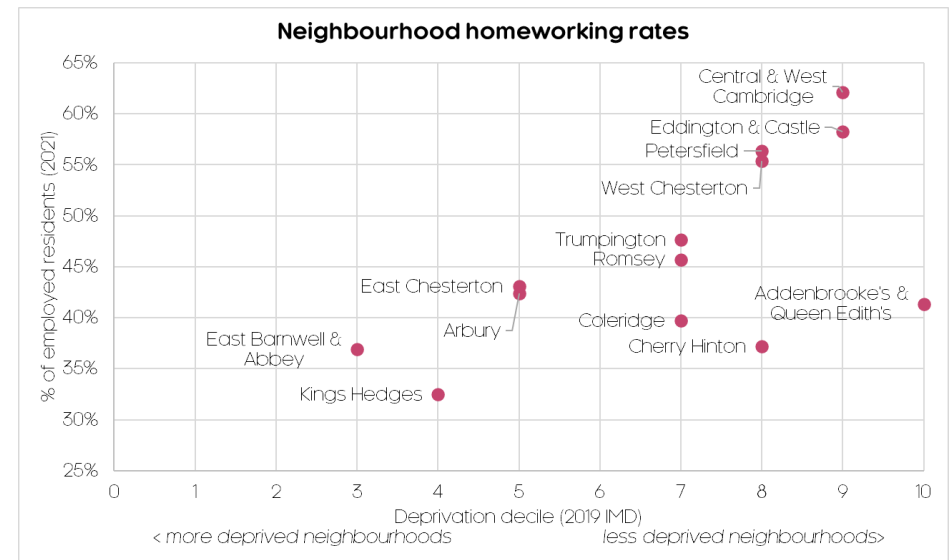


Chart source: ONS Census (via nomisweb.co.uk)

Cambridge’s strong labour market has above-average opportunities for homeworking. The Centre for Cities estimate almost two-fifths of jobs in Cambridge can be more easily done from home.⁴¹ And the 2021 Census showed almost half (45%) of the Cambridge (City & Fringe) workforce worked from home, above the national average of 31%, and the highest rate of any city in England and Wales.⁴²

This largely reflects the overrepresentation of 'high skill' workers in Cambridge; according to the 2021 Census, such workers were twice as likely to work from home.⁴³ As a result, residents in Cambridge's less deprived neighbourhoods were more likely to work from home, in contrast to its more deprived neighbourhoods, where such opportunities are rare – for instance, only 3 in 10 residents in Kings Hedges reported homeworking, in contrast to 6 in 10 in Central & West Cambridge.

Cambridge workers travel further than benchmarks to reach their place of work

The 2011 Census showed workers across Cambridge (City & Fringe) travelled on average 17.6km from their residence to their place of work.⁴⁴ This exceeded national (14.5km) and national city (14.0km) benchmarks, and was in fact the 5th further distance travelled to work of 58 cities in England and Wales. Lower skill, lower paid workers are more likely to travel further to work in Cambridge due to the high cost of living in the City.

8.4 Earnings and pay

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Median weekly pay (full-time workers)			6th (of 58)
Median weekly pay (part-time workers)			2nd (of 58)
Proportion of employees 'low-paid'			2nd (of 58)
Pay inequality (20th-80th percentile ratio)			19th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Wages in Cambridge remain above benchmarks, although real terms growth has been subdued

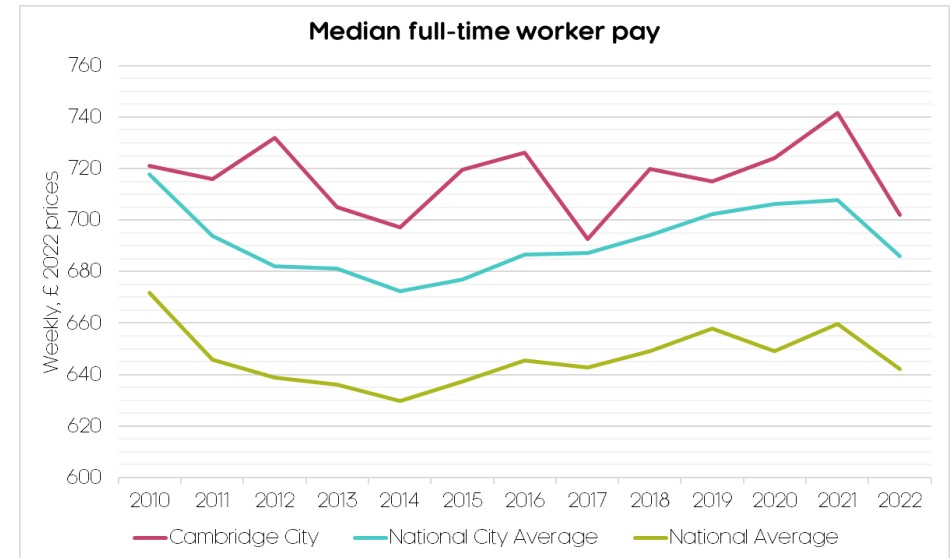


Chart source: ONS Employee earnings in the UK (via nomisweb.co.uk)

The median weekly pay for full-time workers in Cambridge stood at £702 in 2022, which exceeds both national (by 9%) and national city (by 2%) benchmarks.⁴⁵ In 2022, full-time workers in Cambridge ranked as the 6th highest paying out of 58 cities in England and Wales, largely reflecting the higher pay available in Cambridge's knowledge industries.

Yet in real terms, pay growth has been stubbornly low in Cambridge; relative to 2012, the median full-time workers pay is still 4.1% lower – for benchmarks, it is 0.6% higher. Between 2012-22, only 9 other cities experienced slower pay growth than in Cambridge. Over the 2021-22 cost of living crisis, real pay dropped 5.4% - double the national average.

For part-time workers, median weekly pay stood at £281 in 2022, some 22% higher than benchmarks, with part-time workers in Cambridge ranking as the 2nd highest paying out of 58 cities in England and Wales. In contrast to full-time workers, part-time pay (in real terms) is 21% higher than in 2012.

The number workers in 'low-pay' in Cambridge continues to decline

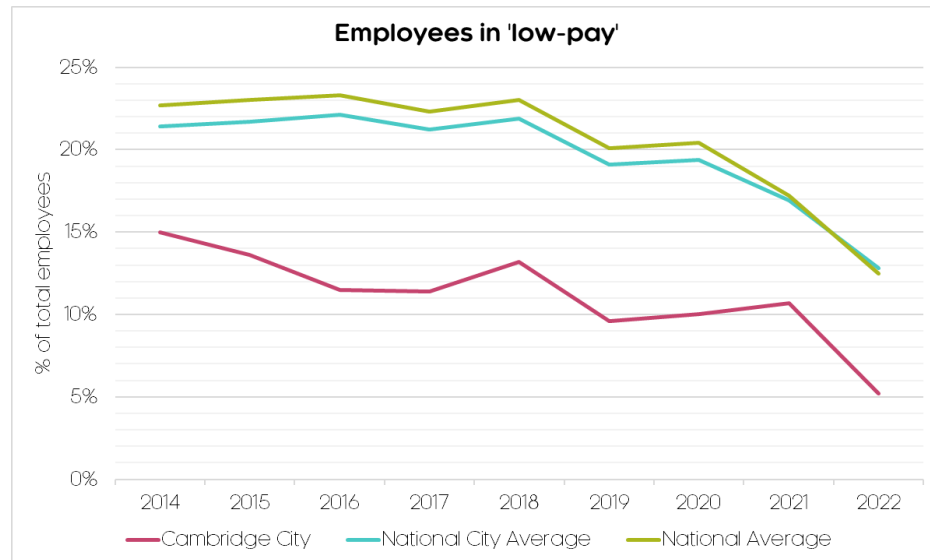


Chart source: ONS Employee earnings in the UK (via nomisweb.co.uk)

The incidence of 'low-pay' in Cambridge (defined as workers earning less than the real Living Wage) declined sharply in 2022 to 5.2% - a record low - although this may have been driven by 'compositional effects'^{46, 47} Since 2014, there has been a three-fold decrease in the proportion of Cambridge workers in low pay. In 2022, Oxford was the only city to have a lower share workers in 'low-pay'.

The gap between the highest and lowest paid workers in Cambridge is below benchmarks, and declining

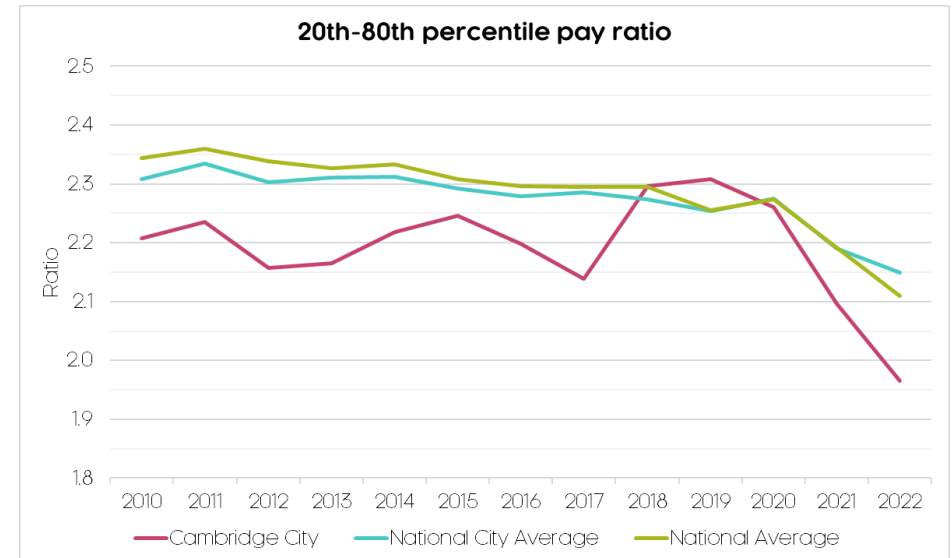


Chart source: ONS Employee earnings in the UK (via nomisweb.co.uk)

The gap (i.e. ratio) between the lowest (20th percentile) and highest (80th percentile) paid workers in Cambridge was below benchmarks in 2022, and the 19th lowest of 58 cities in England and Wales.⁴⁸ After a brief increase pre-pandemic, the gap has declined sharply, given improved pay for low-paid and part-time workers (although as with low-pay, some of this may be attributable to compositional effects).

Analysis presented under the Social Equity lens shows the gap between Cambridge's lowest and highest income *residents* (not workers) was above benchmarks and increasing. Though the two measures are not directly comparable, it may indicate Cambridge's income inequality is being driven by both non-pay income sources (e.g. investment income), and the higher incomes of residents who work (i.e. commute) outside the City.

8.5 Workforce skills and training

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Workforce receiving training share			17th (of 58)
Apprenticeship starts (per 1,000 residents)			N/A
'High-skill' workforce share			2nd (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Cambridge workers have been less likely to receive training opportunities, though this gap is being reversed

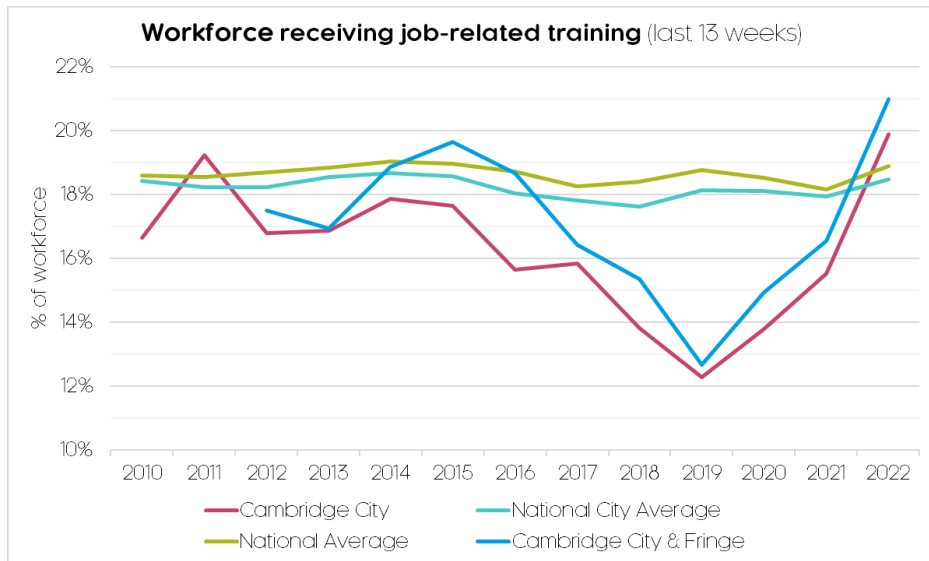


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

The proportion of the Cambridge (City & Fringe) workforce reporting to receive job-related training had tracked below benchmark areas pre-pandemic, although this gap has since been reversed.⁴⁹ In 2022, 21% of workers reported receiving job-related training in the last 13 weeks, up from a low of 13% in 2019, and a rate ahead of benchmarks.

Apprenticeships remain less prevalent than benchmarks in Cambridge, but are typically more advanced

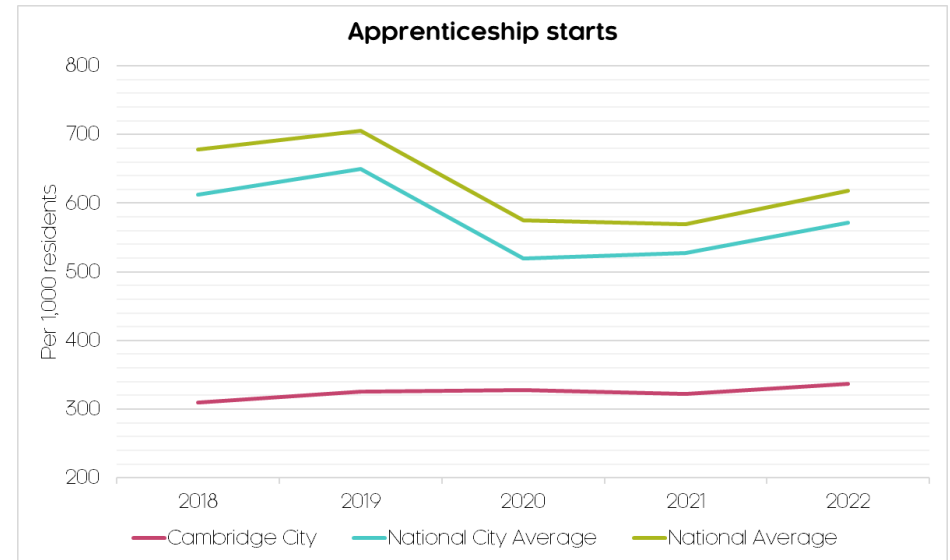


Chart source: DfE Explore education statistics

Both the prevalence of apprenticeship starts and achievements remain below benchmark areas in Cambridge, with residents in Cambridge 66% less likely to start an apprenticeship than the national average over the 2021/22 academic year, the lowest likelihood of 55 cities in England.⁵⁰ Despite this, apprenticeships in Cambridge are typically more advanced, with 50% of achievements in 2021/22 to a 'Higher' level, a rate twice the national average.

This underrepresentation largely reflects the pursuit of other educational opportunities by young people in Cambridge; during the 2020/21 academic year, relative to the national average, Cambridge students were 12% more likely to enter (non-apprenticeship) employment and 31% more likely to progress to higher education.⁵¹

The Cambridge workforce is overrepresented with high-skilled workers

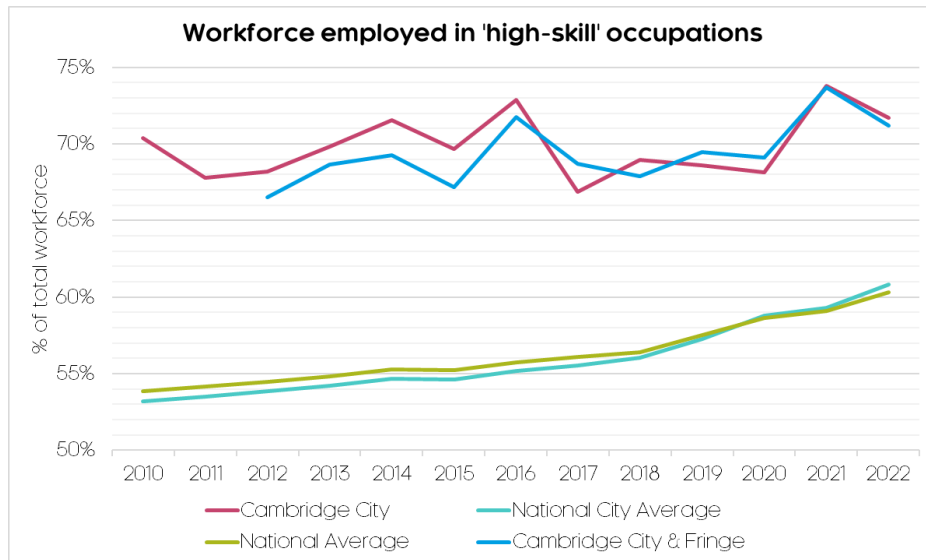


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

Almost three quarters (71%) of the Cambridge (City & Fringe) workforce was employed in 'high skill' occupations in 2022, a share which continues to track well above benchmark areas, and was second only to Oxford out of 58 cities in England and Wales, largely reflecting the high skills requirements of Cambridge's knowledge industries.⁵² This can however create barriers for low and unskilled residents seeking work in the City.

8.6 Job quality and security

Key benchmark metrics <i>Source available in below body of analysis</i>	Relative performance <i>Latest year</i>	Trend performance <i>Over the past 5 years</i>	Latest city rank <i>1st = highest city value</i>
Workforce working long working hours share	Blue	Blue	22nd (of 58)
Workforce in 'insecure employment' share	Magenta	Blue	5th (of 58)
In-work benefit claims share	Blue	Magenta	57th (of 58)

Key: magenta = above average/increasing, grey = average/stable, blue = below average/decreasing

Long working hours affect 2 in 10 Cambridge workers

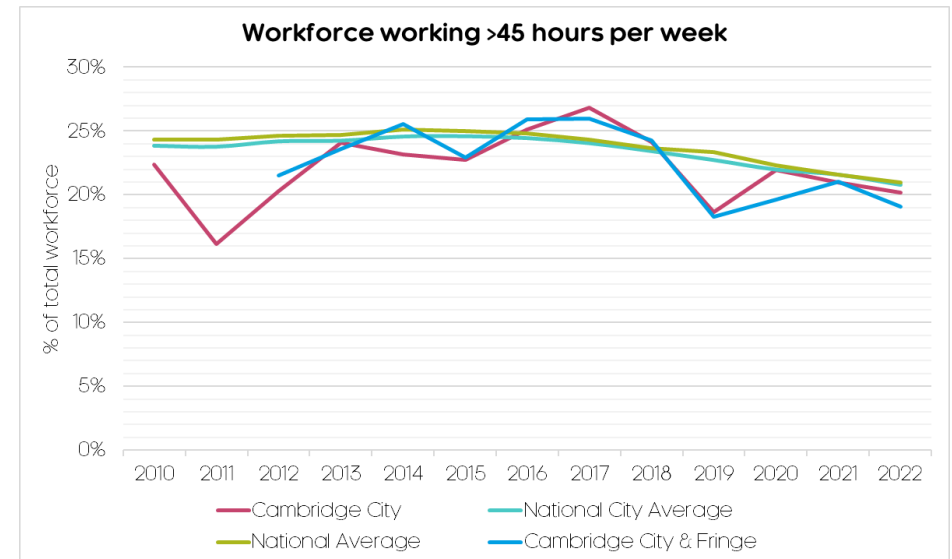


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

In 2022, 2 in 10 (19%) Cambridge (City & Fringe) workers reported working more than 45 hours a week, a proportion marginally below

benchmarks (21%), and the 22nd highest share of 58 cities in England and Wales.⁵³ Though this share increased slightly during the pandemic, it remains well below its high of 26% recorded in 2017.

The incidence of insecure employment in Cambridge is declining, but remains above benchmarks

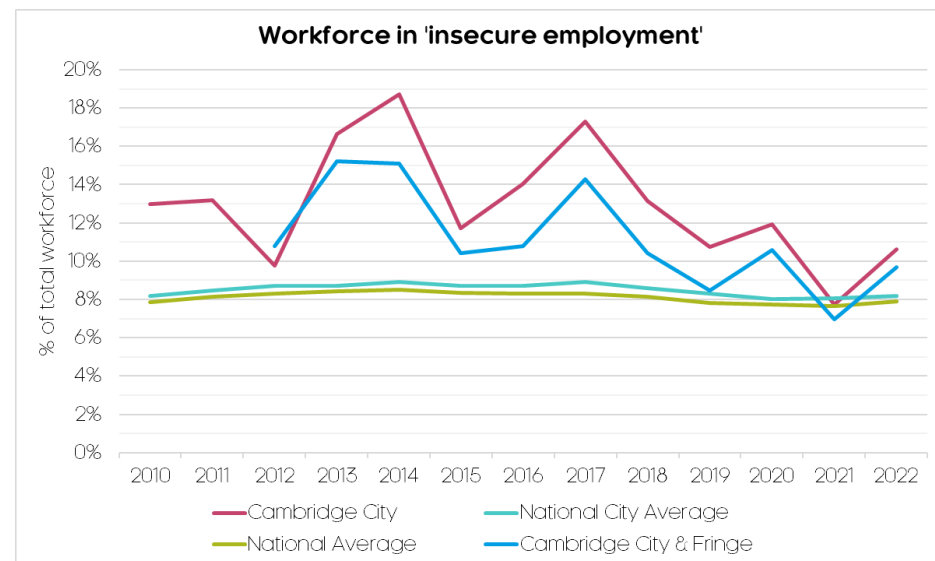


Chart source: ONS Annual Population Survey (via nomisweb.co.uk)

The proportion of the Cambridge (City & Fringe) workforce employed in 'insecure employment' increased to 10% in 2022, marginally ahead of benchmark areas, and was the 5th highest share of 58 cities in England and Wales.⁵⁴ Over the past decade, insecure employment – though volatile – has been above average in Cambridge, affecting 15% of workers in 2014.

The rate of double-jobbing – where a person works more than one job, often in pursuit of additional income – jumped to 7% in 2022, up from 3% in 2019, and eclipsing benchmark areas (4%).⁵⁵ This was the

second highest rate of 58 cities in England and Wales, behind only Oxford. This may in-part be influenced by Cambridge's large student population, where multi-jobbing is more prevalent.

In-work benefit claims increased during the pandemic, but are underrepresented in Cambridge

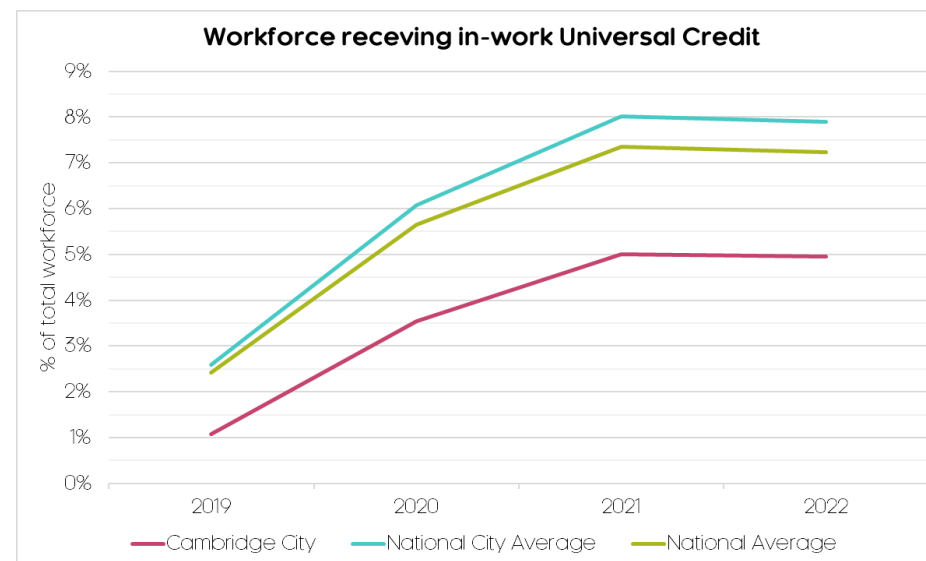


Chart source: DWP Stat-Xplore (for in Universal Credit claims), ONS Annual Population Survey (for workforce totals)

The proportion of the Cambridge workforce receiving in-work Universal Credit was maintained at 5.0% in 2022 – up from 3.5% in 2020 – below both national (7.2%) and national city (7.9%) benchmarks, with Cambridge recording the 2nd lowest share of 58 cities in England and Wales (behind York).⁵⁶ Of the 7,500 Universal Credit claimants in Cambridge in 2022, 45% were in work, above national average of 41%, and an increase on the 38% in 2019.

Although residents in Cambridge's more deprived neighbourhoods have a higher dependency on such benefits

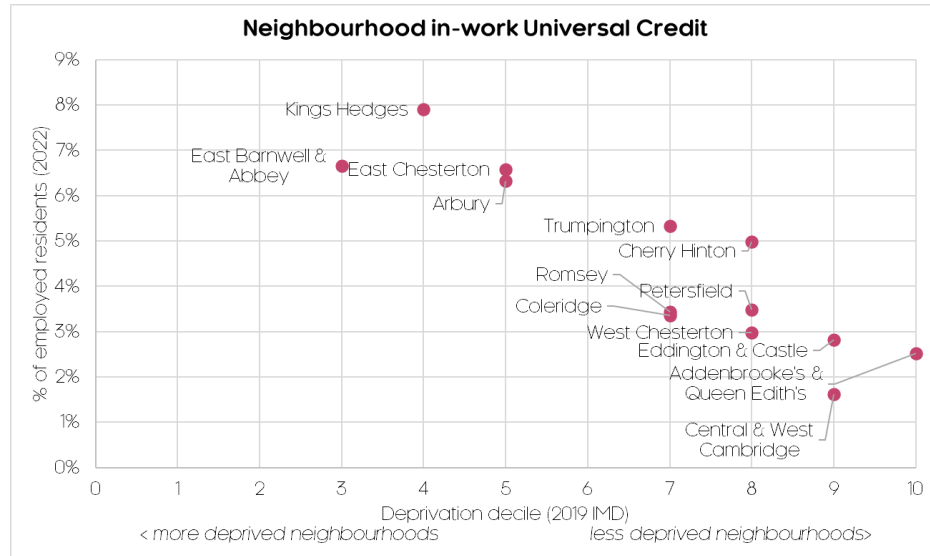


Chart source: DWP Stat-Xplore (for in Universal Credit claims), ONS Census (for workforce totals)

The dependency on in-work Universal Credit is higher in Cambridge's more deprived neighbourhoods: during 2022, 8% of employed residents in Kings Hedges received in-work Universal Credit, a rate above the national average.⁵⁷ Cambridge's other deprived neighbourhoods, including East Barnwell & Abbey, East Chesterton and Arbury also had rates above the City average, as did Trumpington.

Workers in Cambridge are more satisfied than any other city in the country

Analysis by Glassdoor, drawing on 100,000 anonymous reviews from workers in 20 British cities, found Cambridge had the most satisfied workforce in the country.⁵⁸ The level of satisfaction among employees

averaged 3.91 out of 5 – well above the national average of 3.79. This sample – drawn from online reviews - could however be biased towards the top-end of Cambridge's workforce, especially those in high-paying knowledge industries.

8.7 Sources, clarifications and signposting

Interactive versions of the charts presented here can be viewed on the accompanying online dashboard ([accessible online here](#)).

The following endnotes provide detailed sources, clarifications and signposting for all of the data and evidence presented in the Economy

¹ ONS Regional economic activity by gross domestic product *Note: data real terms (constant 2019 prices, using ONS GVA deflator)*

² Knowledge-intensive industries defined throughout this report using an adaption of the SIC-based definitions provided in [this NIC report](#)

³ ONS Regional economic activity by gross domestic product *Note: data real terms (constant 2019 prices, using ONS GVA deflator)*

⁴ Cambridge Ahead Cambridge Cluster Insights *Note: data for financial years*

⁵ ONS Regional economic activity by gross domestic product (for GVA), ONS Employees in the UK (for jobs) *Note: data real terms (constant 2019 prices, using ONS GVA deflator). Benchmarks exclude London due to distortionary effect*

⁶ ONS Subregional productivity in the UK *Note: GVA per employee has been utilised elsewhere due to greater comparability (i.e. city by city) and timeliness*

⁷ See research by the Resolution Foundation [here](#)

⁸ See research by the Bennett Institute [here](#)

⁹ Cambridge Ahead Cambridge Cluster Insights *Note: data real terms (constant 2022 prices, using ONS CPI) Data for financial years*

¹⁰ ONS Business demography *Note: high-growth firms defined here in line with OECD definition*

¹¹ ONS UK business; activity, size and location (via nomisweb.co.uk) *Note: high-performing firms defined here as those with turnovers exceeding £1 million*

¹² Centre for Cities Data Tool

¹³ ONS Annual Population Survey (via nomisweb.co.uk)

¹⁴ ONS Vacancies and jobs in the UK (for vacancies) and Earnings and employment from PAYE Real Time Information (for filled payrolls)

¹⁵ Employer Skills Survey

¹⁶ ONS Business demography *Note: start-up rate defined here as business births as a proportion of total active businesses in the same year*

chapter. A glossary of key terms and abbreviations can be found in the Appendices.

Readers who are interested in more detail – including definitions and methodologies, additional categorisations and detailed spatial breakdowns – are encouraged to review these sources, which are all publicly available

¹⁷ Cambridge Ahead Cambridge Cluster Insights *Note: start-up rate defined here as business births as a proportion of total active businesses in the same year. Data for financial years*

¹⁸ Spinouts UK University Listings

¹⁹ ONS Business demography *Note: closure rate defined here as business deaths as a proportion of total active businesses in the same year*

²⁰ ONS UK business; activity, size and location (via nomisweb.co.uk) *Note: independent businesses defined here as an enterprise unit*

²¹ Visit Britain Inbound Tourism (for international visitors) and Domestic Overnight Tourism (for domestic visitors) *Note: annual data are three-year averages due to small sample size*

²² ONS Employees in the UK (via nomisweb.co.uk) *Note: tourism industries defined here in-line with ONS Tourism Satellite Account definition*

²³ Cambridge BID Monthly Footfall Reports

²⁴ Centre for Cities High Streets Recovery Tracker

²⁵ ONS The night-time economy *Note: night-time industries defined by the ONS as those in which an above average proportion of workers are night-time workers*

²⁶ Centre for Cities High Streets Recovery Tracker

²⁷ VOA Floorspace Statistics *Note: data for financial years*

²⁸ VOA Floorspace Statistics *Note: average property costs defined here in terms of average rateable value per m2. Data for financial years*

²⁹ Ofcom Connected Nations

³⁰ Ofcom Connected Nations

³¹ WIPO Global Innovation Index *Note: annual data are a sum of 5-years due to small sample size. The index uses an alternative definition of Cambridge based on OECD data*

³² Centre for Cities Data Tool

³³ ONS Employees in the UK (via nomisweb.co.uk) *Note: R&D-intensive industries defined here using SIC-based definitions provided in [this OECD report](#)*

³⁴ See research [here](#)

³⁵ Savills Spotlight: Cambridge Offices & Laboratories

³⁶ London Economics The Economic Impact of the University of Cambridge

³⁷ ONS Vacancies and jobs in the UK, ONS Annual Population Survey (for economically active totals) *Note: annual vacancies data are 12-month averages. Annual economically active data 4-quarter averages*

³⁸ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*

³⁹ ONS Employees in the UK (for employees), Earnings and employment from PAYE Real Time Information (for payrolls), Cambridge Ahead Cambridge Cluster Insights (for corporate employees) *Note: Cambridge Ahead data not strictly comparable with ONS data*

⁴⁰ ONS Employees in the UK (via nomisweb.co.uk)

⁴¹ Centre for Cities How easy is it for people to stay at home during the coronavirus pandemic?

⁴² ONS Census (via nomisweb.co.uk)

⁴³ ONS Census (via nomisweb.co.uk)

⁴⁴ ONS Census (via nomisweb.co.uk)

⁴⁵ ONS Employee earnings in the UK (via nomisweb.co.uk) *Note: data presented in real terms (constant 2022 prices, using CPIH)*

⁴⁶ Compositional effects refers to the fact more low-earners are leaving their jobs, and are thus excluded from the pay sample.

⁴⁷ ONS Employee earnings in the UK (via nomisweb.co.uk) *Note: real Living Wage as defined here by the Living Wage Foundation*

⁴⁸ ONS Employee earnings in the UK (via nomisweb.co.uk) *Note: data for full-time workers only, due to small sample size*

⁴⁹ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*

⁵⁰ DfE Explore education statistics *Note: data for academic years. Per person data calculated using Census resident population estimates*

⁵¹ DfE Explore education statistics *Note: data for academic years*

⁵² ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages. High-skill occupations defined here as in the [Levelling Up Missions and Metrics paper](#) (SOC occupational major groupings 1-3 and 5)*

⁵³ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*

⁵⁴ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages. Insecure employment defined here using the definition proposed by the [GLA State of London report](#)*

⁵⁵ ONS Annual Population Survey (via nomisweb.co.uk) *Note: annual data 4-quarter averages*

⁵⁶ DWP Stat-Xplore (for in Universal Credit claims), ONS Annual Population Survey (for workforce totals) *Note: annual claimant data 12-month averages*

⁵⁷ DWP Stat-Xplore (for in Universal Credit claims), ONS Census (for workforce totals) *Note: annual claimant data 12-month averages*

⁵⁸ Glassdoor Best Places to Work UK

State of the City 2023: Appendices

8.8 Supporting organisations

The following organisations were approached as part of the stakeholder engagement for this project. We are grateful to those that kindly spared the time to provide valued scrutiny, feedback and input during the development of the State of the City report and dashboard.

Abbey People	Cambridge Housing Development Agency
Allia Future Business	Cambridge Housing Society
Analysis and Evaluation C&P Combined Authority	Cambridge Innovation Capital
Anglia Water	Cambridge Investment Partnership/Hill Group
Camb United Trust	Cambridge Money Advice Centre
Cambridge 2030	Cambridge Network
Cambridge BID	Cambridge Online
Cambridge Business Advisors	Cambridge Resilience Web

Cambridge CAB	Cambridge Reuse
Cambridge Carbon Footprint	Cambridge Science Park
Cambridge Centre 33	Cambridge Sustainable Food
Cambridge Community Arts	Cambridgeshire Digital Inclusion Network
Cambridge Community Safety Partnership	Cambridgeshire Public Health
Cambridge CVS	Cambridgeshire Public Health Intelligence Team
Cambridge Doughnut Economics Action Group	Cambridgeshire Research Group
Cambridge Enterprise	Cambs Acre
Cambridge Ethnic Community Forum	Camcycle
Cambridge Foodbank	Carbon Neutral Cambridge
Cambridge Friends of the Earth	CBI

Cambridge Housing Associations	Centre for Business Research, Cambridge Judge Business School	Federation of Small Businesses (FSB Beds, Cambs, Herts)	Romsey Mill Trust
Chamber of Commerce	It Takes a City	First Intuition	South Integrated Neighbourhoods
City Climate Leaders Group	Network Rail	Form the Future	Stagecoach
Climate Change Forum	NHS (Integrated Care Partnership)	Friends of Groups (incl. Jesus Green, cemeteries, recreation grounds)	Tenant and Leaseholder representatives on Cambridge Housing Committee
Co-Farm	One Nucleus	GLL Cambridge Contract Manager	The Housing Board
Community Church	Past Present & Future	Greater Anglia	Transition Cambridge
CU Institute for Sustainability Leadership	Public Health England	Greater Cambridge Partnership	Trinity Hall
Director of Sport ARU	Queen Edith's Community Forum	Greater Cambridge Shared Planning Service	University of Cambridge Pro-Vice Chancellor
Director of Sport for University of Cambridge	Real Living Wage Employers	Healthwatch Cambridgeshire and Partnership Boards	Whippet
Diversity and Faith groups	Region of Learning	Home Improvement Agency	
Encompass Network	Resident Associations/Groups		

8.9 Spatial definitions

Throughout this report, extensive use is made of an alternative spatial definition for Cambridge; “Cambridge City & Fringe”. This is because existing spatial definitions typically under or over bound Cambridge’s functional socio-economic space. Such definitions, if used exclusively,

run the risk of not ‘speaking to the people of the City’, particularly if key economic, environmental and social spaces are excluded.

Recent research commissioned by the UKRI¹ has attempted to address these issues and has proposed a new approach. This includes using updated LSOA “building-blocks” (the lowest level of spatial disaggregation widely available) to produce definitions “*more representative of urban functional economic spaces*” in Great Britain.

The research uses more recent 2018 data to produce two definitions for defining functional urban space; a high-density core (HDC) and supporting commuting zone (HDCZ), and a medium-density core (MDC) and supporting commuting zone (MDCZ), with the HDC and HDCZ providing a tighter, urban-focussed definition.

Critically, using these new definitions the research found existing definitions typically lead to “*misleading understandings as to the reality of local economies*”; in Cambridge’s case, it provides specific examples of how the scale of its population and knowledge economy is being underplayed by existing definitions.

The definitions proposed by the study are LSOA-based, which significantly reduces the range and quality of available data and evidence, especially those required for a local analytical framework.

These LSOA-definitions can however be ‘snapped’ to their closest fitting MSOA, the latter of which offer a much wider range of data and evidence. This is similar to the approach to that used by the Centre for Cities to define their Primary Urban Areas (although they ‘snap’ to the closest fitting Local Authority District).

An alternative, MSOA-based definition of Cambridge is therefore shown in the map below. This provides a ‘best-fit’ definition derived from the

LSOA-classified Cambridge HDCZ identified in the research. It incorporates all of the administrative City boundary and some neighbouring geographies in South Cambridgeshire.

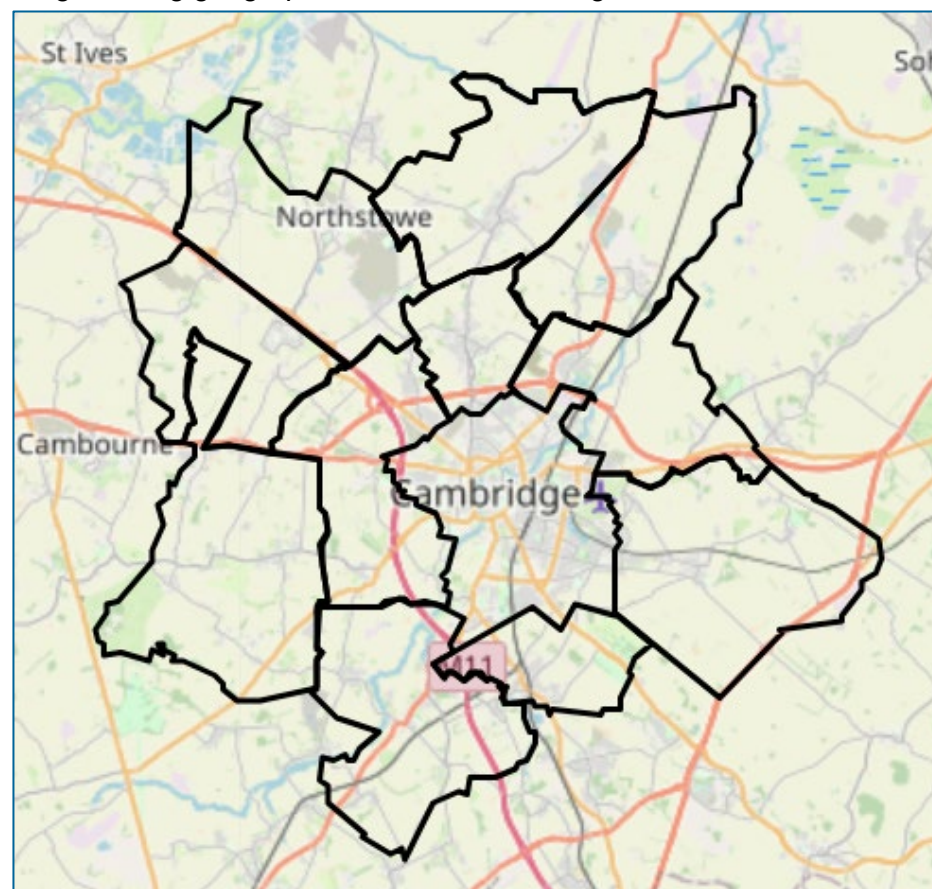


Chart source: Cambridge Econometrics, adapted from UKRI-commissioned research.

Map data from [OpenStreetMap](https://www.openstreetmap.org/).

¹ Available [here](#)

The name of each MSOA captured in this definition and an overview of the key data is also provided in the table below, which highlights how the current administrative boundary of the City significantly underplays the size of the City against key socio-economic criteria.

These MSOAs also provide a platform to provide 'neighbourhood'-level insights. Each individual MSOA captures a neighbourhood area in Cambridge, which generally (although not precisely) aligns with the City Councils electoral wards.

MSOA (2011) code	MSOA (2011) name	Local Authority (2011)	Population (2021)	Employment (2021)	GVA (£m 2020)
E02003719	Kings Hedges	Cambridge	10,300	1,500	67
E02003720	Arbury	Cambridge	9,700	1,300	85
E02003721	East Chesterton	Cambridge	9,700	7,500	531
E02003722	West Chesterton	Cambridge	8,500	2,800	154
E02003723	Eddington & Castle	Cambridge	13,000	9,500	386
E02003724	East Barnwell & Abbey	Cambridge	10,300	4,000	185
E02003725	Central & West Cambridge	Cambridge	16,200	28,000	1,092
E02003726	Petersfield	Cambridge	8,200	8,000	264
E02003727	Romsey	Cambridge	10,200	2,100	96
E02003728	Coleridge	Cambridge	10,800	3,800	170
E02003729	Cherry Hinton	Cambridge	9,300	4,800	707
E02003730	Trumpington	Cambridge	17,400	15,500	1,774
E02003731	Addenbrooke's & Queen Edith's	Cambridge	11,900	22,500	919
	<i>Cambridge City total</i>		<i>145,500</i>	<i>111,300</i>	<i>6,429</i>
E02003776	Cottenham	South Cambs	6,800	1,900	127
E02003777	Longstanton, Swavesey & Oakington	South Cambs	9,900	4,300	280
E02003778	Waterbeach and Landbeach	South Cambs	6,500	4,800	304
E02003779	Bar Hill & Boxworth	South Cambs	5,000	3,300	272
E02003780	Histon, Impington & Orchard Park	South Cambs	11,400	5,000	305
E02003781	Milton, Fen Ditton & Quy	South Cambs	6,100	13,500	1,119

MSOA (2011) code	MSOA (2011) name	Local Authority (2011)	Population (2021)	Employment (2021)	GVA (£m 2020)
E02003783	Girton & Barton	South Cambs	6,900	2,300	128
E02003784	Hardwick & Highfields	South Cambs	8,900	2,000	128
E02003785	Fulbourn & Teversham	South Cambs	9,000	7,500	477
E02003786	Great Shelford & Stapleford	South Cambs	6,500	2,300	126
E02003788	Little Shelford, Foxton & Haslingfield	South Cambs	8,100	2,400	153
	<i>Cambridge City Fringe total</i>		<i>85,100</i>	<i>49,300</i>	<i>3,419</i>
	Cambridge (City & Fringe) total		230,600	160,600	9,848

Chart source: ONS Census (for population), ONS Employees in the UK (for employees), ONS Regional economic activity by gross domestic product (for GVA)

8.10 Glossary of key terms and abbreviations

The following key terms, abbreviations and acronyms are used throughout this report, in both the body of text and accompanying source endnotes.

Term	Definition
Adult	Aged 16 or above
BEIS	Department for Business, Energy & Industrial Strategy
Benchmark	National and/or national city average
BID	Business Improvement District
Child	Aged under 16
City Fringe	Neighbourhoods outside Cambridge's administrative boundary but part of its urban functional economic space
CPI	Consumer Prices index
CPIH	CPI including owner occupiers' housing costs
CO2	Carbon dioxide (chemical formula CO ₂)
CRG	Cambridgeshire Research Group
DEFRA	Department for Environment, Food & Rural Affairs
DfE	Department for Education
DfT	Department for Transport

Term	Definition
DLUHC	Department for Levelling Up, Housing and Communities
DVLA	Driver and Vehicle Licensing Agency
DWP	Department for Work and Pensions
Economically active	Residents who are either employed or unemployed
Economically inactive	Residents who are neither employed or unemployed
Employed	Residents who did some paid work, whether as an employee or self-employed, and unpaid family work
Employees/jobs	Any adult that an organisation directly pays from its payroll(s). Excludes self-employed
EPC	Energy Performance Certificate
FSM	Free school meals
GCSE	General Certificate of Secondary Education
GVA	Gross value added
House/home	Unit of accommodation ('dwelling') in which all rooms are behind a door that only that household can use
Ktoe	Thousand tonnes of oil equivalent to kilowatt hours
MHCLG	Ministry of Housing, Communities & Local Government
Km/m	Kilometres/metres
KSI	Killed or seriously injured
LQ	Lower quartile
LSOA	Lower Layer Super Output Areas
MSOA	Middle Layer Super Output Areas
MW	Megawatts
MWh	Megawatt hours
National average	The England and Wales average (or England average if unavailable)
National city average	The average of all cities in England and Wales (or average of all cities in England if unavailable)
NEET	Not in education, employment or training
Neighbourhood	MSOA, as defined by the 2011 Census, covering no more than 6,000 households
NIC	National Infrastructure Commission

Term	Definition
NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
OHID	Office for Health Improvements and Disparities
ONS	Office for National Statistics
PAYE	Pay As You Earn
PCT	Patent Cooperation Treaty
PHE	Public Health England
POLAR4	Participation of local areas
PM2.5	Fine particulate matter
PT	Public transport
PV	Photovoltaics
R&D	Research and development
R&I	Research and innovation
Resident	Persons in households and communal establishments
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification
SME	Small and medium-sized enterprise
Sq km/m/ft	Square kilometre/metre/foot
TCO2e	Tonnes of CO2 equivalent
µgm-3	Micrograms per cubic meter air
UKRI	UK Research and Innovation
UN	United Nations
Unemployed	Residents without a job and available to work (in the next 2 weeks) and who have looked for work (in the past 4 weeks)
VCS	Voluntary and community sector
VOA	Valuation Office Agency
WIPO	World Intellectual Property Organisation
Workforce	Residents in employment
Working age	Aged between 16 and 64
Young	Aged between 16 and 24

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