

Buckinghamshire Economic Recovery Plan: Evidence Base

July 2020

WORKING DRAFT

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1 Introduction

This evidence base has been developed to inform the Buckinghamshire Economic Recovery Plan. It provides:

- A baseline description of the characteristics and performance of the Buckinghamshire economy pre-Covid
- A summary of how the local economy has been impacted to date by the Covid-19 pandemic
- An indication of how the local economy might be impacted in the medium to long-term
- An indication of potential opportunities for long term economic growth that have arisen or have been accelerated as a result of the pandemic

Throughout, a commentary is provided regarding the extent to which the evidence on which the Buckinghamshire Local Industrial Strategy (LIS) was developed has changed (both in light of the pandemic and as a result of new data being available), and whether its long-term strategic aims remain valid and achievable.

A set of key questions, and best attempts at answers, are summarised in Annex A. Answers are, in part, drawn from the work of leading economic experts made available through the Coronavirus and the Economy [Economics Observatory](#).

Buckinghamshire LEP will be monitoring a range of key indicators over the coming months and years to quantify impact and track recovery. These indicators have been developed in conjunction with the LEP Network and EY to provide a common basis on which to monitor change across different geographic areas. Indicators are sourced from a mix of ‘alternative’ (real-time) and traditional data sources and will be grouped into the following themes:

- Business
- Labour market
- Innovation
- Infrastructure

2 Background

Two comprehensive assessments of the Buckinghamshire economy have been undertaken in the last three years. The first was undertaken to inform the [Buckinghamshire Growth Strategy 2017-2050](#), and the second to inform the [Buckinghamshire Local Industrial Strategy](#). In addition, in 2019, a comprehensive analysis of the skill needs of the Buckinghamshire economy was undertaken to inform the Buckinghamshire Skills Advisory Panel. Combined, these three provide us with a good baseline understanding of the local economy pre-Covid.

In the intervening period (i.e. between the last of these assessments being produced and the onset of the pandemic) new data on local GDP, GVA and productivity has been released by the Office for National Statistics. In addition, the Buckinghamshire LEP has gained access to some additional data sources; such as data on high growth firms (provided by Beauhurst) and real-time job postings (provided by Burning Glass Technologies). This updated or additional data is summarised within this report.

At the time of writing, data and intelligence on the impact of Covid-19 on local economies remains largely qualitative or experimental. Quantitative estimates of local impact tend to be modelled on national data and what is known about the industrial structure of local areas. More robust quantitative data on local impact is available for a handful of measures, namely: unemployment benefit claimants, use of furloughing, take-up of the Self-Employed Income Support Scheme, new business start-ups and job postings.

As more evidence becomes available over time, it will be analysed and used to inform the delivery of Buckinghamshire's Economic Recovery Plan actions.

3 Summary

To be developed

Challenges with producing evidence base

- Fluid situation
- We won't know the full extent of the impact to the local economy for a few years (lag in data)
- Set of lead (red flag / steering) and lag (backward validation) indicators developed

Context

- Economy has been losing ground to other areas over last decade
- High levels of out commuting
- Long-term strategy focused on 4 assets / strategic sectors and five foundations of productivity (people, ideas, infrastructure, place and business environment)

Economic recovery

- LIS is still long-term route to productivity growth
- Assets and drivers remain relevant
- Speed of economic growth will reduce
- Immediate focus limiting scaring (unemployment, profitable / innovative businesses going under etc)
- Upskilling / innovation key to recovery
- Future opportunities - clean growth

4 Economic assessment

4.1 Economic output

Buckinghamshire's economy has been experiencing slow growth in recent years, and going into the Covid-induced economic shock, it was not firing on all cylinders.

Historically high productivity, and inflated GVA (due to the strong housing market) gives the overall impression of a buoyant economy which is therefore low priority for funding. However, this is not the case.

Buckinghamshire's economy generated £16.7bn of GDP in 2018 (the latest year for which data is available)¹. Between 2014 and 2018, Buckinghamshire experienced the third lowest growth in GDP of all 38 LEP areas, with the economy growing by just 0.6%². Buckinghamshire currently ranks 11th out of 38 LEP areas in terms of GDP per head.

Local level GDP data was not produced by the Office for National Statistics at the time of developing Buckinghamshire's Local Industrial Strategy, and therefore GVA data was used as proxy³. Slow local growth in GVA to 2016 was highlighted within the Local Industrial Strategy, and the most recent data shows that this trend has continued. So, going into the economic shock caused by the Covid-19 pandemic, Buckinghamshire's economy was not firing on all cylinders.

Clusters that provide the greatest contribution towards Buckinghamshire's GVA include: digital; professional services and health and care (table 1).

¹ Source: ONS, February 2020

² Chained volume measures (CVM) in 2016 money value

³ GDP is equivalent to GVA plus Value Added Tax (VAT) plus other taxes on products less subsidies on products.

Table 1: Buckinghamshire's GVA by cluster (excluding clusters with fewer than 1,000 jobs)

Cluster	2019 Jobs	Average Wage (2019)	Location Quotient	GVA (2016)	% Total of GVA
Property Development*	8,899	£39,844	1.19	£1,104,135,387	9.20%
Digital	10,574	£50,549	1.30	£960,901,449	8.01%
Professional Services	11,175	£47,598	1.51	£746,223,067	6.22%
Health and Care	23,472	£24,897	0.93	£712,739,667	5.94%
Commercial Services	20,451	£22,003	1.05	£605,864,786	5.05%
Education and Childcare	20,118	£23,392	1.11	£601,988,788	5.02%
Building Services	8,420	£33,913	1.09	£546,224,967	4.55%
Food and Beverage	23,994	£18,363	0.99	£505,590,850	4.21%
Civil Engineering	6,271	£41,917	1.04	£498,423,204	4.15%
Financial and Legal Services	5,092	£35,918	0.49	£465,394,053	3.88%
Downstream Chemical	5,092	£54,166	3.10	£419,710,229	3.50%
Personal Services	10,437	£21,810	0.90	£414,665,776	3.46%
Appliances and Personal Goods	4,079	£45,637	2.36	£413,661,445	3.45%
Automotive Services	5,206	£31,776	1.14	£371,622,631	3.10%
Creative	5,312	£28,311	1.67	£354,895,454	2.96%
Government	6,148	£31,774	0.59	£308,820,314	2.57%
Household Goods and Services	8,540	£24,878	1.06	£276,445,878	2.30%
Production Technology	5,589	£41,724	1.61	£264,453,391	2.20%
Business Services	4,014	£35,615	0.98	£252,105,612	2.10%
Logistics and Ecommerce	4,638	£32,511	0.72	£229,387,604	1.91%
Precision Technology	3,377	£43,830	1.77	£184,895,674	1.54%
Local Environmental Services	1,502	£39,489	1.25	£180,291,799	1.50%
Sports and Leisure	4,199	£25,384	0.95	£176,647,716	1.47%
Visitor Economy	4,585	£21,754	0.80	£173,735,120	1.45%
Education and Knowledge Creation	2,416	£37,684	0.48	£172,147,126	1.44%
Retail	4,538	£20,359	0.96	£145,363,477	1.21%
Printing and Publishing	1,566	£31,940	0.98	£128,901,203	1.07%
Local Transport	2,379	£29,306	0.87	£98,656,922	0.82%
Agricultural Inputs and Services	1,768	£24,992	0.74	£98,714,686	0.82%
Vehicle and Defence Technology	1,986	£43,964	0.84	£95,257,483	0.79%
Food and Drink Production	2,696	£36,793	0.92	£92,409,880	0.77%
Furniture and Wood Products	1,385	£29,621	1.60	£50,988,072	0.43%
Metalworking Technology	1,841	£41,572	1.51	£43,426,164	0.36%
Downstream Metal	1,579	£40,440	1.13	£35,850,805	0.30%
Plastics and Vulcanised Products	1,124	£29,886	0.79	£25,487,124	0.21%

Source: EMSI, 2019

*Treat with caution, includes value generated by home ownership

4.2 Productivity

Other areas of the UK have out-paced Buckinghamshire in terms of productivity growth over recent years. The result being a drop in position from 4th out of 38 LEP areas in 2010, to 9th in 2018. Furthermore, Buckinghamshire's productivity is now just below the national average, or 7% below the national average if the influence of a strong housing market is stripped out.

Behavioural changes of governments and firms as a result of the Covid-19 pandemic could negatively impact productivity growth further. Particularly, a potential trend of de-globalisation and reduced trend, and a likely reduction in business investment in R&D.

Whilst still pursuing policies that encourage FDI, exporting and investment in R&D, along with growing, attracting and retaining businesses operating in high productivity sectors, in the current environment it may be particularly conducive to focus local efforts on infrastructure improvements, improving management practices and re-skilling, as means to raising productivity.

Productivity⁴ is the best measure of comparative economic performance. Productivity matters because increasing productivity is critical to increasing economic growth⁵.

As with the GDP and GVA data on which it is based, there is a significant time lag in the publication of local productivity data. The latest available data, published in February 2020, relates to 2018.

The latest data shows us that whilst productivity in Buckinghamshire has grown over the last 10 years, it has done so at a much slower rate than in other parts of the UK. This has led to the productivity gap between Buckinghamshire and the national average closing. In 2010, Buckinghamshire's productivity was 14% higher than the UK average. However, from 2016 onwards, they have been about the same. In terms of position relative to other Local Enterprise Partnership areas, Buckinghamshire dropped from 4th to 9th place over this period.

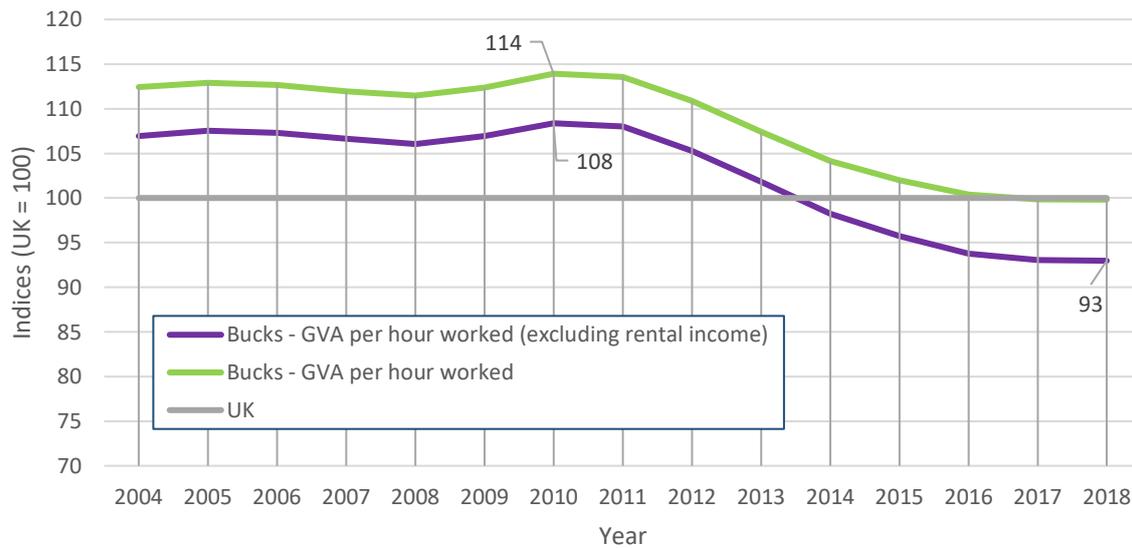
Furthermore, Buckinghamshire's productivity is inflated by its comparatively strong housing market.⁶ When this is taken into account, to provide a measure of economic output more closely related to the input of labour, Buckinghamshire's productivity was estimated in 2018 to be 7% lower than the national average, down from 8% higher than the national average in 2010.

⁴ GVA per hour worked or per job filled

⁵ Source: [Regional and sub-regional productivity in the UK](#), ONS, February 2020

⁶ More details of which are [here](#)

Chart 1: Nominal (smoothed) GVA (B) per hour worked – Buckinghamshire versus the national average (£) (UK = 100)

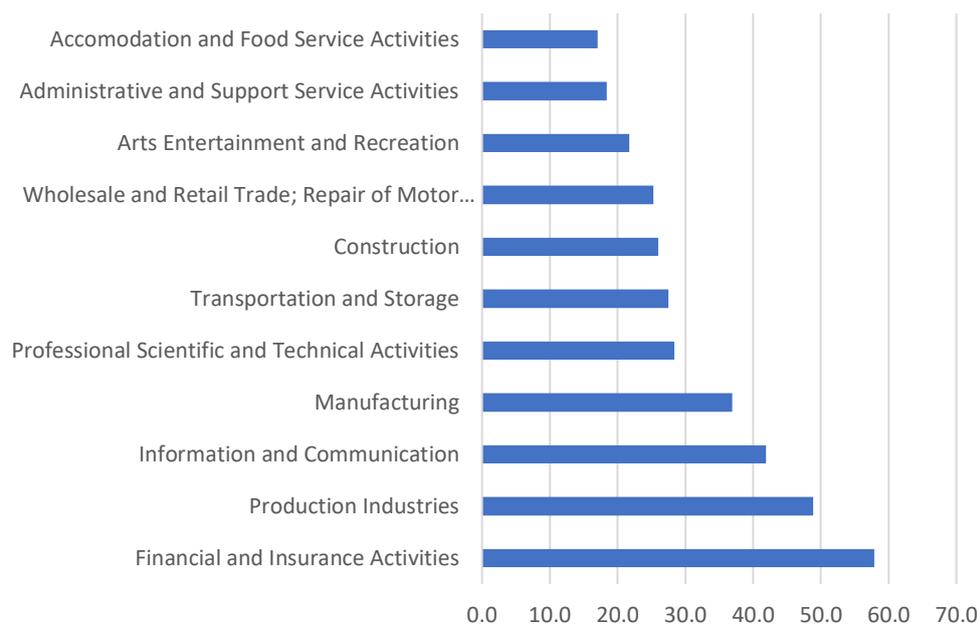


Source: [Regional and sub-regional productivity in the UK](#), ONS, February 2020

Whilst we have been aware of relatively slow growth in local productivity for the last few years (see p20 of the [Buckinghamshire Local Industrial Strategy](#)), the large drop in comparative position became striking in the February 2018 data release. This, in part, appears to be related methodological improvements in the way that GVA estimates at local level are produced, which have led to GVA estimates for Buckinghamshire being revised downwards. [Chart A1](#) illustrates the impact of these changes on the productivity rankings of different LEP areas.

Average labour productivity varies considerably by industry. Therefore, the industry mix of a local economy influences overall productivity levels. High productivity sectors include ‘financial and insurance activities’; ‘production industries’; ‘information and communication’ and ‘manufacturing’. The two industries with the lowest productivity levels are ‘accommodation and food services’ and ‘administration and support services’ (chart 2).

Chart 2: Productivity by sector (£ per hour worked) (selected industries)



Source: [ONS article](#), May 2019

So, since 2010, has Buckinghamshire experienced greater growth in employment in low productivity sectors than high ones? And how has this compared to the national picture?

The data in table 1 illustrates that within industries dominated by the private sector, employment growth has been greater in the two industries with lowest productivity than the four with the highest productivity levels. In terms of volume, there has been greatest growth within the 'administrative and support services industry'. Digging deeper, this has been concentrated in two industries: 'temporary employment agency activities'⁷ and 'general cleaning of buildings'. At the other end of the spectrum, there has been a decline in the number of people working in 'financial and insurance activities' within the county.

⁷ Those counted as employees of employment agencies are those working directly for the agency itself plus those who are supplied to clients' businesses for limited periods of time

Table 2: Productivity levels and employee growth by industry, 2010 to 2018

	Productivity (£ per hour worked)	Additional employees (2010 to 2018)	Bucks employee growth 2010-2018	UK employee growth 2010-2019
Financial and insurance activities	57.9	-510	-10%	0%
Production industries	48.9	600	22%	9%
Information and communication (<i>including some creative industries and some aspects of space industry</i>)	41.9	2,130	18%	22%
Manufacturing (<i>including advanced manufacturing and aspects of MedTech and space industries</i>)	36.9	1,370	9%	4%
Highest productivity industries - total		3,590	10%	8%
Professional, scientific and technical activities (<i>including aspects of MedTech and space industries</i>)	28.4	1,380	7%	35%
Transportation and storage	27.5	1,650	31%	18%
Construction	26.0	590	5%	14%
Wholesale and retail trade; repair of motor vehicles and motorcycles	25.3	3,090	8%	5%
Arts, entertainment and recreation (<i>includes some creative industries</i>)	21.7	1,050	21%	9%
Administrative and support service activities	18.4	9,360	67%	26%
Accommodation and food service activities	17.1	3,120	26%	27%
Lowest productivity industries - total		12,490	48%	27%

Source: Productivity data, ONS (2020) and EMSI Analyst, 2010 and 2018 (based on ONS Business Register and Employment Survey and Annual Business Inquiry data)

When seeking to understand sub-regional productivity differences, it is important to keep in mind that industry mix generally plays a relatively small role in explaining average productivity differences between areas, and that it is the differences between average firms' productivity within industries that has the greater effect⁸. Research on firm level productivity identifies the following types of firms as tending to have higher productivity:

- Those that are involved in Foreign Direct Investment (FDI) (either attracting investment from overseas corporations or undertaking investment overseas)
- Foreign owned firms
- Those that export
- Those with strong management practices
- Those that invest more in R&D

⁸ [Understanding spatial labour productivity in the UK](#), Office for National Statistics, May 2019

In addition, firm-level productivity is impacted by the location in which firms operates. For example: local labour markets, infrastructure, distance, levels of firm competition, agglomeration benefits, consumer tastes and local spending power⁹.

These factors sit within the government's five foundations of productivity (ideas; people; infrastructure, business environment and place) which formed the backbone of the Buckinghamshire Local Industrial Strategy.

In terms of the impact of Covid, there are indications that a potential 'deglobalisation' trend, could permanently reduce international trade, which could have negative implications for productivity. In addition, business investment in R&D is likely to be significantly lower over the next 2-3 years as firms seek to re-coup losses and re-pay debt. Whilst still pursuing policies that encourage FDI, exporting and investment in R&D, along with growing, attracting and retaining businesses operating in high productivity sectors, in the current environment it may be particularly conducive to focus local efforts on infrastructure improvements, improving management practices and re-skilling, as means to raising productivity.

⁹ *Ibid*

4.3 Economic Structure

In broad terms, Buckinghamshire has a relatively diverse economy. As such, its fortunes are not overly dependent on one or two industries, or on a handful of significant employers.

Sectors that were immediately and severely impacted by the Covid economic shut down are no more prevalent within the Buckinghamshire economy than nationally.

Whilst the Covid-19 pandemic will have ramifications for all four of Buckinghamshire's strategic sectors, it is unlikely to impact their long-term growth trajectory, nor their importance to the local economy. In addition, the pandemic may lead to greater cross-sector innovation and disruption, as some firms are forced to pivot or diversify.

High levels of self-employment could have a negative impact on the local economy in the short-term, however, this entrepreneurial backbone of the economy, along with strong networks and business support, could enable a fairly swift bounce-back.

FDI into the county could be significantly impacted in the short to medium term, as elsewhere in the country, at a time when it is needed the most.

4.3.1 Industry

The latest comprehensive data we have on the industrial structure of the Buckinghamshire economy relates to 2018. This enables us to update the analysis undertaken to inform the Buckinghamshire Local Industrial Strategy (LIS) which utilised data up to 2016. Between 2016 and 2018 there was little change structural change. The 'human health and social work' sector remained the county's largest employer, whilst the 'wholesale' sector remained Buckinghamshire's greatest specialism in broad terms, with local employment in this sector as a proportion of all employment being twice the national average (chart 3). As mentioned previously, the 'administrative and support service' industry experienced greatest growth in employees between 2010 and 2018 (table 2). This is a continuation of the trend highlighted in the LIS evidence base. Employee growth in the 'information and communication' industry slowed between 2016 and 2018, although it remains a key industry with a higher concentration of employees locally than nationally ($LQ^{10} = 1.4$).

¹⁰ A Location quotient (LQ) is a way of identifying industries or occupations that are specialisms within a local economy (compared to the national average). For example, Buckinghamshire's wholesale industry has a Location Quotient of 2, which means that this industry is twice as concentrated in the local economy than in the national economy. A score of over 1 indicates a local specialism.

Buckinghamshire has UK average proportions of employment in most of the industries hardest hit by the Covid-19 economic lockdown (e.g. ‘accommodation and food service activities’ and ‘retail’). Buckinghamshire itself does not have a significant aviation industry, however, many residents have been, or are likely to be, impacted by the huge drop in activity at both Heathrow¹¹ and Luton airports. In addition, there are around 1,500 jobs within the ‘manufacture of air and spacecraft and related machinery’ in the local economy, which proportionally is around twice the national average.

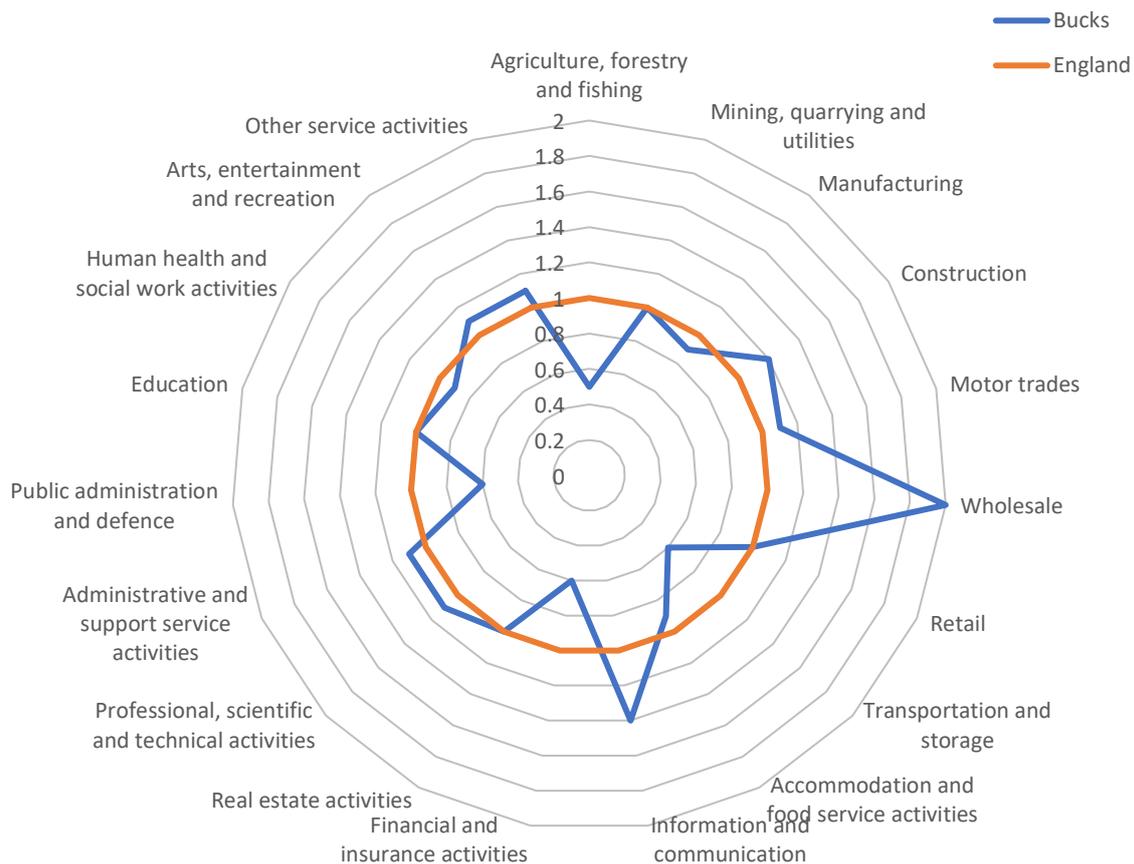
Table 3: Employees by sector in Buckinghamshire, 2010 and 2018

Description	2010 Jobs	2018 Jobs	2010 - 2018 Change	2010 - 2018 % Change	2018 Location Quotient
Agriculture, forestry and fishing	810	960	160	20%	0.5
Mining, quarrying and utilities	1,960	2,400	450	20%	1.0
Manufacturing	15,890	17,260	1,370	9%	0.9
Construction	12,250	12,840	590	5%	1.2
Motor trades	5,090	4,700	(400)	(8%)	1.1
Wholesale	16,240	18,200	1,950	12%	2.0
Retail	19,660	21,200	1,540	8%	1.0
Transportation and storage	5,360	7,010	1,650	31%	0.6
Accommodation and food service activities	12,060	15,190	3,130	26%	0.9
Information and communication	11,860	13,990	2,130	18%	1.4
Financial and insurance activities	5,050	4,540	(510)	(10%)	0.6
Real estate activities	4,500	4,050	(450)	(10%)	1.0
Professional, scientific and technical activities	21,020	22,410	1,380	7%	1.1
Administrative and support service activities	13,930	23,290	9,360	67%	1.1
Public administration and defence	7,930	6,110	(1,820)	(23%)	0.6
Education	19,950	20,280	330	2%	1.0
Human health and social work activities	24,090	28,040	3,940	16%	0.9
Arts, entertainment and recreation	4,970	6,020	1,050	21%	1.1
Other service activities	7,030	5,090	(1,940)	(28%)	1.1
Total	209,670	233,560	23,890	11%	

Source: EMSI Analyst, 2010 and 2018 (based on ONS Business Register and Employment Survey and Annual Business Inquiry data) [note – this table does not include self-employment]

¹¹ It is estimated that at least 2,000 Buckinghamshire residents work on-site at Heathrow. Anecdotally, residents employed by airlines (including pilots), along with ground staff, are extremely worried about job losses and pay cuts.

Chart 3: Employee location quotients (over 1 (orange ring) = Bucks specialism)



Source: BRES, ONS, 2018

As highlighted in the LIS evidence base, it continues to be the case that Buckinghamshire has the lowest proportion of jobs in the public sector of all LEP areas (12%). In the short-term, this may make the area more vulnerable in terms of job losses. Public sector workers are unlikely to have been furloughed and are less likely to be made redundant as a result of the Covid-19 pandemic.

As with many other part of the UK, Buckinghamshire’s visitor economy (travel, hospitality, tourism, events, leisure, entertainment), personal services (hairdressing, complementary health care, animal care etc), construction & real estate, creative industries and manufacturing sectors have been hardest hit by the pandemic.

The impact on two specific sectors, ‘film & high-end TV’ and ‘aviation’, has been felt more acutely in Buckinghamshire than in many other parts of the country. The speed of bounce back for both is anticipated to be very different, however. Whilst the film and TV sub-sector is beginning to bounce-back relatively quickly (over the next 6 months), the impact on the aviation industry (and its supply chain) is predicted to be more severe. According to the IATA, recovery in the aviation sector recovery could lag two years behind wider economy. Large-scale redundancies and reduced terms and conditions have begun to be announced. This has / will impact a wide range of jobs and

different skill and income levels, including very specialised roles. It is estimated that over 2,000 Buckinghamshire residents work on-site at Heathrow airport, with more working at Luton and in airport supply chains. Furthermore, reduction in air travel could reduce inward investment, which is vital for productivity and job growth, over the next few years.

For some firms, the pandemic will have a negligible or positive impact. Firms operating within tech driven sectors that enable remote working, such as VoIP, EdTech, eHealth and digital security, for example, are likely to have been positively impacted. Along with some in the Life Sciences sector.

4.3.2 Strategic sectors

Buckinghamshire's Local Industrial Strategy is centred around growing four strategic sectors: Space; Creative and Digital; High Performance Technology and Medtech. All four meet the following criteria:

- 1) Local presence of a nationally or globally significant asset
- 2) High concentration of jobs in the local economy
- 3) Strong growth prospects

The Covid-19 pandemic will have ramifications for all four, however, it is unlikely to impact their long-term growth trajectory, nor their importance to the local economy. In addition, the pandemic may lead to greater cross-sector innovation and disruption, as some firms are forced to pivot or diversify.

Table 4: Strategic sectors, impact and opportunities (as of July 2020) [in development]

Sector	Immediate impact of Covid-19	Speed of bounce-back	Changes	What can be done to aid local recovery and support long term growth?
Creative industries	<p>The pausing of film, TV, theatre productions and live events had a significant impact on those working in Buckinghamshire’s creative industries and its supply chain.</p> <p>Many businesses were not eligible for the initial round of local authority grants (either due to their size, nature or the fact that they do not pay business rates direct).</p> <p>Within the TV and theatre industries, where short-term contracts are the norm, many workers were not entitled to support under the various schemes. It is estimated that three quarters of freelancers fell through the cracks of Government support.</p> <p>Advertising revenues are being hit by crisis, whilst subscriptions are a more stable and predictable revenue source coming directly from consumers.</p>	<p>The speed of bounce-back looks set to vary within the creative industries.</p> <p>With software, film and high-end TV expected to return to pre-Covid trajectories more quickly than live events.</p> <p>Some of the early film and TV productions to re-start have been those backed by US money.</p> <p>Domestic productions and broadcasting are likely to take longer to return and as they are less able to absorb the additional costs generated by following the new safety guidelines (extra crew, PPE, slower shooting days, extra space), and the level of financial risk.</p> <p>Museums, libraries and attractions are beginning to re-open across the county.</p>	<p>Within the film and high-end TV sector, extensive work has been undertaken to enable productions to re-start safely. A key concern being that if one person becomes infected, whole teams will need to self-isolate which will mean productions will need to be paused which has significant financial implications. Some companies have appointed Covid officers.</p> <p>Across the sector, there has been an increased demand for on-line training / upskilling whilst staff have been furloughed and freelancers out of work. Industry-specific coronavirus awareness training has been developed by ScreenSkills and Skills for Health.</p> <p>The pandemic has accelerated the shift from traditional</p>	<ul style="list-style-type: none"> Put creative and cultural industries at the heart of place-based recovery plans to creative vibrant places that draw in talent and inward investment Support organisations / initiatives that are helping freelancers and the independent sector through difficult times Continue to facilitate sharing of best practice (e.g. creative industries skills group - sharing Covid and non-Covid related training resources) Support infrastructure and skills initiatives that will help maintain and grow inward investment Highlight innovation success stories to inspire others

			transmission of TV and radio to streaming.	<ul style="list-style-type: none"> • Create real-time interactive map of local creative firms / assets to help identify hidden clusters of activity and grow networks
High performance manufacturing	<p>Fortunes have been mixed within the sector. Firms operating within automotive and aerospace supply chains have been particularly badly hit.</p> <p>Significant UK industrial, technology and engineering businesses from across the aerospace, automotive and medical sectors, quickly came together to produce medical ventilators.</p> <p>Businesses from the Silverstone Technology Cluster (STC) sourced and manufactured crucial supplies of personal protective equipment (PPE) for front-line healthcare workers across Northamptonshire.</p>	<p>The speed of bounce-back for those operating within the sector is dependent on ability to operate and adhere to Covid guidance, and level of demand for products.</p> <p>Overall, Make UK predict that it will take until 2022 for UK manufacturing to recover to its pre-Covid growth trajectory.</p>	<p>The pandemic has highlighting that Industry 4.0 technologies (like 3D printing, the internet of things (IoT), advanced robotics, artificial intelligence and big data) are necessary for survive in a global marketplace that requires agile and flexible production systems and supply chains.</p> <p>Higher levels of collaboration between firms and increased movement of capabilities across sectors could be changes that continue in the medium term.</p> <p>There could be a shift towards onshoring or nearshoring elements of the supply chain.</p>	<ul style="list-style-type: none"> • Support companies to reassess their technological gaps and put in place a digital transformation plan to come out of the crisis stronger and better prepared to face future disruptions • Support the continued growth of the Silverstone Technology Cluster • Map specialisms and explore the demand for a South Bucks Advanced Engineering Cluster • Highlight pivoting success stories to inspire others • Support innovation in green fuel technologies
Space	<p>The space industry, while less exposed than some other industries, has been impacted by Covid-19, with launches postponed, supply chains disrupted, access to finance issues threatening the survival of start-ups, and events cancelled.</p>	<p>SMEs and start-ups are exposed to liquidity dry-ups, especially with the likely decrease of private investments in the short/medium term</p>	<p>In the long term, the space sector has a critical role to play in combating climate change, and helping prepare for and mitigate other key risks identified on the National Risk Register.</p>	<ul style="list-style-type: none"> • Investment to advance initial elements of the Westcott 10-year plan including production capability • Support pivoting of advanced manufacturing businesses and whose customers are in sectors

	Strong government interest in the sector makes it more resilient long-term.		Satellite data and drone technology can help meet ongoing challenges such as delivering test kits, masks, gowns and goggles, managing infectious disease outbreaks and supporting the health and wellbeing of the nation.	have been severely impacted by the pandemic (e.g. aviation and automotive) to the space market
MedTech	<p>The MedTech industry is playing a crucial role in ensuring that the right technologies are available, at scale and speed, for NHS providers and patients to combat Covid-19.</p> <p>The pandemic is putting the supply chain for MedTech products under pressure. Some MedTech companies are experiencing increased demand, whilst others are seeing demand for their products decline (for example, companies that manufacture equipment used solely in elective procedures, which are being postponed due to the virus)</p> <p>R&D programs have been affected as many hospitals and researchers have had to deprioritise product evaluations.</p>	As the spread of the virus has been brought under control, the negative supply chain impacts for non-Covid related healthcare products will subside.	<p>Within the care sector, the pandemic is accelerating the closure of underperforming assets.</p> <p>The Covid-19 pandemic has highlighted the need for investment and innovation in the UK healthcare property sector, with long-term demand due to an ageing population combined with the accelerated closure of underperforming assets leading to a national bed crisis in care homes¹²</p>	<ul style="list-style-type: none"> • The need to advance the trust and use of remote and community based care – building on Adept pilot concepts in Garden town and beyond – need to pick up training requirements • Highlight innovation activities (including Innovate UK funded) to inspire others and identify collaboration opportunities. • Green Prescription National Pilot

¹² Source: Frank Knight / CoStar - <https://product.costar.com/home/news/395682403>

Case study

A local advanced and digital manufacturing company is seeking to recoup a loss of immediate business from the automotive and aerospace sector by pivoting to produce components for the UK space sector that are not currently manufactured in the UK, so are subject to import costs and potential supply issues.

Case study

Pinewood – to be developed

Universal's *Jurassic World: Dominion* was the first major studio movie to re-start filming proper in the UK at Pinewood Studios.

Case study

Include some case studies of those awarded grants – require permission?

Case study

Goodfabs?

4.3.3 Clean growth

The recognition of the need for the world to address climate change ramped up significantly during 2019, in no small part due to the actions and profile of Greta Thunberg.

The Buckinghamshire Local Industrial Strategy set out the following high-level ambition in relation to the climate change agenda:

“By 2050, Buckinghamshire will aim to have secured achievement of carbon neutrality in a way that improves quality of life for residents, minimises the productivity impact on current businesses and maximises commercial opportunities across Buckinghamshire”.

The Buckinghamshire LIS evidence base highlighted a number of ways in which Buckinghamshire’s space and high-performance technology clusters are, and could, contribute to national clean growth objectives. This included opportunities at Westcott to support low carbon and electric Connected and Autonomous Vehicles (CAV); along with fuel cell development. In the long term, the space sector has a critical role to play in combating climate change, and helping prepare for and mitigate other key risks identified on the National Risk Register.¹³

There are a number of firms operating within the clean growth sector in Buckinghamshire. In addition to Bosch (see below) high growth experts Beauhurst identify 10 high growth clean energy companies within Buckinghamshire, six of whom are located in the Wycombe area.

Case study

In early 2020, Buckinghamshire head-quartered Bosch have increased their investment in hydrogen fuel cell production by increasing its shareholding in UK-listed Ceres Power, a developer of solid oxide fuel cell technology¹.

Further evidence is required to identify additional clean growth opportunities for Buckinghamshire, alongside the need to ensure all future growth is carbon neutral.

4.3.4 Firm size

As described within the Local Industrial Strategy, Buckinghamshire is largely a micro firm economy, with a small number of large, international firms, and a strong track record for new business start-ups. This remained the case immediately prior to the Covid-19 pandemic. In 2019, there were 34,400 VAT / PAYE registered business units in Buckinghamshire, of which 77% were micro in size (employing less than 4 people), the highest proportion of all LEP areas. Around 90 large businesses (employing more than 250 people) are based in the county.

It is unclear whether smaller firms will be disproportionately impacted by the economic ramifications of Covid-19.

¹³ Add source

4.3.5 Self-employment

A high proportion of those working in the Buckinghamshire economy are self-employed individuals with no employees (16% versus 12% nationally). The second highest proportion of all LEP areas (after Cornwall and the Isles of Scilly).

The self-employed have experienced widespread income losses during the Covid crisis. This has caused financial distress, exacerbated by uncertainty over future business prospects. The Self-Employed Income Support Scheme (SEISS) has reduced the financial impact for some, but not all have been eligible.

Directors of limited companies, who often take very small salaries and pay themselves dividends if their company makes a profit, have been amongst those hardest hit as they have been eligible for little financial support.

Further information is provided within the 'people' section.

4.3.6 Foreign ownership

There are in the region of 430 foreign owned firms in Buckinghamshire (1% of all businesses), however, they provide 16% of private sector employment and produce 32% of turnover¹⁴. In terms of employment, Buckinghamshire ranks 38 out of 150 local authority areas in terms of the proportion of employment generated by foreign owned firms. As previously mentioned, foreign-owned firms tend to be more productive than their UK-owned counterparts.

Despite concerns surrounding Brexit, we are aware of 13 successful FDI projects in Buckinghamshire in 2019/20¹⁵, a similar number to in 2018/19. These created 159 new jobs, compared to 341 in 2018/19. Key sectors for investment in 2019/20 were 'creative and media' and 'electronics and communications'.

According to the [OECD](#), FDI flows are expected to fall by more than 30% in 2020 even under the most optimistic scenario for the success of the public health and economic support policy measures taken by governments to address the pandemic and the resulting recession. However, FDI could play an important role in helping local economies recover from recession. Evidence from past crises suggests that foreign-owned affiliates, including SMEs, can show greater resilience during crises, along with being more productive and R&D intensive.

4.4 Business support

The Covid-19 pandemic has impacted the vast majority of businesses in some way. The extent to which businesses have been adversely affected has tended to depend on:

- The sector in which they operate
- The sectors they supply to
- Location

¹⁴ ONS, 2018

¹⁵ Note, these figures do not include major investments into screen and film

- Whether staff can work from home
- Whether staff can be furloughed
- Ability to operate whilst adhering to social distancing measures
- Ability to access government support
- How long they have been operating
- Cash reserves

Figure 1 provides a summary of sectors and types of businesses who have been hardest hit to date.

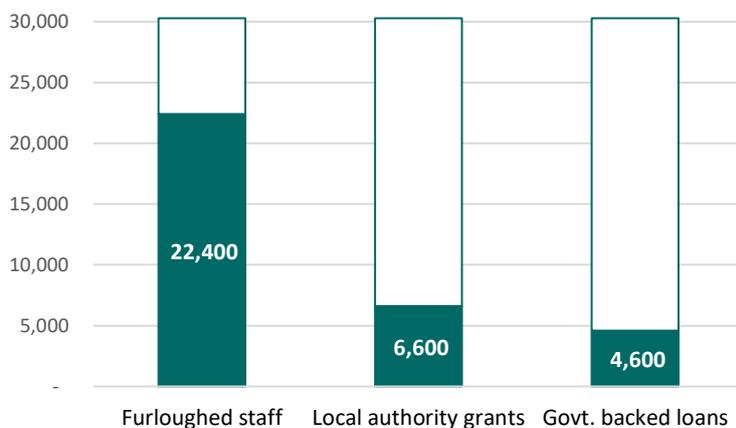
Figure 1: Businesses hardest hit

Sectors	Types of businesses
<ul style="list-style-type: none"> • Aviation / travel • Hospitality • Leisure and entertainment • Retail • Events • Personal services (<i>health & complementary medicine, hair & beauty</i>) • Creative industries (<i>TV and film, creative arts, advertising</i>) • Manufacturing • Construction • Business services (<i>security, laundry, cleaning</i>) • Professional services (<i>advisory, training, recruitment</i>) • Publishing and printing 	<ul style="list-style-type: none"> • Closed sectors • Staff unable to work from home • Social distancing not possible / not financially feasible • Footfall reliant (e.g. town-centre based) • Business to consumer • Unable to access government support • Start-ups • Scale-ups • Turnover drastically reduced but can't furlough staff

Source: Buckinghamshire Business First enquiries and surveys responses, press reports, sector bodies

The majority of Buckinghamshire businesses accessed some sort of support between March and June 2020. With use of the Job Retention Scheme being most common.

Chart 4: Use of business support schemes



Source: HMRC, July 2020

Buckinghamshire Business First provided nearly 2,000 business assists in March & April 2020, a 125% increase from March & April 2019, and nearly 700 firms responded to BBF-run local surveys. Whilst

Buckinghamshire Council distributed £83m in grant funding to hard-hit businesses. For many businesses, the schemes (particularly furloughing) have enabled them to survive. Some businesses were reluctant to take out loans due to underlying concerns over future demand.

Some businesses and individuals have slipped through the support net. These include:

- Those who have been significantly impacted but have been unable to access local authority grants (e.g. those who supply 'closed' sectors such as hospitality; those with rateable values of over £51,000; those without fixed premises)
- Those who have recently become self-employed
- Those who are self-employed but earn over the threshold for support
- Those who have been significantly impacted but have been unable to furlough staff (e.g. businesses with animals who need caring for)
- Freelancers / those on short-term contracts (particularly in the film and TV industry)
- Company directors who pay themselves via dividends

For some firms, it's all about survival. We are unlikely to get comprehensive local level data on how many firms have permanently ceased trading as a result of, or accelerated by, Covid, until 2021.

In the short-term, reduced demand and increased debt may result in: the holding back investment plans¹⁶; undertaking workforce restructuring and / or pausing recruitment; reducing fixed costs (such as business premises); diversifying customer and / or supplier bases and entering new markets.

¹⁶ This comes on the back of four years of a reduced appetite for investment for some due to the uncertainty regarding Brexit.

4.5 Innovation

Buckinghamshire has an entrepreneurial economy. High rates of company formation, a comparatively high proportion of scale-ups, along with high levels of product and service innovation, should help the economy bounce-back from the economic shock of Covid. However, in terms of longer-term transformational growth, levels of R&D activity, both within local firms and Higher Education Institutions are estimated to be relatively low, and are often masked by extremely high levels within other parts of the South East (particularly Oxfordshire and Berkshire). With central government focusing on R&D as a key element of its recovery roadmap, this message needs articulating to ensure Buckinghamshire isn't overlooked in terms of future investment

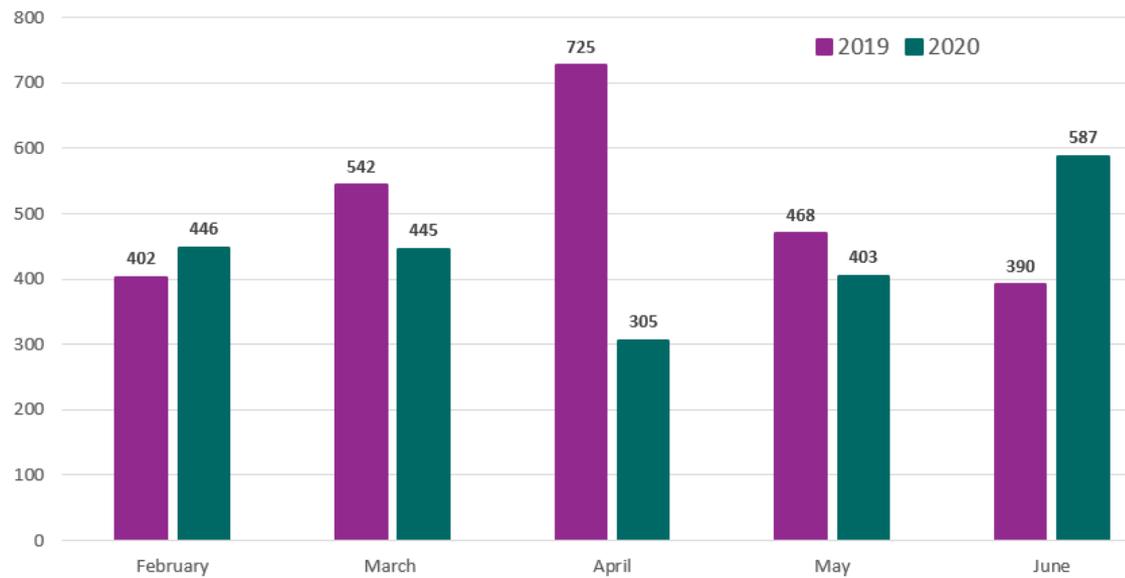
4.5.1 Start-ups, scale-ups and survival

The key to resilience is innovation. Areas with high levels of vibrant, innovative and entrepreneurial firms tend to be hit less hard by external shocks. Buckinghamshire has traditionally had high new business formation rates. And businesses starting up in Buckinghamshire have higher survival rates than in many other parts of the UK. For example, 48% of local firms that were 'born' in 2013, were still operating five years later. This compared to the South East average of 45% and the national average of 42%. Buckinghamshire is home to a slightly higher proportion of high growth firms than average (5.6% of firms with 10+ employees are high growth compared to 5.0% nationally).

Comparatively high proportions of start-up and scale-up firms in Buckinghamshire indicate high levels of entrepreneurial behaviour which bode well in terms of the area's ability to bounce-back from the economic impact of Covid.

Companies House registration data shows a 33% drop in the number of new companies forming in Buckinghamshire between March and May 2020 compared to March to May 2019 (chart 8). There is likely to be some pent-up demand here, with higher numbers of registrations likely in June and July. Most are likely to be starting up from home.

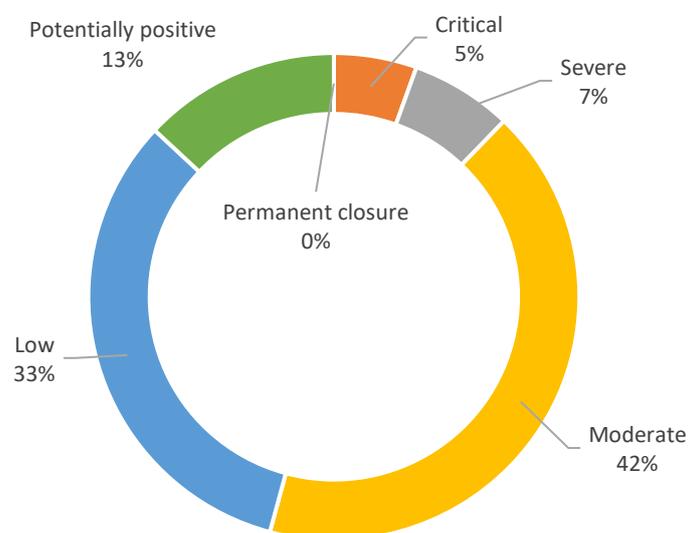
Chart 5: Number of new business incorporations



Source: BvD, FAME

Looking specifically at Buckinghamshire’s high growth / high growth potential firms (using data compiled by Beauhurst), two fifths are estimated to have been moderately impacted by Covid, and a third minimally impacted. 13% are estimated to have been potentially positively impacted (slightly lower than the national average) and 12% critically or severely impacted (again, slightly lower than the national average of 14%) (chart 6)

Chart 6: Estimated impact of Covid on Buckinghamshire’s high growth / high growth potential firms (as of 3 July 2020)



Source: Beauhurst, July 2020

4.5.2 Research and Development

Spending on Research and Development (R&D) is the typical metric of innovative effort. It is difficult to accurately quantify how levels of spend on R&D in Buckinghamshire compare with other areas. This is because the data of expenditure on R&D (GERD, BERD, GovERD and HERD¹⁷) is not available at the Buckinghamshire level. Data for Buckinghamshire is combined with data for Berkshire and Oxfordshire (NUTS2 region), both of whom have very different economies and research bases.

Berkshire, Buckinghamshire and Oxfordshire combined perform extremely in terms of R&D spend, having the 15th highest R&D intensity (GERD as a % of GDP) in Europe, and 3rd highest in the UK (after East Anglia and Herefordshire, Worcestershire and Warwickshire)¹⁸. The national debate, in relation to the ‘levelling up’ agenda, currently centres around the high concentration of public sector R&D investment made in London and the South East (in particular Oxford and Cambridge).

In 2018, the Smart Specialisation Hub modelled LEP-level R&D from NUTS2-level data. This was presented within the Buckinghamshire LIS evidence base. Without access to the methodology used to model Buckinghamshire level data (the Smart Specialisation Hub has now been wound down), it is difficult to ascertain its validity. Our hunch is that the analysis over-inflates R&D levels for Buckinghamshire, therefore we advise that this is not used to inform local R&D related policy decisions.

An alternative source of business innovation data is the UK Innovation Survey, for which 113 Buckinghamshire firms were surveyed. The Enterprise Research Centre (ERC) published LEP-level analysis of the 2017 survey data in 2019¹⁹. The results of the survey suggest²⁰ that 19.1% of Buckinghamshire firms undertook R&D between 2014 and 2016. A much lower proportion than in fellow OxCam Arc LEP areas, and neighbouring Thames Valley Berkshire.

Table 5: Proportion of firms undertaking R&D

LEP	% firms	Rank (out of 38)
Oxfordshire	40.2%	1
Northamptonshire	35.7%	2
South East Midlands	30.0%	3
Thames Valley Berkshire	28.5%	4
Coventry and Warwickshire	28.1%	5
Greater Cambridgeshire and Greater Peterborough	27.9%	6
Worcestershire	25.6%	7
Gloucestershire	24.8%	8
Enterprise M3	24.6%	9

¹⁷ Gross Domestic Expenditure on R&D (GERD), Business Expenditure on R&D (BERD), Government Expenditure on R&D (GovERD), Higher Education Expenditure on R&D (HERD)

¹⁸ Source: [Eurostat](#), 2018

¹⁹ Source: [Benchmarking Local Innovation](#), ERC, 2019

²⁰ Estimates are subject to sampling error

Greater Birmingham and Solihull	24.4%	10
//		
Buckinghamshire	19.1%	29

Source: [Benchmarking Local Innovation](#), ERC, 2019

The following firms with a Buckinghamshire presence are ranked amongst the top 200 in the world for investment in R&D: Johnson & Johnson; Robert Bosch; Bristol-Myers Squibb; General Electric; Hitachi; Allergan; Otsuka and Netflix.²¹

As noted within the Buckinghamshire LIS evidence base, Buckinghamshire ranks ‘average’ for total Innovate UK and Catapult investment. Data on Innovate UK grants indicate that two areas of innovation specialism in Buckinghamshire are:

- Electronics, photonics & electrical systems
- Space

Within Buckinghamshire, firms and institutions within the High Wycombe area have received the greatest number of Innovate UK grants in recent years.

In comparison to others operating within the OxCam Arc, Buckinghamshire-based Higher Education Institutions (the University of Buckingham, Buckinghamshire New University and the National Film and Television School) as less likely to have undertaken collaborative research with non-academic organisations involving public funding²².

4.5.3 Wider measures of innovation

Further analysis of the data from the UK Innovation Survey suggests that Buckinghamshire firms are comparatively more likely than firms in other areas to undertake product or service innovation (top ranked LEP area) and that innovating firms are more likely to collaborate for innovation (6th out of 38 LEP areas). The survey suggests that innovating Buckinghamshire firms are comparatively less likely than those in other areas to generate strong sales from innovation products or services (ranked 26th out of 38 LEP areas). This is a measure of the short-term success of firm innovation and potentially indicates shortcomings terms of commercialisation.

4.5.4 Impact of Covid-19 on innovation

Overall, business investment in R&D is likely to stall over the next two years, as firms deal with the aftermath of the Covid-19 pandemic, including, for some, operating with increased levels of debt.

For some firms, the Covid-19 pandemic has led to, or accelerated innovation, some of whom have taken advantage of local and national innovation grants. To date (1 July) nine local firms have received Covid-19 related Innovate UK grants, and 35 firms have received Buckinghamshire Recovery Investment Fund grants.

²¹ Source: [Eurostat](#), 2019

²² Source: HESA - <https://www.hesa.ac.uk/data-and-analysis/business-community/services>

4.6 People

Buckinghamshire residents have enjoyed good labour market conditions in recent years. Many travel outside of the county to access jobs in London, Slough, Milton Keynes, Reading and Oxford.

In addition to health concerns, the Covid-19 pandemic has already had seismic ramifications for employment, education and skills. This is likely to continue in the short to medium term.

High qualification levels amongst Buckinghamshire residents could mean the area is able to bounce-back more quickly than other parts of the country.

There are big questions that we do not yet know the answer to, including, the scale of redundancies and the future of remote working.

Whilst the 'people' element of the Local Industrial Strategy remains relevant, rapid additional action is required in the short-term to minimise the severity of scarring.

The Covid-19 pandemic is, and will continue to, have a significant impact on jobs, education and skills development. This section summarises the state of the Buckinghamshire labour market prior to the pandemic and highlights areas in which skills deficits were impacting on employers' ability to grow and operate effectively.

4.6.1 Population

Approximately 544,000 people currently live in Buckinghamshire. As noted in the Buckinghamshire LIS evidence base, a comparatively high proportion are over the age of 90. By 2038, the county is projected to experience a 147% growth in people aged over 90, and a 40% growth in people aged over 60. There is also expected to be 10% more 8 to 18-year olds, but fewer people in the 20-35 age bracket. In 2018 there were three working age people per older dependent (aged 65+) in Buckinghamshire. By 2038, this is predicted to reduce to two²³.

It is unclear how the Covid-19 pandemic will alter population projections, and what the long-term health implications for individuals contracting the virus might be.

4.6.2 Deprivation

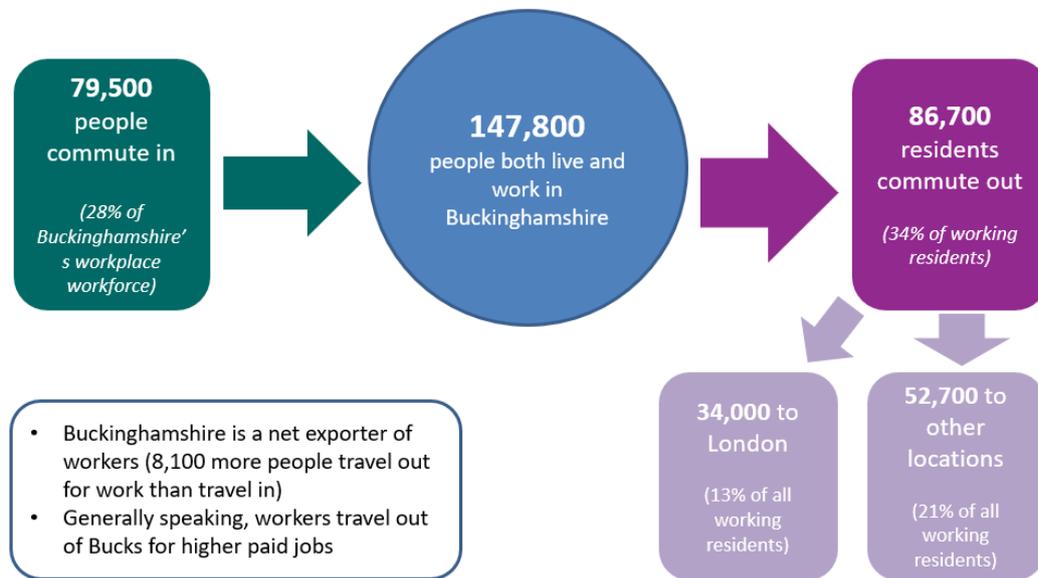
There are significant differences in economic performance and wellbeing between and within areas of the UK. Covid-19 is likely to exacerbate existing inequalities. Disadvantaged households and the areas in which they live are likely to be hardest hit. Overall, Buckinghamshire has very [low levels of disadvantage](#). There are some small pockets within the Aylesbury Vale and Wycombe areas where residents are amongst the most deprived 30% nationally.

²³ Buckinghamshire Council Insight Team, January 2020

4.6.3 Commuting

Buckinghamshire has one of the least self-contained labour markets in the country and is a net exporter of workers. Approximately 34% of working age residents commute out of the county, over a third of whom work in London. Those working in Buckinghamshire tend to earn less than working age Buckinghamshire residents, suggesting that many of those travelling outside of the county for work do so to access higher paid jobs.

Chart 7: Commuting into and out of Buckinghamshire



Source: Census 2011

In the short-term at least, there is likely to be a reduction in the volume and frequency of commuting amongst those able to work from home, and those who are out of work. There is potentially an opportunity to capitalise on the spending power and freeing up of time that this could create for Buckinghamshire residents.

4.6.4 Occupational composition

Buckinghamshire residents are much more likely to be working in 'managerial, director and senior official' roles than the national average. They are also more likely to be doing so than those working in the Buckinghamshire economy. There is less variation in relation to other occupational groups. Buckinghamshire residents and workers are less likely to be working as 'process, plan and machine operatives' than the national average. And Buckinghamshire residents are also less likely to work 'elementary' and 'care, leisure and other service' occupations, with slightly more Buckinghamshire-based workers doing so, but still fewer than the national average.

Chart 8: Occupations in which Buckinghamshire residents and those working in the Buckinghamshire economy work



Source: Annual Population Survey, ONS, 2019

As previously noted, a high proportion of those working in the Buckinghamshire economy are self-employed individuals with no employees (16% versus 12% nationally). Table 4 lists the top occupations in which self-employed individuals work.

Table 6: Number of people self-employed by occupation

	Self-employed
Taxi and cab drivers and chauffeurs	2,300
Construction and building trades (not elsewhere classified)	1,800
Carpenters and joiners	1,600
Cleaners and domestics	1,600
Hairdressers and barbers	1,400
Photographers, audio-visual and broadcasting equipment operators	1,300
Painters and decorators	1,300
Gardeners and landscape gardeners	1,300
Actors, entertainers and presenters	1,200
Arts officers, producers and directors	1,100
Animal care services occupations (not elsewhere classified)	1,100
Shopkeepers and proprietors – wholesale and retail	1,000
Plumbers and heating and ventilating engineers	900
Childminders and related occupations	800
Authors, writers and translators	800
Teaching and other educational professionals (not elsewhere classified)	700
Managers and directors in retail and wholesale	700
Management consultants and business analysts	700
Managers and proprietors in other services (not elsewhere classified)	700

Source: Estimates based on the Annual Population Survey and Business Register and Employment Survey, ONS, 2019

The extent to which those who are self-employed in Buckinghamshire have been economically impacted by the Covid-19 pandemic has depended on the following factors:

- Ability to work from home
- Eligibility for the SEISS (based on earnings and length of time self-employed)
- Whether or not individuals are company directors paid in part via dividends

Robust data on the earning of those who are self-employed, and the proportion who are company directors, is not available at the Buckinghamshire level.

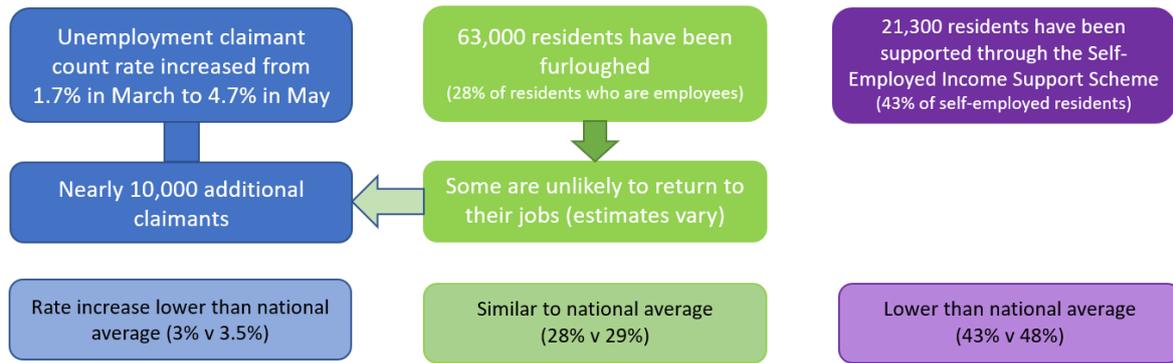
In terms of ability to work from home, of the top occupations undertaken by self-employed people listed in table 4, it is likely that only those in two occupational groups ('authors, writers and translators', and 'management consultants and business analysts') could easily work from home.

4.6.5 Economic activity

Prior to the Covid-19 pandemic, Buckinghamshire residents enjoyed comparatively high levels of economic activity. Employment rates were high and unemployment (although rising slowly over the preceding 12 months) was low.

What we do know with certainty is that a significant proportion of the workforce (36%) have been financially supported by the state in some way as a result of Covid-19. There was a 3% rise in Buckinghamshire's claimant count unemployment rate between early March (pre lockdown) and early May (two months into lockdown), slightly below the national average but still a significant increase of nearly 10,000 additional claimants. Furthermore, 28% of residents who are employees (63,000 residents) have been furloughed, some of whom are expected to be made redundant when the Job Retention Scheme winds down over the coming months. Approximately 43% of self-employed residents (21,300 people) have been supported through the Self-Employed Income Support Scheme. National analysis suggests that many of whom work in the construction sector.

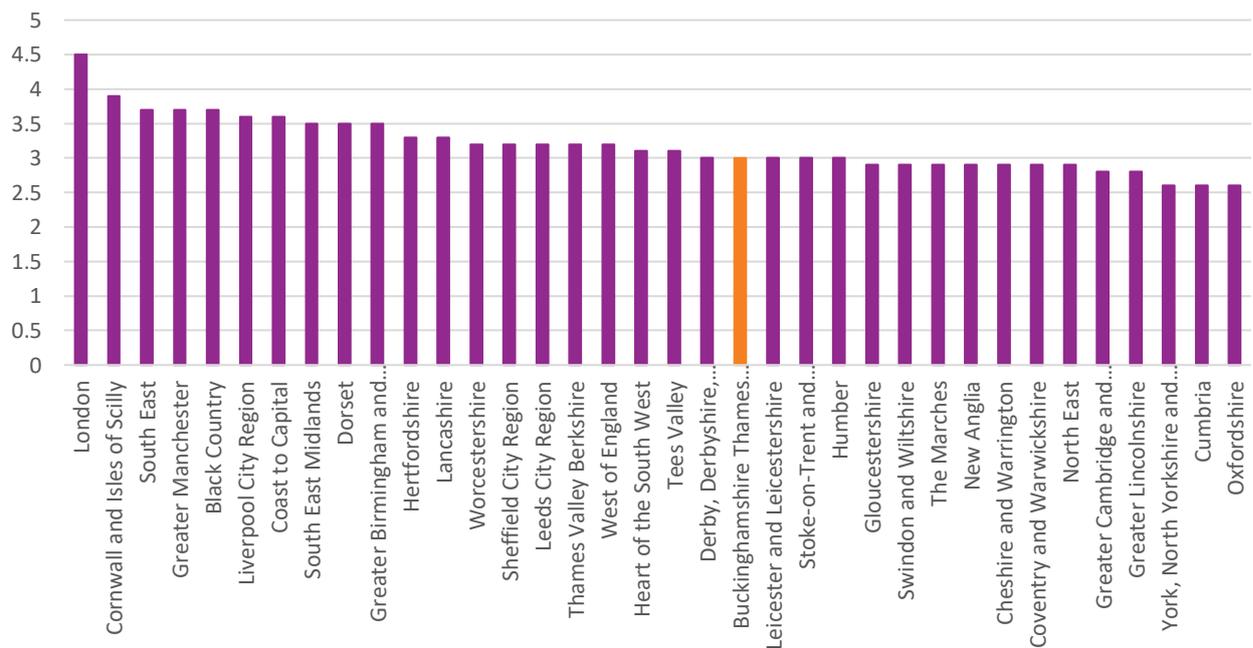
Chart 9: Financial support for workers



Source: DWP and HMRC

Looking in greater detail at claimant count unemployment rates, early data suggests that Buckinghamshire has experienced average levels of growth (chart 10). To understand the degree of scarring caused by this rise in unemployment (bearing in mind that the actual number of people unemployed will be greater than the number claiming unemployment-related benefits), we need to measure how quickly people flow off benefits and back to (good) work. Local level flow data is not currently available.

Chart 10: Percentage point increase in claimant count, March to May 2020



Source: DWP, June 2020

Other immediate labour market and skills impacts have been:

- Plummeting Apprenticeships and internship opportunities
- A rise in applications to undertake undergraduate and post-graduate study
- A rise in applications of health and education jobs
- An increase in demand for online learning content
- Upskilling amongst some on furlough (either employer encouraged or individually driven)

4.6.6 Skills demand

Improving skills (workforce and managerial) is a key driver of productivity growth. Helping those with few skills achieve mid-level skills is important in terms of raising earnings and living standards. Ensuring the local workforce has high levels of job specific and 'soft' skills is vital to enable local employers to maximise profits, innovate, grow and deliver efficient and high-quality products and services.

At a very broad level, qualification levels are used as a proxy for skills. Buckinghamshire residents are more likely to possess higher level qualifications than the national average. 45% of residents hold degrees or higher-level qualifications, compared to the national average of 40%. This places Buckinghamshire 7th out of 38 LEP areas. As previously discussed, a fair proportion of those with higher level qualifications travel out of the county for work.

Prior to the Covid-19 pandemic, skills shortages existed in all corners of the Buckinghamshire economy. Analysis undertaken in 2019 to inform the Buckinghamshire Skills Advisory Panel found that skills shortages were particularly prevalent within the following job families:

- Health and social care
- Construction (with significant additional local demand expected as a result of the HS2)
- Education
- Digital technology
- Engineering

In terms of Buckinghamshire's four strategic sectors, the types of skills in high demand from local employers includes:

- Science, Technology, Engineering, Arts and Maths (STEAM)
- Advanced data analytics and machine learning
- Multidisciplinary (e.g. technical / science and business)
- Business skills - to manage the path from R&D to market
- Applied technical knowledge (e.g. networking, operation systems)
- Cryogenics (Space)

There are a number of sources of real-time job vacancy data which provide a broad indication of the ease by which those who have lost jobs can access new opportunities. Data produced by Adzuna and analysed by the Institute for Employment Studies (IES) suggests that the number of job vacancies in Buckinghamshire has experienced the largest decline (between March and June) of all LEP areas (58%). The analysis also suggests that there are currently 11 people claiming unemployment benefit for every vacancy in the local economy. A higher ratio than in the neighbouring LEP areas of Oxfordshire (4 claimants per vacancy), Thames Valley Berkshire (4) and Hertfordshire (6) and SEMLEP (8).

In the shorter term, there is likely to be reduced demand for some roles whilst the economy gets back on its feet. Analysis of online job postings²⁴ for June 2020 compared to June 2019, shows a reduction in demand for customer service and account management roles; along with administrative, chef and marketing roles. Roles which are holding up in terms of demand include care

²⁴ Source: Labour Insight, Burning Glass Technologies

roles (care assistants, care givers), health roles (nursing), legal roles, financial roles and teaching roles.

In terms of skills, groups of skills for which there has been strong demand between April and June 2020 include: mental health; patient support; general accounting; teaching and financial supporting. Whilst there is currently much less demand than normal for skills such as: customer service; customer relationship management; sales; marketing; drafting and engineering design. How quickly demand for such skills will bounce-back is unclear. In some cases, potentially relatively quickly.

4.6.7 Skills supply

The university destination is deeply ingrained in Buckinghamshire as the pathway of choice. This is bittersweet for the county as only a third of graduates stay or return after study, a much lower proportion than nationally (60%). Buckinghamshire loses one in three graduates to London.²⁵

As highlighted in the Buckinghamshire Local Industrial Strategy, the proportion of Buckinghamshire's population in the 20-30 age group is 10 per cent below the national average, largely as a result of young people not returning to the area after completing university courses. This creates a 'brain drain', which needs to be considered when investing in local skills activities.

Those who don't continue to university gain employment (18%) or continue onto Further Education (3%) or an apprenticeship (3%). They tend to be more likely to remain local for both further education and employment.

In 2017/18 there were 2,610 Apprenticeship starts in Buckinghamshire, approximately 0.8% of the population of working age. Apprenticeship starts have declined in Buckinghamshire in recent years, (largely due to wholesale reforms to the system), but to a lesser extent than nationally. Nationally, pre-Covid, there were concerns that opportunities for young people to undertake Level 2 Apprenticeships were declining as Apprenticeship levy-paying employers increasingly sought to spend their levy on upskilling existing employees and offering higher level Apprenticeships.

²⁵ *Student Geographical Mobility, HEFCE, 2017.*

5 Comparative resilience

Initial analysis examining the potential impact of the pandemic on local economies places Buckinghamshire either towards the 'more resilient' end of the spectrum or mid-table. These analysis (e.g. those produced by Litchfields; the Centre for Progressive Policy and Hatch Regeneris) are largely predicated on the prevalence of firms operating in industries predicted to be most severely impacted.

The initial data on unemployment and furloughing places Buckinghamshire mid-table in terms of initial impact on jobs. Although the large drop in vacancies is potentially concerning regarding the speed by which people are able to access new work. Overall, however, it is too soon to predict unemployment impacts to any degree of accuracy.

High levels of entrepreneurialism within the local business base, a higher than average proportion of tech firms in the economy, higher than average levels of qualifications amongst residents, and relatively easy access to job markets in London, Berkshire, Milton Keynes, Hertfordshire and Oxford are likely to aid the speed of recovery. Although, high levels of self-employment and low levels of R&D could deepen immediate impact, and hamper recovery respectively.

6 Potential new normals

There has been significant debate regarding how the pandemic will change the way we live and work. Table 5 below summarises some potential new 'normal' scenarios and considers the potential economic implications.

Table 7: Potential scenarios

Scenario	Likelihood	Level of impact	Reason for likelihood and level of impact scores	Implications for the Buckinghamshire economy
Prolonged period of full homeworking for office-based staff, followed by a shift to more flexible working when many staff work from home for part of the week	Medium	Medium	<ul style="list-style-type: none"> Anecdotal evidence that office-based firms are not rushing to get staff back into offices, particularly in London 	<ul style="list-style-type: none"> Firms seek to reduce property costs Organisations feel unable to offer work placements, apprenticeships and internships to young people Residents working in office locations outside of Bucks increase daytime spending in local economy Reduced travel / congestion Increased demand for high quality residential digital infrastructure
Reduced demand for office space as firms look to cut fixed costs and embrace flexible working	High	High	<ul style="list-style-type: none"> Anecdotal evidence that local companies are already reducing office space Evidence of drop in office demand (Costar) 	<ul style="list-style-type: none"> Repurposing office space Improving digital connectivity for home working Opening up more opportunities for those who require flexible working to fit around other responsibilities (e.g. childcare)
Permanent shift in shopping habits, with a significant proportion being undertaken online	High	High	<ul style="list-style-type: none"> Acceleration of existing trend 	<ul style="list-style-type: none"> Risk to town-centre high streets without non-retail offers
Businesses relocate away from larger towns/cities to operate remotely or take advantage of lower property costs	Medium	Medium	<ul style="list-style-type: none"> Commentary regarding the potential end of megacities 	<ul style="list-style-type: none"> Increased demand for property in Buckinghamshire Residents working in London and other large towns and cities outside of Bucks increase daytime spending in local economy
Reduction of international trade and mobility	High	Medium	<ul style="list-style-type: none"> Global commentary Firms place greater emphasis on reducing risk and rebuild supply chains accordingly 	<ul style="list-style-type: none"> Could negatively impact productivity Potential creation of opportunities in terms of onshoring or nearshoring

Scenario	Likelihood	Level of impact	Reason for likelihood and level of impact scores	Implications for the Buckinghamshire economy
Workers (and parents taking children to school) choose to travel by car rather than public transport to avoid the virus	Medium	Medium	<ul style="list-style-type: none"> • Those use travel to work via public transport may do so due to lack of a car, so will continue to use public transport • Impact could be mitigated by the Increase in people working from home / unemployment resulting in fewer people travelling to workplaces • Industry experts stating that Covid has 'brought forward the demise of bus public transport by 10 years'. 	<ul style="list-style-type: none"> • Increased road congestion reduces productivity and wellbeing • Increased carbon emissions •

Annex A – Key questions

Impact on the economy

1) To what extent is the Covid-19 pandemic likely to impact local economic growth?

National assessments of the depth and scale of the economic impact of the pandemic are being revised on a regular basis, to consider the ever-evolving picture in relation to such an extraordinary event. The pace of recovery and extent of any long-term economic ‘scarring’ remain highly uncertain. The latest (mid-July 2020) Office for Budget Responsibility central scenario is that economic activity will not bounce-back sharply (reaching its pre-virus levels by the end of 2022) with unemployment remaining higher than 2019 levels for five years²⁶. Whilst some economists believe there will be a quicker bounce-back (the oft mentioned V shape recover), at this stage, the majority opinion suggests that local economic growth will be slower than projected for at least the next two years.

2) What structural changes may occur in the economy?

The Covid-19 pandemic has super-accelerated many trends that were already taking place. These include: the shift to online retailing; the contraction of the mid-market restaurant chain sub-sector; the decline of the pub industry; the transition to the streaming of entertainment content; and an increase in flexible working. Consequentially, some businesses operating in sectors or markets that were in decline, have been amongst the first economic casualties of the pandemic.

In addition, some ‘new’ big shifts have occurred, that may be here to stay. For example: increased demand for more independent ways of living in older age (which has implications for the care sector); and a reduction in business travel.

Other changes are likely to have short-term implications but are less likely to result in long-term structural changes. For example: demand for foreign holidays and use of gyms.

3) How many local businesses will permanently close?

It is very difficult to say. In the aftermath of the 2008/09 recession, there was a 33% increase in business closures, which equated to around 800 more firms closing than might otherwise have been expected.

4) When will different sectors recover?

²⁶ [OBR](#), July 2020

International trade and travel is generally expected to recover in line with past crises, within 11 to 19 months. However, prolonged, or re-introduced, restrictions, along with a potential 'deglobalisation' trend, could permanently reduce international trade and mobility.

Construction is likely to have an immediate bounce-back, to complete already started projects, followed by a slowly on activity. Whilst Make UK predict that it will take until 2022 for UK manufacturing to recover to its pre-Covid growth trajectory.

Approximately half of tourism and hospitality businesses responding to a Visit Buckinghamshire and the Chilterns and Buckinghamshire Business First survey at the end of April 2020, predicted that the impact of Covid-19 will be felt by their business for at least the next 12 months.

The high street retail sector is unlikely to return to its pre-Covid state, with increased levels of online retailing looking like they are here to stay.

The speed of bounce-back looks set to vary within the creative industries. With software, film and high-end TV expected to return to pre-Covid trajectories much quicker than live events. Filming resuming at Pinewood illustrating that the US-backed film sector is already back on track.

5) Which sectors have been least affected, or are most likely to experience strong medium to long-term growth?

Overall, the public sector, digital tech, life sciences and financial services sectors look set to be least impacted by the economic fallout of the Covid-19 pandemic. Whilst sectors such as space, high performance engineering, and film and high-end TV, are predicted to be impacted in the short-term but to be relatively resilient in the long-term.

Firms operating within tech driven sectors that enable remote working, such as VoIP, EdTech, eHealth and digital security, for example, are most likely to have been positively impacted by the pandemic. Along with some in the life sciences sector.

6) What global trends are likely to have the greatest impact on the Buckinghamshire economy?

Global trends that are likely to impact on Buckinghamshire businesses include: a shift away from the globalisation of things (the growth of global value supply chains was stalling before the pandemic and more 'near-shoring' is predicted in the short to medium term); an accelerated adoption of technology; continued focus on climate change and, potentially, weakened international relations. Within Buckinghamshire, businesses within the high-performance technology, life sciences and space sectors, are amongst the most likely to import or export goods internationally.

7) How will Buckinghamshire fair in comparison to other parts of the UK in terms of the economic consequences of Covid-19? Will the Buckinghamshire economy bounce-back more quickly than other parts of the country?

Initial analysis examining the potential impact of the pandemic on local economies places Buckinghamshire either towards the 'more resilient' end of the spectrum or mid-table. These analysis

(e.g. those produced by Litchfields; the Centre for Progressive Policy and Hatch Regeneris) are largely predicated on the prevalence of firms operating in industries predicted to be most severely impacted.

The initial data on unemployment and furloughing places Buckinghamshire mid-table in terms of initial impact on jobs. Although the large drop in vacancies is potentially concerning regarding the speed by which people are able to access new work. Overall, however, it is too soon to predict labour market impacts to any degree of accuracy.

There are significant differences in economic performance and wellbeing between and within areas of the UK. Covid-19 is likely to exacerbate existing inequalities. Disadvantaged households and the areas in which they live are likely to be hardest hit. Overall, Buckinghamshire has very [low levels of disadvantage](#). There are some small pockets within the Aylesbury Vale and Wycombe areas where residents are amongst the most deprived 30% nationally.

High levels of entrepreneurialism within the local business base, a higher than average proportion of tech firms in the economy, higher than average levels of qualifications amongst residents, and relatively easy access to job markets in London, Berkshire, Milton Keynes, Hertfordshire and Oxford are likely to aid the speed of recovery. Although, high levels of self-employment and low levels of R&D could deepen immediate impact, and hamper recovery respectively.

There is [evidence](#) to suggest that southern and eastern regions tend to ‘bounce back’ strongly even if badly hit by a recession. And that [education and skills levels](#) (both of which are high amongst Buckinghamshire residents) may help the resilience of areas in responding to adverse economic shocks. [Experts believe](#) that this pattern may emerge again in the current crisis and be exacerbated by the divide between those who are able to work at home and those who are not.

The evidence therefore suggests that residents might be both less hard hit, and impacted for a shorter period, than people living in other parts of the UK. Given that many residents do not work in the local economy, it is more difficult to assess how the local economy itself will fair in comparison to other areas based on the characteristics of its residents.

8) What will be the impact on Buckinghamshire’s town centres?

The retail and hospitality sectors have also been hard hit, and the longer-term impact is now emerging. Whilst it is still too early to predict with certainty, it could be the case that the resilience of towns will be based on other assets beyond retail meaning that small market towns with a greater independent sector (such as Marlow) will have the greater ability to recover. An overall reduction in larger chains could impact larger settlements more directly, especially High Wycombe and Aylesbury with their sub-regional shopping centres.

Impact on people

9) Who is most likely to be negatively impact by the economic consequences of the pandemic?

As discussed in question 8, Covid-19 is likely to exacerbate existing inequalities. Those likely to be hardest hit are those already disadvantaged in society. For example: those in low income

households; single parents; non-graduates and young people (particularly those from BAME backgrounds) without access to informal networks through which to gain work experience and / or employment.

In terms of the impact of the pandemic on education; those attending independent schools are likely to have experienced least disruption to their education; whilst those in disadvantaged socio-economic groups without access to computers and printers are likely to have experienced the greatest challenges in terms of home schooling.

High unemployment, falling incomes, and reduced economic activity can have lasting consequences for individuals (in terms of wellbeing, economic hardship and reduced opportunities) and the state (in terms of increased spend on support programmes).

10) How many people will lose their jobs?

*The Office for Budget Responsibility estimate that UK unemployment will peak at over three times the 2019 level in Quarter 3 of 2020 (July – September). Nationally, this equates to a rise from 1.3 million to four million. Early indications are that the Buckinghamshire labour market is experiencing a similar scale of impact to the UK as a whole. Therefore, applying national ratios to local data, we could see unemployment in Buckinghamshire rise from **8,700** in 2019 to **26,800** Q3 2020 (out of an economically active population of 274,000)*

We are unlikely to have official local level data to confirm how many people have lost jobs and become unemployed²⁷ until we have passed the Q3 peak. It is also worth bearing in mind that some people will be out of work but not actively seeking new work. For example, they may be unable to seek new work due to a lack childcare, or may be waiting for the job market to pick up. In economic statistics, this group will be classified as being economically inactive rather than unemployed.

Claimant Count data, along with data on furloughing and those claiming self-employment income support, provide an early indication of the immediate impact on workers. However, moving forwards, what will be key will be monitoring the flows of people between different employment states. For example, between being furloughed and being unemployed / economically inactive. Or from the claiming unemployed related benefits to being back in employment. Alternative Claimant Count data for June – August (published in October 2020) will give us a better idea of the volume of people moving onto and off unemployment-related benefits, whilst October and November's Claimant Count data will provide an indication of the size of a potential second wave of unemployment.

11) Will the pandemic have greater negative consequence for men or women?

Early evidence suggested that women were likely to be harder hit by the economic fall-out of the pandemic as they were more likely to work in the consumer service sector which was shutdown by government. Early Claimant Count data did not appear to bear this out in relation likelihood of claiming unemployed-related benefits. However, women working in the service sector are more likely to be employees and therefore furloughed, whilst men working within the construction

²⁷ The official international definition of someone who is unemployed is someone who is not working but would like to, have been out of work for four weeks, are seeking work and are able to start work

industry, are more likely to be casual workers and, potentially ineligible for self-employment income support until the end of June, and therefore claiming unemployment benefit for the period during which much activity within the sector ceased.

In terms of those with parental responsibilities, [commentators suggest](#) that changes in the ways in which people are working (particularly those able to work from home) may help parents to combine work and care, opening up wider career opportunities for some women. In the short-term however, women with young children may be less likely to return to work, due to reduced childcare options both over the summer holidays and in the first term on the new academic year, with many schools not offering after school clubs or childcare.

12) How will young people be affected by the economic downturn?

Young people, particularly those about to enter the labour market, tend to be particularly negatively affected by recessions. A reduced number and lower quality of jobs available can have long-term implications for some young people. It can take longer to access career paths of choice; negatively impact future wages; elongate the period of reliance on parental support and can negatively impact mental health.

Most of the sectors that have been hardest hit by the pandemic to date (such as hospitality, non-food retail, transport, construction, events and entertainment) are those that tend to provide opportunities to non-graduates. It is therefore possible that this downturn will differ to the 2008/09 recession in that it could exacerbate differences between graduate and non-graduates.

Data from [a survey conducted by the Institute of Student Employers](#) indicated that as many as 40% fewer internships and placements might be available in 2020. In addition, 80% of apprenticeships due to start in April 2020 did not do so ([Hooley, 2020](#)).

In the short-term at least, there will be fewer opportunities for those in full-time education to undertake work experience. BAME students and those from disadvantaged socio-economic backgrounds are usually less likely to participate in these schemes ([Delavande et al, 2020](#)). But the gap may widen if the number of placements reduces and students are forced to rely more heavily on personal connections to gain such experience.

13) What should we advise young people who are about to leave education?

For those who were weighing up whether to undertake further study or enter the workplace; a study route (college, university, Apprenticeship) could be the most prudent option in 2020/21.

For those keen to enter the workplace; an understanding of the level of competition for different types of entry-level jobs is likely to be beneficial. Along with practical tips and training, for example, writing CVs and learning how to undertake virtual interviews.

14) What has been the impact on Apprenticeships?

Preliminary [government statistics](#) suggested that Apprenticeship starts from the beginning of the lockdown (23 March) to the end of April were down 51% compared with the same period in 2019.

Apprenticeship vacancies have plummeted. As mentioned in question 12, 80% of apprenticeships due to start in April 2020 did not do so. Whilst demand is returning in some sectors (such as health care), many firms have cancelled their Apprenticeship intakes for the next 12 months, meaning that competition for remaining places is likely to be extremely high.

15) How can mid / late career changers be supported?

Those who become unemployed later in life (particularly over the age of 50) often find it less easy to find new employment than younger people. Many turn to self-employment in a similar field, often earning less than when they were employees. The 2008/09 recession for example, led to a rise in self-employment, with many of those losing jobs within the financial and professional services sectors, becoming independent consultants. The Covid crisis is likely to lead to some older workers losing their jobs for the first time. For example, some of those working in the aviation industry, including pilots who have trained intensively for one career path. Tailored support programmes are likely to be required to help such groups re-skill / upskill to enable them to take up alternative employment, either in the short or longer term.

16) How has the job market changed in terms of demand for skills?

In the long-term (from 2022 onwards), the jobs and skills likely to be in highest demand in the UK are those identified in various national and local skills analysis²⁸ undertaken in recent years. For example: roles requiring digital and other STEM skills; health and social care roles; construction roles; LGV driving roles and chef roles. In the shorter term, there is likely to be reduced demand for some roles whilst the economy gets back on its feet. Analysis of online job postings²⁹ for June 2020 compared to June 2019, shows a reduction in demand for customer service and account management roles; along with administrative, chef and marketing roles. Roles which are holding up in terms of demand include care roles (care assistants, care givers), health roles (nursing), legal roles, financial roles and teaching roles.

In terms of skills, groups of skills for which there has been strong demand between April and June 2020 include: mental health; patient support; general accounting; teaching and financial supporting. Whilst there is currently much less demand than normal for skills such as: customer service; customer relationship management; sales; marketing; drafting and engineering design. How quickly demand for such skills will bounce-back is unclear. In some cases, potentially relatively quickly.

17) How have the self-employed been affected?

The self-employed have experienced [widespread income losses](#) during the Covid crisis. This has caused financial distress, exacerbated by uncertainty over future business prospects. The Self-Employed Income Support Scheme (SEISS) has reduced the financial impact for some, but not all have

²⁸ Buckinghamshire's Skills Analysis for 2019 is available on request

²⁹ Source: Labour Insight, Burning Glass Technologies

been eligible. Those who were had to wait until late May before being able to access the funds, which led to some turning to the benefits system (primarily Universal Credit) for support. The [Resolution Foundation](#) report that one in four new Universal Credit claimants in April and May were previously self-employed.

Those not eligible for the SEISS included those who receive less than half their income from self-employment, those with annual profits of over £50,000 in previous years and those who became self-employed from April 2019.

Behaviour

18) How can local consumer industries be supported from a demand perspective?

Local consumer industries, such as: restaurants; pubs and bars; retail; gyms; music and cultural events; sports centres; theatres; cinemas; visitor attractions; construction; property maintenance; vehicle repair and servicing; hair and beauty; complementary health and fitness, have been hit hard by 'stay at home' measures. These industries collectively provide employment for over a third of those working in the Buckinghamshire economy; and contribute a similar proportion of local economic output (GVA).

Early [data analysis](#) suggests that between February and April 2020, consumer expenditure dropped much more dramatically than incomes. Nationally, the government is rolling out policies (such as VAT reductions) aimed at boosting demand for these services to minimise the impact of recession. There is a potential for local government and other local bodies to encourage consumer demand by:

- Ensuring residents (and visitors) know which businesses are open
- Providing information to reassure customers that appropriate safety measures are in place
- Encouraging businesses and other organisations to re-open town-centre based offices

19) Is remote working here to stay?

Prior to the pandemic, working from home was relatively uncommon. In 2019, about 5% of the UK workforce reported working mainly from home, and just over a quarter had ever worked from home ([Office for National Statistics](#), 2020). Analysis undertaken in Buckinghamshire³⁰ found local proportions to be broadly similar. In the early stages of the pandemic, a survey of UK firms estimated that 37% of employees worked from home in both April and May 2020. ([Decision Maker Panel](#), 2020).

Ability to work from home is largely dependent on occupation. Generally speaking, higher-paying jobs are more likely to be able to be performed from home. National and local surveys suggest that employers have been positively surprised by the efficacy of this new way of working, which along with the potential of property cost savings, could lead to permanent shifts in working practices. This could lead to in-person work, often concentrated in large cities, becoming [less prevalent](#). This could potentially positively impact an area such as Buckinghamshire, with its high levels of out-commuting

³⁰ Add link to Catherine's report

to surrounding cities, by increasing the size of the workday population, and potentially increasing local discretionary spend.

Annex B – Monitoring indicators

[to be completed]

Lead indicators (**red flags**, used to provide advance insight into recovery or risk)

Theme	Measure	An indicator of	Source
Business	Fundraising by high growth firms	Business confidence	Beauhurst
Labour market	Job postings	Demand for labour / potential for scarring	Labour Insight

Lag indicators (**backward validation** of recovery or scarring, used for long term robust monitoring)

Theme	Measure	An indicator of	Source

Based on a long list of common indicators developed by the LEP Network and EY

Annex C – Further charts and tables

Chart C1: Impact of changing methodology for estimating local GVA on productivity ranking of LEPs

