



# **Cambridgeshire and Peterborough Combined Authority**

## **Implications of Covid-19 for CPCA's labour market**

**January 2021**

**Summary Paper**



# About the report and headline findings from analysis

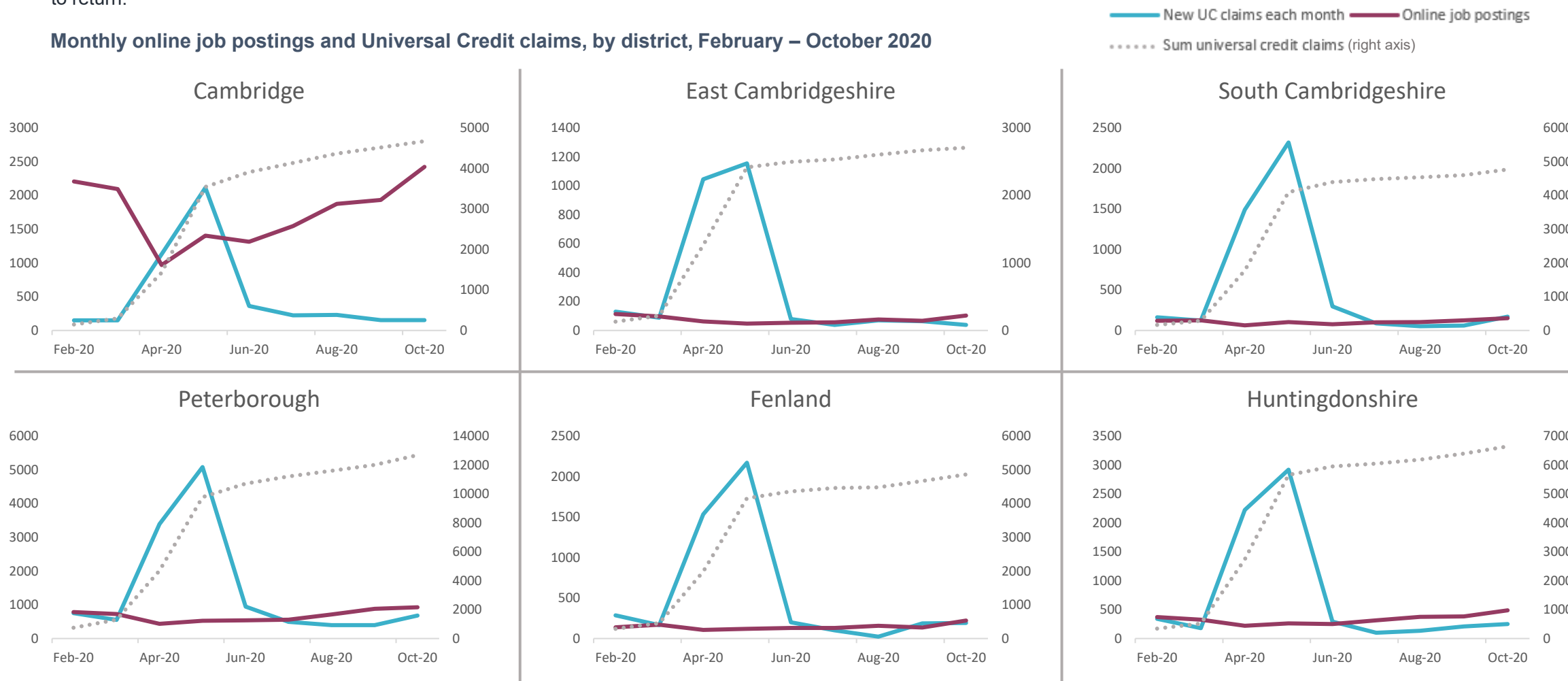
The summary report assesses the **impact of Covid-19 on skills supply and demand** in the Cambridgeshire and Peterborough Combined Authority (CPCA) area. The aim of this report is to support CPCA's development of a skills strategy - and to supplement the analysis of the CPCA Skills Action Plan - by helping to fill gaps in CPCA's labour market information, particularly relating to the impact of Covid-19. The report **focuses on the four priority sectors** that are identified in the Cambridgeshire and Peterborough Independent Economic Review (CPIER): Advanced Manufacturing and Materials, Agri-Tech, Digital and IT, and Life Sciences.

| Questions to answer                                                                                                                                   | Area of focus                                         | Headline findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>What skills are in demand across CPCA?</b>                                                                                                         | Demand across CPCA                                    | <ul style="list-style-type: none"> <li>Online job advertisements across CPCA returned to the five-year average in October 2020 (10.8k) from historic lows in April, driven by gains in Cambridge. Activity in other districts remains subdued.</li> <li>However, data for November indicates a decline in vacancies across CPCA as the second wave of Covid-19 restricts economic activity.</li> </ul>                                                                                                                |
|                                                                                                                                                       | Skills demand in CPCA's priority sectors              | <ul style="list-style-type: none"> <li><b>Priority sectors account for 20% of total employment across CPCA. Demand in these sectors has held up relatively well during Covid-19's impact compared to the economy as a whole.</b></li> </ul>                                                                                                                                                                                                                                                                           |
|                                                                                                                                                       | Jobs at risk of automation                            | <ul style="list-style-type: none"> <li>Core occupations in the priority sectors have a lower exposure to automation than the average across CPCA.</li> </ul>                                                                                                                                                                                                                                                                                                                                                          |
| <b>Where are there cross-overs in occupational demand across sectors, which could present possible routes for people to transfer between sectors?</b> | Occupational crossover in CPCA's priority sectors     | <ul style="list-style-type: none"> <li>Significant occupational crossover exists between CPCA's priority sectors.</li> <li>Approximately 75% of employment is in occupations that exist in at least two priority sectors, however in Agri-Tech that number falls to 56%, indicating that of the four priority sectors its workforce is the most distinct, and therefore skills gaps in the sector may be harder to fill through employees transferring from other sectors and applying a common skill set.</li> </ul> |
| <b>What skills are held by people entering the labour market from CPCA's education providers, and what jobs does that qualify them for?</b>           | Covid-19 impact on education provision                | <ul style="list-style-type: none"> <li><b>Apprenticeship starts in the 2019/20 academic year are down by 15% for the whole year, driven by a 38% reduction in starts since March 2020 compared to previous years.</b></li> </ul>                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                       | Mapping Apprenticeship starts to the priority sectors | <ul style="list-style-type: none"> <li><b>Half of all apprenticeship starts across CPCA are in subject areas related to the priority sectors, and 1 in 4 of these learners is enrolled in a Higher Apprenticeship.</b></li> </ul>                                                                                                                                                                                                                                                                                     |
|                                                                                                                                                       | Take up of government support                         | <ul style="list-style-type: none"> <li>65,000 people are receiving Universal Credit in November, a 113% increase since March 2020. 25,000 of these claims are concentrated in Peterborough while a further 9,000 are in Fenland.</li> </ul>                                                                                                                                                                                                                                                                           |

# Skills demand and supply across districts

The charts below plot monthly online job postings against new monthly universal credit claimants (and also cumulative UC claimants, in dotted grey line on right-axis) from February – October 2020. In April and May of this year all districts experienced a sudden spike in new UC claimants (and a corresponding collapse in online job postings), with Peterborough registering 5,000 new UC claimants in May alone. After the initial crisis abated the number of new UC claimants each month returned to pre-pandemic levels, and there has been a muted recovery in online job postings, led by Cambridge. However, any recovery in the job market has not been strong enough to offset the massive increase in UC claimants across CPCA from earlier in 2020, meaning that a large number of people who were displaced from the labour market during the first wave of Covid-19 are yet to return.

Monthly online job postings and Universal Credit claims, by district, February – October 2020



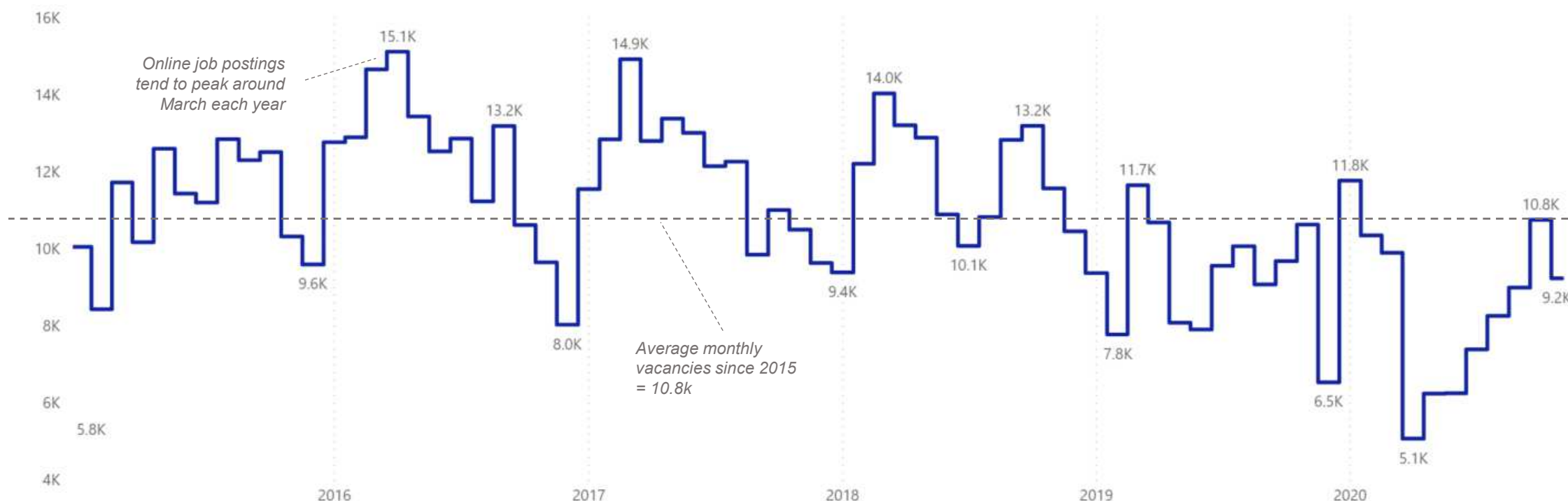
Source: Metro Dynamics analysis of Burning Glass data supplied by CPCA; DWP Universal Credit claimants data

## Vacancies across CPCA gradually recovered to near-average levels after falling to historic lows in April 2020. Increased prevalence of Covid-19 at the end of 2020 has subdued job market activity once again.

This chart shows total job vacancies advertised online across CPCA since January 2015. It shows that CPCA's labour market follows an approximately annual cycle where advertised vacancies peak around March/April each year and tend to be at their lowest around December. In 2020, however, that typical March/April peak became a trough - **fewer vacancies were advertised in April 2020 than in any single month over the past five years.**

Since the lows of April 2020 online **job postings across CPCA have been gradually recovering** to the point where in October the number of vacancies advertised (10.8K) returned to the average monthly level of vacancies across CPCA from the past five years. In November, however, online job postings declined once again as second national lockdown came into effect in response to rising prevalence of the virus.

**Total online job vacancy advertisements, CPCA, 2015 – November 2020**



Note: Information on 'job vacancies advertised online' should be considered as a proxy for skills demand across CPCA and not as a precise estimate.

Source: Metro Dynamics analysis of Burning Glass data supplied by CPCA

# Demand for specialised skills across CPCA

The chart below shows the top 20 specialised skills in demand across all of CPCA’s industries from February – October 2020. The top 20 skills largely fall into four categories: health care, retail / hospitality, or business administration; or they are related to one of CPCA’s Priority Sectors. The analysis shows that 5 of the top 20 skills in demand across CPCA are related to Digital & IT or to Life Sciences, which is an encouraging sign of those sectors’ durability during Covid-19. **Demand for retail / hospitality skills (basic customer service and general sales) has been increasing as more retail businesses reopened over the summer and autumn**, though data does not yet account for the resurgence of Covid-19 at the end of 2020, and the implications of this for retail businesses.

Top 20 skills in demand across CPCA, February – October 2020



Source: Metro Dynamics analysis of Burning Glass data supplied by CPCA

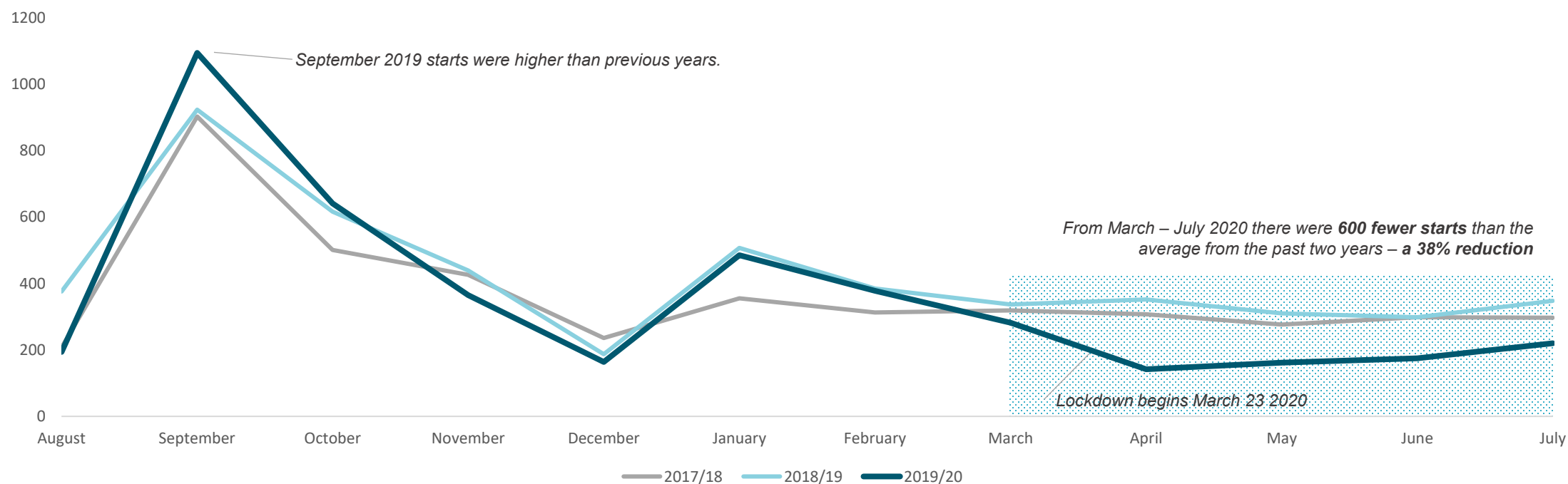
# Covid-19 has reduced the number of apprenticeship starts across CPCA by 38% since March 2020

The chart below shows apprenticeship starts by calendar month for the last three academic years in CPCA. **Apprenticeship starts in the 2019/20 academic year (August 2019 – July 2020) were down 15% overall** compared to 2018/19 across CPCA, slightly better than the 18% reduction across England.

In the first seven months of the 2019/20 academic year (August 2019 to February 2020) apprenticeship starts across CPCA were actually 4% higher than the average from the previous two years over that period of time. However, **since the outbreak of Covid-19 and the introduction of the national lockdown in March 2020, apprenticeship starts are down by 38%**, meaning 600 fewer apprenticeships were commenced in March – July of this year than the average for the previous two years.

The reduction in starts since Covid-19 is fairly consistent across districts: ranging from a 30% reduction in Fenland to a 42% reduction in Peterborough.

Starts per calendar month across CPCA, for academic years 2017/18 – 2019/20



## Understanding CPCA's priority sectors

Combined, CPCA's priority sectors employ 82,000 people: nearly one in five of all jobs across CPCA. Of these 82,000 employees, 37,000 are in occupations which are 'core' to the sector (e.g. software engineers in Digital and IT) while 45,000 are in enabling occupations (such as accountants).

Employment in the priority sectors is heavily concentrated in the south of the Combined Authority's geography, with comparatively little activity in northern areas (one exception being an advanced manufacturing cluster near Peterborough). This report presents maps of where employment is concentrated across CPCA's geography.

On the whole, throughout Covid-19's impact, skills demand across CPCA's priority sectors has held up relatively well compared to demand across CPCA's economy as a whole. Looking longer-term, occupations in CPCA's priority sectors also have a lower exposure to automation than across CPCA as a whole. Latter sections of this report explore these points in more detail.

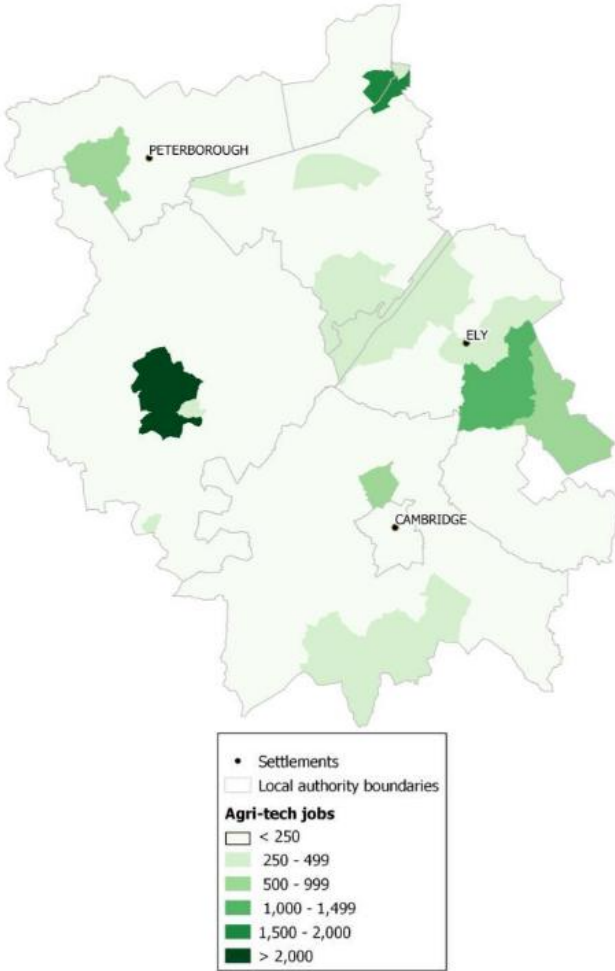
| Priority Sector                             | Priority Sector Employment |                                  |                                      | Occupational Crossover between Priority Sectors |                                             | Automation Exposure                |
|---------------------------------------------|----------------------------|----------------------------------|--------------------------------------|-------------------------------------------------|---------------------------------------------|------------------------------------|
|                                             | Total employment           | Employment in 'core' occupations | Employment in 'enabling' occupations | % of employment not in other priority sectors   | % that overlaps with other priority sectors | % employment exposed to automation |
| <b>Agri-Tech</b>                            | 16,000                     | 2,800                            | 13,200                               | 43.9%                                           | 56.1%                                       | 49%                                |
| <b>Advanced Manufacturing and Materials</b> | 20,700                     | 10,400                           | 10,300                               | 25.8%                                           | 74.2%                                       | 39%                                |
| <b>Life Sciences</b>                        | 19,800                     | 8,800                            | 11,000                               | 20.1%                                           | 79.9%                                       | 31%                                |
| <b>Digital &amp; IT</b>                     | 25,500                     | 15,400                           | 10,100                               | 20.5%                                           | 79.5%                                       | 33%                                |
| <b>Priority Sector Total</b>                | <b>82,000</b>              | <b>37,000</b>                    | <b>45,000</b>                        | -                                               | -                                           | <b>36%</b>                         |
| Other sectors total                         | 369,000                    | 36,000                           | -                                    | -                                               | -                                           | 46%                                |
| CPCA Total                                  | 451,000                    | 73,000                           | -                                    | -                                               | -                                           | 45%                                |



# Where priority sector employment is concentrated across the region

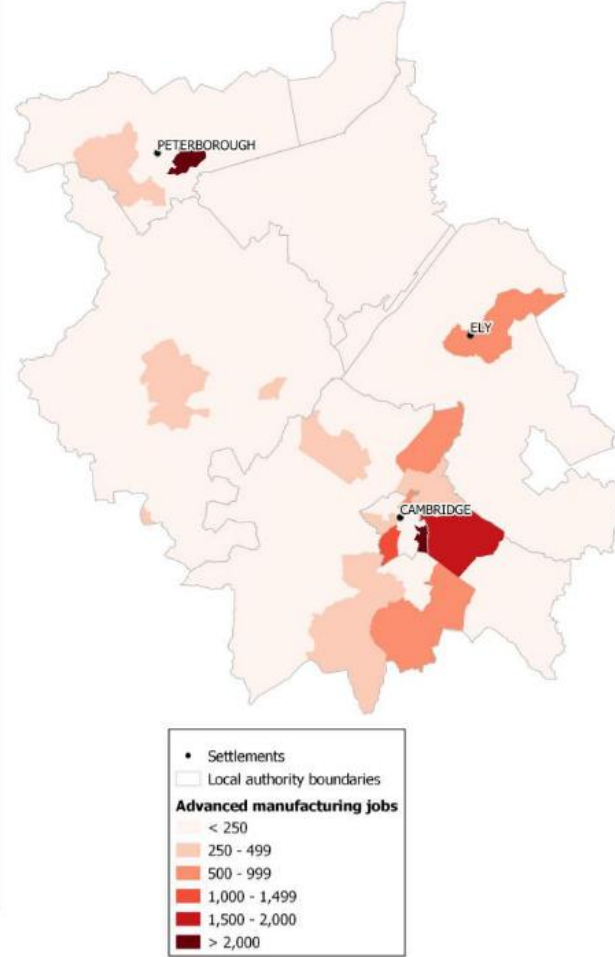
## Agri-Tech

16,000 jobs in the sector. Employment is spread throughout the LEP but the sector has a notably strong presence in East Cambridgeshire and Fenland.



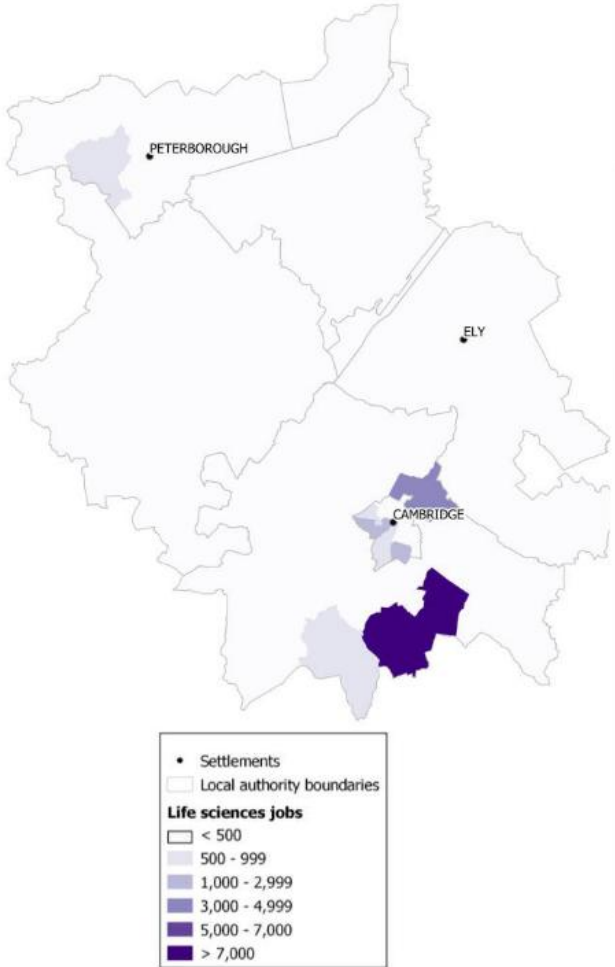
## Advanced Manufacturing and Materials

20,700 jobs in the sector. Jobs are predominantly found in South Cambridgeshire (30%), Cambridge (24%) and Peterborough (22%).



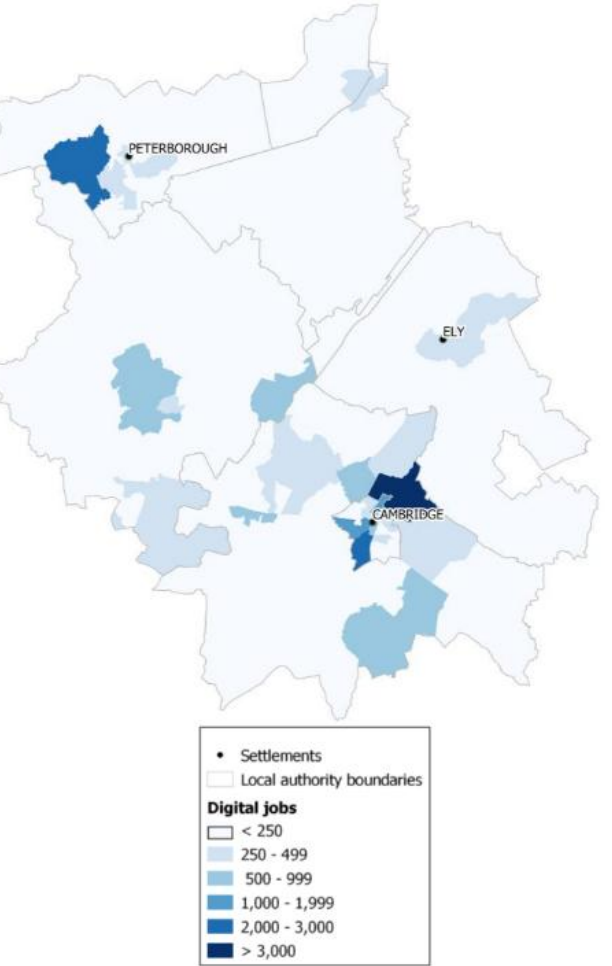
## Life Sciences

20,000 jobs in the sector. Most jobs are located in South Cambridgeshire, making up over 60% of total jobs, followed by Cambridge with 25%.



## Digital and IT

25,000 jobs in the sector. Jobs are largely concentrated in the northern region of South Cambridgeshire (30%), Cambridge (30%) and Peterborough (20%).

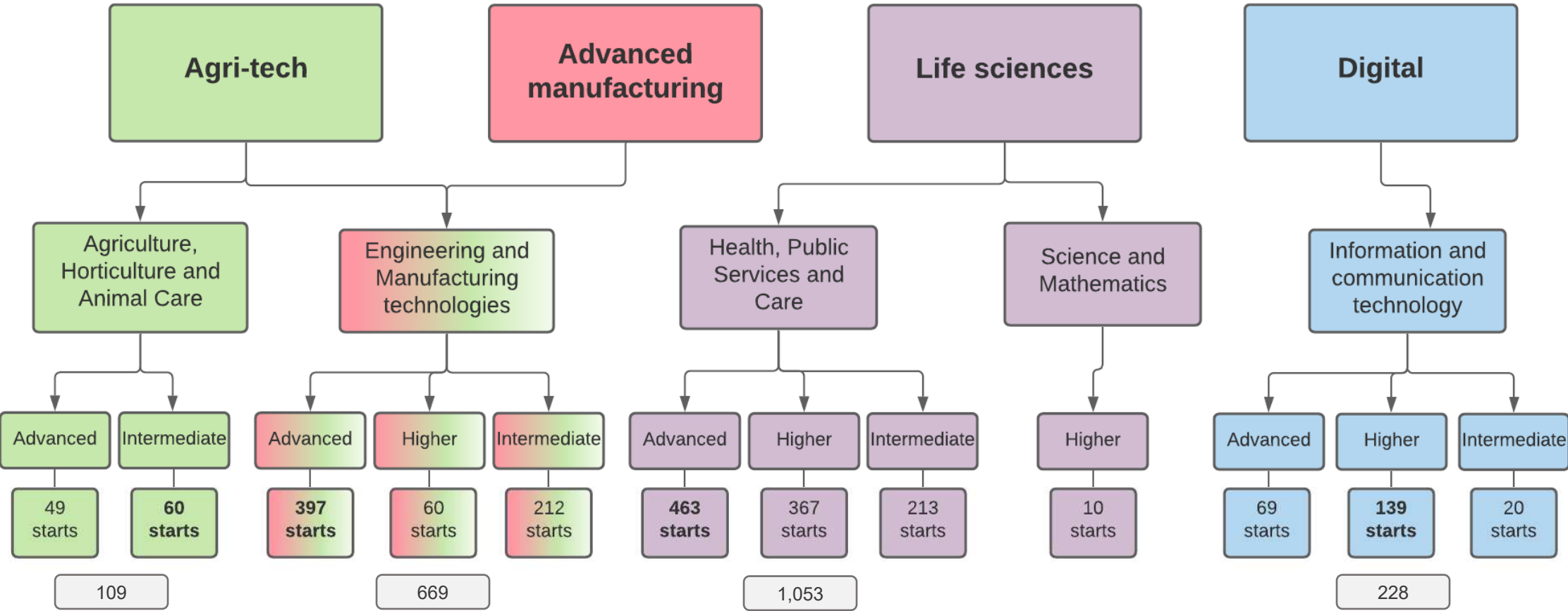




# Apprenticeship starts in subject areas relating to the priority sectors

The diagram below maps apprenticeship starts by subject area to CPCA’s priority sectors for the 2019/20 academic year. For all priority sectors there is at least one directly relevant subject area, demonstrating the potential for CPCA’s apprenticeship system to meet skills demand for some job roles in the priority sectors. In total in 2019/20, there were **2,050 apprenticeship starts in related subject areas** – nearly half of all apprenticeship starts in all subject areas across CPCA. 25% of these starts were in Higher Apprenticeships, which could help meet demand in some highly-skilled job roles in the priority sectors.

Alignment of apprenticeship starts to priority sectors, 2019/20 academic year

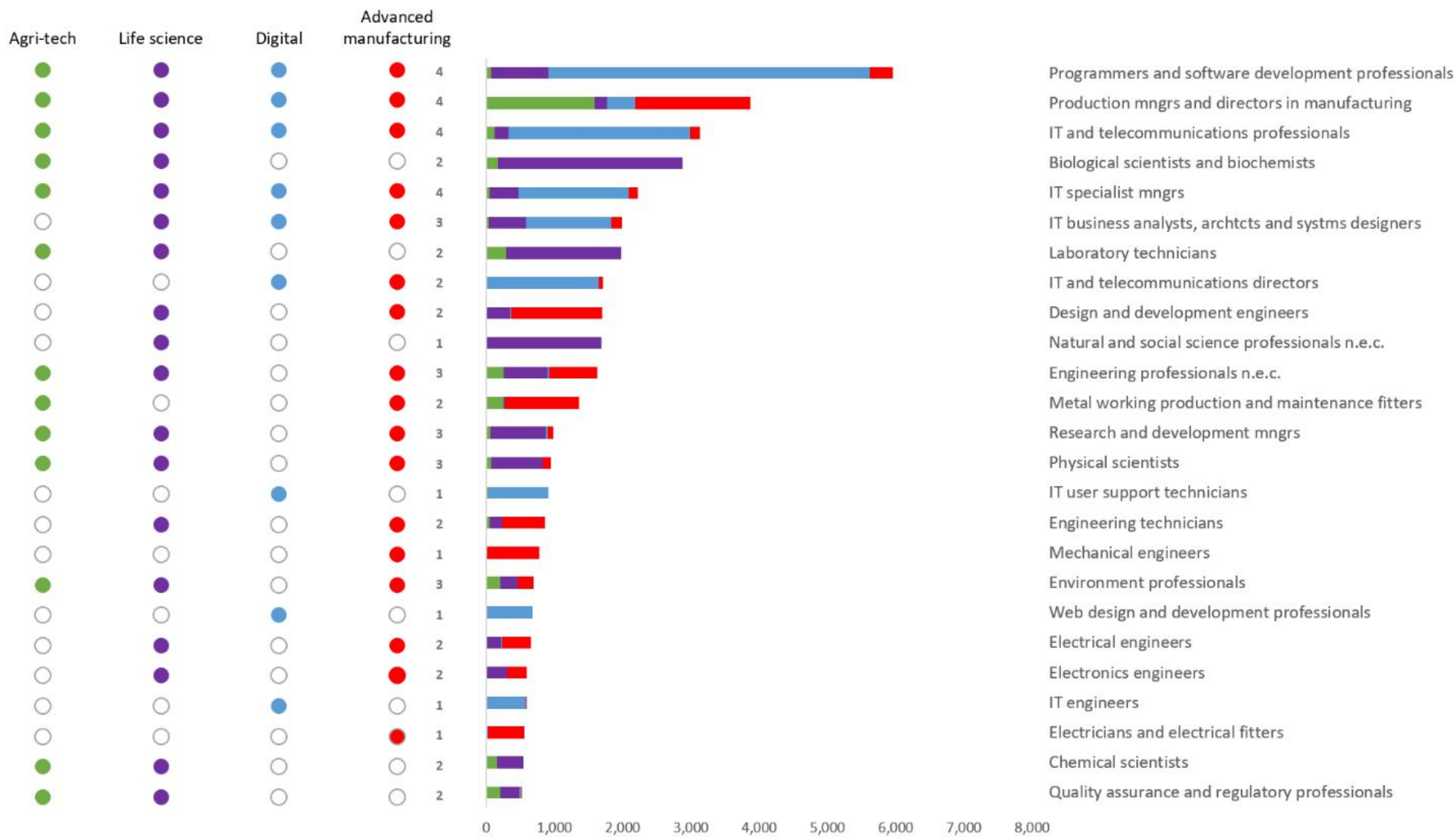


*Note: Most starts in Health, Public Services and Care are likely to be in primary care roles not directly related to the more knowledge-intensive aspects of the Life Sciences priority sector. It should be noted that most skills demand in the priority sectors is filled by university graduates, but the focus in this report is on Further Education provision across CPCA.*

*Source: Metro Dynamics analysis of DFE apprenticeships and traineeships dataset*

# Occupational crossover between priority sectors

Employment in top 25 Core occupations by employment across CPCA’s priority sectors (where employment in a sector > 50)



Source: Metro Dynamics analysis of ONS SIC4 by SOC4 matrices

# Projections for Covid-19 impact on skills demand and supply

This report highlights diverse impacts of Covid-19 across CPCA's geography, with a north-south divide evident (noting pockets of success and deprivation throughout CPCA). **Most employment in the priority sectors is clustered in the south** around Cambridge and South Cambridgeshire, which means that southern areas may be poised for a more rapid recovery once the virus is contained. **In the north, there is a risk of worklessness becoming an embedded feature of the region.** Apprenticeship starts have declined by 10% since 2018, online job postings have not recovered since April, and Universal Credit claims are rising to the point where there is now one UC claimant for every five people in the workforce.

**Nine months after the onset of the crisis, for labour markets it remains too soon to tell whether the worst has passed.** Government policies (particularly the furlough scheme) have delayed the full extent of the impact on labour markets, but a rise in unemployment when the scheme does eventually come to an end appears inevitable.

## Factors influencing future skills demand

- **Structurally higher unemployment is likely to endure for some time** and the burden will fall disproportionately on more deprived people and places.
- **The crisis has sped up the process of digital technology adoption in businesses.** In addition to the current disruption to labour markets and workplaces, technological adoption by companies will transform tasks, jobs and skills over the next few years.
- **The spatial pattern of economy activity and the relationships between places for work, living, leisure and learning are changing.** The 'future of work' has already arrived for a large majority of the online white-collar workforce. Now more workplaces and occupations are amenable to remote working, skills gaps may increasingly be filled by workers not physically near their workplace.

The report adds further weight to CPCA's understanding of well-documented challenges around the provision of education and training in the north of the area, particularly around Peterborough and in Fenland (highlighted on the map below).

The evidence presented in this report indicates that Covid-19 has exacerbated pre-existing issues, threatening a period of stagnation or decline in northern regions of CPCA's geography without intervention.

**Areas of greatest deprivation in the Education, Skills and Training indice of IMD, 2019**

