GREATER MANCHESTER INDEPENDENT PROSPERITY REVIEW

EVIDENCE UPDATE: PRODUCTIVITY AND THE BUSINESS BASE

A research report for the
Greater Manchester Prosperity Review: Evidence Update
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Greater Manchester Combined Authority Research Team produces high quality research and intelligence to form the evidence base underpinning policy and strategy for the city region.

The Greater Manchester Independent Prosperity Review was commissioned by a panel of distinguished experts, chaired by Professor Diane Coyle, to provide a detailed and rigorous assessment of the current state, and future potential, of Greater Manchester's economy. Commencing ten years on from the path-breaking Manchester Independent Economic Review, it provides a fresh understanding of what needs to be done to improve productivity and drive prosperity across the city region.

This latest update, the Greater Manchester Independent Prosperity Review: Evidence Update is a key part of the sustained work done by researchers at the Greater Manchester Combined Authority – with input and challenge from experts. The update explores seven inter-connected thematic areas: carbon neutrality, health inequalities, productivity and the business base, the labour market, skills utilisation and employer investment in skills, trade, and transport in light of the significant economic developments experienced since 2019 (Covid-19, UK's exit from the European Union and the energy and inflation shock).

This report, alongside the six other research reports on the thematic areas listed above, forms part of a suite of work from which the summary, the Evidence Update: Reflections Report is drawn. The evidence update will be used to inform the refresh of the Local Industrial Strategy

Contents

Executive Summary

The Covid-19 pandemic brought about rapid and large-scale disruption to the economy of both the UK and Greater Manchester (GM). This was accompanied by far-reaching state support for the economy through furlough, business grants and loans and other support programmes. Whilst data is still emerging on the total economic impact of the pandemic, initial evidence suggests that in many cases this support appears to have been effective in preventing long term structural change to many elements of the city region's economy. This is not to say that there have not been substantial economic impacts, but that on a range of measures these effects do not appear to be as deep and long lasting as initially feared.

This is well exemplified by examining trends in employment by sector. A close examination of the data shows some important trends:

- The trend for growth in retail employment in GM that preceded the pandemic continued into 2020 with growth of 2%, a trend that was not reflected in the wider North West.
- The construction workforce in GM shrank by 13% between 2019 and 2020, a reduction of 8,000 employments[1]. More recent regional data suggests that this trend may have continued into 2021.
- As one of the sectors most heavily impacted by restrictions, employment in the hospitality, tourism and sport sector declined by 7% during the first months of the pandemic. More recent data suggests that some or all of this employment loss may have been recovered since.
- Counter to expectations and national trends, employment in the logistics sector shrank by 11% during the first months of the pandemic. This was largely as a result of reductions in employment in 'Passenger and Freight Transport by Road and Rail' and 'Postal and Courier activities.' Despite this trend, the number of logistics firms in GM continued to grow.

[1] 'Employments' includes employees plus the number of working owners. This includes self-employed workers where they are registered for VAT or Pay-As-You-Earn (PAYE).

Whilst these trends require close monitoring in the future, when examined in the context of overall employment volumes, they do not yet suggest a marked shift in sectoral employment in GM. Broadly speaking, the trends that were in place before the pandemic remain apparent. This includes an overarching trend towards more rapid growth in employment in service-based industries. Services jobs growth accounted for 77% of jobs growth in GM between 2015 and 2019 (+104,000 jobs). The impact of the pandemic was more keenly felt in service sectors, but early data suggests many of these jobs are likely to quickly bounce back.

A similar story of consistent performance exists when considering the productivity of the GM economy. The Independent Prosperity Review [2](IPR) found that "When comparing absolute levels of productivity, GM has remained at approximately 90% of UK average productivity." Whilst this analysis remains true there is also evidence that GM has, in recent years been one of the best performing areas of the UK in improving its productivity. This appears to be, at least in part driven by the growth in higher paid employment.

Nevertheless, there remain challenges – particularly related to geographic variation in productivity within GM. There is a difference of £13,000 of GVA per job between GM's most productive sub region and its least productive.[3] It is also important to note the size of the gap in productivity between London and GM is substantially larger than the gap between European capital cities and their second- tier equivalents [4]

One area where there does appear to have been longer term structural change is in the adoption of hybrid working. Working from home volumes both nationally and in GM have settled at a level higher than observed in the period preceding the pandemic. It appears increasingly unlikely that these will return to the relatively low volumes of people consistently working from home prior to the pandemic. Whilst the scale of the change is substantial, working from home remains a reality for a minority

[2] GMCA (2019). *Audit of Productivity*. Available at https://www.greatermanchester-ca.gov.uk/media/1911/gmipr_tr_auditofproductivity.pdf

[3] Office for National Statistics (2022), *Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions.* Available at Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions - Office for National Statistics

[4] Centre for Cities (2021). *Is London too successful?* Available at: Is London too successful? | Centre for Cities

of Greater Manchester's workers. Workers in higher paid, higher skills occupations were more likely to work from home than those in the lower paid roles.

1. Introduction and scope

Since the publication of the Greater Manchester Local Industrial Strategy in June 2019[5], the UK and GM economies have undergone a period of acute turbulence and change. The effects of Covid-19 have seen exceptional levels of Government intervention in the economy and the introduction of new ways of working for firms and employees. Allied with this has been significant disruption to business finances with furlough, Government backed loans and a range of support grants and reliefs supporting businesses and transforming balance sheets. This happened against the backdrop of the UK's departure from the European Union and fundamental changes in the availability of labour and the mechanisms for buying and selling goods and services overseas.

A significant volume of recent research work in GM has focused on monitoring newly emerging data to identify the immediate policy responses to this economic turbulence. Less focus has been given to the longer-term structural changes that have taken place in the GM economy. This paper aims to identify some of these changes and their effects and begin to examine how likely they are to endure.

This paper specifically focuses on four topics:

- **Headline measures of the GM economy** examining how productivity and employment have changed in recent years
- **Business demography** and the extent to which sectoral employment, business counts and sectoral output has changed during the pandemic
- How trends in **self-employment** have changed during the pandemic and how the Government's support schemes have interacted with these changes

[5] GMCA (2019). *Greater Manchester Local Industrial Strategy*. Available at: https://www.greatermanchester-ca.gov.uk/what-we-do/economy/greater-manchesters-local-industrial-strategy/

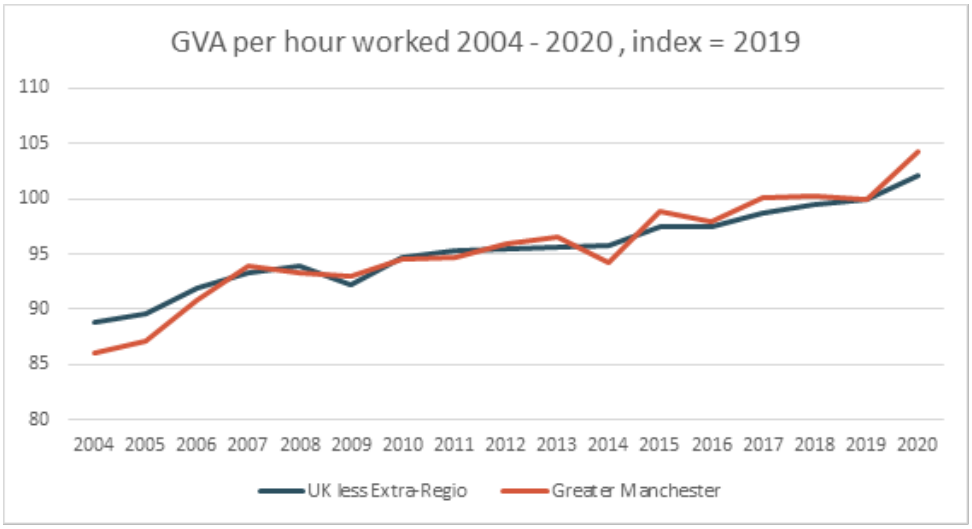
- The **spatial nature of work** including the growth in hybrid working and resultant changes in employee behaviour

2. Headline economic measures

The Audit of Productivity[6] that formed part of the evidence for the Independent Prosperity Review found that: "Productivity levels and productivity growth in Greater Manchester (GM) have consistently trailed UK averages that are inflated by the country's one exceptional performer – London." It continued: "When comparing absolute levels of productivity, GM has remained at approximately 90% of UK average productivity".

Greater Manchester and the UK experienced a sharp decline in productivity growth in the years following the financial crisis: annual increases in productivity shrank from an average of 1.7% for the UK and 3% for GM (2004-2007) to 0.9% for the UK and 1.1% for GM (output per hour).[7] The chart below shows the growth of productivity in GM and the UK from 2004-2020 (with values indexed to 2019) demonstrating this trend. It is noteworthy however that in six of the years during the period 2010-2020, GM's productivity grew more quickly than the UK's.

Figure 1 – Growth of productivity in Greater Manchester and UK 2004 to 2020 (values indexed to 2019)



Source: ONS Sub regional productivity

[6] GMCA (2019). *Audit of Productivity*. Available at https://www.greatermanchester-ca.gov.uk/media/1911/gmipr_tr_auditofproductivity.pdf

[7] ONS (2021). *Sub regional productivity*. Available at https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygvaperhourworkedandgvaperfilledjobindicesbyuknuts2andnuts3subregions

This is highlighted in the latest productivity data, released by ONS in July 2022 which identifies Greater Manchester as one of the biggest improvers on productivity performance in the last decade, with GM contributing more to UK productivity growth than all but two other International Territorial Level 2[8] (ITL2) areas between 2010 and 2020.

The original IPR found that employment growth was concentrated in sectors with output per job of less than £30,000 (in 2013 prices). It stated:

"The share of low productivity sectors in GM – defined as sectors with lower than £30,000 GVA per employment, at 2013 prices – increased from 37.7% in 2005 to 41.8% in 2015"

This analysis has been updated and found that growth in jobs below the inflation adjusted £30,000 threshold contracted slightly between 2015 and 2019 (-1%, -2,000 jobs) whilst the number of jobs in higher productivity sectors (those with output of more than £50,000 per job) grew by 21% (+121,000 jobs). This might help partially explain GM's stronger productivity performance across the period.

Despite these improvements, the gap between London and the South East and Greater Manchester is not closing at an aggregate level. That latest data confirms the continuation of the trend identified in the Prosperity Review that Greater Manchester has productivity at approximately 90% of the UK average. This gap is substantially larger than the gap between European capital cities and their second-tier equivalents. Raising GM's productivity to the UK average would generate an additional £8.6bn of GVA per annum.

A further contributing factor to Greater Manchester's productivity challenge is geographic variation between parts of the city region. There is a difference of £13,000 of GVA per job between GM's most productive sub region Greater

[8] International Territorial Levels (ITL) areas are used by the UK Government as areas of internationally comparable regional geography. These replaced Nomenclature of territorial units for statistics (NUTS) areas in 2021. ITL areas are divided into three tiers where ITL1 areas are the largest and ITL3 areas the smallest Greater Manchester is an ITL2 area which is defined as being an area with between 800,000 and 3 million residents. The UK has 41 such areas.

Manchester South West (comprising Salford and Trafford) and its least, Great Manchester North West (comprising Bolton and Wigan).Raising the productivity of all parts of the city region to the GM average would create an additional £3.4bn of GVA per annum.[9]

Examining the reason for the region's productivity performance

The Productivity Institute addressed similar questions in their analysis of the North West's productivity challenge. The Institute found that, much like GM, the region had a productivity rate of around 90% of the UK average with underperformance across many subregions. Whilst this contained significant variation, only Cheshire East performed better than the UK as whole in terms of level and growth of productivity. Even here the Institute finds that "the productivity advantage seems primarily driven by some very large, high value companies" masking under performance elsewhere.

The Institute concludes that the reasons for the underperformance of the North West region on productivity include "under investment by the public and private sectors in key growth drivers such as hard and soft infrastructure, R&D activity, and human capital." It also highlights that Liverpool and Manchester "lack the scale and transport links to drive productivity across the region in the way that London does for the South East and the rest of the nation".

[9] The Productivity Institute (2021) *The North West of England's Productivity Challenge:* Available at The North West of England's Productivity Challenge: Exploring the Issues - The Productivity Institute

3. Business demography

The Independent Prosperity Review identified GM as the 'most diverse city region economy in the UK', a strength that it concluded could be beneficial to innovation uptake. In order to update our understanding of economic specialisation within the city region it is helpful to consider whether this assessment remains true or whether greater specialisation has emerged since the publication of the IPR. In particular, the analysis in this paper aims to examine change that has been initiated by the Covid-19 pandemic.

The assessment of economic diversity in the IPR relied on analysis undertaken by the ONS of the UK's regional economies using the Krugman Specialisation Index (KSI)[10]. The ONS has not replicated this analysis since 2018 and it is not readily replicable locally. Although it does not seek to update the KSI analysis previously undertaken, this paper examines changes to business volumes, employment volumes and economic output by sector to provide an indication of changes in the specialisation of the Greater Manchester economy.

Wherever possible, analysis has been undertaken using the sector definitions used in Annex 3 of the Audit of Productivity report[11] undertaken for the IPR. These are used as they provide sectoral definitions that are more meaningful in policy discussions than Standard Industrial Classifications (SIC). For example, the Audit of Productivity categorisations refer to 'Business, financial and professional services', a sector widely understood as part of GM's economy, rather than the SIC description of 'Professional, scientific and technical activities' which encompasses a wider and less recognisable group of sectors. The main exception to this is in considerations of economic output. Here, data is only provided by ONS at the highest SIC level and so it is not possible to recreate the Audit of Productivity sectors. A degree of

[10] ONS (2018). *Krugman Specialisation Index.* Available at: ((https://www.ons.gov.uk/file?uri=/economy/nationalaccounts/uksectoraccounts/compendium/economicreview/april2018/economicreviewapril2018/krugmanspecialisationindex.xls

[11] GMCA (2019). *Audit of Productivity*. Available at https://www.greatermanchester-ca.gov.uk/media/1911/gmipr_tr_auditofproductivity.pdf

interpretation will therefore be necessary to align analysis of these measures with other conclusions.

Since the KSI analysis in the IPR was based on 2016 data, analysis in this paper has used this as a base year with changes since then identified.

3.1 Employment

The ONS Business Register and Employment Survey (BRES) provides the most detailed estimates of sub-regional employment by sector amongst official statistics. As such it is powerful in helping understand how employment has grown within and between sectors in GM[12]. The survey asks businesses to provide details of their full-time and part-time staff on a given reference date in the year. It is important therefore to be cautious with the most recent data for which the reference date was 11 September 2020 and as such, captured employment during the furlough scheme and when the UK economy was still subject to some restrictions. At this time, some areas were subject to 'local lockdowns' which were rapidly followed by the introduction of national restrictions on social mixing and a 10pm curfew for hospitality businesses.

To take account of this volatility in the data, analysis below examines three elements:

- Employment change between 2016 and 2019: This examines the changes in employment that had taken place in the period preceding the pandemic
- Employment change between 2019 and 2020: This examines the immediate impact of the pandemic on employment
- Employment changes since September 2020: This examines how employment volumes have recovered since the most recent BRES survey using an alternative data source[13].

[12] Further consideration of changes to employment, unemployment and economic inactivity is given in other papers developed alongside this one

[13] Office for National Statistics. *Workforce jobs by industry*. Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/workforcejobsbyindustryjobs02

Employment change between 2016 and 2019

Except for manufacturing and hospitality, tourism and sport, all sectors experienced at least modest employment growth during the 2016-2019 period as total employment in the city region grew by 7%. Most notably, the digital & creative, logistics, retail and construction sectors underwent double digit employment growth. The addition of 15,000 digital & creative sector jobs represented growth of more than one-fifth in the sector and a similar level of growth in the construction sector saw the addition of 12,000 jobs. The table below provides a full summary of growth by sector.

Table 1: Sectoral employment in Greater Manchester by volume: 2016 and 2019

Sector	2016	2019	% Change
Manufacturing	125,000	121,000	-3.2%
Business, financial & professional services	286,000	306,000	7.0%
Digital & creative	64,000	79,000	23.4%
Health, social care & health innovation	173,000	178,000	2.9%
Logistics	73,000	84,000	15.1%
Retail & wholesale	202,000	223,000	10.4%
Hospitality, tourism & sport	119,000	117,000	-1.7%
Construction	50,000	62,000	24.0%
Other	201,000	218,000	8.5%
Total	1,294,000	1,388,000	7.3%

Source: ONS BRES

Employment change between 2019 and 2020

The Covid-19 pandemic introduced a range of restrictions on public life and on how businesses were allowed to trade. The Government attempted to mitigate the effect of these changes on employment patterns using a range of business support programmes including furlough, business loans (such as the Coronavirus Business Interruption Loan Scheme and Bounce Back Loans Scheme) and taxation relief (such as from business rates and VAT). Whilst these schemes have broadly been

seen as successful in maintaining skills within businesses and preventing the severe rises in unemployment forecast early in the pandemic, some marked effects were in evidence in the data from September 2020. Specifically:

- **Construction**: After initial interruptions to activity on construction sites in the early weeks of the pandemic, the Government issued guidance at the end of March 2020 outlining how sites could continue to operate. Whilst this allowed many firms to restart work, it required the introduction of a range of social distancing measures which in many cases placed restrictions on the volume of workers on site. In GM this was reflected in a reduction in the total construction workforce of 8,000 (-13%) employees between 2019 and 2020.
- **Hospitality, tourism & sport**: The sector underwent both business closures and restrictions in trade such as limits on hours of trading, cancellation of events and requirements for social distancing. In addition to this, restrictions on people's wider mobility (such as requirements to work from home) were likely to have reduced demand in the sector. This is evidenced in changes in employment volumes which shrank by 8,000 employees and reduced the sector's overall share of employment in GM by 0.4%.
- **Retail & wholesale**: The early stages of the pandemic created different challenges for different parts of the retail sector. Some retailers of non-essential goods were required to close whilst others, such as food retailers saw significant uplift in demand. Overall, however, the trend of growth in the sector from the years preceding the pandemic continued with the sector adding a further 4,000 employees (+1.8%) between 2019 and 2020. This growth was particularly focused on home improvement retailers (such as furniture and paint retailers) and food stores.
- **Logistics**: The sector underwent a degree of turbulence during the early stages of the pandemic particularly in relation to shortages of HGV drivers, however demand for services was seen to be strong with the rise in the use of online retail and delivery services. Despite this, employment in the sector fell by 9,000 employees (-11%) erasing almost all of the jobs growth in the sector since 2016.

Changes in the logistics sector

The change in employment in the logistics sector in GM runs counter to expectations and national trends. Nationally, employment in the logistics sector grew by 2.3% between 2019 and 2020. This growth was most pronounced amongst employees in Warehousing roles (+6.7%). In GM the growth in warehousing roles was more modest (+3.2%). However, the area of greatest disparity between local and national trends was in the 'Land transport and transport via pipelines' sector which mainly comprises passenger and freight transport by road and rail. Nationally this sector grew by 1.8% whilst in GM it shrank by 20% (-6,000 employees). GM also saw a substantial reduction in 'Postal and Courier activities' roles (-22%, -4,000 employees) a change that was more modest nationally (-4.3%). The GM trends in the sector were however broadly reflective of the trends seen across the North West.

Full details of the employment change between 2019 and 2020 is shown in the table below.

Table 2: Sectoral employment in Greater Manchester by volume: 2019 and 2020

Sector	2019	2020	% Change
Manufacturing	121,000	124,000	2.7%
Business, financial & professional services	306,000	306,000	No change
Digital & creative	79,000	76,000	-3.4%
Health, social care & health innovation	178,000	174,000	-2.6%
Logistics	84,000	75,000	-10.8%
Retail & wholesale	223,000	227,000	1.8%
Hospitality, tourism & sport	117,000	109,000	-7.2%
Construction	62,000	54,000	-12.9%
Other	218,000	206,000	-5.6%
Total	1,388,000	1,350,000	-2.7%

Source: ONS BRES

Employment changes since September 2020

In order to provide further context on the change seen in the BRES 2020 data, a further data source was analysed: the ONS Workforce Jobs statistics. Whilst much less detailed than BRES, these statistics are timelier and (at the time of writing) provided data up to December 2021. The data does not allow for analysis by bespoke sectors and only provides data at a regional (i.e. North West) geography. The findings below should therefore be treated as indicative for GM, however they are useful in beginning to assess whether some of the changes identified as an effect of the pandemic have begun to recede as economic restrictions have eased.

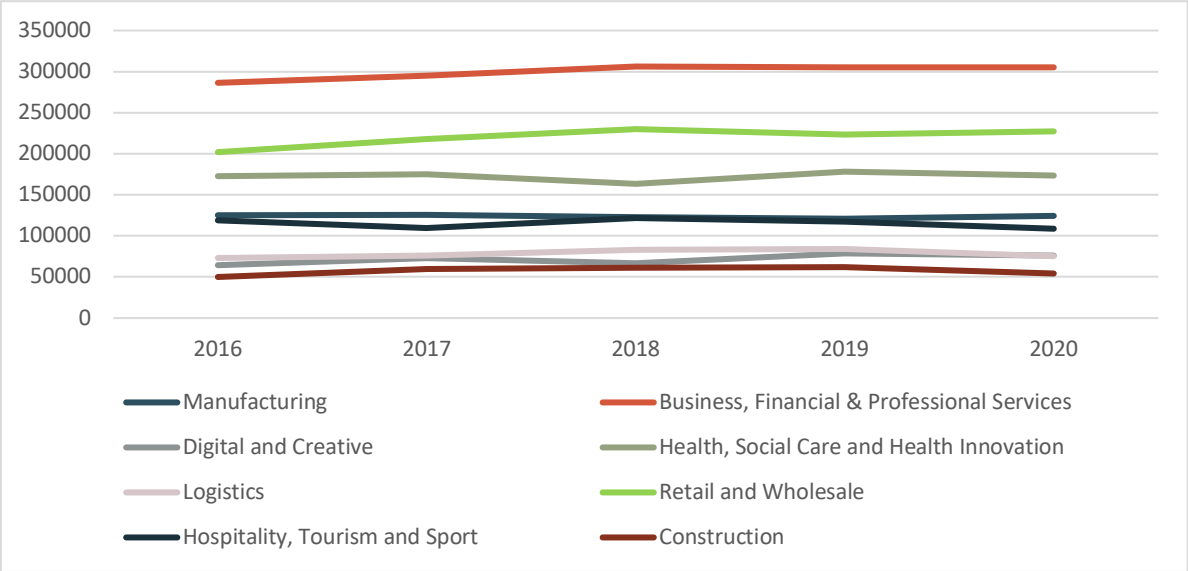
Analysis focussed on the four sectors highlighted above and examined change in the nine months since September 2020. The sector definitions vary slightly from those above, but have been aligned as closely as possible:

- Construction roles in the North West declined across the period by 6%, which was consistent with the level of regional change across the previous 12 months. This suggests that the GM fall in construction employment is likely to have continued into 2021.
- Employment in the accommodation & food services sector grew by 9% in the North West suggesting that some of the employment loss seen in GM in the 2020 data may have recovered since.
- Although the North West saw a 2% reduction in employment in the retail & wholesale sector in the nine months to December 2021, this was consistent with the performance of the sector in the preceding 12 months (also -2%). In this instance, the Workforce Jobs data does not provide a good indication of the likely performance of the GM economy as GM performed against the regional trend, adding employees during the first months of the pandemic.
- The number of employees in the logistics sector in the North West reduced by 3% in the nine months to December 2021, suggesting that GM may have continued the reduction in the size of the sector in evidence in the early stage of the pandemic.

Assessing the significance of changes in sectoral employment

Whilst these changes are pronounced and in need of careful monitoring, it is also important to assess their overall significance. Looking at the trends in the context of overall employment volumes suggests that they do not yet suggest a marked shift in sectoral employment in GM. Broadly speaking, the trends that were in place before the pandemic remain apparent. This is demonstrated in the chart below which shows that none of the sectors examined grew to be larger than any other during the pandemic and instead broad trends continued.

Figure 2: Sectoral Employment in Greater Manchester 2016-2020



Source: BRES, ONS

This includes an overarching trend towards more employment in service-based industries. Services jobs growth accounted for 77% of jobs growth in GM (104,000 jobs) between 2015 and 2019. The impact of the pandemic was more keenly felt in these sectors, but early data suggest many of these jobs are likely to quickly bounce back.

Specialisation

Additional analysis was undertaken to identify the extent to which changes in employment volumes represented a change in the specialisation of the Greater Manchester economy. In order to estimate this, 2016 and 2020 BRES employee volume data was used to calculate location quotients which provide a measure of industrial specialisation within a local economy in comparison to the national

economy. The table below examines how these have changed between 2016 and 2020. A Location Quotient greater than one indicates specialisation with the extent of the specialisation increasing the further the value increases above one.

Table 3: Employment Location Quotients in Greater Manchester: 2016 and 2020

Sector	**2016 Location Quotient**	**2020 location quotient**	**Change**	**Categorisation**
Manufacturing	1.05	1.02	-0.03	Decreasing specialisation towards the national average
Business, Financial and Professional Services	1.14	1.16	0.02	Increasing specialisation above the national average
Digital and Creative	0.84	0.95	0.11	Increasing specialisation towards the national average
Health, Social Care and Health Innovation	0.98	0.92	-0.06	Decreasing specialisation below the national average
Logistics	1.18	1.10	-0.08	Decreasing specialisation towards the national average
Retail and Wholesale	1.03	1.14	0.11	Increasing specialisation above the national average
Hospitality, Tourism and Sport	0.93	0.86	-0.07	Decreasing specialisation below the national average
Construction	0.82	0.81	-0.01	Decreasing specialisation below the national average

Source: GMCA analysis of ONS BRES

There were only two sectors that became more intensely specialised across the period examined: Business, financial and professional services and retail and wholesale. It is noticeable however that digital and creative (one of the frontier sectors in the Greater Manchester Local Industrial Strategy) is now closer to the

national average than was the case in 2016 and is on trend to become an area of specialisation for the GM economy. The fall in logistics employment discussed earlier lessens the extent of the specialisation in the sector that was in evidence in 2016.

3.2 Business counts

GM's business base grew by just over 15,000 businesses from 91,500 in 2016 to 106,700 in 2021 (+16%). The fastest growing sector by volume of businesses was retail and wholesale which grew by 4,400 businesses, followed by Business, Financial and Professional Services which grew by 3,300 businesses. This aligns with employment growth patterns as these two sectors also added the greatest volume of employees across the period.

The most marked structural change in business volumes however was in the logistics sector. The number of firms grew by around 2,500, representing growth of 69%. This was particularly focused in the 'Freight Transport by Road' category which accounted for more than half of the growth. The number of firms continued to grow between 2020 and 2021 suggesting that firms in the sector largely continued to trade but reduced their workforces in response to pandemic and other trading pressures.

Full data is available in the table below:

Table 4: Businesses in Greater Manchester: 2016 and 2021

Sector	**2016**	**2021**	**% Change**
Manufacturing	8,875	8,500	-4%
Business, Financial and Professional Services	23,570	26,925	14%
Digital and Creative	9,610	10,415	8%
Health, Social Care and Health Innovation	5,295	5,155	-3%
Logistics	3,620	6,125	69%
Retail and Wholesale	16,595	20,955	26%
Hospitality, Tourism and Sport	6,740	8,335	24%
Construction	9,990	12,325	23%
Other sectors	7,295	7,960	9%
Total	91,590	106,695	16%

Source: ONS UK Business Counts

Business Births and Survival Rates

The IPR evidence review found that GM business births had grown substantially in the years leading up to 2016: business birth rates per 10,000 working age population rose from 62 in 2012 to 115 in 2016. Business birth rates reached a high of 119 per 10,000 working age population in 2017 before decreasing to 93 in 2020. Over the same period, the UK average decreased from 100 in 2016 to 88 business births per 10,000 working age population in 2020. Whilst GM continues to outperform the UK average, it underwent a more rapid rate of reduction than the UK (-19% vs -12%). Whilst this trend will need to be closely monitored in future, GM retains its position as a strong performer on business creation compared to the national average.

The IPR evidence review also found that there were notable differences in the business birth rate across GM's districts; this remains true. As was the case at the time of the IPR, Trafford had the highest business birth rate per 10,000 working age population in 2020 (115). Tameside had the lowest business birth rate per 10,000 working age population (61) a continuation of the trend from the IPR. Between 2016 and 2021, Bury had the largest change in business births (-53%), followed by Manchester (-30%) and Stockport (-21%). Business births increased in three districts: Salford (+10%), Bolton (+6%) and Wigan (+2%).

The IPR also identified that first year survival rates had declined up to 2016 and lagged below the national average. This continues to be the case. First year business survival rates in GM decreased from 91.3% in 2016 to 87.4% in 2019 (the most recent data). Over the same period, first year survival rates across the UK decreased from 91.5% to 88.3%. Therefore, GM is slightly underperforming in terms of business survival rate compared to the UK average.

3.3 Output

Analysis of output figures also provides insight into the resilience of Greater Manchester's economy compared to the UK. This analysis compares Gross Value Added (GVA) data at a Greater Manchester and UK level for the periods 2016 - 2019 and 2019 – 2020.

Analysis of GVA data between 2016 and 2019 shows GVA growth of 10.4% across the period in GM, outpacing UK growth (+5.4%). GM grew more quickly than the UK in a wide range of sectors, most notably in information and communications where growth in GM was 47% across the period.

The full table (including UK growth rates for context) is provided below.

Table 5: GVA Change: 2016 to 2019.

SIC code	**Sector**	**GVA 2016**	**GVA 2019**	**GM % Change**	**UK % Change**
A	Agriculture, forestry and fishing	43	40	-7.0%	9.4%
B	Mining and quarrying	20	30	50.0%	-3.0%
C	Manufacturing	6,488	7,438	14.6%	8.6%
D	Electricity, gas, steam and air conditioning supply	612	1,013	65.5%	9.2%
E	Water supply; sewerage and waste management	905	842	-7.0%	0.9%
F	Construction	4,330	4,608	6.4%	1.7%
G	Wholesale and retail trade; repair of motor vehicles	8,010	9,190	14.7%	0.5%
H	Transportation and storage	3,159	3,729	18.0%	7.1%
I	Accommodation and food service activities	1,787	2,017	12.9%	7.1%
J	Information and communication	2,665	3,922	47.2%	27.4%
K	Financial and insurance activities	5,477	5,459	-0.3%	1.2%
L	Real estate activities	8,654	8,737	1.0%	2.7%
M	Professional, scientific and technical activities	5,295	5,705	7.7%	1.8%
N	Administrative and support service activities	4,337	5,001	15.3%	5.2%

O	Public administration and defence	3,155	3,833	21.5%	8.1%
P	Education	4,291	4,882	13.8%	10.6%
Q	Human health and social work activities	7,484	7,245	-3.2%	2.4%
R	Arts, entertainment and recreation	1,430	1,419	-0.8%	8.3%
S	Other service activities	1,116	1,391	24.6%	8.8%
T	Activities of households	63	46	-27.0%	13.8%
	Total	**69,321**	**76,547**	**10.4%**	**5.4%**

Source: ONS Regional gross value added (balanced) by industry: all ITL regions, ITL2 chained volume measures in 2018 money value

Analysis of GVA data between 2019 and 2020 shows:

- The Covid-19 crisis had a substantial impact on economic growth, GVA in GM declined by 9.4%, slightly less than the UK as a whole (-9.8%).
- GVA declined in all but 3 sectors in GM: Electricity, Gas, Steam and Air Conditioning Supply, (+1.9%), Information and Communication (+0.2%) and Real Estate Activities (+0.1%). Nationally, these sectors declined by -2.7%, -5.8% and -1.5% respectively.

The full table (including UK growth rates for context) is provided below.

Table 6: GVA Change: 2019 to 2020.

SIC code	**Sector**	**GVA 2019**	**GVA 2020**	**GM % Change**	**UK % Change**
A	Agriculture, forestry and fishing	40	38	-5.0%	-9.7%
B	Mining and quarrying	30	24	-20.0%	-20.1%
C	Manufacturing	7,438	6,961	-6.4%	-9.4%
D	Electricity, gas, steam and air conditioning supply	1,013	1,032	1.9%	-2.7%
E	Water supply; sewerage and waste management	842	803	-4.6%	-2.4%

F	Construction	4,608	3,955	-14.2%	-16.7%
G	Wholesale and retail trade; repair of motor vehicles	9,190	8,981	-2.3%	-7.4%
H	Transportation and storage	3,729	3,127	-16.1%	-17.1%
I	Accommodation and food service activities	2,017	1,071	-46.9%	-42.3%
J	Information and communication	3,922	3,930	0.2%	-5.8%
K	Financial and insurance activities	5,459	4,881	-10.6%	-4.2%
L	Real estate activities	8,737	8,742	0.1%	-1.5%
M	Professional, scientific and technical activities	5,705	5,251	-8.0%	-6.1%
N	Administrative and support service activities	5,001	4,068	-18.7%	-18.5%
O	Public administration and defence	3,833	3,679	-4.0%	1.9%
P	Education	4,882	3,968	-18.7%	-18.0%
Q	Human health and social work activities	7,245	6,672	-7.9%	-6.8%
R	Arts, entertainment and recreation	1,419	1,063	-25.1%	-28.8%
S	Other service activities	1,391	1,064	-23.5%	-24.8%
T	Activities of households	46	36	-21.7%	-27.3%
	Total	**76,547**	**69,346**	**-9.4%**	**-9.8%**

Source: ONS Regional gross value added (balanced) by industry: all ITL regions, ITL2 chained volume measures in 2019 money value

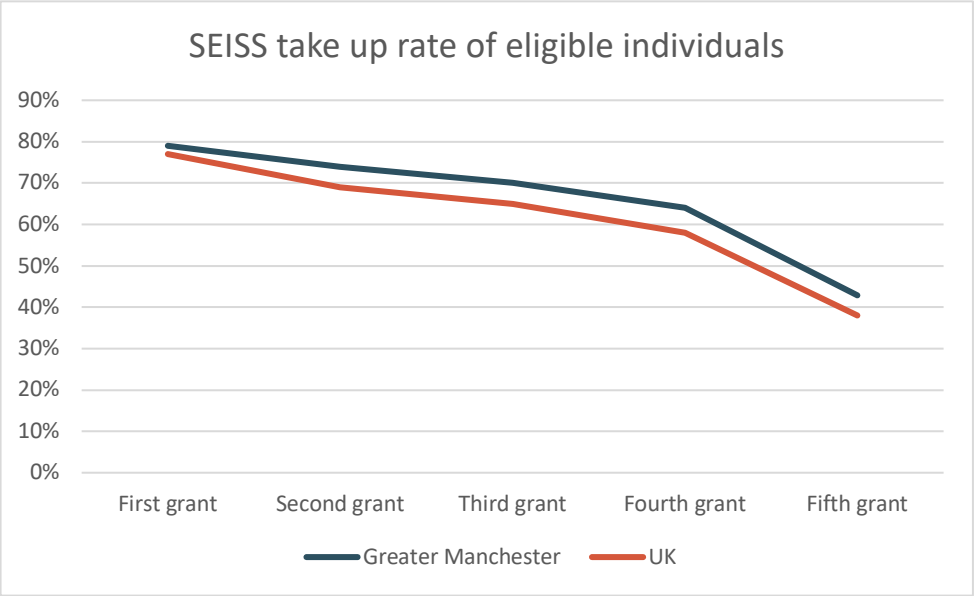
4. Self-employment

The Covid-19 pandemic and the resultant restrictions on trade in the economy had a substantial impact on self-employed workers including decreases in demand and a resultant reduction in turnover. This was recognised by the Government and support put in place through the Self Employment Income Support Scheme (SEISS). The scheme ran for five rounds between March 2020 and September 2021 distributing more than £28 billion in grants across the UK. Perhaps because of the lower numbers of workers involved, the scheme drew less attention than the Coronavirus Job Retention Scheme (typically called furlough) and therefore the potential impacts of changes to the nature and scale of self-employment have the potential to be underestimated. The analysis in this section of the report aims to examine available data on self-employment in Greater Manchester and examine the scale of the change during the pandemic. Since this data is less detailed than for employees, in some cases national data is used to help fill in gaps in analysis.

4.1 Self Employment Income Support Scheme Usage in GM

Data on uptake of SEISS can provide some insight on the scale of the financial difficulties faced by self-employed individuals during the pandemic. The chart overleaf details the proportion of eligible workers that claimed grants through each of the scheme's five rounds.

Figure 3: SEISS take up rate of eligible individuals



Source: HMRC Self-Employment Income Support Scheme (SEISS) Statistics: December 2021

Take up of grants in GM was consistently above the national average across all five rounds of the scheme with the gap slightly widening as the scheme progressed. By its close, Greater Manchester residents' use of the scheme was 5 percentage points higher than the national average (43% vs 38%). In total, 107,000 individuals made a claim under the scheme in GM. The average value of a claim was £2,400 in GM, below the national average of £2,700. The value of grants was linked to the profits of self-employed individuals in the preceding 12 months suggesting that GM workers were less profitable than the national average.

4.2 Describing the movements in self-employment

The Office for National Statistic's Annual Population Survey provides data on historic rates of self-employment and how these changed during the pandemic as shown in the chart below.

Figure 4: Residents aged 16+ in self-employment as a proportion of all employment

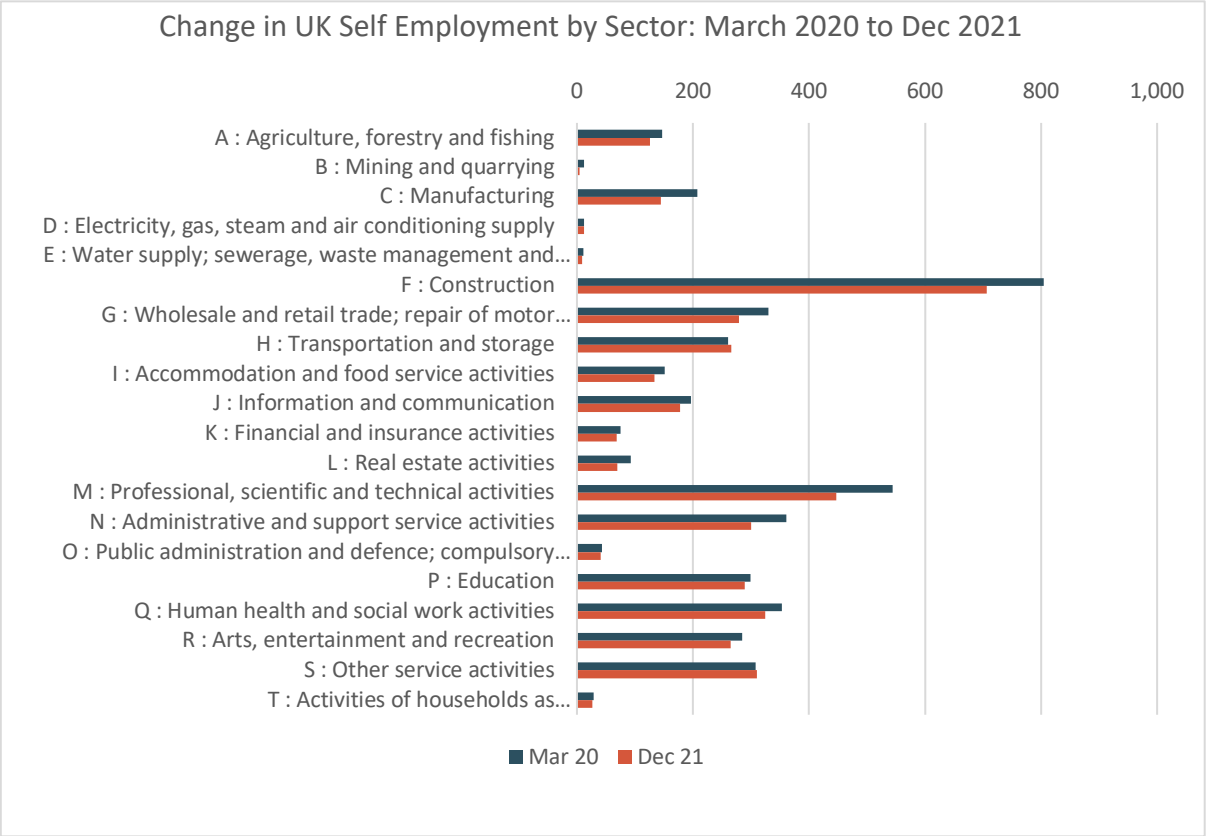
Source: ONS Annual Population Survey

Greater Manchester had lower rates of self-employment for the entire duration of the APS dataset which began in 2004. Nationally self-employed workers have made up at least 14% of the total workforce for more than 10 years (2011-21) and rose to a sustained level above 15% between 2016 and 2020. The GM self-employed only briefly reached 14% of the workforce in the period immediately preceding the pandemic.

The trend in GM and nationally was for a reduction in both the volume and proportion of self-employed workers in the period following March 2020. In Greater Manchester this equated to a reduction in the share of the total workforce in self-employment from 14.0% to 12.3% (-1.7 percentage points) between March 2020 and December 2021. This represented a reduction of the self-employed population in GM of 24,900 workers equivalent to 2% of the 16+ workforce. This was a slightly larger proportional decrease than nationally where the self-employment rate reduced by 1.8 percentage points to 13.3%.

National data can be used to help better understand the nature of these reductions. ONS data on sectoral changes in self-employment between March 2020 and December 2021 are shown in the chart below.

Figure 5: Change in UK self employment by sector: March 2020 to Dec 2021



Source: ONS Self Employment Jobs by Industry

The largest reductions in self-employment occurred in four sectors:

- Construction (-12%, -99,000 workers)
- Professional, scientific and technical activities (-18%, -97,000 workers)
- Manufacturing (-30%, -63,000 workers)
- Administrative and support service activities (-17%, -61,000 workers)

Given that the GM economy is broadly consistent with the national economy in its sectoral composition, it is likely that a similar distribution of change happened in the city region.

4.3 Temporary or structural change?

A fundamental question to consider in assessing the significance of the change is: whether there are signs that the number of self-employed workers will recover or does the change appear to be more permanent. The Greater Manchester level data

does not suggest that numbers of self-employed workers have begun to recover – the most recent data (to December 2021) showed a slight increase in volume (+1,000), however volumes remained well below their pre-pandemic level. National data (which had a further release to December 2021) also does not yet show signs of recovery in the overall volume of self-employed workers. If a recovery is forthcoming, it is not yet evident in the data.

4.4 Reasons for the change

Recent research by the London School of Economics examined data on movements from self-employment to employment and found this was largely driven by those in the 'manager' occupation class (Blundell et al, 2021[14]). The study suggests that a substantial part of the reason for the decrease in volumes of self-employment may be down to how company directors report their status to the ONS Labour Force Survey. Specifically, company directors who may previously have reported themselves as self-employed whilst receiving a relatively modest salary through PAYE may have been incentivised to reconsider themselves as employees when responding to the survey given their eligibility for the furlough scheme. Significantly, this does not necessarily mean they are undertaking a different role, only a reclassification. One caveat to this finding is that this research is national in focus and will not detect any nuance that occurred with the GM economy.

A subsequent study by the LSE[15], examines the characteristics of new entrants to the self-employed sector. It concludes that a significant proportion of recent inflows of self-employment may be temporary, insecure jobs and who many switch back to employment when more secure options become available. This is in contrast to those who have been in self-employment for longer (5+ years) who expect that the most likely way they will leave self-employment will be to retire.

[14] LSE Centre for Economic Performance (2021). *Covid-19 and the self-employed - ten months into the crisis*. Available at https://cep.lse.ac.uk/pubs/download/cepcovid-19-019.pdf
[15] LSE Centre for Economic Performance (2021). *Covid-19 and the self-employed - 18 months into the crisis*. Available at: https://cep.lse.ac.uk/pubs/download/cepcovid-19-025.pdf

5. Spatial nature of work

Amongst the most marked economic effects of Covid-19 has been the growth in working at home and, latterly, hybrid working. Although adoption of these working practices was already in evidence in some industries prior to 2020, this has been rapidly accelerated by the unique and unprecedented requirements of working during the pandemic. This chapter seeks to examine the effect of the pandemic on one particular dimension of these changes – people's place of work and their resultant movement around the city region.

The data in this area is particularly challenging. Many of the data sources were introduced in direct response to Covid-19 and therefore do not benefit from a lengthy time series. Other sources are novel in their collection methods and therefore need to be treated cautiously as they are often not subject to the level of statistical rigour as officially produced data. Building on this knowledge, this chapter considers three key questions:

- How much growth has there been in working from home?
- When do people work from home?
- Which parts of the labour force are more likely to work from home?

These are examined in the remainder of this report.

5.1 How much growth has there been in working from home?

Four data sources were examined to assess this question:

- Official data that has been consistently produced in the period before and during the pandemic through the ONS Annual Population Survey (APS)
- New official data introduced by the ONS through the Opinions and Lifestyle Survey to provide more timely and granular understanding of working from home
- Data produced by GM agencies reporting on the specific circumstances in the city region

- Novel data both at a national and GM scale produced by private sector companies

Prior to the pandemic workers in the North West were less likely to work from home than the national average. The APS for 2019[16] showed that 10% of workers in the region said they had worked at home in the week prior to the interview whilst 4.2% said they mainly worked at home. This compared to 12% and 5.1% nationally. By 2020[17] the proportion reporting recent home working had grown to 22% in the North West and 26% nationally

The full data is shown in the table below:

Table 7: Proportions of residents working from home in the North West and the UK

	Mainly work at home		**Work at home in the week prior to interview**	
	NW	**UK**	**NW**	**UK**
2019	4.2%	5.1%	10%	12.4%
2020	7.0%	8.5%	21.8%	25.9%

Source: ONS Annual Population Survey

This demonstrates two things:

- Uptake of home working in the North West was less prevalent than nationally both before and during the first year of the pandemic
- Home working remained a part of working life for only a minority or workers during the pandemic –just over 1 in 5workers in the North West were reporting any home working in 2020.

In response to significant demand for data during Covid-19 the Office for National Statistics began capturing data on home working through the Opinions and Lifestyle

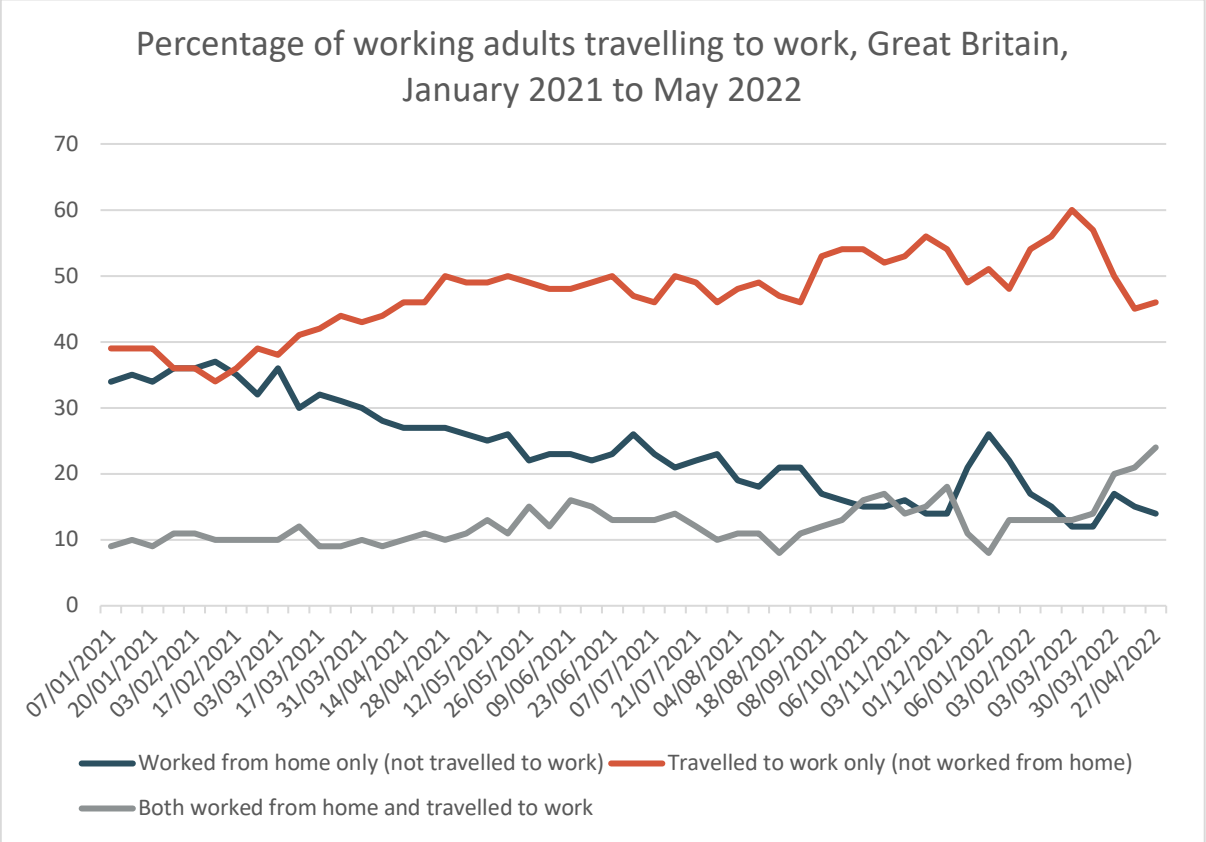
[16] Office for National Statistics (2020). *Coronavirus and homeworking in the UK labour market: 2019*. Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/coronavirusandhomeworkingintheuklabourmarket/2019

[17] Office for National Statistics (2020). *Homeworking in the UK labour market*. Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/homeworkingintheuklabourmarket

survey in early 2021. Due to a smaller sample size than the APS, data is not provided below national level. The survey was undertaken initially weekly and latterly every two weeks.

As summarised in the chart below, the data suggests that throughout 2021 the numbers of workers who worked exclusively at home (i.e. not travelling to work) declined steadily towards a more settled position of between 13% and 17% of workers by April 2022 (if the weeks surrounding Christmas are excluded). This fall has a broad inverse correlation with the number of hybrid workers (i.e. those working both from home and travelling to work) – as the numbers working exclusively at home decreased the number undertaking hybrid working rose.

Figure 6: Percent of working adults travelling to work, Great Britain Jan 2021 to May 2022



Source: ONS Opinions and Lifestyles survey

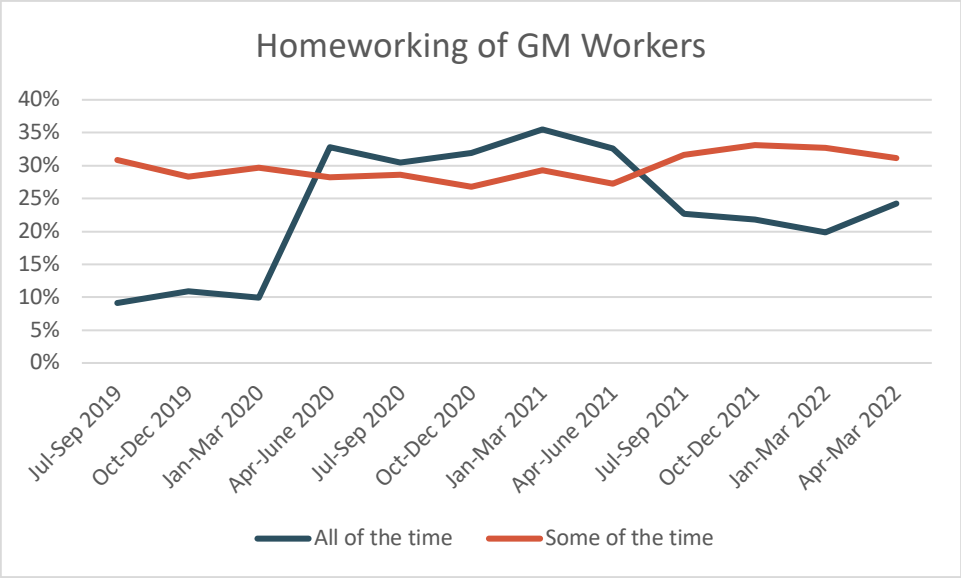
Direct comparison to the baseline data from the APS is difficult as the survey questions are not directly aligned, however, the data suggests that during the first four months of 2022, an average of 31% of workers undertook at least some work

from home. This represents a substantial rise (+ 19 percentage points) when compared with the APS 2019 baseline. Working from home therefore appears to have settled at a much higher level than before the pandemic, with a suggestion that this might have become a structural change in working patterns for many workers.

Local Data

There is a risk that national data might mask a different story at a local level and therefore it is important to examine whether local data aligns with national trends. Although not directly comparable to the ONS figures (as it is derived using a different survey methodology), the Greater Manchester Policing and Community Safety Survey provides some insight on the growth in home working in the city region since the start of pandemic. During the height of the pandemic around a third of respondents to the survey reported they were working from home all of the time. This declined to between a quarter and a fifth of workers for Q3 2021 onwards as shown in the chart below. This echoes the trend seen in the ONS data of a plateauing effect in the late 2021 and 2022, suggesting the arrival of a steadier state in working from home trends.

Figure 7: Homeworking of GM Workers

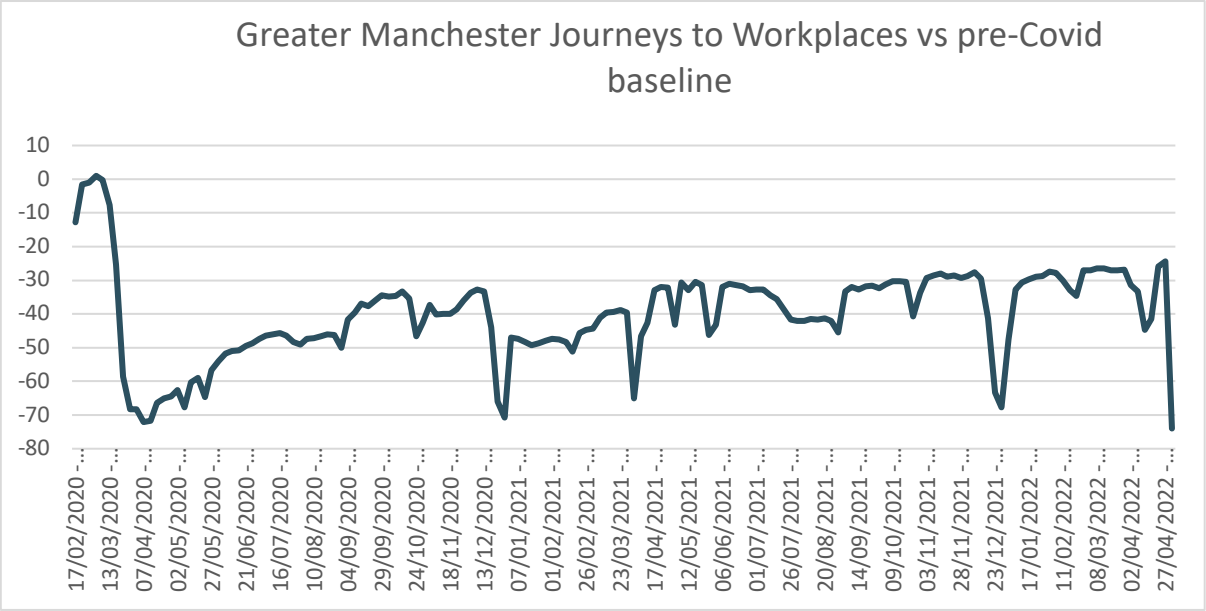


Source: Greater Manchester Policing and Community Safety Survey

This plateauing effect is also in evidence in data provided by Google Analytics. Sourced from mobile phone data, this estimates the volume of individual journeys to workplaces taking place in GM compared to a reference week prior to the pandemic.

The data experiences more ‘noise’ than survey data with reductions in volumes on bank holidays and during school holidays, however, broadly suggests a stabilisation in trends in the lead up to Christmas 2021 and in the following four months. This suggests journeys to workplaces were reduced by around 25% on pre pandemic levels, a trend closely aligned to national trends. The data is shown in more detail in the chart below

Figure 8: Greater Manchester journeys to workplaces vs pre-Covid-19 baseline

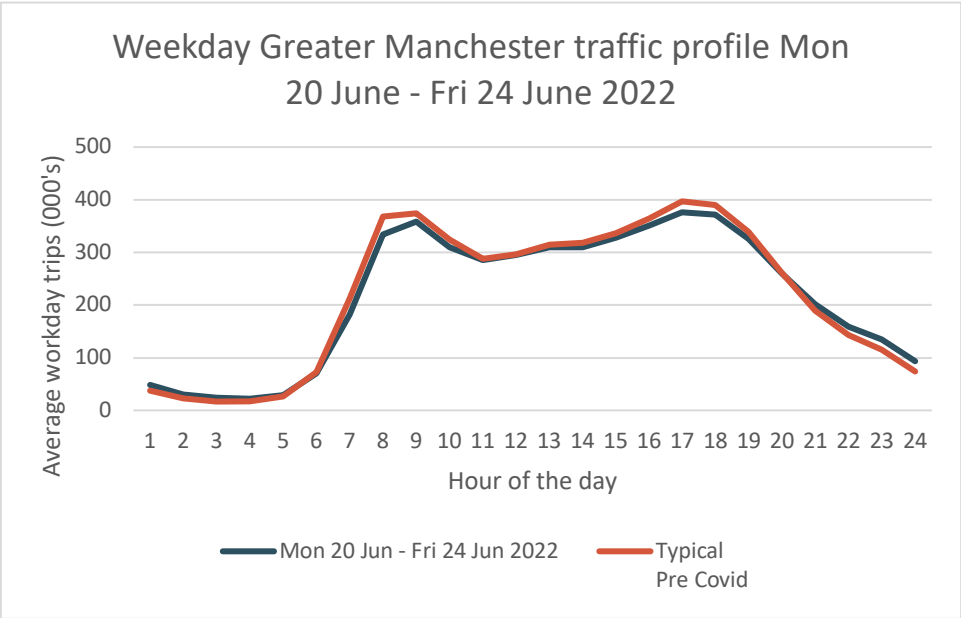


Source: Google Mobility

5.2 When do people work from home?

Since both national and local data suggest a stabilising of hybrid working at levels above those seen before the pandemic, work was undertaken to establish the characteristics of this hybrid work. Firstly, by examining how the new pattern of working was in evidence across the working week. Feedback was gathered from TfGM in early July 2022 on the effects in evidence across the transport network. This found that whilst the volume of road journeys (for cars, vans and HGVs) had broadly recovered to pre pandemic levels there were subtle but important changes to the timings these journeys. The chart overleaf shows data on a week of late June 2022 and shows the flattening of the early morning and late afternoon peaks compared to a typical week from prior to the pandemic. Although seemingly small, this effect can be significant on major routes subject to congestion in these peak periods.

Figure 9: Weekday Greater Manchester traffic profile Mon 20 June - Fri 2024 June 2022



Source: TfGM

Feedback on other modes of travel shows that on rail, traditional peak periods have largely disappeared with late afternoon/early evening now usually the busiest times of day. There appears to have been a shift towards leisure travel with the afternoons of Friday and Saturday now the busiest periods on the network and Sunday the third busiest day of the week with Monday and Tuesday the quietest days. Metrolink also shows lower usage earlier in the week with Mondays and Tuesdays having relatively lower usage overall compared to Wednesday, Thursday and Friday.

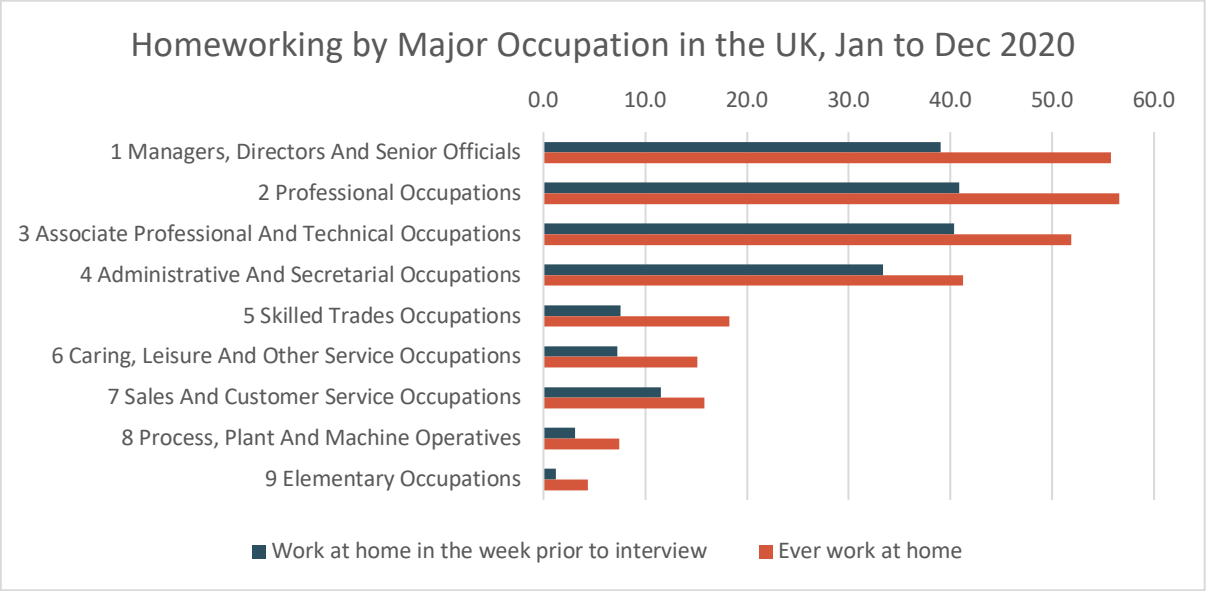
These findings broadly concur with national data gathered by the Financial Times[18] from companies operating building access control systems and logging the number of entrances per day. This showed that activity was highest on Tuesday, Wednesday and Thursday with significantly less activity on Monday and Friday.

5.3 Who works from home?

[18] Financial Times (2022). *Office return stalls as UK staff cling to flexible working*. Available at: https://www.ft.com/content/5ed49b8a-6c69-418c-9a26-7f43a99b1d1f

As highlighted earlier, despite the rapid growth in working from home and hybrid working, it remains a working practice only undertaken by a minority of GM workers. As such it is helpful to consider the characteristics of those working from home. The APS provides data at a UK level on home workers by occupation code which shows the bias in homeworking towards more traditionally professional occupations as shown in the chart below. This creates the risk of a division in the workforce as higher paid, higher skilled workers have the potential benefits of hybrid working (such as lowered travel costs and greater flexibility), whilst these benefits are less likely to be extended to lower paid, lower skilled workers.

Figure 10: Homeworking by major occupation in the UK, Jan to Dec 2020



Source: ONS Annual Population Survey 2020

5.4 Conclusions

The data remains open to further change however it appears that working from home volumes both nationally and in GM have settled at a level higher than observed in the period preceding the pandemic. It appears increasingly unlikely that these will return to the relatively low volumes of people consistently working from home prior to the pandemic.

There is also an increasingly clear trend of when people work from home, focussing particularly on the middle of the week with Tuesday, Wednesday and Thursday being substantially more popular than Monday and Fridays.

Whilst the scale of the change is substantial, working from home remains a reality for a minority of Greater Manchester's workers. Workers in higher paid, higher skilled occupations were more likely to work from home than those in the lower paid roles.

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