

**Economic Impact Assessment
Briefing Note:
MIAH, BASE Building MSP
July 2023**



Summary

This note has been prepared by ekosgen and sets out the headline socio-economic benefits of the proposed location of Manchester Innovation Activities Hub (MIAH) within the BASE building at Manchester Science Park.

The proposed MIAH Centre Hub at the Base Building will generate the following impacts:

- Deliver **1,850 new learners** over ten years, with a focus on industrial digitalisation and electrification skills, increasing employment prospects and earnings potential and improving the productive potential across the economy. Over 10 years the **economic value of human capital improvements** is estimated at **£16.3m**. This is equivalent to an increase in economic capacity and we would expect to see this reflected in an equivalent improvement in economic output over this period. i.e. as a result of the investment, UK economic output would increase by £16.3 million over this ten year period.
- Help to **address skills shortages** and contribute to Manchester's skilled workforce
- Target learners from unemployed or from low income backgrounds, helping to **address inequalities, improve employment prospects and earnings potential**, with the **potential to generate fiscal savings** through a reduction in benefit payments as a result of unemployed or low income residents entering work.
- Deliver up to **520 corporate training spaces** per annum increasing the productivity of local firms.
- Create **incubator space** for start-ups, targeting entrepreneurs from local communities in relevant sectors, **supporting new starts and clustering effects**. The direct jobs accommodated in the incubator space are estimated to generate between **£2.7m and £5.4m** over 10 years in direct GVA. Additional impacts will be generated as new businesses become established, relocate and grow.
- Support **direct employment opportunities** with 12 full-time equivalent (FTE) jobs within MIAH, generating **GVA of £7.3m** over 10 years.
- Support a range of **temporary employment opportunities** during fit-out over a 4 month build period with an estimated to cost over £1.4m.

In terms of the monetised impacts, it is estimated that over ten years of operation MIAH is estimated to generate economic value of **up to £29m**. This is unlikely to capture to full scale of impacts, with a range of wider benefits expected as set out in this note.

10 year Gross Economic Benefits of Change of Use	
Direct Jobs and GVA	£7.3m
Human Capital Improvements (equivalent to improved economic capacity)	£16.3m
Incubator Jobs and GVA	£2.7m - £5.4m
Total	£26.3m - £29.1m

While the floorspace is designated as employment space, it is currently unoccupied and has been vacant since the building opened last year.

Considering the additionality of the potential impacts within the existing use classification compared to the proposed change of use, there is greater likelihood that employment will displace employment from elsewhere in the city. Whereas the training proposals put forward by MIAH are more unique and if not taken forward are more likely to result in reduced training provision in these specialist fields across the city. On this basis, we expect the change of use to deliver **a net positive benefit**.

Overview of the proposition and rationale

A collaboration between The Blair Project, Manchester Science Partnership and Bruntwood Sci-Tech, MIAH will be an Industry 4.0 training facility, delivering the skills needed to support the transition to a net zero carbon economy. MIAH is dedicated to supporting a broader range of entrepreneurs and innovators to develop, prove, prototype and commercialise next generation products and processes to support net zero targets.

Providing industrial digitalisation and electrification skills training in a new community learning space, MIAH will up-skill, re-skill and retrain residents living in surrounding communities for 'hard to fill' occupations requiring specialist skills; specifically targeting underrepresented communities. The facility will be industry-led and provide high quality vocational training delivered by a variety of skills providers including colleges, GTA's, Universities and professional bodies.

The Hub would consist of 930 sqm of dedicated learning, workshop and incubator office space at BASE Building, including industrial grade fabrication equipment, with emphasis on rapid industrial prototyping, advanced materials, digital and low carbon propulsion technologies.

This would require a partial change of use for BASE Building from workspace (use class E) to education space (use class F2). The change of use relates to 930 sqm of Makerspace (open, flexible workshop space) and Mezzanine office space.

Planning Permission for a Change of Use is required by September 2023 to enable sufficient time for fit-out and training activity to commence from April 2024 when MIAH is due to open, and ensure that grant funding can be obtained in line with the necessary timescales.

MIAH is proposing to...

- Upskill **250 new learners** by July 2025, thereafter delivering **200 new learners per annum**, with a focus on **industrial digitalisation and electrification skills**
- Deliver up to **520 corporate training spaces** per annum
- Create **incubator space for start-ups** targeting **entrepreneurs** from **local communities** in relevant sectors

MIAH is directly responding to...

Skills demand drivers¹

- A concentration of **industry and academic excellence** across Greater Manchester in areas of **Advanced Manufacturing, Net Zero and Tech**.
- The need to develop a **pipeline of skills** to support the low carbon transition, to meet local and national **net zero targets**. Skills are needed to support the widespread adoption of green technologies such as electric vehicles, low carbon heating technology, and renewable energy production.
- The proliferation of **electrification, automation, and digitalisation** which is driving skills demands in key sectors such as **manufacturing**.
- **Accelerated digital transformation** which is driving demand for skills such as data analysis, digital marketing, digital finance, cyber and information security.

Skills supply drivers

- **Below average skills attainment:** 10.4% of Manchester's working age residents (aged 16 to 64) and 8.3% of Greater Manchester working age residents have no formal qualifications, compared to 6.4% nationally.²

¹ Greater Manchester Combined Authority, GM Labour Market & Skills Intelligence Pack, 2023

² ONS Annual Population Survey January to December 2021

- **Above average unemployment and inactivity:** unemployment, as of June 2023, stands at 6.2% and 5% across Manchester and Greater Manchester respectively, compared to 3.8% nationally.³ In the Moss Side ward, the neighbouring ward to the site, unemployment stands at 10.7%. 28% of Manchester's working age population and 24% of Greater Manchester's working age population are economically inactive, compared to 21% across the country.⁴ As of 2021, across the neighbouring Moss Side and Rusholme wards, 17% of residents aged 16 and over have never worked and/or are long-term unemployed, compared to a national average of 9%.⁵

Deep-rooted inequalities and supporting Levelling up ambitions

- Manchester is home to some of the most deprived local neighbourhoods in the country, with 43% of neighbourhoods (LSOAs) in the most deprived 10%. This includes areas located adjacent to the site in Moss Side, Ardwick, Hulme and Rusholme.
- MIAH will target marginalised and low income communities from the local area, and is seeking to break down the perceived barriers within the communities.

Impacts

Employment and GVA

The fit out will comprise a 4 month build period and is estimated to cost over £1.4m, supporting **a range of temporary employment opportunities**, including across a range of skilled trades.

While direct job creation is not the purpose of the proposition, **12 full time equivalent (FTE) job roles** will be supported within the proposed MIAH at the Base Building. Based on the projected employment levels, Gross Value Added (GVA – a key measure of economic output) - of **£7.3m will be generated over the first ten years of operation**. This is based on the average GVA per FTE for the education sector in Manchester.⁶ The direct jobs and GVA impacts may grow dependent on future growth in the volume of services.

Associated employee wages are estimated to total around £4.0m over ten years, a considerable proportion of which will be spent locally.⁷ In addition, an estimated £0.8m of National Insurance and income tax will be accrue to the public purse over the decade.

Improving Educational Attainment

The delivery of new courses will support skills acquisition and improved educational attainment, which increases employment prospects and earnings potential, supports wellbeing benefits for learners and increases productive potential across the economy. To capture these productivity gains, we estimate the potential change in human capital⁸ as a result of an individual raising their qualification level, which captures the higher economic output generated as a result of skills acquisition.

In absence of detailed information on expected learners and qualifications, ekosgen has made a number of simplifying assumptions in order to quantify productivity impacts. These assumptions have been approved by Bruntwood. Assumptions and further methodological details are outlined in Appendix 1.

Based on the assumptions provided, for the 1,850 learners that are expected over the 10-year lease period, **we estimate an increase in human capital of around £16.3m**. This is equivalent to an increase in economic capacity for the UK and we would therefore expect to see this reflected in an equivalent

³ Measured using the ONS Claimant Count as a proportion of the working age (16-64) population

⁴ ONS Annual Population Survey January to December 2022

⁵ ONS Census 2021

⁶ Using ONS Regional Accounts and BRES data for 2019 converted into current (2023) prices.

⁷ Based on the average full time salary in the education sector in the North West using the 2022 Annual Survey of Hours and Earnings.

⁸ Human capital is the skills, knowledge, competencies and health an individual or population holds and therefore an indication of the populations productive potential. Upskilling is an investment in human capital which can support improvements in the individuals employment and earnings prospects and increase the productive potential of the economy.

improvement in economic output over this period. i.e. as a result of the investment, UK economic output would increase by £16.3 million over this ten year period.

Adding to Manchester's skilled workforce and addressing skills shortages

MIAH is expected to provide a pipeline of homegrown talent that the city needs to meet existing and future skills demand, as outlined in the Greater Manchester Labour Market & Skills Intelligence Pack. This will help the region to meet its growth ambitions by providing a greater pool of talent for firms in key sectors to expand.

The delivery of up to 520 corporate training spaces will improve the skills of the local workforce, increasing the productivity of local firms, including those within Manchester Science Park.

Targeting learners from low socio-economic backgrounds

MIAH have set a target for 40% of students to be unemployed or from low income backgrounds. This aims to bridge the inequality divide by providing access to high quality training for all. We expect this training will increase the likelihood of these individuals finding employment. Research shows that those who achieve FE qualifications have a lower probability of being on active benefits, which is expected to generate fiscal savings to the taxpayer by reducing benefit payments as a result of unemployed or low income residents entering work.⁹

Cluster effect of the Incubator Hub

Proposals include around 232 sqm of incubator space. MIAH, working with its partners, will encourage and enable entrepreneurship within disadvantaged communities. Providing ease of access to a high quality professional environment is expected to break down the perceived barriers to these types of workspaces within the communities.

Using HCA employment density guide range for incubator space suggests between 4 and 8 FTEs could be accommodated, generating GVA of between £2.7m and £5.4m over ten years.

Once these early stage businesses reach a certain size, there are opportunities to scale up within Manchester Science Park. Since these businesses will be tech focused on Industry 4.0, they will benefit from a clustering effect from being co-located with like-minded businesses.

Impacts associated with the Existing Use Classification

Currently the floorspace is unoccupied and has been vacant since the building opened last year. The original planning statement for BASE suggested between 230 and 800 jobs could be accommodated within the building. Based on the proportion of space proposed for MIAH (930 sqm) suggests between 19 and 67 jobs would be accommodated – equivalent to 17 and 58 FTEs respectively – for the existing use class. Based on the average GVE per FTE in the professional, scientific and technical sector, suggests GVA of £1.2m to £4.0m per annum could be generated if the space was occupied and achieved employment density within the range set out in the planning statement. Assuming full occupation is achieved and maintained 10 years therefore suggests GVA benefits of between £11.6m and £40.4m.

It is important to note this may overestimate the impacts of the existing use as the premises are currently vacant and could potentially remain so for part of the impact period. In addition, given 27% of the floorspace under consideration is currently designated as 'makerspace' it is also assumed this is likely have a lower employment density than the office spaces, generating lower GVA impacts than the average across the building.

There is greater likelihood that employment will displace employment from elsewhere in the city, while the training proposals put forward by MIAH are more unique and if not taken forward are more likely to result in reduced training provision in these specialist fields across the city. On this basis, we expect the change of use to deliver **a net positive benefit**.

⁹ BIS Impact of Skills and Training Interventions on the Unemployed: Phase II Report December 2015

Appendix 1: Education Attainment Methodology

Assumptions

In absence of detailed information on expected learners and qualifications, ekosgen has made a number of simplifying assumptions in order to quantify productivity impacts.

- The proportion of the courses that are not accredited and will therefore not achieve formal qualifications is unknown at this stage. The reason courses will be unaccredited is that they will cover emerging course areas where there is currently no accredited alternative (e.g. qualifications in generative AI). These courses will be industry led e.g. providing a Microsoft or Cisco-led certificate demonstrating competency in that course area or material. In absence of other information, and due to the expected industry-relevance of the training, we assume that this training would lead to skills acquisition equivalent to NVQ Levels 2, 3 and 4.
- We expect 250 learners in 25/26 FY and 200 per year from 27/28 FY onwards.
- One third of new learners will undertake (or earn skills equivalent to) a Level 2 qualification, one third will undertake a Level 3, and one third will undertake a Level 4.
- 20% of learners will be unemployed – which is half of the target that 40% of learners will be either unemployed or low income.
- Unemployed learners have qualification levels equivalent to individuals aged 16-64 within Greater Manchester Combined Authority (GMCA) who are economically inactive.¹⁰
- All other learners have qualification levels equivalent to all individuals aged 16-64 within Greater Manchester Combined Authority (GMCA).

Bruntwood has confirmed that these assumptions are appropriate for the activity proposed and for estimating the impacts.

Methodology

To estimate the impacts of the proposed change of use, we have:

1. Estimated the number of learners expected to study each qualification level each year
2. Estimated the existing qualification levels of learners studying each qualification
3. Using the latest ONS regional human capital data¹¹, we estimated the change in lifetime human capital when learners increase their highest qualification level.
4. We estimate this impact over 10 years (a quarter of the lifetime estimate).

Adopting this approach means that we measure no increase in human capital for learners who study a qualification lower than their existing skill level e.g. an unemployed university graduate who studies a L4 qualification. In reality, this training is designed to deliver skills that are in demand and will increase learners' employability. This is likely to underestimate the impacts.

Limitations

We are limited by the data available. The ONS human capital estimates do not provide estimates for Level 1, therefore we have imputed these values based on the average of 'No Qualifications' and Level 2. The results are also heavily influenced by the assumptions chosen. Some assumptions are expected to lead to an underestimate of the impacts, others may overestimate the impacts. The estimate is the best available central estimate of the impacts. However, if these assumptions or inputs change, the impacts would also change. Therefore, these quantified impacts are subject to uncertainty.

¹⁰ We do not have access to data showing the highest qualification levels of unemployed persons in GMCA. The best available proxy is economic inactive individuals.

¹¹ [Overview of human capital estimates in the UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/people-in-the-uk/population-and-demography/education-skills-and-training/articles/overview-of-human-capital-estimates-in-the-uk/2021-09-16).

