

Manchester City Council Report for Information

Report to: Economy Scrutiny Committee – 11 November 2021

Subject: Contribution of Higher Education Institutes to Manchester's economy

Report of: Director of Inclusive Economy and Strategic Lead Policy & Partnerships

Summary

This report provides an overview of the economic contribution of Manchester's two main universities, The University of Manchester and Manchester Metropolitan University. The report utilises research by Public First which was undertaken in 2020 using data from 2018/19 which quantified the direct value created by the universities, their wider supply chain and procurement spending with local businesses, and the additional spending of their staff, students and visitors. It also draws on Research England's new Knowledge Exchange Framework (KEF) and Higher Education Statistics Agency (HESA) data. Both universities signed the Greater Manchester Civic University Agreement on 24 September 2021 during the Greater Manchester Combined Authority meeting and are committed to delivering positive outcomes for Manchester and the city region.

Recommendations

It is recommended that the Committee consider and comment on the content of the report including the detailed case studies.

Wards Affected: All

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

Both universities are members of the Manchester Climate Change Partnership and are signed up to the city's zero carbon 2038 ambitions, which were calculated through The University of Manchester's Tyndall Centre for Climate Change. They have climate change action plans in place and are also part of the Oxford Road Corridor Zero Carbon Subgroup. They also undertake extensive research to support the city to decarbonise.

Our Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The universities are anchor institutions who employ significant numbers of workers in a broad range of academic and non-academic roles. They spend large amounts of money through their supply chains, attract research and development investment, and also play a major role in promoting the city on a global stage.
A highly skilled city: world class and home-grown talent sustaining the city's economic success	The city's universities create a pipeline of highly skilled graduates and many of these remain in the local labour market.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Both universities are active anchor institutions who seek to drive social value through their procurement and commissioning activity. They are Living Wage Foundation accredited.
A liveable and zero carbon city: a destination of choice to live, visit, work	The universities support the delivery of the city's zero carbon objectives and play a key role in place making, attracting investors and visitors. The universities have joined up with the University of Salford to establish the GM Energy Innovation Agency. MMU deliver carbon literacy training and the University of Manchester hosts the Tyndall Centre for Climate Change Research whose research was used to directly inform our city's 2038 zero carbon target.
A connected city: world class infrastructure and connectivity to drive growth	Both universities manage a large proportion of the city's public realm with a concentration in the Oxford Road Corridor area. They also have important digital assets.

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Background documents (available for public inspection):

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report.

Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

1.0 Introduction

- 1.1 Manchester is internationally renowned for the strength of its Higher Education Institutions which date back nearly 200 years and have always maintained a strong civic bond with the Council. The Universities' positive influence extends well beyond formal education and this report attempts to provide a summary of some of the ways in which Manchester benefits economically from its major universities.
- 1.2 Calculating a precise figure for the economic impact of higher education institutions such as The University of Manchester and Manchester Metropolitan University (referred to from this point on as 'Manchester's universities') is of course a difficult task with many different methodologies, models and proxies available. Their influence on the future lives and careers of those studying, their workforce and the impact of their world-leading research is impossible to fully quantify and there are a wide range of non-economic benefits too in terms of social cohesion, health, culture, democratic life and personal liberties.
- 1.3 This report does, however, provide a summary of some of the key economic data that is available to demonstrate the impact Manchester's universities have on the city's economy. It also includes a number of case studies to highlight specific examples of economic benefit.
- 1.4 A separate report to this committee examine student numbers and graduate retention in Manchester and should be read alongside this report. A future report on Purpose Built Student Accommodation will be scheduled.

CASE STUDY: Oxford Road Corridor

The University of Manchester and Manchester Metropolitan University are key members of the Oxford Road Corridor Partnership which is Manchester's innovation district covering one square mile south of the city centre. For more than 15 years public and private sector innovation anchors in the area have worked in partnership with regional and national government to build on the Oxford Road Corridor's research and development strengths, with a shared vision to create an innovation ecosystem that can match and exceed leading innovation districts in Europe and the United States. The Oxford Road Corridor Partnership also includes the Council, Manchester University NHS Foundation Trust, Bruntwood, Manchester Science Partnerships, Royal Northern College of Music and HOME. Collectively, the Oxford Road Corridor has transformed the area with over £1.1 billion invested in health, education, culture and commercial facilities. The most recent statistics for the Oxford Road Corridor show that the district supports:

- 79,000 jobs - an increase of 24,000 since 2010
- 8,800 businesses - a 61% increase
- 50% of Manchester's life science businesses
- £3.6 billion GVA

- 50% of Greater Manchester's innovation assets
- 15,000 clinical research participants
- 74,000 students
- Over 16,000 international students
- 42% of students studying STEM related disciplines
- 27,000 graduates and post-grads supplied into the labour market each year.

2.0 Sustainability and the Greater Manchester Civic University Agreement

- 2.1 Both of Manchester's universities recently signed up to the Greater Manchester (GM) Civic University Agreement, along with the Royal Northern College of Music, University of Salford and University of Bolton. The agreement committed them to working jointly to address six key priorities: Education and Skills, Reducing Inequalities, Jobs and Growth, The Digital Economy, Net Zero, and Creative and Cultural Economy. A new Civic University Board will oversee specific targets, deliverables and reporting of progress.
- 2.2 These six priorities were informed by listening to local residents. The GM universities commissioned Public First to poll a representative sample of residents across all ten GM authorities to find out how they viewed the city region's universities. The poll was undertaken in February 2021 and in total over 1,000 residents were polled with at least 100 in each local authority. Some high-level results were that:
- 83% thought GM universities are important economically to the region.
 - Economic recovery was identified by residents as the most important long-term social and economic priority followed by reducing unemployment and reducing inequality.
 - 79% (highest in GM) of residents in Manchester surveyed said they were fairly proud or very proud of the role that local universities played – a figure that was higher than in the other nine GM local authorities.
- 2.3 Manchester's universities contribute to the success of schools across the city by working with the Council's School Governance team to promote opportunities for university staff and academics to sit on school governing bodies. UoM run an award-winning initiative to encourage staff to become governors and run regular network events and conferences to support staff to be effective in their roles. At the time of writing there are approximately 70 governors appointed from UoM serving in Manchester schools.
- 2.4 The University of Manchester is also a participant in the city's Anchors & Living Wage Pilot. This aims to promote both the living wage and local employment opportunities within the participating organisations and within their wider sectors. UoM's involvement will help Manchester become an accredited living wage place by the end of 2022, raising the living standards of residents and directly helping to eliminate one of the leading causes of poverty in the city.

3.0 Research, teaching and economic impact

- 3.1. Manchester's universities commissioned Public First to undertake some analysis of the research, teaching and economic impact of the two universities. The research was undertaken in 2020 and reviewed available data for 2018/19 which was obviously pre-pandemic.
- 3.2. In total, Public First estimated that the Manchester universities created £5.3 billion in value for the UK in 2018/19, £2.1 billion for Greater Manchester (2.7% of the GM economy) and £1.2 billion for Manchester.
- 3.3. This £1.2 billion of value for Manchester from the two universities comprised of three key areas:

	Manchester	Greater Manchester	UK
Teaching impact by increasing the human capital and skills of its students for the economy	£217 million	£405 million	£1.2 billion
Research impact from the spillover economic impacts of research	£15 million	£86 million	£2.0 billion
Economic impact from direct, indirect and induced activity	£945 million	£1.6 billion	£2.0 billion
Total	£1.2 billion	£2.1 billion	£5.3 billion

3.4 Economic impact

- 3.4.1 The nature of any university's teaching and research impacts are that they spillover much more into the national, rather than the local, economy. However, the opposite is true of the economic impacts, which are disproportionately located in Manchester and Greater Manchester.
- 3.4.2 The £945 million of economic impacts in Manchester comprise of the following:

	Manchester
Direct	
Operational spending on salaries and finance costs	£222 million
Student subsistence spending	£282 million
Visitor spending	£12 million
Indirect	
Supply chain / procurement	£60 million
Student subsistence spending	£136 million
Visitor spending	£5 million
Induced	
Staff spending	£58 million
Supply chain / procurement	£34 million

Student subsistence spending	£125 million
Visitor spending	£10 million
Total	£945 million

- 3.4.3 These considerable economic impacts can be explained through Manchester hosting one of the largest student populations in Europe, with numbers averaging around 100,000 students in the city region and in excess of 70,000 in the city itself. One in five students in the city is also an international student. The University of Manchester is home to more than 44,000 students and Manchester Metropolitan University to around 33,000. These students contribute £543 million to Manchester alone through direct, indirect and induced expenditure to the economy, as well as contributing to the skills, creativity and vibrancy of the city. Each year Man Met graduates 950 teachers, 350 nurses, 160 physiotherapists, 570 with other health qualifications, and 220 social workers. This pipeline of graduate talent provides the skilled workers needed by employers and essential public services across the country.
- 3.4.4 The University of Manchester employs around 11,000 staff and Manchester Metropolitan University employs over 4,000 staff. These comprise of academic and support roles at all occupational levels. For example, both universities employ significant numbers of staff in areas such as hospitality and catering, professional services, technical, manual and administrative roles. These staff spend money in the economy. All staff are remunerated with at least the Living Wage Foundation accredited rate of pay and staff enjoy a wide range of other benefits such as occupational pensions and flexible working. Both universities are committed to achieving the GM Good Employment Charter status.

CASE STUDY: ID Manchester

ID Manchester is an 18.2 acre, £1.5 billion gross development value project that will create a world leading innovation district and 10,000 jobs on The University of Manchester's former North Campus (the former UMIST campus). It is the next phase of development of the Oxford Road Corridor and will create around 2.6 million sq ft of new office, laboratory and collaboration spaces to incubate and accelerate the growth trajectories of new spin outs and start-ups, support SMEs to innovate and grow, and attract new R&D-intensive global inward investment to the region. ID Manchester has been explicitly designed to maximise the economic impact of the existing R&D assets on the Oxford Road Corridor which have been supported through past UK government investment into scientific excellence, including the Henry Royce Institute, the National Graphene Institute, the Graphene Engineering Innovation Centre, the £25m Christabel Pankhurst Institute for Health Technology, and the Manchester Institute of Biotechnology, all of which are located nearby.

The University of Manchester announced Bruntwood SciTech as its preferred Joint Venture partner to deliver ID Manchester in June 2021, which will directly leverage over £800m of private sector investment into the development. Bruntwood SciTech is a partnership between Bruntwood and Legal & General and is the UK's leading developer of innovation districts.

- 3.4.5 Other economic impacts can be seen from the £94 million of procurement and supply chain impacts from the indirect and induced supply chain spend of the two universities. Both of Manchester's universities are major anchor institutions in the city and have worked with the Council to maximise the social value opportunities from their spend.
- 3.4.6 Each year, Man Met spends more than £100 million on procurement. The University creates £525 million in additional demand for the Greater Manchester economy through the direct value created by the university, its wider supply chain and procurement spending with local businesses, the additional local spending of its staff, students and their visitors.
- 3.4.7 To deliver Social Value, the Man Met Procurement Strategy incorporates opportunities for creating Social Value into all of contracts, encouraging suppliers to offer opportunities for employment, training, placements and work experience to communities and students. They are encouraged to be transparent about their supply chains, ensuring compliance with the Modern Slavery Act and Health and Safety, whilst good working practices are also assessed as part of the tender process. Each lead construction contractor demonstrates a commitment to Corporate Social Responsibility (CSR) and delivers local benefits through a CSR plan, which include measurable commitments to local employment, skills development and community engagement.

CASE STUDY: The University of Manchester Engineering Campus Development

With a value of £400 million, The University of Manchester Engineering Campus Development (MECD) project was among the largest construction programmes undertaken in British higher education, totalling some 11 football pitches in size. What's unique is not only its scale; it's created a record in British higher education by delivering £19.7 million of social value, created through the generation of local jobs, apprenticeships, cash grants and pro-bono support for local communities. Using the sector-leading 'Social Value Portal' tool with its construction partner Balfour Beatty it was calculated that £19.7 million of social value was created for local communities, setting a record for all construction programmes to date in British higher education. The project has now won awards at both the 2020 Times Higher Education Awards and 2021 British Construction Industry Awards in recognition of this achievement.

This £19.7 million of social value consists of:

- 182 new jobs created (target 110), including 95 jobs for unemployed people furthest from the labour market and 87 apprenticeships. Of these, 15 were rehabilitated offenders and one was from local authority care;
- 3,000 schoolchildren from local state schools were engaged across 29 STEM activities;

- 43 local community groups were engaged and supported; £60,000 was contributed to a joint University Community Construction Fund for local community grants; and £18,000 raised for a local homelessness charity;
- A maximum score of 45 out of 45 was achieved in the national 'Considerate Constructors Scheme' covering positive impact on community and the environment (target 40);
- 23 careers events were delivered for University of Manchester students; 4 new graduate trainee positions created; and 10 student internships;

Quotes from beneficiaries:

On jobs, Edgar, who experienced homelessness, was supported into a plastering role. He said: "Through this job opportunity I've been able to move into my own accommodation and move my life on."

David, initially offered a three-week work trial, said: "I was previously unemployed for over 13 years. Three weeks into my placement I was offered a full-time role and this has changed my life for the better."

James, an armed forces leaver, said: "I joined work on MECD as a labourer but have already retrained towards a job I love in waste management."

4.0 Education and Skills

4.1 By increasing the human capital and skills of their students, the Manchester universities increase Manchester's productivity by £217m. Approximately 36,000 graduates each year within the region seek to enter the labour market and approximately 10,000 within the city. Detailed analysis of student numbers and graduate retention in the city has been included in a separate report to the Committee.

4.2 Manchester's universities, along with twelve other colleges and universities from across Greater Manchester, came together to develop a joint commitment to addressing the skills and economic challenges facing the city region. Collectively, these fourteen universities and colleges in Greater Manchester support 200,000 learners annually and contribute £2.5 billion to the regional economy. The joint statement set out closer cooperation on:

- Levelling-up across Greater Manchester and nationally to heal and build back better from the COVID-19 pandemic
- Lifelong learning
- Mental health and wellbeing
- Closer work with Greater Manchester Combined Authority to support regional priorities
- Supporting health, culture and equality

4.3 Manchester's universities are also members of the Greater Manchester Higher programme along with the Manchester College and Royal Northern College of Music. This programme aims to improve the provision of information, advice and guidance about progression routes to higher education to raise

expectations of young people and help widen participation. Activities are aimed at Year 9-13 learners, their parents, carers, and supporters and are targeted at the parts of the region where, historically, the number of young people going to university is at its lowest. The programme also provides outreach activities for schools and colleges located outside of these areas.

CASE STUDY: The Manchester Access Programme

Operating since 2006, the Manchester Access Programme is the University of Manchester's flagship social mobility programme for local Year 12 students in Greater Manchester from disadvantaged backgrounds. It has supported thousands of local learners to enter professions including medicine, dentistry, nursing, accounting, law, business, engineering and teaching. Through advice, financial support and lower admissions offers it supports students to gain a place at the University of Manchester, or another research-intensive university, through online events, workshops, and an academic assignment. Accessing the scheme requires applicants to meet the following criteria:

- live or study at a school or college in Greater Manchester;
- attend a state, post-16 school or college, and are studying a two-year Level 3 qualification (such as A-levels or a BTEC);
- be a Year 12 (lower sixth) student when they apply;
- have at least five grades 9 to 6 at GCSE (or equivalent, such as GNVQ, BTEC) when they apply.
- have attended a state secondary school that they did not need to pay for;
- neither parent nor carer has a university-level degree or equivalent in the UK or abroad. An application may be considered if a parent/carer is currently studying their first degree or graduated in the last ten years;
- be a home registered student or expect to be a UK national or have 'settled status'

Each year 600 students benefit from the programme with a disproportionate number of these hailing from Manchester.

CASE STUDY: MMU First Generation

The MMU First Generation programme supports Year 12 and Year 13 students living or studying in the North West that would like to go to university but whose parents did not. The programme provides practical support and application guidance to students to help them access and then transition to university. Students who progress through the programme onto a full-time undergraduate degree at MMU receive financial and continued personal and professional support throughout their studies. They also qualify for a First Generation bursary of £1,000 and the opportunity to attend a fully-funded workplace residential. The programme aims to help:

- support students in their university applications;
- improve skills that help them to succeed in their current studies and at university, including research skills, referencing academic writing, and communication skills;
- prepare them for the different types of teaching and learning at university;

- provide information about the different courses available;
- show them what it's like to be a university student.

To date, 148 of the 426 students who have progressed to Man Met since the scheme was launched were from Manchester (35%).

CASE STUDY: Manchester Metropolitan University's Degree Apprenticeships Programme

Degree apprenticeships were established in 2015 as a powerful combination of study and on the job learning. With 2,573 apprentice starts to-date, Manchester Metropolitan University is now partnered with more than 500 employers and is an Ofsted Grade 1 Outstanding provider.

Degree apprenticeships are particularly important for young people from disadvantaged backgrounds who might not have been motivated to embark on a traditional degree, but also for those already in work without a degree who are looking to progress. Apprenticeships are the right intervention for those with intersectional disadvantage.

In the last six years Man Met's programme has seen increasing starts for women in STEM, for Black and minority ethnic apprentices from disadvantaged backgrounds, and increased retention and achievement rates for apprentices from areas with a low Indices of Multiple Deprivation ranking in the Income, Employment and Education and Skills domains. They are also benefitting employers by growing talent and reducing skills shortages in Manchester's economy.

40% of the degree apprentices are from Greater Manchester. 40% are the first generation in their family to go to university and 36% are from the most deprived areas.

Man Met's degree apprenticeships programme has been voted the highest-rated university provider for degree apprenticeships in the UK for three years running (RateMyApprenticeship Awards 2019, 2020, 2021).

5.0 Research

5.1 The spillover economic impact of the university's research generates another £2 billion in value for the UK economy and £15 million for Manchester's economy. The University of Manchester is globally renowned for its research and has identified five research beacons which are: Advanced Materials, Biotechnology, Cancer, Energy and Global Inequalities. Manchester Metropolitan University has a Research and Knowledge Exchange Strategy which commits to research excellence that:

- Has real-world benefits for society, culture, the environment and the economy

- Addresses global challenges and contributes to government industrial strategy
 - Encourages links between research, professional practice and teaching
 - Ensures faculties can rank nationally in specific areas of expertise
 - Leads the sector in KTPs that meet 100% Full Economic Costing targets
 - Creates an effective and inspiring ecosystem of internal and external knowledge
- 5.2 Man Met is ranked in the top 10 in the UK for creating Knowledge Transfer Partnerships – turning research into business growth. Since 2013, the University has been awarded 33 Knowledge Transfer Partnerships (KTPs) with Greater Manchester businesses, 28 of which have been SMEs. This amounts to a total funding investment within the Greater Manchester area of £3.5 million with a match funding contribution from business totalling £2 million.
- 5.3 There are currently four live KTPs in Manchester, covering:
- Using artificial intelligence to improve productivity and efficiency of integrated vending machine services.
 - To develop product innovations using Artificial Intelligence and psychometric profiling, for a company that provides market intelligence on children and families.
 - To investigate a type of stem cell, to develop it into a cancer treatment.
 - To develop a faster new product development process for a company specialising in flavourings for the food industry.
- 5.4 Other important examples of how Man Met translates and applies its research can be found in Innospace, a business incubator that gives start-up businesses direct access to expertise, and initiatives such as Print City (which provides advanced 3D printing facilities to businesses) and the Fuel Cell Innovation Centre that is at the forefront of developing low-carbon solutions for the green economy.
- 5.4 Academics from Manchester’s universities have undertaken significant amounts of research since the start of the COVID-19 pandemic, including where it has hit the hardest, how it affects certain groups, and how its impact can be mitigated. So far, they have carried out 234 research projects on COVID-19 between them, with a further 156, and growing number of, studies on the way.
- 5.5 The School of Digital Arts is an interdisciplinary school at Manchester Metropolitan University – a £35m investment into the workspaces, networks, teaching and research that will drive the next generation of creative content. Every year from 2021, over 1,000 students will study disciplines that span film, animation, UX design, photography, games design, AI and more, often working on live projects with industry partners, frequently collaborating with fellow students and researchers.

- 5.6 The University of Manchester hosts the world-renowned Tyndall Centre for Climate Change Research. Scientists at the Tyndall Centre helped Manchester become one of the first cities in the world to set Paris COP21 compliant science-based targets in November 2018. The work on establishing a carbon budget and our zero carbon 2038 target has now been rolled out to a number of other local authorities and cities in the UK and internationally. The Tyndall Centre continue to be an active member of the Manchester Climate Change Agency advisory groups and their scientists have undertaken further work to analyse the city's emissions including reviewing emissions from aviation.
- 5.7 The Manchester Fuel Cell Innovation Centre is a landmark £4.1 million state-of-the-art laboratory at Manchester Metropolitan University, leading the way in harnessing renewable energy. The Centre is exploring the pure science of the fuel cell itself, driving engagement with industry on a local, national and international scale, and developing the technology talent of tomorrow. A strategic asset for the city and University, the Centre brings together the latest technology, world-leading academics and industry professionals to create new, clean electrolysers and fuel cells. It brings alive the synergy between materials research and engineering. The focus is on next-generation energy, which will outperform current fossil fuel alternatives both in terms of environmental efficiency and cost effectiveness.
- 5.8 BeeWell (www.gmbeewell.org) is a new wellbeing programme led by The University of Manchester, the Anna Freud centre and the Greater Manchester Combined Authority, that combines academic expertise with youth-led change to make the wellbeing of young people everybody's business. Designed by young people, #BeeWell will survey the wellbeing of pupils in secondary schools across Greater Manchester from Autumn 2021, for at least three years, and use the results to deliver positive change in all our communities. Over 200 secondary schools (60,000 young people) are now signed up to take part which represents 90% of mainstream settings across Greater Manchester, alongside independent and special education needs schools, pupil referral units and alternative provision.

CASE STUDY: Institute of Place Management (IPM)

In 2015, Manchester City Council Members agreed that they wanted to develop a more strategic approach to the future management of district centres. They agreed to establish a subgroup to contribute to and review this strategy, working with the IPM based at Manchester Metropolitan University. The first task was to understand trends affecting district centres and possible direction of the Subgroup's work – drawing on consultations with IPM.

The IPM began working with Manchester's district centres in early 2017, delivering a programme focused on 'Vital and Viable' places and working with communities in Chorlton, Gorton, Harpurhey, Northenden and Withington. The work was designed to support place making interventions, strengthen the local capacity for change, and to help make informed decisions about the future of each place.

Following this, an IPM Place Management Pilot was established to understand the key factors that local centres can influence. Research was undertaken in Chorlton, Gorton, Harpurhey and Northenden, with a view to promoting active collaboration in these centres to bring about change. The Pilot drew on initial district centre performance assessments by IPM researchers, consultation with local stakeholders, and a report of recommendations.

In addition to recommendations specific to each Centre, the IPM reviewed all the pilots and produced four summary recommendations for the District Centre Subgroup;

- Work should be undertaken to develop targeted and place specific interventions to build local collaboration
- Work should be undertaken to increase local capacity to effect change in areas of the city where existing capacity is low
- Efforts should be devoted to enhancing existing local collaborative networks
- Monitoring data on centre performance should be collected and shared with partners so that evidence based actions to improve centres could be taken.

Further work took place in another six centres – Withington, Fallowfield, Rusholme, Levenshulme, Victoria Road, and Cheetham Hill – and focused on widening the evidence base, developing learning, and the creation of an action plan geared towards influencing local and regional policy. This work has helped to support project development including the Withington Village Strategic Regeneration Framework and bids to the government Levelling Up Fund.

The Vital & Viable project has also informed further policy development work through the Area Based Collaborative Entrepreneurship in Cities European Partnership (ABCitiEs). Working in conjunction with Institutions and local authorities in four European cities (Amsterdam, Vilnius, Varazdin and Athens), the project has taken the learnings from the work in Manchester and is now seeking to embed this in local policy.

6.0 Business support, innovation, enterprise and start-ups

6.1 Whether its splitting the atom, the development of the modern computer or the isolation of graphene, many of the most transformative ideas of our age were formed in Manchester. These produce a range of spin-out benefits to the wider economy and health system, as can be seen from the examples of ID Manchester, Health Innovation Manchester and across the wider Oxford Road Corridor. For example, the discovery of Graphene in 2004 led to significant investment in advanced materials research across the city including the National Graphene Centre, the Graphene Engineering Innovation Centre and the Henry Royce Institute. Today, this is benefiting local SMEs through an

ERDF/Northern Powerhouse funded Sustainable Materials Innovation Hub which is improving the understanding, use, and consumption of plastics across the region and offering free advice to organisations looking to make a change and support them with assessment facilities to develop innovative solutions.

- 6.2 Data from 2018 shows that 148 students from the two universities were involved in creating start-ups and The University of Manchester brought in £5.5 million in public money for work on local growth and regeneration.
- 6.3 Both universities are key drivers behind Innovation GM, which is a £7bn blueprint for translational innovation between Greater Manchester and Government. This aims to catalyse inclusive economic growth to support the UK in achieving its goals of levelling up the North, increasing productivity and increasing global trade. Innovators from business, science, academia and local government are using the Innovation GM partnership as the basis of formal collaboration deals with Government and it is expected that it could create as many as 100,000 jobs and boost the economy by £7 billion across Greater Manchester

CASE STUDY: Greater Manchester AI Foundry and Cyber Foundry

The Greater Manchester AI Foundry is a cutting-edge scheme that has delivered Artificial Intelligence expertise to 100 of Greater Manchester's small and medium enterprises.

The foundry, which is led by Manchester Metropolitan University, with The University of Manchester, the University of Salford and Lancaster University, allows SMEs to undertake introductory business support training and insight into the latest AI technologies, market opportunities and ideas to develop new products.

Businesses can then progress onto phase two, a technical support programme to help companies develop proof-of-concept for new products and services. Currently 20 SMEs have progressed to phase two with more due as the programme continues.

A year before the AI Foundry was launched, the same Universities launched the Greater Manchester Cyber Foundry, a £6 million project to provide bespoke cyber security support to SMEs.

The Foundry is part of the wider push to make Manchester a digital leader. The regional digital and creative sector alone generates £3 billion in output each year, highlighting the importance of protection for key industries from cyber threats.

Strong cyber security is essential for other important sectors in Manchester, such as finance and banking and Industry 4.0 applications, where cyber physical systems are used.

CASE STUDY: The University of Manchester Innovation Factory

The University of Manchester Innovation Factory's mission is to use intellectual property to create positive social and economic impact. The Innovation Factory works with academic and student inventors to identify research that has the potential to create value. It then translates these into a form where they can be used to benefit society as a whole.

Access to innovations may be created via technology licensing or the formation of new spin-out companies. The Innovation Factory aims to provide a world class service to academic colleagues as well as industry; entrepreneurs; licensees; VC & angel investors and corporate venturing partners.

The Innovation Factory aims to be one of the world's most effective Technology Transfer organisations. In 2020/21 it spun out 13 new enterprises in areas including gene software, battery charging, mental health and advanced cancer treatment.

The average external investment per formal spin-out was £4.2 million and the estimated current turnover of all active firms per active spin-out was £24.3 million in 2018.

7.0 Public engagement and reputation

- 7.1 Whilst this report demonstrates a range of 'hard' economic benefits, the impact of Manchester's universities on engagement with the public is also significant. The University of Manchester runs major cultural attractions including Manchester Museum, Manchester Academy, the Whitworth, the John Rylands Library, and the Race Relations Resource Centre. Manchester Metropolitan University oversees the North West Film Archive and Children's Literature Festival. The two universities worked with Manchester City Council to lead the successful UNESCO City of Literature bid.
- 7.2 Public First developed an engagement metric to measure the frequency of the two universities' engagement with the public across dimensions – including public events, mentoring and exhibitions – and found that a member of the public in Greater Manchester came into contact with one of the two universities 4.3 times per minute, or once every 14 seconds across the course of a typical year.
- 7.3 The national and global reputation of the city and the universities are intertwined. Manchester's 'original modern' reputation around the world is built on the pioneering discoveries of academics such as Rutherford, Turing and Geim. Key public figures are associated with the universities, including Brian Cox, Jeanette Winterston, Carol Ann Duffy, Lemn Sissay, David Olusoga, Michael Wood, and Gary Younge. The University of Manchester is the most popular in the UK for undergraduate applicants and leads 1,200 universities

around the world for impact towards the UN Sustainable Development Goals as measured by the Times Higher Education. Manchester Metropolitan University has been in the top 3 of the UK's People and Planet university league table for each of the last six years.

- 7.4 The Manchester Poetry Library opened its doors in September 2021 at Manchester Metropolitan University. Home to a rich collection of books and recordings, poetry in the many languages of the city of Manchester, children's poetry, and an annual programme of events, the library is the first of its kind in the North West. It is a rich resource for the people of the city, with a year-round event programme that builds on Manchester's outstanding reputation as a home of poetry and creative writing.
- 7.5 The Institute of Sport will open in Manchester city centre in early 2022. It will be a global leader in sport education, sport research, and sport impact and the new state-of-the-art building will have space for delivery of teaching up to 1,800 students, with 500+ graduates by 2023. It will be a place that will unlock the power of sport, bringing benefits to society relating to health and wellbeing, economic regeneration, and cultural enhancement.
- 7.6 Over 18,000 international students study at The University of Manchester and over 3,000 at Manchester Metropolitan University. The University of Manchester has more than 500,000 alumni in 190 countries and Manchester Metropolitan University more than 300,000 alumni in 144 countries. These provide global reach, soft power, connections and trading opportunities with a significant network of people around the world that have lived in, and remain connected to, the city.

CASE STUDY: Joint Education Institute between Manchester Metropolitan University and Hubei University

The Manchester Metropolitan Joint Institute, Hubei University was officially launched in October 2021 to provide new education programmes in Wuhan, China.

The new Institute builds on the growing partnership between Manchester Met and the city of Wuhan, which is a twin city of Manchester.

Students at the joint institute (JI) will be able to study on three initial science and engineering undergraduate programmes, with further postgraduate programmes to follow next year. Students also have the opportunity to spend part of their degree course studying at Manchester Met.

The JI is the next step in the University's plans to build ties with China, increasing activity in the country and promoting study opportunities in Manchester.

The new institute comes a year after Man Met's office premises in Wuhan were officially opened by the British Ambassador to China, Dame Caroline Wilson. Wuhan has been the University's regional headquarters since June 2019.

The partnership is helping to build students' cultural understanding and significantly enhance their abilities to thrive in diverse, multicultural environments both in the UK and China.

8.0 Next steps

- 8.1 The relationships between the universities and the city are interdependent. All our higher education institutions contribute to the success of the city through their contribution to talent, research, commercialisation of technology, social responsibility and sustainability and the opportunities they create for our residents. Similarly, Manchester itself contributes to the success of our universities through our offer of good quality employment opportunities, city centre living, a broad and varied cultural and leisure offer and our diverse and welcoming people.
- 8.2 Therefore it is in Manchester's interest to support the continued success of our HEIs. The city will continue to work closely with the universities to make sure they are rooted in place and can make the greatest possible contribution to positive outcomes for our residents, businesses and other organisations. We will also support the development of the university estates including the new ID Manchester development as a key driver of the city centre's success.

9.0 Recommendations

- 9.1 It is recommended that the Committee consider and comment on the content of the report including the detailed case studies.