



Greater Manchester Universities

Overview of the Data Fellowship (23pts)

The Data Fellowship project (Mapping Greater Manchester) constitutes a vital component of the Greater Manchester Strategy program, under the guidance and leadership of the Greater Manchester Civic University Board and Office of Social Responsibility in the University of Manchester. Over the two-month period, the primary focus has been to engage in comprehensive data analysis about Business and Community Interactions and conduct an analytical report. This report delves into an in-depth exploration of the data across five prominent Higher Education Institutes (HEIs) in Manchester, including the University of Manchester (UoM), Manchester Metropolitan University (ManMet), University of Salford (UoS), University of Bolton (UoB), Royal Northern College of Music (RNCM).

Data Analysis

The main purpose of this data fellowship program is to apply quantitative methods dealing with a series of data from (<https://www.hesa.ac.uk/>), including Business and Community Services, Intellectual Property, Start-ups and Spin-offs. To achieve this goal, I primarily employed two key tools: Microsoft Excel and Tableau. These software applications enabled me to create interactive data visualizations and graphs that illuminate various aspects of the data. These visualizations allow for easy comparison not only among the different Higher Education Institutions (HEIs) within GM but also in comparison to HEIs across the UK.

Findings

- During the pandemic years, the financial environment in all GM HEIs was significantly influenced, as evidenced by fluctuations in income during the 2019/2020 academic year across all kinds of business and community services.

- Different GM HEIs have their specialized domains and concentration. For example, the income value (per capita) of contract research services is highest in UoM, the money earned from consultancy services is relatively high in ManMet, and RNCM gained most concerning facilities and equipment-related services.

Key Skills Learnt

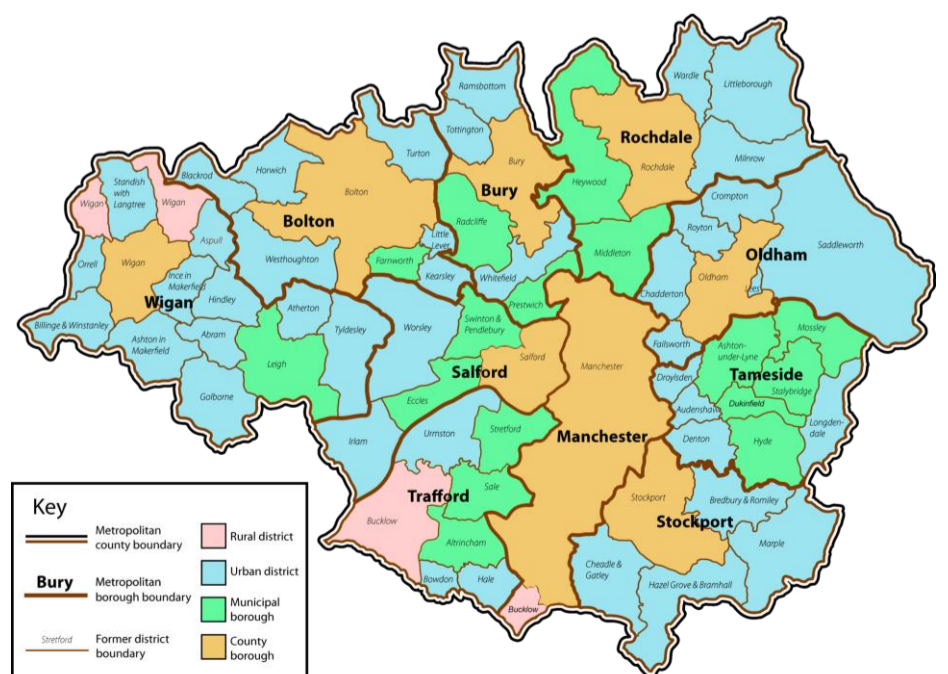
What I have learned from this data fellowship project (the most important ones) are the quantitative data processing skills, including research and analytical skills, which social science students always lack, as well as professional skills. And those skills I acquired through the process greatly benefit my current study and future prospect.

Research and Analytical skills:

- **Designing research and collecting evidence.** This is particularly crucial when dealing with large volumes of data, requiring the selection of the most relevant information for the given topics.
- **Understanding the ethics of undertaking the research.** This not only enriches our knowledge but also provides us with a deeper understanding of the core of the upcoming research, enhancing our motivation when facing challenges.
- **Using quantitative methods.** Using Excel and Tableau to visualize the data and present them in a reader-friendly format.

Professional skills:

- **Collaboration and teamwork.** During this experience, I worked with my colleges, members in the office and financial teams in GMCA, trying to keep pace with them while maintaining my own work routine.
- **Time management.** This two-month experience encompassed both office work and remote work, necessitating the creation of a personal work schedule to complete tasks before deadlines."



A map of the metropolitan county of Greater Manchester