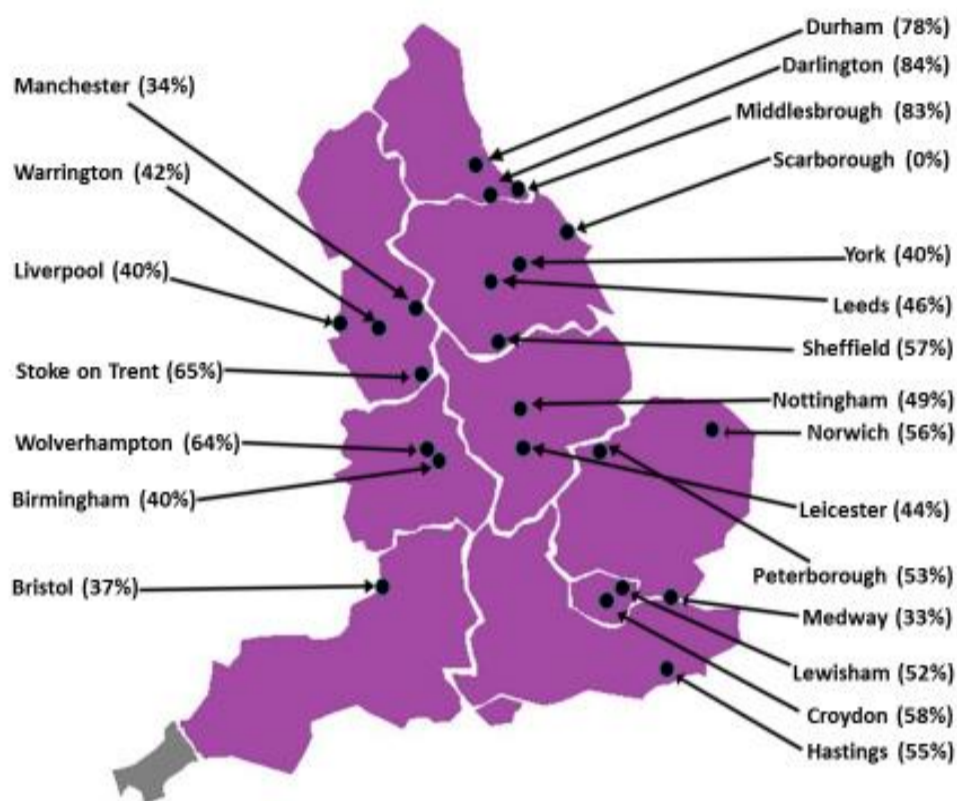**Offender Travel Times – Her Majesty's Prison and Probation Service**

Does Location Truly Matter in an Ever-Connected Society? –

An Investigation into CFO Hub Accessibility, location and its effect on retention

Megan Bickley | BA Criminology

A Map to Show Retention Percentages per CFO Hub

Overview of the Data Fellowship

Her Majesty's Prison and Probation Service Co-Financing Organisation (HMPPS CFO) co-ordinates large-scale programmes to support offenders into employment. This work is financially backed by the European Social Fund (ESF). The CFO has recently set up the CFO Activity Hubs programme. The CFO Activity Hub Provision has been designed to offer tailored support for offenders, particularly those who are disadvantaged and face multiple barriers to employment, and who are not fully supported by existing programmes.

Data Analysis

To retrieve the relevant cohort for the analysis, the dataset was manipulated, so that only vital information needed to answer the research aims were present. Transport rates were calculated across all of the hubs. This method was repeated to initially examine different variables within the dataset, such as travel time.

Primary research was conducted to develop further knowledge of Hub accessibility, this included gathering the distance to the nearest bus stop, train station and car park for each Hub. Once combined with the average crow distance per hub, an accessibility score was created for each method of transport. The distance to other services (job centre + probation office) was found to create a proximity to other services score, this was repeated for the distance to the town centre. The 5 accessibility scores were then weighted based on the percentage of total users of each method of transport.

Retention was also created. Retention is defined as a participant returning to the Hub on another day which is different to their enrolment day. A person's Chi-Squared test $(x^2)^2$ was used to determine whether there was statistical significance between retention and other factors within the dataset. Following this, a logistic regression was conducted to investigate this further, with the chosen statistical significance level being $p. <0.05$, in order to determine whether certain factors impacted the likelihood of participants returning to the hub[2]. Within the logistic regression model odds ratios (Exp(B)) were interpreted to estimate the direction and the size of the impact.

Findings

60% of participants travel for 30 minutes or less to get to the Hub – the majority of participants travel a relatively short time. – Darlington has the most (91%), Sheffield has the least (41%). Nearly half of all participants used public transport to get to the Hub (48%) and nearly a third walked (31%). Only 11% of participants used their own vehicle to get to the Hub.

Participants are more likely to return when the Hub is not located in close proximity of the town/city centre. Participants are more likely to attend when the Hub is located further away from other services. Participants are more likely to return when the Hub is accessible for their method of transport.

Key Skills Learnt
- Data manipulation
- Logistic regression
- Report writing
- Data visualisation – infographics
- SPSS
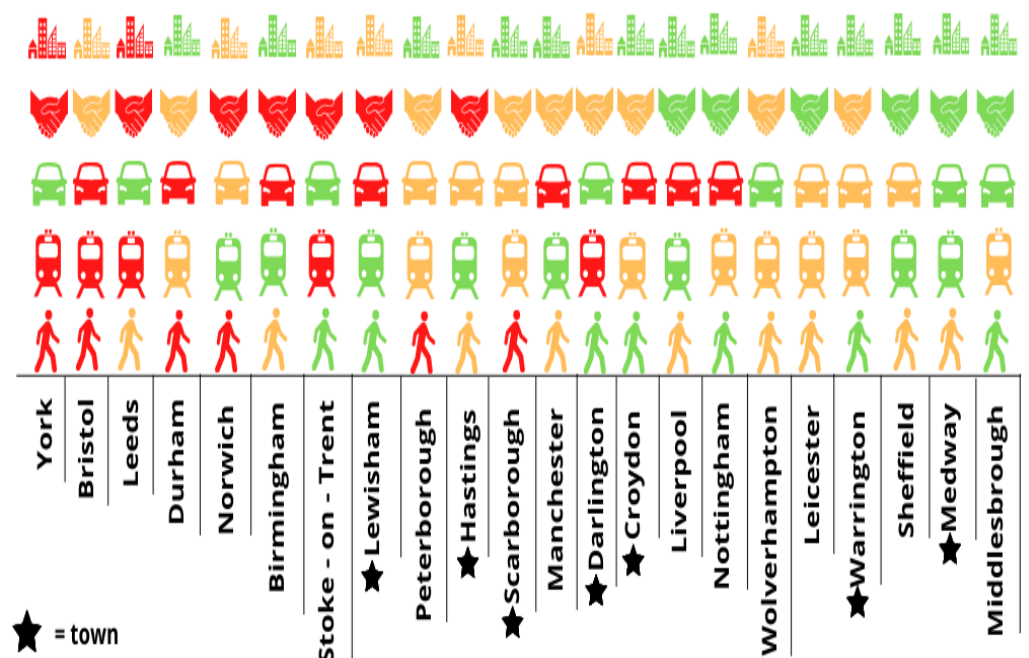
A Graph to Show Accessibility Levels to CFO Hubs – including transport and location