

FareShare Greater Manchester. Mapping Food Poverty.

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Introduction

FareShare Greater Manchester, run by environmental charity EMERGE 3RS, is a poverty charity that redistributes surplus food that would otherwise be wasted, to 236 charities in Greater Manchester. Coupled together, FareShare Greater Manchester tackles food deprivation and the environmental impact of food waste through one mission.

FareShare Greater Manchester had collected copious amounts of data but hadn't had the time to take a look at it, so this summer I researched where FareShare Greater Manchester delivers their food to and how much their charitable outreach matches data from the Indices of Multiple Deprivation.

Objectives

I wanted the research to provide FareShare with an insight into where deprivation is highest in Greater Manchester so such considerations could be factored into their future strategies towards food allocation. As such, a firm objective was to map deprivation in Greater Manchester against their current outreach and then cross-reference this information with their waiting list enquiries. A second objective was therefore to test how closely FareShare was reaching what could be described as areas of high concern. A third objective was to discuss strategies for food allocation with Miranda (Head of Development) to counter weight an informed data approach with practical considerations, for example the viability of community charitable infrastructures.

Methods

When interviewed for the internship, Miranda (our Head of Development) mentioned FareShare GM has relied on organic growth, with charities outreaching to us to become food recipients. When asked what I wanted to do with the data, I said I wanted to strengthen our decision making process for food allocation.

This field of research was new to me, so I started with an old faithful companion, Google, to read the existing statistical reports available to me, using resources like Open Data. Once I had a handle on the scale of the issue and an understanding of the geographical levels data is collected to, I decided to use the 2015, English Indices of Deprivation - LSOA Level. I made this decision because LSOA Level is a geographical level that's precise and would therefore account for the large variance in deprivation within boroughs.

I chose to use the Indices of Multiple Deprivation because I needed the indicators to be nuanced enough to capture the different fields charities operate in. The numerous indicators, for example, the Income Deprivation Affecting Children Index (IDACI), would prove invaluable in informing where our next Holiday Hunger Schemes should be established to meet the needs of children on Free School Meals out of term time. I also needed data that was collected to LSOA Level because the mapping software I used, QGIS, requires Boundary Data, which The UK Data Service collects to LSOA Level. I then imported and linked both shapefiles to QGIS and generated a colour gradient thematic map to demonstrate deprivation per LSOA in Greater Manchester.

I then imported a delimited layer of our waiting list charities' location in longitudinal/latitude format to pinpoint where we should concentrate our efforts next. What the data has informed me has been balanced with the practical realities of tackling food poverty. For example, Rochdale has a lower relative deprivation value than Manchester, but has witnessed a 2.5% increase in relative deprivation. As a result, it's important to understand the discrepancies in charitable infrastructure versus the increase in people experiencing hardship that might exist in meeting food demand. Such analysis



will advise the FareShare managers where the most humanitarian need is to inform which organisations join next, out of a list of over 100 enquiries.

Results and conclusion

The research resulted in FareShare Greater Manchester being provided with a list of how their current 236 CFM's score against the Indices of Multiple Deprivation, as well as how their Waiting List Enquiries scored to assess future food allocation decisions. In addition to a score of deprivation, I generated thematic maps for FareShare meaning further considerations could be factored in, for example, how close a waiting list enquiry was to a current CFM provided with food from FareShare to ensure overarching aims were considered. For example, closing food deserts to address larger food poverty concerns, like the poverty premium residents of geographically isolated areas might incur as a result of having limited access to affordable food providers.

Key skills learned

I became confident using Excel, SPSS, QGIS software, and downloading and utilising government data resources like Open Data Communities to combine FareShare's data with a general picture of poverty in Greater Manchester. I learned how to effectively outreach to members of the community for their insights into how food poverty should be addressed, as well as how to time manage the research I conducted against other obligations of working in a busy charity, that at times were more immediate concerns. I also learned how to relay the complexities of the research to a team with less data knowledge to ensure the FareShare team were comfortable with what I had produced meaning it would be utilised in the future.