Glasgow City Council – Development and Regeneration Services
Service Development – Information, Data and Research
Briefing Paper
GIS Analysis of the Glasgow Guarantee Participants 2015-2016
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Explanatory note: this work was undertaken by Alexandra Fleming-Knox and Amy Shaw during the summer of 2016 as part of a work experience programme organised by the Information, Data & Research section of Service Development in DRS. Both Alex and Amy are students at the University of Glasgow and the paper reflects their work and analysis. It should not be seen as representing the views of either Development & Regeneration Services or Glasgow City Council and must not be seen as reflecting Council policy.

Executive Summary

Since 2009, the Glasgow Guarantee Programme has helped out of work Glaswegians into training, work, modern apprenticeships and graduate schemes. The Guarantee, a Legacy of the Commonwealth Games, is available to those aged 16-19 not in full time education, training or employment, in addition to workless adults and graduates aged 20-29, those aged 50+ and Armed Forces Veterans. The purpose of this paper will be to provide an analysis of this scheme, with the aim of directing the scheme towards sectors which are expanding within the changing labour market.

1. Introduction

- 1.1. The Glasgow Guarantee is a £50 million scheme which was started in 2009 with strong political support. To date it has helped more than 7000 people into employment or training. Companies are encouraged to take part with a financial incentive, capped at £8000. For the modern apprenticeship scheme, funding is given for half of the duration of the apprenticeship. Participants are recruited through schools and colleges, along with job fairs, job centres and Jobs and Business Glasgow. There is strict eligibility for both business and participants; they must be located or reside within the Glasgow City Council postcode boundary.
- 1.2. This paper uses data collected via an online form for 1095 participants of the Glasgow Guarantee over a 15-month period, 2015-16. The information was collated by the Customer Business & Services team within the Council to produce the dataset. To start with, the analysis and mapping focused on participant's demographics, and in particular gender, ethnicity and disability.
- 1.3. The analysis then mapped the location of participants, to check for any signs of under- or overrepresentation; and extended to cover the industrial sectors of the participants. It is hoped that the details outlined below will inform future planning of the Glasgow Guarantee.

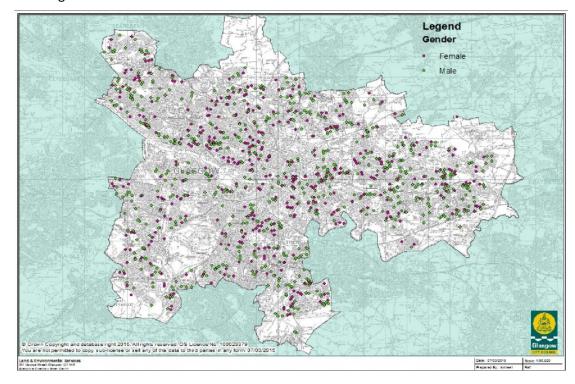
2. Initial Overview

2.1. The Glasgow Guarantee participant dataset contained the dates of birth of participants (showing an age range of 16-64 years) along with postcode, ethnic origin, gender, electoral ward, religion, sexual orientation, national identity, sector successful in and type of vacancy. Three variables of greatest interest, when mapped, were Gender, Ethnic Origin and Vacancy Type.

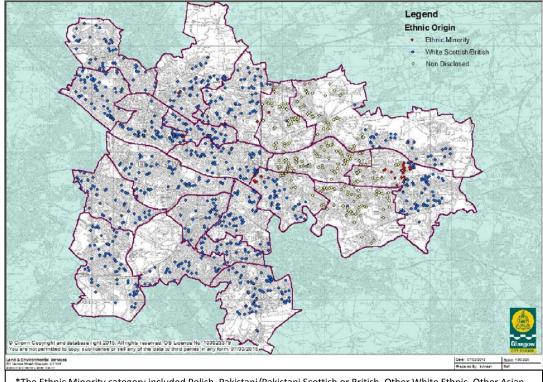
- 2.2. Within the Glasgow Guarantee programme, there are 41% females to 59% males (633 males and 462 females). Young people under 29 years make up 91.0% participants. Young females may be choosing further or higher education instead, as in 2015 68.7% of female school leavers in Glasgow entered higher or further education, whereas 56.1% of male school leavers chose the same path.
- 2.3. Of the participants of the Glasgow Guarantee who stated their ethnicity, 2.9% of these people were ethnic minorities and the other 97.1% were white. This excludes those who chose not to disclose their ethnicity. In comparison to the 2015 estimate that ethnic minorities make up 13.2% of Glasgow's population, the proportion of ethnic minorities involved in the Glasgow Guarantee is relatively low.
- 2.4. In the Glasgow Guarantee Programme, 3.7% of participants stated they had a disability. The economically active people in Glasgow with a disability make up 9.0% of the overall population in 2015. A comparison of these figures reveals an underrepresentation of those with a disability in the Glasgow Guarantee Programme.

3. Analysis by Location

- 3.1. A preliminary analysis of the data by age and electoral ward showed that the age category 18-24 had the highest number of participants in the Ballieston, East Centre and North East wards. This reveals that the highest proportion of young Glasgow Guarantee participants live in the East of the city. The majority of the middle age group, 25-29, were from city centre wards, including the Anderston/City, Hillhead, Pollockshields and Partick West wards. Finally, in the 30+ age group, participants were primarily from the East and the West of the city, particularly the Shettleston, Partick West and Calton wards.
- 3.2. Participants were mapped according to gender by their postcode. Although there is no obvious pattern or correlation, the map visually shows there are more males than females in the Glasgow Guarantee Programme.

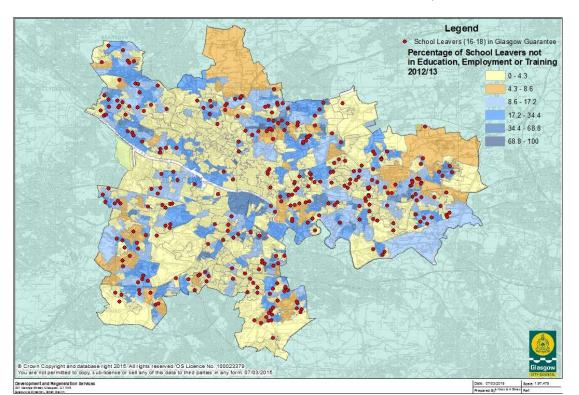


Ethnic origin of Glasgow Guarantee Participants was mapped across Glasgow, showing a noticeable cluster of ethnic minorities* in the East End, with the majority in Baillieston. Also visible are a large proportion of "Non Disclosed" ethnic origins between the City Centre and the East End.



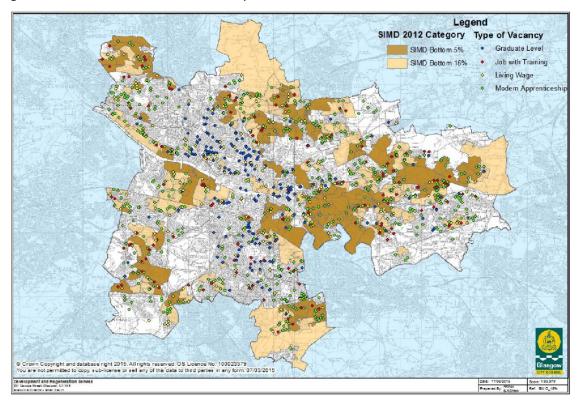
*The Ethnic Minority category included Polish, Pakistani/Pakistani Scottish or British, Other White Ethnic, Other Asian Background, Other African Background, Indian/Indian Scottish or British, Arab/Arab Scottish or British, African/African Scottish or British.

3.3. To find out if the Glasgow Guarantee is targeting areas with a high population of school leavers not in education, employment or training (NEET), participants of school leaver age were mapped together with the proportion of NEET school leavers. The 2012/13 Scottish average for school leavers going onto a positive destination was 91.4%, leaving 8.6% in the NEET category. From the map shown below, the zones shaded in blue are areas of concern as they are above 8.6%. The



majority of school leavers within the Glasgow Guarantee are from areas with a high NEET school leaver population; however there are some high NEET areas which contain no Glasgow Guarantee participants, such as the Gorbals.

3.4. Type of vacancy filled by participants within the Glasgow Guarantee was mapped by location and SIMD 2012 Index. It is shown that the majority of people occupying Graduate Level roles live in the West End and City Centre, areas which are not deprived. Those in Modern Apprenticeship vacancies are spread across the city, but with some clustering in the East, and a noticeable amount (30.2%) are located in the bottom 5.0% of the SIMD Index. Participants in Living wage and Job with Training vacancies are scattered across the city.



Other characteristics were mapped, including Disability and Sector Successful In, however there was no correlation to be found with geographical location.

4. Analysis by Industry

- 4.1. Between 2012 and 2016, employment rate in Glasgow has increased overall by 2.5%, however it has decreased by 1.7% for males and increased by 6.3% for females. The 2015 Glasgow economic activity rate for males aged 16-64 was 76.2%, whereas the rate for females was 69.5%. When compared to the Scottish average, 81.6% for males and 74.0% for females, Glasgow's economic activity rate is less than the Scottish average.
- 4.2. For the years 2010-2015, all sectors except Agriculture & Fishing and Energy & Water expanded, with Other Services seen the biggest increase, 23.0%, closely followed by Banking, Finance and Insurance which expanded by 20.0%. The five sectors within the Glasgow Guarantee that fall into the Other Services category include, in order of popularity; Hairdressing & Beauty, Business, Creative Arts & Design, Sport & Leisure and Performing Arts. One field which has not changed significantly in

size over the last five years was Agriculture and Fishing, within which Horticulture is classed, a sector where 24 modern apprentices were successful in. There were no apprentices in the Energy and Water sector, which has also not grown or declined significantly in the past 5 years.

4.3. Analysis by vacancy type and electoral ward was conducted and revealed the wards with the highest number of each vacancy type. Hillhead and Anderston/City has the highest number of graduate level jobs, hinting at clustering from the city centre towards the West. Jobs with training vacancies were predominately found in the East and North West, particularly in the Ballieston, Drumchapel/Anniesland, East Centre and North East wards. Living wage participants were mainly from the outskirts of the city centre to the North, East and West, in the East Centre, Canal and Govan wards. Finally, the majority of modern apprenticeships were in the East and South, primarily from Baillieston, but also found in Linn, North East and East Centre.

5. Analysis

- 5.1. Doing a gender based analysis of the dataset revealed there are many sectors which males or females dominate, for example males make up 93.5% of Construction and Property whereas females contribute 81.8% of the Hairdressing and Beauty sector. However, there are some sectors in which the results were more unexpected, such as the Legal Profession, where 71.4% of the apprentices were female. Furthermore, 88.4% of those succeeding in Horticulture were male. One of the biggest sectors that modern apprentices succeeded in was the Childcare and Early Year's sector, where 100.0% of all 41 placements were filled by females. However, only 9.3% of the Engineering, Manufacturing and Production sector was made up of females. Additionally, there were sectors which displayed an equal or close to equal balance of gender, such as Journalism and Accountancy and Finance.
- 5.2. There is an underrepresentation of ethnic minorities within the Glasgow Guarantee programme compared to the proportion of ethnic minorities in the Glasgow population. The majority of the BME population are located in the Centre and towards the West in wards such as Anderston/City, Hillhead, Pollokshields, Langside, Southside Central and East Centre. Notably, these areas do not match up with the SIMD 2012 most deprived areas. Furthermore, although the highest density of the BME population is found in the same areas as most Graduate Level vacancies, the most popular vacancy type for ethnic minorities is Modern Apprenticeships. The programme should be more inclusive of certain minority groups such as Black/Black British, as between 2012-2016 there was an increase of 5.0% of Black/Black British people aged 18-24 on jobseekers allowance. This information is of particular relevance to the programme as it seeks to meet its equalities obligations. The BME population should be encouraged into Graduate Level, Jobs with Training and Living Wage vacancies.
- 5.3. The most popular sectors for those with and without a disability were Admin Related and Construction, with 29.0% of those with a disability working in the Admin Related sector. The third most popular sector to work in for those without a disability was Engineering, Manufacturing and Production, which involved 6.1% of the participants. However, there was no one with a disability in this sector. More could be done to make Engineering, Manufacturing and Production more accessible to those with a disability.

5.4. There are five sectors containing a total of 7.6% of participants within the Glasgow Guarantee which are classed in the 'Other Service' category of the Standard Industrial classification (SIC 2007), the category which expanded the most, by 23%, between 2010 and 2015. This was followed closely by the Banking, Finance and Insurance etc. category, which expanded by 20.0%. 32.5% of Glasgow Guarantee participants are involved in this field, the most popular sector being Admin Related, in which 21.1% of participants are involved. This is encouraging as it shows the Glasgow Guarantee is training a significant amount of participants in successful and expanding sectors. Although other sectors are exhibiting slower growth rates between 2.0% and 5.0%, a quarter of Glasgow Guarantee participants are trained in these roles. It would be beneficial to take advantage of the sectors with greater rates of expansion by encouraging participants in this direction. The only sector which participants are being trained in which has not shown any growth in the past five years is Horticulture, in which 2.4% are involved.

6. Next Steps

- 6.1. Firstly, our work has shown that this type of analysis can be carried out over a relatively short period of time and could become part of the regular monitoring of the Glasgow Guarantee. Mapping the home location of participants shows how involvement varies by area, and further discussion of the results can highlight the reasons for this.
- 6.2. Secondly, in broad terms the quality of the data is good. However, there are two comments we would like to make regarding the information. It would be good to have more details about the nature of participants' disabilities, for example if it is a physical disability which limits their ability to work in a certain sector. And there are 51 people working in the "Miscellaneous" sector which makes up 5.0% of the participants. This information is too vague to analyse, and more detail is required.
- 6.3. Thirdly, our expectation was that the Glasgow Guarantee was mainly for school leavers; however we found that 9.0% of the Glasgow Guarantee participants are over 29 years old, and that the workless groups targeted in the scheme include adults aged 50+ and Armed Forces Veterans. Any future analysis might decide to make more use of involvement by age group.

7. Conclusions

7.1. This paper demonstrates how, by mapping and analysing Glasgow Guarantee participant data, it is possible to see who is involved in the programme categorised by gender, ethnic origin and type of vacancy. This allowed for the identification of clusters of ethnic minority participants, in addition to patterns in different levels of vacancy. This aids in targeting activities to promote applications in specific areas. Additionally, this work has identified trends that could be used to inform future planners on where the scheme is most effective, where it could be improved and which groups of people need to be more equally represented in the future.

Appendix

Data was collected from Nomis (Office for National Statistics), Scottish Government publications, 2011 Census data and Skills Development Scotland.

Table 1: Number of Participants by Electoral Ward

Electoral Ward	Number of Participants	% of Total Participants
GCC - Baillieston	102	9.3
GCC - East Centre	75	6.9
GCC - North East	71	6.5
GCC - Linn	67	6.1
GCC - Canal	61	5.6
GCC - Calton	57	5.2
GCC - Greater Pollok	55	5
GCC - Govan	53	4.8
GCC - Garscadden/Scotstounhill	51	4.7
GCC - Partick West	51	4.7
GCC - Shettleston	51	4.7
GCC - Anderston/City	49	4.5
GCC - Southside Central	48	4.4
GCC - Drumchapel/Anniesland	46	4.2
GCC - Craigton	41	3.8
GCC - Maryhill/Kelvin	41	3.8
GCC - Hillhead	39	3.6
GCC - Springburn	39	3.6
GCC - Newlands/Auldburn	31	2.8
GCC - Langside	29	2.7
GCC - Pollokshields	29	2.7
OG - South Lanarkshire Council	4	0.4
OG - Renfrewshire Council	2	0.2
OG - West Dunbartonshire Council	2	0.2
OG - North Lanarkshire Council	1	0.1
Total	1095	

Table 2: Number of Participants by Age and Programme Type

Programme Type	16-24 (% of Programme type)	25-29	30-49	50+	Total
Living Wage	93 (44.9%)	40 (19.3%)	18 (8.7%)	56 (27.1%)	207
Modern Apprenticeship	536 (99.8%)	0	1 (0.2%)	0	537
Job with Training	149 (100%)	0	0	0	149
Graduate Level	62 (30.8%)	116 (57.7%)	22 (10.9%)	1 (0.5%)	201