

# AnnexA2

## Geodemographic analysis and location-adjusted benchmarks—technical details

### Defining areas

1. Any geodemographic analysis must start by defining the area to be used. The starting point is generally a set of small administrative areas for which information is readily available. There is a range of classifiers which can then be used to combine these small areas into groups. The classifier used here is Super Profiles. Further details can be found on the HEFCE web-site, under 'Good Practice—Classification of students based on postcode'.
2. The small areas taken as the basis are the Census enumeration districts (EDs) in England and Wales, and the output areas (OAs) in Scotland. The classification is based on data collected in the 1991 Census, supplemented with data from other sources. These small areas were clustered together according to how similar they were on the variables used. Areas belonging to the same group, or cluster, will not necessarily be geographically adjacent. For example, one cluster might contain suburban areas of semi-detached housing from Leeds, Manchester, Birmingham and Bristol, and another may contain inner city areas from those same cities.
3. Postcodes can be used to identify the ED (or OA) and hence the clusters. This 'postcode mapping' allows nearly all students to be allocated to one of the clusters, on the basis of their home postcode.
4. A small proportion of postcodes cannot be mapped to EDs, either because they have been wrongly recorded or because they are too new to have been included in the postcode file. Similarly, a small proportion of EDs have not been classified, for example if the number of residential dwellings in the area is too small to provide reliable information (or was too small in 1991). In either case the result will be a cluster whose neighbourhood type is unknown.
5. The 160 clusters which resulted from this method were reclassified as 'low participation neighbourhood' or 'other neighbourhood' by estimating, for each cluster, the participation rates in higher education for young entrants. These rates vary from under 5 percent to over 95 percent. Clusters with participation rates less than two-thirds of the national average were defined as 'low participation'.

### Population estimates

6. The participation rates as defined above depend on two elements: the population of the area and the number of students from that area. The number of students is taken from the HESA database, with postcodes used to allocate students to areas. The population estimates are an uncorrected projection of the 1991 Census population figures, the last time for which a full count of the population was available. We are working to create more accurate estimates of population as part of a project to monitor participation across the sector, and these new estimates will be used to check the classification of neighbourhood types as 'low participation'.

### Localised effects

7. Under certain conditions the location of an institution can have an impact on the low participation neighbourhood indicator, making it appear different from the other widening access indicators.
8. In particular, there are three characteristics which have an impact on institutions in London:
  - a. Although most clusters are geographically widespread, some are concentrated in London. This is due to the special patterns of car ownership, methods of commuting, accommodation types and so on.
  - b. Institutions in London tend to recruit a high proportion of students from London.
  - c. The participation rate overall is higher in London than in most other parts of the country.

9. These factors taken together mean that there are some areas in London which may be less likely than similar areas elsewhere to be classed as low participation. As a result, institutions in London tend to have a lower proportion of students from low participation neighbourhoods relative to their benchmarks.

10. There are also other local effects which could have an impact on the rates of participation. For example, enumeration districts in some rural areas cover a greater area than those elsewhere, and so tend to include a wide range of household types. This could, in principle, lead to pockets of low participating groups being incorporated in high participation neighbourhood types. However, we have found no evidence that such effects have a significant impact on the statistics for institutions.

### Measuring effects of locality

11. Table A4 shows the percentages of young entrant students of full-time first degree courses from each of the regions of the UK who come from low participation neighbourhoods; Social Classes III m, IV and V; and state schools. The scale of the differences between regions means that institutions which recruit most of their students locally may find they have characteristics quite different from the national average.

12. Because of these differences, we have looked at ways in which a student's domicile could be incorporated into the existing benchmarks of the access indicators. Using the same methodology as is used for the current benchmarks, and taking the student's region of origin as another factor, we have produced a value that will give an indication of how important the location factor is. This is the location-adjusted benchmark.

13. For institutions which recruit from across the UK, there is very little difference between the standard benchmark and the location-adjusted benchmark. Institutions which recruit more locally may have larger differences between the original and the location-adjusted benchmark. These larger differences show that the indicator is affected by the characteristic of the area the institution recruits from. In general, the greatest differences occur for the low participation indicator, and the smallest for the Social Class indicator.

14. The funding councils for Wales, Scotland and Northern Ireland have decided that they do not wish the location-adjusted benchmark to be provided for institutions in their areas. These benchmarkshave therefore been omitted for institutions outside England.

### Points to note

15. In considering how best to measure locality effects, a major concern was raised. By allowing for the effect of locality, there is a danger that what we are trying to measure could be partly obscured. Differences between geographical areas may be caused by disparities between institutions, or these disparities may be the result of geographical differences. Until we have resolved this circularity we need to be careful in making allowances for geographical effects.

16. There is a further difficulty with the method used. In theory, if an institution situated in a region of low participation were to recruit predominantly from another region of high participation, that institution's benchmark would not reflect its locality. Rather, it would reflect the locality from which its students were recruited. In practice this is unlikely to happen, partly because we have used region rather than some smaller geographical area as the basis.

17. The location-adjusted benchmark has only been used with the access indicators, because of the known differences in the way these groups are spread across the country. They have not been used with the indicator of retention or non-continuation, nor is there any plan to do so, for two reasons. The major reason is that to include location as a factor in non-continuation would imply that people from different regions could have had different continuation rates, even taking into account their subject of study and their entry qualifications.

This would not be acceptable. But in addition, the differences between the non-continuation rates for students from different regions is small, so a local continuation-adjusted benchmark for these indicators would not provide any extra information.

**Table A4 Percentage of young entrants from under-represented groups, by Government Office region**

Region	From low participation neighbourhoods	From Social Classes III, IV, V	From state schools or colleges	Total young entrants
Eastern	9.0	21.7	85.4	18,800
East Midlands	12.3	27.9	88.8	14,100
London	8.4	26.5	79.5	30,300
North-East	23.1	29.3	91.1	8,100
North-West	17.2	28.1	86.8	25,000
South-East	6.6	19.1	80.7	31,300
South-West	8.3	22.2	82.9	16,900
West Midlands	15.9	29.8	87.6	18,900
Yorkshire and the Humber	15.1	26.7	89.2	15,500
Wales	18.2	28.2	93.8	11,000
Scotland	19.2	25.5	85.0	19,800
Northern Ireland	8.6	30.1	99.9	9,000
United Kingdom*	12.5	25.4	85.7	221,100

\*The total includes students whose region of origin is undefined.