# SOCIAL GRADE ALLOCATION TO THE 2011 CENSUS 

This document summarises how the Social Grade can be mapped to the 2011 Census

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March 2013

## Social Grade Approximation for the Census 2011

## Introduction

Social Grade classification is a commonly used measure among marketing and market research practitioners. It is a powerful classification that broadly differentiates groups of people with regards to some attitudes and behaviours, as well as discriminating well on the types of goods and services consumed. The classification groups people into 6 categories A, B, C1, C2, D and E. Social Grade is often recorded about survey respondents by interviewers using a series of questions. These questions would be too long to include in the Census questionnaire, and instead a model can be used to assign respondents to a Social Grade category, based on a restricted set of questions common to both the data on which the model is built and the Census.

An approximation to the Social Grade classification was applied to respondents in the 2001 Census data for the first time, and a similar (but not identical) approach was adopted this time. For the 2001 census, an approximation to Social Grade was modelled based on the data from the National Readership Survey ${ }^{1}$.

To develop the 2011 model, the National Readership Survey was used which corresponded to the same year as the census. Firstly questions common to both the census and NRS survey were identified. The NRS data was then reduced to include only those who were assigned their own Social Grade (rather than that of the household). A number of models were tested to determine which best predicted the respondents Social grade. A CHAID model was eventually used to allocate respondents to their most likely category based on the Standard Occupational Code 2010 code, Employment status, Qualification, Tenure and whether they work Full time, Part time or not working.

Modelling the data achieved an overall allocation rate of $73 \%$ (for the 5 -way classification $A B$, C1, C2, D, E), with individual categories being correctly allocated at a rate of between $66 \%$ and $77 \%$. For the 4 -way classification (AB, C1, C2, DE) the correct allocation rate was $75 \%$.

## Identifying common questions

There are a set of questions that feed in to deriving the Social grade approximation. On the previous census, the key questions used in the model to predict social grade included Employment Status, working status the Standard Occupational Code of the respondent's job (or previous job under certain circumstances), size of establishment, gender, qualification and tenure.

For the 2011 census, the size of establishment was not asked in the census, which affected what information was available to use.

Those questions which were found to be common to both the census and the NRS data (on which the models are based) in 2011 were Marital Status, Working status, Employment Status, Qualifications, Ethnicity, Gender, Number of cars in household, Tenure and Number of adults in household.

The questions were coded up into categories that were also common across the NRS and census. Please see appendix C.

[^0]
## Approach to developing the model

With the 2001 census approach, there were two main stages to the modelling. Firstly an allocation matrix was used to assign respondents to a Social Grade category, based on employment status, Size of establishment and SOC code 2000. This allocated people to individual Social Grade categories, but also to some combined categories (e.g. C1C2D) when there was less certainty about the allocation. In the cases where respondents were allocated to multiple categories, CHAID was used to predict respondents as best as possible to an individual category.

For the 2011 Census, Category A makes up a very small proportion of people and so the first two categories were combined so that groups AB, C1, C2, D and E could be identified.

In terms of identifying common questions, the Size of Establishment where the respondent works was not recorded on the 2011 census, and meant that it was unavailable for use in the model. The allocation matrix equivalent for 2011 was revised to accommodate the lack of the establishment size, which resulted in a greater amount of cases getting allocated to multiple categories.

The models were restricted to those respondents who had their own Social Grade. These were respondents in the NRS who were

1) the Chief Income Earner or
2) the Respondent (but not the Chief Income Earner) and working

In total there were $14429^{2}$ respondents who were included in the model building.
The matrices were tested to verify their allocation rates to the correct categories. The matrix which included establishment size, SOC2010 and employment status, gave an allocation rate of $20 \%$ overall to categories AB, C1, C2 and D. The amended matrix without size band gave an allocation rate of $15 \%$ to the same categories. There were $25 \%$ of the cases which were not allocated to any of the categories, because either the combinations from the matrix did not exist in the data, or because the respondents were not allocated to one of the categories in either SOC2010, Size of establishment or Employment status. Those who were retired, but had no SOC information or working status information were not included in the matrices. Those who were not working (e.g. retired, unemployed or not employed) but had information on their working status in last job, and had a SOC code were treated as others in employment. Students were allocated to C 1 . Those where the size band was unknown were assigned to large establishments.

These low allocation rates meant that the use of an allocation matrix as a first stage gave no advantage to any modelling. As such, several Decision Tree models were developed comparing a range of input variables and combinations thereof.

[^1]
## The Final Model

The chosen model used Standard Occupational Code 2010 code, Employment status, Qualification, Tenure and whether they work Full time, Part time or not working to allocate respondent to the appropriate Social Grade categories.

The chosen model was derived using the Classification Tree module in SPSS, and then refined to give the final model.

The weighted and un-weighted distributions of the Social Grades are shown in Table 1.1

Table 1.1 Distribution of Social Grade for Original and Predicted (weighted and un-weighted)

|  | Original |  | Predicted |  | Original |  | Predicted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Weighted | $\%$ | Weighted | $\%$ | Unweighted | $\%$ | Unweighted | $\%$ |
|  |  |  |  |  |  |  |  |  |
| AB | 9103 | 23.4 | 8816 | 22.7 | 3934 | 27.3 | 3713 | 25.7 |
| C1 | 11915 | 30.7 | 11792 | 30.3 | 4516 | 31.3 | 4523 | 31.3 |
| C2 | 7606 | 19.6 | 7358 | 18.9 | 2461 | 17.1 | 2416 | 16.7 |
| D | 6900 | 17.8 | 7932 | 20.4 | 2173 | 15.1 | 2598 | 18.0 |
| E | 3334 | 8.6 | 2960 | 7.6 | 1345 | 9.3 | 1179 | 8.2 |
| DE | 10234 | 26.3 | 10892 | 28.0 | 3518 | 24.4 | 3777 | 26.2 |
| Total | 38858 | 100.0 | 38858 | 100.0 | 14429 | 100.0 | 14429 | 100.0 |

The percentage of cases that were correctly allocated to the associated segment is below in Table 1.2:

Table 1.2. Proportion of cases correctly allocated to segment

| Social Grade | Percentage correctly allocated to segment |
| :---: | :---: |
| AB | $77.2 \%$ |
| C1 | $74.0 \%$ |
| C2 | $66.1 \%$ |
| D | $74.7 \%$ |
| E | $65.5 \%$ |
| DE | $81.4 \%$ |
| Overall (5-way) | $72.8 \%$ |
| Overall (4-way) | $75.3 \%$ |

Table 1.3 shows the distribution of derived Social Grade produced by the model against actual NRS Social Grade. The values in bold correspond to the above table.

Table 1.3 Percentage of actual social grade predicted by model

## Social Grade in NRS

| Predicted Social Grade | AB | C1 | C2 | D | E | DE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AB | $\mathbf{7 7 . 2 \%}$ | $\mathbf{1 2 . 4 \%}$ | $3.2 \%$ | $0.6 \%$ | $1.7 \%$ | $1.0 \%$ |
| C1 | $18.6 \%$ | $\mathbf{7 4 . 0} \%$ | $9.2 \%$ | $5.0 \%$ | $8.6 \%$ | $6.4 \%$ |
| C2 | $2.4 \%$ | $6.7 \%$ | $\mathbf{6 6 . 1 \%}$ | $13.7 \%$ | $7.1 \%$ | $11.2 \%$ |
| D | $1.1 \%$ | $5.2 \%$ | $19.0 \%$ | $\mathbf{7 4 . 7 \%}$ | $17.1 \%$ | $52.7 \%$ |
| E | $0.6 \%$ | $1.7 \%$ | $2.6 \%$ | $6.1 \%$ | $\mathbf{6 5 . 5 \%}$ | $28.8 \%$ |
| DE | $1.8 \%$ | $6.9 \%$ | $21.5 \%$ | $80.5 \%$ | $82.6 \%$ | $\mathbf{8 1 . 5 \%}$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $\mathbf{1 0 0 \%}$ |

More detail of the Social Grade profiles are shown in the appendices.

## Appendix A

## Allocation to Social Grade categories split by broad working status

| Distribution of cases in actual and predicted Social Grade |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broad Working Status | NRS Social Grade | Predicted Category |  |  |  |  | Total N | \% correctly allocated to Social Grade category |
| Working Full Time |  | AB | C1 | C2 | D | E |  |  |
|  | $A B$ | 80\% | 17\% | 2\% | 0\% |  | 2254 | 80\% |
|  | C1 | 17\% | 71\% | 9\% | 4\% |  | 2239 | 71\% |
|  | C2 | 4\% | 10\% | 72\% | 14\% |  | 1394 | 72\% |
|  | D | 1\% | 7\% | 20\% | 72\% |  | 895 | 72\% |
|  | E | 0\% | 25\% | 25\% | 50\% |  | 4 | - |
|  | Total N | 2233 | 2168 | 1447 | 938 |  | 6786 | 74\% |
| Working Part Time |  |  |  |  |  |  |  |  |
|  | AB | 68\% | 27\% | 1\% | 4\% |  | 474 | 68\% |
|  | C1 | 10\% | 77\% | 3\% | 10\% |  | 787 | 77\% |
|  | C2 | 3\% | 12\% | 56\% | 29\% |  | 355 | 56\% |
|  | D | 1\% | 3\% | 9\% | 87\% |  | 662 | 87\% |
|  | E | 0\% | 0\% | 0\% | 100\% |  | 1 | - |
|  | Total N | 414 | 800 | 288 | 777 |  | 2279 | 75\% |
| Not Working |  |  |  |  |  |  |  |  |
|  | $A B$ | 76\% | 18\% | 3\% | 1\% | 2\% | 1206 | 76\% |
|  | C1 | 8\% | 77\% | 5\% | 5\% | 5\% | 1490 | 77\% |
|  | C2 | 2\% | 7\% | 59\% | 23\% | 9\% | 712 | 59\% |
|  | D | 0\% | 4\% | 9\% | 66\% | 21\% | 616 | 66\% |
|  | E | 2\% | 9\% | 7\% | 17\% | 66\% | 1340 | 66\% |
|  | Total N | 1066 | 1555 | 681 | 883 | 1179 | 5364 | 70\% |

Distribution of weighted and unweighted profiles of Social Grade, by broad working status

|  | Original |  | Predicted |  | Original |  | Predicted |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Weighted | \% | Weighted | \% | Unweighted | \% | Unweighted | \% |
| Working Full Time |  |  |  |  |  |  |  |  |
| AB | 5942 | 28.5 | 5958 | 28.6 | 2254 | 33.2 | 2233 | 32.9 |
| C1 | 6647 | 31.9 | 6450 | 31.0 | 2239 | 33.0 | 2168 | 31.9 |
| C2 | 4938 | 23.7 | 4965 | 23.8 | 1394 | 20.5 | 1447 | 21.3 |
| D | 3281 | 15.8 | 3447 | 16.6 | 895 | 13.2 | 938 | 13.8 |
| E | 12 | 0.1 |  |  | 4 | 0.1 |  |  |
| Total | 20820 | 100.0 | 20820 | 100.0 | 6786 | 100.0 | 6786 | 100.0 |
| Working Part Time |  |  |  |  |  |  |  |  |
| AB | 1037 | 16.4 | 926 | 14.6 | 474 | 20.8 | 414 | 18.2 |
| C1 | 2020 | 31.9 | 2030 | 32.0 | 787 | 34.5 | 800 | 35.1 |
| C2 | 1056 | 16.7 | 837 | 13.2 | 355 | 15.6 | 288 | 12.6 |
| D | 2226 | 35.1 | 2548 | 40.2 | 662 | 29.0 | 777 | 34.1 |
| E | 2 | 0.0 |  |  | 1 | 0.0 |  |  |
| Total | 6341 | 100.0 | 6341 | 100.0 | 2279 | 100.0 | 2279 | 100.0 |
| Not Working |  |  |  |  |  |  |  |  |
| AB | 2124 | 18.2 | 1932 | 16.5 | 1206 | 22.5 | 1066 | 19.9 |
| C1 | 3248 | 27.8 | 3312 | 28.3 | 1490 | 27.8 | 1555 | 29.0 |
| C2 | 1612 | 13.8 | 1556 | 13.3 | 712 | 13.3 | 681 | 12.7 |
| D | 1393 | 11.9 | 1937 | 16.6 | 616 | 11.5 | 883 | 16.5 |
| E | 3320 | 28.4 | 2960 | 25.3 | 1340 | 25.0 | 1179 | 22.0 |
| Total | 11697 | 100.0 | 11697 | 100.0 | 5364 | 100.0 | 5364 | 100.0 |

## Appendix B. Question definitions

NRS questions were coded so that they were comparable with those in the Census.
SOC2010 - This is the 4 digit Standard Occupational Code for 2010.

## Employment Status:

1) Employee
2) Foreman/Supervisor
3) Self Employed with employees
4) Self Employed without employees
5) Managers (SOC2000 codes between 1111 \& 1239)
6) Retired
7) Students
8) Not Employed
9) Unemployed

Tenure: 4 Categories

1) Own Outright
2) Own with mortgage (including shared ownership)
3) Rented - Non Local Authority/Housing Association (including rent free)
4) Rented - Local Authority/Housing Association

Qualifications: 4 categories:

1) Degree level or above
2) $5+$ GCSEs $A^{*}-C$ to degree
3) Other GCSE, equivalents or below (incl. no qualifications)
4) No information/Missing (not applicable in census)

Working Status: 3 Categories:

1) Working Full Time
2) Working Part time
3) Not working Part time or Full time

## Appendix C. Deriving common categories

Questions on the NRS data and the Census data are not directly comparable, and so variables were derived so that the two sets of statements had common categories across their questions. The detail below describes how these starter variables and categories could be derived, based on the information available from the Census.

## Who gets a Social Grade?

Social Grades apply to every Household Reference Person (HRP). If they are not the HRP and were working in the week before the Census, they receive their own Social Grade.

If not a HRP and not working in the week before the Census, they receive the Social Grade of the HRP.

## Deriving Starting categories

Given the general overlap between working status and employment status, priorities are given to a number of groups.
Priority is given in the following order:

1) Students
2) Managers
3) Supervisors
4) Employees
5) Self employed
6) Retired
7) Unemployed
8) Not working - If currently not working, priority is given to the last main job.

For example, if someone is a full time student working part time, they will be assigned as a student. Those who are self-employed with a SOC code which places them as a Manager, they will be assigned to the 'Manager' code.

Working status - This is based on current status, but prioritises student status over working status:

## 1 - Working Full time -

 ECOPUK11 = 02, 04, 06
## 2 - Working Part time -

 ECOPUK11 = 01, 03, 05
## 3 - Not working -

ECOPUK11 = 07, 15, 17, 18, 19

Employment status - This includes overlap between those who are currently out of work, but also uses most recent main job with regards to allocating Social Grade (as is the case in surveys where Social Grade is assigned). The prioritisation above should be applied here:

## Codes are as follows:

1 - Employees -
ECOPUK11 = 01, 02 and SUPERMAN $=2$
2 - Foreman/Supervisors
ECOPUK11 = 01, 02 and SUPERMAN = 1

3 - Self Employed - with employees
ECOPUK11 = 03, 04
4 - Self employed - without employees
ECOPUK11 = 05, 06

## 5 - Managers

SOC Code OCC_CURRENT / OCC_HIST = 1115-1259³ = Managers
6 - Retired
ECOPUK11 = 15
7 - Students
ECOPUK11 = 08, 09, 10, 11, 12, 13, 14, 16
8 - Not employed
ECOPUK11 = 17, 18, 19
9 - Unemployed
ECOPUK11 = 07

Tenure:
5) Own Outright

TENHUK11 = 0
6) Own with mortgage

TENHUK11 = 1 or 2
7) Rented - Non Local Authority/Association (including rent free)

TENHUK11 = 5, 6, 7, 8 or 9
8) Rented - Local Authority/Housing Association

TENHUK11 = 3 or 4

Qualifications:
5) Degree level or above

HLQPUK11 = 15
6) 5+ GCSEs $\mathrm{A}^{*}$ - $\mathbf{C}$ to degree

HLQPUK11 = 12, 13, 14 or 16
7) Other GCSE, equivalents or below (incl. no qualifications)

HLQPUK11 = 10 or 11

[^2]
## Assuming following codes shown

## Variables names, descriptions and values used in DVO specifications

- DVO - Derived Variable for Outputs
- DVP - Derived Variable for Processing
- DVE - Derived Variable for Estimation
- SV - Standard Variable - a variable from a specific Census question i.e. not derived (the specific Census questionnaire and the question wording are shown in blue text)

| Variable name | Varia <br> ble <br> type | Variable description | Values and value descriptions |
| :---: | :---: | :---: | :---: |
| AGE | SV | Age of respondent on Census questionnaire <br> England \& Wales <br> Q3: What is your date of birth? | 000-115 |
| ECOPUK11 | DVO | Economic Activity | 01. Economically Active (excluding Full-time Students), In Employment, Employee, Part-time <br> 02. Economically Active( excluding Full-time Students), In Employment, Employee, Full-time <br> 03. Economically Active (excluding Full-time Students), In Employment, Self-employed with employees, Part-time <br> 04. Economically Active (excluding Full-time Students), In Employment, Self-employed with employees, Full-time <br> 05. Economically Active (excluding Full-time Students), In Employment, Self-employed without employees, Part-time <br> 06. Economically Active (excluding Full-time Students), In Employment, Self-employed without employees, Full-time <br> 07. Economically Active (excluding Full-time Students), Unemployed, Seeking work and ready to start in 2 weeks, and Waiting to start a job already obtained and available to start within 2 weeks <br> 08. Economically Active Full-time Students, In Employment, Employee, Part-time <br> 09. Economically Active Full-time Students, In Employment, Employee, Full-time |


|  |  |  | 10. Economically Active Full-time Students, In Employment, Self-employed with employees, Part-time <br> 11. Economically Active Full-time Students, In Employment, Self-employed with employees, Full-time <br> 12. Economically Active Full-time Students, In Employment, Self-employed without employees, Part-time <br> 13. Economically Active Full-time Students, In Employment, Self-employed without employees, Full-time <br> 14. Economically Active Full-time Students, Unemployed, Seeking work and ready to start in 2 weeks, and Waiting to start a job already obtained and available to start within two weeks <br> 15. Economically Inactive, Retired <br> 16. Economically Inactive, Student <br> 17. Economically Inactive, Looking after home/family <br> 18. Economically Inactive, Permanently sick/disabled <br> 19. Economically Inactive, Other <br> XX. No code required |
| :---: | :---: | :---: | :---: |
| EMPSTAT | SV | Employment Status <br> England \& Wales <br> Q33: In your main job, are (were) you: | 1. An employee? <br> 2. Self-employed or freelance without employees? <br> 3. Self-employed with employees? |
| EVERWORK | SV | Have you ever worked? <br> England \& Wales <br> Q31: Have you ever worked? | 1. Yes, write in the year that you last worked: <br> 2. No, have never worked |
| HLQPUK11 | DVO | Highest level of qualification | 10. No academic or professional qualifications (England \& Wales \& Northern Ireland) <br> 11. Level 1: 1-4 O Levels/CSE/GCSEs (any grades), Entry Level, Foundation Diploma, NVQ level 1, Foundation GNVQ, Basic/Essential Skills (England \& Wales \& Northern Ireland) <br> 12. Level 2: 5+ O Level (Passes)/CSEs (Grade 1)/GCSEs (Grades A*-C), School Certificate, 1 A Level/ 2-3 AS |


|  |  |  | Levels/VCEs, Intermediate/Higher Diploma, Welsh Baccalaureate Intermediate Diploma, NVQ level 2, Intermediate GNVQ, City and Guilds Craft, BTEC First/General Diploma, RSA Diploma (England \& Wales \& Northern Ireland) <br> 13. Apprenticeship (England \& Wales \& Northern Ireland) <br> 14. Level 3: 2+ A Levels/VCEs, 4+ AS Levels, Higher School Certificate, Progression/Advanced Diploma, Welsh Baccalaureate Advance Diploma, NVQ Level 3; Advanced GNVQ, City and Guilds Advanced Craft, ONC, OND, BTEC National, RSA Advanced Diploma (England \& Wales \& Northern Ireland) <br> 15. Level 4+: Degree (BA, BSc), Higher Degree (MA, PhD, PGCE), NVQ Level 4-5, HNC, HND, RSA Higher Diploma, BTEC Higher level, Foundation degree (NI), Professional Qualifications (Teaching, Nursing, Accountancy) (England \& Wales \& Northern Ireland) <br> 16. Other: Vocational/Work-related Qualifications, Foreign Qualifications/ Qualifications gained outside the UK (NI) (Not stated/ level unknown) (England \& Wales \& Northern Ireland) <br> XX. No code required |
| :---: | :---: | :---: | :---: |
| HRPPUK11 | DVO | Household Reference Person Indicator | 0. Not household reference person <br> 1. Household reference person <br> X. No code required |
| $\begin{aligned} & \text { OCC_CURRENT } \\ & \& \\ & \text { OCC_HIST } \end{aligned}$ | SV | Current Occupation code <br> Historical Occupation code <br> England \& Wales <br> Q34: What is (was) your full and specific job title? | Valid text responses are matched against the Standard Occupational Classification 2010 Modified Index and SOC 2010 Census structure to generate a SOC code. |
| RESIDENCE_TYPE | SV | Type of residence | C. Communal Establishment <br> H. Household |


| SUPERMAN | SV | Supervisor status <br> England \& Wales <br> Q36: Do (did) you supervise any employees? | 1. Yes <br> 2. No |
| :---: | :---: | :---: | :---: |
| TENHUK11 | DVO | Household Tenure | Owned <br> 0. Owns outright <br> 1. Owns with a mortgage or loan Shared ownership <br> 2. Shared ownership <br> Social rented <br> 3. Rented from council (Local Authority) <br> 4. Other social rented Private rented <br> 5. Private landlord or letting agency <br> 6. Employer of a household member <br> 7. Relative or friend of household member <br> 8. Other <br> Lives rent free <br> 9. Lives rent free <br> X. No code required |
| URESINDPUK11 |  | Usual residence indicator | 0 Not a usual resident <br> 1 Usual resident |

## Appendix D. Syntax for Allocation to Social Grade groups

## Part time workers (Working status = 2)

Part Time and (SOC starts with 11, 2123 or 24) SG = AB
Part Time and (SOC starts with 221) SG = AB.
Part Time and (SOC starts with $72,12,32,31$ ) SG = C1.
Part Time and (SOC starts with 33,34 or 35,41 or 42 ) SG $=$ C1
Part Time and (SOC starts with 22 and NOT (221)) SG = C1.
Part Time and (SOC starts with 51,52 or 53 ) SG = C2.
Part Time and (SOC starts with 62 and NOT (623)) SG $=$ C2.
Part Time and (SOC starts wit 623) SG = D.
Part Time and (SOC is $5412,5414,5422,5423,5432,5442,5443,5449,6125,6126,6142,6144$ or 6145 ) SG $=$ C2
Part time and SOC starts with (54 or 61) and (SOC is NOT ( $5431,5434,5435,5436,6121,6122,6123,6131,6139$, $6141,6143,6146,6147$ or 6148 )) $\mathrm{SG}=\mathrm{C} 2$

Part Time and (SOC is $5431,5434,5435,5436,6121,6122,6123,6131,6139,6141,6143,6146,6147$ or 6148 ) SG = D

Part Time and (SOC starts with $71,81,82,92$ or 91 ) SG $=$ D.

## Full time workers (Working status = 1)

Full Time and ((SOC starts with 22 Employment status is Self Employed with Employees) $\mathrm{SG}=\mathrm{AB}$.
Full Time and ((SOC starts with 11, 12, 24) and (Qualifications are 'Degree level or above')) $\mathrm{SG}=\mathrm{AB}$
Full Time and ((SOC starts with 35) and (Qualifications are 'Degree level or above') and (Employment status is Selfemployed with employees) $\mathrm{SG}=\mathrm{AB}$

Full Time and ((SOC starts with 35) and (Qualifications are 'Degree level or above') and (Employment status is NOT(Self-employed with employees)) and (SOC is NOT 3542) and (SOC does not start with 356) SG = AB

Full Time and ((SOC starts with 35) and (Qualifications are 'Degree level or above') and (Employment status is NOT(Self-employed with employees or Managers)) and (SOC is 3542 or starts with 356) SG = C1

Full Time and (SOC starts with 21 or 23 ) $\mathrm{SG}=\mathrm{AB}$
Full Time and (SOC starts with 11) and (Qualifications are NOT 'Degree level or above') and (SOC = 1136, 1115, 1116, 1122, 1132, 1134, 1139, 1150, 1162, 1171, 1172, 1181 or 1184) SG = AB

Full Time and (SOC starts with 12, 24 or 35 ) and (Qualifications are NOT 'Degree level or above') SG = C1
Full Time and (SOC starts with 22) and (Employment status is Employees, Self Employed without Employees or Foreman/Supervisor) and NOT (SOC starting with 221) SG = C1.

Full Time and (SOC starts with 22) and (Employment status is Employees, Self Employed without Employees or Foreman/Supervisor) and (SOC starts with 221) $\mathrm{SG}=\mathrm{AB}$.

Full Time and (SOC starts with $31,32,33,34,42$ or 72 ) $\mathrm{SG}=\mathrm{C} 1$

Full Time and (SOC starts with 11) and (Qualifications are NOT 'Degree level or above') and (SOC is NOT (1136, 1115, $1116,1122,1132,1134,1139,1150,1162,1171,1172,1181$ or 1184$)$ ) $\mathrm{SG}=\mathrm{C} 1$

Full Time and ((SOC starts with 41) And Employment Status = Employees, Self Employed or Foreman/Supervisors) SG $=\mathrm{C} 1$.

Full Time and ((SOC starts with 61) and SOC = NOT (6121, 6123, 6131, 6132, 6139, 6143, 6144, 6145 or 6148) SG = C2

Full Time and ((SOC starts with 61) and $\mathrm{SOC}=6121,6123,6131,6132,6139,6143,6144,6148) \mathrm{SG}=\mathrm{C} 1$.
Full Time and (SOC starts with 82) and SOC is NOT $(8212,8214,8222,8223$ or 8232$)$ SG $=$ C2
Full Time and ((SOC starts with 92) and $\mathrm{SOC}=921,924) \mathrm{SG}=\mathrm{C} 2$.
Full Time and (SOC starts with $43,51,52,53,54)$ SG = C2
Full Time and (SOC starts with 62 and NOT (621)) SG $=$ C2.
Full Time and (SOC starts with 621) $\mathrm{SG}=\mathrm{C} 1$.
Full Time and (SOC starts with 91) SG = D
Full Time and (SOC starts with 71 and NOT (7115 or 7130)) SG = D
Full Time and (SOC is 7115) SG = C1
Full Time and (SOC is 7130) SG $=\mathrm{C} 2$
Full Time and (SOC starts with 81 and NOT (812)) SG = D
Full Time and SOC starts with 812 SG $=$ C2
Full Time and ((SOC starts with 61) and SOC = 6145) SG = D.
Full Time and ((SOC starts with 82 ) and $\mathrm{SOC}=8212,8214,8222,8223$ or 8232$) \mathrm{SG}=\mathrm{D}$.
Full Time and ((SOC starts with 92) and SOC is NOT (921 or 924)) SG = D.

## Not working (Working status = 3)

NOT Working and (SOC starts with 34,35 ) and (EMPSTAT $=3$ ) $\mathrm{SG}=\mathrm{AB}$
NOT Working and (SOC starts with 21,23 or 24 ) $\mathrm{SG}=\mathrm{AB}$
NOT Working and (SOC starts with 22) and SOC is NOT 2231 SG = AB
NOT Working and (SOC is 2231) $\mathrm{SG}=\mathrm{C} 1$
NOT Working and (SOC starts with 11) and SOC is NOT (1122, 1139, 1161, 1162, 1184 or 1190) SG = AB
NOT Working and (SOC starts with 11) and (SOC = 1122, 1139, 1161, 1162, 1184 or 1190 ) SG = C1
NOT Working and (SOC starts with 34, 35) and (Self Employed without Employees, Foreman/Supervisors, Retired or Employee) $\mathrm{SG}=\mathrm{C} 1$

NOT Working and (SOC starts with 12, 31, 32, 33, 41, 42, 71, 72) SG = C1
NOT Working and Student SG = C1
NOT Working and (SOC starts with $52,53,82) \mathrm{SG}=\mathrm{C} 2$
NOT Working and (SOC starts with 51, 54, 62) and (Self-employed, Foreman/Supervisor) SG = C2
NOT Working and (SOC starts with 51, 54, 62) and (Retired or Employee) SG = D

NOT Working and (SOC starts with $61,71,81,91$ ) SG = D
NOT Working and (SOC starts with 92) and Tenure = Mortgage or Own Outright SG = D
NOT Working and (SOC starts with 92) and Tenure = Any Rented, including Rent free SG = E
NOT Working and EVERWORK $=2$ and Working status is NOT (Student) $\mathrm{SG}=\mathrm{E}$

## Appendix E. Profile of Derived Social Grade groups vs Actual Social Grade groups

NB. Indices are based on the average value across all Social Grades


| Variable | Category |  |  | Original Social Grade Index |  |  |  |  | Predicted Social Grade Index |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Weighted Total |  | AB | C1 | C2 | D | E | AB | C1 | C2 | D | E |
|  | Other GCSE, equivalents, or below | 10775 | 28\% | 24 | 69 | 89 | 199 | 238 | 18 | 74 | 98 | 181 | 237 |
| Number of Adults (census comparable) | 1 | 9005 | 23\% | 71 | 92 | 75 | 102 | 262 | 71 | 92 | 77 | 105 | 259 |
|  | 2 | 19734 | 51\% | 122 | 98 | 109 | 84 | 62 | 123 | 97 | 106 | 87 | 61 |
|  | 3 | 5797 | 15\% | 90 | 106 | 107 | 127 | 35 | 87 | 106 | 109 | 120 | 36 |
|  | 4+ | 4322 | 11\% | 76 | 120 | 101 | 132 | 26 | 71 | 120 | 107 | 122 | 31 |
| Tenure (census comparable) | Own outright | 12006 | 31\% | 127 | 99 | 105 | 79 | 63 | 119 | 103 | 101 | 90 | 53 |
|  | Mortgaged | 13410 | 35\% | 133 | 112 | 104 | 74 | 9 | 135 | 111 | 106 | 74 | 9 |
|  | Rented - non-LA/HA (incl. Rent free/dk) | 8631 | 22\% | 58 | 113 | 83 | 133 | 140 | 65 | 109 | 84 | 120 | 154 |
|  | Rented - LA/HA | 4811 | 12\% | 16 | 45 | 106 | 167 | 373 | 18 | 47 | 108 | 160 | 374 |
| Number of cars (Census comparable) | 0 | 8408 | 22\% | 35 | 87 | 70 | 141 | 308 | 37 | 90 | 64 | 138 | 316 |
|  | 1 | 15600 | 40\% | 96 | 98 | 114 | 104 | 79 | 100 | 94 | 114 | 106 | 72 |
|  | 2 | 11372 | 29\% | 146 | 110 | 97 | 70 | 6 | 142 | 113 | 101 | 67 | 9 |
|  | $3+$ | 3478 | 9\% | 127 | 107 | 119 | 80 | -- | 115 | 109 | 123 | 86 | -- |
| Marital status (Census equivalent bands) | Single | 9136 | 24\% | 62 | 111 | 84 | 121 | 160 | 67 | 110 | 84 | 111 | 168 |
|  | Married/living with partner | 23609 | 61\% | 122 | 98 | 111 | 89 | 42 | 122 | 98 | 111 | 90 | 45 |
|  | Divorced/Separated | 2933 | 8\% | 72 | 90 | 94 | 111 | 201 | 69 | 95 | 96 | 112 | 190 |
|  | Widowed | 3180 | 8\% | 70 | 91 | 71 | 110 | 262 | 62 | 95 | 68 | 129 | 233 |
| Working status for Split | Working Full Time | 20820 | 54\% | 122 | 104 | 121 | 89 | -- | 126 | 102 | 126 | 81 | -- |
|  | Working Part Time | 6341 | 16\% | 70 | 104 | 85 | 198 | -- | 64 | 105 | 70 | 197 | -- |
|  | Not Working | 11697 | 30\% | 78 | 91 | 70 | 67 | 331 | 73 | 93 | 70 | 81 | 332 |
| Income of CIE | Not asked | 3000 | 8\% | 74 | 100 | 104 | 179 | -- | 73 | 96 | 114 | 155 | 15 |
|  | Up to £3499 | 2153 | 6\% | -- | 113 | 19 | 48 | 582 | -- | 125 | 28 | 64 | 530 |
|  | £3500-£4999 | 4205 | 11\% | -- | 31 | 61 | 132 | 626 | -- | 42 | 71 | 143 | 559 |
|  | £5000-£11999 | 5523 | 14\% | 43 | 117 | 125 | 167 | -- | 53 | 98 | 113 | 163 | 50 |
|  | £12000-£19999 | 7948 | 20\% | 75 | 98 | 137 | 143 | -- | 74 | 101 | 130 | 133 | 7 |
|  | £20000-£29999 | 8361 | 22\% | 105 | 129 | 135 | 54 | -- | 116 | 122 | 130 | 58 | -- |
|  | £30000-£49999 | 5139 | 13\% | 226 | 100 | 60 | 27 | -- | 210 | 106 | 70 | 35 | -- |
|  | £50000-£69999 | 1498 | 4\% | 268 | 94 | 27 | -- | -- | 253 | 98 | 36 | 27 | -- |
|  | $£ 70000$ or more | 1031 | 3\% | 323 | 56 | -- | -- | -- | 276 | 94 | -- | -- | -- |
| Income of Respondent | Not asked | 89 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | Up to £3499 | 2612 | 7\% | 19 | 105 | 34 | 88 | 480 | 15 | 116 | 35 | 105 | 439 |
|  | £3500-£4999 | 4862 | 13\% | 11 | 33 | 66 | 157 | 542 | 10 | 43 | 74 | 166 | 483 |
|  | £5000-£11999 | 8187 | 21\% | 38 | 114 | 121 | 182 | -- | 46 | 98 | 116 | 173 | 35 |
|  | £12000-£19999 | 9536 | 25\% | 75 | 116 | 132 | 118 | -- | 77 | 118 | 127 | 108 | 7 |
|  | £20000-£29999 | 7686 | 20\% | 131 | 127 | 129 | 29 | -- | 139 | 121 | 126 | 37 | -- |
|  | £30000-£49999 | 4054 | 10\% | 273 | 80 | 49 | 11 | -- | 254 | 89 | 64 | 15 | -- |
|  | £50000-£69999 | 1121 | 3\% | 322 | 68 | -- | -- | -- | 309 | 75 | -- | -- | -- |
|  | £70000 or more | 711 | 2\% | 387 | -- | -- | -- | -- | 344 | 63 | -- | -- | -- |
| Any holidays abroad in past 3 years | Yes | 24374 | 63\% | 124 | 113 | 92 | 84 | 40 | 125 | 113 | 92 | 82 | 40 |
| Any business air trips in last 12 months | Yes | 2906 | 7\% | 251 | 94 | 39 | 21 | -- | 248 | 110 | 35 | 15 | -- |
| Informant has credit card | Yes | 18683 | 48\% | 146 | 115 | 90 | 59 | 31 | 147 | 115 | 88 | 64 | 29 |
| Informant has debit / payment card | Yes | 31250 | 80\% | 106 | 107 | 98 | 94 | 75 | 107 | 106 | 99 | 94 | 72 |
| Informant has store card | Yes | 5245 | 13\% | 141 | 120 | 75 | 66 | 43 | 134 | 124 | 69 | 75 | 45 |
| Accessed internet at home, at work, or anywhere else in the past 12 months | Yes | 30118 | 78\% | 117 | 110 | 95 | 86 | 58 | 117 | 110 | 95 | 84 | 63 |
| Informant owns mobile phone | Yes | 34502 | 92\% | 103 | 103 | 100 | 98 | 84 | 104 | 103 | 100 | 97 | 86 |
| Any savings account with a bank / building society | Yes | 25754 | 72\% | 117 | 108 | 98 | 85 | 61 | 116 | 108 | 98 | 86 | 59 |


|  |  | Weighted Total |  | Original Social Grade Index |  |  |  |  | Predicted Social Grade Index |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Category |  |  | AB | C1 | C2 | D | E | AB | C1 | C2 | D | E |
| Any unit trust / investment trust (including equity or stocks \& shares ISAs) | Yes | 4445 | 12\% | 214 | 103 | 63 | 24 | 14 | 199 | 112 | 60 | 38 | 18 |
| Any shares in the company in which he/she works | Yes | 2259 | 6\% | 210 | 104 | 59 | 38 | -- | 202 | 109 | 52 | 50 | -- |
| Any other publicly quoted stocks or shares | Yes | 4342 | 12\% | 201 | 106 | 66 | 34 | 13 | 199 | 106 | 69 | 39 | 18 |
| Any national savings including premium bonds | Yes | 5511 | 15\% | 169 | 114 | 79 | 42 | 25 | 166 | 115 | 78 | 54 | 18 |
| Personal pension | Yes | 16882 | 47\% | 148 | 108 | 99 | 63 | 16 | 145 | 111 | 94 | 68 | 22 |
| Private medical / health insurance | Yes | 5382 | 15\% | 187 | 113 | 74 | 33 | 10 | 182 | 116 | 71 | 44 | 8 |
| Acquired a new credit card | Yes | 2912 | 7\% | 159 | 113 | 88 | 53 | 16 | 158 | 116 | 91 | 52 | 15 |
| Opened a new bank/building society account (including cash ISAs) | Yes | 4497 | 12\% | 157 | 115 | 73 | 63 | 30 | 157 | 119 | 72 | 62 | 25 |
| Bought or sold any unit trusts/investment trusts/stocks \& shares/equity ISAs | Yes | 1635 | 4\% | 245 | 84 | 56 | 27 | -- | 236 | 94 | 49 | 34 | 24 |
| Arranged new or additional private life assurance | Yes | 940 | 2\% | 178 | 109 | 83 | 44 | -- | 167 | 115 | 89 | 46 | -- |
| Changed your pension arrangements | Yes | 1248 | 3\% | 206 | 109 | 65 | -- | -- | 210 | 103 | 75 | -- | -- |
| Taken out a mortgage/changed mortgage provider | Yes | 1232 | 3\% | 193 | 111 | 68 | 39 | -- | 200 | 110 | 69 | 36 | -- |
| Taken out a personal loan of $£ 5000$ or more | Yes | 697 | 2\% | 153 | 113 | 104 | -- | -- | 168 | 108 | 81 | 65 | -- |
| Watched an HD TV channel at home (e.g., Sky HD, freesat) | Yes | 12834 | 33\% | 112 | 109 | 102 | 85 | 59 | 113 | 110 | 102 | 84 | 59 |
| Used a Blu-Ray Disc player | Yes | 5653 | 15\% | 121 | 105 | 108 | 84 | 38 | 120 | 107 | 112 | 80 | 37 |
| Played console games online (e.g., Xbox 360 Live, PS3 Network) | Yes | 6770 | 17\% | 96 | 110 | 104 | 102 | 63 | 99 | 108 | 113 | 91 | 62 |
| Used Wi-Fi networks outside the home or office | Yes | 9270 | 24\% | 158 | 117 | 73 | 59 | 29 | 159 | 118 | 77 | 56 | 27 |
| Wirelessly streamed music or movies around the home | Yes | 4241 | 11\% | 132 | 120 | 90 | 67 | 31 | 144 | 119 | 84 | 65 | 28 |
| Used an e-book reader (e.g. Kindle or Sony e-book Reader) | Yes | 726 | 2\% | 183 | 118 | 67 | -- | -- | 180 | 132 | -- | -- | -- |
| Used a smartphone (e.g. Blackberry, iphone or Nokia N97) | Yes | 9944 | 26\% | 143 | 118 | 77 | 70 | 35 | 146 | 116 | 83 | 65 | 36 |
| Heavy - Weight of Listening to Commercial Radio | Yes | 3006 | 8\% | 46 | 75 | 143 | 166 | 103 | 39 | 78 | 148 | 156 | 102 |
| Medium Heavy - Weight of Listening to Commercial Radio | Yes | 1674 | 4\% | 83 | 103 | 113 | 112 | 82 | 79 | 109 | 110 | 105 | 88 |
| Medium - Weight of Listening to Commercial Radio | Yes | 2290 | 6\% | 77 | 110 | 109 | 107 | 93 | 87 | 102 | 98 | 110 | 109 |
| Light Medium - Weight of Listening to Commercial Radio | Yes | 2252 | 6\% | 95 | 108 | 98 | 107 | 75 | 105 | 102 | 93 | 107 | 73 |
| Light - Weight of Listening to Commercial Radio | Yes | 1525 | 4\% | 109 | 114 | 75 | 106 | 70 | 109 | 116 | 80 | 94 | 76 |
| None - Weight of Listening to Commercial Radio | Yes | 28111 | 72\% | 109 | 100 | 95 | 91 | 105 | 108 | 101 | 96 | 93 | 103 |


[^0]:    ${ }^{1}$ For more information about the National readership survey please see http://www.nrs.co.uk/

[^1]:    ${ }^{2}$ This included England, Wales and Scotland since the model will be applied to GB

[^2]:    ${ }^{3}$ This represents a change in definition of manager from those used in 2001 census

