# SOCIAL GRADE ALLOCATION TO THE 2011 CENSUS

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

Helen Lambert & Corrine Moy GfK NOP 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<sup>1</sup>.

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 AB, 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.

<sup>&</sup>lt;sup>1</sup> For more information about the National readership survey please see http://www.nrs.co.uk/

## 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<sup>2</sup> 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 C1. 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.

 $<sup>^{\</sup>rm 2}$  This included England, Wales and Scotland since the model will be applied to GB

## 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

	Origin	Original		ted	Origina	l	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		

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

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 s	segment
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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.

	Social Grade in NRS											
Predicted Social Grade	AB	C1	C2	D	E	DE						
AB	77.2%	12.4%	3.2%	0.6%	1.7%	1.0%						
C1	18.6%	74.0%	9.2%	5.0%	8.6%	6.4%						
C2	2.4%	6.7%	66.1%	13.7%	7.1%	11.2%						
D	1.1%	5.2%	19.0%	74.7%	17.1%	52.7%						
E	0.6%	1.7%	2.6%	6.1%	65.5%	28.8%						
DE	1.8%	6.9%	21.5%	80.5%	82.6%	81.5%						
Total	100%	100%	100%	100%	100%	100%						

**Table 1.3** Percentage of actual social grade predicted by model

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		Pre	Total N	% correctly allocated to Social Grade category						
Working Full Tim	e	AB	C1	C2	D	E					
	AB	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											
	AB	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%			

	Origin	Original		ed	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	

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

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

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ECOPUK11 = 05, 06
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## 5 - Managers

SOC Code OCC\_CURRENT / OCC\_HIST = 1115 - 1259<sup>3</sup> = 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 A\* C to degree HLQPUK11 = 12, 13, 14 or 16
- 7) Other GCSE, equivalents or below (incl. no qualifications) HLQPUK11 = 10 or 11

<sup>&</sup>lt;sup>3</sup> This represents a change in definition of manager from those used in 2001 census

#### 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 ble type	Variable description	Values and value descriptions
AGE	SV	Age of respondent on Census questionnaire <i>England &amp; Wales</i> <i>Q3: What is your date of birth?</i>	000 - 115
ECOPUK11	DVO	Economic Activity	<ul> <li>01. Economically Active (excluding Full-time Students), In Employment, Employee, Part-time</li> <li>02. Economically Active (excluding Full-time Students), In Employment, Employee, Full-time</li> <li>03. Economically Active (excluding Full-time Students), In Employment, Self-employed with employees, Part-time</li> <li>04. Economically Active (excluding Full-time Students), In Employment, Self-employed with employees, Full-time</li> <li>05. Economically Active (excluding Full-time Students), In Employment, Self-employed with employees, Part-time</li> <li>06. Economically Active (excluding Full-time Students), In Employment, Self-employed without employees, Part-time</li> <li>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</li> <li>08. Economically Active Full-time Students, In Employment, Employee, Part-time</li> <li>09. Economically Active Full-time Students, In Employment, Employee, Full-time</li> </ul>

			<ol> <li>Economically Active Full-time Students, In Employment, Self-employed with employees, Part-time</li> <li>Economically Active Full-time Students, In Employment, Self-employed with employees, Full-time</li> <li>Economically Active Full-time Students, In Employment, Self-employed without employees, Part-time</li> <li>Economically Active Full-time Students, In Employment, Self-employed without employees, Full-time</li> <li>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</li> <li>Economically Inactive, Retired</li> <li>Economically Inactive, Student</li> <li>Economically Inactive, Permanently sick/disabled</li> <li>Economically Inactive, Other</li> <li>XX. No code required</li> </ol>
EMPSTAT	SV	Employment Status <i>England &amp; Wales</i> <i>Q33: In your main job, are (were) you:</i>	<ol> <li>An employee?</li> <li>Self-employed or freelance without employees?</li> <li>Self-employed with employees?</li> </ol>
EVERWORK	SV	Have you ever worked? <i>England &amp; Wales</i> <i>Q31: Have you ever worked</i> ?	<ol> <li>Yes, write in the year that you last worked:</li> <li>No, have never worked</li> </ol>
HLQPUK11	DVO	Highest level of qualification	<ol> <li>No academic or professional qualifications (England &amp; Wales &amp; Northern Ireland)</li> <li>Level 1: 1-4 O Levels/CSE/GCSEs (any grades), Entry Level, Foundation Diploma, NVQ level 1, Foundation GNVQ, Basic/Essential Skills (England &amp; Wales &amp; Northern Ireland)</li> <li>Level 2: 5+ O Level (Passes)/CSEs (Grade 1)/GCSEs (Grades A*-C), School Certificate, 1 A Level/ 2-3 AS</li> </ol>

			<ul> <li>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 &amp; Wales &amp; Northern Ireland)</li> <li>13. Apprenticeship (England &amp; Wales &amp; Northern Ireland)</li> <li>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 &amp; Wales &amp; Northern Ireland)</li> <li>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 &amp; Wales &amp; Northern Ireland)</li> <li>16. Other: Vocational/Work-related Qualifications, Foreign Qualifications/ Qualifications gained outside the UK (NI) (Not stated/ level unknown) (England &amp; Wales &amp; Northern Ireland)</li> <li>XX. No code required</li> </ul>
HRPPUK11	DVO	Household Reference Person Indicator	<ol> <li>Not household reference person</li> <li>Household reference person</li> <li>X. No code required</li> </ol>
OCC_CURRENT	SV	Current Occupation code	Valid text responses are matched against the Standard
&		Historical Occupation code	Occupational Classification 2010 Modified Index and SOC 2010 Census structure to generate a SOC code.
OCC_HIST			
		England & Wales	
		Q34: What is (was) your full and specific job title?	
RESIDENCE_TYPE	SV	Type of residence	C. Communal Establishment
			H. Household

SUPERMAN	sv	Supervisor status	1. Yes 2. No
		England & Wales Q36: Do (did) you supervise any employees?	
TENHUK11	DVO	Household Tenure	Owned         0. Owns outright         1. Owns with a mortgage or loan         Shared ownership         2. Shared ownership         Social rented         3. Rented from council (Local Authority)         4. Other social rented         Private rented         5. Private landlord or letting agency         6. Employer of a household member         7. Relative or friend of household member         8. Other         Lives rent free         9. Lives rent free         X. No code required
URESINDPUK11		Usual residence indicator	0 Not a usual resident 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, 21 23 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)) SG = C2

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) SG = AB.

Full Time and ((SOC starts with 11, 12, 24) and (Qualifications are 'Degree level or above')) SG = AB

Full Time and ((SOC starts with 35) and (Qualifications are 'Degree level or above') and (Employment status is Selfemployed with employees) 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)) 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) SG = 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) SG = AB.

Full Time and (SOC starts with 31, 32, 33, 34, 42 or 72) SG = C1

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))) SG = C1

Full Time and ((SOC starts with 41) And Employment Status = Employees, Self Employed or Foreman/Supervisors) SG = C1.

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 SOC = 6121, 6123, 6131, 6132, 6139, 6143, 6144, 6148) SG = C1.

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 SOC = 921, 924) SG =C2.

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) SG = C1.
- 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 = C2
- 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 SOC = 8212, 8214, 8222, 8223 or 8232) SG = 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) SG = AB

- NOT Working and (SOC starts with 21, 23 or 24) SG = AB
- NOT Working and (SOC starts with 22) and SOC is NOT 2231 SG = AB
- NOT Working and (SOC is 2231) SG = C1
- 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) SG = C1

- 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) SG = C2
- 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) SG = 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

	1		Original Social Grade Index			ex	Predicted Social Grade Index						
Variable	Category	Weight	ed Total	АВ	C1	C2	D	E	АВ	C1	C2	D	E
	Mean Income		£ 18,599	176	97	89	57	19	170	100	91	58	23
		Ν	Col %										
Gender	Female	17797	46%	85	118	65	114	128	84	120	53	116	140
Gender	Male	21061	54%	113	85	130	89	77	113	83	140	87	66
	15-24	3948	10%	28	139	77	159	86	36	137	86	131	98
	25-34	6866	18%	101	101	107	102	74	113	94	101	98	87
A == ====	35-44	7453	19%	115	98	95	89	99	113	102	96	89	92
Age group	45-54	7398	19%	109	102	104	91	77	107	100	106	93	86
	55-64	5683	15%	111	93	111	97	76	109	96	107	97	79
	65+	7510	19%	104	84	98	89	173	95	87	100	106	151
	No information	1399	4%	157	86	125	64		136	87	121	82	39
	White	33761	87%	100	100	102	98	103	99	100	102	99	100
	Black	1418	4%	66	108	77	141	132	64	110	73	132	151
Ethnicity (banded x5)	Asian	1782	5%	89	99	80	141	96	103	93	83	122	102
	Mixed	311											
	Other	187											
	East Anglia	1526	4%	105	98	115	103	50	95	107	99	109	68
Standard region	East Midlands	2960	8%	87	102	104	111	94	86	102	99	120	82
	Greater London	4850	12%	112	114	82	85	86	119	106	84	85	101
	North	2004	5%	74	92	112	122	127	73	91	104	129	126
	North-west	4138	11%	85	108	94	92	139	92	107	92	94	132
	Scotland	3441	9%	86	97	91	116	137	92	93	102	108	124
, , , , , , , , , , , , , , , , , , ,	South-East	7638	20%	133	95	98	84	63	126	101	103	82	61
	South-West	3456	9%	96	100	113	91	98	97	98	116	88	110
	Wales	2018	5%	87	94	93	119	133	85	88	99	122	133
	West midlands	3413	9%	95	95	110	110	88	93	96	104	109	102
	Yorkshire and	3414	9%	82	94	109	113	124	83	100	104	112	106
	Humberside		0,0			100							
	higher managerial occupations	1688	4%	372	40				333	78			
	occupation	2995	8%	361	42				389	32			
	Lower managerial and professional occupations	9108	23%	189	166	19	5	5	196	164	16	13	
	Intermediate occupations	4273	11%	29	238	60	37	22	23	261	39	41	
Nesoca	Small employers and own account workers	3653	9%	59	93	202	84	36	48	85	249	76	
1155500	Lower supervisory and technical occupations	3152	8%		47	364	61	23		16	348	127	13
	Semi-routine	5319	14%		41	146	306	39		36	136	296	22
	Routine occupations	4084	11%			160	331	77			183	292	51
	Never worked and long- term unemployed	3032	8%		19	26	44	928		13	20	46	1,060
	Full-time students	1067	3%		318					330			
	Not classifiable for other	487	1%		80		126	364		175			571
	Missing	1601	4%	137	89	116	87	29	117	95	113	88	69
Qualification (census equivalent bands)	Degree or above	10646	27%	255	96	24	27	14	265	91	28	28	15
	5+ GCSEs A*-C up to degree	15836	41%	44	125	156	83	71	43	124	149	95	67

					Original Social Grade Index				Pre	Predicted Social Grade Index			
Variable	Category	Weight	ed Total	АВ	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
	1	9005	23%	71	92	75	102	262	71	92	77	105	259
Number of Adults (census	2	19734	51%	122	98	109	84	62	123	97	106	87	61
comparable)	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
	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
Tenure (census comparable)	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
	0	8408	22%	35	87	70	141	308	37	90	64	138	316
Number of cars (Census	1	15600	40%	96	98	114	104	79	100	94	114	106	72
comparable)	2	11372	29%	146	110	97	70	6	142	113	101	67	9
	3+	3478	9%	127	107	119	80		115	109	123	86	
	Single	9136	24%	62	111	84	121	160	67	110	84	111	168
Marital status (Census	Married/living with partner	23609	61%	122	98	111	89	42	122	98	111	90	45
equivalent bands)	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 Full Time	20820	54%	122	104	121	89		126	102	126	81	
Working status for Split	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
	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
Income of CIE	£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			
	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
Income of Respondent	£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

				Original Social Grade Index					Predicted Social Grade Index				
Variable	Category	Weight	ed Total	АВ	C1	C2	D	E	AB	C1	C2	D	Е
Any unit trust / investment trust (including equity or stocks & amp; 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