





RSU036 - 2011 Census Imputation Flags for NILS

Although full completion of the Census form is a statutory requirement, it is recognised that some Census forms will not be fully completed for all questions, and it is impractical to return to each household to insist upon full completion.

A system was used in 2011, similar to that in 2001, to impute responses to omitted questions in otherwise complete Census forms. This was developed and applied to all questions, with the exception of religion, although it was applied to the derived variable of community background. Respondents who answered inconsistently or answered incorrectly had their response edited.

In addition to completing incomplete returns through item imputation, additional people were imputed, sometimes within existing households, and this may have affected household composition/relationship variables.

In addition, a small (undisclosed) percentage of the households had their records on the output database slightly modified by random record swapping. This means that a sample of records was 'swapped' with similar records in other geographical areas.

Imputation flags have been created for a number of person and household variables for the NILS. These compare the original scanned response with the basic edit checks completed (initial extract) to the final census database that was used for published outputs and for the NILS variables. For a small number of variables the edit checks were completed after the initial extract which may result in a higher level of 'edit/imputation'.

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Levels of imputation for person records (including NILS and other NILS household members) and household records (households with at least 1 NILS member) are given in the following table:

Person Table	Imputed/Edited/Mis sing	Not Imputed/Not Edited/Not Missing	Records	Imputed/Edited /Missing rate
Age Imputation Indicator	47,027	1,028,535	1,075,562	4%
Available for work Imputation				
Indicator	26,854	1,048,708	1,075,562	2%
Care Imputation Indicator	83,931	991,631	1,075,562	8%
Country of Birth - Flat Imputation Indicator	55,917	1,019,645	1,075,562	5%
Country of Workplace/Study Imputation Indicator	86,714	988,848	1,075,562	8%
Country one year ago - Hierarchy Imputation Indicator	2,549	1,073,013	1,075,562	0%
Disability Imputation Indicator	74,911	1,000,651	1,075,562	7%
Employment - In work Imputation Indicator	46,745	1,028,817	1,075,562	4%
Employment Status Imputation Indicator	56,213	1,019,349	1,075,562	5%
Ever worked Imputation Indicator	92,725	982,837	1,075,562	9%
Health Imputation Indicator	62,422	1,013,140	1,075,562	6%
Hours worked Imputation Indicator	58,652	1,016,910	1,075,562	5%
Industry of work Imputation Indicator	633	1,074,929	1,075,562	0%
Intention to stay Imputation Indicator	30,263	1,045,299	1,075,562	3%
Language Proficiency Imputation Indicator ¹	332,299	743,263	1,075,562	31%
Looking for work Imputation Indicator	50,242	1,025,320	1,075,562	5%
Main Language Imputation Indicator	63,181	1,012,381	1,075,562	6%
Marital Status Imputation Indicator	94,711	980,851	1,075,562	9%
Method of travel to workplace/study Imputation Indicator ²	196,497	879,065	1,075,562	18%

¹ & ² & ³ Filter questions

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Person Table	Imputed/Edited/Mis sing	Not Imputed/Not Edited/Not Missing	Records	Imputed/Edited /Missing rate
National Identity - Country Imputation Indicator	3,549	1,072,013	1,075,562	0%
Passports Held - Hierarchy Imputation Indicator	3,095	1,072,467	1,075,562	0%
Passports Imputation Indicator	69,959	1,005,603	1,075,562	7%
Residence Type (HH or CE) Imputation Indicator	45,550	1,030,012	1,075,562	4%
Sex Imputation Indicator	45,302	1,030,260	1,075,562	4%
Student Indicator Imputation Indicator	87,277	988,285	1,075,562	8%
Term-time Indicator Imputation Indicator	70,465	1,005,097	1,075,562	7%
UK National Identity Imputation Indicator	67,528	1,008,034	1,075,562	6%
Waiting to start a job already received Imputation Indicator	23,600	1,051,962	1,075,562	2%
Workplace/Study Indicator Imputation Indicator ³	467,722	607,840	1,075,562	43%
Year last worked Imputation Indicator	63,410	1,012,152	1,075,562	6%
Year of arrival Imputation Indicator	17,972	1,057,590	1,075,562	2%
Qualifications Level 1 Imputation Indicator	65,623	1,009,939	1,075,562	6%
Qualifications Level 2 Imputation Indicator	65,597	1,009,965	1,075,562	6%
Qualifications Level 3 Imputation Indicator	65,630	1,009,932	1,075,562	6%
Qualifications Level 4 Imputation Indicator	65,609	1,009,953	1,075,562	6%
Qualifications Level 5 Imputation Indicator	65,589	1,009,973	1,075,562	6%
Qualifications Level 6 Imputation Indicator	65,606	1,009,956	1,075,562	6%

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Person Table	Imputed/Edited/Mis sing	Not Imputed/Not Edited/Not Missing	Records	Imputed/Edited /Missing rate
Qualifications Level 7 Imputation Indicator	65,597	1,009,965	1,075,562	6%
Qualifications Level 8 Imputation Indicator	65,604	1,009,958	1,075,562	6%
Qualifications Level 9 Imputation Indicator	65,592	1,009,970	1,075,562	6%
Qualifications Level 10 Imputation Indicator	65,604	1,009,958	1,075,562	6%
Qualifications Level 11 Imputation Indicator	65,602	1,009,960	1,075,562	6%
Qualifications Level 12 Imputation Indicator	80,206	995,356	1,075,562	7%
Qualifications Level 13 Imputation Indicator	67,649	1,007,913	1,075,562	6%

Household Table	Imputed/Edited/Mis sing	Not Imputed/Not Edited/Not Missing	Records	Imputed/Edited /Missing rate
Accommodation Type Imputation				
Indicator	7,999	341,652	349,651	2%
H11 - Central Heating Summary				
Imputation Indicator	6,034	343,617	349,651	2%
Landlord Imputation Indicator	7,859	341,792	349,651	2%
Number of Cars or Vans Imputation				
Indicator	8,056	341,595	349,651	2%
Number of Rooms Imputation				
Indicator	7,677	341,974	349,651	2%
Self Contained Imputation Indicator	7,752	341,899	349,651	2%
Tenure Imputation Indicator	8,323	341,328	349,651	2%

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