





2006 Census birth cohort SURF

http://www.stats.govt.nz/tools_and_services/university-students/2006-census-birth-cohort.aspx

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Data summary

- 10,000 observations (synthesized newborn children)
- 29 variables 20 categorical and nine numeric variables

NOTE: This is a <u>large</u> data set suitable for exploratory use with Achievement Standards 91035 (1.10), 91036 (1.11), 91264 (2.9), 91581 (3.9) and 91582 (3.10)

BACKGROUND ON DATA SET

Synthetic unit-record files (SURF)

This data set ...

- contains 10,000 records on the newborn child, their household and their mother and father (if applicable).
- is based on data for 10,000 randomly selected <u>newborns</u> (aged 0 years) and their parents from the 2006 Census of Population and Dwellings
- represents approximately 19% of all families with newborns in the 2006 Census
- was created by Centre of Methods and Policy Application in the Social Sciences (COMPASS) at the University of Auckland with the support of a grant from the Ministry of Business, Innovation and Employment.
- NOTE: This synthetic data should NOT be used as a source of accurate statistical information, but is <u>largely realistic</u>. Key statistical measures such as mean and variance are similar to those in the real data. Relationships between the variables and the distributions of each variable also imitate the real data.
- Some variables from original 2006 Census birth cohort SURF has been recoded for use in iNZight – see below for details.
- Details of the variables included in this iNZight version of the 2006 Census birth cohort SURF are on the following pages.

VARIABLES

The 2006 Census birth cohort SURF contains the following variables:

The 2006 Census birth Variable name	Variable	Code	Description
	type		
random_ID	ID number		
Ch_gender	Categorical	male female	Gender of newborn child
Deprivation	Categorical	Scale from 1 to 10	NZDep2006 Deprivation index decile from 1 (least deprived) to 10 (most deprived)**
M_age	Numerical	n/a	Mother's age in years
M_work	Categorical	full_time part_time unemployed not in LF	Mother employed full time Mother employed part time Mother unemployed Mother not in the labour force
F_age	Numerical		Father's age in years
F_work	Categorical	full_time part_time unemployed not in LF	Father employed full time Father employed part time Father unemployed Father not in the labour force
No_bedrooms	Numerical		Number of bedrooms in the child's main dwelling
M_years_current_addr	Numerical		Number of years mother has lived at the current address
M_owns_residence	Categorical	owns not_owned	Mother owns usual residence Mother does not own usual residence
M_education	Categorical	none level_1 level_2_3 level_4 diploma degree post_grad	Mother's highest qualification: none Level 1 certificate Level 2 or 3 certificate Level 4 certificate Level 5 or 6 diploma Bachelor degree Post graduate degree including honours, masters, doctorate degrees
M_work_hours	Numerical		Mother's total hours in work per week
M_smoke	Categorical	smoker ex_smoker never	Mother is: a smoker an ex smoker has never smoked
F_years_current_addr	Numerical		Number of years father has lived at the current address
F_owns_residence	Categorical	owns not_owned	Father owns usual residence Father does not own usual residence
F_education	Categorical	none level_1 level_2_3 level_4 diploma degree post_grad	Father's highest qualification: none Level 1 certificate Level 2 or 3 certificate Level 4 certificate Level 5 or 6 diploma Bachelor degree Post graduate degree including honours, masters, doctorate degrees
F_work_hours	Numerical		Father's total hours in work per week
F_smoke	Categorical	smoker ex_smoker never	Father is: a smoker an ex smoker has never smoked
Cellphone	Categorical	cellphone none	Access to a cellphone No access to a cellphone
Landline	Categorical	landline none	Access to a landline telephone No access to a landline telephone

Variable name	Variable type	Code	Description
Internet	Categorical	internet none	Access to the internet No access to the internet
Hhld_income_cat	Categorical	1 2 3 4 5 6 7 8 9 10 11 12 13 14	Total annual gross income for the household Loss Zero Income \$1 - \$5,000 \$5,001 - \$10,000 \$10,001 - \$15,000 \$15,001 - \$20,000 \$20,001 - \$20,000 \$20,001 - \$25,000 \$25,001 - \$30,000 \$30,001 - \$35,000 \$35,001 - \$40,000 \$40,001 - \$50,000 \$50,001 - \$70,000 \$70,001 - \$100,000 \$100,001 or more
Hhld_income_value	Numerical		Total annual gross income for the household (taken from middle of income categories above)Income categoryIncome value1 Loss \rightarrow NA2 Zero Income \Rightarrow \$03 \$1 - \$5,000 \Rightarrow \$2,5004 \$5,001 - \$10,000 \Rightarrow \$7,5005 \$10,001 - \$15,000 \Rightarrow \$12,5006 \$15,001 - \$20,000 \Rightarrow \$17,5007 \$20,001 - \$25,000 \Rightarrow \$22,5008 \$25,001 - \$30,000 \Rightarrow \$27,5009 \$30,001 - \$35,000 \Rightarrow \$32,50010 \$35,001 - \$40,000 \Rightarrow \$45,00012 \$50,001 - \$70,000 \Rightarrow \$85,00014 \$100,001 or More \Rightarrow \$10,000
No_usual_resdnt	Numerical		Usual number of residents in the household
Parents	Categorical	two mother father	Two parent family Single mother family Single father family
Ch_Ethnicity	Categorical	Maori Pacific Asian MELAA Other NZ European	Ethnicity of newborn child**
M_Ethnicity	Categorical	Maori Pacific Asian MELAA Other NZ European	Ethnicity of mother**
F_Ethnicity	Categorical	Maori Pacific Asian MELAA Other NZ European	Ethnicity of father**
M_benefit	Categorical	benefit none	Mother receives government benefit Mother does not receive government benefit
F_benefit	Categorical	benefit none	Father does not receive government benefit Father does not receive government benefit

Interpreting the variables

Deprivation

http://www.health.govt.nz/publication/nzdep2006-index-deprivation

The **Deprivation** variable is based on the NZDep2006 index of socioeconomic deprivation calculated by researchers from the Department of Public Health, University of Otago, Wellington (UOW). NZDep2006 combines nine variables from the 2006 Census which reflect eight dimensions of deprivation. In this SURF, NZDep2006 is an ordinal score between 1 and 10 <u>where 1 represents</u> areas with the least deprived scores and 10 the areas with the most deprived scores. NZDep2006 is a decile rating (divides New Zealand into tenths of the distribution), and applies to geographical areas rather than individual people.

Ethnicity

A newborn child's ethnicity response is decided by whoever completes their census form. Please note that ethnicity is different from nationality or race.

People can identify with multiple ethnicities in the census and up to six are recorded in the original SURF. These have been collapsed to one **Ethnicity** variable using the Ministry of Education priority reporting for student ethnicity system (<u>http://www.educationcounts.govt.nz/data-services/collecting-information/code_sets/ethnic_group_codes</u>). The MoE priority order of ethnicities is

- 1. Maori
- 2. Pacific
- 3. Asian
- 4. MELAA (Middle Eastern, Latin American, African)
- 5. Other
- 6. NZ European

This method of reducing ethnicity is unlikely to result in a variable that represents the ethnic diversity and structure of the New Zealand population. For further details see: <u>http://www.stats.govt.nz/browse_for_stats/population/census_counts/review-measurement-of-ethnicity/~/media/Statistics/browse-categories/population/census-counts/review-measurement-ethnicity/understanding-working-ethnicity-data.pdf</u>

Income, benefits, and labour force status

The labour force status variables (**M_work** and **F_work**) are based on official classifications, and may not align with rules for benefits or typical expectations. The census counts someone of working age (15 years and older) as employed if they worked for at least one hour in the reference week (ending 5 March 2006). This work could have been for pay or profit, or without pay if for a family-owned farm or business.

See the census definitions for more information. This is the same official definition used in the Household Labour Force Survey (HLFS). For example: an unemployment beneficiary could be working a few hours a week, and therefore classified as employed by the census.

See Key differences between the officially unemployed, registered job seekers and recipients of Unemployment Benefits for a comparison of our official definitions and criteria used by the Ministry of Social Development.

Parents

The dataset contains information about the parents of each newborn. If there is only one parent, information on the first or second parent will be missing in the dataset. The information on a parent may not be the biological parent, but a grandparent, foster parent, or other person. This information can be found in the original SURF dataset if needed.