Scotland's Census 2021 Outputs Strategy





What is Scotland's Census?

- It's unique! A household survey of everyone in Scotland, every ten years
- Paints a picture of the characteristics of our population
- Planning is well underway for 2021
- It's a huge exercise
- We have one chance to get it right!





The 2011 Census

- Demographics
- Health
- Housing and Accommodation As a householder, you have a legal duty to fill the will keep it confidential is Protected.
 Housing and Accommodation As a householder, you have a legal duty to fill the will keep it confidential is Protected.
- Migration
- Education
- Labour Market







Users of the data

Wide variety of users:

- Councils (e.g. education, transport and equality monitoring)
- Health service
- Charity/ third sector
- Commercial / private sector
- Government
- Parliament
- Research
- Media
- Public







Key Timings for 2021 Census

- 2018 NRS recommends questions to parliament
- 2019 Census rehearsal
- 2021 Census
- 2022 First outputs from census
- We will continue to engage with users throughout this process





Background to today's event

- Builds on previous engagement work including the June 2017 statistical disclosure control and outputs event which explored:
 - The proposed changes to the statistical disclosure control methodology for 2021 in detail,
 - The potential uses and functionality of a flexible table builder
 - The potential changes to the census website
- Also linked to stakeholder engagement work on question development, as changes to outputs may impact on question design.





Introduction

- NRS have recently published the strategy for the dissemination of statistical outputs from the 2021 Census
- The strategy for 2021 is similar to 2011, but we will highlight and discuss the key differences during this event
- The document will be developed following stakeholder engagement and feedback
- This will support the production of outputs to meet user requirements





Summary of strategy

- The strategy covers the following elements:
- Data Confidentiality
- UK harmonisation
- Meeting user needs
- Dissemination
- Flexible table builder
- Proposed release schedule





Data Confidentiality

- There is a legal requirement to protect statistical confidentiality
- We are planning to use a combination of targeted record swapping (used in 2011) and cell key perturbation (new for 2021)
- For more information see the presentation from our June 2017 SDC and outputs event or speak to us





UK Harmonisation

- UK National Statistician, Registrar General for Scotland and Registrar General for Northern Ireland released a 'Statement of Agreement' in October 2015 on the conduct of the 2021 censuses.
- This recognised that census outputs should constitute consistent, coherent and accessible statistics for the UK and individual countries.
- We continue to work on this with ONS and NISRA and are looking into making UK data more readily available, possibly through the use of an API.





Dissemination

- The website will be the main platform for results dissemination and will be redesigned to make it more user friendly
- Metadata will be incorporated into all outputs
- The number of standard tables will be reduced (change from 2011)
- A flexible table builder to allow users to create their own tables (new for 2021)
- Change in the order outputs are released as a result of the introduction of the flexible table builder and the cell key perturbation.





Any Questions?



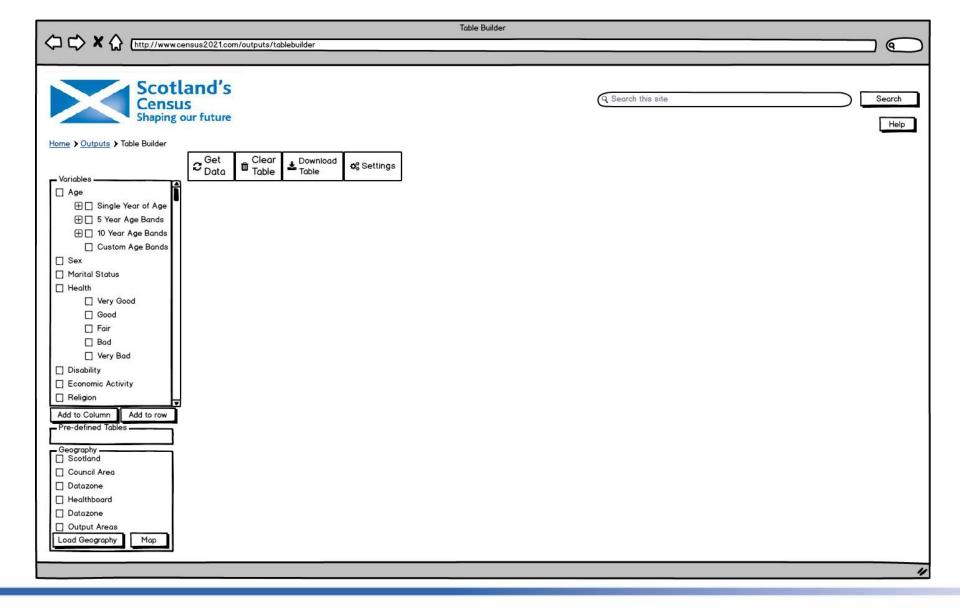


Flexible Table Builder

- Allows users to create their own tables
- Demonstrated at the event in June 2017
- Reduce the need for standard tables and commissioned requests.
- We will still have a commissioned table service for things that cannot be created using the flexible table builder











Scotland's Q Search this site Census Shaping our future Home > Outputs > Table Builder $oldsymbol{s}_{\mathsf{Data}}^{\mathsf{Get}}$ Clear Download Table 🕫 Settings Table Cell count: 90 Maximum table size: 5,000,000 cells Health (?) 🕀 🗌 Single Year of Age Total Very Good Good Fair Bad Very Bad 🕀 🗹 5 Year Age Bands Age ⑦ Total 🕀 🗌 10 Year Age Bands 0 to 4 5 to 9

Table Builder

Custom Age Bands Sex 10 to 14 Marital Status 15 to 19 20 to 24 🗹 Health 25 to 29 🗹 Very Good 30 to 34 Good 35 to 39 🗹 Fair 40 to 44 🗹 Bad 45 to 49 🗹 Very Bad 50 to 54 🗌 Disability 55 to 59 Economic Activity 60 to 64 65 to 69 Religion 70 to 74 Ethnicity 75 to 79 Add to row Add to Column 80 to 84 85 and over Geography Scotland Metadata - Age Council Area Metadata - Health Datazone Healthboard Datazone



Map

Output Areas

Load Geography

Variables

🗌 Age

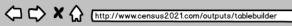




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Search

Help



Scotland's Census Shaping our future



Q Search this site

Search Help

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Home > Outputs > Table Builder

□ Age		1			^		
⊕ ☐ Single Year of Age				Health	-		
	~	Total	Very Good	Good	Fair	Bad	Very Bad
⊕	-	222793	120881	69997	23263	6696	1956
	0 to 4	11512	9428	1890	157	23	14
Custom Age Bands	5 to 9	9172	7760	1255	133	20	4
Sex	10 to 14	9401	7839	1360	165	22	15
Marital Status	15 to 19	14692	11085	3111	423	64	9
☑ Health	20 to 24	23207	15884	6337	822	132	32
🗹 Very Good	25 to 29	21216	13950	6197	891	156	22
Good	30 to 34	17037	10667	5155	940	217	58
🗹 Fair	35 to 39	14742	8452	4860	1032	324	74
🗹 Bad	40 to 44	14831	7935	5081	1292	418	105
Very Bad	45 to 49 50 to 54	15405	7460	5746	1514	537	148
	50 to 54	14302	6306	5435	1790	590	181
C Economic Activity	60 to 64	12791	4863	5096	1876	745	211
-	65 to 69	12454	3766	5363	2309	767 537	249
	70 to 74	8526 7716	2173	3780	1838	537	198 152
Ethnicity	75 to 79	6694	1614 923	3436 2777	1988 2228	526	152
Add to Column Add to row	80 to 84	4986	503	1853	1913	558	180
	85 and over	4968	273	1055	1913	474	159
Geography Scotland Metadata -		4109	2/3	1205	1952	4/4	145
Council Area Metadata -							
Datazone							
Healthboard							
Datazone							
Output Areas							





Standard Tables for 2021

- Aiming to produce less in 2021 as users will be able to create their own tables
- Aim to produce standard tables for most output variables by age and sex
- Small number of other cross tabulations
- Over 400 standard tables in 2011





Discussion

- Will this meet your needs?
- Are there any other tables you would like to be produced as standard?
- Will the reduction in standard tables have a significant impact on your work?





Release Schedule

Date	Торіс
March 2022	First release: Summary population tables by age, sex and Council Area
Autumn 2022	Unrounded and unperturbed population statistics by a range of topics and council area
Winter 2022/23	Predefined tables by topic, age and sex for all unchanged/largely unchanged questions for all standard geographies to output area
March 2023	Final predefined outputs for new questions by topic, age and sex for all standard geographies down to output area
Autumn 2023	Microdata and origin destination data
2024	Workplace and daytime populations

Exact timings and content subject to statistical disclosure control and UK harmonisation considerations





What's the same?

- Still have first release of rounded population by age and sex at council area
- Provide standard tables on the Scotland's Census website
- Provide commissioned table service
- Still provide specialist products such as microdata





What's changing?

- 2011: Univariate then multivariate tables
- 2021: Univariate and multivariate tables at the same time
- Allow users to create their own tables





What's still under consideration?

- Exact timings of releases and UK harmonisation
- Statistical Disclosure Control (SDC) The details of the SDC methodology are still being evaluated





Discussion

- Will the order and timing meet your needs?
- Are there any specific items whose priority you think should be changed?
- Do you anticipate any timing issues with respect to your organisations needs?





Variable Breakdowns

- In 2011 output responses were largely based on tick boxes
- In 2021 look at the size of responses within the write in box
- Propose a threshold (say 5,000, though this will vary by variable) for the minimum number of responses and include categories above this threshold that pass disclosure constraints.
- Some responses may be grouped together depending on conversations with the relevant stakeholder groups





Language

Languaç	ge (Flat) 👔 🛿 🕻	All people aged 3 and over	English only	Gaelic	Scots	British Sign Language	Polish	Other
	Age ‡ () Σ €	\$	\$	A W	*	\$	*	-
	Total	5,118,223	4,740,547	24,974	55,817	12,533	54,186	230,166





All people aged 3 and over	5,118,223
English only	4,740,547
Scots	55,817
Polish	54,186
Gaelic	24,974
Urdu	23,394
Punjabi (Not otherwise specified)	23,150
Chinese (Not otherwise specified)	16,830
French	14,623
British Sign Language	12,533
German	11,317
Spanish	10,556
Arabic	9,097
Italian	8,252
Cantonese	7,486
Russian	6,001
Other languages	99,460





Ethnic Group

Ethnicity	All people	White	White: Scottish	White: Other British	White: Irish	White: Gypsy/Travel ler	White: Polish	White: Other White	Mixed or multiple ethnic groups
Scotland	5295403	5084407	4445678	417109	54090	4212	61201	102117	19815
	Asian, Asian Scottish or Asian British	Scottish or Asian British: Pakistani,	Scottish or Asian British:	Asian, Asian Scottish or Asian British: Bangladeshi, Bangladeshi Scottish or Bangladeshi British	Scottish or Asian British: Chinese, Chinese Scottish or	Asian, Asian Scottish or Asian British: Other Asian	African	African: African, African Scottish or African British	African: Other African
	140678	49381	32706	3788	33706	21097	29638	29186	452
	Caribbean or Black	Caribbean or Black: Caribbean, Caribbean Scottish or Caribbean British	Caribbean or Black: Black, Black Scottish or Black British	Other Caribbean	Other ethnic groups	Arah Arah	Other ethnic groups: Other ethnic group		
	6540	3430	2380	730	14325	9366	4959		





Proposed Breakdown of Other White

5,084,407 4,445,678
4,445,678
417,109
54,090
4,212
61,201
102,117
28,403
11,210
10,291
8,606
5,901
5,466
32,240
-





Religion

Scottish Council Area 2011 🚺 🚦	<u>Scotland</u>
Religion (Scotland) 👔 🌲 🚦	\$
All people	5,295,403
Church of Scotland	1,717,871
Roman Catholic	841,053
Other Christian	291,275
Buddhist	12,795
Hindu	16,379
Jewish	5,887
Muslim	76,737
Sikh	9,055
Other religion	15,196
Not stated	368,039
No religion	1,941,116





Church of Scotland	1,717,871	Other Religions	136,049
Roman Catholic	841,053	Muslim (Islam)	76,737
Other Christian (including Christian related)	291,275	Hindu ²	16,327
Church of England	66,717	Buddhist	12,795
Christian	36,208	Sikh	9.055
Baptist	26,224	Jewish	5,887
Episcopalian	21,289	Pagan	3,467
Protestant	16,609	Spiritualist	3,396
Evangelical	13,229	Mixed Religion	1,774
Pentecostal	12,357	Wicca	949
Methodist	10,979	Spiritual	799
Free Church of Scotland	10,896	Baha'l	459
Jehovah's Witness	8,543	Taoist	326
Scottish Episcopal Church	8,048	Druid	245
Orthodox Church	6,057	Rastafarian	220
Brethren	5,583	Believe in God	216
Church of Jesus Christ of Latter Day Saints (Mormons)	4,651	Scientology	188
Anglican	4,490	Satanism	171
Salvation Army	4,100	Own belief system	152
Presbyterian	3,553	Heathen	150
Non Denominational	2,872	Pantheism	135
Lutheran	2,184	Chinese religion	123
Congregational Church	2,078	Ravidassia	108
United Reform Church	2,021	Jain	106
Church of Ireland	2,020	Shamanism	92
Independent	1,933	Zoroastrian	86
Church	1,909	Witchcraft	81
United Free Church of Scotland	1,514	Deist	74
Greek Orthodox	1,502	Universalist	73
Religious Society of Friends (Quakers)	1,339	Occult	67
Free Presbyterian	1,197	New Age	66
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Religion category	Scotland
All people	5,295,403
Church of Scotland	1,717,871
Roman Catholic	841,053
Other Christian (including Christian related)	291,275
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Sikh	9,055
Jewish	5,887
Other Religions	15,248
No Religion	1,941,116
Religion Not Stated	368,039





Possible Groupings

Pagan	5,194	Episcopalian	29,337
Pagan	3,467	Episcopalian	21,289
Wicca	949	Scottish Episcopal Church	8,048
Druid	245	Presbyterian	5,289
Heathen	150	Presbyterian	3,553
Pantheism	135	Free Presbyterian Evangelical Presbyterian Church	1,197 313
Shamanism	92	Free Presbyterian Church of Scotland	132
Witchcraft	81	Reformed Presbyterian Church	57
Animism	44	Free Presbyterian Church of Ulster Scottish Presbyterianism	14 12
Reconstructionist	31	Presbyterian Church in Ireland	11





Finally

- Thank you for all your contributions today
- If you have any further questions, please speak to us or email <u>scotlandscensus@nrscotland.gov.uk</u>



