



### 2011 Geographies for 2011 Census data in Bristol

#### 1. Background

As part of the 2011 Census, the Office for National Statistics have provided new 2011 boundaries for the analysis of Census data. The smallest geographical units are Output Areas (OAs). Output Areas are built from postcodes and comprise of a minimum of 40 resident households and 100 residents.

Lower Super Output Areas (LSOAs) were produced in 2004 to improve the reporting of small area statistics and are built up from groups of Output Areas. Lower Super Output Areas can also be aggregated to Middle Super Output Areas and to Local Authorities. In Bristol Output Areas and Lower Super Output Areas currently fit to our ward boundaries, although this is not the case in all local authorities.

#### 2. Modification of boundaries in England and Wales

Enabling comparison of data over time was a central aim of ONS in producing 2011 Census boundaries. Some modification of the previous Output Areas and Super Output Areas has taken place where significant population size changes have occurred since 2001. However, the total changes across the OA hierarchy are estimated to be no more than five per cent overall.

Geography	Population			Number of households		
	Average	Minimum	Maximum	Average	Minimum	Maximum
OAs	310	100	625	130	40	250
LSOAs	1,600	1,000	3,000	650	400	1,200
MSOAs	7,700	5,000	15,000	3,200	2,000	6,000

## Table 1: Population and household minimum/maximum thresholds for geographies in England and Wales

Changes in OA and SOA boundaries for the 2011 Census have taken place when:

- significant population change has occurred since the 2001 Census;
- local authority boundaries have changed between 2003 and 2011;
- OA boundaries have been realigned to the England/Scotland border;

areas have been independently assessed as lacking social homogeneity.

Table 1 shows the thresholds used to determine whether the boundaries should be amended for use with 2011 data.

#### 3. 2011 Geographies in Bristol

As a result of boundary modifications, Bristol Local Authority has more OAs, LSOAs and MSOAs in 2011 than in 2001 (see Table 2). The majority of the boundary changes were due to an increase in the size of Bristol's population since 2001 and hence the need to split areas. In addition, six LSOAs and two OAs in Bristol were revised to better reflect the social profile of communities. Two OAs were merged to create one combined OA – this was where the demolition of a block of flats had taken place since 2001.

## Table 2: Changes to Output Areas (OAs), Lower Super Output Areas (LSOAs) and Middle Super Output Areas (MSOAs) in Bristol since 2001

Geography	2001	2011	Reason for changes
OAs	1,297	1,368	34 OAs split to create 105 new OAs 2 OAs merged to create 1 new OA 2 OA boundaries revised
LSOAs	252	263	8 LSOAs split to create 19 new LSOAs 6 LSOA boundaries revised
MSOAs	53	55	2 MSOAs split to create 4 new MSOAs

All newly created boundaries have new codes, and local names have been assigned to the new 2011 LSOAs and 2011 MSOAs (OAs do not have local names). A full list of the changes to LSOA boundaries is available in Appendix 1 and Appendix 2. For a list of changes to Output Area boundaries please refer to the Bristol Census web page.

#### 4. Impact on data time series of geography changes

The minimal changes made to statistical boundaries ensure that making comparisons over time at the small area geography level is still possible. To make comparisons with 2001 Census statistics the method to use is as follows:

- where areas have been split into several new areas since 2001, the 2011 data for the new areas should be aggregated to match the 2001 boundary;
- where areas have been merged into a new area since 2001, the 2001 data for the old areas should be aggregated to match the 2011 boundary;
- where boundaries have been changed to take account of the social profile, both the 2001 and the 2011 data should be aggregated to match the common outer boundary.

A file is available on request which shows the aggregations required to analyse change over time by LSOA in Bristol.

#### 5. Geography codes and naming conventions

All ONS geographies have unique nine character codes. All codes consist of a simple nine character alphanumeric structure; the first three characters represent the area type (eg E01 = LSOAs in England) and the following six characters represent the specific area instance.

Geography type	Geography ID	Range of codes in Bristol	Note
Output Area	E00	E00073143 to E00174333	Not in sequential order
LSOA	E01	E01014485 to E01033370	Not in sequential order
MSOA	E02	E02003012 to E02006890	Not in sequential order
Ward	E05	E05001972 to E05002006	Wards coded in correct sequence for sorting
Local Authority	E06	E06000023	This is the code for Bristol LA

#### Table 3: Geography References in Bristol

Table 3 summarises the codes for geographies in Bristol local authority. Any areas that have changed since 2001 will have a new code which will be out of sequence with the unchanged geographies. For example in St Pauls LSOA E01014490 has been deleted and the three new LSOAs that make up the area in 2011 are E01033347, E01033348 and E01033366. Care should be taken when using these codes.

#### 6. Geography products available

A number of geography reference data products, alongside the relevant stage of 2011 Census statistics release are available. These include:

- digital boundaries of the modified Output Areas, Lower Super Output Areas, Middle Super Output Areas and new Workplace Zones. Boundaries are freely available under the terms of the Open Government Licence;
- lookups between the 2001 and 2011 geographies where they have changed;
- lookups between OAs, postcodes and a number of census output geographies.

#### 7. Useful links

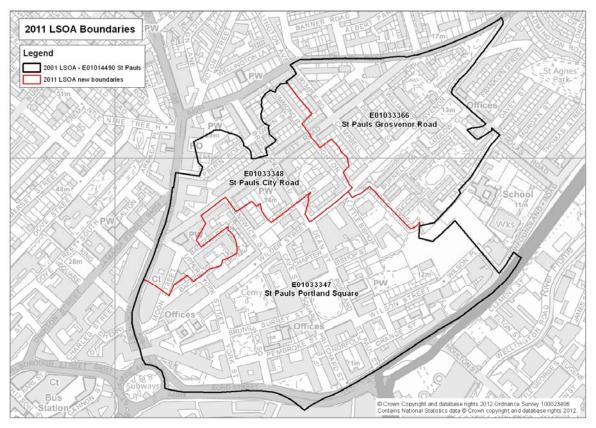
Office for National Statistics geography pages

Jayne Mills, Bristol City Council, November 2012

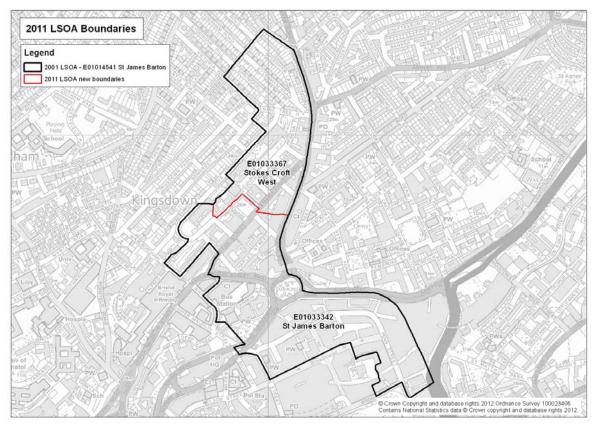
### Appendix 1: Lower Super Output Area boundary splits

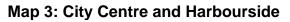
Date	LSOA Ref	ONS Name	Local name	
2001	E01014490	Bristol 023E	St Pauls	
NEW 2011	E01033347	Bristol 023F	St Pauls Portland Square	
	E01033348	Bristol 023G	St Pauls City Road	
	E01033366	Bristol 023H	St Pauls Grosvenor Road	
2001	E01014541	Bristol 025B	St James Barton	
NEW 2011	E01033342	Bristol 025E	St James Barton	
	E01033367	Bristol 025F	Stokes Croft West	
2001	E01014543	Bristol 032D	City Centre and Harbourside	
	E01033344	Bristol 032E	Brandon Hill	
NEW 2011	E01033345	Bristol 032F	The Centre	
	E01033350	Bristol 032G	Spike Island	
2001	E01014697	Bristol 039D	Bedminster	
NEW 2011	E01033359	Bristol 039E	Bedminster East	
	E01033361	Bristol 039F	Bedminster West	
2001	E01014503	Bristol 039C	West Street	
NEW 2011	E01033362	Bristol 039G	West Street East	
	E01033364	Bristol 039H	West Street West	
2001	E01014652	Bristol 031A	Redcliffe	
NEW 2011	E01033355	Bristol 054C	Redcliffe North	
	E01033370	Bristol 054E	Redcliffe South	
2001	E01014656	Bristol 031C	Old Market and the Dings	
NEW 2011	E01033352	Bristol 054A	The Dings	
	E01033353	Bristol 054B	Old Market and Temple Meads	
	E01033358	Bristol 054D	Cabot Circus	
2001	E01014657	Bristol 031D	Barton Hill Road	
NEW 2011	E01033356	Bristol 056C	Barton Hill	
	E01033369	Bristol 056D	Newtown	

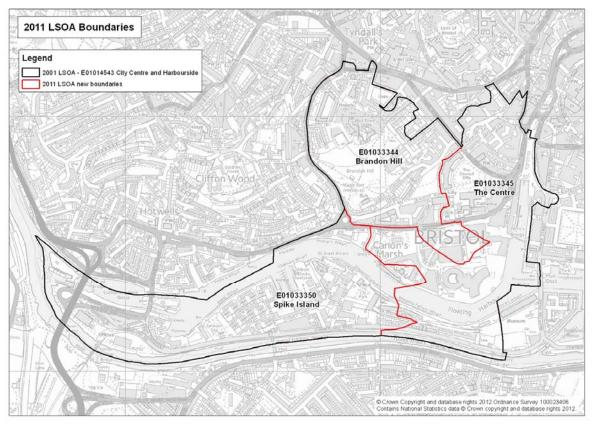
#### Map 1: St Pauls



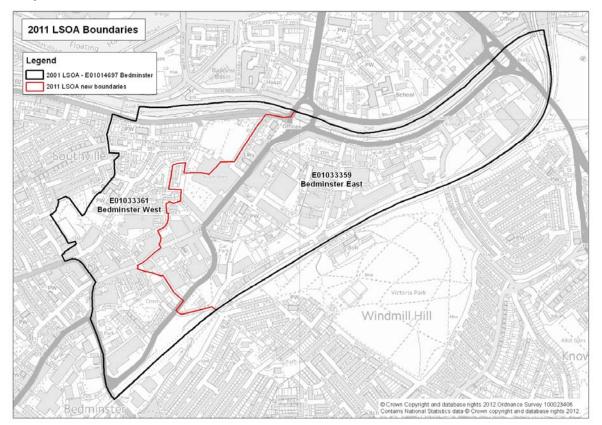




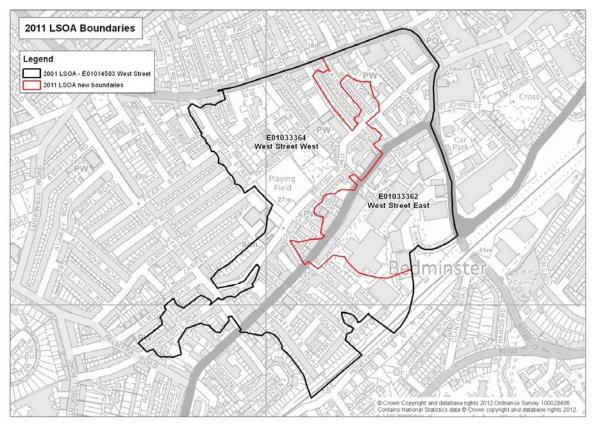




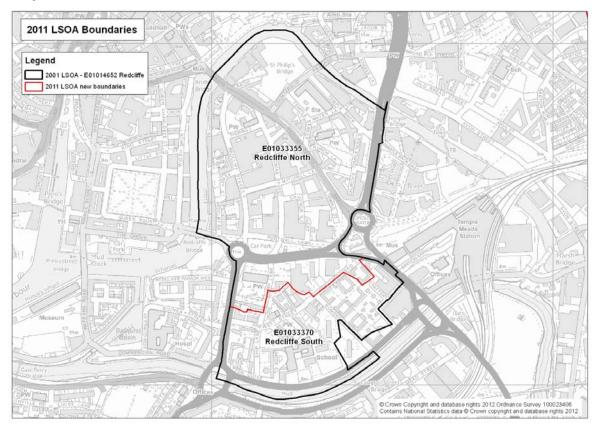
#### Map 4: Bedminster



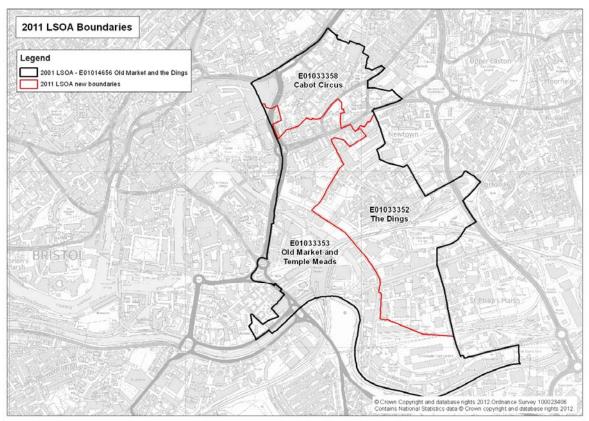
#### Map 5: West Street



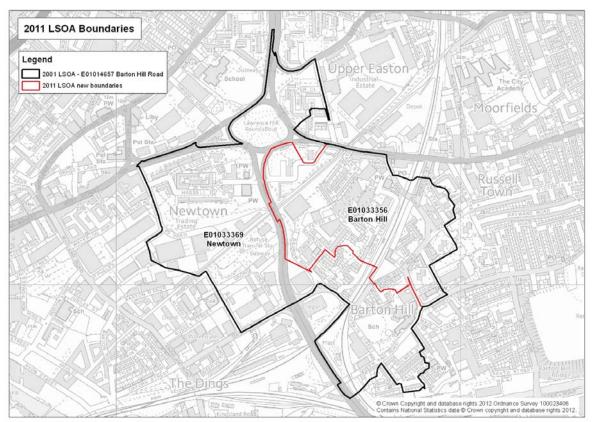
#### Map 6: Redcliffe







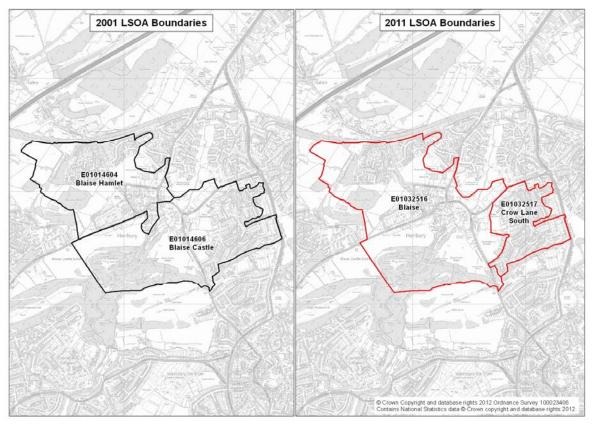
Map 8: Barton Hill Road



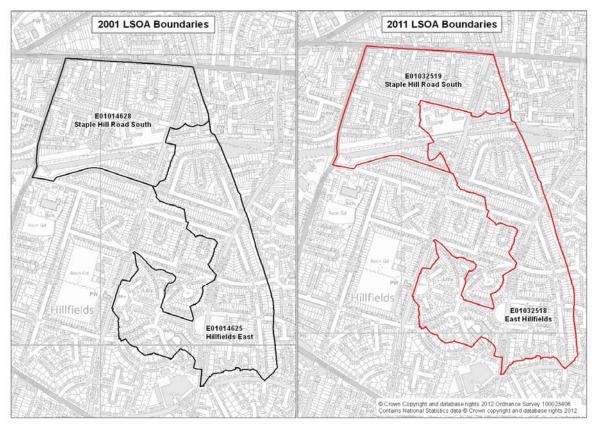
# Appendix 2: Lower Super Output Area boundary changes to reflect social homogeneity

Date	LSOA Ref	ONS Name	Local Name	
2001	E01014604	Bristol 001D	Blasie Hamlet	
	E01014606	Bristol 001F	Blaise Castle	
NEW 2011	E01032516	Bristol 001G	Blaise	
	E01032517	Bristol 001H	Crow Lane South	
2001	E01014625	Bristol 018B	Hillfields East	
	E01014628	Bristol 018C	Staple Hill Road South	
NEW 2011	E01032518	Bristol 018E	East Hillfields	
	E01032519	Bristol 018F	Staple Hill Road South	
2001	E01014724	Bristol 053A	Fulford Road South	
	E01014728	Bristol 053D	Whitchurch Park	
NEW 2011	E01032514	Bristol 053E	Bishport Avenue	
	E01032515	Bristol 053F	Whitchurch Park West	

#### Map 9: Blaise/Crow Lane



Map 10: Hillfields



Map 11: Whitchurch Park

