



ONS(ONC(SC))00/10

ONE NUMBER CENSUS STEERING COMMITTEE

Design Groups for use in the 2001 One Number Census

1. This paper outlines the Design Groups for use in the 2001 One Number Census. These were agreed at the last meeting of the One Number Census Project Board on 20 December 1999.
2. The Central and Local Government Intelligence Partnership Census Advisory Group (CLIP(CSG)) were consulted on the construction of the Design Groups and subsequently approved them at the CLIP(CSG) meeting held on 7 October 1999.
3. **Members of the Steering Committee are asked to note the paper.**

**Emma Wright
Census Division
Office for National Statistics
Room 4200W
Segensworth Road
Titchfield
Fareham
HANTS
PO15 5RR**

February 2000

DESIGN GROUPS FOR USE IN THE 2001 ONE NUMBER CENSUS

1. Introduction

- 1.1 The One Number Census (ONC) project aims to integrate the census counts with the estimated underenumeration. First it will provide a new base for the mid-year population estimates at the Local Authority District (LAD) level, and second it will adjust the Census database itself for the estimated undercount so that all statistics add to 'One Number', consistent with the national estimate of the population.
- 1.2 Although it would be ideal to design the Census Coverage Survey (CCS) to provide direct estimates of the undercount for each Local Authority District (LAD), this would result in a very large sample. Thus, the Local Authorities (LAs) and Unitary Authorities (UAs) in England and Wales will be grouped into Design Groups each of approximately 500,000 population. The CCS design will then be applied separately to each of these Design Groups. It is important to note that:
- a) **The Design Groups are specifically for use in the ONC process to ensure that the CCS sample is drawn from all areas of the country.**
 - b) **No data will be released for these Design Groups.**
 - c) **The accuracy of the estimate for an individual LA/UA within a Design Group should not be affected by the Design Group to which it is assigned.**

2. Criteria used for construction of the Design Groups

- 2.1 The criteria used to construct the Design Groups for 2001 were as follows:
- 1. Design Groups **must** respect the Welsh and Scottish borders.
 - 2. Design Groups **must** either be whole LAs/UAs or groups of whole LAs/UAs (no LAs/UAs will be split across Design Groups).
 - 3. LAs/UAs in the Design Group should be contiguous or very 'close' together.
 - 4. Each Design Group should have a total population of approximately 500,000 – however, large LAs/UAs with a population greater than 500,000 people will not be split for ONC purposes.

In addition, the following criteria were also applied where possible:

- 5. County borders should be respected.
- 6. The number of LAs/UAs in a Design Group should be minimised (less than 8 if possible). If there are a large number of LAs/UAs then the possible sampling constraint that at least one Enumeration District (ED) from each LA/UA should be selected may result in the selection being too restrictive and a larger than expected sample size.
- 7. The expected characteristics of the undercount in LAs/UAs within the same Design Group should not be too dissimilar (i.e. HtC groups are similar across all LAs/UAs within a Design Group).
- 8. LAs/UAs of a similar population size should be grouped.

3. Design Groups for 2001

- 3.1 The Local Authority Districts and Unitary Authorities for England and Wales have been grouped into Design Groups using the criteria outlined in section 2 - these are presented in Table 1 and illustrated in the attached maps. This grouping results in 101 Design Groups that range in estimated 1998 mid-year population from 374,444 – 657,764, with a mean population of 511,991 (and a median of 506,713). These figures exclude Birmingham and Leeds which have significantly greater populations than 500,000 - it was decided these should not be split for ONC purposes. In all, seven of the Design Groups are single LAs or UAs, whilst the maximum number of LAs/UAs within any single Design Group is seven.

Table 1 – Grouping of Local and Unitary Authorities into Design Groups for use in the 2001 One Number Census

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
Central London	Camden (188,609), Kensington & Chelsea (169,926), Westminster (220,846), City Of London (5,210)	584,591
Islington, Hackney, Tower Hamlets	Islington (178,960), Hackney (194,677), Tower Hamlets (181,251)	554,888
Lambeth and Southwark	Lambeth (269,498), Southwark (231,970)	501,468
Hammersmith and Fulham, Wandsworth	Hammersmith & Fulham (157,470), Wandsworth (265,584)	423,054
Harrow and Hillingdon	Harrow (211,286), Hillingdon (251,165)	462,451
Ealing and Hounslow	Ealing (302,118), Hounslow (211,581)	513,699
Richmond upon Thames, Kingston upon Thames, Merton	Richmond Upon Thames (186,701), Kingston Upon Thames (147,331), Merton (184,324)	518,356
Sutton and Croydon	Sutton (177,084), Croydon (338,217)	515,301
Bromley and Lewisham	Bromley (297,118), Lewisham (243,772)	540,890
Bexley and Havering	Bexley (217,840), Havering (228,331)	446,171
Greenwich and Newham	Greenwich (215,093), Newham (231,287)	446,380
Barking and Dagenham, Redbridge and Waltham Forest	Barking & Dagenham (155,557), Redbridge (231,918), Waltham Forest (221,398)	608,873
Barnet and Enfield	Barnet (331,548), Enfield (264,870)	596,418
Haringey and Brent	Haringey (221,571), Brent (253,161)	474,732
Cornwall and Scilly	Caradon (81,285), Carrick (85,286), Kerrier (90,527), North Cornwall (80,671), Penwith (59,332), Restormel (91,272), Isles Of Scilly (1,997)	490,370

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
North & East Devon	East Devon (124,414), Exeter (110,964), Mid Devon (67,400), North Devon (87,089), Torridge (55,440), West Devon (47,489)	492,796
South Devon	Plymouth UA (252,971), South Hams (80,249), Teignbridge (119,398), Torbay UA (122,974)	575,592
Somerset	Mendip (99,161), Sedgemoor (104,254), South Somerset (153,664), Taunton Deane (99,739), West Somerset (32,462)	489,280
Wessex	East Dorset (82,775), New Forest (171,039), North Dorset (60,486), Purbeck (46,143), West Dorset (91,063), Weymouth & Portland (63,010)	514,516
SE Dorset + Isle of Wight	Bournemouth UA (162,421), Isle Of Wight UA, (126,989), Christchurch (43,864), Poole UA (141,453)	474,727
Avon	North Somerset UA (188,699), Bath & North East Somerset UA (167,320), South Gloucestershire UA (240,966)	596,985
Bristol	Bristol, City Of UA (402,310)	402,310
Wiltshire	Kennet (79,465), North Wiltshire (123,775), Salisbury (113,918), West Wiltshire (108,628)	425,786
Gloucestershire	Cheltenham (105,823), Cotswold (82,757), Forest Of Dean (77,824), Gloucester (107,421), Stroud (108,954), Tewkesbury (74,478)	557,257
SW Hampshire	Eastleigh (112,494), Southampton UA (216,031), Test Valley (111,486)	440,011
SE Hampshire	Fareham (105,180), Gosport (76,734), Havant (118,266), Portsmouth UA (189,949)	490,129
N&E Hampshire	Basingstoke & Deane (147,928), East Hampshire (111,337), Hart (86,238), Rushmoor (87,236), Winchester (110,040)	542,779
Oxfordshire	Cherwell (134,600), Oxford (144,055), South Oxfordshire (127,441), Vale Of White Horse (113,177), West Oxfordshire (97,434)	616,707
Buckinghamshire	Aylesbury Vale (157,850), Chiltern (93,698), South Bucks (63,736), Wycombe (163,403)	478,687
Swindon and W. Berkshire	West Berkshire UA (144,240), Reading UA (147,840), Swindon UA (179,725)	471,805
E. Berkshire	Bracknell Forest UA (110,680), Slough UA (111,670), Windsor And Maidenhead UA (140,496), Wokingham UA (145,254)	508,100
North West Sussex	Chichester (107,382), Crawley (96,617), Horsham (121,716), Mid Sussex (127,138)	452,853

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
South West Sussex	Brighton And Hove UA (255,844), Adur (58,525), Arun (140,795), Worthing (99,672)	554,836
East Sussex	Eastbourne (90,449), Hastings (81,365), Lewes (85,859), Rother (91,352), Wealden (142,314)	491,339
N Surrey	Elmbridge (129,320), Epsom & Ewell (70,303), Runnymede (76,399), Spelthorne (88,550), Surrey Heath (83,874), Woking (91,800)	540,246
S Surrey	Guildford (126,664), Mole Valley (78,725), Reigate & Banstead (120,188), Tandridge (79,354), Waverley (115,364)	520,295
W&S Kent	Ashford (99,852), Maidstone (141,068), Sevenoaks (111,720), Tonbridge & Malling (106,040), Tunbridge Wells (102,738)	561,418
N. Kent	Dartford (85,436), Gravesham (91,802), Medway UA (242,557), Swale (118,735)	538,530
E. Kent	Canterbury (139,347), Dover (108,674), Shepway (99,847), Thanet (126,745)	474,613
Milton Keynes, Bedford, Huntingdonshire	Milton Keynes UA (203,186), Bedford (140,197), Huntingdonshire (156,439)	499,822
Mid and S Bedfordshire	Mid Bedfordshire (123,043), South Bedfordshire (110,101), Luton UA (183,287)	416,431
N&W Hertfordshire	Dacorum (137,111), North Hertfordshire (116,730), St Albans (131,359), Stevenage (78,455), Watford (81,708)	545,363
S&E Hertfordshire	Broxbourne (82,318), East Hertfordshire (127,099), Hertsmere (97,314), Three Rivers (86,526), Welwyn Hatfield (94,996)	488,253
W Essex	Basildon (164,444), Brentwood (71,386), Epping Forest (119,813), Harlow (75,838), Thurrock UA (134,962)	566,443
N Essex	Braintree (129,979), Colchester (156,374), Tendring (134,900), Uttlesford (69,261)	490,514
E Essex	Castle Point (84,451), Chelmsford (154,569), Maldon (56,351), Rochford (77,287), Southend UA (176,007)	548,665
N&E Cambridgeshire	Cambridge (120646), E.Cambridgeshire (72878), Fenland (81336), Peterborough (155973), S.Cambridgeshire (132495)	563,328
N. East Anglia	Broadland (118,022), Great Yarmouth (89,281), Kings Lynn & West Norfolk (133,523), North Norfolk (100,189)	441,015

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
W&S East Anglia	Babergh (79,500), Breckland (117,533), Forest Heath (69,183), Mid Suffolk (81,930), St Edmundsbury (97,203)	445,349
E. East Anglia	Ipswich (113,900), Norwich (124,024), South Norfolk (107,703), Suffolk Coastal (121,216), Waveney (108,163)	575,006
Shropshire & Herefordshire	Bridgnorth (52,235), North Shropshire (54,581), Oswestry (34,646), Shrewsbury & Atcham (97,421), South Shropshire (41,507), Telford And Wrekin UA (149,822), Herefordshire UA (167,920)	598,132
Worcestershire	Bromsgrove (85,191), Malvern Hills (74,118), Redditch (76,746), Worcester (95,283), Wychavon (110,584), Wyre Forest (96,278)	538,200
W. Staffordshire	Newcastle-Under-Lyme (123,280), Stafford (126,642), Stoke-On-Trent UA (251,546)	501,468
N,E&S Staffordshire	Cannock Chase (91,520), East Staffordshire (103,433), Lichfield (94,148), South Staffordshire (102,459), Staffordshire Moorlands (94,388), Tamworth (73,864)	559,812
Dudley and Wolverhampton	Dudley (311,468), Wolverhampton (241,623)	553,091
Sandwell and Walsall	Sandwell (290,521), Walsall (261,170)	551,691
Birmingham	Birmingham (1,013,431)	1,013,431
Coventry and Solihull	Coventry (304,334), Solihull (205,649)	509,983
Warwickshire	North Warwickshire (61,905), Nuneaton & Bedworth (118,455), Rugby (87,821), Stratford-On-Avon (114,696), Warwick (123,836)	506,713
Northamptonshire	Corby (51,373), Daventry (67,869), East Northamptonshire (73,469), Kettering (82,357), Northampton (195,825), South Northamptonshire (77,321), Wellingborough (67,582)	615,796
Central Leicestershire	Charnwood (155,364), Leicester UA (294,299), Oadby & Wigston (52,738)	502,401
W,E&S Leicestershire	Blaby (86,439), Harborough (75,188), Hinckley & Bosworth (97,696), Melton (46,293), North West Leicestershire (85,008), Rutland UA (35,691)	426,315
N,W&S Derbyshire	Bolsover (71,157), Chesterfield (100,225), Derbyshire Dales (70,681), High Peak (88,863), North East Derbyshire (98,270), South Derbyshire (80,659)	509,855
E. Derbyshire	Amber Valley (116,609), Derby UA (235,826), Erewash (107,797)	460,232

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
N. Nottinghamshire	Ashfield (107,922), Bassetlaw (105,662), Gedling (111,258), Mansfield (99,287), Newark & Sherwood (104,988)	529,117
S. Nottinghamshire	Broxtowe (109,744), Nottingham UA (286,786), Rushcliffe (105,940)	502,470
Lincolnshire	Boston (54,685), East Lindsey (124,793), Lincoln (82,750), North Kesteven (87,629), South Holland (73,410), South Kesteven (122,694), West Lindsey (77,169)	623,130
N. Cheshire	Halton UA (121,700), Macclesfield (153,096), Warrington UA (190,208)	465,004
S. Cheshire	Chester (118,711), Congleton (88,395), Crewe & Nantwich (114,449), Ellesmere Port & Neston (79,956), Vale Royal (117,765)	519,276
Liverpool	Liverpool (461,481)	461,481
Wirral and Knowsley	Knowsley (154,562), Wirral (327,145)	481,707
St Helens and Sefton	St Helens (178,440), Sefton (287,743)	466,183
Manchester	Manchester (429,812)	429,812
Bolton and Wigan	Bolton (267,494), Wigan (310,491)	577,985
Salford and Trafford	Salford (225,905), Trafford (220,317)	446,222
NE Greater Manchester	Bury (182,790), Oldham (219,215), Rochdale (208,217)	610,222
Stockport and Tameside	Stockport (292,808), Tameside (220,385)	513,193
North Lancashire	Blackpool UA (150,536), Fylde (75,621), Lancaster (136,671), Ribble Valley (53,137), Wyre (105,089)	521,054
West Lancashire	Chorley (97,882), Preston (135,028), South Ribble (103,620), West Lancashire (111,159)	447,689
East Lancashire	Blackburn With Darwen UA (140,023), Burnley (91,049), Hyndburn (79,446), Pendle (83,249), Rossendale (64,329)	458,096
Cumbria	Allerdale (96,114), Barrow-In-Furness (70,385), Carlisle (103,031), Copeland (70,013), Eden (50,097), South Lakeland (103,244)	492,884

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
Sheffield	Sheffield (531,141)	531,141
Barnsley and Wakefield	Barnsley (228,103), Wakefield (318,804)	546,907
Calderdale and Kirklees	Calderdale (192,906), Kirklees (390,868)	583,774
Bradford	Bradford (483,285)	483,285
Doncaster and Rotherham	Doncaster (290,468), Rotherham (254,424)	544,892
Leeds	Leeds (727,389)	727,389
Hull and N. Lincolnshire	Kingston Upon Hull, City Of UA (261,761), North East Lincolnshire UA (156,243), North Lincolnshire UA (152,341)	570,345
East Riding and York	East Riding Of Yorkshire UA (312,772), York UA (177,356)	490,128
North Yorkshire	Craven (52,135), Hambleton (85,934), Harrogate (149,775), Richmondshire (49,329), Ryedale (48,479), Scarborough (108,155), Selby (71,241)	565,048
Tees Valley	Hartlepool UA (91,945), Middlesbrough UA (145,115), Redcar & Cleveland UA (138,326), Stockton-On-Tees UA (180,958), Darlington UA (101,420)	657,764
Durham	Chester-Le-Street (57,163), Derwentside (88,221), Durham (90,276), Easington (93,462), Sedgefield (89,276), Teesdale (24,992), Wear Valley (62,960)	506,350
SE Tyne and Wear	South Tyneside (154,567), Sunderland (292,307)	446,874
Newcastle and Gateshead	Gateshead (198,899), Newcastle Upon Tyne (276,051)	474,950
NE Tyne & Wear	Alnwick (31,358), Berwick-Upon-Tweed (26,518), Blyth Valley (80,688), Castle Morpeth (50,205), Tynedale (58,768), Wansbeck (62,105), North Tyneside (194,020)	503,662
SW Wales	Bridgend UA (131,430), Neath Port Talbot UA (138,768), Swansea UA (229,531)	499,729
S Wales	Cardiff UA (320,940), The Vale Of Glamorgan UA (121,295), Newport UA (139,208)	581,443
Welsh Valleys	Caerphilly UA (169,571), Merthyr Tydfil UA (56,955), Rhondda, Cynon, Taff UA (240,360)	466,886

<u>Name</u>	<u>LAs/UAs (mid-year 1998 population estimates)</u>	<u>Population Estimate</u>
East Wales	Blaenau Gwent UA (72,009), Monmouthshire UA (86,251), Powys UA (125,996) Torfaen UA (90,188)	374,444
NE Wales	Conwy UA (111,948), Denbighshire UA (90,545), Flintshire UA (146,956), Wrexham UA (125,154)	474,603
W Wales	Isle Of Anglesea UA (65,397), Ceredigion UA (70,703), Carmarthenshire UA (168,976), Gwynedd UA (117,450), Pembrokeshire UA (113,693)	536,219