

CENTRAL POSTCODE DIRECTORY

(Version – CPD July 2018)

GUIDANCE NOTES

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CPD Guidance Notes

1 Background

The Central Postcode Directory (CPD) has been compiled for users by NISRA Geography, within NISRA's Demographic Statistics. It relates both current and terminated postcodes in Northern Ireland to a range of statutory, administrative, electoral and other area geographies.

The CPD is created from data of Royal Mail's Postcode Address File (PAF), the Land & Property Services' address database for Northern Ireland ([Pointer](#)) and the Gridlink initiative (see paragraph 5 below).

The CPD provides a direct look-up between postcodes (live and terminated) as at July 2018 and the following geographies:

- Local Government District 2014
- District Electoral Area 2014
- Ward 2014
- Assembly Area 2008

- Small Areas 2011
- Census Super Output Area 2001

- Neighbourhood Renewal Areas
- Travel to Work Areas 2011

- Settlements (2015)

- Townlands
- Counties

It also includes the following historical geographies:

- Local Government District 1992
- Ward 1992
- Census Output Area 2001
- Assembly Area 1998
- Local Government District 1984
- Ward 1984
- Census Enumeration District 1991
- Travel to Work Areas 2007
- Settlements (2005)

A useful 'Basic_CPD' has been created linking the postcodes to administrative/electoral areas. This is in the form of a query in the Access Database and a text file.

The CPD also provides indirect look-ups to Health Boards, Health Board Localities, Health Trusts, Education and Library Boards, NUTS and LAU Areas and European Electoral Region.

This version of the CPD replaces CPDNov2017 that was released in January 2018.

2 Data Formats

The Central Postcode directory (CPD) is supplied in two formats:

- Microsoft Access 2003
- Text file (dollar (\$) separated variables)

Users can easily import the text file format into a range of other platforms including MS Excel, Lotus 1-2-3 and SPSS. A description of how to link data within Access and using SPSS is available to download from the NISRA Geography Website.

The CPD comprises seventeen linked look-up tables, the fields for which can be viewed in Annex B:

- POSTCODES – Main postcode table containing geographical information for 60,677 postcodes
- AA1998 – 1998 Assembly Area lookup table
- AA2008 – 2008 Assembly Area lookup table
- LGD1984 – 1984 Local Government District lookup table
- LGD1992 – 1992 Local Government District lookup table
- LGD2014 – 2014 Local Government District lookup table
- WARD1984 – 1984 Electoral Ward lookup table
- WARD1992 – 1992 Electoral Ward lookup table
- WARD2014 – 2014 Electoral Ward lookup table
- DEA2014 – 2014 District Electoral Area lookup table
- COA2001 – 2001 Census Output Area lookup table
- SA2011 – Small Areas lookup table
- SOA2001 – 2001 Census Super Output Area lookup table
- NRA – Neighbourhood Renewal Area lookup table
- ED1991 – 1991 Census Enumeration District lookup table
- SETTLEMENTS05 – Settlement Names and Bands & Settlement Service Classification lookup table (from 2005 Report)
- SETTLEMENTS15 – Settlement Names and Bands & Drivetimes lookup table (from 2015 Report)
- TTWA2007 – 2007 Travel to Work Area lookup table
- TTWA2011 – 2011 Travel to Work Area lookup table

3 Developments in this version

There are no methodological changes in the creation of this version of CPD since the previous version (November 2017).

4 Gridlink®: General

The postcode has evolved since the early 1960s as a key piece of data that can provide a geo-spatial reference for many uses beyond the delivery of mail. By the 1990s, however, the processes used to link postcodes to other geographies had become increasingly questionable with advances in technology and increased customer expectations in terms of the quality of the grid references and the various area codes assigned to postcodes.

It was also recognised that there was duplication of effort by those organisations producing postcode location data and that customers were seeking more precision in the assignment of grid references across the full range of postcode location products.

In order to deliver improved consistency, a consortium of organisations was formed in 1999 to allow the specialist resources of each member to be pooled. The Gridlink® Consortium consists of Royal Mail Group plc, Ordnance Survey (GB), General Register Office for Scotland, Land and Property Services (LPS) - formally Ordnance Survey of Northern Ireland) and ONS.

It was soon recognised that a core set of data within each Consortium member's postcode products needed to be consistent and branded. Each of the Gridlink® Consortium members produces their postcode products based upon the core data.

5 Grid references and CPD

Postcode grid references in the CPD are based on the Irish Grid Co-ordinate system and are comprised of a 6 character Easting (X) and a 6 character Northing (Y) co-ordinates. The method of allocating a grid reference to a postcode is described below.

However, in some cases a grid reference is not available and for these the values in the X and Y fields are set to 999999. As PO boxes have no spatial information assigned, they have not been allocated a grid reference and the X and Y fields are also set to 999999.

Grid references for live postcodes

The majority of grid references for live postcodes in the CPD are currently derived from the POINTER database. On the POINTER dataset each property within a postcode has its own 1-metre grid-reference. Therefore a 'centroid' grid-reference can be calculated for each postcode. This is based on all the properties within that postcode. 'Centroid' grid-references for each postcode have been calculated using the Gridlink methodology, which is similar to that used for the rest of the UK.

Gridlink Methodology:

For each postcode on the POINTER dataset the average of the X and Y co-ordinates of constituent postcode properties is calculated. This is compared with the grid reference of the nearest property to the average and the grid reference of that property is assigned as the postcode grid-reference 'centroid'. Therefore all postcode 'centroids' are grid-references of an actual property within the postcodes.

New postcodes

When a postcode is first introduced, the properties are assigned temporary co-ordinates on the POINTER database. In due course LPS will improve the co-ordinates as further locational information relating to the properties in the postcode becomes available from their field surveyors.

Terminated postcodes

In order to assist with the allocation of historical data to higher geographies terminated postcodes are included. Grid references for terminated postcodes have mainly been taken from previous versions of the CPD and hence are historically based on the COMPASS dataset used for the 2001 Census.

6 Postcode – higher area assignment

NISRA Geography assigns postcodes to 5 main sets of areas using Geographical Information Systems 'point in polygon' techniques. These techniques compare the grid reference assigned to the postcode against various digital boundary datasets.

1. Small Areas, which can be aggregated to form 1992 Wards, 1992 LGDs, 1998 Assembly Areas, 2008 Assembly Areas and the new modified Super Output Areas, all postcodes have been assigned to these areas using Postcode centroid / SA analysis.
2. The 2001 Census Output Areas - all postcodes have been assigned to these areas using Postcode centroid / OA analysis. 'Statistical Neighbourhood Renewal Areas (NRAs) are also created from the OAs and therefore do not represent the exact NRA but rather an accurate approximation;
3. 1991 Enumeration Districts (EDs) can be aggregated to form 1984 Wards and 1984 LGDs; Postcodes have been assigned to 1984 Wards using Postcode centroid / 1991 ED analysis; and,
4. Postcodes have been assigned to settlements using Postcode centroids / Settlement Development Limit (SDL) boundary analysis.
5. Postcodes have been assigned to Townland and County using Postcode centroids / Townland / County boundary analysis.
6. Ward 2014, which can be aggregated to form 2014 DEAs and 2014 LGDs, all postcodes have been assigned to these areas using Postcode centroid / SA analysis. Note that lookup tables from 2011 Small Areas to 2014 DEAs/LGDs have been developed and can be viewed on the [lookup table section](#) of the NINIS website¹.

7 Terminated postcodes

Postcodes are frequently terminated by the Royal Mail for various reasons but most commonly it is due to the demolition/re-development of buildings or to postcode reorganisations. Terminated postcodes are occasionally re-used by the Royal Mail but not usually before an

¹ <http://www.ninis2.nisra.gov.uk/public/Theme.aspx?themeNumber=10&themeName=People+and+Places>

elapsed period of two years. The CPD contains both 'live' postcodes and postcodes that have been terminated by the Royal Mail but not subsequently re-used.

Royal Mail provides a list of all the live postcodes regularly to ONS and postcodes are flagged accordingly in the ONS All Fields Postcode Directory file. NISRA Geography has used this information to determine which NI postcodes are currently live or terminated and each has been labelled accordingly. The 'Active' field in the main postcode table indicates whether a postcode is terminated or not.

8 Data Validation

To make CPD as accurate and as informative as possible, several stages of validation have been applied to the dataset.

Invalid Postcodes

Where an invalid postcode is identified it is removed from the CPD. The checks for invalid postcodes are as follows:

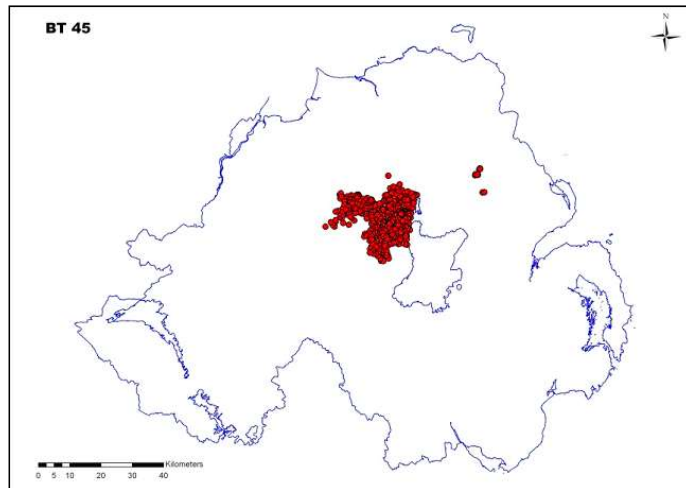
- All postcodes use only 20 out of the 26 letters of the alphabet (letters C, I, K, M, O, V are not used). Any postcodes that have one of the 6 unused letters are excluded. (An example of this is BT7 5OM)
- A list of postcode districts has been obtained from the Royal Mail. Any postcode that is not within a correct postcode district is removed.

Incorrect Grid-References

Where an incorrect grid reference has been identified the postcode is retained in the CPD. However, although the geographical areas are generated based on the old CPD grid-reference, the grid-reference in this version of CPD is set to 666666. NISRA Geography will generate a list of all these postcodes and pass it to the POINTER team in LPS, who will endeavour to correct the grid-reference. Ideally, when the next download from POINTER is obtained these grid-references will have been corrected.

Incorrect grid references are identified using the following checks:

- Distance calculations – a postcode that is more than 20km away from the postcode sector centroid has an incorrect grid reference.
- A visual check for each postcode district. For example the following map shows BT45 which has identified several postcodes (red dots) that appear to have incorrect grid-references.



9 Disclaimer

While NISRA Geography make every effort to ensure the accuracy of the CPD there may be a small number of postcodes missing or incorrectly assigned. Any errors/omissions should be reported to NISRA Geography (see details in Annex A).

NISRA Geography will take reasonable steps to correct any identified errors. (Users should note that each future release of the CPD will include revised grid references for those postcodes that have been passed to the Pointer Team in LPS to ensure a greater degree of accuracy).

NISRA Geography
August 2018

Annex A - Contact Details

The CPD is developed by NISRA Geography within Demographic Statistics.

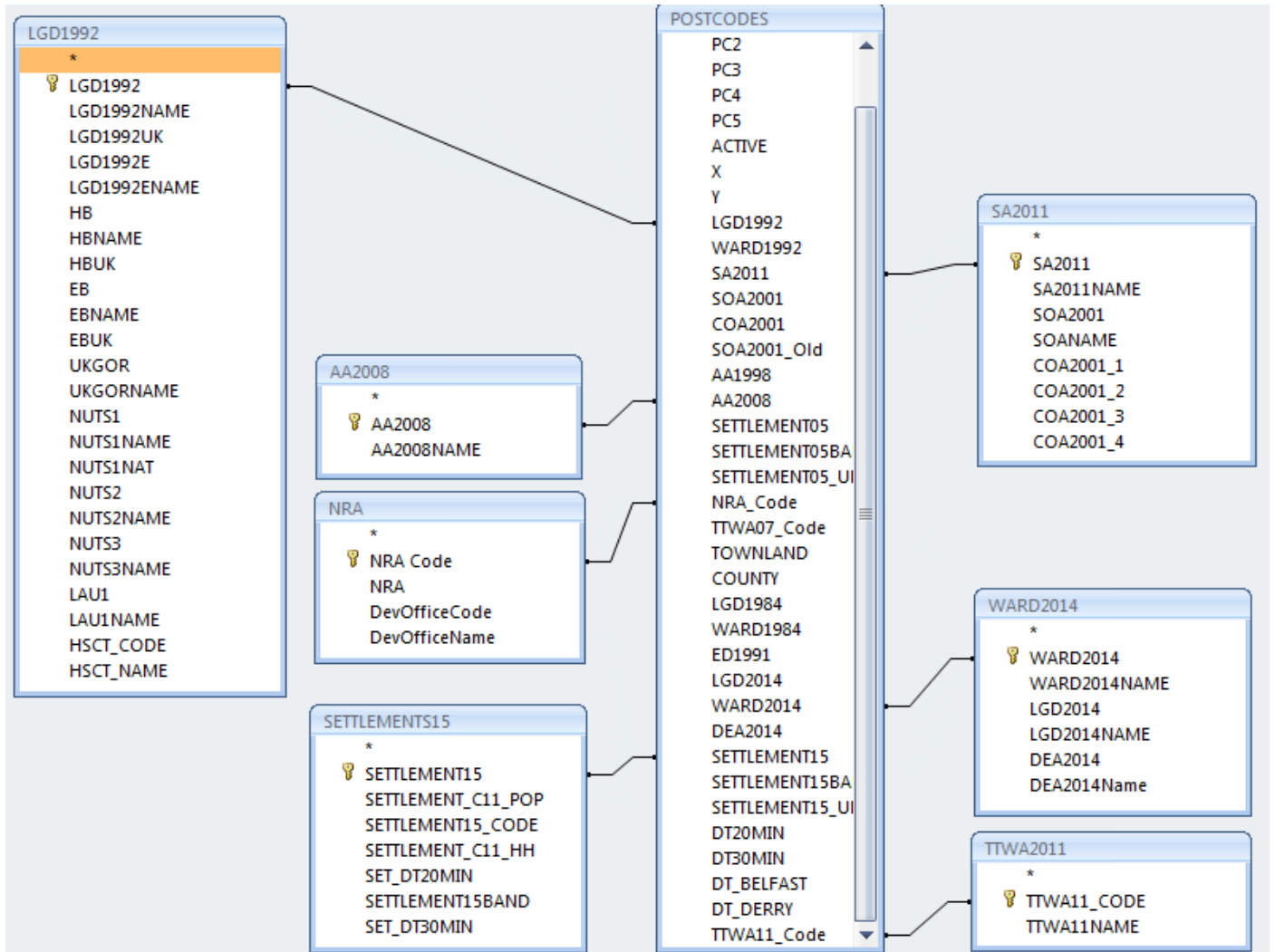
Any queries regarding the CPD should be directed to:

NISRA Geography
Demographic Statistics
NISRA
Colby House
Stranmillis Court
Belfast BT9 5RR

E-mail : deprivation.nisra@finance-ni.gov.uk

Annex B

CPD Table Relationships



Annex C**CPD Table Specifications****AA1998 (Assembly Areas 1998)**

Field Name	Type	Length	Description
AA1998	Text	4	Census Parliamentary Constituency – NI Assembly Area Code
AA1998NAME	Text	27	Census Parliamentary Constituency – NI Assembly Area Name
PARL1992UK	Text	3	Parliamentary Constituency UK Code
PARL1992E	Text	3	Parliamentary Constituency NI Electoral Office Code
EERUK	Text	2	European Electoral Region UK Code
EERUKNAME	Text	16	European Electoral Region UK Name

AA2008 (Assembly Areas 2008)

Field Name	Type	Length	Description
AA2008	Text	9	Assembly Area 2008 Code
AA2008NAME	Text	30	Assembly Area 2008 Label

COA2001 (Census Output Areas)

Field Name	Type	Length	Description
COA2001	Text	10	Census Output Area 2001 Code
SOA2001_Old	Text	8	Census Super Output Area 2001 Code
WARD1992	Text	6	Ward 1992 Code
LGD1992	Text	4	Local Government District 1992 Code
AA1998	Text	4	Assembly Area 1998 Code
AA2008	Text	9	Assembly Area 2008 Code
NRA_Code	Text	9	Neighbourhood Renewal Area Code
SA2011	Text	9	Small Area Code
SA2001Note	Text	50	Indication of a modification to COAs prior to creating SAs

DEA2014 (District Electoral Areas 2014)

Field Name	Type	Length	Description
DEA2014	Text	9	District Electoral Area 2014 Code
DEA2014Name	Text	40	District Electoral Area 2014 Name
LGD2014	Text	9	Local Government District 2014 Code
LGD2014Name	Text	40	Local Government District 2014 Name

ED1991 (Census Enumeration Districts 1991)

Field Name	Type	Length	Description
ED1991	Text	6	Census Enumeration District 1991 Code
MAP	Text	6	MapInfo 1991 Enumeration District Code
WARD1984	Text	4	Census Ward 1984 Code
LGD1984	Text	2	Local Government District 1984 Code

LGD1984 (Local Government Districts 1984)

Field Name	Type	Length	Description
LGD1984	Text	2	Local Government District 1984 Code
LGD84N	Text	15	Local Government District 1984 Name
HB84	Text	5	Health Board
EB84	Text	5	Education and Library Board

LGD1992 (Local Government Districts 1992)

Field Name	Type	Length	Description
LGD1992	Text	4	Census Local Government District 1992 Code
LGD92NAME	Text	15	Local Government District 1992 Name
LGD1992UK	Text	3	Local Government District 1992 UK Code
LGD1992E	Text	2	Local Government District 1992 NI Electoral Office Code
LGD1992ENAME	Text	15	Local Government District 1992 NI Electoral Office Name
HB	Text	5	Health Board
HBNAME	Text	9	Health Board Name
HBUK	Text	3	Health Board UK Code

EB	Text	5	Education and Library Board
EBNAME	Text	14	Education and Library Board Name
EBUK	Text	3	Education and Library Board UK Code
UKGOR	Text	2	UK Government Office Region Code
UKGORNAME	Text	16	UK Government Office Region Name
NUTS1	Text	3	NUTS 1 Code
NUTS1NAME	Text	16	NUTS 1 Name
NUTS1NAT	Text	3	NUTS 1 National Code
NUTS2	Text	4	NUTS 2 Code
NUTS2NAME	Text	16	NUTS 2 Name
NUTS3	Text	5	NUTS 3 Code
NUTS3NAME	Text	35	NUTS 3 Name
LAU1	Text	7	Local Area Unit Code (formerly NUTS 4 areas)
LAU1NAME	Text	15	Local Area Unit Name (formerly NUTS 4 areas)
HSCT_CODE	Text	6	Health and Social Care Trust Code
HSCT_NAME	Text	18	Health and Social Care Trust Name

LGD2014 (Local Government Districts 2014)

Field Name	Type	Length	Description
LGD2014	Text	9	Local Government District 2014 Code
LGD2014NAME	Text	40	Local Government District 2014 Name

NRA (Neighborhood Renewal Areas)

Field Name	Type	Length	Description
NRA Code	Text	9	Neighbourhood Renewal Area Code
NRA	Text	50	Neighbourhood Renewal Area Name
DevOfficeCode	Text	5	Development Office Code
DevOfficeName	Text	50	Development Office Name

POSTCODES

Field Name	Type	Length	Description
PC1	Text	7	Postcode1, BT1_1AA or BT123AA (String of 7 characters)
PC2	Text	7	Postcode2, BT011AA or BT123AA (String of 7 characters)
PC3	Text	8	Postcode3, BT1_1AA or BT12_3AA (String of 7 or 8 characters)
PC4	Text	8	Postcode4, BT01_1AA or BT12_3AA (String of 8 characters)
PC5	Text	7	Postcode5, BT11AA or BT123AA (String of 6 or 7 characters)
ACTIVE	Numeric	1	Royal Mail Postcode Status (Active 1 or Terminated 0)
X	Numeric	6	Easting (X) Coordinate
Y	Numeric	6	Northing (Y) Coordinate
LGD1992	Text	4	Census Local Government District 1992 Code
WARD1992	Text	6	Census Ward 1992 Code
SA2011	Text	9	Small Areas (N00xxxxxx)
SOA2001	Text	8	Super Output Area 2001 (slightly modified)
COA2001	Text	10	Census Output Area 2001 Code
SOA2001_Old	Text	8	Census Super Output Area 2001
AA1998	Text	4	Assembly Area 1992 Code
AA2008	Text	9	Assembly Area 2008 Code (N06xxxxxx)
SETTLEMENT05	Text	35	Settlement Name
SETTLEMENT05BAND	Text	1	Settlement Band
SETTLEMENT05_URBAN_RURAL	Text	5	Settlement Urban or Rural Indicator
NRA_Code	Text	9	Neighbourhood Renewal Area Code
TTWA2007_Code	Number	3	Travel to Work Area 2007
TOWNLAND	Text	50	Townland
COUNTY	Text	50	County
LGD1984	Text	2	Census Local Government District 1984 Code
WARD1984	Text	4	Census Ward 1984 Code
ED1991	Text	6	Census Enumeration District 1991 Code
LGD2014	Text	9	Local Government District 2014 Code (N09xxxxxx)
WARD2014	Text	9	Electoral Ward 2014 Code (N08xxxxxx)
DEA2014	Text	9	District Electoral Area 2014 Code (N10xxxxxx)

SETTLEMENT15	Text	35	Settlement (2015) Name
SETTLEMENT15BAND	Text	1	Settlement (2015) Band
SETTLEMENT15_URBAN_RURAL	Text	5	Settlement (2015) Urban or Rural Indicator
TTWA2011_Code	Text	9	Travel to Work Area 2011

SA2011 (Small Areas)

Field Name	Type	Length	Description
SA2011	Text	9	Small Area Code
SA2011NAME	Text	50	Small Area Code & Ward Name
SOA2001	Text	8	Super Output Area Code
SOANAME	Text	50	Census Super Output Area 2001 Name
COA2001_1	Text	10	Made up of COA_2001 (1 st)
COA2001_2	Text	10	Made up of COA_2001 (2 nd)
COA2001_3	Text	10	Made up of COA_2001 (3 rd)
COA2001_4	Text	10	Made up of COA_2001 (4 th)

SETTLEMENT (Settlements 2005)

Field Name	Type	Length	Description
SETTLEMENT	Text	35	Settlement Name
SETTLEMENTG	Text	35	Settlement Name (grouping Belfast Urban Area, Derry Urban Area, Craigavon Urban Area)
SETTLEMENTBAND	Text	1	Settlement Classification Band
SETTLEMENT_URBAN_RURAL	Text	5	Settlement Urban or Rural Indicator
PRIVATE_SECTOR_SERVICE_CLUSTER	Number	2	Private Sector Service Cluster
COMPOSITE_BAND	Text	3	Composite Band
RETAIL_CENTRE	Text	3	Retail Centre
PUBLIC_ADMIN_HEALTH_EDUC_CENTRE	Text	3	Public Administration, Health and Education Centre
EMPLOYMENT_CENTRE	Text	3	Employment Centre

SERVICE_CLASS	Text	2	Service Class
SERVICE_CENTRE	Text	3	Service Centre

SETTLEMENT (Settlements 2015)

Field Name	Type	Length	Description
SETTLEMENT15	Text	35	Settlement (2015) Name
SETTLEMENT_C11_POP	Number	35	2011 Census Population (exact)
SETTLEMENT15_CODE	Text	9	Settlement (2015) Code
SETTLEMENT_C11_HH	Number	1	2011 Census Households (exact)
SETTLEMENT15BAND	Text	1	Settlement Band (A-H)
SET_DT20MIN	Text	1	Within 20 minutes travel time from major settlement (Y/N)
SET_DT30MIN	Text	1	Within 30 minutes travel time from major settlement (Y/N)
SET_DT_BELFAST	Text	9	Travel time to Belfast City Centre
SET_DT_DERRY	Text	9	Travel time to Derry City Centre

SOA2001 (Census Super Output Areas)

Field Name	Type	Length	Description
SOA2001	Text	8	Census Super Output Area 2001 Code
SOANAME	Text	50	Census Super Output Area 2001 Name
ChangeSince2001	Text	50	Description of Changes
LGD1992	Text	4	Local Government District 1992 Code
MDM_Rank2005	Number	3	Multiple Deprivation Measure 2005 Rank
MDM_Decile2005	Number	2	Multiple Deprivation Measure 2005 Decile
MDM_Rank2010	Number	3	Multiple Deprivation Measure 2010 Rank
MDM_Decile2010	Number	2	Multiple Deprivation Measure 2010 Decile
MDM_Rank2017	Number	3	Multiple Deprivation Measure 2017 Rank
MDM_Decile2017	Number	2	Multiple Deprivation Measure 2017 Decile
TTWA2007Code	Number	3	Travel To Work Area (2007) Code
TTWA2007Name	Text	50	Travel To Work Area (2007)Name

TTWA2011Code	Text	9	Travel to Work Area (2011) Code
TTWA2011Name	Text	50	Travel to Work Area (2011) Name

TTWA2007 (Travel to Work Areas)

Field Name	Type	Length	Description
TTWA2007Code	Number	3	Travel to Work Area (2007) Code
TTWA2007Name	Text	50	Travel to Work Area (2007) Name

TTWA2011 (Travel to Work Areas)

Field Name	Type	Length	Description
TTWA2011_Code	Text	9	Travel to Work Area (2011) Code
TTWA2011NAME	Text	50	Travel to Work Area (2011) Name

WARD1984 (Electoral Wards 1984)

Field Name	Type	Length	Description
WARD1984	Text	4	Census Ward 1984 Code
WARD84N	Text	40	Ward 1984 Name
ONSCODE	Text	11	Office for National Statistics Code
DEDCODE	Text	3	DED ward Code
LGD1984	Text	2	Local Government District 1984 Code
LGD84N	Text	15	Local Government District 1984 Name
TTWA1984	Text	15	Travel to Work Areas

WARD1992 (Electoral Wards 1992)

Field Name	Type	Length	Description
WARD1992	Text	6	Census Ward 1992 Code
WARD92NAME	Text	40	Ward 1992 Name
LGD1992	Text	4	Census Local Government District 1992 Code
LGD1992NAME	Text	15	Local Government District 1992 Name
WARD1992UK	Text	6	Ward 1992 UK Code
WARD1992E	Text	4	Ward 1992 NI Electoral Office Code
WARD1992ENAME	Text	40	Ward1992 NI Electoral Office Name
LGD1992E	Text	2	Local Government District NI Electoral Office Code
LGD1992ENAME	Text	15	Local Government District NI Electoral Office Name
DEA1992	Text	4	District Electoral Area 1992 Code (NI Electoral Office)
DEA1992NAME	Text	40	District Electoral Area 1992 Name (NI Electoral Office)
AA1998	Text	4	Parliamentary Constituency – NI Assembly Area 1998 Code
AA1998NAME	Text	40	Parliamentary Constituency – NI Assembly Area 1998 Name
PARL1992UK	Text	3	Parliamentary Constituency 1992 UK Code
PARL1992E	Text	3	Parliamentary Constituency 1992 NI Electoral Office Code
EERUK	Text	2	European Electoral Region UK Code
EERUKNAME	Text	50	European Electoral Region UK Name
HB	Text	5	Health Board
HBLOCALITYUK	Text	5	Health Board Locality UK Code
HBLOCALITYNAME	Text	40	Health Board Locality UK Name
HBOLDTRUST	Text	40	Health Board Old Area
HBNEWTRUST	Text	40	Health Board New Area
EB	Text	5	Education Board
NUTS3	Text	5	NUTS 3 Area Code
NUTS3NAME	Text	40	NUTS 3 Area Name
LAU1	Text	7	Local Area Unit 1 Code (formerly NUTS 4 areas)
LAU1NAME	Text	15	Local Area Unit 1 Name (formerly NUTS 4 areas)
LAU2	Text	6	Local Area Unit 2 Code (formerly NUTS 5 areas)

LAU2NAME	Text	40	Local Area Unit 2 Name(formerly NUTS 5 areas)
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WARD2014 (Electoral Wards 2014)

Field Name	Type	Length	Description
WARD2014	Text	9	Census Ward 2014 Code
WARD2014NAME	Text	40	Census Ward 2014 Name
LGD2014	Text	9	Local Government District 2014 Code
LGD2014NAME	Text	40	Local Government District 2014 Name
DEA2014	Text	9	District Electoral Area 2014 Code
DEA2014NAME	Text	40	District Electoral Area 2014 Name

BASIC_CPD

Field Name	Type	Length	Description
Postcode	Text	8	Postcode, BT1_1AA or BT12_3AA (String of 7 or 8 characters)
X	Numeric	6	Easting (X) Coordinate
Y	Numeric	6	Northing (Y) Coordinate
WARD1992NAME	Text	40	Census Ward 1992 Name
LGD1992NAME	Text	15	Local Government District 1992 Name
WARD2014NAME	Text	40	Census Ward 2014 Name
LGD2014NAME	Text	40	Local Government District 2014 Name
AA2008NAME	Text	9	Assembly Area 2008 Code
DEA1992_NAME	Text	40	District Electoral Area 1992 Name (NI Electoral Office)