# DATADAPTIVE

# **Product Summary**

<u>Major Towns and Cities</u> is an experimental geography launched by the Office for National Statistics (ONS) in 2015. The geography contains boundaries for builtup areas of all settlements in England and Wales with a usual resident population or workday population of 75,000 or higher at the time of the last Census in 2011.

Major Towns and Cities – Population is a data pack that contains three types of Census 2011 population total and a mid-2017 estimated population total for each town and city, as both a tabular file and as an attributed copy of the MTC boundaries. This data pack was compiled as a source of denominators for comparison of towns and cities in statistical work using the MTC geography.

Datadaptive has calculated the Census 2011 population totals for the major towns and cities by aggregating population data from Output Areas (OAs), the lowest level of Census geography. Output Areas were matched to MTC areas in line with ONS guidance. No adjustment has been made for estimated changes in population since the last Census.

The three types of Census 2011 population total in the data pack are:

- the usual resident population,
- the workday population (where the usually resident population is redistributed to their places of work, while those not in work are recorded at their usual residence), and
- the work place population (where the usually resident population is redistributed to their main place of work, but those not working are excluded).

The mid-2017 population estimates have been added from a separate ONS release and were calculated by ONS for the MTC areas.

#### Data quality statement

The data in this product has been compiled and/or calculated from data published by ONS for re-use under an open licence. Datadaptive has taken reasonable care in preparing the data. However the accuracy and currency of the underlying data is dependent on the input sources.

#### **Data formats**

The tabular data is supplied in CSV format. The spatial data is supplied in unstyled ESRI Shapefile format with the National Grid (OSGB36) projection.

#### Licensing

The data may be re-used under the <u>Open Government Licence</u>. The OGL is an <u>open data</u> licence, which means it is perpetual, royalty- free, non-exclusive, and allows almost unrestricted re-use of the data.

#### Attribution

Following is an attribution statement that acknowledges the intellectual property rights of the third-party providers of open data used in the data collection. You must include this statement if you publish or redistribute the data.

Contains National Statistics data © Crown copyright and database right 2018 Contains Ordnance Survey data © Crown copyright and database right 2018

#### Pricing

Free

#### **Contact details**

Email: info@datadaptive.com

# **File Specifications**

# Major Towns and Cities – Census 2011 Population Totals

File name:	MTC15_POP11
Record count:	112
Geographic coverage:	England and Wales
File format:	CSV

This file is a table of all town and cities in the Major Towns and Cities geography, each attributed with three types of Census 2011 population total, a code and name for the town or city, and additional information on geographic area and population density.

Field Description Type TCITY15CD ONS code Text TCITY15NM Text ONS name HAOAS Decimal Area in hectares calculated from allocated Output Areas HATC Area in hectares calculated from built-up area Decimal POPCNTUR Census 2011 usual resident population total Integer POPCNTWD Integer Census 2011 workday population total POPCNTWP Census 2011 workplace population total Integer Population density: number of persons per hectare PDENOASUR Decimal calculated from POPCNTUR and HAOAS PDENTCUR Decimal Population density: number of persons per hectare calculated from POPCNTUR and HATC

Following is a table of the fields provided for each town or city.

Please see Appendix A for additional information on the calculation of population density.

## Major Towns and Cities – Mid-2017 Population Totals

File name:	MTC15_POP17
Record count:	112
Geographic coverage:	England and Wales
File format:	CSV

This file is a table of all town and cities in the Major Towns and Cities geography, each attributed with a mid-2017 population total, a code and name for the town or city, and additional information on geographic area and population density.

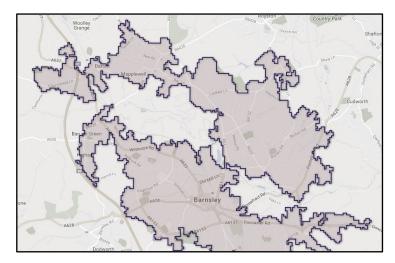
Following is a table of the fields provided for each town or city.

Field	Туре	Description
TCITY15CD	Text	ONS code
TCITY15NM	Text	ONS name
HATC	Decimal	Area in hectares calculated from built-up area
POPCNT17	Integer	Mid-2017 estimated usual resident population total
PDENTC17	Decimal	Population density: number of persons per hectare calculated from POPCNT16 and HATC

# Major Towns and Cities – Boundaries with Census 2011 Population Totals

File name:	MTC15_POP11
Record count:	112
Geographic coverage:	England and Wales
File format:	SHP

This file is a spatial dataset containing polygons for all towns and cities in the Major Towns and Cities geography, each attributed with three types of Census 2011 population total, a code and name for the town or city, and additional information on geographic area and population density.



Following is a table of the attributes provided for each town or city.

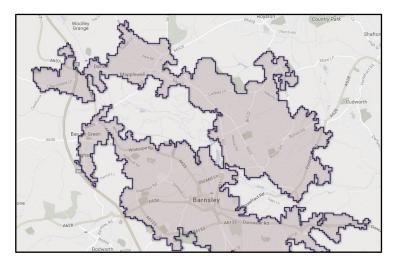
Field	Туре	Description
TCITY15CD	Text	ONS code
TCITY15NM	Text	ONS name
HAOAS	Decimal	Area in hectares calculated from allocated Output Areas
HATC	Decimal	Area in hectares calculated from built-up area
POPCNTUR	Integer	Census 2011 usual resident population total
POPCNTWD	Integer	Census 2011 workday population total
POPCNTWP	Integer	Census 2011 workplace population total
PDENOASUR	Decimal	Population density: number of persons per hectare
		calculated from POPCNTUR and HAOAS
PDENTCUR	Decimal	Population density: number of persons per hectare
		calculated from POPCNTUR and HATC

Please see Appendix A for additional information on the calculation of population density.

## Major Towns and Cities – Boundaries with Mid-2017 Population Totals

File name:	MTC15_POP17
Record count:	112
Geographic coverage:	England and Wales
File format:	SHP

This file is a spatial dataset containing polygons for all towns and cities in the Major Towns and Cities geography, each attributed with a mid-2017 population total, a code and name for the town or city, and additional information on geographic area and population density.



Following is a table of the attributes provided for each town or city.

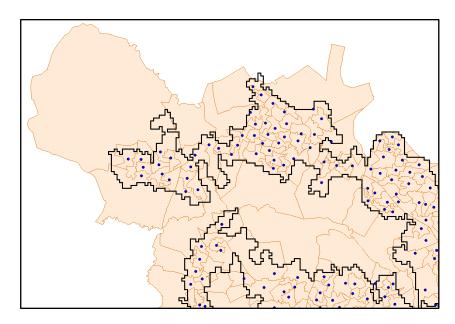
Field	Туре	Description
TCITY15CD	Text	ONS code
TCITY15NM	Text	ONS name
HATC	Decimal	Area in hectares calculated from built-up area
POPCNT17	Integer	Mid-2017 estimated usual resident population total
PDENTC17	Decimal	Population density: number of persons per hectare calculated from POPCNT17 and HATC

# **Appendix A: Calculation of Population Density**

The MTC15\_POP11 files in this data pack contain two measures of population density calculated from the Census 2011 usual resident population:

- PDENOASUR is the number of persons per hectare based on the sum of the area of all Output Areas allocated to the town or city built-up area (HAOAS), and
- PDENTCUR is the number of persons per hectare based on the area of the town or city built-up area itself (HATC).

PDENTCUR will be higher (and often much higher) than PDENOASUR because the Output Areas have been allocated to the town or city based on the location of their population-weight centroids in or near the built-up area, and as illustrated below the geographic area of some of those Output Areas may extend considerably outside the built-up area.



This means the two measures of population density are not compatible. The "true" population density for the built-up area will lie between the two figures. In principle PDENTCUR is likely to be the more accurate but it is for the user to judge the relative suitability of the measures according to the intended use. The population density measures are included in the data pack mainly as an additional baseline for comparison of towns and cities.