Guide	Postcode to OA11
Summary	The geographic key for most More Metric data is the 2011 Output Areas (OA11). In practice the available geographic tag will be postcode. An up to date open source file which includes a mapping from postcode to OA11 is produced quarterly by ONS. More Metrics provide convenient free versions of this file, with added keys and comparative analysis to the original 2011 mapping for added value.
Postcodes	Postcodes cover all properties in the UK. There are approximately 2m live postcodes and each month about 2,750 are added and 2,500 terminated. Postcodes are split between large users, typically corporates, and other which includes residential and small businesses.
Output Areas	2011 Output Areas (OA11) were created for 2011 Census data, and the OA is the lowest geographical level at which census estimates are provided. OAs are built from clusters of adjacent unit postcodes and have similar population sizes and are as socially homogenous as possible based on tenure of household and dwelling type (homogeneity was not used as a factor in Scotland). Urban/rural mixes are avoided where possible, and they have approximately regular shapes and tend to be constrained by obvious boundaries such as major roads. OAs were required to have a specified minimum size to ensure the confidentiality of data. The total number of 2011 OAs is 171,372 for England and 10,036 for Wales and have an average population in 2011 of 309. In Scotland there are 46,351 OAs and Northern Ireland uses 4,500 small areas.
Accessing MM data files	For all More Metric data files with an OA11 geographic key this may be accessed by: 1. Obtaining the full postcode 2. Ensure formatted to PCD8, PCD7, PCDS or PCDC format 3. Use the latest 20001 file to lookup OA11 4. Use the OA11 as geographic key in accessing other files. There is over a 99.97% match rate in the file from postcode to OA11. If the postcode is not matched then it could be retried using the 20002 file, which also includes terminated and large (usually corporate) postcodes. However, the applicability of data extracted with such an OA11 is likely to be low. Clients may wish to reduce the 20001 file to just include the postcode key in their preferred format. Clients may create postcode keyed versions of More Metric datasets for direct access. However, unless refreshed quarterly with the 20001 data refreshes there will be an increasingly likelihood of unmatched postcodes as new postcodes are created. The rate increases at approximately 0.17% per quarter.
Using MM data	The composition of Output Areas changes over time, so there is some degradation of the MM data that uses 2011 census data in its predictor set. This is in part offset by producing data additionally keyed on age, sex or other variables. In aggregate More Metrics believe that their data is robust to changes over time, though when producing models clients are recommended, where possible, to consider excluding OA11's from train data which have experienced the greatest compositional change. More Metrics provide two data sets that clients can use with their own quality rules to determine whether to include or exclude an Output Area. One looks at postcode changes by number and location change. Addition postcodes may indicate new builds, and the location change whether this is infill or greenfield. Terminated postcodes may indicate change of use, or an administrative reorganisation. Additionally for England population change and mix data provides insight within Output Areas.

Postcode to OA11 data files				
Availability	Latest versions and limited history through website or by request.			
Geography	UK (England, Wales, Scotland, Northern Ireland)			
GDPR status	Not Individual Personalised Data. No Individual Personalised Data used to produce it.			
Source data	NSPL files from geoportal.statistics.gov.uk		**Frequency**	Feb, May, Aug, Nov
Keys (1 from 4)	PCD8 (Postcode spread to 8 characters), PCD7 (Postcode spread to 7 characters), PCDS (Postcode in natural format), PCDC (Postcode concatenated with no spaces)			
Data (1)	OA11 (Output Area 2011)			
Formats	20001. yymm.R	Open, non-large postcodes only (~1.7m x 5)		
	20002. yymm.R	All open and closed postcodes (~2.6m x 5)		
OA postcode and location change data file				
Geography	UK (England, Wales, Scotland, Northern Ireland)			
GDPR status	Not Individual Personalised Data. No Individual Personalised Data used to produce it.			
Source data	NSPL files from geoportal.statistics.gov.uk		**Frequency**	Feb, May, Aug, Nov
Keys (1)	OA11			
Data (5)	Census (number of postcodes in OA at census), Current (number of postcodes in OA at census), CurrentOverCensus (ration of current to census), SurvOverCensus (ratio of postcodes in OA at census and still live to current), CentresLenMove (ratio of change in move distance between unweighted centre of OA11 at census and current, compared to mean distance from centre to OA11 at census)			
Formats	20003.Pcd.yymm.R	(232,009 x 6)		
OA population changes data file				
Geography	England			
GDPR status	Not Individual Personalised Data. No Individual Personalised Data used to produce it.			
Source data	Population extracts from NOMIS		**Frequency**	Annual 2 years in arrears
Keys (1)	OA11			
Data (4)	Tot (current total population), PopnChange (current population in OA compared to census population), AvgAgeChange (relative value of change in Avg age current to census) SAvgVarChange (relative value of change in Avg age current to census) NB. Population is collected in age ranges 0-15, 16-24, 25-49,50-64 and 65+. For Avg value ranges are weight 1,2,3,4,5,6 and for Var values ranges are weighted 3,2,1,1,2,3.			
Formats	20003.Pcd.yyyy.R	(181,409 x 5)		

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