

PAF DATA

Introduction

The full Postcode Address File or PAF® for short is a unique database on which the Royal Mail stores all UK Postcodes together with their correct address details. The full data set contains a vast amount of address information, including (Approximately):

- 28,000,000 UK Addresses
- 1,300,000 Organisation Names
- 1,750,000 Postcodes

The full Postcode Address File database is sold on a single or multi user basis and contains address details for every household in the UK including (where applicable):

- Organisation, Sub-Building Name, Building Name, Building Number
- Thoroughfare Name, Locality, Posttown, County and Postcode

Although PAF® was originally created for Royal Mail's own use; it soon became clear that the information contained on PAF® could be invaluable to industry and commerce.

Product Details

- Coverage: UK
- Format: Comma Separated Values Text File
- File Suffix: .CSV
- Source: Royal Mail
- The data is sorted on POSTCODE and DPSuffix
- Update frequency per annum: 4 Geoplan Updates are conducted as standard (a maximum of 12 updates are available if required - please contact us for more information)
- Copyright Information: © Royal Mail Group plc 2018. All rights reserved

Update Information

The primary source of PAF® update information is the postman. Most addresses are visited at least once per day. Changes noted at local delivery offices are implemented directly on the database through the Postcode Duty Automation system. A change could be a new business development or the closure of an existing business. Other sources are Postcode re-coding exercises and changes notified directly to regional Address Management Service Centres.

On the third Friday of each month, Royal Mail takes an extract of PAF®. This is available in a number of forms but all referencing the same data. Full PAF® is based on the monthly changes files, which contain all transactions (insertions, amendments and deletions of addresses) since the previous months extract.

Supply options for this data as standard is to receive a quarterly supply as part of the annual licence.

Level of Detail

The data is provided at either POSTCODE or PREMISE level. At POSTCODE level the data is simply an aggregation from the PREMISE level data.

At POSTCODE level the data is aggregated by POSTCODE, Dependant Thoroughfare, Thoroughfare, and Small User Organisation Indicator and Postcode Type. Where premise level data is shared on the same row the information is separated with a semi colon, where the data is applicable to all records only a singly entry will be provided. Please note this can fluctuate according to the record being revived for the same variable, e.g. Organisation may have entries with a single Organisation but other records may have multiple records and therefore these will be separated by a semi colon.

Number of records will vary but as a guide the following be used in consideration of the application that is used to handle the records in question:

- POSTCODE LEVEL – number of records 1,750,000 (approximate only)
- PREMISE LEVEL – number of records 28,000,000 (approximate only)

Attributes

It is expected that header records may be adjusted so there is further consistency within the product range at future releases - please bear this in mind when importing the data. There are 19 variables supplied as standard.

Header Records in the Product	Description	Maximum Field Size (Postcode Level Product)	Maximum Field Size (Premise Level Product)
Organisation	Organisation	2000	60
Department	Department	350	60
POBox	PO Box	6	6
SubBuilding	Sub Building Name	2500	30
Building	Building Name	3000	50
BuildingNumber	Building Number	450	4
DependantThoroughfare	Dependant Thoroughfare & Descriptor	80	80
Thoroughfare	Thoroughfare & Descriptor	80	80
DoubleDependantLocality	Double Dependant Locality	35	35
DependantLocality	Dependant Locality	35	35
PostTown	PostTown	30	30
POSTCODE	POSTCODE	8	8
DPSuffix	Delivery Point Suffix	350	2
UDPRN	UDPRN	950	8
POSTCODE TYPE	Postcode Type	1	1
SUORDIND	Small User Organisation Indicator	1	1
PostalCounty	Postal County (not postally required)	30	30
TraditionalCounty	Traditional County (not postally required)	30	30
AdministrativeCounty	Administrative County (not postally required)	30	30

Further details about the attribute are available later on in the ReadMe.

File Names

At POSTCODE level the data is supplied as a single file

- PAF_AB_ZE_03_16_PC (approximate file size 650mb)

At PREMISE level the data is supplied as a single file:

- PAF_AB_ZE_03_16_PRM (approximate file size 2.4gb)

In the list above the month of March 2016 is used as an example to illustrate the file names, these will change according to the month and year of the data supply it represents - e.g. PAF_AB_ZE_03_15_PC represents March 2015.

Further Attribute Information

Organisation

The organisation is used to define the premise. The names of Organisations are provided on PAF and these are categorised as small or larger users depending on the amount of mail they receive. If the Organisation is not provided it will be residential delivery point.

Department

The Department is used to define the premise in conjunction with the Organisation.

PO Box

With a PO Box service, the customer receives a shortened, easy-to-remember address that provides a degree of anonymity. Customers either collect their own mail from their local delivery office or can arrange delivery. All PO Box Postcodes are classed as 'Large User' Postcodes.

Sub Building Name / Building Name / Building Number

The Sub Building Name, Building Name or the Building Number all form part of the premise details of the address.

Dependant Thoroughfare & Descriptor / Thoroughfare & Descriptor

There are four Thoroughfare elements on PAF and there should only be one Thoroughfare on a Postcode, although there are some anomalies where existing Postcodes may contain more than one Thoroughfare. These will be corrected over time by Royal Mail. When a Dependent Thoroughfare is present, there will always be Thoroughfare data as well. A Dependent Thoroughfare cannot be present on its own. For some addresses there may be no Thoroughfare information present at all. This usually occurs in rural areas, when the Locality information identifies the location of the address.

Double Dependant Locality / Dependant Locality / PostTown

Four elements identifies a geographical area known as a Locality:

- Double Dependent Locality
- Dependent Locality
- Post Town
- County (although postally not required)

Currently PAF holds details of just over 30,000 Localities in the UK. There can be only one Locality per Postcode. This means all addresses in a Postcode have the same Locality. If need be, Dependent Localities and Double Dependent Localities further define the geographic area. A Double Dependent Locality can be present only when a Dependent Locality is present. There are 1661 Post Towns. A Post Town is mandatory for delivery of mail to a Delivery Point. This is not necessarily the nearest town geographically, but a routing instruction to the Royal Mail delivery office sorting mail for that Delivery Point. A Post Town will always be present in every address, and for some Localities the Post Town will be the only locality element present.

Postcode

The Postcode is part of a coding system created and used by the Royal Mail across the United Kingdom for sorting mail. In other words, Postcodes are an abbreviated form of address, and enable a group of Delivery Points to be specifically identified. When originally created, the Postcode was 'designed' around the capability of Royal Mail sorting equipment to read and interpret typed or handwritten text on mail. This is why Royal Mail prefers the Postcode to be separate and on the last line of an address. The format and rules concerning Postcode layout, in particular which letters can or cannot be used, stem from the fact that certain letters or combinations of letters could be confused (e.g. 'O' and 'Q', or 'V' next to 'V' being misread as 'W'). See Appendix A for more information.

Delivery Point Suffix

The DPS is a unique Royal Mail 2-character code (the first numeric & the second alphabetical – e.g. 2B), which, when added to the Postcode, enables each live Delivery Point to be uniquely identified. Once the Delivery Point is deleted from PAF the DPS may be reused (although they aren't reused until all remaining Delivery Points in the range have been allocated).

DPS format: two characters in a numeric alpha format. Only digits 1-9 appear in the numeric position. To allow the 9U-9Z range to be used as defaults for customer barcoding, DPS allocation is restricted from 1A to 9T (175 occurrences) the alpha characters C, I, K, M, O and V are not used in the DPS. Delivery Point Suffixes on a Postcode may wrap around when all 175 DPSs have historically been allocated.

If a property currently on PAF is demolished, its DPS will be erased. If subsequently a new property is constructed in its place the next available DPS will be allocated.

A Large User Postcode will contain details of one Organisation and its associated Delivery Point details. It will therefore always have a DPS value of 1A.

UDPRN

The UDPRN is the Unique Delivery Point Reference Number – this is a unique identifier for all delivery points.

Postcode Type

There are two types of Postcode:

Large User Postcode is assigned to one single address either due to the large volume of mail received at that address, or because a PO Box service has been set up.

Small User Postcode identifies a group of Delivery Points. On average there are 15 Delivery Points per Postcode. However this can vary between 1 and 100. There will never be more than 100 Delivery Points on a Postcode.

Small User Organisation Indicator

Small User Organisation Indicator can have the values 'Y' or space. A value of 'Y' indicates that a Small User Organisation is present at this address.

Postal County / Traditional County / Administrative County

The county is not required as part of a correct postal address and is not required for addressing purposes. The Former Postal County, Traditional County and Administrative County data is sourced from a Royal Mail Alias product and is provided in the Standard Geoplan supply.

Product Quality

During product creation Geoplan identified some anomalies in the quality of the Royal Mail product. Geoplan have raised these issues with Royal Mail who have subsequently have started a process of investigation to deal with any issues that effect quality. Geoplan have where possible dealt with the issues by creating appropriate fixes so to reduce any client impact. One known issue still outstanding is as follows:

UDPRN – has errors in the content and should not be used.

Other Products

Geoplan have a range of other Postcode related products that are available and can be supplied separately or in a combination with the PAF file that is supplied, including POSTZON, GEOPOINT, GEOPOINT XT and ADDRESSPOINT.

Contact Information:

If you have any queries or require any assistance, please contact Geoplan using the following details:

Sales:

Tel: 01423 569538 or

Email: sales@geoplan.com

Support:

Tel: 01423 722719 or

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APPENDIX A

Breakdown of a Postcode

A Postcode is a combination of letters and numbers. A Postcode defines four different levels of geographic unit. Each Postcode consists of two parts, called the Outward Code (e.g. 'PO1') and the Inward Code (e.g. '1AF'). The first part, or Outward Code, is separated from the second part, the Inward Code, by a single space.

Outward Code

Enables mail to be sorted to the correct local area for delivery. This part of the code contains the area and the district to which the mail is to be delivered, e.g. 'PO1', 'SW1A' or 'B23'

The letters Q, V and X are not used in the first alpha position

The letters I, J and Z are not used in the second alpha position

The only letters to appear in the third position are A, B, C, D, E, F, G, H, J, K, S, T, U and W.

Inward Code

The second part is known as the Inward Code because it is used to sort the mail INTO the local area delivery office

This part is one number followed by two letters. The number identifies the sector in the postal district. The letters then define one or more properties in that sector.

The letters C I K M O V are not used in the second part of the Postcode.

