

## **Postcodes and Census Data**

### **1. Postcodes and Postal Areas**

A postcode is a four digit number used by Australia Post to assist with mail delivery. As it is readily available on the end of each postal address, many researchers and businesses use postcode as a make shift geographic region for aggregation and analysis of address based data. The desire to compare such data to census data in turn creates demand for census data aggregated by postcode. Census data are collected on Collection Districts (CDs) which, for several reasons, are not compatible with postcodes. The Australian Bureau of Statistics (ABS) has, however developed a Census Geographic Area classification known as Postal Areas which approximate the area of those postcodes where people live.

#### **Postal Area**

Postal Areas are created by allocating whole CDs to Australia Post postcode areas on a 'best fit' basis (See *Statistical Geography: Volume 2 — Census Geographic Areas* (Cat. no. 2905.0) available July 2002). Postal Areas derived in this way only approximate Australia Post postcodes.

In developing Postal Areas each CD is allocated an Australia Post postcode. Allocations are done on the basis of population and not area. This means that a CD is allocated to a postcode if the majority of the population in that CD is contained within that postcode. Postal Areas are then formed by joining together the CDs that have been allocated the same postcode.

Allocations have been determined using the best available information on postcode boundaries. Unfortunately official maps of postcode boundaries have not been updated since the early 1990s and none of the more recent interpretations have been endorsed by Australia Post. Users should, therefore, be aware of the limitations of the Postal Area classification.

Some Australia Post postcodes are not included in the Postal Area classification. For instance, in some cases when applying the 'best fit' principle there is no CD which can be allocated to a particular Australia Post postcode. This occurs in two cases:

- where a CD covers two or more whole postcodes, the CD can be allocated to only one Postal Area; or
- where more than one CD partially covers a postcode but all the CDs are allocated to other postcodes with which they also share area.

The Postal Area classification also excludes Australia Post post codes which are not street delivery areas. These include post office box, mail back competitions, large volume receivers and specialist delivery postcodes. These postcodes are only valid for postal addresses and are not a valid location for population data.

# Postal Areas that cross State/Territory borders:

Where Postal Areas cross State/Territory borders standard census products will provide data for the entire Postal Area.

- NSW Postal Area 2620 crosses into the ACT, 2406 crosses into Qld and 2540 crosses into Jervis Bay (Other Territories)
- Vic. Postal Areas 3500, 3585 and 3644 cross into NSW
- Qld Postal Area 4825 crosses into NT
- SA None
- WA None
- Tas. None
- NT Postal Area 872 crosses into SA
- ACT Postal Area 2618 crosses into NSW
- O/T N/A

#### 2. Digital boundaries

Postal Area digital boundaries will be available as part of the Census Geographic Areas 2001, Australia CD-ROM. This will be available at the end of June 2002.

All digital boundaries are supplied as 'all points' boundaries in MapInfo Export (.mif/.mid) format. These are suitable for import into geographic information systems and desktop mapping packages. All spatial data released by the ABS after August 2001 are based on the Geocentric Datum of Australia, 1994 (GDA94). For more information on GDA94 see the Fact sheet *Geocentric Datum of Australia and Australian Bureau of Statistics Boundaries*.

#### **3. Comparing other postcode** based statistics to census statistics

Users of census data can have trouble reconciling their own postcode based statistics with census statistics because:

- many respondents mis-report their postcode;
- it is also difficult to say what the 'correct' postcode for some respondents should be, especially when considering post office boxes and rural delivery services. Census data are based either upon the Postal Area of the residence where a person was enumerated or the Postal Area where they normally reside. By contrast many non-ABS datasets only record the postcode of a person's mailing address. Since many people have different mailing and residential addresses the datasets are difficult to reconcile; and
- postcode boundaries change over time and it can take a long time for respondents and coding systems to adjust to a change in a postcode. This causes problems when working with postcode based data taken from different reference periods as the changes to the boundaries are difficult to reconcile with changes in the population.

#### Comparing non-ABS data on postcode with ABS data on Postal Area as enumerated

The primary consideration when doing a comparison with Census data based on the Postal Area classification is that the Postal Areas are derived using a 'best fit' of whole CDs. The census data are correct for the Postal Area but the Postal Area only approximates the area of the postcode. The Postal Area classification also excludes some postcodes and as such there will be no census data for these postcodes.

# Postal Area of Usual Address Census Night (POCUCP)

Postal Area of Usual Address Census Night (POCUCP) is a census variable which identifies the Postal Area of the person's usual address. For people counted at home, the value for POCUCP is determined from the CD of the residence. For people enumerated away from home, their usual address is coded to a CD where possible and then the Postal Area of that CD is used. Where a person does not state his/her place of usual residence they are coded to Postal Area undefined. For example:

- 2999 NSW Postal Area undefined; and
- 3999 Vic. Postal Area undefined.

#### **4. Alternatives to Postcode/ Postal Area census data**

In previous censuses Usual Address data were only available by Statistical Local Area (SLA) and Postal Area. For the 2001 Census data will be available by CD of usual residence. Users of Census data who previously resorted to Postal Area data may instead wish to consider using CD of usual residence.

For the 2001 Census, State Suburbs (See Statistical Geography: Volume 2 — Census Geographic Areas (Cat. no. 2905.0) available July 2002) have been defined for all capital cities except Canberra, Brisbane and Darwin. In these cities SLAs are closely related to suburbs. Many users of Postal Area data may find that suburb is a more convenient and more readily recognisable geographical area for their purposes. In many cities there is a many to one relationship between suburb and postcode so in theses cases suburb data also provide a finer level of geographical resolution.

### **5. Unallocated Australia Post Postcodes**

Below is a list of Australia Post postcodes for street delivery areas which are not represented in the ABS 2001 Postal Area Classification. Australia Post postcodes for post office boxes, mail back competitions, large volume receivers and specialist delivery postcodes, which are also not represented in the ABS 2001 Postal Area Classification, have not been listed.

		NSW		
2127	2309	2649	2899	
2308	2356	2734		
		VIC		
3005	3279	3422	3590	3755
3008	3301	3432	3599	3852
3010	3329	3488	3617	3873
3050	3378	3489	3637	3893
3217	3384	3494	3663	3928
3267	3385	3522	3704	3954
3273	3387	3565	3718	
3275	3399	3576	3738	
3278	3415	3581	3739	
		<b>4</b>		
4230	4375	4461	4697	4728
4345	4376	4471	4704	4801
4353	4378	4479	4706	4849
4363	4381	4493	4710	
4364	4384	4611	4712	
4365	4423	4676	4713	
4372	4424	4694	4723	

		SA		
5150	5273	5410	5471	5632
5220	5303	5414	5493	5651
5221	5306	5416	5510	5653
5263	5310	5418	5552	5660
5269	5312	5455	5630	5730
		WA		
6036	6357	6420	6473	6627
6038	6358	6421	6489	6628
6090	6368	6422	6505	6632
6221	6384	6424	6506	6711
6223	6385	6427	6512	6712
6228	6394	6428	6564	6723
6232	6396	6445	6568	6733
6240	6403	6446	6571	6761
6243	6411	6462	6572	6762
6252	6412	6465	6574	
6313	6413	6466	6614	
6322	6414	6467	6616	
6326	6419	6470	6625	
		TAS		
7001	7151	7176	7187	
7119	7174	7183	7257	
7139	7175	7185		
		NT		
0840	0853			