

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

CANBERRA, AUSTRALIA

To be treated as strictly CONFIDENTIAL and NOT to be published,
broadcast or cabled before 6 P.M. on MONDAY, 14TH NOVEMBER, 1966.

CENSUS OF THE COMMONWEALTH OF AUSTRALIA

30TH JUNE, 1966

FIELD COUNT STATEMENT NO. 4. - POPULATION : PRINCIPAL URBAN CENTRES OF AUSTRALIA

CONTENTS

<u>Table</u>	<u>Page</u>
Explanatory Notes on the delimitation of urban boundaries for statistical purposes	2.
1. Population : Six Capital City Statistical Divisions, 1961 and 1966	6.
2. Population : Statistical Districts of Canberra, Newcastle, Wollongong and Geelong, 1961 and 1966	8.
3. Population : Principal Urban Centres of Australia, 1961 and 1966	9.
APPENDIX A. Criteria for the Delimitation of Urban Boundaries : Resolutions of the Twenty-seventh Conference of Statisticians - August, 1965	
APPENDIX B. Outline Maps : Capital City Statistical Divisions and Statistical Districts.	

This statement contains preliminary results of the Census of 30th June, 1966. It shows details of the population of the principal urban centres of Australia.

The figures have been compiled by field personnel during the taking of the Census and are subject to amendment. This statement excludes particulars of full-blood Aborigines.

New criteria for the delimitation of urban boundaries have been developed and implemented for the 1966 Census. These are fully explained in the following pages, and have been adopted generally for statistical purposes.

EXPLANATORY NOTES ON THE DELIMITATION OF URBAN BOUNDARIES FOR STATISTICAL PURPOSES

1. INTRODUCTION

For the purpose of presenting population and dwelling statistics obtained at the Census of 30th June, 1966, new methods have been used in the delimitation of metropolitan and certain other urban centres. Briefly, these are as follows:-

- (i) Around each capital city and each town with a population of 75,000 or more two boundaries have been drawn.

The outer boundary, which is fixed, circumscribes the area in close economic and social contact with the main city or town. These areas are designated Statistical Divisions (for capital cities) or Statistical Districts (for Canberra, Newcastle, Wollongong and Geelong).

The inner boundary indicates the area within which, at the time of the Census, there was a density of at least 500 persons per square mile. This density is determined for each Census collector's district (the smallest geographical area available). From Census to Census as urbanization proceeds this inner boundary will move outwards to encompass peripheral development. Some specified areas of lower density (e.g. industrial areas) are classified as urban on other grounds.

- (ii) The principal urban centre within each capital city Statistical Division has been designated the "Metropolitan Area".
- (iii) Population clusters of 1,000 or more persons having a minimum density of 500 persons per square mile have been designated "Urban Centres".

Because of practical difficulties (notably lack of time to carry out an extensive examination of each area in order to re-design suitable collector's districts and the absence of suitable topographic boundaries around small towns) the "density" criterion has at present been uniformly applied only to urban centres within the capital city Statistical Divisions and the Statistical Districts, to other urban centres with a population of 30,000 or more and to a few smaller centres including Darwin. It is proposed to extend the application of the "density" criterion progressively to smaller centres.

2. REASONS FOR CHANGE

The understanding and measurement of the process of urbanization have long been recognized as fundamentally important to considerations of economic and social change. For this reason Census information has traditionally been published separately for "metropolitan", "other urban", and "rural" areas. However, the criteria used in the past for making this dissection (criteria which are still used in many countries) did not provide comparable data for different areas or for different points of time.

3. BACKGROUND

In Australian Censuses up to and including the Census of 1947 complete local government areas were classified as either urban or rural, and "urban" areas therefore usually consisted of whole local government areas, or multiples of them. However, many local government areas, particularly at the fringe of large urban complexes, contain both urban and rural components. In some cases it was necessary to split local government areas for statistical purposes in order to eliminate large rural expanses from the metropolitan areas. Boundaries were also subject to variation by local authorities for reasons unrelated to (and often conflicting with) statistical requirements, and consequently this method became increasingly unsatisfactory.

In the Censuses of 1954 and 1961 all localities of 1,000 population and over (750 and over in Tasmania) were classified as "urban". Boundaries were delineated either from local advice, inspection in the field, or from aerial photographs. However, although these procedures were an improvement on the earlier ones, the boundary decisions made for different urban centres, being highly subjective, did not provide sufficient comparability.

4. PRE-CENSUS RESEARCH

For the 1966 Census it was decided to develop new criteria for the delimitation of metropolitan and other urban boundaries. In November, 1963 preliminary discussions were held with Professor A.T.A. Learmonth, M.A., Ph. D. (Edin.), Professor of Geography at the School of General Studies and G.J.R. Linge, B.Sc. (Econ.), Ph. D., Fellow, Institute of Advanced Studies, both of the Australian National University, Canberra. As a result, Dr. Linge was commissioned to examine and report on "the delimitation of metropolitan and other boundaries, together with suggestions as to nomenclature, boundaries, mapping and any other aspects considered pertinent". The results of his research, which included detailed investigation overseas and extensive field work (in conjunction with officers of the Bureau) in Australia, were published in "The Delimitation of Urban Boundaries" (publication G/2, Research School of Pacific Studies, Australian National University) issued in August, 1965. His report led to the adoption by the Twenty-seventh Conference of Statisticians (August, 1965) of a series of objective criteria for the delimitation of urban boundaries which vary only in minor ways from Dr. Linge's recommendations. These criteria are detailed in Appendix A hereto.

5. SUMMARY OF CRITERIA ADOPTED FOR THE 1966 CENSUS

INVESTIGATION OF OVERSEA PRACTICE reveals that a wide range of criteria has been used by various countries in attempting to delimit urban boundaries. Amongst these criteria are such things as occupation, commuting patterns, commercial relationships (as revealed by stores accounts, telephone calls, etc.) and population density. In general these efforts have resulted in systems which are highly complex (because of the use of a combination of criteria) and subjective (because of the lack of adequate information for particular criteria). Some of the required information has to be gathered from external sources, adding greatly to the cost of determining boundaries, whilst much of the information which becomes available from the Census itself (e.g. commuting or occupational patterns) is of a complex nature and, even with computer processing, would not be available until a year or more after the Census.

THE BASIC CRITERION ADOPTED IN AUSTRALIA for the delimitation of urban boundaries is population DENSITY as applied to small areas. As urbanization increases, the change from rural to urban uses is accompanied by increasing population density. Extensive field investigations have shown that areas at the fringe which have largely lost their rural characteristics and are developing towards urbanization have densities which vary over only a relatively small range. The adoption of a specific density from within that range therefore provides a criterion which adequately delimits urban boundaries and which can be applied objectively and uniformly without undue difficulty or delay.

A density of 500 persons per square mile has been adopted as the criterion.

THE GEOGRAPHIC UNITS to be classified according to the density criterion are collector's districts, the smallest units available. These areas vary in size and shape, but as far as possible they have been designed to ensure that significant urban development in large rural collector's districts is split off as a separate collector's district. Particular rules apply to contiguous areas which have special functions but which do not meet the density criterion, such as airports, sporting areas and industrial areas. In addition, a dwelling density criterion is applied to holiday areas which may be below population density because the Census is taken in mid-week and during the winter.

THE BOUNDARY OF AN URBAN CENTRE is, therefore, the peripheral boundary of an aggregate of contiguous urban collector's districts. The boundary is a moving one which reflects the process of urbanization. The use of objective criteria enables valid comparisons to be made between one urban centre and another, and between the population for an urban centre at one Census with the populations at succeeding Censuses. Comparable information for the 1961 Census has also been prepared, although, because 1961 collector's districts were not especially designed for this purpose, some estimations have had to be made.

FIXED OUTER BOUNDARIES FOR CAPITAL CITIES and some other principal centres have also been delineated. The moving urban boundary, which is useful for the purposes outlined above, has limitations due to the difficulty of compiling other statistical information, much of which is not obtained on a collector's district basis. The fixed boundaries meet the need for areas which (i) fit into the pattern of existing Statistical Divisions (which are used for many statistical purposes), (ii) remain stable over a long period, and (iii) are related economically and socially to the major centre.

For this reason each urban centre of 75,000 population or greater has been circumscribed by a fixed outer boundary. This encloses the area which is considered to be economically and socially oriented towards the major urban centre, and which is large enough to contain the anticipated growth of the major urban centre for a period of from twenty to thirty years. In determining these outer boundaries, the views of State planning authorities have been taken into account. For these areas it is proposed that, at each Census, population information will be prepared for the major urban centre, for individual minor urban centres (population 1,000 or greater), and for the residual rural area. Intercensally, statistics will, in general, relate to the whole area within the fixed outer boundary.

6. NOMENCLATURE

In the case of State capital cities, the total area enclosed by the fixed outer boundary will be designated (using Sydney as an example) "Sydney Statistical Division". The principal urban centre within it will be designated "Sydney Metropolitan Area". Minor urban centres will be designated (using Camden as an example) "Urban Camden".

In the case of other urban centres over 75,000 population, the total area enclosed by the fixed boundary will be designated (using Newcastle as an example) "Newcastle Statistical District". The principal urban centre within it will be designated "Urban Newcastle" (with the exception of the capital city of Canberra which is designated "Canberra Metropolitan Area"). Minor urban areas will be designated (using Avondale as an example) "Urban Avondale".

Other urban centres below 75,000 population will be designated (using Broken Hill as an example) "Urban Broken Hill".

NOTES

- (i) Because of technical difficulties a few collector's districts are included within the following metropolitan areas, even though they did not meet the criteria:

Melbourne Metropolitan Area -

one collector's district in the City of Nunawading;

Adelaide Metropolitan Area -

five collector's districts, one in the City of Burnside, two in the Corporate Town of Campbelltown, and two in the City of Enfield.

The additional population thus included in these metropolitan areas is in no case more than a few hundred.

- (ii) Because the new criteria for the delimitation of urban boundaries were adopted only shortly prior to the 1966 Census a few collector's districts containing urban growth were not split into their rural and (potentially) urban components, with the result that significant urban population remained included in large, predominantly rural, collector's districts which did not meet the density criterion. Such cases occurred mainly around the Sydney Metropolitan Area and Urban Toowoomba. The effect on the Sydney Metropolitan Area is small, probably not more than 5,000 urban population having been omitted. In Toowoomba the effect is proportionately much greater, the urban population probably being understated by up to 3,000 persons.

Such defects will be remedied before the 1971 Census.

- (iii) In this statement, Canberra Metropolitan Area differs from the proclaimed Canberra City District, for which statistics were shown in Field Count Statement No. 1 as City of Canberra.

TABLE 1. - POPULATION : SIX CAPITAL CITY STATISTICAL DIVISIONS, 1961 AND 1966

NOTE. - For Metropolitan and other urban centres, which are delimited by moving boundaries (see Explanatory Notes), the interannual increase or decrease between 1961 and 1966 reflects (i) population changes within the original 1961 boundaries, (ii) urban growth beyond the original boundaries, and (iii) the merging of other urban areas, one with another, or with the Metropolitan Area. Metropolitan and other urban boundaries for 1961 have been redrawn according to the new criteria. The urban populations (partly estimated) within these boundaries are shown in this table for comparison with 1966 population.

	Census, 30th June, 1961	Census, 30th June, 1966			Interannual Increase or Decrease	
		Males	Females	Persons	Numerical	Percentage %
SYDNEY STATISTICAL DIVISION						
Sydney Metropolitan Area	2,197,022	1,204,953	1,239,782	2,444,735	247,713	11.27
Other Urban Centres -						
Urban Parramatta	10,884	(a)	(a)	(a)	(a)	..
Urban Riverstone	4,333	(a)	(a)	(a)	(a)	..
Urban Glenbrook-Faulconbridge	9,640	6,692	7,030	13,722	4,082	42.34
Urban Richmond-Windsor	8,846	5,235	4,679	9,914	1,068	12.07
Urban Camden	2,683	1,642	1,795	3,437	754	28.10
Total Other Urban	36,386	13,569	13,504	27,073	-9,313	-25.60
Total Urban	2,233,408	1,218,522	1,253,286	2,471,808	238,400	10.67
Rural	70,056	37,046	30,773	67,819	-2,237	-3.19
TOTAL SYDNEY STATISTICAL DIVISION	2,303,464	1,255,568	1,284,059	2,539,627	236,163	10.28
MELBOURNE STATISTICAL DIVISION						
Melbourne Metropolitan Area	1,808,534	1,045,257	1,063,242	2,108,499	249,965	13.85
Other Urban Centres -						
Urban Laverton	4,152	(a)	(a)	(a)	(a)	..
Urban Dromana-Sorrento	8,268	4,765	5,134	9,899	1,631	19.73
Urban Werribee	5,099	4,170	4,061	8,231	3,132	61.42
Urban Mornington-Balcombe	5,701	3,933	3,416	7,349	1,648	28.91
Urban Sunbury	3,131	1,831	1,694	3,525	394	12.58
Urban Healesville	2,368	1,362	1,318	2,680	312	13.18
Urban Crib Point	2,078	1,144	685	1,829	-249	-11.98
Urban Berwick	1,262	805	916	1,721	459	36.37
Urban Hastings	(b)	579	557	1,136	1,136	..
Urban Warrandyte	(b)	528	544	1,072	1,072	..
Total Other Urban	32,059	19,117	18,325	37,442	5,383	16.79
Total Urban	1,890,593	1,064,374	1,081,567	2,145,941	255,348	13.51
Rural	93,989	42,750	39,820	82,570	-11,419	-12.15
TOTAL MELBOURNE STATISTICAL DIVISION	1,984,582	1,107,124	1,121,387	2,228,511	243,929	12.29
BRISBANE STATISTICAL DIVISION						
Brisbane Metropolitan Area	587,634	352,692	366,448	719,140	131,506	22.38
Other Urban Centres -						
Urban Ipswich	42,385	(a)	(a)	(a)	(a)	..
Urban Goondi	4,135	(a)	(a)	(a)	(a)	..
Urban Bald Hills	1,649	(a)	(a)	(a)	(a)	..
Urban Caboolture	2,068	1,309	1,232	2,541	473	22.87
Urban Lawnton-Petrie	1,801	1,251	1,250	2,501	700	38.87
Urban Birkdale-Wellington Point	1,862	1,142	1,126	2,268	406	21.80
Urban Beenleigh	1,772	1,013	1,009	2,022	250	14.11
Urban Cleveland	1,462	840	889	1,729	267	18.26
Urban Woodridge	(b)	751	726	1,477	1,477	..
Urban Deception Bay	588	343	360	703	115	19.56
Urban Victoria Point	(b)	306	289	595	595	..
Total Other Urban	57,720	6,955	6,881	13,836	-43,884	-76.05
Total Urban	645,354	359,647	373,329	732,976	87,622	13.58
Rural	47,280	25,560	21,399	46,959	-2,321	-4.91
TOTAL BRISBANE STATISTICAL DIVISION	692,634	385,207	394,728	779,935	85,301	12.32

For Footnotes see end of table.

TABLE 1. - POPULATION : SIX CAPITAL CITY STATISTICAL DIVISIONS, 1961 AND 1966 - Continued

NOTE. - For Metropolitan and other urban centres, which are delimited by moving boundaries (see Explanatory Notes), the interannual increase or decrease between 1961 and 1966 reflects (i) population changes within the original 1961 boundaries, (ii) urban growth beyond the original boundaries, and (iii) the merging of other urban areas, one with another, or with the Metropolitan Area. Metropolitan and other urban boundaries for 1961 have been redrawn according to the new criteria. The urban populations (partly estimated) within these boundaries are shown in this table for comparison with 1966 population.

	Census, 30th June, 1961	Census, 30th June, 1966			Interannual Increase or Decrease	
		Males	Females	Persons	Numerical	Percentage %
ADELAIDE STATISTICAL DIVISION						
Adelaide Metropolitan Area	580,449	357,931	368,999	726,930	146,481	25.24
Other Urban Centres -						
Urban Salisbury-Elizabeth	31,797	(a)	(a)	(a)	(a)	..
Urban Reynella-Port Noarlunga	2,429	5,895	5,980	11,775	9,346	384.77
Urban Gawler	6,433	3,246	3,397	6,643	210	3.26
Urban Gracera-Bridgewater	4,084	2,162	2,309	4,471	387	9.48
Total Other Urban	44,743	11,303	11,586	22,889	-21,854	- 48.84
Total Urban	625,192	369,234	380,585	749,819	124,627	19.93
Rural	33,954	10,674	10,135	20,809	-13,145	- 38.71
<u>TOTAL ADELAIDE STATISTICAL DIVISION</u>	659,146	379,908	390,720	770,628	111,482	16.91
PERTH STATISTICAL DIVISION						
Perth Metropolitan Area	423,930	244,447	255,047	499,494	75,564	17.82
Other Urban Centres -						
Urban Medina-Callista	5,269	2,088	2,053	4,141	872	26.67
Urban Rockingham-Safety Bay	1,726	1,903	1,856	3,759	2,033	177.79
Urban Aradale	2,365	1,688	1,768	3,456	891	34.74
Urban Kalamunda-Gooseberry Hill	2,488	1,527	1,542	3,069	581	23.35
Urban Minana Industrial	1,104	679	592	1,271	167	15.13
Total Other Urban	11,152	7,085	7,811	15,696	4,544	40.75
Total Urban	435,082	252,332	262,858	515,190	80,106	18.41
Rural	40,316	22,193	20,914	43,107	2,791	6.92
<u>TOTAL PERTH STATISTICAL DIVISION</u>	475,398	274,525	283,772	558,297	82,899	17.44
HOBART STATISTICAL DIVISION						
Hobart Metropolitan Area	110,217	58,527	60,888	119,415	9,198	8.35
Other Urban Centres -						
Urban New Norfolk	5,494	2,879	2,896	5,775	281	5.11
Urban Kingston	2,980	1,628	1,635	3,263	283	9.50
Urban Sorell-Midway Point	1,264	849	801	1,650	386	30.54
Urban Lauderdale	649	462	457	919	270	41.60
Total Other Urban	10,387	5,818	5,789	11,607	1,220	11.75
Total Urban	120,604	64,345	66,677	131,022	10,418	8.64
Rural	9,632	5,267	4,949	10,216	584	6.06
<u>TOTAL HOBART STATISTICAL DIVISION</u>	130,236	69,612	71,626	141,238	11,002	8.45

(a) Merged with Metropolitan area.

(b) Non-urban in 1961.



TABLE 2. - POPULATION : STATISTICAL DISTRICTS OF CANBERRA, NEWCASTLE, WOLLONGONG AND GEELONG, 1961 AND 1966

NOTE. - For Metropolitan and other urban centres, which are delineated by moving boundaries (see Explanatory Notes), the intercensal increase or decrease between 1961 and 1966 reflects (i) population changes within the original 1961 boundaries, (ii) urban growth beyond the original boundaries, and (iii) the merging of other urban areas, one with another, or with the Metropolitan Area. Metropolitan and other urban boundaries for 1961 have been redrawn according to the new criteria. The urban populations (partly estimated) within these boundaries are shown in this table for comparison with 1966 population.

	Census, 30th June, 1961	Census, 30th June, 1966			Intercensal Increase or Decrease	
		Males	Females	Persons	Numerical	Percentage %
CANBERRA STATISTICAL DISTRICT						
Canberra Metropolitan Area (a)	55,746	47,714	44,485	92,199	36,453	65.39
Other Urban Centres -						
Urban Queanbeyan	9,448	6,583	5,906	12,489	3,041	32.19
Total Other Urban	9,448	6,583	5,906	12,489	3,041	32.19
Total Urban	65,194	54,297	50,391	104,688	39,494	60.58
Rural	1,957	1,227	1,080	2,307	350	17.88
<u>TOTAL CANBERRA STATISTICAL DISTRICT</u>	67,151	55,524	51,471	106,995	39,844	59.33
NEWCASTLE STATISTICAL DISTRICT						
Urban Newcastle	219,633	116,417	117,550	233,967	14,334	6.53
Other Urban Centres -						
Urban Maitland	19,512	11,380	11,725	23,105	3,293	16.62
Urban Cessnock-Bellbird	15,308	7,416	7,913	15,329	21	0.14
Urban Kurri Kurri-Weston	10,756	5,711	5,851	11,562	806	7.49
Urban Raymond Terrace	3,962	2,512	2,455	4,967	1,005	25.37
Urban Thornton-Beresfield	3,953	2,449	2,335	4,784	831	21.02
Urban Ermenton-Greta	2,598	1,249	1,287	2,536	-62	-2.39
Urban Wangi-Rathmines	2,216	1,202	1,196	2,398	182	8.21
Urban Nelson Bay	1,877	1,141	1,152	2,273	396	21.10
Urban Avondale	(b)	646	686	1,332	1,332	..
Total Other Urban	60,482	33,706	34,580	68,286	7,804	12.90
Total Urban	280,115	150,123	152,130	302,253	22,138	7.90
Rural	28,401	15,250	12,000	25,250	-3,151	-11.09
<u>TOTAL NEWCASTLE STATISTICAL DISTRICT</u>	308,516	165,373	164,130	327,503	18,987	6.15
WOLLONGONG STATISTICAL DISTRICT						
Urban Wollongong	128,360	85,321	77,514	162,835	34,475	26.86
Other Urban Centres -						
Urban Albion Park	4,539	(c)	(c)	(c)	(c)	..
Urban Kiama	3,018	1,900	1,908	3,808	790	26.18
Urban Helenburgh	2,236	1,166	1,167	2,333	97	4.34
Urban Gerringsong	715	392	412	804	89	12.45
Total Other Urban	10,508	3,458	3,487	6,945	-3,563	-33.91
Total Urban	138,868	88,779	81,001	169,780	30,912	22.26
Rural	11,519	4,218	4,102	8,320	-3,199	-27.77
<u>TOTAL WOLLONGONG STATISTICAL DISTRICT</u>	150,387	92,997	85,103	178,100	27,713	18.43
GEELONG STATISTICAL DISTRICT						
Urban Geelong	87,922	52,794	52,180	104,974	17,052	19.39
Total Urban	87,922	52,794	52,180	104,974	17,052	19.39
Rural	8,530	3,324	2,980	6,304	-2,226	-26.10
<u>TOTAL GEELONG STATISTICAL DISTRICT</u>	96,452	56,118	55,160	111,278	14,826	15.37

(a) See Note (i) page 5.

(b) Non-urban in 1961.

(c) Merged with Urban Wollongong.

TABLE 3. - POPULATION : PRINCIPAL URBAN CENTRES OF AUSTRALIA, 1961 AND 1966

Urban Centres	State or Territory	Census 30th June, 1961	Census 30th June, 1966			Intercensal Increase or Decrease	
			Males	Females	Persons	Numerical	Percentage
Sydney	N.S.W.	2,197,022	1,204,953	1,239,782	2,444,735	247,713	11.27
Melbourne	Vic.	1,858,534	1,045,257	1,063,242	2,108,499	249,965	13.45
Adelaide	S.A.	580,449	357,931	363,999	726,930	146,481	25.24
Brisbane	Qld	587,634	352,692	366,448	719,140	131,506	22.38
Perth	W.A.	423,930	244,447	255,047	499,494	75,564	17.82
Newcastle	N.S.W.	219,633	116,417	117,550	233,967	14,334	6.53
Wollongong	N.S.W.	128,360	85,321	77,514	162,835	34,475	26.86
Hobart	Tas.	110,217	58,527	60,888	119,415	9,198	8.35
Geelong	Vic.	87,922	52,794	52,180	104,974	17,052	19.39
Canberra	A.C.T.	55,746	47,714	44,485	92,199	36,453	65.39
Launceston	Tas.	56,465	29,239	31,214	60,453	3,988	7.06
Townsville	Qld	48,794	28,848	27,839	56,687	7,893	16.18
Ballarat	Vic.	53,581	27,358	28,946	56,304	2,723	5.08
Gold Coast	N.S.W./ Qld	34,764	25,843	27,201	53,044	18,280	52.58
Toowoomba(a)	Qld	46,716	25,186	26,934	52,120	5,404	11.57
Rockhampton	Qld	42,850	22,119	23,230	45,349	2,499	5.83
Bendigo	Vic.	39,446	20,059	22,132	42,191	2,745	6.96
Albury- Wodonga	N.S.W./ Vic.	28,796	15,841	16,178	32,019	3,223	11.19
Broken Hill	N.S.W.	31,245	15,097	14,904	30,001	-1,244	-3.98
Darwin	N.T.	14,408	11,191	9,070	20,261	5,853	40.62

Minus sign (-) indicates decrease in population.

(a) See page 5 of Explanatory Notes.

K.M. ARCHER
COMMONWEALTH STATISTICIAN

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
CANBERRA, A.C.T. 14TH NOVEMBER, 1966.

NOTE. - Inquiries concerning these statistics may be made in Canberra by telephoning 41971 Extension 27, or, in each State Capital, by telephoning the office of the Bureau of Census and Statistics.

APPENDIX A.

CRITERIA FOR THE DELIMITATION OF URBAN BOUNDARIES
RESOLUTIONS OF THE TWENTY-SEVENTH CONFERENCE OF STATISTICIANS - AUGUST, 1965

- Resolution 1 (a) That the concept of an inner and an outer boundary around each of the State capitals and other cities with an urban population of at least 75,000 and a regional population of at least 100,000 be adopted, and
- (b) That the inner boundary be drawn to delimit the extent of urban development at each Census and it would therefore, be a moving boundary to be adjusted after each Census, except that any State may extend the inner boundary during inter-censal years to encompass significant and well-defined peripheral population growth, and
- (c) That the outer boundary be designed to contain the anticipated urban development of the city for a period of at least twenty to thirty years.
- Resolution 2 (a) That an urban boundary be defined as soon as possible for all other settlements with a population of 1,000 or more, and
- (b) That State, Statistical Division, Local Government Area, and other boundaries be ignored in delimiting these urban areas.
- Resolution 3 (a) That urban boundaries be defined so as to include all contiguous census collector's districts which have a population density of 500 or more per square mile, but that in applying this basic criterion, the following additional criteria and rules shall be taken into account:-
- (i) Land used for factories, airports, small sports areas, cemeteries, hostels, institutions, prisons, military camps and certain research stations shall be treated as being used for urban purposes if such land is contiguous with collector's districts which conform with density and other criteria;
- (ii) Any area which does not conform with the population density criterion, and in which land is used for large sporting areas, explosives handling and munitions areas, large parks, holding paddocks and reservoirs, must be excluded from the urban area, unless it is bordered on three sides by collector's districts forming part of the urban area;
- (iii) Any area which does not conform with the population density and land-use criteria, but which is completely surrounded by land included in an urban area, must be included in that urban area;
- (iv) If a collector's district, which would have been excluded from an urban area under other criteria, forms an indentation into an urban area which is less than one mile wide at the open end, it must be included in the urban area if a suitable boundary can be defined across the open end;
- (v) Where there is a gap in urban development which is less than two miles (by the shortest rail or road distance) between the edge of one area of urban development and another, the gap is to be ignored and the urban areas treated as contiguous; if there is a gap of two or more miles between two urban areas, those urban areas are to be treated as separate urban areas even if the gap comprises mainly reserved land or a natural barrier;
- (vi) Holiday resorts shall be recognised as urban on a dwellings rather than population density criterion, but care must be taken to omit decaying mining towns and the like in applying this criterion. Such resorts should be classed as urban if they have 250 or more dwellings (with at least 100 occupied dwellings) on Census night and have a recognisable core, except that where a holiday resort adjoins an urban area, it shall be encompassed by the urban boundary if it has a density of 125 or more dwellings per square mile; and
- (b) That the following additional rule shall apply in delimiting the inner boundary where a dual boundary concept is employed:-

* (See Footnote).

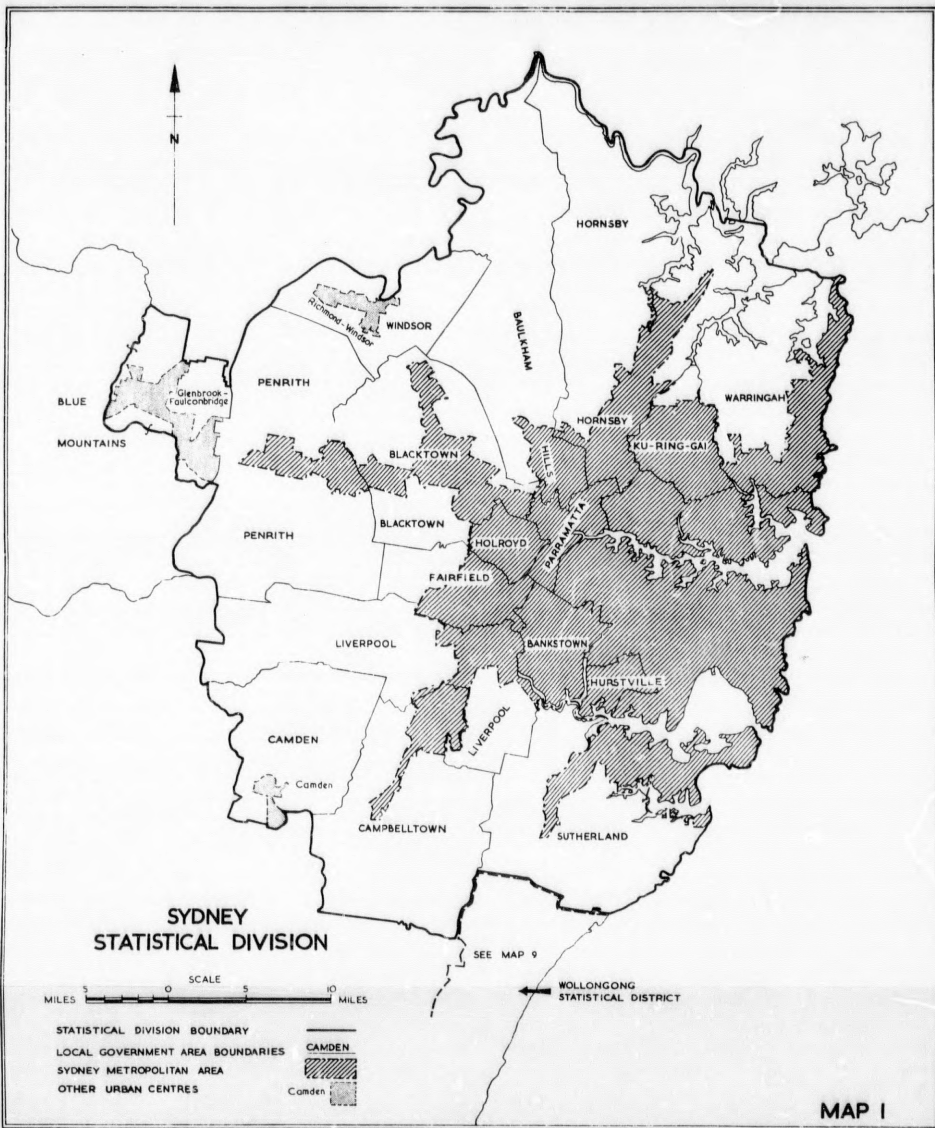
Irrespective of population density and land use, if the addition of collector's districts with a total area of not more than five square miles would bring the whole of a Local Government Area within an inner urban boundary, then the boundary shall embrace them.

- Resolution 4 (a) That in order to define an urban boundary in terms of the criteria specified in Resolution 3, it is first necessary to make a pre-census examination of collector's districts and set a tentative boundary, and
- (b) That in setting the tentative boundary, collector's districts shall, where necessary, be split according to rules which must (i) preserve continuity with previous collector's districts (ii) not result in formation of districts which would exceed the maximum workload for a census collector, and (iii) enable an approximate urban boundary to be defined at the ensuing Census; the rules for splitting collector's districts and setting the tentative boundary to be:-
- (i) Irrespective of population density, a collector's district on the periphery of an urban area shall be split if it has a population of 500 or more living in a part of the collector's district contiguous with the urban area and there is a gap of more than one mile between the outer edge of this area and the furthestmost edge of the collector's district; as far as possible such collector's districts should be split parallel with rather than at right angles to the perimeter of the urban area;
 - (ii) Boundaries selected for the splitting of collector's districts shall conform, as closely as possible, with boundaries of land-use zones;
 - (iii) Where there is a gap of less than two miles between two areas of urban development, a collector's district shall be defined to bridge the gap between the two urban areas, so as to ensure that large areas of non-urban land will not be included within the urban boundary, and
- (c) That after the Census, the urban boundary shall be delimited by examining each collector's district on the periphery of the urban area in the light of the Census results, and including them in, or excluding them from, the area to be encompassed by the urban boundary according to the criteria and rules specified in Resolution 3.

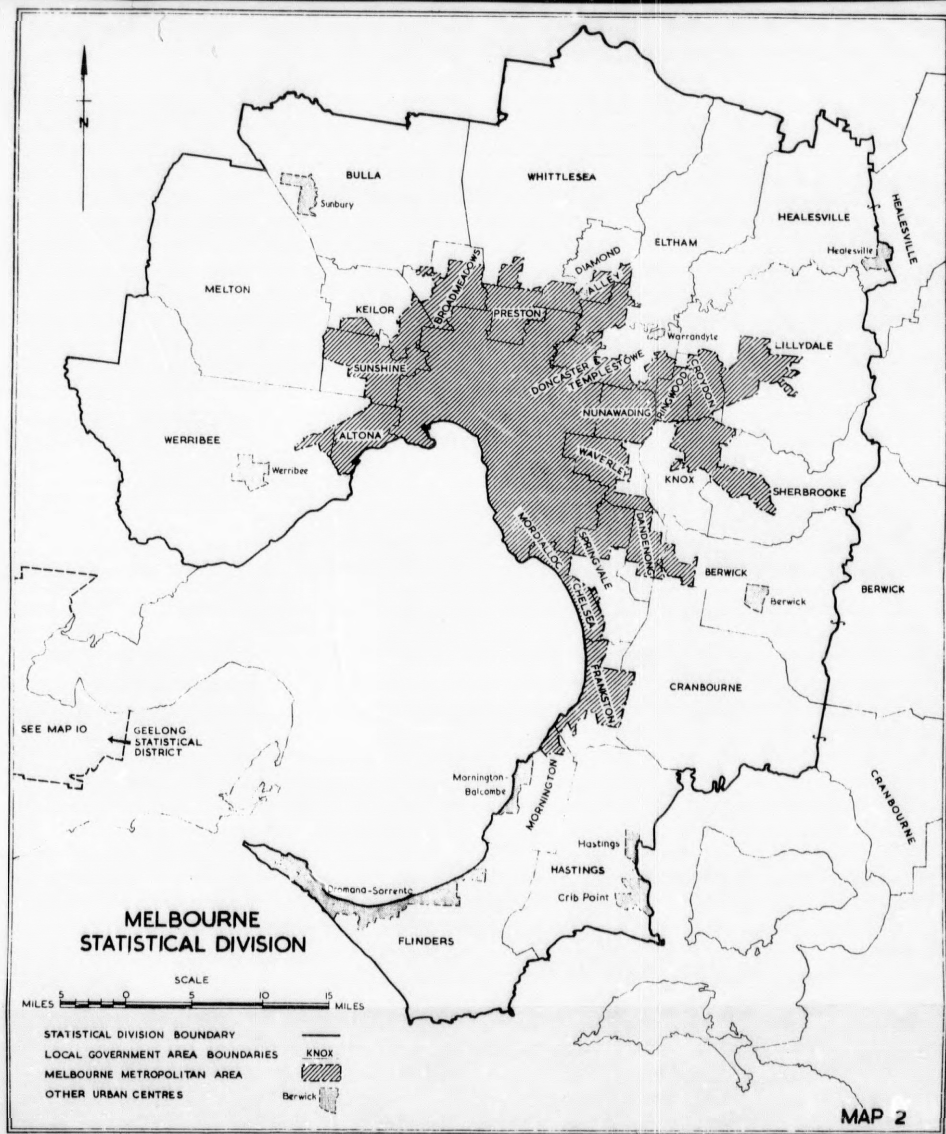
Resolution 5 That where a dual boundary concept is employed, the outer boundary shall be designed to delimit, for at least two or three decades, the region expected to be in close contact with the inner urban area, after making allowances for further urban development, including satellite towns, improvements in transport, and other factors. As far as possible, this region should be composed of complete Local Government Areas, have well defined boundaries, and have a sensible shape. It should take into account the needs of planners. Where the outer boundary follows Local Government Area boundaries and the latter are altered, the outer boundary shall, where considered appropriate, be adjusted accordingly.

- Resolution 6 (a) That for capital cities, nomenclature for the area delimited by (i) the inner, and (ii) the outer boundary shall be (using Melbourne as the example) -
- (i) Melbourne Metropolitan Area, and
 - (ii) Melbourne Statistical Division, and
- (b) That in other cases where a dual boundary concept is employed, the nomenclature shall be (using Newcastle as the example) -
- (i) Urban Newcastle, and
 - (ii) Newcastle Statistical District, and
- (c) That in cases where an urban area alone is delineated, the nomenclature shall be (using Wagga Wagga as the example) -
- Urban Wagga Wagga, and
- (d) That where urban areas are formed by the coalescence of two or more towns, such urban areas shall be assigned a name agreed upon after consultation with the Deputy Commonwealth Statisticians of the States concerned.

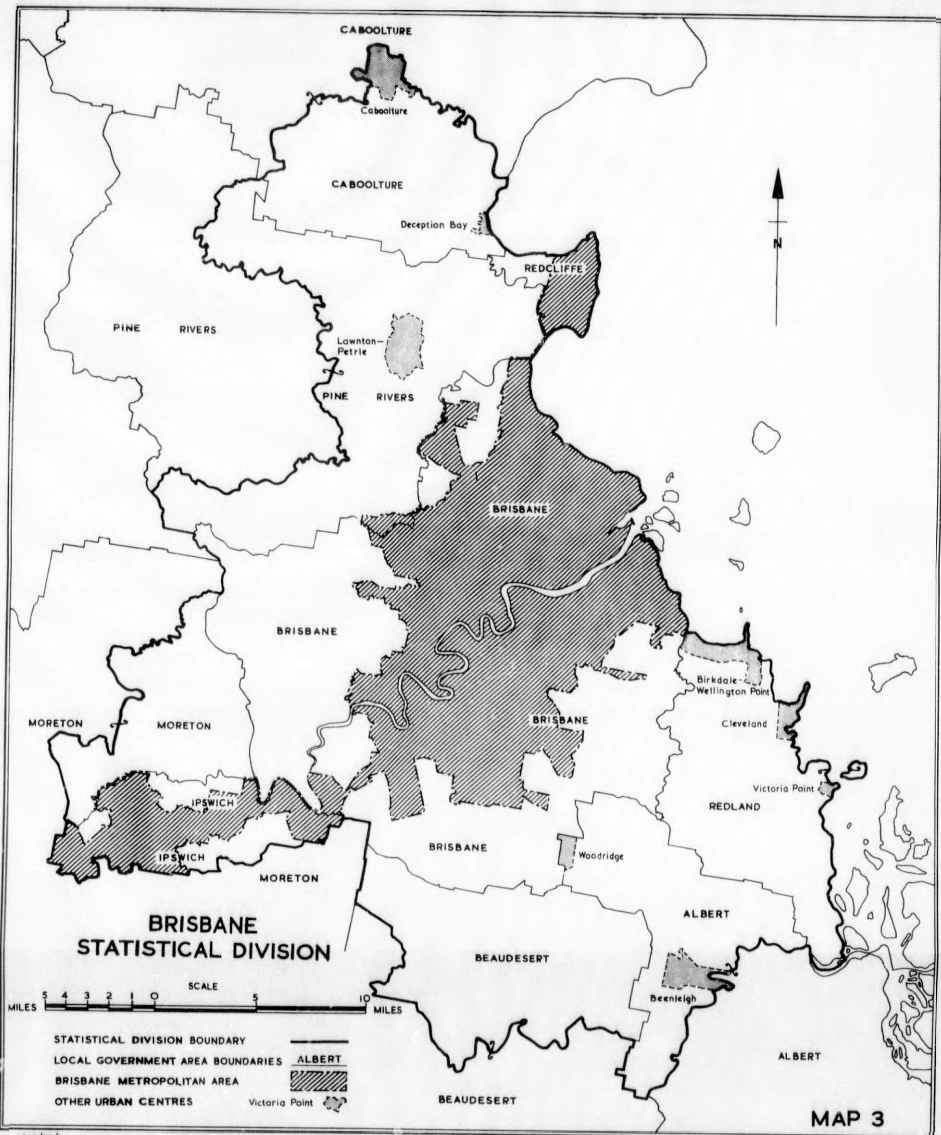
* Pending further consideration by Conference of Statisticians, the implementation of Part (b) of Resolution 3 has been deferred.

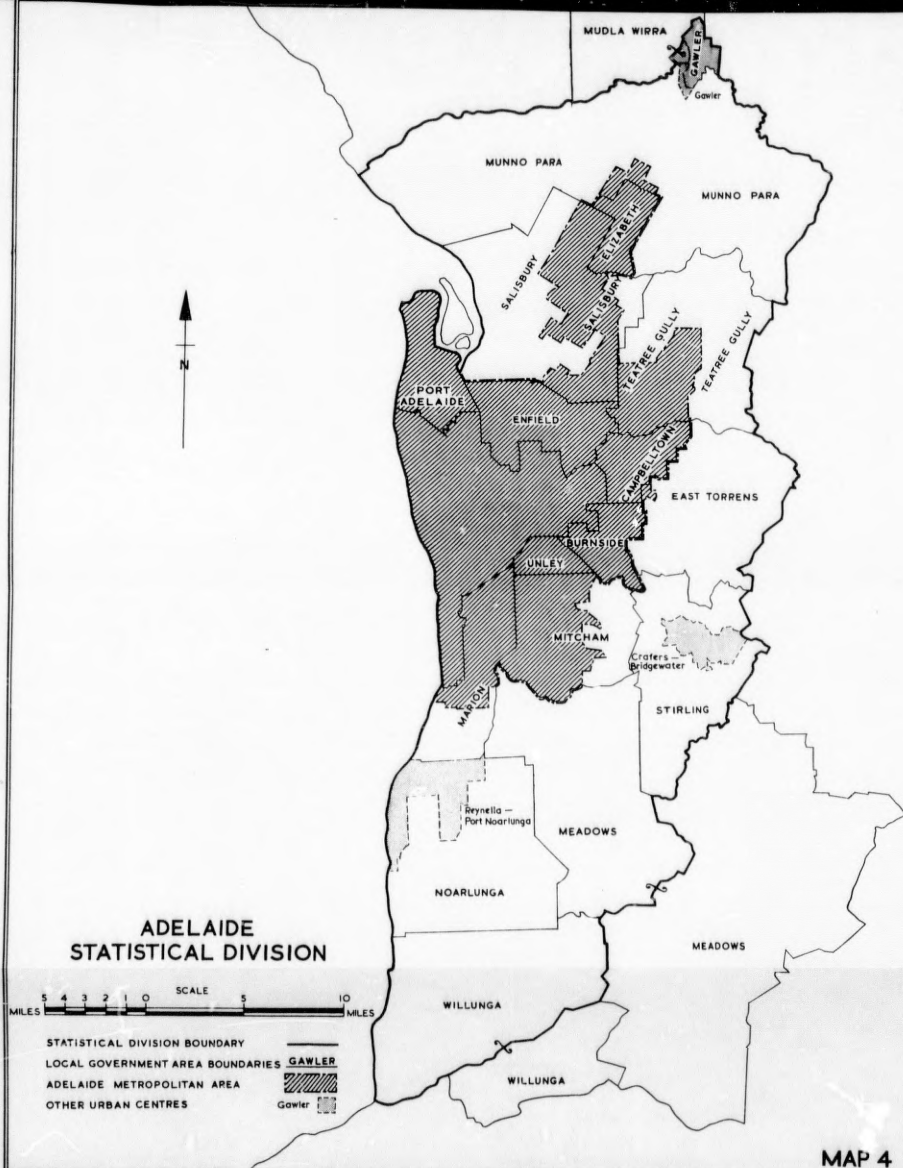


MAP I

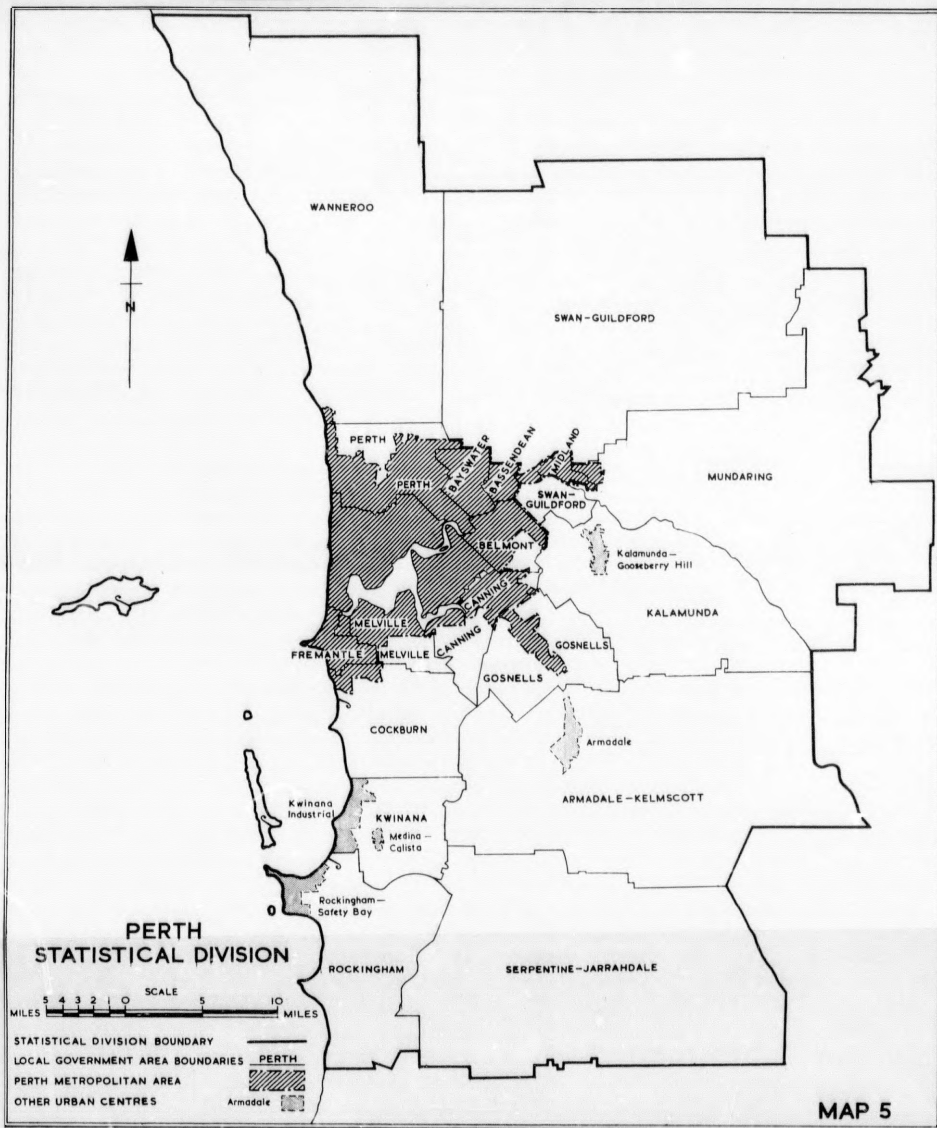


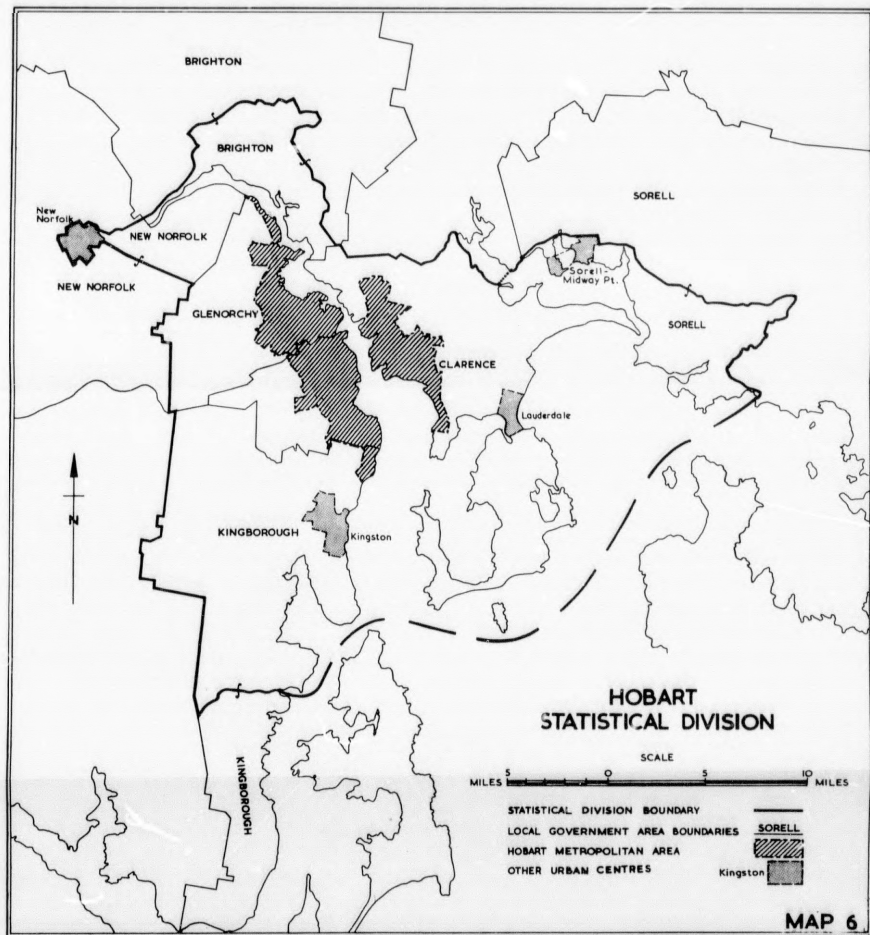
MAP 2





MAP 4



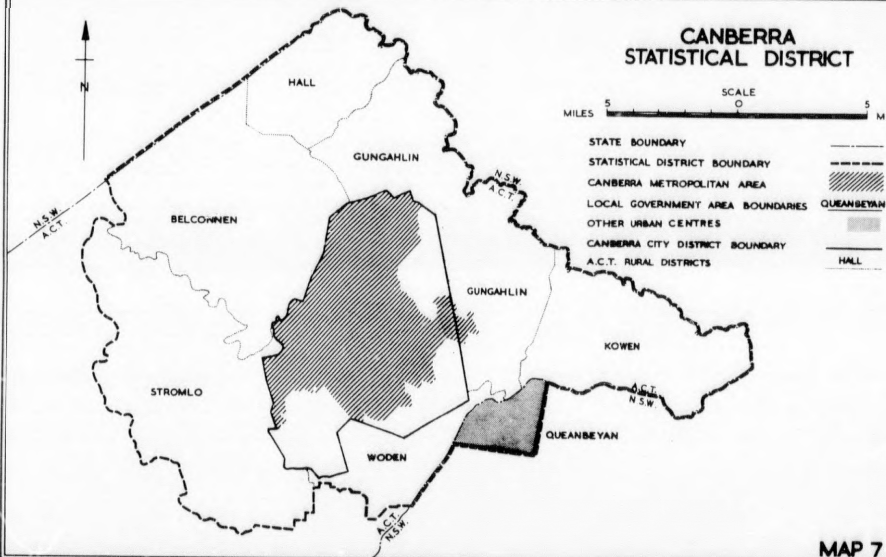


MAP 6

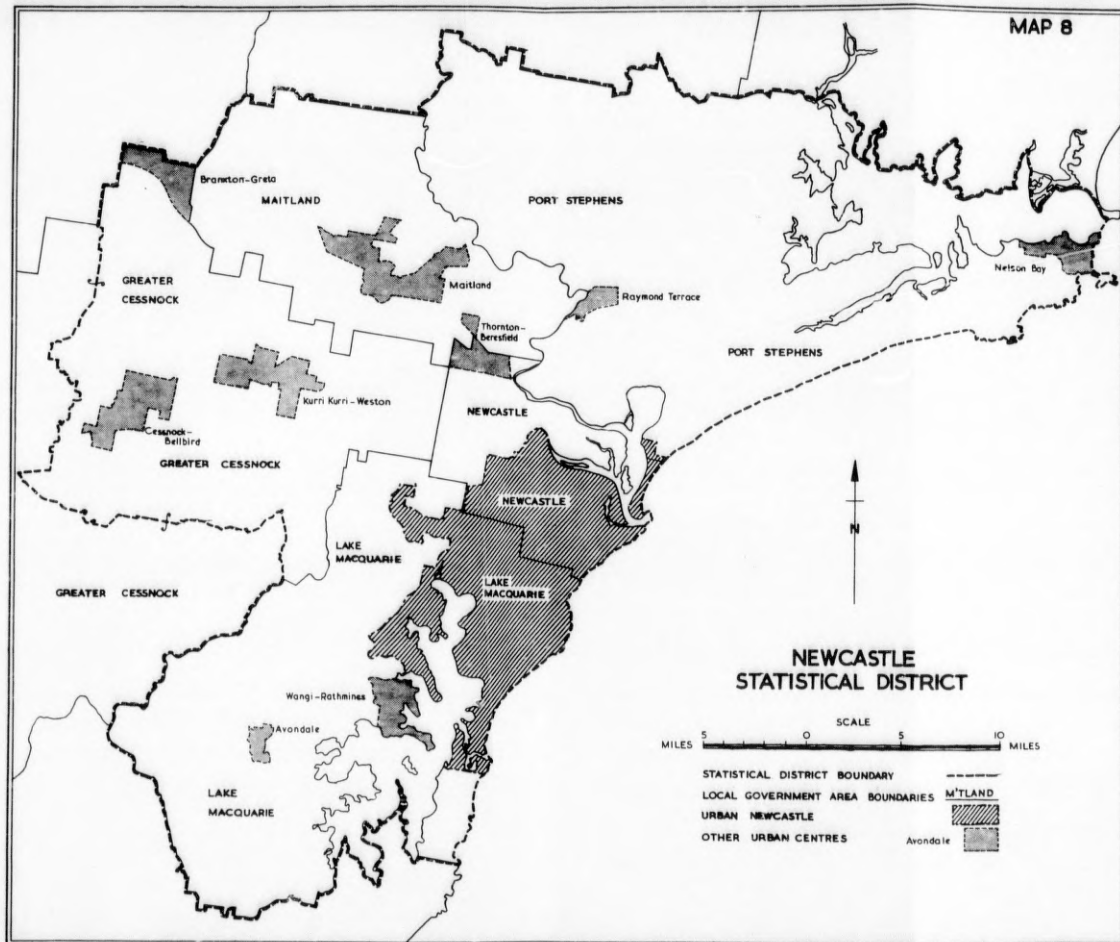
1966/FC/6

CANBERRA STATISTICAL DISTRICT

SCALE
MILES 5 0 5 MILES



MAP 7



WOLLONGONG STATISTICAL DISTRICT

MAP 9



STATISTICAL DISTRICT BOUNDARY

LOCAL GOVERNMENT AREA BOUNDARIES

URBAN WOLLONGONG

OTHER URBAN CENTRES

KIAMA

Kiama

GREATER
WOLLONGONG

GREATER
WOLLONGONG

SHELLHARBOUR

SHELLHARBOUR

KIAMA

Kiama

Gerrington

Helensburg



