

DEMOCRAPHIC PROFILE
OF
THE SYDNEY JEWISH COMMUNITY

Preliminary Report

June 1987

G.T.Eckstein

HIGHLIGHTS OF THE REPORT

- * The Jewish population of Sydney at 30 June 1986 is estimated at 28,680.
- * The population has grown from 27,080 in 1981 equivalent to a growth rate of 1.15% per annum.
- * Almost all of the increase in population is the result of international migration of which 70% derives from South Africa.
- * There has been a small excess of births over deaths in the last five years but until at least the turn of the century deaths are likely to exceed births.
- * The age distribution of the Jewish community differs substantially from that of the general population with a high proportion of the elderly and remarkably low numbers of young adults.
- * Eighty percent of the Jewish population is concentrated within five of the forty three Local Government Areas of Sydney being Waverley, Woollahra, Ku-ring-gai, Randwick and Willoughby. That percentage concentration is increasing.
- * Population growth is discernible in those five Areas with additional growth in Ryde and St. George but nowhere else.
- * The most rapid population growth is taking place on the Upper North Shore (Ku-ring-gai).
- * Jewish day schools educate about one third of students entering secondary education.
- * Secondary students on the Lower North Shore, St. George and Maroubra reside largely outside the Jewish day school network.
- * There is a strong case for seeking Government approval to transfer about 100 nursing home beds from Hunter's Hill to the Eastern suburbs.

CONTENTS

1. BACKGROUND	
1.1. Introduction	1
1.2. Definitions	3
1.3. Census	5
1.4. Methodology	6
2. UNDER-ENUMERATION	
2.1. Causes	7
2.2. Bar Mitzvah Records	9
2.3. Funeral Records	12
2.4. Place of Birth	15
2.5. Balance of the Community	17
3. SIZE OF THE POPULATION	
3.1. Jewish Population of Sydney in 1981	19
3.2. Natural Increase	21
3.3. International Migration	22
3.4. Jewish Population of Sydney in 1986	25
4. CHARACTERISTICS OF THE POPULATION	
4.1. Survey of Recent Bar Mitzvahs	26
4.2. Age Distribution of the Jewish Community	28
4.3. Families with Dependent Children	30
4.4. Educational Facilities	32
4.5. Eastern Suburbs	34
4.6. Northern Suburbs	36
4.7. Balance of Sydney	38
4.8. Geographic Distribution of the Elderly	39
5. REFERENCES	40

1. BACKGROUND

1.1. Introduction

In January 1987 the author was requested by the Chairman of the Jewish Communal Appeal (JCA) to estimate the size and distribution of the Jewish community of Sydney. Previous studies have disclosed valuable insights into aspects of the demography of Sydney or indeed Australian Jewry as a whole (Encel & Buckley 1977, Lippmann 1965). However these large,comprehensive research projects were primarily concerned with the processes whereby special attributes of Jewish demography affect the community in terms of current or projected service provision. The actual count enumerated by the Australian Statistician through the Census of Population and Housing was accepted as the basis for presentation of demographic statistics although the authors recognised that undercounting had taken place. Recently Rubinstein (1986) has estimated the Jewish population of Australia although his approach is different to that taken here in terms of both scope and technique.

The rationale for the commission of this study is obvious. The Jewish community has always accepted that it must act to ensure that certain fundamental responsibilities are undertaken for the benefit of all its members regardless of individual capacity or commitment. The JCA funds a diverse range of community services from welfare to education to services for the aged. The planning of these services depends on accurate statistics for otherwise subjective feelings (however well meaning) take the place of real knowledge and strong advocacy assumes an even greater role in the decision making process than is already the case. Demographic statistics are the most important single element in the evaluation of any professional approach to services planning. A school is determined by pupils, a hospital by patients, an old age home by senior citizens. Unfortunately this has not always been the method adopted by the providers, not just in the Jewish community but by many others, including Government.

Throughout the study a deliberately conservative approach was adopted for estimation. In part this resulted from a reluctance by the author to indulge in undue speculation with specious data. Of more fundamental importance was that the whole aim of the project was to produce demographic estimates which could serve to assist the planning of services within the Jewish community. Planning requires demonstrable evidence rather than reliance upon the possibility of greater than expected demand caused by inaccuracies in data sources.

1.2. Definitions

Perhaps the most difficult element in the entire study was needed to be addressed at the very beginning. It is necessary to define a precise meaning to 'Jewish Population' or 'Jewish Community'. The complex issues involved in the on-going debate which echoes throughout the Jewish world on 'Who is a Jew' is far beyond the scope of this article. There will always be disagreement among even the experts and it does not behove the writer to add further comment on a subject which is outside his competence. However it was essential to reach a decision in order to proceed with a clear and unambiguous definition of exactly what population is being counted. The reader may then determine whether that population is meaningful for whatever context or purpose is required.

This study estimates the population of persons who consider that their religious denomination is Jewish. This definition by self-identification is analogous to that of Aborigine which was adopted by the Statistician in 1976. Prior to that time a particular individual was categorised as Aboriginal if certain criteria on proportion of Aboriginal ancestry were satisfied. In the same way Jews are here defined on the basis of their own conceptual categorization of their religion and not on halachic (traditional religious) considerations based on maternal ancestry. Adopting this definition also avoids the vexed question of whether a gentile has been properly converted which leads to heated rabbinic disagreement.

Clearly there will be differences between the number of Jews as defined above and the number which would have been enumerated had an halachic definition been chosen. However accurate estimation of a population on an ancestral basis is a virtual impossibility. In the 1986 census a question on ancestry was included on the schedule. There is already concern that analysis of this item may not prove meaningful for most purposes. It will be interesting to find the degree of correlation between those who gave their religion as Jewish and those who responded in the same way for their ancestry.

It is worth noting that persons who regard themselves as Jewish in a cultural or national sense but who reject Judaism as a religion would not be

cultural or national sense but who reject Judaism as a religion would not be counted under the chosen definition. It could be argued that defining Jews by religious denomination is unnecessarily narrow. However the meaning, taken from a communal viewpoint, for an atheistic or even Christian Jew is rather elusive. It is hardly likely that a person who does not identify with the Jewish religion would wish to participate in organized communal activities most of which place some emphasis on the religious aspect of their function (day schools, hospitals, nursing homes). On the other hand the non-Jewish spouses and families of Jews may very likely take part in communal activities even if they have not been converted in a manner acceptable to halachic authorities.

1.3. Census

By Act of Parliament the Australian Statistician is required to conduct a census of all persons in Australia at set intervals currently every five years. Some of the questions included at every census are actually stated in the Act and amongst these is a requirement for a question on religion. In recent years the wording has been "What is this person's religious denomination" It is the only optional question in the whole census (i.e there is no legal obligation to respond) and this is clearly marked on the form. It is also acceptable to respond 'No Religion'.

Processing of a national census takes between eighteen months and two years. Consequently the census conducted on 30 June 1986 has not yet been processed and even preliminary tabulations will not appear before the end of 1987. Detailed cross-tabulations of religion with other key attributes (e.g age, place of residence) cannot be expected until well into 1988. Thus the latest information available at the time of writing dates back to 30 June 1981 almost six years ago. This is the main reason for presenting the results of the study in two parts; this preliminary document and a final report after release of the 1986 census statistics. The final report will probably be completed towards the end of 1988.

1.4. Methodology

The statistics which follow are estimates of the number of Jews (as defined above) living in the Sydney Statistical Division on 30 June 1986. These estimates will, of course, be superseded after the release of the actual June 1986 counts. The Sydney Statistical District is a much larger area than is commonly supposed. It includes such outlying centres as Gosford, Katoomba and Campbelltown all of which have Jewish residents. There are 43 legally constituted Local Government Areas (LGA) in metropolitan Sydney although 80% of the Jewish community lives in only 5 of them. The total resident population of Sydney in 1981 was 3,280,000 of which the 24,400 Jews counted by the census represents 0.74%. By contrast the Eastern Suburbs municipality of Waverley was found to have a 12.2% Jewish proportion of residents.

Standard demographic methodology was followed. The technique used was to take the published counts of the 1981 census and subject them to three adjustments.

- (1) A factor for census under-enumeration
- (2) Natural increase from 1981 to 1986
- (3) Net migration between 1981 and 1986

Expressed algebraically the number of Jews living in Sydney in 1986 can be given by the formula:

$$P = uC + I + M$$

where P is the 1986 estimate

u is the under-enumeration factor

C is the 1981 published count

I is the natural increase from 1981 to 1986

M is the net migration from 1981 to 1986

We must now try to calculate the factors u, I and M

The total estimates are then presented further disaggregated according to two characteristics which are of special significance to the JCA but should be of general relevance to most readers. These characteristics are

- (1) the age/sex distribution especially for school-children and the aged
- (2) the location of residence by LGA.

2. UNDER-ENUMERATION

2.1. Causes

Under-enumeration refers to those persons who do consider themselves to be Jewish but for whatever reason were not counted in the Jewish population disclosed by the Statistician. Among the possible reasons for non-inclusion are:

- (1) They were not issued with a census form.

It is very rare for a household to be actually missed altogether by the Census Collector. However if a person is out of the country on census night, they are legitimately excluded from the count. There are many Jews in business and in the professions who travel frequently.

- (2) The Statistician was unable to correctly classify the response. Some Jews may give their religion in terms which cannot be interpreted by the master code list. Although the list is fairly comprehensive, such terms as 'Lubavitch' or even 'Hassidic' may not appear.

- (3) They knowingly responded incorrectly.

The enormous bureaucratic safety net which is applied by the Australian Bureau of Statistics to protect the confidentiality of census respondents is often not known to the community at large. It is possible that some people from countries with histories of Government oppression or those with dreadful wartime experiences would avoid disclosure of a Jewish identity by actually falsifying their response.

- (4) They took advantage of the optional question and chose to withhold a response.

This is the most frequent cause of under-enumeration not just for Jews but for the community at large. Religion is a very personal matter which is recognised by the legislation. Many people feel uncomfortable about indication of their religious belief so that there is always a substantial number of non-responses.

In 1981 it was found that 318,320 persons, almost exactly 10% of the Sydney population did not answer the question on religion or else provided

a response which the Statistician felt was inadequate for allocation to a known religious group. Most of the latter are young adults presumably following one of the many small cults which thrive and wane too quickly to be listed on the master code. One option for estimating under-enumeration might be to assume that this 10% can be divided pro rata among the positive responses. Rubinstein (1986) uses this method with further assumptions for those who responded 'No Religion'. However, since Jewish non-response might have been associated with aspects of persecution and thus at variance with the rest of the population, an alternative method was followed by this study.

Persons who genuinely believed that they were of 'No Religion' or indeed that they were affiliated with a non-Jewish religion should be excluded by definition. However if the reason for a 'No Religion' response was a fear of the authorities, the person ought to be counted in this study as long as they participated in communal activities. If the fear extended to seclusion from all but social contacts, they would not be counted but then again it may be proper for them not to be so. For the purposes of this study, 'No Religion' was considered to be an alternative response to any specific denomination. Hence although another 10% of the Sydney population (306,370) gave this reply, it was felt to be no less specific than 'Catholic', 'Anglican' or 'Muslim'.

2.2. Bar Mitzvah Records

At the age of 13 a Jewish boy is formally confirmed into the responsibilities of his religion at a ceremony known as Bar Mitzvah. This has always been one of the great highlights of Jewish life involving years of study for the boy and great social significance for the entire family. It was felt that no matter how weak the links with organised religion might be, any parent who considered their religion to be Jewish would endeavour to allow their son to be Bar Mitzvah. The analogous argument for girls (Bat Mitzvah) is much weaker and was not pursued.

All Sydney synagogues were asked to examine their records and count the number of boys Bar Mitzvah between July 1981 and June 1983 inclusive (i.e. the two years immediately following the 1981 Census). The assistance of the great majority of synagogues (including all of the larger congregations) was readily obtained. Four small congregations were unable or unwilling to provide the information. For three of these, reliable estimates could be prepared based on their own advertisements in the congregational section of the Australian Jewish Times, a weekly newspaper which services the Sydney Jewish community. The fourth congregation is an extremely orthodox sect who do not usually participate in general communal activities. Nevertheless they are certainly Jews and must be included in this study. All that could be achieved in the circumstances was to use anecdotal information from individual congregants about an estimate for the number of Bar Mitzvahs. However as the total for all four of these congregations is about 3% of the overall total, the potential error brought about by these estimation procedures is believed to be quite small.

The 1981 census enumerated 317 boys aged 11 and 12 who could be expected to be Bar Mitzvah in Sydney during the following two years. Small adjustments were then made to this total to allow for new migrants arriving after 30 June 1981 and still Bar Mitzvah prior to 30 June 1983. Another small adjustment was needed for boys living in country area of New South Wales and travelling to Sydney for the Bar Mitzvah ceremony. On the other hand it was known that at least two Sydney boys went to Israel to be Bar Mitzvah at the Wailing Wall in Jerusalem. It is reasonable to assume that over a period of two years any imbalance is negligible between those who

were actually 13 during the period of investigation but Bar Mitzvah outside the period and those for whom the reverse is true.

TABLE 1 CENSUS STATISTICS AND BAR MITZVAHS 1981-1983

CENSUS

Boys aged 11 or 12 at 30 June 1981	317
* Estimate for new migrants	6
Country residents Bar Mitzvah in Sydney	3
Total	<u>326</u>

BAR MITZVAHS

Direct accounts from congregations	338
Estimate from congregational press reports	8
Estimate by Anecdote	7
Sydney residents Bar Mitzvah in Israel	2
Total	<u>355</u>

* Based on 25% Jewish component of South African migration and 80% Israeli migration. For derivation see Section 12.

It can be seen that the under-enumeration at the census assuming that all boys progress to Bar-Mitzvah is estimated to be 8.9% $((355/326)-1)$. While there is certainly margin for error with some of the estimation techniques used, the hard evidence of known counts and known Bar Mitzvahs must indicate that some under-enumeration exists and probably not less than 5% or more than 12%.

It was now decided to extend this level of under-enumeration to all those aged 0-14 and also those aged 25-44. It was felt that as parents complete the census on behalf of their children, the under-enumeration component should be similar for all family members. Nor was there any

reason to believe that reporting of 11 and 12 year old boys would be any different than reporting for any other dependent children.

2.3. Funeral Records

The second source for estimation of under-enumeration was to examine records of funeral services conducted by a Jewish minister. Circumstances are known where the bodies of practising Jews were buried or cremated by civil authorities according to the clearly expressed wishes of the deceased. A small allowance has been included but the underlying assumption is that the number of these occurrences is very small. Orthodox ministers will only conduct funeral services at the Sydney Chevra Kadisha. Liberal (Reform) ministers will also officiate at funerals and cremations organized through gentile undertakers.

The Sydney Chevra Kadisha accounting for 83% of the funerals kindly allowed access to their records from which were taken the age, sex and country of birth of the deceased. The two Liberal Temples kindly prepared lists of all deceased for whom services were held at places other than the Chevra Kadisha. From these records age and sex could be extracted but not country of birth.

It was decided to restrict this aspect of the study to those who were aged 60 or more at the time of the 1981 census and who died over the following two years (i.e between July 1981 and June 1983 inclusive). The small number of deaths in age groups less than 60 would allow for too much potential for error simply because of random fluctuation from year to year. The actual Jewish mortality rates are not known because religion is not included on official registration certificates. However evidence overseas would suggest that Jewish mortality is similar to that prevailing in the population as a whole and a provisional assumption to that effect was taken.

The New South Wales mortality rates disaggregated into five year age/sex categories were then applied to the Jewish population enumerated at the 1981 census. The calculations are not shown here but can be obtained from the author on request. It was found that 584 deaths could have been expected compared to 680 which were actually recorded plus an arbitrary allowance of 1% for deaths conducted by civil authorities. Table 2 below disaggregates these deaths by age and sex. The reader is reminded

that the 'expected' number is derived from average mortality statistics. Consequently while reasonable accuracy can be anticipated from the total number, potential error margin rapidly increases as the numbers become smaller in specific age groups.

TABLE 2 EXPECTED AND ACTUAL DEATHS 1981-1983

		<u>Expected</u>	<u>Actual</u>	<u>%Under-Enumeration</u>
<u>Sex</u>	Male	310	350	12.9
	Female	274	330	20.4
<u>Age</u>	60-64	48	611	27.1
	65-69	79	87	10.1
	70-74	124	163	31.5
	75 and over	333	369	10.8
	<u>Total</u>	584	680	16.4

Most of the variation shown above indicating different levels of under-enumeration by age and sex can be safely assigned to random fluctuation. However there is scope for doubt regarding substantially heavier mortality among women aged under 75 in the Jewish population than is the case for the population as a whole.

It is known that there is earlier widowhood in that generation of Jews due to the common European practice of substantially greater age difference at marriage than occurred in the general Australian population. It is also well known that widows experience higher mortality than do married women. If this argument is true then an adjustment should be made to the female mortality rates under the age of 75. After some empirical testing it was deemed appropriate to take a conservative viewpoint and adjust only the mortality rates for women aged 70-74. It was noticed that a mortality rate of 3.8 deaths per thousand women per annum for the age group 70-74 produces a mortality pattern consistent with the remainder of the Jewish experience and consistent with mortality for widows in the population as a

whole. The difference is 17 deaths which would not have occurred had the overall mortality rate of 2.9 deaths per thousand in this age group been applied. The difference can be fully appreciated by Table 3 which corresponds with Table 2 adjusted for excess female mortality in the 70-74 age group.

TABLE 3 EXPECTED AND ACTUAL DEATHS 1981-1983
Adjusted Mortality in women aged 70-74

		<u>Expected</u>	<u>Actual</u>	<u>%Under- enumeration</u>
<u>Sex</u>	Male	310	350	12.9
	Female	291	330	13.4
<u>Age</u>	60-64	48	61	27.1
	65-69	79	87	10.1
	70-74	141	163	15.6
	75 and over	333	369	10.8
	<u>Total</u>	601	680	13.1

A reduction of 3.3% in the degree of under-enumeration has been brought about by the decision to assume a higher female mortality rate for women aged 70-74. The reader may prefer to use the 16.4% under-enumeration calculated from the a priori assumption. However in view of the consistency with both empirical evidence and the differential brought about through earlier widowhood, the author has based the estimates following on the 13.1% calculated above to which must be added the allowance factor for deaths conducted by civil authorities. Consequently the actual number of deaths is raised to 687 compared to 601 experienced implying a census under-enumeration of 14.3% in the older population.

2.4. Place of Birth

The two preceding sections have concentrated on age as the major factor accounting for variation in the degree of under-enumeration. However it was earlier argued that a second key attribute specifically affecting Jewish identification on the census might be the respondent's place of birth particularly for those old enough to have memories scarred by wartime experiences. For instance many Sydney Jews born in Eastern Europe were interred in places of indescribable suffering. Persons born in England or Australia were not subjected to such personal deprivation.

Funeral records were again used to test for any substantial variation in under-enumeration by place of birth. It was not considered useful to extend the analysis to younger members of the community since (1) a high proportion were already born in Australia and (2) younger generations did not suffer wartime experiences. Under-enumeration for recent immigrants from South Africa is discussed in Section 12. Persons born in Europe were divided into three groups (Eastern Europe, Central Europe, Hungary) with clearly distinguishable national histories of persecution and of migration to Australia.

Table 4 presents the results in a similar style to Table 3 using the same mortality assumption.

TABLE 4 EXPECTED AND ACTUAL DEATHS 1981-1983
BY PLACE OF BIRTH GROUPS

<u>Country of Birth</u>	<u>Expected</u>	<u>Actual</u>	<u>%Under- enumeration</u>
Australia	90	98	8.9
Britain	85	98	15.3
Central Europe	139	156	12.2
Hungary	71	87	22.5
Eastern Europe	168	189	12.5
Other	48	52	8.3
Total	601	680	13.1

Although under-enumeration for persons born in Hungary appears to be highest and for those born in Australia appears to be lowest, no significant statistical findings can be reached from these figures. A reasonable conclusion (in statistical terminology - the null hypothesis) is that place of birth is of little consequence in accounting for the degree of Jewish identification to the Statistician. (The finding is somewhat surprising to the author as it will be to many readers but the evidence seems to be soundly based).

2.5. Balance of the Community

Under-enumeration factors have now been calculated for families under 45 based on Bar Mitzvah records and for older persons over the age of 60 based on funeral records. There remains those aged from 45-60 who were children or teenagers in the war years. One would expect substantially more reluctance to disclose Jewish identity than those without wartime experience but perhaps less than those who experienced or learned about persecution as full adults. One could speculate endlessly but in the absence of any other information an intermediate level seems responsible perhaps closer to that of the older group. An under-enumeration of 12% has been used for this group.

Finally there is the problem of calculating a suitable level of under-enumeration for young adults aged from 15-24. Reliable statistics for this age group are always difficult to obtain. The population is highly mobile and has entered that stage of the life cycle in which traditional values are questioned and new ideas are explored.

The Jewish community as a whole has a strong commitment to tertiary education so that its young adults tend to remain in the family home a little longer and are in their teenage years perhaps less mobile than found elsewhere in the Australian environment. Nevertheless there is no real insulation against the natural order of experimentation with religion as well as with so many other facets of life. Some young adults break permanently with Judaism at this time; others commence a period of rejection; some others find a strengthened commitment to their Jewish heritage. In short it is a time of rapid change.

It is possible to compare the numbers at one census with those aged five years younger at the census before in an endeavour to quantify what demographers refer to as 'ethnic migration' (i.e. assimilation). However there are grave impediments to this approach. Firstly the 1976 census was based on a sample which makes it unreliable for small communities such as Jews. Secondly it is known that many young adults renounce Judaism only to return in later years. Thirdly it is not possible to separate 'ethnic migrants' from real immigrants who have arrived during the intercensal

period because religion is not recorded by the Department of Immigration.

For Sydney as a whole, the level of non-response among young adults was 28% higher than for family groups. In the absence of any other information, the same approach was taken for the Jewish component. This exercise results in an estimate of a little over 11% under-enumeration for persons aged 15-24.

3. SIZE OF THE POPULATION

3.1. Jewish Population of Sydney in 1981

The actual count of Sydney Jewry can be extracted from a number of detailed tabulations produced by the Australian Bureau of Statistics. However the estimation techniques developed by this study do not warrant a large degree of disaggregation. For the planning of Jewish services, broad groupings by age,sex and place of residence are all that is required. Table 5 shows the actual census count and Table 6 adjusts each age group for under-enumeration using the following factors:

Family Ages	8.9%
Young Adults	11%
Middle Ages	12%
Elderly	14.3%

TABLE 5 ACTUAL 1981 CENSUS COUNTS BY BROAD AGE GROUPS
-SYDNEY STATISTICAL DISTRICT

<u>Age</u>	<u>Males</u>	<u>Females</u>
0-14	2304	2229
15-24	1351	1377
25-44	3298	3452
45-64	2687	2994
65 and over	2072	2647
Total	11716	12697
<u>GRAND TOTAL</u>	<u>24413</u>	

TABLE 6 ESTIMATED JEWISH RESIDENTS 1981 BY BROAD AGES -
 SYDNEY STATISTICAL DISTRICT

<u>Age</u>	<u>Males</u>	<u>Females</u>
0-14	2510	2430
15-24	1500	1530
25-44	3590	3760
45-64	3010	3350
65 and over	2370	3030
Total	12980	14100
<u>GRAND TOTAL</u>	<u>27080</u>	

The overall level of under-enumeration calculated by this method is 10.9%. By a rather extraordinary coincidence the percentage of the Jewish population who did not reveal their religion was found to be 9.8% (10.9/110.9) almost exactly the same as the percentage of the whole population of Sydney who did not answer the question on religion.

3.2. Natural Increase

Natural Increase refers to the excess of births over deaths. If deaths should exceed births which has actually taken place in the Jewish community in recent years, then demographers refer to negative natural increase rather than 'natural decrease'. There is no registration process for births or deaths in the Jewish community so that both factors contributing to natural increase must be estimated by indirect means.

The work of Brass and others has led to a number of techniques by which fertility rates (birth rates) are derived purely from census information (United Nations 1979). It is proposed to use these techniques in the second stage of this report after publication of 1986 census statistics. While the arithmetic is not complex, the actual procedure is rather cumbersome and it was not considered worthwhile to carry out the calculations until the most recent statistics are released.

In the meantime, fertility over the period 1981-1986 has been estimated by applying the rates prevailing among all Sydney women to the Jewish population. It is usual to calculate the resulting number of births by taking the fertility rate for each 5 year age cohort between 15 and 44 and multiplying by the number of women in the respective age category (after adjustment for under-enumeration). This was the technique used here with a further small adjustment for births to new migrants arriving since the 1981 census. It was estimated that the number of children aged 0-4 in 1986 would be 934 boys and 895 girls, a total of 1829.

Mortality levels have been discussed earlier in this article. The number of deaths over the 5 year intercensal period again using total population rates with an adjustment for women aged 70-74 was found to be 887 males and 846 females, a total of 1733.

Thus natural increase during the period 1981-1986 was estimated to be only 96 persons, a growth rate under 0.1% p.a. compared to 0.7% for the whole of Sydney. However it may be noted that natural increase was negative prior to 1981 so that at least the community is now replacing itself without reliance on migration as discussed in the next section.

3.3. International Migration

The historical pattern of migration into Australian Jewry up to 1966 has been fully described by others. As far as is known there was little further change up to 1976. However from the mid 1970's a new wave of migration has developed centred on immigrants arriving from South Africa. Unlike earlier Jewish migrants, the newcomers have, in general, not been penniless refugees but people in comfortable circumstances seeking new surroundings because of the tense political situation in their homeland. They have adapted readily to Jewish life in Australia and take an active part in communal activities.

There has also been recent immigration from Israel and the USSR although numerically less significant than from South Africa. The Department of Immigration and Ethnic Affairs (DIEA) kindly provided detailed tabulations of recent migration by country of origin although the Jewish component could not be ascertained. While it can be safely assumed that the majority of immigrants from Israel (say 80%) would be Jewish, it was necessary to estimate the Jewish proportion of South African migrants.

The 1976 census counted 256 Jews born in South Africa although it must be remembered that census was not wholly reliable owing to the sample schema employed. By 1981 the equivalent number was 1182. If we ignore the relatively insignificant decremental effects of return migration and mortality of a very young population, the whole of this increase can be attributed to immigration over the period 1976-1981. One must also add a factor for migrants coming from South Africa and thus included in the DIEA figure but born elsewhere (say Europe) and therefore not included in the census count. The survey of recent Bar Mitzvah boys discussed in more detail below suggests that about 15% of South African migrants were not born in that country. The number of new migrants from South Africa between 1976 and 1981 can then be estimated as follows:

Difference between 1976 and 1981 census	926
Migrants not born in South Africa	139
Plus underenumeration	107
Total	1172

The DIEA statistics show that a total of 5513 new settlers to Sydney arrived from South Africa between 1976 and 1981. The Jewish proportion of South African migrants is therefore estimated to be in the order of 20-25%. It is reasonable to believe that the Jewish component was similar between 1981 and 1986 and this supposition is supported by the survey. DIEA have established that a further 4941 immigrants arrived from South Africa between 1981 and 1986. The number of new Jewish immigrants from South Africa can therefore be estimated as 1000-1200 over the 5 year period.

Migration between Israel and Australia occurs in both directions and while reliable statistics of migration into Australia are available through DIEA, the emigration numbers are harder to quantify. Apparently much of the problem relates to passport and citizenship regulations. Also expectation about the permanency of settlement may turn out to be different from that anticipated at the time of departure. This applies both to new settlers from Israel as well as to Australians leaving on Aliya.

Immigration statistics indicate that 590 Israeli migrants arrived in Sydney between July 1981 and June 1986. The great majority of these newcomers would have been Jewish. The best estimate for emigration which can be derived from the statistics, with some adjustment for under-reporting as discussed above, would indicate that about 170 Sydney residents departed with the intention of settling permanently in Israel. Thus the estimated net migration from Israel over the five year period is 420 persons.

Immigration from other countries has also occurred with perhaps the Soviet Union being the next largest source of Jews. However neither the census nor the survey indicated that the number of Russian migrants has significantly increased the population. Because the 1976 census was unreliable and the survey only covered one age group, the number of new Russian migrants revealed by the 1986 census will be closely examined. The survey also disclosed a small movement of Jews from the United States, Canada and within Australia. However it is reasonable to surmise that such migration was balanced in either direction.

It is futile to attempt any finer estimation than that given above since more accurate statistics will be available after processing of the 1986 census. For this report it is sufficient to indicate that approximately 1550 persons can be added to the adjusted 1981 census count through net migration. This healthy trend is resulting in a growth pattern in excess of 1% per annum.

Without the continued influx of new migrants the Sydney Jewish community would barely be self-sustaining.

3.4. Jewish Population of Sydney in 1986

Table 6 provided an estimate of the population on 30 June 1981 after adjustment for under-enumeration. The last two sections have calculated the population increase during the intercensal period 1981-1986 as a result of (1) natural increase and (2) net migration. By combining these three sources a single estimate is obtained for the Jewish population of Sydney as at 30 June 1986. This is of course the same population which the most recent census was also counting although the results are subject to under-enumeration.

Once again the estimates have been confined to broad age groups being those of Table 6 five years older with an additional grouping for young children. The choice of age groups was deliberate since those aged from 0-19 can be taken as a rough estimate of dependent children and those aged 70 and over qualify for the formula developed by the Commonwealth Dept. of Health for deriving the accepted level of nursing home beds.

TABLE 7 ESTIMATED JEWISH RESIDENTS 1986 BY BROAD AGE GROUPS
-SYDNEY STATISTICAL DISTRICT

<u>Age</u>	<u>Males</u>	<u>Females</u>
0-9	1870	1800
10-19	1910	1790
20-29	1570	1670
30-49	3910	3990
50-69	2840	3260
70 and over	1710	2360
Total	13760	14820
<u>GRAND TOTAL</u>	<u>28680</u>	

4. CHARACTERISTICS OF THE POPULATION

4.1. Survey of Recent Bar Mitzvahs

Some important aspects of Jewish demography cannot be revealed by analysis of census information. The planning of day schools, perhaps the single most important community need for which this study was commissioned, requires information on not only the potential demand (i.e. the number of Jewish children) but also the current division of pupil attendance at Government and non-Jewish private schools. Consideration must also be given to the movement of families within the Sydney metropolitan area which may shed some light on the direction of future trends.

It was decided to conduct a short survey of all those who were Bar Mitzvah or Bat Mitzvah in the last two years. The inclusion of girls allowed for substantial increase in the sample size but also introduced a bias factor which needed to be tested. The reason for surveying only those who were recently Bar Mitzvah was again that no other community statistic encompasses virtually the entire eligible population. The actual survey form is attached as an appendix to this report.

All the synagogues who helped with the earlier stage of the study again kindly consented to assist the investigation. Lists were prepared of all those who were Bar/Bat Mitzvah during the period January 1985-December 1986. At a late stage of checking results, it was found that one congregation had inadvertently omitted the names of 13 boys and 4 girls. It was then too late for inclusion in the survey. Another 15 boys were estimated to have been Bar Mitzvah in the four congregations which did not participate in the project.

The lists prepared by the congregations supplied the names and addresses of 366 boys and 203 girls. Some no longer lived in Sydney and others were unable to be located. Finally 351 boys and 197 girls were surveyed by mail including a stamped return envelope. These were completed and returned by 164 boys (46.7%) and 104 girls (52.8%) which was comparable to the response rates achieved by similar surveys. Fortunately essential attributes about 183 of the non-respondents (recent migration, type

of school attended) was obtained from indirect sources. Thus useful information was realised for about 80% of the names on the list.

It was quickly found that a very strong bias existed regarding the type of school which Bat Mitzvah girls attended. While the Jewish day schools educated approximately the same number of boys and girls, the total represented 34% of all boys on the list but 63% of all girls. By calculation of the actual number of Jewish girls of Bat Mitzvah age, it could be established that apart from those attending Jewish day schools only about one third of all girls proceed to a Bat Mitzvah ceremony.

The bias in the Bat Mitzvah group was too great to permit the information collected to be used for numerical calculation in the study. Nevertheless some helpful qualitative data were derived from perusal of the forms remitted.

4.2. Age Distribution of the Jewish Community

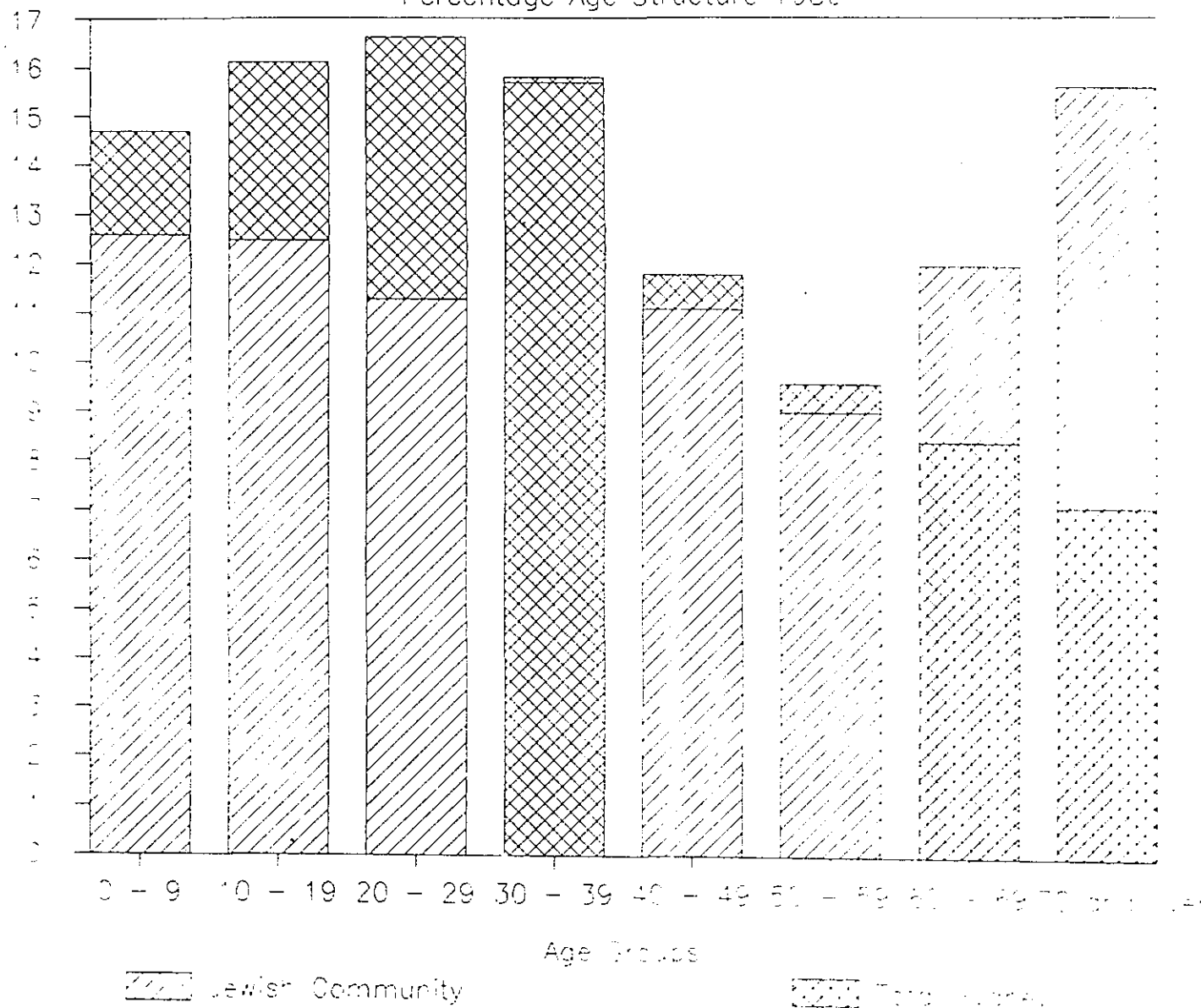
The most striking demographic feature of the Jewish population of Sydney is that it is extremely aged. This fact has been well documented for a number of years and is frequently brought to the attention of the community by the JCA as well as many other organizations. Less well known is that the age structure has other singular features in the middle aged and younger sections of the population. Concentrated waves of immigration rather than steady natural increase results in high proportions of people in quite a small range of ages followed by very low proportions in the next age group. The differentials between the proportion of the Jewish population in a particular age bracket compared to the proportion of the entire population in the same age bracket are shown in Figure 1 below.

It can immediately be seen that the proportion of Jews in their 60's is 50% higher than the comparable proportion in the total population while for Jews over 70 the proportion is more than double. While this concentration in older age groups forms a stark contrast with the younger ages, it will be noticed that Jews now in their 40's are represented in a similar proportion to the whole of the population. Children aged from 0-9 are under represented but not markedly. The real imbalance in the age structure are for persons between the ages of 10 and 30. The consequence of unusually low numbers in teenage and young adult years will have a profound effect on births until at least the turn of the century. The positive demographic action of new migration has created a most decisive influence mitigating the ageing of the population. Migration of young families will continue to exert a stabilising role on the age distribution in addition to its obvious effect on population size.

It is also worth noting that in all adult age groups there is an excess of females. It is rather unusual to find more females than males at ages younger than 50 since about 105 boys are born for every 100 girls. The gap then narrows with increasing age due to heavier male mortality. Without wishing to enter into undue speculation, it is possible that the assimilation process is more marked among males than among females.

Figure 1

Percentage Age Structure 1986



4.3. Families with Dependent Children

The study was specifically requested to investigate internal migration within Sydney by families with dependent children. Obviously the degree of movement is a key factor in the provision of appropriately located educational facilities including day schools. The survey of recent Bar Mitzvahs was a useful indicator since it separately identified those boys who were living in Sydney at the time of the 1981 census and those who were living elsewhere on that date. These boys would have been aged between 7 and 9 years at the time of the census so that the geographical distribution of that age group was compared to the geographical distribution of the survey group.

Jewish families are slightly less concentrated in the Eastern suburbs than are older members of the community. Thus in 1981 the two LGA's of Waverley and Woollahra together took in the residential address of 58% of the Jewish population aged between 50 and 64 whereas the proportion for children aged 0-19 in these two areas was 52%. Elsewhere in Sydney, particularly the LGA of Ku-ring-gai, there is a higher proportion of children than of older people. The survey revealed that 30% of children who live in the Northern suburbs had grandparents who live in the Eastern suburbs. The reverse is true of less than 10%.

The population of dependent children is conventionally taken to be between the ages of 0 and 15. It is common for Jewish children to remain reliant on family support until at least the age of 18 (completion of secondary education) and most continue with some form of tertiary education necessitating at least some further family assistance. Consequently the study estimates the dependent child population in two groups; those aged 0-9 for whom planning decisions must be taken, and those aged 10-19 who are currently benefiting from existing facilities.

It must be pointed out that the sampling error implied by the approach taken could be considerable. The underlying assumption is that family movement as a whole reflects that of boys in the survey. Families

with younger children do not move in the same direction as those with boys of Bar Mitzvah age because people tend to move from less affluent to more affluent suburbs as their financial circumstances improve. However the methodology is examining the pattern of movement over the five year period by the same families. Thus the assumption is that the trend is true of all families and not that younger families live in the same suburbs as older families.

4.4. Educational Facilities

The place of education was one of the most important issues addressed by the study. Over the last ten years there has been a remarkable growth in the number and size of Jewish day schools in Sydney. Indeed the growth has been of such a magnitude that all schools urgently seek funds from the community for critical capital needs. Until additional facilities become available some parents cannot enrol their children in the school of their choice.

The tables below are based on enrolments of boys in early secondary education. The study was particularly concerned with the location of residence of the boys in relationship to Jewish educational facilities. The survey did establish the place of education of younger siblings of these boys but could not of course reveal trends for families whose oldest child was still in primary school. It is also possible that some parents still differentiate educational aspirations between sons and daughters.

It was found that just over one third of boys (34%) in early secondary education are enrolled in Jewish day schools. This can be compared to 43% attending Government schools (including the selective high schools) and 24% at non-Jewish private schools. The proportion of girls in the non-Jewish private school sector may be lower because of the especially high profile which Sydney Grammar (boys) School enjoys in certain sections of the community. The survey indicated that the proportion of children in Jewish primary schools is probably higher. Mount Sinai College in Maroubra presently only offers primary education.

The survey also examined the method of transport by which children commuted from home to school. Very little difference was found according to the suburb of residence but very marked differences for the type of school attended. Children educated at Government schools most commonly travelled by school bus with a sizeable minority only needing to walk. The most common method of commuting to a non-Jewish private school was the standard public transport system followed by private cars. A large majority (70%) of children attending Jewish day schools used private transport. The rather inconvenient location of both the major Jewish day schools can

confidently be accepted as the leading factor accounting for this difference in mode of transport. Variation in family life style could be another possibility.

4.5. Eastern Suburbs

Population

In 1981 it was found that 61% of Jewish families lived in the Eastern suburbs of Sydney. The adjoining LGA's of Waverley and Woollahra are not usefully separated because a very large number of Jewish families live in the Rose Bay, Dover Heights area which is artificially divided by the LGA boundary (Old South Head Rd). Consequently the population change between 1981 and 1986 is only shown for the two LGA's as a total although a finer distribution for 1986 is given in the following section.

Table 8 indicates that the proportion of Jewish families in the Eastern suburbs has fallen slightly although the actual numbers have grown strongly with a large percentage increase in Randwick (N.B. Randwick here means the municipality not the suburb)

TABLE 8 DEPENDENT CHILDREN EASTERN SUBURBS 1981-1986

LGA	1981		1986	
	Number	% Sydney Total	Number	% Sydney Total
Waverley/ Woollahra	3320	51.9	3640	49.4
Randwick	550	8.6	690	9.4
Sydney	40	0.6	40	0.5
EASTERN SUBURBS	3910	61.1	4370	59.3

Type of Schooling

Jewish education is provided by a number of schools in the Eastern suburbs. Moriah High School is presently situated at Bellevue Hill but is soon to be transferred to Queens Park which is located well to the south of most Jewish residences. Meanwhile the Moriah primary school is to be transferred to the Bellevue Hill site. In Randwick there is Mount Sinai College (primary only) and also The Emanuel School offering both primary and secondary education and quite close to the new Moriah site. There is a small orthodox school operated by the Yeshivah and located at Bondi in the heart of the Jewish population.

In all about 40% of early secondary students are enrolled in Jewish day schools in the Eastern suburbs compared with 24% at non-Jewish private schools and 36% at Government schools. However if smaller suburban districts are examined some remarkable differences emerge as can be seen below.

Rose Bay, Dover Heights and Vaucluse (2029-2030)

Approximate number of children: 1820

Type of schooling: one third at each type of school

Bondi (2026)

Approximate number of children: 810

Type of schooling: about half at Jewish day schools and half at Government schools. Hardly any at non-Jewish private schools.

Remainder of Waverley/Woollahra (2023-2025, 2027-2028)

Approximate number of children: 1010

Type of schooling: almost half at Jewish day schools and one third at Government schools.

Randwick Municipality (2031-2035)

Approximate number of children: 690

Type of schooling: two thirds at Government schools.

4.6. Northern Suburbs

The LGA of Ku-ring-gai (the Upper North Shore) has experienced the most rapid growth of Jewish families in the whole of Sydney. It is especially favoured by migrants from South Africa. However substantial growth has also occurred in Ryde and on the Lower North Shore (the LGA's of Willoughby and Lane Cove)

Table 9 indicates the extent of this rather spectacular growth.

TABLE 9 DEPENDENT CHILDREN NORTHERN SUBURBS 1981-1986

LGA	1981		1986	
	Number	% Sydney Total	Number	% Sydney Total
Willoughby/ Lane Cove	430	6.8	530	7.2
Ku-ring-gai	940	14.7	1360	18.5
Other Northern	380	5.9	430	6.0
NORTHERN SUBURBS	1750	27.4	2320	31.5

Type of Schooling

Masada primary school is situated at Lindfield approximately in the geographic centre of Jewish families of the Northern suburbs. The Masada high school at St. Ives is somewhat remote being to the north of the residences of most of the Jewish population and away from the railway line which is the principal means of public transport in the area. While the upper North Shore is renowned for the number and quality of private schools, most of the established schools have the advantage of easy access by train from virtually the whole of the Northern suburbs.

When families actually living in St. Ives are distinguished from those whose residences are elsewhere in the Northern suburbs, the difficulty in reaching the school become apparent.

St. Ives (2075)

Approximate number of children: 460

Type of schooling: three quarters at Masada

Balance of Ku-ring-gai (2069-2074, 2076)

Approximate number of children: 900

Type of schooling: one third at each type of school

Lower North Shore (2063-2068)

Approximate number of children: 530

Type of schooling: about one half at Government schools and one third at non-Jewish private.

Other Northern Suburbs

Approximate number of children: 430

Type of schooling: about 40% each at Government schools and non-Jewish private schools.

4.7. Balance of Sydney

Sadly the number of families living in areas away from the main Jewish population centres now appears to be in decline. The 1981 census indicated that 11.4% of Jewish families did not live in the Eastern or Northern suburbs. By 1986 this proportion had reduced to 9.2% although in actual numbers the decline is less steep corresponding to 730 children in 1981 and 680 in 1986. Only the suburbs in the St. George area which are serviced by the Illawarra Synagogue appear to have experienced any growth at all.

There are no Jewish day schools in these suburbs which might itself be an explanation for families moving elsewhere. Nearly all of the school age children are attending Government schools.

4.8. Geographic Distribution of the Elderly

The residences of persons over the age of 70 are spread in a very different way to families. The 1986 estimate indicates that there are about 4000 Jews of this age living in Sydney. In 1981 only 16% of the elderly lived in the Northern suburbs compared to 63% in the Eastern suburbs, 5% in Hunter's Hill or Hornsby (where Jewish nursing homes and retirement villages are situated) and 15% in the remaining suburbs of Sydney. These proportions appear to have hardly changed by 1986. While family groups tend to be quite mobile with an average change of residence every four years, the elderly tend to remain in the original family home until declining health forces a change. Since there is now an over-representation of elderly in the 'balance of Sydney' suburbs, logistic problems are developing for service organizations such as the Sydney Jewish Centre on the Ageing (1986).

The community may be able to present a well documented case to Commonwealth and State health authorities for the establishment of a Jewish nursing home in the Eastern suburbs. Current guidelines allow for 44 nursing home beds for every 1,000 persons over the age of 70. The Montefiore Home has 174 designated beds so that there are just sufficient for the whole community although the home is inconveniently situated. It can be demonstrated that the Montefiore Home does fulfil this task since 60% of its beds are occupied by former residents of the Eastern suburbs with an average age of 84 years (NSW Health Dept. 1986). Since about 2500 elderly persons live in the Eastern suburbs, one could argue for the transfer of about 100 beds to service that population.

5. REFERENCES

- Buckley B & Encel S The New South Wales Jewish Community: A Survey
Research Report 1977.
- Lippmann W 'The Demography of Australian Jewry'
Jewish Journal of Sociology 8(2) London.
- New South Wales Department of Health
Census of Long Stay Institutions 1986 Sydney
- Rubinstein W 'The Demography of the Australian Jewish Community
1981'
Australian Institute of Jewish Affairs 1986
- Sydney Jewish Centre on Ageing
Demography, Health and Lifestyles: Sydney Old "Old"
Jews 1986 Sydney
- United Nations Manual IV : Indirect Techniques of Demographic
Estimation 1979 New York