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A STATISTICAL PROFILE OF
SAMOANS IN THE UNITED STATES

Part I: Demography

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INTRODUCTION

The selected category "Samoan" appeared for the first time as a separate category on a United States census in 1980. Before 1980, estimates of the number of Samoans in the United States were little more than approximations based on a limited supply of poor quality migration statistics, some community-level studies, and the assessments of community leaders. The 1980 census was therefore the first actual count of Samoans using a specified category, and the first to describe the demographic and socio-economic characteristics of this immigrant group.

The numbers of Samoans, both total counts and for selected characteristics, in this paper have been derived from the "race" question on the U.S. Census. The race question was asked of all persons in the United States. The numbers for any particular ethnic or racial category will depend on the definition employed. The concept of race used by the Census Bureau is based on self-identification, that is, the data represent self-classification by people according to the race with which they identify. Race does not denote any clear-cut scientific definition of biological stock. Since no attempt is made to distinguish number of generations or degree of affiliation, other definitions of Samoan ethnicity may result in different numbers.

Although the 1980 census is the principal source of data on Samoans, information can also be taken from ethnographic and social surveys conducted in the recent past. This paper is intended to provide a broad overview of the demographic and economic situation of Samoans in the United States

rather than a detailed analysis of any one issue or community. For this reason, not all of the community-level data contained in the references have been used. Although the 1980 United States census reported Samoans in every state, a state-by-state comparison is beyond the scope of this paper. Rather, we have focussed particularly on the Samoan populations of Hawaii, California and Washington, with the remainder of the population treated as one group - despite the geographical dispersion. In some subject areas the population of American Samoa in 1980 is also described to provide comparative perspective.

TOTAL POPULATION

The 1980 census counted 41,948 Samoans living in the United States on April 1, 1980 (Table 1). Intercensal comparative methods cannot be used to determine the relative accuracy of this figure because Samoans were not treated as a separate category in 1970. The growth of the Samoan population since the 1980 census also cannot be determined since there are no accurate immigration statistics. Assuming that immigration continued at the same estimated rate of 1900 per year as in the 1976-79 period and that natural increase averaged 3.0 percent per year, a 1983 population of about 50,000 would be possible. Until more precise immigration figures become available, this 1983 population estimate should be used cautiously.

POPULATION DISTRIBUTION

Although the 1980 census found Samoans in every state, about 90 percent were in the Western region of the country. The most important concentrations were in California (48 percent), Hawaii (33), and Washington (4). These three states accounted for 86 percent of the population; no other state contained more than 2 percent of the total (Table 1). The Samoan population of the United States outnumbered the population of American Samoa by almost 10,000, or about 30 percent.

The Samoan population of the United States is highly urbanized. About 96 percent of Samoans lived in urban areas in 1980 and 87 percent lived either in central cities (43 percent) or on the fringe of such cities. Only 4 percent (1,643) lived in rural areas in 1980.

AGE COMPOSITION

High rates of natural increase among Samoans in Samoa and among immigrants have produced a very young Samoan population in the United States. As table 1 shows, the median age of Samoans was 19.5 in 1980, substantially below the United States median of 30 years (U.S. Bureau of the Census, 1983:23). Of all the selected racial groups reported in the 1980 census, Samoans had the lowest median age and the next youngest group - Eskimos - had a median age almost two years higher (USBC, 1983:50).

The median age of Samoans in Hawaii (17.5 years) was two years below the total Samoan population (19.5) and slightly more than one year

below the median of 18.8 reported for American Samoa. Hawaii's lower median age implies either that fertility was higher there than elsewhere in the United States or that Hawaii attracted younger immigrants from Samoa - or some combination of the two. The median age of Samoans outside of the major concentrations in the West (22.7 years) was substantially higher than that reported for the Samoan population as a whole, California or Washington, pointing to important differences in population dynamics of the various areas.

The median age was about the same for males and females except in Hawaii where the male median was slightly lower than the female (tables 2 and 3). This age differential also appeared in the American Samoa data.

Hawaii's slightly younger population showed a greater concentration in the 0-14 year age group than in the other locations (Table 4). The 0-4 age group was 15.3 percent of the total in Hawaii compared to 13.0 percent in California and 13.8 percent in the total Samoan population. The proportion of the Hawaii population aged 0-4 was not only greater than reported elsewhere in the United States, but was also higher than in American Samoa (14.8 percent). While the difference between the two figures may not be statistically significant, it nevertheless would appear that in this respect at least the structure of the Samoan population in Hawaii is more like that of American Samoa than the Samoan population on the mainland. Census data do not show that Samoans in Hawaii have higher fertility rates than their counterparts in California, elsewhere in the United States, or in American Samoa, although they do tend to have their children at younger ages. It is possible that more American Samoan women with younger children immigrate to Hawaii, an easier and

less expensive trip than to California or Washington. It is also possible that young children from other families accompany families to Hawaii to take advantage of better schools and medical facilities; they obtain the advantages of a more developed economy, while remaining a fairly short plane trip away from home.

Since in broad terms the age structure of the males and female population was identical (tables 5 and 6), if immigration was selective of one age-sex category over others it was not evident in the age structure.

Some variation between regions is apparent in the proportion of the female population in the child-bearing years (15-44). Hawaii had the smallest proportion (46 percent) while the highest was found in the group of states other than California, Hawaii, and Washington (table 6). In this respect Hawaii was more like American Samoa than California or the other states.

There was little regional variation in the proportion of the Samoan population 65 years and over, although Washington had the smallest (2 percent) and American Samoa the largest (3 percent). Hawaii was no different than California or the Samoan population as a whole. The Samoan population is basically a young, migrating population, so that too few families have become established to create an aging population, one with a large proportion of older people.

The 15-64 age group, normally the most active economically, varied from 55 percent in Hawaii to 68 percent of the population outside the major concentrations (Table 4). This variation was also apparent in the "dependency ratio" which shows the number of "dependents" which must be supported by every 100 "workers". This ratio was 83 in Hawaii compared to 71 in California, 69 in Washington and 78 in American Samoa. The

balance of the states taken together had a ratio of 48. By contrast, the dependency ratio for the total United States population in 1980 was 51, indicating that every two workers had to support approximately one dependent. In Hawaii, every two Samoans of working age had to support about 1.7 dependents, a considerably greater burden than for the United States as a whole or for Samoans elsewhere (including American Samoa).

The contrast between the age structure of the Samoan population of the United States and the total United States population is illustrated by Table 7 and Figure 1. A much larger proportion of Samoans was under 20 years of age while a larger proportion of the total United States population was over age 44. The nature of the "dependency burden" in the two populations is therefore quite different: Samoans face a "youth dependency" problem characteristic of many developing countries; the United States has an "aged dependency" problem typical of industrialized countries which have passed through the demographic transition.

In summary, the Samoan population was the youngest of all the selected Asian-Pacific minorities in the United States in 1980 with those in Hawaii tending to be younger than their counterparts elsewhere. The dependency burden faced by working-age Samoans is greater than for most other groups in the United States and is greater for Samoans in Hawaii than elsewhere. So far the burden of dependency is from youth, rather than from the aged.

SEX COMPOSITION

The Samoan population of the United States had a sex ratio of 103 in 1980, virtually identical to that of American Samoa (table 8). California had the most even balance between the sexes while Washington and the other states showed considerable male-dominance. Hawaii differed from

the other regions in that its sex ratio of 98 showed a small surplus of females. The relative surplus was particularly noticeable in the 40-54 age group and since this is the same group which had a high sex ratio in California, male out-migration from Hawaii to California seems likely. In broad terms, the working-age Samoan population appears to be female-dominant in Hawaii and male-dominant in California. While the difference between the sex ratios of the 15-64 population in the two states was not large (103 in California compared to 96 in Hawaii), an additional measure of dependency in Hawaii beyond that seen in the age composition is implied.

FERTILITY

While information on the fertility of Samoan women has been collected in a number of surveys (Cook, 1983; Lyons, 1980; Harbison and Weishaar, 1981), not all of it has been published and no studies have focussed on mainland Samoans. The 1980 census is therefore the only source of fertility data for the total Samoan population in the United States.

Samoans have high fertility relative to other ethnic groups reported in the 1980 census. Although the number of children ever born to women aged 15-24 was higher among Aleuts and Eskimos, no other racial group had higher fertility than Samoans in the 25-34 and 35-44 age groups (table 9). If the number of children ever born to women aged 35-44 is taken as an indicator of completed fertility, the average Samoan woman would have about 4.3 children at 1980 fertility rates. By contrast, Japanese and Korean women in the United States would have about 2 children. Of the other Asian and Pacific Islander groups, only Guamanians had a completed fertility rate approaching 4. The Hawaiian rate of 3.3 was exactly one child less than the Samoan rate.

There was little difference in the fertility rates of Samoan women in Hawaii and California. Although those aged 15-34 in Hawaii had more children on average than their counterparts in California, the number of children ever born to women aged 35-44 was similar (table 9).

Some variation between the fertility levels of Samoans living in different communities on the island of Oahu has been noted by Harbison and Weishaar (1981). Migrants who settle in the more cohesive, conservative and less urbanized Samoan communities tend to have higher fertility than those who settle in the less integrated, urbanized communities near Honolulu. This difference appears to be partly attributable to migrant pre-selection rather than to the effects of migration itself. Migrants to the more urban communities tend to have higher pre-migration education levels and lower pre-migration fertility than other immigrants. Those who migrate to the less urban communities have generally spent a larger proportion of their reproductive lives under the influence of rural Samoan norms regarding family size and contraceptive practice - both because they migrate later than other women and because they are less exposed to modernizing influences in Hawaii (Harbison and Weishaar, 1981:270-272).

Migrant pre-selection may also account for the higher fertility of Samoan women aged 15-34 in Hawaii compared to those in California. Families and individuals of rural origin and higher fertility may find it easier to migrate to Hawaii which has more of the socio-cultural character of Samoa than can be found in California. Furthermore, since in 1980 a larger proportion of Hawaii's Samoan population was Samoa-born than is the case in California (61.5 percent compared to 48.6 percent), it is likely that Samoan women in Hawaii had been less exposed to those aspects of urban

life which are usually associated with fertility decline than their counterparts in California.

Analysis of 1980 census data using the "own children" method (Levin and Retherford, 1983), indicates that the fertility rate of Samoan women in the United States has been declining since the mid-1960s. The total fertility rate (TFR) decreased from 5.6 children in the 1965-69 period to 4.1 in 1974-78, a 27 percent reduction during the period (table 10). Fertility decline was particularly apparent among women aged 30 years and older although only a small decrease had occurred in the 15-29 age group.

Although information is lacking on the contraceptive practices of Samoan women throughout the United States, survey data from Hawaii indicate that two-thirds of Samoan women have used contraceptives at some stage of their reproductive lives (Harbison and Weishaar, 1981:270). Baker (1976:14), using the same data set, reported that only 20 percent of women aged 18 and over used contraceptives, a figure presumably referring to the proportion currently practising contraception whereas the former figure refers to the proportion which had ever used contraception. There is some evidence to indicate that contraceptive use by Samoan women in Hawaii is greater in the more urbanized communities than in the more conservative rural ones (Harbison and Weishaar, 1981:270).

The ideal family size for Samoan women in Hawaii in 1975 ranged from an average of 4.4 for women aged 25-30 to 9.3 for women 50 years and older (Baker 1976:15). It is extremely unlikely that this difference was simply a function of age. Rather, younger women accepted family-

size norms closer to (but still higher than) the urban ideal, whereas older Samoan women beyond their child-bearing years probably recall the reproductive values of their rural past.

Whether we use the TFR calculated from vital statistics (table 11) or the number of children ever born to women nearing completed fertility (table 9), Samoan women in Hawaii around 1980 were having an average of just over four children. Although the TFR is not a direct reflection of ideal family size, the broad implication is that Samoan women in Hawaii were on average having about the number of children they desired.

As table 11 shows, the overall fertility of Samoans in the United States in the late 1970s was lower than in American Samoa (TFRs of 4.1 and 4.7, respectively), but not by a very large margin. Below the age of 25, Samoans in the United States had higher fertility rates than their age-mates in American Samoa, but above the age of 30 the reverse was true.

In summary, the fertility of Samoans in the United States is high by United States standards. Samoan women were having just over four children on average in the late 1970s which is approximately double the number necessary for replacement. The crude birth rate in 1980 of 35.1 per 1,000 and the crude death rate of 5.2 per 1,000, made about 3.0 percent natural increase. At this rate of increase, the Samoan population would double in 23 years from natural increase alone - even if immigration ceased. It is more likely, however, that fertility will continue to fall during the 1980s. If the TFR declines at the same rate as it did during the 1970s, Samoan women would be having one less child on average by 1990 (TFR of 3.0); but at this rate of decline Samoan fertility would not reach the level presently experienced by some Asian

minority groups (e.g., Chinese and Filipino) until the end of the century.

Because such a large proportion of the Samoan population of the United States has recently immigrated, reproductive attitudes and values formed in the Samoan islands will have as much effect on fertility as the socio-cultural conditions migrants encounter in the United States. Of course, fertility levels have been dropping steadily in American Samoa over the past two decades (figure 2). Fertility decline in Western Samoa has lagged behind American Samoa by about a decade but a steady decrease was also apparent there during the 1970s. If these trends continue, it can be expected that new immigrants to the United States will bring with them family-size norms somewhat closer to those of the United States as a whole.

MORTALITY

Samoa mortality statistics are not available for the United States as a whole, so a detailed analysis of Samoan mortality patterns for the total population is not possible. In Hawaii, where Samoan deaths have been reported since 1963, the crude death rate in 1980 was 5.2 per 1,000, up from an estimated 4.8 per 1,000 in 1975 (Franco n.d.:45). If we apply the age-specific death rates derived from registered deaths in Hawaii to the total population of the United States, the result is a crude death rate of 5.3 per 1,000. This relatively low death rate is partly a function of the large proportion of the Samoan population in those young age

groups which tend to have low mortality rates. If the 1980 age-specific death rates of Samoans in Hawaii are applied to the total United States population, a crude death rate of 15.5 per 1,000 is obtained compared to the 8.8 per 1,000 which was observed. Samoan mortality seems to be actually higher than total United States mortality, although the crude death rate is lower.

The data presently available are insufficient to explain Samoan mortality patterns in any detail, but some survey data from Hawaii may apply to the Samoan situation as a whole. While there is evidence to suggest that Samoans in Hawaii have difficulty using modern health care facilities effectively and tend to seek professional treatment much later in the course of a disease than other ethnic groups (Cook, 1982:138), there is no evidence to indicate that this affects mortality rates. The infant mortality rate for Samoans in Hawaii during the 1975-78 period (10.3 per 1,000 live births) was lower than the state average (12.6) and comparable to Caucasian and Japanese rates (Gannaway et al., 1981). Although the neonatal mortality rate (deaths to infants under 28 days per 1,000 live births) may have been higher among Samoans than in the state as a whole (9.2 compared to 8.8), because of the small number of cases the difference is probably insignificant and the Samoan rate is the same as for Filipinos and Koreans (Gannaway et al., 1981).

While this evidence is far from conclusive for Samoans elsewhere, it appears unlikely that infant mortality can account for the relatively higher mortality among Samoans as a whole compared to the U.S. total population. The hypothesis that Samoans have higher than average adult mortality is somewhat more plausible.

Several researchers (Prior et al, 1966; Beaglehole et al., 1980) have studied the tendency toward obesity, hypertension and high rates of circulatory disease in Polynesian populations. Recent studies of migration and "modernization" on blood pressure, body weight and hypertension levels of Samoan migrants to Hawaii have produced ambiguous results (McGarvey and Baker, 1979; Hanna and Baker, 1979). The degree to which blood pressure increases following migration appears to depend on the region of Samoa from which migrants originated: those from rural areas exhibited increased blood pressure while those from more urbanized areas of Samoa were no different from their counterparts in Samoa who did not emigrate (McGarvey and Baker, 1979:475). Furthermore, Samoan migrants living in urban Honolulu had lower age adjusted blood pressure than migrants living in the presumably less stressful rural districts of Oahu (Hanna and Baker, 1979:491). In fact, the findings suggest a curvilinear relationship between modernization and blood pressure in Samoans. Samoans least integrated into modern life seem to have the lowest pressure, Samoans intermediate in exposure to modern life seem to have the highest levels of blood pressure, while those most integrated into modern life in Hawaii seem to have somewhat lower blood pressure levels (McGarvey and Baker, 1979:475).

One of the difficulties in interpreting these results is that those migrants with highly elevated blood pressure may already have died, thus biasing the sample of survivors. Unpublished cause of death statistics reported by Hanna and Baker (1979:493) indicate that a significant number of Samoans below age 50 died of "cardiovascular insult" in Hawaii between 1974 and 1978. The authors point out that the younger age groups of Samoans seem to have higher mortality rates from cardiovascular disease than might be expected.

MIGRATION

Of the 42,000 Samoans counted in the 1980 census, 22,600 (54 percent) were born in either American or Western Samoa and were therefore "lifetime" migrants to the United States (table 12). The Western Samoa born numbered 13,200 or about 59 percent of all migrants while the balance were born in American Samoa. Almost one-third of all Samoans in the United States in 1980 were born in Western Samoa while less than one-fourth (22 percent) were born in American Samoa.

The minority status of the American Samoa born is particularly apparent in California where this group comprised only 16 percent of the Samoan total. While half of all Western Samoa born were in California, only one-third of American Samoa born were there. On the other hand, half of the American Samoa born were in Hawaii. Although there were more Samoan born in California than Hawaii, the proportion of Samoan born was much larger in Hawaii (62 versus 49 percent). Conversely, a larger proportion of California's Samoan population was born in the United States (51 percent compared to 49 percent).

In the absence of cross-tabulations by place of birth and socio-economic characteristics, it is impossible to determine the extent to which Samoans born in Western Samoa differ from those born in American Samoa. It should be noted, however, that place of birth cannot be directly translated into place of long-term residence or citizenship. In Shu and Satele's 1976 study of 410 Samoan households in Southern California, 65 percent of householders had spent the major part of their lives in American Samoa and only 7 percent in Western Samoa (1977:75). Many of those who were born

in Western Samoa may have spent sufficient time in American Samoa to acquire similar educational or occupational characteristics as the American Samoa born.

The category of "lifetime migrant" includes those who immigrated as young children as well as those who immigrated as adults. Of particular importance to the issue of acculturation and education, however, is the period of time the average immigrant has spent in the United States. The census does not provide much detail, but as table 23 shows, the 18 percent of Samoans over the age of five years in 1980 were abroad in 1975 can be considered recent immigrants. It is important to note that the 22 percent of Hawaii's Samoan population which had immigrated during the five years prior to the 1980 census was a substantially higher proportion than California's 14 percent and four percentage points higher than the Samoan total. Since recent migrants tend to have greater difficulty obtaining employment and housing, these difficulties will affect a larger proportion of Hawaii's than California's Samoans. And although there are more Samoans in California than in Hawaii, these data suggest that the absolute number of recent migrants is larger in Hawaii. Of course, Hawaii has for a long time served as a staging area for onward migration to California (Pierce, 1954).

If the Samoa-born respondents in Shu and Satele's 1976 survey were representative of Samoan migrants in the United States, two-thirds had immigrated to this country during the previous 15 years, and 24 percent in the previous 5 years (table 14). Of the 50 householders interviewed in Hawaii by Franco in 1983, 40 percent had immigrated during the previous nine years (table 15). The sample size in this case is small but the results broadly confirm what the census suggests - that a substantial proportion of Samoan migrants were recent arrivals.

Although the age at which the average Samoan immigrates to the United States is a useful indicator of the stage in the life-cycle when the first direct experience with American society occurs, unfortunately good data on this topic are lacking. Of those Samoan adults in four Oahu communities who were interviewed by Baker in 1975, the average age of migration was 34.5 years for males and 31 years for females (Baker 1976:5). Since these data seem to have been collected only for adults, however, they do not indicate the average age of immigration for the Samoan population at that time, only the age for those who were already adults; as the individuals in migration streams mature the average age of migration can be expected to decrease. In any case, adult Samoans seem to emigrate at older ages than is typical among other Polynesian migrants (Hayes, 1983; Baker, 1976). If these average ages are representative of present migrants in the United States, they carry extremely important implications for education, language acquisition and acculturation in general. These are relatively advanced ages to be learning how to function in a new socio-cultural system, assuming that previously acquired education and experience were inadequate.

Samoan migration is rooted in 19th century international rivalry which resulted in the partition of the islands into two groups which eventually came under the separate control of New Zealand (Western Samoa) and the United States (American Samoa). Historical conditions of a political, economic, and military nature have continued to influence migration patterns, even when subjective motivations of the immigrants are not considered.

The determinants of Samoan migration to the United States include not only those conditions which tend to push migrants from Samoa and pull them into

the United States, but also factors which make emigration to New Zealand attractive. Since 1975, Samoan immigration to New Zealand has slowed substantially because of more restrictive immigration laws and a severe economic recession. As emigration to New Zealand has become more difficult, migration to the United States has increased (Franco, 1979; Hayes and Levin, 1983). While political, legal and economic conditions are fundamental,

While political, legal and economic conditions are fundamental, they are facilitating or retarding factors rather than direct causes. The level of population growth in American Samoa in recent decades has been acceptable in terms of Samoan culture, but the pressure on agricultural resources is evident. Emigration can be seen as a demographic response to a limited resource base.

A large number of surveys have sought information on the subjective motivations of Samoan migrants, but few have handled the topic with much psychological sophistication. Also, since the methods employed are rarely disclosed it is difficult to compare results. In a recent survey of Samoans living in the Kalihi area of Oahu, "kinship-related" reasons were cited by 23 of the 50 respondents, and 17 cited their children's or their own education as the reason for migrating (Franco 1983:11). Education of children appears in a number of surveys as either the primary reason for immigrating or among the most important (Baker, 1976; Alailima, 1966; Ablon, 1971; Enesa, 1977), but the relative weight given to this motivation seems to depend on the way the information was obtained. Some surveys have emphasized "economic" motivation such as the desire for wage employment and the opportunity to increase prestige by the generosity that a money income permits (Alailima, 1966; Baker, 1976; Forster, 1956), while others found

little evidence of similar motives (Franco, 1983; Enesa, 1977). There is also much variation in the emphasis placed on Samoan social structure as a specific motivation for migration. Shu and Satele stress the desire of many young Samoans to "traditional constraints" (1977:10), while Rolff mentioned the wish to escape the "matai system" (1978:58). Other researchers make no mention of such motivations.

Studies of migrant motivations are difficult to carry out and none of the surveys on this topic for Samoans can be considered adequate from a socio-psychological viewpoint. Motives for migration will differ according to age, sex, marital status, place of origin and other variables, but a relatively large sample size is required if the results are to be statistically adequate. Most studies have used small samples. Since Samoan immigration to the United States has now achieved the character of a "mass movement", the motivations of individuals are an inadequate basis either for understanding the nature of the movement as a whole or for predicting the future course of immigration.

POPULATION PROJECTIONS

In a population experiencing substantial immigration or emigration, realistic projections are extremely difficult to make. Even without the added complication of migration, a population projection simply indicates the consequences of specific assumptions about fertility and mortality rates and should not be confused with a prediction. Predictions are only possible if some factor is held constant with absolute certainty; this is never realistic in demographic matters.

Table 16 shows the projected population of Samoans in the United States to the year 2000 based on five different sets of assumptions. The 1980 populations have been adjusted upwards by 10 percent to allow for liberal assumptions from various estimates of the Samoan population (see Hayes and Levin, 1983) and rounded to the nearest 500. The total population has been broken down into three categories: Hawaii, California and the balance of the country. The distribution between these areas is assumed constant throughout the projection period and the same rates of increase are applied to each area. If immigration to Hawaii increases or decreases relative to California or the other states then both the populations of the areas and their proportions of the total would change.

The projections were made by simple mathematical methods assuming a geometric rate of change. The assumptions used in the projections are shown in figure 3.

/ Figure 3 about here /

Projection I shows what would happen if all immigration ceased and natural increase continued at the rate of 3.0 percent each year. This is about the rate of increase in the late 1970s so this projection is an approximate indicator of the natural growth potential in the Samoan population exclusive of immigration. By 2000, the total population would increase by 38,000 to 84,000 or 83 percent above 1980. In projection II, the same rate of natural increase is assumed but immigration continues at (or probably somewhat higher than) the rate estimated for the late 1970s providing natural increase remains at 3.0 percent (Hayes and Levin, 1983). In this case the total population would increase to 182,000 by the year 2000 or 98,000 more than without immigration, and would be the gross increase

since it includes, in effect, the children born to immigrants as well as the immigrants themselves.

A declining rate of immigration from an annual rate of 4.1 percent in 1980 to 2.0 percent in 2000 was assumed in projection III along with a 3.0 percent constant annual rate of natural increase. A decline in the absolute number of immigrants is not implied, since the total population is increasing rapidly. The difference between this projection and projection II in the 2000 population is 34,000, showing the reduction to be expected from a declining immigration rate. Both natural increase and immigration are assumed to decrease by 50 percent by 2000 in projection IV, resulting in a total population of 131,000 in the year 2000 or 85,000 more than the estimated 1980 population of 46,000.

In projection V immigration is held constant at 4.1 percent annually while natural increase declines at the same rate as in projection IV. The difference between the 2000 population of projection IV and V (28,000) shows the effects of a continuing high rate of immigration in the context of declining fertility.

It is difficult to know which of these projections contains the most realistic assumptions. Natural increase is unlikely to remain constant at the 3.0 percent rate assumed in the first three projections. The declining rates of projections IV and V are probably more realistic. The constant rate of immigration in the context of an increasing population as in projections II and V is unrealistic since it implies a constantly increasing absolute number of immigrants. The most realistic of these projections, then, is projection IV which implies a total population of 131,000 in 2000. Under these assumptions Hawaii's Samoan population would grow to 44,000, California's to 62,000, and there would be 25,000 elsewhere in the United States.

Because these are mathematical, not cohort projections we cannot describe in detail the age structure each of these populations would have. In the case of projection IV, the proportion of the population under the age of 15 would be lower than the present Samoan population because of declining fertility. Since Samoans appear to emigrate at relatively late ages, immigration should not increase the proportion of the population in the young age groups. The principal socio-demographic feature of this population would therefore be the growth of population in the young adult age groups - specifically new labor force entrants in their early twenties.

CONCLUSION

We have briefly described recent and current demographic trends among Samoan migrants in the United States, and have tried to use these trends to project possible population numbers and distribution in the future. Many pertinent variables could not be considered here, but must be analyzed if a full picture of the Samoan migration situation is to be obtained. In order to understand the effect of Western Samoan, American Samoan, United States birthplace on the population, demographic and socio-economic data on these sub-populations must be obtained. Since data in the 1980 census on residence 5 years ago were collected, those data could be used to look at length of migration and integration.

The data presented here have shown that the Samoan population of Hawaii differs from that of California and the rest of the United States. While the total Samoan population is young relative to other ethnic groups or to the total United States population, Hawaii's Samoans are even younger. The Hawaii Samoan population has a higher dependency ratio

and a lower sex ratio than elsewhere in the United States. Completed fertility is about the same across the country, but Samoan women in Hawaii have more children at younger ages than their counterparts elsewhere. Finally, a larger proportion of Hawaii's Samoan population was born in American Samoa and are recent arrivals in the United States than in California.

Many of the dimensions on which Hawaii's population differs from California's have implications for social and economic welfare. In general, Hawaii's Samoan population has more of the character of a "Third World" population than the rest of the United States Samoan population or other ethnic groups within Hawaii.

In the second part of this paper we will be investigating data currently available on the social and economic characteristics of Samoans in the United States. We will be looking to see if the demographic variations between the Samoan population of Hawaii and elsewhere in the United States are also reflected in socio-economic characteristics.

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Table 1. The Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Total persons.....	41,948	20,089	14,073	1,830	5,956	32,297
Under 5 years.....	5,806	2,610	2,157	263	776	4,786
5 to 9 years.....	5,336	2,578	1,954	227	577	4,218
10 to 14 years.....	5,318	2,719	1,940	238	421	4,203
15 to 19 years.....	5,029	2,403	1,754	230	642	3,849
20 to 24 years.....	4,536	1,989	1,257	230	1,060	3,057
25 to 29 years.....	3,920	1,818	1,167	181	754	2,388
30 to 34 years.....	3,176	1,495	917	126	638	2,066
35 to 39 years.....	2,336	1,155	710	119	352	1,610
40 to 44 years.....	1,788	913	581	87	207	1,503
45 to 49 years.....	1,279	655	460	44	120	1,184
50 to 54 years.....	1,116	610	355	28	123	1,077
55 to 59 years.....	782	392	297	23	70	776
60 to 64 years.....	592	307	209	12	64	635
65 to 69 years.....	408	195	158	10	45	413
70 to 74 years.....	223	110	69	4	40	237
75 years and over.....	303	140	88	8	67	295
16 years and over.....	24,403	11,653	7,618	1,051	4,081	18,319
Median.....	19.5	19.4	17.5	19.0	22.7	18.8
Less than 15 years.....	16,460	7,907	6,051	728	1,774	13,207
15 to 64 years.....	24,554	11,737	7,707	1,080	4,030	18,145
65 years and over.....	934	445	315	22	152	945

Source: U.S. Bureau of the Census, 1983

Table 2. The Male Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Males.....	21,249	10,104	6,953	964	3,228	16,384
Under 5 years.....	2,907	1,296	1,096	123	392	2,486
5 to 9 years.....	2,773	1,335	1,016	127	295	2,156
10 to 14 years.....	2,641	1,355	929	132	225	2,256
15 to 19 years.....	2,575	1,227	892	122	334	1,878
20 to 24 years.....	2,348	957	593	130	668	1,390
25 to 29 years.....	2,016	911	569	92	444	1,152
30 to 34 years.....	1,619	739	456	75	349	1,033
35 to 39 years.....	1,179	590	356	56	177	880
40 to 44 years.....	900	479	272	52	97	806
45 to 49 years.....	657	361	216	18	62	638
50 to 54 years.....	577	333	162	12	70	521
55 to 59 years.....	391	195	152	12	32	388
60 to 64 years.....	277	147	101	6	23	333
65 to 69 years.....	180	86	73	3	18	215
70 to 74 years.....	92	43	34	2	13	122
75 years and over.....	117	50	36	2	29	130
16 years and over.....	12,351	5,836	3,696	549	2,270	9,111
Median.....	19.5	19.4	17.4	19.0	22.8	18.5
Less than 15 years.....	8,321	3,986	3,041	382	912	6,898
15 to 64 years.....	12,539	5,939	3,769	575	2,256	9,019
65 years and over.....	389	179	143	7	60	467

Source: U.S. Bureau of the Census, 1983

Table 4. Percentage Distribution of the Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Total persons.....	41,948	20,089	14,073	1,830	5,956	32,297
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years.....	13.8	13.0	15.3	14.4	13.0	14.8
5 to 9 years.....	12.7	12.8	13.9	12.4	9.7	13.1
10 to 14 years.....	12.7	13.5	13.8	13.0	7.1	13.0
15 to 19 years.....	12.0	12.0	12.5	12.6	10.8	11.9
20 to 24 years.....	10.8	9.9	8.9	12.6	17.8	9.5
25 to 29 years.....	9.3	9.0	8.3	9.9	12.7	7.4
30 to 34 years.....	7.6	7.4	6.5	6.9	10.7	6.4
35 to 39 years.....	5.6	5.7	5.0	6.5	5.9	5.0
40 to 44 years.....	4.3	4.5	4.1	4.8	3.5	4.7
45 to 49 years.....	3.0	3.3	3.3	2.4	2.0	3.7
50 to 54 years.....	2.7	3.0	2.5	1.5	2.1	3.3
55 to 59 years.....	1.9	2.0	2.1	1.3	1.2	2.4
60 to 64 years.....	1.4	1.5	1.5	0.7	1.1	2.0
65 to 69 years.....	1.0	1.0	1.1	0.5	0.8	1.3
70 to 74 years.....	0.5	0.5	0.5	0.2	0.7	0.7
75 years and over.....	0.7	0.7	0.6	0.4	1.1	0.9
Less than 15 years.....	39.2	39.4	43.0	39.8	29.8	40.9
15 to 64 years.....	58.5	58.4	54.8	59.0	67.7	56.2
65 years and over.....	2.2	2.2	2.2	1.2	2.6	2.9
Dependency ratio*.....	71	71	83	69	48	78

$$* \frac{(0-14) + 65 \text{ and over}}{15-64} \times 100$$

Source: U.S. Bureau of the Census, 1983

Table 5. Percentage Distribution of the Male Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Males.....	21,249	10,104	6,953	964	3,228	16,384
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years.....	13.7	12.8	15.8	12.8	12.1	15.2
5 to 9 years.....	13.1	13.2	14.6	13.2	9.1	13.2
10 to 14 years.....	12.4	13.4	13.4	13.7	7.0	13.8
15 to 19 years.....	12.1	12.1	12.8	12.7	10.3	11.5
20 to 24 years.....	11.0	9.5	8.5	13.5	20.7	8.5
25 to 29 years.....	9.5	9.0	8.2	9.5	13.8	7.0
30 to 34 years.....	7.6	7.3	6.6	7.8	10.8	6.3
35 to 39 years.....	5.5	5.8	5.1	5.8	5.5	5.4
40 to 44 years.....	4.2	4.7	3.9	5.4	3.0	4.9
45 to 49 years.....	3.1	3.6	3.1	1.9	1.9	3.9
50 to 54 years.....	2.7	3.3	2.3	1.2	2.2	3.2
55 to 59 years.....	1.8	1.9	2.2	1.2	1.0	2.4
60 to 64 years.....	1.3	1.5	1.5	0.6	0.7	2.0
65 to 69 years.....	0.8	0.9	1.0	0.3	0.6	1.3
70 to 74 years.....	0.4	0.4	0.5	0.2	0.4	0.7
75 years and over.....	0.6	0.5	0.5	0.2	0.9	0.8

Source: U.S. Bureau of the Census, 1983

Table 6. Percentage Distribution of the Female Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Females.....	20,699	9,985	7,120	866	2,728	15,913
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Under 5 years.....	14.0	13.2	14.9	16.2	14.1	14.5
5 to 9 years.....	12.4	12.4	13.2	11.5	10.3	13.0
10 to 14 years.....	12.9	13.7	14.2	12.2	7.2	12.2
15 to 19 years.....	11.9	11.8	12.1	12.5	11.3	12.4
20 to 24 years.....	10.6	10.3	9.3	11.5	14.4	10.5
25 to 29 years.....	9.2	9.1	8.4	10.3	11.4	7.8
30 to 34 years.....	7.5	7.6	6.5	5.9	10.6	6.5
35 to 39 years.....	5.6	5.7	5.0	7.3	6.4	4.6
40 to 44 years.....	4.3	4.3	4.3	4.0	4.0	4.4
45 to 49 years.....	3.0	2.9	3.4	3.0	2.1	3.4
50 to 54 years.....	2.6	2.8	2.7	1.8	1.9	3.5
55 to 59 years.....	1.9	2.0	2.0	1.3	1.4	2.4
60 to 64 years.....	1.5	1.6	1.5	0.7	1.5	1.9
65 to 69 years.....	1.1	1.1	1.2	0.8	1.0	1.2
70 to 74 years.....	0.6	0.7	0.5	0.2	1.0	0.7
75 years and over.....	0.9	0.9	0.7	0.7	1.4	1.0
15 to 44 years.....	49.0	48.8	45.6	51.5	58.1	46.1

Source: U.S. Bureau of the Census, 1983

Table 7. Percentage Distribution of the Population and of the Samoan Population of the United States, by age group and sex: 1980

Age Group	United States		Samoans in the United States	
	Males (000)	Females (000)	Males	Females
Total persons.....	110,053	116,493	21,249	20,699
Percent.....	48.6	51.4	50.7	49.3
Under 5 years.....	3.7	3.5	6.9	6.9
5 to 9 years.....	3.8	3.6	6.6	6.1
10 to 14 years.....	4.1	3.9	6.3	6.4
15 to 19 years.....	4.8	4.6	6.1	5.9
20 to 24 years.....	4.7	4.7	5.6	5.2
25 to 29 years.....	4.3	4.3	4.8	4.5
30 to 34 years.....	3.9	4.0	3.9	3.7
35 to 39 years.....	3.0	3.1	2.8	2.8
40 to 44 years.....	2.5	2.6	2.1	2.1
45 to 49 years.....	2.4	2.5	1.6	1.5
50 to 54 years.....	2.5	2.7	1.4	1.3
55 to 59 years.....	2.4	2.7	0.9	0.9
60 to 64 years.....	2.1	2.4	0.7	0.8
65 to 69 years.....	1.7	2.2	0.4	0.5
70 to 74 years.....	1.3	1.7	0.2	0.3
75 years and over.....	1.6	2.8	0.3	0.4

Source: U.S. Bureau of the Census, 1983

Table 8. Males per 100 Females, the Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Total persons.....	41,948	20,089	14,073	1,830	5,956	32,297
Males/ 100 females.	102.7	101.2	97.7	111.3	118.3	103.0
Under 5 years.....	100.3	98.6	103.3	87.9	102.1	108.1
5 to 9 years.....	108.2	107.4	108.3	127.0	104.6	104.6
10 to 14 years.....	98.7	99.3	91.9	124.5	114.8	115.9
15 to 19 years.....	104.9	104.3	103.5	113.0	108.4	95.3
20 to 24 years.....	107.3	92.7	89.3	130.0	170.4	83.4
25 to 29 years.....	105.9	100.4	95.2	103.4	143.2	93.2
30 to 34 years.....	104.0	97.8	98.9	147.1	120.8	100.0
35 to 39 years.....	101.9	104.4	100.6	88.9	101.1	120.5
40 to 44 years.....	101.4	110.4	88.0	148.6	88.2	115.6
45 to 49 years.....	105.6	122.8	88.5	69.2	106.9	116.9
50 to 54 years.....	107.1	120.2	83.9	75.0	132.1	93.7
55 to 59 years.....	100.0	99.0	104.8	109.1	84.2	100.0
60 to 64 years.....	87.9	91.9	93.5	100.0	56.1	110.3
65 to 69 years.....	78.9	78.9	85.9	42.9	66.7	108.6
70 to 74 years.....	70.2	64.2	97.1	100.0	48.1	106.1
75 years and over.....	62.9	55.6	69.2	33.3	76.3	78.8

Source: U.S. Bureau of the Census, 1983

Table 9. Children Ever Born in the United States and Selected States by Race and Spanish Origin and Age Group of Women: 1980

Racial Group Spanish Origin	United States			Hawaii			California		
	15-24 years	25-34 years	35-44 years	15-24 years	25-34 years	35-44 years	15-24 years	25-34 years	35-44 years
Total population....	317	1476	2639	302	1333	2479	307	1347	2483
White.....	269	1404	2544	327	1212	2242	260	1251	2352
Black.....	540	1859	3185	597	1557	2286	454	1629	2858
American Indian.....	530	2012	3450	584	1502	2424	463	1750	2932
Eskimo.....	505	2199	4152	2000	-	-	474	1736	2774
Aleut.....	471	1763	3169	391	-	-	552	1311	1883
Asian and Pacific Islander:									
Japanese.....	106	908	1872	113	947	2010	76	751	1767
Chinese.....	82	939	2233	118	1107	2270	62	887	2191
Filipino.....	278	1270	2216	372	1662	2877	253	1254	2213
Korean.....	229	1244	2045	154	1071	1753	149	1206	2132
Asian Indian.....	236	1336	2197	341	681	2593	276	1362	2328
Vietnamese.....	305	1775	3391	235	1500	3093	246	1562	3471
Hawaiian.....	431	1880	3325	439	2041	3541	387	1503	2982
Guamanian.....	408	1885	3700	538	1935	3932	373	1883	3894
Samoan.....	453	2400	4276	485	2689	4237	455	2416	4346
Other Asian/Pac.....	433	1694	2723	353	1907	2880	380	1589	2489
Race, n.e.c.....	546	2026	3528	512	1683	3266	553	2029	3657

n.e.c. Not elsewhere classified

- Zero or rounds to zero

Source: U.S. Bureau of the Census, 1983

Table 10. Age-specific and Total Fertility Rates of Samoan Women in the United States Derived by Own-Children Method: 1966-1980

Age Group	Five-Year Average Rates					
	1976- 1980	1975- 1979	1971- 1975	1970- 1974	1969- 1973	1966- 1970
15 to 19 years.....	66	63	67	67	70	73
20 to 24 years.....	237	222	223	227	234	254
25 to 29 years.....	253	234	236	244	251	279
30 to 34 years.....	160	149	153	165	176	218
35 to 39 years.....	88	84	109	127	134	174
40 to 44 years.....	43	45	67	73	79	89
45 to 49 years.....	34	31	30	29	29	37
Total Fertility.....	4398	4132	4425	4661	4873	5620

Source: Special tabulation made at U.S. Bureau of the Census, 1983, and subject to error.

Table 11. Age-specific and Total Fertility Rates of Samoan Women in the United States, Hawaii, and American Samoa, in recent periods

Age Group	Hawaii	Samoans United States	American Samoa
	1979- 1981	1976- 1980	1976- 1980
15 to 19 years.....	72	63	42
20 to 24 years.....	285	222	175
25 to 29 years.....	249	234	254
30 to 34 years.....	137	149	200
35 to 39 years.....	59	84	143
40 to 44 years.....	23	45	76
45 to 49 years.....	-	31	44
Total Fertility.....	4125	4132	4670

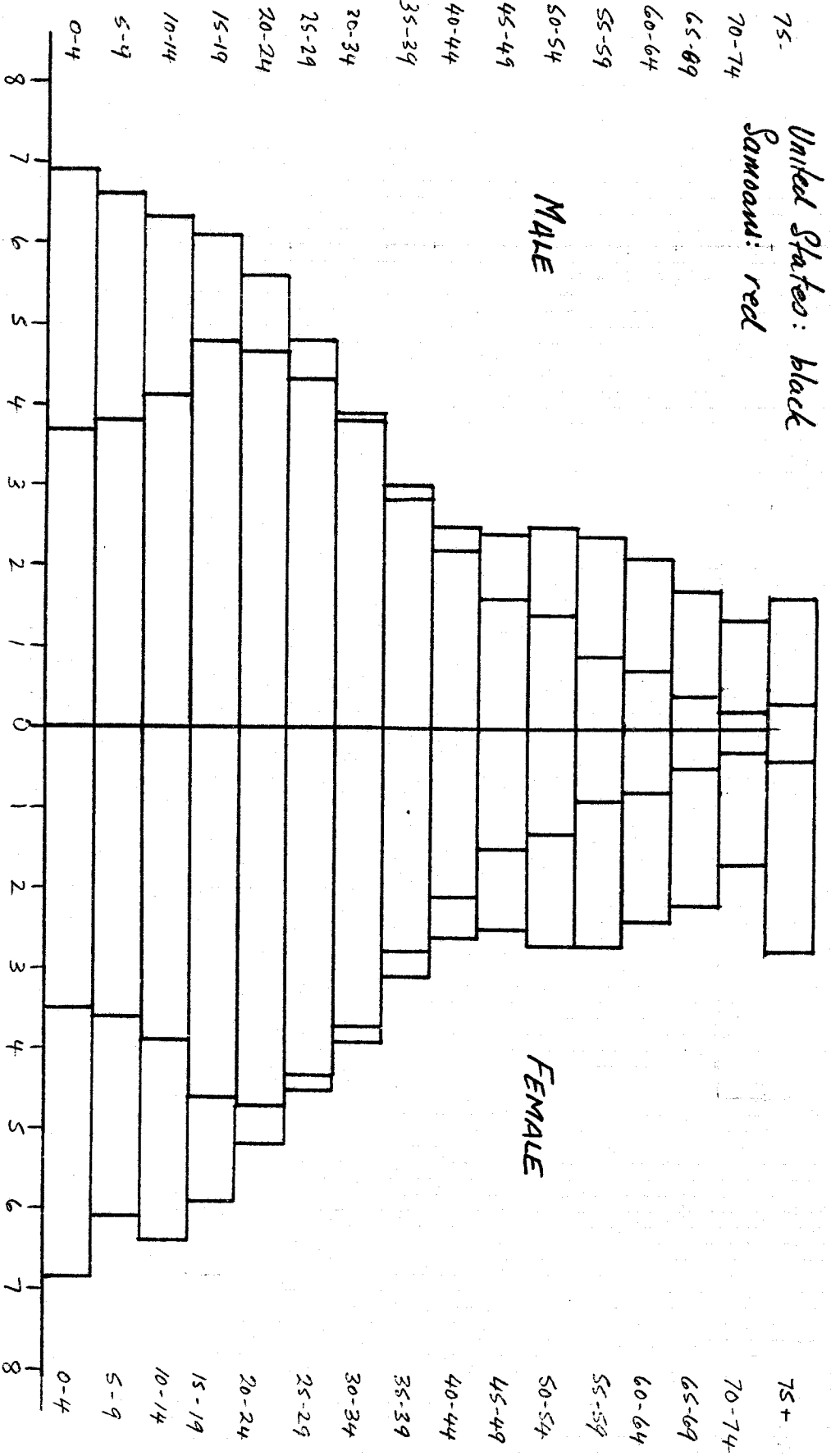
Source: Hawaii, State of Hawaii; United States, U.S. Bureau of the Census, 1983; American Samoa, Levin and Retherford, 1983.

Table 16. Projected Samoan Population of the United States: 1980-2000

Projection and Year	Total	Hawaii	California	Other States	Average Annual Increase
Projection I					
1980.....	46,000	15,500	22,000	8,500	...
1985.....	53,500	18,000	25,500	10,000	1,500
1990.....	62,000	21,000	29,500	11,500	1,600
1995.....	72,000	24,000	34,500	13,500	2,000
2000.....	84,000	28,000	40,000	16,000	2,400
Projection II					
1980.....	46,000	15,500	22,000	8,500	...
1985.....	65,000	22,000	31,000	12,000	3,800
1990.....	92,000	31,000	44,000	17,000	5,400
1995.....	129,000	43,500	61,500	24,000	7,400
2000.....	182,000	61,000	87,000	34,000	10,600
Projection III					
1980.....	46,000	15,500	22,000	8,500	...
1985.....	64,000	21,500	30,500	12,000	3,600
1990.....	86,500	29,000	41,500	16,000	4,500
1995.....	115,000	39,000	55,000	21,000	5,700
2000.....	148,500	50,000	71,000	27,500	6,700
Projection IV					
1980.....	46,000	15,500	22,000	8,500	...
1985.....	64,000	21,500	30,500	12,000	3,600
1990.....	84,000	28,500	40,000	15,500	4,000
1995.....	107,000	36,000	51,000	20,000	4,600
2000.....	131,000	44,000	62,000	25,000	4,800
Projection V					
1980.....	46,000	15,500	22,000	8,500	...
1985.....	65,000	22,000	31,000	12,000	3,800
1990.....	89,000	30,000	42,500	16,500	4,800
1995.....	119,000	40,000	57,000	22,000	6,000
2000.....	159,000	53,500	76,000	29,500	8,000

Source: Projections made by authors. Not yet verified.

Figure 1 Population Pyramid for United States Total Population and Samoans in U.S.



1981

Table 12. Place of Birth of the Samoan Population of the United States for Selected States: 1980

Place of Birth	United States				
	Total	California	Hawaii	Washington	All Others
Total.....	41,948	20,089	14,073	1,830	5,956
United States.....	19,349	10,326	5,423	668	2,932
Samoa, Total.....	22,599	9,763	8,650	1,162	3,024
American Samoa.....	9,361	3,158	4,653	355	1,195
Western Samoa.....	13,238	6,605	3,997	807	1,829
Percent Distribution:					
Total.....	100.0	100.0	100.0	100.0	100.0
United States.....	46.1	51.4	38.5	36.5	49.2
Samoa, Total.....	53.9	48.6	61.5	63.5	50.8
American Samoa.....	22.3	15.7	33.1	19.4	20.1
Western Samoa.....	31.6	32.9	28.4	44.1	30.7

Source: U.S. Bureau of the Census, 1983. Table 94.

Table 13. Place of Residence in 1975 of the Samoan Population in the United States and in Selected States: 1980

Residence in 1975	United States				
	Total	California	Hawaii	Washington	All Others
Samoans, 5 yrs and over..					
Percent.....	100.0	100.0	100.0	100.0	100.0
United States.....	81.9	85.6	77.9	84.7	78.8
Abroad.....	18.1	14.4	22.1	15.3	21.2

Source: U.S. Bureau of the Census, 1983. Table 94.

Figure 2.

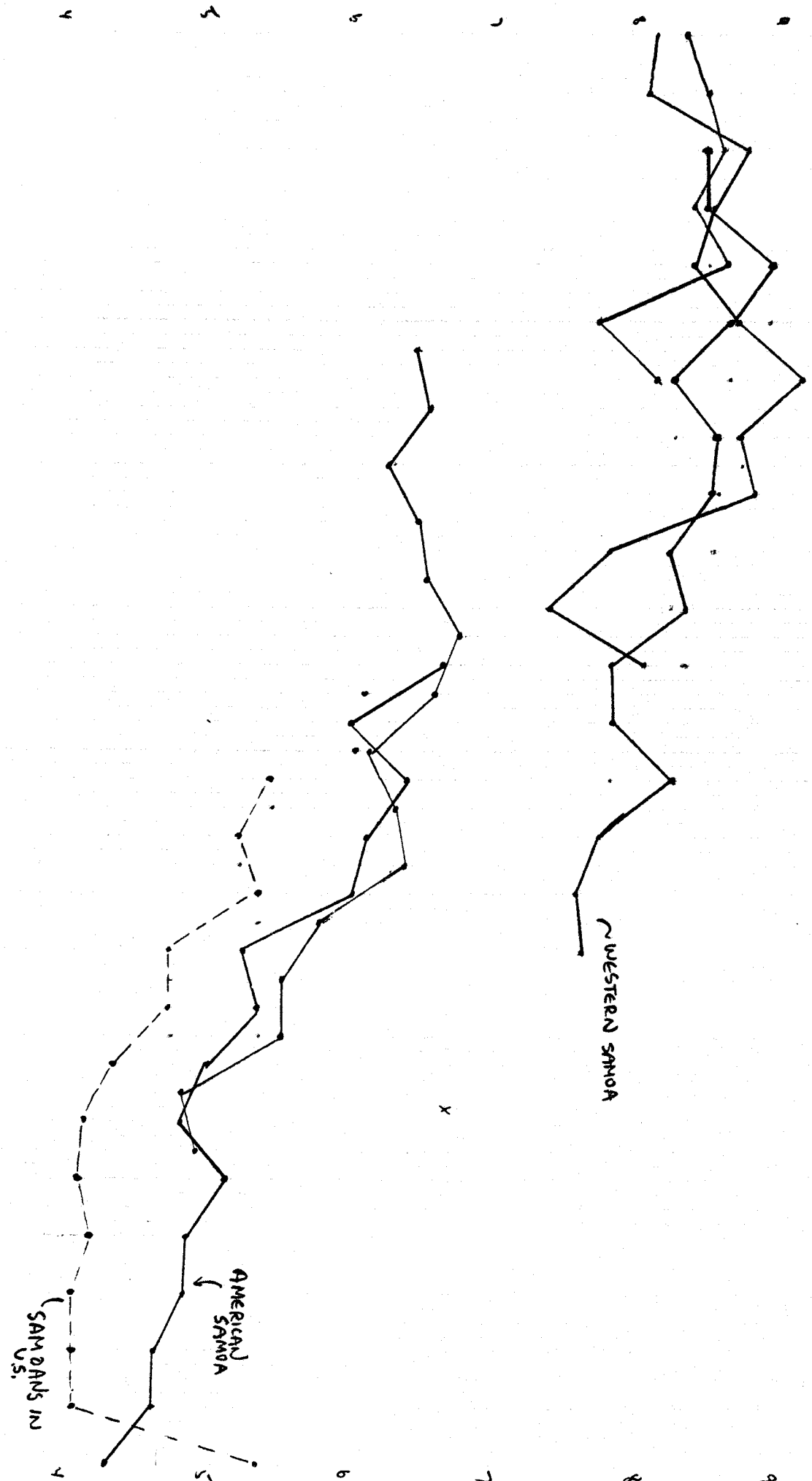


Table 3. The Female Samoan Population of the United States for Selected States and the Population of American Samoa, by age group: 1980

Age Group	United States					American Samoa
	Total	California	Hawaii	Washington	All Others	
Females.....	20,699	9,985	7,120	866	2,728	15,913
Under 5 years.....	2,899	1,314	1,061	140	384	2,300
5 to 9 years.....	2,563	1,243	938	100	282	2,062
10 to 14 years.....	2,677	1,364	1,011	106	196	1,947
15 to 19 years.....	2,454	1,176	862	108	308	1,971
20 to 24 years.....	2,188	1,032	664	100	392	1,667
25 to 29 years.....	1,904	907	598	89	310	1,236
30 to 34 years.....	1,557	756	461	51	289	1,033
35 to 39 years.....	1,157	565	354	63	175	730
40 to 44 years.....	888	434	309	35	110	697
45 to 49 years.....	622	294	244	26	58	546
50 to 54 years.....	539	277	193	16	53	556
55 to 59 years.....	391	197	145	11	38	388
60 to 64 years.....	315	160	108	6	41	302
65 to 69 years.....	228	109	85	7	27	198
70 to 74 years.....	131	67	35	2	27	115
75 years and over.....	186	90	52	6	38	165
16 years and over.....	12,052	5,817	3,922	502	1,811	9,208
Median.....	19.5	19.5	18.0	19.0	22.5	19.2
Less than 15 years.....	8,139	3,921	3,010	346	862	6,309
15 to 64 years.....	12,015	5,798	3,938	505	1,774	9,126
65 years and over.....	545	266	172	15	92	478

Source: U.S. Bureau of the Census, 1983

Table 14. Year of Migration for a Sample of Samoan Adults in Southern California: 1977

Period of Migration	Number	Percent
Total	410	100.0
Before 1940	25	6.1
1941 - 1945	1	0.2
1946 - 1950	8	2.0
1951 - 1955	29	7.1
1956 - 1960	64	15.6
1961 - 1965	58	14.1
1966 - 1970	122	29.8
1971 - 1975	93	22.7
1976	6	1.5
No response	3	0.7
Not applicable	1	0.2

Source: Shu and Satele, 1977:74

Table 15. Year of Migration for a Sample of Samoan Householders in Hawaii: 1983

Period of Migration	Number
1950 - 1954	2
1955 - 1959	3
1960 - 1964	5
1965 - 1969	5
1970 - 1974	15
1974 - 1979	10
1980 - 1983	10

Source: Franco, 1983:9

Figure 3. Projection Assumptions for Samoans in the United States, 1980-2000

Projection and Period	Natural Increase	Net Increase	Total
Projection I			
1980-1985.....	3.0	None	3.0
1985-1990.....	3.0	None	3.0
1990-1995.....	3.0	None	3.0
1995-2000.....	3.0	None	3.0
Projection II			
1980-1985.....	3.0	4.1	7.1
1985-1990.....	3.0	4.1	7.1
1990-1995.....	3.0	4.1	7.1
1995-2000.....	3.0	4.1	7.1
Projection III			
1980-1985.....	3.0	3.8	6.8
1985-1990.....	3.0	3.3	6.3
1990-1995.....	3.0	2.8	5.8
1995-2000.....	3.0	2.3	5.3
Projection IV			
1980-1985.....	2.8	3.8	6.7
1985-1990.....	2.4	3.3	5.8
1990-1995.....	2.1	2.8	4.9
1995-2000.....	1.7	2.3	4.0
Projection V			
1980-1985.....	2.8	4.1	6.9
1985-1990.....	2.4	4.1	6.6
1990-1995.....	2.1	4.1	6.2
1995-2000.....	1.7	4.1	5.8

Notes: Rates are applied at the mid-point of each period, are average annual increase in percent, and total may not equal sum of natural increase and migration because of rounding.

A STATISTICAL PROFILE OF
SAMOANS IN THE UNITED STATES

Part II: Social and Economic Characteristics

by

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The urbanization experience of Samoans in Pacific city provides an unusual example of a non-Western people who have adapted with relative ease to the demands of urban American life. A major factor contributing to their adaptation is the retention of a social system characterized by the traditional affective ties of the little community, modified to assist its members with the instrumental functions necessary for survival in the city. Ties of ethnicity, family and church assist the individual in his search for employment and housing. They relieve the burden of finances at times of crisis, offer a many-faceted orientation for the new arrival, and provide an extraordinary social security in a complex and impersonal urban milieu.

-- Joan Ablon

The fa'asamoa assures Samoans of food and shelter in time of need. It facilitates the survival of more Samoans than would otherwise be possible and serves to maintain ties with the home islands. But the price for these benefits is high, including poverty, social isolation from American society, and stressful value conflicts for Samoan youth.

--Karla Rolff

INTRODUCTION

During the past sixty years, Samoan migration to the United States has changed its character from the pioneering movement of a few individuals and families in the 1920s to the en masse migration of many thousands during the 1970s. High rates of immigration and natural growth have resulted in a rapidly increasing Samoan population to 42,000 in 1980.

The migration of Samoans north to the United States and south to New Zealand has attracted a great deal of attention from social scientists and government agencies. At least 200 articles, dissertations and reports dealing with various aspects of the Samoan community in the United States or New Zealand have been written (Levin and Hayes, 1983; Spoonley et al, 1980). Most of the academic studies about Samoans in the United States have been concerned with the degree to which Samoan institutions have adapted to the social and economic environment of a modern industrial society and the role these institutions has played in facilitating or retarding the socio-economic success of individual Samoan migrants. Collectively, these studies do not present a clear picture. Researchers seem to reflect the same ambivalence regarding the effects of Samoan institutions (and their cultural value) as is often expressed by Samoans themselves.

The socio-economic conditions of Samoans in the United States have not been clearly identified. Most studies have focussed on the "community" level analysis of a single researcher and have not always been comparable with each other. The publication for the first time of detailed information on Samoans in United States census provides the

first opportunity to view the socio-economic situation of Samoans in a broad, comparative light. Since the census asked a standard set of questions of all selected groups¹ in all states at the same time, it provides an invaluable resource for comparative analysis, which can facilitate the formulation of more precise hypotheses regarding the determinants of socio-economic conditions among Samoan migrants.

The purpose of this paper is to present a broad statistical profile of the socio-economic status of Samoans in the United States. The emphasis is on description rather than explanation in the narrow sense. The primary data source is the 1980 United States census. Although the census provides essentially a static picture as of April 1, 1980, the Samoan community is a dynamic one. The ebb and flow of migrants and the rapid increase in the U.S.-born Samoan population guarantees constant and rapid change.

GEOGRAPHIC DISTRIBUTION AND URBANIZATION

The 1980 census showed Samoans in every state and the District of Columbia. While the population by state ranged from 20,089 in California to just 6 each in Arkansas and Delaware, 92 percent of all Samoans were in the ten states shown in table 1. Almost half of the Samoan population was in California; the West region of the country accounted for 90 percent of the total. The most significant concentrations outside the West were in New York, Virginia and Florida.

/Table 1 about here/

The relocation of Samoans from Samoa to the United States is not only a movement from Samoa to Hawaii and onward to the United States mainland, but is fundamentally an urbanization movement. Although

1 "Selected groups" in this paper refers to the detailed racial groups in the 1980 United States census.

some Samoans emigrate from the port towns of Apia and Pago Pago, a great many originate from what are essentially rural villages and go directly to or near large American cities. Indeed, as table 2 shows, Samoans in the United States were more highly concentrated in urban areas in 1980 than was the United States population as a whole. Only 4 percent of Samoans live in rural areas compared with 26 percent of the total population. The vast majority of Samoans (87 percent) lived either in central cities (43 percent) or in the urban fringe (44 percent). As table 3 shows, the largest single urban concentration of Samoans was in Honolulu SMSA (13,811) followed by Los Angeles-Long Beach (8,049) and San Francisco-Oakland (4,329). The Los Angeles area including Anaheim had about the same number as the city of Honolulu and taken together these two cities accounted for 52 percent of the entire Samoan population in the United States.

/Tables 2 and 3/

Since urban living often implies apartment housing, several studies have suggested that Samoans have difficulty in trying to continue living as they did in rural areas. Urban housing is usually unsuitable for either the regular preparation of native Samoan foods or the extended-family household which is typical of rural Samoan villages.

SOCIAL CHARACTERISTICS

Households. The 1980 census reported 8,308 Samoan householders. Of this total, 47 percent (3,878) were in California, 32 percent (2,671) were in Hawaii and 4 percent (369) were in Washington (table 4). About 87 percent of Samoan households (defined by having a Samoan householder) contained families, a higher proportion than for the population as a whole (73 percent). The proportion of family households was somewhat

larger in Hawaii than elsewhere and was substantially lower among Samoans outside California, Hawaii and Washington.

In general, a higher proportion of Samoan households in the United States had a male householder than the total population (77 percent compared to 72 percent), but in Hawaii almost 30 percent of Samoan households had a female householder compared with the national average of 28 percent (table 4).

/Table 4 about here /

About 97 percent of Samoans were found in households with the balance in "group quarters", a distribution similar to the population as a whole. A slightly larger proportion of the Samoan population was in group quarters (3.3 percent compared with 2.5 percent) than the total U.S. population, probably because more Samoans were in college residences. The proportion of the overall Samoan population in institutions (hospitals, jails, homes for the aged, etc.) was the same as for the United States population as a whole, but Hawaii and "all other" states had a slightly higher proportion of institutionalized persons than California or Washington.

The average Samoan household contained just over five persons (5.2) compared to the United States average of just over three persons (3.3); that is, the average Samoan household contained an additional two persons (table 4). In Hawaii, Samoan households tended to be slightly larger than in California, and although they were smaller in Washington (5.0), they were still well above the United States average.

The average Samoan household size shown by the census was smaller than might be expected from the results of previous surveys. Shu and

Satele's 1976 survey of 410 Samoan households in Southern California found an average of 6.0 persons per household and similar figures were reported for Hawaii in the 1950s (Forster 1954:29). While Census data show that Samoans have larger than average households, an average household size of 5 does not necessarily indicate serious overcrowding. The data for all Samoans do not confirm the image of large extended families crowded into accommodations intended for small nuclear families, although more such families probably exist among Samoans than in the general population. Although Samoan households were larger than the average U.S. household, they were smaller than the average household in American Samoa which had 7 persons in 1980.

Families. About 87 percent of Samoans who lived in households lived in family-based households, although the proportion in family households was higher in Hawaii (93 percent) than elsewhere. Samoan families were much more likely to contain children under the age of 18 (81 percent) than all United States families (51 percent) and the proportion of all Samoan families with children was higher in Washington and Hawaii than elsewhere (table 5). Similarly, the proportion of Samoan families with children under 6 was much higher than the national average -- 49 percent compared with only 12 percent for the total United States.

/Table 5 about here/

A smaller than average proportion of Samoan families contained a married couple (78 percent compared to 82 percent), with the difference being greater for Samoans in Hawaii (72 percent). Samoan families are apparently more likely to contain members of a wider kinship group than is typical in the United States population as a whole.

The proportion of all Samoan families with female householders with no husband present (18 percent) was higher than in the total population (14 percent), except in California where it was about the same. In Hawaii, however, 24 percent of families and 20 percent of families with children under 18 were headed by a female with no husband present, much higher than the U.S. averages of 14 and 9 percent, respectively. Female householders with children under 6 years comprised 12 percent of all Samoan families in Hawaii, more than 7 times the U.S. average. While these statistics may appear to indicate family disorganization, other possibilities include a higher rate of widowhood in Hawaii or husbands absent on the mainland for employment or other activities.

Marital status. The marital status of Samoans in 1980 is shown in table 6. The proportion of the Samoan population which was married was smaller than for the population at large, especially among males. The age structure of Samoans accounts for some of the difference, but economic conditions, for example, would make it difficult for young migrants to establish new households in the United States. On the other hand, the proportion of the population which was single was similar to that observed in American Samoa, suggesting the operation of a cultural rule regarding the appropriate age of marriage.

/Table 6 about here/

There was little variation in marriage patterns between the states although the rate of separation, divorce and widowhood appears to have been marginally higher in Hawaii than in California.

The smaller proportion of widowed Samoans by comparison with the United States population was largely a reflection of its more youthful age structure since fewer Samoans have lived long enough to become widowed.

Although the separation rate among Samoans was higher, especially among females, than the national average, the divorce rate was lower.

Shu and Satele's 1976 survey found that the proportion of married Samoans was 72 percent (1977:34), considerably higher than shown by the census. Shu and Satele's survey only recorded the marital status of persons over 18 while the census referred to persons 15 years and over, and the survey did not include Samoans living in such group quarters as dormitories or barracks.

The census data do not include information on the extent of intermarriage between Samoans and non-Samoans. The most contemporary alternative data source for Southern California is Shu and Satele's 1976 survey conducted in the Los Angeles area. Of the 887 ever-married Samoan respondents, 95 percent were married to Samoans and only 13 persons (less than 2 percent) were married to Caucasians (Shu and Satele, 1977:69). It is likely, however, that mixed families had a less than equal chance of being selected for this survey, so that the rate of intermarriage may actually have been higher than the survey indicated.

Out-marriage has occurred on a fairly large scale among Samoans in Hawaii. Most Samoans who came to Hawaii before the 1920s appear to have integrated into Hawaiian society (Alailima, 1972:47), more than likely through marriage. Intermarriage with other ethnic groups was a frequent occurrence during the 1960s. In a sample of 64 households in the Makaha-Nanakuli area of Oahu, Yost (1965:44) found 117 American-born children -- 67 percent of whom were of mixed parentage. The most prominent marriage partners for Samoan men were part-Hawaiian women, while Samoan women tended to marry Filipino and Caucasian men (Yost, 1965:32).

A survey conducted by the Hawaii State Department of Health in 1970 reported 7,000 part-Samoans in addition to 6,753 (presumably full) Samoans (Hawaii Department of Planning, 1973:3), implying that part-Samoans were a majority of the state's Samoan population.

Marriage statistics for the state of Hawaii confirm that out-marriage has continued at a high rate throughout the 1970s. Of the 2,611 marriages involving a Samoan bride or groom during the period 1970-81 (inclusive), 1,490 or 57 percent were with a non-Samoan (Hawaii Department of Health, 1982). About 38 percent of these marriages were to Caucasians, 30 percent were to Hawaiians and the balance were distributed across most of the other "ethnic" groups in Hawaii. Out-marriage to Caucasians occurred more frequently when the bride was Samoan than when the groom was (44 percent and 33 percent of all out-marriages, respectively).

These marriage patterns are reflected in the number of part-Samoan children born during the same period. Of the 6,179 births to Samoans during the period 1970-81, 52 percent were to a non-Samoan mother or father (Hawaii Department of Health, 1982). About 39 percent of all births to Samoan mothers involved a non-Samoan father and 31 percent of births to Samoan fathers occurred to a non-Samoan mother.

Samoan marriage and birth statistics for Hawaii do not support the image of ethnic cohesion which Shu and Satele (1977:35) presented for Samoans in southern California. If the accuracy of the latter image in California is confirmed by census data an important difference between the two Samoan communities may have been discovered. The implications of this difference, if confirmed, may be extremely important since Samoans in California appear to have attained a higher level of socio-economic

achievement than Samoans in Hawaii. If this greater success is a product of a more cohesive community and the continuation of fa'asamoa, as some have suggested (e.g., Ablon, 1971:95), by Ablon's thinking, the weakening of fa'asamoa in Hawaii may have contributed to the relatively low socio-economic status of Samoans there. Since more Samoans in Hawaii are recent immigrants, and, therefore more likely to continue fa'asamoa the observed differences between Samoans in the two states are almost certainly not attributable to this factor.

INCOME AND POVERTY

Income. The historical role of immigrants as a source of unskilled, cheap and powerless labor has usually guaranteed low incomes for at least the first generation or so. As American Nationals, however, American Samoans are not subject to those processes which regulate the supply of labor to certain industries and thereby ensure that low wage levels are maintained. While Samoans usually intend to work when they arrive in the United States, they are not "labor migrants" whose incomes are structurally determined. The relatively low incomes of Samoans are determined by more complex processes.

The low incomes of Samoans in Hawaii by state standards can be inferred from the types of occupations pursued, high rates of unemployment and the relatively large number of Samoan families receiving public assistance (Hawaii Department of Planning, 1973). A small number of studies have collected information on the actual monetary incomes of Samoans in the United States (Schmitt, 1971; Shu and Satele, 1977), but these do not provide an adequate base to measure income trends among Samoans. The Hawaii Health Surveillance Survey (Schmitt, 1971)

conducted between 1964 and 1967 reported the incomes of 520 Samoan householders. The absolute numbers are no longer meaningful, because of inflation, but the median income of Samoans was 34 percent below the median for all householders in the sample.

Income data collected for Samoans in 1976 by Shu and Satele (1977:36) in southern California showed a median annual household income of about \$10,000. According to the 1980 census the median household income of Samoans throughout the United States in 1979 was \$13,848 (table 7). By comparison, the median household income for the United States as a whole was \$16,841. In other words, Samoan households received about 82 percent of the United States median income.

/Table 7 about here/

The census also revealed differences in the household incomes of Samoans: the median income in California (\$16,616) was about 55 percent higher than the median for Hawaii (\$10,742); the median Samoan household in California earned about \$5,900 more than its counterpart in Hawaii.

Samoan households in California also had higher incomes than those in Hawaii regardless of the age of the householder. Where the householder was aged between 55 and 64 years, however, the income difference between the two states (table 7) was a remarkable \$17,400, (\$28,693 in California and \$11,250 in Hawaii). An income gap of such magnitude suggests major differences in the economic foundation of Samoan households in the two states.

As table 7 shows, households with female householders with no husband present had median household incomes about half that of all households combined (\$7,059 compared with \$13,848). Since Hawaii had proportionally more of these households than California, the median income for Samoan households was, of course, much lower than in California.

The median household income of households having a female householder with no husband present was substantially lower if children were present. Those households with children under 6 years of age had a lower median income than others (\$5,231 compared to \$6,526).

When median household income was classified by the number of workers, the difference between Samoan households in California and Hawaii were much less than when all households were combined. A Samoan household in Hawaii with one worker received 93 percent of the income of a similar household in California. Similarly, a household containing three or more workers in Hawaii received 86 percent of the income of its California counterpart. While household incomes in Hawaii were lower than in California regardless of how many workers were present, general differences in wage and salary levels in the two states can not account for the lower median income of Samoans in Hawaii. Rather, the households in the two states had different compositions: fewer Hawaii families had two or more workers (43 percent compared to 59 percent in California) and more had no workers at all (17 percent compared to 9 percent in California). A substantial majority of Samoan families in Hawaii (57 percent) had only one worker or none at all, while almost 60 percent of California's Samoan families had two or more workers.

These differences in composition are in turn a function of variations in household composition. Samoan households in Hawaii were more likely to have a female householder and less likely to contain a married couple than in California. Also, Samoan households in Hawaii tended to be larger and, if the householder was female, were more likely to contain young children. The lowest incomes were found in such households.

The vast majority of Samoan households (85 percent) received their income from earnings (table 7), but the proportion with earnings was

higher in California (88 percent) and Washington (88 percent) than in Hawaii (78 percent).

About 33 percent of all Samoan households in Hawaii were receiving some public assistance income in 1979 in contrast to 20 percent of those in California. Both of these figures were well above the respective state averages (9.3 percent of all families in Hawaii and 9.5 percent in California, but in Hawaii the proportion of Samoan families receiving public assistance was three and a half times the state average. With the exception of Vietnamese families (51 percent of whom received public assistance income in 1979), proportionately more Samoan families received public assistance income than any other selected group.

In California, of course, Samoan families were a minuscule proportion (0.1 percent) of all families receiving public assistance; in Hawaii, however, 3.8 percent of all families receiving public assistance income were Samoan while Samoans comprised only 1.5 percent of the State's population.

The distribution of families among income groups reveals further differences between Samoan families in Hawaii and California. As table 8 shows, proportionately fewer Samoan households in California than Hawaii had incomes below \$10,000 in 1979 while a larger proportion had incomes of \$25,000 and over.

/Table 8 about here/

In order to gain some perspective on Samoan income patterns, we have shown the distribution of Samoan households among income categories in the United States, California, and Hawaii next to the respective

total national and state distributions (table 9). While the distributions were different, in California the Samoan distribution was much closer to the state as a whole than in Hawaii. The proportion of Samoan families earning below \$10,000 was about the same as the state as a whole (26.2 and 26.8 percent, respectively), and virtually the same proportion fell in the \$25,000 to \$34,999 category. In Hawaii, however, the state distribution was markedly different from the Samoan distribution. By comparison with the state as a whole, Samoan households were highly "over-represented" in the income categories below \$15,000 and "under-represented" in income categories from \$15,000 and over.

/Table 9 about here/

The differences between the income distribution of Samoan households in Hawaii and California (table 9) were clearly reflected in the gap between the respective state and Samoan medians: in California the Samoan median income of \$16,616 was 91 percent of the state median (\$18,243) whereas in Hawaii the Samoan median (\$10,742) was only 52 percent of the state median (\$20,473).

The distribution of all Samoan households across income categories also differed substantially from the distribution of all households in the United States, although the discrepancy was much less than in Hawaii. In broad terms, Samoan households were under-represented in the upper income categories (\$20,000 and over) and over-represented in income categories below \$15,000. Equal proportions of all United States and Samoan households fell into the income category \$15,000 to \$19,999.

Household income among Samoans, as for the population as a whole, tended to increase with the age of the householder until the group aged 65 and over when it dropped sharply. This pattern was clearly evident

in California (table 10), although the absolute income levels of Samoans were lower (with the exception of the 55 to 64 year age group which had a higher median income than the state as a whole.) In Hawaii, however, the pattern of rising household income with age of the householder was substantially attenuated, not only by comparison with the state of Hawaii as a whole, but also in comparison with Samoans in California. The median income for householders aged 55 to 64 in Hawaii was only 39 percent of that received by similar households in California.

/Table 10 about here/

The level of consumption which household income permits is affected not only by the absolute amount of monetary income but also by the number of individuals that income is required to support. As already shown, the fact that Samoan households tend to be larger than the national average is reflected in the substantially lower per-capita incomes received by Samoans. In California, the per-capita income of Samoans in 1979 was \$4,081 or about half the state average (table 11). In Hawaii, Samoan per-capita income (\$2,729) was only 35 percent of the state total and only 31 percent of the per-capita income of Whites. Next to the Vietnamese, Samoans have the lowest per capita incomes of all selected groups in California reported by the census; in Hawaii their per capita income was lower even than that of the Vietnamese.

/Table 11 about here/

Poverty. Given the comparatively low incomes of Samoans, it is not surprising that a substantial proportion of the Samoan population lived below the official poverty level in 1979. Of all Samoan families in the United States, 27.5 percent had incomes below the poverty level and almost 37 percent were below 125 percent of the poverty level (table 12).

Again, Hawaii contrasted with California and Washington: 40 percent of Samoans in Hawaii had incomes below the poverty level compared to 21 and 31 percent in the other two states respectively.

/Table 12 about here/

The incidence of extreme poverty (income below 75 percent of the poverty line), was also substantially higher among Samoans in Hawaii (28 percent) than in California (14 percent).

The situation of Samoans can be seen more clearly when compared to the total populations of the major states in which they reside or to the nation as a whole. Table 13 shows that about 10 percent of the Hawaii population had incomes below the poverty level in 1979 whereas 40 percent of Samoans were in this category. The proportion of the Samoan population which was near-poor (below 150 or 200 percent of poverty) was also substantially higher than in the state as a whole: 76 percent of Samoans in Hawaii had incomes below 200 percent of the poverty level compared to 29 percent of the state's population.

/Table 13 about here/

Although proportionately more Samoans had incomes near or below the poverty level in California than in the total state population, the contrast was not as great as in Hawaii.

If "persons" is used as the unit of analysis, Samoans had almost double the incidence of poverty as the United States population as a whole. For example, 20 percent of Samoans had incomes below 75 percent of the poverty level in 1979 compared to 8 percent of the total U.S. population; and 63 percent of Samoans fell below 200 percent of the poverty level compared with 32 percent of all Americans (table 13).

Of the 1,917 Samoan families whose income was below the official

poverty level in 1979, about 40 percent (760) received public assistance income (table 14). A higher proportion received public assistance in Hawaii (46.4 percent) than in California (34.8 percent). On the other hand, more poor householders in California worked in 1979 than Hawaii. A substantial proportion of poor households (39 percent) had a female householder with no husband present. The vast majority of these (98 percent) also had children in the household, probably accounting for the extremely small number of female householders below poverty who worked (about 14 percent of the total).

/Table 14 about here/

Only 58 households below the poverty level (3 percent) had an elderly householder over 65 years; only 1.6 percent of Samoan poor were 65 years or over. Thus, it is too soon to say whether Samoan poverty is as related to old age as in the general population. Only a small proportion of poor Samoan households received social security income (table 14).

Not only were proportionately more Samoan households below the poverty level than in the population as a whole, but Samoan poor were poorer than the average. That is, the mean deficit between income received and that required to take the household to above the poverty level was much greater for Samoans than for all poor households combined. Poor Samoan families would need an additional \$962 on average to reach the poverty level of the United States (table 15). In Hawaii the equivalent figure was \$1274. Thus, Samoan families, especially in Hawaii, were not only more likely to be poor than the average family in the United States, but were more likely to be very poor.

/Table 15 about here/

Samoans in the United States and California were poorer than any

other selected group with the exception of the Vietnamese (table 16). In Hawaii, however, the incidence of extreme poverty was highest among Samoans. Of all Samoans in Hawaii in 1979, 76 percent were in households which received income below 200 percent of the poverty level.

Thus, even among those Samoans in Hawaii who could not be classified as officially poor, a substantial number received very low incomes and by implication suffered considerable material deprivation by state standards. Of course, these data do not take into account income in kind such as food stamps, gifts or home-produced food, so no inferences can be drawn regarding the links between these income levels and malnutrition or general health.

HOUSING

Housing conditions not only reflect income levels and the quality of life in a broad sense, they also play a role in determining occupational achievement by affecting education and health. Home ownership is itself a measure of socio-economic success, but it also indicates a greater degree of economic control over one's fate, a factor in the quality of family life.

Although the amount of space available per household member indicates something about housing quality, cultural values determine what is an appropriate "cultural" density. High density is often indicative of inadequate income and low quality housing. Samoan households in the

Samoan households in the United States have higher densities than most of the other selected groups. Of all households in the United States, 61 percent had 0.5 or fewer persons per room; but only 16 percent

of Samoan households were in this category (table 17). Conversely, 26 percent of Samoan households had 1.51 or more persons per room, while only 1.4 percent of all U.S. households (and less than one percent of White households) had this density. These statistics reflect, of course, the larger average household size of Samoans, but they are also a function of the fact that Samoans are more likely to live in families and that few Samoans live in single-person households.

/Table 17 about here/

According to 1980 census data, only 29 percent of Samoan housing units were owner-occupied (table 18), compared to the national average of 64 percent. Next to Vietnamese, Samoans had the lowest rate of owner-occupied housing units of any selected group. This low rate of home ownership was partly caused by difficulty in qualifying for mortgages.

/Table 18 about here/

EDUCATION AND LANGUAGE

Education. Education is the most frequent reason given by Samoans to explain their immigration to the United States. Householders, who are interviewed in most surveys, refer to their children's education since the majority of householders have completed their own schooling.

Samoans may value education for its own sake or they may see education as instrumental for achieving occupational success or social mobility in the United States. Whatever importance this distinction might have for the socio-economic situation of Samoans, what is more important in this context is the relationship between the educational achievement of Samoans and the occupations to which they have either obtained or been denied access. Sociological literature demonstrates

a clear correlation between education and occupational position in the population as a whole; what is much less clear is why this correlation exists and whether it is as strong for ethnic minorities as for the total population.

It has been argued that employers perceive education not so much as an indication of possession of knowledge and skills, but as a "signal" that the potential employee has appropriate attitudes toward training and work discipline in general. If ethnicity tends to distort this signal then higher levels of educational attainment may not achieve the desired result for some groups. The argument that education is simply an indicator of ability and that the most able always have access to the best positions is difficult to verify.

Basic data on the educational characteristics of Samoans in the United States and for selected states from the 1980 census are presented in table 19. There were generally minor differences in enrollment between Samoans in various parts of the United States. It is difficult to assign much meaning to these data without comparing them to those for the total United States population or other ethnic groups. A high proportion of the Samoan population in "other states" was attending college (31 percent). This proportion was slightly more than twice the rate of the total population and almost three times the Hawaii rate. A considerable proportion of the Samoan population in states other than Hawaii went there to attend college.

/Table 19 about here/

Since educational achievement is related to the operations of the competitive labor market, education obtained becomes relevant mainly in

relation to the educational level of others who are competing in the same markets. In table 20, the percentage of the Samoan population of the United States, California and Hawaii having a specified number of years of schooling is compared with the total population of each of these areas.

/Table 20 about here/

The main difference between Samoans and the total United States population in educational attainment in 1980 was in the proportion which had completed four or more years of college rather than in the proportion at lower levels. Only 5 percent of Samoan females had completed 4 or more years of college compared to 13 percent of the total population (table 20).

In California, the proportion of the Samoan population having only an elementary school education was about the same as for the total state population. Among males, however, this proportion was slightly lower (table 20). The major difference occurred at higher levels, particularly in the proportion which had completed four or more years of college. Of all California males aged 25 years and over, 24 percent had completed four or more years of college compared to only 9 percent of Samoan males. For females the equivalent figures were 15 and 4 percent, respectively.

The difference between Samoans and the total California population in the proportion of those 25 years and over who had completed from one to three years of college was only 5 and 6 percentage points for males and females respectively, the Samoan population being lower in each case.

These figures may overstate the amount of college-level education received by Samoans (by including in the same category those who had completed only one year of college and those who had completed up to three).

Without a more thorough examination of census and other data it would be inappropriate to conclude that educational deprivation at the college level is the primary cause of low socio-economic attainment by Samoans.

The figures showing the proportion of the Samoan population which had not completed high school are perhaps more impressive. About 35 percent of Samoan males and 39 percent of females in California had not completed high school, compared to 25 and 28 percent, respectively, for the whole state (table 20). For males, the proportion of the Samoan population with from one to three years of high school was about double that of the California population and for females it was about one and a half times as high.

In Hawaii, the educational disadvantages experienced by Samoans were greater than in California. About 58 percent of Samoan males and 44 percent of females 25 years and over in Hawaii had completed high school in 1980. The equivalent figures for the state as a whole were 75 and 73 percent. Thus, on this measure, the educational level of Samoans in Hawaii was not only lower than Samoans in California, but the educational gap between Samoans and the rest of the Hawaii population was much greater than the gap between Samoans in California and the California population as a whole. The proportion of all Samoan women in Hawaii aged 25 and over which had completed high school (44 percent) was much lower than among Samoan women in California (61 percent) or the states of California and Hawaii as a whole (72 percent). Since such a large proportion of Hawaii's Samoan population consisted of recent migrants, the reasons for the low level of educational attainment by women cannot lie exclusively in conditions in Hawaii but must also be related to pre-migration conditions in Samoa.

Ethnographic evidence gathered in the 1950s indicates that Samoan migrant women in Hawaii were at a serious disadvantage in attaining English language skills and ability (Eyde, 1954:15; Forster, 1954:12,68-69), and to the degree that language proficiency affects educability, this initial disadvantage probably has been reproduced among second generation Samoan women.

The tendency of minority-group women in Hawaii to have a lower proportion of high school graduates than their counterparts in California is not exclusive to Samoans (or to females), but the discrepancy between Samoan women in Hawaii and those in California appears to be much greater than among any other ethnic group (table 21).

/Table 21 about here/

Language. Until language data from the 1980 census are available, a detailed pattern of Samoan language use across the United States can not be obtained. Similarly, data on English language ability among Samoans have yet to be tabulated.

One study of immigrants to Hawaii has suggested that

In relation to the other problems faced by Samoans, language and communication are considered of lesser importance. English is not entirely foreign to them because it is the medium of instruction in Samoan schools (Hawaii Commission on Manpower and Full Employment, 1972:91).

The report goes on to say, however, that the "...inability to communicate in English has limited the range of occupations they can perform and has restricted contact to those within their group" (1972:91). These statements reveal the paradoxical character of Samoan language use and aspirations. Next to the more immediate issues of accommodation, employment and transportation, language problems are not of great concern to recent arrivals (Hawaii Commission on Manpower 1972:15). The standard of English proficiency which many migrants have achieved in Samoa often turns out to

be inadequate for employment purposes in the United States. Immigrant parents often cite improved English ability in their children as a primary motive for immigrating to the United States; but at the same time many of these parents want their children to know Samoan and continue to use it in the household (Taga, 1964).

The extent to which Samoan language remains in use in Samoan households is illustrated by Shu and Satele's finding (1977:39) that 86 percent of respondents (householders in most cases) spoke Samoan in their homes and about the same proportion considered Samoan to be their first language. Only 8 percent of this sample reported that they were unable to speak English at all, but the authors concluded that about half of the respondents either were not fluent in English or could not speak it. The functional capacity of Samoan householders in this sample is more realistically revealed by the finding that 43 percent would consider using an interpreter to help explain medical problems to an English-speaking doctor (Shu and Satele, 1977:40).

A potential communications gulf of serious proportions between first generation immigrants and their American-born children was also revealed by the 72 percent of all householders who indicated that their children most often spoke English in the home whereas the majority of parents used Samoan (Shu and Satele 1977:39).

The determinants of English language proficiency among Samoan migrants are not clear from data presently available. More information is needed on the degree to which English is in fact the "medium of instruction" in Samoan schools (e.g., at what grade does it begin, for what proportion of the teaching day it is used, how effectively is it taught). Some survey data suggest that immigrants from Pago Pago were

more likely to speak, read and write "good" English than those who originated from the more rural villages of Tutuila (Lyons, 1980:128). The same study also suggests that Samoans in the Kalihi area of Oahu were even less capable of speaking English than the inhabitants of four of the five Tutuila villages which were surveyed. The contrast between the language ability of Samoans in Kalihi and in the predominantly Mormon settlement of Laie (20 percent and 57 percent, respectively, were able to speak "good" English), suggests that religious affiliation may be a factor in linguistic competence (Lyons 1980).

Some of the reasons for poor English language capability among Samoan immigrant women in Hawaii have already been mentioned. As Eyde (1954:15) and Forster (1954:12) discovered, Samoan women were generally confined to the household and had little opportunity to improve their English through interaction with native speakers. In contrast, Samoan men spoke English in the workplace and had more opportunity to improve their facility through interaction. It is plausible that the poor English ability of Samoan migrant women who arrived in the 1950s and 1960s has prolonged the period in which Samoan remains the language of the household and retarded the progress of second-generation children.

LABOR FORCE

In a society centered on a market-based economy, the socio-economic position occupied by the majority of the population is determined by their ability to compete in labor markets as well as by fluctuations in the demand for labor within those markets. The vast majority of Samoans are seeking access to labor markets which contain a large number of other immigrant groups with similar aspirations and abilities. While

the functioning of the labor markets of southern California and Hawaii cannot be discussed in detail here, the market for the type of skills and capabilities that Samoan immigrants generally have is highly competitive. Furthermore, these markets have probably become more competitive in recent years as the American economy has moved through various recessions. The assessment of the socio-economic position of Samoans must therefore consider the structural and institutional factors which influence their access to the work place.

Unemployment. Unemployment has been described in a number of studies as the major social problem experienced by Samoans in the United States. Rates of unemployment ranging from 29 percent (Shu and Satele, 1977:69-70) up to an incredible 65 percent (informant quoted by Maatz, 1978) have been cited as evidence. In most cases, however, the labor force has not been defined in a conventional way and these rates cannot be compared with those calculated by the Census Bureau.

As table 22 shows, 9.7 percent of the Samoan labor force was unemployed during the four weeks preceding the 1980 census. The unemployment rate was somewhat higher for females (10.1 percent) than males (9.4 percent) but in absolute terms more Samoan males were unemployed than females. While not approaching the magnitude shown in other sources, these rates were higher than the United States averages of 5.2 and 6.8 percent for males and females, respectively.

/Table 22 about here/

In Hawaii and California, the Samoan unemployment rate in 1979 was substantially higher than the respective state averages, particularly in Hawaii where it was double the rate for the state as a whole (10.2 percent compared to 4.7 percent for the state). Samoan unemployment

rates were essentially the same in both California and Hawaii although the rate for the state of California was almost 40 percent above Hawaii's. In other words, Samoan unemployment rates do not appear to have been affected by the overall level of employment in the state in which Samoans resided.

Samoan unemployment rates by sex surpassed those of all other Asian and Pacific Islands minority groups in both Hawaii and California with the single exception of Asian Indian women in California. In Hawaii, the Samoan male unemployment rate was four times that of Japanese males and was even 60 percent higher than among the Vietnamese, most of whom were refugees.

Young Samoans just entering the labor force were extremely likely to be unemployed (table 22). For example, in California 30 percent of youths aged 16 to 19 who were in the labor force in March, 1980 were unemployed, double the California average for this age group. In Hawaii, the rate of youth unemployment was substantially lower (19 percent), but was still about twice the state average.

Although 95 percent of Samoans in the labor force worked at some time during 1979, only 51 percent held full-time jobs (table 23). The proportion of the female labor force which held full-time jobs (41 percent) was much lower than among males (58 percent) and proportionally more females experienced some unemployment during the year. In general, a larger proportion of the Samoan labor force obtained full-time work in California than in Hawaii. Only 37 percent of Samoan women held full-time jobs in Hawaii during 1979 compared to 48 percent in California.

/Table 23 about here/

Employment status. The vast majority of Samoans who were employed

and under-represented in such "white collar" occupations as managers and professionals. This pattern was generally the same for both sexes although there were differences in magnitude. In Hawaii, for example, female workers were more highly over-represented in services than male, probably because of the larger number of women in entertainment. On the other hand, the over-representation of males was greater in the category of "operators, fabricators and laborers."

The distribution of Samoan workers by occupation presents a somewhat less positive picture than their distribution by industrial sector. While those Samoans who were employed in 1980 were engaged in various sectors in roughly similar proportions to the labor force as a whole (either state or national), their occupations within those sectors were, on average, lower in prestige, income and authority than those performed by the labor force as a whole.

The proportion of Samoan workers in precision production and crafts occupations in California, however, was about the same as in the state labor force -- and in the case of females was somewhat higher.

A full explanation of these patterns would require more data than are presently available from the census. For example, to what extent is the concentration of Samoan workers in blue collar occupations related to the need of new immigrants to earn relatively large wages quickly in order to pay back loans advanced to cover migration expenses? Professional and managerial occupations require advanced education and even if they were capable of receiving such training, new migrants usually cannot afford to invest the necessary time. Furthermore, they often have remittance obligations to their kin at home and in order to meet them migrants usually have to find work quickly.

In this interpretation, the high proportion of "blue collar"

in 1980 received a wage or salary from private employment (about 78 percent). The balance either worked for federal, state or local government or were self-employed. A very small number (25 in total) were classified as unpaid family workers (table 24). In California, a larger proportion of the Samoan labor force (20 percent) worked for governments than in the total state labor force (17 percent), while in Hawaii the proportions were about the same. The only area in which Samoans appear to be seriously "underrepresented" is in California state government: 1.3 percent of the Samoan labor force was employed by the state of California compared with 3.6 percent of the total labor force. A much higher proportion of the Samoan labor force in California was employed by the federal government than was true for the California labor force as a whole (7.5 percent and 3.7 percent respectively).

/Table 24 about here/

The number of Samoans in self-employment is disproportionately low by comparison with the national or state averages.

Distribution of Samoan Labor Force by Industry. The distribution of the labor force across economic sectors is normally an indicator of the structure of the economy in a given area. The distribution between sectors of a specific ethnic group is obviously related to the economic structure of the economy which determines, to a degree, the type of economic opportunities which are potentially available to that or any other group. When there are major discrepancies between the two distributions social, cultural or other processes (ranging from systematic discrimination to individual preferences) are at work. Of course, the economic sector in which one works is only an indirect indicator of socio-economic status since a given industry will contain a wide range of occupations carrying

different rewards of income and prestige.

The Samoan labor force appears to have been concentrated in three sectors in 1980: manufacturing, trade and services (table 25), not unexpected since this distribution was largely a reflection of the United States economy. The broad similarity between the total United States economy and the distribution of the Samoan labor force can be seen more clearly in table 26. While Samoans were "under-represented" in some sectors (agriculture, trade, professional services), they were "over-represented" in others (personal services, entertainment and public administration). But in broad terms the two distributions were remarkably similar.

/Tables 25 and 26 about here/

Less congruence is apparent at the state level, however. In California, Samoan workers were over-represented in manufacturing and to a lesser extent in trade by comparison with the state labor force. As a result, a smaller proportion of the Samoan labor force was in services than was the case for the state as a whole. But the percentage of the Samoan labor force in professional services and public administration taken together was still reasonably close to the state labor force (23.5 percent compared to 25.1).

In Hawaii, the distribution of the Samoan labor force between sectors in 1980 differed from the state labor force in two areas: fewer Samoans were in trade and many more were in entertainment relative to the state as a whole. Because of the large number of Samoans in entertainment (352 in absolute numbers) the Samoan labor force was more service-oriented than the state labor force. Again, relatively fewer Samoan workers were in professional services and public administration than in the state

labor force, but the difference was not large (24.5 and 27.7 percent, respectively).

In summary, Samoans have been disproportionately represented in manufacturing in California and entertainment in Hawaii and somewhat under-represented in trade in both states. Samoans are under-represented in professional services but only by a small margin. The extent to which these patterns are determined by economic, social or cultural constraints rather than individual preference cannot be determined from census data.

Distribution of Samoan Labor Force by occupation. The distribution by occupation reveals more about the socio-economic status of Samoans. For simplicity we have shown this distribution across broad occupational categories (table 27). A more detailed analysis would require classification by sub-categories or single occupations. Again, the most meaningful comparison is between Samoan workers and the national or state labor force.

/Table 27 about here/

Although Samoans were reasonably well represented in technical, sales and administrative occupations and precision production occupations, they were under-represented in managerial occupations by comparison with the total U.S. labor force (table 28). The category in which Samoans (particularly males) were over-represented was operators, fabricators and laborers -- broadly speaking, "blue collar" occupations. Female Samoan workers were particularly concentrated in service occupations.

/Table 28 about here/

Samoans were over-represented in both Hawaii and California in 1980 in the "blue-collar" occupations of "operators, fabricators and laborers"

workers in the Samoan labor force could be attributable to a composition effect; namely, a large proportion of new migrants in the labor force. A structural interpretation, on the other hand, would focus upon the wide range of processes which might constrain Samoans' occupational mobility, ranging from segmented labor markets to inadequate linguistic or technical skills among Samoan workers.

SUMMARY AND CONCLUSIONS

This statistical review has identified a number of socio-economic dimensions on which the Samoan population of the United States differs from either the total United States population or the populations of those states in which the majority of Samoans live. Samoans are generally worse off than other selected groups, even than recent refugees, for various characteristics. The most important finding of this study is the large difference between the socio-economic status of Samoans in California and those in Hawaii. While California's Samoans have still not quite attained the consumption and life-style ideals of the American middle-class, they appear to be much closer than their counterparts in Hawaii.

Samoan households are, on average, larger than among the United States population as a whole and are more likely to contain children. Furthermore, Samoan households are much more likely to contain young children under six years than is the average American household. This feature of Samoan households has probably helped keep household incomes low; even with expanded day-care facilities, the presence of young children constrains the participation of women in the labor force and reduces the number of income earners in the family.

Samoa households in Hawaii are larger than the state average and larger than the households of any other selected group in the state. Furthermore, Samoan households in Hawaii are more likely to have a female householder than other selected groups in the state or Samoan households elsewhere. The high proportion of female householders with no husband present has had a depressing effect on the median household income since such households have lower incomes than average, and those with young children have the lowest incomes of all.

The data reported in this paper provide strong confirmation of the findings of other studies showing a substantial proportion of all Samoan families living in poverty. While it is true that the median household income of Samoan households in 1979 was 82 percent of the national median, Samoan households are larger than the national average which reduces their per-capita income below the U.S. average.

Samoa household incomes in Hawaii are extremely low, either by comparison with other groups, the state as a whole or Samoan households elsewhere. In 1979, 40 percent of Samoans received incomes below poverty level; the poverty level is set on the basis of the national average cost of living and since living costs are higher than average in Hawaii the proportion of the Samoan population below the poverty level in Hawaii is probably in excess of 40 percent.

In any case, the proportion of all Samoan families in Hawaii which is either poor in the official sense or "near-poor" is extremely high. Even when the Samoan preference for large households and their obvious skills in gaining satisfaction from family life is considered, the material resources apparently available to Samoans indicate a level of relative deprivation which is probably beyond compensation by cultural satisfaction.

Samoans in California appear to have had more success in the labor market than their counterparts in Hawaii. Although this success is probably related to their individual characteristics, the nature of the labor markets and related institutions in the two states may have contributed. California's social and economic institutions may be more conducive to Samoan socio-economic success than Hawaii's. Since Samoans are Polynesians, they are often mistaken for Hawaiians and therefore often receive the prejudicial treatment which Hawaiians have historically faced in their own state. Their similarity to Hawaiians, however, has facilitated Samoan entry into entertainment fields.

If Samoans in California are to be considered "poor", they appear to occupy a social stratum which can be characterized as "working poor". While their involvement in the labor market may be at a fairly low level, they are nevertheless functioning in it. Samoans in Hawaii, by contrast, can be characterized as "welfare poor"; they are not poor only because they have low-paying jobs. They are poor because a substantial proportion are unable to obtain a proper foothold in the labor market at all. In sociological terms, Samoans in California occupy a "proletarian" stratum; in Hawaii, Samoans form an underprivileged stratum or "underclass". The social policy implications in the two situations are quite different.

Of course, this factor alone will not explain the condition of Samoans in Hawaii. The socio-economic status of Samoans is more than the accumulated result of the variables discussed in this paper.

While this paper has described many of the determinants of Samoan socio-economic status, further analysis of census and other data is required before firm conclusions can be drawn. Census data are particularly appropriate for determining the contribution of individual characteristics to the problems of low income and poverty, but cross-tabulations are required to go beyond the level of this paper. Among the more useful of these are:

1. Occupational achievement and educational attainment;
2. Length of residence in the United States, educational attainment and occupation;
3. Place of origin in Samoa (American/Western), occupational achievement and educational attainment;
4. Educational attainment and female householder;
5. Female householder and place of origin in Samoa;
6. Language competence by occupational achievement and length of residence.

If this information is available for Hawaii and California separately, it should be possible to determine the extent to which the socio-economic status of Samoans in the two states is a function of the relative presence or absence of individuals having certain characteristics.

It would also be useful to know more about the dynamics of selective migration, not only from Samoa to the United States as a whole, but also between Hawaii and California. If more of those Samoans whose adaptation to American life is less than successful tend to remain in Hawaii while the more successful move on to California, then part of the explanation for the lower socio-economic status of Samoans in Hawaii relative to California will have been found.

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Table 1. Ten States with Largest Samoan Populations: 1980

State	Number	Percent
United States.....	41,948	100.0
Total, top ten.....	38,798	92.5
1. California.....	20,089	47.9
2. Hawaii.....	14,073	33.5
3. Washington.....	1,830	4.4
4. Utah.....	763	1.8
5. Texas.....	503	1.2
6. Missouri.....	478	1.1
7. New York.....	296	0.7
8. Virginia.....	270	0.6
9. Florida.....	252	0.6
10. Oregon.....	244	0.6
Balance of states.....	3,150	7.5

Source: U.S. Bureau of the Census, 1983

Table 2. Urban-Rural Distribution of Samoan and United States
Total Population: 1980

Geographic Distribution	Samoans		United States
	Number	Percent	
Total.....	41,948	100.0	100.0
Urban.....	40,305	96.1	73.7
Urbanized areas.....	36,475	87.0	61.4
Central cities.....	18,147	43.3	29.6
Urban fringe.....	18,328	43.7	31.8
Outside urbanized areas.....	3,830	9.1	12.3
Places of 10,000 or more..	709	1.7	6.0
Places of 2,500 to 10,000.	3,121	7.4	6.4
Rural.....	1,643	3.9	26.3
Places of 1,000 to 2,500..	232	0.6	3.1
Other rural.....	1,411	3.4	23.2

Source: U.S. Bureau of the Census, 1983

Table 3. Standard Metropolitan Statistical Areas (SMSAs)
with Largest Samoan Populations: 1980

SMSA	Number	Percent
Total population.....	41,948	100.0
In SMSAs.....	40,273	96.0
Honolulu.....	13,811	32.9
Los Angeles-Long Beach...	8,049	19.2
San Francisco-Oakland....	4,239	10.1
San Diego.....	2,807	6.7
Anaheim-Santa Anna- Garden Grove.....	2,008	4.8
Seattle-Everett.....	1,164	2.8
San Jose.....	1,037	2.5
Salt Lake City-Ogden.....	597	1.4
Riverside-San Bernadino- Ontario.....	466	1.1
Tacoma.....	373	0.9
Oxnard-Simi Valley- Ventura.....	366	0.9
Kansas City.....	363	0.9
Salina-Seaside-Monterey..	359	0.9
New York City.....	213	0.5
Other SMSAs.....	4,421	10.5

Source: U.S. Bureau of the Census, 1983

Table 4. Household Characteristics for Samoans in the United States and Selected States: 1980

Characteristic	Total U.S. Pop. (000,000)	Samoans			
		Total	Calif- ornia	Hawaii	Washing- ton
Total persons.....	226.5	41,948	20,089	14,073	1,830
In households.....	220.8	40,545	19,691	13,789	1,733
In group quarters.....	5.7	1,403	398	284	97
Inmate of institution...	2.5	262	95	95	7
Other group quarters....	3.2	1,141	303	189	90
Percent.....	100.0	100.0	100.0	100.0	100.0
In households.....	97.5	96.7	98.0	98.0	94.7
In group quarters.....	2.5	3.3	2.0	2.0	5.3
Inmate of institution...	1.1	0.6	0.5	0.7	0.4
Other group quarters....	1.4	2.7	1.5	1.3	4.9
Persons per family.....	3.27	5.17	5.36	5.37	4.44
Persons per household....	2.74	4.77	5.01	5.14	4.96
Households.....	80.4	8,308	3,878	2,681	369
Family householder.....	58.9	7,235	3,463	2,485	310
Non-family householder....	21.5	1,073	415	196	59
Percent.....	100.0	100.0	100.0	100.0	100.0
Family householder.....	73.3	87.1	89.3	92.7	84.0
Non-family householder....	26.7	12.9	10.7	7.3	16.0
Percent householder by sex:					
Male.....	72.0	77.1	80.4	70.5	78.7
Female.....	28.0	22.9	19.6	29.5	21.3

Source: U.S. Bureau of the Census, 1983

Table 5. Family Characteristics for Samoans in the United States and Selected States: 1980

Characteristic	Total U.S. Pop. (000,000)	Samoans				
		Total	Cali- fornia	Hawaii	Washing- ton	All Others
Total families.....	58.9	7,235	3,463	2,485	310	977
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
With children under 18...	51.1	80.6	80.2	83.7	84.2	72.7
With children under 6....	12.4	48.5	45.9	50.1	53.9	52.2
Married couple family....	82.2	77.8	80.8	71.6	79.4	82.4
With children under 18...	41.3	64.0	66.7	60.9	67.4	60.8
With children under 6....	10.5	39.6	39.0	37.3	44.8	46.0
Female hher, no husband present.....	14.3	17.6	14.2	24.3	17.7	12.1
With children under 18...	8.7	14.0	10.8	20.1	15.5	9.1
With children under 6....	1.5	7.8	5.7	11.9	8.1	4.8

Source: U.S. Bureau of the Census, 1983

Table 6. Marital Status of Samoans in the United States and Selected States by Sex: 1980

Characteristic	Total U.S. Pop. (000,000)	Samoans				
		Total	Cali- fornia	Hawaii	Washing- ton	All Others
Males 15 years and over..	83.8	12,928	6,118	3,912	582	2,316
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Single.....	30.0	40.9	39.0	41.0	42.1	45.8
Now married.....	60.0	52.4	55.2	53.4	53.1	43.0
Separated.....	2.0	2.1	1.8	1.4	2.4	3.9
Widowed.....	2.5	1.5	1.3	1.3	0.7	2.5
Divorced.....	5.4	3.2	2.8	2.9	1.7	4.8
Females 15 years and over.	91.4	12,560	6,064	4,110	520	1,866
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Single.....	23.0	33.5	33.9	34.0	32.1	31.6
Now married.....	54.7	51.9	52.4	50.1	53.5	54.0
Separated.....	2.6	4.3	4.0	5.1	5.8	3.3
Widowed.....	12.4	5.8	5.7	6.3	3.8	5.8
Divorced.....	7.2	4.4	4.0	4.6	4.8	5.4

Source: U.S. Bureau of the Census, 1983

Table 10. Selected Characteristics by Median Income of Total and Samoan Households by Household Income Categories in United States and Selected States, 1979: 1980

Characteristic	Total		California		Hawaii	
	Total	Samoaans	Total	Samoaans	Total	Samoaans
Median Income by Age of Householder:						
15 to 24 years.....\$	12,669	8,654	12,369	12,765	9,645	6,288
25 to 34 years.....\$	19,041	12,229	19,420	15,564	17,898	9,973
35 to 44 years.....\$	23,162	16,659	25,083	19,267	25,401	11,863
45 to 54 years.....\$	25,864	16,478	28,489	18,500	31,180	12,371
55 to 64 years.....\$	21,950	22,976	24,888	28,693	29,366	11,250
65 years and over.....\$	12,295	11,300	14,340	11,429	18,049	9,571
Female householder, no husband present.....\$						
With own chldrn <18 yrs..\$	9,960	7,059	11,088	7,003	11,231	6,775
With own chldrn <6 yrs..\$	8,002	6,526	9,266	6,037	8,147	6,557
With own chldrn <6 yrs..\$	5,229	5,231	6,154	5,341	5,861	4,753
Median family income by number of workers:						
No workers.....\$	7,791	5,036	9,097	5,368	7,832	5,010
1 worker.....\$	16,181	11,213	17,409	12,888	15,531	9,675
2 workers.....\$	23,058	18,784	25,405	20,879	25,374	15,490
3 or more workers.....\$	31,880	29,625	34,386	31,911	37,398	27,500
INCOME TYPE IN 1979						
Households with earnings (%)	81.3	84.6	82.1	87.7	88.0	77.6
Mean earnings.....\$	20,727	16,970	22,614	18,975	23,274	14,704
With wage and salary(%)	77.7	84.0	78.4	87.4	85.5	77.3
Mean earnings.....\$	19,796	16,778	21,283	18,730	22,139	14,611
With social security.....(%)	25.9	9.4	22.1	10.9	20.8	9.6
Mean earnings.....\$	4,094	2,845	4,182	2,716	4,016	2,963
With public assistance...(%)	8.0	22.0	9.6	19.9	8.8	32.6
Mean earnings.....\$	2,518	4,354	3,036	4,322	3,161	4,487
With all other incomes...(%)	23.8	18.3	24.1	17.6	24.3	18.6
Mean earnings.....\$	4,036	4,305	4,514	4,406	5,351	4,566

Source: U.S. Bureau of the Census, 1983

Table 7. Household Income of Samoans in United States and Selected States, 1979: 1980

Household Income	Total	California	Hawaii	Washington
Households.....	7,830	3,660	2,666	367
Less than \$5,000.....	1,135	443	457	51
\$5,000 to \$7,499.....	713	247	326	43
\$7,500 to \$9,999.....	896	291	455	43
\$10,000 to \$14,999.....	1,459	602	537	49
\$15,000 to \$19,999.....	1,145	660	235	50
\$20,000 to \$24,999.....	799	440	205	46
\$25,000 to \$34,999.....	1,075	596	314	56
\$35,000 to \$49,999.....	476	299	112	18
\$50,000 or more.....	132	82	25	11
Median income.....	\$13,848	16,616	10,742	14,740
Mean income.....	\$16,493	18,641	14,100	17,570
Median income by age of householder:				
15 to 24 years.....	\$ 8,654	12,765	6,288	12,708
25 to 34 years.....	\$12,229	15,564	9,973	11,023
35 to 44 years.....	\$16,659	19,267	11,863	14,545
45 to 54 years.....	\$16,478	18,500	12,731	18,750
55 to 64 years.....	\$22,976	28,693	11,250	31,260
65 years and over.....	\$11,300	11,429	9,571	3,750
Female householder, no husband present.....	\$ 7,059	7,003	6,775	6,641
With own children under 18 years.....	\$ 6,526	6,037	6,557	6,797
With own children under 6 years.....	\$ 5,231	5,341	4,753	6,437

Source: U.S. Bureau of the Census, 1983

Table 7. Household and Family Income of Samoans in United States and Selected States, 1979: 1980 - continued

Household and Family Income	Total	California	Hawaii	Washington
Median family income, by number of workers:				
No workers.....	\$ 5,036	5,368	5,010	6,202
1 worker.....	\$11,213	12,888	9,675	9,605
2 workers.....	\$18,784	20,879	15,490	21,008
3 or more workers.....	\$29,625	31,911	27,500	24,533
INCOME TYPE IN 1979				
Total households.....	7,830	3,660	2,666	367
Households with earnings.	6,628	3,210	2,069	324
Percent.....	84.6	87.7	77.6	88.3
Mean earnings.....	\$16,970	18,975	14,704	17,393
Wage and salary income...	6,574	3,199	2,061	319
Percent.....	84.0	87.4	77.3	86.9
Mean wage and salary.....	\$16,778	18,730	14,611	17,207
With non-farm self-emp...	321	171	63	11
Mean.....	\$ 6,876	6,247	4,781	11,098
With interest, dividend..	855	348	287	66
Mean.....	\$ 1,073	737	838	1,170
With social security.....	736	398	256	11
Mean.....	\$ 2,845	2,716	2,963	2,772
With public assistance...	1,722	728	870	68
Percent.....	22.0	19.9	32.6	18.5
Mean.....	\$ 4,354	4,322	4,487	4,353
With all other incomes...	1,429	643	496	103
Mean.....	\$ 4,305	4,406	4,566	3,972

Source: U.S. Bureau of the Census, 1983

Table 8. Percentage Distribution of Samoan Households by Household Income Categories in United States and Selected States, 1979: 1980

Household and Family Income	Total	California	Hawaii	Washington
Total households.....				
Percent.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	14.5	12.1	17.1	13.9
\$5,000 to \$7,499.....	9.1	6.7	12.2	11.7
\$7,500 to \$9,999.....	11.4	8.0	17.1	11.7
\$10,000 to \$14,999.....	18.6	16.4	20.1	13.4
\$15,000 to \$19,999.....	14.6	18.0	8.8	13.6
\$20,000 to \$24,999.....	10.2	12.0	7.7	12.5
\$25,000 to \$34,999.....	13.7	16.3	11.8	15.3
\$35,000 to \$49,999.....	6.1	8.2	4.2	4.9
\$50,000 or more.....	1.7	2.2	0.9	3.0
Accumulated percent:				
Less than \$5,000.....	14.5	12.1	17.1	13.9
Less than \$7,500.....	23.6	18.8	29.3	25.6
Less than \$10,000.....	35.0	26.8	46.4	37.3
Less than \$15,000.....	53.6	43.2	66.5	50.7
Less than \$20,000.....	68.2	61.2	75.3	64.3
Less than \$25,000.....	78.4	73.2	83.0	76.8
Less than \$35,000.....	92.1	89.5	94.8	92.1
Less than \$50,000.....	98.2	97.7	99.0	97.0

Source: U.S. Bureau of the Census, 1983.

Table 9. Percentage Distribution of Total and Samoan Households by Household Income Categories in United States and Selected States, 1979: 1980

Household Income	United States		California		Hawaii	
	Total	Samoans	Total	Samoans	Total	Samoans
Total households.....						
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	13.3	14.5	11.5	12.1	8.3	17.1
\$5,000 to \$7,499.....	8.0	9.1	7.2	6.7	6.4	12.2
\$7,500 to \$9,999.....	7.9	11.4	7.6	8.0	7.2	17.1
\$10,000 to \$14,999.....	15.3	18.6	14.8	16.4	14.1	20.1
\$15,000 to \$19,999.....	14.1	14.6	13.3	18.0	12.8	8.8
\$20,000 to \$24,999.....	12.4	10.2	12.1	12.0	11.8	7.7
\$25,000 to \$34,999.....	15.7	13.7	16.5	16.3	17.8	11.8
\$35,000 to \$49,999.....	8.6	6.1	10.7	8.2	13.5	4.2
\$50,000 or more.....	4.6	1.7	6.4	2.2	8.0	0.9
Median.(dollars).....	16,841	13,848	18,243	16,616	20,473	10,742
Mean...(dollars).....	20,306	16,493	22,416	18,641	24,519	14,100
Accumulated percent:						
Less than \$5,000.....	13.3	14.5	11.5	12.1	8.3	17.1
Less than \$7,500.....	21.3	23.6	18.7	18.8	14.7	29.3
Less than \$10,000.....	29.2	35.0	26.3	26.8	21.9	46.4
Less than \$15,000.....	44.5	53.6	41.1	43.2	36.0	66.5
Less than \$20,000.....	58.6	68.2	54.4	61.2	48.8	75.3
Less than \$25,000.....	71.0	78.4	66.5	73.2	60.6	83.0
Less than \$35,000.....	86.7	92.1	83.0	89.5	78.4	94.8
Less than \$50,000.....	95.3	98.2	93.7	97.7	91.9	99.0

Source: U.S. Bureau of the Census, 1983

Table 11. Per Capita Income of Selected Groups in the United States, California and Hawaii, 1979: 1980

Selected Group	United States	California	Hawaii
Total.....\$	7,298	8,295	7,740
White.....\$	7,808	9,109	8,762
Black.....\$	4,545	5,710	5,437
American Indian, Eskimo, Aleut..\$	4,577	6,030	6,244
Asian and Pacific Islander...\$	7,037	7,243	7,351
Japanese.....\$	9,068	9,567	9,475
Chinese.....\$	7,476	7,946	9,422
Filipino.....\$	6,915	6,625	5,375
Korean.....\$	5,544	6,010	6,520
Asian Indian.....\$	8,667	8,159	10,165
Vietnamese.....\$	3,382	3,315	2,813
Hawaiian.....\$	5,691	7,169	5,328
Guamanian.....\$	5,533	5,747	4,249
Samoan.....\$	3,573	4,081	2,729

Source: Bureau of the Census, 1983

Table 12. Summary Poverty Measures of Samoans in the United States and Selected States, 1979: 1980

Summary Poverty Measures	Total	California	Hawaii	Washington
Families.....	6,963	3,266	2,481	329
Income below poverty level.....	1,917	687	931	87
Percent.....	27.5	21.0	37.5	26.4
Below 125 percent poverty.....	2,555	889	1,243	120
Percent.....	36.7	27.2	50.1	36.5
Unrelated individuals.....	2,230	941	533	113
Income below poverty level.....	890	378	224	29
Percent.....	39.9	40.2	42.0	25.7
Below 125 percent poverty.....	996	402	269	38
Percent.....	44.7	42.7	50.5	33.6
Persons.....	38,134	17,707	14,036	1,723
Income below poverty level.....	11,247	3,792	5,647	532
Percent.....	29.5	21.4	40.2	30.9
Below 125 percent poverty.....	14,802	5,106	7,380	672
Percent.....	38.8	28.8	52.6	39.0
Percent of Persons:				
Below 75 percent of poverty....	19.6	13.8	27.8	19.7
Below poverty level.....	29.5	21.4	40.2	30.9
Below 125 percent of poverty...	38.8	28.8	52.6	39.0
Below 150 percent of poverty...	46.9	36.1	62.5	44.3
Below 200 percent of poverty...	62.5	53.9	75.7	58.0

Source: U.S. Bureau of the Census, 1983

Table 13. Summary Poverty Measures of Samoans in the United States and Selected States, 1979: 1980

Summary Poverty Measures	United States		California		Hawaii	
	Total	Samoans	Total	Samoans	Total	Samoans
Percentage below poverty level:						
Families.....	9.6	27.5	8.7	21.0	7.8	37.5
Unrelated individuals.....	25.1	39.9	19.7	40.2	23.0	42.0
Persons.....	12.4	29.5	11.4	21.4	9.9	40.2
Below 125 percent poverty:						
Families.....	13.4	36.7	12.2	27.2	11.8	50.1
Unrelated individuals.....	33.3	44.7	28.1	42.7	28.5	50.5
Persons.....	17.0	38.8	16.0	28.8	14.4	52.6
Percent of Persons:						
Below 75 percent of poverty....	8.3	19.6	7.5	13.8	6.1	27.8
Below poverty level.....	12.4	29.5	11.4	21.4	9.9	40.2
Below 150 percent of poverty...	21.7	46.9	20.7	36.1	19.0	62.5
Below 200 percent of poverty...	31.7	62.5	30.0	53.9	29.0	75.7

Source: U.S. Bureau of the Census, 1983

Table 14. Poverty Status of Samoan Families and Persons in the United States and Selected States, 1979: 1980

Summary Poverty Measures	Total	California	Hawaii	Washington
Total Families.....	6,963	3,266	2,481	329
Income below poverty level.....	1,917	687	931	87
Percent.....	27.5	21.0	37.5	26.4
Income in 1979 Below poverty level.				
With social security.....	148	55	82	8
With public assistance income..	760	239	432	49
Mean income deficit.....	\$4,038	4,015	4,188	4,006
Persons per family.....	5.31	5.02	5.64	5.26
Householder worked in 1979.....	815	302	344	27
Percent.....	42.5	44.0	36.9	31.0
Female hher, no husband present	742	275	417	36
Percent.....	38.7	40.0	44.8	41.4
Householder worked in 1979.....	104	61	37	6
With related children < 18 yrs	730	271	409	36
Percent.....	38.1	39.5	43.9	41.4
Householder 65 years and over..	58	7	47	4
Total unrelated individuals				
Income below poverty level.....	2,230	941	533	113
Percent.....	890	378	224	29
Percent.....	39.9	40.2	42.0	25.7
With social security.....	92	34	45	-
With public assistance income..	85	43	26	-
Mean income deficit.....	\$2,588	2,558	2,608	2,113
Worked in 1979.....	382	154	69	21
65 years and over.....	60	-	41	-
Total persons.....				
Income below poverty level.....	38,134	17,707	14,036	1,723
Percent.....	11,247	3,792	5,647	532
Percent.....	29.5	21.4	40.2	30.9
65 years and over.....	176	27	126	4
Percent.....	1.6	0.7	2.2	0.8

Source: U.S. Bureau of the Census, 1983

Table 15. Proportions of Total and Samoan Families and Persons in the United States and Selected States by Poverty Status, 1979: 1980

Summary Poverty Measures	United States		California		Hawaii	
	Total	Samoans	Total	Samoans	Total	Samoans
Families:						
Income below poverty level.....	9.6	27.5	8.7	21.0	7.8	37.5
With public assistance income..	32.5	39.6	31.6	34.8	36.6	46.4
Householder worked in 1979.....	50.5	42.5	52.6	44.0	48.9	36.9
With related children <18....	74.3	(NA)	79.1	94.5	82.2	97.0
Female hher, no husband present	43.8	38.7	44.2	40.0	45.1	44.8
Householder worked in 1979....	17.9	14.0	42.2	22.2	36.7	8.9
With related children < 6 yrs.	20.9	(NA)	48.7	69.5	55.6	72.7
Householder 65 years and over..	13.8	3.0	7.6	1.0	9.5	5.0
Mean Income deficit.....\$	3,076	4,038	3,097	4,015	2,914	4,188

Source: U.S. Bureau of the Census, 1983

Table 16. Proportions of Persons Below 75 Percent and 200 Percent of Poverty Level for Selected Groups in the United States, California and Hawaii, 1979: 1980

Selected Group	Below 75 % Poverty Level			Below 200% Poverty Level		
	United States	California	Hawaii	United States	California	Hawaii
Total.....	8.3	7.5	6.1	31.7	30.0	29.0
White.....	6.1	5.9	6.1	27.2	25.4	31.4
Black.....	21.5	14.8	9.9	56.8	47.3	55.5
American Indian, Eskimo, Aleut..	19.3	11.8	12.5	55.4	42.8	50.8
Japanese.....	4.8	5.3	2.4	16.6	16.2	12.3
Chinese.....	9.6	9.5	4.8	32.2	29.4	18.0
Filipino.....	4.5	4.2	5.3	25.1	24.0	34.2
Korean.....	8.3	8.9	8.7	32.3	33.6	35.5
Asian Indian.....	7.0	9.4	3.2	24.3	29.2	22.9
Vietnamese.....	28.2	30.5	23.6	59.9	63.1	72.5
Hawaiian.....	9.6	8.1	8.8	38.9	31.4	39.0
Guamanian.....	9.2	7.3	10.1	39.5	34.2	54.1
Samoan.....	19.6	13.8	27.8	62.5	53.9	75.7

Source: U.S. Bureau of the Census, 1983

Table 17. Percentage of Households with Specified Ratio of Persons per Room by Selected Group: 1980

Selected Group	Percentage of Households with Persons per Room					
	Total	0.5 or less	0.51-0.75	0.76-1.00	1.01-1.50	1.51 or more
United States total....	100.0	61.4	20.5	13.6	3.1	1.4
Black.....	100.0	48.6	20.6	19.6	7.8	3.4
White.....	100.0	64.2	20.4	12.4	2.2	0.8
Japanese.....	100.0	53.8	22.3	18.4	3.7	1.9
Filipino.....	100.0	26.8	21.3	25.7	13.2	13.0
Vietnamese.....	100.0	14.7	12.8	23.1	19.5	29.8
Hawaiian.....	100.0	35.7	19.9	23.6	11.5	9.3
Samoan.....	100.0	16.2	13.9	22.9	21.2	25.9

Source: U. S. Bureau of the Census, 1983

Table 18. Housing Characteristics of Selected Groups: 1980

Selected Group	Occupied Housing Units			Median Persons per Unit	
	Total (000s)	Percent		Owner Occupied	Renter Occupied
		Owner Occupied	Renter Occupied		
United States Total.....	80,390	64.4	35.6	2.60	1.99
White.....	68,810	67.8	32.2	2.53	1.88
Black.....	8,382	44.4	55.6	3.09	2.33
American Indian.....	384	53.2	46.8	3.29	2.66
Eskimo.....	9	59.7	40.3	4.26	2.45
Aleut.....	4	55.6	44.4	3.26	2.15
Japanese.....	234	59.0	41.0	2.91	1.81
Chinese.....	248	54.5	45.5	3.49	2.19
Filipino.....	197	55.9	44.1	4.20	2.64
Korean.....	81	44.5	55.5	4.06	2.78
Asian Indian.....	119	50.7	49.3	3.64	2.34
Vietnamese.....	52	26.7	73.3	4.79	3.81
Hawaiian.....	46	47.4	52.6	3.60	2.57
Guamanian.....	8	44.5	55.5	4.11	3.05
Samoan.....	8	29.1	70.9	5.18	4.23

Source: U.S. Bureau of the Census, 1983

Table 19. Educational Characteristics of Samoans in the United States and Selected States: 1980 - continued

Characteristic	Total	California	Hawaii	Washington	Other States
YEARS OF SCHOOL COMPLETED					
Persons 25 years and over	14,907	7,139	5,051	655	2,062
Elementary:					
0 to 4 years.....	886	328	416	21	121
5 to 7 years.....	995	418	479	49	49
8 years.....	802	307	401	29	65
High School:					
1 to 3 years.....	3,101	1,556	1,179	143	223
4 years.....	5,706	2,851	1,829	236	790
College:					
1 to 3 years.....	2,327	1,211	578	113	425
4 or more years.....	1,090	468	169	64	389
Males.....	7,514	3,690	2,400	368	1,056
Elementary:					
0 to 4 years.....	350	162	125	13	50
5 to 7 years.....	427	177	210	9	31
8 years.....	347	116	188	5	38
High School:					
1 to 3 years.....	1,454	817	475	79	83
4 years.....	2,920	1,451	925	146	398
College:					
1 to 3 years.....	1,283	648	368	73	194
4 or more years.....	733	319	109	43	262
Females.....	7,393	3,449	2,651	287	1,006
Elementary:					
0 to 4 years.....	536	166	291	8	71
5 to 7 years.....	568	241	269	40	18
8 years.....	455	191	213	24	27
High School:					
1 to 3 years.....	1,647	739	704	64	140
4 years.....	2,786	1,400	904	90	392
College:					
1 to 3 years.....	1,044	563	210	40	231
4 or more years.....	357	149	60	21	127
Percent high school graduates	61.2	63.5	51.0	63.1	(NA)
Male.....	65.7	65.5	58.4	71.2	(NA)
Female.....	56.6	61.2	44.3	52.6	(NA)
Median yrs school completed..	12.3	12.3	12.0	12.4	(NA)

Source: U.S. Bureau of the Census, 1983

Table 19. Educational Characteristics of Samoans in the United States and Selected States: 1980

Characteristic	Total	California	Hawaii	Washington	Other States
SCHOOL ENROLLMENT					
Total persons.....	39,520	18,087	14,349	1,837	5,247
Persons 3 yrs + enrolled...	15,618	7,209	6,029	684	1,696
Percent.....	39.5	39.9	42.0	37.2	32.3
Nursery school.....	504	229	165	26	84
Percent.....	3.2	3.2	2.7	3.8	5.0
Kindergarten.....	974	398	374	45	157
Percent.....	6.2	5.5	6.2	6.6	9.3
Elementary school.....	8,194	3,899	3,261	391	643
Percent.....	52.5	54.1	54.1	57.2	37.9
High school.....	3,789	1,765	1,590	148	286
Percent.....	24.3	24.5	26.4	21.6	16.9
College.....	2,157	918	639	74	526
Percent.....	13.8	12.7	10.6	10.8	31.0
Percent enrollment by age:					
3 and 4 years.....	23.8	22.4	26.0	21.2	(NA)
5 and 6 years.....	85.4	88.4	84.5	82.9	(NA)
7 to 15 years.....	96.7	97.4	96.0	98.8	(NA)
16 and 17 years.....	86.4	85.5	90.0	82.5	(NA)
18 and 19 years.....	48.3	51.6	51.9	38.7	(NA)
20 and 21 years.....	22.3	21.5	21.5	13.6	(NA)
22 to 24 years.....	19.5	19.6	17.1	3.4	(NA)
25 to 34 years.....	10.8	8.2	11.2	4.7	(NA)

Source: U.S. Bureau of the Census, 1983

Table 20. Percentage Distribution of Years of Schooling for Samoans Aged 25 Years and Over in the United States and Selected States: 1980

Characteristic	United States		California		Hawaii	
	Total	Samoans	Total	Samoans	Total	Samoans
YEARS OF SCHOOL COMPLETED						
Males.....	100.0	100.0	100.0	100.0	100.0	100.0
Elementary: 0 to 4 years....	3.9	4.7	4.0	4.4	5.2	5.2
5 to 7 years....	6.8	5.7	5.3	4.8	5.5	8.8
8 years.....	7.8	4.6	4.6	3.1	4.4	7.8
High School: 1 to 3 years....	14.2	19.4	11.4	22.1	9.7	19.8
4 years.....	31.1	38.9	27.3	39.3	33.6	38.5
College: 1 to 3 years....	16.1	17.1	23.0	17.6	18.5	15.3
4 or more years.	20.1	9.8	24.3	8.6	23.0	4.5
High School Graduates.....	67.3	65.7	74.7	65.5	75.2	58.4
Females.....	100.0	100.0	100.0	100.0	100.0	100.0
Elementary: 0 to 4 years....	3.3	7.3	3.9	4.8	5.4	11.0
5 to 7 years....	6.5	7.7	5.3	7.0	6.5	10.1
8 years.....	8.2	6.2	5.2	5.5	5.4	8.0
High School: 1 to 3 years....	16.2	22.3	13.2	21.4	10.3	26.6
4 years.....	37.7	37.7	35.2	40.6	36.5	34.1
College: 1 to 3 years....	15.3	14.1	21.9	16.3	18.3	7.9
4 or more years.	12.8	4.8	15.2	4.3	17.7	2.3
High School Graduates.....	65.8	56.6	72.4	61.2	72.5	44.3

Source: U.S. Bureau of the Census, 1983

Table 21. Proportions of High School Graduates for Asian and Pacific Islander Populations 25 Years and Over in the United States, California and Hawaii by Sex: 1980

Asian and Pacific Islander Group	Males			Females		
	United States Total	Cali- fornia	Hawaii	United States Total	Cali- fornia	Hawaii
Japanese.....	84.2	88.2	75.4	79.5	83.8	70.0
Chinese.....	75.2	76.8	78.2	67.4	67.2	72.8
Filipino.....	73.1	74.6	48.0	75.1	75.6	55.1
Korean.....	90.0	90.0	81.7	70.6	75.0	66.5
Asian Indian.....	88.8	84.7	80.1	71.5	68.4	72.7
Vietnamese.....	71.3	73.6	63.1	53.6	55.7	48.0
Hawaiian.....	70.0	76.2	67.8	67.0	75.4	68.5
Guamanian.....	71.2	72.0	82.1	64.7	64.5	54.1
Samoan.....	65.7	65.5	58.4	56.6	61.2	44.3
Asian/Pacific n.e.c.	73.7	74.0	69.1	55.9	60.0	57.7

Source: U.S. Bureau of the Census, 1983

Table 22. Labor Force Status of Samoans in United States and Selected States:
1980

Characteristic	Total	California	Hawaii	Washington	Other States
Persons, 16 yrs and over..	22,739	10,594	7,673	1,056	3,416
In the labor force.....	13,700	6,609	4,030	685	2,376
Percent.....	60.2	62.4	52.5	64.9	69.6
Unemployed.....	1,194	630	373	49	142
Percent unemployed.....	9.7	10.1	10.2	8.5	(NA)
Males.....	11,550	5,358	3,735	611	1,846
In the labor force.....	8,484	3,911	2,545	470	1,558
Percent.....	73.5	73.0	68.1	76.9	84.4
Unemployed.....	665	344	195	49	77
Percent unemployed.....	9.4	9.7	8.9	10.4	(NA)
Females.....	11,189	5,236	3,938	445	1,570
In the labor force.....	5,216	2,698	1,485	215	818
Percent.....	46.6	51.5	37.7	48.3	52.1
Unemployed.....	529	286	178	-	65
Percent unemployed.....	10.3	10.6	12.1	-	7.9
Aged 16-19 in labor force....	1,202	563	381	59	199
Unemployed.....	253	166	73	4	10
Percent.....	21.0	29.5	19.2	6.8	5.0
Non-civilian labor force.....	1,408	384	374	108	542
Males.....	1,343	373	365	100	505
Females.....	65	11	9	8	37
Inmate of Institution.....	216	83	86	11	36
Males.....	181	81	86	-	14
Females.....	35	2	-	11	22

Source: U.S. Bureau of the Census, 1983

Table 23. Labor Force Status of Samoan workers in United States and Selected States in 1979: 1980

Labor Force Status	Total	California	Hawaii	Washington	Other States
Persons, 16 yrs and over..	22,739	10,594	7,673	1,056	3,416
In labor force in 1979.....	14,746	7,107	4,269	758	2,612
Percent worked in 1979.....	95.2	94.7	94.8	95.5	(NA)
Percent worked 50-52 weeks..	51.0	53.2	51.2	45.0	(NA)
Unemployed 15 or more weeks..	1,370	677	400	95	198
Percent.....	9.3	9.5	9.4	12.5	7.6
With unemployment in 1979....	3,881	1,778	1,064	288	751
Percent.....	26.3	25.0	24.9	38.0	28.8
MALES					
In labor force in 1979.....	8,894	4,135	2,619	529	1,611
Percent worked in 1979.....	96.2	95.7	95.8	94.3	(NA)
Percent worked 50-52 weeks..	57.7	59.5	60.2	44.8	(NA)
Unemployed 15 or more weeks..	714	326	228	66	94
Percent.....	8.0	7.9	8.7	12.5	5.8
With unemployment in 1979....	2,121	931	587	215	388
Percent.....	23.8	22.5	22.4	40.6	24.1
FEMALES					
In labor force in 1979.....	5,852	2,972	1,650	229	1,001
Percent worked in 1979.....	93.6	93.3	93.3	98.3	(NA)
Percent worked 50-52 weeks..	40.8	44.6	37.0	45.4	(NA)
Unemployed 15 or more weeks..	656	351	172	29	104
Percent.....	11.2	11.8	10.4	12.7	10.4
with unemployment in 1979....	1,760	847	477	73	363
Percent.....	30.1	28.5	28.9	31.9	36.3

Source: U.S. Bureau of the Census, 1983

Table 24. Class of Samoan workers in United States and Selected States: 1980

Class of Worker	Total	California	Hawaii	Washington	Other States
Persons, 16 yrs and over..	22,739	10,594	7,673	1,056	3,416
Employed, 16 years and over	11,098	5,595	3,283	528	1,692
Private wage and salary.....	8,688	4,427	2,527	400	1,334
Federal government.....	853	421	264	61	107
State government.....	465	73	297	25	70
Local government.....	857	567	141	31	118
Self-employed.....	210	100	49	11	50
Unpaid family.....	25	7	5	-	13
Males.....	6,476	3,194	1,985	321	976
Private wage and salary.....	5,042	2,529	1,506	240	767
Federal government.....	539	255	196	24	64
State government.....	231	34	131	22	44
Local government.....	493	307	108	14	64
Self-employed.....	163	69	44	11	39
Unpaid family.....	8	-	-	-	8
Females.....	4,622	2,401	1,298	207	716
Private wage and salary.....	3,646	1,898	1,021	160	567
Federal government.....	314	166	68	37	43
State government.....	234	39	166	3	26
Local government.....	364	260	33	17	54
Self-employed.....	47	31	5	-	11
Unpaid family.....	17	7	5	-	5

Source: U.S. Bureau of the Census, 1983

Table 25. Industry of Samoan workers in United States and Selected States: 1980

Industry	Total	California	Hawaii	Washington	Other States
Persons, 16 yrs and over..	22,739	10,594	7,673	1,056	3,416
Employed, 16 yrs and over.	11,098	5,595	3,283	528	1,692
Agriculture, forestry, fish..	193	58	70	16	49
Mining.....	39	14	-	-	25
Construction.....	592	208	288	10	86
Manufacturing.....	2,598	1,826	311	148	313
Transportation.....	712	308	266	18	120
Communication.....	192	105	33	4	50
Wholesale trade.....	319	181	71	41	26
Retail trade.....	1,525	725	490	67	243
Banking and credit agencies..	236	164	40	11	21
Insurance, real estate.....	327	164	83	19	61
Business and repair service..	580	283	220	16	61
Private households.....	70	23	18	6	23
Other personal services.....	471	169	236	10	56
Entertainment and recreation.	486	53	352	-	81
Professional services.....	1,957	978	490	130	359
Public administration.....	801	336	315	32	118

Source: U.S. Bureau of the Census, 1983

Table 26. Industry of Samoan workers in United States and Selected States: 1980
Percentages

Industry	United States		California		Hawaii	
	Total (000)	Samoans	Total (000)	Samoans	Total (000)	Samoans
Persons, 16 yrs and over.	171,214	22,739	18,127	10,594	723	7,673
Employed, 16 yrs and over.	97,639	11,098	10,640	5,595	415	3,283
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture, forestry, fish..	3.0	1.7	3.1	1.0	3.5	2.1
Mining.....	1.1	0.4	0.4	-	0.1	-
Construction.....	5.9	5.3	5.7	3.7	7.2	8.8
Manufacturing.....	22.4	23.4	20.3	32.6	7.9	9.5
Transportation.....	5.8	6.4	5.4	5.5	7.2	8.1
Communication.....	1.5	1.7	1.7	1.9	1.6	1.0
Wholesale trade.....	4.3	2.9	4.4	3.2	3.9	2.2
Retail trade.....	16.1	13.7	16.5	13.0	19.9	14.9
Banking and credit agencies..	2.3	2.1	2.7	2.9	2.6	1.2
Insurance, real estate.....	3.8	2.9	4.5	2.9	5.0	2.5
Business and repair service..	4.2	5.2	5.4	5.1	4.3	6.7
Private households.....	0.7	0.6	0.8	0.4	0.5	0.5
Other personal services.....	2.4	4.2	2.5	3.0	7.1	7.2
Entertainment and recreation.	1.0	4.4	1.7	0.9	1.7	10.7
Professional services.....	20.3	17.6	20.0	17.5	17.7	14.9
Public administration.....	5.3	7.2	5.1	6.0	10.0	9.6

Source: U.S. Bureau of the Census, 1983

Table 27. Occupation of Samoan workers in United States and Selected States: 1980

Major Category of Occupation	Total	California	Hawaii	Washington	Other States
Persons, 16 yrs and over..	22,739	10,594	7,673	1,056	3,416
Employed, 16 years and over	11,098	5,595	3,283	528	1,692
Managerial and professional..	1,381	627	365	64	325
Technical, sales, administ...	2,929	1,660	681	128	460
Service occupations.....	2,192	852	941	84	315
Farming, forestry, fishing...	202	41	104	22	35
Precision production, craft..	1,390	752	376	78	184
Operators, fabricators.....	3,004	1,663	816	152	373
MALES					
Employed, 16 years and over	6,476	3,194	1,985	321	976
Managerial and professional..	765	313	180	44	228
Technical, sales, administ...	1,061	623	214	59	165
Service occupations.....	1,119	442	491	34	152
Farming, forestry, fishing...	187	35	95	22	35
Precision production, craft..	1,143	631	320	57	135
Operators, fabricators.....	2,201	1,150	685	105	261
FEMALES					
Employed, 16 years and over	4,622	2,401	1,298	207	716
Managerial and professional..	616	314	185	20	97
Technical, sales, administ...	1,868	1,037	467	69	295
Service occupations.....	1,073	410	450	50	163
Farming, forestry, fishing...	15	6	9	-	-
Precision production, craft..	247	121	56	21	49
Operators, fabricators.....	803	513	131	47	112

Source: U.S. Bureau of the Census, 1983

Table 28. Proportions of Samoan workers by Occupation in United States and Selected States: 1980

Major Category of Occupation	United States		California		Hawaii	
	Total	Samoans	Total	Samoans	Total	Samoans
Employed, 16 years and over	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional..	22.7	12.4	25.1	11.2	23.5	11.1
Technical, sales, administ...	30.3	26.4	32.6	29.7	32.0	20.7
Service occupations.....	12.9	19.8	12.6	15.2	17.9	28.7
Farming, forestry, fishing...	2.9	1.8	2.8	0.7	3.4	3.2
Precision production, craft..	12.9	12.5	12.3	13.4	11.6	11.5
Operators, fabricators.....	18.3	27.1	14.5	29.7	11.7	24.9
MALES						
Employed, 16 years and over	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional..	23.6	11.8	26.7	9.8	24.6	9.1
Technical, sales, administ...	19.0	16.4	21.0	19.5	19.3	10.8
Service occupations.....	9.2	17.3	9.9	13.8	14.4	24.7
Farming, forestry, fishing...	4.3	2.9	4.1	1.1	5.0	4.8
Precision production, craft..	20.7	17.6	19.4	19.8	19.6	16.1
Operators, fabricators.....	23.2	34.0	18.8	36.0	17.0	34.5
FEMALES						
Employed, 16 years and over	100.0	100.0	100.0	100.0	100.0	100.0
Managerial and professional..	21.5	13.3	23.0	13.1	22.2	14.3
Technical, sales, administ...	45.6	40.4	48.1	43.2	46.9	36.0
Service occupations.....	17.9	23.2	16.2	17.1	22.0	34.7
Farming, forestry, fishing...	1.0	0.3	1.1	0.2	1.5	0.7
Precision production, craft..	2.3	5.3	2.9	5.0	2.1	4.3
Operators, fabricators.....	11.7	17.4	8.7	21.4	5.3	10.1

Source: U.S. Bureau of the Census, 1983

HOW MANY SAMOANS?
AN EVALUATION OF THE 1980 CENSUS COUNT OF
SAMOANS IN THE UNITED STATES

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This paper is a draft. The numbers in the text and tables have not been verified. PLEASE DO NOT CITE.

In a June, 1983 article in Time magazine about new immigrants, an estimate of 60,000 Samoans in southern California was given (Andersen 1983:18-25). Since the 1980 census only recorded 42,000 Samoans in the whole United States, and about 10,000 in Southern California, if the estimate in Time were correct, and was obtained through accepted survey methods, the Census Bureau would have missed about 5 in every 6 Samoans in southern California, and if similar populations in the rest of the country were similarly missed, at least 100,000 Samoans would have been expected to be enumerated in the country as a whole.

However, since Samoans were enumerated for the first time as a separate group in the 1980, previous figures could only be estimates, and estimates which were of necessity based on little data. Hawaii is the only state which records births and deaths of Samoans in the United States. There are no data at all on migration to the United States, or on movements back and forth between the United States and Samoa. Therefore, the estimates vary considerably, depending on who is making the estimate, and the reason for the estimate. During the 1970s and 1980s estimates of Samoans in the United States varied from Park's (1979:27) figure of about 20,000 for 1971 to more than 70,000 estimated by Rolff (1978:58) and Takeuchi (1983) (Table 1). Although some of the assumptions used to obtain the estimates are given by some of the authors, no one has systematically looked at the data from the various statistical sources, to assess the validity of the various estimates. This paper will look at the various estimates of the Samoan population in the United States, and assess their relationship to the 1980 census data.

PREVIOUS ESTIMATES

The 1920 United States census counted six Samoans, all in California and all but one foreign-born (U.S. Bureau of the Census, 1933:59). The same number was again enumerated in 1930, but all were "native born", two were in Utah and four in California. The category "Samoan" did not reappear in United States census tabulations until 1980. During the intervening period, estimates of the number of Samoans in the United States were little more than approximations based on a limited supply of poor quality migration statistics, some community-level studies and the assessments of community leaders. The 1980 census therefore provided the first actual count of Samoans in fifty years, and was the first census to describe the demographic and socio-economic characteristics of this immigrant group.

Of the 41,948 Samoans enumerated in the United States in 1980, the largest concentrations were in California (20,098), Hawaii (14,073), Washington (1,830), and Utah (763), but Samoans were found in every state and the District of Columbia (U.S. Bureau of the Census, 1983:125). These figures refer to those who identified themselves as Samoan on the "race" question asked of all persons. Similar numbers of individuals were reported of Samoan ancestry and speakers of Samoan language, items which were asked only on a sample basis.

The total number of Samoans differs with many of the estimates made by social scientists and others during the past decade. Estimates for the United States ranging from 20,000 in 1971 (Park 1979:27) to 59,000 in 1973 (Lewthwaite, Mainzer, and Holland, 1973:155) have been suggested for the early 1970s. A U.S. Department of Health, Education, and Welfare

report estimated 37,000 Samoans in Los Angeles county alone in 1977 (Franco 1978:262), and numbers as high as 90,000 have been presented for the state of California in 1978 (Macpherson et al, 1978:247-249). A fairly comprehensive historical review of population data on Samoans in Hawaii was prepared by the Hawaii Department of Planning and Economic Development after the 1970 census (1973). Some selected estimates of the number of Samoans in the United States, Hawaii and California between 1929 and 1983 are show in Table 1.

/Table 1 about here/

This paper compares the 1980 census count of Samoans in the United States with other estimates using demographic methods. Because of limitations of time, money, methods and skills, sub-components of a population may not have complete coverage in a census, but demographic methods can provide an estimate of the coverage error. The term "error" is used in this context refers simply to the difference between two sources of information, neither of which may provide the true number. Also, since certain assumptions must be made in determining an estimate for a population, different sets of assumptions provide different estimates of the population size.

Furthermore, the number of persons in any particular ethnic or "racial" category will depend on the definition employed. Data on Samoans in this paper are derived from the "race" question which was asked of all persons. The concept of race used by the Census Bureau is based on self-identification, that is, the individuals classify themselves according to the race with which they identify. In this sense, race does not denote any clear-cut scientific definition of biological stock and no attempt is made to distinguish number of generations or degree of affiliation.

EVALUATION METHODS

Shryock and Siegel (1975:105) divide the standard methods for evaluating census coverage fall into six general categories: (1) reenumeration; (2) comparison of successive censuses; (3) consistency checks within a single census; (4) checks against independent aggregates; (5) matching against individual records; and (6) post-enumeration sample survey. The first method is obviously ruled out. Since Samoan was not included as a separate category in 1970, the method of intercensal comparison cannot be applied either. Internal consistency within the enumerated population has been checked and reported elsewhere (Hayes and Levin, 1983) Comparison with such independent aggregates as church records is a plausible procedure in areas of high Samoan concentration, but the high rates of circular mobility between Samoa, Hawaii, and the United States mainland would make the method unreliable unless severe statistical controls were maintained. It is unlikely that such a method could be applied on a national basis. In those areas where survey data are available, census and survey data can be compared, and the possibility of such an approach is being explored. The longer the time which has elapsed between the census and the survey, however, the more unreliable this method is. Post-enumeration surveys have, of course, been conducted by U.S. Census Bureau (Passel et al., 1983), but the Samoan population is too small to be identified as a separate group.

Applied demographic analysis using census data and vital statistics from a variety of sources must be used to evaluate the number of Samoans in the United States. Although Samoans were not treated as a separate category in 1950 through 1970 U.S. censuses, they have been counted in American Samoa, Western Samoa and New Zealand, the other major centers of Samoan population since about 1900. Very few Samoans live outside these four

locations, but small groups are likely in Tonga, Fiji, and possibly Australia. If a base population in the United States could be established, census data from the other three locations in combination with vital and migration statistics would provide a means of estimating the "expected" Samoan population of the United States in 1980. The difference between the estimated and enumerated population will then be determined.

ESTABLISHING A BASE POPULATION

Although at least six Samoans were on the United States mainland in 1920, the migration history of Samoans prior to World War II is poorly documented. Movement to Hawaii and California started during World War I (Lewthwaite, Mainzer, and Holland 1973:134), but adventurous sailors probably were visiting Pacific ports as early as the 1840s and became absorbed into local populations. The nucleus of the Samoan population in Hawaii was formed in the 1920s from three groups: five or six families numbering 33 persons in 1925 who settled in Laie village of Oahu, an unknown number of entertainers who stayed in Hawaii after touring the United States, and between 50 and 60 released prisoners who chose not to return to Samoa (Alailima 1982:105; Born 1968:456). It is not known, of course, how many of these persons eventually returned to Samoa or later migrated to California or other places. If the broadest assumption of no subsequent return migration is accepted, there were 100 to 200 Samoans in Hawaii by the mid-1920s, but many of these may have been absorbed into the local Hawaiian population (Alailima 1982:108). Samoan immigration to Laie slowed in the 1930s and "totally ceased" during World War II (Stanton 1978:273).

Although between November 1947 and March 1950 letters of identity were issued to 474 American Samoans intending to travel to the United States (Lewthwaite et al., 1973:134), an unknown number actually made the journey. The 1950 census reported 463 residents of Hawaii who were born in American Samoa (U.S. Bureau of the Census, 1953:18), but gave no indication of the total Samoan population by race. While some researchers have accepted 463 as the total Samoan population in 1950, this figure does not account for the Hawaii-born children of earlier migrants. Again, making liberal assumptions by assuming a 1925 population of 100 and a 2 percent annual growth rate, there would have been an additional 63 Hawaii-born Samoans by 1950, not counting children born to new migrants. We have therefore used 526 (463 + 63) as the lower bound of the Samoan population in 1950.

Establishing a median level and upper bound is more difficult, however. We have arbitrarily used 300 and 500 to represent the medium and upper limits of the Samoan population in 1925. To obtain an estimate of the 1950 population, since it was clear that there was almost no migration during the period, we assumed, again, completely arbitrarily, that immigration continued at the rate of 10 migrants per year from 1925 to 1930, slowed to 5 per year during the Depression and World War II and increased again to 40 per year from 1946 to 1950. It was further assumed that the natural growth rate in the United States and Hawaii was the same as observed in American Samoa during the period: 1.8 percent from 1925 to 1930 and 2.4 percent thereafter (Park, 1979:15-20). These calculations result in a medium estimate of 900 and an upper limit of 1200 Samoans in Hawaii in 1950.

Other than the 1920 census figure already mentioned, little is known about the pre-World War II Samoan population on the United States mainland. According to Lewthwaite et al. (1973:134), a Samoan "community" was "seemingly" established in California during World War I, but they cite no location, numbers, or source. No information has been found showing a larger migration flow to the mainland than to Hawaii prior to the 1950s, so Hawaii-resident Samoans were probably the majority at least until 1950. For the sake of argument, however, we have assumed two different distributions for 1950: (1) three-quarters of all Samoans were in Hawaii with the balance on the mainland; and (2) an equal distribution between the two locations.

Table 2 shows the results when these distributions are combined with the low, medium, and high estimates for Hawaii in 1950. For ease of computation, however, the two middle pairs have been averaged as shown in table 2, reducing the number of estimates of the total Samoan population to four: 700, 1,100, 1,700, and 2,400. The estimate 1,100 means either that the population was equally distributed between Hawaii and the United States mainland with approximately 550 in each location, or that it was distributed 75:25 with 800 in Hawaii and 300 on the mainland. Similarly, the number 1,700 means either 850 were in each location or, on the basis of a 75:25 distribution, 1,300 were in Hawaii and 400 on the U.S. mainland.

/ Table 2 about here /

RECONCILIATION OF CENSUS, NATURAL GROWTH, AND MIGRATION DATA

To obtain the total Samoan population in all locations for which we have data, the combined total for Hawaii and the mainland must be

added to the populations of American and Western Samoa, and the Samoan population of New Zealand. Since the total populations of American and Western Samoa have been used in this analysis rather than only the Samoan population, a small number of non-Samoan residents will be included. Because births and deaths are not reported by race or ethnicity in either Western or American Samoa, migration has been estimated for the total population. A significant outflow of non-Samoans from either location would tend to overstate Samoan emigration to the United States.

Since the populations of Western Samoa and New Zealand were enumerated on September 25, 1951, 18 months after the American Samoa and the United States censuses, an intercensal adjustment has been made by adding migration and natural increase for the period April 1, 1950 to September 25, 1951.

As McArthur has reported (1968:144-45), there was net emigration from American Samoa during the intercensal period April 1, 1950 to September 25, 1956 of approximately 3000. McArthur estimated that about 1000 of these went to Western Samoa and fewer than 2000 migrated from the Samoan islands. This estimate is consistent with figures supplied by the Naval Administration of American Samoa which indicate that 1,987 Samoans left the islands between May 3, 1950, and June 30, 1956 (Lewthwaite et al, 1973:136). If emigration was evenly distributed throughout the 1950-56 period, the total net outflow during the 18 months between censuses of 1950 (American Samoa) and 1951 (Western Samoa) would be 462.

Table 2 shows the results when immigration of 462 persons is combined with each of the four previously obtained estimates of the 1950 population and natural increase of 3.5 percent annually, the rate observed in American Samoa in the 1950-56 period (Park, 1979:15-20), but which might be high for the resettled population. The September, 1951 Samoan population of the United States ranges from 1,200 to 3,000 depending on which of the proposed estimates of the 1950 population is accepted. To obtain the September 25, 1951 population of American Samoa, emigration of 462 was subtracted from the 1950 census total of 18,397 and 18 months natural increase was added (also at an annual rate at 3.5 percent), resulting in a population of 19,445. Table 3 combines the four estimates of the Samoan population in the United States from Table 2 with the adjusted population of American Samoa, the population of Western Samoa, and the Samoan population of New Zealand.

/Tables 2 and 3 about here /

These initial estimates for 1951 can be used to obtain later estimates of the population of Samoans in the United States for any subsequent year by adding immigration and births and subtracting deaths. If P_0 represents the 1951 population, subsequent populations (P_n) can be obtained by the formula:

$$P_n = P_0 + (B - D) + M$$

where B = births, D = deaths, M = net migration, and n = years.

Since birth and death statistics for the total Samoan population in the United States are unavailable, natural increase must be estimated. The procedure used here for the period 1951-1965 was to apply the same birth and death rates as were observed by Park (1979:15-20) in American Samoa during the same period. This method tends to overstate the number of births since migrants tend to have lower fertility than non-migrants.

For the period from 1965 to 1980, fertility estimates derived from the application of the "own children" method to the 1980 census data for Samoans in the United States were applied (Levin and Retherford, 1983). While this analysis shows a decline of about one-third in the total fertility rate (from 5.9 to 4.0) between 1966 and 1979, the crude birth rate was still 35 per 1,000 in 1979 because of the very young age of the population. A constant birth rate of 0.035 was therefore used throughout the period 1968-80 (0.037 for the period 1965-67) on the assumption that declining total fertility is not yet reflected in the crude birth rate. Assuming a crude death rate of 0.005, the rate of natural increase would have been 3.0 percent throughout this period. The crude death rate (CDR) in American Samoa was 0.0049 (4.9 per 1,000) in the 1973-75 period (Park 1979:20). For Samoans in Hawaii the CDR was 4.8 per 1,000 in 1975 (Nordyke, 1979) and we have estimated a CDR of 5.2 per 1,000 in 1980 (Hayes and Levin, 1983) Thus a CDR of 0.005 is probably reasonable for the 1965-80 period.

The calculation of net migration is more complicated. A continuous series of annual migration statistics for the 1951-1980 period is unavailable either from the American Samoa or United States end of the migration stream. Consequently, net migration must be estimated using indirect intercensal methods. If American Samoa were the only source of Samoan migrants to the United States, this would be a relatively straight forward matter. But many migrants originate from Western Samoa, spending varying periods of time in American Samoa before moving on the United States. Even if few Western Samoans emigrated to the United States, the continuous inflow to American Samoa would tend to conceal the outflow of American Samoans to the United States.

If the total population of Samoans in Samoa, the United States and New Zealand is treated as a closed system, that is, there is no in- or outmigration, Samoan migration to the United States can be estimated, but some strong assumptions must be made. First, it must be assumed that those Western Samoans who did not emigrate to New Zealand either migrated to American Samoa or entered the United States directly. Second, all those Samoans who emigrated from American Samoa must be assumed to have migrated to Western Samoa, entered New Zealand directly, or entered the United States. These assumptions rule out Samoan migration to other Pacific Islands or anywhere else. While these are unrealistic assumptions, the error they produce will probably be small, and the result will be to overstate immigration to the United States rather than to understate it. The immigration of Tongans, Tokelau islanders, and other Pacific Islanders during the 1951-80 period has not been taken into account, but this movement should offset the error produced by not taking account of Samoan emigration elsewhere in the world.

Table 4 presents a summary of the net intercensal migration estimates for American and Western Samoa and New Zealand during the 1951-81 period. Detailed calculations are shown in tables 5 and 6. The Samoan estimates are based on the "vital statistics" method represented by the balancing equation:

$$M = (P_1 - P_2) - (B - D)$$

The Western Samoa vital statistics shown in table 5 have been adjusted for underregistration; the likelihood of migration being understated is extremely small. American Samoa vital statistics have not been adjusted since they were believed to be 95 percent complete from 1951 to 1972

(Park, 1972:27), and coverage has more than likely improved in the last decade.

/Tables 4, 5 and 6 about here/

To obtain total Samoan immigration to the United States, Samoan immigration to New Zealand has been subtracted from the total net migration from both Western and American Samoa. New Zealand immigration data were derived from the net balance of Samoan arrivals and departures (Table 7), adjusted to intercensal periods.

/ Table 7 about here /

Since all migration estimates have been adjusted to Western Samoa census dates, it is difficult to check them against other estimates using different dates, but some approximate comparisons are possible.

"More than 4000" American Samoans emigrated to the United States between September 25, 1956 and April 1, 1960 (American Samoa, 1960), somewhat below the estimate of 5,805 estimated here for the 1956-61 intercensal period. Koenig (1961:17) estimated net emigration of 5,306 between 1950 and 1960, whereas we obtained the higher figure of 7,850 for the intercensal period 1951-61 (Table 4). By combining vital, census, and departure-arrival data, Lewthwaite, Mainzer, and Holland (1973:146) claimed net emigration of 10,000 for the 1960s, but their estimate was not an exact intercensal one. We obtained 7,250 for the 1961-71 period.

Little comparative information is available for the 1970s, but departure and arrival data for American Samoa are available for 1977 (Pereira, 1978) and indicate net migration of 2,049, close to the average of 1,900 which we have estimated for the 1976-81 period.

Starting from the four estimates of the 1951 population shown in Table 1 and using estimates of migration and natural increase as

described above, the Samoan population of the United States was estimated by single year using the formula:

$$P_2 = P_1 + (0.5 M) + (B - D) + (0.5 M)$$

where P_1 = population first year, M = annual migration, B = births, D = deaths and P_2 = population second year. The numbers of births and deaths were obtained by applying crude birth and death rates to the mid-year population $P_1 + (0.5 M)$. The formula assumes that migration is evenly distributed throughout the year.

RESULTS

Annual population estimates from 1951 to 1980 are presented in Table 8 which also shows the birth and death rates and average annual migration levels employed in the estimates.

/ Table 8 about here /

The differences between the four estimates of Samoans in 1980 and the 1980 census count are summarized in Table 9. The discrepancy between the estimated and enumerated population ranges from 4,600 to 8,900, representing percentage differences of from 10 and 17 percent. Since we have consistently used the most liberal assumptions in making the estimates, and since we have used somewhat arbitrary starting populations in 1950, these differences between our estimates and the actual census figures are not too surprising.

/ Table 9 about here/

Since each estimate employed the same rate of natural increase and immigration, the difference between them reflects the size of the starting population. Thus, the difference of 1,850 between base populations I and

IV in 1951 results in a spread of 4,250 by 1980 and an increase of 8 in the percentage discrepancy. The difference suggests that the starting population would have to be very much higher than we assumed to attain some of the previously suggested estimates.

DISCUSSION AND CONCLUSION

Even the lowest of the 1980 estimates was based on strong assumptions about immigration; more precise migration figures might result in a smaller discrepancy between the census count and the demographic estimates. The estimates used in this analysis implied total immigration of 30,500 Samoans during the 1951-80 period. Although some of these migrants would have died in the meantime, only 22,600 Samoan-born were reported in the census, considerably fewer than expected. On the other hand, 19,350 U.S.-born Samoans were reported, 3,250 more than the 16,100 expected on the basis of our fertility and mortality estimates.

If a rate of 10 percent below the estimates is assumed, the U.S.-born Samoan population would have been 21,300 and the Samoa-born population would be the difference between this figure and the estimated total population of 46,600. The resulting figure of 25,300 is relatively close to what the Samoa-born population would be when adjusted upwards by 10 percent (24,900). It is very likely, therefore, that actual immigration was less than indicated in our estimates, and that natural increase was higher. In absolute terms, approximately 5,200 immigrants would have to be replaced by an equivalent number of U.S.-born, a plausible assumption in light of the very high rate of Western Samoan immigration

estimated for the 1976-80 period. Western Samoa frontier data (Table 7) for American and Western Samoan citizens indicate about 2,400 fewer immigrants in this period than suggested by the vital statistics method. According to the latter estimates, 18,400 Western Samoa-born persons should have been enumerated in the 1980 U.S. census, whereas only 13,200 were.

While it is apparent from estimate IV in table 9 that a 1980 Samoan population of 51,000 cannot be completely ruled out, given the uncertainty about the Samoan population of California in the 1950s, a population of twice this size would require immigration 52 percent higher than we estimated and a constant 4.5 percent annual rate of natural increase, neither of which is supported by evidence. On the other hand, if the immigration and natural growth estimates we have used are accurate, the 1980 Samoan population of the United States could not have reached 100,000 unless the 1951 population was around 23,000. Since the population of American Samoa was only 19,000 in 1950, the possibility of there being 23,000 Samoans in the United States in the following year seems rather remote.

The demographic analysis reported here estimated that with particular starting populations for 1950 and assumptions about natural growth and migration, the Samoan population of the United States in 1980 would have been between 46,600 and 51,000. The 1980 U.S. census counted 42,000 Samoans or from 10 to 17.5 percent below the estimates obtained. These are provisional estimates based on aggregate, not cohort data and relatively unrefined projection methods. Also, the highest estimated difference of 17.5 percent is predicated on a 1951 Samoan population of 3,039 for which there is presently no historical evidence. As more data come to light on the history of Samoans in California and elsewhere on the U.S. mainland more informed estimates will be possible.

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Table 1. Estimates of the Size of the Samoan Population in the United States

Year	United States	Hawaii	California	Source
1929		125		Pierce 1956:20
1950		463		USBCensus 1950:18
1956		1-2,000		Hirsh 1956:1
1960				
1962				
1964-67		2,420		Hawaii Health Surveillance Prog.
1966		7,500		Alailima and Alailima 1966:1
1968				
1970		5-18,000		McCormick 1972:9
	20,000		15-20,000	Ablon 1971:329
				Park 1979:27
1972	48,000	5.5-11,000 12,000		Schmitt 1972
			23,000 ^a	Selle 1972:48
			15-30,000	Chen 1973:41
				Lewthwaite et al 1973:133
1975	70,000	7,030 21,000	51,000	OEO 1975 Census Update Survey
1976	68,000		37,000	Rolff 1978:58
		16,000		Emery 1976:10
				McGarvey and Baker 1979:463
1977			20,000 ^b	Shu and Satele 1977:7
		5,648		Population Characteristics of Hawaii: 1977
1978		6,000		Markoff and Bond 1980:189
1979		11,520		The State of Hawaii Data Book
1980	40,000- 60,000	10,000- 12,000	36,000- 41,000	Shore 1980
1981		9,357		Hawaii State Dept. of Health
1982		8-18,000 12,556		Alailima 1982:105
1983	73,000	30,000	60,000 ^c	Hawaii State Dept. of Health
				Takeuchi 1983
				Andersen 1983

a For Southern California only.
b Los Angeles area only
c Los Angeles-Anaheim

Table 2. Estimates of the Total Samoan Population of the United States in 1950 and on September 25, 1951

As- sump- tion	Base Pop- ulation, Hawaii, 1950	Ratio- Hawaii: Main land	Population			Esti- mate, 1950	Nat- ural In- crease	Mi- gra- tion	Popu- lation 9/25/51
			Hawaii	Main- land	Total				
I	526	75:25	526	175	701	701	37	462	1,200
		50:50	526	526	1,052	1,114	58	462	1,634
II	882	75:25	882	294	1,176	1,698	89	462	2,249
		50:50	882	882	1,764	2,448	129	462	3,039
III	1,224	75:25	1,224	408	1,632	2,448	129	462	3,039
		50:50	1,224	1,224	2,448	2,448	129	462	3,039

Natural increase based on annual rate of 3.5 percent

Table 3. Total Estimated and Enumerated Samoan Population: 1951

		Estimate			
		I	II	III	IV
TOTAL	P ₅	106,890	107,324	107,939	108,729
United States	P ₁	1,200	1,634	2,249	3,039
American Samoa	P ₂	19,445	19,445	19,445	19,445
Western Samoa	P ₃	84,909	84,909	84,909	84,909
New Zealand	P ₄	1,336	1,336	1,336	1,336
Percent Distribution					
TOTAL		100.0	100.0	100.0	100.0
United States		1.1	1.5	2.0	2.7
American Samoa		18.2	18.1	18.0	17.9
Western Samoa		79.5	79.1	78.7	78.2
New Zealand		1.3	1.2	1.2	1.2

Sources: United States, Table 2 this paper; American Samoa, U.S. Bureau of the Census, 1950: ; Western Samoa, McArthur (1968:122); New Zealand, Pitt and Macpherson (1974:119).

Table 3. Total Estimated and Enumerated Samoan Population: 1951

Estimates	Total	United States	American Samoa	Western Samoa	Samoans in New Zealand
I	106,890	1,200			
II	107,324	1,634	19,445	84,909	1,336
III	107,939	2,249			
IV	108,729	3,039			
Percent Distribution					
I	100.0	1.1	18.2	79.5	1.3
II	100.0	1.5	18.1	79.1	1.2
III	100.0	2.0	18.0	78.7	1.2
IV	100.0	2.7	17.9	78.2	1.2

Sources: United States, Table 2 this paper; Park (1979:11); Western Samoa, McArthur (1968:122); New Zealand, Pitt and Macpherson (1974:119).

Table 4. Estimated Samoan Migration to the United States: 1951-1981

Period	American Samoa (1)	Western Samoa (2)	Total (3)	New Zealand (4)	United States (5)	Annual Average (6)
			(1)+(2)		(3)-(4)	
1951-56	1,537	2,905	4,442	2,404	2,038	408
1956-61	2,692	5,857	8,549	2,744	5,805	1,161
1961-66	559	6,621	7,180	4,312	2,868	574
1966-71	1,387	7,713	9,100	4,715	4,385	877
1971-76	2,051	15,891	17,942	9,153	8,789	1,758
1976-81	1,273	8,578	9,851	223	9,628	1,926
Total	12,499	47,565	57,064	23,551	33,513	1,117

Sources: Tables 5 and 6. Data for New Zealand from Table 7, adjusted to intercensal period.

Table 5. Estimated net migration, Western Samoa: 1951-81

	Intercensal Period					
	9/25/51 9/25/56	9/25/56 9/25/61	9/25/61 11/21/66	11/21/66 11/ 3/71	11/3/71 11/3/76	11/3/76 11/3/81
First census	84,909	97,327	114,427	131,377	146,627	151,983
Second census	97,327	114,427	131,377	146,627	151,983	158,130
Population increase	12,418	17,100	16,950	15,250	5,356	6,147
Births	18,035 ^a	25,627 ^b	29,144 ^b	27,851 ^c	25,780 ^c	17,656 ^c
Deaths	2,712 ^a	2,670 ^b	5,573 ^b	4,887 ^c	4,532 ^c	2,934 ^c
Natural increase	15,323	22,957	23,571	22,963	21,247	14,772
Estimated migration	-2,905	-5,857	-6,621	-7,713	-15,891	-8,578

Notes: Population increase is the difference between the two census enumerations; Natural increase is the difference between births and deaths; Estimated migration is the difference between population increase and natural increase. The minus sign indicates a decrease.

^a Assumes 25 percent underregistration.

^b Based on 24 percent underregistration.

^c Adjusted assuming 20 percent underregistration.

Sources: Western Samoa, 1969:11; McArthur, 1968:122; Bannister *et al*, 1978:18-36; Western Samoa, 1974:2; Western Samoa, 1980:5.

Table 6. Estimated net migration, American Samoa: 1950-1980

	Intercensal Period			
	4/ 1/50 9/25/56	9/25/56 4/ 1/60	4/1/60 4/1/70	4/1/70 4/1/80
First census	18,937	20,154	20,051	27,159
Second census	20,154	20,051	27,159	32,397
Population increase	1,217	-103	7,108	5,138
Births	5,172	2,975	9,669	10,959
Deaths	974	581	1,301	1,451
Natural increase	4,198	2,391	8,398	9,509
Estimated migration	-2,981	-2,498	-1,290	-4,371

Notes: Population increase is the difference between the two census enumerations; Natural increase is the difference between births and deaths; Estimated migration is the difference between population increase and natural increase. The minus sign indicates a decrease.

Sources: McArthur, 1968:143; Government of American Samoa, 1971:27-28; Park, 1979:12; Government of American Samoa, 1981.

Table 7. Net Samoan migration to New Zealand and net migration from Western Samoa: 1962-1982

Year	Immigration to New Zealand	Emigration from Western Samoa	
		Samoan Citizens	All Persons
1962	763	(NA)	(NA)
1963	844	(NA)	(NA)
1964	595	(NA)	(NA)
1965	444	(NA)	(NA)
1966	820	1,024	1,243
1967	1,370	396	588
1968	371	3,436	1,476
1969	596	1,655	2,192
1970	1,424	(NA)	2,545
1971	1,085 ^a	(NA)	569
1972	1,560	(NA)	1,144
1973	2,047	2,029	3,778
1974	3,225	4,198	4,244
1975	2,635	2,437	2,670
1976	1,214	1,206	1,086
1977	336	3,076	1,287
1978	-140	1,332	3,628
1979	206	490	5,087
1980	56	61	5,229
1981	-454	(NA)	(NA)
1982	105	(NA)	(NA)

(NA) Not available. Minus sign means net emigration from New Zealand

^a Estimated.

Sources: New Zealand 1981-82:13; Western Samoa 1967-80.

Table 8. Four Estimates of the Annual Samoan Population of the United States: 1951-80

Year	Estimated Population, using Different 1951 bases				Growth Assumptions			
	I	II	III	IV	Net Mi- gra- tion	Birth Rate	Death Rate	Nat- ural Increase
1951	1,200	1,634	2,249	3,039	408	.045	.0093	.0357
1952	1,657	2,106	2,743	3,561	408	.045	.0093	.0357
1953	2,131	2,596	3,255	4,101	408	.045	.0093	.0357
1954	2,621	3,103	3,785	4,661	408	.045	.0093	.0357
1955	3,129	3,628	4,334	5,241	408	.045	.0093	.0357
1956	3,654	4,171	4,902	5,690	1,161	.0436	.0093	.0343
1957	4,959	5,493	6,249	7,063	1,161	.0436	.0093	.0343
1958	6,308	6,859	7,641	8,436	1,161	.0436	.0093	.0343
1959	7,722	8,295	9,105	9,978	1,161	.0436	.0065	.0371
1960	9,189	9,783	10,623	11,528	1,161	.0436	.0065	.0371
1961	10,710	11,325	12,196	13,134	574	.042	.0065	.0355
1962	11,671	12,308	13,210	14,181	574	.042	.0065	.0355
1963	12,666	13,325	14,259	15,265	574	.042	.0065	.0355
1964	13,697	14,379	15,346	16,387	574	.042	.0065	.0355
1965	14,793	15,470	16,470	17,548	574	.037	.005	.0320
1966	15,817	16,545	17,578	18,689	877	.037	.005	.0320
1967	17,211	17,962	19,028	20,174	877	.037	.005	.0320
1968	18,649	19,424	20,524	21,707	877	.035	.005	.030
1969	20,085	20,894	22,026	23,244	877	.035	.005	.030
1970	21,584	22,406	23,573	24,827	877	.035	.005	.030
1971	23,118	23,964	25,166	26,458	1,758	.035	.005	.030
1972	25,592	26,463	27,701	29,031	1,758	.035	.005	.030
1973	28,139	29,037	30,311	31,681	1,758	.035	.005	.030
1974	30,763	31,687	32,999	34,410	1,758	.035	.005	.030
1975	33,465	34,417	35,768	37,221	1,758	.035	.005	.030
1976	36,247	37,227	38,619	40,115	1,926	.035	.005	.030
1977	39,283	40,292	41,725	43,267	1,926	.035	.005	.030
1978	42,409	43,448	44,924	46,512	1,926	.035	.005	.030
1979	45,629	46,699	48,219	49,854	1,926	.035	.005	.030
1980	46,573	47,652	49,186	50,834

Note: Census dates used were September 25 for 1951, 1956, and 1961, November 21 for 1966, November 3 for 1971 and 1976 and April 1 for 1980.

Table 9. Estimated Undercount of Samoans in the 1980 United States Census

	Estimated populations, using Different 1951 bases			
	I	II	III	IV
Estimated population, September 25, 1951	1,200	1,634	2,249	3,039
Expected population, April 1, 1980	46,573	47,652	49,186	50,834
Enumerated population, April 1, 1980	41,948	41,948	41,948	41,948
Difference between expected and enumerated	4,625	5,704	7,238	8,886
Percent of expected population	9.90	12.0	14.72	17.48
Implied coverage (percent complete)	90.10	88.00	85.28	82.52
Implied growth rate (average annual percent)	12.97	11.90	10.83	9.85