Table H-1. Occupancy, Utilization, and Financial Characteristics of Housing Units: 1970—Continued

430-268 P.O.176

(For means, medians for derived figures (percent, median, etc.) and meaning of symbols, see text)

Census Tracts	Balance of Honolulu County—Con. (Kahaluu)									Totals for split tracts on Honolulu County		
	Tract 0102.02	Tract 0103.01	Tract 0103.02	Tract 0104	Tract 0105.01	Tract 0108	Tract 0110	Tract 0111.02	Tract 0113	Tract 0103.02	Tract 0105.01	Tract 0111.02
All housing units	748	2 033	81	7	6	1 215	953	330	1 488	776	1 402	1 655
Vacant—seasonal and migratory	2	10	–	–	1	–	–	–	–	–	2	–
All year-round housing units	746	2 023	81	7	7	1 215	953	330	1 488	776	1 400	1 655
TENURE, RACE, AND VACANCY STATUS												
Owner occupied	296	1 044	60	–	–	4	787	256	834	678	1 032	1 376
Cooperative and condominium	–	–	–	–	–	–	–	–	–	24	–	–
White	82	432	5	–	–	4	433	165	170	121	486	936
Negro	1	1	–	–	–	–	–	–	3	–	4	7
Renter occupied	348	781	21	6	7	1 211	148	68	592	94	303	235
White	176	417	8	4	2	1 166	96	51	269	52	154	210
Negro	3	7	–	1	–	65	–	–	3	–	4	–
Vacant year-round	102	198	–	1	–	–	18	6	62	4	65	44
For sale only	3	48	–	–	–	–	1	1	9	2	41	21
Vacant less than 6 months	…	6	–	–	–	–	…	…	7	…	40	21
Median price asked	…	$32 500	–	–	–	–	…	…	$28 800	…	$44 600	$42 900
For rent	4	26	–	–	–	2	3	8	8	2	8	6
Vacant less than 2 months	…	22	–	–	–	–	…	…	7	…	6	5
Median rent asked	…	$144	–	–	–	–	…	…	$700	…	$225	$300
Other	95	174	–	1	–	–	15	2	45	–	16	17
LACKING SOME OR ALL PLUMBING FACILITIES												
All units	47	106	4	–	1	7	33	1	81	2	39	2
Owner occupied	34	22	–	–	–	–	9	1	37	2	8	2
Negro	–	–	–	–	–	–	–	–	–	–	–	–
Renter occupied	13	63	4	–	1	7	24	–	41	5	18	–
Negro	–	–	–	–	–	–	–	–	–	–	–	–
Vacant year-round	–	19	–	–	–	–	–	–	3	–	3	–
For sale only	–	–	–	–	–	–	–	–	2	–	1	–
For rent	–	2	–	–	–	–	–	–	–	–	–	–
COMPLETE KITCHEN FACILITIES AND ACCESS												
Lacking complete kitchen facilities	4	36	1	–	–	1	13	–	20	2	56	3
Access only through other living quarters	1	1	–	–	–	1	–	–	1	–	–	–
ROOMS												
1 room	12	18	1	–	1	–	9	–	18	1	15	2
2 rooms	37	61	4	–	1	1	13	1	45	5	38	2
3 rooms	89	169	3	–	1	19	9	7	155	19	51	12
4 rooms	174	372	7	4	3	28	33	14	356	35	105	26
5 rooms	262	716	25	1	1	376	114	95	583	291	507	357
6 rooms	93	349	25	1	–	634	499	128	220	287	410	695
7 rooms	33	186	16	1	–	133	236	63	65	111	200	349
8 rooms	13	71	–	–	–	15	96	16	21	23	45	123
9 rooms or more	13	44	–	–	–	7	34	6	15	4	26	37
Median	4.7	5.0	5.5	4.4	3.7	5.8	6.2	5.9	4.8	5.6	5.5	6.1
All occupied housing units	644	1 835	81	6	7	1 215	935	324	1 426	772	1 335	1 611
PERSONS												
1 person	49	104	6	2	–	2	32	7	85	14	55	35
2 persons	109	366	11	2	2	219	146	50	243	86	231	202
3 persons	77	312	14	1	2	220	145	56	191	134	236	275
4 persons	100	351	18	1	1	354	235	88	220	198	293	410
5 persons	83	278	18	–	2	210	186	64	195	181	255	322
6 persons or more	226	414	14	–	–	160	191	59	492	159	265	357
Median, all occupied units	4.4	3.9	4.0	2.0	3.3	3.8	4.3	4.1	4.4	4.3	4.0	4.2
Median, owner occupied units	4.8	3.8	4.2	–	–	…	4.2	4.1	4.6	4.3	4.0	4.3
Median, renter occupied units	4.1	4.0	3.3	2.0	3.3	3.8	3.5	3.8	4.1	3.9	4.0	4.0
Units with roomers, boarders, or lodgers	39	57	–	–	2	1	14	3	37	4	16	16
PERSONS PER ROOM												
1.00 or less	359	1 383	72	6	4	1 132	867	298	897	668	1 131	1 493
1.01 to 1.50	143	275	7	–	1	70	55	25	296	84	158	133
1.51 or more	112	167	2	–	2	13	13	3	233	20	53	19
Units with all plumbing facilities—1.01 or more	202	407	7	–	2	63	60	28	459	101	193	168
VALUE												
Specified owner occupied units	277	1 002	60	–	–	…	775	253	764	651	1 014	1 369
Less than $5 000	27	2	–	–	–	…	…	–	49	1	–	–
$5 000 to $7 499	14	1	1	–	–	…	1	–	31	1	–	–
$7 500 to $9 999	15	10	–	–	–	…	…	–	39	–	–	–
$10 000 to $12 499	33	18	–	–	–	…	2	–	81	–	1	–
$12 500 to $14 999	34	16	1	–	–	…	1	1	93	4	3	2
$15 000 to $19 999	36	47	1	–	–	…	8	3	118	14	43	16
$20 000 to $24 999	64	223	19	–	–	…	22	111	166	383	315	393
$25 000 to $34 999	35	383	35	–	–	…	576	128	116	259	459	817
$35 000 or more	19	302	3	–	–	…	165	10	91	9	193	171
Median	$12 700	$12 200	$16 400	–	–	…	$13 700	$16 300	$14 200	$13 400	$19 700	$18 700
CONTRACT RENT												
Specified renter occupied units	343	769	19	–	7	1 211	140	63	577	92	301	220
Less than $ 5	14	47	1	–	–	…	15	–	16	1	6	1
$ 5 to $ 9	2	29	4	–	–	–	4	–	4	4	10	1
$ 10 to $ 14	6	30	1	–	–	…	9	…	52	1	36	…
$ 15 to $ 19	25	39	4	–	1	…	…	…	91	9	62	…
$ 20 to $ 24	47	49	1	–	1	…	3	…	62	1	13	1
$ 25 to $ 34	137	228	…	–	–	67	9	4	126	5	41	6
$ 35 to $ 49	49	183	2	–	–	6	10	8	73	18	23	22
$ 50 to $ 74	18	49	…	–	–	…	5	13	32	28	16	14
$ 75 to $ 99	7	59	4	–	–	…	68	31	37	28	69	1
$100 or more	33	60	2	–	5	1 174	13	7	6	5	13	…
Median	$ 49	$ 137	$ 76	…	…	$ 315	$ 99	$ 56	$ 51	$ 91	$ 77	$ 82

*Limited to one family homes on less than 10 acres and no business or property. †Excludes one family homes on 10 acres or more.

[redacted]

Stamp - Year-to-File - General Statistics file

State of Hawaii
Department of Planning and Economic Development
P. O. Box 2359
Honolulu, Hawaii 96804

Statistical Report 83 August 27, 1971

ESTIMATES OF THE HAWAIIAN POPULATION OF HAWAII*

This report presents statistics on the number of Hawaii residents who have Hawaiian blood. It has been compiled in an effort to answer numerous queries addressed to State agencies regarding the "pure" and part Hawaiian population.

Official census statistics no longer provide accurate information on this matter. A query on race has appeared in every official census conducted in Hawaii, from the first all-island count in 1849 to the most recent in 1970. Many authorities have questioned the accuracy of these data, however, particularly for the more recent enumerations. It has long been suspected that some part Hawaiians tend to forget their non-Hawaiian ancestry in replying to census queries and "pass" as pure Hawaiians. There is also a strong possibility, largely disregarded in earlier discussions, that other part Hawaiians fail to mention their Hawaiian blood and thus merge statistically with a non-Hawaiian group.

The 1970 decennial census exacerbated these problems. For the first time in any official census of the Islands, no category was provided for part Hawaiians. Self-classification of race was requested. Persons with mixed origins who asked how they should answer this question (many did not ask) were told to mark the race of their father, or, if he was of mixed blood as well, to use the race of their father's father. One effect of this new procedure was to add many part Hawaiians to the "Hawaiian" category. Another effect was to swell the "white" and "Chinese" totals with part Hawaiians, inasmuch as many part Hawaiians have Caucasian or Chinese fathers. The 1970 census data on race are thus not comparable to earlier enumerations, when separate Hawaiian and part Hawaiian categories existed. (It should be noted that 1970 tabulations released to date have combined the Hawaiian, Korean, and miscellaneous groups into a single "all other" category numbering 98,441, or 12.8 percent of the population; later reports will present a separate "Hawaiian" total, based on the new definitions.1/)

There is little question that the number of pure Hawaiians has sharply declined during the 193-year period since Captain Cook's first visit, while the part Hawaiian population has increased at a rapid rate. It is now thought that approximately 250,000 Polynesians lived in the Hawaiian Islands when the first Westerners arrived in 1778.2/ War, infanticide, disease, reduced fertility, and out-migration contributed to their early decline, with gonorrhea, syphilis and recurring epidemics as perhaps the most important factors. Hawaiian depopulation has continued at an almost constant rate since the 18th century, averaging 1.4 percent a year between 1778 and 1823, 2.2

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* Revised and updated from an article by Robert C. Schmitt, "How Many Hawaiians?", published in The Journal of the Polynesian Society, Vol. 76, No. 4, December 1967, pp. 467-475.

percent annually from 1823 to 1853, 1.9 percent from 1853 to 1878, 1.6 percent between 1878 and 1910, 2.0 percent from 1910 to 1940, 1.6 percent in 1940-1950, and 0.8 percent in 1950-1960. The part Hawaiians meanwhile recorded steady gains, with annual growth rates of 5.1 percent in 1853-1878, 4.1 percent in 1878-1910, 4.7 percent in 1910-1940, 4.0 percent in 1940-1950, and 2.1 percent in 1950-1960. By April 1, 1960, according to alternate census tabulations, there were either 10,502 or 11,294 pure Hawaiians and either 91,109 or 91,597 part Hawaiians in the State.3/ Totals for selected years are reported in table 1.4/

The Hawaiian decline and part Hawaiian rise were relative as well as absolute. Americans, Europeans and Asians migrated to Hawaii in great numbers during the 19th and 20th centuries and soon overtook the native population. Persons of non-Hawaiian blood, less than 3 percent of the total population in 1853, passed the 50-percent mark around 1887 and reached an all-time high of 86.2 percent in 1930. Pure Hawaiians, who accounted for 100 percent of the population of the Island chain on contact, fell to 49.7 percent in the 1884 census and 1.8 percent by 1960. Part Hawaiians constituted 1.3 percent of the population in 1853, reached a record high of 14.8 percent of the total in 1950, and subsided to 14.4 percent a decade later.

This, roughly, is the official record. How accurate are these statistics?

Not very, according to recent evidence. This evaluation stems from independent survey findings, a comparison of cohort statistics from successive censuses, birth and death tabulations by the Hawaii Department of Health, anthropological field checks, blood-typing studies, and records of the Department of Hawaiian Home Lands and Kamehameha Schools.

These sources differ widely in the degree of care taken in their preparation. The Kamehameha Schools and Department of Hawaiian Home Lands (both of which limit their services to persons with Hawaiian blood) go to considerable effort to obtain accurate information on the racial backgrounds of persons using their facilities. Anthropological and genetic studies are similarly painstaking. A somewhat greater range of error is possible in the household sample and birth and death statistics published by the State Department of Health; although the survey personnel and registration clerks of the Department are well-trained and experienced, the nature of their work precludes in-depth probing of racial ancestry. Least accurate of all available sources is the decennial census, with its hastily-trained, inexperienced enumerators and superficial coverage of race.

Direct evidence regarding the accuracy of census statistics is provided by the Hawaii Health Surveillance Program survey, conducted on the Island of Oahu by the Hawaii State Department of Health. A probability sample of 26,108 persons, interviewed by carefully trained public health nurses and professional survey staff using a detailed schedule, provided data for the three-year period ended March 31, 1967. A similar survey, covering 8,009 persons, was taken on the Neighbor Islands in the Fall of 1967 for the Vocational Rehabilitation Plan. These surveys indicated an average of 7,540 Hawaiians and 118,640 part Hawaiians (out of an estimated non-institutional, non-barracks population of 652,160) living in the State in 1964-1967. Detailed results appear in table 2. The 1960 Census, in contrast, reported at least 10,502 Hawaiians and 91,109 part Hawaiians in the Islands. Although some of the difference between Health survey and census findings can be attributed to sampling variation, a later survey date, and omission of persons in institutions and military barracks from the Health study, part is obviously related to such matters as schedule design, interviewer training, and editing procedures. Of the two enumerations, the Health survey is in all likelihood the more accurate. Neither count, of course, is free of errors caused by unrecognized or unadmitted racial mixture.

Misreporting has inflated Hawaiian population totals for many years. Romanzo Adams, for example, estimated that 9,780 persons classified as pure Hawaiians in the 1930 U.S. Census were actually part Hawaiians. As a consequence, the number of full-blooded Hawaiians in the Islands in 1930 was actually 12,856 instead of 22,636, and the number of part Hawaiians was 38,004 rather than 28,224.5/ No allowance was made for part Hawaiians incorrectly classified as non-Hawaiians. Adams wrote:

> For more than a hundred years there has been a passing over of part-Hawaiians into the Hawaiian group. That is, part-Hawaiians, especially the darker complexioned ones, frequently are ignorant of their possession of non-Hawaiian blood or they think that their little non-Hawaiian blood is of no practical importance and so they claim to be full-blooded Hawaiians. It is estimated that, as a consequence of such passing and of further unrecognized intermixture, about 43 percent of the so-called Hawaiians of today have a little of the blood of people who came after 1778. In making this estimate the historic situation covering over a century and a half has been considered.6/

An unpublished study by W. A. Lessa suggests that Adams's estimate, if anything, greatly overstated the number of full-blooded Hawaiians surviving in 1930. Lessa wrote:

> Regarding Hawaiians, the very thorough research I did in 1930-1932 turned up only about 1700 Hawaiians, all others not being "pure" by the strict criteria I applied, whereby I rejected any subject with the slightest known admixture. The present figure ought to be perhaps well under 1,000, considering the small size of Hawaiian families and the marked tendency to intermarry with other racial groups. My data are very close to being as accurate as can be ... 7/

Additional evidence is provided by the State Department of Hawaiian Home Lands. This agency serves families in which at least one member has 50 percent or more Hawaiian blood. In April 1965 a Department official estimated that only about 100 of the 1,700 families on land administered by the Department had any pure Hawaiian members.8/

A study in Hawaii population genetics by Morton, Chung and Mi lends further support to these conclusions. These authors analyzed 172,448 live birth certificates and 6,879 fetal death certificates for the years from 1948 through 1958. Noting "considerable evidence that pure Polynesians lack [type] B, and acquire it only through admixture," they also studied records of the Honolulu blood bank. They concluded that "if the present frequency of B in Hawaiians was attained by a constant rate of admixture, starting from a pure Polynesian population with no B genes, then the Hawaiians born before 1810 were substantially pure Polynesian. On the blood type evidence, "Hawaiians' have 8.5% Caucasian admixture and 13.7% Chinese admixture, while 'Caucasian-Hawaiians' have 8.4% Chinese admixture and 'Chinese-Hawaiians' have 14.6% Caucasian admixture."8/ Morton and his co-authors thus agree with Adams's conclusion that unreported intermixture dates from the early post-contact period. A similar stand was recently taken by McArthur after careful study of historical materials.10/

Vital statistics compiled by the State Department of Health reinforce the impression that full-blooded Hawaiians may be rarer than is generally recognized. As indicated in table 3, five-year totals on the number of pure Hawaiian births have dropped from 1,342 in 1940-1944 to 289 in 1965-1969. Hawaiian births as a percent of the Hawaiian and part Hawaiian total fell from 9.1 in 1940-1944 to 1.3 in 1965-1969. Even these figures are misleading, since the pure Hawaiian counts include illegitimate babies born to Hawaiian mothers and unknown fathers. Such births accounted for 43.3 percent

of the pure Hawaiian total in the most recent five-year period. If illegitimate babies are omitted (since most are probably part Hawaiian), the quinquennial totals for full-blooded Hawaiians have declined from 1,126 to only 164 during this thirty year period.

Comparison of census data with birth statistics provides further evidence. The 1960 U.S. Census reported 26.6 percent more Hawaiians under ten years of age than appeared in statistics on live births for the preceding decade; yet the Census showed 21.7 percent fewer part Hawaiians. When the 1960 Census count on persons 10 to 19 is compared with 1950 Census data on persons under 10, there appears to have been a 5.2 percent increase in Hawaiians and a 17.0 percent decrease in part Hawaiians. When allowance is made for normal mortality and out-migration, these comparisons (presented in greater detail in table 4) strongly indicate an overrepresentation of pure Hawaiians and underrepresentation of part Hawaiians in the Census.

The proportion of Hawaiian births differs widely by source, varying inversely with the degree of care likely to have been taken in compiling the data. Statistics developed by the Kamehameha Schools (which follow a policy of restricting enrollment, except for faculty children, to Hawaiians and part Hawaiians) provide an example. A careful check of enrollment records as of November 1, 1959 showed that only seventeen (or 1.0 percent) of the 1,749 boys and girls in the school were unmixed.11/ Birth statistics for the corresponding age group -- that is, Hawaiian and part Hawaiian children born 1942 to 1954 -- report 5.3 percent as full-blooded. Among Hawaiian and part Hawaiian children five to seventeen years old enumerated in the 1960 Census, 6.5 percent were listed as unmixed. Additional information appears in tables 4 and 5. Although these differences may reflect differential mortality, migration and schooling patterns, it seems more likely that they stem chiefly from interviewer procedures and response verification.

Part Hawaiians are becoming progressively more fractional. In 1969, for example, more than half of the 4,593 Hawaiian and part Hawaiian babies born had one part Hawaiian and one non-Hawaiian parent (see table 6). The composite or average blood mixture of students at the Kamehameha Schools dropped from fifty percent to 1954 to thirty-six percent in 1970, and the proportion with at least half-Hawaiian ancestry declined from 60.9 to 25.4 percent of the student body during the same 16 year span (see table 7). The schools reported forty-one pure Hawaiian students (3.3 percent of the student body) in March 1954 but only four (0.16 percent) in November 1970. The 1964-1967 Hawaii Health Surveillance Program survey cited earlier and in table 2 found that 62,080 of the 93,840 part Hawaiians on Oahu admitted to two or more non-Hawaiian strains. (Among the 31,760 with only one non-Hawaiian strain, 17,800 were Caucasian-Hawaiians and 10,440 were Chinese-Hawaiians.)

The growing number of Hawaii residents with one-eight, one-sixteenth, or even less Hawaiian blood suggests the possibility that many such persons, technically classified as part Hawaiians, may be reporting themselves as non-Hawaiians to census enumerators. Evidence supporting such a notion appears in migration estimates, which show a heavy net out-migration for Hawaiians and part Hawaiians.12/ These estimates, computed by the residual method, may in fact reflect "passing" of part Hawaiians as non-Hawaiians as much as they mirror a true out-migration. A part Hawaiian child, correctly classified on its birth certificate but thought of as non-Hawaiian by the census-taker, would appear as an out-migrant in computations of intercensal components of population change.

In the light of the foregoing comments and data, only the roughest kind of estimate of the "true" number of Hawaiians and part Hawaiians living in the Islands can be ventured. Recent figures on "pure" Hawaiians range from Lessa's informal guess of "well under 1,000" to the 1960 Census total of 11,294. Later data from the Health survey suggest that the 1960 Census count of somewhat more than 91,000 part Hawaiians for the entire chain was perhaps 10 or 15 percent too low. All things considered, the weight of evidence points to a current population of around 130,000 persons with Hawaiian blood. Of this total, probably not more than a few thousand could accurately claim unmixed ancestry, in the strictest sense of the term.

Footnotes

1/ U.S. Bureau of the Census, Census of Population: 1970, Final Report PC(1)-B13, table 17 and Appendix B.

2/ Robert C. Schmitt, "New Estimates of the Pre-Censal Population of Hawaii," The Journal of the Polynesian Society (in press).

3/ The lower Hawaiian and higher part Hawaiian totals were obtained from a special hand tabulation of 1960 census data, in which non-response was allocated on a pro rata basis; the higher Hawaiian and lower part Hawaiian totals, in contrast, were obtained from a machine tabulation in which non-response was usually assigned on the basis of race reported for the household head. See the Hawaii State Department of Planning and Economic Development, Racial Statistics for Hawaii, 1960 (Statistical Report 9, December 26, 1963).

4/ Eighteen official censuses have been taken in Hawaii during this period. For data from those not cited here, see Andrew W. Lind, Hawaii's People, 3rd edition (Honolulu: University of Hawaii Press, 1967), p. 28, and Robert C. Schmitt, Demographic Statistics of Hawaii: 1778-1965 (Honolulu: University of Hawaii Press, 1968), pp. 43, 74, and 120.

5/ Romanzo Adams, Interracial Marriage in Hawaii (New York: The Macmillan Co., 1937), p. 15.

6/ Ibid., p. 14.

7/ Letter from W. A. Lessa to Robert C. Schmitt, November 11, 1964. Dr. Lessa did his Hawaiian research as part of a larger study under the guidance and jurisdiction of Dr. Harry L. Shapiro of the American Museum of Natural History. The statistical work was completed at the Peabody Museum of Harvard University under Earnest Hooton.

8/ James C. Clark, Planning Coordinator, in discussion with Robert C. Schmitt, April 26, 1965.

9/ Newton E. Morton, Chin S. Chung, and Ming-Pi Mi, Genetics of Interracial Crosses in Hawaii (Basel and New York: S. Karger, 1967), pp. 13, 26, 29, and 127.

10/ Norma McArthur, "Essays in Multiplication: European Seafarers in Polynesia," The Journal of Pacific History, Vol. I (1966), pp. 91-105.

11/ For Kindergarten through the 12th grade, excluding 10 non-Hawaiian faculty children. Data supplied by the Office of the President, The Kamehameha Schools, May 24, 1965.

12/ Robert C. Schmitt, "Recent Migration Trends in Hawaii," Social Process, Vol. XXV (1961-1962), pp. 15-22, espec. pp. 19-20.