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Wartime Earnings and Spending
in Honolulu, 1943

By

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of the

COST OF LIVING DIVISION



Bulletin No. 788

[Reprinted from the *Monthly Labor Review*, April 1944,
with additional data]

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Contents

	Page
Summary	1
Family income:	
Earnings of workers.....	2
Family income, family size, and number of earners.....	4
Racial and national origin in relation to family size and income.....	6
Family outlay:	
The family balance sheet in relation to income.....	8
Summary of expenditures for major categories of consumption.....	10
Food purchases.....	13
Housing and household operation.....	19
Housefurnishings.....	22
Clothing.....	24
Medical and personal care.....	31
Transportation.....	32
Recreation expenditures.....	33
Description of sampling method.....	36

Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., July 18, 1944.

THE SECRETARY OF LABOR:

I have the honor to transmit herewith a report summarizing the results of a survey of the income and expenditures of families of wage earners and clerical workers in Honolulu, Hawaii, during wartime. This report was prepared in the Cost of Living Division by Lenore A. Epstein, assisted by Elizabeth H. Hyde. The general discussion on family income and family outlay appeared in an article in the April 1944 issue of the *Monthly Labor Review*.

The survey was conducted during July and August 1943, under the direction of Lenore A. Epstein, assisted by Elizabeth H. Hyde of the Cost of Living Division, and Stella M. Jones, of Honolulu, on summer leave from the Territorial Department of Public Instruction. Thirteen residents of Honolulu, representing the principal racial groups in the population, interviewed the families selected for study. The success of the survey is due in large measure to their painstaking work and the generous cooperation of the families studied. This study had the benefit also of cordial cooperation and advice from persons in Territorial and Federal agencies and at the University of Hawaii, and from interested individuals.

The survey, the first of its kind undertaken in Hawaii, was designed to provide the basis for an index of changes in the cost of goods and services purchased by families of wage earners and clerical workers in Honolulu. The Department of Labor and Industrial Relations, Territory of Hawaii, has used the data to prepare such an index and is publishing the results at quarterly intervals.

A. F. HINRICHS, *Acting Commissioner.*

HON. FRANCES PERKINS,
Secretary of Labor.

*Bulletin No. 788 of the
United States Bureau of Labor Statistics*

[Reprinted from the MONTHLY LABOR REVIEW, April 1944, with additional data]

Wartime Earnings and Spending in Honolulu, 1943

Summary

Eighteen months of war brought many changes in the lives of civilian workers living in Honolulu, Hawaii. The black-out and the curfew were most noticeable to one arriving from the mainland, but residents soon adjusted their living habits to conform to these restrictions. War-inflated incomes and correspondingly large expenditures have, despite high prices, meant more satisfactory diets and more luxuries to many families of wage earners and clerical workers than they were able to afford in pre-war days.

In April 1940 Honolulu, the largest city in the Territory of Hawaii, had a population of 179,326. Japanese comprised 34 percent of the total population at that time, Caucasians 28 percent, Hawaiians and part-Hawaiians 17 percent, Chinese 12 percent, Filipinos and persons of other races 8 percent. Of the entire population, 87 percent were American-born.¹

The present population is estimated at about 230,000, exclusive of the large number of men in military service recently stationed in and near the city. The increase reflects partly the influx of workers from mainland United States to fill war jobs in the Pearl Harbor Navy Yard and on Army construction projects, and partly the migration of workers from the sugar and pineapple fields of Oahu and the other islands to better-paying city jobs.²

During the summer of 1943, the U. S. Bureau of Labor Statistics conducted the first general survey of the incomes and expenditures of families of wage earners and clerical workers in Honolulu, to provide a basis for an index of changes in the cost of living. This covered a carefully selected group of 100 families representing all important racial groups in the city.³ The study excluded families of business and professional people and certain "white collar" workers with relatively high incomes, as well as single individuals. Information was obtained on income and on all categories of family spending for the month of June 1943. In addition, detailed reports were obtained on actual purchases of foods in the 7 days immediately preceding the interview with the family. Reports on purchases of clothing and housefurnishings and, as a check, estimates of amounts spent for all other types of family expenditure were also obtained for the 12 months ending with June 1943.

¹ United States Census of 1940.

² After the outbreak of war the movement from the outer islands was virtually stopped by restriction on transportation between Oahu and the outer islands.

³ For description of sampling method used in selection of families, see p. 36.

The survey shows that large cash incomes were being received by families of working people in Honolulu in 1943. In the month of June 1943, the gross income averaged \$415 per family. This was before deductions for taxes, war bonds and stamps, and various forms of social insurance. One of the principal reasons for these unusually large cash incomes, in addition to the many opportunities for employment at high wages during the war, is the large size of the families in Honolulu, and the fact that typically two or more persons in each family are working. Actually over one-third of the families surveyed had as many as three earners. Families are large, averaging 5 persons as compared with 3.6 persons in wage-earner and clerical families in the mainland cities. Of these five, 3.3 were 14 years of age or over.

Although prices of living essentials are typically high in Honolulu and outlays for family living are necessarily large, these high money incomes enabled most Honolulu families not only to meet current expenses, but to make some savings in addition to their purchases of war bonds and stamps and their current payments of Federal and Territorial income taxes. For this group of 100 families, about 65 percent of total income, or \$270 in the month of June, went for actual purchases of goods and services. Federal and Territorial income taxes and the victory tax took another 17 percent, or \$71, from the family income, and savings including purchases of war bonds and stamps took another 15 percent. Small outlays were also made for gifts and contributions.⁴

Food absorbed about 44 percent of the \$270 spent currently for goods and services. This includes not only food for preparation at home, but meals eaten away from home. Clothing took another 11 percent; housing, fuel, household operation and furnishings together, another 17 percent. Transportation and medical care each took about 6 percent. A relatively large proportion—about 10 percent—went for recreation, liquor, and tobacco, and the remainder for other miscellaneous expenditures.

Food took an unusually large share of the family budget for incomes as large as these. This is attributable to the relatively high prices of food in Honolulu, the large size of the families, and also to the fact that virtually no new housefurnishings or cars, which would normally have been bought with these greatly enlarged incomes, were available for purchase. A considerable share would probably also have been spent for larger houses to alleviate the overcrowding which characterizes these homes, had it not been for the serious housing shortage.

Family Income

EARNINGS OF WORKERS

With the need for workers at the Pearl Harbor Navy Yard, on other war jobs, and in civilian industries, many wage earners were receiving very high earnings; a fourth of those in the families studied earned

⁴ Presumably part of the income tax payments had been saved in April and May, as no income taxes were paid in those months. The monthly tax burden for the average worker's family in Honolulu was thus about \$33 during the second 3 months of 1943. Since a few persons paid during March the full amount of the Federal income tax due and some paid the full amount of the smaller Territorial tax due, the average monthly income tax payment for the first 6 months of 1943 would have been slightly higher. Since the Federal and Territorial withholding taxes, with higher rates on current income, went into effect on July 1, 1943, the average monthly tax burden has risen to about \$41. A \$5 poll tax was also levied on each adult resident prior to July 1943, and was usually deducted from earnings during the early months of the year.

more than \$250 in June. Of the entire group of wage earners and clerical workers, however, half earned less than \$175 (table 1).

Many of the workers in the families surveyed were on the Federal pay roll, some were Territorial and city employees, and others worked in civilian plants, offices, restaurants, and the like. The wage-earner occupations represented ranged from the highly skilled machinist, electrician, carpenter, welder, rigger, policeman, truck and bus driver, jeweler, barber, hotel cook, seamstress, through stevedore, presser, waitress, fruit grader, cannery packer, and laundry checker, to charwoman, janitor, and general laborer. The clerical group was relatively large, since the main offices of the sugar and pineapple companies and the large wholesale houses which supply most of the retailers in the Territory are in Honolulu. Clerical workers for these firms and in the employ of the Government included typists, stenographers, sales clerks, assistant cashiers, bookkeepers, office-machine operators, and inspectors whose monthly salaries did not exceed \$300.⁵

TABLE 1.—*Distribution of Earners in Families of Wage Earners and Clerical Workers in Honolulu, by Monthly Money Earnings, June 1943*

Money earnings in June 1943	Earners with classified total money earnings		Earners with classified money earnings after pay-roll deductions ¹	
	Number of earners	Percent of earners	Number of earners	Percent of earners
Under \$50.....	19	8.7	22	10.1
\$50 and under \$100.....	32	15.1	36	16.4
\$100 and under \$150.....	37	16.9	52	23.7
\$150 and under \$200.....	40	18.2	41	18.7
\$200 and under \$250.....	35	16.0	36	16.4
\$250 and under \$300.....	26	11.9	19	8.7
\$300 and under \$350.....	16	7.3	8	3.7
\$350 and over.....	13	5.9	5	2.3
All earnings classes.....	219	100.0	219	100.0
Median earnings per earner.....	\$176.25		\$150.00	
Mean earnings per earner.....	181.22		161.75	

¹ Deductions for victory tax, war bonds, unemployment compensation, Federal old-age and survivors insurance, Federal retirement benefits, and Territorial public welfare.

About one-fourth of these workers earned less than \$100 in June, principally older persons and school children. Some were employed only part time—particularly the children of high-school age who started work at the close of the school term on June 10—but the great majority worked the full month.⁶

The high earnings of some workers were attributable in part to overtime pay for long hours; those of others, to substantial cost-of-living bonuses paid by some of the Hawaiian firms. An indication of the wages that must be paid to attract workers, at least to jobs in “non-essential” industries, is given by a newspaper advertisement⁷ that called for a fountain boy, with entrance wage of \$150.00 per month.

⁵ Families were excluded from the survey (1) if they included persons in professional occupations or salaried workers whose regular earnings were more than \$300 per month or \$3,000 during the year ending July 1943, (2) if the chief earner was self-employed (unless the net income from his business was less than 25 percent of his own total earnings), (3) if other earners in the family were self-employed and had full-time employees or received from their business net income that amounted to more than 25 percent of family income, and (4) if more than 25 percent of the family's income was derived from rents, securities, relief allowances, or social-insurance benefits.

⁶ The average number of equivalent full-time workers per family (assuming 26 days of work as full-time) was 2.0 as compared with an average of 2.2 persons working at some time during June.

⁷ Honolulu Star-Bulletin, October 11, 1943.

"Take-home" earnings averaged nearly \$20 less than total earnings per worker, after pay-roll deductions of approximately \$9.00 for war bonds, \$6.50 for victory tax, and additional amounts largely for social-insurance benefits.⁸ Fifty percent of the workers received less than \$150.00 per month in pay after such deductions.

FAMILY INCOME, FAMILY SIZE, AND NUMBER OF EARNERS

Over half of all the families surveyed had 5 or more members⁹ and over a third had 3 or more earners (tables 2 and 3). Of the total number of persons in these families, two-thirds were 14 years of age or older and over one-quarter were aged 3 to 14 years. Altogether 44 percent of all family members were gainfully employed during all or part of the month of June.

TABLE 2.—*Number and Age of Members in Families of Wage Earners and Clerical Workers in Honolulu, by Net Money-Income Class,¹ June 1943*

Item	All families	Families with net money incomes, ¹ in June, of—			
		\$100 and under \$250	\$250 and under \$350	\$350 and under \$450	\$450 and over
Number of families having²—					
2 members.....	11	5	5	1	.....
3 or 4 members.....	37	12	12	10	3
5 or 6 members.....	27	9	6	5	7
7 or more members.....	25	5	3	4	13
All families.....	100	31	26	20	23
Average number of persons³ per family:					
14 years of age and older.....	3.3	2.2	3.0	3.4	5.1
Under 14 years.....	1.7	2.5	1.2	1.4	1.3
Total.....	5.0	4.7	4.2	4.8	6.4
Average net money income¹ per person.....	\$74.56	\$44.50	\$71.19	\$82.85	\$101.44

¹ Money income in June after specified pay-roll deductions (see table 1).

² No families included persons who were not family members for the full month.

TABLE 3.—*Number of Earners in Families of Wage Earners and Clerical Workers in Honolulu, by Net Money-Income Class,¹ June 1943*

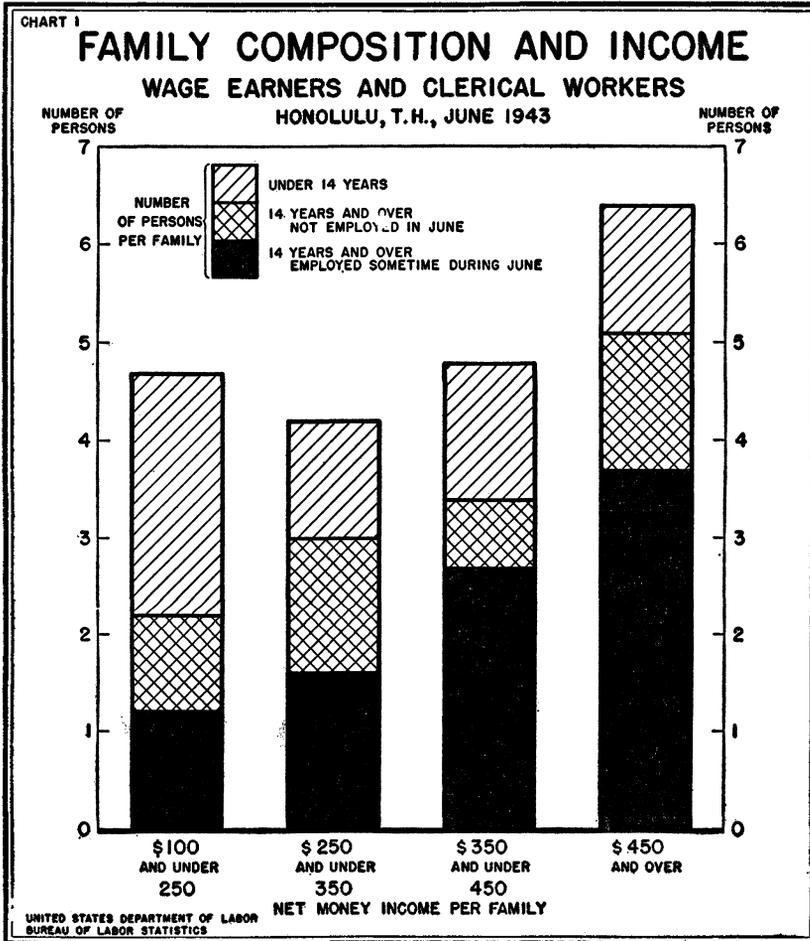
Item	All families	Families with net money incomes, ¹ in June, of—			
		\$100 and under \$250	\$250 and under \$350	\$350 and under \$450	\$450 and over
Number of families having—					
1 earner.....	41	25	13	3	.....
2 earners.....	25	6	10	6	3
3 earners.....	17	.....	3	6	8
4 earners.....	10	.....	.....	4	6
5 or more earners.....	7	.....	.....	1	6
All families.....	100	31	26	20	23
Average number of earners per family.....	2.2	1.2	1.6	2.7	3.7

¹ Money income in June after specified pay-roll deductions (see table 1).

² Including unemployment compensation, Federal old-age and survivors insurance, Federal retirement benefits, and the Territorial public-welfare tax of 0.5 percent on earnings. The latter was not strictly a social insurance contribution, since the funds were collected for general relief. However, it was not possible to tabulate this item separately.

³ Single individuals, or 1-person families, were excluded from the survey.

The large number of earners per family meant substantial incomes for most families.¹⁰ During June 1943, the gross incomes of approximately four-fifths of the families exceeded \$250, and the incomes of a third amounted to \$450 or more (table 4). Even after pay-roll deductions for bonds, victory taxes, and social security, more than two-thirds had over \$250 left to spend in that month, and nearly one-fourth had \$450 or more. On the average, these families thus had cash to spend amounting to \$372 in June, or about \$75 per person



Whenever family incomes were very large, exceeding \$450 per month after deductions, many members of the family—both old and young—worked.¹¹ The 23 families in this class averaged 6.4 persons, 3.7 of whom were employed during the month. All these families had at least 2 earners and more than half had 4 or more. By contrast, the

¹⁰ Income from sources other than earnings was of relatively slight importance, averaging less than \$18 per family, in June, as compared with gross earnings of \$397.

¹¹ Families are classified by the amount of income they received after pay-roll deductions whenever data are presented by income level, since consumption expenditures (which form the main subject of this article) are more closely correlated with net than with gross income.

31 families with cash to spend (after pay-roll deductions) between \$100 and \$250, had 4.7 members, and an average of only 1.2 were employed—since 2.5 were under 14 years of age. (See chart 1.)

TABLE 4.—Distribution of Families of Wage Earners and Clerical Workers in Honolulu, by Monthly Money-Income Class, June 1943

Money-income class	Number of families	
	Total money income in June	Money income in June after pay-roll deductions ¹
\$100 and under \$150.....	1	4
\$150 and under \$250.....	18	27
\$250 and under \$350.....	27	26
\$350 and under \$450.....	21	20
\$450 and over.....	33	23
All families.....	100	100
Median income per family.....	\$367.31	\$322.92
Mean income per family.....	\$414.68	\$372.05

¹ Deductions for victory tax, war bonds, unemployment compensation, Federal old-age and survivors insurance, Federal retirement benefits, and Territorial public welfare.

The families with the largest incomes (exceeding \$450) to spend in June, after deductions, were not so much better off as at first appears, because of the large size of their families. On a per-capita basis, incomes at the highest level (over \$450) averaged 22 percent greater than those from \$350 to \$450, although family incomes averaged about 60 percent more. Similarly, per-capita incomes for the \$350–\$450 income group were 16 percent higher than those of families at the \$250–\$350 level, while family incomes were about 35 percent larger. Families in the two lowest income groups were an exception because of the much greater number of young children in families with incomes below \$250.

RACIAL AND NATIONAL ORIGIN IN RELATION TO FAMILY SIZE AND INCOME

The racial composition of the population of Honolulu goes far to explain the large size of families. It has been traditional in Oriental, particularly Chinese, families for adult children to remain in the household and turn their earnings over to their parents. The new generation has gradually been breaking away from the custom. Now, when more adequate earnings might be expected to accentuate this trend, the serious shortage of houses and apartments prevents many young couples from finding separate quarters.

There has been a strong tendency in Hawaii toward economic stratification by race, as evidenced by the findings of a study of labor conditions in the Territory in 1939. The author summarizes, as follows:

It is obvious that the Caucasians who migrated to Hawaii from the American mainland hold the dominant economic position in terms of both wealth and management. Broadly speaking, Hawaiians and Portuguese are next. * * * Because the Chinese arrived earlier than the great bulk of Oriental migrants they had the advantage of having established themselves in strategic positions early in the period of economic expansion. The Japanese, on the other hand, have the advantages of large numbers and great racial solidarity. * * * The Filipinos, of all the large racial groups, occupy the least advantageous economic position.¹²

¹² Shoemaker, James H.: Labor in the Territory of Hawaii, 1939. Washington, D. C., 1940.

As a result of the war and the consequent labor shortage, employment opportunities have improved for persons of Oriental extraction. Despite the large number of skilled workers brought from the mainland to work in the navy yard and on war construction projects, many local residents are filling jobs at a higher level of skill than they could obtain previously. Although alien Japanese cannot be employed on restricted projects for the War or Navy Departments and even American-born persons of Japanese ancestry encounter some discrimination, large numbers have shifted from domestic work at extremely low wages to somewhat more lucrative employment. In pre-war days a small store provided the sole support of many a large Oriental family. At present, many such stores are run by elderly parents with the assistance of young children in after-school hours, while the older children are employed outside at jobs which now provide the major portion of the families' incomes.

The families covered in the present survey represented a wide diversity of racial groups as follows:

	Number of families, by racial origin of—	
	Family head	Homemaker
Hawaiian.....	7	4
Part-Hawaiian.....	11	15
Caucasian.....	28	26
Japanese.....	34	36
Chinese.....	¹ 12	² 13
Other ³	8	6

¹ Includes 1 man of Chinese-Japanese ancestry.

² Includes 1 woman of Chinese-Caucasian ancestry.

³ Includes Korean, Filipino, and Puerto Rican families, which, because of the small number in the sample are grouped together.

The Census classifies Puerto Ricans in Hawaii as a separate group rather than with other Caucasians, because of special interest in their number. Census reports for Honolulu, however, combine Puerto Ricans with Koreans, Negroes, and "All others." The latter Census classification was used in this study.

The Caucasian families ¹³ contained only 3.9 persons, on the average, as contrasted with 5.5 among the families of Japanese, Chinese, Korean, Filipino, and Puerto Rican extraction (table 5). The number of persons gainfully employed in June averaged 1.8 for the former and 2.4 for the latter. The families with a Hawaiian or

TABLE 5.—Number of Persons and Number of Earners in Families of Wage Earners and Clerical Workers in Honolulu, by Race of Family Head, June 1943

Item	All families	Caucasian	Hawaiian and part-Hawaiian	Other	
				Total ¹	Japanese
Total number of families.....	100	28	18	54	34
Number of members in family:					
2 to 5 members.....	48	19	9	20	14
5 to 7 members.....	27	7	3	17	10
7 or more members.....	25	2	6	17	10
Number of earners in family:					
1 earner.....	41	15	6	20	11
2 earners.....	25	4	8	13	9
3 earners.....	17	8	2	7	3
4 or more earners.....	17	1	2	14	11
Average number of persons per family.....	5.0	3.9	5.2	5.5	5.4
Average number of earners per family.....	2.2	1.8	2.0	2.4	2.6

¹ In addition to Japanese, includes Chinese, Korean, Filipino, and Puerto Rican.

¹³ Half of those covered in the survey were of Portuguese extraction.

part-Hawaiian head covered in the survey contained 5.2 members, on the average, of whom 2.0 were gainfully employed during June. Over half of the Caucasian families were supported by a single earner, as compared with one-third of the Hawaiian and slightly over a third of all the other families. A third of the families of Japanese ancestry contained 4 or more earners.

Individual earnings were largest among the Caucasian group. The average earner in Caucasian families received \$217, gross, during June, as compared with \$166 for Oriental workers (table 6). Workers of Japanese ancestry, who were numerically most important in this group, earned \$149 on the average.¹⁴ Hawaiian workers received an average wage of \$185 before deductions.

TABLE 6.—*Money Income and Earnings of Families of Wage Earners and Clerical Workers in Honolulu, by Race of Family Head, June 1943*

Item	All families	Caucasian	Hawaiian and part-Hawaiian	Other	
				Total ¹	Japanese
Total number of families.....	100	23	18	54	34
Families with net money income, in June, of—					
\$100 and under \$250.....	31	6	5	20	11
\$250 and under \$350.....	26	12	4	10	9
\$350 and under \$450.....	20	6	5	9	8
\$450 and over.....	23	4	4	15	6
Average money income in June:					
Total income per family, before deductions.....	\$414.68	\$409.37	\$412.10	\$418.29	\$397.14
Income after deductions:					
Per family.....	372.05	355.64	364.34	383.12	366.67
Per person.....	74.56	90.53	70.52	69.89	68.50
Average money earnings in June:					
Total earnings per family—					
Before deductions.....	396.86	395.07	380.10	408.38	384.77
After deductions.....	354.23	341.34	332.35	368.21	354.30
Total earnings per earner—					
Before deductions.....	181.22	216.90	184.91	166.28	148.66
After deductions.....	161.75	187.40	161.68	151.78	136.89

¹ In addition to Japanese, includes Chinese, Korean, Filipino, and Puerto Rican.

Because of smaller families, the average income received by Caucasian families was slightly lower than for any other major racial group except the Japanese. On a per-capita basis, however, average income (after pay-roll deductions) ranged downward from \$90 for the Caucasian group to \$70 for the Oriental, Filipino, and Puerto Rican families.

Family Outlay

THE FAMILY BALANCE SHEET IN RELATION TO INCOME

In Honolulu, as elsewhere, the smaller the income, the smaller the savings and the larger the proportion of income spent each month for living essentials. Thus, among families with net incomes between \$100 and \$250 per month, outlays for current consumption during

¹⁴ The number of families of Chinese ancestry covered in the survey was too small to provide reliable data for separate analysis. A composite picture of the income and earnings of families of Chinese, Korean, Filipino, and Puerto Rican origin has little significance because of the heterogeneity of the group. Information from these families together with that furnished by families of Japanese ancestry, however, provides a good indication of the economic level of the "third stratum" at the present time.

June amounted to 85 percent of gross income and 95 percent of the income received after pay-roll deductions (table 7). Among families at the higher end of the income scale, consumption expenditures amounted to 53 and 58 percent of gross and net income, respectively.

TABLE 7.—Money Income, Expenditures, and Savings of Families of Wage Earners and Clerical Workers in Honolulu, by Net Money-Income Class,¹ June 1943

Net money-income class ¹	Total income	Income received ¹	Expenditures for—			Savings ³
			Current consumption	Gifts and contributions	Personal taxes ²	
Average amount per family in June 1943						
\$100 and under \$250.....	\$223.49	\$209.58	\$198.65	\$11.11	\$21.99	\$1.74
\$250 and under \$350.....	335.69	298.45	237.51	7.40	53.16	37.62
\$350 and under \$450.....	455.40	401.83	300.79	13.90	95.03	44.68
\$450 and over.....	712.77	648.31	376.39	12.96	130.98	192.44
All families.....	414.68	372.05	270.06	11.13	70.97	62.52
Percent of total income						
\$100 and under \$250.....	100.0	89.8	85.1	4.8	9.4	0.7
\$250 and under \$350.....	100.0	88.9	70.8	2.2	15.8	11.2
\$350 and under \$450.....	100.0	88.2	66.0	3.1	21.1	9.8
\$450 and over.....	100.0	91.0	52.8	1.8	18.4	27.0
All families.....	100.0	89.7	65.1	2.7	17.1	15.1

¹ Total money income in June minus specified pay-roll deductions (see table 1).

² Includes June installments on Federal and Territorial income taxes and victory taxes deducted from pay. Excise taxes are included as expenditures for the item to which they apply.

³ Includes war bonds purchased directly and through pay-roll deductions and social-insurance contributions deducted from pay (see table 8 for details).

Personal taxes at the higher income levels were substantially larger than at the lower levels, as would be expected. Among families with net incomes below \$250 per month, they took more than 9 percent of gross income. If the June income taxes could have been evenly distributed over the 3-month period, April through June, the tax payments, including victory-tax deductions, would have represented the following proportions of gross income, for families with specified net incomes:

	Percent of gross income
\$100 and under \$250.....	4.5
\$250 and under \$350.....	7.5
\$350 and under \$450.....	9.3
\$450 and over.....	8.5
All families.....	8.0

Individual purchases of war bonds and stamps by wage earners and clerical workers were relatively generous, in relation to income, in view of the considerable amounts already allotted for this purpose through pay-roll deductions (table 8). The total going to war-bond purchases in June represented nearly 8 percent of gross income. Families at each income level except the lowest devoted approximately 8 percent of their gross income to bonds. Those at the lowest level spent 6 percent in this manner, although many went into debt to do so.

TABLE 8.—Personal Taxes, War-Bond Purchases, and Other Savings of Families of Wage Earners and Clerical Workers in Honolulu, by Net Money-Income Class,¹ June 1943

Item	All families	Families with net money income, ¹ in June, of—			
		\$100 and under \$250	\$250 and under \$350	\$350 and under \$450	\$450 and over
Personal taxes.....	\$70.97	\$21.99	\$53.16	\$96.03	\$130.98
Income taxes paid directly.....	56.66	17.18	41.78	80.57	105.91
Victory taxes deducted from pay.....	14.31	4.81	11.38	15.46	25.07
Savings.....	62.52	1.74	37.62	44.68	192.44
War bonds and stamps.....	31.88	14.12	27.68	38.02	55.23
Purchased directly.....	12.05	2.68	7.63	11.25	30.38
Allotted through pay roll.....	19.83	11.44	20.05	26.77	24.85
Social-insurance contributions ² deducted from pay.....	8.49	7.66	5.81	11.34	14.54
Residual net surplus or deficit ³	22.15	-20.04	4.13	-4.68	122.67

¹ Net money income in June after pay-roll deductions for victory taxes, war-bond purchases, and social insurance contributions.

² Unemployment compensation, Federal old-age and survivors insurance, Federal retirement benefits, and Territorial public welfare.

³ Savings include payments on life insurance and annuities; mortgage principal paid; increase in cash, in bank accounts, and in money loaned; and repayments on debts. Deficits comprise decrease in cash or bank accounts, amounts received from sale of property and on debts due, and increases in mortgage principal and in debts. Included also in the net figure is a small amount accounted for by minor discrepancies in figures furnished by families on their income and disbursements.

Gifts and contributions during June showed no clear relation to family income, since they always vary greatly in any single month. When averaged over the entire year ending June 1943, amounts spent per month for gifts to friends and contributions in support of relatives, war relief, church, and welfare organizations were as follows for families with specified net incomes in June:

	Per month
\$100 and under \$250.....	\$5.91
\$250 and under \$350.....	8.32
\$350 and under \$450.....	11.70
\$450 and over.....	20.52
All families.....	11.05

As previously noted, families in the lowest bracket found their incomes insufficient to cover current expenditures, gifts, taxes, war-bond purchases, and social-insurance contributions. They ended the month with a net cash deficit of \$20, or nearly 9 percent as much as their gross income (table 8). Even if it is assumed that two-thirds of the money used to pay income taxes was withdrawn from savings accumulated for that specific purpose, they would still have been over \$8 "in the red." Families in the two middle income brackets came out approximately even. Those with the very largest cash incomes—that averaged \$648 after deductions—saved 19 percent of this sum, in addition to the amount spent for bonds, or about 17 percent of their gross income.

SUMMARY OF EXPENDITURES FOR MAJOR CATEGORIES OF CONSUMPTION

In considering family buying, the 100 families surveyed have been analyzed together rather than by separate racial groups, first, because

the number studied was small, and, second, because food-consumption habits have been so Americanized during the war as to make it less important than it would have been before the war to consider consumption by racial groups. This is the result of both the higher incomes and the limited supplies of oriental-type foods available. In pre-war days, there were also significant differences in habits of dress and in home furnishings. Now native dress has been discarded almost completely by the residents of Japanese ancestry. On the other hand, more women of Chinese extraction wear native dress now than formerly, although it remains the exception rather than the rule for street wear.

Of the \$270 spent for goods and services in June by the average family in the group surveyed, 44 percent went for food, nearly 17 percent for rent and home maintenance,¹⁵ 13 percent for clothing and personal care, and 11 percent for recreation, reading matter, tobacco, and liquor. Another 13 percent was divided almost equally between transportation costs and medical care, leaving a small amount for miscellaneous items. (See table 9 and chart 2.)

Average outlays per family for all categories of consumption except housing increased with fair regularity as income increased. The decline in housing expenditures reflects the increasingly large proportion of families that owned their homes, since the current costs of upkeep, exclusive of mortgage payments (which are considered savings), were considerably less than cash rents.

As a proportion of total expenditures for current consumption, food was, of course, most important, ranging from 48 percent at the lowest level to 42 percent for families that received \$350 to \$450 net income. Housing was next most important for the lowest income group, followed by clothing. At all other income levels, however, clothing ranked after food, taking 10.4 to 11.5 percent of the total.¹⁶ Housing took fourth place for the families in the two middle income ranges, but fell to ninth at the highest level. However, when fuel, household operation, and furnishings expenditures were combined with outlays for housing proper, they totaled 17 or 18 percent at the three lower income levels and 14 percent at the highest. Medical care and transportation both ranked among the first six separate categories for families at each income level.

On a per-capita basis, average expenditures for goods and services amounted to \$42 at the \$100 to \$250 income level, as compared with approximately \$60 at the three succeeding income levels. For each category except housing, families in the lowest income class spent less than those with larger incomes. Among the three groups of families with higher incomes, however, there were no consistent differences in average per-capita outlays, except for a steady decline in those for housing.

¹⁵ Includes current housing expenses of home owners and outlays by all families for cooking fuel, light, and refrigeration; household operation, supplies, and services; and housefurnishings.

¹⁶ Clothing purchases were at a considerably lower rate in June than during the year ending July 1943, when family outlays for clothing averaged \$515, or 16 percent of total annual expenditures for current consumption.

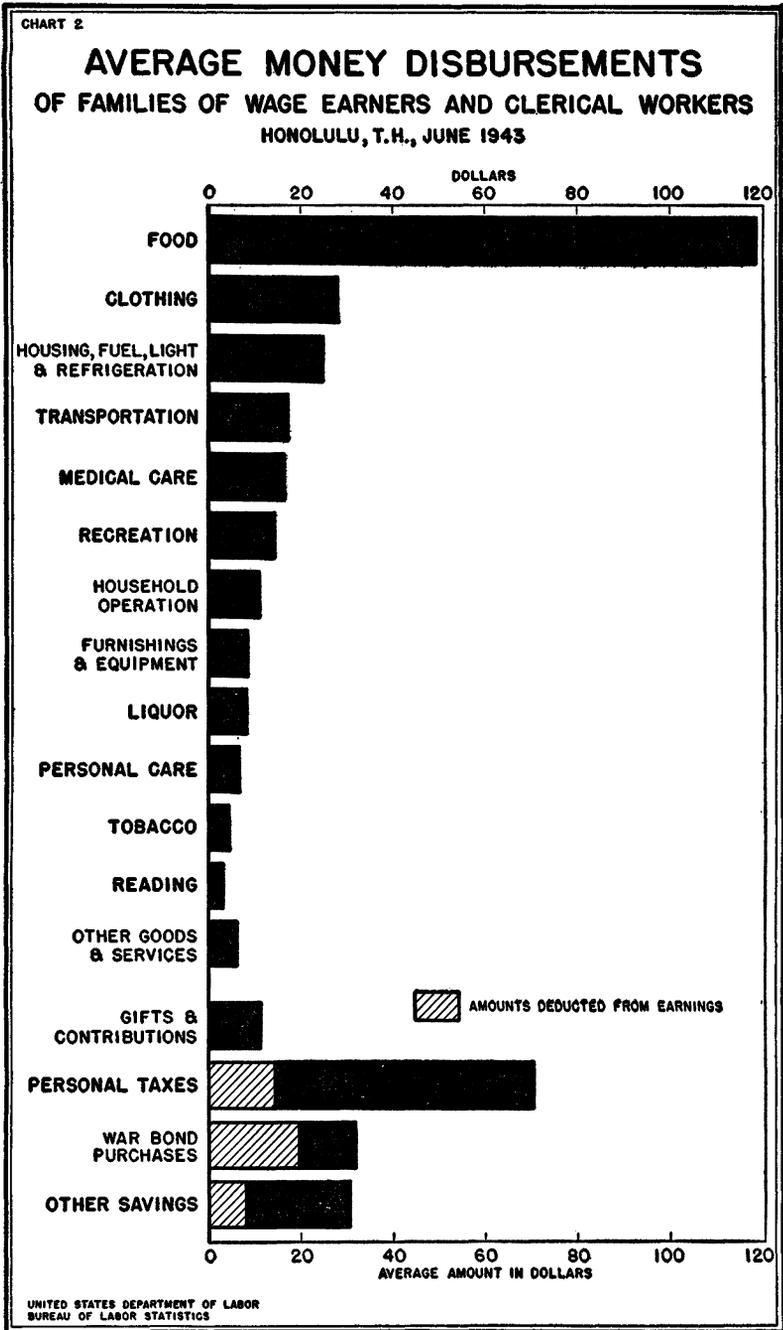


TABLE 9.—Average Monthly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, by Net Money-Income Class,¹ June 1943

Item	All families	Families with net money income ¹ in June of—			
		\$100 and under \$250	\$250 and under \$350	\$350 and under \$450	\$450 and over
Average expenditures in June 1943					
Food ²	\$119.00	\$95.01	\$105.08	\$124.75	\$162.06
Housing.....	17.81	20.56	17.61	19.32	³ 13.00
Fuel, light, and refrigeration.....	7.26	5.65	6.46	8.89	8.94
Household operation.....	10.96	7.08	10.14	11.40	16.75
Furnishings and equipment.....	8.77	2.53	5.84	14.82	15.22
Clothing.....	28.63	18.94	26.36	34.50	39.15
Personal care.....	6.95	5.65	6.68	7.27	8.74
Medical care.....	16.59	12.96	13.42	18.38	23.51 ⁴
Transportation.....	17.46	8.76	18.25	18.57	27.32
Reading.....	3.07	1.39	2.78	3.16	5.57
Recreation.....	14.47	8.12	8.93	21.56	23.19
Tobacco.....	4.47	3.68	4.44	4.30	5.68
Liquor ⁵	8.42	5.12	7.20	5.34	16.91
Miscellaneous ⁶	6.20	3.20	4.32	8.53	10.35
Total.....	270.06	198.65	237.51	300.79	376.39
Percent of total expenditures					
Food ²	44.0	47.8	44.2	41.5	43.1
Housing.....	6.6	10.4	7.4	6.4	3.4
Fuel, light, and refrigeration.....	2.7	2.8	2.7	3.0	2.4
Household operation.....	4.1	3.6	4.3	3.8	4.4
Furnishings and equipment.....	3.2	1.3	2.5	4.9	4.0
Clothing.....	10.6	9.5	11.1	11.5	10.4
Personal care.....	2.6	2.8	2.8	2.4	2.3
Medical care.....	6.1	6.5	5.6	6.1	6.2
Transportation.....	6.5	4.4	7.7	6.2	7.3
Reading.....	1.1	.7	1.2	1.0	1.5
Recreation.....	5.4	4.1	3.8	7.2	6.2
Tobacco.....	1.7	1.9	1.9	1.4	1.5
Liquor ⁵	3.1	2.6	3.0	1.8	4.5
Miscellaneous ⁶	2.3	1.6	1.8	2.8	2.8
Total.....	100.0	100.0	100.0	100.0	100.0

¹ Money income in June after specified pay-roll deductions (see table 1).

² Includes expense for food at home, meals and liquor purchased away from home.

³ Includes expense for bottled liquor only.

⁴ Including education, union dues, tools, funeral and cemetery expense, interest on debts, war insurance on property.

⁵ This low average reflects the large proportion of families that owned their homes and incurred little expense for upkeep during the month.

FOOD PURCHASES

Expense per meal per person averaged 27 cents for food served in the homes of wage earners and clerical workers in Honolulu during the summer of 1943.¹⁷ Meals eaten at restaurants, cafeterias, canteens, and fountains cost 56 cents per person, on the average. These findings are based on detailed information provided by the 100 families surveyed on food purchases during the 7 days preceding the date of interview. During the week an average of \$25.65 per family was spent for food to be eaten at home or carried from home in box lunches, \$4.85 for meals away from home, and \$0.64 for snacks and

¹⁷ The total expense for food at home was divided by the number of meals eaten in the home or carried from home during the week. Of the total number of meals prepared at home, 97.8 percent were eaten by family members and 2.2 percent by boarders and guests. Infants' feedings were not considered meals.

for drinks in restaurants and at bars (table 10).¹⁸ Food supplements in the form of vitamin and mineral concentrates and cod-liver oil represented an additional \$0.22. Nearly 18 percent of the total outlay for food was for food purchased outside the home. Of all the meals eaten by family members during the week, 90 percent were eaten at home, 8.5 percent were purchased away from home, and the remainder were obtained as guests of friends or without charge at the place of employment.

TABLE 10.—Food: Average Weekly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, by Money-Income Class,¹ July–August 1943²

Money-income class in June ¹	Food expenditures in 1 week				
	Average amount per family			Percent of total	
	Total	For preparation at home	In restaurants, etc. ³	For preparation at home	In restaurants, etc. ³
All incomes.....	\$31.14	\$25.65	\$5.49	82.4	17.6
\$100 and under \$250.....	22.54	19.65	2.89	87.2	12.8
\$250 and under \$350.....	28.56	24.93	3.63	87.3	12.7
\$350 and under \$450.....	35.37	28.47	6.90	80.5	19.5
\$450 and over.....	41.99	32.11	9.88	76.5	23.5

¹ Money income in June after pay-roll deductions (see table 1).

² 78 schedules cover a 7-day period in July; 22, a 7-day period in August.

³ Includes alcoholic drinks purchased in restaurants and at bars.

Expenditures for food away from home were considerably higher for families with larger incomes than for those receiving less. About 13 percent of the total for food was spent in this way by families in the two lowest income classes, and 24 percent by those who received cash incomes of \$450 and over in June.¹⁹ Since most of the meals purchased away from home were purchased at work, the amounts spent are closely related to the number of earners.

Substantially all families with incomes above \$450 had some expense during the week for meals out, as compared with slightly less than two-thirds of the families at each of the three lower-income levels. Average expense for these meals ranged from 51 cents for persons in families with spendable incomes under \$250 in June to approximately 58 cents for those at higher income levels.

Families in the lowest income group spent considerably less per person per meal served at home than did those with larger incomes—22 cents as compared with an average of 31 cents at the next two income

¹⁸ Average food expense per week was somewhat lower according to the families' estimates for June than for the 7-day period for which detailed information was obtained. A similar relationship has been found in all previous studies of family expenditures by the Bureau of Labor Statistics. In these studies the "food check list" information was generally obtained after the general schedule had been completed. The differences have been attributed to the fact that families tend to forget certain expenditures when they are called on to make a general estimate for a relatively long period of time and that a total derived from reports on specific items is more inclusive and therefore more accurate. In the Honolulu survey, however, detailed information on food purchases was obtained first. The homemaker was then asked whether expenditures during the week covered were usual; if not, she was asked either to itemize expenditures that were larger or smaller than normal during the week as compared with her food outlays in June, or, if this was not practical, to estimate her total expenditures for food during June. A number of the women were very positive regarding their average weekly food expenditures.

Although it seems likely that the "food check list" reports on food purchased for home use include some expenditures made prior to the 7-day period covered, there is no evidence that there is any bias in the distribution of the total among various foods. However, if expenditures for food at home were overstated, the proportion for food away from home, which was reported as substantially the same as in previous months, may be slightly understated.

¹⁹ Money income in June, after specified pay-roll deductions. See p. 9, table 7.

levels and 28 cents at the highest. This difference probably reflects in part the economies that are possible when buying for very large families.

More than one-third of the expense for food at home was for meat, poultry, and fish (table 11). Roughly one-fifth was for dairy products, eggs, fats, and oils and another fifth for fruits and vegetables. The grain and baking products group accounted for more than a tenth of the food cost, reflecting the importance of rice in the Oriental diet. The remaining amount went for sweets, beverages, special Hawaiian and Oriental foods, condiments, and miscellaneous foods. The various food groups took roughly the same share of the food-at-home budget of families with low as with high incomes. In general, the diet of families of wage earners and clerical workers during the summer of 1943 appears to have been rich in calories, protein, and protective foods.

Food rationing had not been extended to the Hawaiian Islands by June 1943, and for the previous year, at least, Honolulu had had an ample supply of most foods. Fresh fish, however, which is traditionally of great importance in the diet of Hawaiians and Japanese, was very scarce, largely as a result of wartime restrictions on fishing. The local supply of chicken (also popular) was likewise inadequate, and shipments of poultry from the mainland had been negligible except for holiday turkeys.

Despite the shortages, 41 of the 100 families bought fresh or quick-frozen fish during the week surveyed, and 30 bought chicken. A number of these purchases were made at prices above the ceilings established by the Territorial Office of Price Administration. This explains in part the large expenditures per family buying—\$3.00 for chicken and over \$1.90 for fish.

The fish and chicken shortage undoubtedly partially accounts for the relatively large amounts spent for beef and other meats. Although both cattle and hogs are raised in the Islands, most of the meat in the Honolulu market comes from the mainland. Ninety-three of the families bought one or more cuts of beef—81 of these bought steaks and/or roasts during the week. Hamburger was next in popularity, with 57 families reporting purchase, as compared with only 32 buying cheap cuts for boiling. Fresh pork was used almost as much as beef, expenditures for pork comprising 9 percent, and for beef 11 percent, of the total expense for food at home. During the week covered, fresh pork was purchased by 71 families, bacon and/or smoked or cured ham by 55.

More money was spent for whole milk than for any other food item except steaks and roasts (table 11).²⁰ At the usual price of 20 cents per quart both in stores and delivered, \$1.45 provided an average of more than 1 quart per family per day. There were 14 families that did not buy any whole milk during the week, but 9 of these bought evaporated milk, leaving only 5 that bought neither. Nearly half of the families bought some evaporated milk. Total purchases represented an average of more than six 14½-ounce cans per family buying.²¹

²⁰ The milk expenditures shown in table 11 include the charges incurred for milk that was delivered during the week to families that were billed once a month for delivered milk.

²¹ In September 1943 the Territorial Office of Food Control made a plea for a voluntary reduction of 10 percent in purchases of evaporated milk, 20 percent in butter consumption, and 33 percent in purchases of canned fruits and vegetables.

TABLE 11.—Food—At Home: Average Weekly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, July–August 1943¹

Item	Weekly expenditures for food at home		Item	Weekly expenditures for food at home	
	Average per family	Percent of total		Average per family	Percent of total
All foods.....	\$25.65	100.00	Vegetables and soups—Continued.		
Meats, poultry, and fish.....	8.80	34.31	Fresh and frozen—Continued.		
Beef.....	2.91	11.35	Turnips.....	\$0.11	0.43
Steaks and roasts.....	2.09	8.15	Watercress.....	.18	.70
Other, fresh.....	.63	2.46	Other fresh and frozen vegetables.....	.50	1.95
Corned, dried, chipped.....	.19	.74	Canned vegetables and soups.....	.75	2.93
Veal, fresh.....	.17	.66	Asparagus.....	.12	.47
Lamb, fresh.....	.14	.55	Corn.....	.06	.23
Pork.....	2.34	9.12	Peas.....	.06	.23
Fresh.....	1.08	4.21	Other canned vegetables.....	.16	.63
Smoked or cured:			Soup.....	.24	.94
Bacon.....	.32	1.25	Tomato sauce and paste, and catsup.....	.11	.43
Ham.....	.79	3.08	Dried vegetables.....	.02	.08
Sausage and salt pork.....	.15	.58	Fruits.....	2.23	8.69
Other meats ².....	.96	3.74	Fresh and frozen.....	1.81	7.06
Poultry.....	1.18	4.60	Avocados.....	.07	.27
Chicken.....	.90	3.51	Bananas.....	.13	.51
Other.....	.28	1.09	Oranges.....	.89	3.47
Fish and other sea food.....	1.10	4.29	Other citrus fruit.....	.12	.47
Fresh and quick-frozen.....	.79	3.08	Papaya.....	.17	.66
Canned, dried, and other.....	.31	1.21	Watermelon.....	.21	.82
Dairy products and eggs.....	3.73	14.54	Other fresh and frozen fruits.....	.22	.86
Milk, whole, bottled.....	1.45	5.65	Canned.....	.38	1.47
Milk, evaporated.....	.36	1.40	Pears.....	.06	.23
Milk, other.....	.03	.12	Pineapple.....	.06	.23
Cream (canned, A voset).....	.03	.12	Fruit cocktail and salad mix.....	.08	.31
Ice cream.....	.35	1.36	Other canned fruits.....	.18	.70
Cheese.....	.15	.51	Dried.....	.04	.16
Eggs.....	1.38	5.38	Canned and bottled juices.....	.49	1.91
Fats and oils.....	1.13	4.41	Grape.....	.07	.27
Butter.....	.54	2.11	Pineapple.....	.08	.31
Mayonnaise.....	.28	1.09	Tomato.....	.10	.39
Other fats and oils ³.....	.31	1.21	Citrus fruit juices.....	.08	.31
Grain and bakery products.....	2.74	10.68	Other juices.....	.16	.63
Bread.....	.71	2.77	Beverages.....	.98	3.82
Other baked goods ⁴.....	.73	2.84	Tea.....	.11	.43
Flour and prepared mixes.....	.08	.31	Coffee.....	.19	.74
Rice.....	.95	3.70	Soft drinks and fruit drink mixes.....	.62	2.42
M a s a r o n i, s p a g h e t t i, and noodles.....	.13	.51	Other.....	.06	.23
Other cereal and grain products.....	.14	.55	Miscellaneous foods.....	1.79	6.98
Sugar and sweets.....	.76	2.96	Local.....	1.11	4.33
Sugar.....	.25	.97	Poi.....	.41	1.60
Candy.....	.29	1.13	Miso and natto ⁵.....	.09	.35
Jellies, jams, and preserves.....	.14	.55	Tofu and aburage ⁶.....	.06	.23
Other sweets.....	.08	.31	Soya sauce.....	.45	1.76
Vegetables and soups.....	3.00	11.70	Salt-pickled vegetables and other pickled foods.....	.10	.39
Fresh and frozen.....	2.23	8.69	Other.....	.68	2.65
Potatoes ⁷.....	.27	1.05	Nuts.....	.06	.23
Beans.....	.16	.63	Condiments and sauces.....	.13	.51
Cabbage ⁸.....	.34	1.32	Olives and dill pickles.....	.14	.55
Cucumbers.....	.08	.31	Packaged dessert mixtures.....	.09	.35
Lettuce.....	.17	.66	Other foods.....	.26	1.01
Onions.....	.23	.90			
Tomatoes.....	.19	.74			

¹ 178 schedules cover a 7-day period in July; 22, a 7-day period in August.

² Including bologna, frankfurters, canned luncheon meats, liver, etc.

³ Including oleomargarine, shortening, salad and cooking oils, etc.

⁴ Including rolls, crackers, cookies, cakes, etc.

⁵ White potatoes, \$0.26; sweetpotatoes, \$0.01.

⁶ Including head, Chinese, mustard varieties, and swamp cabbage.

⁷ Fermented soybean foods.

Egg purchases by the 100 families of wage earners and clerical workers surveyed aggregated 197 dozen during the week, or an average of about $2\frac{1}{2}$ dozen for each of the 80 families reporting expense for eggs. Fresh Island eggs, at an average price of 79 cents per dozen, made up 37 percent of the total. California eggs were 15 cents less per dozen, on the average. Some of these were cold storage, many months old; others, fresh at the time of shipment, had been in transit 10 to 14 days and may or may not have been refrigerated during that time. It is the custom to sell such eggs as "California eggs," without information as to their age. Fresh local eggs are, therefore, in great demand, but the supply is insufficient and many never reach the retail stores. Hawaiian and Oriental wage earners are at an advantage in obtaining local eggs, since they are most likely to have friends among the poultry producers.

Butter purchases during the week averaged more than $1\frac{1}{2}$ pounds for each of the 61 families reporting such expense. Purchases of oleomargarine were negligible. Outlays for mayonnaise and other fats and oils, which are important in Oriental cooking, together amounted to slightly more than butter expenditures.

Expenditures for rice were larger than for any other type of grain product. Oriental families commonly buy rice in quantity. Of the 34 families that purchased rice during the week, 8 bought in 100-pound bags and 3 in "half bags" (50 pounds). Few families do much baking at home and expenditures for flour were small. Purchases of bread, reported by all but 2 families, amounted to about 1 loaf per day, at 10 cents a loaf. Amounts spent for other baked goods were about the same as for bread, on the average—7 in every 10 families reporting expense for commercially baked cookies, cake, pies, or sweet rolls.

About two-thirds of the families bought white potatoes during the week—an average of nearly 6 pounds per family purchasing.

Poi, the native Hawaiian substitute for both bread and potatoes, has become popular with many Island residents. Despite the serious shortage of poi in Honolulu, resulting from a decline in taro production on Oahu, 27 of the 100 families reported purchase during the week, with expenditures averaging slightly over \$1.50. At the ceiling price of 12.5 cents per pound, this meant an average purchase of about 12 pounds per family.

The large quantity of bread and potatoes purchased, in addition to rice and poi, suggests that the diet of wage-earner and clerical families in Honolulu is high in calorie content as well as in the protective foods.

Fruits and vegetables accounted for over one-fifth of the families' expenditures for food at home, with fresh produce much more important than canned. These purchases were supplemented from small home gardens in a few cases, although in most sections of Honolulu, summer gardens are not very successful since plants dry up unless watered daily and generously. Home gardens and commercial plantings have both been urged vigorously, to relieve the pressure on shipping.²² It is only since the outbreak of war, however, that any significant amount of land has been released from sugar and pineapple production for truck-garden purposes.

Approximately \$2 was spent during the week for fresh vegetables other than potatoes. Except for dry or mature onions, which ac-

²² The Territorial Office of Food Control has encouraged commercial production of vegetables on patriotic grounds, and price ceilings on local produce have been set at generous levels as an incentive.

counted for 19 cents, practically all vegetables were locally grown. Various types of cabbage were most important, with tomatoes (nearly 1 pound per family), watercress, lettuce, and beans next in importance. Expenditures for many of these vegetables were slightly higher and a few somewhat lower than would be expected on a year-round basis, to judge by monthly production estimates for the Territory.²³ Potato purchases were slightly low.²⁴

Outlays for fresh fruits, on the other hand, amounted to nearly 20 cents more per family, on the average, than would be expected the year round. Local watermelon and mainland plums, pears, and grapes, which were on the market during the period of the study, are highly seasonal. The papaya supply is also somewhat better in July and August than during most other months. Production of avocados and bananas, however, is relatively low in the summer.

Oranges shipped from California, were by far the most important among the fruits purchased, accounting for about half the total expense for fresh fruits. Of the 100 families surveyed, 72 purchased oranges during the week, averaging about 2½ dozen per family purchasing.²⁵ In addition to 89 cents spent for oranges, 12 cents went for lemons and grapefruit.

Canned vegetables and fruits together accounted for only 3.5 percent of food expenditures. Canned soups added another 1 percent. Expenditures for canned asparagus, which is generally considered a luxury item, were larger than for any other single item.

As soon after December 7 as supplies warranted, families in Hawaii were urged to lay in a supply of canned goods. The Federal Surplus Commodities Corporation has endeavored to maintain a stock pile of essential foods in the Territory for use in the event shipping is cut off. Several times, when warehouses were overcrowded, families were again urged to buy in quantity to relieve the shortage of storage space. The small purchases of canned goods may reflect consumption from stocks previously accumulated by the families. A considerable number of the wage-earner families interviewed, regularly bought canned goods as well as rice in quantity.

Juices, canned and bottled, were more important than canned fruits, comprising 2 percent of all expenditures for food at home. Tomato juice was most popular, followed by pineapple, citrus fruit, and grape. The popularity of canned pineapple and pineapple juice is striking in a city skirted by pineapple fields. Fresh pineapple is available in many stores throughout the year, but is expensive.

Soft drinks were purchased for consumption at home by 71 of the families.

Except for rice, special foods characteristic of the Oriental diet are at present surprisingly insignificant among families of wage earners and clerical workers in Honolulu. They comprised less than 4 percent of the total spent by the entire group for food at home. Lack of the foods formerly imported from the Orient is, of course, an important factor. Probably more important, however, is the tendency toward Americanization of food habits among second- and third-generation persons of Oriental extraction, particularly those that are employed

²³ Agricultural Outlook, University of Hawaii and U. S. Department of Agriculture Extension Service.

²⁴ Based on data on monthly unloads at Honolulu from the mainland during 1941 (the latest date for which information was available) in Agricultural Extension Circular No. 146, University of Hawaii and U. S. Department of Agriculture Extension Service.

²⁵ Based on an average price of 49 cents per dozen for oranges, 176 to 220 in size, as reported by the Department of Labor and Industrial Relations, Territory of Hawaii.

and therefore in close touch with Occidentals and their customs.²⁶ Present large incomes have given great impetus to adoption of American food habits, which are more costly than the Oriental diet.

HOUSING AND HOUSEHOLD OPERATION

Two out of every five families of wage earners and clerical workers surveyed in Honolulu owned their homes in June 1943, most of which were single-family dwellings (table 12). Of the renter group, over half lived in one-family houses and about one-fourth in two-family houses. The houses and apartments contained, on the average, 3.3 rooms, exclusive of baths, kitchens, and lanais (porches). About one-sixth of them contained 1 or 2 rooms, and less than a tenth as many as 5 or 6. Almost all of the very small dwellings were tenant-occupied; 26 of the 34 containing 4, 5, or 6 rooms were owner-occupied.

TABLE 12.—Housing: Size and Type of Dwelling Unit and Water and Telephone Facilities, Families of Wage Earners and Clerical Workers in Honolulu, June 1943

Item	All families	Renters	Owners
Number of families.....	100	59	41
Average number of rooms per dwelling.....	3.3	2.9	3.8
Average number of persons per room.....	1.5	1.7	1.4
Type of dwelling:			
1-family.....	72	33	39
2-family.....	17	15	2
Other.....	11	11	
Water facilities:			
Running hot and cold.....	40	19	21
Running cold only.....	60	40	20
Telephone in dwelling.....	46	17	29

¹ Includes 1 family for which type of dwelling was not reported.

² Includes 1 family with running hot and cold water outside dwelling

Both renters and owners were seriously crowded, however, with an average of 1.7 persons per room (exclusive of kitchen) in the tenant-occupied units and 1.4 per room in the owner-occupied units. The families that rented were smaller in size than those of home owners, and had 1 room less per dwelling, on the average.

In the studies of housing accommodations in war production areas on the mainland, 1.5 persons per room has been set by the National Housing Agency as the maximum for satisfactory accommodations. In arriving at this standard, kitchens (but not kitchenettes) were included as rooms. Since the data for the Honolulu study were obtained without this distinction, it is assumed for comparison purposes that all had kitchens.²⁷ Measured by this wartime standard, 17 of the 100 families surveyed were living in excessively crowded quarters;²⁸ another 32 dwellings housed between 1.0 and 1.5 persons per room (including kitchen). Thus, nearly half of the families lived

²⁶ As contrasted with the large number of first- and second-generation persons who operate small stores, and whose contact is mainly with others of their own national background.

²⁷ Families not having housekeeping facilities were excluded from the study.

²⁸ Families of war workers living in houses or apartments in 13 key production centers on the mainland have recently been surveyed by the U. S. Bureau of Labor Statistics at the request of the National Housing Agency to assist in determining whether more housing is needed in the city. The proportion of such families (excluding those not reporting number of rooms) in which the number of persons per room was in excess of 1.51 was as follows:

	Percent		Percent		Percent
Akron, Ohio.....	4	Lancaster, Pa.....	2	New Orleans, La.....	16
Baltimore, Md.....	6	Macon, Ga.....	13	Omaha, Nebr.....	4
Chester, Pa.....	5	Milwaukee, Wis.....	3	San Antonio, Tex.....	14
Denver, Colo.....	4	Mobile, Ala.....	20	San Diego, Calif.....	6
Harrisburg, Pa.....	3				

in homes providing less space than the generally accepted American standard of 1 person per room.

If kitchens are excluded from the room count, 42 of the 100 families surveyed had more than 1.5 persons per room, the present war housing accommodation maximum; and 69 had more than 1 person per room, the peacetime adequate housing standard. (See table 13.) The situation is particularly serious in view of the large number of persons 14 and over in these families.

TABLE 13.—Housing: Distribution of Families According to Number of Persons Per Room (Exclusive of Kitchen), by Tenure and Race of Family Head, Honolulu, June 1943

Persons per room	Total number of families	Number of families by—					
		Tenure		Race of family head			
		Renters	Owners	Hawaiian and part-Hawaiian	Caucasian	Japanese	Other
1.00 and under	31	16	15	6	17	5	3
1.01 to 1.50	27	15	12	3	5	13	6
1.51 to 2.00	25	15	10	4	5	10	6
2.01 and over	17	13	4	5	1	6	5
Total	100	59	41	18	28	34	20
Percentage distribution of families							
1.00 and under		27.1	36.6	33.3	60.7	14.7	15.0
1.01 to 1.50		25.4	29.3	16.7	17.9	38.2	30.0
1.51 to 2.00		25.4	24.4	22.2	17.9	29.4	30.0
2.01 and over		22.1	9.7	27.8	3.5	17.7	25.0
Total		100.0	100.0	100.0	100.0	100.0	100.0

Overcrowding was most pronounced among the large Oriental and Hawaiian families. Approximately half of the Chinese, Japanese, and Hawaiian homes had more than 1.5 persons per room (exclusive of kitchen), whereas only slightly over a fifth of the Caucasian families suffered from similar crowding. Three in five of the latter had quarters that provided at least 1 room for each family member.

As would be expected, there were relatively more home owners at the higher than at the lower income levels (table 14). Half of them estimated their homes would rent for \$50 or more; whereas half of the renters paid \$22 or less for their dwellings during the month of June²⁹ (table 15). The average rent was only slightly over \$24; with fewer than 1 in 10 families paying \$40 or more. A few of the tenant families occupied units in low-cost housing projects.

While real estate values in Honolulu have sky-rocketed as a result of the housing shortage, a large share of the rent increases took place when there was a change of tenant. These increases were particularly marked in Waikiki and other areas that cater to the white transient trade. Since most of the families covered in the survey are long-time residents and many had not moved since the war started, the rents they were paying in June probably were not much higher than in pre-war days, when crowded quarters were the best they could

²⁹ According to the Census returns for April 1940, half of all the tenant-occupied units in the city of Honolulu rented for less than \$21.61; and in the areas of the city most heavily populated by wage-earner families, half rented for less than \$19.45 (Census tracts 2-10, 12-16, 18, 19, 23, 24-26).

afford. Many might be glad to move to larger quarters now, however, if any could be found at fairly reasonable rates.

TABLE 14.—Housing: Tenure of Families of Wage Earners and Clerical Workers in Honolulu, by Money-Income Class ¹ and by Race of Family Head, June 1943

Money income in June	All families	Renters	Owners	Race of family head		All families	Renters	Owners
\$100 and under \$250.....	31	25	6	Hawaiian or part-Hawaiian.....	18	10	8	
\$250 and under \$350.....	26	17	9	Caucasian.....	28	16	12	
\$350 and under \$450.....	20	11	9	Japanese.....	34	22	12	
\$450 and over.....	23	6	17	Other.....	20	11	9	

¹ Money income in June after specified pay-roll deductions (see table 1).

TABLE 15.—Housing: Number of Families of Wage Earners and Clerical Workers Renting and Owning Homes in Honolulu, by Monthly Rent or Rental Value, June 1943

Monthly rent or rental value	Number of families		Monthly rent or rental value	Number of families	
	Renters	Owners		Renters	Owners
\$12 and under \$15.....	7	-----	\$75 and under \$100.....	-----	9
\$15 and under \$20.....	15	-----	\$100 and over.....	-----	6
\$20 and under \$25.....	15	-----	Total.....	59	41
\$25 and under \$30.....	8	1	Median rent or rental value.....	\$22.00	\$50.00
\$30 and under \$40.....	9	8	Mean rent or rental value.....	\$24.13	\$61.60
\$40 and under \$50.....	4	8			
\$50 and under \$75.....	1	9			

Facilities in the homes of wage earners and clerical workers in Honolulu were quite modern despite the crowded conditions. Two out of five had hot and cold running water; the remainder had cold running water. All had electric lights and about three out of four had gas or electric cooking stoves. Nearly half had telephones in their homes. The proportion of owners having both hot water and telephone facilities was considerably higher than the proportion of families who rented their homes.

In semitropical Honolulu, heat is not necessary in any season.³⁰ Electricity charges, therefore, accounted for nearly half the total June expenditures for fuel, light, and refrigeration, and gas for cooking took another 28 percent. Electricity charges were probably lower than normal, however, because of stringent black-out restrictions in June 1943.³¹ Average monthly expenditures for fuel, light, and refrigeration items by families of wage earners and clerical workers in Honolulu in June 1943 were as follows:

	Number of families reporting	Average expenditure per family in June
All items.....	99	\$7.26
Electricity.....	¹ 97	3.50
Gas.....	62	2.07
Kerosene.....	27	.52
Wood.....	5	.70
Charcoal.....	3	.16
Ice.....	11	.31

¹ Lights were included in the rent paid by the 3 remaining families.

³⁰ Homes in some of the more exclusive heights areas require fireplaces.

³¹ Black-out regulations were gradually relaxed, beginning in the summer of 1943, and the black-out was lifted entirely in the spring of 1944.

Kerosene was purchased by a fourth of the families as cooking fuel, and by a few others as fuel for heating water. Wood and charcoal were purchased by a small number of Japanese families, primarily for use in heating water for their outside baths.³² A large majority of the families had mechanical refrigerators. Eleven families reported purchase of ice, with an average expenditure during the month of \$2.82; for the entire group of families, however, this amounted to less than 5 percent of fuel, light, and refrigeration outlays.

Other services and supplies for household operation required an average monthly expenditure of about \$11 per family. Laundry sent out was the largest single item, amounting to \$2.23 or one-fifth of the total. The following statement shows average monthly expenditures for items of household operation by families of wage earners and clerical workers in Honolulu in June 1943.

	<i>Average expenditure per family in June</i>
All household operation	\$10. 96
Water rent	1. 55
Telephone	1. 72
Domestic service	1. 54
Laundry sent out	2. 23
Soap for household use	1. 58
Other cleaning, laundry, and kitchen supplies ¹ .....	. 75
Toilet paper, paper towels, napkins, etc. ....	. 74
Stationery, postage, etc. ....	. 48
Other household operation expense .....	. 37

¹ Includes cleaning powders, polishes, starch, bluing, steel wool, and matches.

Expenditures for domestic service, water rent, and soap for household and laundry use each absorbed \$1.60 per family. Four-fifths of the renters reported that water was included in their rental rate. Thus, expense for this service represents the costs incurred by owners and the relatively small group of tenants who paid their own water bills. Only 6 of the 100 families employed domestics in June. While it is not customary for families of wage earners or clerical workers to employ servants, it seems probable that somewhat more of the families, especially those with an employed homemaker, would have done so if domestic help had been available.

HOUSEFURNISHINGS

Despite wartime shortages of many types of housefurnishings, families of wage earners and clerical workers spent slightly over \$100 per family for such goods during the year ending July 1943³³ (table 16).

More was spent for radios and radio-phonographs than for any other single item. Ten of the 100 families purchased a radio, at an average price of more than \$100.

Expenditures for all types of kitchen, cleaning, and laundry equipment averaged \$15. Few families purchased durable equipment such as stoves, refrigerators, washing machines, vacuum cleaners, etc., but unit prices of such articles, even when second-hand, were so high that

³² Large tubs, in outside bath houses, arranged so that a fire may be built under the tub to heat the water, are common to many Japanese families. However, 12 of the 34 covered in the survey had running hot and cold water in their dwellings.

³³ The expenditure per family in June was about 35 cents more than the monthly average of the annual expenditures.

in the aggregate they accounted for two-thirds of this total. Pots, pans, mops, and other items that need frequent replacement comprised the other third.

Not only has furniture production on the mainland been curtailed during the war, but shipments to Hawaii have been severely limited to conserve shipping space. Some furniture, mostly bedroom suites, punees,³⁴ and mattresses are made locally. The rattan furniture that was so popular in pre-war days has been off the market entirely since the fall of the Philippines. Nevertheless, outlays for furniture amounted to \$27, on the average, with more than half of this going for bedroom furniture.

TABLE 16.—Furnishings and Equipment: Average Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943

Item	Average expenditure per family	Item	Average expenditure per family
All furnishings and equipment.....	\$101.18	Rugs and textile furnishings—Continued.	
Kitchen, cleaning, and laundry equipment.....	14.99	Blankets, comforts, and quilts.....	\$3.85
Kitchen stoves:		Bedspreads, slip covers, and afghans.....	2.15
Gas.....	2.39	Sheets.....	2.86
Kerosene.....	.27	Pillowcases.....	1.21
Refrigerators:		Draperies and curtains.....	1.67
Electric.....	2.04	Tablecloths and napkins.....	.66
Ice.....	.05	Bath and hand towels.....	2.30
Washing machines, electric.....	9.20	Yard goods for household:	
Vacuum cleaners, electric.....	1.23	Cotton.....	2.60
Other electrical equipment.....	1.79	Other.....	1.22
Pots, pans, and cutlery.....	2.02	Other textile furnishings.....	1.36
Brooms, brushes, and mops.....	1.49	Dishes, silver, and other tableware.....	3.71
Other kitchen, cleaning, and laundry equipment.....	1.51	China, dishes, and pottery.....	1.87
Bedroom, living room, and dining room furnishings.....	26.81	Glassware.....	.68
Suites:		Tableware.....	.69
Living room.....	5.16	Other.....	.47
Bedroom.....	9.13	Miscellaneous.....	31.22
Dining room.....	.32	Water heaters:	
Beds, cots, and cribs.....	3.59	Gas.....	2.36
Mattresses and matting.....	2.00	Other.....	.58
Daybeds, couches, and punees.....	1.01	Electric fans.....	1.44
Dressers, chiffoniers, and chests.....	1.03	Sewing machines.....	6.83
Sofas, settees, divans, etc.....	1.75	Light bulbs.....	1.23
Tables, large and small.....	1.10	Radios and radio phonographs.....	10.92
Other furniture.....	1.42	Flashlights and batteries.....	1.33
Rugs and textile furnishings.....	24.42	Blinds, shades, screens, and awnings.....	1.36
Floor covering:		Other furnishings and equipment.....	3.58
Linoleum and felt-base.....	2.87	Repairs and cleaning.....	1.54
All other floor coverings.....	1.67		

Wool rugs, which have been popular in Honolulu homes despite the warm climate, were practically unavailable during the year ending July 1943. This was also true of lauhala floor coverings, which are a local product, since the lauhala weavers have found small articles such as purses and mats more profitable. Expenditures for floor coverings (mostly for linoleum, felt-base floor covering, and small mats) were, therefore, small, averaging less than \$5.

Purchases of other textile furnishings accounted for about a fifth of the total, with sheets and bed coverings most important. A fifth of the families bought blankets of wool or wool mixtures. A third of the group reported expense for sheets, and nearly half bought bath towels.

³⁴ Wooden frame to hold bedsprings and mattress.

Sewing-machine expenditures were relatively large, reflecting the importance of home sewing. Six of the 100 families purchased sewing machines at an average price of more than \$100. In the aggregate these expenditures represented 7 percent of the total amount spent for housefurnishings.

Although a considerable number of families made some expenditure for dishes, glassware, or other tableware, the amounts spent were not large. For black-out use, 7 in every 10 families bought dim-out light bulbs, and more than half purchased flashlights or flashlight batteries.

CLOTHING

Informality is the general rule of dress for most of the population in Hawaii. A large proportion of the men regularly wear gaily colored sport shirts. Women commonly go bare-legged, wearing play shoes or sandals and simple wash frocks to the office. Many wear slacks when shopping downtown, as well as for sports and work in shops or in the navy yard. The black-out and the curfew had so restricted evening social activities that dress clothes were seldom needed. Heavy coats, which are usually the most expensive item in the mainland clothing budget, are unnecessary in Hawaii's warm climate.

During the 12-month period ending July 1, 1943, families of wage earners and clerical workers in Honolulu spent an average of \$515 for clothing, or 16 percent of their estimated annual expenditures for current consumption.³⁵ This compares with expenditures of \$278 during the calendar year 1941, or 12 percent of total expenditures, by mainland city families averaging 3.4 persons in size.³⁶

The large amounts devoted to clothing and accessories by the Honolulu families surveyed are due in the first instance to the large size of the families and to the proportion of the adults who worked during the year. A previous investigation showed that employed persons spend more for clothing than nonworking persons of the same age in families with similar incomes.³⁷ The large incomes, a result of the many opportunities during the war for employment at relatively high wages, undoubtedly encouraged some free spending. The large amounts—8 percent of the total clothing budget—spent for watches and jewelry is indicative of this. There is evidence, also, of hoarding of shoes during the spring of 1943, when shoe rationing was announced for the mainland. Purchases of shoes, sandals, and slippers amounted to almost \$90 per family, or 16 percent of the total for clothing of all kinds during the year.

³⁵ Spending was thus at a considerably higher rate than in June 1943, when clothing costs represented only 11 percent of consumption expenditures. The difference may be attributed to three factors: (1) traditionally heavy pre-Christmas sales of clothing; (2) the custom of outfitting children shortly before the opening of school in September; and (3) the June income tax installments.

³⁶ Unpublished data from a study of family spending and saving in wartime, by the U. S. Bureau of Labor Statistics. Clothing expenditures per person (including single consumers), exclusive of materials and services for home sewing, compared as follows:

	<i>Women and girls</i>	<i>Men and boys</i>
Honolulu, 1942-43:		
14 years and older.....	\$118	\$127
3 to 14 years.....	40	33
Mainland cities, 1941:		
16 years and older.....	99	86
3 to 14 years.....	47	39

³⁷ U. S. Bureau of Labor Statistics, Bulletin No. 638: Money Disbursements of Wage Earners and Clerical Workers, 1934-36—Summary Volume, pp. 121-123.

Ready-made garments, footwear, and accessories together amounted to 86 percent of the annual outlay for clothing; yard goods and findings to 7 percent; and tailor and seamstress services to 2 percent (table 17). The remaining 5 percent went for upkeep of clothes and shoes—mostly cleaning and pressing.

TABLE 17.—*Clothing: Expenditures for Ready-to-Wear, Yard Goods, and Services, Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Item	Annual clothing expenditures for—			
	Persons in the family during the full year ¹		Persons in the family at any time during the year	
	Average amount per person ²	Average amount per family	Average amount per family	Percent of total clothing expenditures
All clothing.....		\$495. 29	\$515. 37	100. 0
Ready-to-wear clothing and accessories ³		423. 48	443. 38	86. 0
Men and boys 14 years of age and over.....	\$114. 70	177. 79	189. 02	36. 9
Women and girls 14 years of age and over.....	113. 78	192. 30	200. 01	38. 8
Boys 3 through 13 years of age.....	32. 45	24. 34	24. 38	4. 7
Girls 3 through 13 years of age.....	39. 12	23. 87	23. 87	4. 6
Infants under 3 years ⁴	16. 71	5. 18	5. 20	1. 0
Yard goods and findings ⁴		36. 17	36. 17	7. 0
Seamstress and tailor ⁴		9. 61	9. 61	1. 9
Cleaning and pressing.....		22. 25	22. 39	4. 4
Shoe shines and repairs.....		3. 78	3. 82	. 7

¹ All persons 1 year of age or over who were family members for the entire year ending July 1943 and all infants under 1 year whose parents were family members for the entire year.

² The figures in this column are averages per person of the designated sex-age group. They differ from the totals in tables 18 and 22 because of the exclusion of expense for cleaning, pressing, alterations, and shoe shines and repairs.

³ Includes hats, gloves, belts, ties, handkerchiefs, watches, and jewelry.

⁴ Includes expenditures for clothing for unborn infants.

⁵ Information is not available as to whether any expenditures for yard goods, and seamstress and tailor, were for persons in the family only part of the year.

Much more home sewing is done by families of wage earners and clerical workers in Honolulu than on the mainland. Three-quarters of the Honolulu families reported purchases of yard goods during the year, as contrasted with 57 percent of the families of wage earners and clerical workers in large mainland cities during the depression years 1934-36,³⁷ when the economies of home sewing should have been especially attractive. Moreover, only 2.4 percent of the total clothing expenditures of the mainland families were for yard goods and findings. One in 3 of the Honolulu families had some expense for a seamstress or tailor, as compared with 1 in 20 of the families of mainland wage earners.

These differences are due in large measure to the Japanese custom of sewing at home. Most women of Japanese ancestry are expert seamstresses; many have used this skill to earn a livelihood. In pre-war days many probably made their own garments and those of their children as an economy measure. A second important factor is the small stature of the Japanese, which makes it difficult for adults to find ready-made garments that fit properly.

All of the Japanese families surveyed purchased yard goods during the year. Their expenditures for materials and findings averaged \$78

³⁷ *Idem*, table A-8, p. 270.

per family, or 15 percent of their total annual expenditures for clothing. An additional \$11 was paid to have the garments made. Expenditures by families of Japanese ancestry represented nearly three-fourths of the aggregate outlay for yardage and findings, and about two-fifths of the aggregate amount paid to seamstresses and tailors. A third of the payments for having clothes made to order were reported by families with a Hawaiian or part-Hawaiian head.

Cleaning and pressing services were most important to the Caucasian families, possibly because proportionately more of the workers in these families have white-collar jobs. Shoe shines and repair services, although small in the aggregate, were also relatively more important for these families.

The apportionment of clothing expenditures among ready-to-wear, yardage, and services was influenced more by racial background than by family income. The most clearly defined difference in relation to income was the greater importance of yardage and findings at the low than at the high income levels.

Over three-fourths of the aggregate annual outlay for clothing by all of the families studied went for ready-to-wear apparel for persons 14 years of age and over ³⁹ (table 17). When their expenditures for cleaning, pressing, alterations, and shoe-repair services are included, the proportion of the total chargeable to persons 14 or over rises above 80 percent.⁴⁰ An understanding of the types of apparel important to wage earners and clerical workers in Honolulu can, therefore, be obtained best by examining in some detail the manner in which their annual clothing expenditures were distributed.⁴¹

Clothing for women and girls 14 years of age and over.—Shoes and dresses were by far the most important purchases by women and girls during the year ending July 1943, with more than \$20 spent for each (table 18). Since outer wraps are seldom needed, coats, jackets, suits and sweaters together accounted for less than half as much, or only 8 percent of the total. Underwear was of considerable importance, with more than \$6 spent on slips alone. Although bare legs are more common than stockings on the Honolulu streets, expenditures for hose also amounted to more than \$6, over 5 percent of the clothing budget of women and girls 14 years and over.

Sport clothes are much more popular in Honolulu than in most mainland cities. Slacks are accepted for street wear and, with the Hawaiian-print blouses, are common garb for work. Overalls and regular work clothes have not been adopted by many working women, as they have in some West Coast aircraft and shipbuilding centers.

Purchases of native Hawaiian, Chinese, or Japanese dresses and sandals are negligible. Although the Chinese high-necked, split-skirt dress is not uncommon on the streets, and the Hawaiian holoku is popular for dancing, these garments are seldom for sale ready-made.

The large expenditures for many women's apparel items reflect both generally high prices and extensive purchases by some of the women

³⁹ Fourteen years was selected as the basis for classification because of the tendency for Honolulu children in their middle teens to dress as adults and because of frequency of employment (at least part-time) among children of this age at the present time.

⁴⁰ The survey provides no information on the allocation by age groups of expense for yard goods and findings nor on payments to seamstresses and tailors for making up garments.

⁴¹ Unless otherwise noted, all data presented subsequently refer to persons who were family members for the full year, since the inclusion of expenditures for persons who entered or left the family (whether for marriage, military service, employment elsewhere, or other reasons) only for the period that they were members of the family would distort the pattern of spending.

and girls surveyed. Although many apparel merchants contend that their customers now prefer high-priced merchandise to that lower in price, women in over a third of the families surveyed reported that they regularly shopped for underwear for themselves and their children in the 5 and 10 cent to \$1 variety stores which specialize in low-priced lines. The OPA ceilings on apparel and shoes, issued in the late summer and fall of 1943, reduced many prices, particularly for shoes, substantially below those paid by families during the period covered by the survey.⁴²

TABLE 18.—*Clothing: Average Annual Expenditures for Women and Girls' Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Item	Annual clothing expenditures for women		Item	Annual clothing expenditures for women	
	Average per woman	Percent of total		Average per woman	Percent of total
All clothing.....	\$118.27	100.0	Underwear, etc.—Continued.		
Dresses, slacks, sportswear, etc.....	34.69	29.3	Girdles, corsets.....	.82	.7
Dresses:			Brassieres.....	\$1.94	1.6
Rayon, silk.....	15.69	13.3	Panties.....	4.04	3.4
Cotton.....	4.81	4.1	Pajamas.....	.96	.8
Other.....	.19	.2	Nightgowns.....	2.06	1.7
Native costumes: Kimonos, hoo, and den sam, holokus, etc.....	.24	.2	Robes, housecoats, and beach robes.....	2.09	1.8
Skirts.....	1.95	1.6	Other.....	.17	.2
Blouses:			Footwear.....	31.39	26.5
Rayon, silk.....	2.76	2.3	Hose:		
Cotton.....	.71	.6	Rayon, silk.....	6.24	5.3
Slack suits:			Other.....	.51	.4
Rayon, silk.....	4.08	3.4	Anklets.....	.81	.7
Other.....	.96	.8	Shoes:		
Slacks and coveralls.....	1.52	1.3	Leather.....	19.60	16.6
Play suits, sun suits, and shorts.....	.77	.7	Fabric.....	1.51	1.3
Bathing suits.....	.75	.6	Sandals and slippers for street wear.....	1.43	1.2
Other.....	.26	.2	Slippers for bedroom wear.....	1.00	.8
Coats, suits, and jackets.....	9.38	7.9	Shoe shines and repairs.....	.29	.2
Coats:			Accessories.....	20.21	17.1
Light wool.....	2.78	2.4	Hats.....	1.35	1.1
Other.....	.14	.1	Gloves.....	.02	(?)
Suits.....	2.40	2.0	Purses.....	5.24	4.4
Sweaters.....	1.92	1.6	Handkerchiefs.....	.65	.6
Jackets.....	.84	.7	Jewelry and watches—purchase and repair.....	12.20	10.4
Raincoats.....	1.30	1.1	Other accessories.....	.75	.6
Underwear, nightwear, and robes.....	18.40	15.6	Cleaning, pressing, and alterations.....	4.20	3.6
Slips.....	6.32	5.4			

¹ Based on information provided by 169 women and girls 14 years of age and over who were members of the family during the full year. All but 3 of these had some expense for clothing during the year.

² Less than 0.05 percent.

Nearly a third of all the leather shoes purchased for women and girls 14 or over during that period cost more than \$7.50 per pair (table 19). About a sixth were obtained for less than \$4.50, but most of those were of the play-shoe type.⁴³

⁴² For example, according to prices on identical shoes collected by the Territorial Department of Labor and Industrial Relations, men's inexpensive quality street oxfords declined 12 percent in price and men's medium quality work shoes nearly 17 percent, when the price schedule went into effect.

⁴³ The average price of \$6.53 compares with an average price of \$4.52 for leather shoes purchased by women in mainland cities during 1941—unpublished data from a study of spending and saving in wartime, by the U. S. Bureau of Labor Statistics.

TABLE 19.—*Clothing: Distribution of Shoe Purchases, by Price, Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Shoes	Percentage distribution by purchase price		
	Men and boys 14 years of age and over	Women and girls 14 years of age and over	Children 3 to 13 years of age
Purchase price per pair ¹			
\$1.50 and under.....			2.5
\$1.51 to \$2.50.....	0.8	1.3	12.1
\$2.51 to \$3.50.....	2.3	4.8	28.1
\$3.51 to \$4.50.....	3.7	11.7	14.6
\$4.51 to \$5.50.....	17.2	16.9	25.5
\$5.51 to \$6.50.....	14.4	16.2	8.3
\$6.51 to \$7.50.....	23.3	18.1	7.0
\$7.51 to \$8.50.....	10.7	15.0	1.9
\$8.51 to \$9.50.....	12.4	10.6	
\$9.51 to \$10.50.....	9.6	2.9	
\$10.51 and over.....	5.6	2.5	
Total.....	100.0	100.0	100.0
Average number of pairs purchased ²	2.2	3.0	1.2
Average price per pair ¹	\$7.46	\$6.53	\$4.95
Median price per pair ¹	\$7.50	\$6.50	\$3.95

¹ Based on purchases of leather shoes by persons who were in the family at any time during the year.

² Based on purchases of leather shoes by persons who were members of the family for the full year.

TABLE 20.—*Clothing: Purchases and Prices of Selected Articles for Women and Men,¹ Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Item	Average number purchased per person ²	Price per article ³	
		Average	Median
Women's textile clothing:			
Dresses:			
Rayon.....	1.8	\$8.95	\$7.50
Cotton.....	1.0	4.62	3.95
Coats, light wool.....	.2	15.64	13.50
Slack suits, rayon.....	.5	8.40	7.95
Slips, rayon, silk.....	3.4	1.84	1.95
Panties, rayon.....	5.7	.59	.55
Brassieres.....	1.9	1.05	.75
Hose, rayon.....	3.4	1.31	1.35
Anklets, cotton.....	2.9	.27	.25
Men's textile clothing:			
Suits, light wool.....	.3	34.62	35.00
Trousers, wool.....	.8	11.28	10.00
Trousers, cotton.....	2.2	3.91	3.50
Jackets, leather.....	.3	13.26	13.00
Shirts:			
Work.....	4.0	1.78	1.50
Business.....	.4	2.31	2.25
Sport.....	3.1	2.85	2.95
Undershirts, cotton.....	7.2	.51	.50
Shorts, cotton.....	7.2	.49	.50
Hose, cotton.....	11.3	.33	.25
Handkerchiefs.....	8.8	.28	.15
Yard goods for clothing for all family members:			
Rayon.....	⁴ 13.6	⁵ 1.00	⁶ 1.00
Cotton.....	⁴ 28.4	⁵ .55	⁶ .50

¹ Persons 14 years of age and over.

² Averages based on number of women and men, respectively, who were members of the family for the full year.

³ Based on all articles purchased by persons who were in the family at any time during the year.

⁴ Average number of yards per family.

⁵ Price per yard.

The number of leather shoes purchased—3 pair per woman on the average—seems especially high since in Honolulu shoes are seldom worn at home after working hours. The extensive purchases clearly reflect the hoarding that occurred in the spring of 1943 when shoe rationing was announced for the mainland but was not extended to Hawaii. However, the popularity of play shoes, which are not very durable even when high-priced, and which are difficult to repair, is a second important factor.

Dresses purchased averaged three per person during the year, almost all of them rayon or cotton (table 20). Rayon dresses were more numerous than cotton, although the latter are common for street as well as house wear. Prices were below \$5.50 for a fourth of the rayon dresses purchased and above \$10.50 for about 30 percent (table 21). Cotton dresses, in general, were much cheaper, about half of these costing less than \$3.95.

For slips, rayon hose, and anklets, purchases per woman averaged one every 3 or 4 months, at prices averaging \$1.84, \$1.31, and 27 cents, respectively. Purchases of panties averaged one every other month.

TABLE 21.—*Clothing: Distribution by Price of Women's Rayon and Cotton Dresses,¹ Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Price class	Percentage distribution by purchase price of—		Price class	Percentage distribution by purchase price of—	
	Rayon dresses	Cotton dresses		Rayon dresses	Cotton dresses
\$1.50 and under.....		2.7	\$8.51 to \$9.50.....	3.3	7.1
\$1.51 to \$2.50.....	0.3	12.0	\$9.51 to \$10.50.....	8.2	
\$2.51 to \$3.50.....	1.0	28.8	\$10.51 to \$11.50.....	6.9	.5
\$3.51 to \$4.50.....	10.9	13.6	\$11.51 to \$12.50.....	8.9	
\$4.51 to \$5.50.....	13.2	12.5	\$12.51 to \$14.00.....	7.9	.5
\$5.51 to \$6.50.....	9.2	9.8	\$14.01 and over.....	5.9	
\$6.51 to \$7.50.....	12.5	11.4	Total.....	100.0	100.0
\$7.51 to \$8.50.....	11.8	1.1			

¹ Includes all rayon and cotton dresses purchased by women and girls 14 years of age and over who were family members at any time during the year.

Clothing for men and boys 14 years of age and over.—A larger share of the men's clothing dollar was used for trousers and slacks than for any other type of apparel (table 22). Shirts and shoes were next in importance. Expenditures for underwear averaged considerably less than among women and girls. Cleaning and pressing services, by contrast, were much more important for men than for women, with charges representing nearly 8 percent of their total outlay for clothing.

Outlays for wool suits and separate wool trousers, respectively, averaged \$9, despite the climate and the customary informality of dress. Wool or part-wool trousers are commonly worn with sport shirts, and two-piece gabardine or tropical worsted wool suits are popular with wage earners for dress. During the year, about a fifth of the men and boys 14 years of age and over bought wool suits. Prices were high, half of these costing more than \$35. A third of the group purchased wool trousers—an average of nearly three pairs (2.7) for those reporting such expense. More than a fourth of these cost over \$13.50; fewer than a fourth, under \$7.50. Almost three times as many cotton as wool trousers were purchased, at an average price about a third as high (table 20). Approximately 60 percent of

them were work trousers, which were much more popular than bib-style overalls.

The most characteristic article of men's attire in Hawaii is the short-sleeved sport shirt, frequently with colorful designs. It is the fashion for street and office wear, except among the salaried officials. Three sport shirts per man were purchased during the year, half of them at \$2.95 or more. Work shirts were bought in greater quantity—four per year, on the average; the cost was more than a dollar less per shirt. The business shirt that is customary on the mainland, except for manual work, was of negligible importance.

TABLE 22.—*Clothing: Average Annual Expenditures for Men and Boys,¹ Families of Wage Earners and Clerical Workers in Honolulu, Year Ending July 1943*

Item	Annual clothing expenditures for men		Item	Annual clothing expenditures for men	
	Average per man	Percent of total		Average per man	Percent of total
All clothing.....	\$126.69	100.0	Underwear, nightwear, and robes.....	\$10.53	8.3
Suits, slacks, shirts, and sportswear.....	54.12	42.7	Undershirts.....	3.80	3.0
Suits:			Shorts.....	3.52	2.8
Wool.....	8.90	7.0	Pajamas and nightshirts.....	2.41	1.9
Other.....	.88	.7	Bathrobes, beachrobes, etc.....	.63	.5
Slack suits.....	1.72	1.4	Other.....	.17	.1
Trousers and slacks:			Footwear.....	26.68	21.1
Cotton.....	8.82	7.0	Hose.....	5.20	4.1
Wool.....	9.44	7.4	Shoes.....	16.96	13.4
Other.....	1.79	1.4	Sandals for street wear.....	.60	.5
Shirts:			Bedroom slippers.....	.92	.7
Work.....	7.09	5.6	Boots, etc.....	.95	.8
Business.....	.95	.7	Shoe shines and repairs.....	2.05	1.6
Sport.....	8.60	6.8	Accessories.....	17.44	13.8
Other.....	.60	.5	Hats.....	2.00	1.6
Overalls and coveralls.....	2.75	2.2	Gloves, work.....	1.20	1.0
Bathing trunks and shorts.....	1.25	1.0	Handkerchiefs.....	1.98	1.6
Other.....	1.33	1.0	Ties.....	1.13	.9
Jackets and coats.....	8.03	6.3	Jewelry and watches.....	9.63	7.6
Sweaters.....	.82	.6	Other accessories.....	1.50	1.1
Jackets:			Cleaning, pressing, and alterations.....	9.89	7.8
Leather.....	3.42	2.7			
Other.....	2.54	2.0			
Raincoats.....	1.19	.9			
Other.....	.06	.1			

¹ Based on information provided by 155 men and boys 14 years of age and over who were members of the family during the full year. All but 5 of these had some expense for clothing during the year.

Men bought fewer leather shoes than women and paid considerably more per pair. Half of them cost more than \$7.50 and 28 percent more than \$8.50 per pair.

Clothing for children 3 to 13 years of age.—It is generally much less expensive to outfit children than adults, especially in large families where clothes can be "handed down." Among the families of wage earners and clerical workers surveyed in Honolulu, only a third as much was spent for clothing for girls 3 to 13 years of age as for women and girls 14 years or over—an average of \$40 per girl; and only a fourth as much for young boys as for men and boys 14 or over—an average of \$33 per boy.

Dresses were by far the largest item of expense for girls under 14, comprising 25 percent of the total. Outlays for trousers comprised a third of all clothing expenditures for young boys.

Shoe purchases accounted for about the same proportion of the clothing budget for girls as for women and for boys as for men, but the price per pair was, of course, much lower for children and fewer pairs were purchased. It is not uncommon for children in Honolulu to go barefoot to school or the movies.

MEDICAL AND PERSONAL CARE

Expenditures for medical care vary greatly among families. During June, 16 of the 100 families reported no expense and 27 others made relatively small payments. Over half of the aggregate expenditures for medical care and supplies was incurred by the 9 families who spent over \$50 during the month. These bills, averaging more than \$90, meant a heavy financial burden to the families concerned.

The distribution of total monthly medical-care expenditures of families of wage earners and clerical workers in Honolulu, by amounts spent ⁴⁴ in June 1943, is shown below.

	Number of families	Percent of total monthly expenditures for medical care
No expense reported.....	16	-----
Under \$5.....	27	3. 2
\$5 and under \$10.....	17	7. 2
\$10 and under \$20.....	18	14. 3
\$20 and under \$30.....	6	9. 0
\$30 and under \$50.....	7	15. 4
\$50 and over.....	9	50. 9
Total.....	100	100. 0

Aggregate expenditures for dental care in June were about the same as those for care by general practitioners and specialists. Together they comprised over 75 percent of all expenditures for medical care (table 23). The number of families reporting expense for dental care, however, was considerably smaller than the number reporting physician's charges. Medicine and drugs absorbed 8 percent of the total. Health and accident or hospitalization insurance was carried by one or more members of about a fifth of the families;⁴⁵ payments were small and during June averaged only 2 percent of all expenditures for medical care.

TABLE 23.—*Medical Care: Average Monthly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, June 1943*

Item	Number of families re- porting expense	Expenditures in June	
		Average amount per family	Percent of total
All medical care.....	84	\$16. 59	100. 0
Care by general practitioner or specialist.....	43	6. 26	37. 7
Dental care.....	27	6. 31	38. 0
Hospital room or ward.....	3	. 99	6. 0
Medicine and drugs.....	52	1. 31	7. 9
Eyeglasses.....	7	1. 06	6. 4
Health and accident insurance, and group hospitalization.....	19	. 38	2. 3
Other medical care and supplies.....	-----	. 28	1. 7

⁴⁴ For items included, see table 23.

⁴⁵ Many of these insurance payments were made through pay-roll deductions. However, amounts deducted for this purpose were considered part of net spendable income and were included as medical-care expenditures.

The June expenditures for physicians' care imply a rather heavy incidence of illness. There was an epidemic of light influenza during the month, and several persons required attention because of industrial accidents. Physicians' fees also included varying amounts for prenatal and pediatric care. During the preceding 11 months, babies were born to 10 of the 100 families surveyed. Some, but not all, were delivered in hospitals. A total of 22 family members, including these mothers, specifically reported expense for hospitalization during the year. Three of these cases were in June.

The relatively large amounts paid to dentists in June may reflect the tendency of families to wait till the end of the school term to have work done on their children's teeth. Nevertheless, they point again to the fact that families of wage earners and clerical workers in Honolulu were living at a comfortable level in 1943, since expenditures for dental services are usually closely related to income,⁴⁶ persons in strained economic circumstances seldom visiting the dentist except in urgent cases. Many families may have been having dental work done in 1943 that they were unable to afford in pre-war days when incomes were lower.

Expenditures for personal care, in contrast to those for medical care, vary little from month to month. All the families surveyed reported some expense. Substantially all of them made some outlay for haircuts for the men and boys of the family. Permanent waves are common among the women and girls, and haircuts are infrequent in the periods between the semiannual permanents.

Approximately a third of the \$7.00 spent in June for personal care went for haircuts and a sixth for other services (table 24). The other half was spent for various toilet articles and preparations. Cosmetics and dentifrices were most important, with 53 and 85, respectively, of the 100 families reporting such expense during the month. Nine out of ten bought toilet soap.

TABLE 24.—*Personal Care: Average Monthly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, June 1943*

Item	Monthly expenditures for medical care		Item	Monthly expenditures for medical care	
	Average per family	Percent of total		Average per family	Percent of total
All personal care.....	\$6.95	100.0	Toilet articles and preparations...	\$3.49	50.2
Services.....	3.46	49.8	Toilet soap.....	.60	8.6
Haircuts.....	2.24	32.2	Dentifrices.....	1.03	14.8
Shaves.....	.15	2.2	Cosmetics.....	1.21	17.4
Shampoos.....	.21	3.0	Shaving soap, cream, and other toilet preparations.....	.32	4.6
Permanent waves.....	.47	6.8	Brushes, combs, razors, files, and other toilet articles.....	.33	4.8
Other waves.....	.11	1.6			
Other services.....	.28	4.0			

TRANSPORTATION

Outlays for automobile operation during June 1943 were almost as large, in total, as the amounts spent for public transportation facilities.

⁴⁶ See U. S. Bureau of Labor Statistics Bulletin No. 648, *Family Expenditures in Selected Cities, 1935-36*, Volume V—Medical Care.

Over half of the families surveyed owned cars. Most of them also reported some expense for bus or trolley travel to work, to school, to shopping centers, to movies, or to visit friends and relatives.

Car-sharing pools were fairly common. Workers in a number of families made payments to others under such an arrangement, and several reported receipt of payments from co-workers and friends who regularly rode to work with them.⁴⁷

Under the gas-rationing system in effect in June 1943 every car received a basic monthly ration of 10 gallons of gas, with additional allowances for occupational driving.⁴⁸ Supplemental allowances were provided for 24 of the 55 automobiles owned by members of the wage-earner families surveyed. The average expenditure of \$3.60 for gas meant approximately 17 gallons per car. The relatively large expenditures for oil and for repairs and maintenance reflect the age of the cars (table 25). Employment in war work gave many of the car owners access to the limited supply of new tires or better grades of recapped tires. Taxes paid during the month were relatively high, since 42 of the car owners paid the \$5 Federal use tax in June. The Territorial auto tax and license fees, which were payable earlier in the year, together with the Federal use tax, represented an average monthly cost of \$1.76 per automobile, as compared with the average June payment of \$3.82.

TABLE 25.—Transportation: Average Monthly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, June 1943

Transportation	Average expenditure per family	Automobile operation	Average expenditure per automobile ¹
All transportation.....	\$17.46	All automobile operation.....	\$15.31
Automobile operation and maintenance.....	8.42	Gas.....	3.60
Other transportation.....	9.04	Oil.....	.58
Bus and trolley.....	6.64	Tires and tubes.....	1.70
Shared automobile expense; rented automobile and motorcycle.....	.87	Repairs and maintenance.....	4.40
Taxi.....	.66	Taxes.....	3.82
Railroad—Honolulu to Pearl Harbor.....	.28	Insurance.....	.50
Plane.....	.59	Garage rent, parking, and other expense.....	.71
		Number of automobiles owned.....	55

¹ Includes 1 car owned by a policeman who received a monthly allowance for gas, oil, and maintenance but paid his own taxes and insurance.

RECREATION EXPENDITURES

As noted previously, the black-out⁴⁹ and the 10 o'clock curfew that were put into effect immediately after the December 7 attack limited evening social activities in Honolulu. At the same time, the popularity of movies increased. Even after 18 months under black-out restrictions, many homes in Honolulu had no facilities—or unsatisfactory ones—for ventilating a blacked-out room. Hence movies, which were scheduled so that the last show ended by 9 o'clock at the latest, provided an excellent escape from hot and crowded homes.

⁴⁷ These amounts were considered part of net spendable income.
⁴⁸ Mileage rationing was instituted in September 1943. The A ration books issued likewise provided 10 gallons a month, but half of this was allocable to occupational driving in the case of persons receiving B or C books.
⁴⁹ Black-out requirements were gradually eased, beginning in the summer of 1943. In the spring of 1944, the black-out was lifted.

The average June expenditures of \$14.47 per family for movies and other types of recreation are particularly striking in comparison with the average monthly outlay of \$8.00 (including expense for radio purchase) reported by families in urban areas of mainland United States during the first 3 months of 1942.⁵⁰ For the families surveyed in Honolulu this represented 5.4 percent of all expenditures for current consumption in June 1943 as contrasted with 4.2 percent for mainland families.

During June, 95 of the 100 families paid some movie admissions. The payments averaged \$6.15 per family, or more than 2 percent of total family expenditures (table 26). At rates ranging upward from 20 cents for adults and 10 cents for children in some neighborhood houses, to 77 cents at the Waikiki theater where seats for all evening shows were reserved, this expenditure would have allowed practically every family member (except infants) one movie each week. Outlays for admissions to other types of entertainment and to sports events were relatively small. Some concerts and illustrated lectures are provided free of charge in parks and at the Academy of Arts and the Public Library.

TABLE 26.—*Reading, Recreation, and Tobacco: Average Monthly Expenditures by Families of Wage Earners and Clerical Workers in Honolulu, June 1943*

Item	Number of families reporting expense	Average expenditure per family in June 1943
Reading, recreation, and tobacco.....	100	\$22.01
Reading.....	95	3.07
Newspapers.....	94	1.28
Magazines.....	54	1.28
Books ¹	10	.51
Recreation.....	98	14.47
Admissions to movies.....	95	6.15
Other admissions.....	18	.81
Social and recreational club dues.....	17	1.13
Equipment, supplies, and fees for games and sports.....	18	1.69
Luncheon expenses, ² and flowers and favors for other entertaining.....	12	1.29
Photographic equipment.....	12	1.18
Records and sheet music.....	13	.55
Other recreation ³	(4)	1.68
Tobacco.....	75	4.47
Cigarettes.....	71	3.89
Cigars and other tobacco.....	11	.58

¹ Purchase of books, other than school books, and loan library fees.

² Other than food.

³ Including musical instruments, toys, food for and care of pets, orchid raising as a hobby, and unitemized vacation expenses.

⁴ Information not available.

Expenditures for games and sports were second in importance after those for movies, with pool and bowling popular among the young adults. Swimming, which Honolulu's long shore line makes accessible to the entire population, generally entails no cost.

Families of Honolulu wage earners and clerical workers spent \$3.07, on the average, in June for newspapers, magazines, and books—about 50 percent more than the average monthly outlay for reading by mainland city families in the winter of 1942.⁵¹ Newspaper prices in

⁵⁰ Unpublished data from a study of family spending and saving in wartime, by the U. S. Bureau of Labor Statistics.

⁵¹ Unpublished data from a study of family spending and saving in wartime by the U. S. Bureau of Labor Statistics.

Honolulu were unusually high—5 cents for each of the two regular dailies as well as for the Chinese- and Japanese-language papers, which are popular with older persons of Chinese and Japanese ancestry.

Less than half of the outlays for reading matter went for newspapers, however. Despite the fact that magazines from the mainland generally arrive 3 or 4 weeks out of date, outlays for magazines were as large as for newspapers in June. As income increased, amounts spent for magazines and books rose rapidly in relation to outlays for newspapers, as follows:

Money income in June:	Average expenditures for—	
	News- papers	Magazines and books
\$100 and under \$250.....	\$0. 87	\$0. 52
\$250 and under \$350.....	1. 32	1. 46
\$350 and under \$450.....	1. 47	1. 69
\$450 and over.....	1. 62	3. 95

At all income levels, purchases of comics represented a considerable share of the total for books and magazines.

During June, expenditures for cigarettes averaged \$3.89 per family, as compared with only 58 cents for all other tobacco products. For the 71 families with members that purchased cigarettes, this provided over a package a day at the 17-cent rate that prevailed for standard brands—slightly more at the carton price of \$1.50 that a few stores offered.

Bottled liquor has been rationed in Hawaii since November 1942. The ration allows each ration-book holder (adult), per week, either a quart (or fifth) of hard liquor, a gallon of wine, or a case of beer. Beer manufactured on the mainland and domestic (mainland) or imported wines and hard liquor are not available continually because of shipping limitations. Locally manufactured beer, imitation gin, rum, and bourbon are on sale regularly, but few persons use their ration for local products when mainland stocks are on sale. During June, when mainland liquor was available for 2 weeks, members of 57 families made purchases amounting to 3.1 percent of all expenditures for current consumption⁵²—almost twice as much as tobacco outlays.

⁵² Exclusive of liquor purchased by the drink at restaurants and bars, which was included with food away from home.

Description of Sampling Method Used

Names of families to be interviewed were drawn at random from a registration file covering every individual in the city of Honolulu.

Under the Hawaii Defense Act, enacted immediately after the attack on Pearl Harbor, all persons in the Territory of Hawaii were required to register. The original enumeration was carried on by house-to-house canvas; thereafter, all new residents were required under penalty of law to register at a central office and old residents were required to record change of address and of marital status, and relevant facts. For each individual registered, information was obtained on place of birth and citizenship, racial and national extraction, age, occupation, place of employment, and person to be notified in case of accident or death. In addition, from one member of each household (generally the head), information was obtained on the number in the household; on household equipment such as beds, baths, and radios; on automobiles, etc. The enumeration sheets for Honolulu residents were filed by the 29 census tracts of the city, on the basis of the person's address at the time of registration. The total number of persons in the city was estimated at about 230,000.

In order to have a sufficiently long list of names to provide the requisite number of eligible families for the study, the sampling ratio 1:200 was used. A random number between 1 and 201 was used in sampling each of the 29 census tracts. If the person whose name was drawn was not the head of a household, the name of the first householder that was filed in sequence thereafter was selected.

Relevant information for each householder so selected was noted on a special record sheet. (These were kept in order, by tract and within tracts.) When the drawing was completed, a total of 1,156 names had been obtained. The distribution by racial extraction of the persons in this sample corresponded closely with that estimated for the city in the spring of 1942.

Two hundred of the families in the original drawing were clearly ineligible for the survey, primarily by reason of occupation or because the family comprised only one member.

The final sample of 100 was drawn from the remaining 956 record sheets. The first, tenth, nineteenth, twenty-ninth, thirty-eighth, etc., sheets were drawn. The remaining sheets in each group served as a pool of substitutes for the family assigned from that group. Substitutes were subsequently drawn, as needed, in such a way that the substitute family was as similar as possible to the family originally assigned in respect to racial extraction, occupation, and/or family size. A total of 163 families were visited by field agents; of these 2 were unwilling to provide the information requested, 2 were unable to provide information that was sufficiently complete for use, and 56 were found to be ineligible for inclusion in the survey.