THE HAWAIIAN HOME LANDS PROGRAM:
RETURN TO THE LAND OR BUREAUCRATIC CAGE?

by

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Working Paper No. 95-4
February 1995

ABSTRACT

Cook’s contact with Hawaii in 1778 initiated a tragic decline in the Hawaiian population and sweeping changes in social, economic, and political institutions prompted by Hawaii’s integration with the outside world. Increasing economic integration after 1860 with the United States, Hawaii’s main market for sugar, was coupled with U.S. annexation of Hawaii in 1898. The economic conditions of Hawaiians declined through World War I, and a movement arose among Hawaiians to rectify their situation by returning to small farms on government lands. In 1921, the federal Hawaiian Homes Commission Act set aside approximately 5 percent of island land for Hawaiians satisfying a 50 percent blood quantum requirement. Hawaiian Home Lands (HHL) Program experiments with farming failed, and the Program’s focus switched to providing improved housing lots and mortgage subsidies for Hawaiians. Expenditures on the HHL Program were relatively high in its first 15 years, declined markedly from World War II to the 1960s, and were volatile thereafter. Our analysis concludes that (1) government support for the HHL Program was roughly related to Hawaiians’ numerical voting power and political organization; (2) the HHL program, with its home-lot production subsidies and alienability constraints, was inefficient and inequitable; and (3) there are high institutional barriers to fundamental reform.

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Captain James Cook's first contact with Hawaii in 1778 initiated a flood of fundamental changes for the Hawaiian people. The history of the nineteenth century is dominated by the tragic fall in the Hawaiian population and sweeping changes in social, economic, and political institutions prompted by Hawaii's integration with the outside world. The rise of the sugar industry at mid-century led to increasing economic integration with the United States; in 1898 the United States annexed Hawaii. Political integration with the United States failed to halt the decline in the general welfare of the Hawaiian population which faced increasing economic competition from Japanese and Chinese workers leaving the sugar plantations.

During World War I a movement arose among Hawaiians to rectify their declining situation. In 1921 Congress responded by passing the Hawaiian Homes Commission Act (HHCA). Its ostensible goal was to return Native Hawaiians to the land, thereby facilitating the "rehabilitation" of the Hawaiian race. The HHCA set aside 203,300 of Hawaii's 4,112,128 acres for establishment of small farms and ranches by Native Hawaiians. Yet by 1989, the Hawaiian Homes Commission (HHC) had awarded only 32,713 acres to 5,778 Native Hawaiians. Farms and ranches awarded to Native Hawaiians achieved only limited success, and in 1923 the HHCA was amended to allow Native Hawaiians to lease improved residential lots. Long waiting lists for residential lots appeared in the 1940s and have persisted into the 1990s. Hawaiian groups have accused the State of Hawaii of violating its trust obligations to Native Hawaiians in its management and disposal of HHCA lands. By all accounts, the HHCA has had only limited success in achieving its original goal of rehabilitation.

This paper outlines the economic and political decline of Hawaiians since Western contact; discusses the Hawaiian Home Lands (HHL) Program as the central response by the state and federal governments to rectify Native Hawaiians diminished circumstances; and, most importantly, focuses on understanding how the program has performed, why it persists in its current form, and how it might be restructured to provide more benefits to Native Hawaiians. The paper begins (Section II) with an outline of the complex factors leading to the declining welfare of Hawaiians in the nineteenth century and the annexation of Hawaii by the United States. Section III discusses the Hawaiian political movement to return to the land and the enactment of the HHCA. Section IV outlines the HHCA's central provisions. Section V discusses the transition of the HHCA from
an agricultural homestead program to a quasi-public housing program and presents information on its operation from the early 1920s to the early 1990s. Section VI analyzes some political and economic factors which affected the program's performance and provides a rough computation of the program's waste. Section VII briefly presents some proposals for reform and discusses the high institutional barriers to implementing reforms.

I. HAWAII IN 1778

In 1778 Captain James Cook's ships encountered a group of eight small tropical islands populated by a people with social and political institutions remarkably similar to those in other more distant Polynesian societies. Although several distinct political entities actively competed with each other, the people of Hawaii were bound together by a common society. In each polity the populace was divided into three classes: chiefs (ali`i), commoners (maka`ainana), and priests (kainuna). Each polity was led by a ruling chief (mo`i) who held title to all lands and goods. In the manner of a feudal society, the ruling chief gave temporary land grants to lesser chiefs (ali`i nui) who then gave temporary land grants to their land managers (konohiki). The konohiki then subleased the land to commoners to grow taro and other tropical crops. Usually the land managers retained an active role in the management of their diverse lands (ahupua`a) which normally extended from the mountains to the coral reef fishing grounds. The common people worked in a variety of occupations (canoe-building, home-building, bird-catching, fishing), with the bulk of the work being the cultivation of the land.

Work, like most other activities, was organized around an extended family unit, the `ohana. The term `ohana was used to cover relatives by blood, marriage, and adoption. Many communal activities were conducted by the `ohana such as planting and harvesting crops, clearing land, constructing irrigation works, and fishing beyond the shoreline's coral reefs. Land managers collected the chief's share of output from the family's headman (haku) rather than from individual farmers. In the absence of organized market institutions, the `ohana acted to reduce the cost of exchange among family members. It facilitated specialization in work activities and ensured the ability to consume a somewhat varied market basket of goods. In a similar fashion, the inclusion of diverse lands in the ahupua`a helped to make this production unit generally self-sufficient; without extensive market institutions linking these units, organization of production under the
auspices of one large diversified firm further facilitated the expansion of opportunities for individual workers and consumers. While occasional market fairs (where participants exchanged cloth, mats, baskets, pigs, dogs, dried fish, vegetables, poi, canoes, paddles, and spears) allowed for some regional specialization in production, the institutions of the `ohana and the ahupua'a were vital given the rough geography and shifting political boundaries in Hawaii.

Two missionary observers believed that the chiefs managed, via taxes, arbitrary confiscations, and voluntary offerings, to appropriate about two-thirds of the `ohana's output. There is some evidence that the net appropriation may have been lower, as the chiefs stored and ultimately redistributed a large fraction of their share of the produced goods. Marshall Sahlins has speculated that the storage and redistribution of goods was intended to redistribute income, to provide revenue for public works projects, and to ensure adequate stores during times of war and famine. In any case, even with these substantial taxes/land rents, the common people lived well above subsistence levels. Tales of starvation are absent from the renderings of pre-1778 Hawaiian history. Theodore Morgan has observed that "[i]n good times the food supply was adequate in quantity and variety." Ralph Kuykendall has emphasized that the common people "were probably less downtrodden than the lower classes of Europe in the eighteenth century," noting that they "regularly had time for cultural activities, sports, and games."

Common people, unlike the serfs in Europe, were not bound to the soil, and their relative mobility contributed to their real incomes. The commoners' ability to vote with their feet placed constraints on the ability of chiefs to extract all income above subsistence levels; at the same time the high transportation costs associated with moving to another district allowed chiefs to extract a portion of the common people's income above the subsistence level. If the chiefs attempted to extract additional income, commoners had an additional option besides moving. The historical record contains numerous stories of rebellions against chiefs who have oppressed the common people. David Malo, an early chronicler of the tales of pre-historical Hawaii, wrote that "[f]or this reason ... some of the ancient kings had a wholesome fear of the people." As in other societies, competition between the ruling chiefs was not confined to the labor and product markets. Constantly waging war on each other, the ruling chiefs attained power by assembling loyal armies composed of large numbers of chiefs. In pre-contact Hawaii chiefdoms expanded and contracted,
formed and broke alliances, and apparently maintained this state of affairs for many centuries.

Thus, on eight small isolated islands in the middle of the Pacific Ocean, without mineral resources but with a complex agricultural technology, there existed for many centuries multiple competing polities in a common cultural and economic environment. The Hawaiians cultivated numerous tropical root, tuber, and tree crops in "irrigated valley lands ranked among the most productive agricultural ecosystems anywhere in Polynesia." While the commoners were poor, competition between the chiefs for their services prevented their incomes from being pushed to subsistence levels. Numerous institutions, such as the `ohana and the ahupua`a, were developed to exploit economies of scale in food production. To some observers, Hawaii's complex civilization, with its highly developed production technology, hierarchical, social, and political organization, art and culture, religious beliefs and temple rituals, was an amazing achievement for an isolated people.

II. THE LONG DECLINE IN HAWAIIAN WELFARE: 1778-1920

Soon after Western contact King Kamehameha I conquered the other political entities and established a unified nation in 1795. Yet between contact in 1778 and the passage of "rehabilitation legislation" in 1920, the economic and political condition of Hawaiians declined markedly.

Perhaps the signal event of post-contact Hawaiian history, commencing shortly after Cook's arrival in 1778, was the spread of new diseases (mumps, measles, influenza, smallpox, venereal diseases, cholera) to which the Hawaiian population had virtually no immunity. There is considerable controversy over estimates of the 1778 population. Schmitt (1968) estimated 225,000; Stannard (1989) estimated 795,000; and Dye (1994) estimated 110,000. The first accurate census in 1849 revealed a much diminished full-Hawaiian population of 78,854 and a part-Hawaiian population of 471. In the 51 years after the 1849 census, the resident Hawaiian population continued its precipitous decline, falling to 29,799 full-Hawaiians and 9,857 part-Hawaiians. By 1920 the full-Hawaiian population declined to 23,723 and the part-Hawaiian population increased to 18,027, thereby registering the first increase in the broadly defined Hawaiian population since western contact. Table 1 summarizes data on Hawaii's population and its ethnic composition.
The rapidly declining Hawaiian population affected all aspects of Hawaiian society in the nineteenth century. La Croix and Roumasset (1988, 1990) argue that a major effect of the population decline was to increase labor scarcity and thereby increase commoners’ wage rates. The higher wage rates reduced the surplus realized by chiefs and land managers from their agricultural lands. After 1820 the impact on the chiefs was magnified by growing urbanization, as commoners migrated to three villages (Honolulu on Oahu, Lahaina on Maui, and Hilo on Hawaii). The movement to urban areas disrupted the relationship between chiefs and commoners, inducing the development of new governmental institutions and stimulating competition between chiefs for tenants. Traditional systems of governance based on the hierarchy of common people and chiefs broke down with the rural exodus. As more common people pursued activities outside the traditional agricultural economy and divisions over the development of a code of law among chiefs grew, the enforcement of traditional practices by local chiefs began to break down in the late 1820s. When the regent, Kaahumanu, died in 1832, the new king (Kamehameha III) and his Council of Chiefs responded to the confusion over law enforcement by promulgating new laws designed to protect public order and settle private disputes. In sum, the reduction in the chiefs' income and their loss of authority to new governmental institutions represented a severe shock to the traditional hierarchical structure of Hawaiian society.

The declining population and the shock of foreign influence were combined with a crisis in Hawaii’s traditional religion. In 1819 King Kamchameha II and several high chiefs broke the religion’s prohibition (kapu) on the sexes eating together. Defenders of the traditional religion rebelled against the king, but were easily defeated. Wooden statues of the Hawaiian Gods mounted on stone altars were burned by the common people. The implosion of the traditional religion left a gaping religious void that was quickly filled by the arrival of protestant missionaries from Massachusetts in March 1820. Conversion of the chiefs to the new religion was facilitated by the missionaries' instruction in the written Hawaiian language. By the late 1820s, most high chiefs and many commoners had converted. The new religion suppressed traditional Hawaiian customs and games, such as the hula, and established United States missionaries as important advisors to the King. The precipitous destruction of the traditional religion and its replacement with a puritanical protestant sect within a ten-year span are representative of the rapid social,
political, and economic change of this era.

Government reform was followed in the 1840s by land reform measures establishing fee-simple property rights in land and redistributing the rights to land. The bulk of the lands were assigned to the king (984,000 acres), the Hawaii government (1,495,000 acres), and 252 chiefs and land managers (1,619,000 acres). The commoners received only 28,600 of Hawaii's 4.1 million acres. The original land reform measure did not allow foreigners to own land, but an 1850 law opened the door to foreign ownership. Transferable property rights in land ultimately led to severely reduced land holdings by Hawaiians (La Croix and Roumasset, 1990; Kameʻelehiwa, 1992). Over the course of the next 75 years, major Hawaiian land owners voluntarily sold their lands, often to sugar plantations; lost land due to mortgage default; assigned their lands to charitable trusts; and had their lands sold at auction after dying intestate. In addition, many commoners who were awarded small land holdings either abandoned or sold their lands to sugar plantations and migrated to the cities to work as clerks, stevedores, teamsters, construction workers, and day laborers. In 1920 over 50 percent of the part-Hawaiians and 36 percent of full-Hawaiians lived in Honolulu, compared to 33 percent of the entire population. By 1919, part- and full-Hawaiians owned only 9.77 percent of the value of assessed real property in the Territory.

One consequence of the land reform measures was that it enabled sugar planters to assemble large tracts of land (some of which were rented from individual Hawaiians, the King, and the Hawaiian Government) for large-scale sugar production. The Civil War in the United States cut off the supply of Louisiana sugar to the Northern States, and Hawaii was one of several foreign suppliers expanding production to fill the gap. A reciprocity treaty, implemented in 1876 and renewed in 1887, allowed Hawaiian sugar to enter the United States free of duty. Responding to the higher net sugar price, sugar planters increased the acreage devoted to sugar from 12,283 acres in 1874 to 125,000 acres in 1898. This spectacular growth established the economic power of sugar plantations which were generally controlled and managed by American and other Caucasian residents.

The 1893 overthrow of the monarchy by Caucasian residents and the subsequent annexation of Hawaii by the United States in 1898 radically reduced Hawaiian political power. Grandy and
La Croix (1995) attribute the 1893 revolution by Caucasian merchants (assisted by U.S. marines) to the large discrepancy between the economic and the political power of foreign residents. Annexation by the United States was, however, not inevitable, and ensued primarily as a consequence of the increased strategic importance of the Islands during the Spanish-American War. While Hawaiians retained some political power in their role as the largest bloc of voters for a two-house territorial legislature, most political power was transferred to a Governor appointed by the President of the United States; to the U.S. military, which established several major military bases on government lands; and to the U.S. Congress, which could block amendments to the territorial constitution.

Immigration to Hawaii, both pre- and post-annexation, also markedly affected the political and economic conditions of Hawaiians. Beginning in 1865, the Hawaii government and the sugar industry cooperated to bring Chinese, Japanese, Portuguese, Filipino, Korean, and other workers to Hawaii to labor in the sugar fields. Combined with a falling Hawaiian population, the immigration rapidly reduced the proportion of full- and part-Hawaiians in the total population from 97.1 percent in 1853 to 24.5 percent in 1900 and to 16.3 percent in 1920. Beginning with annexation, U.S. immigration laws restricted Chinese and Japanese workers from entering Hawaii, prompting the sugar industry to substitute Filipino immigrants. Table 1 provides data on the changing ethnic composition of Hawaii's population.

The influx of foreign workers also quickly changed the ethnic composition of the sugar plantation workforce. In 1882 one of every four plantation employees was full-Hawaiian or part-Hawaiian; by 1900 Hawaiian representation had fallen to three out of every 100 workers. Many Hawaiians, looking for better opportunities, migrated to Honolulu, Hawaii's largest city. Table 2 presents data from the U.S. Census on the occupations of Hawaiians in 1900; over 33 percent were employed as "unspecified" laborers in a variety of fields, 14.6 percent had their own farms or were overseers on sugar plantations, 10.5 percent worked in agriculture, 5.4 percent worked as fishermen, 4 percent as carpenters, and another 9.6 percent in other manufacturing activities. The remaining 22.8 percent of the workforce was scattered across a wide variety of professional, government, and trade occupations.

Hawaiians were not the first or the last workers in the sugar fields to leave the plantation
for the city. Chinese workers had begun to leave the plantations in the early 1880s and had successfully established small businesses and rice farms. After 1900 many Japanese field workers also began to leave the plantations after their 4-year contracts expired. In 1900 the Japanese comprised just 15.7 percent of Honolulu's population, but by 1910 Japanese made up 30 percent of the city's total (Fuchs, p. 122). The increased competition with Japanese and Chinese immigrants for jobs and the continued exodus of Hawaiians to urban areas are both reflected in the 1920 census data on Hawaiian male workers' occupations (Table 3). Hawaiians with their own farms or working as overseers declined from 14.6 percent of the workforce in 1900 to 3 percent in 1920. Farm laborers expanded from 7.3 percent of the workforce in 1900 to 15.2 percent in 1920; this indicates that Hawaiian farmers sold their land, with many continuing to work as farm laborers and others moving to urban areas. In 1890 approximately 7.7 percent of the male Hawaiian workforce were fisherman, and 79 percent of all fisherman were Hawaiian. Increasing competition from Japanese fishermen reduced the percentage of Hawaiians working as fishermen from 5.4 percent in 1900 to 2.8 percent in 1920. Only 26 percent of all fisherman were Hawaiian in 1920. In 1880, nearly all longshoremen were Hawaiian; during the 1880s they began to be gradually replaced by Chinese workers whose contracts on the sugar plantations had expired. By 1920 only 49.9 percent of the dock workforce was Hawaiian. Hawaiians working as clerks increased from 2.7 percent of the labor force in 1900 to 5.2 percent in 1920, indicating a movement from blue-collar jobs to low-status white-collar jobs. In spite of an increase in the percentage of the labor force working in professional service, the increasing competition from the children of Japanese and Chinese immigrants painted a bleak picture of the future for many Hawaiians.

The 1920 Census also reveals that secondary school enrollment of Hawaiians lagged behind other ethnic groups. Among children aged 16-17 living in Honolulu in 1920, 56.5 percent of Japanese, 57.3 percent of Chinese, 63.8 percent of Caucasians, and 51 percent of Hawaiians were enrolled in school. Adult male labor force participation rates also lagged behind those of other groups. In 1920, 78.8 percent of full-Hawaiian males, 60.5 percent of part-Hawaiian males, 85.6 percent of Japanese males, 82.5 percent of Chinese males, and 80.3 percent of Caucasian males participated in the labor force. Adult female labor participation rates were also lower for full-
Hawaiians (7.7 percent) and part-Hawaiians (13.7 percent) than the general population (20.1 percent).

After 140 years of Western contact, the economic, political, cultural, and demographic conditions of Hawaiians had, in many ways, severely deteriorated. The Hawaiian population was drastically diminished; the Hawaiian Kingdom's independence had been lost; Hawaiians had sold, lost, or abandoned most of their lands; increasing competition from Chinese and Japanese immigrants was reducing the relative economic position of Hawaiians; and Hawaiians were lagging behind other groups in educational attainment, thus providing a worrisome signal that their situation was unlikely to improve in the near future. Nonetheless, Hawaiians did retain some residual political influence, and the stage was set for an attempt to halt their deteriorating circumstances and to identify paths to political, cultural, and economic renewal.

III. ORIGINS OF THE HAWAIIAN HOMES LEGISLATION

The economic impact of World War I on Hawaiians appears to have been the trigger stimulating expanded political activity by Hawaiians. The general price inflation of World War I was coupled with relative price increases for such Hawaiian food staples as poi and fish. "In 1914 the selling price of a 100-pound bag of taro from the farmer to the poi mill was $1.25 ... in the early part of 1918, it was $2.05." 23 Disruptions in shipping during the war and meat rationing increased the price of fish "by almost 100 percent. For example, fish that normally had sold for 20 cents a pound sold for 35 to 40 cents a pound." 24 Hawaiians complained about the higher prices and noted that poi, the traditional Hawaiian food manufactured from the taro plant, was now grown by Chinese farmers, processed in Chinese poi mills, and distributed by Chinese and Japanese trade networks. Local Hawaiian civic clubs bemoaned the concentration of Hawaiians in crowded urban tenements, blamed high death rates on the urban crowding, and began to contemplate plans for the "rehabilitation" of the Hawaiian race. 25 In fact, crude birth and death rates for 1919 indicated that the crude birth rate for full-Hawaiians (29.16 per 1000) was somewhat lower than the rate for all groups (34.76 per 1000), while the crude death rate for full Hawaiians (39.42 per 1000) was substantially higher than the rate for all groups (15.36 per 1000). 26

Daviana McGregor identifies the November, 1914 formation of the Hawaiian Protective
Association as the signal event which prompted Hawaiians to undertake political activity to rehabilitate the Hawaiian race.27 The Association published a newspaper, engaged in social and educational work in the community, and was active in a 1918 campaign against run-down tenement housing. Public discussion among Hawaiians of their changed economic circumstances intensified.

During 1918, Princess Kawananakoa toured farm districts in the United States, gathering information about wartime measures to return urban workers to the farm. Upon her return to Hawaii, she urged Hawaiians to return to agricultural occupations and enterprises to avoid the ills of urban crowding.28 The Hawaiian Protective Association drafted a resolution urging that Hawaiians be allowed to homestead government lands when leases to sugar companies expired. Leaders presented the resolution to John Wise, a Hawaiian Republican member of the Territorial Senate. In December 1918, Wise announced a plan for rehabilitation of Hawaiians which focused on reforming Hawaii's homesteading laws.29 Existing law required that upon petition of 25 qualified individuals, agricultural lands be opened to homesteading if unoccupied or leased subject to a notice of withdrawal.30 Some leases of government sugar cane lands had expired during World War I, but President Wilson had issued an executive order preventing their release for homesteading during the War.31 Other leases were scheduled to expire over the next few years. Wise introduced a resolution in the Territorial Senate (HCR 2) asking the U.S. Congress (1) to open 80 percent of the government sugar cane lands for homesteading; and (2) to reserve a portion of these lands for Hawaiian homesteaders. The Territorial Legislature endorsed HCR 2 in April 1919. The Territorial Legislature also passed a second resolution (HCR 28) recommending changes to federal law desired by sugar interests, many of which were in direct contradiction to the goals of HCR 2.

After U.S. Congressional hearings in February 1920, the two resolutions were merged into a single bill (HR 12683) and introduced to Congress by Delegate Kuhio. Significantly, the reformulated measure did not allow government sugar cane lands to be opened for homesteading. Instead it provided for a $1 million fund to finance development of second-class agricultural lands to be set aside for Hawaiian homesteading. Funding for this program would come from rents on government sugar lands and receipts from water licenses. Leases to Hawaiians would be for 999
years, and individuals with any Hawaiian ancestry were eligible for the program. Congress retained the power to decide whether to release the sugar lands for homesteading or to continue leasing the lands at auction.

After the Territorial Legislative Commission returned to Hawaii in March 1920, its members became aware of opposition by Hawaiian groups, Island newspapers, and the Hawaii Chamber of Commerce to the bill's provisions to return Hawaiians to the land. After discussions between the various parties and deliberations by the U.S. House Committee on Territories, a new bill (HR 13500) was introduced which made significant changes to HR 12683. Important changes included restricting access to individuals who were at least 1/32 Hawaiian; shortening the duration of leases from 999 to 99 years; specifying the particular tracts of lands to be placed under control of the rehabilitation program; and transferring from Congress to the territorial administration the right to decide whether to lease the territorial government's sugar lands or to open them to homesteading. HR 13500 passed the House in May 1920, but was not acted upon by the Senate during the 1920 or 1921 sessions of the 66th Congress.

After the failure of HR 13500, Delegate Kuhio returned to Hawaii to fashion a more acceptable bill. After extensive discussions, the Territorial Legislature passed new resolutions endorsing amendments to HR 13500. The U.S. House and Senate passed S. 1881 in June 1921, and President Harding signed the bill on July 9, 1921.

IV. THE HAWAIIAN HOMES COMMISSION ACT

The Hawaiian Homes Commission Act (HHCA) contained no preamble specifying its purpose, but it was generally recognized that its purpose was the "rehabilitation of the Hawaiian race." The HHCA did not open any of the government-owned lands leased to sugar plantations. Instead it designated about 203,000 acres of very marginal public lands (approximately 5 percent of the Islands' total acreage) as "Hawaiian home lands" and transferred their control to the newly created Hawaiian Homes Commission (HHC), consisting of the Governor and four gubernatorial appointees. The HHCA enabled the HHC to lease the lands as homesteads to Native Hawaiians for a term of 99 years; lands not homesteaded were to be returned to the territorial land commissioner. Homesteaders could obtain 20-80 acres of agricultural land, 100-500 acres of first-class pastoral land, or 250-1,000 acres of second class pastoral land. The annual rent on leases,
regardless of acreage, was one dollar, and there was a moratorium on county property tax payments for 5 years. Lessees were required to occupy and to use or cultivate the site within one year after the lease was made and to continue to cultivate or use it; the HHC could strip any lessee of their lease if this provision was violated. Within any 5-year period, the HHC could open no more than 20,000 acres for settlement.

Lessees had to be Native Hawaiian, i.e., with 50 percent or more Hawaiian blood. Upon the death of a lessee, the lease passed to statutorily-specified relatives only if these relatives satisfied the blood quantum requirement. A lessee was allowed to transfer or mortgage his lease only with the permission of the HHC and only to Native Hawaiians who satisfied the blood quantum requirement. Subletting was strictly prohibited.

The HHCA prohibited lessees from applying for loans under the 1919 Farm Loan Act of Hawaii. Combined with the prohibition on mortgaging the land to a non-Hawaiian, the HHCA's provisions effectively cut off the homesteader from most private and governmental sources of capital. The only source of capital for the homesteader, beyond personal savings and loans, was the Hawaiian Homes Loan Fund which was authorized to loan up to $3,000 per homesteader. In effect, the HHCA set up the HHC as a monopoly supplier of capital to the homesteader.

The Hawaiian Homes Loan Fund was initially used to pay the Commission's operating and capital costs as well as make loans to homesteaders. All revenues from the leasing of public lands "made available" to be Hawaiian home lands and 30 percent of the revenues from the leasing of territorial sugar lands and receipts from water licenses were to be accumulated in the fund until it reached $1,000,000. The Legislature periodically increased the funding cap until it finally abolished the cap in 1959 (Spitz, 1963).

While Hawaiian leaders, including Jonah Kuhio Kalanianaole, Hawaii's non-voting delegate to the U.S. House of Representatives, Territorial Senator John Wise, and Princess Kawananakoa all advocated a government program that would rehabilitate Hawaiians by returning them to agricultural work on their own small farms, the final legislation differed greatly from Wise's original proposal. Hawaii's rich government sugar lands were closed to all homesteading. The territorial lands set aside for Hawaiians were marginal or submarginal agricultural lands, previously rejected by sugar, rice, and pineapple planters. Homesteader rights in the new home
(1936); Kewalo and Papakolea, Oahu (1937); Waimanalo, Oahu (1938); Anahola, Kauai (1957); Kekaha, Kauai (1958); Paukukalo, Maui (1959); Kapaaakea, Molokai; Waianae, Oahu (1971); Kuhio Village, Hawaii (1971); Lualualei, Oahu (1985); Kula and Waiehu, Maui (1986); and Waiakea, Hawaii (1989). After the disastrous experience with diversified farming on Molokai, the only subsequent settlement developed with farms or ranches was at Waimea, Hawaii.32

A rough indication of the performance of the HHL Program between 1921 and 1989 is contained in measures of HHL assignment of trust lands to Native Hawaiians. There are three closely related measures of such activity: (1) the number of homestead leases assigned; (2) the number of improved homestead house lots; and (3) the total acreage leased for homesteads. Given the heterogeneity in the value of acres leased, the total number of leases is the probably the best indicator of the diffusion of HHL Program benefits among the eligible Hawaiian population. The number of leases assigned increased throughout the period, with a significant increase in the growth of new leases being observed after 1977 (see Figure 1).33 Nonetheless, the total number of leases allotted over the life of the program is small.

Another indicator of the state's commitment to the HHL Program is estimated HHL Program expenditures.34 This series includes all expenditures from all funds for administration, operation, and capital improvement projects (Figure 2). HHC expenditures began as a relatively high percentage of state revenues in the 1920s (10 to 19 percent) and declined rapidly in the 1930s.35 Since 1950, HHC expenditures have been somewhat volatile, but have generally not exceeded 2 percent of state government expenditures. While HHL Program expenditures increased in the 1970s, they declined again from the late-1970s to the mid-1980s. During the administration of Governor John Waihe (1987-1994), the State's first part-Hawaiian Governor, HHL expenditures again assumed a slightly upward trend.

The 1959 Hawaii Statehood Act specified that the HHHCA must be made a part of the Hawaii State Constitution and mandated the inclusion of a provision in the Constitution establishing a trust relationship between the federal and state governments over the program.36 Administrative control over the program was granted to the State, but the Act could be amended only with the consent of Congress. The 1978 Hawaii Constitutional Convention amended the Act to make changes in the program's administration and substantive requirements. The changes were
approved by Congress in 1986. The most important amendments included allowing homesteaders to leave their homesteads to Hawaiians with at least a one-fourth Hawaiian blood quantum and requiring the HHC to give preference to Native Hawaiians when leasing unassigned lands (Parker, 160-161).37

Beginning in the 1970s, Hawaiians lobbied and litigated to have the federal government enforce its trust over the state's administration of the program. While federal courts agreed that the federal government had a trust responsibility toward the HHL Program, they also concluded that neither individual Hawaiians nor Hawaiian groups had standing to sue to enforce the obligation.38 In 1982, a joint federal-state task force was established to investigate allegations of mismanagement and trust violations. The task force's 1983 report substantiated many of the allegations, made recommendations for reform, and suggested that the DHHL (the Department of Hawaiian Home Lands, the successor to HHC after statehood) end its policy of distributing Program land only after it had been improved sufficiently to meet county zoning and building codes.39 The DHHL responded by increasing the number of leasees from 3332 in 1984 to 6,068 in November 1994. Most of the new leases were, however, granted on unimproved land that remains unimproved in 1995.

Since World War II, HHL residential programs have been characterized by excess demand. While the HHC compiled long waiting lists for various projects, many applicants were never awarded a lease. Several times in the post-war period, the HHC "lost" its waiting list. In 1994 the waiting list consisted of approximately 16,000 persons. Hawaiians have also frequently charged DHHL with irregularities concerning the allocation of lands. In 1991, the Legislature established the Hawaiian Home Lands Claims Trust to review petitions from HHL Program applicants who may have been damaged by mismanagement of the program from 1959 to 1988.40

VI. AN ECONOMIC AND POLITICAL ANALYSIS OF THE HHL PROGRAM

A. Political Support for the HHL Program

Since annexation in 1898, Hawaii's politics has been heavily influenced by ethnic coalitions and ethnic bloc voting. Hawaiians were mostly aligned with Caucasians between 1900 and 1946 when a dominant Republican party controlled both the Territorial Senate and House. In the decade following World War II, the Democratic party gained strength by organizing the
growing bloc of Japanese voters. The turning point in party control came in 1954 when the Democrats attained large majorities in both the Territorial House and Senate. During the 15 years following World War II, Hawaiians switched their allegiance from the Republican to the Democratic party. Since 1962, all State Governors have been Democrats, and there have generally been overwhelming Democratic majorities in the State House and Senate.

The large potential Hawaiian voting bloc was an important factor inducing a Republican Congress to pass the HHCA in 1921. Hawaiian voters comprised 56 percent of the electorate in 1920. Yet between 1898 and 1920, neither the Territorial Legislature nor the U.S. Congress had passed major legislation to reward the Hawaiian bloc in the Republican coalition. The rise in organized Hawaiian political activity after 1914 and the continuing decline in the economic condition of Hawaiians increased the chance that Hawaiians would defect to the Democrats unless legislation specifically benefitting Hawaiians was enacted.

While Hawaiians have managed to remain aligned with the winning coalition throughout the twentieth century, their political power declined markedly between 1920 and 1950. Hawaiian voters decline to 40 percent of the electorate in 1930, 25 percent in 1940, and 18 percent in 1950. After 1950 data on the race of registered voters are not collected. As a proxy for registered voters, we use the percentage of the overall population over the age of 20 composed of Hawaiians.\textsuperscript{41} Our data show the Hawaiian percentage as 12 percent in 1960, 17 percent in 1970, 19 percent in 1980, and 21 percent in 1989. The decrease in Hawaiian numbers from 1920 to 1960 is reflected in declining program expenditures (see Figure 2), while the increase from 1960 to 1989 is mirrored in slightly increasing but volatile program expenditures.

The slightly higher expenditures (as a percentage of state government spending) on the HHL Program since the early 1970s may also reflect the large increases in the real value of land in Hawaii since the late 1950s, when tourism began to take-off.\textsuperscript{42} Higher real land values increase the subsidy accruing to each HHL applicant who receives an improved housing lot for an annual one dollar rent. The higher value of the housing lot award may have induced Native Hawaiians to organize and to lobby for more expenditures on the HHL Program. The increase in land prices has certainly been accompanied by increasing Hawaiian political activity, much of which has also been induced by other economic, political, and cultural forces.
B. Fine-Tuning a Program or Survival of the Fittest Bureaucrats?

The early history of the HHL Program is particularly important, as the Program was originally structured to return Native Hawaiians to the land on owner-operated farms and ranches. The program's original goal of "rehabilitating" Hawaiians by returning them to work on their own small farms was, within just a few years, greatly de-emphasized. Given the mixed results of the initial agricultural settlements on Molokai, HHC officials quickly petitioned Congress to allow the program to provide applicants with improved housing lots and mortgage loans in HHL residential subdivisions. While the program still relocated Hawaiians from crowded urban tenements to a single-family residence in an all-Hawaiian neighborhood, the rehabilitative work component of the program was essentially eliminated. The HHL Program had been deftly transformed into a housing subsidy program.

The HHCA's goal of locating Hawaiians on marginal and submarginal agricultural lands was ill-fated, and the swift move by the HHC to transform the HHL Program probably saved many Hawaiian families from a dismal future. The program had, however, now been transformed from a rehabilitative to a welfare program. A housing subsidy program might have helped to improve the general welfare of Hawaiian families, but it was unlikely to have addressed fundamental problems, such as low school enrollment rates, or to have provided a springboard for Hawaiian economic growth.

It is possible that the transformation of the HHL Program was prompted not only by HHC bureaucrats quick perception of the poor quality of Program lands, but also by the self-interested behavior of bureaucrats interested in perpetuating their new-found jobs. There is certainly precedent for such arguments in the context of federal programs for Native Americans. Fred McChesney (1990) has argued that other federal land programs have been modified to perpetuate the federal Indian bureaucracy. McChesney analyzed the Dawes Act which allotted fee simple rights in tribal lands for individual Native Americans and allowed non-Native Americans to purchase "surplus" tribal lands. He argued that the suspension of land allotments in the early 1920s was prompted by both bureaucratic and political incentives. Officials in the Bureau of Indian Affairs realized that as the stock of lands managed by the Bureau dwindled, the agency would shrink and many staffers would lose their jobs. To perpetuate their jobs, officials in the
Bureau of Indian Affairs lobbied Congress to stop allotment. While bureaucratic self-interest may have played a role in transforming the HHL Program, coalition politics also influenced the course of the program. As we discussed above, political equilibrium requires that some government programs be directed to provide benefits to the large bloc of Hawaiians in the reigning Republican coalition. In the mid-1920s Hawaiians were still a powerful voting bloc; eliminating the HHL Program was probably not a viable option for most territorial politicians regardless of its performance or future prospects. Since some territorial revenues were earmarked for the Program and it was endowed with a stock of land, it would not be surprising if enterprising bureaucrats developed a new program to perpetuate their jobs and to maintain political equilibrium. The critical question, which we address below, is whether the restructured HHL Program provided benefits to Native Hawaiians in an equitable and efficient manner.

C. An Equitable and Efficient Program?

Rose and La Croix (1995) have argued that the HHL Program has dispensed benefits to Native Hawaiians in a highly inequitable manner. As we discussed earlier (Section IV), as of November 1994, the HHL Program has provided only 6,068 home lots to Native Hawaiian applicants. A 16,000-person waiting list remains. This is mainly due to the high cost of developing an improved housing lot and providing a mortgage subsidy and to the bureaucratic logjams and delays at DHHL. The 1994 waiting list consisted of approximately 16,000 Native Hawaiians. If housing lots are developed at the same rate as they have been since statehood (1959), it will take 80 years until the median applicant on the 1994 waiting list receives an HHL Program award! The result is that a few Native Hawaiians will receive a valuable housing package this year, while the median applicant will not receive an award during his or her lifetime.

The HHL Program has been also been structured so that it is likely to provide benefits in a highly inefficient manner. Housing programs which subsidize the production of housing, such as the HHL Program, often produce housing at a resource cost, C, that is greater than the housing's market value, R. A measure of production efficiency is R/C. A careful study of the production efficiency of the HHL public housing program has not been done, so one cannot say precisely how wasteful this program is. Given the lack of data specific to the HHL Program, we
cite estimates of production and consumption inefficiency in major U.S. housing programs that subsidize the production of housing. Estimates are taken from Stephen Mayo's (1986) careful review article. In the case of the U.S. "Public Housing" Program, for every dollar expended, 43 cents of value are delivered to recipients.

Many of the sources of waste in production subsidy programs are also found in the HHL Program. A few examples applicable to the HHL program will illustrate. The difficulty of exchanging HHL program lands results in project locations determined by historical accident rather than economic considerations. The use of tax-free bonds to finance infrastructure wastefully biases expenditures in favor of initial capital expenditures over recurrent maintenance expenses. Regulations requiring that union wages be paid on publicly supported housing projects also increase costs. Probably the greatest source of production inefficiency within the HHL Program is the lack of high-powered incentives within the public sector to control housing costs and to maintain quality. The private sector's construction industry is motivated by profit and undertakes a new project only when the production cost is less than or equal to the project's expected benefits. The DHHL is not required to satisfy such a test, and even if it were, bureaucratic incentives to enforce it effectively are weak.

DHHL provides three types of subsidy for each homestead. First, it leases the unimproved land to the homesteader for 99 years at an annual rent of one dollar; typically the unimproved land would have a market value of about $35,000. Second, DHHL develops the lot at a cost of $58,000. Third, it provides mortgage re-insurance on the homesteader's purchase of the structure, typically for $90,000. A half-point reduction in the interest rate attributable to this insurance on a $90,000 home loan over 30 years is worth about $4,000. Thus, the total value of the DHHL subsidy to a successful applicant is $97,000. Applying the U.S. figures of production waste ($43 of value for every $1.00 expended) to HHL Program housing lots, the $97,000 package is only worth $42,000 to the successful applicant. However, the typical applicant is unlikely to receive $42,000 in subsidies now. Instead, due to the logjam of government planning, funding, and development, the delivery of the subsidy package to the median HHL Program applicant is likely to be pushed far into the future. We noted above that if homestead lots are developed at the same rate as they have been since statehood (1959), it would be 80 years until
the median applicant received an HHL Program award. Suppose, instead, that we assume that the State of Hawaii or a sovereign Hawaiian government lowers the future waiting period to just 20 years. After discounting at 15 percent, one study’s conservative estimate of the discount rate of an average Hawaiian, the value of the HHL Program award falls from $42,000 to just $2,500.

D. Indirect Benefits

There may be "indirect" benefits to the HHL program that we have failed to include in our analysis. Possible indirect benefits to Hawaiians include: (1) the knowledge that the Program’s lands are inalienable; (2) the creation of ethnically homogeneous Hawaiian neighborhoods; and (3) the possibility of using Program lands as a land base for a sovereign Hawaiian government. Let us briefly discuss each in turn.

The knowledge that the Program lands are inalienable may be of value to many Hawaiians, given the small amount of land which Hawaiians currently own in Hawaii. Underlying some Hawaiians desire to retain land ownership is a deeply held cultural belief that `aina, or the land, is more than a mere commodity to be traded for other valued goods. Although some Hawaiians have traded their land away, many Hawaiians (and Polynesians generally) have respected and revered the land as a form of spiritual and emotional as well as material wealth. Those who still do will benefit from the knowledge that government’s holding of the land in trust keeps it Hawaiian, forever out of the hands of foreigners.

Another indirect benefit to Hawaiians of DHHL holding lands in trust is based on the relative ease with which people living in close proximity to one another can preserve and enhance their culture. If Hawaiian residences were contiguous, there would be more opportunities for the occupants to interact as Hawaiians. Community centers, schools, churches, some businesses, and neighborhood associations would permit Hawaiian traditions to be passed along from one generation to another in an environment sheltered from the rest of society. This argument is not as strong today as in 1921. Due to technological advances, people can transport themselves and communicate across distances at greatly reduced costs. Moreover, in many cities and rural areas there are spontaneously evolved ethnic communities. Nonetheless, the government mandate of ethnically homeogeneous Hawaiian communities may increase the probability that such communities will endure.
A third indirect benefit from holding HHL program lands in trust is to aid in reestablishing Hawaiian sovereignty. The Native Hawaiian sovereignty movement has gathered increased support from Hawaiians and other ethnic groups over the last decade. DHHL trust lands may help to establish a new political entity in two ways. First, some Hawaiians argue that the existence of federal legislation, the HHCA, which recognizes a trust relationship between Hawaiians and the United States, is an implicit recognition of their inherent sovereignty. Second, Rose and La Croix (1995) have estimated that the DHHL controls assets (lands and dedicated revenues) worth $850 million. By promising to use and disperse these resources more efficiently, or perhaps to distribute them to their supporters, sovereignty leaders can consolidate support.

The intangible, indirect benefits which may stem from the HHL Program are difficult to value and we do not attempt such an exercise. However, given the low value ($2,500) of the Program’s direct benefits to the median Native Hawaiian on the waiting list, the indirect benefits would have to be very large for the Program to be considered successful.

VII. CONCLUSION

Rose and La Croix (1995) have made three suggestions for reforming the HHL Program. One option is to eliminate all alienability restrictions or, more minimally, to allow a lessee, without DHHL approval, to sell the home/lease package to any Hawaiian with a positive blood quantum. This would provide Native Hawaiians with more mobility and with increased incentives to maintain and upgrade housing on Program lands. A second option, providing a housing consumption subsidy rather than a housing production subsidy, would reduce the Program’s inefficiency. Production waste would be reduced, and Native Hawaiians who rent as well as purchase housing could be assisted. A third option is to liquidate many of the program’s assets and to disperse the proceeds to Native Hawaiians on the waiting list. This option would enable the median Native Hawaiian to receive HHL Program benefits now rather than many years in the future. In addition, it would allow the beneficiary to use the program’s assets for other important activities, such as purchasing land, financing education, or reducing high debt burdens.

The structure of the HHL Program does not, however, lend itself to comprehensive reform. Fundamental revisions of the 1921 HHCA must clear multiple hurdles. They must be approved by both houses of the Hawaii State Legislature and the Governor; be approved by both
the U.S. Congress and the President; and, although not required by law, be approved by a vote of Hawaiians, for whom the Program's lands are held in trust. The multiple barriers to changing the program combined with the controversial nature of government lands trusts virtually ensures that fundamental change will not occur until there is a crisis in the Program or until the Hawaiian community becomes more informed not just of the low level of benefits delivered to a typical Native Hawaiian applicant, but also of the large potential benefits that could accrue to Native Hawaiians from reforming the Program.

The multiple barriers to changing the HHL Program have been advantageous in one major respect: they have helped to ensure that the revenues and lands dedicated by the HHCA to Native Hawaiians have been retained by Native Hawaiians for three-quarters of a century. On the other hand, the multiple barriers have also served to "lock-in" a housing subsidy program which is both highly inequitable and highly inefficient. "Improved" administration of the HHL Program or its transfer to a sovereign Hawaiian government are unlikely to remedy its fundamental difficulties. The dilemma of how to reform the HHL Program within the context of a trust relationship is fundamental, and applies not just to Native Hawaiian land trusts but also to the numerous Native American land trusts in North America. Progress toward this goal would, however, help to ensure that land, an asset with cultural, economic, and political dimensions, is put to its best use.
REFERENCE


ENDNOTES

1. Hawaiian Homes Commission Act, 42 Stat. 108 (1921). We use the term "Native Hawaiian" to refer to any person with 50 percent or more Hawaiian blood. We use "Hawaiian" more inclusively to refer to any person with any Hawaiian blood.


3. Some controversy exists as to whether the 'ohana represents a single extended family or a group of extended families. See Beechert (1985), p. 7.

4. See William Richards, Letter of William Richards to Commander Charles Wilkes, U.S.N., Commander of the U.S.A. Exploring Expedition (March 15, 1841), in Sahlins and Barrere (1973), p. 23 and Dibble (1909), p. 74. Since Richards' letter was written in 1841, the two-thirds figure may not be applicable to earlier periods. Also, Richards' figure is not based on empirical investigations.

5. A more complete discussion of the role of the ali'i in the Hawaiian economy can be found in Sahlins (1972).


10. See Kirch (1985), p. 7. There was irregular communication with, and possibly migration from, the Society Islands and Tahiti.

11. Kauai was not integrated into the unified nation until 1810. Throughout the paper we use the term "Native Hawaiian" to mean a Hawaiian who would qualify for the HHL program, i.e., with a 50 percent blood quantum. We use the broader term "Hawaiian" in a more inclusive manner, i.e., to refer to all persons with Hawaiian blood.

12. They also argue that the 1795 unification of Hawaii initially provided the victorious chiefs with some monopsony power over the common people.

13. La Croix and Roumasset (1984) have argued that the old religion represented an investment in legitimacy by the ali'i. In the absence of a clear-cut superiority in violence, the presence of the old religion allowed the ali'i to maintain their authority. With the acquisition of Western military technology, legitimacy became less important, relative to violence, in maintaining the prevailing order. As the religion became less valuable, it was eliminated at an opportune moment.

15. Many American residents had given up their American citizenship and pledged allegiance to the Hawaiian Kingdom.


18. Bureau of Public Instruction (1891), p. 26. The Census Report also observes that "[t]here is quite a common impression abroad in the community that the Chinese have superseded the Natives in this business to a much greater extent than these figures would indicate. It is quite possible that some of the Natives returned as fisherman may be working for Chinese bosses."


20. Ibid.


30. The May 27, 1910 amendments to Section 73 of the Organic Act [a federal law establishing the territory's fundamental governmental institutions] provided that most land leases contain a provision that the Territorial Government could withdraw the land from the lease "for homestead or public purposes".

31. 40 U.S. Statutes at Large 1804.
32. Information obtained from interviews with Kenneth Tokoguchi and Stanley Wong at DHHL and annual reports of the HHC.

33. About 800 of the leases assigned in 1984 were unimproved, and most lots remain unimproved in 1995.

34. The authors constructed expenditure data using the following sources: the HHC’s biennial reports to the territorial legislature, the DHHL’s annual reports, the session laws and revised statutes of the territory and the state, and interviews during 1992-1993 with personnel at DHHL. The expenditures series (and all other series expressed in dollars) have been annualized and deflated to constant 1991 dollars.

35. Both of these state fiscal variables are taken from Schmitt (1968) and the Hawaii State Data Book (various issues).

36. Hawaii Admission Act, 73 Stat. 4-6 (1959), sec. 4, 5; Hawaii Constitution art. 12, sec. 2.

37. The homestead can only be willed to one-quarter Hawaiians who are blood relatives of the lessee.

38. See Parker (1989) for a more extended discussion of the litigation as well as the Report to the United States Secretary of the Interior and the Governor of the State of Hawaii.

39. Id. at 30.

40. Native Hawaiian Trusts Judicial Relief Act, Hawaii Revised Statutes, Ch. 674 provides details of the Review Panel’s charge and procedures.

41. Data are from the Annual Report of the Governor of Hawaii to the Secretary of the Interior (1920-1940), the Census’s Current Population Reports, Series P-20 (1950), Historical Statistics of Hawaii (1968), and The State of Hawaii Data Book (various issues). After 1960, Census data are not categorized by specific Asian and Polynesian races in Hawaii, but by “White, Black, Other, and Hispanic.” Regarding our proxy variable for Hawaiian voters, we recognize that various ethnic groups have different propensities to register to vote and that this proxy contains measurement errors. Since our estimate of the total population of voters after 1960 does not deduct a substantial number of unnaturalized immigrants from the Philippines and Japan, the voting base is biased upwards, thereby biasing the percentage of Hawaiian voters downwards.

42. See La Croix, Rose, Mak (1995).

43. Carlson (1985) argued that the demand by non-Native Americans for tribal lands fell as real land rents declined in the 1920s. The declining land rents reduced the economic rents available from purchasing at congressionally-specified prices, thereby dissipating political support from potential purchasers (whites) for the allotment program.
44. Loudat, Horn, and Lucas (1994).

45. Mak and Fujii (1979).

46. There is no consensus among Hawaiians regarding the meaning of sovereignty. It is sufficient for our purposes that sovereignty is some unspecified degree of independence from the existing state and federal governments.
TABLE 1
HAWAII'S POPULATION BY ETHNICITY

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>1778</th>
<th>1853</th>
<th>1900</th>
<th>1920</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Hawaiian</td>
<td>1778</td>
<td>70,036</td>
<td>29,799</td>
<td>23,723</td>
</tr>
<tr>
<td>Stannard</td>
<td>795,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schmitt</td>
<td>225,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dye</td>
<td>110,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-Hawaiian</td>
<td>0</td>
<td>983</td>
<td>7,857</td>
<td>18,027</td>
</tr>
<tr>
<td>Caucasian</td>
<td>0</td>
<td>1,600</td>
<td>10,547</td>
<td>27,740</td>
</tr>
<tr>
<td>Japanese</td>
<td>0</td>
<td>0</td>
<td>61,111</td>
<td>109,274</td>
</tr>
<tr>
<td>Chinese</td>
<td>0</td>
<td>364</td>
<td>25,767</td>
<td>23,507</td>
</tr>
<tr>
<td>Portuguese</td>
<td>0</td>
<td>87</td>
<td>18,272</td>
<td>27,002</td>
</tr>
<tr>
<td>Filipino</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>21,031</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>67</td>
<td>648</td>
<td>5,608</td>
</tr>
<tr>
<td>Total Population</td>
<td>?</td>
<td>73,137</td>
<td>154,001</td>
<td>255,912</td>
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</table>

TABLE 2

OCCUPATIONS OF HAWAIIANS & PART-HAWAIIANS IN 1900

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Percentage of Total Employment</th>
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</thead>
<tbody>
<tr>
<td>AGRICULTURAL PURSUITS</td>
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<td></td>
</tr>
<tr>
<td>Agricultural Laborers</td>
<td>784</td>
<td>7.29</td>
</tr>
<tr>
<td>Farmers, planters, overseers</td>
<td>1,573</td>
<td>14.62</td>
</tr>
<tr>
<td>Other Agricultural</td>
<td>340</td>
<td>3.16</td>
</tr>
<tr>
<td>PROFESSIONAL SERVICE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>132</td>
<td>1.23</td>
</tr>
<tr>
<td>Government Officials</td>
<td>78</td>
<td>.73</td>
</tr>
<tr>
<td>Lawyers</td>
<td>85</td>
<td>.79</td>
</tr>
<tr>
<td>Other Professional Service</td>
<td>141</td>
<td>1.31</td>
</tr>
<tr>
<td>DOMESTIC &amp; PERSONAL SERVICE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laborers</td>
<td>3,574</td>
<td>33.22</td>
</tr>
<tr>
<td>Servants</td>
<td>148</td>
<td>1.38</td>
</tr>
<tr>
<td>Watchmen, Policemen &amp; Firemen</td>
<td>268</td>
<td>2.49</td>
</tr>
<tr>
<td>Other D&amp;P Service</td>
<td>283</td>
<td>2.63</td>
</tr>
<tr>
<td>TRADE &amp; TRANSPORTATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boatmen, Sailors</td>
<td>244</td>
<td>2.27</td>
</tr>
<tr>
<td>Clerks &amp; Copyists</td>
<td>290</td>
<td>2.70</td>
</tr>
<tr>
<td>Draymen, Teamsters</td>
<td>398</td>
<td>3.70</td>
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<tr>
<td>Other Trade &amp; Transportation</td>
<td>390</td>
<td>3.63</td>
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<tr>
<td>MANUFACTURING</td>
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<tr>
<td>Fishermen</td>
<td>582</td>
<td>5.41</td>
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<tr>
<td>Carpenters &amp; Joiners</td>
<td>433</td>
<td>4.02</td>
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<tr>
<td>Painters</td>
<td>172</td>
<td>1.60</td>
</tr>
<tr>
<td>Machinists</td>
<td>21</td>
<td>.20</td>
</tr>
<tr>
<td>Other Manufacturing</td>
<td>832</td>
<td>7.73</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,758</td>
<td>100.00</td>
</tr>
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TABLE 3

OCCUPATION OF HAWAIIANS & PART-HAWAIIANS IN 1920

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Percentage of Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGRICULTURAL PURSuits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Laborers</td>
<td>1,843</td>
<td>15.23</td>
</tr>
<tr>
<td>Farmers, planters, overseers</td>
<td>360</td>
<td>2.97</td>
</tr>
<tr>
<td>Other Agricultural</td>
<td>615</td>
<td>5.08</td>
</tr>
<tr>
<td><strong>PROFESSIONAL SERVICE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>431</td>
<td>3.56</td>
</tr>
<tr>
<td>Government Officials</td>
<td>179</td>
<td>1.48</td>
</tr>
<tr>
<td>Lawyers</td>
<td>46</td>
<td>.38</td>
</tr>
<tr>
<td>Other Professional Service</td>
<td>682</td>
<td>5.64</td>
</tr>
<tr>
<td><strong>DOMESTIC &amp; PERSONAL SERVICE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laborers</td>
<td>18</td>
<td>.15</td>
</tr>
<tr>
<td>Servants</td>
<td>204</td>
<td>1.69</td>
</tr>
<tr>
<td>Watchmen, Policemen &amp; Firemen</td>
<td>299</td>
<td>2.47</td>
</tr>
<tr>
<td>Other D&amp;P Service</td>
<td>344</td>
<td>2.84</td>
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<tr>
<td><strong>TRADE &amp; TRANSPORTATION</strong></td>
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<tr>
<td>Boatmen, Sailors</td>
<td>236</td>
<td>1.95</td>
</tr>
<tr>
<td>Clerks &amp; Copyists</td>
<td>630</td>
<td>5.21</td>
</tr>
<tr>
<td>Draymen, Teamsters, longshoremen</td>
<td>885</td>
<td>7.31</td>
</tr>
<tr>
<td>Laborers</td>
<td>1,178</td>
<td>9.73</td>
</tr>
<tr>
<td>Other Trade &amp; Transportation</td>
<td>1,236</td>
<td>10.21</td>
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<tr>
<td><strong>MANUFACTURING</strong></td>
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<tr>
<td>Fishermen</td>
<td>333</td>
<td>2.75</td>
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<tr>
<td>Carpenters &amp; Joiners</td>
<td>337</td>
<td>2.78</td>
</tr>
<tr>
<td>Painters</td>
<td>160</td>
<td>1.32</td>
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<tr>
<td>Machinists</td>
<td>183</td>
<td>1.51</td>
</tr>
<tr>
<td>Engineers, Cranemen, Hoistmen</td>
<td>203</td>
<td>1.68</td>
</tr>
<tr>
<td>Laborers</td>
<td>641</td>
<td>5.30</td>
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<tr>
<td>Other Manufacturing</td>
<td>1,066</td>
<td>8.81</td>
</tr>
<tr>
<td><strong>MINING</strong></td>
<td>23</td>
<td>.02</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12,102</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 1 - Number of Leases Granted, 1921-1992
Figure 2 - Hawaiian Homes Expenditures, 1921 -1989

- Percent of State Budget
- Percent of State GSP