

### 3.13 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

This section describes the social and economic setting for the islands of O‘ahu and Hawai‘i. As detailed below, the State of Hawai‘i has experienced prolonged economic stagnation during the past decade. The terrorist events of September 2001, which significantly damaged the tourism industry, the largest sector in the state’s economy, significantly exacerbated Hawai‘i’s economic problems.

Over all, state economic and population growth for the past decade has lagged the rest of the nation, although there was significant variability in growth rates among the different counties within the state. For example, the population of Honolulu County grew by only 4.8 percent during the 1990s, while the population of Hawaii County increased by 23.6 percent, almost double the national growth and triple the state’s growth. Other major trends that occurred in the Hawaiian economy during the 1990s, included continued growth in federal government spending and expansion of private sector technology employment. Other sectors, including agriculture, continued to decline in importance. Finally, while the number of military personnel decreased during the 1990s, the military remained second only to tourism as the largest sector in Hawai‘i.

#### 3.13.1 Introduction/Region of Influence

The socioeconomic indicators used for this study include regional economic activity (employment and business sales volume), population, housing, and schools. These indicators characterize the ROI. An ROI is a geographic area selected as a basis on which social and economic impacts of project alternatives are analyzed. The ROI includes nearby trade and service centers related both directly and indirectly to the economic activities of each installation, and takes into account the residency distribution of military and civilian personnel, and the schools their children attend. The ROI for socioeconomic impacts includes Honolulu County (Island of O‘ahu), on which SBMR, DMR, and KTA are located, and Hawai‘i County (the Island of Hawai‘i), on which PTA is located. For the purpose of discussing socioeconomic characteristics, the islands can be further defined by political and statistical subdivisions.

One county covers each island. Honolulu County covers O‘ahu and parts of the smaller islands, and Hawai‘i County covers the Island of Hawai‘i. Honolulu County is divided into seven Census County Divisions (CCDs), including ‘Ewa, Honolulu, Ko‘olauloa, Ko‘olaupoko, Wahiawā, Waialua, and Wai‘anae. A CCD represents a relatively permanent statistical area established cooperatively by the US Census Bureau and state and local government authorities. The twelve districts within Hawai‘i County are Hilo, Honoka‘a-Kukuihaele, Ka‘ū, Kea‘au-Mountain View, North Hilo, North Kohala, South Kohala, North Kona, South Kona, Pā‘auhau-Pa‘auilo, Pāhoa-Kalapana, and Pāpa‘ikou-Wailea. DMR is within the Waialua CCD, and KTA is within the Ko‘olauloa CCD. SBMR is within the Wahiawā CCD. PTA occupies mainly Pā‘auhau-Pa‘auilo CCD and small portions of the North Kona, South Kohala, and North Hilo CCDs.

The socioeconomic resources of these areas are affected by the land uses and activities within the state and on O‘ahu and the Island of Hawai‘i in particular. Socioeconomic resources include population, employment, income, earnings, housing, and schools. The

population data include the number of residents in the area and the recent changes in population growth. Data on employment, labor force, unemployment trends, income, and industrial earnings describe the economic health of a region. Income information is provided as an annual total by county and per capita. Housing availability and school enrollment and capacity are important considerations in assessing the effects of potential growth. The number and type of housing units, ownership, and vacancy rate also can be indicators of the regional quality of life. Additional demographic data, including race and ethnicity, age, and poverty status, are presented to evaluate potential environmental justice issues.

### 3.13.2 Resource Overview

#### ***Population***

The population of the Island of Hawai'i doubled between 1970 and 1990; however, overall population growth rates have declined in the 1990s (USARHAW and 25th ID[L] 2001b). Net internal migration was the primary source of population increase in Hawai'i County between 2000 and 2001, compared with international migration and natural increase, whereas internal migration was the dominant source of decrease in Honolulu County. Natural increase and international migration accounted for major population increases in Honolulu County (Enterprise Honolulu, no date; HDBEDT 2000). Population distribution and growth are primary concerns identified in the general plan for O'ahu. Specific policies are set forth in the plan to control the growth of O'ahu's resident and visitor population by limiting population growth, reducing immigration, and promoting a more even population distribution to relieve development pressures on scarce natural resources and infrastructure (City and County of Honolulu 1992).

As shown in Table 3-13 the population of the state increased by 9.3 percent between 1990 and 2000. This compares to a 13 percent growth rate for the United States as a whole during the same period. While the population increase in Hawai'i County (23.6 percent) was more than twice the percentage increase in the state level, the population increase in Honolulu County (4.8 percent) was approximately half that of the percentage increase at the state level. In 2000 Hawai'i County's population accounted for 12.3 percent of the state population (a slight increase from 1990) and ranked second in the state (which contains four counties). Honolulu County's population (ranked first in the state) made up 72.3 percent of the state population (a 2.2 percent decline from the 1990 level) (US Census Bureau 1990a, 2000a).

Hawai'i has a large military population, albeit one that has decreased from a high of 67,100 military personnel in 1984 to 40,800 in 2000. Nonetheless, military personnel and their dependents still total more than 83,000 and account for almost eight percent of the state's population (HDBEDT 2001c). Because most of the population resides in or near Honolulu, the presence of military personnel and their dependents is most prominent on O'ahu.

Within Hawai'i County, the Kea'au-Mountain View, South Kohala, North Kohala, and Ka'u CCDs experienced the greatest population growth, and the population of the Pāpa'ikou-Wailea CCD declined by 2.8 percent between 1990 and 2000. In 2000 the populations of the Hilo CCD (which includes the city of Hilo), North Kona CCD (which includes the city of

**Table 3-13**  
**Hawai'i, Hawai'i County, and Honolulu County Population**

	1990	2000	% Change 1990-2000
Hawai'i	1,108,229	1,211,537	9.3
Hawai'i County (Island of Hawaii)	120,317	148,677	23.6
Hilo CCD	39,537	42,425	7.3
Honoka'a-Kukuihaele CCD	3,681	3,895	5.8
Ka'u CCD	4,438	5,827	31.3
Kea'au-Mountain View CCD	14,079	22,738	61.5
North Hilo CCD	1,541	1,720	11.6
North Kohala CCD	4,291	6,038	40.7
North Kona CCD	22,284	28,543	28.1
Pa'auhau-Pa'auilo CCD	1,864	2,213	18.7
Pa'hoa-Kalapana CCD	6,702	8,597	28.3
Pa'pa'ikou-Wailea CCD	5,102	4,961	-2.8
South Kohala CCD	9,140	13,131	43.7
South Kona CCD	7,658	8,589	12.2
Honolulu County (O'ahu)	836,231	876,156	4.8
'Ewa CCD	230,189	272,328	18.3
Honolulu CCD	377,059	372,279	-1.3
Ko'olaupoko CCD	18,443	18,899	2.5
Ko'olaupoko CCD	117,694	117,994	0.3
Wahiawā CCD	43,886	38,370	-12.6
Waialua CCD	11,549	14,027	21.5

Sources: US Census Bureau 1990a, 2000a.

Kailua-Kona), and Kea'au-Mountain View CCD (south of Hilo) were the largest population centers on the Island of Hawai'i, with 28.5 percent, 19.2 percent, and 15.3 percent of the population, respectively. Within Honolulu County, substantial population increases in the 'Ewa (18.3 percent) and Waialua (21.5 percent) CCDs were offset by decreases in the Wahiawā (-12.6 percent) and Honolulu (-1.3 percent) CCDs. The Honolulu CCD (which includes the city of Honolulu) and the 'Ewa CCD (which includes the city of Makakilo, 'Ewa Beach, and the Village of Waipi'o) were the largest population centers on O'ahu, with 42.5 and 31.1 percent of the Honolulu County population, respectively, in 2000 (US Census Bureau 1990a, 2000a).

### ***Economy, Employment, and Income***

The tourism industry is the state of Hawai'i's most important source of economic activity, accounting for more than a quarter of the gross state product. As a result of the September 11, 2001, terrorist attacks in the United States, this industry has experienced a lingering decline, particularly with respect to international visitors (HDBEDT 2001a). Private sector technology has become a productive and rapidly growing aspect of the state's economy. In the mid-1990s, a 17 percent growth in private technology sector jobs offset a 0.1 percent decline in private sector employment to produce positive private sector employment growth (HDBEDT 2001b). Federal government expenditures in Hawai'i totaled approximately \$9 billion in 2000. This total was 5.2 percent more than in 1999 and 60 percent more than the spending level in 1990. Defense expenditures accounted for 39 percent of federal spending in 2000, down from approximately 54 percent in 1990. Nonetheless, defense spending in Hawai'i increased 33 percent between 1990 and 2000 to \$3.5 billion (HDBEDT 2001c). In

2002, per capita defense spending in Hawai'i reached \$3,045, second only to that of Virginia. The economic impacts of this spending has a ripple effect throughout the Hawaiian economy due to additional spending by military residents for goods and services procured off-post and the increased demand for goods and services generated by vendors and contractors associated with the military installations.

A major decline in sugar production and an increase in tourism on the Island of Hawai'i, particularly along the Kohala and Kona coastlines, significantly influenced the economy during the 1990s (USARHAW and 25th ID[L], 2001b). Tourism replaced sugar as the county's primary economic generator during the mid-1980s, reaching a peak in visitor arrival numbers in 1989. Since 1990, external factors, such as the Asian economic crisis, the Persian Gulf War, and a brief economic downturn in the continental US, have contributed to economic stagnation. The agriculture sector has continued to be an element in the county's economy through the growing of coffee, macadamia nuts, papaya, flowers and nursery products, vegetables, aquaculture, forestry, and several processing plants (County of Hawai'i 2001a). Between 1987 and 1997, the total value of agriculture declined by 17 percent, and the value of crops declined by about 14 percent (HDBEDT, no date [a]). Over the same period annual domestic arrivals to Hawai'i County increased by about 23 percent. Data for international arrivals are available from 1992 to the present, and between 1992 and 2000 annual international arrivals increased by approximately 47 percent (HDBEDT, no date [b]).

Goals expressed in Honolulu County's 1992 general plan reflect concerns for economic and agricultural diversification on O'ahu, as well as for maintaining a strong visitor industry, expanding ocean-related industries, and assisting fisheries. The substantial role of the federal government in O'ahu's economy is evident in the goals and policies set forth to increase the amount of federal spending on O'ahu. These include encouraging the military to purchase local goods and services, leasing new facilities rather than using tax-exempt federal land, and providing a substantial level of federal employment on O'ahu and a high level of military employment in the Hickam-Pearl Harbor, Wahiawā, Kailua-Kāne'ohe, and 'Ewa areas (City and County of Honolulu 1992). Between 1987 and 1997, the total value of agriculture in Honolulu County declined by 15 percent, and the value of crops declined by about 11 percent (HDBEDT, no date [c]). Over the same period annual domestic arrivals to Honolulu County decreased by about a quarter of a percent. Between 1992 and 2001 annual international arrivals declined by almost five percent (HDBEDT, no date [d]).

Table 3-14 presents the distribution of employment among the various industry sectors and the changes experienced in these sectors between 1990 and 2000 for Hawai'i, Hawai'i County, and Honolulu County. The services, government, and retail trade sectors employed the greatest number of workers in the state and in both Hawai'i and Honolulu counties in 2000. Between 1990 and 2000 employment in the state of Hawai'i in the mining, farm services, forestry, and fishing sector and services sector increased by the largest percentages (41.2, 24.4, and 20.0 percent). Within the government sector, state and local government employed the majority of workers. The military experienced a 21.5 percent decline in employment between 1990 and 2000. Of the major sectors shown in Table 3-14, construction, manufacturing, and farm employment experienced the greatest percentage decreases over the decade in the state (BEA 2002a).

**Table 3-14**  
**Sector Employment**

Sector	Hawai'i			Hawai'i County			Honolulu County		
	1990	2000	Percent Change 1990 to 2000	1990	2000	Percent Change 1990 to 2000	1990	2000	Percent Change 1990 to 2000
Farm employment	14,610	12,890	-11.8	5,948	5,581	-6.2	3,429	3,009	-12.2
Farm services, forestry, fishing	7,572	9,423	24.4	1,672	NA	NA	4,189	5,096	21.7
Mining	374	528	41.2	75	NA	NA	251	345	37.5
Construction	40,228	32,083	-20.2	4,549	4,369	5.5	29,244	21,711	-25.8
Manufacturing	24,041	20,785	-13.5	2,666	NA	NA	17,872	15,614	-12.6
Transportation and public utilities	45,299	47,311	4.4	2,681	3,191	4.0	36,967	37,085	0.3
Wholesale trade	25,887	26,233	1.3	2,384	NA	NA	21,096	20,796	-1.4
Retail trade	131,848	138,565	5.1	12,460	14,154	17.8	98,042	98,596	0.6
Finance, insurance, and real estate	61,225	63,629	3.9	4,608	5,684	7.1	48,529	48,602	0.2
Services	207,861	249,499	20.0	20,440	27,219	34.2	153,043	175,426	14.6
Government	171,742	165,686	-3.5	10,130	12,182	15.3	150,286	139,596	-7.1
Federal, civilian	33,717	30,083	-10.8	791	1,038	1.3	32,134	28,051	-12.7
Military	67,225	52,776	-21.5	1,212	1,277	1.6	64,459	49,829	-22.7
State and local	70,800	82,827	17.0	8,127	9,867	12.4	53,693	61,716	14.9
Total Employment	730,687	766,632	4.9	67,613	79,628	17.8	562,948	565,876	0.5

Source: BEA 2002a

The employment growth figures for Hawai'i County contrast substantially with the state averages. In Hawai'i County, on the Island of Hawai'i, employment in the services, finance, insurance, and real estate, and government sectors increased by the greatest percentages between 1990 and 2000 (33.2, 23.4, and 20.3 percent). Within the government sector, both federal civilian and military employment increased over the decade, and farm employment and construction experienced the only employment declines. In Honolulu County (covering O'ahu) employment growth between 1990 and 2000 was similar to the state average, with the mining, farm services, forestry, and fishing, and services sectors experiencing the greatest percentage increases between 1990 and 2000. The construction, manufacturing, farming, and government sectors all experienced decreased employment over this period (-25.8, -12.6, -12.2, and -7.1 percent). The decline in employment in the government sector is attributed to decreases in federal civilian and military employment (-12.7 and -22.7 percent, respectively); state and local employment increased in Honolulu County by 14.9 percent (BEA 2002a).

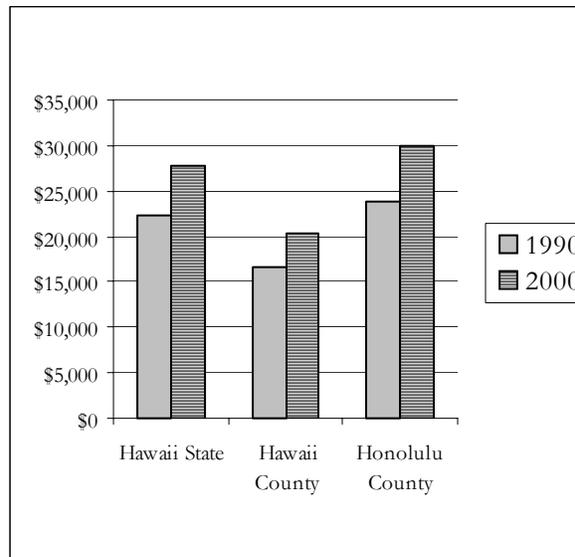
As shown in Table 3-15, both Hawai'i and Honolulu counties experienced higher unemployment increases than the state average between 1990 and 2000. Hawai'i County in particular had substantial growth in its labor force (20.0 percent), employment (16.9 percent), and unemployment (90.7 percent). It also had the highest unemployment rate in 2000 (6.7 percent), which exceeded the state average of 4.3 percent, while Honolulu County's unemployment rate (3.8 percent) was below that of the state (BLS, no date).

**Table 3-15**  
**Labor Force, Employment, and Unemployment**

	Hawai'i			Hawai'i County			Honolulu County		
	1990	2000	Percent Change	1990	2000	Percent Change	1990	2000	Percent Change
			1990 to 2000			1990 to 2000			1990 to 2000
Labor force	549,506	595,432	8.4	58,330	70,001	20.0	407,735	423,675	3.9
Employment	533,521	569,915	6.8	55,883	65,335	16.9	398,183	407,782	2.4
Unemployment	15,985	25,517	59.6	2,447	4,666	90.7	9,552	15,893	66.4
Unemployment rate	2.9	4.3		4.2	6.7		2.3	3.8	

Source: BLS, no date

As shown on the chart below, Honolulu County had the highest per capita personal income in 2000. At \$29,960, it exceeded the state average (\$27,851) by slightly more than \$2,100 and the Hawai'i County level (\$20,399) by approximately \$9,500. Honolulu County also experienced the greatest growth in per capita personal income between 1990 and 2000. For Hawai'i, Hawai'i County, and Honolulu County per capita personal income increased by 24.5, 22.9, and 26.1 percent, respectively (BEA 2002b).



Source: US Bureau of Economic Analysis 2002a.

Figure 3-17 Per Capita Personal Income

### **Housing**

Table 3-16 shows housing occupancy type and vacancy for the state, and Honolulu and Hawai'i counties in 1990 and 2000. Between 1990 and 2000 the total number of housing units and the number of occupied housing units in Hawai'i County increased by substantially more than the state average, and the total number of housing units and the number of occupied housing units in Honolulu County increased by a lower percentage than the state average. The number of vacant units in Hawai'i County increased by 42.7 percent, and Honolulu County and the state experienced even higher vacancy increases (70.8 and 80.3 percent). In 2000 the state vacancy rate was 12.4 percent (57,302 units), while Hawai'i

**Table 3-16  
Housing**

	Hawai'i			Hawai'i County			Honolulu County		
	Percent Change			Percent Change			Percent Change		
	1990	2000	1990 to 2000	1990	2000	1990 to 2000	1990	2000	1990 to 2000
Total	389,810	460,542	18.1	48,253	62,674	29.9	281,683	315,988	12.2
Occupied	356,267	403,240	13.2	41,461	52,985	27.8	265,304	286,450	8.0
Owner-occupied	191,911	227,888	18.7	25,336	34,175	34.9	137,910	156,290	13.3
Renter-occupied	164,356	175,352	6.7	16,125	18,810	16.7	127,394	130,160	2.2
Vacant	33,543	57,302	70.8	6,792	9,689	42.7	16,379	29,538	80.3
For rent	9,451	15,699	66.1	1,859	1,556	-16.3	5,748	12,203	112.3
For sale only	1,631	3,720	128.1	379	678	78.9	900	2,572	185.8
Rented or sold, not occupied	3,735	2,683	-28.2	776	463	-40.3	2,540	1,690	-33.5
For seasonal, recreational, or occasional use	12,806	25,584	99.8	2,045	5,101	149.4	4,462	6,856	53.7
For migrant workers	82	57	-30.5	44	21	-52.3	14	17	21.4
Other vacant	5,838	9,559	63.7	1,689	1,870	10.7	2,715	6,200	128.4

Source: US Census Bureau 1990a, 2000b

County had the highest vacancy rate of 15.5 percent (9,689 units) and Honolulu County had the lowest vacancy rate of 9.3 percent (29,538 units). Most of the vacant units in Hawai'i County and the state were for seasonal use; whereas, in Honolulu County, the largest number of vacant units were rental units. Within Hawai'i County, the North Kona and Ka'u CCDs had the highest vacancy rates (24.6 and 23.4 percent), most of which were for seasonal use; and the Pāpa'ikou-Wailea and Pā'auhau-Pā'auilo CCDs had the lowest vacancy rates (6.2 and 7.7 percent) (US Census Bureau 1990a, 2000b).

As shown in Table 3-16, there was a relatively even mix of owner- and renter- occupied housing in the state and in Honolulu County (56.5 percent owned and 43.5 percent rented in the state and 54.6 percent owned and 45.4 percent rented in Honolulu County); whereas a higher percentage of occupied housing was owner-occupied in Hawai'i County (64.5 percent, or 130,160 units). Within Hawai'i County the North Hilo and Pā'auhau-Pā'auilo CCDs had the highest percentage of home ownership (78.7 and 77.1 percent, respectively), and the North Kona and South Kohala CCDs had the lowest levels of home ownership (58.5 and 58.9 percent). The 'Ewa and Ko'olaupoko CCDs had the highest home ownership levels in Honolulu County (with 66.5 and 66.0 percent owned in each CCD), and the Wahiawā and Waialua CCDs had the lowest levels of home ownership in the county (US Census Bureau 1990a, 2000b). The median single-family home resale value for Hawai'i County in 1998 was \$159,000, an increase of 38.2 percent from 1988; the median single-family home resale value for Honolulu County was \$297,000, up 39.4 percent from 1988 but down 2.6 percent from the previous year (HDBEDT, no date [a] and [c]).

### Schools

The Honolulu School District provides public schooling for the state, with 261 schools located throughout the islands (NCES 2002). Within Hawai'i County in 2000 a total of 32,974 students were enrolled in school up to the high school (grade 12 level), of whom 6.7

percent were in preschool, 6.2 percent were in kindergarten, 56.5 percent were in elementary school (grades 1-8), and 30.6 percent were in high school (grades 9-12). Within Honolulu County a total of 168,531 students were enrolled in school up to the high school (grade 12 level), of whom 7.7 percent were in preschool, 7.2 percent were in kindergarten, 56.6 percent were in elementary school (grades 1-8), and 28.5 percent were in high school (grades 9-12) (HDBEDT, no date [b] and [d]). In general, schools that would be affected by the Proposed Action are operating at or below capacity, with the exception of Mililani High School on O‘ahu. Details on current enrollment levels and operating capacities for the affected schools are presented in Chapter 4, Section 4.13.3, and in Chapter 5, Section 5.13.2.

### 3.13.3 Environmental Justice

A discussion of environmental justice issues is presented in accordance with EO 12898, and a discussion relating to the protection of children from environmental health risks is presented in accordance with EO 13045.

On February 11, 1994, President Clinton issued EO 12898, entitled Federal Actions to Address Environmental Justice in Minority and Low-Income Populations. This order requires that “each federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities, on minority populations and low-income populations” (EO 12898, 59 FR 7629 [Section 1-101]). The Army has done the following to comply with the order:

- Gathered economic, racial, and demographic information generated to identify areas of low-income and high minority populations (those who are in the minority of the population of the US as a whole, consisting of Blacks or African Americans, Native Americans, Eskimos, Aleuts, Asians, Pacific Islanders, other, and two or more races) in and around the project area; and
- Assessed the alternatives for disproportionate impacts resulting from on-site activities associated with the Proposed Action.

Racial and ethnic data for the state, Hawai‘i County, and Honolulu County for 1990 and 2000 are illustrated in Table 3-17. The dominant ethnic group in 2000 in the state and both Hawai‘i and Honolulu counties was the Asian and Pacific Islander group, with 51.0, 38.0, and 54.9 percent of the population, respectively. The population in almost all racial/ethnic categories declined between 1990 and 2000, with the exception of the “other and two or more races” category. This population group expanded exponentially, indicating that many who would have been categorized in another group in 1990 were able to identify themselves as “two or more races” in 2000 (a new designation in the 2000 Census). Between 1990 and 2000 the Hispanic population increased in the state and both project area counties, but Hawai‘i County experienced a much higher increase (26.7 percent) than the state average (7.8 percent) or Honolulu County (3.2 percent). The Black or African American population in Hawai‘i County experienced a substantial increase (13.5 percent) between 1990 and 2000 (US Census Bureau 1990a, 2000a).

**Table 3-17**  
**Population Percentage by Race/Ethnicity**

Race/Ethnicity	Hawai'i			Hawai'i County			Honolulu County		
	Percent of Total Pop 1990	Percent of Total Pop 2000	Percent Change in Actual Pop. 1990 to 2000	Percent of Total Pop 1990	Percent of Total Pop 2000	Percent Change 1990 to 2000	Percent of Total Pop 1990	Percent of Total Pop 2000	Percent Change in Actual Population 1990 to 2000
Race/Ethnicity	1990	2000	Percent Change 1990 to 2000	1990	2000	Percent Change 1990 to 2000	1990	2000	Percent Change 1990 to 2000
White	33.4	24.3	-20.4	39.7	31.5	-1.7	31.6	21.3	-29.5
Black or African American	2.5	1.8	-19.1	0.5	0.5	13.5	3.1	2.4	-20.3
Native American, Eskimo, Aleut	0.5	0.3	-30.7	0.7	0.4	-23.3	0.4	0.2	-38.3
Asian and Pacific Islander	61.8	51.0	-9.9	57.1	38.0	-17.9	63.0	54.9	-8.6
Other, and Two or More Races	1.9	22.7	1,201.9	2.0	29.6	1,733.4	1.9	21.2	1,061.9
Hispanic <sup>1</sup>	7.3	7.2	7.8	9.3	9.5	26.7	6.8	6.7	3.2

Source: US Census Bureau 1990a, 2000a

<sup>1</sup> Persons of Hispanic origin may be of any race.

Within Hawai'i County the Hilo and Pāpa'ikou-Wailea CCDs had the highest minority populations (minority includes all categories except White and Hispanic, which is considered an ethnic group rather than a racial category); however, all CCDs were composed of greater than 50 percent minority populations. The North Kohala, Kea'au-Mountain View, and Pāhoa-Kalapana CCDs had the highest percentage of Hispanic populations in Hawai'i County, with 13.5, 13.2, and 12.3 percent. Within Honolulu County the Wai'anae, 'Ewa, and Honolulu CCDs had the highest minority populations, with 88.8, 82.7, and 80.3 percent of the population. All CCDs in Honolulu County were composed of 67 percent or greater minority populations. The Wai'anae and Wahiawā CCDs had the highest percentage Hispanic populations in Honolulu County, with 13.9 and 12.8 percent (US Census Bureau 1990a, 2000a).

Potential effects to Native Hawaiian cultural or spiritual resources, or to Hawaiian Homelands, are addressed in the Cultural Resources sections of this report.

The US Census Bureau uses a set of money income thresholds that vary by family size and composition to determine which families are poor. If a family's total income is less than its threshold, then that family, and every individual in it, is considered poor. The poverty thresholds do not vary geographically, but they are updated annually for inflation using the Consumer Price Index. For example, in 2000 the average estimated poverty threshold for an individual was an annual income of \$8,787, and for a four-person household it was \$17,601 (Dalaker and Proctor 2000). Census estimates for 1998 indicate that approximately 10.5 percent of the population of the state, 15.1 percent of Hawai'i County, and 9.7 percent of Honolulu County was below the poverty line in 1998 (US Census Bureau 2001). This represents a 27.8 and a 36.9 percent increase, respectively, in the number of individuals

below the poverty line in Hawai'i and Honolulu counties from 1990 levels (US Census Bureau 1990b, 2001). Within Hawai'i County, Hilo had the highest total number of families below the poverty line in 1999 (1,128 families), and the areas with the highest percentage of families below the poverty line were Nānāwale Estates (28.9 percent), Laupāhoehoe (28.4 percent), Orchidlands Estates (24.1 percent), Hawaiian Beaches (23.8 percent), Mountain View (23.6 percent), and Hawaiian Acres (22.5 percent). In Honolulu County in 1999, Honolulu had the largest total number of families below the poverty line, and the Mākaha Valley (32.4 percent), Mākaha (22.3 percent), Nānākuli (19.2 percent), Mā'ili (19.3 percent), and Wai'anae (17.2 percent) had the highest percentage of families below the poverty line (HDBEDT, no date [b] and [d]).

#### ***Executive Order 13045***

EO 13045, entitled Protection of Children from Environmental Health Risks and Safety Risks (EO 13045, 62 FR 19885), states that each federal agency shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. Environmental health risks and safety risks mean risks that are attributable to products or substances that the child is likely to come into contact with or to ingest.

In 2000 approximately 25.6 percent of the state's population was made up of children (under 18 years old), an increase of 10.9 percent from 1990. The percent of the population of Hawai'i County under 18 years in 2000 was 27.4 percent, an increase of 18.1 percent from 1990. In Honolulu County 25.1 percent of the population was under 18 in 2000, a 7.4 percent increase since 1990. Within Hawai'i County, the Pāhoa-Kalapana, South Kohala, and Kea'au-Mountain View CCDs had the highest population percentages below the age of 18 (30.1, 30.1, and 31.0 percent), and the Hilo, North Kona, and Kea'au-Mountain View CCDs had the largest total populations of children (11,175, 7,281, and 7,040). Within Honolulu County, the Wai'anae, Ko'olauloa, and Wahiawā CCDs had the highest population percentages below the age of 18 (36.3, 32.3, and 31.0 percent), and the 'Ewa and Honolulu CCDs had the largest total populations of children (75,526 and 76,231) (US Census Bureau 1990a, 2000c).