

## SECTION 5 – SOCIO-ECONOMIC AND CULTURAL ENVIRONMENT

### 5.1 Socio-Economic Characteristics

The project area is entirely located within the Līhu‘e Census Designated Place No. 405. In 2000, Kaua‘i’s population was 58,463 people. It is currently estimated at 63,004 people, an annual increase of approximately 1.1 percent, and projected to grow to 70,200 by the year 2015 (DEBT&T, 2005), an annual increase of 1.14 percent. Of the total population, approximately 12,022, or 20.56 percent, reside in Līhu‘e District. A comparison of local and statewide socio-economic characteristics is shown in Table 5-1: Demographic Characteristics based on 2000 census data.

In 2004, The top four employers by industry were 1) Leisure and hospitality (including accommodation and food services), 2) Trade, transportation, and utilities, 3) Government and, 4) Professional and business services. By 2012, leisure and hospitality and trade, transportation and utilities are expected to represent over half of the total employment positions added in Kaua‘i County (Hawai‘i Workforce Informer, Department of Labor and Industrial Relations).

Table 5-1  
 Demographic Characteristics (2000 Census Data)

	Līhu‘e CDP No. 405		County of Kaua‘i		State of Hawaii	
	Number	Percent	Number	Percent	Number	Percent
<b>POPULATION</b>						
Total population	5,674		58,463		1,211,537	
Male	2,722	48	29,252	50	608,671	50.2
Female	2,952	52	29,211	50	602,866	49.8
Median Age	44	(X)	38.4	(X)	36.2	(X)
Under 5 years	318	5.6	3,605	6.2	78,163	6.5
18 years and over	4,378	77.2	43,020	73.6	915,770	75.6
65 years and over	1,271	22.4	8,069	13.8	160,601	13.3
<b>RACE</b>						
One Race	4,513	79.5	44,525	76.2	952,194	78.6
White	1,291	22.8	17,255	29.5	294,102	24.3
Black or African American	12	0.2	177	0.3	22,003	1.8
American Indian and Alaska Native	13	0.2	212	0.4	3,535	0.3
Asian	2,794	49.2	21,042	36	503,868	41.6
Native Hawaiian and Other Pacific Islander	365	6.4	5,334	9.1	113,539	9.4
Some other race	38	0.7	505	0.9	15,147	1.3

**Table 5-1  
Demographic Characteristics (2000 Census Data)**

	Līhu'e CDP No. 405		County of Kaua'i		State of Hawaii	
	Number	Percent	Number	Percent	Number	Percent
Two or more races	1,161	20.5	13,938	23.8	259,343	21.4
Hispanic or Latino (of any race)	370	6.5	4,803	8.2	87,699	7.2
<b>HOUSEHOLD</b>						
Household population	5,547	97.8	57,831	98.9	1,175,755	97
Group quarters population	127	2.2	632	1.1	35,782	3
Average household size	2.55	(X)	2.87	(X)	2.92	(X)
Average family size	3.16	(X)	3.34	(X)	3.42	(X)
Total housing units	2,399		25,331		460,542	
Occupied housing units	2,178	90.8	20,183	79.7	403,240	87.6
Owner-occupied housing units	1,289	59.2	12,384	61.4	227,888	56.5
Renter-occupied housing units	889	40.8	7,799	38.6	175,352	43.5
Vacant housing units	221	9.2	5,148	20.3	57,302	12.4
<b>SOCIAL</b>						
Population 25 years and over	4,152		38,872		802,477	
High school graduate or higher	3,533	85.1	32,368	83.3	678,666	84.6
Bachelor's degree or higher	969	23.3	7,551	19.4	210,041	26.2
Civilian veterans (civilian population 18 years and over)	611	13.7	5,688	13.2	120,587	13.7
Disability status (population 5 years and over)	1,288	23.9	10,662	19.6	199,819	18.4
Foreign born	510	8.7	7,574	13	212,229	17.5
<b>ECONOMIC</b>						
In labor force (population 16 years and over)	2,736	58.1	28,355	63.1	612,831	64.5
Mean travel time to work in minutes (workers 16 years and over)	14	(X)	21.5	(X)	26.1	(X)
Median household income in 1999 (dollars)	44,906	(X)	45,020	(X)	49,820	(X)
Median family income in 1999 (dollars)	56,875	(X)	51,378	(X)	56,961	(X)
Per capita income in 1999 (dollars)	22,619	(X)	20,301	(X)	21,525	(X)
Families below poverty level	24	1.7	1,224	8.4	22,101	7.6
Individuals below poverty level	262	4.6	6,085	10.5	126,154	10.7

***Impacts and Mitigation:***

No impacts to population are expected as a result of the project. Short-term economic benefits include expenditure of funds and creation of jobs during construction. Long-term, the project may stimulate economic activity by improving linkages between coastal commercial nodes in the towns of Anahola, Keēlia, Waipouli, Wailua and Kapa‘a. The path is also expected to be a recreational attraction for residents and visitors which may, in turn, encourage new demands for goods and services in the project area. In addition, the path will benefit residents by offering a transportation alternative to the automobile whether commuting, traveling to recreational destinations, or accessing the shoreline for fishing and other activities. This will help alleviate traffic congestion that will likely accompany projected population growth.

## ***5.2 Archaeological and Historical Resources***

An archaeological field inspection and literature review was conducted by Cultural Surveys Hawai‘i (CSH) to identify the presence of any cultural or historic sites along the proposed bike-pedestrian path alignments. CSH’s report is appended to this document. Archaeological investigation consisted of literature research of the project area and surface inspection of the proposed alignment alternatives between Nāwiliwili, Ahukini, and the Lihu‘e Civic Center. The results of the investigation are as follows:

- Seven historic properties—all in the coastal portion—have been previously identified in or immediately adjacent to the project area: three pre-Contact sites (a cultural layer at the shoreline, SIHP No. 50-30-11-424, an oval-shaped stone alignment or terrace, SIHP No. 50-30-11-421, and a 400-foot long stone wall considered to be a possible extension of Ninini Heiau, SIHP No. 50-30-11-100) and four historic-era sites (two stone wall remnants, SIHP Nos. 50-30-11-422 & 423, the ruins of a plantation camp near Ahukini Landing, SIHP 50-30-08-9000, and a plantation-era piggery, SIHP No. 50-30-08-3958). SIHP Nos. -100, -422 and -423 *may* be impacted by the proposed project; the other historic properties should not be affected by the proposed project. See **Figure 5-1**.
- A historic cemetery designated 11-B004 (cf. Kikuchi and Remoaldo 1992) is located near Nāwiliwili Park. No description is noted for this cemetery.
- Paukini Rock, designated 11-1999, is located within the waters of Kalapakī Bay. Paukini Rock is associated with Kuhiau Heiau (site 11-099) and is said to be its sister heiau and the possible home of the kahuna of Kuhiau.
- Two historic bridges are located within existing rights-of-way / proposed path alignments: an old railroad bridge previously modified as a pedestrian walkway spans the Nāwiliwili Stream, and an old one-lane bridge in disrepair spans the Pū‘ali Stream in Niūmalu.

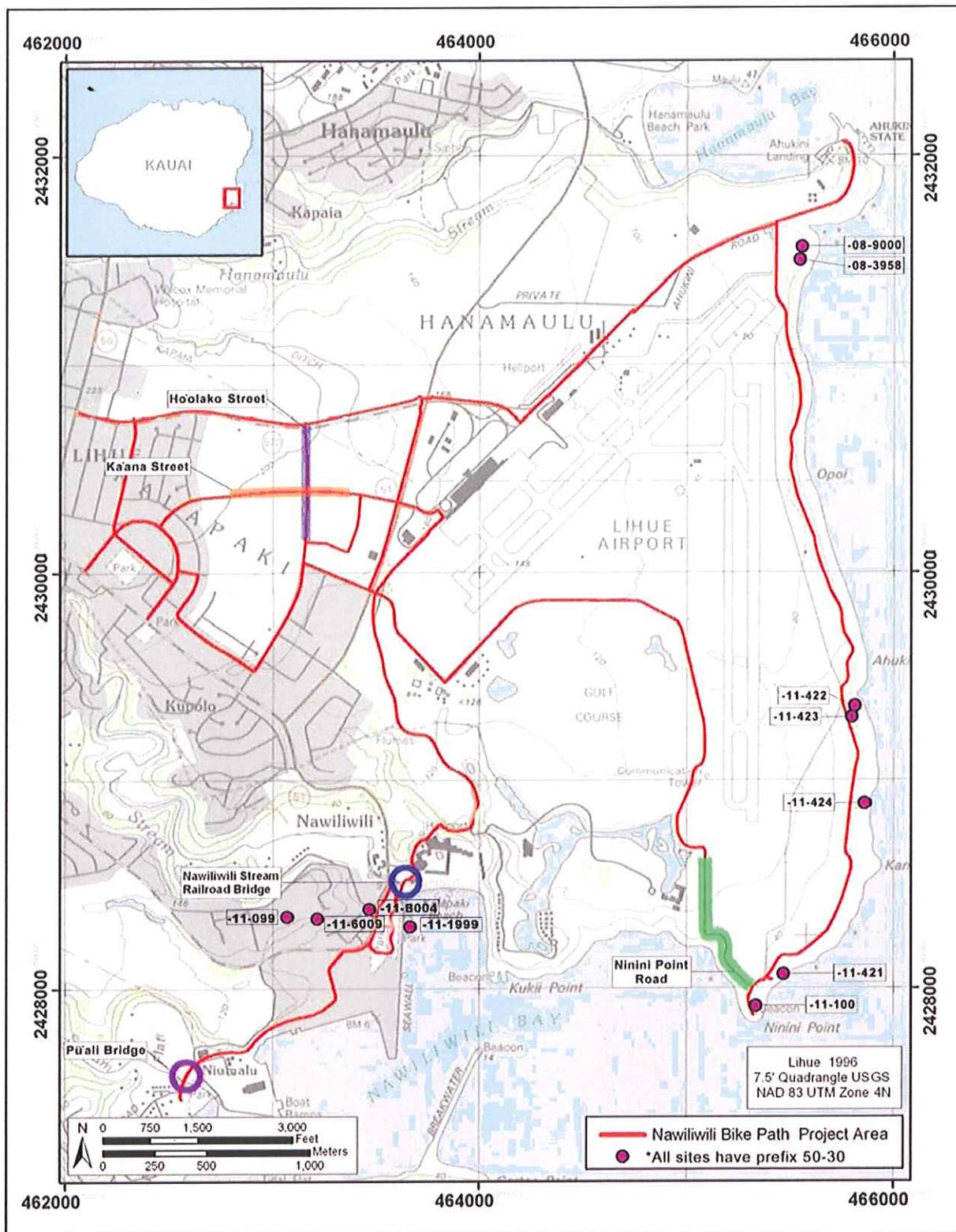


FIGURE 5-1: State Historic Sites

- Several coastal areas may contain historically-significant subsurface archaeological deposits, especially from Ninini Point to the previous location of the long-destroyed Ahukini Heiau (located at Ahukini Point, about halfway up the coast from Ninini to Ahukini Landing). The old Hawaiian village of Kalapakī was once located in this area as well. The coastal area near Niunalu Park may also contain historically-significant subsurface archaeological deposits.
- The remaining portions of the project area have been previously under commercial sugar cane cultivation and/or have been modified by modern development; it is therefore unlikely that additional historic properties (either on the surface or in subsurface deposits) are present throughout most of the project area.

*Impacts and Mitigation:*

1. The archaeological field inspection prepared for the project identifies known historic properties, as well as areas along the path routes where the potential for encountering previously unknown cultural or historic properties is higher. The preferred path alignment is routed to avoid known archaeological and historic sites. The final alignment will be established during the design phase when ground survey will be used to precisely locate known historic properties and ensure they are avoided by the path.
2. An Archaeological Monitoring program satisfying HAR Chapter 13-279 will be developed and implemented consisting of a combination of on-site and on-call monitoring, particularly along the coastal alignment between Ahukini and Ninini Point and in Nāwiliwili Park. Monitoring is probably not necessary in any of the mauka (inland) areas away from the coast, since these have all been severely modified by prior historic and modern disturbances.
3. An Archaeological Inventory Survey (AIS) satisfying HAR Chapter 13-276 will be considered in consultation with the State Historic Preservation Division for three undeveloped, vegetated areas considered for path alignments if those path segments are ultimately developed. The three areas are:
  - Path Segment B-3 – This alignment was considered, but rejected in favor of Segments B-1 and B-2 due to the presence of a nesting colony of Newell’s Shearwater. See Section 2.2.1.B for additional information.
  - Path Segment L-1, Ka’ana Street and,
  - Path Segment L-5 Hoolako Street. Path improvements along the Ka’ana Street and Ho’olako Street alignments will be constructed as part of Grove Farm’s Wailani development. An archaeological inventory survey conducted for this area in 1994 as part of the Lihu’e – Hanamā’ulu Master Plan EIS (PHRI, 1994). Due to extensive modification of the land from agricultural activities, no historic or cultural resources were discovered during the 1994 field survey. SHPD will be consulted to determine

if additional archaeological inventory survey work is required for these path segments. The focus of additional investigation would be on plantation era agricultural infrastructure (ditch works, utility structures). See Section 2.2.2.L for additional information.

- An AIS is recommended for the coastal alignment corridor between Ahukini Point and Ninini Point (portion of Segment A-1). Pursuant to on-going consultation with SHPD, subsurface testing may be required within the footprint of proposed improvements where drainage structures or other improvements involving significant ground disturbing activities (e.g. comfort station, septic leachfields) are planned given the likelihood of encountering historically-significant cultural materials in this area.
4. The historic cemetery designated B004 by Kikuchi and Remoaldo (1992) is located near the Nāwiliwili Park portion of the proposed bike- and pedestrian-path alignment. There is no description of this cemetery and the extents are unknown. Nāwiliwili Park and the adjacent areas makai of Rice Street have undergone extensive development and modification over the decades. Planned improvements within the park are located in areas currently developed with park and roadway improvements and it is unlikely that project activities will encounter unknown historic or cultural remains. Nevertheless, work in the area will be conducted in accordance with an approved archaeological monitoring plan developed in consultation with SHPD.
  5. In the event that unknown or unexpected historic or cultural features, deposits, or burials are discovered during project activities, all work in the area will be suspended immediately until the monitoring archaeologist evaluates the significance of the findings and notifies the SHPD to determine the appropriate course of action.
  6. The two bridges located within existing rights-of-way / proposed alignments will be documented and formally assessed for historic significance by a qualified Architectural Historian.
  7. No impacts to historical and cultural resources are anticipated in the remainder of the project area and no further historic-preservation work is recommended for the remainder of the project area (i.e., all those lands not specifically mentioned above)
  8. Proposed interpretive signage at Ninini Point and Nāwiliwili Park will include educational information on the history of the area and on the historical and cultural resources that existed in the past and in the present day.

### **5.3 Cultural Resources and Practices**

A cultural impact evaluation (CIE) was conducted by Cultural Surveys Hawai'i to determine if the proposed bike-pedestrian path would significantly impact traditional uses of the area. CSH's report is appended to this document as Appendix B. As part of the CIE, individuals were identified and interviewed to identify traditional uses of the area and to identify specific cultural practices that may have occurred or is currently occurring in the area of the bike-pedestrian path.

Hawaiian organizations, agencies, and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), and Kaua'i Island agencies pertinent to the proposed project area such as the Kaua'i Island Burial Council (KIBC), Kaua'i Historical Preservation Review Commission (KHPRC), State Department of Land and Natural Resources Kaua'i Land Division, Kaua'i Paths, Royal Order of Kamehameha, Kaumuali'i Chapter No. 3, and Kaleo O Kaua'i.

Thirty-two agencies/organizations or individuals were contacted for this CIE. Seventeen community agencies/organizations or individuals participated in brief informal interviews or provided referrals. The findings of this CIE suggest that there are three major areas of cultural interest and concern regarding the proposed Nāwiliwili-Ahukini Bike/Pedestrian Path Project:

- (1) There is concern that the Nāwiliwili-Ahukini Bike / Pedestrian Path may cut off or restrict existing motor vehicle access to shoreline fishing spots. Additionally, there is concern that the path will draw more people to the area who engage in fishing. There is concern that there will be increased fishing by non-residents which may lead to overfishing. It is hoped that seasonal fishing restrictions will be monitored and enforced.
- (2) There may be Native Hawaiian burials (*iwi*) in Nāwiliwili Valley (Kahumoku Road). There is general concern for potential for disturbance of *iwi* in the project area.
- (3) Many historic and cultural properties and places exist along the pathway, especially in Nāwiliwili Valley. Every effort should be made to route the final path alignment away from historic and cultural sites to avoid adverse impacts.

#### **Impacts and Mitigation Measures**

1. While there is much to recommend development of a path alignment through Nāwiliwili Valley, this alternative is no longer being considered as part of the preferred path alignment. Therefore no mitigation measures specific to Nāwiliwili Valley are required or recommended as part of this project. See Section 2.2.2.N for further discussion.

2. The preferred path alignment is routed to avoid known archaeological and historic sites. The final alignment will be established during the design phase when ground survey will be used to precisely locate known historic properties and ensure that they are avoided by the path.
3. An Archaeological Monitoring program satisfying HAR Chapter 13-279 will be developed and implemented consisting of a combination of on-site and on-call monitoring, particularly along the coastal alignment between Ahukini and Ninini Point. Monitoring is probably not necessary in any of the proposed mauka (inland) areas away from the coast, since these have all been severely modified by prior historic and modern disturbances. See Section 5.2 for additional discussion.
4. Access to and along the coastline for fishing, surfing, resource gathering and ceremonial activities will be preserved in perpetuity with the development of the path. Motor vehicle access will be limited to designated locations where safe path crossings are to be installed. Non-motor vehicle access will remain unimpeded to all areas makai of the proposed path. Concerns about the path facilitating an increase in newcomers fishing along this stretch of coastline with resulting reduction in stocks of near-shore fish will be communicated to DLNR Division of Conservation and Resource Enforcement (DOCARE). DOCARE is the State agency responsible for enforcement of existing fishing regulations and catch limits.
5. Interpretative signage will be developed in consultation with community members who have knowledge of cultural sites and practices. Efforts will build upon the work of the Coastal Path Historical and Cultural Committee Draft Report, included as **Appendix E** of this document.

## **5.4 Shoreline Access**

Currently the public can access the shoreline between Ahukini and Ninini Point via a public access easement that follows Ninini Point Road and the unimproved dirt road along the coastline makai of the airport. The public access easement connects with Ahukini Road, a public right-of-way under the administration of the State Department of Transportation, Airports Division. The road provides access to Ahukini Landing, a State recreational facility open to the public. The area is regularly accessed by fishermen and other recreational users.

The 1991 Kaua'i Beach Access Inventory Update identifies all existing, potential and desirable beach accesses both public and private. Seven access points within the project area are identified as "existing public beach accesses." These include Niūmalu Park, Nāwiliwili Harbor, Nāwiliwili Small Boat Harbor, Nāwiliwili Park, Kalapakī Beach, Airport/Ninini, and Ahukini Landing. The Kaua'i Beach Access GIS Project was developed to begin the process of updating

the Inventory and document new public beach access ways recorded since 1991. The 2005 report of The Commission on Public Access, Open Space, and Natural Resource Preservation outlines recommendations to improve public access, and identifies priority sites for acquisition. No sites within the project area were recommended as priority sites for public access acquisition.

***Impacts and Mitigation:***

The proposed project is being developed to preserve public access to coastal and shoreline areas. The new path will facilitate easier access for pedestrians and bicyclists to the Ahukini to Ninini Point shoreline. Path improvements will conform with ADA accessibility standards to ensure that individuals with disabilities are also able to enjoy these coastal areas. Existing access for fishing will also be preserved, however motor vehicle access to fishing spots will be limited to five designated locations where vehicles can cross the path. The entire coastline will remain unimpeded for non-motorized vehicle and pedestrian access.

Improvements to the Kaua'i Lagoons lateral shoreline access path and trail will likewise facilitate public shoreline access along a stretch of coast that has previously been difficult to reach. See Section 2.2.2.B for more information.

None of the seven access points identified in the Kaua'i Beach Access Inventory will be adversely affected by this project. Construction of the proposed path will enhance public shoreline access. No special mitigation measures concerning shoreline access are required or recommended.

## ***5.5 Public Safety / Crime***

Since data collection began in 1975, the year 2005 showed record low property crime rates, burglary rates, and larceny-theft rates in Kaua'i County. Crime statistics are separated into two different categories: Index Crime and Part II Offenses. Index Crime includes murder, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. Part II offenses include all criminal offenses not classified as index crimes. Part II offenses include juvenile offenses as well as offenses such as embezzlement, drug abuse violations, gambling, driving under the influence, and vandalism.

The total number of Index Crimes reported in Kaua'i County decreased 17.8% from 2004 to 2005; violent crimes decreased 33.2%, while property crimes decreased 16.5%. In 2005, the number of reported Index Crimes in Kaua'i County decreased for six of the eight categories: forcible rape, 13.5%; robbery, 36.4%; aggravated assault, 38.1%; burglary, 4.2%; larceny-theft, 22.8%; and arson, 30.0%; motor vehicle theft showed an increase of 36.3%; the total of two

murders reported for 2005 showed no change from the previous year. Part II Offenses increased by 13.5% in 2005.

Over the past 10 years, the population of Kaua'i County increased 10.8%. During that same period, the total number of reported Index Offenses decreased 25.4%, violent crimes increased 124.2%, and property crimes dropped 28.6% (Crime In Hawai'i 2005, Department of the Attorney General).

### *Impacts and Mitigation*

Certain segments of the preferred bike path alignment will be located in remote and/or densely vegetated areas which could provide opportunity and cover for unwanted activities. These segments include: Ninini Point road from Kapule Highway to the Light House, and Ninini Point Lighthouse to Ahukini Landing.

Mitigation measures may include: routine maintenance to cut back vegetation from the pathway; nighttime lighting, public phones at the comfort station; gating the shoreline road at its intersection with Ahukini Road during night time hours to limit motor vehicle traffic, routine patrols by law enforcement or volunteer path docents, and signage to educate the public about prohibitions and precautions. Specific mitigation measures will be developed in cooperation with the Kaua'i Police Department, Kaua'i Path, Inc., the Transportation Security Administration, and other government agencies and organizations as appropriate.