4 WAIMEA TOWN PLAN

4.1 CURRENT AND FUTURE PLANS AND DEVELOPMENTS

4.1.1 POPULATION

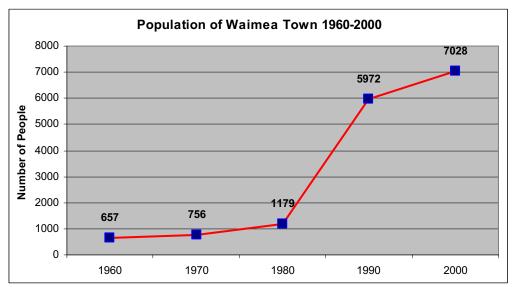


FIGURE 4.1: WAIMEA POPULATION 1960-2000

U.S. Census 1960, 1970, 1980, 1990, 2000

As can be seen in the figure above, it appears that the town of Waimea saw a dramatic increase in population between 1980 and 1990. However, part of the reason for the apparent dramatic increase in population is that the Census expanded the boundary area of the Waimea Census Designated Place between 1980 and 1990. In 1980 the Waimea Census Designated Place consisted of areas mainly surrounding the town center, while the 1990 Waimea Census Designated Place incorporated areas extending beyond the town center from Mahua St. on the west end to a little past Mud Lane on the east end and also extending south towards the Waimea Airport. Thus, with a larger area, the 1990 Census counted significantly more people in Waimea when compared with the 1980 Census. That said, the 1990 population count is much more reflective of the actual Waimea community, as compared with the 1980 Census count that was only limited to the town center area.

Of more relevance to the current CDP process is the increase in population from 1990 to 2000: a net increase of a little over 1,000 people. There are no accurate numbers available for the current (May 2008) Waimea population, but based on County building permit records (see "Housing" section, below), permits were issued in Waimea for a total of 415 units for the years 2003 through 2006, or an average of about 104 units per year. This level of building activity was probably slower for 2001-02 and for 2007. If about 500 units were built for the years 2001 through 2007, additional

population for that period would have been about 1,500 people – a significant increase for a relatively small community.

4.1.2 LAND USE

The development pattern in Waimea Town is linear from east to west, and concentrated along Māmalahoa Highway and Kawaihae Road. Development along these two roadways is spread out over six miles with the town center approximately at the mid point of the six mile stretch. Important developments along the highway include the North Hawai'i Community Hospital and the W.M. Keck Observatory. In part, because of the town's spread out development pattern along the major highway corridor, traffic congestion is a problem as residents who need to commute to the town center for daily necessities such as shopping or banking, compete with commuters who are traveling between Hilo and Kona.

Most of the commercial development is concentrated in and around the Waimea Town Center, at the intersections of Māmalahoa Highway and Kawaihae Road. The two main shopping centers include supermarkets, banks, and other smaller shops which cater to both local residents and tourists. Also located near Waimea Center are several of the town's 12 schools, including the Parker School on Lindsey Road and Waimea Elementary and Middle School on Māmalahoa Hwy. Hawai'i Preparatory Academy, one of the largest private schools in the state, has its main campus located on the west end of town along Kawaihae Rd.

Most of the Parker Ranch lands in South Kohala are located to the south of Waimea along Māmalahoa Highway. The Parker Ranch corporate headquarters, along with the historic race track, is located off of Māmalahoa Highway. Located just south of the Waimea Town Center is the historic Pukalani Stables Complex. To the south of town is the Waimea-Kohala Airport and the Lālāmilo farm lots. To the north of the Town Center are views of the Kohala Mountains and various culturally important *pu'u* that dot the mountain's slopes.

Table 4.1 summarizes planned development projects in the Waimea area. Figures 4.2 and 4.3 illustrate the General Plan LUPAG for Waimea and County Zoning for Waimea.

NIa	Development – Waimea Area					
No.	Development	Land Owner/ Developer	Description	Development Status		
1	DHHL Lālāmilo Homesteads	DHHL	442 house lots on 160 acres. Development will also include a community center, parks, general agriculture, preservation area (19.1 acres), open space areas (44.5 acres) Phase 1 includes 34 in-fill house lots. The remaining planned house lots will be built in Phases 2 & 3.	Preliminary construction began in 2005		
2	DHHL Pu'ukapu Homesteads	DHHL	Unspecified numbers of: house lots on 88 acres, farm lots on 598 acres, pasture lots on 4,797 acres; Community Pasture (529 acres), Pasture & Farm Lease (5,573 acres), Public Service Facilities (40 acres), Water / Forest Reserve / Conservation (165 acres)	Master Plan completed 2006		
3	DHHL Honoka'ia Homelots	DHHL	The project is actually located in the neighboring Hāmākua district, but is within close proximity to Waimea. The minimum lot sizes are designed to be 10 acres. The entire project area is about 2,500 acres	Preliminary planning and research completed		
4	HPA campus consolidation	Hawaiʻi Preparatory Academy	The school is considering relocating the lower and middle schools from their current sites to a site on the Kohala side of the existing solid waste transfer station. Access to the proposed campus relocation would be from Kawaihae Road.	TBD		
5	Okada Farm Subdivision	Okada Farms	The farm is planned to be subdivided into one acre agriculture parcels. Currently, the farm is the largest contiguous farm in Waimea.	TBD		
6	Waimea Parkside	Kaloko Development Inc.	40-lot subdivision on a 9.18 parcel near Lindsey Road	Under construction		
7	Parker Ranch 2020 (Waimea Town Center Plan)	Parker Ranch	Overall Plan calls for 750 homes and 250,000 (?) square feet of commercial space.	80 homes have been constructed		
9	Luala`i at Parker Ranch	Kaomalo LLC, Schuler Homes Inc., Parker Ranch	322 residential units, parks, and open space on 75 acres of land. This project is part of the "Parker Ranch 2020" plan.	Phase I completed in 2002		
10	Magoon Property	Magoon Estate Ltd.	Property across from Waimea school is under consideration for a possible mixed-use commercial and residential development	In planning stage		

Table 4.1 Current and Futur	re Development – Waimea Area
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No.	Name of Development	Land Owner/ Developer	Description	Development Status		
11	Waimea District Park	Hawai'i County	As part of the Parker Ranch 2020 Plan, Parker Ranch is required to allocate 21.5 acres of its land for a County regional park facility. Currently the land adjacent to and south of the Lālāmilo Farmlots is the leading candidate for the site of the future regional park.	TBD		
12	Lālāmilo State Land	State DLNR	DLNR entered a 35-year lease agreement with FR Cattle Company for 9,000 acres of ranch land. The area has several archeological sites and unexploded ordnance from previous military training exercises.	TBD		
13	Parker School Expansion	Parker School Trust Corporation	The school is looking at plans for expansion. A site north of the KTA shopping center is being considered.	TBD		
14	North Hawai'i Community Hospital	North Hawai'i Community Hospital	A 2008 master plan calls for the development of multi- story office buildings behind the hospital, a large auditorium, classrooms, and kitchen. Parker Ranch has donated lands for the hospital's expansion plans.	TBD		
15	Waimea Trails and Greenways	Hawai'i County	The greenway system will provide alternative modes of circulation. The greenway system is intended for pedestrian and bicycle uses. Currently, the project is managed by the County of Hawai'i Department of Parks and Recreation and a citizen advisory group known as the Waimea Trails and Greenway Committee.	Phase I construction completed		
16	Anna Ranch	Anna Ranch Trust	Trustees of the ranch are engaged in strategic planning to preserve the ranches historic sites and possibly establish a historic museum.	In Progress		
17	Waiulaula Watershed	MKSWCD	The Mauna Kea Soil and Water Conservation District (MKSWCD) in collaboration with NRCS are planning to preserve and increase water quality in the Waiuluulu Watershed. This watershed area includes flood prone areas in Waimea Town and Lālāmilo.	TBD		
18	Kauhale 'Ōiwi Pu'ukapu	Kanu o ka 'Āina New Century Public Charter School	The project is a series of small scale building complexes meant to house the programs and services of Kanu o ka 'Āina. The project is located on 15 acres on DHHL Pu'ukapu Homestead land.	Phase I construction has begun		

Table 4.1 Current and Future Development (Continued)

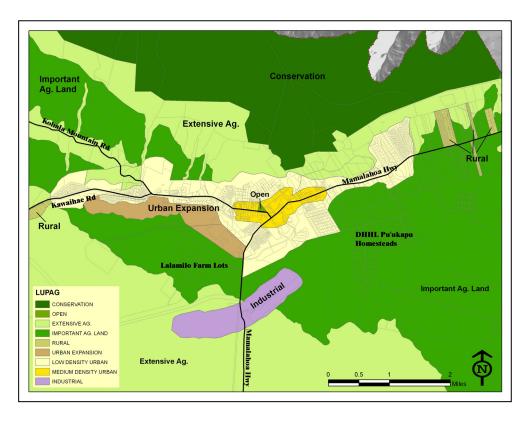
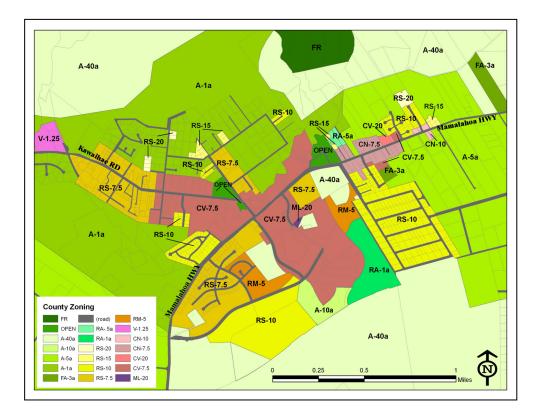


FIGURE 4.2: GENERAL PLAN LUPAG FOR WAIMEA

FIGURE 4.3: COUNTY ZONING FOR WAIMEA



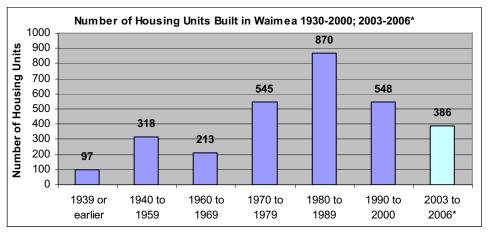


Figure 4.2 Housing

From 1970-2000 almost 1,400 housing units were built in Waimea. Currently, there are approximately 2,900 housing units in Waimea. * 2003-2006 Housing units are an estimate based upon the number of Building permits that were issued during those years.

	Waimea "Dry Side"		Waimea "Wet Side"		Waimea South of Māmalahoa Hwy.	
Year	Number of Permits	Number of Units	Number of Permits	Number of Units	Number of Permits	Number of Units
2003	4	4	57	81	58	58
2004	7	6	66	65	12	12
2005	11	11	65	63	46	45
2006	3	3	29	29	38	38
Total	25	24	217	238	144	153

Table 4.2 New Residential Building Permits in Waimea (2003-2006)

Source: The HI Co. Planning Department

There were a total of **396** residential building permits issued by the County for the Waimea area for **415** residential units from 2003-2006. The large majority of permits were issued for the "Wet Side" or east side of Waimea Town, while relatively few building permits were issued for the "Dry Side" or west side of Waimea Town.

Current and Future Road Projects

Parker Ranch Connector Road is designed to start from Māmalahoa Highway near the Parker Ranch rodeo grounds, then run just south of Parker Ranch's Luala'i subdivision and shopping center, and reconnect Māmalahoa Highway at or near Kamamalu Street, near the Waimea Civic Center. The connector road project will include a linear park and bikeway and a pedestrian pathway. The project is estimated to cost approximately \$13.1 million, and construction for part of the project is to begin in the near future. The timetable for completion of this connector road is as follows:

- 1. From Māmalahoa Highway near the rodeo grounds to the Luala'i subdivision, Kaomaloa Street, including the intersection with Māmalahoa: by May of 2009.
- 2. From Luala'i subdivision, Kaomaloa Street to Pukalani Road including the Pukalani Extension with connection to the completed portion of Pukalani Road: by May of 2010.
- 3. Completion of the final section of the Parker Ranch connector road, from Pukalani Road to Māmalahoa Highway in the vicinity of Kamamalu Street. Parker Ranch is responsible for construction of this final section of road in conjunction with development of the immediately surrounding area, with the proviso that this section must be completed no later than the issuance of the building permit for the 450th residential unit within the rezoned parcel. There continues to be debate as to whether this section of the connector road should intersect with Kamamalu Street, or should connect directly onto Māmalahoa Highway in the vicinity of the civic center and North Hawai'i Hospital. Other options are to indefinitely postpone construction of this section of the road or to connect the road in both locations with only one-way traffic traveling west adjacent to the North Hawai'i hospital so as to mitigate the noise impact to the hospital and to decrease the extent to which Kamamalu Street is affected.

Lindsey Road Extension. This project extends Lindsey Road from its intersection with Māmalahoa Highway to the proposed Waimea Bypass Road. Extension of Lindsey Road from its current terminus near the Post Office and Kahilu Theater to the Parker Ranch Connector Road corridor is the responsibility of Parker Ranch. Parker Ranch is required to construct this section of the Lindsey Road Extension concurrently with any commercial development of the immediately surrounding commercial zoned areas and must complete this section prior to issuance of a certificate of occupancy for that commercial development. Parker Ranch is also responsible for construction of that portion of the Lindsey Road extension located between the Connector Road and the future State Waimea Bypass Road located east of the rezoned property.

Richard Smart in the Parker Ranch 2020 Plan envisioned this Lindsey Road Extension as a "community street" and central to his vision of creating a "village center" in Waimea.

Road "A" is an internal connector road that will bisect the Luala'i subdivision and the Waimea public school property and connect on to the Lindsey Road Extension. The Department of Education is expected to pay for this road.

Lālāmilo Connector Road also known as the Māmalahoa Highway – Kawaihae Road Connector **Project** would connect the Kawaihae Road to Māmalahoa Highway near the Lālāmilo Farm Lots. The proposed road would start at the Māmalahoa Highway near the Parker Ranch Race Track and near the terminus of the planned Parker Ranch Connector Road. The road would travel in a northwesterly direction, intersecting Kawaihae Road near the Waimea Solid Waste Transfer Station Road. The cost for this project is estimated to be over \$9 million. Currently an Environmental Assessment for the project is being prepared by the County Department of Public Works. A number of objections to the alignment of the road have been raised. There is concern about_the adverse impact the road may have on the farm lots and other abutting properties, in particular an organic farm.

Waiaka Bridge and Intersection Replacement Project would widen and realign the bridge over the Waiaka Stream. The scope of the project also includes reconstruction of the adjacent intersection of

the Kohala Mountain Road and Kawaihae Road and installation of various safety improvements. To date the public prefers a new alignment mauka of the existing bridge location, with provisions for pedestrian, bicycle, and equestrian use. One possibility that received general community support is to retain the current bridge and use it solely for non-vehicular traffic. Construction is scheduled to begin in 2011 and will be funded by State and possibly Federal funds.

Lindsey Road Bridge Replacement Project is located near the Māmalahoa Highway intersection. The project is slated for the 2009-2010 fiscal year. There is great concern that this construction project will cause more traffic congestion in the center of town.

Waimea Bypass Road was initially proposed by the State DOT in the 1960s. The purpose of the proposed Waimea Bypass Road is to reduce cross-island traffic traveling between east and west Hawai'i through Waimea Town. The road's most recent design is to start from the Māmalahoa Highway near Mud Lane and connect with the Kawaihae Bypass Road at Māmalahoa Highway. The project is expected to be funded by State and Federal highway programs. However, the only funding to date has been for an Environmental Impact Statement, which is still underway. Major controversial questions surrounding this project include how, where, and whether to traverse the DHHL Pu'ukapu farm lots on the east side of Waimea. Waimea residents are also concerned about the road's alignment immediately south of the town center. There is considerable sentiment in the Waimea community that this State highway should be aligned to the south of the Waimea Airport.

Kawaihae Road Bypass is planned to start at Māmalahoa Highway near the Waimea Airport at the terminus of the Waimea Bypass Road. As with the Waimea Bypass Road, there is considerable sentiment in the Waimea community for this road to be aligned south of the Pu'u Pa – Pu'u Huluhulu cindercone complex. This highway will link up with the Queen Ka'ahumanu Highway in the vicinity of Kawaihae Harbor. The road is designed to relieve traffic anticipated from the further development of the resort areas, vehicles traveling between East Hawai'i and West Hawai'i, and increased vehicle, cargo, and Superferry traffic from Kawaihae Harbor. The Draft EIS was begun in 2006 and planning for the project is still in process. This road is proposed to be constructed in up to three sections. There is considerable district-wide community support for construction of the segment in the area of Kawaihae, given the potentially significant impact of the Superferry and military traffic into and out of the Harbor. According to the County Department of Public Works, construction of the road is scheduled to begin in 2014.

Waimea Trails and Greenways creates a corridor through Waimea town along the Waikoloa Stream consisting of trails and greenways. This project is intended to encourage alternative forms of circulation other than by car for trips within Waimea Town by providing accessible pathways to connect residential areas with schools and commercial areas. The trail will extend along Waikoloa Stream from the South Kohala View Estates on the west and travel northeast, through the Waimea Nature Park to the State land north of Church Row. The project will also consist of a 17-acre trail head, picnic area, and parking area located on the State land near the Waimea Solid Waste Transfer Station. The first phase of the project, in the vicinity of the Waimea Nature Park, has been completed and is open to the public. The project will be federally funded.

4.2 WAIMEA TOMORROW: WAIMEA CONCEPTUAL PLAN & POLICIES

PURPOSE: This **Waimea Town Conceptual Plan** presents in graphic and narrative form general guidelines for the long-range – 20+ year look-ahead – future of Waimea Town.

During the course of the Community Readiness Process and Waimea Focus Group meetings, five main concerns were consistently voiced:

- Preserving Waimea's "sense of place"
- Moderating the pace of growth and change in Waimea
- Wise management of natural resources and important agricultural lands
- Development of affordable housing
- Timely construction of transportation and circulation improvements

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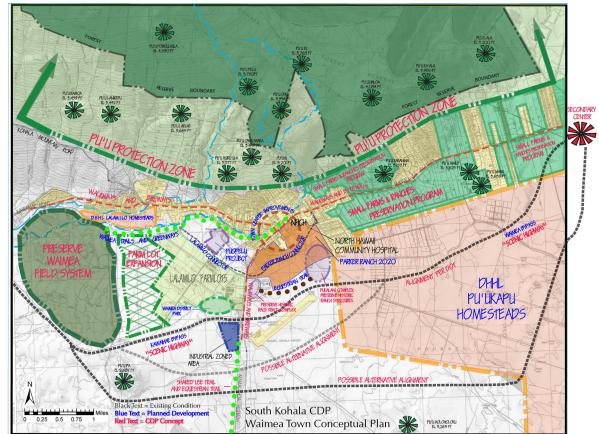


FIGURE 4.4: WAIMEA TOWN CONCEPTUAL PLAN

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Chapter 4: Waimea Town Plan

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This Conceptual Plan is presented as an important **linking step** between the Focus Group discussions and the resulting "Planning Notes" (November 2007) and the more detailed **Action Programs** that the CDP Team has developed on specific plan elements, including:

- 1. Strategies to "save the pu`u"
- 2. Strategies for preserving small farms, small ranches, and open spaces in East Waimea, and expanding farming activities
- 3. Plans for implementing walkways and bikeways along major roads

A note on the Conceptual Plan graphics and text: the graphic includes a variety of land use elements and ideas, including:

- Existing Land Uses (black text on the graphic)
- Projects and developments planned by various agencies and land owners (blue text)
- Concepts and land uses recommended by the CDP (red text)

The Conceptual Plan text provided here addresses most of but not all of the elements shown on the graphic. The text also includes some policies and details that are not shown on the graphic. Thus, text and graphics are presented as mutually supporting planning tools, but are not "identical" in content.

Note: the term "Waimea Community" is used in many places in this CDP text. Our working definition of the "Waimea Community" is **all of the people who live in and work in and are associated with the town of Waimea,** including but of course not limited to recognized community leaders and the members of various Waimea-based social, educational, cultural, and business organizations.

Based on input from the Community Meetings and Focus Group Meetings, the South Kohala Steering Committee meetings, and planning studies undertaken to date, suggested Overall Policies for Land Use in Waimea Town are:

- Waimea Policy 1. PRESERVATION OF WAIMEA'S SENSE OF PLACE shall be the principal, overarching land use policy for Waimea. This policy shall be implemented through measures for responsible growth, and through the preservation and protection of important lands and resources, including important cultural and historic sites and structures, important agricultural lands, and visually and environmentally important open space areas in Waimea Town.
- **Waimea Policy 2. "RESPONSIBLE GROWTH"** shall be an overarching land use policy for Waimea. Adequate infrastructure, including roads, water supply, electrical power, drainage structures, schools, and parks, shall be provided by public and/or private entities before any large-scale new residential or commercial projects can be considered for approval by the County.
- Waimea Policy 3. ENVIRONMENTAL STEWARDSHIP shall be an overarching land use policy for Waimea. Land use decisions shall be based on wise management practices for forests, watersheds, natural drainage ways and streams, native ecosystems, and important agricultural lands.
- Waimea Policy 4. DEVELOP AFFORDABLE HOUSING FOR WAIMEA. County Government and the Waimea community shall work with major area land owners, including the State of Hawai'i, Parker Ranch and the Department of Hawaiian Home Lands, to plan and implement affordable housing projects for low and moderate income people of Waimea.

Waimea Policy 5. TIMELY IMPLEMENTATION OF NEEDED CIRCULATION AND TRANSPORTATION IMPROVEMENTS. The County Government shall coordinate and work with the community and with state and federal agencies toward the timely construction of priority circulation and transportation improvements, including pedestrian, bicycling, and public transportation, improvements in order to alleviate severe traffic congestion that is impacting Waimea Town.

Important related land use strategies for Waimea Town are summarized below.

POLICY NO. 1 PRESERVATION OF WAIMEA'S SENSE OF PLACE

Strategy 1.1 Protect the *Pu'u* of Waimea – The green *pu'u* above Waimea Town have great cultural, historical, and visual importance for the community. Together with the grand views of Mauna Kea to the southeast of the town, the *pu'u* define the special landscape "sense of place" of Waimea.

Efforts to protect the pu'u should be centered on keeping the pu'u and surrounding areas in agricultural use (grazing) and conservation use. Many of the pu'u have deep cultural importance for Native Hawaiians, and they are important areas for Native Hawaiians to pursue traditional cultural practices. Allowing access to the pu'u is important for these traditional cultural practices. The pu'u also play an important role in the natural systems of the watershed.

A State-owned parcel that contains three of the most important *pu'u* of Waimea was recently "downzoned" by the County Council from Ag-1a and Ag-5a to "Ag-400" – a zoning designation that will prevent the land from being divided up into small agricultural lots. An overall protection plan is now needed for the other important *pu'u*: not only the steeply sloping cinder cone features, but also their associated slopes within the "*Pu'u Protection Zone*" as illustrated in the accompanying "Concept Plan for Waimea." The tree line referenced in the 1986 Waimea Design Plan should serve as the lower boundary line for the "Pu'u Protection Zone." The Waimea Design Plan states: "*Preserve the Kohala Mountains and pu'u's above the present tree line.*"

The *Pu'u* Protection Plan for Waimea could include one or more of the following tools:

- Prohibit any new structures above the tree line referenced in the 1986 Waimea Design Plan
- Voluntary downzonings
- Purchase of conservation easements by the County or by a Land Trust
- Development of educational materials on the history and cultural importance of the *pu'u*
- Partnership agreements with DLNR and DHHL
- Partnership agreements with private land owners

If restrictions on the use of these lands are found to significantly diminish the value of a particular parcel, consideration should be given to providing fair compensation to the land owner.

The *Pu'u* Protection Plan for Waimea presented in the "Action Program" section consists of the acquisition of conservation easements and the requirement of a use permit for grading and construction on steep slopes. It has also been suggested that the Waimea Community and the County request the State Legislature to pass a Concurrent Resolution stating that the *pu'u* lands of Waimea shall be preserved as undeveloped pasture and forests. Public access to *pu'u* located on State land should be provided. Private land owners may also be able to provide public access easements. A regional scale *pu'u* protection program could preserve all of the important *pu'u* in the District of South Kohala – and perhaps in neighboring districts as well. See the *Pu'u* Protection Action Program for details.

Strategy 1.2 Acquire Critical Open Space Areas – Some of the *pu'u* lands may need to be acquired – either by the County through the recently formed Open Space Commission or by a non-profit entity like the Hawai'i Island Land Trust. Some of the visually important small farm and small ranch lots in East Waimea may also be priorities for acquisition in order to ensure their continued use for farming or ranching – either fee purchase or acquisition of conservation easements. Depending on the disposition of the land owner, "downzoning" or special overlay districts may not be the best strategy to use for preserving critical open space areas, as these measures can lead to legal challenges and litigation. Acquisition of the fee interest or of conservation easements for critical open space parcels can therefore be, in some cases, the best approach. Of course, the constraint for this strategy is the availability of acquisition funds. See the **Action Program – Acquire Critical Open Space Areas in East Waimea** for details.

Strategy 1.3 Protect important cultural and historic sites, structures, and landscapes - Waimea Town has a wealth of cultural and historic resources, from pre-contact Hawaiian culture, from the heyday of the paniolo era, and from more recent times. A list of some of these sites and resources is located in section 2.5.1 of this CDP. Many of these sites, structures, and landscapes should be protected and preserved as important elements of Waimea's heritage and sense of place. The "Waimea Concept Plan" graphic identifies only a few of these important resources: the Waimea Field System to the west of the Lālāmilo Farm Lots, the Pukalani Complex, including the Breaking Pen, Carriage Barn, Pukalani Stables, Blacksmith Shop, and Pu'u Hihale Corral near Waimea Town Center, the pu'u mauka of the Town, and the Racetrack Complex near the Parker Ranch Headquarters. These identified sites are not meant to be "officially protected" sites, but are identified as important examples of Waimea's history. There are many other important historical properties, including the Anna Ranch, the churches of "Church Row," the old Lindsey house, and the Parker Ranch houses at Puopelu, to name a few. Overall, Waimea needs to establish an official "historic district," at the state and/or federal level, to preserve and protect its cultural and historic heritage. A Waimea historic district could honor Hawaiian culture, paniolo traditions, agriculture, and natural resources. Access to grants and other funding sources is possible by establishing such a special historic district designation.

Strategy 1.4 Encourage small-scale farming through expanded tax credits – There has been much talk of late about the need for "food security" for Hawai'i, and the need to expand diversified agriculture. However, recent statistics from the state Department of Agriculture indicate that the number of farms, farm acreage, and farm workers is declining in Hawai'i. This trend appears to be especially acute for animal products, including dairies, chicken and egg farms, and pig farms. If farming, including small family farms and part-time farms, is to continue to be an important part of the region's food production and economy, incentives for farming are needed. These incentives could include County real property tax incentives and state farm income tax credits. The State Legislature is currently considering a number of incentives for farming, including tax credits, loan guarantees, and a provision allowing on-site housing for farm workers.

Strategy 1.5 Expand the Lālāmilo Farm Lots – The Lālāmilo Farm Lots were originally subdivided and made available to farmers in the early 1960's and were intentionally isolated by locating them sufficiently distant from town. At that time, there were 27 lots, ranging in size from 15 to 57 acres, and totaling approximately 550 acres. This development was created with the intention that no individual lot would have less than 15 arable acres to produce truck-crops for local and export markets. Today, there are approximately 35 farm operations active here, employing about 150 full-time and some part-time workers. Of the 35 farm lots, 32 are now owned in fee, and 3 are still leased from the State. These farmlots are an important asset not just for Waimea, but for the entire State due to the unique climatic conditions of the area and the irreplaceable irrigation system.

There are a hundred acres or more of state-owned land located between the existing farm lots and the historic "Waimea Field System" that could be developed for expansion of farming activities. Assuming a minimum farm lot size of 15 acres, this expansion area could provide about 7 new farm

lots, and something in the range of an additional 30 to 40 full-time farm jobs, and additional foodproducing farms. There have been conflicting opinions from the community regarding the need or demand for additional farm acreage. A market demand analysis and agriculture water use analysis should be developed to address the need for expanding the Farm Lots. Expansion of the farm lots should also be conditional on the ability to adequately increase the supply of water for irrigation.

A caution: any expansion of the Lālāmilo Farm Lots should be carefully designed to avoid infringing on the culturally and historically significant Waimea Field System. As well, buffer areas consistent with the State Department of Agriculture's recommendation of "800 feet and preferably 1,000 feet distant from the Farm Lots" should be maintained around the existing (and any future) farm lots so that farming activities will not be adversely impacted by nearby residential or other development.

Strategy 1.6 Recognize and protect significant trees and other plants in Waimea – A high priority for Waimea should be the identification and protection of significant mature trees or tree clusters within Waimea Town, especially those along the road sides and stream beds, as well those that serve as significant windbreaks.

Throughout its history and still today, Waimea has been recognized as a place of great natural beauty. Waimea is where the mountains and forests and the streams and lush varied tree canopy meet the fertile plains. Preserving Waimea's close relationship with nature is critical to preserving its "sense of place". Most people in the Waimea community recognize the need to protect and preserve the quantity and diversity of mature trees in and near the town center, as a way to maintain:

- its village character,
- its diversity of bird life,
- its pedestrian friendly character;
- its visual beauty, and
- the environmental benefits, such as creating windbreaks and erosion control buffers, and the contribution to an agriculture-friendly climate.

Thought needs to be given to the establishment of a "Waimea Trees Advisory Committee" that would work in partnership with interested private groups such as the Outdoor Circle, and with concerned government entities such as the County's exceptional tree Council and the Parks and Recreation Department toward the recognition and preservation of exceptional trees in Waimea. The importance of encouraging protection of trees and vegetation in Waimea goes beyond the significance of individual trees. Other reasons such as global warming, rainfall distribution, and windbreak preservation, make protecting the trees of Waimea a vital undertaking.

Strategy 1.7 Encourage design and architectural guidelines that promote Waimea's *paniolo* **heritage** - The 1986 Waimea Design Plan should be used as a reference and starting point for formulating additional design and architectural guidelines for new developments in Waimea.

POLICY NO. 2 "RESPONSIBLE GROWTH": MODERATE THE PACE OF GROWTH AND CHANGE IN WAIMEA

Strategy 2.1 The County should carefully evaluate and condition, as appropriate, any rezoning that would negatively impact important agricultural lands or culturally, visually and environmentally important open spaces or resources in Waimea -- Time will be needed to implement a number of important open space preservation tools and programs, including acquisition of fee interest or conservation easements for important pu`u and some of the East Waimea farm and ranch lots. While these tools and programs are being put into place, private lands that are currently zoned A-5a, A-10a, A-20a, or A-40a should retain their current zoning. Exceptions can be made for affordable housing, agricultural cluster subdivisions, and small-scale

rezonings of 4 lots or less that may assist families in allowing their children to obtain individual properties.

Strategy 2.2 Work with Parker Ranch to phase the "Parker 2020" Development -- The original Parker 2020 Master Plan envisioned a total of about 750 homes and 250,000 square feet of retail and office commercial development on Parker Ranch lands located at the center of Waimea Town. To date, about 240 lots have been subdivided and 80 homes have been built and sold. Pursuant to a major re-organization, there is an understanding that the newly appointed Parker Ranch Trustees will be taking a fresh look at the goals and objectives of this major development. If the additional 670 homes per the original Master Plan were to be built by 2020, **this one project alone** would add some 1800 people to Waimea's population over the next 12 years – a population increase comparable to the increase of 1,056 people in Waimea's population during the decade 1990-2000. Development projects of this size typically have a fairly aggressive "build-out" schedule. However, this may be a good time to reassess the size and development pace of this project. In the event that Parker Ranch does proceed to develop any of the remaining portions of this Parker 2020 development, community input should be encouraged and carefully considered during the development approval process.

Strategy 2.3 Revise the County Subdivision Regulations and Planning Department policies and enforcement procedures to ensure that agricultural subdivisions are created for agricultural purposes and are not used for rural residential purposes without rezoning -- State Land Use statutes restrict residential structures on lots created after June 3, 1976 in the State "Agriculture" District to "farm dwellings." In practice however, the Hawai'i County Planning Department has approved many "agricultural subdivisions" that are actually rural residential developments.

There is certainly a demand and a place for rural residential projects. However, rural residential projects should be required to apply for and receive State Land Use "Rural" classification, and County "Rural Residential" Zoning designation. As a corollary, any and all agricultural subdivisions should be required to submit a farming plan for either commercial farming, including grazing of animals, or subsistence farming together with their preliminary subdivision documents, and the Planning Department should design and implement a monitoring program that will ensure implementation of these farming plans. In the interim, until such farm plan requirements are put in place, the Planning Department should encourage land owners of Ag-zoned parcels who are proposing "Ag Subdivisions" to cluster smaller lots in areas of the site where structures would have low visual impact, and then delineate most of the remaining acreage as permanent open space areas.

Strategy 2.4 Amend the County of Hawai'i General Plan "LUPAG" map by reducing the acreage of "Low Density Urban" land in Waimea Town -- The current County General Plan LUPAG map for the Waimea area includes over 1,000 acres of "Low Density Urban" land in the Waimea area. This designation is defined in the General Plan (page 14-7) as: "*Residential, with ancillary community and public uses, and neighborhood and convenience-type commercial uses; overall residential density may be up to six units per acre."*

Note that *"six units per acre"* translates to 5,000 square foot minimum lot size. The "Low Density Urban" areas on the LUPAG map include some existing development, but also include important cultural, historic, agricultural, and open space lands both *mauka* and *makai* of Māmalahoa Highway. Also of concern are the several hundred acres of "Urban Expansion" land shown on the south side of Kawaihae Road just west of Waimea Center, and the several hundred acres of "Rural" land shown along the south side of Kawaihae Road, roughly between Waimea and Kawaihae. Further development of these areas would continue the "suburban sprawl" development pattern that is not compatible with the goal of preserving Waimea's "sense of place."

The details of any changes to the Waimea section of the County General Plan LUPAG map will need to be worked out at a future date.

Strategy 2.5 Develop a secondary commercial center on the east end of town -- By providing a secondary center that services people's basic daily necessities, a small-scale commercial center located on the east end of town would help to alleviate traffic congestion that develops around the existing commercial center in the town center. Residents who live on the east end of town could instead patronize the secondary commercial center for daily necessities instead of driving to the town center.

POLICY NO. 3 ENVIRONMENTAL STEWARDSHIP

Strategy 3.1 Protect Important Agricultural Lands – The Hawai'i County General Plan (February 2005) defines "Important Agricultural Lands" (IAL) as *"those (lands) with better potential for sustained high agricultural yields because of soil type, climate, topography, or other factors."* (See General Plan p. 14-8 for the full definition.) The LUPAG maps for South Kohala show Important Agricultural Lands in a broad band about 1.2 miles wide north and south of the first 1+ mile of Kohala Mountain Road, in a broad area that includes most of the DHHL Pu'ukapu lands, and in the southeastern sector of the South Kohala District in the vicinity of the Saddle Road/Māmalahoa Highway junction. (See LUPAG map for details.) These lands should be used for extensive and intensive farming and ranching, and should not be rezoned for urban or suburban-type land uses.

POLICY NO. 4 DEVELOP AFFORDABLE HOUSING FOR WAIMEA

Strategy 4.1 Develop a Waimea Affordable Housing Program – In 2006, State and County housing agencies sponsored an update of a state-wide "Housing Policy Study." This study included a special analysis of the "homeless" issue. For Hawai'i County, the study found that approximately 1/3 of the County's 150,000 residents were either: (1) homeless, or (2) only a paycheck or two away from becoming homeless, or (3) doubled up or tripled up with other families because they were unable to find affordable for sale or rental housing. Clearly, affordable housing is a state-wide – and national – issue and problem, and one that is very difficult to solve.

During the CDP process, Waimea residents have said: "Please find a way to provide affordable housing so that our children can live in the town where they grew up." There is also a need for affordable housing for many of the key employees that work in Waimea, including teachers and hospital workers. An effective affordable housing program that would build affordable for sale homes and provide affordable rentals could be developed using a non-profit, locally-based housing corporation and the "land trust" model. See the **Affordable Housing Action Program** for further details.

Strategy 4.2 Encourage policies that would provide more affordable rental units in Waimea -- The County should work with the Waimea community to develop programs that would increase the number of affordable rental units. Ideas such as revising the Ohana Dwelling section of the Zoning Code should be further studied.

POLICY NO. 5 TIMELY IMPLEMENTATION OF NEEDED TRANSPORTATION AND CIRCULATION IMPROVEMENTS

Note: with the exception of, Policy 5.1 "Walkways and Bikeways along the main roads," the projects described below are all at some level of planning by various community, county and state entities. We have included a brief description of these projects because they are very important for the future of Waimea. However, the CDP cannot devote a significant amount of time and resources to evaluating these transportation plans or develop any detailed alternatives to proposed new roadways or traffic improvements. The CDP can, however, reflect community priorities and

concerns regarding these projects – concerns that are not always reflected in the official project plans and reports.

Strategy 5.1 Plan, design, and construct walkways and bikeways within the existing rights of way of the main Waimea Roads: Kawaihae Road and Māmalahoa Highway -- Except for sidewalks for a few blocks within the center of Waimea Town, there are no walkways or bikeways along the major roads that could be used by pedestrians and bicyclists, including children walking to and from school. Constructing safe bikeways and walkways along Māmalahoa Highway and Kawaihae Road would provide people with alternatives to travel by car, and would thus potentially alleviate to some degree the peak hour traffic jams that now characterize Waimea.

There is a need for both "higher speed" bike lanes for the "expert" recreational or commuter bicyclist, as well as walkway/bikeway shared paths that are separated from the roadway, and that are safe for children and elders. The Waimea Town Plan section of the South Kohala CDP provides a detailed **Action Program** for the planning, design, and construction of these walkways and bikeways.

Strategy 5.2 Support the implementation of the Waimea Trails and Greenways Project – Plans for the Waimea Trails and Greenways project have been developed over a period of some 13 years. The first phase of the project, about ½miles in length, from Lindsey Road to the beginning of the Sandalwood subdivision, has recently been completed. This multi-purpose path is planned to eventually extend to the vicinity of "Church Row." This stream-side trail will be an important complement to the planned walkway/bikeway system that the CDP proposes along the main roadways. It is recommended that the Waimea Trails and Greenways Project also be considered for equestrian use. The County should continue to support this important community project through funding and technical assistance.

Strategy 5.3 Plan, design, and construct a system of equestrian trails for Waimea – There has been considerable discussion in recent years about the need and desirability of equestrian trails in the Waimea area. Of course, a generation or two ago, horses and riders were a natural part of the Waimea scene, and as recently as the 1980's, it was not uncommon to see people riding their horses along the main roads. Now, however, traffic volumes effectively preclude horses and riders in town. Community leaders need to work with Parker Ranch and other land owners to develop a system of equestrian trails that will be compatible with existing and future residential, commercial, and institutional land uses.

The "Waimea Conceptual Plan" graphic shows two schematic alignments for possible equestrian trails: one from the vicinity of the Parker Ranch Headquarters to the vicinity of the Pu'ukapu houselots, and another trail along the State DOT easement that parallels Māmalahoa Highway, from the vicinity of the Waimea Airport southward for a distance of about 7 miles. The establishment of safe equestrian trails in and around Waimea Town is an important program that can connect Waimea present and future to its special *paniolo* past.

Strategy 5.4 Plan, design, and construct a system of multi-purpose paths and trails for Waimea – There are many other opportunities for the establishment of paths and trails in the Waimea area. The CDP Action Committee should organize a sub-committee to help gather community input to decide on priority trail routes. After community input has been gathered, the sub-committee should help with the implementation of priority trail projects. Several suggested multi-purpose paths and trails for Waimea include but are not limited to the following ideas below.

Parker Ranch Equestrian Plan - The Parker Ranch 2020 Equestrian Plan calls for a non-profit to take over the operation and maintenance of this trail. According to the zoning ordinance, the trail is to be completed before the occupation of any residential or commercial development in the Waimea Town Center.

A temporary trail located in the Parker Ranch Connector Road Phase Two corridor may serve the community well. While the connector road cannot be built in the immediate future, a trail in this location would provide the community a needed alternative travel route.

A perimeter trail around the State owned Buster Brown parcel that could possibly extend to Anna Ranch or to HPA has been advocated by several community members.

Ala Kahakai National Historic Trail Comprehensive Management Plan/EIS – Map of Alternative C: Ahupua'a Trail Systems shows the proposed corridor and possible connector and lateral trails in South Kohala. Waimea Trails & Greenways could be extended down an alignment that would follow Waikoloa Stream and Waiulaula Stream to connect with the Ala Kahakai NHT. When Paniolo Road is extended from Waikoloa to Kawaihae Road, a parallel shared use path could connect to Waimea Trails & Greenways and the Ala Kahakai NHT.

Kohala Watershed Management Plan – Trails and Public Recreational Use Areas map shows a number of existing unimproved and dirt roads and trails in South Kohala. The plan encourages use of these roads and trails by the public.

PB Americas Waimea Traffic Circulation Study – Map shows Waimea Trails & Greenways extending eastward along the Old Homestead Road, a path along Māmalahoa Highway, Parker Ranch Connector Road and Lālāmilo Connector Road and the Lindsey Road Extension. During the Parker Ranch Connector charrette, it was suggested that a path on one side of the connector road(s) could accommodate pedestrians and slow bike riders and one on the other side of the connector road(s) could accommodate equestrians. Note that this suggestion plus the opening of the Parker Ranch equestrian trail would create an equestrian loop. Also, it would connect the Waimea Trails & Greenways parking lot (which is planned to accommodate horse trailers to allow equestrian use of portions of the trail) to the equestrian trail loop, and if a north-south shared use trail in the vicinity of Waimea Civic Center connected these trails to the Old Government Road, a longer loop would be possible.

It is also recommended that the Old Government Road (that extends behind Imiola Church and runs along until it reaches behind Pu'u Kakanihia and follows down Lanimaomao Stream, exiting out near the Kamehameha Schools Preschool) be cleared of vegetation and considered as a multipurpose trail.

Nino Walker's Paths in the Country Map – This map shows one way to create an alternative access to the Waipio Rim Trail that was lost when the White Road Trail was closed. The trail could follow the perimeter of Anna Ranch or the State parcel north of town. A number of possible trail alignments are suggested within Waimea town.

Existing utility pole easements are potential trail systems that already exist and with minimal improvement could become long linear recreational facilities, for hiking, horseback riding and bicycling. The conceptual Kapuni O Hawai'i trail paralleling Queen Ka'ahumanu Highway along the utility pole line, as well as the one makai of Māmalahoa Highway are examples. Steps should be taken in the initial phasing of the bike/pedestrian network to include these rights of way where ever possible.

A pedestrian/bike/horse bridge across Waikoloa Stream would be provided on State property to connect the Kapiolani/Spencer/Hokuula/Lindsey loop (which is already used by pedestrians, bike riders and equestrians) to the rest of the shared use network via Church Row. Portions of one or both of State lots 6-5-004-015 and 6-5-004-079 could serve as trail head parking lots and/or community gardens. Parker Ranch lot 6-5-004-099 would have to be crossed, but crossing might be possible within a drainage easement.

The widening of the shoulder area along the Kohala Mountain Road to allow for bicyclists should also be considered as a future project. Currently, the road is already used by many bicyclists.

Implementation of many of the ideas presented above would require the cooperation of South Kohala land owners.

Strategy 5.5 Implement short-term traffic mitigation improvements in and around Waimea Town Center – The "Draft Waimea Traffic Circulation Study" by the engineering company PB Americas provides recommendations on relatively near-term improvements that could be implemented to lessen the severity of peak hour traffic congestion in Waimea Town Center. These improvements include widening a section of Māmalahoa Highway from 2 lanes to 4 lanes, and improvements to the main intersection of Māmalahoa Highway/Lindsey Road/Kawaihae Road.

Some community members have gone on record criticizing the study for lack of understanding of Waimea's unique history and "country town" character. Specifically, some people have strongly opposed any widening of Māmalahoa Highway near the town center from 2 lanes to 4 lanes. The suggested alternate action is "changes in travel habits" rather than road widening. For example, starting time for (some) schools and/or some places of employment both in Waimea and in the Resorts might significantly alleviate traffic congestion during peak hours – although changing starting times for schools to a later time may result in schools ending at the same time as the afternoon peak traffic conditions.

There were community concerns about other plan details. However, the plan was recently submitted to the County as a "final" plan with no changes. Safe routes to school programs that encourage bicycling and walking to school will alleviate a percentage of morning traffic and should be part of a comprehensive traffic mitigation plan for Waimea Town Center. This includes sidewalk, cross walk improvements, crossing guards, pedestrian and bicycle education in schools, "Walking Bus" programs, and "Bicycle Train" (adult supervised bicycling to school programs.) The County needs to work closely with the Waimea community as elements of this plan are designed and implemented.

Strategy 5.6 Design and construct the Parker Ranch Connector Road – Parker Ranch and the County of Hawai'i recently reached an agreement regarding design and construction of the "Parker Ranch Connector Road." This much needed road would extend from Kamamalu Street in east Waimea to Māmalahoa Highway just north of the Parker Ranch racetrack and rodeo grounds. Regarding the intersection of this Connector Road with Māmalahoa Highway to the east of Waimea Center: the North Hawai'i Hospital has gone on record opposing any intersection that would require the Connector Road to be constructed in close proximity to the Hospital's eastern boundary. The North Hawai'i Hospital has also stated that the bypass should not be constructed on hospital property. Construction of this road would allow traffic between East Hawai'i and Māmalahoa Highway south to avoid the congestion of Waimea Town Center. The estimated cost of the road is \$15 million, and the estimated completion date is 2010. Engineering design work for the project is to proceed in early 2008. Details of the multi-purpose path that will parallel the new road have yet to be finalized.

Strategy 5.7 Design and construct the Lālāmilo Connector Road – This proposed road would extend from the Parker Ranch Connector/Māmalahoa intersection to Kawaihae Road in the vicinity of the existing County solid waste transfer station. Construction of this road, together with completion of all three Phases of the Parker Ranch Connector Road, could potentially allow traffic between Waiaka and Pu'ukapu to circumvent the Waimea Center. The estimated cost is over \$9 million, and the road would be financed and maintained by the County. As of January 2008, the Environmental Assessment and detailed design work for this project was "on hold" pending finalization of the "*Waimea Traffic Circulation Study*." Of special concern is the State Department of Agriculture's recommendation of "800 feet and preferably greater than 1,000 feet distance from

the Farm Lots" between this proposed road and the existing Lālāmilo Farm Lots, and in particular an organic farm that would be adversely affected by the new road. Bicycle facilities and pedestrian paths should be included in the design of this road.

Strategy 5.8 Work with the State Department of Transportation to resolve the best alignment for the proposed Waimea/Kawaihae Road Bypass Highway – This major state highway project has been studied and debated for some thirty years. This Bypass Highway would be a major regional arterial 2-lane highway that would provide a new route for traffic between East Hawai'i and Kawaihae Harbor. The most recent proposed alignment for this road in the vicinity of Waimea extends from near the Mud Lane/Māmalahoa Highway intersection, through the upper sections of the DHHL Pu'ukapu Homesteads, through Parker Ranch lands just north of the Waimea Airport, across Māmalahoa Highway south, and then south of the Lālāmilo Farm Lots and the Waimea Field System.

There appears to be a strong community consensus that this highway must be built and that it is absolutely critical not only to the preservation of the culture and character of Waimea Town, but to the safety and convenience for all the residents and businesses of East, North, and West Hawai'i and would clearly solve the current as well as the future ills facing the traffic through Waimea Town. Much community input has indicated that the alignment should be south of, rather than north of, the Airport (see page 62). Some community members have commented that the entire alignment of this road in the vicinity of Waimea as proposed by the State is not acceptable, and that the alignment should be farther south of Waimea Town (see Figure 4.4). Also, some members of the local Hawaiian community are opposed to any highway construction within Pu'ukapu Homesteads. An "Environmental Impact Statement" for this project has been "in the works" for approximately 10 years. Actual design and construction of this bypass highway may take another 10 years or more. Any plans for this Bypass Highway should include designation of this road as a "Scenic Highway" with appropriate controls on future development of lands with highway frontage. Adequate right-of-way width to include future widening and bike lanes should also be included in the design of the road.

4.3 ACTION PROGRAMS FOR WAIMEA

4.3.1 ACTION PROGRAM – "PROTECT THE PU'U OF WAIMEA"

The Need for Action

The green pu'u above Waimea Town and their associated sloping acreage have great cultural, historical, ecological, and visual importance for the community. Together with the grand views of Mauna Kea to the southeast of the town, the pu'u define the special landscape "sense of place" of Waimea. The pu'u are also important spiritual and resource areas for Waimea's Native Hawaiian people.

Many of these pu'u have been used as grazing lands for generations, while some are forested. These pu'u and



their associated lands are of vital importance to the health of the Waimea watershed. Generally, by "protection of the pu'u" the CDP means continuing pasture and forest use of the pu'u and not allowing residential or commercial development.

The pu'u that most strongly define the *mauka* landscape of Waimea are the large, green pastureland pu'u that are located outside of the State's Forest Preserve area. Moving from west to east, these pu'u are:

<i>PU'U</i> NAME	ELEVATION	TMK NO.	TMK ACREAGE	OWNER	
КАМОА	3,439	362001005	247	State of Hawai'i	
LANIKEPU	3,442	362001008	895	Parker Ranch	
LAELAE	3,665	5 TMK's *	(see note below)	(see note below)	
HOKU'ULA	3,377	365001020	420	State of Hawai'i	
OWAOWAKA	3,449	365001020	420	State of Hawai'i	
KI	3,201	365001020/03	420+37	State of Hawai'i	

Table 4.3 Pu'u in Pastureland

*Note: Pu'u Laelae is located at the junction of five (5) TMK's: 06 (State of Hawai'i), 08 (Parker Ranch), 10 (DHHL), 11 (DHHL) and 19 (DHHL). Open pasture lands downslope from this *pu'u* summit, TMK 14, are owned by the Anna Ranch Trust. Sloping lands associated with the *pu'u* above Hawai'i Preparatory Academy are owned by the Academy.

Other important pu'u in the area include a number of forested pu'u located within the State Forest Reserve:

- Pu'u Pelu Elevation 3,750 (feet above MSL)
- Pu'u Ohu Elevation 3,934
- Pu'u Iki Elevation 3,768
- Pu'u Haloa Elevation 4,084
- Pu'u Ka'ala
 Elevation 3,985
- Pu'u Lala Elevation 3,200

Given their location in the State Forest Reserve area, these *pu'u* are not at risk of being subdivided or developed.

There are also several small pu'u that are located within the small ag/ranch lots area of East Waimea:

- Pu'u Kakaniha Elevation 3,157
- Pu'u Maile Elevation 3,625
- Pu'u Manu Elevation 3,635

And some isolated *pu'u* located south of Waimea, including:

- Pu'u Pa / Huluhulu Elevation 2,687
- Pu'u Holoholo Ku Elevation 3,263

The state-owned parcel that contains three of the most important pu'u of Waimea (parcel 20) was recently "downzoned" by the County Council, with the concurrence of the State DLNR, from Ag-1a and Ag-5a to "Ag-400" – a zoning designation that will prevent the land from being divided up into small ag lots.

An overall protection plan is now needed for the other important pu'u. and their associated pasture lands and forests. Of most concern are the pu'u that are the first three pastureland pu'u identified in the Table above – Pu'u Kamoa, Pu'u Lanikepu, and Pu'u Laelae. In a "worst case" scenario, these pu'u and their associated lands would some day be subdivided and developed as houselots. The visual and environmental impact of developing these steep, scenic, and historic lands would be huge.

The overall **Pu'u** Protection Plan for Waimea can include a number of strategies, including the following:

Strategy 1.1.Acquire conservation easementsStrategy 1.2.Require a Use Permit for Grading on Steep Land

Details and proposed "Action Programs" for these strategies are provided on the following pages.

Strategy 1.1 Acquire Conservation Easements for Critical *Pu'u* Parcels

Overview

Acquisition of the fee interest of a property – by the County or by a non-profit land trust – would provide the higher level of control, but would also be the more expensive type of action. Purchase of a Conservation Easement would give the purchasing entity a limited level of control over future uses of the parcel, but would be less costly. Purchase of a conservation easement would also be more appropriate if the parcel's owner intends to continue using the parcel for ranching.

Generally, the purchase of a conservation easement for a given property would mean that the property cannot be developed for residential, commercial, industrial, or institutional uses, and that the use of the property shall remain agricultural and/or open space.

The conservation easement strategy would be feasible for privately owned pu'u lands, but would not be applicable to DHHL lands, which are held in trust by DHHL for the benefit of native Hawaiian people.

The **Action Program** for the acquisition of conservation easements on critical *pu'u* parcels can be summarized as follows:

- Who should take the lead? Waimea-based open space subcommittee of the South Kohala "CDP Action Committee," which is the community-based entity that will be the successor to the Steering Committee; with assistance from the County Planning Department; the County Public Access, Open Space, Natural Resources Preservation Commission; and the Hawai'i Island Land Trust (HILT)
- What needs to be done? Meet with owners of critical privately owned *pu'u* parcels "one on one" to find out if they are willing to negotiate a conservation easement for the parcel(s). These meetings could include "land owner education" on the tax benefits and other benefits of establishing conservation easements. For willing land owners, proceed with appraisals of the value of a conservation easement, and negotiate a fair price. Seek acquisition funds from the County and/or from the HILT and/or from wealthy donors residing in the Waimea area. Implement the acquisition process, including final negotiations, funding, finalizing a purchase and sale agreement, and a formal closing. Note: some land owners may be willing to donate a conservation easement to the County in order to receive tax benefits.
- When should actions be initiated? Initial discussions with land owners can begin as part of the CDP process. Details and a start on actual acquisitions can be pursued after the South Kohala CDP has been enacted.

- **How much will it cost?** The cost of an acquisition program of this kind can be quite high. For example, if the program results in the acquisition of 1000 acres of conservation easements at a cost of \$10,000 per acre, the cost would be \$10,000,000 – not including costs for appraisals, attorneys' fees, closing costs, and other related expenses. To put these costs in perspective, however, we should keep some of the following numbers in mind:
 - The County of Hawai'i is setting aside 2% per year of County real property tax revenues in the County's open space acquisition fund. This percentage currently equates to about \$4,000,000 per year.
 - The Hawai'i Island Land Trust, first formed in 2004, may eventually be able to raise enough money to fund annual acquisitions of \$1,000,000 or more.
 - In 2007, 1160 acres of open space lands at Pūpūkea-Paumalū on O'ahu were acquired by the North Shore Community Land Trust (NSCLT). Funding for this acquisition \$11.5 million was provided by a coalition of public and private entities, including the U.S. Army, the State legislature, the City and County of Honolulu, the Trust for Public Lands, and the NSCLT)

General conclusion: an open space acquisition program costing in the millions of dollars is expensive, but can be done if the lands in question are important enough. For the "preservation of the Waimea's sense of place," the preservation of the green, historic, culturally important pu'u of Waimea is of critical importance.

• **Intended Outcome:** Preservation of the *pu'u* of Waimea as open space for ranching, forestry, and watershed protection in perpetuity.

Strategy 1.2. Require a Use Permit for Construction on Steep Slopes

Overview

Construction of buildings, roads, and associated structures on steep slopes of over 25 percent often results in significant increases in storm water runoff, soil erosion, and siltation of streams and near shore waters. Homes built on steep slopes have experienced foundation failures, with resulting costly structural damage and injury to the occupants.

The County Planning Department could control construction on steep slopes including construction on otherwise unprotected *pu'u* or *pu'u* related slopes by requiring a use permit for proposed grading and construction on any parcel where the average slope of the land is greater than 25 percent. This requirement would include any proposed construction on the steep sides of *pu'u* and gulches. The use permit requirement would include a requirement for a public hearing on the proposed use. The use permit could be denied if the proposed construction was found to have potential significant negative impacts on the natural and/or visual environment. The permit could also direct the owner to avoid building on steep slopes if there is a less steep building site available on the parcel.

- Who should take the lead? Hawai'i County Planning Department
- What needs to be done? Develop appropriate language requiring a use permit for construction on steep slopes, and proceed with the process for amending the Zoning Ordinance.
- When should actions be initiated? The Planning Department can move ahead with this Zoning Ordinance amendment in the near future.
- **How much will it cost?** Costs will be primarily staff time and the cost of notifying the public of the proposed Zoning Ordinance amendment.

• **Intended Outcome:** The Planning Department will then have better regulatory tools to control construction activities on steep slopes, including any proposed construction on the scenic and culturally important *pu'u* of Waimea.

4.3.2 ACTION PROGRAM – ACQUIRE CRITICAL OPEN SPACE AREAS IN EAST WAIMEA

The Need for Action

Some of the privately-owned *pu'u* lands of Waimea may need to be acquired – either by the County through the recently formed Open Space Commission or by a non-profit entity like the Hawai`i Island Land Trust.

Also of great importance to the rural and *paniolo* character of Waimea are the visually important small farm lots and ranch lots in East Waimea. Some of these parcels may also be priorities for acquisition in order to preserve their use for farming and ranching – either fee purchase or acquisition of conservation easements.

From Mud Lane to Church Row, and not including DHHL lands or large parcels that are more or less "country estate" parcels with large homes, there are approximately 40 small farm and ranch parcels 10 or more acres in size in this area that front onto Māmalahoa Highway, and that are still "intact" and



Open pasture land in East Waimea

in some form of open space – e.g., that have not been subdivided and developed for residential purposes. The "view from the road" driving into Waimea from the east (from Honoka'a) is thus still rural in nature, with grazing horses, sheep, and cattle, woodlots, and small farm fields dominating the view.

For some years, however, the trend for these rural lots in east Waimea has been subdivision actions and/or sale of a parcel and development of expensive homes. A major impediment that discourages the continued use of these lands for agriculture is the heavy traffic on Māmalahoa Highway, especially during peak morning and afternoon commute times. Farmers often must transport slow moving agricultural equipment and products on the highway, which is extremely hazardous during these periods of the day. Potential new farmers, as well as the remaining farmers, consider this condition a deterrent to expanding their operations by seeking more land to lease or purchase in this area.

It is important to note a couple of distinguishing features between the agricultural lands in east Waimea and those in the Lālāmilo Farm Lots. First, east Waimea agricultural lots have been farmed since the era leading up to World War I, whereas the Lālāmilo Farm Lots were first awarded in the 1960s. Second, traffic problems do not exist yet in the Lālāmilo farm lots because it is a concentrated agricultural subdivision that was constructed away from the town center with the express intention of keeping it isolated.

Acquisition of the fee interest or of conservation easements for several critical open space parcels may be possible. Of course, the constraint for this strategy is the availability of acquisition funds.

For those parcels that are being proposed for rezoning by the owner – say from A-40a (40-acre minimum lot size) to A-5a (5-acre minimum lot size) – an alternate strategy would be to work with

the parcel owner and agree to rezoning a portion of the parcel to RS-20 or RS-10 to accommodate a reasonable number of lots, and downzone or place an agricultural easement on the rest of the property. This strategy would be a sort of "internal Transfer of Development Rights" (TDR).

Strategies to consider for the preservation of some of the small farms and ranches thus include:

Strategy 2.1 – Acquisition of Fee Interest or of Conservation Easements Strategy 2.2 – Internal TDR

Strategy 2.1 – Acquisition of Fee Interest or of Conservation Easements

Overview

Acquisition of the fee interest of a property – by the County or by a non-profit land trust – would provide the higher level of control, but would also be the more expensive type of action. Purchase of a Conservation Easement would give the purchasing entity a limited level of control over future uses of the parcel, but would be less costly. Purchase of a conservation easement would also be more appropriate if the parcel's owner intends to continue to live on the property and continue using the parcel for farming or ranching. Acquisition of the fee interest would be the better approach for those small farmers and ranchers who need retirement funds.

Generally, the purchase of a conservation easement for a given property would mean that the property cannot be developed for residential, commercial, industrial, or institutional uses, and that the use of the property shall remain agricultural and/or open space.

Based on recent sales of some of the parcels in East Waimea, a 40-acre farm or ranch lot might sell in 2008 for about \$2,000,000. The alternative Conservation Easement cost for the 40-acre parcel might be about 1/2 that amount, or about \$1,000,000.

A further alternative might be the purchase of a conservation easement for only a portion of the parcel – e.g., that portion of the parcel that is most visible from Māmalahoa Highway. For example, if a typical 20-acre parcel is about 400 feet wide by about 2200 feet deep, a conservation easement on the highway frontage section of the parcel measuring 400 feet wide by 1000 feet deep would still provide for a significant amount of open space at a cost of perhaps about 50% of the cost of a conservation easement for the entire parcel.

The **Action Program** for the acquisition of the fee interest or of conservation easements for selected parcels in East Waimea would be similar to the Action Program for the purchase of conservation easements for the *pu'u* parcels, and can be summarized as follows:

- Who should take the lead? Waimea-based open space subcommittee of the South Kohala CDP Community Action Committee, with assistance from the County Planning Department, the County Open Space Commission, and the Hawai'i Island Land Trust (HILT)
- What needs to be done? Create a detailed map and list of open space parcels, together with notes on their current use and owners. Meet with owners "one on one" or in small groups to find out if they are willing to or planning to or in need of selling their land either the fee interest or a conservation easement. Set approximate purchase prices and designate one or more parcels as the highest priority for acquisition. Seek acquisition funds from the County and/or from the HILT and/or from wealthy donors residing in the Waimea area. Implement the acquisition process, including appraisals, negotiations, funding, finalizing a purchase and sale agreement, and a formal closing.

- When should actions be initiated? Initial discussions with land owners can begin as part of the CDP process. Details and a start on actual acquisitions can be pursued after the South Kohala CDP has been enacted.
- **How much will it cost?** The cost of an acquisition program of this kind can be quite high. For example, if the program results in the acquisition of 100 acres in fee simple at a cost of \$50,000 per acre = \$5,000,000 plus 400 acres of conservation easements at a cost of \$25,000 per acre = \$10,000,000 over a 10-year period, total 10-year costs could easily be \$15,000,000 or more not including costs for appraisals, attorneys' fees, closing costs, and other related expenses. To keep these costs in perspective, however, we should keep in mind the funding sources and conservation precedents that are noted for the Strategy 1.2. Acquire Conservation Easements for Critical *Pu'u* Parcels, above.

General conclusion: an open space acquisition program costing in the millions of dollars is expensive, but can be done if the lands in question are important enough. For the "preservation of the Waimea's sense of place," the East Waimea small farms and ranches are of critical importance.

• **Intended Outcome:** Preservation of most of the remaining small farms and ranches in East Waimea as open space for farming and ranching.

Strategy 2.2 – Internal Transfer of Development Rights

Overview

During the CDP process, there has been considerable interest in and discussion of the concept of "Transfer of Development Rights" (TDR). This planning/development concept is used in many U.S. mainland communities. In a typical transaction, a developer purchases the development rights for "Farmer A's" 200-acre farm that has A-5a zoning = development potential for about 36 5-acre lots (assuming 10% of the land for roads and other infrastructure). The developer is then allowed to "transfer" the "development rights" for the 36 units to a "receiving site" – say a 50-acre site near town zoned RS-10. The developer is allowed to increase the density of his development by 36 units without having to go through a rezoning process to be permitted the higher density. Farmer A's land can no longer be subdivided and developed and the developer's project near term is more profitable.

The proposed "internal" TDR strategy for some of the small farms and ranches in East Waimea would involve the Planning Department working with the parcel owner to work out an agreement whereby a portion of the parcel would be rezoned to RS-20 or RS-10 to accommodate a reasonable number of lots, and the remainder of the parcel would be downzoned or restricted by means of an agricultural easement or conservation easement.

- Who should take the lead? Hawai'i County Planning Department
- What needs to be done? The Planning Department can begin discussions with the owners of priority parcels. Rezonings from Ag zoning to Residential zoning will also require a change in State Land Use designation from "Agricultural" to "Urban," but this change can be accomplished through a County Special Permit/County Council action if the parcel to be rezoned is less than 15 acres.
- When should actions be initiated? This program for internal TDR's could be initiated at any time, and could be applied to several rezonings of East Waimea lands that are currently being proposed.

- **How much will it cost?** The cost to the County will be mainly Planning Department staff time.
- **Intended Outcome:** A number of critical East Waimea open space and farm areas will be preserved and protected in perpetuity, and, at the same time, the parcel owner will be able to create a number of residential lots for use by family members and/or for sale to others.

4.3.3 ACTION PROGRAM – AFFORDABLE HOUSING FOR WAIMEA

The Need for Action

Throughout the "Community Readiness Program" (CRP) and the Community Development Plan (CDP) process, the theme of **AFFORDABLE HOUSING** was discussed by the community many times and with great urgency.

The state-wide real estate market surge from about 2002 through 2006 resulted in a 100% or more increase in house prices in many communities, including Waimea. By the end of 2006, the median price for a new 3-bedroom single family house in Waimea was about \$800,000 – well beyond the means of most local families, even with both husband and wife working full time. As has been the case for many established Hawai'i communities, the people of Waimea found that their young families could no longer afford a home there, and many older couples were struggling to pay their inflated real property taxes.

There are no easy answers to the affordable housing needs – of Waimea, or of Hawai'i County, or of the State of Hawai'i. Even without the impacts of the recent real estate market surge, land and labor and materials are expensive in Hawai'i, and there is little incentive for private developers and contractors to build affordably priced for sale or rental units.

For Waimea, the "land" part of the equation may be solvable to some extent. There are a number of State-owned parcels in or near Waimea that could potentially be developed for affordable housing. In addition, as some of the need for affordable housing is for employees of beneficiaries of Parker Ranch Trust – e.g., teachers at Hawai'i Preparatory Academy and at Parker School, and staff of the North Hawai'i Hospital – Parker Ranch may be able to provide land for affordable housing at a low cost.

For the Waimea community and its affordable housing needs, the most useful tools or strategies may be:

Strategy 3.1 Self-Help Housing

Strategy 3.2 Non-Profit Housing Development Corporation or similar entity

Strategy 3.1 Self-help housing

Overview

The Hawai'i Island Community Development Corporation (HICDC), with offices in Hilo, develops self-help housing projects throughout Hawai'i County.

The mission of HICDC is to provide low income families with housing opportunities. The organization provides technical assistance to participants in self-help housing programs and assists

families in applying for loans from USDA Rural Development. HICDC also develops housing for low income senior citizens.

HICDC is currently developing plans for two affordable housing projects in North Kohala:

- Kamakua Self Help Subdivision 22 self help homes on 7,500+ sf lots on a 16-acre site near Kohala High School. The 15-acre makai portion of the 31-acre property could be developed as a "phase 2" project.
- Ainakea Senior Residences 30 1-bedroom, 1 bath units for senior citizens 62+ years of age and with incomes at 50% of area median income. Construction scheduled to start in June 2008.

The Waimea community could establish an ongoing Self-Help Housing Construction Program that would provide 10 to 20 homes per year for at least the next 10 to 20 years. Although these numbers are not very large, the construction of 100 to 200 affordable homes per decade would still be a significant achievement, and would certainly help both young and old to live affordably in their own town.

- WHO will take the lead? The South Kohala CDP Action Committee will have an ongoing role for the implementation of the CDP, including the implementation of affordable housing programs. A subcommittee of the Action Committee can work with HICDC and with the County Office of Housing and Community Development (OHCD) to establish an ongoing self-help housing program for Waimea.
- **WHAT needs to be done?** Work with the Hawai'i Island Community Development Corporation (HICDC) to establish an ongoing self-help housing program for Waimea.
- WHERE will actions take place? State-owned parcels in and near Waimea may have potential as affordable housing sites. In addition, Parker Ranch may be able to provide land at a nominal cost if employees of Parker Ranch Trust beneficiaries are given preferential status for the purchase or rent of affordable units that would be constructed on that land.
- HOW MUCH will self-help housing cost? For a small (10-20 lots) subdivision with 7,500 sf lots, and assuming conformance to current County subdivision standards, and assuming building a new subdivision, the cost of land plus grading, roads, drainage, and utilities ("infrastructure") will be in the range of \$100,000 to \$150,000 for each house lot. Costs would be lower if land costs are nominal. For a "self-help" constructed home of 1,100 square feet, the cost of materials and contractors for foundations, plumbing and electrical work will be about \$120,000, not including the value of the "self-help" labor. So: total cost for a self-help home could be in the range of \$220,000 to \$270,000 for self-help homes in a new subdivision.
- **Intended Outcome** If an average of 10 to 20 moderately priced self-help homes can be constructed every year for the next ten years, there would be a total of 100 to 200 new affordable homes created in Waimea.

Strategy 3.2 Non-profit housing corporation(s)

Overview

There are a number of non-profit corporations in Hawai'i that are focused on the development of affordable housing.

In 2006, the County's Office of Housing and Community Development (OHCD) and others were instrumental in forming a new "501c (3)" non-profit entity called the "Hawai'i Island Housing Trust.

(HIHT)." The mission of HIHT is to plan, finance, and construct affordable housing projects, including "workforce housing projects," in areas of the County where there is the greatest need.

HIHT is designed to create a number of subsidiary entities, each of which would be a "single member Limited Liability Corporation (LLC)" that would also have tax-exempt status under the 501c (3) certification of HIHT. Each LLC would be the "developer" of a particular housing project.

HIHT's first project will be the "Kamakoa at Waikoloa Village" workforce housing project. The master plan for this ambitious project calls for the construction of 800 for-sale homes and 400 rental units, plus parks, a community center, a daycare center, and a site for a future elementary school.

For sale homes will be comparable in quality to "market homes," but will be priced to be affordable to families earning 80% to 140% of the area median income, which in 2007 was about \$57,000 for a family of 4 persons. In 2007 dollars, that would mean that homes would be priced from about \$235,000 to \$385,000, and rents will be from about \$800 to \$1100 a month.

The "For Sale" homes do not include sale of the land; each home buyer will receive a sub-lease for their building lot. Prices for the homes and apartments are to remain affordable "in perpetuity."

One of the major challenges for affordable housing projects is **financing:** how to design a financing plan that will provide construction financing and "permanent" financing at the lowest possible cost. For the Kamakoa project, the primary financing sources may be summarized as follows:

- Initial planning funds: from the County's Affordable Housing Revolving Fund
- Infrastructure financing: from County General Obligation (GO) Bond funds and from Tax Exempt Bonds that will be issued through a "Community Facilities District" (CFD), a new entity that will be created for this purpose;
- Vertical (housing construction) financing: from Tax Exempt Revenue Bonds.
- Home mortgage loans for home buyers: special "below market rate" loans guaranteed by the quasi-public national home loan corporation known as "Fannie Mae."

These financing tools collectively, together with the "Land Trust" land lease structure, lower the price of the for–sale homes to about 60% to 70% or less of the price of a market home. Thus, for example, a \$300,000 home in the Kamakoa project would sell for about \$430,000 to \$500,000 if it was located elsewhere in Waikoloa Village.

A subsidiary LLC of HIHT could be created to develop affordable housing projects for Waimea. There could be one LLC that could develop a number of sites, or alternatively there could be several LLC's each of which would develop a specific site. Alternatively, a new non-profit entity could be affiliated with HIHT for the purposes of developing affordable homes and rental apartments for Waimea. A second alternative would be to establish a Waimea affordable housing entity that would be affiliated with HIHT but that would NOT need its own 501(c) 3 certification, per IRS rules for what is called "Group Exemptions." The IRS sometimes recognizes a group of organizations as tax-exempt if they are affiliated with a central (non-profit) organization. (See IRS Rev. Proc. 80-27, 1980-1 C.B. 677). A third alternative would be to create a separate Waimea Housing Non-Profit.

At least for the first several projects, new affordable housing projects for Waimea should probably be relatively small in size: perhaps in the range of 20 to 30 units. Smaller projects would fit better into the fabric of the existing community, and would also be easier to bring on line in a reasonable timeframe. Note that planning for the Kamakoa project began in early 2004, and the project will (finally) begin site construction work in mid 2008 – a planning/design period of 4+ years. The first

homes will not be ready for occupancy until late 2009 – nearly 6 years after planning work began. Large projects require large land areas and large amounts of time to plan and design!

The LLC (or similar Waimea-based entity) would own the land, and home buyers would lease their lot for a nominal amount. Homes would be kept affordably priced **in perpetuity** through deed restrictions that limit price appreciation, and through a requirement that any future sale of a home would have to be to the LLC.

This strategy would thus be to create a non-profit housing development organization (or similar entity) for Waimea that will develop affordable for-sale and rental housing to meet the needs of the Waimea community.

- WHO will take the lead? The South Kohala CDP Action Committee should have an ongoing role for the implementation of the CDP, including the implementation of affordable housing programs. A subcommittee of the Action Committee can work with HIHT and with the OHCD to establish the Waimea Affordable Housing LLC or some similar entity.
- WHAT needs to be done? Work with the HIHT Board of Directors and the County Office of Housing and Community Development (OHCD) to create an LLC subsidiary or similar entity to develop affordable housing for Waimea. Some of the more detailed tasks include the following:
 - Create and organize the Waimea Affordable Housing Entity: articles of incorporation, bylaws, board of directors, policies and procedures, etc.; seek and obtain initial seed money
 - Tentative selection of a project site or sites,
 - Initial project planning and financial proforma, potentially funded by the County's Affordable Housing Revolving Fund.
 - Proposal to County Council for General Obligation (GO) Bond financing for land acquisition, design, and possibly for some of the infrastructure costs.
 - County Council approval of GO Bond financing for land acquisition and (?) some of the infrastructure costs.
 - Designation of the project site as a "201H experimental affordable housing project."
 - o Design and implement financing program for infrastructure and vertical construction.
 - Design and construction of infrastructure and homes. Note: the project could include some "self-help" homes and/or "owner-builder" homes.
 - Marketing and sale of the homes.
- WHERE will actions take place? Potential sites for the development of small affordable housing projects in Waimea will need to be identified. Sites within walking distance of Waimea Town Center should be given priority.
- **HOW MUCH will it cost?** Use of the "land trust" land lease model, together with restrictions on appreciation of house values and creative financing can result in sales prices

and rent prices that are significantly below area "market" prices. For Waimea, that could mean, for example, a new 1,100 square foot home on a 7,500 square foot lot might sell for \$250,000 to \$300,000, and a 400 sf 1-bedroom rental apartment might rent for \$600 to \$800 per month.

• **Intended Outcome:** Once organized, up and running, the Waimea Affordable Housing Entity could conceivably develop 20 or more units per year. At this production rate, the Entity could build about 200 or more units over a 10 year period – which would meet a significant amount of the demand for affordable homes.

4.3.4 ACTION PROGRAM – WALKWAYS AND BIKEWAYS FOR WAIMEA

The Need for Action

There is a critical need to plan, design, and construct walkways and bikeways within the existing rights of way of the main Waimea Roads: Kawaihae Road and Māmalahoa Highway.

Except for sidewalks for a few blocks within the center of Waimea Town, there are no walkways or bikeways along the major roads that can be used by pedestrians and bicyclists, including children walking to and from school.

Constructing safe bikeways and walkways along Māmalahoa Highway and Kawaihae Road would provide people with alternatives to travel by car, and would thus potentially alleviate to some degree the peak hour traffic jams that now characterize Waimea.

The typical right-of-way of the main roads leading into and out of Waimea is 50 to 60 feet in width, and the average paved roadway, including travel lanes and a narrow paved shoulder, is about 26 feet. (See map showing rights-of-way widths.) Thus, there is typically about 24 feet of right-of-way, or an average of 12 feet on each side, that is available for walkways and/or bikeways. These dimensions will of course vary, depending on specific site conditions including drainage ditches, slope conditions, adjacent land uses, and the need for left turn lanes at major intersections.

See **Appendix G** for illustrative cross-sections for several "typical existing conditions" for both Māmalahoa Highway and Kawaihae Road, followed by "conceptual walkway and bikeway" cross-sections that illustrate possible widths and locations for permanent walkways and bikeways along these roads.

It should be noted that the pedestrian and bicycle advocacy non-profit known as "PATH" (Peoples Advocacy for Trails Hawai'i) has proposed that the County adopt a "shoulder stabilization" strategy with future maintenance projects – e.g. extending the new pavement an additional +/- eight feet on both sides of the road to provide a shared use shoulder that would create additional surface for walking, bicycling, emergency breakdown, bus pick up. "Shoulder Stabilization" should be funded with "shoulder preparation" funds that allow for preparation of the shoulder (e.g. grading, grubbing) prior to repaving. PATH and other organizations point out that while this is not considered the ideal treatment for the shoulder (sidewalks and where possible separated shared use paths are far superior to create safe walkways); this treatment uses the existing in-house resources of the Department of Public Works to at least maintain the shoulder for use. This strategy has recently been implemented for the Kawaihae Road repaving project.

Strategy 4.1 Walkways and bikeways for Waimea

The **Action Program** for planning, design, and construction of walkways and bikeways along Waimea's main roads may be described as follows:

- Who should take the lead? Waimea-based walkways/bikeways subcommittee of the South Kohala Community CDP Action Committee, with assistance from the County Planning Department, the County Department of Public Works, the State Department of Transportation, and PATH.
- What needs to be done? Receive review and input from the Waimea community on these walkway/bikeway ideas during the implementation of the CDP, including input on phasing the design and construction work. Agree on a "Phase 1" length of walkway/bikeway for early implementation. Soon after enactment of the South Kohala CDP, present a request to County Council for funding of the survey work and design for Phase 1, with the understanding that construction funds will be requested in the following year. Contract for (perhaps through PATH) the survey and design work, and do the work. Put together the request to County Council for construction funds. Receive construction funds and contract for the work. Do the construction work and proceed with design and construction of subsequent phases.
- When should actions be initiated? Phasing of the bikeways and walkways should be decided by the CDP Action Committee. A funding request for design and survey work for Phase 1 can be submitted as part of the FY 2009/2010 County CIP program.
- **How much will it cost?** Order of magnitude cost estimates developed as part of the South Kohala CDP work were as follows: "for one mile sections of roadway with improvements on both sides of the road"

Curb and Gutter	\$550,000
5′ wide asphalt bike lane	\$250,000
5' wide concrete path	\$300,000
5' wide asphalt path	\$200,000
5' wide grass strip	\$200,000

Thus, if the "typical" bikeway/walkway configuration for the main roadways in Waimea is no curb/gutter, 5'wide bike lane both sides + 5' wide grass strip both sides + 5' wide asphalt path both sides, the cost per mile would be approximately \$650,000, or about \$123 per linear foot. These costs do not include topo survey, design costs, or construction management, which would add about 20% to the costs.

• Intended Outcome: Completion of a continuous walkway/bikeway system along Māmalahoa Highway from Mud Lane to Waimea Center and from Waimea Center to the vicinity of the Waimea-Kohala Airport; and along Lindsey Road/Kawaihae Road from Waimea Center to Hawai'i Preparatory Academy. The system, when completed, would total about 10 miles. The walkways and bikeways would provide Waimea residents with alternative, safe modes of circulation, promote healthy walking and bicycling, and alleviate traffic congestion and air pollution.