



DRAFT

Kīlauea Town Plan
An Update of the Kīlauea Sub-Area Plan

September 2005

D R A F T

Kīlauea Town Plan

An Update of the Kīlauea Sub-Area Plan

*Prepared for: Kaua'i County Planning Department
By: PlanPacific, Inc.*

September 2005

Table of Contents

	Page
Chapter 1: Origin and Purpose of the Kilauea Town Plan	
1.1: The Kaua'i General Plan.....	1-1
1.2: Implementation of the Kilauea Town Plan.....	1-1
Chapter 2: Focus of the Kilauea Town Plan	
2.1: The Challenge of Agricultural Zoning	2-1
2.2: The Context of Historic, Scenic and Natural Assets	2-3
2.3: The Need for Resident-Oriented Housing and Services	2-5
Chapter 3: The Planning Process	
3-1: The Charrette Approach	3-1
3-2: Schedules, Outreach and Outcomes	3-1
3-3: First Public Meeting	3-2
3-4: The Charrette	3-3
3-5: Follow-Up to the Charrette.....	3-6
Chapter 4: History of Town and Regional Growth and Housing Need	
4.1: History of Kilauea Town Expansion.....	4-1
4.2: Population and Housing Considerations.....	4-2
Chapter 5: Challenges and Opportunities for Town Expansion	
5.1: The Challenge of Infrastructure Needs and Costs.....	5-1
5.2: The Challenge of Long-Term Housing Affordability	5-2
5.3: The Challenge of Multiple Land Ownership	5-2
5.4: Opportunities to Reduce Infrastructure Costs.....	5-3
5.5: Opportunities to Coordinate Landowners.....	5-5
5.6: Opportunities to Conserve Affordable Housing and Land	5-6
Chapter 6: Recommendations	
6.1: Review of Recommendations in North Shore Development Plan.....	6-1
6.2: Recommendations Concerning Regional and Town Form	6-2
6.3: Recommendations Concerning Housing Development.....	6-6
6.4: Recommendations Concerning Town Character.....	6-10
Appendices	
A: Updated Evaluation of Site Selection for North Shore Middle School	
B: Summaries of Public Meetings, Results of Visual Response Survey	
C: Summary of Stakeholders' Meeting Concerning Infrastructure Issues	

Figures and Tables	Page
Figure 1-1: General Plan Town Expansion Area and By-Pass Road.....	1-2
Figure 2-1: Potential “Build-Out of Housing in Agricultural and Open Lands	2-2
Figure 2-2: Kīlauea Assets Map	2-4
Figure 2-3: Median Home Sales Prices on Kaua’i, 1990-2005	2-6
Figure 2-4: Location of Potential Middle School Site	2-7
Figure 4-1: Pattern of Town Expansion, 1970 to Present.....	4-1
Figure 4-2: Resident Population of Kīlauea Town, Actual and Projected.....	4-3
Figure 4-3: Housing Characteristics in Kīlauea Town, 2000	4-3
Figure 4-4: What People Looking for North Shore Housing Can Afford	4-4
Figure 4-5: Household Characteristics in Kīlauea Town, 2000	4-4
Figure 4-6: Household Income of Kīlauea Town Residents, 2000.....	4-5
Figure 5-1: Landownership Relative to Town Expansion.....	5-3
Figure 5-2: Example of a Community Land Trust Project	5-7
Table 6-1: Status of 1980 North Shore Development Plan Proposals	6-1
Figure 6-1: Recommended Land Use Pattern for Full Town Expansion	6-5
Figure 6-2: Recommended Phase 1 Town Expansion	6-9
Figure 6-3: Development Potential of In-Fill Housing Sites.....	6-10

About the cover:

*Kīlauea Lighthouse, an historic aide to navigation,
symbolizes the intent of the Kīlauea Town Plan to serve as a guide
to the Kīlauea community as it plies the waters of the future*



Chapter 1

Origin and Purpose of the Kīlauea Town Plan

1.1 The Kaua'i General Plan

The *Kaua'i General Plan*, adopted in November 2000, calls for the expansion of Kīlauea town to accommodate approximately 40 acres of additional “residential community”, a 10-acre park, and the construction of a new “by-pass” road from Kūhiō Highway to Kīlauea Point.

During the deliberation over this *General Plan* policy, residents were divided over the issue of town growth. A 1999-2000 poll of 424 Kīlauea households found that 74% supported “little” (40%) or “some” (34%) growth, and 24% supported “no growth”.¹

The legislative intent of the town expansion policy was to control the spread of “gentlemen’s estates” by directing new housing development into urbanized areas and to discourage “special permit” uses for civic and commercial uses in agricultural zones by providing for expansion of the town’s commercial core area. The purpose of the by-pass road was to provide a safer entry to town and divert the through traffic to Kīlauea Point.

The *General Plan* sets forth the following vision for Kīlauea:²

Kīlauea’s character is expressed in its stone plantation buildings, the farms surrounding the town, and its active community association. A by-pass road runs makai from Kūhiō Highway on the Hanalei side of town, providing the preferred route to the enlarged commercial area in the town center and the Kīlauea Point National Wildlife Refuge. The by-pass road has a safe walkway and bike path and is the preferred route for getting to the Kīlauea Point National Wildlife Refuge. The pedestrian-friendly town remains rural in character, with smooth traffic flow and residential areas protected from commercial/industrial development.

1.2 Implementation of the Kīlauea Town Plan

The *Kīlauea Town Plan* is adopted as an update of the Kīlauea Sub-Area Plan, which is defined in the *North Shore Development Plan*, as the town of Kīlauea and its immediate environs, as shown in Figure 1-1.³ An amendment to the *North Shore Development Plan*, which was last updated in 1981, is adopted by ordinance. Therefore, the Planning Department initiates the amendment through the Planning Commission, which holds a public hearing on the proposal and forwards a recommendation to the Kaua'i County Council. The County Council adopts the ordinance and the Mayor signs it into law.

¹ Testimony of Linda Sproat for the Kīlauea Neighborhood Association to the General Plan Advisory Committee meeting in Hanalei on January 25, 2000.

² *Kaua'i General Plan*, page 6-4

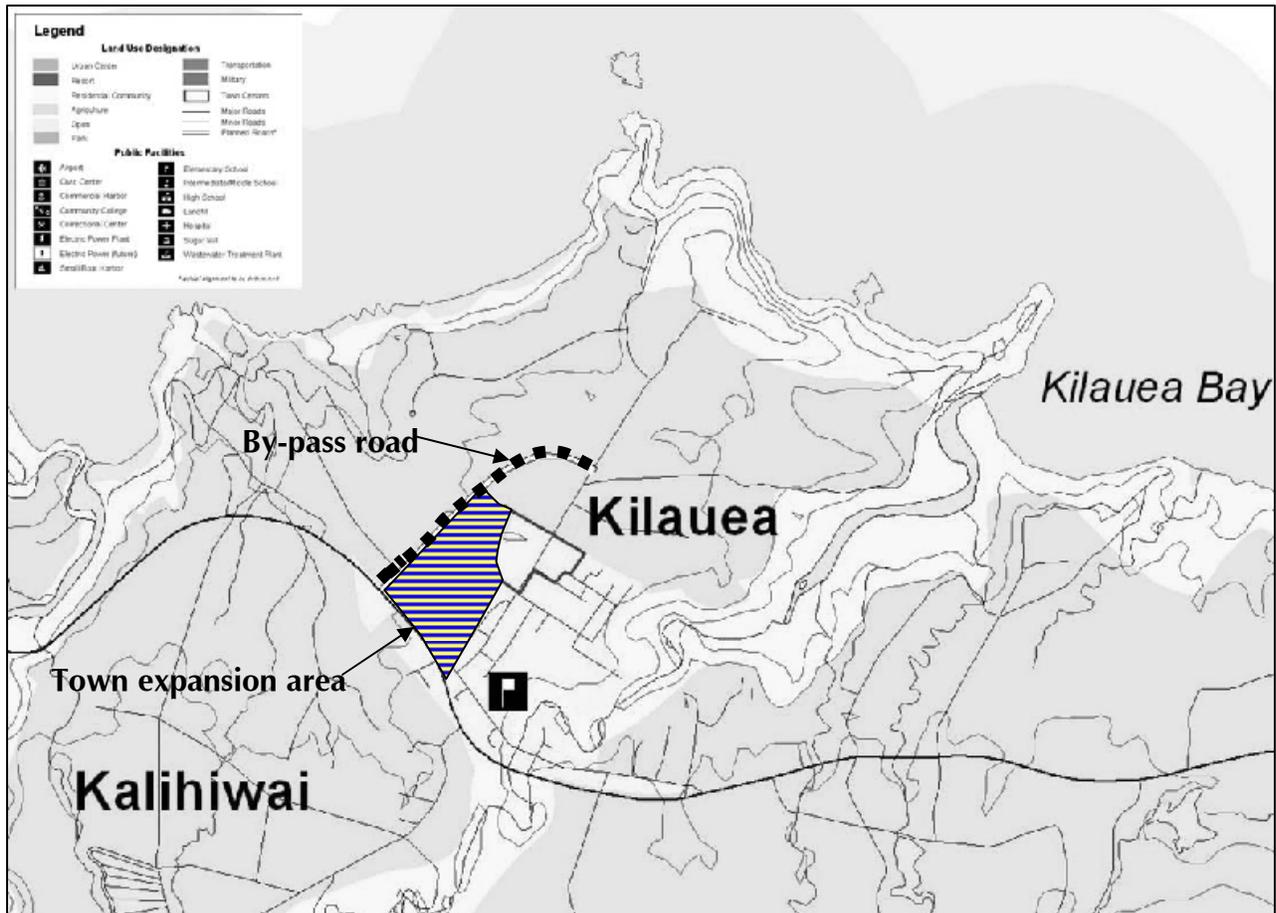
³ To put a broader context to the *Kīlauea Town Plan*, especially for the analysis of housing, regional infrastructure and agricultural land uses, the geographic scope sometimes extended beyond this area.

Because the *Kilauea Town Plan* follows, but further refines, the policies of the *Kaua'i General Plan*, it is recommended that Section 6.1.4.2 of the latter be amended to add the following subsection (b)(3):

- (3) *The guidelines and strategies for expanding the town of Kilauea shall be further defined in the Kilauea Town Core Sub-Area Plan.*

Varied subsequent steps are necessary to implement the policies and proposals contained in the *Kilauea Town Plan*. Some proposals are implemented by zone changes, some by code amendments, others by infrastructure improvement projects, and still others by parties other than the County, including the state and federal governments and the private and non-profit sectors. Implementation measures are described and assigned more specifically in Chapter 6. As the development proposals for the town expansion area move through the land use entitlement process, the implementation details will become more defined, and perhaps will change. The purpose of the Kilauea Town Plan is to provide overall guidance for the entitlement review process rather than a strict regulatory framework.

**Figure 1-1
General Plan Town Expansion Area and By-Pass Road**





Chapter 2

Focus of the Kilauea Town Plan

Several background considerations and issues give focus to the *Kilauea Town Plan*. First, the town of Kilauea is surrounded by agricultural land. While agriculture remains an important activity in the area, much of the land has been converted to non-agricultural uses, notably large residential estates. Second, Kilauea is gifted with extraordinary historic, scenic and natural assets that not only enhance the quality of life for residents, but also attract many visitors, which raises both challenges and opportunities. Third, as in other North Shore Kaua'i communities, Kilauea experiences a shortage of affordable housing for long-term residents and lacks certain desired services and facilities. Each of these issues is discussed below.

2.1 The Challenge of Agricultural Zoning

The town of Kilauea is located in a rural area and is surrounded by lands zoned for agriculture. Much of this land is in active agricultural use, ranging from large-scale, export-oriented orchard operations to small farms specializing in organic produce (see Figure 2-1.) The presence of these agricultural uses is highly visible in the twice weekly farmers markets that are held in the town, one sponsored by the County and the other by a private hui. These markets not only provide direct income to the farmers, but also offer fresh, wholesome food products to residents at reasonable prices, providing a valuable service in a small community than lacks a supermarket. The markets are also popular with visiting tourists, stimulating economic activity within the town center.

Kilauea's flourishing agricultural industry is nevertheless being challenged by land subdivisions, condominium property regimes, and special permits on agriculturally-zoned lands for residential and other uses rather than agricultural production. There is a strong market for visitor accommodations and luxury vacation and retirement homes that is exerting development pressure on Kilauea's agricultural lands, resulting in several types of direct and secondary impacts on the resi-

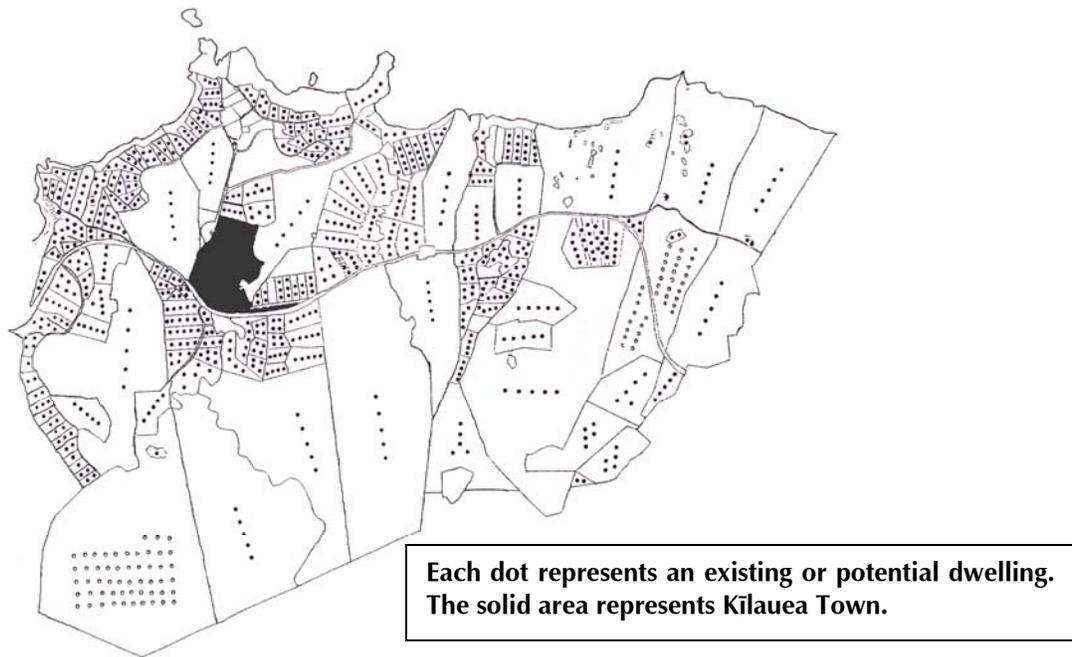


Popular farmers' markets (top photo) attest to the vibrancy of agriculture in the life of Kilauea, but some agricultural lands are being converted to other uses (bottom photo), threatening the long-term viability of agriculture in the region.

dent community in town and the farmers outside of town. One of the obvious impacts, especially in recent years, is the steep rise in land values. This, in turn, affects assessed valuation and property tax liability, which puts a financial squeeze on farmers and homeowners alike. Some impacts are more subtle, such as a growing disparity in the socio-economic profile of the community, and an erosion of small-town neighborliness and familiarity, since the newer, often part-time, residents outside of town are less likely to mix frequently with the long-term residents in town. The social divide is physically apparent where the new residential developments outside of town take the form of sprawling mansions within “gated communities.”

Substantial additional housing development capacity remains in the agricultural subdivisions and condominium property regimes outside of town in the Kīlauea region, but this would not produce housing that is affordable for long-term residents in the workforce, as is discussed in Chapter 4. The diagrams below are from a “build-out” analysis of the region, showing the potential regional development pattern if all of the properties in the “agricultural” and “open” districts were developed with the maximum number of housing units permitted by the County zoning code.

Figure 2-1: Potential “Build-Out” of Housing in Agricultural and Open Lands



Source: University of Hawai'i at Mānoa, Department of Urban and Regional Planning Student Practicum, Planning for the Future of Kīlauea, 1991.

Special permits, subdivisions and condominium ownership of agriculturally-zoned land is not a phenomenon unique to Kīlauea. It is an island-wide – even state-wide – issue that needs to be addressed at that level. The *Kaua'i General Plan* discusses this issue at length and suggests several strategies to abate inappropriate development of agricultural lands.¹

¹ *Kaua'i General Plan*, pages 5-7 through 5-12

Chapter 6 points out particular strategies to respond to the challenge of subdivisions, condominiums and special permit uses on agricultural lands in the Kīlauea region.

2.2 The Context of Historic, Scenic and Natural Assets

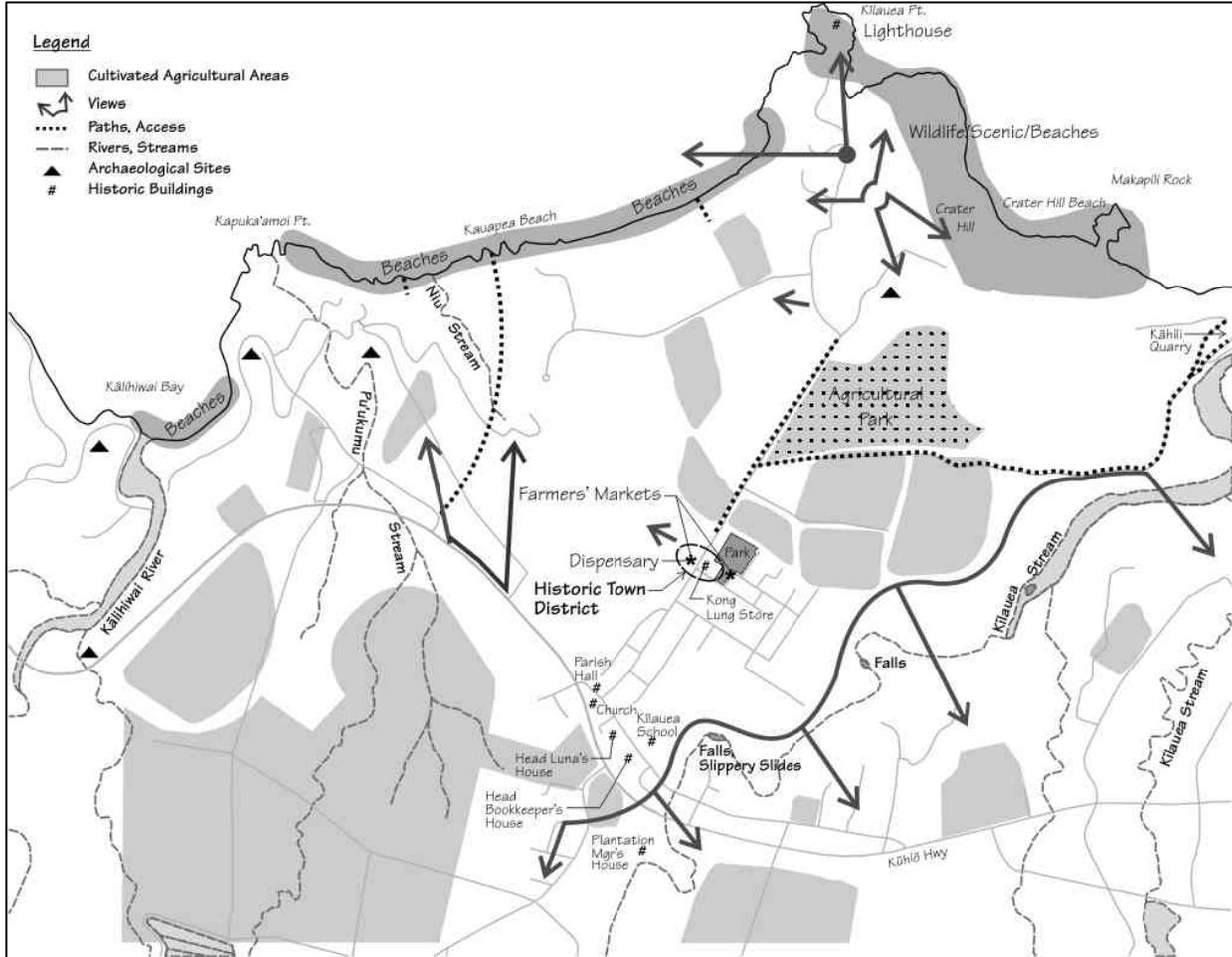
Kīlauea’s history as a sugar plantation town gave rise to some fine historic structures that have survived the closure of the plantation and are listed on the Hawai'i and National Registers of Historic Places. Two of the structures – the Kīlauea Lighthouse at Kīlauea Point, and the wood-frame Kīlauea School, which is within the town, are on public lands, so their preservation is protected by statutes. A unique feature of Kīlauea is the presence of several plantation-era buildings constructed of lava rock. All of these buildings are on private properties and most are listed on the Hawai'i and National Registers. Nevertheless, this recognition does not necessarily insure that the structures will be preserved. Additional incentives for the property owners and/or maintenance standards and regulations would be necessary to prevent the demolition or inappropriate alteration of these buildings or their physical context. The region also includes some archaeological sites, whose location is identified along with the historic structures in Figure 2.1.

Kīlauea’s natural setting offers magnificent scenic vistas and provides significant habitat for native wildlife, including some rare and endangered species that are denizens of the Kīlauea Point National Wildlife Refuge. The Refuge, which is maintained by the U.S. Fish and Wildlife Service (USFWS), is situated along the spectacular shoreline cliffs and includes the Kīlauea Lighthouse. USFWS plans to expand the Refuge to include the mouth of Kīlauea Stream to the east and additional seacliffs to the west (see Figure 2-2.)



Scenic Kīlauea Point and Lighthouse are assets that present both issues and opportunities for residents of the town.

Figure 2-2: Kilauea Assets Map



While Kilauea residents generally have a positive view of the Refuge, recognizing its protection of native habitat and species and its contribution to the local economy, they are also concerned about the loss of the easy, informal access they once enjoyed to places such as the shoreline, Kilauea Stream and Crater Hill.² An additional concern is the impact of increased visitor traffic brought about by the Refuge and, in particular, the Kilauea Lighthouse as a scenic attraction. The most oft-mentioned problem is the speed and volume through traffic along Kilauea Road, which serves as a link between Kūhiō Highway and Kilauea Point and traverses a residential neighborhood in the mauka portion of this route.

The USFWS and the Federal Highway Administration (FHWA) are presently studying alternative transportation solutions for the Refuge to provide “the highest quality visitor experience [while being] sensitive to biological and cultural resources and the needs of the

² U.S. Geological Survey, *Visitor and Community Survey Results for Kilauea Point National Wildlife Refuge and Lighthouse: Completion Report*, May 17, 2005 draft.

local community.”³ The planning team for this study made community presentations in parallel with the planning process for the *Kīlauea Town Plan*. While the FHWA representative stated that it is unlikely that the proposed Kīlauea Point by-pass road would qualify for funding under the program that he administers, other possibilities for partial federal funding are discussed in Chapter 5.⁴

In addition, the USFWS/FHWA study is considering other transportation measures, such as a park-and-ride lot and shuttle bus system for Kīlauea Point visitors that could possibly provide some transportation benefits for Kīlauea residents, as well. For example, a logical site for the park-and-ride lot would be adjacent to the intersection of Kūhiō Highway and the proposed by-pass road. This would also be a good location for a park-and-ride lot for resident commuters using The Kaua'i Bus, and it happens that the County's Transportation Agency is considering the possibility of such a commuter lot in the North Shore.⁵ If the two park-and-ride lots are shared or collocated and USFWS provides a shuttle service, Kīlauea residents could catch the shuttle to The Kaua'i Bus stop and reduce the demand on parking spaces at the commuter lot.

2.3 The Need for Resident-Oriented Housing and Services

Responses to a survey questionnaire mailed out to all households in Kīlauea zip code area in the latter part of 2004 found that residents were generally satisfied with the quality of life in their community. But when asked about specific aspects, respondents clearly had the lowest degree of satisfaction with the availability of affordable housing.⁶ The survey also indicated that community expectations are not being met regarding public transit service, the availability of walkways and paths, and the availability of local, well-paying jobs and the number of stores and shops, in that order. These results mirror the top issues that were identified in the small group discussions in the community planning charrette process for the *Kīlauea Town Plan*, which is discussed in the following chapter.

A major impediment to providing affordable housing in Kīlauea is the shortage of vacant land supply in the Urban District for the development of new housing. As discussed in more detail in Chapter 4, the town boundary of Kīlauea expanded incrementally in the years between 1975 and 1995 as new housing – much of which was specifically designated for low- and moderate income households – was developed. During the past decade, however, there has been little increase in the in-town housing stock, except in terms of market price, which has risen dramatically in Kīlauea, as elsewhere on the island (see Figure 2-2.) There are presently only a couple of vacant, residential-zoned lots in town. Since land is the most significant component of housing cost in Kīlauea, as in most other places in Hawai'i, building more houses in land-extensive agricultural subdivisions and condominium property regimes outside of town is not a viable strategy for affordable housing development. To the contrary, as previously discussed, the residential development that has occurred outside of town in recent years has been part of the problem, not the solution.

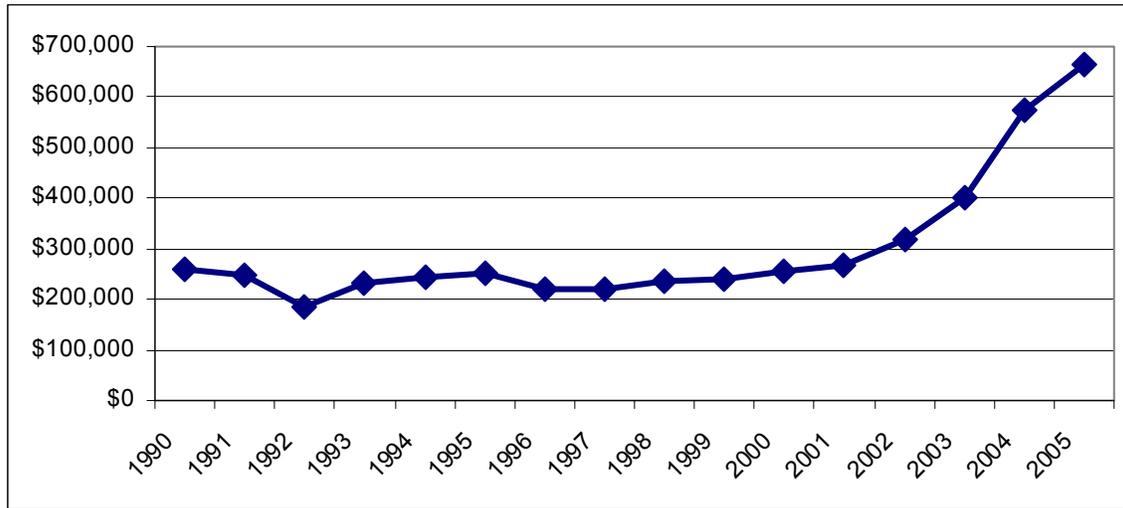
³ U.S. Geological Survey, *op. cit.*, p. 1-1. The specific agency within FHWA is the Central Federal Lands Highway Division of the Federal Highway Division, U. S. Department of Transportation.

⁴ Michael Dotson, FHWA, via personal communication at meeting on February 26, 2005.

⁵ Bernard Carvalho, Director of Kaua'i Offices of Community Assistance, via personal communication at meeting on April 28, 2005.

⁶ U.S. Geological Survey, *op. cit.*, p. 2-26.

**Figure 2-3
Median Home Sales Prices on Kaua'i, 1990-2005**

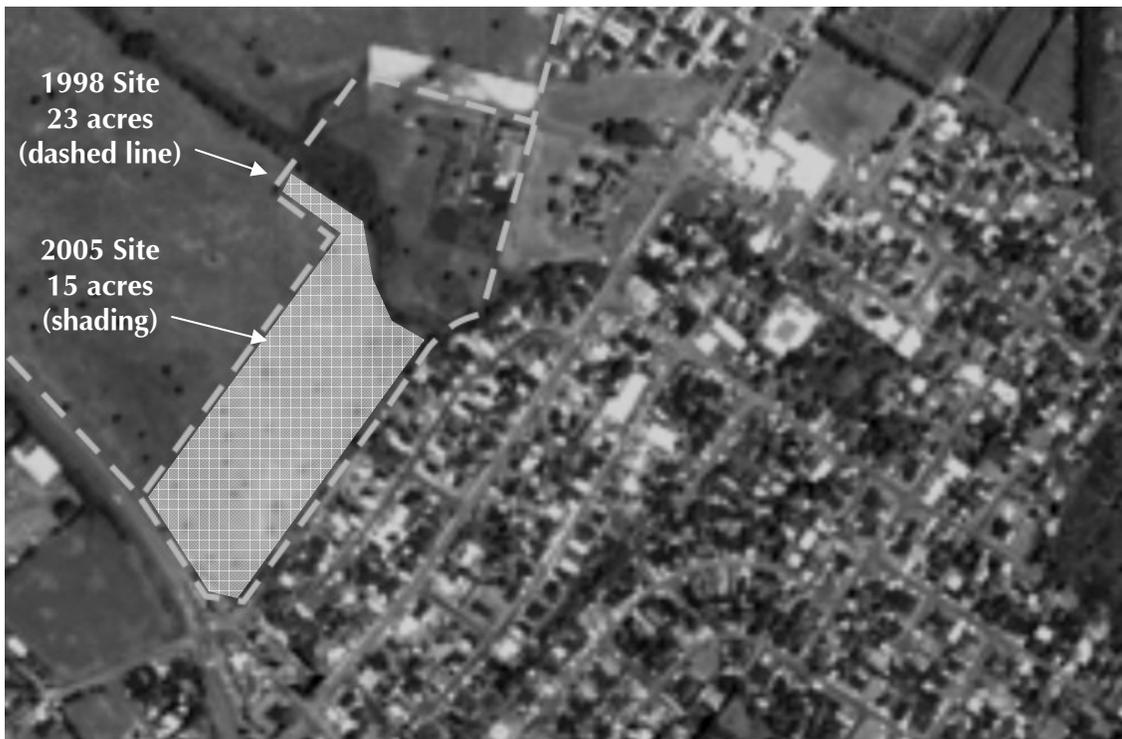


There is also a shortage of suitably zoned lands for industrial, commercial and institutional uses in Kīlauea town. Fronting Kūhiō Highway is a 3-acre commercial-zoned area and a 10-acre light industrial-zoned area, but both of these parcels have remained undeveloped with these zoning designations for more than two decades due to the cost of remedying infrastructure deficiencies. There is also additional development capacity on the 6-acre commercial-zoned property occupied by the former dispensary building in the center of town, but the owner of this property has an active proposal to develop approximately 57,000 square feet of additional floor area for retail and office uses on this site.

In the meantime, the shortage of suitable commercial and industrial-zoned sites is evidenced by the continued adaptive reuse of former plantation buildings within residential neighborhoods for commercial and industrial purposes. These uses do not conform to the residential zoning, but the owners have been allowed to make improvements, expand and even establish new uses on the property via the Special Permit procedures under the County's Comprehensive Zoning Ordinance. As mentioned previously, Special Permits have also been granted for urban-type uses in the agricultural zone, such as the Kaua'i Christian Academy, just outside of town. These Special Permit uses, for the most part, provide a valued service to the community. Some, such as the medical clinic and the pre-school near the center of town, can co-exist fairly compatibly with nearby residential uses because of the nature of their activity and location. Uses of a more industrial nature, such as the automobile repair shop and the building supply store, while providing a needed service at a convenient location for customers, are more likely to create traffic and noise impacts on neighbors, especially because they are located on a residential street. Other uses, such as the former plantation warehouse that is currently being used as a self-storage facility, have marginal value to the community at their present location, and the cost of the property improvements has long been amortized by the owner. The industrial use properties are good candidates for being converted to residential use, consistent with the zoning.

A potential use that could be located within the planned town expansion area is a new public secondary school for the North Shore. A 1998 site selection study conducted by the State, at the urging of Kaua'i's elected representatives, identified a site in this vicinity as one the three most promising potential locations for a Middle School serving the North Shore (see Figure 2-3.)⁷ Many North Shore residents have expressed a long-standing desire for a new secondary school on North Shore due to long commute for students to Kapa'a High/Middle School. They also argue that a smaller school would provide a more advantageous educational and social climate for the students.⁸

Figure 2-4
Location of Potential Middle School Site



When the State's site selection study was completed, the County had not yet adopted the *Kaua'i General Plan*, which set forth the policy to expand Kilauea town to encompass the site near Kilauea that had been identified as one of the State's preferred locations for the middle school. Therefore, as part of the preparation of the *Kilauea Town Plan*, the planning consultant updated the site selection study to take this new land use policy into account, using the same site selection criteria as the 1998 study. The 2005 update reduced the size of the Kilauea site to about 15 acres (see above Figure 2-3), which while still meeting the State's standards for this type of school site, recognizes that the original 23-acre site was bifurcated by a wide drainage swale, making it inefficient to integrate the

⁷ Department of Accounting and General Services, *Final Environmental Impact Statement and Site Selection Study for the New Hanalei Middle School*, May 24, 1999.

⁸ The Board of Education has, in concept, endorsed a move toward smaller schools. According to the "Creating Communities of Learners" policy adopted by the Board of Education in 1997 (as modified in 2002), middle schools should have a design enrollment 600 students and high schools a design enrollment of 1,000 students.

makai portion for site development. The updated evaluation placed the Kilauea site at the top among the three sites (see report in Appendix A.) The Kaua'i Planning Department then submitted the re-evaluation to the Department of Education (DOE) and asked whether the site within the town expansion area should be set aside for future middle school use. DOE replied that enrollment projections do not justify the development of a new middle school in the North Shore and recommended that the site not be set aside for this purpose (see Appendix A.)



Chapter 3

The Planning Process

3.1 The Charrette Approach

The *Kīlauea Town Plan* developed out of a charrette process modeled by the National Charrette Institute (NCI), which is a nonprofit educational institution that advocates “Dynamic Planning” -- plans based on shared community values and derived through charrette events.

The term “charrette” originated at the École des Beaux-Arts in Paris during the 19th Century. Carts or “charrettes” would be used to collect art projects from students as they scrambled to meet short deadlines. In its present application, the charrette is an intense single- or multi-day event to solve a design-related problem with the participation of professionals and the public. Public officials, professional planners, architects, and the like, identify the stakeholders and plan the charrette event for maximum participation and results. Charrettes typically conclude with the presentation of a final plan which represents a compilation of the ideas offered during the charrette event. Charrettes are advantageous over other methods of participatory planning in that they require less time commitments, are more cost effective, and allow for greater participation and democracy than design by committee. Most important, they are better at achieving transformative change in communities because of the intense focus of the participants and the quicker change-over from design to implementation.

3.2 Schedules, Outreach and Outcomes

Between October and December 2004, prior to holding public meetings, the consultant leading the charrette process conducted research, made site visits, mailed out survey questionnaires to owners of vacant land in the area, and contacted key stakeholders. Key stakeholders included the property owners whose land is affected by the proposed town expansion, County agencies, the U.S. Fish and Wildlife Service, and the Kīlauea Neighborhood Association (KNA), four of whose representatives led the consultant on a day-long tour of the town and surrounding area.

Public outreach was organized into three phases centering on the following sequence of events:

- An introductory community meeting in early January 2005 to present background material, explain the planning process, and identify top issues and objectives to be addressed in plan, using break-out groups to solicit broad participation;
- The five-day charrette at the end of February 2005 consisting of working sessions, open house, closing meeting;
- A follow-up meeting, originally scheduled for April 2005 but postponed to July to address some outstanding issues, for the presentation of the final plan.

During the week of December 20, 2004, more than 360 fliers announcing this meeting were mailed, reaching every mailbox holder in the Kilauea zip code area, 96754, as well as major land owners in the planning area and key public agency representatives. The flier also included the schedule for the charrette and follow-up meeting so that people could prepare in advance. At the beginning of January, posters also were placed around town.

To keep people involved in the process, the consultant mailed out newsletters following the first meeting and the five-day charrette to a cumulative list of all of those who had participated in any of the public meetings and posted some of the interim planning products on the County's website. One of those products was a "visual response survey", which, as mentioned below, was presented at the initial public meeting. The website posting afforded people who did not attend that meeting the opportunity to respond to the survey via mail.

The following sections summarize the steps in the planning process.

3.3 First Public Meeting

The purpose of the first public meeting, held on Wednesday evening, January 5, 2005, was to formally introduce the planning team to the public, introduce the Kilauea Town Plan project, provide technical background, describe the planning process and schedule, and invite the public to participate through break-out sessions and hands-on exercises. These exercises included a visual preference survey, listing the town's assets on photos and paper, identifying the top concerns, and visioning for the future of Kilauea Town. Over 140 people attended, much more than expected, and the participants were quite diverse and very enthusiastic.



At the first public meeting, facilitators led the discussion of issues, and each of the four break-out groups ranked the top three issues.

The visual response survey showed 30 images and had people rate each image on a scale from -10 to +10. Over 150 people participated in this survey (some participated via the County's website and some mailed in forms that were made available around town). The images that rated high positive (median value of 5 or better), with little disagreement (standard deviation less than 5.5) were those of the natural areas, the open space areas, the Wildlife Refuge, Kilauea Elementary School, and the farmers' market. The images that rated positive with little disagreement were those of various homes and businesses around town, the Neighborhood Center, the Kaua'i Christian Academy, and examples of

affordable housing outside of Kilauea. Images that were rated low positive (median value of 0-2) with little disagreement were those of a streetscape and a few businesses. People responded more positively to the activity, but more negatively to things such as overgrown vegetation, lack of parking, lack of adequate pedestrian space. The images that elicited negative responses, with little disagreement, were of a multifamily townhome on O'ahu

and the Mini Storage. People were reacting to the way it looks and/or its location. The remaining images were those where people disagreed the most (median value between -2 and +2 and high standard deviation.) These were scenes of homes along Kauapea Road, Ocean Pointe homes on O'ahu, the gas station, and the Seacliff Plantation. See Appendix B for visual response survey images and results.

The views and opinions expressed in the visual response survey were consistent with what emerged as the top concerns and issues, as identified in break-out group discussions. Participants were organized into four groups in order to have sizes that were small enough to encourage active, broad participation in the discussion. The discussion was led by a group facilitator, who asked the group first to identify community issues and concerns, and then, by a show of hands, to rank the top three issues that they believe the plan should address. The results from this ranking process, shown below in rank order for each group, were remarkably consistent across the groups:

<p>Group 1</p> <ol style="list-style-type: none"> 1. Pedestrian safety, need sidewalks, sewer/drainage 2. Need middle/high school 3. Protect beach & mountain access; need facilities for youth activities (tied) 	<p>Group 2</p> <ol style="list-style-type: none"> 1. Need affordable housing 2. Impact of "gentlemen's estates" 3. Drugs, need organized recreation activities for youth
<p>Group 3</p> <ol style="list-style-type: none"> 1. Need affordable housing 2. Need public transportation, sidewalks, bike facilities 3. Protect visual and physical access to natural areas 	<p>Group 4</p> <ol style="list-style-type: none"> 1. Need affordable housing 2. Speeding traffic thru residential areas (Kilauea Road) 3. Protect beach & mountain access

A few weeks following the first public meeting, the consultant sent Newsletter #1 to all participants of that meeting who provided mailing information, as well as to those who later requested a copy, and to major land owners. The newsletter summarized preliminary results of the visual preference survey, the top issues identified by the four break-out groups, a preliminary assets map, and some technical information on affordable housing, which was one of the top issues. A reminder about the dates, times and locations for the public events in the upcoming charrette was also included. Newsletter #1 was posted on the County of Kaua'i's website and extra copies were made available at public places around town.

3.4 The Charrette

The charrette occurred during February 24 to 28, 2005, with the following schedule of events:

- February 24th (Thursday evening): A public meeting that opened with a presentation by the consultant on the results of the January meeting and some additional background material in response to questions that were raised at the first meeting; following this, participants were organized into four break-out

groups and asked to identify on large aerial photos of the Kilauea region community assets, problem areas, and potential land use changes.

- February 25th (Friday): Consultant compiled and reviewed results from break-out group mapping exercises; conducted one-on-one meetings and interviews with stakeholders; and formulated alternative concept plans showing town expansion and other options.
- February 26th (Saturday morning): A public “open house” format, where the meeting room was filled with displays and stations representing the landowners’ and USFWS proposals, as well as the alternative plan concepts prepared by the consultant; public was invited to view and comment (via “post-it” notes) on the plan alternatives and engage in informal discussion with the various representatives and other participants.
- February 27th-28th (Saturday afternoon through Monday afternoon): Consultant compile and review comments on alternative plan concepts; conduct additional interviews and research; and prepare illustrations, maps and data to support a proposed conceptual plan.
- February 28th (Monday evening): The closing public meeting, at which the consultant present the proposed conceptual plan and identify remaining issues to be resolved or explored further; participants are asked to respond to a questionnaire itemizing the proposed planning principles and guidelines and to ask questions or state observations about the proposed plan.

Over 240 people participated in the charrette. Approximately 195 were from Kilauea, and all but nine of the remainder lived in the North Shore region.



The Saturday “open house” format during the charrette enabled people to mix informally with stakeholders (left) and comment on alternatives (center). At right, people listen to the consultant’s presentation and make notes for the follow-up discussion and survey.

At the end of the charrette, it was clear that the need and desire for affordable housing was a top issue. People expressed concerns about the rise in property values and the spread of outlying “gentlemen’s estates”. Transportation concerns were also still high; specifically, people wanted a safer entry to town, convenient and safe places to walk and bike and reduction of through traffic in the residential neighborhood. Preserving or expanding

physical and visual access to natural areas remained an important issue, with concerns about visitor versus local use and access. Preservation of the existing town character was also a widely-held desire.

The results from the questionnaire after the presentation of the proposed concept plan indicated consensus on the proposed planning principles and guidelines. Most, if not all, felt that:

- Town expansion should be a good fit with the existing town; that the expansion should emphasize the town core and avoid highway commercial; that adjacent uses should be compatible or buffered; that circulation ties in to the existing network; and that expansion should integrate natural features into the town.
- Town expansion should seek to provide as much long-term affordable housing as feasible; efforts of affected landowners should be coordinated; a variety of housing types should be provided to respond to a range of needs; partnering with the public sector would be necessary to realize affordability; and partnering with non-profits would be necessary to reach the population most in need of affordable housing and to maintain long-term affordability.
- Improvements should be made in the existing town, consistent with its rural character; non-conforming industrial uses should be phased out of residential areas; the vacant industrial and commercial zoned sites along Kuhio Highway should be re-zoned to prevent strip development; new housing needs to be built to discourage crowding in existing housing; walking/bike paths should be provided along collector streets; design guidelines should be created for commercial and public buildings; and agriculture trade should be promoted.

There were some outstanding questions at the end of the charrette; namely:

- Is the development of a middle school realistic? The Department of Education did not embrace the idea even though they did a site selection study that identified Kilauea as a desirable site. In addition, while it was a top issue in one of the groups of the first public meeting, its priority fell by the end of the charrette.
- Would the park-and-ride for visitors to the Wildlife Refuge be located in town? While a concurrent study is being done, there is no final plan or recommendation on how the park-and-ride would function, how big the park-and-ride will be, or where it should be located. It is also still questionable whether the park-and-ride idea will be implemented at all.
- Are there demographic changes affecting housing need (e.g., more elderly, more demand for first-time renters or buyers)?
- What are the other proposed developments nearby (i.e. Princeville) and how would this affect housing supply?
- At what pace and to what extent will expansion occur? What about the “balance” of the plateau area?
- How should development be phased from the “town core”?

- Will partnering between landowners, public and nonprofit sectors occur?

3.5 Follow-Up to the Charrette

The following steps were taken to address the above questions:

- The consultant organized a “stakeholders” meeting with County/State agencies, affected landowners, and KNA representatives on April 28 to discuss infrastructure issues and potential for public assistance in support of the goal of developing affordable housing in the town expansion area (see Appendix C);
- The consultant updated the Department of Education’s 1997 Site Selection study and asked the County to request formal DOE comment on the potential set-aside of the Kilauea site; DOE responded on June 28 (see Appendix A);
- Two of the three landowners whose property is affected by the designated “town expansion area” and USFWS presented their plans to KNA on June 8 and indicated that they are trying to coordinate their plans;
- The consultant met with KNA on June 28 and observed their process for arriving at a group position on the major elements of the proposed conceptual plan;
- From the end of February through early July, the consultant conducted further research into infrastructure, housing, regional development issues and made inquiries concerning the potential for “partnering” in the development of affordable housing.

Meanwhile, to keep participants engaged and informed, Newsletter #2 was produced and mailed out via email and mail on March 31st. This newsletter posted the results of the survey on planning principles and included a refined assets map and a refined conceptual plan map. It also announced that the presentation of the final plan, originally scheduled for April 16th, was postponed until after the needed additional follow-up steps were completed.

In mid-June, the consultant mailed out notices to everyone who had attended a previous public event or had asked to be contacted, and posted notices around Kilauea, that the presentation of the final plan would be held on July 9th at Kilauea Neighborhood Center. The consultant presented the final plan to the approximately 90 people in attendance, and opened the remainder of the meeting for a question-and-answer session. The presentation was subsequently posted on the County’s website.



Chapter 4

History of Town and Regional Growth and Housing Need

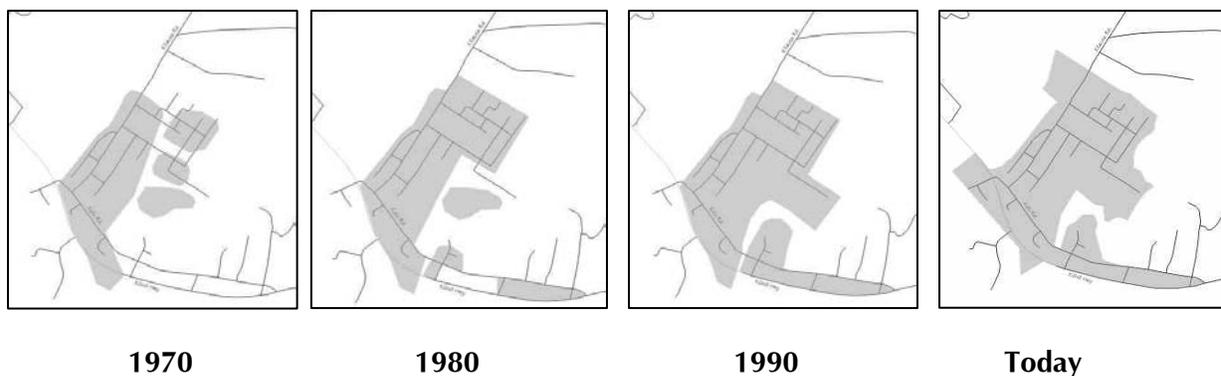
4.1 History of Kīlauea Town Expansion

The town of Kīlauea originated as the center of a sugar plantation operation. As mentioned in Chapter 2, several buildings, some of which are registered historic sites, remain as vestiges of that era, although the original plantation worker housing, which was typically a simple wood-frame cottage with corrugated metal roofing, has now been removed. The land surrounding the town was mostly in sugar cane cultivation rather than small farms.

After the closure of Kīlauea Sugar Plantation in 1970, a core of long-time residents committed to keeping the town alive formed a community association – the Kīlauea Neighborhood Association – which continues to be a strong community advocate to this day. In addition to the loss of its major employer, the Kīlauea community also faced the transformation of the surrounding agricultural lands. The landowner, C. Brewer, subdivided and sold the former plantation lands, putting into motion the development of small farms, as well as the “gentlemen’s estates” that were discussed in Chapter 2. The break-up of the Kīlauea plantation lands was a major impetus for the County’s adoption of its present limitations on the subdivision of agricultural lands.

Other developments beyond the Kīlauea subarea – notably, the emergence of the Princeville resort – created employment opportunities in the region and attracted new residents. In the mid-1970’s, the town of Kīlauea began to re-build, starting with the replacement of plantation worker housing and adding increments of new development tracts in the 1980’s and 1990’s. One of these new development projects was the so-called “Titcomb Tract”, which was developed by Princeville to fulfill its employee housing requirement. Previous development increments included housing to meet the County’s affordable housing standards, including a tract built as “self-help” housing.

Figure 4-1: Pattern of Town Expansion, 1970 to Present



Because the town's commercial core area developed around the adaptive reuse of former plantation buildings approximately a half-mile makai of Kūhiō Highway, Kīlauea has had the good fortune to avoid the type of highway-oriented strip commercial development that plagues towns such as Waipouli and Kapa'a. Strip development results not only in highway congestion and traffic safety hazards, but also in visual pollution, often in the form of attention-grabbing signs, whether legal or not. Moreover, the businesses that are attracted to such locations are usually oriented at least as much to highway travelers as to local residents. Since Kūhiō Highway is the route to Princeville, Hanalei, the Nā Pali coast and other visitor destinations, highway-fronting businesses are likely to serve tourists.

There are few options for further expansion of Kīlauea's town limits. To the east is Kīlauea Stream, which forms a natural boundary for the existing town. To the south, or mauka of the highway, there is agricultural land that could be converted to urban use, but this would result in an undesirable bifurcation of the town by Kūhiō Highway. Pedestrian crossings would be hazardous and flow of through traffic would be impaired. It may also be difficult to find a site for wastewater treatment that would not adversely affect existing or potential potable water supply. To the north, or makai of town, urban expansion could occur in the direction of Kīlauea Point. However, this would mean that future residential areas would be affected by the traffic along Kīlauea Road, which is one of the issues that vexes the present residents along that route. Moreover, some of this land is in active agricultural use, a key 75-acre parcel next to Kīlauea Road has been set aside for a future County agricultural park, and a large parcel on the other side of the road is already developed for school use (Kīlauea Christian Academy). This leaves the large tract of unused agricultural land west of town, curiously called the "North Plateau", as the most logical direction for town expansion.

4.2 Population and Housing Considerations

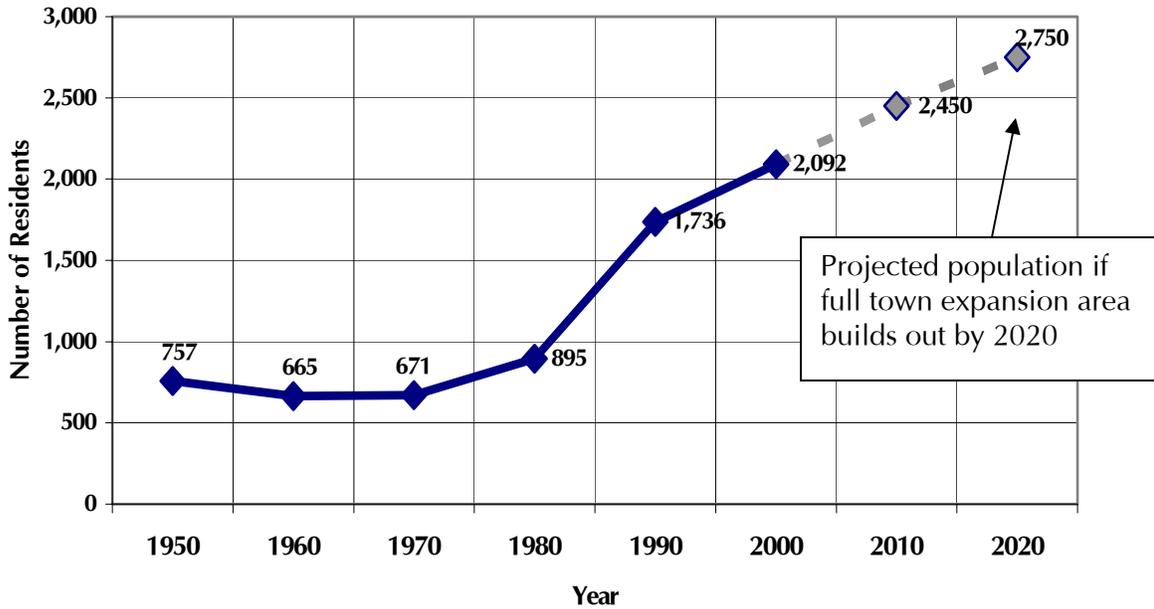
Kīlauea town's resident population began to decline in about 1970, a couple of decades prior to the closure of the plantation, and continued that trend until the mid-1970's (see Figure 4-2.) As new employment came to the region to replace plantation jobs, the population began to rise again. The most significant increase occurred in the 1980's decade, when the largest new residential subdivisions were developed. Slower growth in the 1990's was probably influenced in part by the impact of Hurricane Iniki.

The graph in Figure 4-2 projects the potential population growth if the town expands its boundaries according to the *Kaua'i General Plan* policy and the area is built out by 2020. In actuality, development does not always follow a pre-ordained schedule. There are many intervening factors, such as the land use entitlement process, infrastructure development requirements and costs, and market and financing considerations that may deter or delay the planned expansion of the town. Chapter 5 discusses some of these intervening factors as they apply to the expansion of Kīlauea Town, suggesting that the projected population increase shown in Figure 4-2 may not be realized.

It is important also to bear in mind that there are qualitative factors to consider in planning the expansion of a small, rural town like Kīlauea, where the community is close-knit and the residents treasure the bonds of trust and friendship that form among long-time neighbors. Throughout the planning process for the *Kīlauea Town Plan*, residents expressed anxiety about losing Kīlauea's special small-town qualities. While most appear to accept the necessity to expand the town's boundaries to accommodate affordable

housing and provide more public and commercial services for residents, the results of the public workshops strongly suggest that this support dissipates if town expansion is for housing at prevailing market prices, or for commercial and industrial uses that do not primarily serve the needs of residents.

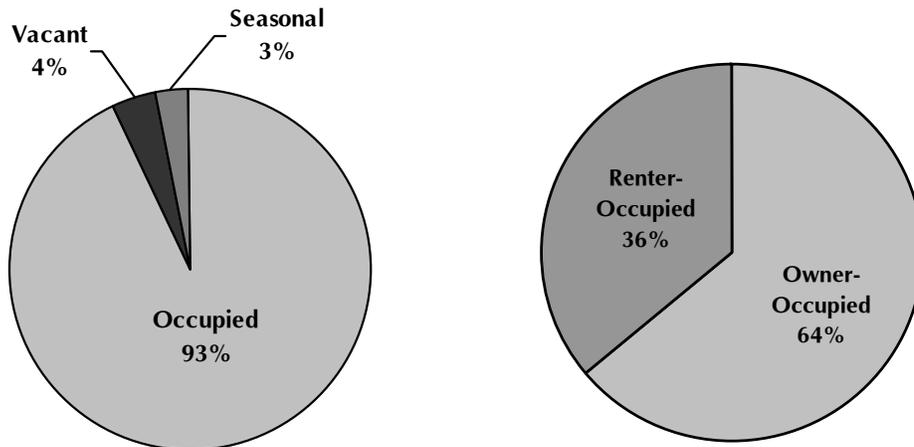
Figure 4-2: Resident Population of Kilauea Town, Actual and Projected



Source: U.S. Census Bureau (historic population); PlanPacific, Inc., projected population.

The concern about potential “gentrification” of Kilauea is not unfounded. As witness, the graph in Figure 2-2 shows a steep rise in the residential sales prices in recent years. Most Kilauea residents, if they do not presently own a home, are priced out of this market. Since more than a third of Kilauea’s households are renters (see below), this is a significant concern.

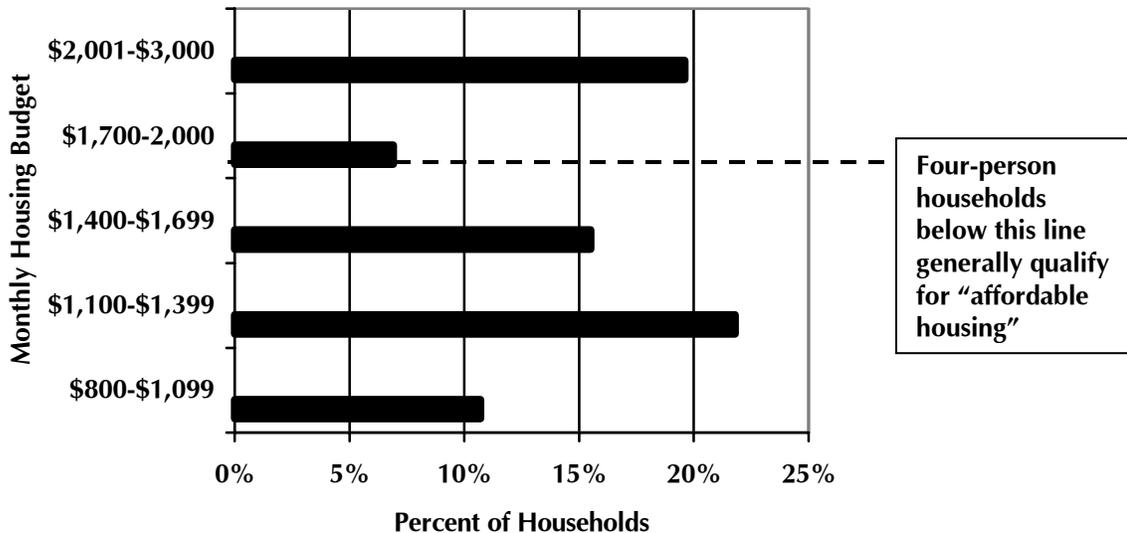
Figure 4-3: Housing Characteristics in Kilauea Town, 2000



Source: U.S. Census Bureau

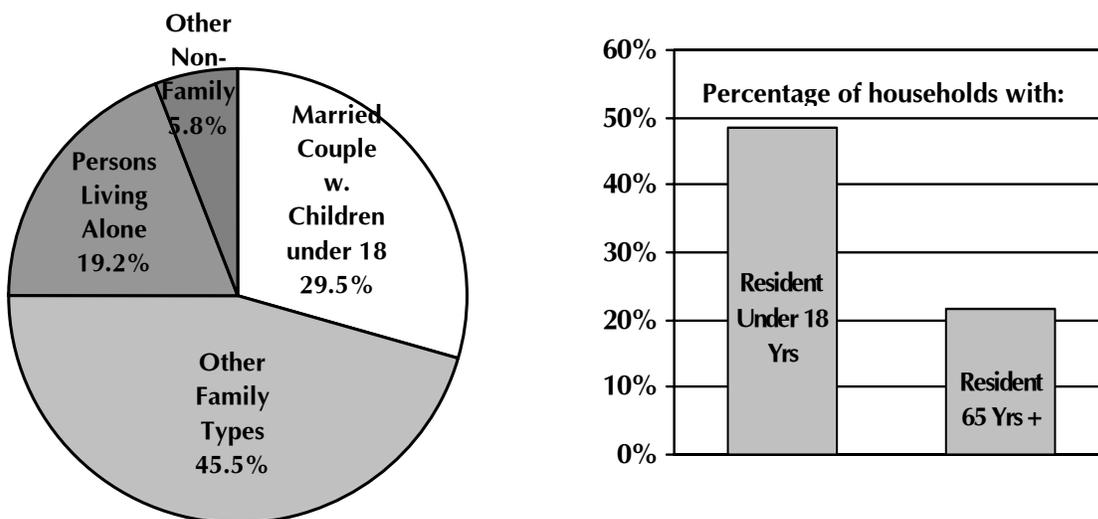
A 2003 State housing study found that 21.4% of those who are moving out of state are doing so because of housing cost.¹ The pressure is particularly strong in areas like North Shore Kaua'i where there is strong demand for vacation and second homes and a limited stock of housing available for year-round residents. As indicated in Figure 4-4, most of those who are looking to rent or buy a year-round residence in the North Shore region are households that qualify for "affordable housing" programs, as defined by the County.

Figure 4-4: What People Looking for North Shore Housing Can Afford



Looking specifically at the population of Kilauea Town, less than one-third of the households are "nuclear families"; i.e., married couples with children. Many people live alone, and even more live in multi-generation households. The latter may be due to both cultural and economic factors.

Figure 4-5: Household Characteristics in Kilauea Town, 2000

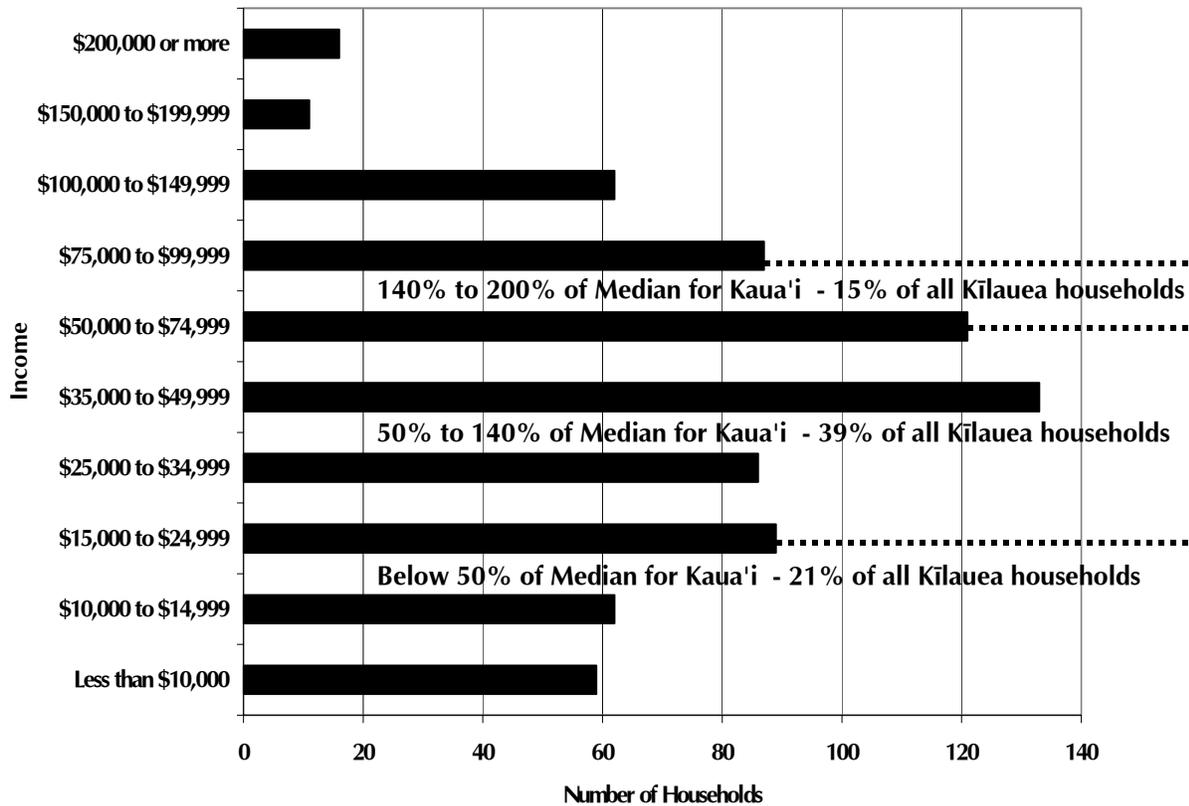


¹ SMS Research & Marketing Services for State of Hawai'i, *Hawai'i Housing Policy Study, 2003*

The incomes of most (i.e., 60%) Kilauea Town households fall within the range qualifying for the County Housing Agency's "affordable housing" programs, which is 140% of the islandwide median household income (see Figure 4-6.) The County requires housing developers that apply for rezoning to a residential district to set aside a certain percentage of the units in the development for households meeting these income criteria. At the higher end of the range, the developers are generally expected to deliver the housing without the use of public subsidies, but some form of government assistance is necessary to reach households at the lower end of the income range. It is generally unfeasible to provide ownership opportunities for households whose income is below 50% of the median income.

Due to escalating housing prices, an increasing percentage of households who are not eligible for affordable housing programs are nevertheless unable to afford housing that is available on the market, even though there may be two or more income-producers in the household. The size of this "gap" of "workforce" household group varies according to current market prices and interest rates, but under present conditions, it generally includes the households whose income is between 140% and 200% of the islandwide median. In Kilauea Town, this group made up approximately 15% of the population in 2000 (see below.) Overall, then, about three-quarters of Kilauea's resident population would not be able to afford to buy a home in Kilauea on the open market unless they could convert the equity in a home they presently owned or had other unusual assets they could apply to a home purchase.

Figure 4-6: Household Income of Kilauea Town Residents, 2000



Source: U.S. Census and Kaua'i Housing Agency



Chapter 5

Challenges and Opportunities for Town Expansion

5.1 The Challenge of Infrastructure Needs and Costs

Expansion of the town as envisioned in the General Plan entails substantial costs for the development of off-site supporting infrastructure.

Water source and transmission

The Department of Water's (DOW) present potable water source to serve Kīlauea does not have sufficient capacity to support full expansion of the town. Moreover, DOW is concerned that the existing town relies on a single source and transmission line for its water supply and would like to see a second source and transmission line as a back-up in case the present system fails or is damaged.

DOW suggested the development of a new source in Moloa'a, where there is a well with proven reliability. However, the well is privately owned and approximately 4.5 miles east of Kīlauea. Building the transmission line and securing access to the water use rights would cost an estimated \$4 to \$5 million.¹

New entry road

The proposed "by-pass" road would divert though traffic to Kīlauea Point, mostly generated by visitors to the Kīlauea Lighthouse and Wildlife Refuge, from the residential neighborhood along the mauka end of Kīlauea Road, to a point beyond the town. Moreover, it would provide a safer entry to the town and Kīlauea Point from Kūhiō Highway.

The estimated cost of the new "by-pass" road is about \$5 to \$6 million. Expensive features of this new road are a proposed roundabout at the highway intersection and a bridge spanning a drainage gulch that cuts diagonally through the town expansion site. The bridge alone accounts for about \$1 million of the cost. In addition, extending the new road to allow traffic generated by the Kīlauea Point attractions to by-pass the town completely requires a roadway length that is about twice as long as it would need to be if the purpose of the road were primarily to serve as a new entry to the town core of Kīlauea.

Wastewater treatment plant

A wastewater treatment system is required for the proposed town expansion because of the number of dwellings and the diverse types of uses that would be located in this area. Regardless of the treatment technology that is used, the system will be privately owned and maintained, although it may be feasible and desirable to extend the service beyond the town expansion area to include existing nearby commercial properties in the town core.

¹ This and other off-site infrastructure cost estimates were provided by FPA, one of the two landowners with property in the proposed town expansion area.

At an estimated cost of between \$1.5 and \$2 million, the wastewater treatment system would be the least expensive of the necessary off-site infrastructure components.

At the time this report was prepared, it appeared that these infrastructure systems would have to be financed exclusively by the developers/landowners in the town expansion area. During the February 2005 charrette and at a follow-up meeting in April 2005, public agency representatives indicated that, while some form of federal or local funding may be available, there was no certainty that such financial assistance would be forthcoming.² If the infrastructure costs must be covered entirely by private capital, it will be very difficult to provide affordable housing beyond what is typically exacted from private developers through the entitlement process. It will also be difficult to provide housing that is affordable on a long-term basis.

5.2 The Challenge of Long-Term Housing Affordability

Affordable housing projects were built in Kilauea during the 1980's and 1990's with County assistance or under County mandate. These projects were subject to a 10-year "buy-back" period to discourage speculative re-sale activity on the homes during that period. However, the buy-back period has now lapsed and many of the units have since been re-sold at prevailing market value, which has climbed significantly in recent years (see Figure 2-3.) Today, there is little or no inventory of affordable housing available for sale in Kilauea.

The North Shore of Kaua'i is intended to be primarily a rural region, so it is not feasible to increase the supply of housing in Kilauea indefinitely to maintain an affordable housing market, especially because this is a high demand market for affluent buyers, as well. The sharp rise in value of houses that were originally sold as affordable units after the lapsing of the buy-back period demonstrates how strong demand drives up the price of all housing.

Developing affordable housing with a limited, 10-year period to discourage speculation on re-sales is also an inadequate strategy over the long term. Affordable housing needs to be available on a continuing basis for younger generations of Kilauea residents who wish to stay or return to town.

5.3 The Challenge of Multiple Land Ownership

The area proposed for expansion of the town is not under single ownership. About half of the proposed expansion area, or about 22 acres, is owned by a group of investors from the U.S. mainland led by Leland Bertsch, who is the developer of the post office building that is situated on a portion of the property.³ The other half of the proposed expansion area is held by Fowler Property Acquisitions, LLC (FPA), which is based in California.⁴ The FPA tract extends beyond the proposed town expansion area to include at least 75 acres of additional vacant agricultural land. Also on the same subdivision lot are five condominium property regime (CPR) lots that front Kauapea Road. Two of the lots contain dwellings, and the other three are likely to be developed with dwellings. Under the County's subdivision regulations, FPA cannot further subdivide the property to separate the

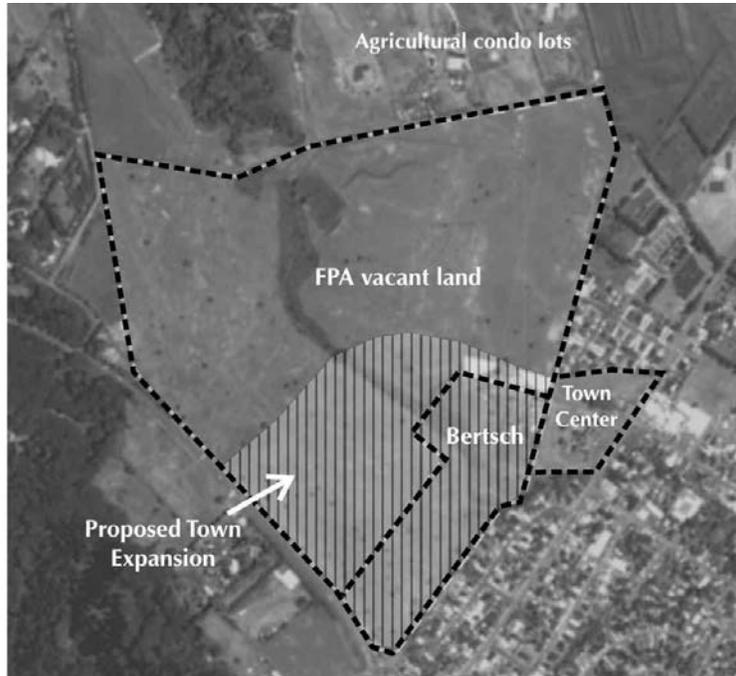
² See Appendix C for notes of the April 28, 2005 meeting.

³ Tax Map Key 5-2-05:24

⁴ Tax Map Key 5-2-05:23

vacant land from the CPR lots unless the portion of the property to be separated is removed from the State Agricultural District and County agricultural zone.

Figure 5-1: Landownership Relative to Town Expansion



The photo at left, shows the relationship between the existing town, the proposed town expansion area, and, landownership. The “agricultural condo lots” are part of the same subdivision lot on which FPA holds its currently vacant agriculturally-zoned tract. Note that the Bertsch tract is situated between the existing town and FPA’s portion of the proposed town expansion area. Note also the adjacency of the Town Center property, which is proposed for additional commercial development, as permitted by present zoning.

The landownership situation makes it challenging to coordinate the land use entitlement process and to plan, schedule the phasing, and finance the cost of development. FPA appears to be the owner with the greater capability and interest to undertake the development of the town expansion area, but the parcel held by the Bertsch is situated between the existing town and the FPA property, so it is essential that the objectives and efforts of these two property owners be perfectly aligned. Moreover, the owner of the adjacent, partially vacant commercial-zoned area, which is planned for further development by Kilauea Town Center, LLC, is also expecting to tie in to the potable water and wastewater system improvements for the town expansion area.⁵ Therefore, the need for coordination extends to three different landowners.

5.4 Opportunities to Reduce Infrastructure Costs

Infrastructure systems do not necessarily have to be developed or financed in the manner described in Section 5.1. Below are some ways in which the infrastructure costs may be reduced or the public sector participates in financing to better achieve the affordable housing objective.

Water source and transmission

It is very probable that water sources closer to Kilauea than Moloa'a are available or will soon be developed. The DOW proposes to drill, in the near term, one or two new wells in the Kilauea-Waipake-Kallihiwai Water System service area to supplement its two existing

⁵ Tax Map Keys 5-2-23: 28 & 27

wells, each of which has a pumpage capacity of 1 million gallons per day (mgd).⁶ While the DOW plan states that the supply is “slightly deficient” to meet existing maximum day demand, pumpage records suggest that there is more than adequate capacity on a average daily demand basis.⁷ About one-third of water sales in this system are to agricultural customers, which is the highest percentage of agricultural usage on the island. As noted in the DOW plan, the agricultural lands in Kīlauea actually consist of a mixture of agricultural and residential uses. To conserve water supply for the development of affordable housing, DOW could shift its priorities to service the proposed town expansion area before extension of service to outlying subdivisions and dwellings in agriculturally-zoned areas.

If the development of a new municipal well is further delayed and the DOWs believes it necessary to reserve capacity in its existing wells and/or provide a second transmission line to Kīlauea town to improve service reliability, then an alternative water source might be found on private land near Kīlauea. For example, there are two existing wells on the mauka side of Kūhiō Highway that were intended to serve a proposed retail commercial and light industrial development that has not come to fruition. The combined capacity of these wells is 0.6 mgd per day, but a pump and a storage tank are needed to make the wells functional and meet fireflow standards. While this is not the only potential nearby water source on private land, it has the distinct advantage of being an unused source with a tested capacity.

If the new water source is on private land, DOW should seriously consider the use of eminent domain to acquire the water rights for public use, especially since one of the purposes of the new source and transmission line is to improve reliability for existing customers in Kīlauea.

New entry road

The construction of the proposed entry road could qualify for federal funding in two ways, even if assistance is not available through the Central Federal Lands Highway Division program discussed in Chapter 2. It may be possible to obtain a special appropriation through Hawai'i's Congressional delegation to defray at least part of the cost of road construction because it would clearly improve access to Kīlauea Point, which is under federal jurisdiction and is one of Kaua'i's major visitor destinations. A less direct route to securing federal funding is to classify this new road as a “major collector” and re-classify the upper portion of Kīlauea Road, which runs through a residential area of town, from “major collector” to “local” street. Shifting this classification means that the new entry road can be listed on the State Transportation Plan, thereby making it eligible for partial federal funding.

The cost of the new entry road could be reduced if its length were shortened by about half such that its route from the highway toward Kīlauea Point does not completely by-pass the town but instead approaches the town center as an extension of Keneke Road. This would provide most of the benefits of a by-pass road by diverting traffic generated by Kīlauea Point from most of the residential areas that line Kīlauea Road. This section of Kīlauea

⁶ Kaua'i Department of Water, *Water Plan 2020*, March 2001. Well development was planned to occur in Fiscal Year 2001, but this schedule has obviously been delayed.

⁷ According to records at the State Commission on Water Resources, DOW pumped an average of 0.038 mgd and 0.133 mgd from their two Kīlauea wells.

Road in the mauka section of town has a straight alignment and relatively level terrain, so through traffic tends to move at higher speeds than the posted limits, posing a potential hazard for pedestrians and conflict with vehicles exiting the numerous residential driveways along both frontages. While the shorter entry road route would still require that through traffic traverse the section of Kilauea Road fronted by the Titcomb Tract housing area and a few residential lots on the opposite side of the road, there are very few residential driveways that connect directly to Kilauea Road in this section, and there is a parallel, paved pathway that clearly separates pedestrian and bicycle traffic from vehicular traffic.

There is also the possibility of reducing cost by confining town expansion to an area extending from the town core makai of the drainage gulch, thus avoiding the expensive bridge and highway intersection. This could also be viewed as a first phase of town expansion, in which case the more costly elements of the new entry road would be deferred to a later phase, possibly when federal or other public funding becomes available. Unfortunately, this may also defer or decrease the likelihood of a park-and-ride lot adjacent to Kūhio Highway for commuters using the Kaua'i Bus, since the opportunity of combining this use with a Kilauea Point shuttle bus system (see Chapter 2) will be lost.

Wastewater system

The cost of a wastewater treatment system could be spread to a larger number of users by having existing commercial uses in the adjacent town core connect to the system. This would not only lower the unit construction and operation cost to each user of the system, but also remove present individual ground disposal units for the commercial developments in town, to the long-term benefit of groundwater quality. The initial cost of connection to the system may be a concern to some commercial users. On the other hand, if existing commercial operations were required to connect to the system, it may encourage some of the non-conforming commercial uses to relocate to properties that have the proper zoning, wastewater and other facilities that were intended for that purpose.

5.5 Opportunities to Coordinate Landowners

The most direct way to coordinate landowners in the town expansion area is for one of the owners to buy the other's land. In this instance, it would more likely for FPA to purchase Bertsch's land, since the former has more experience and capability for the type of development proposed for the town expansion area. A purchase agreement between the two is reportedly not under consideration by these owners, but both have indicated a willingness to enter into some form of cooperative arrangement for the joint development of their properties. Beyond this general discussion, however, there was no specific agreement between these parties at this time this report prepared. It is also unclear what, if any, agreements exist between these two landowners and Kilauea Town Center with respect to cost-sharing for infrastructure development.

If agreements between the private landowners fail, the County or State could use its powers of eminent domain to acquire the land if there is a clear public purpose, such as affordable housing or open space preservation. However, it is very unlikely that this step would be taken, not only because of the necessary commitment for funds for purchase of the land at fair market value, but also because the condemnation would probably be contested by the owners, making it a politically difficult, costly and time-consuming undertaking. In

addition, it would obligate the government to plan and implement the town expansion project. While there have been several successful government-initiated community development projects in Hawai'i that are even larger than the proposed Kilauea town expansion area – e.g., West Loch Estates and Villages of Kapolei in the 'Ewa region of O'ahu – these have taken place in areas where the government was attempting to take the lead in investing in the development of areas where major urban growth is planned. Kilauea's are not comparable.

An alternative might be the purchase of all or portions of the affected land area by a non-profit entity, such as a community land trust. This would require substantial capital, as well as the cooperation of the landowners, but land trusts are able to raise sources of funds that are not available to government bodies, and can offer attractive tax advantages to the sellers. Moreover, land trusts can hold land for a variety of purposes. This is discussed in the following section, especially in reference to the objective of conserving affordable housing stock and reserving land for possible future town expansion.

5.6 Opportunities to Conserve Affordable Housing and Land

While labor and construction materials costs are higher in Hawai'i than in many other locations, the major component of housing cost – and contributor to the escalation of market prices for new or resold houses – is land value. When buyers of affordable housing are able to re-sell their house at a substantial profit after the 10-year “buy-back” period has lapsed, most of the appreciated value is typically in the land, even if building improvements were made during that period. Therefore, if the objective is to avoid losing the inventory of affordable housing over the long term, there needs to be some mechanism to control the effects of appreciated land value.

In some places, community land trusts have been used to both develop and maintain the stock of affordable housing. Land trusts, in general, are non-profit entities, sometimes state-chartered, that exist in 31 states of the U.S., including Hawai'i. In Hawai'i, they have not yet been used for affordable housing projects, although there are several instances where land trusts have been used to preserve scenic or natural areas.

A land trust can be used to acquire the land underneath an affordable housing project, either prior to or after project development, and make the housing permanently affordable by retaining an interest in the land. The trust may get the funding for the land purchase through a variety of sources: private donations, government or foundation grants, revenue bonds, private or public loans, and leasehold income. They can also receive the transfer of title to the land at less than appraised fair market value, which offers tax advantages to the original owner.

The role of the trust is to retain the interest in the land. This enables affordable housing in two ways. First, the land is leased to homebuyers, not sold, so that the price to buyers is substantially reduced. Second, by retaining the land interest, the trust also regulates the resale price for the housing unit, so that it remains available to future buyers who qualify for affordable housing programs. Figure 5-2 shows how this works, using an actual project as an example.

Figure 5-2: Example of a Community Land Trust Project



At left is a partial site plan of a 31-acre tract in an urban residential neighborhood in Madison, Wisconsin purchased by a land trust for open space preservation, community gardens and the development of 30 dwellings. Two-thirds of the housing units were sold to people at or below 80% of the community's median household income, and the balance were sold at prevailing market rates. There is no mandatory "buy-back" period, but the trust holds the land title and regulates the resale prices by retaining 75% of the appreciated value of the home. For example, the first buyer bought a unit at \$100,000. A few years later, he wants to sell and the market appraisal shows a value of \$120,000. According to the formula, the house sells to the next buyer at \$105,000, with the original buyer gaining \$5,000 of the appreciated value.

Source: Madison Area Community Land Trust website

Another approach to providing permanent housing affordability is the limited equity cooperative. Under this arrangement, the cooperative is a non-profit corporation that purchases the housing project from the developer and then sells shares of the project to future occupants of the housing units rather than fee simple ownership of the units themselves. Typically, both the initial sales price and resale values are lower than the 20% down-payment for a conventional mortgage on a home. After occupancy, the resident pays a monthly fee, set by an elected board of residents, for the unit's portion of the project's mortgage payments, utilities, insurance and maintenance.

State law enables limited equity cooperatives in Hawai'i, but few have been developed here. Lenders tend to be reluctant to provide financing for the purchase of shares in a cooperative. Also, the initial buyers tend to absorb a greater amount of the project's costs to amortize the loan for the cooperative's purchase of the project from the developer. Finally, some people are discouraged by the level of involvement expected of the residents to manage the cooperative. On the other hand, this aspect of cooperative living may be attractive to Kilauea residents who value living in a close-knit community.

Another housing arrangement that may have appeal in Kilauea is "co-housing", where several households share the use of certain facilities or even services to promote community-based living and reduce costs. Co-housing communities have a clustered design, which not only enhances the feeling of connectedness with neighbors, but also

optimizes the amount of common open space on the site. Residents typically own their own living quarters, but share amenities such as a community kitchen and dining room, children's playroom, laundry, guest rooms, and more. While shared use can reduce overall development and maintenance costs, co-housing does not, in itself, insure that the units will be affordable, either initially or on re-sale, unless it is combined with some other mechanism to regulate price, such as the land trust or cooperative models discussed above.



Chapter 6

Recommendations

6.1 Review of Recommendations in North Shore Development Plan

The North Shore Development Plan Update proposed several implementation measures for the Kīlauea Sub-Area, some related to zoning or land development, and others which are capital improvement projects. Table 6-1 summarizes the disposition or current status of those proposals.

Table 6-1: Status of 1980 North Shore Development Plan Proposals

Recommendation	Priority	2005 Status
<i>Zone Changes/Land Acquisitions:</i>		
Rezone remnant lot mauka of highway next to Kīlauea Stream from Residential to Agriculture	NA	Implemented
Rezone 30-35 acre adjacent to Kīlauea School Residential/Project District	NA	Implemented; site developed for housing
Rezone 1 acre bounded by highway, stream, Kolo Road, Ho'okui Road to Residential	NA	Not implemented; site and adjacent 3-acre lot to east rezoned Commercial
Rezone 5-10 acres at former Metcalf Farm from Agriculture to Light Industrial	NA	Implemented; site remains undeveloped
Rezone 3.5 acres in town center and 0.5 acres at town entry to Commercial/Project District		Implemented; town center site still undeveloped, but project is proposed
Obtain pedestrian easement to Kīlauea School from adjacent new residential subdivision	NA	Implemented
Acquire 1-2 acres adjacent to Kīlauea School for future expansion	NA	Implemented
<i>Capital Improvement Projects:</i>		
Acquire and develop 100-200-acre Agricultural Park	1	Partially implemented; 75 acres dedicated to County; site unimproved
Repair railing and pavement of Old Kīlauea Stream Bridge	1	Implemented
Improve sidewalks in town center for pedestrian circulation	2	Partially implemented; shared-use bike/walk path along Kīlauea Road
Develop parking area at Kīlauea Bay	2	Not implemented; requires road access dedication (see below)
Plant street trees along Kīlauea Road	3	Not implemented
Expand Kīlauea Park and provide tennis courts	3	Not implemented
Develop a landscaped town entrance	4	Partially implemented; limited land area available
Improve road from town to Kīlauea Lighthouse	4	Not implemented; but bikepath built
Improve road from town to Kīlauea Bay	4	Not implemented; but road to be conveyed to County
Expand elderly housing	4	Not implemented; site still available
Improve town center minipark	5	Not implemented
Build by-pass road to Kīlauea Lighthouse from Kūhiō Highway	5	Not implemented

It is evident from Table 6-1 that few of the proposed capital improvement projects were implemented. Kīlauea is a small community in a rural region that has experienced relatively slight population growth when compared to some other regions on Kaua'i. Public investments tend to go to the larger population centers or urban growth areas. Also, expenditures that are directly related to public health and safety concerns, such as facility repair, fire and police protection, and traffic safety improvements, tend to get higher priority than budget requests related more to quality of life considerations, such as recreation or aesthetic improvements. Since 1980, Kaua'i has suffered two major hurricanes, so public attention and funding have been focused even more on rebuilding essential infrastructure.

Some of the proposed improvements were deferred not only because of lack of funding, but also because other actions were needed in order to enable or facilitate the project's implementation. For example, the proposed agricultural park could not be developed until the land was dedicated, and that occurred just this year. Parking improvements at Kīlauea Bay could not be built until the issue of public access on the road to Kīlauea Bay was settled. The proposed by-pass road from Kūhiō Highway to Kīlauea Highway was not very likely to happen unless the right-of-way, and perhaps the improvements, were dedicated as part of the development of adjoining land. While the *Kaua'i General Plan* calls for both the by-pass road and the development of adjacent land (i.e., the town expansion area), it will be very difficult to both build the road and provide affordable housing in the expansion area without substantial public funding, so some hard choices must be made.

The following sections set forth the recommended policies and guidelines for the Kīlauea Sub-Area, and summarize the purpose and intent of those recommendations to clarify the policy choices.

6.2 Recommendations Concerning Regional and Town Form

The intent of the *Kaua'i General Plan* was to provide for an orderly expansion of Kīlauea Town to allow for the development of resident-oriented housing and strengthen the town's commercial core. It proposed a by-pass road from Kūhiō Highway to Kīlauea Point to divert through traffic and protect the integrity and safety of the residential neighborhood in town. It also called for measures to abate the spread of non-agricultural uses of agricultural land, a pattern that has taken hold in the Kīlauea region, even though there is still a vital base of agricultural activity in the area.

In the course of developing the *Kīlauea Town Plan*, several issues came to light that needed to be addressed in order to fulfill the intent of the *Kaua'i General Plan* and the expressed desire of the community:

- First, it is clear that affordable housing is a primary objective. Therefore, the proposed town expansion should be focused on that objective.
- Second, there are vacant lands zoned for commercial and light industrial use along Kūhiō Highway that, if developed, would directly compete with the objective to strengthen the town's commercial core, and create other deleterious effects of highway strip commercial development.
- Third, while a by-pass road may be desirable to divert through traffic from the town's residential neighborhood, a route that also by-passes the town's

commercial core would be likely to have an adverse impact on businesses and employment in the town. The alignment of the by-pass road should take this into account. Also, the new road has perhaps an even more important function as a safer entry into town than the poorly designed highway intersection at Kolo Road. For these reasons, it would be more accurate to think of this as a “new entry road” rather than the “by-pass” road.

- Fourth, town expansion also presents opportunities to improve pedestrian and circulation within the town, linkages to popular destinations outside of town, and integration of the natural and scenic assets into the town core.
- Finally, the town is becoming encircled by agricultural subdivisions and condominiums that are developed for residential and other non-agricultural uses. How will the town be able to accommodate housing needs for residents two or three generations for now if the town boundary cannot expand beyond what is presently proposed in the *Kaua'i General Plan*? Having some land reserve adjacent to the proposed town boundary expansion would keep options open for these future generations.

With these points in mind, the following are the recommended principles and implementation measures for regional and town form. The proposed land use pattern for the town and its immediate environs is illustrated in Figure 6-1 and Figure 6-2. The proposed circulation plan for the town is depicted in Figure 6-4.

- **Emphasize the town commercial core and prevent highway strip commercial development.** The recommended land use plan provides for ± 3 acres of land for commercial use and ± 5 acres for light industrial use in the proposed town expansion area in the vicinity of the post office. This is in addition to the ± 3 acres of vacant land surrounding the former dispensary that is already zoned for commercial use and available for future development. The land use plan also calls for the two undeveloped parcels along the highway frontage that are presently zoned for commercial and light-industrial use to be re-zoned for residential and agricultural use, respectively. Both properties have remained undeveloped for nearly 25 years, despite these designations.
- **Provide appropriate buffering for adjacent land uses.** The proposed commercial and light-industrial uses are separated from existing residential areas. When future residential areas are developed near the commercial and light-industrial areas, a combination of solid walls and landscaped setbacks should be used as buffering where uses the areas adjoin. The light industrial area should be served by its own local street to avoid impacts of business-generated parking, traffic and noise that occur when residences share the street. The proposed new community park is located next to Kūhiō Highway, both to provide convenient vehicular access for people living in the region but out of walking range, and to serve as a buffer between the highway and new residential neighborhoods in the town expansion area.
- **Divert through traffic to Kilauea Point away from residential neighborhoods and tie in to the existing street network.** The alignment of the proposed new entry road from Kūhiō Highway, instead of by-passing the town entirely, connects to the town center via an extension of Keneke Road near the post

office. This route effectively diverts the through-traffic from existing residential neighborhoods where driveways exit directly onto Kīlauea Road. The site design for residential neighborhoods in the town expansion area should avoid direct driveway connections onto the new entry road in order to avoid future conflicts between through traffic and residential uses. By connecting the new entry road to the town center, businesses and employment will benefit by the continued exposure to visitors to Kīlauea Point. Equally important, this alignment for the new entry road will provide town residents with a more convenient route to and from the highway. Figure 6-1 also provides for a possible extension of the entry road to function as a town by-pass route if the federal government funds the construction of the road.

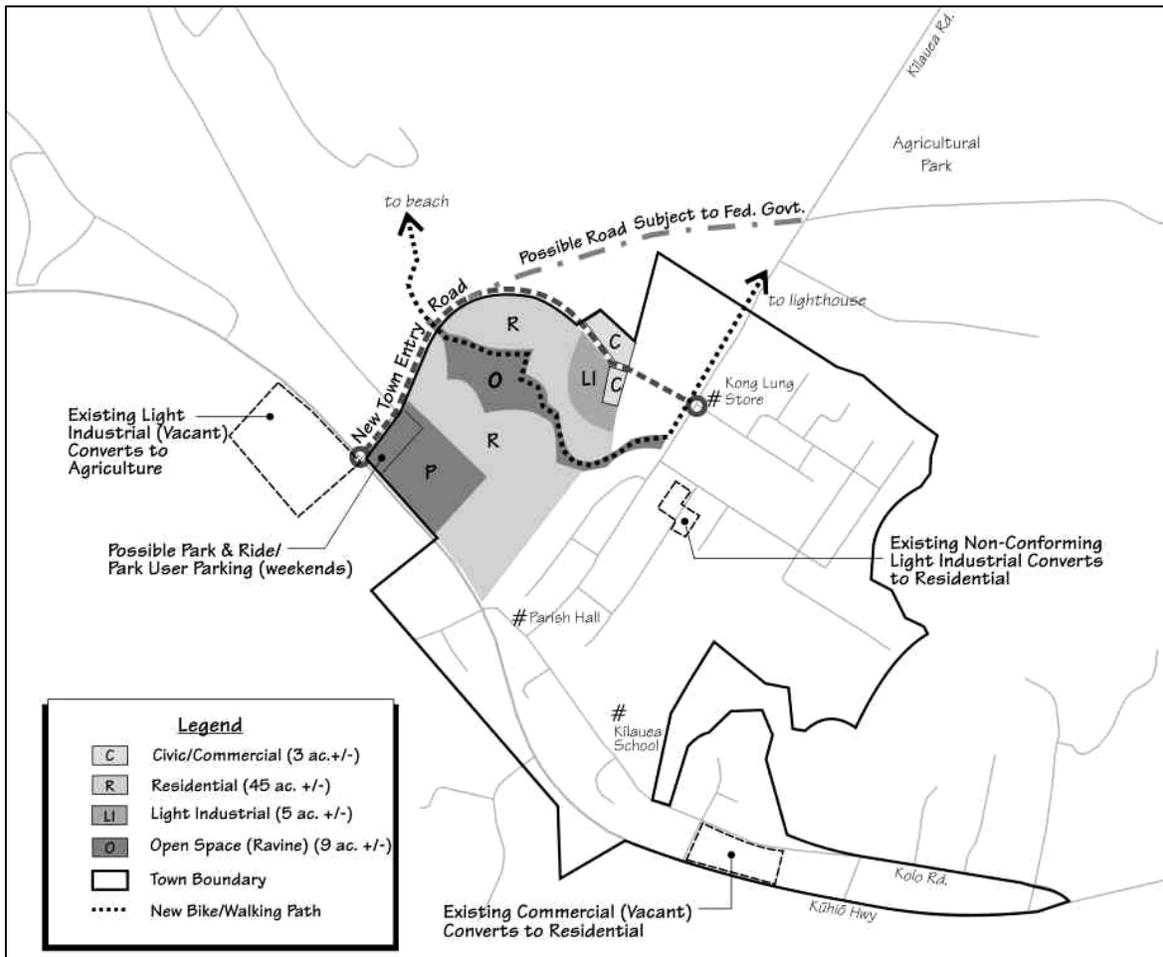
- **Integrate natural features into the town.** Kīlauea Stream presently forms a wonderfully scenic eastern boundary for the town and a natural edge for Kīlauea Elementary School. The ravine that cuts diagonally through the proposed town expansion area can likewise be integrated as a natural element, serving not only as a natural drainage swale, but also as a scenic and recreational feature with the addition of attractive landscaping and a bike/walk trail following the alignment of the ravine. This is reflected in Figure 6-1.
- **Curtail residential condominium development and other non-agricultural uses on agricultural land.** The adverse consequences of inappropriate development and use of agricultural land were discussed both in the *Kaua'i General Plan* and in Chapter 2 of this report. As mentioned previously, this is an islandwide issue, but the Kīlauea region should get special attention because it was the subdivision of the former Kīlauea Plantation lands that first brought attention to the problem, and the region's existing agricultural operations are suffering the consequences of misuse of agriculturally zoned lands, such as high land valuations. To abate the incursion of these non-agricultural uses, agricultural subdivision lots in the Kīlauea region should be limited to either the current number of legal dwellings on the lot, provided there are no more than 5 dwellings, or one dwelling on the lot, whichever is greater. Also, the County should establish size limits and other controls on "farm dwelling" use in the agricultural district similar to those in the Honolulu and Maui zoning codes to comply with the intent of the State Land Use Law.¹



This gated residential community near Crater Hill, outside of Kīlauea Town, is one of many examples of non-agricultural uses of agricultural lands in the region.

¹ Chapter 205, Hawai'i Revised Statutes

Figure 6-1: Recommended Land Use Pattern for Full Town Expansion



- **Reserve a portion of the plateau west of Kilauea Town for permanent open space, agriculture and/or future town expansion.** As discussed in Chapter 5, and illustrated in Figure 5-1, the proposed town expansion area covers only a portion of the vacant agricultural-zoned land held by one of the two landowners. More than 75 acres would remain on this tract after the town expansion area is removed, and the future use of this land is constrained by zoning and subdivision regulations. The owner has proposed to develop the remainder with agricultural or rural residential lots, in part to help finance the construction of infrastructure improvements for the town expansion. However, this proposal would contribute to the problems that are described in the previous paragraph. In addition, the addition of structures and landscape features in this area could adversely affect the scenic makai view across the plateau from Kūhiō Highway (indicated on the map in Figure 2-2.) Finally, and most important, the subdivision and development of this portion of the plateau would foreclose the option of further expanding the town boundary to meet the housing needs of future generations. Possibly, future generations may decide to meet housing needs in some way other than by expanding the boundary of the town, and reserve the plateau instead for agriculture or open space. In order to keep the

options open, it will probably be necessary for a community land trust or similar entity to acquire and hold the balance of the plateau.

- **Emphasize “visitor demand management” at Kīlauea Point National Wildlife Refuge (KPNWR).** Chapter 2 makes reference to an “alternative transportation systems study” for KPNWR being conducted by federal agencies in parallel with the *Kīlauea Town Plan*. As part of this study, the federal team is considering a variety of parking, transportation, and access control measures to accommodate visitors. One of the alternatives under consideration – i.e., use of a shuttle bus for visitors – got a fair amount of attention in the public workshop discussions for the *Kīlauea Town Plan*. The details of the shuttle operation are undefined, its feasibility is undetermined, and its potential benefits to the residents of Kīlauea are far from clear, especially if construction of the planned new entry road is deferred or abandoned (see discussion in following section concerning housing development.) From the standpoint of the Kīlauea community’s interests, the preferred alternative is to manage visitor demand at KPNWR by using entry fees and other measures, such as requiring advance appointments in certain instances, and make only modest changes to parking and transportation arrangements rather than to take steps that may promote increased visitation to KPNWR.

6.3 Recommendations Concerning Housing Development

The need for affordable, resident-oriented housing was clearly the top priority during the preparation of the *Kīlauea Town Plan*. While this is not a new issue for this community, it has assumed greater importance in recent years with the rise of sharp in housing prices in the region.

The high priority on affordable housing influences the *Kīlauea Town Plan* in several ways:

- First, there is strong desire for the housing to be affordable and available for residents of Kīlauea. There are many renters or people who are living with relatives or friends in the area who are looking for suitable housing but are unable to afford what is on the market. Some, however, do not qualify for County-sponsored affordable housing programs, so the housing need spans a range of incomes. Among those that do qualify for those programs, there is considerable anxiety that a large number of applicants from outside the area will squeeze out the local residents’ opportunity to secure an affordable home. This is an understandable concern because government-sponsored housing programs cannot be discriminatory. In actuality, however, when government-sponsored housing projects are developed in rural communities like Kīlauea, almost all units are filled by local residents or people who already work in the vicinity and desire to live nearby.
- Second, in order to deliver housing that is affordable, it will be necessary to develop housing types other than conventional single-family detached dwellings. In addition to reducing cost, the variety of housing types offers more choices for consumers, as well as the potential for unit and site design that promotes a stronger sense of community, such as co-housing arrangements and community rooms or gardens within multi-unit housing clusters. The results of the visual response survey at the first public meeting showed that people can

overcome their resistance to multi-family affordable housing if it is attractively designed as appears to be a good “fit” for a rural town.



The affordable housing projects shown above elicited a favorable response from Kilauea residents because, while not in Kilauea, they include design elements that fit the context of Kilauea – for example, the reference to historic plantation housing in apartment buildings in the left photo, the informal common walkway connecting the detached dwellings in the center photo, and the community garden next to the senior housing apartments in the right photo.

- Third, many Kilaueans who value their close-knit community worry that the size of the town expansion area and timetable for its build-out will be too large and fast for the existing town to absorb into the social fabric, fearing that something intangible but very important will be lost. As it happens, a more deliberate, slower phasing of town expansion may also be warranted in order to achieve the primary affordable housing objective. As noted in Chapter 5, if private developers finance all of the cost for infrastructure development in the town expansion area, it will be far less feasible or likely to achieve the optimum amount of affordable housing. If the first phase is confined to 15 acres extending from the town core, the County could defer expensive infrastructure items and expedite the land use entitlement process, as explained below.
- Fourth, Kilauea residents expressed frustration that most of the inventory housing that was previously developed in the town under the affordable housing guidelines, often with government subsidies, is now depleted because the 10-year “buy-back” restrictions have lapsed, and many of these units have been sold at market rate with significant appreciated value. There needs to be some mechanism to preserve affordable housing stock over a long term to offer to future qualifying households.
- Finally, there are opportunities within the existing town boundaries to develop some additional housing on “in-fill” sites, such as vacant lots and residential-zoned properties with non-conforming uses. The number of potential additional housing units on such sites is quite small, however, due to lot sizes, wastewater treatment requirements and other constraints.

Below are the recommended principles and implementation measures for housing development:

- **Provide new housing at prices that reflect the market characteristics of existing town residents.** Based on the household income figures for Kilauea Town, as reported in the 2000 Census (see Figure 4-6), housing in the town expansion area should be targeted to the following markets: 60% of the units or housing sites for households qualifying for “affordable” housing (i.e., 140% of

the Kaua'i median or below); 15% for “workforce” households (i.e., 140% to 200% of the median); and 25% for those who can afford “market-rate” housing.

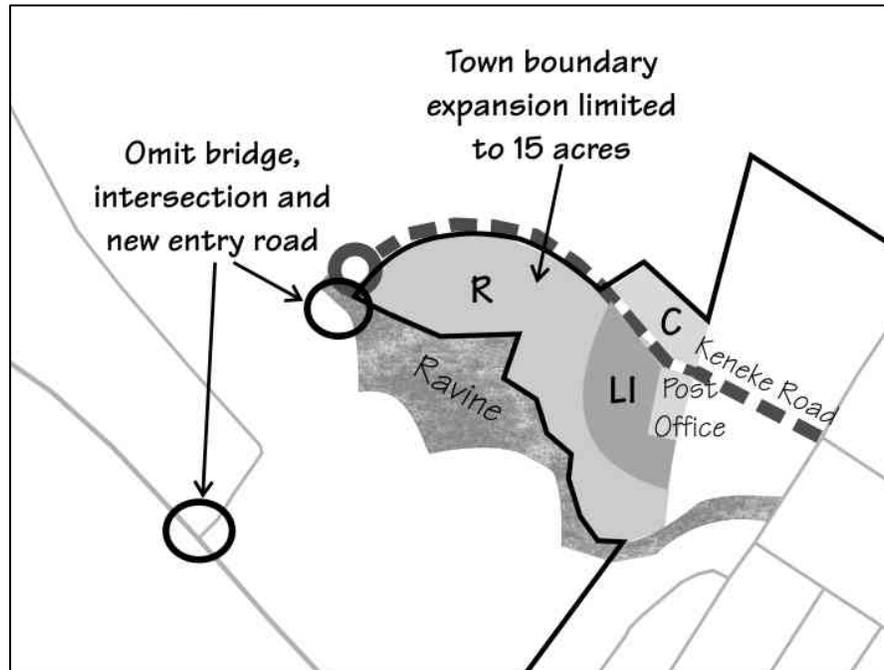
- **Provide a mix and variety of housing types in designs and layouts that promote a sense of community.** The photos on the previous page are examples of housing types and designs that could be adapted for Kīlauea’s town expansion area. Some Kīlauea residents may find the co-housing living arrangement (see Chapter 5, page 5-7) quite appealing, both because of its economic advantages and the intimate sense of community that it fosters. Self-help housing – where the buyer builds all or part of the house on a finished building lot – is an approach that also reduces cost and strengthens the bonds of community, and it has been done previously in Kīlauea.
- **Involve public and non-profit agency participation in the planning, financing and delivery of affordable housing.** Some form of assistance from the public and/or nonprofit sector is virtually essential to develop affordable housing. Several types of federal grants, are available for the development of affordable housing and supporting infrastructure in rural communities (see Chapter 5), and some are available only to nonprofit organizations.² Federal funding should also be sought for the construction of the new entry road, as explained in Chapter 5.
- **Avoid high infrastructure costs and expedite entitlement processing by confining the first phase to 15 acres, extending from the existing town core.** Keeping the size to 15 acres enables the County to approve the State Land Use District Boundary amendment concurrently with the County zone change, which shortens the land use entitlement process. If more than 50% of the housing units in the first phase are affordable, the entitlement process can be shortened even more through the State statute that allows exemptions from development codes for affordable housing projects.³ The use of this statute would also enable the modification of design standards in development codes to reduce housing costs and create a site plan and streetscape that is in keeping with the rural character of the existing town. Extending the first phase from the town core rather than the highway would avoid or defer the cost of expensive infrastructure components, such as the highway intersection and bridge over the ravine (see Figure 6-2.)
- **Preserve the stock of affordable housing.** The 10-year “buy-back” provisions for government-sponsored affordable housing projects are embedded in State statutes and County regulations, but it is possible to use other mechanisms to insure that housing remains affordable over the long term. As described in Chapter 5, if the ownership of the land is held by a community-based trust, both the initial cost of the housing to the first buyer and the resale price to subsequent buyers can be greatly reduced. Implementation of a community land trust requires the formation of a non-profit organization, but it happens

² The U.S. Department of Agriculture’s Office of Rural Development and Farmers Home Administration. The Community Block Grant Program is another potential source of funding, although it is not specifically designated for rural communities, so a request for Kīlauea would need to compete with needs for other areas on Kaua'i.

³ Chapter 201G, Hawai'i Revised Statutes.

that there is already such an entity in place that could be a vehicle for a land trust in Kīlauea.⁴ Another means to keep housing affordable over the long term, as also described in Chapter 5, is to convey homeownership in the form of shares in a limited equity cooperative rather than outright ownership of the unit itself.

Figure 6-2: Recommended Phase 1 Town Expansion

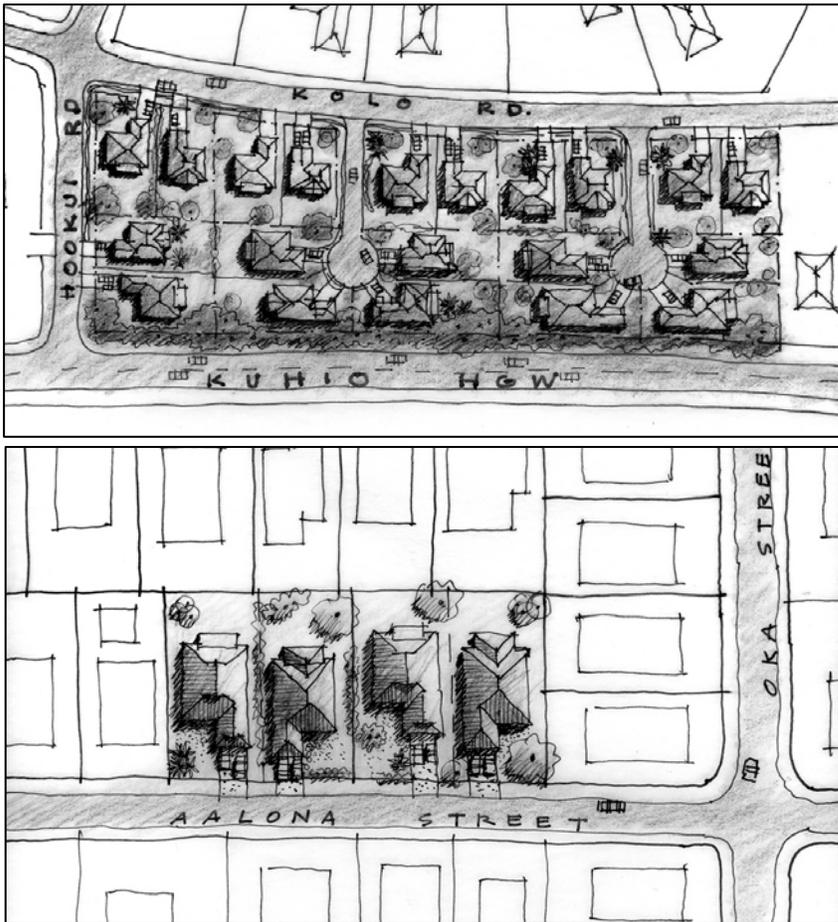


- Provide additional “infill” housing development sites in the existing town.** There few residential-zoned properties in town available for additional housing. The largest site is the undeveloped portion of the State’s elderly housing project. Another opportunity is the vacant property between Kūhiō Highway and Kolo Road that is presently zoned commercial but proposed for residential use. The residential-zoned properties that are presently occupied by nonconforming industrial uses (see Figure 6-1) are proposed for conversion to residential use, but it is likely to take some time for this to occur, unless the County enacts a provision in its zoning code to amortize nonconforming uses. Amortization is enabled by State statute.⁵ The housing development potential of all of the in-fill sites is constrained by regulations requiring a minimum of 10,000 square feet per residential lot for individual, on-site wastewater treatment disposal units. The housing subdivision in the Titcomb Tract was designed to meet this standard, but they were allowed to have two dwellings on each of the lots share the aerobic treatment unit. Figure 6-3 shows the development potential of two of the larger possible housing sites using the same criterion.

⁴ Aina Ho’o Kupu o Kīlauea, which is registered as a 501C(3) organization.

⁵ Chapter 46, Hawai’i Revised Statutes.

Figure 6-3: Development Potential of In-Fill Housing Sites



At top left, this vacant ± 3 -acre site, presently zoned commercial, could accommodate a site layout for up to 10 residential lots with a minimum area of 10,000 square feet each, with two houses on each lot sharing a common septic unit. A drainage easement on the eastern side of the property, however, would reduce the development potential to about 16 dwellings. Below left, the site of the Mini-Storage building could be subdivided into two residential lots, with two dwellings on each lot sharing a common septic unit, for a total development potential of four dwellings.

6.4 Recommendations Concerning Town Character

Kīlauea’s rural charm is quite evident, not only in the scenic landscapes that surround the town, but also in the historic features and the informal, inviting character of the architecture and streetscapes, in both the commercial developments and the residential neighborhoods. These are qualities well worth protecting in the existing town, and expressing in the future expansion of the town. At the same time, some interventions are desirable to improve the quality of life in the town:

- First, while the roadway right-of-way design for Kīlauea’s streets is generally adequate for a rural town, there are some places where improvements would be desirable from the standpoint of safety and convenience. It would be impractical in terms of cost and disruption, and undesirable in terms of community design, to improve Kīlauea’s streets – either in the existing town or in the proposed town expansion area – to current County standards. However, modest improvements such as paved walkways and traffic calming measures at key intersections would be cost-effective and appropriate to the rural design context.

- Second, one of the limitations of the town's present street network is the prevalence of cul-de-sacs. As a result of this street pattern, vehicular, pedestrian and bicycle routes are indirect and less convenient. Although the intent of cul-de-sacs is to slow the speed of traffic, it has been found that drivers sometimes tend to speed even more along straighter stretches of street in order to "compensate" for the time lost in following a circuitous route. In addition, the less direct pedestrian and bicycle routes discourage people from using these modes for short trips, adding to vehicular traffic. Current thinking about effective traffic circulation and management advises a more inter-connected grid of streets rather than cul-de-sacs.
- Third, there are nonconforming commercial and industrial uses on residential-zoned properties in town that cause nuisances for surrounding residential neighbors, such as noise and traffic. For the most part, these uses are located in plantation-era buildings that have been adapted to their current use, and the original investment cost for the building had been amortized. The County has allowed improvements to these properties via Special Permits, in part as an acknowledgment that there are no suitable sites for these community-serving uses elsewhere in town. The proposed land use plans shown in Figures 6-1 and 6-2 will provide new sites for commercial and light industrial uses, and their locations will avoid impacts on adjacent residential uses. Therefore, the nonconforming uses in town should be phased out and the properties converted to residential use.
- Fourth, while Kīlauea is fortunate to have several historic buildings of distinctive character and new buildings that are generally attractive and complementary to the rural ambience, there is no guarantee that this condition will be perpetuated in the existing town or carried over to the new additions to the town. Some of the new residences built outside of town are much larger in scale than those in town, but the large lots on which they are situated and their physical separation from town diminishes the contrast in scale and architectural scale. During the public meetings for the *Kīlauea Town Plan*, as well in previous planning community meetings, residents have generally expressed a reluctance to accept residential design covenants or restrictions, but there is some support for design guidelines for commercial and public buildings.⁶
- Finally, Kīlauea's origin is in plantation agriculture, with sugar cane as the area's export crop. Today, agriculture remains an important activity in the region, but the crops are more diverse and the market is for local consumption as well as export. The town supports a two thriving farmers' markets per week, attesting to the vitality of agriculture as an economic activity in the area. The farmers' markets also provide a valuable service to the community, by offering fresh produce at reasonable prices to local residents in a town that lacks a supermarket. While these markets appear to be functioning reasonably well, it would be highly desirable to incorporate a more intentional design for the farmers' markets in the areas designated for future commercial use.

⁶ The most recent and direct expression of this is the polling by the Kīlauea Neighborhood Association at its meeting on June 29, 2005.

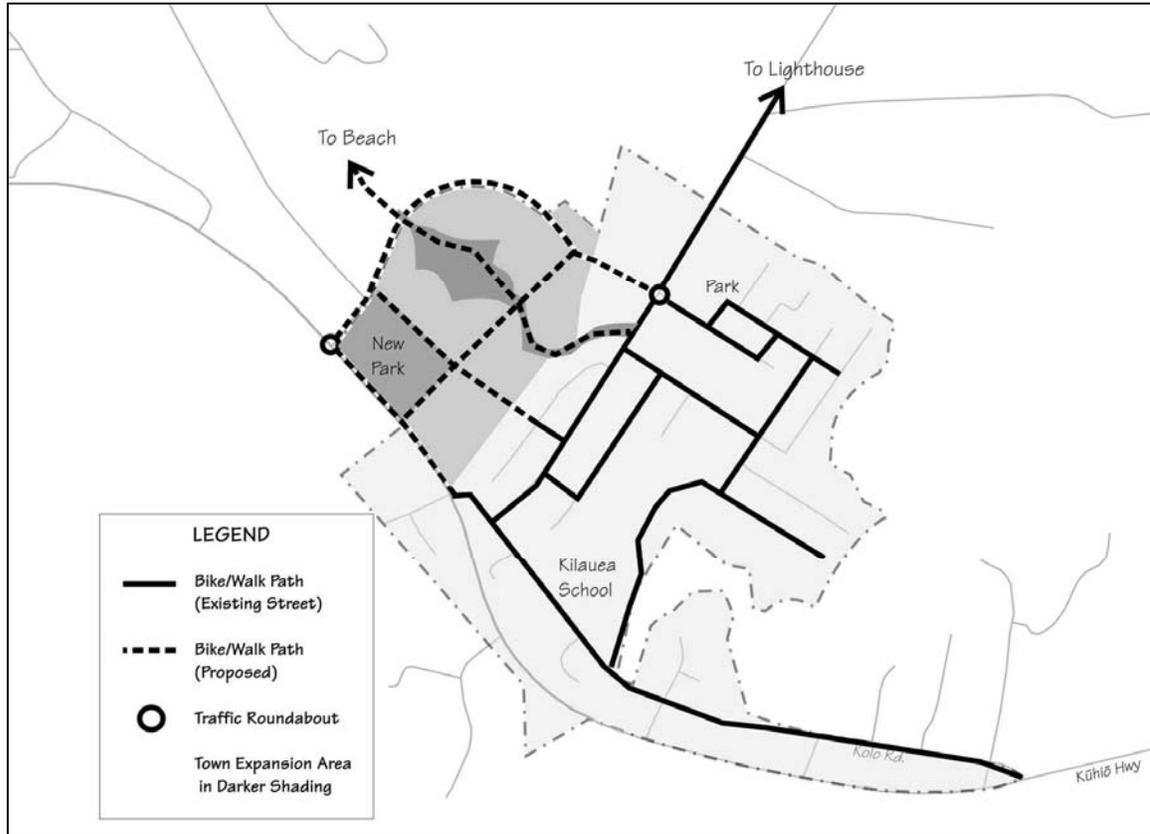
Following are the recommended principles and implementation measures concerning town character:

- **Retain rural street standards for the existing town and apply these standards to the proposed town expansion area.** The cross-section design for existing streets in town is self-evident. For the town expansion area, streets should follow the same basic design, but perhaps with some minor modifications, as needed, for more effective management of stormwater. If the Planning Commission cannot assume the authority to modify public works standards to achieve this objective, it may be necessary to apply the waiver authority enable by State statute for the development of affordable housing projects.⁷
- **Design the street system for the town expansion area based on the principle of “connectivity”.** The new street system should avoid cul-de-sacs and tie into the existing network of streets in the town. Figure 6-4 indicates points where connections are recommended. During the second phase of town expansion – i.e. – the area between Kūhiō Highway and the ravine (see Figure 6-1) – it will be necessary to acquire a residential lot on Kaikala Street to make the connection between the street systems. The owner of this lot could be offered a property in the town expansion area as compensation.
- **Provide walk/bike paths along collector streets.** Drainage swales on either side of the street function reasonably well, but paved pathways along principal streets would allow pedestrians a place separate from the roadway surface where they can walk when the drainage swales are full or muddy (see photo below right.) The recently constructed asphalt pathway pathway along Kīlauea Road (photo below left) illustrates what can be done on other streets in town. To increase the chance for funding, it is recommended that these pathways be built only on one side of each of the collector streets (see Figure 6-4.)



⁷ Chapter 201G, Hawai'i Revised Statutes

Figure 6-4: Circulation Plan for Kilauea Town and Expansion Area



- **Phase out non-conforming industrial uses on residential streets.** The County should discontinue the issuance of Special Permits to prolong the life of nonconforming uses – especially those of a light industrial nature – on residential-zoned properties. Instead, these uses should be phased out and encouraged to relocate to areas that are appropriately zoned. Most of these are in older, adaptively re-used structures whose cost has been amortized, as in the example of the Min-Storage shown in the photo below. These properties should then be redeveloped and converted to residential use.



- **Establish design guidelines for commercial and public buildings.** There are two existing sets of design guidelines that have relevance to Kilauea. The County's historic resources management plan contains some useful generic guidelines for the preservation, restoration and modification of historically significant buildings.⁸ A more regional reference is the design guidebook for Hanalei that was produced by a nonprofit organization.⁹ The Hanalei guidebook suggests guidelines for both old and new structures, including residential as well as commercial and public buildings. It also includes guidelines for parking, landscaping and signage. With some adaptation to conditions specific to Kilauea, these guidelines could be applied to the review of proposed new commercial and public buildings and building additions. While there is a mechanism for design review for new commercial buildings in Project Districts, there is no formal process at present for reviewing the design of alterations or additions to existing buildings. This would require an amendment to the Kaua'i County Code.



- **Promote local agricultural trade by providing a permanent site for a farmers' market.** Both of the Farmers' Markets presently take place in the center of town – the County-sponsored Sunshine Market in the parking lot of the Kilauea Neighborhood Center and the privately-sponsored market in the vicinity of the post office. It would be desirable to have a single, more permanent location for the markets so that the facilities can be designed to accommodate this activity. Permanent structures are not necessary, but it would be convenient to have a storage area available nearby for tables, shading devices, chairs for the vendors, and other equipment. Also, nearby should be a loading area for the farmers' pick-up trucks or vans and ample customer parking. A possible location for the set up of tents and tables is the small park fronting the former dispensary building. It is a highly visible, accessible location in an attractive setting, and the park gets little use at the present time. Plans for the expansion of the adjacent commercial-zoned land should include parking and loading areas to accommodate the farmers' markets.

⁸ Kaua'i Planning Department, *County of Kaua'i Historic Resources Inventory and Management Plan*, 1988.

⁹ 1000 Friends of Kaua'i and Land and Community Associates, *Hanalei Design Guidelines Handbook*, June 1988.

Appendix A
Updated Evaluation of Site Selection for North Shore Middle School



345 Queen Street, Suite 802
Honolulu, Hawaii 96813
Phone: (808) 521-9418
Fax: (808) 521-9468
E-Mail: jwhalen@planpacific.com

PLANPACIFIC

M E M O R A N D U M

DATE: **12 May 2005**

TO: **Keith Nitta, Project Manager, and Ian Costa, Planning Director
Planning Department
County of Kaua'i**

FROM: **John P. Whalen, AICP**

SUBJECT: **Potential Middle School Site in Kilauea Town expansion area**

This is an updated analysis of the one of the potential sites for a North Shore (or "Hanalei") Middle School, which is located within the area proposed in the Kaua'i General Plan for the expansion of the town of Kilauea. The site near Kilauea was originally identified in a 1998 State study, which preceded the adoption of the General Plan in 2000.

As your consultant for the preparation of the Kilauea Sub-Area Plan, which is to give further detail and refinement to the proposed town expansion, we would like to resolve whether the expansion area will include the new school. Consequently, we have prepared the following analysis, which we ask that you forward to the relevant State agencies for their response.

Our analysis concludes that revised circumstances make the Kilauea site much more attractive than it was in 1998, primarily due to the proposed town expansion. It is now has clearly higher ratings than the other two "top three" sites in the 1998 study (see summary, last page.) Also, the proposed town expansion will generate additional student population, which may offset the decline in student population that this region has experienced in recent years.

Background

In 1998, the State of Hawaii Department of Accounting and General Services (DAGS), in coordination with the State Department of Education (DOE), conducted a study to analyze various sites for a "New Hanalei Middle School." Then, and currently, there were/are not enough students to warrant the construction of such a school. In addition, since the study was conducted, the numbers of students in Hanalei Elementary, Kilauea Elementary, and Kapa'a Middle School (which currently services students who live on the North Shore of Kaua'i) have been declining each year. Even with the Board of Education's "Creating Communities of Learners" policy to reduce the number of students per school, current facilities are sufficient. Thus, although the DOE participated in the site selection, it has no plans or timeline for actual construction. The study was conducted mainly to fulfill a request from Kaua'i's North Shore community. The community's main concern is with the travel time from the North Shore to Kapa'a.

A Final Environmental Impact Statement for the site selection was prepared and completed on May 24, 1999. Since then, no further action by the DOE for the planning or construction of a new middle school has occurred. However, with the Kilauea Town Plan being underway, one of the

three viable sites that was considered in the *Final EIS and Site Selection Study for the New Hanalei Middle School* will be affected. "Site 2", which was formerly referred to as "Site 6A", falls within the Kīlauea Town Plan project area. Site 2 is TMK parcel 5-2-05:24 owned by Charles Ehlen, Pete Hogue, Leland Bertsch, and Thomas Dowhan. It is approximately 23 acres in size and located along Kūhio Highway.

The concept plan presented at the end of the February 2005 planning charrette for the Kīlauea Town Plan tentatively designated a 15-acre portion of this property, located between Kūhiō Highway and a drainage swale to the northwest, for a new middle school. The concept plan also proposed a new 10 acre park adjacent to the east side of the middle school site.

In addition to the middle school site and the park site, the Kīlauea Town Plan proposes several other changes that might affect the condition of the middle school site:

- 1) a new entry road to Kīlauea Town from Kūhiō Highway;
- 2) residential development, which would increase the general and middle school population, create new roads/access to the school site, alter access to utilities, and shift the location of the center of town;
- 3) new pedestrian pathways;
- 4) a new light industrial area; and
- 5) new commercial areas

Ancillary to the changes in land use, a new water source and transmission lines will be developed, and a new wastewater treatment plant will be built. All of the above changes call for a new assessment of how Site 2 meets the site selection criteria for a middle school.

The *Final EIS and Site Selection Study* considered Minimum Site Criteria and Desirable Site Criteria for selecting a new middle school site. Below is a listing of each criterion, followed by a comparison between the evaluation of Site 2 in 1998 (shown in *italics*) and or analysis of how the site as designated in the Kīlauea Town Plan fares under the revised circumstances (shown in **bold italics**.)

Minimum Site Criteria

1. Acreage: The usable area of the potential school site must be at least 18 acres, or 15 acres if the site adjoins a park.
1999 – 18 acres assumed; criterion met
2005 – 15 acres designated, but adjacent to park; criterion met
2. Shape: The length to width ratio of the site must not exceed 2.5 to 1.
1999 – criterion met
2005 – approximate ratio is 2:1; criterion met
3. Tsunami: The site must not be in a tsunami inundation zone.
1999 – not in tsunami zone; criterion met
2005 – no change; criterion met
4. Flood: The site must not be in a major flood plain if adequate drainage provisions cannot be made at reasonable cost.

1999 – not in flood zone; criterion met

2005 – no change; criterion met

5. Landslide: The site must not be located within a known or potential landslide area.

1999 – not in known potential land slide area; criterion met

2005 – no change; criterion met

6. Traffic: The site must not be located in an area hazardous from the standpoint of pedestrian and traffic safety unless mitigative safety provisions can be made.

1999 – located along Kūhio Highway and access is from Kūhio Highway; may need safety provisions

2005 – location adjacent to Kūhio Highway, but access will be from an interior collector street and a pedestrian pathway linked to the present town of Kīlauea; criterion would be met

7. Timing: The acquisition of the site must be possible early enough to allow construction to meet DOE's scheduled school opening date.

1999 – undetermined

2005 – site would be available for acquisition prior to anticipated need; criterion would be met

8. Location: The site must be within the ultimate service area.

1999 – criterion met

2005 – with the proposed town expansion, the service area center would shift west and closer to the proposed school site; criterion would be met

9. Displacement: The site must be obtained without mass relocation of families.

1999 – undetermined

2005 – the site is still vacant and would not involve mass relocation of families; criterion met

10. Historical: Development of the site must not result in the destruction of buildings or sites designated as historic and deserving of preservation by Historic Buildings Task Force or the Bishop Museum.

1999 – no effect on significant historical sites

2005 – no change; criterion met

11. Energy Conservation and the Use of Recycled Products:

Not relevant to site selection

Desirable Site Criteria

A. Environmental Setting

1. Slope: The average slope of the site is between 1 and 3 percent ("Good"), or between 4 and 11 percent ("Fair").

1999 – 0 to 8 percent; Fair

2005 – no change; Fair

2. Shape: Length-width ratio is 1.0:1.0 to 1.5:1.0 (“Good”), or 1.6:1.0 to 2.0:1.0 (“Fair”).

1999 – 1.5:1.0; Good

2005 – 2.0:1.0; Fair

3. Soils and Foundation: More than a 5 foot depth to bedrock, low shrink-swell potential, high shear strength, and rapid permeability (“Good”), or any depth with low or moderate shrink-swell potential, high shear strength, and moderate to rapid permeability (“Fair”).

1999 – Puhi silty clay loam, 3 to 8 percent slopes, with a depth to bedrock greater than 5 feet, moderate to low shrink swell potential, high shear strength, high compacted density, and moderate to rapid permeability; and Ioleau silty clay loam with a depth to bedrock greater than 5 feet, moderate shrink to swell potential, and slow to moderately slow permeability; Good

2005 – no change; Good

4. Aesthetic Qualities: The site has some natural features in the form of trees, plants, rock formations, views, etc. (“Good”), or lacks most of the desirable natural features, but still has the potential of becoming a beautiful campus through proper landscaping (“Fair”).

1999 – no overhead utility lines, provides panoramic view of the Pacific Ocean as well as the mountain range in the background; Good

2005 – no overhead utility lines except along Kūhio Highway, view of the Pacific Ocean, adjacent to open space/ravine, view of the mountain range; Good

B. Roads and Utilities

5. Roadways: The site has at least one adequate roadway to meet the ultimate school needs (“Good”), or has inadequate roadways, but has sufficient R-O-W to accommodate necessary improvements to meet school needs (“Fair”).

1999 – off Kūhio Highway with no R-O-W requirements. A Master Plan is in the works to provide an access lane to Kūhio Highway, which may require road widening; Fair

2005 – a new collector street would access the site; Good

6. Water: The site has adequate water pressure and capacity available to meet the school needs and has adequate fire hydrants available along one adjacent roadway (“Good”), or has adequate water pressure and capacity available to meet school needs but has no, or inadequate fire hydrants available (“Fair”).

1999 – existing transmission facilities are adequate, existing source and storage facilities are inadequate to handle the proposed domestic and fire flow demands of the proposed school; Fair

2005 – a new water source would be developed for the proposed surrounding development and new fire hydrants would be built to service the proposed school; Good

7. Sewer: The site has adequate sewer lines available to meet the school needs (“Good”), or is within 2000 feet of an adequate sewer line, which can be extended to serve the school (“Fair”).

1999 – no sewer system, will need to get approved septic tanks and leeching field; Poor

2005 – a new sewer system would be built to service the proposed town expansion and school; Good

8. Drainage and Flood: The site has adequate drainage facilities available to meet the school needs (“Good”), or may be connected to off-site drainage facilities (“Fair”).

1999 – no drainage system; Poor

2005 – likely connection to off-site drainage facilities along northern site boundary; Good

9. Power and Phone: The site has adequate existing power and communications available to meet the school needs (“Good”), or may require improvements to existing services (“Fair”).

1999 – adequate existing power and communications; Good

2005 – connections may be improved with town expansion; Good

C. Accessibility

10. Vehicular Circulation: The site has through streets along 2 or more sides (“Good”), or has a through-street along only one side; or dead-end streets along 2 or more sides (“Fair”).

1999 –no other access except Kūhio Highway; Fair

2005 – new road(s) to be built; Good

11. Vehicular Safety: Access to the site is via a through-street, but not a major street or highway, without dangerous conditions and currently or potentially capable of handling heavy traffic (“Good”), or access is via a major street without dangerous conditions and currently or potentially capable of handling heavy traffic (“Fair”).

1999 –no other access except Kūhio Highway; Poor

2005 – new road(s) to be built; Good

12. Public Bus Service: The site is served by a major bus line running through the service area (“Good”), or a major bus line passes within ½ mile from the site (“Fair”).

1999 – the county bus system runs a daily bus service through Kīlauea on an hourly basis, starting at 5:15 am on weekdays; Good

2005 – no change; Good

13. Pedestrian Access: The site will have relatively unrestricted pedestrian access from 2 or more sides (“Good”), or relatively unrestricted pedestrian access from one side (“Fair”).

1999 – pedestrian access along Kūhio Highway only; Poor

2005 – pedestrian access would be along a ravine path on one side, a new street on another side, and along Kūhio Highway; Good

14. Pedestrian Safety: Adequate and safe walkways/shoulders to the site are available (“Good”), or safe walkways/shoulders to the site will be provided along the school access road(s) (“Fair”).

1999 – walkways/shoulders do not exist, but will be provided along the school access road; Fair

2005 – new roads and proposed pedestrian path linked to town would provide adequate and safe walkways/shoulders; Good

D. Environment

15. Rainfall: The site has a median annual rainfall less than 30 inches (“Good”), or between 30 and 40 inches (“Fair”).

1999 – average annual rainfall between 60” to 80”, but ranked Good

2005 – no change; Good

16. Highway Noise: The site is more than 1,000 feet from major roads, highways, and truck routes (“Good”), or within 1,000 feet of major roads, highways, and truck routes, but is shielded by existing buildings (“Fair”).

1999 – the site is within 100’ of a highway and is not shielded; Poor

2005 – no change, unless the buildings are located near the ravine and/or landscaping is provided; Poor

17. Aircraft Noise: The site is far away from airports (“Good”), or not in vicinity of airports (“Fair”).

1999 – the site is far away from airports; Good

2005 – no change; Good

18. Industrial and Agricultural Nuisances: The site is free from noise, dust, odors, smoke, and other nuisances created by industrial or agricultural activities (“Good”), or the noise, dust, odors, smoke, etc. from industrial or agricultural activities are at worst periodic and well within the limits of human toleration (“Fair”).

1999 – the site is adjacent to grazing lands; Fair

2005 – the site would be adjacent to a park, residences, and open space; Good

19. Commercial Attractions: The site is more than 1/2-mile from commercial businesses that may attract students during school hours (“Good”), or the site is reasonably far (1/4- to 1/2-mile) from distracting commercial business (“Fair”).

1999 – Good

2005 – new commercial businesses are anticipated at the town center, located less than 1/2-mile away; Fair

20. Wetlands: The site contains no wetlands (“Good”), or the site is close to wetlands (“Fair”).

1999 – Good

2005 – no change; Good

21. Endangered Species: The site contains no endangered species (“Good”), or the site is adjacent to properties that have endangered species (“Fair”).

1999 – Good

2005 – no change; Good

E. Community Criteria

22. Government – State Land Use District Map Designation: The site is within the Urban District (“Good”), or the site is within the Rural District (“Fair”).
- 1999 – the site is within the Agricultural District; Poor*
- 2005 – no change; Poor**
23. Government – County General Plan Designation: The site is designated Urban Residential, Rural Residential or Public, within which school use is consistent (“Good”), or the site is designated for apartment or park use (“Fair”).
- 1999 – the site is within the Agricultural District; Poor*
- 2005 – the site has been re-designated Residential Community; Good**
24. Government – County Zoning Designation: The site is zoned Commercial, within which schools are a permitted use (“Good”), or the site is zoned Special Treatment (Public) and requires a Use Permit for school development (“Fair”).
- 1999 – the site is zoned Agricultural; Poor*
- 2005 – no change; Poor**
25. Community Effects – Interference with Institutions: The site is greater than 0.5 mile from hospitals, rest homes, and any other institution, which may be disturbed by large groups of students (“Good”), or it’s far enough away (0.25 to 0.5 mile) so that disturbance to the institution by the activities of the proposed school will be minimal (“Fair”).
- 1999 – Good*
- 2005 – no change; Good**
26. Community Effects – Agricultural Land Classification: The site is located on land with very poor (E) productivity rating (“Good”), or fair (C) to poor (D) productivity rating (“Fair”).
- 1999 – the land is classified with a fair (C) productivity rating; Fair*
- 2005 – no change; Fair**
27. Community Effects – Existing Land Use: The site is vacant and unused (“Good”), or it’s being used for government agencies or institutions (“Fair”).
- 1999 – the site is vacant; Good*
- 2005 – no change; Good**
28. Community Effects – Proximity to Commercial Centers: The site is more than a half mile from those commercial enterprises (bowling alleys, video arcades, pool halls, stores, etc.) that may attract students during school hours (“Good”), or it’s reasonably far (0.25 to 0.5 mile) from potentially distracting commercial enterprises (“Fair”).
- 1999 – the site is less than 1/2-mile from the Commercial Center, but rated Good*
- 2005 – it is unknown what new businesses will go into the new Kilauea Town Center, but the commercial center will be expanded; Fair**
29. Community Effects – Aesthetic Value: The site is not an aesthetic asset to the community and will not interfere with scenic vistas when it is developed as a school (“Good”), or it has little aesthetic value to the community or may partially obstruct scenic vistas when it is developed as a school (“Fair”).

1999 – the site is adjacent to several homes and new construction will block their open space views, but it was rated Good.

2005 – no change; Good

30. Community Effects – Location: The site is within reasonable walking distance (0.75 mile) of 75% of the students (“Good”), or is within reasonable walking distance for 50% of the students (“Fair”).

1999 – Fair

2005 – the new town expansion would generate more students in the Kilauea area, but it is still anticipated that fewer than 75 percent will come from Kilauea; Fair

F. Cost Considerations

31. Comparative Land Value, based on the assessed value of the land.

(assessed land value/area x 18 acres)

1999 – Site 1: \$35,694

Site 2: \$660,528

Site 3: \$1,404

2005 – Site 1: \$ 26,832

Site 2: \$ 522,000

Site 3: \$ 274,730

32. On-Site Improvements (clearing, building construction, etc.).

2005 – with the new improvements associated with the overall town expansion, it is anticipated that the costs associated with Water and Sewer will decrease (ignoring inflation) and become more comparable to the costs calculated for Site 1 (Princeville).

33. Off-Site Improvements (utilities, sidewalks, etc.).

2005 – no change

34. Bus Subsidy Costs.

2005 – no change

Evaluation Summary Table

Minimum Criteria	1999	2005
Acreage	ok	ok
Shape	ok	ok
Tsunami	ok	ok
Flood	ok	ok
Landslide	ok	ok
Traffic	need safety provisions	ok
Timing	undetermined	ok
Location	ok	ok
Displacement	undetermined	ok
Historical	ok	ok
Energy	undetermined	undetermined

Desirable Site Criteria	Site 1	Site 2 (1999)	Site 2 (2005)	Site 3
A. Environmental Setting				
Size	G	P	G	P
Slope	F	F	F	F
Shape	G	G	F	G
Soils & Foundation	F	G	G	F
Aesthetic Qualities	G	G	G	G
B. Roads & Utilities				
Roadways	G	F	G	F
Water	P	F	G	P
Sewer	P	P	G	P
Drainage/Flood	P	P	F	P
Power/Phone	F	G	G	G
C. Accessibility				
Vehicular Circulation	F	F	G	F
Vehicular Safety	F	P	G	P
Public Bus Service	G	G	G	G
Pedestrian Access	P	P	G	P
Pedestrian Safety	G	F	F	F
D. Environment				
Rainfall	G	G	G	G
Highway Noise	G	P	P	F
Aircraft Noise	P	G	G	G
Ind./Ag. Nuisances	F	F	G	F
Commercial Attractions	P	G	F	G
Wetlands	P	G	G	P
Endangered Species	G	G	G	F
E. Community Criteria				
State Land Use	P	P	P	P
County GP	P	P	G	P
County Zoning	P	P	P	P
Interference w/Institutions	G	G	G	G
Agricultural Land Classification	G	F	F	F
Existing Land Use	G	G	G	G
Proximity to Comm'l Ctrs.	P	G	F	G
Aesthetic Value	G	G	G	G
Location	G	F	F	F
Totals				
Good (G)	14	14	20	11
Fair (F)	6	8	8	10
Poor (P)	11	9	3	10

Appendix B
Summaries of Public Meetings, Results of Visual Response Survey

County of Kaua'i Planning Department &
PlanPacific, Inc.



Mahalo to all who made the first public meeting a success!

The first public meeting for the Kīlauea Town Plan was held on the evening of January 5, 2005. It was a rainy Wednesday night, but many people were still very interested in participating. We had a turn-out of approximately 140 people. A big **MAHALO** to all of you who took the time to attend! Special thanks to those who also helped us clean up and put things back in order.

For those who were unable to attend the meeting, but participated in the Visual Preference Survey via on-line at

www.kauai.hawaii.gov or postings at various locations in town, thank you too! If you know of others who want to be included on our mailing list, tell them to send their information (name, address, email, phone number) to PlanPacific, 345 Queen Street Suite 802, Honolulu, HI 96813, Attn: Lisa Imata. Information can also be emailed to: limata@planpacific.com.

Preliminary results from the survey have been tallied and are discussed on the following page.

In addition to the Visual Preference Survey, we had small group discussions about Kīlauea's assets, issues, and opportunities. A summary is included in this newsletter.

One of the top issues was affordable housing. There were many questions on what defines "affordable" and the different ways it can be done (both in terms of funding as well as physical form). We will begin to address the issue of affordable housing in this newsletter.

Upcoming Meetings

If you didn't receive your notice in the mail, the next round of meetings will be for the Charrette. The Charrette will be an intense multi-day event involving stakeholders (citizens, planners, designers, etc.) to get input on Kīlauea's Town Plan. We will be setting up office in Kīlauea from February 24th - 28th. The **Kick-Off Meeting** will be **Thursday, Feb. 24th, 6-8 pm, at the Kīlauea Gym**. The **Open House** will be **Saturday, Feb. 26th, 3-5 pm at the Kīlauea Neighborhood Center Meeting Room**. The **Closing Meeting** will be **Monday, Feb. 28th, 6-8 pm at the Kīlauea Elementary School**. See you all there! Bring your family, neighbors, and friends!

Visual Preference Survey - Preliminary Results

Affordable Housing Favored Over Market-Rate Housing

The purpose of the Visual Preference Survey is to gather residents' impressions of the present community image and to build consensus for its future character.

The Visual Preference Survey that was administered at the January 5th meeting contained 30 images. Attendees were asked to score each image -- up to positive 10 or down to negative 10 -- and comment on what they liked or disliked in the photo. The images were representations of 4 basic categories: 1) civic spaces/places, 2) commercial areas, 3) residential places, and 4) agriculture/open space areas. A total of 100 people participated in the survey that night.

Most of the photos were of places and buildings in and around Kīlauea, but the 5 photos below were of housing projects outside of Kīlauea. Two of the photos on this page show affordable rental projects for families or the elderly. That is, the rents are within a range that makes them accessible to people with Section 8 rental housing certificates, so that they pay no more than 30% of their monthly income on rent. The development of all three projects shown on this page was assisted by county housing agencies with the use of federal funding.

The two photos on the next page show two types of housing in a master-planned community that has received many design awards. The housing is sold to buyers at market rates, so the prices -- especially for the single-family dwellings -- are generally out of the "affordability" range of most households in Kīlauea.

As you can see from the median scores for each image, the affordable housing examples were preferred to the market-rate housing, even though participants were not told whether the projects were affordable or market-rate, or whether they were single-family or multi-family units.

The Kalepa Village project, Image 18, is probably familiar to many people in Kīlauea because it is on the Island of Kaua'i, but most people probably did not recognize the other two affordable projects -- Images 19 and 20. In fact, from the comments on the response forms, it is clear that Image 19 would have gotten a much higher overall score if people knew that it was affordable. The most negative scores for this photo were mostly from people who mistook this elderly rental housing project as an expensive "gentleman's estate".



Image 18
Median Score: +4

Affordable rental units for families in Hanama'ulu, Kaua'i.

Mostly 2- and 3-bedroom units. Lower-income tenants pay no more than 30% of monthly income for rent with rental certificate.



Image 19
Median Score: +3

Affordable rental units for elderly in Mānoa Valley, O'ahu.

Units are Studio and 1-bedroom. Rents range from \$590 to \$720 per month. There are 8 buildings with 10 units each, a community building and garden.



Image 20
Median Score: +4

Affordable single-family units for families in West Loch, O'ahu.

Units are 2- and 3-bedrooms. Project was developed with the use of federal and county funds. Buyers had incomes of no more than 120% of the island's median.



Image 21
Median Score: 2

Market-priced single-family dwellings in Ocean Pointe, 'Ewa, O'ahu.

Units have 3 bedrooms and about 1,800 sq. ft., with garage. Lots are about 4,500 sq. ft. Sales prices are about \$425,000.



Image 22
Median Score: -2

Market-priced townhouse units for sale in Ocean Pointe, 'Ewa, O'ahu

Units have 3 bedrooms and about 1,400 sq. ft., with garage. Sales prices are about \$340,000

The results of the Visual Preference Survey demonstrates that it is possible to produce attractive housing at affordable rates, and that our perceptions of housing types are not always consistent with reality.

What is “Affordable” Housing?

Government programs and policies for affordable housing are based on the principle that a household should not have to pay more than 30% of its monthly income for housing.

There are many different types of county, state and federal programs for developing affordable housing and providing rental or mortgage assistance. Eligibility for housing assistance is based on income qualifications, using the median family income for Kaua’i (\$56,300 for a 4-person household as of 1/28/04) as a guideline. The median income varies according to the size of the household. The table below summarizes the income eligibility for two common types of housing assistance programs available on Kaua’i:

Maximum Household Income to Qualify for:	No. of People in Household				
	1	2	3	4	5
Section 8 Rental Assistance (50% of median)	\$22,600	\$25,850	\$29,050	\$32,300	\$34,900
County “Inclusionary” Housing Set-Asides (140% of median)	\$55,200	\$63,100	\$70,950	\$78,850	\$85,150

The County’s “inclusionary” housing program requires developers to provide affordable housing as a condition for certain types of land use approvals. Generally, the County seeks to obtain housing for a variety of income levels. At the high end, the program reaches households with incomes of up to 140% of median for Kaua’i, but rental housing serving a much lower income group has also been developed under this program.

Affordable housing is a big and long-standing issue everywhere on Kaua'i. The Kilauea Town Plan cannot "solve" this island-wide problem on its own. However, there are opportunities to lessen the severity of the problem in Kilauea because the Kaua'i General Plan designated the expansion of the Town specifically to address the need for affordable housing.

Questions to Consider About Affordable Housing for Kilauea

What types are needed and what forms should they take?

Most people prefer a single-family home, especially one with a generous yard. But as a 2003 survey conducted for the State Housing Policy Plan update showed, this is an unrealistic expectation for most households in North Shore Kaua'i who are seeking to buy or rent a home in the area. The cost is simply beyond their

means, and most of the cost is in high land value. For some buyers, a house on a smaller lot may be feasible, but others will find even this too expensive.

This means that other forms of affordable housing may be necessary, especially to give elderly, young adults, and "starter" families in Kilauea a chance to find a place of their own in

Town rather than be forced to move away.

Rentals should also be available to those who either cannot afford, or do not wish to own, their home. Co-op housing is another alternative that is more affordable than conventional ownership and it also gives the "shareholder" some advantages of ownership, such as equity, stable tenure and tax deductions.

Where can it be located?

Most properties within Kilauea Town are fully developed. It is possible to build some additional affordable housing on the few remaining vacant or under-utilized lots, but this will not satisfy even the current need. Some expansion of Kilauea Town is necessary to

provide an adequate supply of land for housing in order to make it affordable. The *Kaua'i General Plan* indicates a town expansion area toward the "north plateau". However, this land is held by two different landowners, only one of which has

expressed an interest in developing affordable housing. Will this expansion area be sufficient to address the need for affordable housing? If the second landowner does not want to develop housing, what is the best use of this land?

Who's going to build it, and how do we keep it affordable?

The housing has to be built by someone, and the cost of developing it must be reasonable enough to make it feasible to deliver to the consumer at affordable prices. Government can assist developers who are committed to provide affordable housing by

expediting land use approvals and development permits, providing tax incentives, and by participating in the cost of developing infrastructure. Financing costs are a big factor, and government can borrow money at cheaper rates than can private

developers. Non-profit housing agencies can also partner with the County and private developers by gaining access to development funding sources that are available only to non-profits and by managing and operating rental projects to ensure that they remain affordable.

Top Issues - Results from the Discussion Groups

During the latter part of the first public meeting, we divided up into four small groups to discuss Kilauea's assets, issues, and opportunities. Each group reported back to the whole group. The top ranked issues were:

Group 1	Group 2	Group 3	Group 4
1. Pedestrian safety: safety for kids, lack of sidewalks, sewer/drainage maintenance 2. Middle school & High school: need support for public schools, upgrade public school facilities (like the cafeteria) 3. Beach and mountain access – loss and protection 4. Lack of facilities for teen activities (tied with #3)	1. Lack of affordable housing 2. Gentlemen's estates 3. Drugs: need organized recreation for youth and facilities for them	1. Need affordable housing 2. Need public transportation infrastructure: bus shelter, lack of sidewalks, plan for transportation circulation – bike, walk, cars all together, keep bike-friendly 3. Physical access and access to view of natural assets of Kilauea	1. Lack of affordable housing; first time buyers at disadvantage 2. Traffic through residential areas, speeding on Lighthouse Road 3. Access to beaches and mountains

Next Step: Community Mapping

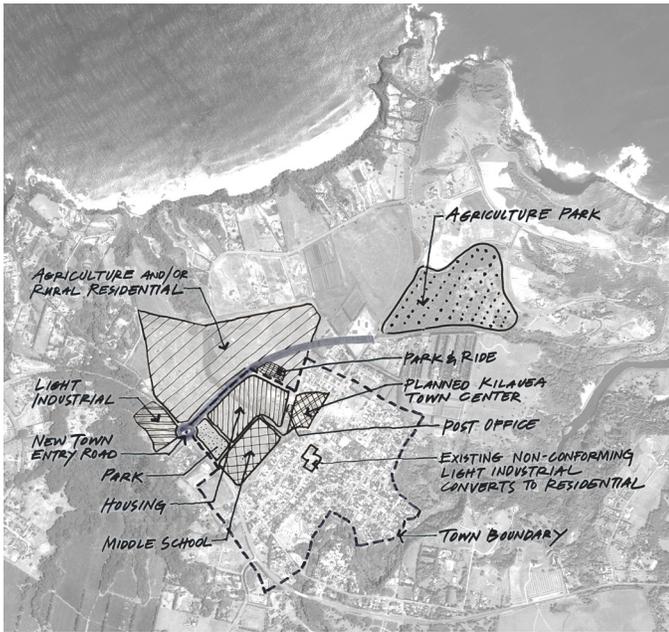
People who attend the Thursday evening meeting on February 24th, which kicks off the plan Charrette event, will have an opportunity to do some hands-on community mapping. This is an important step in shaping the future of Kilauea.

In the mapping exercise, we'll consider ideas and alternatives to respond to the top issues that were identified at the January 6th meeting. A key issue is affordable housing, as discussed in this newsletter. The Kaua'i General Plan identifies an expansion area for Kilauea Town that is intended to help address this need. In our mapping exercise, we can begin to address the other questions of affordable housing such as type(s), location(s), and builder(s).

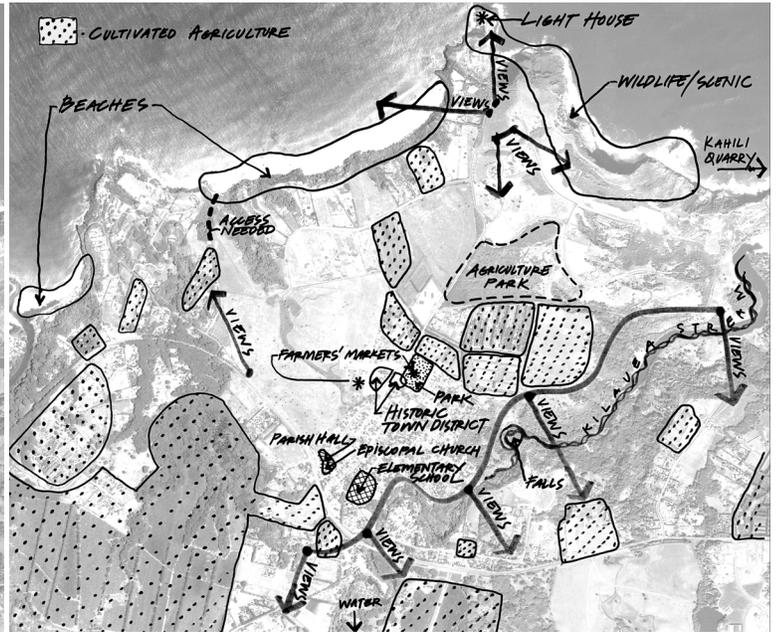
As shown above, there are other issues to consider, as well. Three of the groups at the January meeting identified a cluster of transportation issues – through traffic in residential areas, pedestrian safety concerns, and the poor connection between the Town and Kūhiō Highway – as important. Three groups named protection of scenic resources and access to natural areas as top concerns. Two mentioned youth-related concerns – the need for a middle school, and for active recreation facilities and programs to divert youth from the use of drugs.

The schematic map on the next page, to the left, represents an alternative that closely follows the Kaua'i General Plan land use map. It shows the town expansion to a portion of the "north plateau" to accommodate new housing and a new "bypass" road that would create a new entry into town from Kūhiō Highway and divert through traffic to the lighthouse away from the residential neighborhood. Possible sites for a middle school and a new active recreation park have been added to respond to top issues.

This schematic is not the only option to consider – it's just a beginning. To prepare for the mapping exercise, you can think about some questions. Is there a better alignment for the bypass road? Is the town expansion area the "right amount"? How much "light industrial" area does Kilauea really need, and does the General Plan map show it in the right location?



Kaua'i General Plan Build-Out



Assets

Community mapping will also take into account the natural areas (including scenic views) that will not be developed and identify where to provide protection or better access. The map to the right is a preliminary compilation of the natural and resource assets that were identified by the groups at the January meeting and in previous plans – especially the Kaua'i General Plan and North Shore Development Plan Update. At the February 24th meeting, we will add to and refine this “natural assets” map.

PLANPACIFIC, INC.
 345 QUEEN STREET, SUITE 802
 HONOLULU, HI 96813

County of Kaua'i Planning Department &
PlanPacific, Inc.

Meeting Update ✓

The Kīlauea Town Plan **Wrap-Up Meetings** that were originally scheduled for the morning and afternoon of Saturday, April 16th **have been postponed**. Keep an eye out for a post card in the mail announcing a new meeting date, time, and place. You can also check www.kauai.hawaii.gov and go to Departments>Planning>Projects for the announcement (as well as a pdf version of this newsletter).

Results from the Charrette closing meeting

Mahalo to all who attended the Charrette meetings and Open House!

For those of you who attended the Monday night Charrette Closing meeting, you may recall that we went over 3 Guiding Principles and asked for your feedback on comment forms. Each principle was broken down to four or more guidelines and you were free to comment on any or all of them. Here is a summary of the responses (45 total):

Principle: Expansion should be a "good fit" with the existing town

- *Emphasize the "town core" and avoid highway commercial (31 in favor, 1 against – person favors highway commercial)*
- *Adjacent uses are compatible or buffered (18 for, 0 against)*
- *Circulation system ties in to the existing network (21 for, 0 against)*
- *Integrate natural features into the town (24 for, 0 against)*

Some comments: "This is super critical. Nothing else is important if this is not achieved."; "Very appealing,

Anything to avoid congestion on Kolo Rd."; "Develop in harmony with geography and maintain current assets of Kīlauea"; "Use native vegetation as much as possible"; "New road must meander"; "Please, please, please reroute traffic away from Kīlauea Rd. residential area"

Principle: Expansion should seek to provide as much long-term affordable housing as feasible

- *Coordinate efforts of affected landowners (19 in favor, 0 against)*
- *Provide a variety of housing types to respond to a range of needs (21 for, 1 against – see person's comment below)*
- *Partner with public sector to reduce development costs in exchange for affordability commitments (19 for, 0 against)*
- *Partner with non-profits to reach the most in need and to maintain long-term affordability (23 for, 0 against)*

Some comments: "Include units for middle class, not only low income"; "Affordable lots would be great"; "Extremely important"; "No [variety], we need low

(continued on back cover)

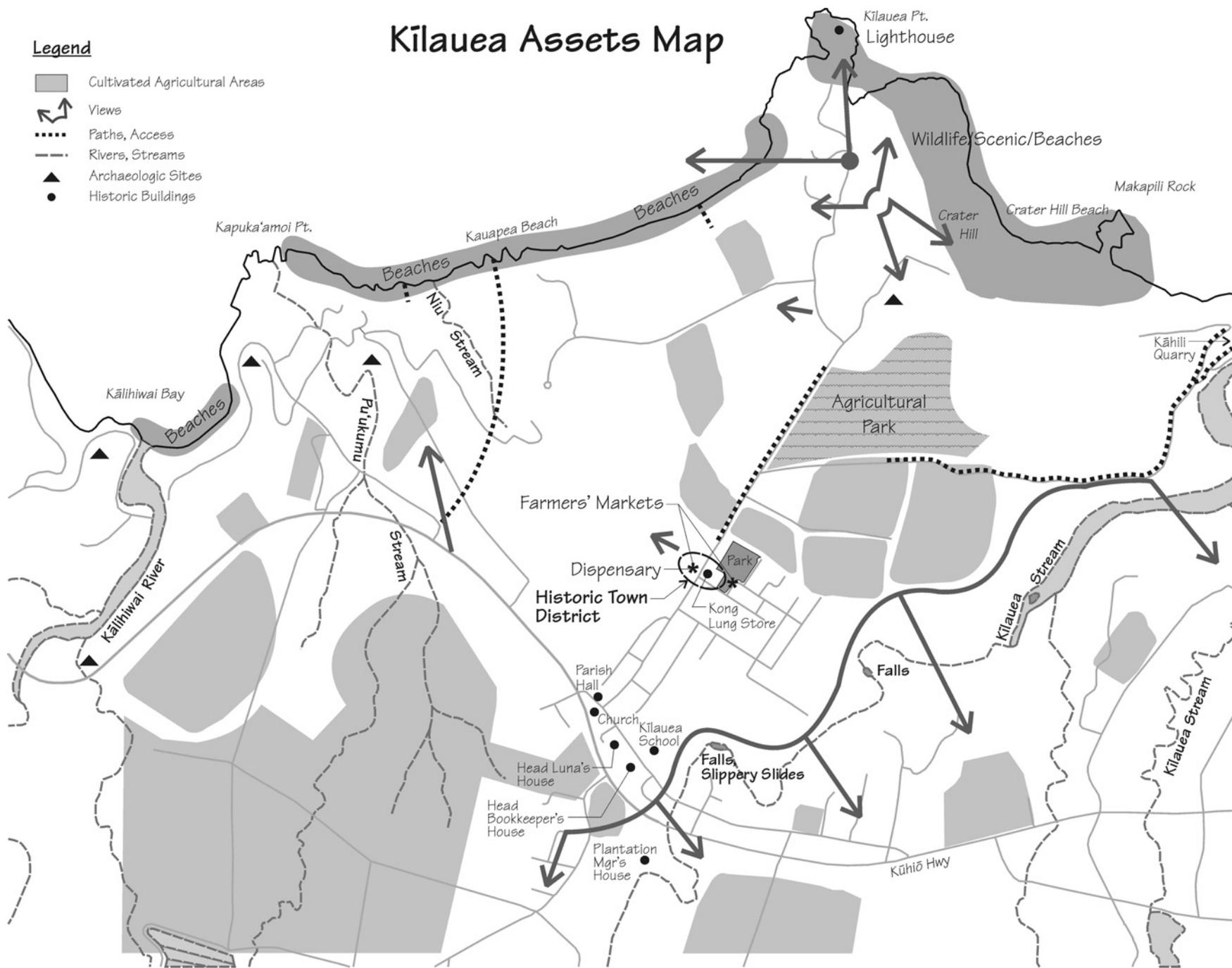
Refined Maps from the Charrette

The following two pages show the Kīlauea Assets Map and the Kīlauea Conceptual Plan, refined as a result of our community mapping exercise. As a reminder, the purpose of these maps are to identify community assets for preservation and to address the key issues identified in our January meeting; that of affordable housing, transportation (through traffic in residential areas, pedestrian safety concerns, and the poor connection between the Town and Kūhiō Highway), protection of scenic resources and access to natural areas, and youth-related concerns – the need for active recreation facilities and programs and the potential need for a middle school.

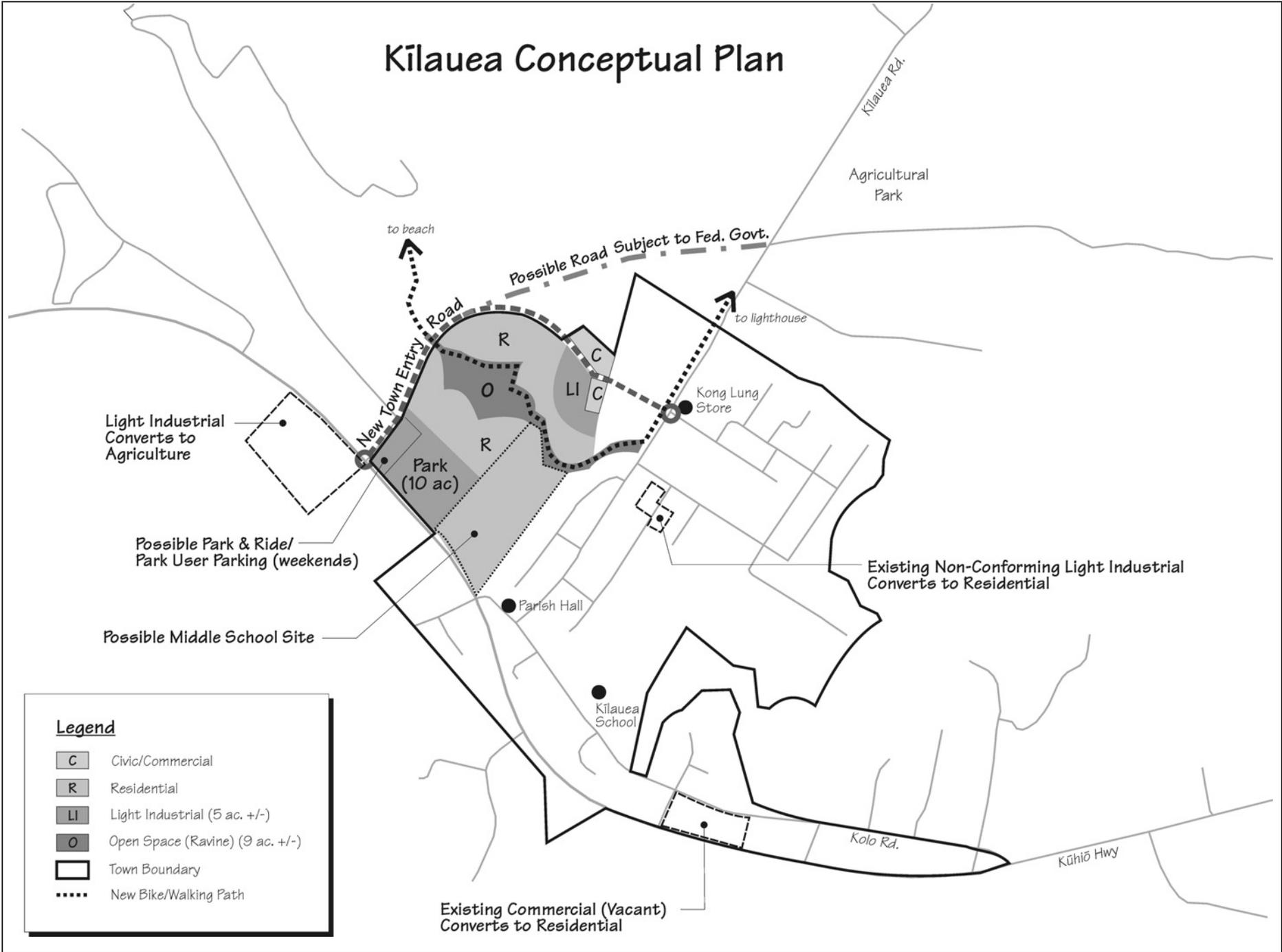
Kīlauea Assets Map

Legend

-  Cultivated Agricultural Areas
-  Views
-  Paths, Access
-  Rivers, Streams
-  Archaeologic Sites
-  Historic Buildings



Kīlauea Conceptual Plan



Results from the Charrette closing meeting (from page 1)

income housing for first homebuyers & county workers”; “Apartments are needed”; “Not ‘as feasible’, but as necessary”

Principle: Improve conditions in existing town to retain rural character

- *Phase out non-conforming industrial uses on residential streets* (20 in favor, 2 against – one person concerned about cost to existing business, one says “maybe not”)
- *Re-zone vacant industrial and commercial zoned sites on highway* (19 for, 1 against – person prefers industrial and commercial uses along the highway)
- *Discourage crowding in existing housing* (22 for, 1 against – “not at expense of affordable housing”)
- *Provide walking/bike paths along collector streets* (28 for, 0 against)
- *Design guidelines for commercial and public buildings* (23 for, 0 against)
- *Promote agriculture trade* (21 for, 0 against)

Some comments: “Very important [phasing out non-conforming industrial uses]”; “Aloha Lumber - auto repair & mini storage need improvement or removal, medical bldgs & Goodman/Longley Dev. OK”; “...split industrial between Princeville & Kilauea”; “Yes! Long over due [re-zoning vacant highway sites]”; “Phase out vacation rentals in residential zoning”; “Paths make town dynamic and sociable”; “...very important to have bike & walk paths for young and old”; “...the public should have a say in design guidelines”; “...at least mandate color theme – dark green w/brown or vice versa – No white (trim or otherwise) no pastels!”; “Include residential [design guidelines]”; “Locate bigger area for the sunshine market [for more vendors]”; “Enforce agricultural use”

Results of Visual Response Survey

Images that people liked a lot

- Median score +5 or greater
- Average (mean) score +5 or greater
- Little disagreement (standard deviation less than 5.5)
- Number in corner of slide indicates its rank in this group, from highest to lowest average and mean score



Results of Visual Response Survey

Images that people liked, but not as strongly

- Median and average scores between +5 and +2
- Little disagreement (standard deviation less than 5.5)
- Number in corner of slide indicates its rank in this group, from highest to lowest average and mean score



Images that got a barely positive response

- Median and average scores +2 and 0
- Little disagreement (standard deviation less than 5.5)
- Number in corner of slide indicates its rank in this group, from highest to lowest average and mean score



Images that people did not like

- Negative median and average scores
- Little disagreement (standard deviation less than 5.5)
- Number in corner of slide indicates its rank in this group, from highest to lowest average and mean score



Results of Visual Response Survey

Images on which people disagreed

- Median and average scores between +2 and -2
- Standard deviation (degree of disagreement) greater than 5.5
- Number in corner of slide indicates its rank in this group, from highest to lowest average and mean score.



Image "1" (top left) was the only one of this group to have positive average and median scores. Negative comments: "too crowded" and "not the right type [of housing for Kilauea]". Positive comments: "attractive [housing/street]". Few commented on "affordability". [Photo is of a market-rate housing development on O'ahu where houses are selling at about \$425,000; average lot sizes are 4,500 sq. ft.]

Images "2", "4" and "5" got very negative scores from people who commented on loss of access to public places, exclusivity or lack of affordability or inappropriate use for the location. On the other hand, many people gave these images positive scores because of attractive views.

Image "3" got a negative average score, but several positive scores, largely due to the utility of the gas station and store. Negative comments: "unattractive appearance", "traffic hazard", "no sidewalks".

Appendix C
Summary of Stakeholders' Meeting Concerning Infrastructure Issues

Kīlauea Town Plan Stakeholders' Meeting Notes

Thursday, April 28, 2005, 9:00 am – 11:00 am
Līhu'e Civic Center, Planning Commission, Room 2 A/B

Present: Diane Zachary – Kaua'i Planning & Action Alliance (Meeting Facilitator)
Gary Cogan – Partner, Kīlauea Associates (Landowner)
Rob Haugland – Partner, Kīlauea Associates (Landowner)
Tom Witten – PBR Hawai'i (Consultant to Kīlauea Associates)
Dave Livingston – Partner, Kilauea Town Center (Landowner)
Greg Fujikawa – Kaua'i Department of Water
Wynne Ushigome – Kaua'i Department of Water
Glenn Yamamoto – Hawai'i Department of Transportation, Highways
Bernard Carvalho – Kaua'i Offices of Community Assistance
Ken Rainforth – Kaua'i Housing Agency
Keith Nitta – Kaua'i Planning Department
John Whalen – Plan Pacific (Consultant to Kaua'i Planning Department)
Beryl Blaich – Kīlauea Neighborhood Association (KNA); other KNA attendees for portions of the meeting were Gary Blaich and Linda Sproat

Diane Zachary facilitated the meeting and Keith Nitta was the recorder. Attendees introduced themselves.

Briefings:

John Whalen opened with an overview of the proposed Kīlauea Town Plan and the background for the project, stemming from the adoption of the Kaua'i General Plan (GP) in 2000. The GP designated an expansion area for Kīlauea Town and a "bypass road" to Kīlauea Point from Kūhiō Highway, but did not give much information about how this was to be implemented, and the community itself was divided on the issue.

During the planning charrette at the end of February 2005, affordable housing was identified as the top issue, followed by transportation issues (mostly related to vehicular through-traffic) and natural and cultural resource preservation. At the end of the charrette, a conceptual plan consisting of the basic components of a town expansion area and a new entry road to town from the highway was presented.

While the objective of the expansion plan is to provide affordable housing, the challenges are the high cost of infrastructure development, lengthy entitlement procedures, and the need to coordinate efforts between three landowners, two of whom hold property in the expansion area and the third awaiting water system improvements to develop commercial uses.

The most costly infrastructure items are the new entry road, water system and wastewater treatment facilities, in that general order. The purpose of the stakeholders' meeting is to explore how public agencies may be able to assist in reducing developers' costs for infrastructure and entitlements if affordable housing is provided.

Tom Witten followed with a presentation of Kīlauea Associates' (KA) preliminary site plan and housing program. KA's plan shows about 40-45 acres of residential development in the expansion area. In addition, there is a 10-acre park, a light-industrial use area near the post office, and a site for a middle school that was identified in a State site selection study several years ago.

KA agrees with the charrette plan's proposal to concentrate new commercial/industrial development in the existing town core to avoid strip development along the highway. Unlike the charrette plan, KA's version extends the entry road beyond the town to serve a "by-pass" for through traffic to Kīlauea Point.

Other features of the KA plan are:

- (1) A mix of housing types, including multi-family units, to address a range of housing markets, including affordable;
- (2) incorporating the existing drainage gulch through the site as a open space element with a bike/walk trail that links Kīlauea Town to beach access easements; and
- (3) A transitional, low-density "ag/rural" housing area west of the expansion area to serve as a buffer between the town and agricultural lands beyond.

At this point, KA cannot describe the number or mix of housing units because much will depend on infrastructure costs, but about 350 units are projected.

Coordination Among Landowners:

John Whalen reported that he spoke with the third affected landowner (Lee Bertsch) a few minutes prior to the meeting. Bertsch could not be present at the meeting, but reported that he has been in communication with KA and declined to participate in the discussion via speakerphone. Instead, he asked for copies of the meeting notes.

Rob Haugland commented that the construction of the new entry road is a concern because of the high cost. Also, it would traverse properties other than KA's, no matter what its alignment. Since it would serve through traffic to Kīlauea Point, he believes federal assistance for road construction is justified.

Gary Cogan said that KA wants to continue to keep an open line of communication with the community by attending KNA meetings, etc. Also, he confirmed that KA is having discussions with Bertsch to see how they can best coordinate the development of their adjoining properties.

Beryl Blaich inquired whether a GP amendment was necessary to implement the more refined town expansion plan. Keith Nitta responded that the amendment was necessary, and would be initiated by Planning Department as an outgrowth of the town plan.

Land Use Entitlements:

Bernard Carvalho explained that the Affordable Housing Task Force that he heads for the County focuses on the coordination and streamlining of plan reviews by County agencies for housing projects that are sponsored directly or indirectly by the County. They have not employed the Chapter 201G, HRS provisions to do this; instead they work within existing County laws and procedures.

Ken Rainforth acknowledged that Kauai is the only county that hasn't used the "201G" process for affordable housing. There is nothing to prevent its use for housing development at Kīlauea, but there is a "learning curve" for the County. Also, he was not sure whether this could be used at the State Land Use Commission (SLUC) level because the project would probably have to meet the State's affordable housing criteria for 50% of the units. Possibly, it could be applied to a phase of the project that meets these criteria. Rainforth will look further into this matter and report back.

John Whalen commented that the phasing approach could defer the high cost of building the entry road, but it's unclear whether a less expensive solution for providing water for the first phase can

be found. Glenn Yamamoto pointed out that the existing highway intersection may not be adequate to support a phase one. Wynne Ushigome said the Water Department would be unable to respond until the developer(s) have prepared a water master plan.

New Entry Road:

John Whalen pointed out that the proposed entry road construction could be eligible for federal funding if it is classified as a “major collector” road in the State Transportation Plan, transferring that designation from the mauka portion of the existing Kilauea Road within the town. Glenn Yamamoto responded that the State Transportation Department would consider that proposal, but the request should be initiated by the Planning Department. Keith Nitta said he would check with the Planning Director, but believed that his department would be willing to initiate the request.

John Whalen reported that another possibility to secure federal funding is through a special appropriation linked to the current transportation planning project being conducted by the U.S. Fish and Wildlife Service, in cooperation with the USGS and USDOT. However, the federal planning team that participated in the February charrette did not hold out much promise for such funding. Glenn Yamamoto will check whether the new entry road would qualify for funding under the Intermodal Surface Transportation Equity Act (ISTEA), since it would be a route to a scenic destination and would support bicycle and pedestrian as well as vehicular (and possibly transit) traffic.

Still another possibility is some federal transit funding for at least a portion of the intersection improvements if the Kaua'i Bus decides to develop a “park-and-ride” facility at Kilauea. Bernard Carvalho confirmed that Kaua'i Bus is studying the possibility of a park-and-ride in the North Shore region, but has not settled on a site.

In response to an inquiry, Glenn Yamamoto responded that the State Transportation Department has no plans to improve the intersection at the existing entry to Kilauea. He also responded that DOT is open-minded about the proposed roundabout at the highway intersection, but observed that the diameter might have to be quite wide due to the traffic speed along this route.

Water:

John Whalen stated that the cost of developing a water source and system improvements for the town expansion area significantly exceeds the per-unit water facilities rate charge (FRC) that the developer(s) would normally have to pay in order to connect to the municipal water system. If the developer(s) have to absorb this additional cost, it will be very difficult to provide more than a minimal amount of affordable housing.

The high cost is attributable largely to the distance from the Moloa'a source that the Department of Water (DOW) wants the developer(s) to use in order to both supply water from the expansion area as well as improve the reliability of water supply to the existing town.

Rob Haugland mentioned that another problem with the Moloa'a source is that the DOW does not own it; it is on long-term lease from the landowner, Jeff Lindner. This puts KA and other developers in an awkward “sandwich position” between the DOW and the private owner, so it is hard to work out an acceptable arrangement for long-term water needs. Wynne Ushigome responded that DOW isn't requiring that the water come from Moloa'a; they just suggested this because Moloa'a is a proven, reliable source, whereas potential sources closer to Kilauea are less certain. The most promising sites other than Moloa'a appear to be Pu'u Pane and Waipake, but these may be useful more for tanks and boosters rather than new wells. Ushigome reiterated that finding a source and preparing a water master plan is the responsibility of the developer, not DOW. Rob Haugland said that KA does have a consultant (Aqua Engineers?) working on this, but

they still need to know whether DOW is willing to participate in cost of developing the water system improvements.

DOW has some plans to provide service for smaller projects in the area; e.g., approved subdivisions that are on the “waiting list” for water. By DOW policy, there is a limit of 5 water meters per parcel in Kīlauea. At present, there are no plans for source and storage projects for Kīlauea, although they have a planning project in progress to identify possible sites. The results of this planning process will be known in a couple of years.

John Whalen mentioned that federal or state funding could be made available for water development to support affordable housing. He mentioned specifically the USDA’s Rural Utility Services’ loan and grant programs for local governments and nonprofit organizations. He asked whether either the DOW or Housing Agency would be willing to pursue this with the USDA office in Hilo. Ken Rainforth said that he would inquire about these programs and report back. He added that the State used to assist in the exploration of water sources, but no longer has sufficient funds to support this effort. This is why DOW has so little information about potential sources. Wynne Ushigome explained that DOW is reluctant to fund well exploration out the ratepayer base because new sources are intended to serve primarily new development rather than existing customers. In addition, the cost of exploration is high and there is significant risk of little “payoff”; i.e., water may not be found.

John Whalen asked whether existing water resources might be sufficient to support a “Phase I” of the town expansion, making improvements to existing lines, tanks and boosters. Greg Fujikawa was uncertain, pointing out that DOW needs to reserve water to provide for existing commitments and take care of its waiting list first.

Rob Haugland asked whether KA could develop a private water system for the Kīlauea expansion, like the one at Princeville, and be exempt from the facilities rate charge (FRC). Wynne Ushigome replied that the FRC would not apply if the developer provides private water.

John Whalen asked whether DOW would be willing to participate in or partially reimburse for the cost of developing the water system improvements by the private developer(s) if those improvements are “oversized” to take care of DOW’s waiting list, in addition to providing more reliable service to existing customers. In response, Greg Fujikawa said that the DOW would be willing to ask the Commission whether it would be willing to fund out of the ratepayer base the portion of the water system improvement cost that benefits existing customers or those on the “waiting list”.

The discussion of this issue concluded that the next step is for the developer(s) to prepare a water master plan and review this with DOW.

Wastewater:

John Whalen mentioned that USDA also has loan/grant programs available for wastewater treatment systems for affordable housing projects, although applicants must be nonprofit entities. He wanted to question the Department of Public Works representative (who was invited to, but not present at the meeting) whether, and under what conditions, the County would accept dedication of a privately-developed wastewater treatment system.

Gary Cogan responded that KA is already developing a plan for a private wastewater treatment system (through their consultants, Aqua Engineers) and are not as concerned about this infrastructure requirement as they are about the new entry road and the water system. Consequently, the discussion of this issue ended on that note.

Financing:

John Whalen inquired whether the County has considered the adoption of a Community Facilities District Ordinance, as authorized by State statute and implemented in the counties of Honolulu and Hawai'i. Ken Rainforth responded that he is not aware of any movement toward this approach on Kaua'i, and that the County would be at "square one" if they attempted to implement it.

Gary Cogan stated that KA has had experience with this type of financing on the Mainland, but for smaller projects. The approach is used routinely in California, so it is easier to implement there for that reason.

The consensus at the meeting seemed to be that, which this financing approach could have some benefits, it would be too daunting and time-consuming to undertake such an unfamiliar program to have practical application to Kīlauea.

Closing:

In response to a question, John Whalen said that the charrette "follow-up" public meeting in Kīlauea, originally scheduled for April 16 and postponed to await the outcome of the stakeholders' meeting, will be rescheduled for the date during the last two weeks of June.

Diane Zachary closed the meeting shortly after 11:00 am.