



KAUAI OVERALL ECONOMIC DEVELOPMENT PLAN

VOLUME I

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EXECUTIVE SUMMARY

1. Purpose

The preparation of a current Overall Economic Development Plan (OEDP) was commissioned by the Kauai Economic Development Board (KEDB), in conjunction with the County of Kauai, for three reasons:

- o To provide a forum for broad citizen participation in addressing issues and identifying opportunities for economic development on Kauai.
- o To develop a guide to the specific strategies and actions that should be taken to ensure a less vulnerable and more dynamic economy.
- o To conform to Economic Development Administration (EDA, of the U.S. Department of Commerce) requirements that such a plan be in place to be eligible to receive grants or loans for projects.

2. OEDP Process

The development of the OEDP is sponsored by private-public collaboration between KEDB and the County government, but is directed through a broad-based citizens' Steering Committee. This group, as well as four sector-related focus groups, was used to gain insight and establish priorities as to economic development problems and opportunities. In addition, previous studies and statistical analysis were used to set a firm foundation for the revised OEDP. Once it has been formally adopted, the Steering Committee will take responsibility for periodically updating the OEDP.

3. Analysis of Kauai economy

Some of the major conclusions that emerged from this analysis include:

- o The economy has shifted from an agricultural base to a tourism base over the past twenty years.
- o The traditional agricultural economy is shifting from sugar production (though still dominant) to diversified agriculture.
- o The economy has demonstrated rapid growth -- in population, in tourism, in tourism-related industry and amenities, and in support services and infrastructure needed to accommodate such growth.
- o The economy is vulnerable, based on the two sectors, to worldwide economic trends and conditions affecting demand for tourism and agricultural products.

- o Significant changes to the economy will be required to prevent possible harmful effects from this vulnerability, yet there is strong commitment to preserving current environmental amenities and lifestyle values found on Kauai.
- o In order to manage such changes, unprecedented forward thinking, citizen involvement, and public-private cooperation will be required.

4. Goal Statement

If the problem can be summarized as (1) dependency on the world economy for economic vitality in Kauai, and (2) prospects of rapid growth inappropriate to Kauai, then the solution lies in (3) diversification of the economic base, and (4) balanced growth and development. This notion is summarized in the goal for economic development on Kauai, stated as follows:

"Achieving 'balanced' growth toward a more diversified economy -- thereby increasing the quality of employment opportunities, yet preserving the lifestyle, the unique environment, and the cultural values of Kauai."

5. Economic development strategy

The recommended strategy to achieve this goal is primarily to strengthen the island economy to ensure that new economic endeavors are lasting and appropriate, given community development desires relevant to Kauai and its unique array of attributes. A second part of this strategy is recruiting or attracting firms that will reinforce balanced growth and development. The following components are emphasized:

- a. Focus efforts on new directions, through formation of new local business ventures and selective recruiting, to accomplish the following:
 - Diversify agriculture, and encourage value-added processing of agricultural crops and goods.
 - Promote tourism in more sophisticated ways, based on selective niches, coordinated marketing and development, and emphasis on particular themes (nature, historical, and cultural tourism).
 - Develop information-based industries, which build upon and complement agriculture and tourism and their related support services.
 - Use prototype development and licensing of information-based products and services to create exports appropriate to Kauai.

- b. Create the pre-conditions to such development through:
 - Upgrading the critical resource of education
 - Using well-conceived image-making and marketing to support development
 - Ensuring public-private cooperation on an on-going basis
 - Seeking anchor commitments as means of seeding the development strategy

6. Objectives for OEDP

The objectives that are used to focus this strategy, and that lead to a specific action program, consist of the following:

- a. Support existing base industries, specifically sugar production and processing, and the visitor industry.
- b. Diversify agricultural production and processing.
- c. Support new initiatives in tourism to remain continually attractive and competitive in worldwide markets.
- d. Develop information, health and wellness, and creativity-based businesses appropriate to Kauai.
- e. Use the new business formation resulting from agricultural diversification, tourism initiatives, and information-based development to stimulate further growth and expansion of the Kauai economy.
- f. Support these export-related economic activities with a balanced approach to development of public and private facilities and services – including resort development, public infrastructure, community facilities, public transit and others -- consistent with environmental preservation and enhancement of the quality of life on Kauai.

7. Overview of OEDP Report

Details of the economic analysis, statements of critical issues, and further explanation of the goal, strategies, and objectives are presented in the report. A list of actions that could be taken in support of this economic development strategy is also provided.

Background and support for the analysis summarized in the Executive Summary and detailed in the report is provided in a series of appendices contained in volume II of this report.

APPENDIX J: OEDP PUBLIC HEARING

A public hearing was held on December 14, 1993 at the Kauai Community College. The hearing was attended by Sue Kanoho (KEDB), David Proudfoot (KEDB), Glenn Sato (Kauai County, OED), Gary Baldwin, Pam Parker, Ken Stokes, Randy Honjo, Elsie Godbey, Tom Godbey, and Lelan Nishek. Comments on the OEDP were made in three areas.

The first concerned the visitor industry section of the Plan. It was noted that representatives of the industry on Kauai would like to see more emphasis on tourism marketing and tourism development overall. Furthermore, it was noted that the industry has a hard time getting a handle on the definition on ecotourism. It was suggested that an ecotourism conference be held on Kauai with international participants. Finally, it was noted the industry is happy with the recommendation to extend the airport runway.

The second set of comments focused on the lack of attention the Plan pays to the role of native Hawaiians in Kauai's overall planning process, particularly in the development of the visitor industry. It was noted that a new organization of native Hawaiians, "*Hui Ho'okipa O Kaua'i*", had recently been formed to address this problem.

The third set of comments regarded the need to enlist planners and designers to draw-up long-term plans for beautification and creation of public recreational areas on Kauai.

Participants in the hearing expressed a general consensus that the OEDP is a very good start to what should be an on-going process of goal and task-setting for Kauai's policymakers, and for public and private implementation.

INTRODUCTION

The Kauai Economic Development Board, in conjunction with the County of Kauai, has commissioned the completion of an Overall Economic Development Plan (OEDP). There were three compelling reasons for this:

- o The plan should provide a basis for future public- private cooperative efforts, as a guide to actions taken for the attainment of a dynamic economy and preservation of the quality of life on Kauai.
- o The sponsors also sought a road map understandable to citizens and founded on their participation to serve as a guide to further economic development initiatives.
- o In order to qualify for EDA funding, it is a requirement that a current OEDP plan be completed; the previous report was outdated and the issues, analysis, and action plan needed to be revised to reflect present conditions.

The consulting team was commissioned to collect information, conduct the initial public participation program, and to prepare this report. Once adopted by the County, however, the OEDP is intended to be a dynamic guide for economic development efforts by both the private and public sectors. The OEDP is intended to be a working document which will undergo yearly review and revision, if necessary, in order to respond to changes in the island economy and to direct those in a constructive manner.

In the following sections, we present an overview of the OEDP process; summarize key trends and characteristics of the Kauai economy; present critical issues; outline a development strategy; provide goals and objectives; and finally, present a set of actions that will be instrumental in fulfilling those objectives.

In addition, a number of appendices containing further background information, more detailed analysis, and lists of participants in the OEDP process are provided.

OVERVIEW OF THE OEDP PROCESS

The process of completing the Overall Economic Development Plan (OEDP) for Kauai County consists of a number of interrelated tasks. These tasks are illustrated in consecutive order on the exhibit on the following page (Exhibit 2.1).

There are four key elements to the process:

- o Organization of a Steering Committee
- o Seeking citizen input and representation
- o Analysis of problems and opportunities, and formulation of a development strategy and action plan
- o Review and consensus building for draft OEDP

As seen in the diagram, the process first required a review of previous studies, to determine what could be learned from those reports and to avoid re-inventing conclusions and analyses previously completed. At the same time, a current profile of economic trends on Kauai was completed, to provide an understanding of the factors which affect economic development. From that analysis, and from the previous reports, a set of critical issues was identified.

Those critical issues, as well as the background analysis, were used as the basis of four focus group meetings that were convened in December, 1991. A number of citizens of the County, representing the following types of economic or business interests, participated in the sessions:

- o Traditional and diversified agriculture
- o Tourism and related development
- o Emerging businesses, including light manufacturing, assembly, and food processing
- o High technology, telecommunications, and energy development

In each session, participants were given an overview of the OEDP process, a brief summary of key economic trends on Kauai, and then asked to identify major problems, opportunities, and potential actions to strengthen the Kauai economy. These meetings were used to solicit ideas and remedies to problems identified; this provided valuable citizen input to the final document presented here.

In parallel with those efforts, the OEDP Steering Committee was formed, representing various business, professional, civic, educational, government, and other interests on Kauai. A broad-based group was selected and given the charge of working with the consulting team to review critical issues in sessions similar to those conducted with the focus groups. At the initial session, they were given the same introduction as the focus groups, and were also asked to help identify problems, opportunities, and key actions that could be taken.

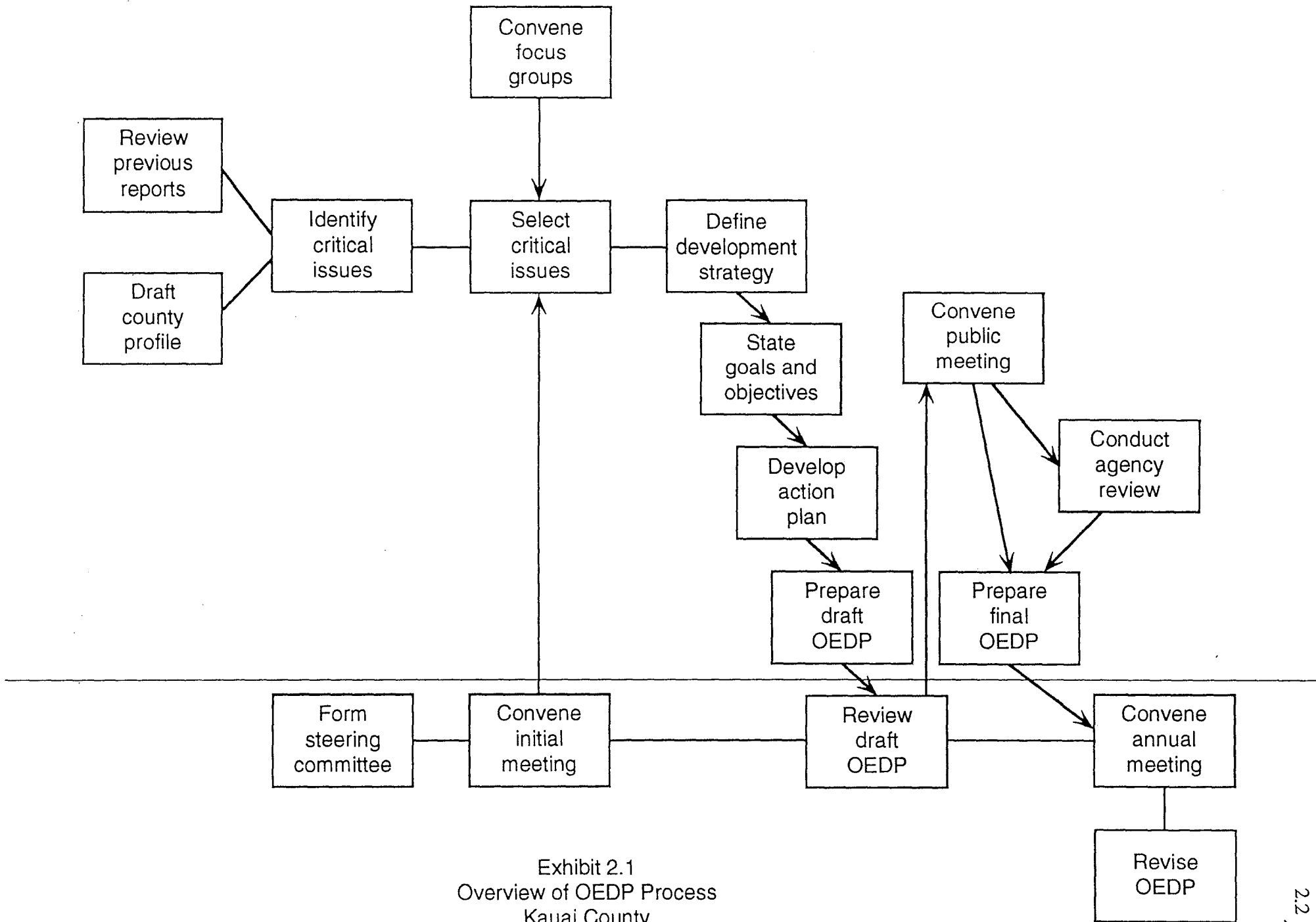


Exhibit 2.1
 Overview of OEDP Process
 Kauai County

It then became the responsibility of the consulting team to assimilate this information, and to forge a coherent set of goals, objectives, development strategies, and an action plan. That material was provided as a draft OEDP, and reviewed by the client. Upon their approval, it was submitted to the Steering Committee for its review and consideration.

As required by the process, after the final OEDP was completed, a public hearing was scheduled under the auspices of the Office of the Mayor and Kauai Economic Development Board, where citizens were encouraged to comment and make suggestions on the OEDP. Following that public meeting, the final OEDP was submitted to state and federal officials, principally the Department of Business, Economic Development, and Tourism, and local and regional representatives from the Economic Development Administration (U.S. Department of Commerce).

Finally, the OEDP Steering Committee was charged with the responsibility to convene an annual meeting to review the status of the OEDP, to provide for changes in direction as well as current progress reports, and to update and revise the OEDP, when necessary.

Members of the Steering Committee are listed in Appendix A, and participants in the focus group meetings are provided in Appendix B. For reference purposes, an overview of EDA programs is provided as Appendix C. The review of previous economic development plans is included as Appendix D.

ECONOMIC PROFILE AND PHYSICAL SETTING

A summary of the physical characteristics and the economy of the island are presented in this section. Although brief, it points out many important features about Kauai, both as constraints to development and representing resources available for economic growth and expansion. A more detailed discussion of environmental characteristics, political geography, and land use regulation is presented in Appendix E. An inventory of the government program, facilities and services is provided, for purposes of reference in Appendix F. The economic profile of Kauai is detailed in Appendix G. Reference to those appendices will help complete understanding of the particular features of the island and its economy, and how both problems and opportunities relating to economic development can be identified from such analysis and description.

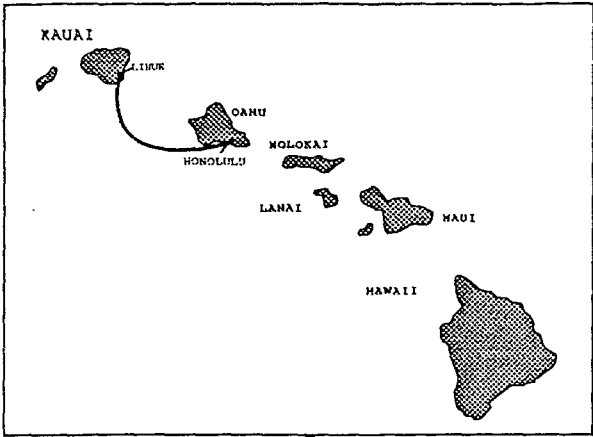
1. Physical setting

The island of Kauai is located at the northern end of the major Hawaiian Islands, approximately 95 miles northwest of Oahu. The island was formed some 25 million years ago, by volcanic action; it is in the shape of a cone, 32 miles in diameter, with 549 square miles of area and 137 miles of coastline.

The center and northwestern sectors of the island are largely uninhabited and generally inaccessible. Population is concentrated along the coastline, with only a scarce number of subdivisions on upland plains. Most of the urban development is on the eastern side, with resort development on the south, east, and north coasts. The westside consists of smaller, more traditional communities, largely focused on agricultural production. Most land uses are for agricultural purposes (largely sugar cane fields) or conservation.

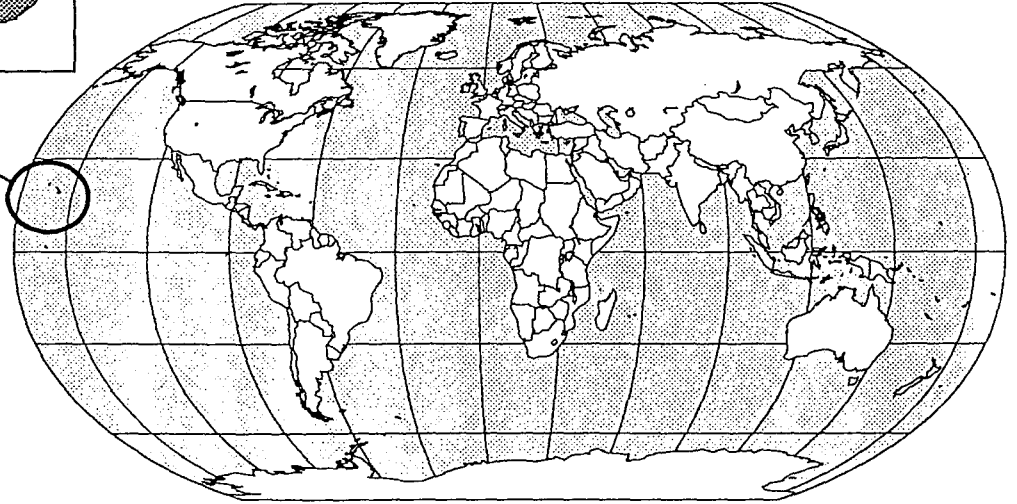
There are physical limits to where development could occur on Kauai. Because of potential tsunamis, some sectors have restrictions on development. Another constraint is the island's topography. Over half the island has a slope of 20 percent or more, and two-thirds is greater than 10 percent. Thus, only a third of the land area has a slope of less than ten percent. Because of these slopes, many areas have unstable conditions, which, when coupled with extremely heavy rainfall, can contribute to a high frequency of flooding, mud slides, and other conditions which make it difficult to build.

The overall impression of the island is one of vast open spaces, much of which is in agricultural production. Combining vistas of blue ocean, green mountains and other distinct geographical features, its physical appearance is striking. Perhaps the most important amenity of the island, coupled with the lifestyle related to it, is the viewscape. Both are important to the residents, and they provide a continued attraction to visitors. Current residents and all visitors hold a stake in, and would want to preserve these most essential assets of the island.



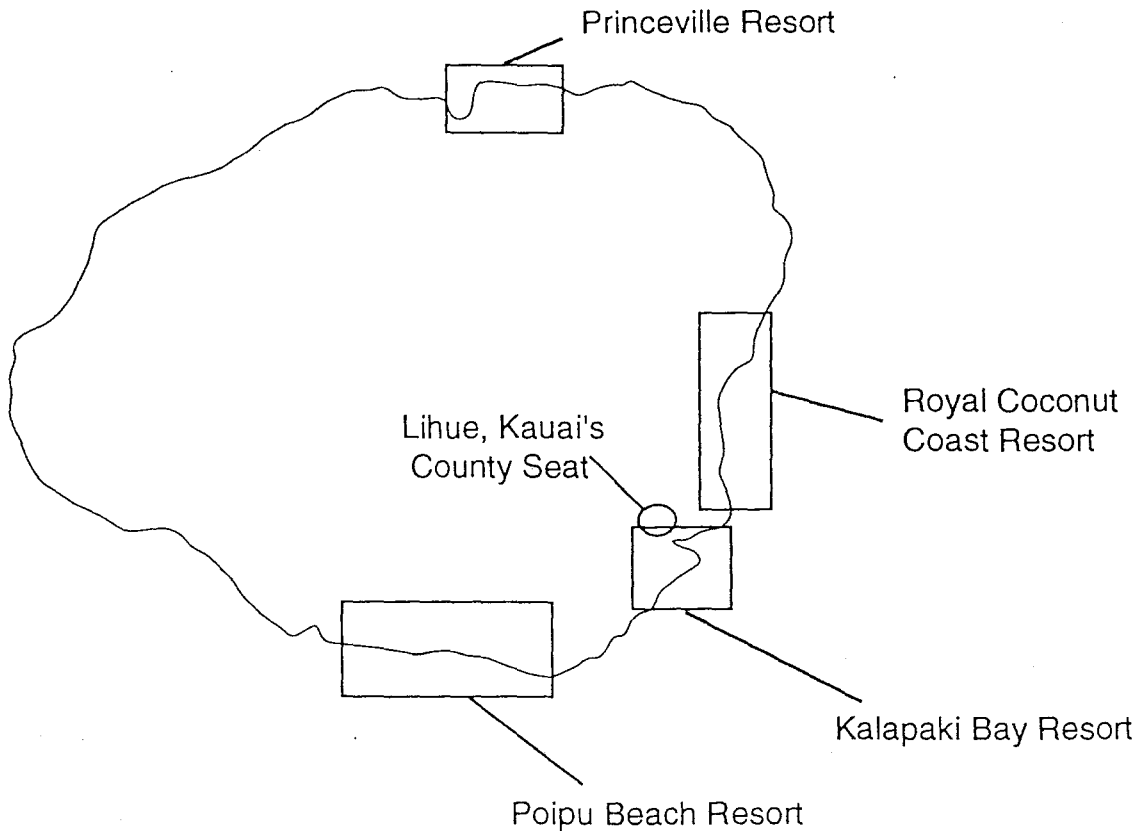
Hawaii

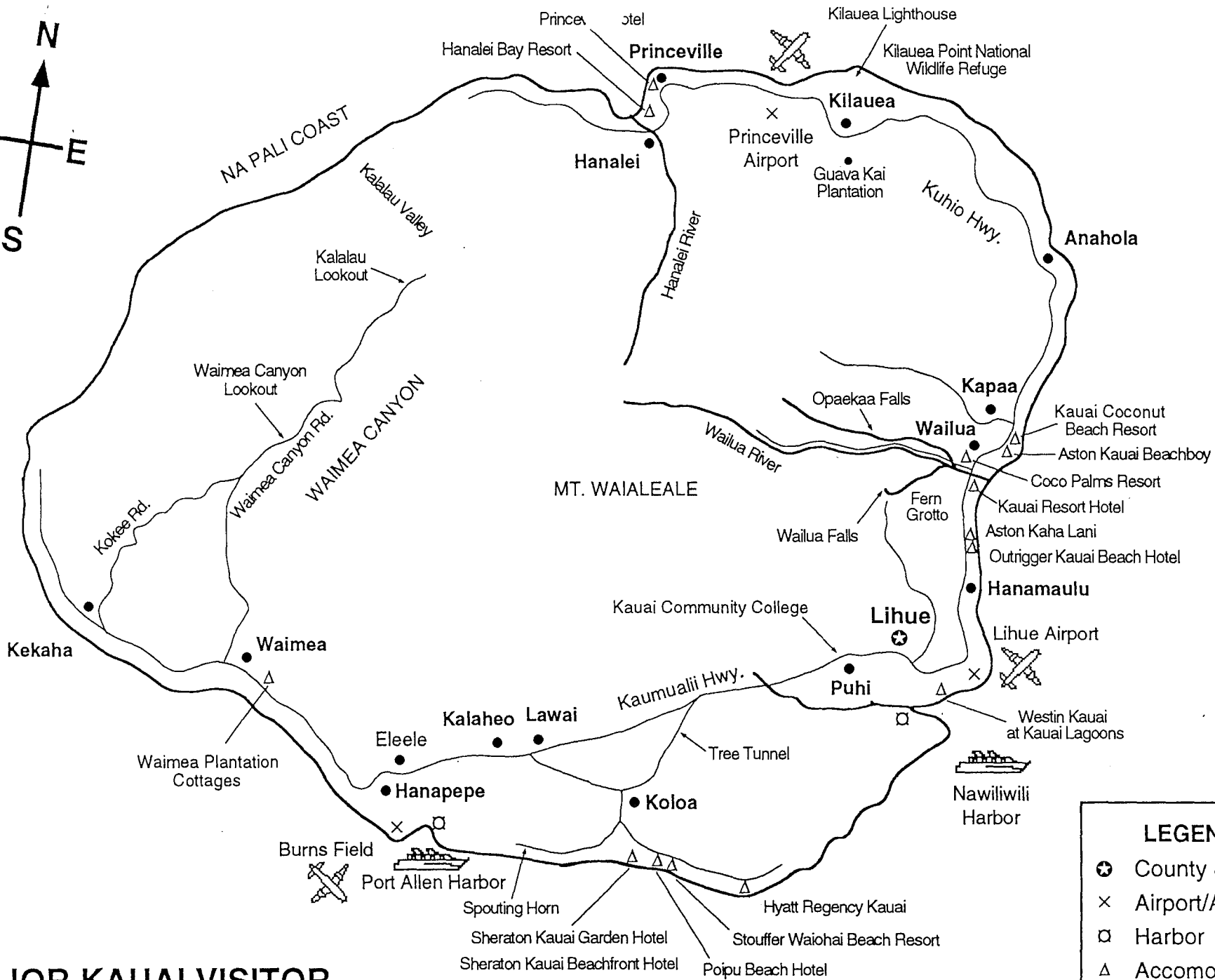
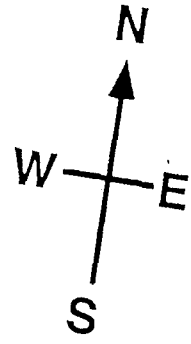
Main islands of Hawaiian chain,
Kauai-Honolulu jet route



'Kauai, Hawaii

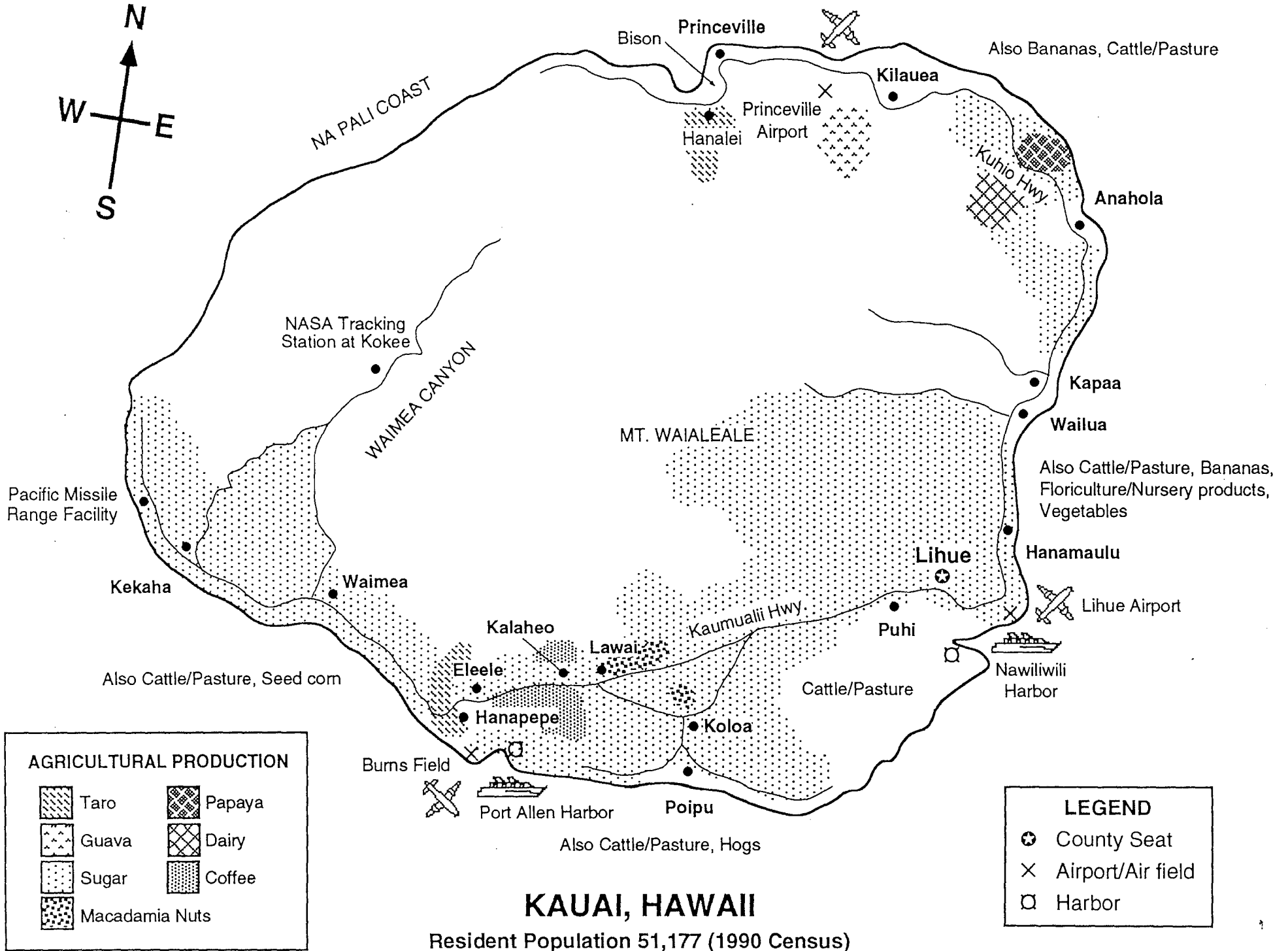
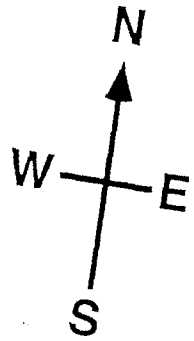
Resident Population 51,177 (1990 U.S. Census)

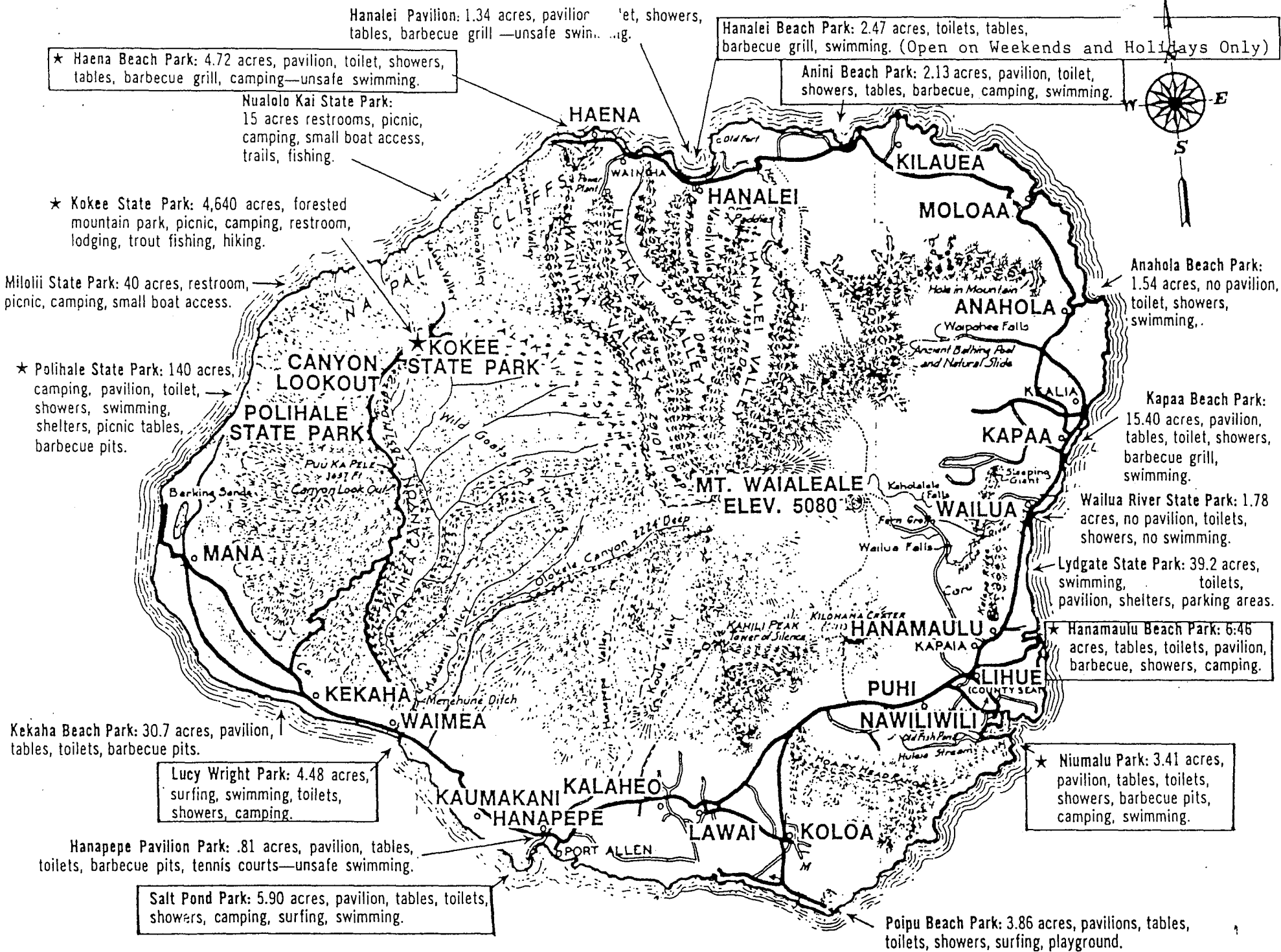




MAJOR KAUAI VISITOR ACCOMODATIONS AND ATTRACTIONS

LEGEND	
⊕	County Seat
×	Airport/Air field
□	Harbor
△	Accomodation
—	River/Stream





★ mobile campers allowed.
 All others, tent camping only.

KAUAI COUNTY AND STATE PARK LANDS

Table 3.1
Summary of Economic Characteristics
Kauai County

1. Population, population growth:

	<u>Number</u>		<u>Change rates</u>	
	1990	1980-1990	1990-2000	
Resident	51,177	+ 30.9	+ 27.3	
Average daily visitors	17,634	+142.9	+ 39.8	
De facto, total	67,963	+ 46.5	+ 32.3	

2. Median housing values:

Kauai	171,500
Hawaii	245,300
USA, national median	79,100

3. Household size and measure of overcrowding:

	<u>Persons per household</u>	<u>Percent of households with more than one person per room</u>
Kauai	3.10	16.04
Hawaii	3.02	15.92
USA, national	2.63	4.90

4. Patterns of employment:

	<u>1986</u>	<u>1990</u>	<u>Changes, 1986-1990</u>
Total employment	21,250	28,000	+ 6,750
Sugar production and processing	2,200	1,850	- 350
Services	5,150	7,600	+ 2,450
-- hotel	2,650	4,000	+ 1,350
-- other	2,500	3,600	+ 900
Retail	4,800	6,550	+ 1,750

Note: Table 3.1 provides only a summary of key economic indicators; refer to Appendix G: Economic Profile for detailed tables and more discussion; sources of information are provided at the end of Table 3.1

2. Economic profile

The economic conditions of Kauai are summarized in Table 3.1, and are briefly discussed in the following paragraphs. The source of information for both the table and the narrative is Appendix G, Economic Profile; specific tables with full information and sources are noted for each economic characteristic and can be found in the Appendix.

The population of the island has grown significantly over the past decade (about 31 percent), and will continue to grow, but at a slower rate (estimated at 27 percent). Resident population was 51,177 in 1990 and is expected to grow to over 65,000 by the year 2000. If visitors are added, that total is estimated at about 90,000 persons on the island at any given time.

The cost of housing is expensive, relative to the rest of the United States, but is less than Hawaii state levels. Median housing values were \$171,500 for Kauai, more than twice the national median, but still only 70 percent of the statewide median housing.

Housing conditions, on average, are crowded. Because of a higher number of persons per household, and relatively smaller, more expensive houses, Kauai's percent of overcrowded households (about 16 percent) is higher than the state. It is noteworthy that both the state and Kauai were considerably higher than the national average of 4.90 percent. By way of comparison, the second ranking state in this measure was California with 12.29 percent, followed by Texas, Alaska, and the District of Columbia, all in the eight percent range.

In terms of employment, the total number of jobs increased by about 32 percent from 1986 to 1990; significant increases in the hotel and retail sectors offset smaller decreases in sugar processing and production. This gives a clear indication of the importance of the visitor industry to the Kauai economy. A further measure is found when major sectors are added together. The hotel, visitor-related, and sugar-related sectors together accounted for over 40 percent of the employment on Kauai. If indirect employment that relies on agricultural production and the visitor industry is added, these two sectors are commonly understood to provide 80 percent of the employment in the Kauai economy.

Government employment is also significant, with a total of 3,350 jobs. A total of 2,100 jobs were reported for state employees, 900 for the local positions, and 350 federal positions. The largest employers include the state, the county, and the Pacific Missile Range Facility.

Unemployment in the state and on Kauai is low relative to the mainland; however, the level of unemployment (5.4 percent in May, 1992; 7.7 percent in August, 1992) remains higher on Kauai than for the rest of the state. The same observation can be made for per capita personal income; Kauai's average per capita income (estimated at \$17,000 in 1990) is about 83 percent of the state level.

The cost of living is relatively high on Kauai -- because of housing costs, basic commodities, and the total tax burden (federal, state, and local). Given the level of current salaries and wages, many families and individuals struggle to afford the lifestyle provided on Kauai. There are higher rates of multiple job holders per household and numbers of jobs per employee than found in comparison with state and national averages. The percentage of low and moderate income families or persons is in the 40 percent range.

When specific sectors of the economy are examined, the dominance by agriculture and the visitor industry emerges. In agricultural production and processing, sugar, the mainstay of the traditional economy, continues to dominate the annual sales and the acreage in production. However, as these proportions have declined over recent years, other profitable crops have developed -- but not enough to offset the continued decline in the sugar industry. Further expansion of diversified agriculture may sustain the agricultural sector as a viable part of the Kauai economy.

The more recent development of the visitor industry has brought the most dramatic change to the Kauai economy. The number of visitors has increased by almost 250 percent in the past 15 years, and is expected to grow by another 65 percent in the next 15 years. However, during the past decade, there has been a more rapid expansion in the number of resorts and hotel rooms than in numbers of visitors, leading to low occupancy rates. World events such as the Gulf War, recession, and natural disasters (such as the devastating floods of December, 1991) have contributed to low visitor counts, thus aggravating the occupancy problem. This situation is not evenly distributed, with significantly lower occupancy on Kauai's North shore, and higher occupancy rates on the South shore.

From the perspective of government services and fiscal administration, there has been a significant increase (by about 78 percent) in the level of expenditures over the past six years. This was in response to the greater demands placed on county government because of population growth in general, but particularly because of real estate development and tourism-related services. That growth resulted, however, in increases in the value of the tax base and total assessed values, and total tax revenues increased over the same period. A surplus of revenues over expenditures has occurred since 1984, so the tax structure, although an increasingly heavy burden for taxpayers, has been able to keep up with growing demands for government facilities and services.

Table 3.1, continued

5. Key sectors of employment, 1991:

	<u>No. of jobs</u>	<u>Percent of County total employment</u>
Hotel, direct	4,000	14.29
Visitor-related	5,450	19.46
Sugar-related	1,850	6.61
Government, all levels	<u>3,350</u>	<u>11.96</u>
Total	14,650	52.32

6. Households, income and employment characteristics:

	<u>Kauai</u>	<u>Hawaii</u>	<u>USA</u>
6.1 Unemployment rate, 1992 (May)	5.4	3.6	7.3
6.2 Per capita personal income	17,000 (estim.)	20,356	18,685
6.3 Employees per household	1.68	1.47	1.26

7. Low/moderate income:

	<u>Percent of total</u>
-- families	37.91
-- persons	41.21

8. Agricultural sector:

	<u>Number of producers</u>	<u>Acres in production</u>	<u>Annual sales (in 000s)</u>
Sugar cane	5	38,100	52,400
Livestock operations	270	150,000 (1)	5,009
Diversified agric.			
vegetables, melons	25	100	278
fruits	55	700	2,558
mac nuts	8 (2)	580 (2)	1,270 (3)
taro	40	165	1,379
flowers, nursery	45	92	2,380

(1) estimate

(2) mac nuts only

(3) estimate includes sales of macadamia nuts, coffee and other emerging crops

Table 3.1, continued

Kauai County

9. Visitor industry characteristics:

9.1 Number of visitors (average daily)

	<u>Number</u>	<u>Percent change</u>
1975	4,941	n.a.
1990	17,200	+ 248.1 (1975-1990)
2010	28,500 (est.)	+ 65.7 (1990-2010)

9.2 Occupancy rates

September, 1991

N. Kauai	43
C. Kauai	62
S. Kauai	58
Kauai	59
State	73

9.3 Proportion of state industry

	<u>Percent of state totals</u>		
	<u>no. visitors</u>	<u>expenditures</u>	<u>no. of rooms</u>
1975	7.45	n.d.	7.83
1980	7.52	6.60	7.97
1985	9.83	8.40	8.65
1990	10.61	10.12	10.85

10. County revenues and expenditures (in millions):

	<u>Revenues</u>	<u>Expenditures</u>
1985	35.303	32.114
1988	37.432	37.014
1991	60.134	57.126
Percent change, 1985-1991	+ 70.34	+ 77.89

Table 3.1, continued

Notes: Sources of information (refer to Appendix G)

1. Table G.1; Statistical Abstract of Kauai Economy, 1991 and Kauai Housing Needs Assessment Study, 1991.
2. Table G.5; 1990 Census of Population and Housing, State of Hawaii.
3. Table G.6; 1990 Census of Population and Housing, State of Hawaii.
4. Tables G.10 and G.11; Labor Force Data Book (annual), Hawaii State Department of Labor and Industrial Relations (as reported in Statistical Abstract of Kauai Economy, 1991; and U.S. Department of Commerce, County Business Patterns (annual)
5. Same as item 4.
- 6.1 Table G.12; First Hawaiian Bank, Economic Indicators; March/April, 1992.
- 6.2 Table G.13; same as item 6.1
- 6.3 Table G.16; derived from Bank of Hawaii, Annual Economic Report, 1991; First Hawaiian Bank, Economic Indicators, November/December, 1991; and 1990 Census of Population and Housing, State of Hawaii.
7. Table G.14; 1980 Census of Population and Housing (1990 data not available).
8. Tables G.17 and G.19; Statistical Abstract of Kauai Economy, 1991.
- 9.1 Table G.1; same as item 1.
- 9.2 Table G.22; Bank of Hawaii, Economic Indicators: Kauai County Supplement, November/December, 1991; and Economic Indicators, March/April, 1992.
- 9.3 Tables G.20 and G.21; derived from Hawaii Visitors Bureau research statistics and Kauai Data Book, 1991; Bank of Hawaii, Hawaii, 1991: Annual Economic Report.
10. Table G.23; County of Kauai, Comprehensive Annual Financial Report, Year Ending June 30, 1991.

CRITICAL ISSUES

The dominant theme that emerged from the OEDP Steering Committee meetings, the focus group discussions, interviews with key officials and others on Kauai was recognition of the need to make choices regarding the economic future of the island. Most observers acknowledged the need to make tradeoffs to reconcile present problems and future opportunities.

In order to make these sometimes confusing and difficult choices more apparent, we conceived a balance sheet for Kauai, listing assets and liabilities that relate to economic activity. That balance sheet is presented in Exhibit 4.1.

The major assets consist of the quality of the environment, scenic beauty, and lifestyle; however, there are other resources which can be relied upon, which include civic participation, access to government, and generally a spirit of cooperation.

The liabilities or constraints to growth include the cost of living -which is considerable, dominance of the economy by tourism and agriculture, and increasing demands on the infrastructure because of rapid growth and development. A surprisingly large number of those involved in the OEDP process cited the quality of the educational system as a major concern, and saw that as perhaps the greatest constraint on economic development, diversification, and a secure future for the economy.

The balance sheet for Kauai is not in a customary format, for there is no counterpart to net worth, to equalize assets and liabilities. Rather, the reconciliation of assets and liabilities comes from the need to identify major issues that confront the Kauai economy, and then to devise approaches or strategies that can deal with them.

Major issues were gathered and assembled into a coherent set. Among the issues that were identified during the OEDP process, the following were considered most critical:

1. Growth: The growth in the visitor industry, coupled with increases in the resident population, has led to strains on the infrastructure and the quality of life.
2. Environment: Preservation of natural resources including scenery, open space, forests, beaches, ocean, air and water, etc. are threatened by physical development and population increases.
3. Human resources: The need to improve the quality of Kauai's workforce through better education, training, and employment opportunities was commonly expressed.
4. Quality of life: The need to maintain the integrity of Kauai's island lifestyle and environment while providing ample opportunities for families to grow and prosper, was important.

Exhibit 4.1
Balance Sheet/Statement of Assets and Liabilities
Kauai County

Assets

- o Unique environment: scenic beauty, pristine setting
- o Physical setting: oceans, beaches, mountains
- o Fertile land, with year-round growing season
- o Climate

- o Lifestyle: rural, family-oriented
- o Access to high socioeconomic groups (income, education levels)
- o Reputation, image as a tourist destination
- o Strong work ethic
- o Multi-ethnic culture, social interactions: multi-lingual, diverse and integrated population

- o Supportive business environment
- o Access to government, community spiritedness
- o Public-private cooperation

- o High technology based military facility (Pacific Missile Range)
- o Advanced telecommunications system
- o Strategic location in mid-Pacific

Liabilities

- o Cost of living: land, housing, transportation, taxes
- o Traffic and increased congestion, particularly on Eastside
- o Two sector economy dominated by agriculture and tourism
- o Vulnerability to international economic trends

- o Dependency upon being a destination resort
- o Reliance on overseas travel to survive and grow
- o Cost of visiting

- o Decline of traditional agriculture
- o Relatively little surplus labor
- o Labor force skills not suited for new direction of growth
- o Limited managerial/entrepreneurial expertise

- o Limited educational opportunities
- o High tax burdens
- o Lack of cooperation among government officials

More specific concerns included:

5. Land use and zoning: Increasingly the mechanism by which the County directs development and growth is by use of these tools. There is increasing public pressure to use these tools in an attempt to alleviate fears of declining access to shorelines and other recreational areas, and to historical and archeological sites, and a desire to maintain Kauai's open spaces and prime agricultural lands.
6. Government regulation: Concerns were expressed about an over abundance of government regulation, primarily through land use and tax policies established to limit economic growth and development; such regulations were viewed as particularly affecting small business formation and real estate development.
7. Tax policy: Another issue was that rapidly increasing property tax assessments both discourage potential for new business development and contribute to residents' increasing cost-of-living.
8. Employment: Wage rates were low relative to the cost of living; the economy provided limited quality, high-paying employment opportunities; lower paying service jobs were more the norm.
9. Education: There was strong consensus that the educational system did not adequately prepare graduates for employment, especially for higher level, technical or professional jobs; likewise, a lack of higher education and employment opportunities has led to a "brain drain."
10. Housing: The lack of affordable rental and purchase properties contributes to the high cost of living and lowers the quality of life.
11. Infrastructure: Infrastructure was deemed inadequate and did not meet the needs of a rapidly growing population. Deficiencies were cited in transportation, energy, water, sewer, and solid waste. High energy costs and limited supplies were of particular concern.
12. Cost of living: The overall high cost of land, housing, food, basic goods, transportation, and taxes, coupled with the relatively low wage rates and limited job opportunities, affects both future economic development of Kauai and the overall quality of life for its residents.

In the following chapter, a more detailed discussion of the strategies for economic development provides an approach to dealing with these issues, thereby assuring successful and effective economic development on Kauai.

DEVELOPMENT STRATEGY

The identification of problems and listing of critical issues is one side of the understanding needed to chart a course for economic development, through the OEDP process. The other side is represented by a coherent strategy for economic development, refined into a concrete goal, objectives to accomplish that goal, and specific actions that can be taken to attain the objectives.

In this chapter, an overall economic development strategy for Kauai is presented, with considerable discussion of four inter-related sectors to the economy. In the next chapter, the economic development goal and a set of objectives are outlined, followed by a final chapter with an action program for implementation.

1. Economic Development Strategy

We have not outlined a sector-by-sector strategy, because opportunities for future growth and expansion on Kauai do not reside within a single industry. Rather, carefully coordinated development in several directions at the same time would bring the best results.

First, every effort must be made to maintain the current base of agriculture and tourism. This means that sugar production and processing should be supported as long as it is economically viable. And the visitor industry should be strengthened in order to increase its competitiveness and to reduce its vulnerability to external market conditions.

Second, new directions must also be pursued to avoid an economic downturn on a broad scale if either of the major economic sectors should falter. For example, if sugar continues to decline, efforts must be made in advance to compensate for losses of jobs, revenues, and compatible land uses. While shoring up existing industries to brace them against external downturns, the overall economic development strategy should place special emphasis on economic diversification.

Diversification should be sought through formation of new local business ventures or selective recruiting; and should consist of the following:

- o Seek diversified agriculture, and value-added processing.
- o Engage in sophisticated tourism, targeted to selective niches, relying on coordinated marketing and development, and emphasizing creative, health and wellness, and information based themes.
- o Develop a third sector to the economy, through home-grown energy, information-based, health and wellness, and creative enterprises -- most appropriate to the Kauai economy and least disruptive to the lifestyle and environmental quality.
- o Use prototype development and licensing of high intellectual content or creativity-based services or products, as a means of exporting products and services of Kauai.

- o Build a reputation as a model community site for research, development and testing of new products and services in agriculture, tourism, energy, health, and creative info-based industries.
- o Recruit on a selective basis companies that fit the criteria appropriate to Kauai, and that will serve as an anchor for further development of the emerging sector; likewise, recruit talented individuals and willing entrepreneurs to implement and develop those core businesses in the proposed energy, information-based, health and wellness, and creative industries.

In order to achieve these outcomes, certain pre-conditions should be present, or means should be found to establish them. The most important components to trigger the strategy include the following:

- o Upgrading the critical resource of education
- o Carefully crafting approaches to marketing and image-making, to reinforce the development efforts.
- o Building an information and creative infrastructure, that will continue to provide business opportunities
- o Ensuring public/private cooperation on an on-going basis, to aid both businesses and industries in their formation.
- o Seeking anchor commitments, as a means of initiating development and attaining a critical mass of resources to trigger further development.

In summary, the economic development strategy consists of reducing vulnerability, building upon present assets, and seeking selective new and complementary opportunities -- all appropriate to the resources and constraints found on Kauai.

2. Overview of Development Strategy

The basic economy of Kauai consists of four interrelated sectors. The four sectors are:

- o Traditional and diversified agriculture
- o Tourism and related industries
- o Emerging ventures, appropriate to the Kauai economy
- o Support economy, with services and non-export goods provided to local residents

The first three are "export-related," in that goods produced or services performed are for the benefit of non-residents or consumers not in the local economy. The agriculture and visitor industries, two of the three export sectors, are subject to international market forces and worldwide economic conditions; sale of these goods and services will always be conditioned upon demand external to Kauai.

The third sector, emerging businesses, is at a relatively formative stage, and will be more fully explained in a later section. But it shares the characteristic of being dependent on international demand; although produced on Kauai, ultimate consumption of its production may also lie elsewhere.

The fourth sector is derivative and dependent on the health of the first three; the service, retail, wholesale, transportation, utilities, construction, and other industries are dependent on the level of activity in the three export sectors and will grow in proportion to changes or growth in those areas.

These sectors are interrelated in complex ways. Those relationships are depicted in Exhibit 5.1. The exhibit shows that agriculture relies on three types of activities: traditional agriculture (sugar production and processing), diversified agriculture, and processing to permit shipment of finished products, not just primary commodities.

Tourism likewise is shown with its current emphasis on providing a quality vacation or recreation experience. The diagram also suggests emphasis on a different type of tourism experience -- through conferences, training, promotion of selected themes for visitors, and then use of such creative or intellectual experiences to generate new ideas or concepts that might be captured as the basis for business formation appropriate to Kauai.

The third sector, emerging businesses selected from a number of energy, information-based, health and wellness, and/or creative opportunities, is yet to be fully developed, but it complements the agriculture and tourism sectors, and likewise serves as a source of emerging business opportunities on Kauai.

Support activities provide goods and services consumed by Kauai residents and supports the export-related sectors. Such activities are a major source of employment in themselves, and are vital to future economic expansion on Kauai. But such growth and development will occur only in direct proportion to the growth and development of the agricultural, tourism, and emerging business sectors.

Following are key trends in each of these sectors, providing background information and suggestions for future development.

3. Traditional and diversified agriculture

The present agricultural economy is vulnerable as a result of its near total dependence on the sugar industry. The traditional economy is based on agricultural production, with export primarily of raw sugar (and previously pineapple) from the island to mainland and overseas markets. This has begun to shift, in response to costs of production and competitive conditions on a world wide basis. Even given the favorable growing conditions for sugar production, international cost and supply conditions -- as well as shifts in preferences -- limit market prospects, and contribute to the slow decline of the industry.

On the other hand, there has been significant progress in developing and producing other types of crops at commercial scale. Such diversified agriculture can take two forms. The first arises with the introduction of a new product grown on Kauai; this can occur when a cost advantage

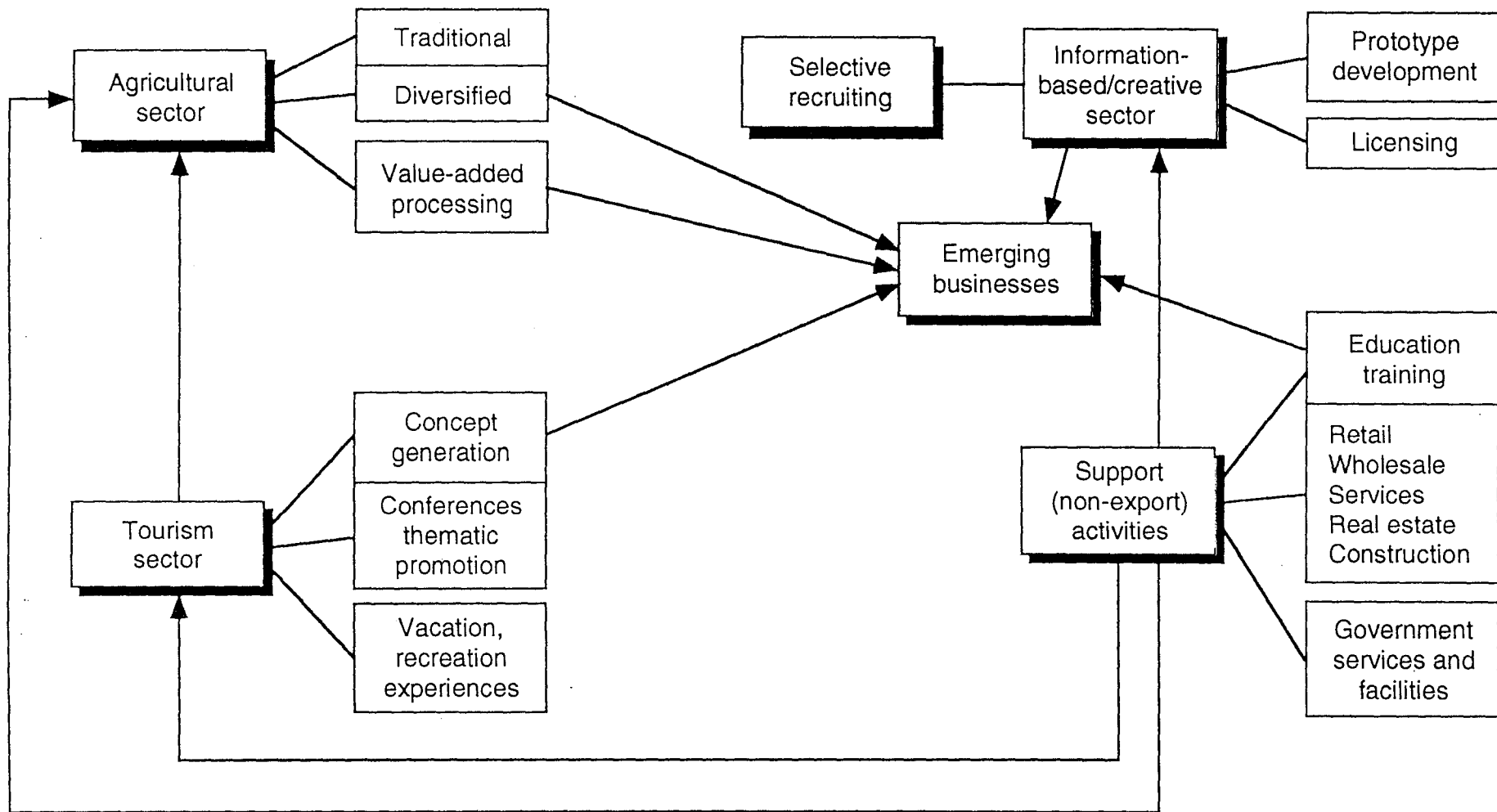


Exhibit 5.1
Sector Interrelationships
Kauai County

exists for production on Kauai, such as with macadamia nuts and coffee. The second occurs with the addition of further value through food processing and manufacturing (as seen in guava processing and manufacture of ice cream as exports). One area of opportunity lies in continued expansion of diversified agriculture, and then exporting more finished products.

3.1 Guava production

A good example of how this broadens the economy and adds depth to the agricultural sector is found in the recent experience of Kilauea Agronomic, Inc. (KAI), a grower and processor of guava. KAI plantation grew from 330 acres in 1985 to 480 acres in 1987 and remains the same size today. It increased its production of guava puree from 2.5 million pounds in 1985 to 9.5 million pounds in 1990.

KAI's expansion and initial success was due to a marketing agreement with Ocean Spray Corporation which assured the company of a constant market. Today, however, KAI is experiencing an oversupply as a result of Ocean Spray's inability to meet its expectations in marketing the Mauna Lai guava drink. Stiff competition by other tropical fruit drink marketers has resulted in excess supplies.

KAI, however, is optimistic about the future. It views this as a transitional period from which it can recover as it changes its marketing strategy from a joint venture agreement to a long-term non-exclusive supply contract. In order to sell its guava to other companies, however, KAI recognizes that it must work to establish wider market recognition of the guava on its own, as well as through fruit drink companies such as Ocean Spray. Because the tropical fruit drinks industry is presently experiencing double digit growth, and there is room in the market to create demand for guava drink and other guava-based products, company officials feel marketing efforts will pay off.

The KAI story is consistent with the story of many other agriculture products on Kauai -- a story of excellent growers with limited marketing expertise. This is the situation facing the papaya and floriculture industries as well. Both are ideal crops for Kauai but they require the ability to market the product in a very competitive environment. Neither of these crops lends itself to large corporate-type investments. Rather, they are well-suited to a large number of independent growers -- which is the situation on Kauai. What is required is a separate, co-operative or corporate marketing firm which can buy and market diversified products. This approach contributed to the success of the papaya industry on the Big Island and other places.

3.2 Papaya production

Other lessons can be learned from the experience of Kauai's papaya growers. The demise of Best Fruits -- the Moloaa Papaya Co-op's packaging and marketing arm which failed in 1985 -- showed that on Kauai the growers were not successful at simultaneously growing, treating, packaging, and marketing the fruit. The papaya industry virtually shut down the year after Best Fruits went bankrupt.

Despite its difficulties since 1985, however, today the future of the papaya industry on Kauai looks good. The Moloaa Farmers' Co-op (MFC) has been put back together and a new organization, the Kauai Sunshine Co-operative, has been formed for marketing and promotion. It has recruited new members; one is already shipping 3,000 pounds of papaya per month to Canada, which does not have fruit fly treatment restrictions.

The long-sought dry heat fruit fly disinfestation treatment facility needed to renew exports of papaya from Kauai was funded by the 1991 Legislature. The facility has yet to be built, however, a temporary treatment chamber from the University has recently been installed on the Moloaa Farmers' Co-op site, enabling some test shipments for mainland markets within a few months; if certified by USDA the chamber could also be used to clear other crops for export. In addition, the Co-op has built a packing area next to their fields which will eventually allow it to ship up to 10,000 pounds of fruit per day. A partnership of two growers is currently acting as agent for marketing the fruit in Canada and on the mainland, while another farmer and local distributor are handling the local market.

Although the state-wide Papaya Action Committee (PAC) estimates production on Kauai will reach about 800,000 pounds this year -- an increase of only 10,000 pounds over 1990 -- the president of the Kauai-based cooperative estimates his production alone will exceed that amount. If the fruit is cleared by USDA for export, this spokesman believes the coop growers' production could easily exceed one million pounds. The Office of Economic Development estimates production could reach 1.5 million pounds by the end of 1992. This is dramatic news, as the price per pound of fresh Kauai Sunrise papaya has increased from 22.5 cents in 1986 to 35.5 cents in 1992. According to the PAC, Hawaii farm income from fresh papaya sales last year was expected to be \$16.3 million, an 11 percent increase over the \$14.7 million earned in 1990. The market is expected to continue expanding as the health and nutritional benefits of the fruit increase its popularity both on the North American continent and in Japan.

3.3 Floriculture

There are similar movements in the development, production, and marketing of other diversified agricultural products. The overall floriculture and nursery products industry doubled between 1986 and 1990, both in numbers of farms (from 25 to 50) and in value of sales (from \$1.146 to \$2.378 million). The industry suffered an overall decline in 1991, but this was due to a decrease in nursery products. This portion of the industry is closely tied to the construction industry which is experiencing a slump as a result of the present economic recession. Although exact figures are not yet available, floriculture alone actually increased in 1990 and again in 1991. The three main shippers of heliconias and ginger all experienced an increase in sales of more than 30 percent in 1991.

The number of tropical flower growers is increasing. The local market is saturated (only anthuriums, protea and mainland flowers are brought into Kauai), and 80 percent of the flowers produced are exported. One of the largest growers has been acting as a central marketer, purchasing from numerous smaller growers and selling directly to retailers on the mainland.

The County, in cooperation with the Kauai Economic Development Board and the University of Hawaii, has supported two plant collection trips to South America, which resulted in successful propagation on Kauai of new species with commercial potential.

Local growers have joined the Hawaiian Florists and Shippers Association which recently negotiated lower rates with Canada, and Federal Express US, and has lobbied for support from the state and the County. Industry representatives are currently seeking funds to have a business and marketing plan done in order to encourage a private investor to invest in a central marketing organization. Another bright spot for the industry in terms of marketing is the fact that FTD is doing a special section on tropical flowers in their catalogue, which is put out every three years. This will interest more florists in carrying the tropicals highlighted in the catalogue.

The depressed state of the California floriculture industry due to drought, the new varieties of Kauai tropicals, the consistent high quality of Kauai's production in terms of size and shelf life, and the initiatives of the growers mentioned above combine to paint a very bright future for the floriculture industry on Kauai. In recognition of this, Grove Farm Corporation has made more land available for lease to growers; and if an agriculture park is established on Kauai this sector is expected to continue increasing as a result of the availability of more land.

3.4 Macadamia nuts and coffee

Another example of agricultural diversification is found with the aggressive efforts made by the McBryde Sugar Company to diversify its sugar acreage through heavy investments in coffee and macadamia nuts. By the end of 1991 McBryde had 4,800 acres in coffee in addition to its 7,000 acres in sugar. The sheer number of acres planted make coffee the number three agriculture product on Kauai (behind sugarcane and fruit). Confidence in the potential success of coffee has led the plantation to take its better fields out of sugar and put them into coffee. To date 650 acres have been harvested and shipped to its joint venture partner, Hills Brothers, where it is processed, packaged and presently being test marketed.

McBryde has an additional 575 acres planted in macadamia nuts -- making it the fourth largest agriculture product on Kauai in terms of acreage. McBryde harvested 130,000 pounds of nuts in their shells in 1991 and sold most of it locally to Lapperts Kauai Ice Cream company. McBryde states it is on schedule for development and very optimistic with this new product as well.

3.5 Agriculture research and development

Seed corn is another bright spot for diversification of Kauai agriculture. Three international seed companies -- Pioneer, Pfizer/Dekalb, and Northrup King -- conduct research and produce hybrid corn, sunflower, cotton and soybean seed on approximately 350 acres on the West Side of Kauai. Although no exact figures are available (considered proprietary information), it is estimated that the industry on Kauai accounts for more than half of the statewide industry, valued at a total of \$6.7 million. Pioneer and Northrup King have been operating successfully on Kauai for over twenty years. Dekalb/Pfizer has been cultivating about 75 acres for almost ten years. Pioneer has nearly 200 acres and employs approximately 40 local people full time and 100 part time. In addition it brings in about 65 professionals on a rotating basis every two weeks. Pioneer anticipates increasing its acreage to 300 next year. Further expansion in the industry will be difficult, however, due to the high cost of labor (the expertise needed requires highly skilled professional breeders, technicians, and other with advanced degrees) and the lack of available land. Local labor is paid an average of \$13 per hour -- much higher than sugar workers.

3.6 Truck crops

Another facet of agriculture diversification is found with the Sunshine Markets, where local produce is sold in five weekly markets at locations island-wide. This provides a market for small-scale growers and a source of lower-cost produce. Although popular with local residents, the markets have become quite an attraction for visitors in the resort areas. Once an agriculture park is established on Kauai this sector is also expected to expand as a result of the availability of more land, perhaps to a commercial scale.

Finally, Kauai would benefit by having one or several products for which it is widely known. The Big Island has coffee, Macadamia nuts, and flowers. Maui has onions and potato chips. Kauai could become known for "Kauai" coffee, macadamia nuts, guava, or taro. This would require better marketing, as well as further development of the taro product; some efforts are already underway diversifying guava products.

The experience cited above suggests a development strategy designed to support continued expansion of diversified agriculture, but with increasing emphasis on value-added products for export. By processing and selling finished products based on worldwide demand, profit margins can be increased while additional jobs are created for production and processing. Direct flights from Kauai to the mainland and foreign distributors would help ensure the success of this strategy.

Another aspect of an agricultural strategy is the need to bring the visitor industry and the agriculture sector together, to understand their interdependence. Examples of this under-recognized relationship include:

- o If tourism should decline, the tax revenues that are provided from that sector would decrease, and therefore reduce funds available to the government in support of agricultural diversification.
- o The cost of maintaining the viewscape so valuable to tourism is borne by agricultural operators; with declines in agriculture, there is a question of how the viewsapes would be sustained. For example, how attractive would Hanalei Valley be if there were no taro patches there; or if sugar acreage continues to decline, how will the viewsapes so important to Kauai's attractiveness be maintained.
- o As the sugar industry declines there is less biomass available for electricity generation, at a time when the cost of oil and utility rates are on the rise. Kauai's renewable energy production declined from 50 percent in 1989 to 35 percent in 1991, and an electric rate increase of 19 percent is pending before the Public Service Commission. Tourism cannot remain competitive if price increases of any type are not resisted, so that the tourism experience can be affordable to as broad a group as possible.

The point of this is that both agriculture and tourism are required for a viable economy, and the two have a strong interdependence that must not only be recognized, but built upon as part of an economic development strategy.

3.2 Tourism and Related Industries

Trends:

Kauai's visitor industry has undergone dramatic changes in recent years. It has experienced a rapid rise in the total number of tourists, an increase in visitor accommodations which outpaced the rise in visitors, and thus it has experienced relatively low occupancy rates. Over the past two years the visitor industry has levelled off and even declined. This experience demonstrates the volatility of the industry as it reacts to both national and international economic trends and world events. It is a very sensitive industry which reacts swiftly to both man made and natural disasters.

Like the traditional agricultural sector, the tourism economy is unbalanced and vulnerable. It is vulnerable to external economic trends and heavily geared to the high-end resort market activity. Although the attractiveness of the island has fueled Kauai's economic growth and development for the past two decades, there are several factors that must be recognized about this situation.

First, there will always be a dependency on the visitor's ability to afford air travel to sustain tourism. Whether from Japan, the mainland or other origins, the time and cost involved in traveling to Kauai is a fact of the industry. Second, and related to that fact, is that overseas travel is highly dependent upon worldwide economic conditions. In times

of uncertainty, such as the Gulf War, or economic downturns, like the current recession, there will be direct and swift negative impacts on the industry. Third, there will also be limits due to cost, and thus only a relatively narrow range of the world population can avail themselves of a vacation experience on Kauai.

Finally, it is important to recognize that even among those that can afford a Kauai vacation, there will also be competing and attractive destinations worldwide. Hence, there is a need to pay continual attention to the comparative attractiveness and affordability of the Kauai experience.

In other words, continual enhancement of the "product" -- the Kauai experience -- is absolutely essential, so that there will always be a relative attractiveness, sufficient to overcome the comparatively high cost and limited affordability to a wide market.

It is noteworthy, then, to compare certain aspects of the Kauai experience with other destinations in the state, for it points out several important things about the visitor industry on Kauai. According to a comprehensive survey of tourism (1), Kauai was ranked the lowest of all the islands for cultural activities and visibility, shops and stores, visitor information, sightseeing tours, night clubs, dinner cruises, fishing, tennis and water sports. Kauai was consistently rated third out of the four major islands for hotel accommodations (including rooms, staff, dining, and service). Kauai's low ranking in the above categories is surprising given the quality of accommodations and variety of experiences that exist on the island.

When visitors were asked what they liked least about their trips to Hawaii, the survey concluded that 20 percent of Oahu visitors felt it was too overcrowded with too many tourists. Eight percent on Maui felt that way, seven percent on the Big Island, and only three percent on Kauai shared that opinion. Costliness and traffic congestion were the second and third largest complaints for all islands except the Big Island; Kauai ranked equal with Oahu for frustrations with traffic congestion.

According to the survey, Kauai draws almost exclusively higher income visitors (\$75,000 or more annually), while Big Island visitors are mostly from the middle income range (\$35,000 to \$74,999 annually), and Oahu draws the lower income visitors. Visitor count growth on the Big Island has exceeded Kauai's over the past couple years.

In general, visitors to Kauai tended to spend less, stay a shorter amount of time, and had lower rates of repeat visits than found on other islands.

(1) Source: 1990 HVB Visitor Satisfaction Survey .

Strategies:

In order to strengthen and expand Kauai's tourism industry, the question then becomes how to build upon a well-established identity with the higher income market, yet appeal to a broader, middle income market. Several conclusions can be reached to improve Kauai's tourism.

3.2 a) Marketing

First, the visitor experience on Kauai must be appealing to as wide a market as possible and remain extremely flexible to change. Although it pays to develop a specific identity which appeals to the most stable customers, the industry will not realize its full potential if it focuses solely on one particular niche. Heavy concentration on attracting the most affluent market will provide some security in times of general economic hardship, however, it will not allow for capturing other potentially lucrative markets in times of economic stability and growth.

Second, Kauai should build a reputation for excellence in service and accommodations as well as for providing a variety of experience and budget. It should not strive to be all things to all people, but it must develop excellence in those qualities that appeal to a cross section of visitors, while extending its appeal to new potentially lucrative market segments.

Third, Kauai must market itself as an active and exciting island. The island already receives the highest marks for beautiful scenery and beaches. Kauai is first, and foremost, the "Garden Island." It represents to many visitors and Hawaii residents those characteristics that have been seriously compromised on many of the other islands as a result of urban development and rapid population growth. Kauai should maintain its pristine garden identity through new promotional efforts to reinforce that image and build upon it. One way of expanding this image is to market Kauai as a destination for residents from the rest of the state - to experience Hawaii as it used to be.

3.2 b) Cultural & Recreational Assets

Tourism on Kauai will benefit if certain assets are developed more completely and then marketed effectively. Part of the appeal lies in combining recreation, adventure, and intellectual values into a single experience. Cultural and historical elements to activities provide an additional draw which complements or enhances any activity, and which particularly appeals to the modern traveler -- generally of higher income, greater education, and considerable discretion in spending patterns. Furthermore, development of culturally, historically, and environmentally conscious clientele can support efforts to develop and preserve these assets.

For example, a kayak trip up the river can be enhanced by a visit along the way to the legendary Menehune fishpond, or a visit to ancient Heiaus. A bike ride along the Hanalei river valley can be enhanced by a stop at the Haraguchi Rice Mill and a tour of the taro fields, or a stop at an old plantation house. A horseback ride is made that much more interesting when it includes visits to archeological sites.

Part of the tourism strategy then consists of recognizing the value of such experiences, creating a range of opportunities, and then promoting those experiences. There are a number of underdeveloped assets that could be used in this effort. Several examples are described.

Kauai has a wealth of archeological and historic sites, as well as cultural events. The numerous heiaus which exist around the island have not been restored, identified and interpreted for potential visitors. And the island's festivities are not fully supported and publicized to capture the visitor audience. Expansion of visitor activities in this area requires careful consideration of cultural sensitivities and must include representative organizations in providing access to sites.

3.2 c) Biking, Hiking, Camping

Another means of improving the tourism experience would be development of a system of bikeways. Kauai provides varied and attractive scenery and terrain for potential hiking visitors. In addition to bikeways, Kauai's visitor industry will benefit greatly from an expanded image of providing the widest variety of hiking, camping and recreational parks and facilities.

Kauai has numerous county and state parks forest reserves which provide a vast amount of recreational acreage and miles of hiking trails. The very unique vistas, scenery, flora and fauna of these parks and reserves provide an unmatched attraction to the oldest and most pristine of the Hawaiian islands. The numerous camping sites and comfort facilities should be well marketed to the "nature" and "adventure" tourists which are a rapidly growing segment of the visitor market. This kind of a vacation appeals to both the highly educated, environmentally conscious visitors as well as those from Europe and elsewhere seeking a truly unique experience which cannot be matched in their own regions. It also is appealing to the budget-conscious young travelers seeking adventure and "back-to-nature" experiences.

3.2 d) Towns

Kauai's visitor industry would also benefit by being identified as having quaint towns which are each known for something special -- for what you can see, or experience there. Lahaina is a very big draw for Maui, Kona for the Big Island, and Waikiki for Oahu. Kauai does not have any of these; but it does have several unique small towns. A county-wide effort should be adopted to assist all of Kauai's small towns to identify and express their own entrepreneurial initiatives in an effort to develop a distinguishing character unique to each community.

3.2 e) Accommodations

Kauai should re-focus its attention on promoting a greater variety of more budget-conscious accommodations. Increasingly, today's travelers are looking for more personalized experiences which can be found at smaller hotels, inns, and bed and breakfasts. This would complement the large-scale, and often self-contained resorts, by giving a range of choices to a broader base of potential visitors.

Future visitor industry development on Kauai should focus on the types of accommodations which give the visitor a better sense of truly being a "neighbor," rather than a visitor. These types of accommodations have a

further advantage in that they provide greater opportunities for local ownership and management which can be better integrated into the Kauai community. And finally, the lower prices they command will contribute to longer stays with more money spent on activities, food and gifts outside the resort establishments.

3.2 f) Niche Markets

Kauai should develop market niches particularly in areas that competing resort destinations have not emphasized and which complement economic development activities in other sectors. As part of the same appeal to the intellectual, healing, and creative aspect of a recreation and leisure experience for which Kauai can become known, there is a large untapped market in educational and training seminars and conventions. Kauai should establish a reputation for the quality of this type of experience, becoming a meeting place for these events in a variety of fields. The island is increasingly gaining a reputation, for example, on the cutting edge of the health and healing field through its diverse seminars and conferences put on by the Kauai Foundation for Continuing Education. It should take advantage of its reputation as a place of spirituality and healing to further enhance this image. According to the HVB survey, "The personality of Kauai is best described by its visitor respondents as exotic, spiritual/ uplifting, and quaint....relaxing, restful, [and] homey".

Kauai should exploit this image, exploring ways to build on it. Educational visitor opportunities could be better secured through establishment of a central conference center and training facility on the East side. This would allow the numerous smaller scale properties in the area to benefit from whatever is taking place at the center. Hotel operators would provide the rooms, meals, and activities, and visitors would have a wide selection of accommodations and restaurants when attending an event. It also gets more money circulated in the community, whereas presently large properties which can accommodate on one site all the needs of a convention can capture most of the dollars spent as a result of that event.

Other benefits from this specialization could arise, if organized properly. Given a commitment to forming new businesses (discussed in the next section), tourism organized around educational and intellectual themes and experiences can support other aspects of economic development (including astronomy-related high technology, athletic training, traditional Hawaiian healing, and ocean science related research and development, for example). Following are some of the ways this can be accomplished:

- o Tourism of this sort can serve as a means of generating concepts or ideas that could be used for business development on Kauai. For example, a symposium on alternative energy sources could lead to products or services that could be developed on Kauai and then exported. Or a conference on health care and wellness can provide ideas needing further refinement, suitable for investigation and testing on Kauai.

o This form of tourism could also be used as part of a broader campaign to selectively recruit companies appropriate to the economic base of Kauai. Thus, involvement in conferences, seminars, or the general quality of a Kauai experience could result in companies' visits. Through that, they could determine if location of training facilities, research and development operations, communications centers, or even possible assembly and light manufacturing operations would make sense and could be encouraged.

o Another aspect to this would be a subtle form of recruitment of managers and entrepreneurs, who once exposed to the lifestyle and quality of life on Kauai, the perception of opportunity for business development, and impressed by the resources organized in support of emerging companies, would consider relocation to Kauai.

A variation of this would be to establish a program to tap local expertise and to attract visiting fellows or masters. That is, leading and recognized members of industry, the arts and sciences, and other fields of endeavor would be invited to a sabbatical-type experience on Kauai. While in residence and enjoying themselves, they could lead conferences, and provide leadership and direction to development initiatives. If a leading research person on optical transmission could be lured to Kauai for a period of time, and given some responsibilities for conducting seminars and performing research, that person may also be a draw for others in the field, and also provide resources to development efforts. Similarly, if a noted artisan would agree to the program, it would serve as a focal point both for tourism promotion and possible spin offs of a commercial nature.

Tourism, then, provides an end in itself, as the dominant aspect of the present and future economy of Kauai. But the strategy entails doing that in ways that build on the current base, expand selectively, and supports other economic development activities.

3.3 Emerging Businesses, appropriate to Kauai

The third sector, emerging business, is less well identified and not well developed, but it is this area where hopes of attaining balance, reducing vulnerability and dependency, and ensuring some degree of self-sustaining security for the island economy would lie. That is, if a two-legged stool represents the present economy, the success of the economic future lies in building a viable and strong third leg.

This means new business development, creation of jobs through retention and expansion of existing small business, supporting local entrepreneurship, and recruiting or attracting those firms that will reinforce growth and development. However, supporting new business ventures without careful focus and ensuring that they are consistent with the resources and constraints found on Kauai would be imprudent. Emergence of new businesses must occur in recognition of certain realities imposed by doing business on the island and within the state.

Some lessons can be learned from experiences elsewhere. One analogy would be to Denmark, where factors of production and basic resources are such that it requires competing on the basis of design and quality, rather than through mass production and provision of commodities. Denmark is able to compete on a worldwide basis by recognizing its limits and working within them. Similarly, Switzerland has been able to find its comparative advantage with a specialization in financial services unique in the world economy. These examples help support the conclusion that although Kauai cannot compete well across the board and in all economic sectors, it can carve out a unique and sustainable position by recognizing its assets and opportunities and carrying out effective development strategies.

The City of Indianapolis offers another lesson in economic development strategy. Although it has historically had a broad manufacturing base, the city was vulnerable as a result of dependency on demand generated outside the community and through a worldwide economy. City officials identified an under-recognized niche several years ago -- sports and other athletics -- as a theme for economic development. It became a vital part of both local development and recruitment efforts, vastly different from what any other community at the time was doing. Identification of this niche led to creation of new public and private entities, and resulted in development of a number of related sectors, including specialization in sports medicine, medical devices, biotechnical development, and insurance. The Indianapolis strategy provides an example of finding a niche to give focus to economic development, then developing public and private approaches to exploit and expand on that selective foundation.

These factors are important to consider when seeking the types of business development that would be successful for Kauai. The realities of business development appropriate to the Kauai economy include the following:

3.3 a) Strategies

First, because of the shipping and transportation costs involved, as well as a labor force unskilled in manufacturing, there is no comparative advantage to manufacturing or production of commodity-type goods. Light manufacturing, assembly, or prototype development could work, however, in selected cases; order fulfillment for computer software, electronic distribution of intellectual property, or assembly of prototype solarpowered vehicles are examples of manufacturing appropriate to Kauai.

Second, the strategy of new business formation also underlines the importance of existing and continual development of "cottage industries," both because mass production is not likely (due to labor shortages and shipping costs), but also because of the part they can play in the rapid and continual development of new products and services. This means of production is already established on Kauai - in crafts, specialty food products, and floral products, among others. Thus, the use of small scale production is a recognized aspect of the Kauai economy and should be built upon.

Third, the basic educational system, both for academic purposes and vocational training, should be recognized as a vital part of development, and therefore upgraded to provide the skills and training needed for economic diversification.

Fourth, the island's ability to compete in a world economy depends on high "idea content" goods and services. That is, the quality of design and the uniqueness of the intellectual content may provide market niches and demand where otherwise it would be difficult to compete. The opportunities lie with the mobility of ideas and services rather than goods.

Fifth, the creation of such ideas cannot be done in isolation. There should be continual stimulation of creative and intellectual activities on the island, in order to create a current of ideas that constantly flows and builds. Likewise, global communications is also important. Use of existing telecommunications infrastructure is ideal to maintain continual contact and to build extensive business relationships.

Sixth, there needs to be an intellectual and creative "infrastructure" to encourage and support this type of development. For example, the notion of starting think tanks or selectively recruiting research and development departments of major corporations would be consistent with this approach. Building and operating training facilities on a contract basis for corporate clients should also be considered. And there will be an on-going need to train and/or recruit talented managers and potential entrepreneurs.

Seventh, Kauai's strategic location between Asia and North America, combined with its global communications infrastructure, enables the island to serve as a time zone bridge for telemarketing and value-added information processing services.

Eighth, development opportunities in this area should have export potential as a component of the economic strategy. Relying on prototype development and licensing as a strategy will provide a source of revenue, employment, and business formation even though production and distribution might occur elsewhere on a worldwide basis.

Finally, this strategy favoring emerging businesses has a direct connection to tourism; this approach gives means of both sustaining the creative processes upon which this industry will depend, and provides themes around which visitor packages could be created. To the extent that such "products" can continually be created, it gives the ability to target specific experiences to visitors, and to make Kauai commonly understood as the place to go for intellectual growth, professional development and creative activity. In other words, Kauai can become a "model" demonstration site in the Pacific for new products, services & training.

3.3 b) Opportunities

In applying these lessons to the economy of Kauai, the best opportunity for diversification lies in emerging information-based or creativity focused business ventures. Some types of products or services that could be developed as part of this industry are found in Exhibit 5.2.

Exhibit 5.2

Creative/information-based products or services

Kauai County

Creative services and production facilities

- o Film-making and related support services
- o Music production and support services
- o Books and magazines
- o Publishing
- o Fashion design
- o Furniture, other consumer product design
- o Arts and crafts design and production

Technical services

- o Industrial design (CAD/CAM operations)
- o Engineering
- o Engineering design
- o Software development and production
- o Data entry
- o Astronomy
- o Energy product development

Research and development

- o Agricultural product development
- o Environmental research and development
- o Waste disposal techniques and recycling
- o Ocean research and development
- o Space industries research
- o Energy production and product research and development
- o Biomedical/biotechnical research and development
- o Medical technology and health care services
- o Testing laboratories
- o Prototype development

Other services

- o Insurance
- o Financial services
- o Credit analysis and collection
- o Telemarketing
- o Public opinion polling
- o Telecommunications
- o Training and skill development
- o Executive conferences and professional development
- o Specialized professional services (patent law, maritime law, international accounting)
- o Language banks, translation capability
- o Athletic training
- o Healing arts (including sports and tropical medicine, spiritual healing, stress management, and wellness programs)

These possible candidates for emerging businesses all share a common set of characteristics, and help define a development strategy for emerging businesses:

- o Uniqueness of product
- o Need for skilled labor and creative talent
- o High "thoughtware" content; little material content
- o Low dependency on goods movement
- o Reliance on attractiveness of place to recruit and retain talent; lifestyle is important to location decisions
- o Relatively low cost to entry; little capital required to start production or services
- o Able to build a critical mass of activity of sufficient density to trigger a self-sustaining momentum of creativity to spawn further ideas, concepts, business ventures, and economic activity.

Types of products and services suggested in the exhibit share these characteristics, and some combination of them represents the foundation for an information-based/creative industry.

The candidates include creative services and production, where the product is either support services or actual production for art, music, literature, fashion, consumer products, and other creative products. Also, technical services including engineering and design, as well as software development and marketing and alternative healing and health care systems, fit these criteria.

The program to support research and development is more ambitious, for it would require ensuring the preconditions to both recruit companies and to attract managers and entrepreneurs needed for that industry. If organized properly, and with a combination of corporate, state and federal support, university affiliations, and local government and private initiative, research and development could be undertaken in a number of areas. Further, that development could be refined and advanced through testing facilities, prototype development and licensing to major companies for full-scale production and distribution.

There are a number of other services that might be possible, all of which fit within the guidelines. Financial services, services relying on telecommunication networks, and training-related activities are other possibilities.

3.4. Support Services and Facilities

This sector provides support for the three "export" oriented sectors, but is equally important on its own. Activities in this area create the conditions under which other sectors can grow. Thus, provision of housing, transportation, a quality education, infrastructure, government services, regulation, land use and tax policy, and other factors are essential to the island economy.

The specific nature of these will be determined in part by how the other sectors develop, but suggestions for a minimal component are provided in the last chapter of the OEDP, in the Action Program.

GOALS AND OBJECTIVES

As required in the guidelines provided by EDA, economic development must be directed by a commonly understood goal, for which a consensus exists among a wide and diverse group of citizens. Given that goal, a set of objectives is developed that specifies what outcomes or results can be targeted, and therefore what measures of progress toward economic development on Kauai can be obtained.

1. Goal of economic development

Based on citizen participation through the OEDP Steering Committee, the compilation of the focus group findings, and key interviews with public, private, and civic representatives, a consensus statement of the goal for economic development was determined. That goal is stated as follows:

"Achieving 'balanced' growth toward a more diversified economy -- thereby increasing the quality of employment opportunities, yet preserving the lifestyle, the unique environment, and the cultural values of Kauai." (1)

There are important elements to this goal statement which require closer examination.

(1) The "Kauai 2000 and Beyond" process currently underway on Kauai, to examine its future and to identify a common vision, parallels completion of the OEDP. Through two workshops in November, 1991 and May, 1992, over 100 participants representing a broad cross section of interests on Kauai were asked to work together to identify a common vision for Kauai's future. From that vision came a mission statement, which in turn was used to develop goals and objectives necessary to accomplish the tasks needed to reach the vision. Participants agreed that the next step was to develop an implementation plan for attaining the selected goals and objectives.

The mission statement developed by the Kauai 2000 and Beyond workshops calls for:

"A community partnership committed to a life of aloha that nurtures our unique environment, cultures, and quality of life."

First, the notion of balanced growth means careful, deliberate growth and expansion of the economy, in ways appropriate to Kauai. It is not rampant, unchecked growth that would destroy the natural features, cultural values, and lifestyle found on Kauai. Nor does it mean zero or slow growth, for that will lead to stagnation, and loss in ability to respond to changing economic conditions.

Second, as stated previously, the economy at present is dependent on the tourism and agriculture sectors, with limitations to employment opportunities and wages levels in both cases. There is, therefore, a need for diversification to avoid the consequences of a downturn in either sector, and to upgrade the employment opportunities available to residents of Kauai.

Finally, whatever form diversification takes, it will have to be consistent with sustaining and enhancing the lifestyle, natural amenities, and cultural values shared by residents, for to erode those will be to debase the entire premise for the economy and to devalue the assets subscribed to by those living and working on Kauai.

2. Objectives

The objectives that were developed to attain the stated goal for economic development are listed in this section. They are organized into five categories, corresponding to the overall Kauai economy and the four interrelated sectors that were discussed under Development Strategy.

A classification system was developed to aid understanding and reference. The five major categories consist of the following:

	<u>Category of objective</u>	<u>Symbol</u>
o	Overall economy	OV
o	Agriculture production/processing	AG
o	Visitor industry	VI
o	Emerging businesses	EM
o	Support facilities and services	SU

Within each category, an objective will be assigned a unique number (For instance, Objective 1 for Agriculture will be labelled AG-1). As will be seen in the following chapter, those identifying numbers are then used as means of classifying actions that should be taken to implement these stated objectives; those also will be assigned a reference number. (For example, the first action recommended under Objective 1, Agriculture will be referenced as AG-1 (1).)

The objectives are presented in Table 6.1, followed by brief comments on each group.

Table 6.1
List of Objectives, by Sector
Kauai County

<u>Sector/objective</u>	<u>Objective</u>
-------------------------	------------------

OV: Overall economy

- | | |
|------|---|
| OV-1 | Ensure effective, participatory management of economic development. |
| OV-2 | Direct economic growth and expansion to reduce vulnerability and improve the quality of employment opportunities. |
| OV-3 | Remain flexible and opportunistic to respond to changes in economic conditions. |

AG: Agricultural sector objectives

- | | |
|------|---|
| AG-1 | Maintain existing products and crop levels to the extent possible. |
| AG-2 | Diversify by seeking crops for export market, where evidence of demand exists. |
| AG-3 | Increase value-added food processing; sell fewer commodities and more finished or processed products. |
| AG-4 | Create "Grown on Kauai" as a market identity. |
| AG-5 | Engage in new product development, conducting research and product testing as necessary. |
| AG-6 | Develop visitors attractions around agricultural operations. |

Table 6.1 (continued)

VI: Visitor industry objectives

- | | |
|------|--|
| VI-1 | Maintain and enhance Kauai's identity as a unique visitor destination. |
| VI-2 | Preserve and improve the quality of the visitor experience on Kauai. |
| VI-3 | Broaden marketing efforts to carefully selected, undeserved niches. |
| VI-4 | Seek additional visitor activity through promotion of specialized themes, focusing on information-based, creative, health and wellness, athletics, and cultural subjects. |
| VI-5 | Use the visitor industry as a means of recruiting or soliciting:
-- new business concepts and opportunities for emerging business
-- existing businesses appropriate to Kauai
-- management and entrepreneurial talent
-- creative and intellectual "masters." |
| VI-6 | Coordinate support for visitor industry among public and private organizations. |

EM: Emerging business objectives

- | | |
|------|--|
| EM-1 | Identify potential areas of opportunity and develop strategy for emerging business. |
| EM-2 | Ensure the continual flow of business ideas and concepts, through research and development, and theme-based tourism. |
| EM-3 | Develop well-coordinated and comprehensive support services. |
| EM-4 | Ensure sources of financing appropriate to emerging businesses. |
| EM-5 | Develop special facilities or amenities to encourage business formation. |
| EM-6 | Link emerging businesses to diversified agriculture, selective tourism, and targeted recruiting. |
| EM-7 | Develop licensing and prototype development as a means of exporting products of Kauai. |

Table 6.1 (continued)

SU: Support facilities and services objectives

SU-1	Improve the quality of basic education in Kauai schools.
SU-2	Focus on skills training appropriate to the creative, health and wellness, and information-based industries.
SU-3	Ensure an affordable range of residential housing and visitor accommodations.
SU-4	Ease congestion through alternative transportation modes.
SU-5	Designate areas of the island to sustain population; preserve agriculture and conservation lands for viewscape, as tourism amenities, and for agricultural production.
SU-6	Use energy conservation or resource management techniques as a means of lowering costs and saving resources.
SU-7	Continue to seek alternative sources of energy, to avoid dependency and to identify new business opportunities.
SU-8	Use County operating and capital budgets, coupled with state and federal funds, in a strategic manner to support infrastructure or initial investment to trigger key economic activities.

The common thread in the first group of objectives, relating to the Overall Economy (OV), is the need for management and organization of both the planning process for economic development, and on-going coordination of actions taken to implement those plans. This is important not only to be effective in such development, but it is needed because of the integrated nature of the objectives. That is, because of the current and future interrelationships among the four sectors of the economy, actions or improvement in one will have consequences for all others.

Two examples emphasize this fact. If alternative transportation is sought, it will have implications for public sector expenditures and thus tax revenues and budget allocations. It will also affect private service operators. Moreover, easing congestion and traffic make access easier for both residents and visitors. In the case of visitors, it maintains the attractiveness of the island as a destination. Finally, if alternative systems or vehicles are used (such as solar vehicles or a well organized demand-responsive mini-bus system), they can be developed as prototype systems, and then used to serve the visitor population. Given the income and educational levels of most visitors, they in turn can become proponents of such systems upon their return to the mainland or elsewhere, building demand for systems developed on Kauai.

Another example is found where a thematic conference is organized on Kauai, attracting leading thinkers and policy-makers around a selected topic. By carefully organizing the event, then gleaning from it ideas, contacts, research and development opportunities, and potential emerging businesses that could be developed on Kauai, there is more at stake than just providing an enriched conference or vacation experience. Such events should be viewed as part of a comprehensive and integrated attempt to diversify the economy into information-based, health and wellness, or creative activities, compatible with Kauai's economy and lifestyle. If the topics result in new agriculture products, energy or transportation alternatives, telecommunication opportunities, alternative healing concepts, or creative and arts production, such conferences will dovetail into other areas of development suggested for Kauai.

These examples demonstrate the necessity to undertake a continual refinement of strategy, based on a solid foundation. But the formal mechanism by which this occurs needs to be constructed and maintained. The objectives for the Overall Economy (OV) are central to this process.

The common thread underlying the Agricultural objectives (AG) is simpler. It consists of maintaining the current base of agriculture, broadening that base through diversified crop production, and value-added processing, and making efforts to develop marketing capability on an industry-wide, integrated basis.

The objectives for the Visitor Industry (VI) also call for preserving the existing base, reinforcing it through improvements to amenities, and support activities that make the Kauai experience comfortable, appealing, and affordable. However, there is more required. To ensure continued attractiveness in a competitive world market, the objectives lead to

three new initiatives. The first is to reexamine existing approaches to marketing, to ensure that it is possible to appeal to as broad a range of visitors as possible, with affordable packages.

The second initiative is needed to differentiate the visitor experience on Kauai from all others. By organizing around themes or niches such as professional development, creative, intellectual and health-oriented topics, and innovative technologies, Kauai can become known for this type of tourism. This will constitute an approach to marketing and promotion that has been underdeveloped by other resort or visitor destinations.

The third initiative is to organize such thematic or targeted tourism to yield other benefits for Kauai, and to contribute to its economic diversification. The objectives of the visitor industry should be directed to support agricultural development, recruitment of targeted firms, and to create resources for emerging businesses.

Each objective relating to Emerging Businesses (EM) addresses different needs for an effective program of business formation. There needs to be a source of business concepts or ideas appropriate to Kauai, coupled with business developers and entrepreneurs to engage in development. Support in the form of facilities, advice, marketing, and finance is also required. These resources must be organized within an overall framework, and well coordinated with essential support from public officials and private organizations.

The important point of the Emerging Businesses objectives is that all of them must be accomplished at the same time. To do one and neglect others misses vital components to a successful program supporting business development. Thus, the strategy for development must be well-conceived, broadly supported, and each participant's role in it clearly defined. It must be implemented in a manner that is flexible and opportunistic, allowing for adjustments and changes as results from initial efforts affect future plans. The simultaneous and integrated nature of business formation makes this a challenge, but as discussed, success in developing emerging businesses is vital to the economic future of Kauai.

The final set of objectives, those related to the Support Facilities and Services (SU), establishes the pre-conditions for agricultural diversification, new initiatives for tourism, and emerging business. A fundamental area of attention is education, but infrastructure and capital spending decisions will also guide how development takes place and will govern the success of the overall development activity. Kauai's dependence on imported oil for the majority of its energy production is another important consideration. The supply of energy thus is subject to cost increases which can only be passed along to residents and businesses. Means of avoiding this dependency on oil imports and vulnerability to cost increases warrant special attention.

ACTION PROGRAM

Based on the analysis of the four key sectors, and the outline of development strategies and objectives from the previous sections, specific actions that are required to complete those strategies are listed in Tables 7.1 to 7.5.

1. Priority actions

As seen in the tables, there are a number of actions -- too numerous to undertake at the same time. Therefore, there are certain key actions that should precede others -- in part because they will be reasonably easy to accomplish, but more because they will help set the development process in motion in the proper direction, as outlined in this plan.

The leading actions, gleaned from the tables, include the following:

1. Convene the Steering Committee, and ensure that an on-going consensus lies behind any actions that are taken; organize properly to carry out an economic development campaign.
2. Form a special committee or task force to investigate information-based opportunities, and then continue to serve as a clearinghouse and advisor to business developers.
3. Form a second special committee to perform a similar investigation and then continue as developer/advisor for creative ventures.
4. Form a third special committee for similar purposes for health and wellness ventures.
5. Form an energy task force to focus specifically on reducing Kauai's dependency on imported oil and to identify energy product and service applies as a new industry.
6. Create a county-wide community development corporation (CDC) to carry out projects to aid business and industry formation.
7. Conduct a detailed public and private review of the educational system, to develop further concrete actions that will not only improve the quality of the existing system, but ensure that it can support and enhance the strategy outlined in this plan.
8. Undertake a review of the marketing of tourism, examining the current image and service in the industry; more importantly, develop a strategic plan that outlines how the strategy focused on creative and information-based themes would be implemented.
9. Develop a small business incubator facility, as a vital resource in a broad effort to develop emerging businesses appropriate to Kauai.

10. Proceed with development of the Fruitfly Disinfestation Facility to treat papaya and other fruits for export out of state.
11. Proceed with the development of and agriculture park where small scale producers can begin operations, develop products, test markets, and build a base of new, diversified products; apply similar resources to create shared facilities to promote food processing enterprises.
12. Organize a business support network that can serve tenants of the small business incubator, the agricultural park, and the food processing facilities providing business advice, management and technical assistance, loan packaging and financial advice, and strategic marketing services; using existing resources such as the SBDC, the RC&D, the KEDB, Chamber of Commerce, OED and DOA Marketing Branch but with careful coordination.
13. Determine the feasibility of a multi-purpose conference and training center, examining the level of demand for such a facility; this analysis should also contain a program plan and marketing approach to develop the type of theme-based conferences proposed in this plan.
14. Complete the Kauai General Plan Update (now underway), including examination of the carrying capacity of infrastructure, environmental preservation, and energy self-sufficiency. Not only are these resources needed for future growth and economic development, but business opportunities should be found within them that will fit within the overall economic development strategy.
15. Create a facilities and improvements plan which will help determine both the location and quality of future development, but it will also define where growth should not occur. These issues, must be addressed in order to move toward diversity and away from vulnerability to worldwide conditions.

2. Responsibility for implementation

It is obvious that all the prescribed actions cannot be implemented at the same time, nor should they be. Likewise, it is also obvious that without diligent management and coordination, the multi-faceted development effort will never be completed. Assignment of clear responsibility for implementation is necessary for successful completion of the OEDP.

The primary responsibility will reside with the Steering Committee, at least in making policy decisions and providing direction. In turn, the Committee should organize a number of sub-committees or task forces on a number of topics -- in part to gain greater expertise, but more to narrow the scope of the actions to a manageable level.

The actual implementation will reside with a number of organizations. Two are critical to the effort -- the Kauai Economic Development Board representing the private sector, and the County Office of Economic Development.

If the recommendation to form a county-wide community development corporation is followed, that entity can then take a major portion of the responsibility for implementing the plan, particularly those areas where facilities or programs supporting the overall strategy need to be built and maintained.

Other key organizations include the following:

- o County Council and Administrative Departments
- o Chamber of Commerce
- o Department of Education and PTSA
- o Kauai Community College
- o State Department of Business, Economic Development, and Tourism
- o Governor's Office and State Legislature

If the major responsibilities are sorted by the four sectors to the Kauai economy, the following become key participants and members of coalitions that are needed within sectors and across the economy for effective economic development.

Agriculture

- o Growers
- o Processors
- o Farm Bureau
- o State Department of Agriculture
- o State Department of Land and Natural Resources
- o Private developers (agriculture park)

Visitor industry

- o Kauai Tourism Promotions Committee
- o Hawaii Hotel Association
- o Hawaii Visitors Bureau
- o Transportation companies
- o Resort associations
- o Tour operators and conference coordinators

Emerging businesses

- o Small Business Associations
- o Electric and telephone companies
- o Banks, other financial institutions
- o State High Technology Development Corporation
- o Hawaiian Strategic Corporation
- o Entrepreneurs and business developers
- o Business advisors and service providers

Support facilities and services

- o County Public Works, Finance, and Planning Departments
- o State Department of Transportation

Table 7.1

Action Program: Overall Economy (OV)

Number	Objective
OV-1	Ensure effective, participatory management of economic development.
OV-2	Direct economic growth and expansion to reduce vulnerability and improve the quality of employment opportunities.
OV-3	Remain flexible and opportunistic to respond to changes in economic conditions.

Number	Actions needed
OV	(1) Use OEDP Steering Committee in following ways: <ul style="list-style-type: none"> -- as a clearinghouse for ideas and activities -- to coordinate implementation of the OEDP -- as a focal point for public-private initiatives.
OV	(2) Conduct annual review of OEDP, including changes to Economic Profile.
OV	(3) Make periodic revisions to OEDP, as needed.
OV	(4) Delegate to appropriate committees for further investigation and implementation of specific actions.
OV	(5) Coordinate with other activities related to Kauai economy.
OV	(6) Participate in and encourage collaborative discussions such as Kauai 2000 process.
OV	(7) Assist and provide background for current efforts to upgrade and revise the General Plan for Kauai; provide similar aid to other planning efforts.
OV	(8) Conduct active information campaign to publicize OEDP process; conduct public meeting; submit information to news media on periodic basis.
OV EM-1	(9) Examine merits of forming county-wide economic development corporation, to serve as vehicle for guiding and directing strategy for business formation.
OV EM-1	(10) If feasible, establish county-wide community development corporation, as sponsor of shared use facilities, such as incubator or product development center, training facility, or agriculture park.

Table 7.2

Action Program: Agriculture (AG)

Number	Objective
AG-1	Maintain existing products and crop levels to the extent possible.
AG-2	Diversify by seeking crops for export market, where evidence of demand exists.
AG-3	Increase value-added food processing; sell fewer commodities and more finished or processed products.
AG-4	Create "Grown on Kauai" as a market identity.
AG-5	Engage in new product development, conducting research and product testing as necessary.
AG-6	Develop visitors attractions around agricultural operations.

Number	Actions needed
<u>Existing crop production</u>	
AG-1 (1) AG-2	Lobby U.S. Congress more effectively in support of favorable legislation in Farm Bill.
AG-1 (2) AG-2	Monitor and analyze changes and developments in international trade agreements affecting agriculture production.
AG-1 (3) AG-2 AG-3	Seek operational fruitfly eradication facilities; gain U.S. Department of Agriculture and international clearance for new and existing crops.
AG-1 (4) AG-2	Adjust property tax rates and regulations for agricultural land to remove disincentives to living on the land or to maintain them as non-native forests (*).

(*) Note: Forestry is not recognized as an agricultural use; many farmers choose to destroy trees rather than pay higher assessments; in spite of exemptions for native forests, there is a disincentive to maintain nonnative stands of trees.

AG-1	(5)	Establish a low interest rate loan fund to enable part-time farmers to become full-time, dedicated producers.
AG-2		
AG-1	(6)	Assist local farmer/entrepreneurs to put funding request packages together, including business plans, projections, etc; make use of small business incubation and referral services.
AG-2		
AG-1	(7)	Provide technical/vocational training to increase skills of local labor supply, including substitution of highly specialized personnel needed for agricultural product development (e.g., expensive talent for experimental seed program provided from mainland on a rotating basis).
AG-2		
AG-1	(8)	Provide early education program to motivate potential growers and product developers; provide support for 4-H program and recognize youth accomplishments in schools.
AG-2		
AG-1	(9)	Lengthen the runway at Lihue airport to handle direct flights, then provide overnight delivery of products.
AG-2		
AG-1	(10)	Sell to local customers, as a form of import substitution; survey prospective users (hotels, resorts) to determine needs, quantities, and qualities of existing and potential products (e.g. fresh produce, meats, flowers, etc.). Match users with growers.
AG-2		
AG-5		

Diversified agriculture

AG-2	(11)	Provide targeted marketing and financial assistance to a few selected products with the highest potential, including the following likely to be grown by small producers: floriculture, fruits, and truck crops. Other products are likely to be grown by corporate producers at a larger scale, but still would warrant assistance; such products include: guava, experimental seeds, coffee, and macadamia nuts.
AG-2	(12)	Explore new crops and products through R & D subsidies and industry feasibility studies, including the following: spices, exotic herbs, vanilla, shredded green papaya (to Japan), forestry and the sale of hardwoods.
AG-2	(13)	Develop a system of agricultural parks, with below market costs for leasing land, business and technical assistance, and marketing advice; focus on smaller producers willing to experiment on diversified products.
AG-3		
AG-2	(14)	Develop aquaculture enterprises and use ocean resources for food production and processing.
AG-5		

Table 7.2
Action Program

Number	Action needed
AG-2 (15)	Create an aquaculture research and development park to assist to assist with the development of aquaculture enterprises while providing visitor attractions.
AG-2 (16)	Investigate feasibility of use of marketing cooperatives, to sell products on a combined basis for many producers; and conduct centralized marketing programs.
AG-2 (17)	Seek contracts with major Japanese and U.S. product brokers and buyers (e.g., Safeway, Kroger, etc.)
AG-2 (18) AG-3 AG-5	Become members of relevant associations (e.g., American Culinary Association), so that growers can determine what food products have demand, and could be produced on Kauai.

Food processing

AG-3 (19)	Create incubator-type facilities with food processing equipment on a shared-use basis, available to produce small quantities of newly developed products.
AG-3 (20) AG-5	Conduct feasibility analysis of re-establishing cattle feedlots and beef processing facilities.

Market identity

AG-4 (21)	Create a of "Grown on Kauai" labelling program to establish niche market identity.
AG-4 (22)	Continue participation in trade shows; arrange for mainland buyers to represent multiple lines of Kauai-based products.
AG-4 (23)	Market gift baskets featuring Kauai products to hotels, restaurants and other retail outlets.

Research and development

AG-5 (24)	Maintain on-going program of research and development for new products and more efficient production of existing products; collaborate with USDA and University of Hawaii in such research, and selectively sponsor own research efforts.
AG-5 (25)	If hardwood production proves feasible, seek opportunities to manufacture and assemble finished products on Kauai.

Visitor attractions

(26)	Support through government incentives the existing private sector R & D activities and market the island as a choice location for agriculture R & D enterprises.
AG-6 (27)	Create displays of local produce and other agricultural products in locations island-wide.

Action Program: Agriculture (AG)

Number	Action needed
AG-6 (28)	Use agricultural facilities as tourism amenities; provide "working plantation" type experiences, with demonstrations of producing and processing different products (e.g. Guava K.A.I. Visitor Center).
AG-6 (29)	Develop the agricultural "parks" which allow visitors to walk through and enjoy learning about the particular commodity (e.g. Guava K.A.I.)
(30)	Create a "living museum" at a sugar plantation showing the cultural/historical development of the sugar industry on Kauai and the realities of the present-day industry.
AG-6 (31)	Negotiate access agreements between plantations and hotels or tour operators to conduct outings (including bike rides, hiking trails, horseback rides, agricultural/ecological tours) on agriculture lands. Kauai and the realities of the present-day industry.

Table 7.3
 Action Program: Visitor Industry (VI)

<u>Number</u>	<u>Objective</u>
VI-1	Maintain and enhance Kauai's identity as a unique visitor destination.
VI-2	Preserve and improve the quality of the visitor experience on Kauai.
VI-3	Broaden marketing efforts to carefully selected, under-served niches.
VI-4	Seek additional visitor activity through promotion of specialized themes, focusing on information-based, creative, health and wellness, athletics, and cultural subjects.
VI-5	Use visitor industry as a means of recruiting or soliciting: -- new business concepts and opportunities for emerging business -- existing businesses appropriate to Kauai -- management and entrepreneurial talent -- creative and intellectual "masters."
VI-6	Coordinate support for visitor industry among public and private organizations.

<u>Number</u>	<u>Action needed</u>
<u>Unique visitor destination</u>	
VI-1 (1)	Continue to assess competing destination vacation areas to determine how competitive advantage can be maintained; conduct on-going market research and product improvement.
VI-1 (2) VI-6	Differentiate from other vacation or recreation experiences by better organization and use of promotional themes.
VI-1 (3)	Continue to conduct national campaign exclusively for Kauai, emphasizing the quality of a Kauai experience.
VI-1 (4) VI-3 VI-4	Create a marketing campaign which highlights the unique outdoors experience which Kauai offers to eco- and adventure tourists emphasizing the large number of beach parks, hiking trails, forest reserves, and camping and picnicking facilities.
VI-1 (5)	Support hotel management courses and training at University of Hawaii; establish as pre-eminent in country in that area.

Table 7.3

Action Program: Visitor Industry (VI)

- VI-1 (6) Establish program for visitor industry training and professional development at KCC, particularly for on-going training in theme-based promotion and services; establish as preeminent in county in those areas.
- VI-4
- VI-1 (7) Encourage cooperative efforts by schools and employers to provide training, through an apprenticeship program (including culinary arts, events management, grounds maintenance and landscaping, and other skills).
- VI-3
- VI-1 (8) Emphasize service training, including personal grooming, demeanor, and attitude of hotel staff.

Improve amenities

- VI-2 (9) Analyze carrying capacity for future resort development, to anticipate physical requirements and impacts from development; determine limits to expansion and seek optimal locations; coordinate with provision of public facilities and services (e.g. water, sewers, electrical powers, streets and roads, use of public transit).
- VI-2 (10) Limit further mega-hotel, large-scale resort development until occupancy rates improve and the industry is stabilized.
- VI-2 (11) Preserve viewscapes, develop cultural and physically attractive locations, and improve access to sites.
- VI-2 (12) Maintain height limitations and other building standards.
- VI-2 (13) Complete inventory of cultural and historic sites, and make assessment of tourism appeal; develop improvements strategy for those selected for promotion.
- VI-2 (14) Post attractive well-placed signs at selected visitor attractions throughout the island. Many of Kauai's greatest attractions are little known and poorly identified. This is particularly the case at beach parks and historical and archeological sites.
- VI-2 (15) Improve brochures and maps, and develop consistent and attractive directional and interpretative signage for cultural, archeological, and historical sites; promote the Kauai heritage in fashion similar to the National Trust for Scotland or England.
- VI-2 (16) Create a program to ensure that parks are properly maintained; use an adopt-a-park program as a fund raiser for various school and civic organizations; this gives personal attention to the park, yet saves public costs.

Action Program: Visitor Industry (VI)

Number	Action needed
VI-2 (17)	Develop, according to the Hanapepe/Eleele Community Development Plan, the upper part of the Hanapepe River Valley as a large scale regional park to include camping and picnicking areas, with trails along the river from the park to the river's mouth.
VI-2 (18)	Construct athletic facilities in Lihue according to the Lihue Complex master plan.
VI-2 (19)	Develop a promotional program and marketing plan targeted to mainland and overseas companies combining training and professional development with recreation. companies combining training and professional development with recreation. Facilities should include state-of-the-art video and teleconferencing equipment. Sponsors should seek commitments to use the facility from possible clients as evidence of demand.
VI-2 (20)	Conduct feasibility analysis for conference center and training facility.
VI-4	
VI-2, 3,4 (21)	Establish international professional film production training institute, to attract filmmakers from all over the world and within all areas of the industry, to Kauai to hold support and teach seminars and workshops
VI-2 (22)	Create a transportation master plan which provides for circulation around and between resort and commercial areas. Local small businesses and hotels can benefit from the training and educational events only if access and public transport is available between conferences sites and businesses.
VI-2 (23)	Develop island-wide bikeway system -- designate Kealia to Anahola cane-haul road (soon to be taken out of use) as a bikeway/nature park and horseback trail. -- divert the existing portion of the Kapaa bikepath which goes along the highway to come in closer to the shoreline in the vicinity of Kapaa Shores. -- extend the existing Kapaa bike path to Kealia in order to complete the bikeway along the coast from Wailua to Anahola. -- provide bikelanes along all major thoroughfares.
VI-2 (24)	Develop walking trails around all major recreation areas, including Lydgate Beach Park to Anahola, the Nawiliwili/ Kalapaki Bay area, the Poipu Beach area, and the Hanapepe Salt Pond peninsula.
VI-2 (25)	Extend the runway at Lihue Airport to accommodate direct flights.

Action Program: Visitor Industry (VI)

- VI-2 (26) Explore feasibility of purchase or charter of aircraft for direct flights from mainland for professional or trade association groups; the Kauai vacation and educational/ cultural experience could begin even during the flight to Kauai.
- VI-3
- VI-4
- VI-2 (27) Support establishment of smaller, more personal hotels.
- VI-2 (28) Encourage bed and breakfast type accommodations; set up a central reservation number, make the number available to travel agents, and conduct inspection program to ensure quality.
- VI-2 (29) Reconstitute the Main Street programs on an island-wide basis. Focus specifically on Hanalei, Hanapepe, and Waimea as tourist destinations. Consider listings on the National Register of Historic Places either on a district or single site basis.
- VI-2 (30) Assess needs of Main Street communities; ensure they are promoted as visitor attractions.

Broaden marketing efforts

- VI-3 (31) Increase per visit spending, length of stay, and rate of return by attracting mid-sized conventions of professional and trade groups.
- VI-3 (32) Create identity as the meeting place for educational training seminars and conventions. The island is increasingly gaining a reputation, for example, as being on the cutting edge of the health and wellness field through diverse seminars and conferences put on by the Kauai Foundation for Continuing Education.
- VI-4
- VI-3 (33) Create a new slogan which incorporates all of Kauai's assets. Similar to the "Big Island" for Hawaii or the "Meeting Place" for Oahu, Kauai's slogan should give the impression that there is a lot to do and see, while inviting the visitor to discover more about the island. Two possible candidates are suggested: "Kauai: A Neighborly Place" or "Thinking Person's Paradise."
- VI-3 (34) Establish a native Hawaiian task force to identify ways to feature Native Hawaiian culture in a non-exploitative manner; use as an educational resource.
- VI-4

Number Action needed

Theme-based promotion

- VI-4 (35) Develop educational, ecological, athletic, and cultural packages. Among the information-based themes that should be considered, the following show promise to generate tourist activity:
- Training and executive seminars
 - Software development, biotechnical
 - Arts, creative, and media production
 - Wellness, health care
 - Ecotourism, environmental preservation
 - Aquaculture, alternative energy
 - Hawaiian history and culture
 - Sports events (Quarterback Challenge, Golf Grand Slam, winter league baseball, marathon, surfing contests, etc.)
- VI-4 (36) Conduct continuous market research -- seeking niches, reinforcing the strategy of content-enriched, information based/creative packages, and testing market appeal of high content, theme-based packages.
- VI-2 (37) Emphasize training hotel employees and resort workers in service, friendliness and neighborliness; add briefings on topics chosen for promotion in theme-based packages, to give working knowledge of those topics.
- VI-4

Recruiting based on tourism

- VI-5 (38) Use theme-based conferences and seminars as means of recruiting businesses (software, health and wellness, financial services, etc.) or artist/entrepreneurs (film, music, art, and support services).
- VI-5 (39) Establish a program of Kauai fellowships, identifying leading business, intellectual, and artistic leaders; designate them as "masters" or entrepreneur/artist-in-residence, and organize to take advantage of their presence -- both as a tourism attraction and as means of seeking business opportunities.
- VI-4
- VI-5 (40) Create an international professional institute to attract filmmakers, and to demonstrate the viability of film-making as our industry on Kauai.
- VI-5

Coordinate visitor industry

- VI-6 (41) Appoint a joint agricultural and tourism council to explore areas of mutual benefit and to coordinate promotional efforts.

Table 7.3
Action Program: Visitor Industry (VI)

Number	Action needed
VI-6 (42)	Convene meetings between local entrepreneurs and hotel/resort operators to see what services, products, and other needs could be met locally; hold periodic meetings to discuss concepts, products, and marketing; find opportunities for import substitution.
VI-6 (43)	Coordinate implementation of an annual promotional plan and county-wide strategy.
VI-6 (44)	Provide annual update and revision of county-wide visitor industry strategy.

Table 7.4
Action Program: Emerging Business (EM)

Number	Objective
EM-1	Identify potential areas of opportunity and develop strategy for emerging business.
EM-2	Ensure continual flow of business ideas and concepts, through research and development, and theme-based tourism.
EM-3	Develop well-coordinated and comprehensive support services.
EM-4	Ensure sources of financing appropriate to emerging businesses.
EM-5	Develop special facilities or amenities to encourage business formation.
EM-6	Link emerging businesses to diversified agriculture, selective tourism, and targeted recruiting.
EM-7	Develop licensing and prototype development as a means of exporting products of Kauai.

Number	Action needed
--------	---------------

Emerging business strategy, opportunity identification

- | | |
|--------------|--|
| EM-1 | (1) Organize sub-committee or task force to investigate specific opportunities and develop more refined strategy for information based companies. |
| EM-1 | (2) Organize similar task force to investigate special opportunities for creative products and services; likewise, use the same approach for health and wellness services. |
| EM-1 | (3) Inventory existing resources and develop industry-specific strategies for (1) arts, film, and music production (2) technology research and development (3) technical services (4) telecommunications and data processing. |
| EM-2
EM-5 | (4) Conduct focus group or workshop to brainstorm approaches for use of existing telecommunications system; the advanced fiber optic telecommunication system in place has excess capacity which could be used for business development. |
| EM-2 | (5) Seek opportunities in alternative energy areas, including solar photovoltaic and batteries, waste-to-energy generation, and transportation systems. |
| EM-2 | (6) Establish relationships with in-state research organizations (University of Hawaii, USDA, medical facilities, corporate research and development groups, High Technology Development Corporation, and others) to seek development opportunities. |

Table 7.4
Action Program: Emerging Businesses

<u>Number</u>	<u>Action needed</u>
EM-2 (7) EM-6	Use concept-based, thematic conferences as means of generating ideas and business concepts, and for identifying entrepreneurs willing to relocate.
EM-2 (8) EM-3	Conduct discussions with Pacific Missile Range Facility (PMRF) on research collaboration, labor needs, and provision of local services to support their programs.
EM-2 (9) EM-6	Consider establishment of research and development institutions, or local offices of national and international research organizations, as part of selective recruiting; If established, develop continuing and public forum to publicize and further refine concepts that could be applied in Kauai.
<u>Education, business services, and start-up assistance</u>	
EM-3 (10)	Investigate the connection between secondary schools, Kauai Community College, and labor training organizations to provide needed skills for emerging businesses; organize task force to assess links between education and emerging business strategy.
EM-3 (11)	Provide vocational training in technical skill areas needed by emerging business; set up Private Industry Council to provide contractual training custom-tailored to needs of emerging firms.
EM-3 (12)	Emphasize training of paralegals, technicians, and business development specialists.
EM-3 (13)	Recruit patent attorneys, high tech financiers, venture capitalists, and marketing specialists.
EM-3 (14)	Use Junior Achievement and Entrepreneurs Clubs to develop interest among youth in business development.
EM-3 (15)	Maintain current information (publications, periodicals and journals) on technology development, as a source of information-based business opportunities; maintain in accessible form in library or other public location.
EM-3 (16)	Continue compilation and publication of product directory for Kauai.
EM-3 (17)	Provide "incubation" services, by organizing a network of local business service providers, focused on the needs of clients; such services should include management and technical assistance, loan packaging, marketing, and matching local investors with banks and other sources of funds.

Table 7.4
Action Program: Emerging Business (EM)

7.17

<u>Number</u>	<u>Action needed</u>
EM-3 (18)	Provide access to on-line data services for market analysis, technical reference (Dow-Jones statistics, Dodge construction reports, Valu-line, etc.).
EM-5	
EM-3 (19)	Set thresholds for regulations and taxes to assist start-ups; provide tax relief and limited exemptions for small enterprises.
EM-3 (20)	Appoint a small business advocate or ombudsman to assist emerging firms complete licensing and registration; use this person to make the case for regulatory relief or expedited applications on behalf of the clients.
EM-3 (21)	Publicize "success" stories on Kauai, to provide role models.

Project financing

- EM-4 (22) Establish venture capital forum on Kauai, inviting both residents and qualified visitors; invite mainland business owners to make presentations on Kauai; link into mainland investors and advisory network for venture capital.
- EM-4 (23) Establish a financial "angels" network, matching individual investors with potential companies formed on Kauai; use visitor population as source of prospective investors.
- EM-4 (24) Provide assistance in identifying, then applying for SBIR (Small Business Innovation Research) contracts; these contracts are very useful for product development.
- EM-4 (25) Conduct feasibility analysis of a Kauai-based Strategic Investment Fund or Revolving Loan Fund for early stage financing, as a public/private venture; include banks and the County as funding sources.

Facilities

- EM-5 (26) Establish small business incubator or product development center as lower cost shared-use facility.
- EM-5 (27) Establish shared-use center for training and professional development, to be used on short-term basis by visiting firms.
- EM-5 (28) Set up testing laboratories, if feasible.

Table 7.4
 Action Program: Emerging Businesses (EM)

Number	Action needed
EM-5 (29)	Explore island-wide local area network (LAN) to promote technology development, encourage business formation, and provide part of information-based, creative infrastructure needed for continual stimulation of ideas. Kauai is already wired in part for such a resource; this would add more use of the existing system.
EM-5 (30)	Explore link with KCC's Internet system and the state FYI network for communicating about economic development activities and potential new companies on Kauai.
EM-5 (31)	Encourage developers of offices and residential complexes to include data transmission and other telecommunications amenities in some or all of the units.
EM-5 (32)	Encourage cottage industries with zoning and licensing procedures; make this option available on a selective basis.
EM-5 (33)	Establish think tanks or research facilities on a targeted basis; shared-use facilities should be explored for the following areas: biotechnology, health care delivery, telecommunications, artificial intelligence, software development, multimedia and computer art, sports and tropical medicine, alternative energy, and others.
EM-5 (34)	Examine feasibility of shared-use facilities for film, music and art creation and production, including small-scale production and combined marketing and distribution (similar to order fulfillment for software).
EM-6 (35)	Promote such facilities as a visitor attraction; appeal to a fantasy experience where a tourist could make films, create art, or make a recording using shared-use facilities and professional instruction.

Selective recruiting

EM-2 (36)	Use the various multi-tenant facilities (small business incubator, agricultural park, training center), business services (incubation services), access to capital, favorable government and business support, links to R&D institutions and universities, and idea generation through conferences and seminars as evidence of a comprehensive and holistic approach to business development.
EM-5	
EM-6	

Creation of these approaches to business formation results in assets that will serve as an integral part of any recruitment campaign.

Table 7.4
 Action Program: Emerging Businesses (EM)

<u>Number</u>	<u>Action needed</u>
EM-6 (37)	Conduct selective recruiting of appropriate light manufacturing and assembly operations; candidates would include the following, among others: <ul style="list-style-type: none"> -- software development and product testing -- software order fulfillment, where orders for software could be replicated, packaged, and shipped from a shared-use facility; support services (via an 800 telephone number) could be linked to this operation -- printing, publishing, and media production -- film, music, and art production and distribution facilities -- assembly of prototype electric/solar vehicles (see Hanapepe Market Feasibility Analysis, with plans for reuse of AMFAC site)
EM-1 (38) EM-6	Conduct effort to recruit research and development activities; develop strategy and conduct campaign to attract R&D units of major corporations or industry consortia.
EM-6 (39)	Establish a campaign to recruit corporate training departments' activities to Kauai.
EM-6 (40)	Recruit managers and entrepreneurs, willing to start businesses

Prototype development and licensing

EM-7 (41) EM-3	Draft model agreements for joint ventures, strategic alliances, and licensing agreements.
EM-7 (42) EM-3	Provide legal assistance to firms seeking to "export" information-based products or services.
EM-7 (43)	Assist in making contacts with major firms on mainland or overseas, willing to work with Kauai-based emerging businesses.

Table 7.5

Action Program: Support Facilities and Services (SU)

Number	Objective
SU-1	Improve the quality of basic education in Kauai schools.
SU-2	Focus on skills training appropriate to the creative, health and wellness, and information-based industries.
SU-3	Ensure an affordable range of residential housing and visitor accommodations.
SU-4	Ease congestion through alternative transportation modes.
SU-5	Designate areas of the island to sustain population; preserve agriculture and conservation lands for viewscape, as tourism amenities, and for agricultural production.
SU-6	Use energy conservation and resource management techniques as means of lowering costs and saving resources.
SU-7	Continue to seek alternative sources of energy, to avoid dependency and to identify new business opportunities.
SU-8	Use County operating and capital budgets, coupled with state and federal funds, in a strategic manner to support infrastructure or initial investment to trigger key economic activities.

Number	Action needed
<u>Education</u>	
SU-1 (1)	Improve basic education through parent, teacher, administration collaboration; conduct review of educational system.
SU-1 (2)	Approach foundations, U.S. Department of Education, or other sponsors to fund program to upgrade schools, to supplement public funding, and to provide extra resources needed for effort.
SU-1 (3)	Emphasize technical education and on the job (OJT) training.
SU-1 (4)	Upgrade computer training in elementary schools.
SU-1 (5)	Use teleconferencing to bring in educational programs from Oahu and the mainland; use resources of University of Hawaii and elsewhere.
SU-1 (6)	Set up Technology Academy, similar to the HTDC project in Mililani, with corporate support and collaboration.

Education

- | | |
|----------|---|
| SU-1 (1) | Improve basic education through parent, teacher, administration collaboration; conduct review of educational system. |
| SU-1 (2) | Approach foundations, U.S. Department of Education, or other sponsors to fund program to upgrade schools, to supplement public funding, and to provide extra resources needed for effort. |
| SU-1 (3) | Emphasize technical education and on the job (OJT) training. |
| SU-1 (4) | Upgrade computer training in elementary schools. |
| SU-1 (5) | Use teleconferencing to bring in educational programs from Oahu and the mainland; use resources of University of Hawaii and elsewhere. |
| SU-1 (6) | Set up Technology Academy, similar to the HTDC project in Mililani, with corporate support and collaboration. |

Number Action needed

SU-1 (7) Recognize and use "kupuna" retirees familiar with the land and environment as master teachers; make use of their knowledge and experience.

Skills training

SU-2 (8) Consider setting up Private Industry Council and make use of JTPA programs; use as part of recruiting efforts.

SU-2 (9) Consider apprenticeship program or mentoring arrangements for diversified agriculture, product development and packaging for tourism, health and wellness, or information-based/creative ventures.

Housing

SU-3 (10) Use cluster development to make efficient use of infrastructure and to lower land costs.

SU-3 (11) Make more state land available for development.

SU-3 (12) Request state to donate lands for affordable housing.

Transportation

SU-4 (13) Use smaller buses or mini-vans on fixed schedules to supplement public transit service; continually identify pockets of demand for public transit services and match with flexible scheduling and vehicle size to increase service; encourage companies and community groups to petition for service if a set threshold of demand can be demonstrated.

SU-4 (14) Develop company or employer-sponsored van or bus service (e.g. PMRF, sugar plantations, hotels, etc.) Set up ridesharing collection points, where drivers headed to same destination could fill cars and provide rides.

SU-4 (15) Encourage car-pooling, through media campaign and parking rate concessions.

SU-4 (16) Encourage employers and individuals to work at home, lessening the need for travel, where possible.

SU-4 (17) Develop bikeway system (see Visitor Industry)

Action Program: Support Facilities and Services (SU)

Number	Action Needed
--------	---------------

Environment, land use and zoning

- | | |
|------|---|
| SU-5 | (18) Recognize environment as greatest asset and attraction; conserve environment to ensure a quality visitor experience. |
| SU-5 | (19) Channel growth to areas where more efficient services and infrastructure are provided; discourage growth from areas requiring higher public and private costs to develop and maintain. |
| SU-5 | (20) Use comprehensive planning process to determine carrying capacity, optimal locations for future development and upgrading of current development and infrastructure. |
| SU-5 | (21) Enforce current zoning regulations; put time limits on approved actions to "use it or lose it" if development does not occur. |
| SU-5 | (22) Maintain the "balanced growth" approach until infrastructure and development plans are in place. |
| SU-5 | (23) Provide shoreline access; enforce existing agreements and regulations. |
| SU-5 | (24) Expand the "adopt-a-highway" program. |
| SU-5 | (25) Develop education programs at elementary level to teach value of environment; provide training for teachers. |

Energy conservation/resource development and management

- | | |
|------|--|
| SU-6 | (26) Establish task force to identify means of reducing Kauai's dependency on imported oil. |
| SU-6 | (27) Educate youth on conservation of energy and water. |
| SU-6 | (28) Incorporate energy conservation factors into building code. |
| SU-6 | (29) Continue active participation in Public Utilities Commission's Integrated Resource Planning (IRP) process, to promote conservation and demand-side management techniques. |
| SU-6 | (30) Support program of energy audits and retrofits. |
| SU-6 | (31) Encourage recycling to reduce solid waste volume. |
| SU-6 | (32) Explore feasibility of solid waste incineration as energy source for power generation. |

Technology opportunities

- SU-7 (33) Continue to seek opportunities for solar, hydro, and other alternative forms of energy.
- SU-7 (34) Establish program for solar water heaters through Kauai Electric, with financing through electric bills for conversions.
- SU-7 (35) Support private sector initiatives to develop electric powered vehicle or photovoltaic technology; use Kauai as showcase for such applications and export prototypes or license technology.

Tax policy, government regulation

- SU-8 (36) Consider user-oriented taxes to cover costs, such as waste disposal fees or per auto tax to reflect the amount of use or number of vehicles.
- SU-8 (37) Increase contracting of government services to reduce costs, if possible, and thereby lessen tax burden.
- SU-8 (38) Provide incentives for energy conservation, land conservation, and historic preservation.
- SU-8 (39) Consider designation and development with enterprise zones
- SU-8 (40) Decrease tax burden; increase assessments only if house is sold.
- SU-8 (41) Determine impacts of regulations on emerging business; provide relief up to threshold of size and assistance in navigating the process.
- SU-8 (42) Convene business and citizen groups to seek ways to streamline regulations, and find means of participation.

OVERALL ECONOMIC DEVELOPMENT PLAN (OEDP)

Final Report
Volume II: Appendices

Submitted to:

The OEDP Steering Committee
County of Kauai

Under the sponsorship of:

Kauai Economic Development Board (KEDB)
Office of Economic Development (OED)
County of Kauai

Submitted by:

Pryde, Roberts Development Services
Alexandria, Virginia

August, 1992

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APPENDIX A: OEDP STEERING COMMITTEE MEMBERS

1. Glenn Sato County, Office of Economic Development
2. Mike Veith County, Finance Department
3. Barbara Robeson County, Planning Commission
4. Joe Munechika County Council

5. Ezra Kanoho State Legislator, Kauai County
6. Maurice Kaya State of Hawaii, DBED Energy Office
7. Bob Agres State of Hawaii, DBED Community-based Economic Development
8. Edwin Pettys State of Hawaii, DLNR Forestry Division

9. Melvyn Kihara Bank of Hawaii, KEDB
10. Wayne Richardson (4) Chamber of Commerce, KEDB
11. Sue Kanoho Kauai Economic Development Board

12. Jim O'Donnell Kauai Community College
13. June Stark Kauai Community College

14. Barnes Riznik Kauai Historic Preservation Commission
15. Marion Penhallow Wilcox Hospital
16. Mike Machado ILWU, Kauai Planning Commission
17. Luella Lem Native Hawaiian

18. Bill Peay (4) U.S. Department of Defense (PMRF)
19. Michael Woltman P.I.G.
20. Peter Yukimura Koa Trading Company
21. John Hoxie McBryde Sugar Company

22. Gary Hooser (3) Kauai Business and Real Estate Magazine
23. Carlotta Quarre (2) Kalapaki Bay Resort Association
24. Alton Miyamoto Kauai Electric Company

25. Roy Oyama (1) Pioneer Seed Company
26. Dick Argus Kauai Cable Company
27. Tad Miura M. Miura Store
28. Greg Pai Office of State Planning
29. Linda Colburn Office of Hawaiian Affairs

Numbers in brackets indicate individual also participated in the focus groups, according to the number of the session.

APPENDIX B: FOCUS GROUP PARTICIPANTS

Session One: Diversified and Traditional Agriculture
December 9, 1991 (morning)

- | | | |
|-----|------------------|-------------------------------------|
| 1. | Jack Gushigen | Kilauea Agronomics, Inc., Guava Kai |
| 2. | Carol Hariguchi | Hariguchi Rice Mill and Taro Farm |
| 3. | Keith Smith | McBryde Sugar Company |
| 4. | Karen Caires | Kipu Kai Ranch, UH Ag Extension |
| 5. | Roy Oyama (S) | Pioneer Seed Company |
| 6. | Mike Furukawa | Lihue Plantation Company |
| 7. | Judy Peckenpaugh | Kauai Tropicals |
| 8. | Bruce Robinson | Gay & Robinson Sugar Company |
| 9. | Mike Strong | Kilauea Farms |
| 10. | Gary J. Figueroa | Kauai Plantscape Systems |
| 11. | Ted Blake | Napohaku Farm |

Session Two: Tourism and Related Development
December 9, 1991 (afternoon)

- | | | |
|-----|---------------------|-------------------------------------|
| 1. | Mel Ventura | Ventura Development Corporation |
| 2. | Gordon Kiyabu | Hawaii Visitor's Bureau, Kauai |
| 3. | Kamika Smith | Smith's Tropical Paradise |
| 4. | Margy Parker | Poipu Beach Resort Association |
| 5. | Kaleo Patterson | Ko'olau Hui'ia Church |
| 6. | David Elpern | Kauai Foundation for Continuing Ed. |
| 7. | Ray Blouin | Waimea Plantation Cottages |
| 8. | Roselle Bailey | Ka-imi-naauao-o'hawai'i nei |
| 9. | Tani Bova | Princeville Resort Association |
| 10. | Carlotta Quarre (S) | Kalapaki Bay Resort Association |

Session Three: Emerging Businesses, including Manufacturing, Light
Assembly and Food Processing
December 11, 1991 (morning)

- | | | |
|----|------------------|-------------------------------------|
| 1. | John Wada | Jack Wada Electronics |
| 2. | Carol Bain | Kauai Products Council |
| 3. | Gary Hooser (S) | Kauai Bus. and Real Estate Magazine |
| 4. | Jim Frazier | Kilauea Agronomics, Inc. |
| 5. | Wayne Katayama | KAI Kukui Jams & Jellies |
| 6. | Walter Lappert | Lappert's Ice Cream |
| 7. | Charlie Kawakami | Big Save |
| 8. | Bill Williamson | First Hawaiian Bank |
| 9. | Ken Stokes | Entrepreneur |

Focus Group Participants (continued)

Session Four: High Technology, Telecommunications, and Energy
Development, December 11, 1991 (afternoon)

- | | | |
|-----|----------------------|-----------------------------------|
| 1. | John Dunn | John Dunn Associates |
| 2. | Wayne Richardson (S) | Chaney Brooks Real Estate |
| 3. | Norman Ahu | Hawaiian Tel |
| 4. | Bill Bass | High Tech Development Corporation |
| 5. | Dr. Quentin Belles | County Computer Board |
| 6. | Randy Hee | McBryde Sugar Company |
| 7. | Ron Richmond | The Solar Electric Company |
| 8. | Alton Miyamoto | Kauai Electric Company |
| 9. | Ned Dana | Run Computer Run |
| 10. | Chris Cook | Office of Economic Development |
| 11. | Bill Peay (S) | U.S. Department of Defense (PMRF) |

(S) denotes individual also is member of OEDP Steering Committee.

APPENDIX C: ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS
(Economic Development Administration (EDA),
U.S. Department of Commerce)

The following summary of EDA programs is taken from the Federal Register, Part IV: "Economic Development Administration Programs for Fiscal Year 1992; Availability of Funds Notice;" Volume 57, No. 23/Tuesday, February 4, 1992.

The Economic Development Administration's stated overall goal is "to support projects designed to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions of the Nation and to address economic dislocations resulting from sudden major job losses".

Priority consideration for funding will be given to areas which among other criteria demonstrate the following:

- Large concentration of low income families
- Low labor force participation rates
- Substantial loss of population due to the lack of employment opportunities
- Unusually large numbers (or high rates) of business failures or farm loan foreclosures
- High farm credit delinquencies
- Sudden major layoffs or plant closures
- Projects located in authorized and dedicated enterprise zones

EDA gives special consideration to projects that address the needs of rural communities, particularly aid directed toward the economic diversification of such areas.

Project grants can be awarded to any state or political subdivision thereof, or private or public nonprofit organization or association representing any redevelopment area or part thereof, public and private colleges and universities, and Indian tribes. Redevelopment areas must have a current EDA-approved Overall Economic Development Program (OEDP). "Non-profit applicants are urged to seek the cooperation and support of units of local government and, when deemed appropriate by EDA, to have the local government serve as co-applicant for EDA assistance".

1.1 Description of programs

The following programs listed in the Federal Register could be of valuable assistance to Kauai for funding its economic development efforts:

1. Public Works and Development Facilities Assistance

Purpose: To provide funding for public works and development facilities that contribute to the creation or retention of private sector jobs and to the alleviation of unemployment and underemployment; and to help communities achieve lasting improvement by stabilizing and diversifying local economies.

Funding Availability: \$154.160 million

Funding Instrument: Direct grants not to exceed 50 percent of the estimated cost of the project.

1.2 Guaranteed Loans

Purpose: To guarantee up to eighty percent of the principal and interest of loans made by eligible commercial lending institutions to private borrowers for the purchase of fixed assets or for working capital purposes for projects located in areas eligible for EDA assistance.

EDA loan guarantees are made available to help businesses expand, establish, or maintain operations in both rural and urban areas.

Funding Availability: \$5 million.

1.3 Technical Assistance

Purpose: To provide technical assistance useful in alleviating or preventing conditions of excessive unemployment or underemployment and problems of economically distressed populations. EDA is particularly interested in projects which demonstrate innovative approaches to economic diversification in the following areas: a) export development, b) assistance to business in uses of technology, c) minority business developed in distressed areas, and d) tourism.

Funding Availability: \$2.176 million

Funding Instrument: Grants and cooperative agreements not to exceed 75 percent of proposed project costs.

1.4 Planning Assistance for Economic Development Districts, Indian Tribes, and Redevelopment Areas

Purpose: To defray administrative expenses in support of the economic development planning efforts of these areas.

Funding Availability: \$20.668 million

Funding Instrument: Grants for up to 75 percent of project costs.

1.5 Research and Evaluation Projects

Purpose: To support studies that will increase knowledge about the causes of economic distress and approaches to alleviating such problems.

Funding Availability: \$500,000

Funding Instrument: Grants and cooperative agreement awards covering up to 100 percent of project costs.

1.6 Economic Adjustment Assistance (Title IX)

Purpose: To assist areas experiencing long-term economic deterioration (LTED) and areas threatened or impacted by sudden and severe economic dislocation (SSED).

LTED: Revolving loan funds are the most common type of activity funded, although other types of activities are also funded.

SSED: Assists applicants to respond to actual or threatened major job losses (dislocations) and other severe economic adjustment problems.

Funding Availability: \$23 million (split evenly between the two programs).

Funding Instruments: Grants not to exceed 75 percent of the project cost.

2. Relevance to Kauai

Through a interview with EDA officials (1), the following information was provided relative to possible funding for projects on Kauai.

301-D Planning Program:

- provides funds for salaries for planning and staff positions
- special funding for Native American groups
- \$50,000-\$75,000 available

302-A Program:

- provides funds for salaries for economic development planning
- for States and large cities
- funds Pacific Basin Development Council

Technical Assistance Program:

- provides funds to study issues, carry out feasibility studies (e.g., Hanapepe project)
- \$200,000 available for entire Western region (\$10-25,000 for each project)
- special University funding, presently providing \$1/2 million to UH Pacific Business Center which is supposed to use University faculty in its work.

(1) This information was provided during a February 13, 1992 meeting with Jacob Macias, EDA Regional Office, Seattle and Frank McChesney, EDA Office, Honolulu.

Public Works Program:

- provides funds for public infrastructure projects
- \$500,000 to \$750,000 available (50/50 matching basis)
- requires a 25 year lease, paid-up in advance for all 25 years.

Title IX:

- provides funds for federally-declared disaster relief, and long-term economic dislocations
- both a strategy program and implementation, e.g., technical assistance studies and public works projects

2.2 Eligibility

The main criterion for EDA funding eligibility is high unemployment. However, Kauai can qualify for EDA funding if it can show underemployment, pockets of poverty, low income relative to cost of living, housing shortages, and/or homelessness. Kauai must include this evidence in any application it makes for EDA funding.

2.3 Tips for Applying

EDA recommends that when applying for a very large scale Public Works grant that the County request funding for only one portion of the project, for example site development. In the case of the Hanapepe project the County should be the responsible party, however, it could bid out the project to someone else, a Community Development Corporation, for example.

It is imperative that for any EDA grant requiring a match from the State or County, that this matching funding be in place before application for funding. Furthermore, a project should not be time-critical due to the length of time it takes for an EDA grant to clear. For example, matching funds should not have a one year "use it or lose it" limitation imposed on it because of the extended time it takes for EDA to process a grant.

APPENDIX D: REVIEW OF PREVIOUS STUDIES

1. Introduction

As required by the guidelines for preparing an Overall Economic Development Plan (OEDP) provided by the Economic Development Administration, it is necessary to summarize previous documents and studies relating to economic development on Kauai. More importantly, such an exercise will point out progress with each successive plan, and will illuminate those areas where little progress is evident. Finally, given consideration of current trends and economic circumstances, such studies continue to provide guidance for economic activities needed on Kauai.

There are a variety of planning studies that could be cited, including an overall general plan for the island, various functional plans (such as agriculture, tourism, infrastructure and public facilities, transportation, coastal zone management, and energy self-sufficiency, among others), and area specific plans (related to Waimea, Hanapepe/Eleele, Hanalei, for example). Reference to these studies is made in Appendix H: Bibliography.

Many of these studies are out-dated, and most are undergoing revision or updating at the present time. Consideration of previous economic development studies, as well as preparation of this current OEDP, is useful and timely, for it provides essential information that will serve as the foundation for and a complement to those other efforts.

The focus of this appendix lies on economic development studies previously completed on Kauai. These are four in number, consisting of the following and summarized in the following sections.

- 1969 Kauai OEDP (prepared by Bartram et al.)
- 1973 Kauai OEDP update (prepared by Valerie Kam, County of Kauai)
- 1980 Economic Development Plan (prepared by Muroda and Associates)
- 1985 Economic Development on the Island of Kauai: Issues and Options (prepared by Department of Business and Economic Development, State of Hawaii)

2. Overall Economic Development Plan, County of Kauai; 1969.
(prepared by Bartram, et al.)

The Overall Economic Development Plan (OEDP) provided a detailed review of the Kauai economy including statistics on land, manpower, capital and public services. The OEDP also provided some projections for different sectors of the economy, particularly anticipated increases in the visitor count, and the predicted expansion of the visitor industry.

The OEDP did not discuss goals, strategies, objectives or potential new directions for Kauai's economy, although it did occasionally address some of the obstacles to development as it described each industry on the island. It is interesting to note that many of these obstacles do not differ from those we face today. It is also interesting to note that throughout the study there was considerable concern expressed over the ability of the island to keep pace with planned visitor industry growth, particularly with regard to labor, housing, and public services.

The OEDP provided a list of potential projects to be carried out with suggestions as to which agencies were responsible for their execution. The writers put most emphasis on joint Neighbor Island programs to be led by the "Tri-County Economic Development and Planning Council" -- it would be useful to know what happened to the Council and if any of the suggested programs were carried out. The OEDP did not, however, give any guidelines for how these agencies were to proceed, the estimated budget required for each project, nor target dates of completion.

In summary, the OEDP provided an exhaustive description of the economy in 1969 (where current statistics were available) as well as projections through 1990. It outlined some of the obstacles which needed to be overcome for further development of existing industries. It did not, however, set out any goals for the future of Kauai, nor did it suggest any particular strategies or courses of action.

Summaries of analysis and conclusions from each sector are presented.

2.1 Agriculture

The pineapple cannery and commercial acreage was on a decline at this time. Sugar was considered stable with a need to expand acreage among the eight operating plantations. There were 360 diversified crop farms, mostly under 10 acres in size, and employing a total of 470 people in 1968. The number of farms was steadily decreasing. There were 43 taro farmers on 170 acres. The largest diversified crops being exported were bananas and papayas. The number of fruit growers grew from 44 in 1960 to 67 in 1969. Banana and papaya sales went up 1.5 million pounds during the same period. Kauai accounted for 8 percent of the state fruit market, 4 percent of the vegetable and melon market, and 19 percent of other crops statewide in 1969. The projected employment in diversified agriculture in 1990 was 400.

There were 47 commercial hog farms, and 220 cattle ranches in 1968; the number of both types of farms was declining. Local beef provided 67 percent of state demand, but only two percent of hotel demand; on a statewide basis 25 percent of beef production was consumed by the hotels and resorts. There were four dairy farms with average herds of 500 cows. The outlook for them was good.

The seed industry was represented by Pioneer and Northrup King. The OEDP predicted the industry statewide would reach \$25 million on 4,000 acres by 1988. It was predicted Kauai's participation would be limited as a result of a shortage of available land and labor.

It is noteworthy that as of 1991, the industry was valued at \$6.7 million and covered 920 acres of land statewide. Although labor continues to be a problem, Dekalb-Pfizer has joined the other two companies on Kauai; the county today accounts for approximately two-thirds of the statewide industry.

Problems cited in 1969 for the further development of agriculture included:

- Lack of familiarity with Kauai produce
- Fumigation requirements
- Short state land leases
- Mainland and foreign competition
- Labor shortage due to farmers' sons leaving and higher resort wages
- Transportation costs between islands were high compared with mainland rates.

Potential projects listed were:

1. Apply for EDA grant to study feasibility of fruit and flower processing businesses on Kauai.
2. Introduce graduated County water rates for large volumes used in intensive farming.
3. Request State to offer loans to part-time farmers for diversified agriculture operations.
4. Study marketing possibilities for taro in mainland and Far East.
5. Get Cattlemans' Association to request introduction of U.S. meat grading to Kauai.
6. Determine local hotel food requirements and publish information for distribution to small farmers.
7. Print tax brochure to distribute to farmers to encourage dedication of land to agriculture.
8. Carry out joint Neighbor Island marketing study regarding selling fruits and vegetables directly to the military.
9. Encourage computer data processing as a means to improve small farm management.

2.2 Tourism

In 1967 westbound visitors made up 84.6 percent of total visitors to Hawaii, but only five percent of eastbound visitors came to Kauai. Visitors to Kauai increased by 300 percent between 1960 and 1968. Kauai was passed by Maui in 1965 in total visitors, then by the Big Island in

1966. In 1969 Kauai represented 8.4 percent of the total state hotel room inventory -- which increased by 221 percent between 1962 and 1968, and the occupancy rate remained above 70 percent until 1969. That same year direct hotel employment was 1,377 and 510 people were employed in tourist-related industries. The industry was expected to experience moderate growth in the 1970s and 1980s despite problems of manpower, housing, land prices and inadequate government services. The County had no promotional programs of its own at that time.

Potential projects listed were:

1. Promote Neighbor Islands jointly by official visits to mainland gateway cities.
2. Make cost-benefit analysis of Neighbor Island promotions in mainland cities to attract "class" tourists.
3. Urge State to conduct an Eastbound visitor survey.
4. Ask airlines to conduct cost-benefit analysis of direct flights to Kauai.
5. Publish series of brochures on recreational opportunities.
6. Survey mainland and Eastbound travel agents to determine contents of their Neighbor Island package tours.
7. Publish brochure to advertise Neighbor Islands to Japanese.
8. Prepare standard letter to send to Kauai visitors inviting them to return.
9. Develop cost-benefit formula to determine what types of resorts bring the greatest benefits and costs to Kauai.
10. Encourage development of "class" hotels.
11. Set-up information network of writers visiting the State and write them requesting they visit Kauai.
12. Lobby for a state inter-island ferry system.

It is interesting to note that many of these actions were pursued, some were accomplished, but an equal number would reappear in the 1992 version of the OEDP -- still relevant to current economic conditions.

2.3 Small business

In 1963 there were 234 retailers on Kauai and 38 wholesalers. A large number of these stores were "mom and pop" establishments. There were 130 selected services, mostly health and personal services; and there were 23 manufacturers including pineapple and sugar processing, employing

1,170 people, of which only 300 were in diversified manufacturing. Kauai accounted for only 3.5 percent of total state manufacturing.

In 1963 50 percent of all Kauai businesses had less than five employees, 73 percent had less than \$100,000 in annual sales, 64 percent had a net worth of less than \$10,000 and 68 percent used family labor.

The report accurately predicted a decline in the "mom and pop" establishments; it also predicted growth in tourist-related retail and service opportunities, and growth in manufacturing employment from 300 to 1300 by 1990. By 1989, however, manufacturing employment had only reached 1,000 and it was entirely in non-durable goods. The OEDP also predicted that imported goods would be produced locally as the local market grew. This has occurred only on a limited scale, particularly in the handicrafts and other tourism-related gifts items.

The following projects were suggested:

1. Exempt or defer lease rents and/or property taxes to selected industries.
2. Prepare feasibility studies for the SBA to approve investments by SBA-affiliated local development corporations.
3. Investigate formation of tri-county government-regulated Small Business Investment Company.
4. Seek tax exemptions for certain new and expanding industries (including food processing, garment manufacturing, industrial park development, R&D firms, housing and fisheries).
5. Assess feasibility of half a dozen new small business opportunities related to growth in the visitor industry and the resident population.

None of these recommendations have been pursued to date, although EDA technical assistance funds have been secured for redevelopment projects.

2.4 Research and development

The OEDP described Kauai's only R&D industries as the Pacific Missile Range, the Kokee Tracking Station and the University of Hawaii Agriculture Experiment Station in Wailua. Employment at PMRF and Kokee totalled 440 with increases expected at that time. The OEDP predicted 1,000 R&D jobs due to these two facilities by 1990. While PMRF employs approximately 650 people today (125 civilians, 125 military, and 400 contract employees), the Kokee Tracking Station has closed.

The major problems for R&D expansion outlined in the OEDP were (and continue to include):

- A critical housing shortage on the leeward side
- Lack of available skilled manpower
- Cost of land, equipment and supplies
- Lack of promotion of R&D activities

The following projects were suggested:

1. Apply for a National Science Foundation grant to study ways to share PMRF science facilities for non-military oceanographic research and to advertise potential to major colleges and scientific institutions.
2. Encourage use of Kauai as extension of the University ocean programs, particularly the Sea Grant Program.
3. Lobby legislators for tax concessions for new R&D industries locating in Neighbor Islands.
4. Inform leading universities through a brochure of the unique possibilities of Kauai for ecology studies.
5. Begin a two year associate of science degree in marine science technology.

2.5 Overall major problems

- Labor shortages due to:
 - Competition from tourism and construction industries
 - Out-migration of high school graduates
 - Unattractive wages in primarily agriculture and services
 - Tourist industry imports management workers and does not encourage career opportunities
 - Housing shortage discourages relocation from outside
 - Lack of public transportation
 - Little support from private industry to recruit a larger labor force; new housing was a particular problem.
- Housing shortage due to:
 - Average cost second highest in USA
 - "Tight money" situation
 - No enforceable County housing code
 - Construction industry pressed by the demand for new hotels and new housing simultaneously
 - Construction costs 30 percent higher in Hawaii than mainland
 - Scarcity of land suitable for house lots and high land price
 - Closing of plantation "camp towns" accelerates demand.

- Land restrictions due to:
 - New land to expand agriculture operations not available
 - Shortage of land for urban development due to concentrated land ownership in hands of plantations and State which prefers to lease, not sell
 - Short supply of land for urban development increases cost of residential, commercial and resort development
 - State and private leasing policies lead to uncertainty over long-term
 - Speculative buying and selling increases prices
 - Restricted ability to provide public improvements at the rate of private development.

Nearly all of the above continue to be major problems today.

2.6 New industries and projects

1. **Movie production:** Establish liaison with movie industry officials in Hollywood responsible for site selection.

It should be noted that the County has actively pursued the film industry through a full-time film coordinator position who maintains close contact with major film producers.

2. **Fishing:** Two suggestions were made:

- request U.S. Bureau of Commercial Fisheries to study possibility of stocking inland waters for commercial fishing.
- inform Kauai commercial fisherman of grant and loan programs to help modernize and expand their fleets.

3. **Mining:** Inventory mineral resources throughout the State and including their usefulness and availability for local construction needs.

4. **Forestry:** Encourage State to enlist cooperation of U.S. Forest Service to undergo intentional reforestation program for commercial forestry.

3. Overall Economic Development Plan, County of Kauai; 1973 update.
(prepared by Valerie Kam, County of Kauai)

This OEDP gave updated statistics on the state of the economy by industry sectors, but it did not give any new insights into strategies for overcoming old problems. It was basically a statistical update of the 1969 Bartram Plan.

4. County of Kauai Economic Development Plan (Phase I); 1980 (prepared by Muroda and Associates, Inc.)

Although this study was labeled Phase I, there apparently never was a Phase II. This may account for the scarcity of specific recommendations in this report. Phase I concentrated almost entirely on defining what economic development is and making forecasts for the direction and pace of development on Kauai.

The study concluded that tourism and related real estate development would continue to grow and should be supported particularly as a vehicle for funding diversified agriculture, housing, and infrastructure development projects. It foresaw no other economic activities significant enough to warrant governmental influence. It did warn, however, that unchecked tourism development would spur heavy transient immigration, rampant real property appreciation, increased costs of living and disruptive socio-economic changes -- all problems which Kauai faces today.

The authors concluded that about 85 percent of the new jobs created would be low and middle income, requiring the County to focus on the approximately 4,000 low and middle income housing units needed by 1990. "Real estate earnings", they correctly predicted, "will continue to be more and more beyond the reach of the workforce unless the economy provides an increase in per capita income to bring resident earning closer to housing rates". Yet the Plan did not offer any insights into how this might be achieved other than emphasizing continued tourism development to fund the infrastructure improvements that tourism and the consequent population growth would require.

The only other industry it suggested to pursue was diversified agriculture, which the authors believed was more valuable for its social and environmental benefits than for its employment benefits.

The authors specifically mentioned that, based on its projections that high school enrollment on Kauai would decrease throughout the decade, there would be no need for a four-year college (This has proven inaccurate). The authors suggested, instead, that more effort be placed on building the two-year program and that funds be devoted to subsidizing student enrollment in four year colleges elsewhere. This recommendation contradicted the problem the Plan pointed out of keeping skilled professionals on Kauai.

The Plan's specific recommendations for funding infrastructure and diversified agriculture support included:

1. Unit assessments with a surcharge based on total area occupied by the development
2. A base fee of \$10,000 per acre for conversion of agriculture to residential or commercial zoning
3. Real property tax rate increases, particularly weighted against hotel and non-resident apartments

4. Increased conveyance taxes to curb speculation
5. Creation of Agriculture Residential Districts (to allow subdivision of large agriculture parcels into residential parcels, yet secure 25 percent of the parcel as agriculture lands dedicated to the County in perpetuity)
6. Significant County cash outlay to help finance start-ups and assist in marketing and coordination of production
7. Set up a County office for agriculture development initially located within the Office of Economic Development.

The flat rate unit assessments would not earn as much revenue as the property tax rate system employed today, which takes into account the actual value of the units based on their cost of development rather than their income (This ensures a steadier tax flow due to the fluctuation of tourism income). The land value of a tourism development today is assessed on a per unit basis which also brings a steadier tax revenue than would a surcharge based on total area occupied by a development.

Some form of the second recommendation is being considered today in the recently completed Infrastructure Financing Study. This is an interesting proposal in that it would be the equivalent of requiring a developer to share with the County the appreciation in value the developer experiences when a parcel is "up-zoned".

The third recommendation did take place, in effect, when residential property tax rates were significantly lowered, leaving hotel/apartment rates on par with commercial and industrial properties. The relative rates were further differentiated in 1991 when a new Homestead rate was added to existing rates.

Increased conveyance taxes have not been considered locally because this is a State tax over which the County has no control. However, it should be noted that it would be difficult to differentiate between legitimate investors and speculators, rendering this tax a potentially regressive one.

Although Agriculture Residential Districts have not been considered to date, in 1988 the County did create an Economic Development Loan Fund specifically to help new agribusiness start-ups, and in 1989 it hired an Agriculture Development Specialist within the Office of Economic Development to assist with marketing and overall agriculture industry support.

5. Economic Development on the Island of Kauai: Issues and Options, 1985. (State of Hawaii, Department of Economic Development and Planning)

This document was not intended to be an economic development plan. It does not make recommendations nor provide any guidelines for implementation. Instead it provided a thorough discussion of the major issues affecting the economic development of Kauai and presented potential options to pursue.

It is the most useful document for our purposes today in that it provides the most up-to-date and thorough discussion of the critical issues facing the County of Kauai and provides options which continue to be applicable.

5.1 Agriculture

Although many of the same concerns existed then, such as the worrisome decline of the sugar industry, some interesting points of change should be noted. First, the cattle industry in 1983 was the second ranking agriculture industry after sugar. Grain production, particularly seed, was the third followed by taro, vegetables and melons, fruits, swine, and lastly flowers and nursery products. While cattle operations have significantly declined to date, livestock as a whole remains the number one sector after sugar, followed by seed, fruits (primarily guava), flowers and taro. Coffee and macadamia nuts are completely new products since this study and hold promise to quickly become the top ranking diversified crops for the island.

Despite these changes, all of the issues and options for diversified agriculture outlined in this study are still critical to the industry today. Some of the options which are being pursued include: the development of agriculture parks, and efforts to maintain the viability of the papaya growers cooperative. Other commodity cooperatives, as the document suggests, however, are not being pursued. The major concerns for the industry continue to be:

1. The lack of affordable and available land
2. Infrastructure development costs, especially water access
3. Inadequate labor supply
4. Lack of knowledge of, and inability to meet market demand and supply conditions
5. Transportation routes and costs.

5.2 Tourism

With regard to tourism the document points out that while total visitors grew an average of nearly 9 percent per year between 1964 and 1985, and the total number of visitor units grew by 11.8 percent per year, the occupancy rate fluctuated a great deal over the twenty year period. This was due in part to the increased number of rooms, but it was also due to internal and external events outside the control of the county. These events included the 1969 and 1979 oil price increases, the early 1980s recession, and hurricane Iwa.

The industry faces similar circumstances today. The total number of visitors is increasing each year, along with the total number of visitor units, while the occupancy rate continues to fluctuate. The industry has also experienced several negative external influences in 1991 including the Persian Gulf War and the subsequent national recession. The study further points out that while the visitor industry grew rapidly over the previous two decades, it also exhibited a high degree of instability; this is as true in 1992 as it was in 1985.

Finally, the report concluded that although the dollars spent on promotion of the visitor industry greatly increased, the research and information necessary for good planning did not keep pace. For example, there was no data on Japanese arrivals, and although 1984 Japanese visitor promotions seem to be successful, the degree of success could not be quantified due to lack of data. Although the State HVB is now collecting more data specific to Kauai, there still remains a problem locally with measurement of a promotion's success, to be able to determine whether the island's dollars are being put to the best use.

APPENDIX E: ENVIRONMENTAL/LAND USE PROFILE

1. Purpose

The guidelines for preparing an OEDP, issued by EDA, require special attention to an environmental profile of the County. As indicated, there is the need to provide for "proper balance between the goals of economic development and environmental enhancement....so that adverse environmental impacts are mitigated or avoided to the extent possible." (EDA correspondence of July 23, 1991 to KEDB and County of Kauai).

In the following sections, major aspects of the environmental and land use features of the island of Kauai are summarized, in the format suggested for an environmental exhibit required as part of the OEDP, including the following topics:

- Narrative description of the area
- Political geography
- Land usage
- Public services
- Cultural resources
- Natural and coastal areas, endangered species
- Regulatory environment

We also inventoried reports, maps, plans and other documents readily available through County offices. The most important of those are identified in Appendix H: Bibliography in this report. But if further information is required, it could be assembled from the inventory maintained by County offices.

2. Narrative description of area

The island of Kauai is located at the northern end of the group of major Hawaiian islands, approximately 95 miles northwest of Oahu. Like the other islands in the region, Kauai was formed by volcanic activity which began some 25 million years ago. It is essentially a single volcanic dome with a land area of approximately 549 square miles. The island is roughly circular in shape, with two main mountain peaks, Kawaikini (elevation 5243 feet) and Waialeale (elevation 5148 feet).

With a diameter of approximately 32 miles and coastline of approximately 137 miles, Kauai is the fourth largest of the major Hawaiian islands (following Hawaii, Oahu, and Maui in size). Kauai, however, is believed to be the oldest of the major islands; it has been estimated to be as old as 5.6 million years. As a consequence of time, wind, and water, deep valleys and canyons have been etched into Kauai's physical landscape. The valleys formed by stream erosion in the upper part of Waimea Canyon on Kauai are as much as 2,600 feet deep, while sea cliffs, cut by waves on the Napali Coast range between 300 to 2,000 feet in height.

The island of Kauai is characterized by a diversity of climates and land covers, ranging from lush jungle-like conditions in the central part of the island to dry, desert like areas in western (leeward) part of the island. Rainfall near the summit of Waialeale has been measured to be more than 450 inches per year, leading some observers to call it the "wettest spot on earth." The tremendous amount of rainfall is responsible for the creation of the Alakai Swamp, which is almost ten miles in length. In spite of the rainfall, the longest river in the island, the Waimea River, is only about 20 miles long. This river has carved the Waimea Canyon, sometimes referred to as the "Little Grand Canyon of the Pacific." The other well known river on Kauai is the Wailua River, which is fed by two waterfalls, Wailua and Opaekaa.

The southwestern and south central areas of the island are used primarily for the cultivation of sugarcane while the principal human settlements have concentrated on the southeastern part of the island surrounding the community of Lihue. Lihue also serves as the County seat and is the center of commercial activity. Development has spread along two spines extending from Lihue. Towards the north, the communities of Hanamaulu, Wailua and Kapaa have seen much new growth and development over the past decade. Development has also begun to affect the southern towns of Kalaheo, Koloa, and Hanapepe, and the Poipu resort area of the island continues to grow.

There are a number of physical constraints to development on the island of Kauai. There are some areas which are particularly susceptible to tsunamis, especially those originating in the Aleutian Islands. The North Shore is the most vulnerable coastline in Hawaii and has experienced tsunami waves which have reached more than 50 feet in height. Another constraint to development is related to the topography of the land. Some 50.5 percent of the land area has a slope of 20 percent or more. Another 16 percent of the island's area has a slope of 10 to 19 percent. Only 33.5 percent of the land has a slope of 10 percent or less. About a quarter of the area has an elevation of 2000 feet or more.

Generally speaking, as elevations increase so too does the average annual rainfall. In addition, as the island is farther north than some of the other inhabited places in Hawaii, it is in the path of a greater number of cold-front storms which cross the Pacific Ocean. In many of the high elevations, which are areas of high rainfall, the soils become increasingly unstable and serve to limit development. There is periodic flooding occurring as well in several of the valleys during periods of heavy rainfall. Other factors which constrain development include the two-tiered system of land use control (state and county) in Hawaii and the large amount of land owned by the government and large landowners. The system of land use control will be described more in a later section.

Kauai has an interesting cultural and social geography which has affected settlement patterns and development of the island. Waimea, on the southwestern coast of the island is reported to be the site of Captain Cook's first landing in the island. From that point of initial contact, Kauai, like the rest of Hawaii, experienced a succession of changes

including the introduction of large-scale plantation agriculture, the importation of contract laborers from Japan, China, the Philippines, and other Pacific nations, the development of property ownership rights, the overthrow of the Hawaiian monarchy, and the emergence of large landowners that ultimately took control of the economy of Hawaii.

Plantation agriculture continues to maintain a presence on Kauai. In recent years, Sugar has been the leading agricultural product of Kauai as well as for the state as a whole. It has a long history in Kauai, beginning in the early 1800s when Hawaii's first sugar mill was founded at Koloa, Kauai. There are currently some 40,000 acres in sugarcane production on Kauai yielding some 1.8 million tons of unprocessed cane with a value of roughly \$51.5 million. Other crops produced include various fruits, vegetables, macadamia nuts, and taro (Kauai is the state's leading producer of taro). Although the value of sugar produced on Kauai has fluctuated, due to many factors (global competition, beet sugar, corn syrup, artificial sweeteners, etc.), it is clear that both the acreage in sugarcane, the volume of mill production, and the number of employees has decreased steadily.

While there have been some modest improvements in diversification of agricultural products (especially in terms of flowers, vegetables, and other diversified agriculture), as a whole, the agricultural sector on Kauai faces a number of uncertainties associated with the rising cost of land, labor, transport, and other key inputs.

Although agricultural production still is important, the engine of growth and development has been tourism. The annual number of visitors to Kauai has grown steadily, from around 150,000 in 1964 to more than 1.1 million in 1989. There has been a corresponding increase in the visitor accommodations, with an estimated 3,983 total hotel rooms, 3,434 visitor condominiums, and a variety of other guest accommodations totalling more than 7,563 units on Kauai.

The growth of tourism on Kauai can be easily measured by job count figures. There are more than 7,600 people employed in the hotel and service industries, with an additional 6,400 employed in the wholesale and retail trade activities. This compares to only 1,200 employed in agricultural activities, and 1,000 employed in manufacturing industries (virtually no durable goods are produced on Kauai). Finally, one can measure the growth in tourism in terms of the increase in visitor expenditures which have grown from \$45.1 million in 1970 to \$952.3 million, annually, by 1989. Tourism and its related activities have come to dominate the local economy.

3. Political geography

The County of Kauai consists of the islands of Kauai and Niihau. Since virtually all of Niihau is privately owned and sparsely populated, discussion in this report is limited to the main island of Kauai. The County is a corporate body with all powers authorized by the Hawaii State Constitution, the laws of the State of Hawaii, and the Kauai Charter. The legislative power of the county is vested in a seven member County Council who are elected at large for two year terms. Council powers include the authority to enact zoning ordinances, formulate and enact annual operating and capital budgets, exercise eminent domain, authorize and issue general obligation and revenue bonds, and adopt a general plan for the County. The executive power of the County is vested in the Mayor who exercises direct supervision over the county departments and agencies; creates and abolishes authorized county government positions and appoints necessary staff. The Mayor also submits annual operating and capital budgets, makes annual and periodical reports pertaining to County policies, programs, and operations, and enforces the provisions of the County Charter.

County Departments are listed in Appendix F, and include the normal complement of municipal functions. In addition, a number of advisory committees, representing interests ranging from arborists to water safety, were appointed and have been active over recent years; such committees number almost 30 in total. The presence of so many, diverse committees and councils suggests a degree of public involvement and demonstrates the range of political and social issues which have been addressed by County government over the years.

The political geography of Kauai has been shaped by a number of different economic and social developments. The presence of plantation agriculture and the emergence of strong organized labor has engendered a generally progressive orientation towards land use and social policy. The island's geographic distance from Honolulu, the center of the state's political machinery and the fact that Kauai is the smallest of the four counties in Hawaii have meant the development of a somewhat independent and different political system, with a greater emphasis on environmental issues and on quality of life concerns.

There have also been some tensions between State and County government with regard to the expansion of facilities and externally financed developments, such as a large affordable housing project (financed by the State of Hawaii) in the Hanapepe Cliffside area. The emphasis on growth control, rural preservation, and sustainable economic development is embodied in the County's General Plan, zoning ordinance, and agency plans. While concerns regarding the balancing of economic development with the natural environment have been long standing ones on Kauai, in recent years there has been heated debate surrounding resort development, golf course construction, coastal zone management, and subdivision development.

4. Land usage

The pattern of land use reveals much about Kauai's physical and social environment. Hawaii is one of several states in the nation in which the state government plays an active role in zoning. Under Hawaii's land use law (Chapter 205, Hawaii Revised Statutes), all land is classified as urban, conservation, agriculture or rural. The state government retains primary jurisdiction over conservation, agriculture, and rural lands, while the County government exercises control, principally through locally adopted zoning and subdivision ordinances, over urban zoned lands. While building codes and other regulations enforced by County agencies apply to non-urban lands within Kauai's jurisdiction, it is important to recognize that in Hawaii there are two levels of zoning, one at the state level and another at the county level of government.

The majority of Kauai's land, almost 200,000 acres, is classified by the State Land Use Commission as conservation lands. These are lands in which development is strictly limited and in some instances banned. Reasons for disallowing development relate to the protection of watersheds and sensitive environments as well as concerns such as erosion, landslides, flooding, and other ecological hazards which preclude development. The next largest category of land use is agriculture, which on Kauai amounts to about 140,000 acres. It has been said that preservation of agriculture was one of the principal arguments for the adoption of Hawaii's state land use law. The rural land use classification on Kauai amounts to 1,233 acres. The rural classification was designed to allow an increase in the intensity of use above that allowable with agricultural zoning, but less than that allowed within the urban districts. The urban districts are where the major residential, commercial, business, and industrial activities are located and amount to approximately 12,976 acres, or only about 3.7 percent of the total acreage of Kauai.

Another way of examining land use on Kauai is by utilizing tax base data which reveal the different classes of property for taxation purposes. On Kauai, there are some 4,298 acres classified (for tax purposes) as improved residential (predominantly single family), another 659 acres classified for apartment uses, 554 acres classified for commercial purposes and 1,313 acres classified for industrial uses. A total of 764 acres is classified for hotel and resort purposes.

5. Public services

Police protection, fire protection, solid waste disposal, parks and recreation, roadways, water services and sewerage are the most important public services provided by the County of Kauai. Public education (elementary, secondary, and university) is provided in Hawaii by the State government.

The Kauai Police Department's main station and headquarters is located in Lihue, the county seat. Substations are located in Waimea and Hanalei. Plans have been made to move the police station from its current location

in the near future to provide additional space and parking. There are also plans for expanding the Waimea station.

The Kauai Fire Department has its main station and administrative headquarters in Lihue; other stations are located in Hanalei, Kapaa, Koloa, Hanapepe, Kalaheo, and Waimea. The County plans to replace the existing Kalaheo facility with a new, large station. In addition to providing fire fighting services, the department also maintains an emergency rescue unit. More than 80 percent of the emergency calls in a given year involve responses to medical emergencies.

The County maintains an island-wide system of solid waste collection and disposal. These services are administered by the Department of Public Works. Since the closing of the Halehaka landfill (near Lihue), the Kekaha Landfill is the only landfill on Kauai. There are transfer stations located at Hanalei, Kapaa, and Lihue. The County is actively exploring alternative waste reduction technologies (recycling, composting, source reduction, etc.).

The County of Kauai maintains an island-wide system of parks and recreation facilities. The system consists of 15 neighborhood parks, 17 community parks, seven district parks, three regional parks, and a variety of beach parks include those located in Hanalei, Poipu, and Kapaa. There is also a municipal golf course, a stadium complex, and a convention hall. In addition to these facilities, there are also a number of state and federal lands which are dedicated for outdoor and recreational use.

Kauai is served by a system of State and County roads and a small County bus system. There are two main arterials on Kauai: Kaunaulii Highway which starts in Lihue and circles the island to the west, and Kuhio Highway which runs east and north from Lihue. Altogether, the state maintains approximately 180 miles of roadways and the County maintains another 251 miles. There also is an additional 20 miles of private roadways and cane field roads which do not meet County standards. The County currently operates a small bus service within the Lihue and Wailua-Kapaa areas.

Potable water is provided through the County Department of Water. Unlike other places, most potable water in Hawaii (and Kauai) is groundwater. The County maintains a systems of wells, storage facilities and a distribution system which is organized by hydrologic units. Kauai not only has a very high quality of drinking water (no treatment is necessary), but in general water is plentiful. In part this is due to the heavy rainfall which falls in the center of the island and the various development restrictions imposed by the State and County governments of Hawaii, to limit urbanization in water resource areas.

The County of Kauai currently operates four waste water treatment facilities located in Lihue, Wailua, Hanapepe/Eleele, and Waimea. The facilities in Lihue and Wailua are the largest with a capacity of 1.2 million gallons per day and 1.5 million gallons per day, respectively. There are

plans to expand both the Lihue and the Hanapepe/Eleele facilities. The remainder of the County is served by private sewage treatment facilities or by cesspools and septic tanks. Most of the resorts located in Poipu utilize injection wells. In some areas, effluent is utilized to irrigate golf courses.

The County of Kauai is served by the Lihue Airport which at present can handle inter-island jet aircraft and smaller overseas aircraft. In order to accommodate all classes of aircraft, the principal runway needs to be widened and lengthened. Improvements in progress include runways brought into code conformance and expansion of cargo areas, terminal facilities, and parking at the Lihue Airport.

Nawiliwili Harbor is the principal port for Kauai. It handles both container and bulk cargo. It has a 40 foot deep entrance channel and a 35 foot deep harbor basin with approximately 1,200 lineal feet of pier and 7 acres of shed and open storage areas. In 1987, it handled about one million tons of cargo. Improvements scheduled for 1993 include construction of another pier, expansion of shed and open storage areas, installation of more cargo handling equipment, and improved vehicle access. Port Allen is Kauai's second harbor, located on the south shore. It has a 35 foot deep entrance channel with two 600 foot piers and 2 acres of shed and storage space. The port currently supports a number of U.S. Naval operations as well as small passenger and commercial fishing activities. There are, at present, no major plans to improve Port Allen.

6. Cultural resources

It should be noted that Kauai has a rich cultural heritage. The presence of taro fields (Kauai is largest producer of taro in the state), Hawaii fishponds, and various structures (walls, heiau, and settlement remains) is evidence of its unique culture. The culture is reflected today in the thousands of places names which have roots in history and legend. Much of Native Hawaiian culture has been replaced by Western and Asian cultures. As a consequence, the cultural resources on Kauai are diverse. Plantation agriculture also had an influence on the social and spatial environment.

The notion of Kauai as the "Garden Isle" has also been promoted in recent years. A rural lifestyle is part of the appeal of Kauai, and while the County struggles to maintain a balance between growth and the appeal of its rural, small town character, it is clear that presence of farmlands, open space, conservation areas, and natural settings has become an integral part of Kauai's cultural resources. A more complete inventory of cultural resources is presented in Appendix F, where recreation and cultural attractions are listed.

7. Natural and coastal areas, endangered species

Kauai is abundant in terms of natural resources which present both opportunities as well as potential hazards. There are many pristine beach areas, several caves, rivers, waterfalls, and other geological features which are important visitor attractions. Because of the limited

development and extremely wet conditions, the central part of the island remains one of the largest areas for indigenous plants and animal life in the state. In addition, two native forest birds, the Koloa (duck), Coot, Stilt (waterbird) as well as many types of sea birds (Shearwater, Redfooted Booby, White-tailed Tropic, etc.) are found on Kauai. Other endangered species such as the Hawaiian Monk Seal and Green Sea Turtle have also been found on Kauai.

As an island environment, there are a variety of different hazards which need to be recognized. Compared to the island of Hawaii (Big Island), Kauai is stable in terms of volcanic activity and earthquakes. On the other hand, because of the northern location, Kauai is much more vulnerable to tropical storms, high surf, tsunamis, and flash flooding than some of the other islands in the state. In recent years, damage on Kauai from hurricanes and coastal flooding has been significant. Coastal erosion, an ongoing, natural process, continues to occur on Kauai. For the most part, beach erosion becomes redefined as a hazard when development occurs (as it has) in unstable areas. The problem of coastal erosion has been compounded by the construction of seawalls and other physical barriers. The construction of resorts, subdivisions, and other developments has contributed to the deterioration of coastal areas not only through the construction of shoreline structures, but also by increased runoff and non-point source pollution. As there are short-term economic incentives associated with increased development in natural areas, there is a need on Kauai to balance economic growth with its long-term costs and externalities.

8. Regulatory environment

Given the special conditions on Kauai it is not surprising to find that an extensive regulatory environment has evolved over the years. To understand the regulatory practices, a few of the major laws and regulations that have an impact on economic development in Kauai are summarized. These include the state land use law, the Hawaii EIS (environmental impact statement) system, the coastal zone management plan, and the County General Plan and zoning ordinances.

The Hawaii State Land Use Law (Chapter 205, Hawaii Revised Statutes) was described briefly in an earlier section on land use. Because State government is involved in the zoning of all lands in the state, it exercises considerable control over growth and development, principally through the release of agriculture or conservation lands for development. The Land Use Law (passed in 1961) required that a comprehensive review of state land use classification boundaries (urban, rural, conservation, agricultural) be conducted every four years. In 1985, the law was modified to emphasize the state's role in long range planning. The State of Hawaii is currently in the process of completing the boundary review and its comprehensive planning study.

Hawaii's EIS law (Chapter 343, Hawaii Revised Statutes) was enacted in 1974. The law requires the preparation of an environmental impact statement for projects or programs that use state or county funds, that

are located in a conservation district, that involve the reclassification of conservation districts, that are located in the shoreline area, or other special areas. The guidelines for the law are similar to those for federal EISs adopted under the National Environmental Protection Act. The EIS document is intended to provide background information to local and state officials, policy-makers, and the general public. Since EISs are required for many projects, the EIS process which includes publication of preparation notices, public hearings, a comment period, and so on has become one of the principal arenas for the discussion of development and change in Hawaii. Kauai is no exception and over the years, EISs on resort development, golf course construction, and other large projects have been contentious.

In 1978, Hawaii passed the Coastal Zone Management Act, which created a CZM (Coastal Zone Management) program. The program was modelled after the federal act of 1972 and attempts to protect coastal resources including wetlands, flood plains, estuaries, beaches, dunes, barrier, islands, coral reefs, and other wildlife habitats. The Hawaii program identified a number of management objectives including recreation, historic resources, scenic and open spaces, coastal ecosystems, economic uses, coastal hazards, and management of development. As a way of ensuring that CZM concerns were identified and considered in the development process, the Special Management Area (SMA) permit was created. The SMA permit supplements existing County regulations and is administered through the County Planning Department. The SMA permit gives the County Planning Director and Planning Commission on Kauai additional authority to regulate development in coastal areas.

The regulatory system on Kauai, therefore, involves an interface between State laws and County ordinances. While the State Land Use law, EIS law, and CZM law establish conditions for development which exist statewide, the Kauai General Plan, Development Plans, and the Comprehensive Zoning Code serve to determine local goals and objectives, priorities, and constraints on development. While the General Plan establishes overall guidance and defines the specific subareas for planning (Development Plan areas), there are specific geographic (e.g. North Shore, Kapaa, Lihue, Poipu, etc.) development plans and functional plans (housing, water, transportation, economic development, etc.).

APPENDIX F: LIST OF FACILITIES, SERVICES AND PROGRAMS

In this appendix, a listing of the federal, state, and local programs, private and non-profit organizations, public facilities, public services, and other resources available in support of or responsible for promoting economic development on Kauai is provided.

The extensive listing of facilities, services, and programs indicates a broad array of organizations and resources. Each agency or resource may prove useful. But it is more likely that successful economic development will require the ability to forge coalitions and effectively organize these resources for specific projects or actions.

1. Federal Programs

Department of Housing and Urban Development
Community Development Block Grant Program
Rehabilitation Loan Funds

Department of Commerce
Economic Development Administration
Planning and technical assistance grants
Public works and project loans
Travel & Tourism Administration
International Trade Administration

Department of Agriculture
Soil Conservation Service
Agricultural Conservation Program
Farmers' Home Administration (Kauai)
Agricultural Stabilization & Conservation Service
Animal Plant Health Inspection Service (Kauai)
Rural Development Agency

Small Business Administration
Lending programs and loan guarantees
Small Business Development Center

Department of Health and Human Services
Administration for Native Americans
Technical assistance and grants for Native Hawaiians

2. State Programs and Organizations

Department of Agriculture
Marketing Division
Agricultural Loan Division
Inspection and Quarantine Branch
Agriculture Park Branch

2. State Programs and Organizations (continued)

Department of Business, Economic Development, and Tourism
Small Business Information Service
Business Action Center
Financial Assistance Branch
 Hawaii Capital Loan Program
 Hawaii Innovation Development Branch
Business Development and Marketing Division
 Overseas offices in Hong Kong and Japan
Ocean Resources Branch
Film Industry Branch
 Governor's Film & Video Advisory Committee
Office of Space Industry
Tourism Division
Energy Division
Community-based Economic Development Program
Research and Economic Analysis Division
Library
On-line Electronic Bulletin Board System

DLIR, Aloha State Specialized Employment Training Program

Department of Land and Natural Resources
Aquaculture Development Program

High Technology Development Corporation
Small Business Innovation Research Grant Program
Hawaii Software Service Center
FYI Electronic Gateway Service

Hawaii Strategic Development Corporation
Revolving Investment Fund

University of Hawaii, Office of Technology Transfer and Economic
Development

University of Hawaii, Pacific Business Center Program

Hawaii Aquaculture Advisory Council
Hawaii Fisheries Coordinating Council
Hawaii Ocean Engineering Business Council
Pacific International Center for High Technology
Research

Hawaii Space Development Authority
Pacific Space Center
OHA, Economic Development Loan Program
Chamber of Commerce of Hawaii
 Small Business Center

Hawaii Business League
Small Business Hawaii
Hawaii Farm Bureau
Hawaii Visitors' Bureau
Hawaii Hotel Association

3. County-level Resources3.1 General description

Transportation:

Lihue Airport: number of passengers in 1990 2,848,323

Princeville Airport

Nawiliwili Harbor: Kauai's primary commercial harbor has a depth of 40 feet, a 1300 foot pier, and extensive facilities for handling overseas and inter-island vessels, including passenger cruise ships.

Port Allen: Kauai's second commercial harbor, with a depth of 35 feet, and a 600 foot pier, accommodates inter-island barges, some overseas barges and some cruise ships. Port Allen also hosts onshore facilities for the Pacific Missile Range.

The Kauai Bus: The newly established system runs six public routes throughout the island and runs ten "on call" routes for senior citizens and the disabled.

Miles of streets 252

Number of street lights 2,150

Fire Protection:

Number of stations 7

Number of fire personnel and officers 112

Police Protection:

Number of stations 3

Number of police personnel and officers 167

Number of patrol units 47

Total number of police units 87

Sewage System:

Number of treatment plants 4

Number of service connections 2,563

Daily avg. treatment (gallons) 2.3 million

Maximum daily capacity of treatment plant (gallons) 3.7 million

3. County-level Resources (continued)

Water System:

Number of service connections	14,949
Number of fire hydrants	1,928
Annual water consumption (gals)	4.46 billion
Maximum daily capacity of plant (gallons)	34.16 million

Energy:

Kauai Electric Co. output 1990	369,337 MWh
Projected output 2010	853,750 MWh
Gasco, Inc. 1989 output	58,052 therms

Education (state controlled):

Number of elementary schools	11
No. of elem. school instructors	356
Number of secondary schools	3
No. of second. school instructors	220
Number of community colleges	1

Hospitals:

Number of hospitals	3
Number of patient beds	311

Wilcox Memorial Hospital is the largest hospital and can accommodate 75 acute care beds and 110 long term care beds for a total of 185 beds. The hospital employs 620 full and part-time individuals including 75 physicians. In fiscal year (FY) 1990 inpatient admissions totalled 4,602, while outpatient admissions totalled 157,472. In FY 1991 these figures reached 4,897 and 161,005 respectively.

Culture & Recreation:

Community centers	9
Parks	64
Beach parks	19
Gymnasiums	3
Swimming pools	2
Golf Courses	2
Tennis Courts	10
Baseball & softball fields	33
Basketball courts	21
Volleyball courts	3
Stadiums	2

3. County-level Resources (continued)

War Memorial Convention Hall 1,000 seats

Telecommunications:

GTE Hawaiian Telephone provides service to Kauai. The first rural cellular telephone system in the U.S. was installed on Kauai in 1989. Kauai will shortly be connected to Oahu via fiber optic cable. The state's fiber optic cable network currently connects to most major cities in Asia and the U.S. Several other companies provide "equal access" overseas telephone service.

In addition, there are microwave links to Oahu and satellite services from Kauai. Construction of a multi-purpose digital earth station on Oahu is planned to deliver advanced international services by the end of 1992, with a new satellite link between Hawaii and 24 Pacific Rim countries.

Radio:

KFMN FM97
KUI Radio AM 720
KONG AM 57 & FM 93.5

Newspapers:

Garden Island
Kauai Times

Magazines:

Kauai Business & Real Estate Magazine
Kauai Magazine
The Sandwich Isles Quarterly

Shopping Centers:

Kukui Grove Center (260,000 sq. ft., 37 stores)
Kauai Village Shopping Center (101,546 sq. ft., 48 stores)
Coconut Marketplace (70 stores)
Ching Young Village
Eleele Shopping Center
Hanalei Center
Kapaa Shopping Center
Kiahuna Shopping Village
Pacific Ocean Plaza
Princeville Center
Rice Shopping Center

3. County-level Resources (continued)

Industrial parks:

Lihue Industrial Park Unit I	20 acres
Lihue Industrial Park Unit II	26 acres
Nawiliwili Coral Fill Industrial Subdivision	16 acres

3.2 County government

Office of Economic Development
 Tourism, Agriculture, Energy & New Business Development
 support programs
 Business Assistance
 Kauai Tourism Promotions Committee
 Kauai Agriculture Committee
 Film Advisory Board
 Kauai Energy Advisory Committee

Civil Defense Agency
 County Attorney
 Elderly Affairs
 Fire Department
 Police Department
 Planning Department

Department of Finance
 Department of Personnel Services
 Department of Public Works
 Board of Ethics
 County Housing Agency

Major County commissions include:

Police Commission	Civil Service Commission
Planning Commission	Liquor Control Commission

3.3 Other county organizations

Kauai Economic Development Board
 Kauai Community College, Small Business Development Center
 Chamber of Commerce of Kauai
 Kauai Economic Opportunity
 Alu Like, Kauai
 Kapaa Business Association
 Hanapepe Business and Professional Association
 West Kauai Business and Professional Association
 Maile Business and Professional Women's Club
 North Shore Business and Professional Women
 North Shore Association of Kauai

3. County-level Resources (continued)

Contractors' Association of Kauai
Kauai Board of Realtors
Rotary Club of Kauai
Hawaii Hotel Association, Kauai Chapter
Hawaii Visitor's Bureau, Kauai Chapter
Poipu Beach Resort Association
Princeville Resort Association
Kalapaki Bay Resort Association
Royal Coconut Coast Resort Association
Kauai Farm Bureau
Kauai Pork Producers' Council
Kauai Cattlemans' Association
Hawaii Tropical Flowers and Foliage Association, Kauai Chapter

3.4 Recreation, cultural, and historic sites

State Parks:

Polihale State Park
Waimea State Recreation Pier
Waimea Canyon State Park
Kokee State Park
Russian Fort Elizabeth State Historical Park
Ahukini State Recreation Pier
Wailua River State Park
Haena State Park
Na Pali Coast State Park

Major County Parks:

Kekaha Beach Park
Waimea Lucy Wright Beach Park
Hanapepe Salt Pond Beach Park
Kukuiula Beach Park
Poipu Beach Park
Niumalu Beach Park
Nawiliwili Beach Park
Hanamaulu Beach Park
Kapaa Beach Park
Waipouli Beach park
Anahola Beach park
Anini Beach Park
Hanalei Black Pot Beach Park
Haena Beach Park
Lydgate Beach Park

3. County-level Resources (continued)

Major Archeological and Historic Resources:

Kekaha:

Hooneenu Heiau
Hauola Heiau

Waimea:

Fort Elizabeth
Waimea Town
Captain Cook Monument
Cook's Landing Site
Shingon Mission Shrines
Waimea Foreign Church
Waimea Burial Caves
Waimea Taro Terraces
Menehune Ditch
Lewaulu Heiau
Taro Terrace and House Sites
Waimea Valley Complex
Ahuloulu Heiau Complex

Numila:

McBryde Sugar Mill

Hanapepe:

Soto Zen Bell
Hanapepe House Site Complex
Hanapepe Burial Caves
Hanapepe Salt Pans

Wahiawa:

Wahiawa Petroglyphs Site

Lawai:

Lawai Lava Tubes 3071 & 3072
Kuhio Park

Poipu:

Kaneioluma Heiau

Koloa:

Lava Tubes
Old Koloa Sugar Mill
Sugar Monument
Jodo, Honganji & Shingon Missions
Koloa Union Church
St. Rafael's's Church & Rectory

3. County-level Resources (continued)

Puhi:

Kilohana Estate
Grove Farm Locomotives

Lihue:

Lion Horse Trough
Grove Farm Homestead
Grove Farm Kaipu Camp
Kauai Museum
Lihue United Church & Parish Hall
Lihue Lutheran Church

Niimalu:

Menehune Fishpond/Alekoko

Wailua:

Wailua River: ancient seat of Kauai royalty and location of various archeological sites.
Mouth of Wailua River: landing place of first alii from Tahiti, location of Hauola, City of Refuge, and Hikia o Kala Heiau and Alakukua Heiau.
Malae Heiau: one of the most important Hawaiian religious centers before the introduction of Christianity into Hawaii.
Kuamoo Road: follows the sacred highway of kings.
Holo-Holo-Ku Birthstones and Ka Lae A Manu Heiau: birthplace of Kauai royalty.
Poliahu Heiau: site of former King's home and temple.

Kapaa:

All Saints Episcopal Church & Sunday School Hall

Anahola:

Anahola Dune Burials

Moloaa:

Kihei Heiau Complex

Kilauea:

Kilauea Lighthouse Complex
Christ Memorial Church
Kilauea Plantation Manager's House
Kapinao Heiau

Hanalei:

Hanalei Museum
Hanalei NWR Historic & Archeological District
Hanalei Chinese Cemetery
Hanalei Pier
Haraguchi Rice Mill
Waioli Mission Complex

3. County-level Resources (continued)

Princeville:

Fort Alexander

Wainiha:

Wainiha Taro Terraces Site

Haena:

Haena Archeological Complex

Na Pali:

Na Pali Coast Archeological District

APPENDIX G: ECONOMIC PROFILE

In order to determine the overall economic development strategy for Kauai County, it is necessary to understand current economic patterns, and to learn where both problems and potential opportunities exist. In the following sections, we have summarized key economic and other characteristics of the County; the text material makes reference to a series of tables that follow.

1. Population (Table G.1)

The population of the County has grown considerably over the past decade, by around 30 percent, to total over 51,000 persons. At the same time, de facto population (the total of resident and visiting population on an average daily basis) increased to almost 68,000. The growth rate for the de facto population was 46.5 percent. Average daily visitors showed the most dramatic rate of growth, almost 143 percent for the decade.

The growth in population was not evenly distributed in the County. The north and east sectors grew substantially, reflecting development, in those areas, while the west sector (Waimea) barely showed an increase.

Projections of population for the balance of the decade and beyond show about the same rate of increase (increasing by 30.9 percent from 1980 to 1990 versus 27.3 percent from 1990 to 2000) for resident population, but a decline in the rate exhibited for average visitors from the level for the previous decade (decreasing from a rate of 142.9 percent from 1980 to 1990 to a rate of 39.8 from 1990 to 2000). The increase is substantial in any event, with around 22,000 new residents, an added 11,000 visitors on a daily basis, and almost 34,000 in total population projected over the next 15 years.

The implications of this growth for housing, community services and facilities, transportation and access, utility capacity and waste disposal, and business opportunity will be significant, and need to be carefully anticipated. Equally, the impacts on environmental conditions and lifestyle must also be determined.

2. Age distribution (Table G.2)

The trend toward an older population was observed on Kauai over the past decade. The median age increased from 29.8 to 33.9 years from 1980 to 1990. What is more significant is the composition of the population. The larger increases came in the 20-44 and over 65 age brackets. This means that those migrating to Kauai consisted largely of those in the family formation years; as increased childbirths occur, possible demands will be made on schools and recreation facilities. Likewise, the largest increase was among older persons, beyond retirement age. Again, this will present a different set of needs, to accommodate an older population with special housing and health care needs.

Vacancy rates are uniformly low, indicating the limited supply of housing. This is particularly true for owner-occupied units, but rental vacancies are not large either.

6. Measure of overcrowding (Table G.6)

One of the clear indications of the tight housing situation is the percentage of households with more than one person per room. For the County as a whole, the rate is 16.04 percent, while the state of Hawaii is only slightly lower at 15.92. This gains perspective if the national average of 4.90 percent is compared. This means that about four times as many households would be considered overcrowded in Kauai as found on average in the United States.

Even on Kauai, the rates vary among communities. The communities on the West side have a higher rate of overcrowded housing than elsewhere -- particularly census tracts 404 (Puhi), 407 (Eleele), 408 (Hanapepe), and 409 (Waimea).

7. Land use classifications and tenure (Table G.7)

The predominant land uses on Kauai are agricultural and conservation, reflecting its relatively undeveloped and rural state. The description as the "Garden Island" accurately reflects the vast amounts of scenic undeveloped or productive land. There was a significant amount of land classified for hotel and resort purposes over the past five years, with a sixfold increase. It should be noted that there are minor discrepancies in these figures, due to adjustments and changes in how parcels are listed.

In terms of ownership, the largest amount of land is held in private hands, but the state owns a large amount, generally provided on a lease basis for agricultural or urban use.

8. Number of establishments (Tables G.8, G.9)

The economic base of Kauai can be seen in the patterns of business establishments, as well as in how they have increased over the past three decades. The largest number of establishments in 1989 were found in the retail, services, construction, and finance/real estate/insurance sectors.

Highest rates of increase (from 1959 to 1989) were found in construction, transportation, retail, and services. The specific sub-categories of printing and publishing, water and air transportation, real estate, hotels, amusements and recreation, and health care showed considerable increase.

Among the smaller sized establishments (with between one and nine employees -- a common indicator of business formation), there was an overall increase from 1979 to 1989 of almost 60 percent, with the largest increases in the service (with 69 percent) and finance/real estate/insurance (at around 82 percent) sectors.

3. Ethnic composition (Table G.3)

Although it may be common in mainland communities to find diversity among ethnic groups in social and economic characteristics, that is more difficult with the ethnic mix found in Hawaii. As seen in the table, the largest identifiable ethnic group in Kauai was Filipino, followed by Japanese and Caucasian. Taken together, Hawaiians and part Hawaiians constitute the largest ethnic group, with about a 23 percent total; Filipinos represent 22 percent of the population, Japanese are 21 percent, and Caucasians are 19 percent. Thus, there is not a dominant ethnic group on Kauai, and a wide variety of smaller groups.

It is interesting to examine the rates of increase in the ethnic groups. The fastest growing groups were Native Hawaiians (about 28 percent increase) and Caucasians (slightly less in rate). To the extent that there are disparities in the level of income, education, and labor force participation among groups, these rates of growth may point out future and current problems for the Kauai economy. More specifically, since Native Hawaiians have often ranked lower on social and economic indicators, that group may seek means of more proportional participation in the mainstream Kauai economy.

4. Housing characteristics (Table G.4)

Key housing indicators are summed up in the table. The number of households increased over the past decade at a slightly higher rate than the resident population, but total housing units increased at less than the increase in the de facto population (42.0 percent versus 46.5 percent). This means that overall housing supply does not fully match up with population increases, when non-resident or visitor-related housing is taken into account.

The cost of new construction rose substantially, from an average of \$69,000 for a single family home to about \$123,000. Multi family dwellings increased from \$57,000 to slightly above \$165,000.

If projections of housing supply are examined, it was estimated that total units would increase by over 50 percent by the year 2000 and more than double by 2010. It appears that conditions of supply and demand will take a number of years to even out, with consistent shortfalls of housing at affordable levels until then.

5. Median housing values (Table G.5)

Housing is very expensive on Kauai, with a county-wide median housing value of \$171,700. That figure varies significantly in various geographical areas of the county, with the lowest median found on the west side, and the highest in Hanalei/Kiluaea. The overall median for the state of Hawaii is higher than on Kauai, by about 43 percent.

Retail increases were found in medium sized establishments. For firms employing between 10 and 99 employees, there was an increase of 80.2 percent in the number of establishments between 1980 and 1990. Manufacturing was dominated by large companies, with only modest increases in the number of establishments.

9. Economic base/patterns of employment (Tables G.10, G.11)

The pattern of employment adds to the understanding of the economic base of Kauai. It was estimated that in 1990, there were approximately 28,000 employees in the county, with the largest numbers in the services, retail, and state government sectors. Construction, transportation and communications, finance and real estate, and agricultural workers form a second tier of employment.

It should be noted that two industries -- hotels/tourism and sugar production -- account for or are closely related to over 40 percent of the County's employment opportunities. Together, they directly represent about 20 percent of all jobs. If related sectors such as construction and retail are considered, then another 20 percent of the economy is involved. If all employment relating directly or indirectly to tourism and agricultural production on Kauai, virtually 80 percent of employment would be involved. To the extent that either industry would decline or even suffer short-term downturns, it would cause serious dislocations in the Kauai economy. On the other hand it can also be viewed as a stable base upon which to build.

Over the past four years, there were around 6,750 employees added in the County, with the following increases:

<u>Sector</u>	<u>No. of employees</u>
1. services	+2450
2. retail	+1750
3. construction	+ 800
3. government	+ 550
4. finance, real estate, insurance	+ 550

There were decreases in employment in the manufacturing sector (250 jobs) and agricultural workers (100 jobs), both reflecting the decline of sugarcane production and processing on Kauai.

If the shifts in employment are tracked over a longer period (Table A.11, from 1959 to 1989), the relative decline in sugar production was partially offset by the increases in other agricultural production and processing. The emergence of the visitor industry, with hotel employment and related amusement and recreation, retail, and transportation services can be tracked over the past ten to fifteen years as the greatest source of added employment in the Kauai economy. Similarly, construction and wholesale contributed a proportional share of the new jobs, many of which directly or indirectly related to tourism.

10. Rates of unemployment (Table G.12)

Hawaii has historically had lower rates of unemployment than the mainland, in times of recession or expansion. This is partially because of a relatively finite labor force and a growing number of jobs; in order to increase the labor force in most instances, relocation from the mainland or overseas is required, and temporary employment by means of migration is not widespread. Because of this labor conditions are perpetually tight.

Kauai is in the same situation, but seems to have higher rates of unemployment than found statewide. Although rates have historically been low, they tend to be about 50 percent higher in Kauai. As of May, 1992 the rate of 5.4 percent reflects the lingering effects of the mainland recession, with downturns in tourism on Kauai; the rate rose to 7.7 percent by August, 1992.

11. Total and per capita personal income/cost of living (Table G.13)

Aggregate personal income totalled over \$790 million in 1989, and was \$15,585 on a per capita basis. The rate of increase in aggregate income was over 110 percent, while per capita increase -- reflecting added population growth -- was 64 percent.

If these increases are compared with a cost of living index (measured for urban employees in Honolulu), there was approximately the same rate of increase between per capita income and the consumer price index.

12. Low and moderate income persons and families (Table G.14)

Because of the quality of employment opportunities on Kauai (with relatively low pay for agricultural, retail, and service workers), and the costs of both housing and government services, there are a high proportion of families and individuals classed as low and moderate income. Although the data were not available for 1990, 1980 census data revealed a county-wide rate of low and moderate income families at about 38 percent; a similar ranking for persons was at 41 percent.

Although the percentages of low and moderate income families varied with communities on Kauai, there was not necessarily a discernible pattern according to areas of Kauai.

13. Personal income/affordability of housing (Table G.15)

The cost of living is very high on Kauai, as reflected in both housing costs and the tax burden. With a median house value of \$171,500, the ability to purchase a home is limited for many families and individuals. Those that are currently in homes would have few prospects for upgrading without significantly increasing household incomes; many wishing to migrate to Kauai would be largely discouraged by housing costs.

As seen in the analysis, the tax burden on an average Kauai household is in the range of 28 percent, while the cost for a typical mortgage would add 25 percent. Thus, monthly expenditures for housing and taxes alone would require over half of monthly income. And to afford the median value house with a typical mortgage, given average earnings, would require over \$70,000 in equity.

14. Household employment rates (Table G.16)

In order to earn enough household income to support the cost of living on Kauai, a significant number of households have multiple wage-earners. While the national average number of wage earners per household is 1.26, that indicator is 1.47 for the state of Hawaii, and on Kauai it is 1.68. If families only are considered (excluding single person households), the rate increase to 1.89 for Kauai, still greater than the rate of 1.64 for the state. If job counts (not numbers of employees but number of jobs) are considered, then the rate on Kauai increases to about two jobs per household.

15. Agricultural production (Table G.17)

Once the dominant economic activity on Kauai, agriculture has seen significant shifts in production and relative contribution to the Kauai economy.

First, the number of employees in agricultural production (see Table A.10) has declined for sugar, but increased for other crops.

Second, the numbers of producers has shifted, with decreases in vegetables and melons, fruits, taro, cattle, hogs, and other operations. There has been an increase over the same period, from 1982, for mac nuts and flowers and nursery products.

Third, similar trends are found in total acres in production, with a decline by 50,000 acres since 1982, largely due to cutbacks in sugarcane and ranching. There was also a decline in acreage for those products listed above, and increases for mac nuts and flowers and nursery products.

The conclusion from these figures is that the agricultural base of Kauai is shifting from traditional products to "diversified" agriculture, although in sheer production volume, employment, and numbers of acres used, sugarcane production continues to be the most important crop on the island.

16. Sugarcane production (Table G.18)

There are five operating sugarcane operations on Kauai. As of March, 1992, they reported a total of 34,130 acres in production, and total employment of 1,352. Future prospects for maintaining these levels of production and employment are not clear, but the long-term trend is toward continued scaling down of production.

17. Annual sales of agriculture and fishing products (Table G.19)

If the annual sales of the livestock and crop production is considered, commercial fishing, hogs, fruits, taro, and flowers and nursery products increased over the past decade, while sugar, cattle, vegetables and melons decreased in sales volume. Upon closer examination, fruits declined in volume of production, but the value of the production increased, signifying that fewer corps are produced, but for higher prices.

Likewise, the volume and sales of nursery products have both declined; that shift obscures the significant increases in both volume and sales for flower products, offsetting a decline in nursery production.

18. Average daily visitors (Table G.20)

The most dramatic change in the Kauai economy over the past 15 years has been the development of the visitor industry, both for its direct impacts and the indirect contribution to every sector. According to the figures presented in the table, statewide visitors increased by over 140 percent over the past 15 years, while visitors to Kauai increased by almost 250 percent. Average daily visitors from west and east-bound origins totalled 17,200 in 1990, up from around 5,000 in 1975.

Kauai continues to increase its capture of visitors; its "market share" of state visitors increased from 7.45 percent in 1975 to 10.61 in 1990. Although this increase is important, Kauai still has a relatively minor portion of the statewide visitor traffic. As also can be seen, the portion that comes to Kauai tends to spend less than elsewhere in the state, since percent expenditures lags behind the percentage number of visitors. However, in 1990 the gap appears to be closing, and may indicate continued ability to attract higher spending visitors. On the other hand, it could only reflect the downturn in tourism generally in the state, and resulting sensitivity to price.

19. Hotel room inventory and occupancy rates (Table G.21)

Over the same 15 years, the number of rooms available to visitors has increased from about 3,100 to 7,800. The inventory of rooms on Kauai represents 10.86 percent of the state total, slightly higher than state proportions for both numbers of visitors and expenditures. This has led to consistently lower occupancy numbers than found statewide; since 1980 there has been about a ten percentage point difference in occupancy between Kauai and the state, signalling a consistent over supply of available rooms.

20. Recent hotel occupancy rates (Table G.22)

If recent rates for occupancy are tracked, the extreme sensitivity to economic factors external to Kauai is found. The figures demonstrate the combined effect of the Persian Gulf war, then the lingering recession on the mainland, as seen in the downturn in occupancy for both the state and

Kauai in early 1991 and continuing through that year. Again, although the state declined, the effect on Kauai was more pronounced; occupancy as low as 54 percent was found in March, 1991. This means that slightly over half the available rooms were full at that time.

If occupancy rates are examined for various areas on Kauai, significant differences also can be found. The resorts and hotels of the North Shore have been consistently lower than the County average, in large measure due to the opening of Princeville and the increased supply of available rooms. The hotels and resorts on the east coast and in Koloa/Poipu have higher rates of occupancy, but still not at the more robust level found for the state.

21. Public revenues and expenditures (Table G.23)

Another significant element to the Kauai economy is the contribution of the public sector. While government employment on Kauai is dominated by state employees, with 2100 employees versus 900 for the county (see Table G.10), the County plays an important role in the economy. In 1991, total expenditures by the County were over \$57 million, a sharp increase from previous years, and a 78 percent increase in spending from 1985. Revenues, however, also increased over that period by 70 percent, due in part to increasing amounts of property tax collected.

The county budgets suffered deficit spending in 1986 and 1987, but now have provided surpluses in the past four years. Even though expenditures have increased, the ability to find sources of revenue to cover it have also been demonstrated.

It is noteworthy that assessed values of property on Kauai increased from about \$850 million in 1982 to over \$5.1 billion in 1991. Over that period, tax rates actually decreased. This means that the dramatic growth in assessed values was such that reductions in tax rates were possible, even though actual collections of property tax increased.

22. Property tax characteristics (Table G.24)

Although the property tax is not the only source of funding for the County, and other sources have contributed an increasing proportion, there are several noteworthy characteristics. The portion of those taxes assessed against the residential sector is large, with over half from single family homes, homesteads, and apartments. Businesses contribute about one-third, with hotels and resorts providing about 20 percent of total property tax revenues. Agricultural and conservation uses contribute a relatively smaller proportion.

The structure of the property tax base has become increasingly dependent on the health of the resort industry. Of the ten largest taxpayers on Kauai, five are hotels and four are resort-related real estate developers. In spite of vast land-holdings, only one sugarcane producer is on the list of largest taxpayers. As a percentage of County property tax, the five hotel operators pay 9.3 percent, and the real estate developers add another 6.7 percent. The two combined provide over 16.0 percent of the property taxes of the County.

Table G.1
Population Characteristics
Kauai County

1. Total population

<u>Year</u>	<u>Resident population</u>	<u>Average visitors</u>	<u>De facto population</u>
1980	39,082	7,259	46,341
1985	45,400	11,470	56,238
1990	51,177	17,634	67,963
2. Percent change, 1980-1990	+30.9	+142.9	+46.5
3. Percent change, resident population by district, 1980-1990			
Hanalei	+73.6		
Kawaihau	+48.9		
Lihue	+24.1		
Koloa	+30.1		
Waimea	+ 3.4		

Source: Statistical Abstract of Kauai Economy, 1991; p. 6.

4. Total projected population

<u>Year</u>	<u>Resident population</u>	<u>Average visitors</u>	<u>De facto population</u>
1995	57,747	19,469	77,216
2000	65,160	24,649	89,809
2005	73,524	28,533	102,057
5. Percent change 1990-2005	+43.7	+61.8	+50.2

Source: Derived from DBED projections, as reported in Kauai Housing Needs Assessment Study; 1991; p. 20.

Table G.2
 Age Distribution
 Kauai County

Age distribution	1980		1990		Percent change 1980-1990
	number	percent	number	percent	
Under 5 years	3461	8.86	3999	7.81	+15
5 - 19 years	9515	24.35	11058 (e)	21.61	+16
20 - 44 years	14015	35.86	20205 (e)	39.48	+44
45 - 64 years	7732	19.78	9231	18.04	+19
Over 65 years	4339	11.10	6684	13.06	+54
Total	39082		51177		+31
Median age	29.8		33.9		

Notes: (e) = estimated, to form consistent age brackets

Source: 1990 Census of Population and Housing and Statistical Abstract of Kauai Economy, 1991.

Table G.3
 Ethnic Composition
 Kauai County

<u>Ethnic group</u>	<u>1982</u>	<u>1987</u>	<u>Selected growth rates (percent change, 82-87)</u>
Unmixed			
Filipino	9572	10362	+ 8.25
Japanese	10680	9842	- 7.85
Caucasian	6796	8679	+27.71
Native Hawaiian	408	510	
Chinese	260	247	
Black, Puerto Rican	249	215	
Korean	n.a.	116	
Other, unknown	<u>75</u>	<u>297</u>	
Sub-total, unmixed	28040	30268	+ 7.95
Mixed			
Part Hawaiian	8028	10275	+27.99
Other mixed	<u>4325</u>	<u>5681</u>	+31.35
Sub-total, mixed	12353	15956	+29.17
Total, all groups	40393	46224	+14.44

Source: Based on sample survey conducted by Hawaii State Department of Health; reported in Statistical Abstract of Kauai Economy, 1991, p. 8.

Table G.4
Housing Characteristics
Kauai County

1. Housing inventory/number of households

	1980	1990	Percent change 1980-1990
Owner occupied	6429	9582	+49.0
Renter occupied	<u>5591</u>	<u>6713</u>	+20.1
Total occupied units (no. of households)	12020	16295	+35.6
Vacant units	1375	1318	
Non-resident units	<u>1433</u>	<u>3441</u>	+140.1
Total housing units	14828	21054	+42.0

Source: 1990 Census of Population and Housing and Hawaii Data Book, 1990, pp. 536, 540.

2. Cost of new construction

	1980	1990
Average single family	\$69,008	\$122,808
Average multi-family	\$56,832	\$165,304

Source: Derived from building permit authorizations, as reported in Statistical Abstract of Kauai Economy, 1991; p. 30.

3. Projected housing inventory

Year	Total dwelling units	
	number	percent change, from 1990
2000	32,264	+53.2
2010	49,455	+134.9

Source: Kauai Housing Needs Assessment Survey, 1991; p. 37

Table G.5
 Median Housing Values
 Kauai County

Area	Census tract no.	Median housing value		Vacancy rate	
		amount (1990)	percent of County median	owner	renter
Hanalei/Kilauea	401	275,600	160.7	1.5	7.4
Wailua/Anahola	402	201,113	117.3	0.6	3.7
Kapaa	403	151,500	88.3	0.8	2.5
Puhi/Hanamaulu	404	142,400	83.0	0.2	1.6
Lihue	405	176,300	102.8	0.8	5.9
Koloa/Poipu	406	195,800	114.2	0.9	9.0
Eleele/Kalaheo	407	170,400	99.4	0.1	4.2
Kaunakani/Hanapepe	408	148,400	86.5	0.3	1.1
Waimea/Kekeha	409	130,900	76.3	0.7	2.7
County of Kauai		171,500	100.0	0.7	4.3
State of Hawaii		245,300	143.3	0.8	5.4

Source: 1990 Census of Population and Housing, State of Hawaii.

Table G.6
 Measure of Overcrowding
 (Percentage of households with
 more than one person per room)
 Kauai County

<u>Area</u>	<u>Census tract no.</u>	<u>Measure of overcrowding</u>
Hanalei/Kilauea	401	11.18
Wailua/Anahola	402	12.47
Kapaa	403	19.71
Puhi/Hanamaulu	404	28.10
Lihue	405	8.21
Koloa/Poipu	406	15.09
Eleele/Kalaheo	407	17.28
Kaunakani/Hanapepe	408	17.41
Waimea/Kekeha	409	19.10
County of Kauai		16.04
State of Hawaii		15.92
National, USA		4.90

Source: 1990 Census of Population and Housing, State of Hawaii.

Table G.7
 Land Use Classifications and Tenure
 Kauai County

1. Land use classification

<u>Classification</u>	<u>Acres, by land use</u>	
	1986	1991
Residential		
Single family (1)	4,171	4,233
Apartment	574	435
Homestead (1)	3,964	1,198
Hotel and resort	240	1,591
Commercial	483	401
Industrial	1,286	1,276
Agricultural	204,188	201,554
Conservation	184,026	178,510
Total (2)	398,932	389,199

Notes:

(1) Single family is improved residential land, while homesteads are unimproved residential parcels.

(2) Excludes highways, streets, and other public rights-of-way.

Source: Statistical Abstract of Kauai Economy, 1991; p. 27

2. Land tenure (patterns of ownership)

<u>Land tenure</u>	<u>Number of acres</u>
Federal	3,158
State	150,984
County	610
Private	196,540
Niihau	<u>46705</u>
Total	397,997

Source: Statistical Abstract of Kauai Economy, 1991; p.28.

Table G.8
 Number of Establishments
 Kauai County

	1959	1969	1979	1989
Total	364	486	892	1445
Agriculture, Forestry, Fishing	5	7	10	13
Mining	1	4	1	1
Construction	36	38	95	133
Manufacturing	22	22	22	30
Food & kindred	17	14	11	14
Printing & publishing	-	-	-	6
Transportation, Public Utilities	11	28	38	71
Water transport.	1	-	2	9
Air transport.	-	-	5	13
Transportation services	-	-	7	21
Communications	-	3	4	6
Wholesale	27	30	49	69
Retail	139	160	327	444
Finance, real estate, insurance	14	33	82	149
Real estate	-	10	36	86
Services	107	149	224	374
Hotels	4	12	17	29
Amusement, recreation	11	14	13	39
Health	27	24	39	70

Source: U. S. Department of Commerce. Bureau of the Census.
County Business Patterns (annual)

Table G.9
 Number of establishments (by number of employees)
 Kauai County

	Year	1-4	5-9	10-19	20-49	50-99	100-250	Over 250	Total
Total	1989	716	360	191	110	43	16	9	1445
	1984	614	268	144	88	21	7	4	1146
	1979	481	193	117	60	22	14	5	892
Construction	1989	75	33	18	6	1	-	-	133
	1984	67	29	3	5	-	-	-	104
	1979	67	16	7	4	-	1	-	95
Manufacturing	1989	7	6	8	5	-	3	1	30
	1984	6	5	9	3	1	3	-	27
	1979	4	3	9	2	-	4	-	22
Transportation, Public Utilities	1989	22	21	9	6	9	4	-	71
	1984	21	7	6	10	5	2	1	52
	1979	14	5	6	4	5	2	2	38
Wholesale	1989	26	21	16	6	-	-	-	69
	1984	20	24	7	3	1	-	-	55
	1979	20	15	9	5	-	-	-	49
Retail	1989	161	126	74	60	21	2	-	444
	1984	182	94	57	49	8	-	-	390
	1979	157	83	43	34	9	1	-	327
Finance, Real Estate, Insurance	1989	84	36	18	9	-	2	-	149
	1984	65	26	13	6	2	-	-	112
	1979	44	22	9	3	3	1	-	82
Service	1989	196	97	42	14	12	5	8	374
	1984	192	67	44	12	4	2	3	324
	1979	130	43	32	7	4	5	3	224

Source: U.S. Department of Commerce. Bureau of the Census. County Business Patterns (annual)

Table G.10
Economic Base/Patterns of Employment

<u>Industry/sector</u>	<u>1986</u>	<u>1988</u>	<u>1990</u>
Contract construction	650	900	1450
Manufacturing	1200	1050	900
durable goods	50	50	neg.
nondurable goods	1150	1050	900
Trans., comm., utilities	1950	2350	2400
Wholesale trade	400	400	500
Retail trade	4800	5300	6550
Fin., insur., real est.	1000	1100	1550
Services, miscellaneous	5150	7000	7600
hotel	2650	4050	4000
other	2500	2950	3600
Government	2800	3050	3350
federal	250	300	350
state	1750	1900	2100
local	850	850	900
Sub-total, non-agricultural (wage and salary)	17950	21150	24300
Agricultural (wage and salary)	1250	1200	1150
sugar	1050	1000	950
other	200	250	200
Self-employed (agricultural and non-agricultural)	2050	2100	2550
Total	21250	24450	28000

Source: Labor Force Data Book (annual), Hawaii State Department of Labor and Industrial Relations; as reported in Statistical Abstract of the Kauai Economy, 1991; p. 14.

Table G.11
 Number of Employees
 Kauai County

	<u>1959</u>	<u>1969</u>	<u>1979</u>	<u>1989</u>
Total	4918	6363	11404	18473
Agriculture, Forestry, Fishing	17	n.d.	n.d.	61
Mining	n.d.	n.d.	n.d.	n.d.
Construction	306	258	562	797
Manufacturing	2321	1710	720	1279
Food & kindred	2207	1532	617	1097
Printing & publishing	-	-	-	113
Transportation, Public Utilities	309	521	1600	1642
Water transport.	n.d.	n.d.	n.d.	206
Air transport.	n.d.	n.d.	n.d.	359
Transportation services	n.d.	n.d.	n.d.	240
Communication	n.d.	n.d.	n.d.	197
Wholesale	323	282	412	605
Retail	836	1514	3389	5588
Eating & drinking	163	413	1347	2416
Finance, real estate, insurance	73	246	796	1273
Real estate	n.d.	114	528	853
Service	631	1368	3674	6805
Hotel	165	493	1682	3073
Amusement, recreation	97	117	223	586
Health	147	303	690	1477

Source: U.S. Department of Commerce. Bureau of the Census.
County Business Patterns (Annual)

Excludes self-employed persons, government and railroad workers.

Table G.12
Rates of Unemployment
Kauai County

<u>Year</u>	<u>State</u>	<u>County</u>
1980	4.9	4.2
1985	5.6	6.8
1990	2.8	3.6
1992, May	3.6	5.4
1992, August	n.a.	7.7

Source: Hawaii Data Book, 1991, pp. 313, 315; Bank of Hawaii Annual Economic Report, 1991, p. 5; Statistical Abstract of Kauai Economy, 1991, p. 12; First Hawaiian Bank, Economic Indicators, March/April, August, 1992.

Table G.13
 Total and Per Capita Personal Income
 Cost of Living Index
 Kauai County

<u>Year</u>	<u>Total personal income (in millions of dollars)</u>	<u>Per capita personal income</u>
1980	374.5	9,499
1985	515.8	11,365
1989	790.0	15,585
Percent change, 1980-1989	+110.95	+64.07

Source: Statistical Abstract of Kauai Economy, 1991; p. 17.

<u>Year</u>	<u>Cost of living index</u>
1980	83.0
1990	138.1
1991	149.1
Percent change, 1980-1990	+66.39

Note: Based on consumer price index, urban Honolulu resident,
 as reported by First Hawaiian Bank, Economic Indicators;
 March/April, 1992.

Source: Statistical Abstract of Kauai Economy, 1991; p. 74.

Table G.14
 Low and Moderate Income Persons and Families
 Kauai County

Area	Census tract no.	Percent low-moderate income	
		families	persons
Hanalei/Kilauea	401	44.96	49.32
Wailua/Anahola	402	30.39	34.83
Kapaa	403	47.13	50.90
Puhi/Hanamaulu	404	44.51	46.63
Lihue	405	26.97	31.03
Koloa/Poipu	406	32.12	36.12
Eleele/Kalaheo	407	34.50	37.27
Kaunakani/Hanapepe	408	37.96	42.29
Waimea/Kekeha	409	44.03	46.28
County of Kauai		37.91	41.21

Source: U.S. Bureau of the Census; 1980 data, 1990 data not available.

Table G.15
 Personal Income/Affordability of Housing
 Kauai County

1.	Per capita income (1989)	15,585
2.	Persons per household	3.10
3.	Household income (b x c)	48,313
4.	Adjust to disposable income	
4.1	Total personal income, Kauai (in \$ thousands)	790,000
4.2	Less GET tax	26,992
4.3	Less state income tax	14,398
4.4	Less property tax	20,905
4.5	Less federal tax and FICA	<u>158,000</u>
4.6	Net disposable income	569,705
5.	Per household disposable income	34,487
6.	Ratio of income to mortgage amount	35%
7.	Amount affordable for housing (maximum likely mortgage)	98,500
8.	Median housing price	171,500
9.	Average amount of equity needed	73,000

Notes:

- 4.4 Assumes a combined effective tax rate of 20 percent, for both FICA and federal income tax payments.
6. Assumes lenders will provide mortgages on the basis of no more than 35 percent of household income, as a maximum affordable for home purchases.
9. Difference between median housing value and average amount of mortgage available (line 8 minus line 7), according to per household lending amounts. There will be wide variations according to different forms of financing and maturity of loans, as well as existing owners versus new purchases.

Table G.16
 Household Employment Rates
 Kauai County

	<u>Kauai</u>	<u>State</u>
1. Number of employees (1990)	27,350	524,000
2. Number of households (1990)	16,295	356,267
3. Employees per household	1.68	1.47
4. Employees per household for families only (excludes single person households)	1.89	1.64
5. Jobcount (1990 estimate)	28,300	583,900
6. Jobcount per household	1.74	1.64
7. Jobcount per families only	1.97	1.86

Source: Bank of Hawaii; Annual Economic report, 1991; pp 29, 31;
 First Hawaiian Bank; Economic Indicators (November/December,
 1991); and U.S. Bureau of Census; 1990 Census of Population and
 Housing.

Table G.17
 Agricultural Production
 Kauai County

1. Total acres in production (crops and livestock)

1990:	225,000
1986:	230,000
1982:	275,000

Source: Statistics of Hawaiian Agriculture (annual), as reported in Statistical Abstract of Kauai Economy, 1991; p. 35.

2. Number of producers

<u>Producer</u>	<u>1982</u>	<u>1986</u>	<u>1990</u>
Sugarcane	5	5	5
Vegetables, melons	52	48	25
Fruits	82	78	55
Mac nuts	2	5	8
Taro	49	50	40
Flowers and nursery	25	25	45
Cattle	190	160	160
Hogs	115	110	90
Milk	14	13	12
Eggs, broilers	6	5	5
Honey	12	7	3

Source: Statistical Abstract of Kauai Economy, 1991; pp. 36, 40-41.

3. Number of acres in production

<u>Type of crop</u>	<u>1982</u>	<u>1986</u>	<u>1990</u>
Sugarcane	44,900	43,200	38,100
Vegetables, melons	100	100	100
Fruits	800	800	700
Taro	210	215	165
Flowers, nursery	46	31	92
Mac nuts	n.e.	n.e.	580

Source: Statistical Abstract of Kauai Economy, 1991, p. 35; interviews with Department of Agriculture.

Table G.18
 Sugarcane Production
 Kauai County

<u>Company</u>	<u>Majority landowner</u>	<u>Acres in production</u>	<u>Number of employees</u>
Lihue Plantation	DLNR/L.P.	11,300	415
Kekaha Sugar	DLNR	8,400	285
McBryde	McBryde/ DLNR	7,000	345 (1)
Olokele	DLNR	4,730	207
Gay and Robinson	Gay and Robinson	2,700	100
Total		34,130	1,352

Notes:

(1) Includes coffee and mac nut production workers

Source: Based on interviews with company representatives; March, 1992.

Table G.19
 Annual Sales of Agriculture and Fishing Products
 Kauai County

<u>Type of product</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>
	(sales in \$ thousands)		
Commercial fishing	n.e.	1093	1777
Livestock			
Cattle	3118	1860	1160
Hogs	674	758	1011
Other (1)	1929	2453	2938
Total	5721	5071	5009
Crops			
Sugar	83600	53300	52400
Vegetables, melons	537	608	278
Fruits	1536	1697	2558
Taro	865	1032	1379
Field crops	954	1716	1952
Nursery, flowers	615	1179	2380 (e)
Total	88165	59554	60267

Notes:

(e) = estimated; reflects decrease of nursery production from 1989, but increase in floriculture in both 1990 and 1991.

(1) Includes producers of milk, eggs, and broilers, and nominal amounts of sheep, wool, turkeys, horses, honey, and beeswax.

(2) Macadamia nuts, coffee, and other emerging crops not estimated, but included in totals; approximate total of emerging crops is \$1.270 million.

Source: Statistics of Hawaii Agriculture (annual); reported in Statistical Abstract of Kauai Economy, 1991. Also, based on interviews with Hawaii Department of Agriculture and McBryde Sugar Company, 1992.

Table G.20
 Average Daily Visitors in Kauai
 (Total East-West Bound)

<u>Year</u>	<u>Kauai</u>	<u>State</u>	<u>Kauai as a</u> <u>percent of state</u>	
			<u>visitors</u>	<u>expenditures</u>
1975	4,941	66,308	7.45	n.d.
1980	7,259	96,497	7.52	6.60
1985	11,470	116,700	9.83	8.40
1990	17,200	162,070	10.61	10.12
Percent change, 1975-1990	+248.11	+144.42		

Source: Derived from Hawaii Visitors Bureau research statistics, and
Kauai Data Book, 1991.

Table G.21
 Hotel Room Inventory and Occupancy Rates
 Kauai County

Year	Room Inventory		Occupancy Rates	
	number	percent of state	Kauai	State
1975	3,102	7.83	77.2	74.1
1980	4,322	7.97	69.6	69.3
1985	5,656	8.65	67.1	77.5
1990	7,846	10.86	67.6	78.8

Source: Bank of Hawaii; Hawaii 1991: Annual Economic Report, pp. 29, 31.

Table G.22
 Recent Hotel Occupancy Rates
 Kauai County

	Percent Occupancy				
	N. Kauai	C. Kauai	S. Kauai	Kauai total	Statewide
March, 1990	40	72	79	71	83
June, 1990	36	68	68	64	80
September, 1990	43	70	76	69	79
March, 1991	40	55	56	54	65
June, 1991	39	64	58	59	75
September, 1991	43	62	58	59	73
February, 1992	n.d.	n.d.	n.d.	57	79

Source: Honolulu Advertiser (July, 1991) and Bank of Hawaii; Economic Indicators: Kauai County Supplement; November/December, 1991, and Economic Indicators; March/April, 1992.

Table G.23
 Public Revenues and Expenditures
 Kauai County

1. Revenues and expenditures

Amounts in Operating Budget (in millions)

<u>Year</u>	<u>Revenues</u>	<u>Expenditures</u>	<u>Surplus (Deficit)</u>	<u>Property tax</u>
1985	35.303	32.114	3.189	18.295
1886	34.675	34.840	(.165)	17.873
1987	35.939	46.775	(10.836)	17.246
1988	37.432	37.014	.418	18.222
1989	46.371	42.882	3.489	20.904
1990	55.541	48.526	7.015	23.494
1991	60.134	57.126	3.008	27.665
Percent change, 1985-1991	+70.34	+77.89		+51.22

2. Changes in property tax rates and assessments

<u>Year</u>	<u>Tax rates (per \$1000 assessed valuation)</u>	<u>Assessed value</u>
1982	\$14.50	\$849,493,000
1991	\$3.94-\$7.99	\$5,198,985,000

Source: Comprehensive Annual Financial Report, Year Ending
 June 30, 1991; County of Kauai; pp. 77, 78, 79, 83, 86.

Table G.24
 Property Tax Characteristics
 Kauai County

1. Percent by land use category

	<u>Percent of property tax</u>	
Residential		
Single family	21.93	
Homestead	10.18	
Apartment	<u>20.29</u>	
Sub-total		52.40
Commercial	10.44	
Industrial	4.72	
Hotel/resort	<u>19.62</u>	
Sub-total		34.78
Agricultural		10.41
Conservation		<u>2.42</u>
Total percent		100.00

Source: Department of Finance, County of Kauai.

2. Ten largest taxpayers, fiscal year 1991-1992

<u>Taxpayer/property owner</u>	<u>Busines type</u>	<u>Taxes paid</u>	<u>Percent of County total</u>
Hemmeter/VMS Kauai Company II	hotel	1,406,520	4.6
Lihue Plantation Co.	sugarcane	1,061,366	3.7
Kawailoa Development	r.e. develop.	866,501	2.9
Princeville Development Co.	r.e. develop.	649,022	2.1
Hemmeter/VMS Kauai Company III	hotel	488,394	1.6
Waiohai Resort Partners, LTD.	hotel	438,965	1.4
Embassy Hawaii Corp.	r.e. develop.	274,476	0.9
Hemmeter/VMS Kauai Company I	hotel	272,372	0.9
K.H. Hotel Partnership	hotel develop.	257,225	0.8
Wailua Associates	r.e. develop.	224,987	0.7
Total (1)		5,959,832	19.6

(1) Does not add due to rounding.

Source: Department of Finance, County of Kauai; memorandum of
 September 9, 1991.

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APPENDIX I: COMMENTS FROM PUBLIC HEARING AND AGENCY REVIEW

The Draft Overall Economic Development Plan (OEDP) was presented to members of the Steering Committee for their review and comment, at a meeting conducted on July 6, 1992. The comments, suggestions, recommendations, and editing of those individuals is reflected in the Final Report.

The report on the meeting, including a summary of the comments, is attached as Appendix I.

KAUAI ECONOMIC DEVELOPMENT BOARD

RECOMMENDED CHANGES/ADDITIONS/DELETIONS KAUAI OVERALL ECONOMIC DEVELOPMENT PLAN UPDATE

July 16, 1992

The Overall Economic Development Plan Update steering committee met on July 6, 1992 at the Kauai Community College Learning Resource Center Room 129 at 5:00 p.m. to discuss the draft copy of the Overall Economic Development Plan (OEDP) Update. Kirsten Baumgart-Turner, sub-contracted by Pryde Roberts Development Services, attended the meeting. Steering Committee members in attendance were:

- Linda Colburn
- Gary Hooser
- Mel Kihara
- Ezra Kanoho
- Sue Kanoho
- Alton Miyamoto
- Joe Munechika
- Jim O'Donnell
- Bill Peay
- Marion Penhallow
- Glenn Sato
- Mike Vieth
- Mike Woltmon
- Peter Yukimura

Important areas of concern that should be reviewed are as follows:

In the Executive Summary under Purpose: the priority list should show #2 as #1, #3 as #2 and #1 as #3 (copy attached). The word "self-sufficient" should be changed throughout the document as everyone agreed this is not realistic for Kauai.

There was considerable discussion about the lack of acknowledgement of the Pacific Missile Range Facility (PMRF) as a major employer and key player in possible high tech opportunities in the future. Ocean engineering did not seem to be mentioned at all. Military → scientific research/non-defensive issue is important - might translate into better non-military.

There was some concern about the issue of outside expertise being brought in, instead of using what we have here already = recruitment vs. enabling. We should stress capacity building through education, management and technical assistance.

We need to be sensitive to descriptions such as "walking through a heiau". Some people could view this as culturally destructive as not respectful of the Hawaiian culture. Be sensitive to the use (which could also quickly become abuse, i.e., Haunama Bay, Oahu) of archeological sites for education and tourism. The issue of culture in the report could be developed a little more. The comment made was that this could be an OEDP for any area, we need to be a little more specific when thinking of Kauai. (Vol. I, Sec. 5.10)

Recommended changes for OEDP
July 16, 1992
Page Two

Everyone agreed that in Vol. I, Sec. 5.8 regarding energy there needs to be clarification on the fact that it was a proposed 19 percent rate increase. There was some concern that the energy issue be addressed accurately since this is very important to Kauai's economy and success of businesses.

The sugar industry seems to be addressed lightly. Although we know it is on the decline, there doesn't seem to be enough about the subject and what might happen should sugar disappear completely.

It was suggested that anytime you use words such as "braindrain" you should give an example of what that means after the word(s).

Other areas that need to be reviewed again are:

- Delete specific location reference to the Hanapepe AmFac site
- 7.1 C.D.C. correction
- To confirm: Hurricane Iwa was November of 1982. Someone told me they saw the hurricane listed as Dec. '91 (although I couldn't find anything).
- Suggestion to separate out 5.11 as one paragraph by itself
- Please check # of acres in production for Livestock Operations, there is an argument that it is only 15,000 acres not 150,000
- Vol. I, Sec. 6.5/SU-3 the word "affordable" housing maybe should read "accommodations"
- "Kauai 2000 and Beyond" draft vision and mission are attached. Please delete the words "to forge"
- 7.3 Check name of "Hawaiian Strategic Corp."
- Throughout Vol. II Kilauea is misspelled (G.5/G.6/G.14)
- When referring to schools, we should include both public and private
- 3.1 under Physical Setting "periodic tsunamis" the word periodic implies there is one every couple years. Use a different word.
- 5.9 Check and reference the source for paragraph #3

OEDP PUBLIC HEARING

A public hearing was held on December 14, 1992 at the Kauai Community College. The hearing was attended by: Kirsten Baumgart-Turner, David Proudfoot, Sue Kanoho, Glenn Sato, Gary Baldwin, Pam Parker, Ken Stokes, Randy Honjo, Elsie Godbey, Tom Godbey, Lelan Nishek. Comments were made in three areas.

The first concerned the visitor industry section of the Plan. It was noted that representatives of the industry on Kauai would like to see more emphasis on tourism marketing and tourism development overall. Furthermore, it was noted that the industry has a hard time getting a handle on the definition of ecotourism. It was suggested that an ecotourism conference be held on Kauai with international participants. Finally, it was noted the industry is happy with the recommendation to extend the airport runway.

The second set of comments focused on the lack of attention the Plan pays to the role of native Hawaiians in Kauai's overall planning process, particularly in the development of the visitor industry. It was noted that a new organization of native Hawaiians, "Hui Ho'okipa O'Kaua'i", had recently been formed to address this problem.

The third set of comments regarded the need to enlist planners and designers to draw-up long-term plans for beautification and creation of public recreational areas on Kauai.

Participants in the hearing expressed a general consensus that the OEDP is a very good start to what should be an on-going process of goal- and task-setting for Kauai's policy-makers, and for public and private implementation.

APPENDIX J: APPROVAL LETTER FROM EDA

The letter of approval from the Economic Development Administration (EDA), U.S. Department of Commerce is attached as Appendix J, provided as part of Volume II of the Final Report.

POST HURRICANE ADDENDUM
TO THE OVERALL ECONOMIC DEVELOPMENT PLAN
FOR KAUAI

July 20, 1993

POST-HURRICANE ADDENDUM TO OEDP

June 25 and June 28, 1993
Lihue Plantation Conference Room

The first week of June, 1993 all participants in the original four OEDP focus groups, and all members of the OEDP Steering Committee were invited to attend a re-convening of the original OEDP focus groups in an attempt to document any new and/or outstanding issues and options for economic development on Kauai.

Each focus group identified major problems within their specific area of concern, the critical issues underlying those problems, opportunities for economic development, and some recommended actions to take advantage of the identified opportunities.

The dominant issues identified by the focus groups have changed somewhat from those identified before the hurricane; and those which remain the same have either increased in their urgency or taken on new characteristics.

Unlike the original OEDP, rapid growth in the number of visitors and visitor plant, and rapid residential growth is no longer a problem. The situation has reversed itself with the recovery of tourism identified as the major concern for the survival of Kauai's economy. Unemployment and lost revenue are the direct results of flailing tourism, while the island continues to suffer from high, and in some cases increased, operating and living costs.

Inadequate infrastructure, on the other hand, continues to be a problem with previously sighted deficiencies worsened due to hurricane damage. Inaccessibility to insurance, poor education and re-training, and an increased housing shortage also plague the island.

Preservation of natural resources continues to be of critical concern, particularly as a result of the devastation to Kauai's lush flora and subsequent problems with erosion. The cost of living has increased in terms of rental rates, and due to housing reconstruction cost increases, and the increased cost for otherwise non-existent insurance policies. Transportation costs and flow have worsened due to the cut-back in inter-island flights and the withdrawal of a major mainland carrier which provided direct access to mainland markets.

Finally, many people sighted the social impact of the hurricane, and the perceived poor response of government to all of the above-mentioned critical issues which have resulted in a lack of confidence in government institutions, increased social ills, and a lower over-all quality of life.

Critical Issues

1. Economy: The overall economic picture has greatly worsened due to both the hurricane and the international economic recession. All of the issues identified below contribute to the poor state of Kauai's economy. The recovery of tourism and agriculture, was considered crucial to Kauai's economic stability. The limited size of the economy is also considered an obstacle to economic diversification.
2. Tourism Recovery: Visitor industry recovery was identified by all four groups as the key to Kauai's economic recovery.
3. Employment: Although human resources continue to be a critical issue, the nature of employment problems has changed. There is now an unemployment problem as opposed to a labor shortage problem. Unemployment, and the "labor shortage" which companies are now experiencing is primarily a result of lay-offs due to revenue losses and competition for workers from the thriving construction industry. The high cost of living and poor educational opportunities continue to influence the supply of skilled labor.
4. Insurance: The state-wide insurance crisis caused by the overwhelming hurricane damage, has made the inaccessibility to insurance coverage of all forms a very critical issue for the continued development of the island.
5. Education and Training: The poor quality and limited opportunities for education, training and employment continue to present major obstacles to business expansion and new industry, and to improved quality of life as local workers are often displaced by imported skilled labor.
6. Infrastructure: Infrastructure was deemed even less adequate than before the hurricane. Deficiencies were sighted in housing, transportation, particularly direct airline routes to the mainland, inter-island flights, intra-island traffic flow, energy, waste disposal, water delivery, and the cost of all of these. The most noted change is the simultaneous intensification of all of these problems.
7. Government: The perceived role of government in Kauai's economic development has changed somewhat in that over-regulation is not presently at issue. Rather there was a consistent perception by all groups of a lack of support, responsiveness and follow-through by government institutions in assisting Kauai's efforts to recover from the hurricane.
8. Housing: Increased insurance costs, increased construction costs, and increased competition for scarce units have further contributed to the high cost of living and a lowered quality of life on Kauai.
9. Operating and Living Costs: The overall cost of living and of doing business continues to affect general business survival and expansion. A noted change is the increase in competition from statewide influx of businesses that don't bear local fixed costs.

10. Dependence on Outside Resources: The cost of importing most basic inputs, often including skilled labor, and the time lags this creates put tremendous constraints on economic recovery, growth and diversification.

11. Marketing: There was consistent agreement among the four focus groups that the recovery of tourism is key to the revitalization of Kauai's economy. Insufficient marketing is considered to be the main obstacle to reviving the industry.

12. Land: The availability of affordable land, particularly for agricultural use continues to be a critical issue. There is continued support for land use permitting and zoning as a means of guiding development, protecting Kauai's cultural and environmental integrity, and maintaining its open spaces and prime agricultural lands.

13. Natural Disasters: The relative frequency of natural disasters, their impact on the economic development of the island, and the development of efficient response and recovery mechanisms, are now considered critical issues. A perceived risk of natural disasters on Kauai has also led to a perception of increased risk of capital investment in the island.

14. Environment: While preservation of, and access to natural resources continues to be a concern, the primary focus on the environment has turned to the urgent need to better handle solid waste disposal, and to clean up the parks, beaches, and other recreational areas.

15. Quality of Life: The previous concern for maintaining the integrity of Kauai's rural lifestyle has changed to focus more directly on the morale and economic well-being of the community. Increasing social ills as a result of the above-mentioned issues has become a critical issue for the over-all well-being of the community.

Participants

The invited participant list , and actual attendance lists follow (Steering Committee members, distributed across the four groups, are marked with an S):

Diversified and Traditional Agriculture

June 25, 9:00 am - 11:00 am

- | | |
|---------------------|-----------------------------|
| 1. Jack Gushigen | 10. Gary J. Figueroa |
| 2. Carol Hariguchi | 11. Ted Blake |
| 3. Keith Smith | 12. John Hoxie (S) |
| 4. Karen Caires | 13. Ed Pettys (S) |
| 5. Roy Oyama (S) | 14. Ezra KanoHo (S) |
| 6. Mike Furukawa | 15. Luella Lem (S) |
| 7. Judy Peckenpaugh | 16. Dr. Michael Woltman (S) |
| 8. Bruce Robinson | 17. Bill Jessup |
| 9. Mike Strong | 18. Glenn Sato (S) |
| | 19. Sue KanoHo (S) |

Actual attendance:

1. Jack Gushigen
2. Rodney Hariguchi for Carol Hariguchi
3. Richard Ebesu (UHCTAHR) for Karen Caires
4. Roy Oyama
5. Michael Woltman
6. Bill Jessup
7. Glenn Sato

Tourism and Related Development

June 25, 1:00 pm - 3:00 pm

- | | |
|--------------------|--------------------------|
| 1. Mel Ventura | 10. Tani Bova |
| 2. Gordon Kiyabu | 11. Lin Brazil |
| 3. Kamika Smith | 12. Barbara Robeson (S) |
| 4. Margy Parker | 13. June Stark (S) |
| 5. Kaleo Patterson | 14. Barnes Riznik (S) |
| 6. David Elpern | 15. Marion Penhallow (S) |
| 7. Ray Blouin | 16. Joe Munechika (S) |
| 8. Roselle Bailey | 17. Mike Machado (S) |
| 9. Glenn Sato (S) | 18. Sue KanoHo (S) |

Actual attendance:

1. Kamika Smith
2. Kelly Hoen (Hyatt Regency Kauai) for Margy Parker
3. Tani Bova
4. June Stark
5. Glenn Sato
6. Sue KanoHo
7. Gary Baldwin for himself
8. Peter Herndon for himself
9. Peter Wolf for himself

Emerging Businesses (including Manufacturing, Light Assembly,
and Food processing)

June 28, 9:00 am - 11:00 am

- | | |
|---------------------|------------------------|
| 1. John Wada | 8. Ken Stokes |
| 2. Carol Bain | 9. Tad Miura, Jr. |
| 3. Gray Hooser (S) | 10. Bob Agres (S) |
| 4. Wayne Katayama | 11. Peter Yukimura (S) |
| 5. Walter Lappert | 12. Mel Kihara (S) |
| 6. Charles Kawakami | 13. Mike Veith (S) |
| 7. Bill Williamson | 14. Glenn Sato (S) |
| | 15. Sue Kanoho (S) |

Actual attendance:

1. John Wada
2. Wayne Katayama
3. Tad Miura, Jr.
4. Peter Yukimura
5. Mel Kihara
6. Mike Veith
7. Glenn Sato

High Technology, Telecommunications, and Energy Development

June 28, 1:00 pm - 3:00 pm

- | | |
|-----------------------------|----------------------|
| 1. John Dunn | 9. Ned Dana |
| 2. Wayne Richardson III (S) | 10. Bill Peay (S) |
| 3. Norman Ahu | 11. Mike Veith (S) |
| 4. Bill Bass | 12. Gary Hooser |
| 5. Quentin Belles | 13. Dick Argus (S) |
| 6. Randy Hee | 14. Maurice Kaya (S) |
| 7. Ron Richmond | 15. Sue Kanoho (S) |
| 8. Alton Miyamoto (S) | 16. Glenn Sato (S) |

Actual attendance:

- | | |
|---------------------------------|---------------------------------|
| 1. Norman Ahu | 8. Dick Argus |
| 2. Janice Kato for Bill Bass | 9. Steve Alber for Maurice Kaya |
| 3. Randy Hee | 10. Sue Kanoho |
| 4. Alton Miyamoto | 11. Glenn Sato |
| 5. Ned Dana | |
| 6. Richard Correa for Bill Peay | |
| 7. Mike Veith | |

Diversified and Traditional Agriculture

June 25, 1993, 9:00 am - 11:00 am

Problems:

1. Transportation costs and flow. High cost to transport both livestock and chemicals (O). Costs increased due to withdrawal of United Airlines. Shippers must now pay cost of changing carriers in Honolulu, instead of direct flight to mainland (N).
2. Affordable Agriculture Land shortage for purchase and rent at agriculture rates (O).
3. Water shortage due to emergency power shortage (N); water for agriculture use limited versus abundant domestic water supply; Disputes over water rights between government agencies and private sector (O); potential County rate increase limit the competitiveness and potential expansion of agriculture (N); poor water delivery system further damaged by hurricane (O/N)
4. Labor Shortage. Employees lost to construction industry or due to layoffs as a result of lost revenue (N).
5. Lost Markets both locally and out-of-state (N).
6. Lost Revenue (N).
7. Insurance Reimbursements held-up to-date, or slow in coming. State has been slow in responding to failure of insurance companies (N). No livestock or crop insurance available, and no government reimbursement process (O/N).
8. New Insurance policies unavailable (N).
9. Government Assistance poor in responding to insurance company failures (N); lack of government agency coordination and communication (O); poor response of USDA, sent few personnel, no emergency program at State or federal level. Federal Crop insurance program not available in Hawaii (O).
10. Housing shortage (O) due to: slow insurance reimbursements, competition from off-island construction workers willing to pay higher prices, increases in cost (N); affordable housing located in only one or two areas leads to transportation problems; increased cost of housing for employees (N).
11. Diversified Industry Loss of macadamia nuts due to long growth period required (N).
12. Emergency Power Shortage created a water shortage (N); agriculture treated as secondary group (O).
13. Poor Awareness of Hurricane's Impact on farmers and agriculture in general (N).
14. Power shortage during disaster caused water shortage and livestock deaths; high cost contributes to lack of competitiveness.

(O) = Outstanding problem (N) = New problem

Opportunities:

1. Obtain good airline rates for agricultural needs.
2. Hire visitor industry service workers.
3. Create more responsive permitting process (now being realized).
4. Develop an island-wide, piped water distribution system.
5. Coordinate water distribution management and servicing under one entity.
6. Create agriculture parks that allow farmers and workers to live on the land.
7. Take advantage of surplus housing created when construction workers leave.
8. Utilize remaining skilled, recovery personnel. Encourage recovery workers to become involved in agriculture by providing training opportunities.
9. Creation of a disaster preparedness program for agriculture based on assessments of what went wrong.
10. Improve government coordination and communication in disaster response.
11. Identify and invest in hurricane-resistant crops and crops which have a short recovery/growth period.
12. Upgrade infrastructure to better withstand hurricanes.
13. Improve public transportation, especially through use of federal disaster funds and demonstration of federally funded successes such as the Iniki Express.

Actions (numbers correspond to Opportunities identified above):

1. a) Develop marketing programs which lead to increased and more consistent volume, hence, better air rates;
b) Task County agriculture coordinator to set up coordination between producers to get best transportation rates.
2. a) Task County to work with State unemployment office to place visitor industry workers in agriculture industries;
b) Task State and County to facilitate coordination between agriculture employers and unemployment office.
3. a) Evaluate the emergency permitting program to incorporate it into the regular permitting process;
b) Consider continuing private contracting of the program's operations.
- 4-5. Set-up a County/State agriculture water board.
6. Amend the County Coastal Zone Ordinance to allow cluster residence in agriculture parks.
8. Encourage the University of Hawaii/Kauai Community College to create and advertise training opportunities for remaining recovery workers.
9. a) Encourage government agencies to revise their disaster response programs working with the Farm Bureau and the DOA to specifically address the agriculture sector's power and water needs;
b) Farm Bureau should initiate and seek funding for a disaster preparedness program for agriculture based on assessments of what went wrong after hurricane Iniki.
11. a) Task UH to publicize crops which experienced quick recovery post-Iniki;
b) Research crops, landscaping, and other hurricane-resistant agriculture commodities.
12. a) Put power lines underground;
b) Better educate public and contractors about hurricane-protective building options;
c) Provide funding for running and servicing back-up power generators for water system;
d) Provide back-up solar power generators.
13. Issue a County request for proposals for a private firm to run the existing public bus system.
16. Farm Bureau should initiate and seek funding to document and publicize the impact of the hurricane on farmers.

Tourism and Related Development
June 25, 1993, 1:00 pm - 3:00 pm

Problems:

1. Jobs. Insufficient funding for job creation (N).
2. Retraining needed for jobs within the visitor industry (O).
3. Housing shortage worsened (O/N); less affordable due to decreased inventory and a slow repair rate (N).
4. Insurance difficult to obtain for both residential and commercial (N), and slow settlements on old policies (N).
5. No Customers (N).
6. Government response demonstrates a lack of urgency (O/N); also more government attention is given to entitlements, and less to economics which is contributing to a false sense of security (N);

Confidence in Government Institutions is lacking due to poor response, lack of government marketing awareness, lack of support and knowledge of Kauai by State government; and lack of communication between State government and private sector (O/N).
7. Image is poor due to high costs (O), and hurricane damage (N).
8. Competition from other Hawaii destinations deliberately steering visitors away from Kauai.
9. Training Programs ineffective as a result of people "working the system" to maintain unemployment benefits; over-regulation of training programs.
10. No Jobs.
11. Natural Disasters threaten the industry; poor education regarding how to prepare for and respond to natural disasters.
12. Waste Disposal insufficient.
13. Transportation. Poor traffic flow and insufficient number of flights.
14. Long-term Planning insufficient, particularly for economic diversification.
15. Agriculture declining, specifically sugar.
16. Community Morale declining.
17. Beaches and Parks in poor condition.
18. Population Change resulting in increased number of unskilled workers.
19. Cost of Living greatly increased.
20. Education. Poor quality and limited opportunities.

Opportunities:

1. Provide federal/state funding for tourism marketing and related economic development projects.
2. Refocus government priorities on tourism's role in the economy.
3. Greater government funding for tourism marketing.
4. Training to upgrade unemployed workers' skills.
5. Improve infrastructure and facilities.
6. Improve Kauai's image.
7. Focus on cultural heritage development and marketing.
8. Create a reputation as a center for natural disaster preparedness training.
9. Recreate a viable visitor industry.
10. Provide visitor industry leadership for disaster preparedness.
11. Create diversified jobs.
12. Expand educational opportunities.
13. Create a more broad-based visitor industry focus group.
14. Increase visitor industry participation in OEDP process through more representation on the Steering Committee.
15. Create high technology jobs.
16. Expand business opportunities through visitor industry promotion.
17. Improve community morale.
18. Preserve the environment.
19. Improve the visitor industry image and credibility.
20. Improve social awareness.
21. Diversify local agriculture to produce a variety, and adequate quantity (including landscaping products) of products for use by the visitor industry.
22. Create self-sufficiency in agriculture and use the visitor industry as an export opportunity.
23. Reassess housing/building alternatives.

Actions: (numbers correspond to Opportunities identified above):

1. a) Continue grant writing and legislative action groups;
b) Train and hire more grant writers.
- 2,3,9. a) Educate State, and DBEDT in particular, on the urgency and the need to be responsive to community-based tourism development efforts, through public awareness, a letter campaign, personal visits and the media;
b) Relocate appropriate state government departments to the neighbor islands;
c) Make HVB office more autonomous and accountable to Kauai.
d) Develop niche marketing in sports, agriculture, etc.
- 4,11,12. a) Train and hire more grant writers.
b) Improve JTPA effectiveness through greater involvement with state agencies and private sector.
c) Continue and expand HIRE KAUAI program.
5. Create effective mechanism to address infrastructure needs through community-based groups working with government agencies.
6. a) Focus on one-on-one marketing through television.
b) Focus advertising campaign on Kauai's uniqueness.
7. Focus on cultural heritage in community events and activities.
8. a) Create a Disaster Preparedness Institute.
b) Demand visitor industry participation in state disaster preparedness efforts.
10. Create a public relations campaign to highlight the efforts of the visitor industry before, during, and after hurricane Iniki.
- 13, 14. a) Request County and KEDB reorganize the OEDP Steering Committee to reflect the visitor industry's weight in the economy;
b) Request OEDP Steering Committee regularly communicate through the newspaper past and future actions.
15. a) Develop PMRF partnership with the community.
b) Invest federal and private sector funds, and community input to develop a high tech industry.
- 16,19. Encourage the State and non-profit organizations to focus programs on stress awareness and coping skills.
17. a) Identify and implement new technologies (incinerators, recycling, etc.) for waste disposal;
b) Beautify roads through replanting;
c) Revitalize "Litter Bugs Me" and "Adopt a Highway" programs.
18. Create an on-going campaign on the visitor industry's role and its impact on the community.
20. Create an agriculture, hotel, and restaurant cooperative to support local diversified agriculture development.
21. Create agriculture export industries.
22. Create incentives for low income housing development.

Emerging Businesses (including Manufacturing, Light Assembly,
and Food processing)

June 28, 9:00 am - 11:00 am

Problems:

1. High Costs of inputs (O/N).
2. Energy and Other Service Costs have increased since the hurricane (N).
3. Property and Casualty Insurance hard to obtain (N).
4. Crop Insurance non-existent (O).
5. Lack of Revenue (N).
6. Confidence in Economy low (N).
7. Competitiveness globally (O), and relative to visitor industry wages (O), and with hurricane recovery businesses (N).
8. Intensification of Problems Simultaneously due to hurricane and lack of resources to meet all problems (N).
9. Hotel Closings negatively affect Kauai's image, employment, and visitor count (N).
10. Unemployment Benefits end beginning in August (N).
11. Business Interruption Insurance ends in October (N).
12. Iniki Stress Syndrome (N).
13. Fractured Services delayed and unavaliable (N).
14. Transportation space, timing and volume (N). Curtailed schedules for cruise ships and airlines (N). UAL withdrawal (N). Local airlines don't accommodate high volume needs; poor connections and high freight cost (O/N).
15. Government Revenue Shortage in near term (N).
16. Low Multiplier Effect of Reconstruction Services (N).
17. Waste Disposal (O/N).
18. Traffic worse (O/N).
19. Businesss Survival in question due to decline in volume (N).

Opportunities:

1. Time available to plan a shift in the tourism product, specifically eco-tourism.
2. Economic diversification.
3. Develop alternative sources of financing for infrastructure.
4. Renew, remove, and replace outdated infrastructure.
5. Greater efficiencies in business.
6. Capital investment.
7. Temporary sales volume increases.
8. Identify temporary and new niche markets.
9. New money/new investors; and hotel upgrades.
10. Improve tourist industry image and gain stronger local support.
11. Identify hurricane resilient crops.
12. Recognize and support role of large agriculture producers who are more hurricane resilient.

Actions: (numbers correspond to Opportunities identified above):

1. a) Provide coordinated approach to tourism product development that informs across the board.
b) use experienced resource people to assist
2. a) Secure the economic base to allow for diversification;
b) Identify economic alternatives;
c) Use disaster assistance funds for diversification.
- 3,4. Use disaster assistance funds for infrastructure development.
- 5,6,7. a) Create business trade shows;
b) Develop a business conference on disaster recovery and survival (include representatives from Florida);
c) Provide incentives for targeted industries.
8. a) Provide incentives for targeted industries.
b) Offer use of public lands at lower rates; work with federal and state agencies;
c) Increase Kauai products promotions.
9. Provide incentives for hotels to re-open, for example tax breaks, including real property taxes, and threaten to revoke permits.
10. Develop a local school and media campaign to demonstrate the importance of tourism and related businesses to the economy.
11. Fund UH College of Tropical Agriculture and Human Resources programs for agriculture development.
12. Develop a local school and media campaign to demonstrate the importance of agriculture to the economy.

High Technology, Telecommunications, and Energy Development

June 28, 1:00 pm - 3:00 pm

Problems:

1. Low-Skilled Labor Force is an increased problem since the hurricane (O/N). Different types of skills are required to build, as opposed to maintain, an economic base (N).
2. Displacement of Local Workers due to the need for already trained workforce (O/N).
3. Semi-Skilled Local Workers lost(N).
4. Housing Shortage worsened (O/N).
5. Training. Inability to train, and to retrain skilled workforce is a barrier to new industry development (O).
6. Perceived Risk of Natural Disasters (N).
7. Insurance unavailable (N).
8. Incentives unavailable for new or expanding businesses (O).
9. Costs of insurance, energy, housing, and lease space (O/N).
10. Lack of Revenue (N).
11. Capital Investment limited (O/N).
12. Government Support lacking for high technology infrastructure improvements (O).
13. Traffic worsened (O/N).
14. Government Coordination and cooperation lacking among agencies; multiple permits required, processes conflict (O).
15. Energy. Temporary excess generation creates disincentive to new development; keeps rates high, and is a disincentive to demand-side management (N).
16. Base Closure threat (N).
17. Infrastructure inadequate; Kauai always "playing catch-up" (O).
18. Dependence on Outside Resources (O).

Opportunities:

1. Attract new business relocations, start-ups, and expansions.
2. Encourage the development of energy service companies through performance contracting.
3. Develop training enterprises.
4. Develop implementation training for Demand-Side Management programs under the Integrated Resource Planning process.
5. Create a "Rent A Skilled Laborer" business including training.
6. Take advantage of skilled retirees.
7. Market Kauai as a location for branch offices or back office operations.
8. Market Kauai's location in Pacific Rim, particularly for software developers.
9. Develop new businesses utilizing fiber optic cable.
10. Link new fiber optic businesses with Maui's super computer; some examples include movie graphics, engineering modeling, climate modeling, ocean monitoring.
11. Conduct natural disaster research on Kauai.
12. Develop hazard mitigation products and services.
13. Develop an electrically powered transportation system.
14. Use presently available federal funds (ARPA, FEMA, DOE, EDA) to finance #11, #12, #13 above, and product demonstration and training programs.
15. Create a critical mass of innovative entrepreneurs.

Actions: (numbers correspond to Opportunities identified above):

1. a) Create a business incubator or technology center;
b) Develop government incentives including tax breaks, lower than market lease rates, subsidies or grants for energy and other business operating costs;
c) Publicize all available government incentives;
d) Market Kauai's lifestyle through a brochure.
2. a) Apply for federal funds (ARPA, FEMA, DOE, EDA) to finance #11, #12, #13 above, and product demonstration and training programs;
b) The County should take the lead in applying for federal funds for its own facilities.
- 3, 4, 5. a) Provide educational grants that are tied to returning to Kauai;
b) Provide targeted training at the secondary school level (beginning with junior high school).
7. a) County should request the State government relocate processing and other similar type services to Kauai;
b) Lobby for legislative action for the above relocations.