

# Kaua`i Economic Development Plan Update

Kaua`i's Comprehensive Economic Development Strategy (CEDS) Report

## 2010-2015

March 2010

Culture & Arts  
Food & Agriculture  
Health & Wellness  
Science & Technology



Sports & Recreation  
Sustainable Technologies & Practices  
Visitor Industry



County of Kaua`i  
Office of Economic Development



KAUAI ECONOMIC DEVELOPMENT BOARD

This report was prepared under an Award from the U.S. Department of Commerce, Economic Development Administration (Economic Development Administration Award No. 07 69 06172).

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# Mahalo

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Kaua`i, the nation, and the world have undergone many changes since the *Kauai Economic Development Plan* was written in 2004. A global economic recession, high fuel prices, and downturn in Hawai`i's major economic driver, tourism, have led to business closures, high unemployment, and reduced government revenues. It is therefore timely that we update our economic roadmap for Kaua`i.

On behalf of the Kaua`i Economic Development Board (KEDB) and County of Kaua`i Office of Economic Development (OED), we would like to acknowledge the leadership from Mayor Bernard Carvalho and Kaua`i County Council for supporting this update. Funding from the Department of Commerce, Economic Development Administration, Office of State Planning, and County of Kaua`i allowed us to retain the services of 3Point Consulting to analyze industry cluster data and NKN Project Planning to facilitate meetings and prepare this update.

We would like to thank the Comprehensive Economic Development Plan (CEDS) Committee for their guidance in this process. Members who served on this committee included:

Bill Arakaki	Walt Barnes	Katherine Brocklehurst
Council Member Dickie Chang	Kathy Clark	Tom Cooper
Ian Costa	Helen Cox	Captain Aaron Cudnohufsky
Randall Francisco	Donald Fujimoto	Bill Grier
Randall Hee	Laurie Ho	Eugene Jimenez
Steven Kai	Sue Kanoho	Wayne Katayama
Keone Kealoha	John Latkiewicz	Kelly Liberatore
Jan Miyamoto	State Rep. Mina Morita	Jerry Ornellas
Roy Oyama	Kaliko Santos	Mike Tresler
Jerry Walker	Roy Yamakawa	Laurie Yoshida
Diane Zachary		

We would like to acknowledge the more than 45 individuals who participated in industry cluster focus group discussions. The names and affiliations of all participants are listed in **Appendix A**. All of these meetings would not have been possible without the coordination and direction provided by Susan Tai, KEDB Economic Development Plan Director.

We hope that individuals and organizations representing public, private, and community interests will work together to implement priority projects listed in this report. Focused action, collaboration, and commitment will go a long way toward strengthening and diversifying Kaua`i's economy.

Matilda Yoshioka  
President & CEO  
Kaua`i Economic Development Board

George Costa  
Director  
Office of Economic Development  
County of Kaua`i

## 1.0 EXECUTIVE SUMMARY

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A major global recession and dramatic increases in fuel prices contributed to a decrease in visitor arrivals to Kaua`i by 10% between 2008 and 2009.<sup>1</sup> Aloha Airlines and ATA went out of business in 2008, and Gay and Robinson harvested its last sugar crop in 2009. Kaua`i's unemployment rate was 9.2% as of November 2009.

### 1.1 Accomplishments since 2004

In spite of the gloomy economic picture since the last Kaua`i Economic Development Plan/Comprehensive Economic Development Strategy (CEDS) was written in 2004, there have been many accomplishments:

#### **Food & Agriculture**

- The County of Kaua`i developed a "Kaua`i Made" brand
- A deluxe farmer's market opened at Kaua`i Community College
- The seed industry doubled its acreage on Kaua`i
- Kaua`i Coffee Company has the highest acreage of coffee grown in the nation

#### **Health & Wellness**

- Wilcox Hospital opened a new imaging center and added six new operating rooms
- The first assisted living facility on Kaua`i, The Regency at Puakea, opened with 100 units
- Mahelona Hospital opened an emergency room serving East and North Kaua`i
- Kauai Health and Wellness Association formed and has over 60 members

#### **Sports & Recreation**

- Phases 1 & 2 of the multi-use path have been completed
- Nawiliwili Harbor improvements have been completed
- Lydgate and Koloa/Po'ipu soccer fields have been completed

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<sup>1</sup> The Garden Island, "Visitor arrivals up, but 2009 trends down," January 31, 2010, p. C1.

## Culture & Arts

- There has been a steady increase in the number and variety of visual art, performing art, music, and dance exhibits and performances on Kauaʻi
- The ARTS newsletter is now a 8-page color insert in the Kauaʻi People magazine with a circulation of 33,300 copies with an on-line presence

## Science & Technology

- KEDB-sponsored Aloha ʻIke program has sponsored 67 Science, Technology, Engineering and Math (STEM) projects totaling \$330,000 in direct grants to teachers island-wide
- In partnership with the Hawaiʻi Space Flight Laboratory, Kauaʻi Community College will be home to a telemetry and weather station to support educational opportunities and commercial satellite downlinks

## Sustainable Technologies & Practices

- A biodiesel plant is in operation, converting used cooking oil to diesel for farm equipment
- KIUC's Energy Efficiency programs are promoting solar water heating and energy efficient appliances
- The Kauaʻi Energy Sustainability Plan has been drafted and is currently undergoing public review

## 1.2 Guiding Principles

There is a general recognition that to improve Kauaʻi's economy over the next 10 years, we must be guided by the following principles:

- *Economic Diversification*: to strengthen selected industry clusters to minimize dependence on a single industry
- *Economic Self-Sufficiency*: to minimize imports and promote import substitution
- *Economic Opportunity for all*: to offer an appropriate K-20 education and adequate training opportunities to give workers choices and to promote living wages

### **1.3 Approach to Economic Development**

To address these concerns, a three-prong approach is recommended in this plan.

1. Pursue goals and objectives common to all businesses on Kaua`i
2. Identify key projects that will strengthen Kaua`i's visitor industry
3. Focus on priority projects of six industry clusters:
  - Food & Agriculture
  - Health & Wellness
  - Sports & Recreation
  - Culture & Arts
  - Science & Technology
  - Sustainable Technologies & Practices

### **1.4 Economic Development Goals**

In response to the critical issues impacting economic development, five goals have been established.

1. To assist new and existing businesses create new jobs
2. To facilitate career planning for students
3. To expand and train the workforce to meet the needs of employers
4. To promote affordable housing
5. To improve the skill level and work readiness of students to achieve career and college success

### **1.5 Visitor Industry Priorities**

Visitor Industry leaders prioritized key strategies:

1. Effectively address crime and burglaries affecting visitors
2. Protect air routes and gateways to ensure consistent airlift to Kaua`i
3. Effectively address infrastructure improvements

Visitor industry leaders also identified their priority infrastructure improvements:

1. Wailua Emergency Bypass Road (between Hanamaulu & Wailua River)
2. Lihue Airport Runway Expansion
3. Kuhio Highway Relief Route (between Hanamaulu & Kealia)

## 1.6 Priority Projects

Some of the priority projects for each industry cluster are listed below.

### Food & Agriculture

- Improve and upgrade agricultural water irrigation systems throughout the island
- Renovate the Kaua`i Tropical Fruit Disinfestation facility
- Build a modular slaughterhouse, processing, and chilling facility

### Health & Wellness

- Conduct a feasibility study for a Health & Wellness Retreat Center
- Advocate for policies to improve the health and wellness of citizens
- Increase the diversity of health care education and training

### Sports & Recreation

- Conduct a feasibility study on a multi-use arena and multi-use regional parks
- Build and maintain athletic facilities and community centers
- Restore beach at Po'ipu Beach Park

### Culture & Arts

- Aggregate, disburse, and maintain a consolidated calendar of arts and cultural events that is accessible to residents and visitors
- Offer skill-building technical assistance workshops
- Develop a Kaua`i Center for Culture and the Arts to include exhibit, retail, classrooms, and offices

## Science & Technology

- Continue to support STEM learning opportunities for students
- Advocate for government incentives to support science and technology businesses in Hawaii
- Conduct a feasibility study for a film, digital media, and production center

## Sustainable Technologies & Practices

- Promote residential solar water heating
- Plan, construct, and maintain a biomass facility
- Promote the use of energy efficient products

### 1.7 Plan Implementation

Successful implementation of this plan will require empowering several established organizations to be “lead cluster entities” on Kaua`i.

Industry Cluster	Lead Cluster Entity
Food & Ag	Kaua`i County Farm Bureau
Science & Technology	Kaua`i Economic Development Board
Culture & Arts	Garden Island Arts Council
Sports & Recreation	County Department of Parks and Recreation
Sustainable Technologies & Practices	Office of Economic Development

One industry cluster, Health & Wellness, would like to begin meeting to discuss one specific project, a Health and Wellness Retreat Center. Wilcox Hospital will serve as the lead organization to bring stakeholders together to facilitate discussions.

Funding is needed to facilitate cluster discussions around priority projects. Capacity building, technical assistance, and capital improvements funds are



also needed. The County of Kaua`i should aggressively pursue New Market Tax Credits, federal, and private funding.

With the above components in place, the Kaua`i community can work together to shape its economy in alignment with its values, vision, and guiding principles. A stronger and diverse economy will benefit future generations and help create opportunities for all.

## 2.0 INTRODUCTION

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The Kaua`i Economic Development Board (KEDB) and the County of Kaua`i Office of Economic Development (OED) present the ***Kaua`i Economic Development Plan Update/Comprehensive Economic Development Strategy (CEDS), 2010-2015.***

This plan is intended to serve as Kaua`i's economic development "road map" for the next 5 years. It is intended to guide all stakeholders who have an influence on Kaua`i's economic future.

### 2.1 Definition & Values

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Economic Development is defined in this plan as the process of positive change in the production, distribution, or consumption of goods and services. This update identifies key assets, resources, and action needed to increase wealth and prosperity on Kaua`i.

Key community values, articulated in the ***Kaua`i General Plan, 2000***, form the foundation of this plan:

- Caring for our lands and waters
- Preserving our rural character
- Supporting culture and a vibrant, healthy community
- Providing opportunities for all in a strong, diverse economy

### 2.2 Background and Process

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In 2009, the **Office of State Planning** contracted the **Kaua`i Economic Development Board (KEDB)** to update Kaua`i's Comprehensive Economic Development Strategy (CEDS) Report, 2005-2015. The **County of Kaua`i Office of Economic Development (OED)** contributed additional funds to ensure that the plan addressed capacity issues within industry clusters. 3Point Consulting was retained to analyze cluster industry data. NKN Project Planning was retained to facilitate meetings and write this update.

In September 2009, the **KEDB** and **OED** launched a joint planning process with the formation of the **Kaua`i Comprehensive Economic Development**

**Strategy (CEDS) Committee.** The CEDS Committee met three times over a five month period to provide guidance and to review the CEDS update.

The CEDS committee agreed that the six industry clusters were still relevant and should be pursued to help diversify and strengthen Kauai’s economy. These clusters include:

- Agriculture & Food
- Culture & Arts
- Healthcare & Wellness
- Science & Technology
- Sports & Recreation
- Sustainable Technologies & Practices

Between October 2009 and January 2010, **focus group** meetings were organized for each cluster. Each industry cluster met three times to discuss opportunities and threats, industry cluster vision, priority projects, and implementation issues. Individuals who participated in cluster focus group discussions are included in **Appendix A**.

### **2.3 Economic Development Administration**

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The U.S. Department of Commerce, Economic Development Administration (EDA), funds economic development initiatives throughout the country. As described earlier, this plan serves as Kaua`i’s Comprehensive Economic Development Strategy, the official document that EDA uses to screen projects for funding consideration.

### 3.0 ISLAND-WIDE VISION

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A 20-year vision for the island is described in the *Kaua`i General Plan*, 2000. Highlights of the island-wide vision include:

- A “garden island” of unsurpassed natural beauty
- A rural environment of towns separated by broad open spaces
- A vital modern society formed by the people and traditions of many cultures
- An island of distinctly individual towns and communities, each with its own unique history and character
- A rural place whose population size and economy have been shaped to sustain Kauai`s natural beauty, rural environment, and lifestyle

### 3.1 Changes since 2004 CEDS

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Since the 2004 CEDS was written, there have been significant changes on Kaua`i, the nation, and the world. Some of these changes include:

- Strong economic growth from 2005 through 2007
- Global economic downturn beginning in late 2008
- Unemployment has increased from 4% to 10%
- Cost of oil has increased
- Aloha Airlines and ATA went out of business (March, 2008)
- Gay & Robinson shut down sugar operation (October, 2009)
- A total of 1,030,647 visitors flew to Kaua`i in 2008, 20.7 percent lower than 2007
- Pacific Missile Range Facility funding and employment has increased

### 3.2 Economic Development 2020 Vision

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- Economy is strong, stable, and diversified
- While the visitor industry still provides the largest number of jobs, new businesses in agriculture, health and wellness, sustainable technologies & practices, art & culture, science & technology, and sports & recreation provide an increasing proportion of total jobs
- There are many job opportunities with higher wages
- Wages allow people to comfortably support their families
- Unemployment is low (3-5%)
- Kaua`i Island Utility Cooperative (KIUC) is robust and is a leader in promoting energy conservation and renewable energy
- We have decreased energy consumption and increased our use of renewable energy
- We have preserved Kauai`s special environment and culture
- Locally-grown products are consumed locally and exported. We have become more food self-sufficient.

#### Education Vision

- A strong education system prepares Kaua`i`s children, teens, college students and adults to work in the diversified economy
- Kaua`i Community College is accessible and affordable with certificates and degrees that prepare our residents to earn livable wages
- KCC has housing for students, faculty, and international students.

## Housing Vision

- There is a continuum of housing (from homeless shelters, transitional, rental housing, and for-sale multi- and single-family homes) to meet the needs of Kaua`i's residents
- County government funding is used to leverage private and other government funding to create affordable housing
- There are lands zoned with adequate infrastructure for residential development
- Families are prepared for and understand the responsibilities of homeownership

## Small Business Vision

- Small businesses are the foundation of Kaua`i's economy
- Employs the largest percentage of the population
- County, State, and Federal governments support business by:
  - Providing needed infrastructure to towns and urban centers
  - Minimizing regulations and making them understandable
  - Providing limited tax incentives
- Government funds business start-up and technical assistance programs
- Access to start-up and expansion capital is available to qualified businesses

### **Airport Vision**

- Lihue Airport is continually upgraded to support the desired level of economic development
- Airport facilities have been improved to facilitate direct shipment of cargo to the mainland
- Fuel storage facilities have been expanded and adequately support air travel

### **Harbor Vision**

- Nawiliwili Harbor and Port Allen are continually upgraded to accommodate modern shipping requirements
- Small boat harbors are upgraded and managed to accommodate resident fisherman, recreational boating, boat tours, and rentals for visitors

Separate visions have been written for six industry clusters and are found in Chapter 8.

## 4.0 ECONOMIC DEVELOPMENT APPROACH

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### 4.1 Strategy

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This plan presents a three-pronged economic development strategy:

- Address critical issues that impact all businesses on Kaua`i. Identify goals and objectives that will improve all businesses on Kaua`i. (Chapter 5)
- Identify key projects that will strengthen Kaua`i's largest industry, the visitor industry (Chapter 6)
- Focus on the priority projects of six industry clusters that will help to diversify Kaua`i's economy (Chapter 7)

### 4.2 Guiding Principles

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Three guiding principles of this plan are:

***Economic Diversification:*** To strengthen selected industry clusters so that Kaua`i is less dependent on a single industry.

***Economic Self-Sufficiency:*** To minimize imports from State, nation, and the world by substituting imports with locally produced goods and services, reducing intermediaries, and promoting local purchasing.

***Expand Economic Opportunities for all:*** To promote jobs that pay living wages, provide training and skills to create and upgrade employment choices, and reduce poverty on the island



## 5.0 Economic Development Goals and Objectives

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This section describes several indicators of Kaua`i's economy and critical issues affecting Kaua`i's future economic growth.

### 5.1 Critical Issues

#### Economy

- Unemployment rate was 9.2% as of November 2009<sup>2</sup>
- Only 22% of the jobs paid a living wage in 2008<sup>3</sup>
- Industry mix on Kaua`i has not changed since 2000<sup>4</sup>

#### Education

- Public High School graduation rate is decreasing<sup>5</sup>
- High School graduates entering KCC test below college transfer levels<sup>6</sup>
- 25% of 10<sup>th</sup> Graders and 48% of 3<sup>rd</sup> Graders did not meet Hawai`i State Assessment (HSA) standards of proficiency in 2008<sup>7</sup>

#### Housing

- The median single-family home sales price was \$442,000 in November 2009<sup>8</sup>
- The median rent for a two-bedroom home increased to \$1,183 per month in 2008<sup>9</sup>
- Over 740 individuals, or 1.2% of the population, are homeless<sup>10</sup>

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<sup>2</sup> Department of Labor, State of Hawai`i, "Unemployment Rates-Not Seasonally Adjusted," [http://www.hiwi.org/admin/uploadedPublications/1019\\_URATE\\_current.pdf](http://www.hiwi.org/admin/uploadedPublications/1019_URATE_current.pdf), accessed on January 17, 2010.

<sup>3</sup> 3Point Consulting, "Economic Needs & Industry Clusters, CEDS Data Update," October 26, 2009.

<sup>4</sup> Ibid.

<sup>5</sup> "Measuring What Matters for Kaua`i, Community Indicators Report 2008," Kaua`i Planning & Action Alliance, July 2009, p. 34.

<sup>6</sup> Ibid, p. 36.

<sup>7</sup> Ibid, p. 33.

<sup>8</sup> "Home sales surge on Big Isle, Kaua`i," The Honolulu Advertiser, December 8, 2009, p. B5.

<sup>9</sup> "Measuring What Matters for Kaua`i, Community Indicators Report 2008," Kaua`i Planning & Action Alliance, July 2009, p. 31.

<sup>10</sup> Ibid, p. 40.

## 5.2 Infrastructure Improvements

The Comprehensive Economic Developments Strategy (CEDS) Committee identified and ranked critical infrastructure improvements that are needed to support existing and future economic growth. These improvements are ranked in order of priority and slightly differ from visitor-industry priorities listed in *Section 6*.

- A. Kūhio Highway Relief Route, between Hanamaulu and Keālia
- B. Waimea Wastewater Treatment Plant
- C. Kaumuali'i Highway widening, between Līhu'e and Maluhia Rd.
- D. Electrical transmission & distribution
- E. Līhu'e Airport Fuel Storage Expansion
- F. Līhu'e Airport Parking Expansion
- G. Līhu'e Airport Runway Expansion
- H. Kilauea Water Improvements
- I. Traffic Circulation Improvements in Kōloa/Po'ipū
- J. Waimea – Kekaha water improvements (8)
- K. Wailua Emergency Bypass Road, between Hanamaulu and Wailua River
- L. Wailua Wastewater Treatment Plant
- M. Līhu'e, Hanama`ulu, Puhi
- N. Hanapēpē & Waimea River Levees
- O. Kapaia to Wailua Emergency Bypass Road
- P. Po'ipū-Kōloa Wastewater Treatment Plant
- Q. Nāwiliwili to Anahola bike path completion
- R. Hā`ena State Park

It should be noted that while the CEDS Committee identified key road widening improvements listed above, they also recognize the need to plan for multi-modal alternatives, smart growth, and pedestrian-oriented town centers.

## 5.3 Goals and Objectives

The top five economic development goals and corresponding objectives are as follows:

- 1.0 **To assist new and existing businesses create new jobs**
  - 1.1 To provide access to business planning assistance, including market research

- 1.2 To assist with permitting, licensing, and regulatory issues
- 1.3 To facilitate access to start-up and expansion capital
- 1.4 To develop an entrepreneurship center/business incubator facility

**2.0 To facilitate career planning for students**

- 2.1 To expose teachers, counselors, and parents to work places and opportunities on Kaua`i
- 2.2 To expose students to various career paths
- 2.3 To encourage/require middle and high school students to develop post-high school plans
- 2.4 To give students “hands-on” experience in the workplace through internships, mentoring, and partnerships with prospective employers

**3.0 To expand and train the workforce to meet the needs of employers**

- 3.1 To obtain data on the workforce needs and skills of Kaua`i’s employers
- 3.2 To design and provide training to meet specialized needs
- 3.3 To seek new and untapped sources of employment to meet labor needs

**4.0 To promote affordable housing**

- 4.1 To develop new affordable single- and multi-family housing
- 4.2 To rehabilitate single- and multi-family housing
- 4.3 To increase homeownership through self-help housing, first-time homebuyer loan programs, and homebuyer education and counseling
- 4.4 To fund homeless, transitional, and special needs housing with supportive services

5.0 **To improve the skill level and work readiness of students to achieve career and college success**

- 5.1 To have all children reading at grade level by third grade<sup>11</sup>
- 5.2 To strengthen the rigor of high school curriculum<sup>12</sup>
- 5.3 To teach volunteerism and citizenry

**Lead Agencies**

A lead entity or entities is assigned to each objective. In some cases, lead agencies have yet to be identified or there are multiple lead agencies. The role of KEDB and OED in the next phase of work is to identify and gain commitments from lead agencies responsible for implementing objectives.

**Action Plans**

Action plans have not been developed and will require further collaboration between various lead agencies in the next phase of work.

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<sup>11</sup>The P-20 Partnerships for Education goal is to have 55% of Hawaii's working age adults to have a 2- or 4-year college degree by the year 2025. This objective is consistent with one of the four P-20 objectives.

<sup>12</sup> Ibid.

## Kaua`i Economic Development Plan Goals and Objectives

<b>Goal 1.0</b>	To assist new and existing businesses in targeted clusters create new jobs	
<b>Objectives</b>	<p>1.1 To provide access to business planning assistance, including market research services</p> <p>1.2 To assist with permitting, licensing, and regulatory issues</p> <p>1.3 To provide entrepreneurial training/business incubator</p> <p>1.4 To facilitate access to start-up, micro-enterprise, and expansion capital funds</p>	<p style="text-align: center;"><b>Lead</b></p> <p>Small Business Development Center (SBDC) Kaua`i Chamber of Commerce Kaua`i Community College (KCC) DBEDT, High Tech Development Corp.</p> <p>Office of Economic Development (OED) SBDC</p> <p>KCC SBDC OED</p> <p>State DBEDT Small Business Administration Private Venture Capital Agencies</p>

## Kaua'i Economic Development Plan Goals and Objectives

<b>Goal 2.0</b>	To facilitate career planning for students	
<b>Objectives</b>	<p>2.1 To expose teachers, counselors, and parents to work places and opportunities on Kaua'i</p> <p>2.2 To expose youth to various career paths through career days, speakers bureau, etc.</p> <p>2.3 To encourage/require middle and high school students to develop post-high school plans</p> <p>2.4 To give youth "hands-on" experience in the workplace through internships, mentoring, and partnerships with prospective employers</p>	<p style="text-align: center;"><b>Lead</b></p> <p>Kaua'i Economic Development Board OED/Kaua'i Workforce Investment Board Department of Education Kaua'i Community College</p> <p>Same as above</p> <p>Department of Education</p> <p>Kaua'i Economic Development Board OED/Kaua'i Workforce Investment Board Department of Education Kaua'i Community College</p>

### Kaua`i Economic Development Plan Goals and Objectives

<b>Goal 3.0</b>	To expand and train the workforce to meet the needs of employers	
<b>Objectives</b>	<p>3.1 To obtain data on the workforce needs of Kaua`i's employers</p> <p>3.2 To fund, design, and provide training to meet specialized needs</p> <p>3.3 To seek new and untapped sources of workers to meet labor needs</p>	<p style="text-align: center;"><b>Lead</b></p> <p>OED/Kaua`i Workforce Investment Board</p> <p>Kaua`i Community College WorkWise! Kaua`i Chamber of Commerce OED/Kaua`i Workforce Investment Board</p> <p>OED/Kaua`i Workforce Investment Board WorkWise!</p>

### Kaua`i Economic Development Plan Goals and Objectives

<b>Goal 4.0</b>	To promote affordable housing	
<b>Objectives</b>	<p>4.1 To develop affordable single- and multi-family housing</p> <p>4.2 To rehabilitate single- and multi-family rental housing</p> <p>4.3 To increase homeownership through self-help housing, first-time homebuyer loan programs, and homebuyer education and counseling</p> <p>4.4 To fund an emergency shelter, increase transitional housing units, special needs housing, and fund supportive services</p>	<p style="text-align: center;"><b>Lead</b></p> <p>For-profit &amp; non-profit housing developers County Housing Agency State Housing Finance Development Corp.</p> <p>County Housing Agency For-profit &amp; non-profit housing developers Hawai`i Public Housing Authority (HPHA) State Housing Finance Development Corp.</p> <p>County Housing Agency Non-profit housing organizations</p> <p>County Housing Agency Nonprofit housing developers Nonprofit social service providers State Department of Human Services</p>



## Kaua`i Economic Development Plan Goals and Objectives

<b>Goal 5.0</b>	To improve the skill level and work readiness of students entering the work force	
<b>Objectives</b>	<p>5.1 To have all children reading at grade level by third grade</p> <p>5.2 To strengthen the rigor of high school curriculum</p> <p>5.3 To teach volunteerism and citizenry</p>	<p style="text-align: center;"><b>Lead</b></p> <p>Department of Education Parents</p> <p>Department of Education</p> <p>Department of Education PTSAs, SCC, Parents</p>

## 6.0 Visitor Industry

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### 6.1 Background and Composition of Visitor Industry

The visitor industry is the largest industry on Kaua`i and includes transportation, accommodations, catering, recreation, and services to visitors. The visitor industry workforce is employed in hotels, restaurants, airlines, car rental companies, airport operations, security, retail stores, entertainment, and many other businesses that provide services to travelers.

In a typical year, the visitor industry generates about one-third of Kaua`i's real income.<sup>13</sup> One in every three jobs Statewide is generated by the visitor industry.<sup>14</sup>

### 6.2 Visitor Industry 2015 Vision

Tourism on Kaua`i will:

- Honor the people and heritage of Kaua`i
- Support and enhance the quality of life for residents
- Value and perpetuate the natural and cultural resources of Kaua`i
- Support a vital and sustainable economy; and
- Provide a unique, memorable, and enriching visitor experience

### 6.3 Visitor Industry Plan

***The Kaua`i County Tourism Strategic Plan: 2006-2015*** outlines goals, objectives and strategies to meet the vision for tourism on Kaua`i. The plan prioritizes strategies and identifies responsible entities.

### 6.4 Key Visitor Industry Strategies

A survey of visitor industry leaders was conducted in January 2010 to identify priority strategies. Strategies are listed below in order of priority:

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<sup>13</sup> University of Hawai`i, Economic Research Organization, *Kaua`i Economic Outlook*, prepared for the County of Kaua`i, June 14, 2004.

<sup>14</sup> Department of Labor & Industrial Relations, State of Hawai`i, *Career Directions in Travel & Tourism*, June 2004.

1. Effectively address crime and burglaries affecting visitors
2. Protect air routes and gateways to ensure consistent airlift to Kaua`i
3. Effectively address the infrastructure improvements to improve the quality of life on Kaua`i
4. Increase the number of rental cars
5. Support the development and promotion of community-driven programs that reinforce the unique sense of place of communities, such as those with historical or cultural significance
6. Increase the awareness of Hawaiian culture among residents and the visitor industry
7. Encourage two-way communications between residents and the visitor industry

## 6.5 Infrastructure Improvements

Industry leaders were also surveyed to identify priority infrastructure projects. Priority projects are listed below in order of priority:

1. Wailua Emergency Bypass Road (between Hanamaulu & Wailua River)
2. Lihue Airport Runway Expansion
3. Kuhio Highway Relief Route (between Hanamaulu & Kealia)
4. Kapaia to Wailua Emergency Bypass Road
5. Kaumuali'i Highway Widening (between Lihue & Maluhia Road)
6. Lihue Airport – Fuel Storage Expansion
7. Haena State Park – Plan and Improvements
8. Wailua Wastewater Treatment Plant
9. Lihue Airport – Parking Expansion
10. Electrical Transmission & Distribution

## 6.6 Industry Clusters

Each of the six industry clusters described in **Chapter 7** include priority projects that could strengthen visitor industry niche markets. These clusters include:

- Health & Wellness
- Food & Agriculture
- Culture & the Arts
- Sports & Recreation
- Science & Technology
- Sustainable Technologies & Practices

## 7.0 KAUA`I'S TARGET INDUSTRY CLUSTERS

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This section describes six target clusters that are considered “good investments” for the Kaua`i economy.

- Food & Agriculture
- Health & Wellness
- Sports & Recreation
- Culture & the Arts
- Science & Technology
- Sustainable Technologies & Practices

Each sub-section includes a description of the cluster, challenges and opportunities, priority projects that would strengthen the cluster, and performance measures.

## 7.1 Food & Agriculture

### 7.1.1 Cluster Background and Composition

The Food & Agriculture Cluster is comprised of Kauaʻi industries involved in the production, processing, distribution, and wholesale and retail sale of food and food products. The goal of this industry cluster is to create agricultural and food enterprises that create jobs and are profitable by replacing imports and exporting products to markets beyond Kauaʻi.

**Table 7-1: Industries on Kauaʻi Comprising Food and Agriculture Cluster<sup>15</sup>**

Industry	2001 Jobs	2007 Jobs	Δ2001- 2007 Jobs	2001 Wages	2007 Wages	Δ2001-2007 Wages
Agricultural Production	778	680	-98	\$ 29,016	\$ 39,078	\$ 10,062
Food Manufacturing	128	128	0	\$ 15,860	\$ 22,048	\$ 6,188
Agricultural Wholesale	220	278	58	\$ 32,131	\$ 31,356	\$ (775)
Farm & Garden Supply	66	62	-4	\$ 25,995	\$ 31,356	\$ 5,361
Grocery & Food Stores	834	947	113	\$ 19,344	\$ 21,516	\$ 2,172
Food Services & Restaurants	3,058	3,383	325	\$ 13,295	\$ 18,148	\$ 4,853
	5,084	5,478	394			
<b>Average Kauaʻi Wage Δ:</b>						<b>\$ 8,580</b>

In 2007, the Food & Ag cluster supported an estimated 5,478 jobs. More than half of the cluster’s jobs are in the Food Services Industry. Between 2001 and 2007 there was a total loss of 98 jobs in agricultural production. The loss of jobs as a result of Lihue Plantation’s closure was offset by the increase in seed corn and coffee production on Kauaʻi. Since 2007, additional agricultural production jobs have been lost due to the closure of Guava Kai Plantation and Gay and Robinson sugar operation.

In addition to being “good investments” from an economic perspective, industries in the cluster also contributed to non-economic goals such as preserving open space and maintaining the rural character of Kauaʻi.

<sup>15</sup> Jobs data from U.S. Bureau of Labor Statistics, Covered Employment @ Wages, supplemented by County Business Pattern data. Wage data from U.S. Bureau of Labor Statistics, Covered Employment & Wages. Living Wage data from the State Department of Business and Economic Development and Tourism Family Economic Self Sufficiency Study.

### 7.1.2 Food & Agriculture 2020 Vision

**Agriculture enterprise** helps to keep Kaua`i green and economically healthy through a variety of crops, including food, fiber, and fuels. Kaua`i is exporting coffee, seed crops, papaya and exotic fruits, and seafood, as well as and other value-added food products. In addition, small farmers grow a variety of unique crops such as herbs, nutraceuticals, exotic flowers, plants, and perfume ingredients. The taro industry is the largest in the state and a major supplier to O`ahu and to the mainland markets. Many taro products are produced on Kaua`i, including chips and poi. Agricultural lands are also used to develop renewable energy.

**Kaua`i residents** see the value of supporting farmers by buying locally-grown fruits, vegetables, taro, plants, flowers and other basic foods. The market for organically-grown crops is increasing. In place of imported meat, Kaua`i residents purchase primarily grass-fed beef from cattle raised on Kaua`i's pasturelands and prepared in local processing facilities. As a result, Kaua`i produces more of its own food, reducing food imports and keeping more money within the community.

**Farmers** on Kaua`i are thriving and profitable. They are known for their high-quality products. They are supported by high local demand and exports to Asia and the Mainland. Many farmers work directly with restaurants and the visitor industry. Local agricultural products are an important attraction for visitors. The visitor industry showcases Kauai agricultural and aquacultural products, and collaborates in the promotion of exports.

**Small farmers** work cooperatively together, collaborating to control costs and market their products. By developing strong local demand, they minimize their vulnerability to fluctuations in oil prices, transportation costs, and markets.

**Corporate agriculture and aquaculture businesses** are volume exporters for worldwide markets. Locally-managed, they offer opportunities to work with small independent producers, help to preserve agricultural infrastructure, and provide a range of employment opportunities. Their ability to weather varying market conditions lends stability to the Kaua`i economy.

**The forest products industry** is growing hardwoods, including teak, mahogany, bamboo, albizia, and eucalyptus, in a number of locations throughout the island. Kaua`i sawmills cut the rough timber to provide local building materials and renewable energy. Fine tropical hardwoods are cut for local craftspeople making and exporting wood bowls, musical instruments, furniture and other products.

**Former sugar plantation land, facilities, and systems** are used primarily for farming, forestry, renewable energy, and aquaculture. Viable irrigation systems are maintained and enhanced by local water cooperatives. Through government-private landowner partnerships, an inventory of small agricultural lots, with irrigation water, is maintained for lease to individual farmers and small cooperatives. This public-private partnership is supported by innovative tax incentives and zoning regulations.

**Kaua`i Community College**, as well as other organizations, help farmers to acquire business skills essential for success. There are specialized programs for tropical agriculture and aquaculture. Many of Kaua`i's youth are finding careers in these fields.

**Federal, State and County government** support diversified agriculture by offering tax incentives; maintaining the agricultural irrigation and road infrastructure on State-owned lands; and providing State lands for agricultural use at affordable lease rents. They promote cooperatives and partnerships for central processing; provide facilities for disinfestations and shipping; and offer technical and marketing support. Airport facilities and aircraft have been improved to facilitate the direct shipment of Kaua`i agricultural products to the mainland. State and county government maintain rights to irrigation water, oversee shared usage and maintenance of irrigation systems, and purchase locally-grown products.

**The keys to the success** of the food and agricultural industry on Kaua`i include the strong collaboration that exists between growers, retailers, and restaurants; centralized coordination of the food and agricultural cluster activities; and growing interest in the wide variety of employment opportunities in food and agricultural industry. As a result, Kaua`i's economy is more diversified, green open spaces are preserved, and we have maintained a rural lifestyle and experience enjoyed by residents and visitors alike.

### 7.1.3 Cluster accomplishments since 2004

- The County of Kaua`i developed a "Kaua`i Made" brand
- The Garden Island Resource Conservation & Development, Inc. has collaborated with Kaua`i Community College to offer business training for small farmers and certification training for landscapers

- The Kaua`i County Farm Bureau and Kaua`i Community College have initiated a weekly “deluxe farmers’ market” on Saturdays at Kaua`i Community College for Kaua`i grown agricultural and value-added products
- The Kaua`i County Farm Bureau and County of Kaua`i are in the process of launching a “Kaua`i Grown” brand
- A staging area for cattle headed for the harbor has been established at Ma`alo Road
- Kaua`i Community College is developing a Bioscience Certificate program
- Kaua`i Coffee Company has the highest acreage of coffee in the nation

#### **7.1.4 Trends**

- Increase in food safety regulations
- Increase interest in food sustainability
- Agricultural operations are using existing resources to be more energy efficient
- Seed industry has doubled its acreage on Kaua`i

#### **7.1.5 Challenges**

- Lack of collaboration and cooperation between the food industry and farmers
- Cost of freight has doubled in price
- Cost of materials have increased
- People don’t know where to go to buy local products
- People are not educated on the value of buying local (i.e., healthy, fresh, superior products, and value of keeping money circulating in our local economy)
- Customer wants to buy cheapest product available, which in most cases is not locally produced



- State courts are now determining interim in-stream standards requiring 50% diversion back to streams. Minimum flow standards will be established for every stream.
- Farmers need to be flexible and adapt to meet global market demands
- Wholesalers control the local market
- State Department of Agriculture (DOA) is charging fees for services (inspections)
- State Department of Agriculture has added new procedures to certify shipments (California has stopped accepting shipments into their state)
- Affordable housing for farmers and farm workers is lacking. Many farmers are not able to live and work on agricultural lands due to zoning restrictions.
- There is an absence of good market information flowing between consumers (restaurants, grocers) and producers (farmers). This hampers growth on both ends of the supply chain.
- Physical infrastructure for agriculture, particularly irrigation systems and roads are in need of repair and maintenance.
- Farmers need training in business and marketing, one-on-one assistance.
- The high cost of freight is a barrier to exporting many food products and bringing in materials and supplies.
- Long term leases (over 10 years) are needed by growers if they are to continue in farming.
- The industry faces a shortage of farmers.
- The industry faces a shortage of agronomists, botanists, and bioengineers.
- Students are not interested in farming as a career.
- Investment in new crop and new food product research and development is needed.

### 7.1.6 Opportunities

- Federal government has a mandate to convert 20% of fuels to biofuel. Renewable energy is a growing component of agriculture
- Aloha Air Cargo will provide a 35% inter-island discount to farmers if plane is filled. A freight consolidator is needed.
- More than two-thirds of all produce is shipped into Hawai`i, creating opportunities for import substitution. These opportunities are concentrated in select crops, seasonal produce, and specialty items.
- Export potential also exists: agricultural exports increased 23% from 1997 to 2001, ranking Hawai`i 7<sup>th</sup> among 50 states in export growth. The export potential for tropical fruits, tropical flowers and plants, and seed corn is high.
- There is a growing consumer interest in organic products, quality branded produce, and exotic varieties.
- Kaua`i has good agronomics for many crops – year-round growing season, good soils, climate, etc.
- Agricultural lands with water are available to farmers.
- Innovative production/distribution models are available to learn from, e.g., KTA’s Mountain Apple Brand on the Big Island, but requires a special person to form relationships with farmers, market the brand, and commit to the model.
- Energy crops create opportunities for linkage between Food & Agriculture and Renewable Energy clusters, e.g., biomass, ethanol and sugar production.
- Kaua`i Community College is eager to partner to support agriculture. KCC is planning a Sustainable Living Center that will include an agricultural demonstration and training site. The Center will also showcase alternative energy, and waste management systems that could be applied to farms across the island.

## 7.1.7 Priority Projects

### Organization

- Increase the capacity of the Kaua`i County Farm Bureau to bring together stakeholders, promote networking, and monitor priority projects within the Food & Agriculture Cluster

### Agricultural Irrigation Systems

- Save, preserve, and upgrade irrigation systems, electrical systems, and roads critical to agricultural production
  1. Kilauea Agricultural Park
  2. Kekaha ditch improvements (Black Pipe Siphon, Pali Wooden Flume)
  3. Kekaha ditch renovations
  4. Kapa`a stream diversion at Kahuna Road
  5. East Kaua`i Main Transmission Line/Lateral 6 Diversion Gate (Pani structure)
  6. East Kaua`i Lateral 8 Discharge Control Gate Structure
  7. Kaloko Irrigation System improvements
  8. Hanalei Stream Improvements

### Production

- Renovate the Kaua`i Tropical Fruit Disinfestation Facility for exports including produce and value-added products
- Increase research and development to improve the quality of agricultural production
- Build a modular slaughter, processing, and chilling facility for livestock industry, after studying Honolulu, Maui, and Molokai facilities

### Human Resource

- Establish additional business training and technical assistance programs for farmers, or enhance existing programs to reach more small producers

- Improve recruitment and mentoring for agriculture students and others entering the field

### **Marketing**

- Conduct market studies, including data on worldwide demand, and distribute to growers
- Conduct market study on locally grown cattle
- Create entities to coordinate marketing and distribution in collaboration with growers, following the model being used by KTA, Alluvion, and others
- Produce a local farm/crop directory and distribute to buyers and retailers (including local restaurants and markets)
- Hold food industry events to promote Kaua`i agriculture and food products

#### **7.1.8 Other Projects**

- Inventory the number of planned and proposed certified, commercial community kitchen for food product development, testing and production by local farmers and new entrants to the food industry. Assess level of committed users.
- Create a web-based portal for value-added and agricultural products from Kaua`i.
- Amend current land use ordinance to allow for seasonal or dormitory housing for farm workers.
- Construct a staging area at the harbor for agricultural exports.
- Obtain community development “quotas” from the Western Pacific Fisheries Management Council for fisheries resources allocated to the State of Hawai`i.

### 7.1.9 Implementation

The Food & Agriculture focus group agreed that the Kaua`i County Farm Bureau should lead this industry cluster. To increase the capacity of the Kaua`i County Farm Bureau, the following recommendations are made:

- Increase membership by including non-farmers, restaurants, and hotels
- Increase revenues by exploring alternative revenue sources, re-examining membership dues structure, expanding membership, and increasing fair admissions
- Hire a full-time staff, beginning with an Executive Director. Hire a marketing director or contract out this service.
- Help commodity groups to organize and develop strategies around shared concerns (see **Attachment A**)
- Develop statewide, national, and international strategies to promote Kaua`i products, via trade shows, partnering with commodity groups and other islands
- Obtain a capacity building grant to develop a Kaua`i County Farm Bureau Strategic Business Plan
- Increase efforts to recruit new board members

To increase the capacity of the Food & Agriculture Cluster:

- Clarify roles and responsibilities of the numerous groups and organizations in implementing priority strategies to avoid duplication of goals (see **Attachment A**)
- The Kaua`i County Farm Bureau should facilitate quarterly discussions with key stakeholder representatives to review the progress of priority projects, help to problem-solve, and strengthen communications within the cluster.

### 7.1.10 Performance Measures

- Increase in the number of jobs created
- Increase in average annual wages in the cluster that exceed the rate of inflation, moving it toward the living wage for Kaua`i
- Reduction of imported produce and food products from other islands, the U.S. mainland, and other countries.
- Increase in Kaua`i exports of agricultural and food products to other islands, the U.S. mainland, and other countries.
- Progress in increasing the Kaua`i County Farm Bureau to oversee implementation priority projects.

**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

**COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: FOOD & AGRICULTURE**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
FA-1	Increase capacity of Kaua'i County Farm Bureau	Kaua'i County Farm Bureau	No				
FA-2	Kilauea Agricultural Park	County Office of Economic Development	Yes	Public Works	100	\$4,000,000	County Private
FA-3	Kekaha Ditch Improvements (Black Pipe Siphon, Pali Wooden Flume)	Kekaha Agricultural Cooperative	Yes	Public Works	25-50	\$1,050,000	State Private New Market Tax Credits (NMTC)
FA-4	Kapa'a Stream Diversion at Kahuna Road	East Kauai Water Users' Cooperative	Yes	Public Works	5-10	\$215,000	State NMTC
FA-5	Main Transmission Line/Lateral 6 Diversion Gate (Pani) Structure	East Kauai Water Users' Cooperative	Yes	Public Works	5-10	\$160,000	State NMTC
FA-6	Lateral 8 Discharge Control Gate Structure	East Kauai Water Users' Cooperative	Yes	Public Works	5-10	\$75,000	Private NMTC

ID Number	Project	Applicant	Meets EDA Criteria	Project Type	Estimated Jobs	Total Estimated Cost/Est. Federal Cost	Potential Source of Matching Funds
FA-7	Kaloko Irrigation System Improvements	Kilauea Irrigation Company	Yes	Public Works	10-20	\$1,500,000	Private NMTTC
FA-8	Hanalei Stream Improvements	Kaua`i Taro Growers Association	Yes	Public Works	30-50	\$1,500,000	State U.S. Fish & Wildlife
FA-9	Renovations to Kaua`i Tropical Fruit Disinfestation Facility	Agriculture Development Corp.	Yes	Public Works	5-10 full-time 5-10 part-time	\$1,000,000	State
FA-10	New product research and development	UH-CTAHR	No				
FA-11	Market study on the consumer acceptance of local cattle	Kaua`i Cattleman's Assoc.	Yes	Technical Assistance	1-2		
FA-12	Business and Technical Assistance	UH-CTAHR KCC SBDC SDOA	No				
FA-13	Recruit and mentor students to enter ag industry	DOE	No				
FA-14	Coordinate marketing and distribution	Commodity groups	No				



FA-15	Produce a local farm/crop directory	Kaua`i County Farm Bureau	No				
FA-16	Hold food events to promote Kaua`i ag	Kaua`i Ag. Initiative (KAI)	No				

**Long-Range: 4-5 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
FA-16	Modular slaughterhouse, processing, and chilling facility	Kaua`i Cattleman's Association	Yes	Public Works	50-100	\$2,500,000	Private NMTC
FA-17	Kekaha Ditch renovations	Kekaha Agricultural Cooperative	Yes	Public Works	100+	\$10,000,000 - \$13,000,000	State Private NMTC

## **Attachment A Food and Agriculture Cluster**

### **1.0 Organizations and groups involved in Food and Agriculture**

- Kaua`i Landscape Industry Council
- Hawai`i Flowers and Nursery Association
- Farmers Union
- Kaua`i Agricultural Advisory Committee (KAAC)
- KEDB Food & Agriculture Committee
- Kaua`i Agriculture Initiative (KAI)
- Kaua`i County Farm Bureau
- Food Industry Forum
- Kaua`i Agriculture Tour Operator Alliance
- Malama Kaua`i
- Apollo Kaua`i
- Kaua`i Farmers Association
- Hawai`i Hotel and Lodging Association
- Po`ipu Beach Resort Association
- Hawai`i Food and Beverage Association
- Kaua`i Community College

### **2.0 Commodity Groups**

There are many commodity groups with a range of organizational capacity and networking opportunities.

- Hawai`i Tropical Flowers & Foliage Association, Kaua`i Chapter
- Hawai`i Crop Improvement Association
- Hawai`i Papaya Industry Association
- Kaua`i Cattleman's Association
- Garden Island RC&D, Forestry Committee
- Commercial fisherman
- Kaua`i Bee Keepers Association
- Kaua`i Taro Grower's Association
- Hawai`i Tropical Fruit Growers Association, Kaua`i Chapter
- Hawai`i Organic Farmers Association
- West Kaua`i Boater's Association

## 7.2 Health & Wellness

### 7.2.1 Cluster Background and Composition

The Health & Wellness Cluster includes a range of health services providers and practitioners, traditional and non-traditional. The cluster includes hospitals, and doctors' and dentists' offices as well as chiropractors, nutritionists, nursing homes, mental health services providers, naturopaths, physical therapists, home healthcare providers and others.

**Table 7-2: Industries on Kaua`i Comprising Health & Wellness Cluster<sup>16</sup>**

NAICS	Industry	2001 Jobs	2007 Jobs	Δ'01- '07 Jobs	2001 Wages	2007 Wages	Δ2001-2007 Wages
44610	Health & personal care stores	175	238	63	\$ 30,437	\$ 35,412	\$ 4,975
62110	Offices of physicians	435	314	-121	\$ 56,832	\$ 90,792	\$ 33,960
62121	Offices of dentists	143	156	13	\$ 34,008	\$ 44,824	\$ 10,816
62130	Offices of other health practitioners	48	61	13	\$ 30,940	\$ 40,300	\$ 9,360
62140	Outpatient care centers	40	56	16	\$ 44,772	\$ 44,512	\$ (260)
62151	Medical & diagnostic laboratories	NA	NA	NA	NA	\$ 43,650	NA
62161	Home health care services	85	49	-36	\$ 19,448	\$ 19,084	\$ (364)
62200	Hospitals	620	810	190	\$ 35,512	\$ 45,680	\$ 10,168
62310	Nursing care facilities	250	350	100	\$ 35,000	\$ 39,780	\$ 4,780
NA	Other Health & Well. (estimated)	682	780	98		NA	NA
<b>Cluster Total</b>		2,478	2,814	336			
<b>Average Kaua`i Wage Δ:</b>							<b>\$ 8,580</b>

Between 2001 and 2007, there was a decrease in the number of jobs in the physician offices and home health services. However, there was an overall increase in the total number of jobs in the health and wellness cluster. Health & Wellness focus group participants expressed a concern that the number of jobs in two categories, hospitals and nursing care facilities, appear to be under-represented.

Key strengths of the Health & Wellness cluster include strong projected growth and the fact that most industries in the cluster pay well above the Kaua`i living wage (e.g., Offices of Physicians, \$90,792; Hospitals, \$45,680; and Outpatient

<sup>16</sup> Jobs data from U.S. Bureau of Labor Statistics, Covered Employment @ Wages, supplemented by County Business Pattern data. Wage data from U.S. Bureau of Labor Statistics, Covered Employment & Wages. Living Wage data from the State Department of Business and Economic Development and Tourism Family Economic Self Sufficiency Study.

care centers, \$44,512). Industries in healthcare and wellness also draw upon a common pool of skilled labor requiring similar types of knowledge and training.

### 7.2.2 Health and Wellness 2020 Vision

**Mālama kou kino, e nā `ohana, e nā `āina**  
*Take care of yourself, the families and the land*

The people of Kaua`i are committed to leading a healthy lifestyle based on wellness for themselves, their families, and our beautiful island of Kauai. Residents and visitors are equally enjoying professional care and services for their well-being, resulting in the economic revitalization, growth and stability for the Health and Wellness Industry on Kaua`i.

### 7.2.3 Health and Wellness 2020 Descriptive Vision

**The most important results** are that people are aware of and have access to professionals to help them lead a healthy life and are taking personal responsibility for their health. Residents are receiving specialized treatment on island.

**Health professionals and practitioners** (e.g., doctors, nurses, physical therapists, and occupational therapists) are accessible, affordable, and have long-term relationships with clientele. Health care professionals receive training locally to upgrade skills and learn new technology. There is adequate funding to support this training. Health professionals and practitioners are working in collaboration with wellness practitioners.

**Wellness practitioners** (e.g., personal trainers, massage therapists, aestheticians) are accessible, affordable, and provide integrated services to individuals. They are working in collaboration with health care professionals. Preventive services are designed for youths and adults and are paid for by insurance companies and/or employers.

**Hospitals** provide affordable universal care, emergency services, and critical care services. Hospitals actively promote wellness, have up-to-date medical technology that is financially sustaining, and have expanded services into specialty areas. Hospitals have been upgraded to provide for and meet community health care needs.

**Assisted living facilities** are available, affordable, and flourishing. Facilities are able to meet the diverse needs of residents, are well managed, and provide a high quality of care.

**Long-term care facilities/nursing homes** are affordable and meet the needs of the frail elderly and their families. There are facilities around the island to meet the growing elderly population, with highly trained staff.

**Home health services** are abundant as demand has increased. Home health services are covered by private insurance and there is an increase in reimbursements to service providers. There are more nurse aides who are well trained and who consistently deliver a high quality of care.

**Residents** have access to health care that fits their individual needs. They are wiser consumers of health and wellness services. As a result, they are healthier, happier, and able to enjoy the island lifestyle.

**Visitors** are attracted to Kaua`i to access wellness services that are world renowned. They come and often return to Kaua`i for relaxation and rejuvenation. They are educated to safely enjoy the beaches and attractions on Kaua`i.

**The community** is focused on health and wellness. Streets are well lit and designed for walking and biking. The multi-purpose shoreline path is complete. We are enjoying a high quality of life.

**The keys to our success** are collaboration among members of the Health and Wellness cluster, dedication to the vision and plan, consistent message, and adequate funding.

### 7.2.3 Cluster Accomplishments since 2004

- The Kaua`i Health and Wellness Association (KHWA), a non-profit, membership-based organization, was established in 2005. The KHWA is open to healthcare professionals and anyone with a vested interest in the wellness of Kaua'i residents and visitors. There are over 60 members.
- Two high schools have Health Academy and internship programs
- Wilcox Memorial Hospital opened a new imaging center, added six new operating rooms, and converted medical records to electronic form

- Mahelona Hospital opened an emergency room serving north and east Kauaʻi
- Workforce Development, Wilcox Memorial Hospital, and Hawaiʻi Health System Corporation (KVMH and Mahelona) list job openings on their websites
- The first assisted living facility on Kauaʻi, The Regency at Puakea, opened with 100 units

#### 7.2.4 Trends

- Increase in managed care for Medicaid recipients
- Increase in home health services
- Increase in residential adult care facilities, as an alternative to nursing homes
- Decrease in stand-alone physician offices due to the high overhead costs
- Increase in the number of uninsured residents

#### 7.2.5 Challenges

- Government and nonprofit service providers have fewer resources resulting in reduced services
- Reduction in government reimbursements for health care (Medicare, Medicaid). Physicians are getting a 21% cut from current Medicare reimbursements. As a result, there will be fewer physicians willing to service the most vulnerable.
- Reduction in insurance reimbursement (or at least reimbursement not keeping pace with rapidly rising costs of health care delivery)
- There is an illegal drug and prescription drug problem on Kauaʻi.
- There is a shortage of psychologists and an acute shortage of psychiatrists.
- There is a need for greater access to on-island substance abuse treatment.
- There has been an increase in obesity, eating disorders, and diabetes.

- The cluster faces a shortage of skilled healthcare workers including social workers, physical therapists, occupational therapists, speech therapists, ultrasound technicians, imaging technicians, coders, and nurse aides.
- Students must go to the mainland for degrees in occupational and physical therapy.
- Specialized healthcare education and training are not available on Kaua`i (start at KCC, then complete program in Honolulu).
- More educational options are needed for those who wish to enter or transition into healthcare from other fields. Scholarships and modular courses are needed for those who are working, have family obligations, and are pursuing their education.
- Nursing home admittance criteria have changed, making it difficult to accept clients with certain physical, emotional, and mental conditions.
- 30 additional beds for long-term care are needed on Kaua`i.
- Building confidence and pride in existing healthcare institutions on island.
- National policies may impact the economic feasibility of operating nursing homes.
- Traditional and non-traditional health and wellness practitioners do not normally communicate and work with each other.
- There are limited services and facilities for individuals with severe disabilities.

### **7.2.6 Opportunities**

- The elderly population is large and growing, requiring additional products and services
- Prevention and wellness services are needed to address obesity, eating disorders, diabetes
- Need for youth and adult residential treatment facilities

- Blending Western medicine with Native Hawaiian, Asian, and holistic healing will produce an attractive mix of services for health and wellness visitors
- Wilcox Health has developed a women’s center, offers chemotherapy, and cardiac services. The Kaua`i Medical Clinic has a health maintenance program.
- Kaua`i residents and visitors undergo approximately 400 of 7,900 (5%) in-patient procedures or visits on O`ahu which could potentially be provided on Kaua`i.
- More collaboration could occur among health and wellness providers

### 7.2.7 Priority Projects

#### Short-term

- **Advocate for policies to improve the health and wellness of Kaua`i citizens**
- **Increase the diversity of health care education and training at Kaua`i Community College**

Specifically offer courses in the following areas: social work, speech therapy, ultrasound technician, imaging technician, health information technicians/coders. Deliver training in different venues, not just in the classroom, using non-traditional formats to accommodate working hours. Split training between KCC and O`ahu institutions.

- **Develop prevention and wellness services to address obesity, eating disorders, diabetes**

Assess current programs, collaborate among service providers, support programs, increase public awareness

- **Promote complete streets, walking and bike paths**

Support and assist organizations promoting healthier communities such as Get Fit Kaua`i, Kaua`i Health and Wellness Association, State Department of Health, Lihu`e Business Association

- **Increase collaboration among health and wellness providers**



- **Provide stipends and scholarships for health care training covering a combination of tuition and lost wages for those who must forgo employment to pursue education**

Increase public awareness of training resources and scholarships that are available

- **Develop and encourage wellness programs for employers (public, private, nonprofits)**

Find sources of funding to market employee wellness programs to employers by making the case of economic benefits (long term savings) to employers who invest in employee wellness (positive return on investment).

- **Expand mental health and drug abuse services**
- **Build residential substance abuse treatment facilities**

### **Long-term**

- **Build affordable assisted living facilities**
- **Plan and construct a community-based Health & Wellness Retreat Center**

The facility would integrate Hawaiian, traditional, and non-traditional healing arts. The retreat center would serve residents and a worldwide audience and include a conference room, lodging, and treatment rooms

- **Wilcox Hospital improvements**

Develop a 200-stall parking structure, expand solar farm, and install a 256 slice CT Scanner

### **Other Projects**

- Promote physical education in schools
- Build skilled nursing facilities for long-term care (dependent on pending health care reform)

### 7.2.8 Cluster Collaboration

Health & Wellness focus group participants believe that, given the diversity within the cluster, collaboration should focus around one priority project: a health and wellness retreat center. Wilcox Memorial Hospital will take the lead to initiate discussions with stakeholders.

### 7.2.9 Performance Measures

- Increase in the number of jobs created
- Average annual wages among industries in the cluster that continue to exceed the Kaua`i living wage
- Progress in bringing together stakeholders, completing a feasibility study, and developing a health and wellness retreat center

**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

**COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: HEALTH & WELLNESS**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant/Lead</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>HW-1</b>	Conduct a feasibility study for a Health & Wellness Retreat Center	Wilcox Hospital	Yes	Technical Assistance	1-2 (short-term)	\$150,000	Private County State
<b>HW-2</b>	Advocate for policies to improve the health and wellness of citizens	SDOH, Hospitals	No				
<b>HW-3</b>	Increase diversity of health care education and training	Kaua`i Community College	No				
<b>HW-4</b>	Develop prevention and wellness services to address obesity, eating disorders, and diabetes	Kaua`i Medical Clinic HMSA Health Pass Ho`ola Lahui SDOH Nonprofits	No				
<b>HW-5</b>	Promote complete streets and walking paths	Kauai Path County of Kaua`i	No				
<b>HW-6</b>	Increase collaboration among health and wellness providers	tbd	No				Foundations

<b>HW-7</b>	Provide stipends and scholarships for health care training	Private businesses Nonprofits	No				
<b>HW-8</b>	Develop and encourage wellness programs for employers	HMSA	No				
<b>HW-9</b>	Expand mental and drug abuse services	State Nonprofits	No				

**Long-Range: 4-5 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>HW-10</b>	Build residential drug and alcohol treatment facilities	State of Hawaii Nonprofits	No				
<b>HW-11</b>	Build affordable assisted living facilities	Private businesses	No				
<b>HW-12</b>	Wilcox Hospital improvements to develop 200-stall parking structure, expand solar farm, and install CT Scanner	Wilcox Hospital	Tbd				

## 7.3 Sports & Recreation

### 7.3.1 Cluster Background and Composition

The Sports & Recreation Cluster includes a range of industries providing recreational services and attractions to residents and visitors. Included within this cluster are industries such as golf courses, recreational instruction (surfing, windsurfing, parasailing, etc.), campsites, recreational sports centers, equipment rentals, and supportive services like tour operators, travel agencies, and others.

**Table 7-3: Industries on Kauaʻi Comprising Sports & Recreation Cluster<sup>17</sup>**

NAICS	Industry	2001 Jobs	2007 Jobs	Δ'01-07 Jobs	2001 Wages	2007 Wages	Δ2001-2007 Wages
451110	Sporting goods stores	82	69	-13	\$ 15,488	\$ 19,864	\$ 4,376
487900	Scenic & sightseeing transportation	153	132	-21	\$ 35,877	\$ 29,952	\$ (5,925)
532292	Recreational goods rental	35	55	20	\$ 30,098	\$ 38,745	\$ 8,647
561510	Travel agencies	57	75	18	\$ 22,579	\$ 24,232	\$ 1,653
561520	Tour operators	86	162	76	\$ 22,579	\$ 38,120	\$ 15,541
611620	Sports & recreation instruction	20	34	14	\$ 10,764	\$ 27,610	\$ 16,846
713910	Golf Courses & Country Clubs	147	215	68	\$ 24,958	\$ 24,300	\$ (658)
713940	Fitness & recreational sports centers	59	79	20	NA	\$ 28,760	NA
713990	All other amusement & recreation	112	173	61	\$ 17,624	\$ 29,000	\$ 11,376
721210	Recreational, vacation camps	NA	NA	NA	\$ 32,912	\$ 33,800	\$ 888
<b>Cluster Total</b>		847	994	147			

**Average Kauaʻi Wage Δ      \$ 8,580**

Between 2001 and 2007, 147 new jobs were created in this cluster, driven by golf courses, tour operators, and other amusement and recreation. Wages in sports and recreation instruction and tour operators increased higher than the average Kauaʻi wage between 2001 and 2007.

The Sports & Recreation Focus Group noted that the number of jobs in the “sports and recreation instruction” category seems unusually low, given their knowledge of existing businesses in this industry.

<sup>17</sup> Jobs data from U.S. Bureau of Labor Statistics, Covered Employment @ Wages, supplemented by County Business Pattern data. Wage data from U.S. Bureau of Labor Statistics, Covered Employment & Wages. Living Wage data from the State Department of Business and Economic Development and Tourism Family Economic Self Sufficiency Study.

### 7.3.2 Sports & Recreation 2020 Vision

**The most important results** are that Kaua`i has parks and facilities that meet the needs in every community. Facilities are well-maintained. The multi-use path is complete. Kaua`i's sporting venues attract state, national, and international events.

**Sport and recreational facilities** are updated, well-maintained, and well-used. A 7,500 seat multi-purpose arena is built next to multi-purpose fields in Lihu`e. There are regional parks with multi-use facilities in East, West, and South Kaua`i.

**Sport and recreational events** are well-run, well-attended, and well-marketed. There is an increased mix of local, state, national, and international events and tournaments that expose youth and adults to higher levels of competition. Events are world renowned, attract annual followers, and are an increasing part of the island's economic base.

**Golf courses** are the best in the world. They are financially healthy and use environmentally-friendly practices. There are different tiers of courses that are attractive and affordable to residents and visitors.

**Fitness centers** are located throughout the island. Centers have updated equipment, a variety of programs, are affordable, and well-attended.

**Recreational tours and rentals** are respectful of the land and the host culture. They are offered in areas that are safe and work in harmony with resident enjoyment and use. Management systems are in place so that both residents and visitors can safely enjoy and appreciate Kaua`i's world-class beauty and natural resources.

**Sports and recreational instructors** are trained and certified. As a result of increased business development and experience, businesses are growing and employers are paying livable wages. Instructors are the catalysts for a "Healthy Kaua`i."

As a result of improved facilities, events, and motivational instructors, **residents** are more physically active and are using paths, parks, and facilities. Adults value fitness and encourage their kids to exercise, eat right, and be fit. Visitors have easy on-line access and plan their trips around sports and recreational opportunities on Kaua`i.

**The Sports and Recreation working group** represents a cross-section of the sports and recreation interests on Kaua`i. They are putting time, effort, and resources into implementing priority projects. They are using their networks and

are marketing strategically to promote events. They are collaborating with the Health and Wellness working group.

*The keys to our success* include creating a strategic thinking working group, committed leadership, champions at the local, state, and federal levels, adequate funding, and on-going collaborations and partnerships.

### 7.3.3 Accomplishments

- County parks have been improved and are well-maintained
- Nawiliwili Harbor improvements have been completed
- Phases 1 & 2 of the multi-use coastal path have been completed
- County Park Master Plan is being updated
- Lydgate and Koloa/Po'ipū soccer fields have been completed
- Kikiaola Small Boat Harbor improvements are underway
- There are many sporting and recreational events and tournaments, such as the Kaua'i Marathon, golf tournaments, and canoe races, that attract visitors throughout the year

### 7.3.4 Trends

- Decrease in State funding to maintain parks and facilities
- Net airlift to Kaua'i has increased with more non-stop flights and flights to key gateways
- Increase in family vacations involving multiple generations
- Higher spending visitors have higher expectations in service and quality

### 7.3.5 Challenges

- Kaua'i's State parks require improvements and better maintenance. State funding is inadequate

- Additional improvements are needed at small boat harbors
- The limited market and high cost of liability insurance for recreational businesses is an impediment to cluster growth
- Kauaʻi’s roads are inadequate to meet the needs of residents and visitors
- Land use and water permitting processes are complex and lengthy
- Lack of communication between public and private sectors on the use of beaches (unencumbered State lands)
- Workers compensation and surcharge is extremely expensive
- Visitors do not understand and appreciate the local culture, creating a disconnect between visitors and residents
- The cost of living is high, making it difficult to pay a livable wage

### **7.3.6 Opportunities**

- Kauaʻi’s natural beauty and recreational areas are unparalleled
- Some areas hold untapped potential for controlled recreational and educational use
- There are opportunities for limited recreational uses on agricultural lands, providing supplemental income to private land owners
- Host statewide sporting events throughout the year, such as volleyball, soccer, tennis, and track
- Host national and international events, such as the Kauaʻi Marathon.



### 7.3.7 Priority Projects

- Conduct a feasibility study to identify key sporting events, meetings, conventions, concerts, cultural and art events that could be accommodated on Kaua`i (considering both current and future facilities). The study would also assess alternative sites for the two facilities listed below and prepare development and operating budgets for each venue.
  1. 7,500 seat multi-use arena in Lihu`e for volleyball, basketball, tennis, hula, and other athletic and cultural events. The facility could also serve as an emergency shelter.
  2. Multi-use regional park in Lihu`e sized to host statewide tournaments such as soccer, baseball, tennis, football, and island-wide fairs.
- Build, renovate, and maintain athletic facilities (such as gymnasiums, soccer fields) and community centers in communities throughout the island, consistent with the updated County Park Plan
- Restore beach at Po`ipū Beach Park
  1. Short-term: add 500 cubic yards of sand, conduct shoreline certification survey
  2. Long-term: develop and implement long-term beach restoration plan
- Complete the multi-use path from Nawiliwili to Anahola
- Address water safety issues with monitoring, community education, additional lifeguards, and equipment (Kipu Falls, Queens Bath, beaches)

#### State Projects

- Complete and implement the Ha`ena State Park Master Plan
- Complete and implement the Koke`e State Park Master Plan
- Develop Master Plan for Wailua State Park
- Develop the Wailua Reservoir Education Center, combining fishing and camping areas, a native plant reforestation project, and an environmental education center located at the Wailua Reservoir.

### 7.3.8 Implementation

The Sports & Recreation focus group recommends the formation of a Sports & Recreation Working Group to include representatives from the following organizations:

- County Office of Economic Development
- County Department of Parks and Recreation
- Kaua`i Visitor Bureau
- Kaua`i Economic Development Board
- Department of Education, Kaua`i Superintendent
- Po`ipu Beach Resort Association
- Hawai`i Hotel and Lodging Association
- North Shore Business Council
- West Kaua`i Business and Professional Association
- Hanapepe Economic Alliance
- Hanapepe Business and Professional Association
- Kapa`a Business Association
- Lihue Business Association
- AYSO
- Pop Warner
- Baseball Association
- Junior Golf
- Garden Island Arts Council
- Kaua`i Concert Association
- Kumu Hula

The County Department of Parks and Recreation will serve as the lead entity to bring together stakeholders and to oversee implementation of priority projects. Funding is needed to secure a group facilitator to bring together the above organizations, develop a vision for a multi-use arena, raise funds for a feasibility study, and secure a project manager and/or consultant to conduct the feasibility study.

As the need for a multi-use center was a priority for the Culture & Arts Cluster focus group, a joint meeting should be held to discuss whether one facility could accommodate the needs of both clusters or whether separate facilities should be pursued.

### 7.3.9 Performance Measures

- Increase in the number of jobs created
- Increases in average wages in the cluster's industries that exceed inflation, moving the average cluster wage toward living wage levels
- Progress in bringing together stakeholders to address priority projects
- Progress in completing feasibility study and developing a multi-use arena

**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

**COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: SPORTS & RECREATION**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>SR-1</b>	Feasibility study on multi-use arena and multi-use regional parks.	County of Kaua`i	Yes	Technical Assistance	2-5	\$500,000	Private County
<b>SR-2</b>	Build and maintain athletic facilities and community centers, consistent with updated Park Plan	County of Kaua`i	Yes	Public Works	tbd	tbd	tbd
<b>SR-3</b>	Restore beach at Po`ipū Beach Park	County of Kaua`i	Yes	Public Works	tbd (job preservation)	\$1,500,000	County State (HTA) Po`ipū Beach Resort Assoc.
<b>SR-4</b>	Complete the multi-use path from Nawiliwili to Anahola	County of Kaua`i	Yes	Public Works	30	Phase III tbd Phase IV tbd	federal

<b>SR-5</b>	Address safety issues with monitoring, education, lifeguards, equipment	Kaua'i Visitors Bureau County of Kaua'i	Yes (signage & equipment)	Public Works	tbd	tbd	tbd
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**Sports & Recreation**  
**Long-Range: 4-5 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>SR-6</b>	Develop multi-use arena in Lihu'e	County of Kaua'i	Yes	Public Works	50	tbd	New Market Tax Credits
<b>SR-7</b>	Develop multi-use regional park in Lihu'e	County of Kaua'i	Yes	Public Works	10	tbd	tbd

## 7.4 Culture & Arts

### 7.4.1 Cluster Background and Composition

The Culture & Arts Cluster includes a variety of industries engaged in artistic and cultural activities. Music, film, writing, publishing, graphic design, hula, crafts, photography and performing arts as well as educational and cultural attractions like museums, historical sites, botanical gardens, theatres, and cultural education programs are all included. The cluster is comprised of both for-profit and non-profit entities engaged in these activities. The cluster supported 734 jobs in 2007.

**Table 7-4: Industries on Kauaʻi Comprising Culture & Arts Cluster<sup>18</sup>**

NAICS	Industry	2001 Jobs	2007 Jobs	Δ'01-07 Jobs	2001 Wages	2007 Wages	Δ2001-2007 Wages	
451100	Hobby, musical instrument store	110	79	-31	\$ 17,383	\$ 19,350	\$ 1,967	
451200	Book, periodical & music stores	68	41	-26	\$ 18,900	\$ 22,390	\$ 3,490	
453920	Art dealers	82	39	-43	NA	NA	NA	
512100	Motion Picture & Video Industries	NA	36	NA	\$ 17,212	\$ 29,432	\$ 12,220	
711110	Theater companies & dinner theaters	NA	NA	NA	NA	\$ 32,450	NA	
711120	Dance companies	NA	NA	NA	NA	\$ 27,640	NA	
711130	Musical groups & artists	24	30	6	\$ 34,670	\$ 45,890	\$ 11,220	
711500	Indep. artists, writers & performers	22	28	6	\$ 32,220	\$ 42,830	\$ 10,610	
712110	Museums, historical sites	205	202	-3	\$ 24,958	\$ 32,136	\$ 7,178	
712130	Zoos & botanical gardens	118	94	-24	\$ 21,943	\$ 36,500	\$ 14,557	
NA	Others Culture & Arts (estimated)	59	59	0	NA	NA	NA	
<b>Cluster Total</b>		<b>779</b>	<b>734</b>	<b>-116</b>				
							<b>Average Kauaʻi Wage Δ:</b>	<b>\$ 8,580</b>

Firms and industries in the cluster are unified by their reliance on a mix of cultural, natural and historic assets unique to Kauaʻi including a similar workforce of creative individuals. Industries in the cluster also draw upon a common customer base: visitors and residents with an interest in arts and culture. Those cluster companies that draw visitor traffic depend on shared physical infrastructure to maintain attendance. Finally, these industries all play an important role in defining the cultural character of Kauaʻi.

Between 2001 and 2007 the Performing Arts industry added 49 jobs on Kauaʻi. However, there was a net loss in jobs in this cluster. Over the past two years,

<sup>18</sup> Jobs data from U.S. Bureau of Labor Statistics, Covered Employment @ Wages, supplemented by County Business Pattern data. Wage data from U.S. Bureau of Labor Statistics, Covered Employment & Wages. Living Wage data from the State Department of Business and Economic Development and Tourism Family Economic Self Sufficiency Study.

further decreases in employment occurred due to the global recession, reduction in visitor travel, and reduced revenues of both for- and non-profit organizations.

#### 7.4.2 Culture & Arts 2020 Vision

**The most important result** is that we have worked together to provide quality culture and arts events, performances, and attractions on Kaua`i.

**The Kaua`i Center for Culture and Arts** is a reality, with a performing arts theatre, exhibit, retail, classroom, and office space. The Center is self-supporting, fully staffed, and is accessible to the community. The Center is a gathering place for youth and adults, offers world-class workshops and events, and serves both residents and visitors year round.

**Cultural and Art festivals and events** have a world-wide reputation, attracting residents and visitors. Festivals and events are well-organized and well-attended, with venues around the island. Visitors are aware of cultural and art offerings before they arrive on Kaua`i. They are exposed to the Hawaiian and other cultures during they stay. As a result of these authentic and unique experiences, visitors choose to return to Kaua`i.

**Artists, musical groups, performing artists, and media producers** are supported and nurtured. They are increasing in numbers and are making a living wage. We have developed new talent from our youth. Kaua`i is a magnet for world-class artists who inspire, teach, and raise the bar to new levels. Artists perform in venues throughout the island where their particular art can be shared, displayed, and taught.

**Hula hālau** continue to grow with interest from all age groups and are a critical part of the Kaua`i experience. Visitors from around the world come to Kaua`i to learn the hula and Hawaiian culture.

**Botanical gardens and museums** share Kaua`i's history, culture, and unique resources to resident and visitors from around the world. Botanical gardens and museums are working with other events and organizations to enhance programs and offerings.

**Residents** have an increased awareness of their ancestral and cultural roots and incorporate their culture into their daily lives and routines. The community takes great pride in and supports activities, events, performances, and venues. They are involved in supporting events through their involvement and financial contributions. The culture and history of Kaua`i is documented for future generations. Youth have a place to learn and appreciate the culture and the arts. They have opportunities to intern with various culture and art organizations. The Kaua`i Bus has convenient routes to transport our youth to island cultural and art events.

**The Culture and Arts cluster working group** is a synergistic collaboration in support of artistic and cultural communities. The working group meets regularly, is well-organized, and well-funded. The head of this cluster has a range of skills to lead, educate, and improve community awareness of events.

**The keys to our success** are passionate leaders, mutual respect, and consistent funding. We have implemented programs for our youth that entice them to learn, understand, and perpetuate the culture and the arts.

### 7.4.3 Trends

- Internet purchases of musical instruments, books, and artwork have reduced cluster jobs on Kauaʻi
- Performing arts have increased due to strong community interest, more sophisticated marketing, and stronger organizations sponsoring events
- Hula hālau business models are evolving from traditional, to competition- and teaching-oriented
- Worldwide interest (especially in Japan) in hula and Hawaiian culture creates business opportunities

### 7.4.4 Accomplishments

#### Visual Arts

- Kauai Society of Artists have maintained a relatively steady venue with regular and new exhibitions throughout the year. They developed an Artists Guide, put fliers into the airport racks, and maintain a website.
- Art Galleries have managed to keep their doors open in spite of the economic downturn. Art walks in Hanapepe continue; art walks in Kapaʻa have just started. These are economic drivers.
- Community art workshops have been happening quietly in many small semi-private venues despite the lack of workshop space.
- Garden Island Art Council's (GIAC) Van Go offers a steady stream of activities for youth and families island-wide. GIAC will create 24 ceramic murals inside the Kamalani Pavilion.



- GIAC has been doing the Airport Window Displays since 2007, which is enjoyed by both interisland travelers and airport employees.

### **Marketing and Outreach**

- Since 2005, GIAC's Art and Culture calendar is sent out two to three times a month to promote Arts and Culture events. With over 4,000 recipients, attendance at events has increased steadily.
- The ARTS newsletter went from a stapled legal size copy machine document numbering 250 in 1982 to a stunning 8 page color tabloid insert in the Kauai People magazine with circulation of 33,300 copies and on-line presence on GIAC and Honolulu Advertiser websites.

### **Performance Arts and Theatre Productions**

- Hawai'i Children's Theatre and Kaua'i Community Players have joined forces to develop and maintain their KAPA space in Puhi which also doubles as the Puhi Playhouse. They store costumes, have rehearsals and lessons, build sets, and put on sell-out productions.
- KPAC is DOE connected but they work closely with the other theatre groups for all their resources and talents.
- Women in Theater has been rounding out the theatre offerings with serious dramatic productions.
- Hawaii Children's Theatre conducts a Summer Stars program that trains young actors and actresses for productions. Some theater classes are also offered by the Kauai Academy of Creative Arts.
- Kauai Sings, a fundraiser for Malama Pono, has been successfully growing their fan base and offers music events throughout the year.
- St Michaels and All Angels Episcopal Church offers an annual Jazz Festival featuring local and national talent.

### **Music**

- Over the past 10 years, music events and offerings have increased dramatically.
- Many musicians appreciate Kaua'i as a place to perform.

- E Kanikapila Kakou in its 27th year promotes Hawaiian music artists and brings locals and visitors audiences together to appreciate and support Hawaiian music.

### **Dance**

- Over the past 10 years, the number of excellent dance schools, each unique in the way they train and present their students, have grown in numbers. Dance instructors put on recitals, hold classes, train students for theatre productions, and offer adult classes.

### **Collaboration**

- There is an increase in collaboration between various non-profits to maximize their own and each other's events.

### **Other**

- Niihau Shell Lei Cooperative has been established
- County of Kaua`i purchased a large mobile stage that can be rented for community festivals and events
- Programs have been established to teach Hawaiian language, protocol, place names, etc. to workers in Kaua`i's visitor industry
- Interpretive walking trails have been established in Koloa-Po'ipu, Hanapepe, Wailua, Lihue, Waimea, and Historic Kapa`a Town

## **7.4.5 Challenges**

- Hawai`i Tourism Authority, during this economic downturn, is focusing efforts on marketing rather than on culture and supporting cultural practitioners
- State Foundation on the Culture and Arts funding has been dramatically reduced
- Lack of venues to display local art, hold events
- Expensive to operate and maintain exhibit space
- No funding exists to administer exhibit space

- There are many local art and cultural events that sometimes conflict with each other
- There are limited opportunities for youth to learn and perpetuate the culture
- Youth have competing interests (e.g., electronic games, sports). Traditional culture and arts may not appeal to youth
- Cultural resources are being degraded by unauthorized or inappropriate use (e.g., weddings held on cultural sites, proposed tour to “activate” heiau)
- Road improvements are needed to maintain and improve resident and visitor access to cultural and historic attractions (roads in Koke`e)
- There is a lack of adequate/equitable access to capital for firms in the cluster
- Many firms in the cluster are nonprofit organizations facing the unique challenges of that sector including: reduced public funding and financial stability
- Expensive for independent studios to film on Kaua`i and as a result Kaua`i is considered a boutique location
- There is a need for a 200-seat theatre to accommodate smaller productions

#### 7.4.6 Opportunities

- Marketing hula and Hawaiian culture to the Asian market, specifically Japan and China
- Kaua`i has many unique cultural assets including a voyaging canoe, Hawaiian Studies Program, Niihau shells, and cultural and historic sites
- Cultural tourism is a niche with promising demand and customer characteristics. Cultural and heritage tourists tend to stay longer, spend more, and treat the destination with greater respect than other tourists
- Marketing to foreign groups and audiences can increase sales and attendance (especially for museums)

- There is proven demand for cultural tourism from Kaua`i's museums, botanical gardens, events, and festivals
- There is a growing number of contemporary artists in visual arts and dance
- Targeted marketing to youth
- Hold events where youth naturally congregate (e.g., Kukui Grove)

#### 7.4.7 Priority Projects

- Aggregate, disburse, and maintain a consolidated calendar of arts and cultural events on Kaua`i that is accessible to residents and visitors
- Offer skill-building technical assistance workshops (quarterly training) to nonprofit organizations engaged in arts and culture enterprises, including grant writing, event planning, and strategic planning
- Develop a Kaua`i Center for Culture and the Arts to include exhibit, retail, classrooms, and offices
- Support programs that teach our youth Hawaiian language, music, and arts
- Create affordable space for hālau, exhibitors, and practitioners
- Improve communications between business (e.g., hotels) and art & culture organizations
- Create an Culture & Arts working group to improve communication and coordination within cluster
- Develop interpretive trails and walking tours in communities across Kaua`i, highlighting historic and cultural sites, with appropriate Native Hawaiian place names, interpretive signage and protocols
- Acquire land for and establish permanent fair grounds for cultural festivals throughout Kaua`i (see *Sports & Recreation Cluster*)
- Acquire, rehabilitate, adapt and re-use existing historic facilities (e.g., Haraguchi Rice Mill) for new commercial purposes
- Create exhibit space alternatives, such as “Art on the Street” (using storefront window space)

#### 7.4.8 Other Projects

- Provide marketing assistance programs targeting arts and culture enterprises with particular attention to marketing overseas to visitors and customers
- Adapt and use Kaua`i's Voyaging Canoe for cultural education excursions for visitors and residents
- Acquire and maintain a mobile, high-quality, tent-structure for large cultural festivals
- Establish community-based, experiential and cultural learning centers on Kaua`i
- Create a consolidated directory of art and culture businesses, programs and attractions
- Provide additional funding and support for the film industry on Kaua`i

#### 7.4.9 Implementation

The Culture & Arts focus group recommends that the Garden Island Arts Council take the lead in guiding the Culture & Arts Industry Cluster. The following organizations could be invited to participate:

- Garden Island Arts Council
- Kaua`i Concert Association
- Kaua`i Society of Artists
- Kaua`i Academy of Creative Arts
- Hula Halau/Kumu Hula
- Hawaiian Agencies and Organizations of Kaua`i (HAO)
- Association of Hawaiian Civic Clubs
- Hawaiian Societies
- Na Mea Hawaii
- Hawaiian Children's Theatre
- Kaua`i Community Players
- Kaua`i Music Festival
- County of Kaua`i
- Kaua`i Visitor Bureau
- Kaua`i Museum
- Kaua`i Community College
- Kaua`i Japanese Cultural Society
- Chinese Heritage Society

- Hui Alu Okinawan Club
- Kaua`i Filipino Chamber of Commerce
- Kaua`i Chamber of Commerce
- Hawai`i Community Foundation
- West Kauai Community Assn (Town Celebration)
- Waimea Visitor Center
- Waimea Heritage Days
- Hui O Laka/ Koke`e Museum
- Grove Farm Homesteads
- Storybook Theatre/Keiki Storybook Festival
- Hanapepe Town Art Walk Group
- Mokihana Club (Music)
- Inspiration Magazine (Health & Wellness)
- KKCR Community Radio
- Women in Theatre
- Hale Opio
- Orchid Society
- Bonsai Society
- Gardens - NTBG, Limahuli, Lawai, McBryde, Na Aina Kai, etc
- Music - Kauai Chorale, Sunshine Express, bands, orchestras, ensembles, choral groups, youth groups, recording studios, etc.
- Dance Schools -- Janie Crane, Jenn Schwartz, Aloha-Tiffany Dodge, Rebecca Owen, Carol Culver, KUGA
- Prince Kuhio Celebration planners
- Heiwa I Kauai (Tahitian)
- Polynesian Cultural Festival
- Lawai International Center - 88 Shrines
- Malie Foundation - Kauai Mokihana Festival
- American Indians group - Powwow Festival
- Taro Festival
- Coconut Festival
- Homegrown Festival
- Malama Ola Festival
- Koloa Plantation Days

Funding is needed to secure a group facilitator to bring together the above organizations. The Garden Island Arts Council would help to move the cluster to a new level, by improving communications within the cluster, increasing and coordinating marketing, and addressing priority projects.

The focus group also recognized the critical role of the Garden Island Arts Council in promoting Art and Culture on Kaua`i. Several recommendations to improve the capacity of the organization include:

- Complete strategic plan
- Expand membership to include hotels and timeshares
- Partner with Kaua`i Visitor Bureau to promote events, artists, concerts

#### **7.4.10 Performance Measures**

- Increase in the number of jobs created
- Increases in average wages in the cluster's industries that exceed inflation, moving the average cluster wage toward living wage levels
- Increases in visitor satisfaction with the cultural, natural, and historical experiences on Kaua`i.
- Increases in the number of visitors who travel to Kaua`i because of its cultural, natural, and historic attractions.
- Progress in bringing together stakeholders and forming a cluster working group to address priority issues.

**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

**COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: CULTURE & ARTS**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>AC-1</b>	Consolidate calendar of art & cultural events	County of Kaua`i	No		.5	\$40 – 50,000 to maintain	Private
<b>AC-2</b>	Skill-building technical assistance	Art & Culture Cluster Working Group	No			tbd	
<b>AC-3</b>	Conduct a feasibility study for the Kaua`i Center for Culture & Arts	Art & Culture Cluster Working Group	Yes	Technical Assistance	2.0	\$100,000	Private, Foundations
<b>AC-4</b>	Support programs that teach our youth Hawaiian language, art, and culture	tbd	No			tbd	Kamehameha Schools, OHA, HTA
<b>AC-5</b>	Create affordable space for hālau, exhibitors, practitioners	tbd	Yes	Public Works	5-10	tbd	



<b>AC-6</b>	Improve communications between businesses & arts and culture orgs.	Art & Culture Cluster Working Group	No			tbd	
<b>AC-7</b>	Create an Culture & Arts Cluster Association	tbd	Yes	Technical Assistance	.5	\$100,000	Foundations, Private
<b>AC-8</b>	Develop interpretive trails and walking tours	tbd	No				State HTA
<b>AC-9</b>	Conduct a feasibility study for permanent fair grounds around island	tbd	Yes	Technical Assistance	2-3		
<b>AC-10</b>	Create exhibit space alternatives	tbd	?				

**Long-Range: 4-5 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>AC-11</b>	Acquire, rehab, adapt existing historic facilities for new commercial purposes	tbd	Yes	Public Works	tbd	tbd	New Market Tax Credits
<b>AC-12</b>	Construct Kaua`i Center for Culture & Arts	tbd	Yes	Public Works	tbd	tbd	New Market Tax Credits

## 7.5 Science & Technology

### 7.5.1 Cluster Background and Composition

The Science & Technology Cluster includes firms in information technology, life sciences, scientific research and development, digital media, and related service industries. Kaua`i firms in the cluster supported an estimated 344 jobs in 2007.<sup>19</sup>

**Table 7-5: Industries on Kaua`i Comprising Science & Technology Cluster<sup>20</sup>**

NAICS	Industry	2001 Jobs	2007 Jobs	Δ'01-07 Jobs	2001 Wages	2007 Wages	Δ2001- 2007 Wages
325410	Medicinals, Botanicals, Pharma	NA	NA	NA	NA	\$ 78,970	NA
339112	Surgical & Medical Instruments Mfg	80	114	34	NA	\$ 43,272	NA
511210	Software Publishers	20	20	0	\$ 36,400	\$ 65,575	\$ 29,175
513320	Wireless telecom carriers	272	30	-242	\$ 49,041	\$ 47,424	\$ (1,617)
514191	On-Line Information Services	NA	NA	NA	NA	NA	NA
514210	Data Processing Services	12	25	13	NA	\$ 24,908	NA
541500	Computer systems design & related	17	50	33	\$ 37,366	\$ 79,761	\$ 42,395
541700	Scientific Research and Development Svc	17	225	208	\$ 46,540	\$ 56,940	\$ 10,400
541900	Other professional, scientific, tech	55	73	18	\$ 20,135	\$ 29,824	\$ 9,689
NA	Other High Tech (estimated)	50	50	0	NA	NA	NA
<b>Cluster Total</b>		506	344	162			
						<b>Average Kaua`i Wage Δ:</b>	<b>\$ 8,580</b>

The industries within the cluster are diverse. Rather than being grouped together due to horizontal or vertical linkages, these industries were grouped because they share many needs and challenges. For instance, biotechnology, information technology, and research companies all would benefit from a trained workforce, assistance with start-up or expansion, and investment in research and development.

There was a total decline in this industry cluster based on the reduction of wireless telecommunication carrier services on Kaua`i. This was slightly off-set

<sup>19</sup> Two additional NAICS industries, *Scientific Research and Development* and *Other Professional and Technical Services* were added to this cluster based on feedback from the CEDS Committee.

<sup>20</sup> Jobs data from U.S. Bureau of Labor Statistics, Covered Employment @ Wages, supplemented by County Business Pattern data. Wage data from U.S. Bureau of Labor Statistics, Covered Employment & Wages. Living Wage data from the State Department of Business and Economic Development and Tourism Family Economic Self Sufficiency Study. NA is used where an industry had too few firms to register in data collected by the U.S. Census Bureau County Business Patterns (CBP) survey. Estimated figures in the "Other" category represent conservative estimates of total jobs in industries where CBP data was unavailable.

by the increase in jobs in Scientific Research and Development Services. Average wages in this cluster are well above the Kaua`i living wage.

The Science & Technology focus group raised concerns that the job numbers in this cluster are underestimated. There are about 850 non-military jobs at the Pacific Missile Range Facility that are not reflected in the above table. Further research is needed to determine how military contractors are reporting data to the United States Bureau of Labor Statistics.

## 7.5.2 Science & Technology 2020 Vision

**Kaua`i's infrastructure, workforce, and higher education** attract knowledge-based businesses working in science and technology enterprises. These businesses are linked with the college and the high schools, providing internship, fellowships, and training opportunities for Kaua`i students. After attending college, students are able to find well-paying jobs on Kaua`i. All parts of the island are served by high-speed and high-bandwidth communications.

Many **residents** have been trained in science and technological skills. A large number of them have their own businesses. Many work from their homes and service a world-wide market through global computer communications systems.

**New businesses** include digital media, film, renewable energy, and bioscience companies. A new digital media, film, and production facility is located on the Kaua`i Community College campus. Science and technology businesses not only provide high paying jobs, but help to sustain a high quality of life on Kaua`i.

The **Pacific Missile Range Facility** (PMRF) is the largest fleet training, testing, and evaluation range in the world. It attracts tech businesses to locate on Kaua`i. PMRF remains a federal installation, with substantial federal funding. Scientific and commercial research is an important part of PMRF activities. With a proactive program to hire current and returning residents, PMRF and its associated companies provide training and work in cooperation with the college and the high schools.

**State government** supports science and technology through funding research and development, providing renewable energy tax credits and other tax incentives, making land and infrastructure available, and providing appropriate subsidies to attract science and technology firms to Hawai`i. The State provides assistance in reaching global markets, in encouraging local employment and business ownership, and educating Kaua`i students so that they can fill science and technology jobs.

**County government** supports science and technology businesses by zoning appropriately located land for commercial uses and by providing adequate County infrastructure.

**The keys to success** are continued collaboration, government incentives, resources to promote STEM activities from K-20, and an increased awareness of career opportunities in science and technology on Kaua`i.

### 7.5.3 Cluster Accomplishments since 2004

- KEDB successfully facilitates the Science and Technology Industry Cluster through two committees, Education and High Technology.
- Kaua`i Community College science and math faculty are working in collaboration with State Department of Education high school teachers to align STEM curriculum. The partnership is designed to build a seamless transition for students to successfully progress without remediation.
- Through a partnership with the Hawai`i Space Flight Laboratory, Kaua`i Community College will be home to a telemetry and weather station that will support both educational opportunities and educational and commercial satellite downlinks.
- Kaua`i Community College has provided structured training for this industry cluster.
- KEDB-sponsored Aloha `Ike program has sponsored 67 projects totaling \$330,000 in direct grants to teachers island-wide.
- KEDB-sponsored Lego Robotics program has engaged the majority of schools on Kaua`i.
- Hawai`i Space Grant Consortium has provided fellowships at Kaua`i Community College and internships at the Pacific Missile Range Facility and local industry.

### 7.5.4 Trends

- Pacific Missile Range Facility operations and reach has grown dramatically
- The seed corn industry jobs statewide has grown 17% per year and many of these jobs are science and technology jobs

- Increase in the number of small (50-75 employee) information technology businesses
- China and India continues to directly compete with lower wages and qualified employees

### 7.5.5 Challenges

- It is difficult to retain qualified employees who have moved from the mainland due to the high cost of living, travel distance, and rural lifestyle.
- Electricity is unstable, especially for PMRF-related projects. Back-up power is a necessity and is expensive.
- Agricultural biotechnology faces opposition throughout the State.
- There are no incentives for science and technology firms to relocate to Hawai`i, much less Kaua`i.
- Dependence on federal funds is a risk factor. Kaua`i needs to plan for sustainability beyond federal funding.
- Many states (and nations) are competing for growth of their high tech industries including biotechnology and information technology. It is less expensive to do business in China and India.
- Students are entering Kaua`i Community College with low levels of math and science.
- Kaua`i Community College training and degrees do not always translate into an actual job. The percentage of students that pursue advanced degrees is low.
- Since Kaua`i Community College's overall student enrollment is low, it's financially difficult to offer specialized courses.
- Act 221 has not had an impact on Kaua`i

## 7.5.6 Opportunities

- Biotechnology on Kaua`i has a large presence, with potential for expansion.
- There is robust hiring/job creation projected by PMRF and seed corn industry.
- Kaua`i has many advantages that could be used to attract businesses e.g., strategic location in the Pacific, strong agricultural infrastructure, coordinated federal, state, and county regulatory framework, year round growing season, diverse renewable energy sources, and strong intellectual property laws.
- Kaua`i Community College has 12-15 acres that could be used to train and teach the community about renewable energy, green building design, and sustainable agriculture.
- Kaua`i Community College is a “University Center,” that offers Bachelor and Master Degrees in selected areas.
- Kaua`i Community College supports collaborative efforts to provide training to meet the needs of Kaua`i employers.
- Retirees and part-time residents may be an untapped source of expertise for high tech companies, and the educational institutions who train tech workers.

## 7.5.7 Priority Projects

### Workforce Development

#### Existing Programs

- Continue to develop training and distance learning opportunities at Kaua`i Community College to meet the needs of science and high technology businesses on Kaua`i
  - Associate of Arts, Bachelor of Science (nursing, engineering), and Certificate programs in Biosciences
  - Associate of Science degree in Process Management (applicable to radar, optics, telemetry, environmental process, and risk assessment)

- Continue to support the Aloha `Ike and other programs to strengthen Science Technology Engineering and Math (STEM) learning opportunities for grades K-12
- Continue to support robotics programs island-wide and create linkages with KCC, State, University of Hawai`i at Manoa, and industry
- Continue to provide STEM training and exposure to K-12 teachers and counselors
- Continue to expand youth internship opportunities by strengthening partnerships between KCC and other programs with local businesses and industries.
- Continue dialogue and coordination between KCC and K-12 teachers to align science and math curriculum and expectations

#### **New Programs**

- Get parents excited and motivated about career opportunities on Kaua`i and to encourage their children to pursue STEM career paths by working with employers
- Develop age-appropriate DOE career messages and empower career counselors to deliver consistent career messages

#### **Advocacy**

- Advocate for government incentives to create a business-friendly climate to support science and technology businesses in Hawai`i

#### **Business Opportunities**

- Conduct a feasibility study for a film, digital media, and production center
- Conduct a feasibility study for a Sustainability Center (see *Sustainability Cluster, Project STP-9*)
- Conduct a feasibility study for a business incubator

### 7.5.8 Tactics

- Expand educational funding programs (e.g., Aloha `Ike program)
- Give KCC students school credit for assisting schools in STEM-related programs

### 7.5.9 Implementation

The Kaua`i Economic Development Board (KEDB) serves as the lead organization of the Science & Technology Cluster. KEDB has two active committees, *Education* and *Science & Technology*, that will continue to implement many of the priority projects listed in this plan. It is recommended that the KEDB Education Committee be expanded to include County Office of Economic Development Director, Kaua`i Community College Chancellor, and PMRF representative.

Kaua`i Community College will continue to develop training, learning opportunities, and internship programs. HSGC will continue to offer fellowships, internships, and training programs.

A partnership between the County Office of Economic Development and Kaua`i Community College is needed to develop the film, digital media and production facility, Sustainability Center, and Business Incubator.

### 7.5.10 Performance Measures

- Increase in the number of jobs created
- Increases in the proportion of cluster jobs filled by local residents (versus imported labor)
- Average annual wages within the cluster that continue to exceed the Kaua`i living wage
- Progress in bringing together stakeholders, completing feasibility studies, and developing digital media facility and sustainability center
- New partnerships between educational institutions and cluster companies working to assure that education and training meets the needs of the cluster and its workers.



**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY**

**COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: SCIENCE & TECHNOLOGY**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant/Lead</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Est. Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>ST-1</b>	Develop training and learning opportunities at KCC	Kaua`i Community College (KCC)	No				
<b>ST-2</b>	Support Aloha `Ike, STEM, and other programs	Kaua`i Economic Development Board (KEDB), Science & Tech and Education Committees	No				Private Dept. of Labor Dept. of Educ.
<b>ST-3</b>	Support robotic programs	Dept. of Education (DOE) KEDB S&T Comm. Educ. Comm.	No				
<b>ST-4</b>	Provide STEM training and exposure to K-12 teachers & counselors	DOE KEDB S&T Comm.	No				
<b>ST-5</b>	Expand and fund KCC internship program	KCC Hawai`i Space Grant Consortium	No				Private Federal

<b>ST-6</b>	Coordinate science and math curriculum between KCC and K-12 teachers	KCC DOE	No				
<b>ST-7</b>	Excite and motivate parents about STEM career opportunities on Kaua'i	KEDB S&T Comm. Educ. Comm. Kaua'i Chamber of Commerce	No				
<b>ST-8</b>	Develop DOE career messages and empower counselors to deliver messages	KEDB Educ. Comm. DOE KWIB	No				
<b>ST-9</b>	Advocate for government incentives	KEDB S&T Comm. Kaua'i Chamber	No				
<b>ST-10</b>	Conduct a feasibility study for a film, digital media, and production center	OED KCC	Yes	Technical Assistance	2-3	\$200,000- \$300,000	private
<b>ST-11</b>	Conduct a feasibility study for a Sustainability Center	OED KCC	Yes	Technical Assistance	2-3	\$200,000- \$300,000	private
<b>ST-12</b>	Conduct a feasibility study for a Science & Technology business incubator facility	OED KEDB	Yes	Technical Assistance	2-3	\$200,000- \$300,000	private

**Long-Range: 4-5 Years**

ID Number	Project	Applicant	Meets EDA Criteria	Project Type	Estimated Jobs	Total Estimated Cost/Est. Federal Cost	Potential Source of Matching Funds
ST-13	Develop film, digital media, and production facility	OED KCC	Yes	Public Works	10-50	\$8,000,000 - \$10,000,000	private
ST-14	Develop Sustainability Center	OED KCC	Yes	Public Works	tbd	tbd	tbd

## 7.6 Sustainable Technologies & Practices

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### 7.6.1 Cluster Background and Composition

The Renewable Energy cluster has been renamed ***Sustainable Technologies & Practices*** cluster to encompass renewable energy, waste reduction, reuse, recycling, and green building practices and materials. This cluster includes a variety of industries that generate, distribute, and build technology for renewable energy. Types of renewable energy include wind, solar, ocean, biomass, hydro-electric, hydrogen fuel cells, and photovoltaic energy.

There is little data available to analyze this cluster on Kaua`i. However, focus group meetings confirm that there is growth potential in this cluster. While the federal government does not have separate industrial classification codes for green and clean technologies and practices, a conservative estimate on the current employment in the cluster is about 135. Jobs in this cluster include research, skilled manufacturing, and engineering to labor intensive jobs at recycling centers and retail jobs at thrift stores. Average wages may be at or slightly above the living wage for Kaua`i.

### 7.6.2 Sustainable Technologies & Practices 2020 Vision

**The most important results** are that through renewable energy production and conservation, we have significantly reduced our dependence on fossil fuels. Local and state governments have fully integrated sustainability into their planning and operations.

**Renewable energy** is locally generated for local use, has created new businesses and living wage jobs, and has helped to diversify Kaua`i's economy. Renewable sources are running on a smart grid.

**Conservation** is part of Kaua`i's residents' normal practices. Some of these practices include the use of energy efficient appliances, solar hot water use, public transit use, reuse, and recycling. Conservation measures have reduced the demand for energy island-wide.

**Recycling** is implemented island-wide and is supported by a Material Recovery Facility and curbside pick-up. As a result, we have significantly diverted the amount of solid wastes entering our landfill.

**Green technologies** seamlessly blend into our daily lives in areas such as food production, renewable energy, and construction. Green technologies are flourishing as a result of a trained work force, economic opportunities, and new building products on the market.

**Regulations** with aggressive mandates and incentives for energy efficiency, transportation efficiency, and diversion of waste have been the foundation for achieving this vision. Regulations reflect the shared values of the community and are enforced.

**The County of Kaua`i** is a leader in energy efficiency. The County supports the creation of green jobs, sponsors needed legislation, incorporates sustainable practices into County facilities and operations, and streamlines the permitting process for renewable projects.

**The Sustainable Technologies & Practices Committee** is a public-private collaboration that successfully identifies and addresses challenges to implementing sustainable technologies and practices.

**The keys to our success** was our foresight and commitment to move toward sustainability, a shared sense of responsibility, broad participation across the community, collaboration, teamwork, hard work, follow-through, and accountability.

### 7.6.3 Accomplishments

- KIUC's Energy Efficiency programs promote solar water heating and energy efficient appliances
- Kaua`i has the highest penetration of photovoltaic energy onto the KIUC grid per capita in the nation
- A biodiesel plant is in operation, converting used cooking oil to diesel for farm equipment
- Phase I of a pilot research and development facility that converts algae to jet fuel plant is in operation
- The County Integrated Solid Waste Management Plan was completed in 2009; and approved in 2010
- The Kaua`i Planning & Action Alliance held conferences on the "Greening of Kaua`i's Visitor Industry" in 2006 and 2007

- Niihau School became the first school in the nation to have a 100% photovoltaic system. The county secured federal funding, worked with the State Dept. of Education, and coordinated with the private landowner
- KIUC received four letters of intent for renewable energy projects, with one project moving forward
- KIUC completed a Renewable Energy Technology Assessment report by Black and Veatch in 2005
- County Energy Sustainability Report was completed in March 2010
- KEDB Energy Conferences were held in 2008 and 2009
- KEDB formed a Renewable Energy Committee in 2005
- Apollo Kaua`i was formed in 2005
- Malama Kaua`i was formed in 2006
- The 2009 International Energy Conservation Code was adopted for new construction by the County of Kaua`i
- Zero Waste Kaua`i was formed

#### 7.6.4 Challenges

- Federal and State laws and regulations regarding impacts to native species (e.g., birds, snails) from certain kinds of renewable energy generation (e.g., wind, hydro) impacts the feasibility of projects.
- It is costly to build and operate renewable energy facilities. In 2010, renewable energy sources are more expensive than oil.
- Federal funds and champions are not permanent.
- There is a lack of federal, state, and county funds for implementation.
- The loss of knowledge and understanding of Kaua`i's agricultural water and irrigation systems.

### 7.6.5 Opportunities

- County of Kaua`i adoption of the new energy efficient building code (IECC)
- County of Kaua`i adoption and implementation of the Kaua`i Energy Sustainability Plan (KESP)
- Develop models for alternative housing methods and materials
- Promote conservation by highlighting community-based models and solutions
- County of Kaua`i could initiate an energy efficiency program that targets large consumers with large carbon footprints
- Implement an island-wide mandatory recycling program
- Change zoning to allow micropower generation
- Develop community-based energy plans based on resources and needs in each community
- Preserve surface water systems for food, energy, and potable water
- Volatile oil prices, concerns over energy security, and growing interest among utilities, developers, and government are all likely to increase demand for renewable energy technology and services.
- Public education efforts are ongoing and awareness is growing of the need to invest in renewable energy technology, generation, and distribution.
- Federal and State mandates that 30% of Hawai`i's energy supply must be from alternative sources by the year 2020 will drive implementation of renewable energy.
- Kaua`i has the ability to tap many sources of renewable energy (wind, hydro, solar, ocean, etc.).
- Funding is available for renewable energy projects, e.g., from the Department of Energy, USDA, the National Renewable Energy Laboratory, the Small Business Innovation Research program, and other sources.
- Biomass and biofuels offer Kaua`i opportunities for cross-industry benefits between alternative energy producers and agricultural producers.

### 7.6.6 Criteria

In selecting priority projects, the Sustainable Technologies & Practices focus group identified key criteria:

- Technologically feasible
- Financially feasible
- Doesn't limit future choices
- Scalable: ability to ramp up or down based on success
- Creation of livable wage jobs
- Capacity to implement
- Relative dependence on oil and off-island resources
- Conform to sustainable principles

### 7.6.7 Priority Projects

- Form a Sustainable Technologies & Practices (STP) Committee
- Promote residential solar water heating, wherever practical
- Plan, construct and maintain a Kaua`i biomass generation facility
- Promote the use of energy efficient products
- Build a materials recovery facility/expand curbside recycling (incl. green waste)
- Advocate for regulations to promote energy efficiency (recycling, building codes, land use policies)
- Promote distributed electricity generation tied to a smart grid
- Develop a carpool/rideshare program
- Develop a model to demonstrate green building materials and techniques (see *Science & Technology Project, ST-13*)
- Develop concentrated solar power
- Incorporate renewable energy at public facilities
- Develop large-scale photovoltaic projects
- Develop hydroelectric projects



### 7.6.8 Other Projects

- Plan for shift to electric vehicles
- Increase public transit routes/frequency
- Change law to allow micropower generation (e.g., small windmills)
- Plan, construct, and maintain a Kaua`i liquid biofuel plant
- Plan, construct, and maintain a waste to energy plant
- Develop community-based energy plans, based on needs and resources of each community
- Develop a composting facility/program

### 7.6.9 Implementation

The County Office of Economic Development will take the lead in bringing stakeholders together to oversee implementation of priority projects. The focus group unanimously recommended the formation of a Sustainable Technologies & Practices (STP) Committee. The group will develop a clear mission, be results-driven, and have meetings that are well-designed and facilitated. All focus group members indicated an interest in participating in the STP Committee and identified others who should be invited to participate:

- Large landowner
- County council representative
- Philanthropist
- Representative of Senator Inouye

It was pointed out that there are many related groups, including the Hawai`i Clean Energy Initiative, Sustainability Working Group, KIUC Strategic Planning Committee, and KEDB Renewable Energy Committee that involve similar players. The goals of these groups should be clearly understood before proceeding to avoid duplication and to encourage collaboration.

In addition to forming the STP Committee, success in this industry cluster will require:

- Political will, leadership, and risk-taking
- Public support and a shared sense of urgency
- Legislation for dedicated funding
- Consensus among key stakeholders with clear commitments and responsibilities
- Key County government personnel (energy efficiency coordinator, facilities energy manager, and policy manager)
- Follow-through and timely action
- A long-term commitment
- A crisis, such as sustained high oil prices, that impacts people
- Positive return on investments
- County fast-tracking of viable projects

#### **7.6.10 Performance Measures**

- Increase in the number of jobs created
- Average annual wages among industries in the cluster that continue to exceed the Kaua`i living wage
- Progress in bringing stakeholders together in forming the Sustainable Technology and Practices Committee

**HAWAII STATEWIDE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY  
COUNTY OF KAUAI PRIORITY PROJECTS LIST**

**TARGETED INDUSTRY CLUSTER: SUSTAINABLE TECHNOLOGIES & PRACTICES**

**Short-Range: 1-3 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant/Lead</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Est. Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>STP-1</b>	Form a Sustainable Technology & Practices Committee	County of Kaua`i Office of Economic Development	No				
<b>STP-2</b>	Advocate residential solar water heating	KIUC- retrofits Private-new homes	No				
<b>STP-3</b>	Develop Biomass facilities	KIUC Private	Yes	Public Works	Tbd	Tbd	New Market Tax Credit
<b>STP-4</b>	Promote use of energy efficient products	KIUC	No				
<b>STP-5</b>	Build Material Recovery Facility/expand curbside recycling	County of Kauai	Yes	Public Works	Tbd	<b>\$5,000,000</b>	County of Kaua`i New Market Tax Credit
<b>STP-6</b>	Advocate for regulations to promote energy efficiency	KIUC County State	No				

<b>STP-7</b>	Promote distributed generation tied to grid	KIUC Private	No				
<b>STP-8</b>	Develop a carpool/ Rideshare program	County	No				
<b>STP-9</b>	Develop a model to demonstrate green building materials and techniques	KCC Contractor's Assoc.	No				
<b>STP-10</b>	Develop large-scale photovoltaic projects	Private	Yes				

**Long-Range: 4-5 Years**

<b>ID Number</b>	<b>Project</b>	<b>Applicant</b>	<b>Meets EDA Criteria</b>	<b>Project Type</b>	<b>Estimated Jobs</b>	<b>Total Estimated Cost/Est. Federal Cost</b>	<b>Potential Source of Matching Funds</b>
<b>STP-11</b>	Develop concentrated solar power	Private	Yes				
<b>STP-12</b>	Incorporate renewable energy at public facilities	County of Kaua`i State of Hawaii	Yes				
<b>STP-13</b>	Develop hydroelectric projects	Private KIUC					

## 8.0 PLAN IMPLEMENTATION

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### 8.1 Lead Entities

To successfully implement this plan, the County of Kaua`i should empower several established organizations to be “lead cluster entities.” The role of a Lead Entity is to bring together the various representatives of each cluster to address common concerns, network, and oversee implementation of cluster priorities listed in this plan.

Cluster	Lead Entity	Follow-up
Food & Agriculture	Kaua`i County Farm Bureau	Encourage completion of strategic business plan and hiring of full-time staff
Science & Technology	Kaua`i Economic Development Board	Expand KEDB Education committee membership
Culture & Arts	Garden Island Arts Council	Encourage completion of strategic business plan; met with Sports & Recreation cluster to discuss multi-use arena
Sustainable Technologies & Practices	County Office of Economic Development	Meet with other groups to clarify roles and to avoid duplication of efforts, bring diverse stakeholders together
Sports & Recreation	County Department of Parks and Recreation	Bring diverse stakeholders together, meet with Culture & Arts cluster to discuss multi-use arena

The Health & Wellness Cluster will focus on one initiative, the creation of a Health & Wellness Center. Wilcox Hospital will be the lead entity to bring stakeholders together to begin the discussion.

### 8.2 Funding

Capacity-building funds are needed to strengthen existing nonprofit organizations on Kaua`i that could serve as lead entities for industry clusters.

Technical Assistance funds are needed to determine the feasibility of numerous projects, including a modular slaughterhouse, multi-use arena, health & wellness retreat center, sustainability center, cultural and arts center, and film, digital media, and production center.

Capital/public works funds are needed to implement improvements that have been identified by existing organizations, including agricultural irrigation system improvement projects and projects listed above.

Given limited State and County resources, the County of Kaua`i should aggressively pursue New Market Tax Credits, federal, and private funding.

### **8.3 Tracking Progress**

To ensure that progress is being made, the County Council Economic Development Committee and Office of Economic Development should convene the CEDS Committee annually to track the status of priority projects. The purpose of this review is to share accomplishments, address road blocks, and to update priorities until the next Plan update.

With the above components in place, we can begin to shape Kaua`i's economy in alignment with our values and vision. A stronger and diverse economy will benefit future generations and create opportunities for all.

## Appendix A: Cluster Focus Group Participants

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### Culture & Arts

Fred Aki	Musician & Composer
Katherine Brocklehurst	Garden Island Arts Council/The Brocklehurst Group
Nalani Brun	County Office of Economic Development (Tourism)
Chris Faye	Artist and Kaua`i Museum
Sally French	Kaua`i Society of Artists
Leina`ala Pavao-Jardin	Kumu Hula
Sue Kanohe	Kaua`i Visitors Bureau
Tony Kilbert	Kaua`i Community College Performing Arts Center
Ron Margolis	Kaua`i Concert Association
Kaliko Santos	Office of Hawaiian Affairs
Art Umezu	County Office of Economic Development (Film Commission)
Carol Yotsuda	Garden Island Arts Council

### Food & Agriculture

Laurie Ho	USDA Resource Conservation & Development Program
Steven Kai	Pioneer Hi-bred International
Arryl Kaneshiro	Grove Farm Company
Wayne Katayama	Kaua`i Coffee
Jerry Ornellas	East Kaua`i Water Users' Cooperative/Kaua`i County Farm Bureau
Roy Oyama	Kaua`i County Farm Bureau
Liz Ronaldson	Growing Greens Nursery
Bill Spitz	County Office of Economic Development Agriculture
Roy Yamakawa	UH College of Tropical Agriculture and Human Resources

### Health & Wellness

Kurt Akamine	Ohana Pacific Management Company
Dr. Dileep Bal	Hawai`i State Department of Health
Kathy Clark	Wilcox Memorial Hospital
Bill Grier	Dept. of Labor & Industrial Relations (Workforce Dev't)
Eugene Jimenez	County Housing Agency
John Latkiewicz	Hawai`i Small Business Development Center (Kaua`i)
Kelly Liberatore	Makai Properties/Kaua`i Board of Realtors
Jan Miyamoto	County Office of Economic Dev't (Workforce Investment)
Char Ravelo	Kaua`i Health & Wellness Association
Kaliko Santos	Office of Hawaiian Affairs
Leila Ventar	NurseFinders – Kaua`i
Jerry Walker	West Kaua`i Medical Center

## Science & Technology

Jack Benzie	Pacific Missile Range Facility
Jerry Brockelhurst	KKCR/The Brocklehurst Group
Stu Burley	Strategic Theories Unlimited LLC
Tom Cooper	General Dynamics - AIS
Helen Cox	Kaua`i Community College
Clarence Ishida	Wilcox Memorial Hospital
Dave Kane	Trex Enterprises
John Latkiewicz	Hawai`i Small Business Development Center (Kaua`i)
Sarah Styan	Syngenta Seeds

## Sports & Recreation

Bev Brody	Get Fit Kaua`i
Rick Haviland	Outfitters Kaua`i
Paul Ito	Puakea Golf Club
Sue Kanoho	Kaua`i Visitors Bureau
Jody Kjeldsen	Po`ipū Beach Resort Association
Elliott Mills	Kaua`i Marriott Resort & Beach Club
Lenny Rapozo	County Department of Parks & Recreation

## Sustainable Technologies & Practices

Walt Barnes	AT&T
Jack Benzie	Pacific Missile Range Facility
Stu Burley	Strategic Theories Unlimited LLC
Bill Cowern	Hawaiian Mahogany
Randall Hee	Kaua`i Island Utility Cooperative
Wayne Katayama	Kaua`i Coffee
Keone Kealoha	Mālama Kaua`i
Nick Michaels	Virtual Power Plant
Ben Montgomery	Virtual Power Plant
State Rep. Mina Morita	Hawai`i State Legislature
Glenn Sato	County Office of Economic Development (Energy)
Ben Sullivan	Mobius Designworks
Diane Zachary	Kaua`i Planning & Action Alliance