

# 1. Planning for the Future

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This chapter gives an overview of the General Plan document, describes the purpose of the General Plan, and outlines the process by which it was created during the 1998-'99 General Plan Update. The last two parts of the chapter address the planning system and citizen participation. These sections contain policies setting the framework for planning and community participation.

This General Plan document is given the effect of law through adoption of an ordinance by the County Council. The ordinance establishes definitions, how the document is to be applied, authority for making interpretations, the process for amending the plan, and other matters relating to the administration of the General Plan.

## 1.1 HOW TO READ THIS PLAN

The plan is organized according to themes, rather than according to topics like “land use” or “public facilities.” The themes emerged from public discussion and development of the 2020 vision statement. The first and last chapters set forth the framework for planning and implementation. Chapter 2 contains Kaua‘i Vision 2020. Chapters 3-8 set forth policy according to the Plan’s main themes. Following is a list of the chapters:

1. Planning for the Future
2. Vision for Kaua‘i 2020
3. Caring for Land, Water and Culture
4. Developing Jobs and Business
5. Preserving Kaua‘i’s Rural Character
6. Enhancing Towns & Communities and Providing for Growth
7. Building Public Facilities and Services
8. Improving Housing, Parks and Schools
9. Implementation

Appendices present technical material or information that is too detailed for the body of the plan.

Each chapter sets forth policy and implementing actions that apply to a range of topics and government responsibilities. Within each chapter, there are headings for specific topics, such as “Community Participation” or “Visitor Industry.” Policies and implementing actions are associated with specific topics. The background for the policies is found in descriptive or “Overview” sections. Some topics have a “Rationale” section that sets forth the reasons for the policy. These text sections clarify the policy statements, providing context and a means for future interpretation.

The Plan includes two sets of policy maps that intended to be used in conjunction with the text policies. Each set includes an islandwide map and five regional maps. The General Plan

Land Use Map depicts policy for long-range land uses with the following map designations: Urban Center, Resort, Residential Community, Transportation, Military, Agriculture, Resource, Major Parks, Town Center, and Public Facilities. All but the last two are designated by map color. Town Centers are designated by a boundary, and public facilities are designated by various symbols. Scenic Roadway Corridors are shown on the Heritage Resource Map.

The General Plan Heritage Resources Map depicts important natural, historic, and scenic resources that are cited in the text policies. It includes two elements important to scenic views: (1) mountains, streams and other important landforms; and (2) Scenic Roadway Corridors.

## **1.2 PURPOSE OF THE GENERAL PLAN**

The General Plan fulfills legal mandates of State law and the Charter of the County of Kauaʻi. More importantly, it provides guidance for land use regulations, the location and character of new development and facilities, and planning for County and State facilities and services.

### **1.2.1 Legal Mandate**

The County of Kauaʻi is legally mandated to prepare and adopt a General Plan by State law and the County Charter.

Chapter 46 of the Hawaii Revised Statutes (HRS) grants the counties certain powers and responsibilities. Among them is the power to regulate land development through zoning. However, the law makes clear that zoning must be based on a general plan. HRS Sec. 46-4 states in part:

Zoning in all counties shall be accomplished within the framework of a long range, comprehensive general plan prepared . . . to guide the overall future development of the county. Zoning shall be one of the tools available to the county to put the general plan into effect in an orderly manner.

Along with the authority to zone, each county also has the responsibility to prepare a long range, comprehensive plan. In fact, the general plan comes before and *guides* zoning.

Article 14 of the County Charter states that the Planning Director shall prepare a general plan; that the Planning Commission shall review the general plan and shall transmit it with the Commission's recommendations through the Mayor to the County Council; and, finally, that the County Council shall adopt the general plan by ordinance. It makes similar provisions for county development plans. According to the Charter, the general plan shall set forth:

. . . in graphic and textual form policies to govern the future physical development of the county. Such plan may cover the entire county and all of its functions and services or may consist of a combination of plans covering specific functions and services or specific geographic areas which together cover the entire county and all its functions and services. The general plan shall serve as a guide to all future council

action concerning land use and development regulations, urban renewal programs and expenditures for capital improvements.

The County adopted its first General Plan in 1971. Based on a 1982 update study, the County adopted a revised General Plan in 1984. Both the original and the 1984 General Plan addressed the entire county and all of the county's functions and services and included land use maps, depicting existing and future land uses. Thus, each GP fulfilled the Charter requirements. While the Charter provides the option of preparing "a combination of plans" that would together cover all aspects of the county, the County has chosen to prepare a single, unified General Plan document.

### **1.2.2 Setting a Direction**

The General Plan states the County's 20-year vision for Kaua'i and sets policies for achieving that vision. The General Plan is a direction-setting, **policy** document. It is not intended to be regulatory in the sense of a zoning code or other land use regulation.

The General Plan represents an opportunity to look at the whole island, to think about the future, and make early decisions about issues and opportunities. The specificity of the General Plan depends on the level of agreement that can be reached concerning (a) vision and direction and (b) strategies for achieving the vision.

The policies are intended to guide County decision-making by mapping the direction of future development; by describing what kind of future development is desirable; and by setting priorities for public improvements. The policies will guide the County in making revisions to land development regulations; in deciding on zone changes and development permits; and in setting strategies for capital improvements. The General Plan also establishes a framework and priorities for future community-level planning and long-range planning for public facilities.

## **1.3 THE GENERAL PLAN UPDATE PROCESS**

The 2000 General Plan was developed by the Planning Department in collaboration with a 34-member Citizens Advisory Committee (CAC). They were supported by a consultant team that prepared research and analysis, facilitated public discussion, and drafted plan elements.

The Mayor appointed most of the CAC, and the County Council added two members. CAC membership represented a broad cross-section of the leading community organizations, including the Chamber of Commerce, the Resource Conservation & Development Corporation, the Farm Bureau, the League of Women Voters, the Sierra Club, the Outdoor Circle, the Kaua'i Economic Development Board, the unions, the churches, and the Thousand Friends of Kaua'i. Members included attorneys, planners, real estate developers, nonprofit sector workers, a doctor, community activists, several small business owners, and a high school student representative. Representation was evenly distributed among Kaua'i's five districts.

The CAC held over 20 meetings during a two-year period – beginning in February 1998 and continuing through the preparation of the General Plan document for submittal to the Planning Commission early in the year 2000. The purpose of the CAC was to provide critical information for the plan, to participate in developing plan policies, and to provide feedback

and recommendations to the Planning Department concerning the form and content of the General Plan. In addition, CAC members participated in five Task Groups to formulate detailed strategies in the following areas: Rural Lands and Agriculture; the Visitor Industry and Growth; Energy and Environmental Issues; Native Hawaiian Issues; and Community Participation. The Task Groups also enlisted resource persons with expertise in the visitor industry, agriculture, real estate, parks management, economic development, watershed planning, and public facilities and services (water supply, transportation, solid waste, electrical power, wastewater systems, and drainage).

Prior to most meetings, the consultant team prepared and circulated working papers or reports concerning the agenda topic(s). Meetings were publicized, and each one drew a number of interested community members. Non-CAC attendees often availed themselves of the opportunity to comment at the end of each meeting. Meeting summaries were prepared and circulated for review and approval.

In addition, the Planning Department led a phased outreach program to inform the wider community of the planning process and to get input. In the early months of 1998, the Department held meetings with 25 community organizations seeking ideas about values, the special assets of various Kaua‘i communities, issues of concern, and opportunities for the future. This was followed by the first of three rounds of regional meetings in the five Planning Districts. Held in June 1998, these meetings provided feedback on the CAC’s draft Community Values statement. Using maps, community members indicated the location of important community resources, as well as places with issues or opportunities related to future development.

Over the weekend of October 10-12, 1998, the Department held a Future Fair at the Kukui Grove Shopping Center. Co-sponsors included the Mayor’s Office, the County Council, the Chamber of Commerce, the Garden Island RC&D, and the Kaua‘i Discovery Center. Opened by Mayor Maryanne Kusaka, the Future Fair hosted exhibits by 60 community groups, landowners, business and government agencies. During the weekend, the Fair attracted about 3,000 participants. Ideas from the Future Fair were incorporated into the 2020 Vision statement.

The second round of meetings, held January-early March 1999, featured a presentation on the Draft 2020 Vision statement. The islandwide portion of the Draft Vision was published by the Garden Island in installments, and copies were widely distributed. In addition, the Project Team presented vision statements focused on each Planning District. Each of these “close-up” visions concluded with a list of issues and opportunities affecting the respective communities. Meeting participants broke into small groups to discuss whether they agreed or disagreed with Vision elements, what they would change what they found missing. The Department and the CAC used the summaries from these Planning District meetings to set the agenda for the final phase of work.

The third round of regional meetings was held in January 2000. The agenda was to brief community members and elicit their comments on the Discussion Draft General Plan.

## 1.4 PLANNING SYSTEM

The planning system is composed of several elements, as shown in Figure 1-1. The General Plan, the Development Plans and the Public Facility Plans state long-term policy directing development of the land use ordinances and the Capital Improvement Program. Zone change ordinances change the type of use and development intensity of specific sites. Day-to-day land use and capital funding decisions are based on the plans and regulations.

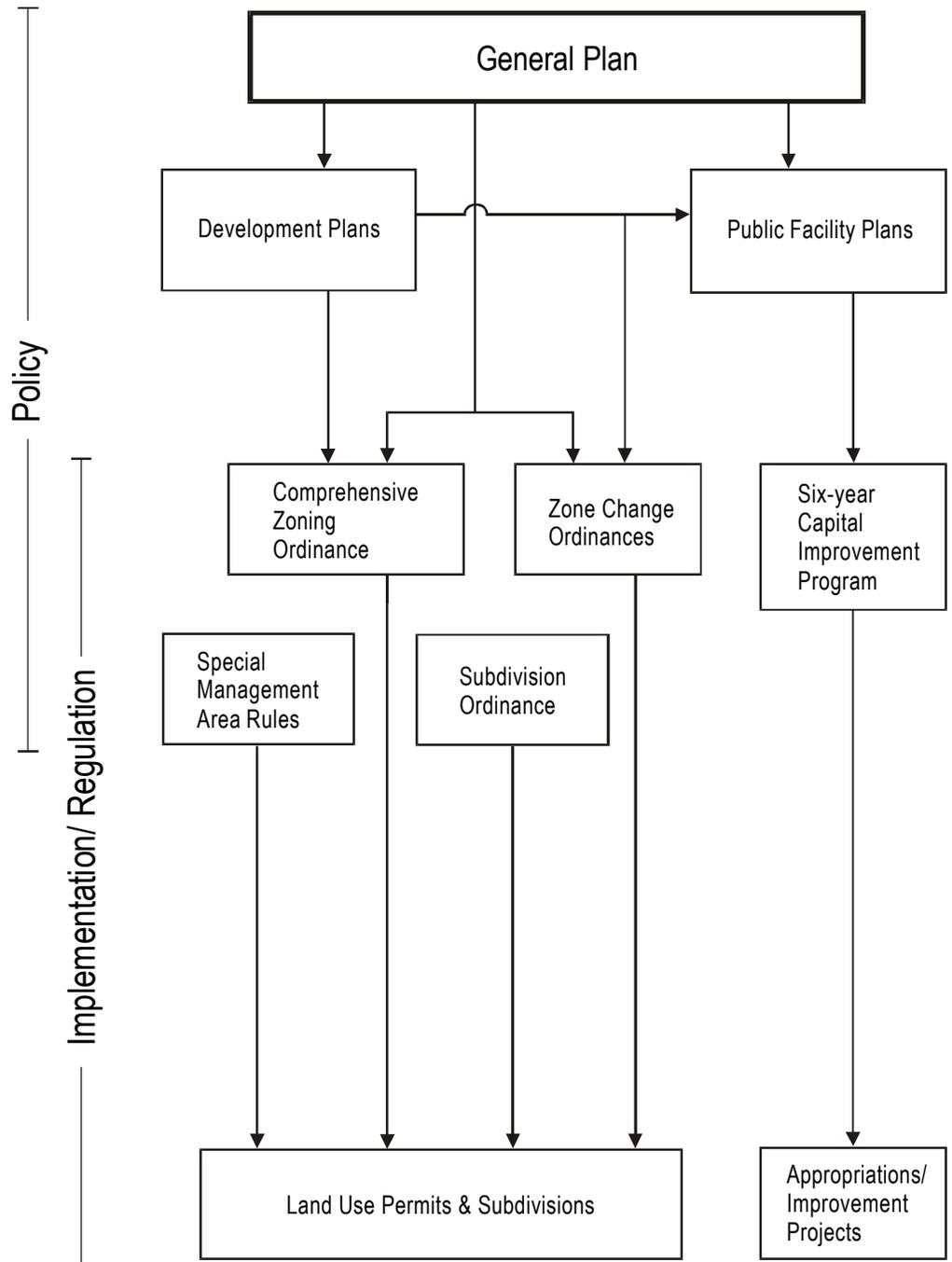
The elements of the planning system are described below. Policy concerning the preparation of Development Plans is set forth in Section 1.5.

### 1.4.1 Policy

The planning system of the County of Kaua‘i is composed of the following elements and functions:

- (a) The General Plan is the primary policy directing long-range development, conservation, and the use and allocation of land and water resources in the County of Kaua‘i.
  - (1) The General Plan establishes through maps and text geographic areas of the County which are intended to be used for various general purposes such as agriculture, resorts, urban communities, and preservation of natural, cultural and scenic resources.
  - (2) The General Plan establishes through maps and text policy to direct the revision of land development regulations, including the Comprehensive Zoning Ordinance, subdivision, grading and drainage regulations.
  - (3) The General Plan establishes a framework for planning of specific geographic areas and of County public facilities.
  - (4) The General Plan shall have a time horizon of 20 years, and shall be updated every five to ten years.
- (b) A Development Plan is intended to direct physical development and public improvements within a specific geographic area of the County within the framework of the General Plan. In accordance with the County Charter, a Development Plan shall be submitted to the Planning Commission for review and recommendation and to the County Council for adoption by ordinance.
  - (1) Depending on its purpose, a Development Plan may be long-range and comprehensive, or it may be limited in scope and timeframe.
  - (2) A Development Plan may contain detailed guidance for land use and zoning, circulation systems, street design, architectural design, specific public facilities, or other matters relating to the physical development of the planning area.
  - (3) A Development Plan may recommend the establishment of a special treatment district, a change to the zoning map, or other changes to the CZO. Actual land use regulations, however, shall be adopted as part of the CZO and the zoning maps.

**Figure 1-1  
County of Kaua'i Planning System**



- (c) A Public Facility Plan is a long-range plan for a public service system, such as solid waste management, or a master plan for a specific facility, such as a landfill.
- (1) The County shall prepare and update as needed a long-range, comprehensive plan for the development, operation, and funding of each of the following County systems:
- Water Supply
  - Parks and Recreation
  - Solid Waste Management
  - Long-Range Land Transportation
- (2) The County shall prepare long-range facility plans as needed for the following services:
- Wastewater Treatment (by facility)
  - Flood Prevention and Drainage (by watershed)
  - County Roads (by area)
- (d) The purpose of the Comprehensive Zoning Ordinance is to provide regulations and standards for development of land uses and the construction of structures. The CZO establishes various zoning districts and overlay districts; delineates uses and development standards for each district; establishes permits and permit processes; and establishes criteria for granting permits. The CZO and the Zoning Maps shall be revised as necessary to conform to the General Plan.
- (e) A zone change is a legislative action setting land use policy for a specific parcel of land. A zone change shall meet the following criteria to be adopted: consistency with the General Plan Vision; conformance to the General Plan policies; availability of adequate public facilities; and compatibility of the zoned uses to the surrounding environment, both the built environment and the natural environment. Policies set forth in the General Plan, either general or specific to the site, shall be applied in the review and adoption of a zone change.
- (f) Land use permits and subdivisions are specific actions taken in response to an application. The procedure and criteria for decisions are set forth in the Comprehensive Zoning Ordinance, Subdivision Ordinance, and Special Management Area (SMA) Rules.
- (g) The Capital Improvement Program sets forth capital improvement projects by order of priority, the amount and means of financing, and the schedule of activities and expenditures.
- (h) The Planning Department shall carry out the following functions in support of the planning system:

- (1) Periodically update 20-year economic and population projections for the County, by geographic area.
- (2) Provide support to State and County agencies in preparing public facility plans that affect Kaua'i.
- (3) Actively participate in planning efforts affecting Kaua'i, in order to assure conformance with the General Plan, public facility plans, and Development Plans.
- (4) Prepare Development Plans in collaboration with community organizations.
- (5) Manage and coordinate agency review of proposed zone changes and land use permits.
- (6) Monitor County and State programs for conformance to the General Plan policies.
- (7) In collaboration with community organizations, develop indicators and measure progress related to specific elements of Kaua'i Vision 2020 and specific General Plan policies.

## **1.4.2 Rationale for Policy**

### **1.4.2.1 Elements of the Planning System**

Although Figure 1-1 shows the planning system arranged as a hierarchy, each element is equally important. The arrows express the transition from broad policy to more specific policy, to land use regulation (left side) and project implementation (right side). The General Plan sets forth the basic policy of the County. This policy is elaborated through the more detailed plans, zoning and land use regulations.

Development Plans and Public Facility Plans occupy the second tier. A Development Plan establishes more detailed policy that is specific to a certain community or geographic area and can also establish the basis for zoning controls that are unique to the area. Public Facility Plans analyze alternatives and establish policy regarding the future development of specific systems and facilities. Development Plans and Public Facility Plans are strategic in character. They define and set forth strategies and courses of action, often engendering commitment of resources and development of physical improvements.

The third tier reflects the interface between policy and implementation. The Six-Year Capital Improvement Program (CIP) expresses expenditure and action priorities. It also establishes a financial plan and a general schedule for implementing projects.

On the land use regulation side, the regulatory ordinances (and administrative rules), including the CZO, the SMA Rules, and the Subdivision Ordinance, set standards for land uses, as well as procedures and criteria for deciding discretionary permits. Similar to the CIP, the land use regulations translate policies into more concrete terms. Regulations are the "rules of the game." To the extent possible, regulations should be written so that they can be understood equally well by zoning administrators and the general public. Too much complexity or too many administrative interpretations indicate a need to revise the regulations.

The CZO and other land use regulations serve to elaborate on General Plan and Development Plan policy. The regulations translate policies (both maps and text) into specific terms (permissible uses, building heights, etc.).

Zone change ordinances also translate policies into specific terms that apply to a particular land parcel or group of parcels. The General Plan Land Use Map shows only general land uses for an area. At the time of zoning, decisions need to be made concerning a wide range of issues, including but not limited to the following: potential effects on the use and character of surrounding lands and appropriate mitigation measures; the specific location of commercial and residential areas; densities of development; the road system; and the adequacy and/or improvement needs of infrastructure and community facilities. The adoption of a zone change ordinance and the conditions placed on the zone change express County policy.

The last tier of Figure 1-1 represents implementation. The left side of the figure relates to regulatory action on land use permits. The right side represents appropriation of funds and development of projects. Permit decisions are guided by the applicable regulations. It is incumbent upon the County to amend the regulations as necessary to implement General Plan and Development Plan policies. In the absence of such action, the General Plan or the Development Plan policies cannot be used to augment or preempt the regulatory ordinances. (SMA permits are an exception. State law specifically mandates that an SMA permit must be consistent with not only County zoning but also the general plan.)

Needed but not shown in the diagram is an evaluation element, a means of assessing progress in relation to the General Plan vision and policies, using indicators and benchmarks that have developed collaboratively among the County and various community interests. Developing agreed-upon indicators is an important first step in objectively evaluating the County's progress and building accountability and feedback into the system.

Also not shown as part of the planning system are site development and construction regulations, such as the grading ordinance and the drainage standards. These regulations play a major role in guiding land development and maintaining environmental quality. Their role in conserving land and water resources is discussed in Chapter 3.

#### **1.4.2.2 Purpose, Uses and Form of Future Development Plans**

The County Charter charges the Planning Director to "Prepare a general plan and development plans for the improvement and development of the county." (Section 14.04.A.) According to the Charter, "'Development plan' means a relatively detailed scheme for the replacement or use of specific facilities within the framework of and implements [sic] the general plan." (Section 14.07.)

Six Development Plans were prepared in the 1970s as a follow-up to the original 1971 General Plan. They primarily addressed the urban-designated lands in six Planning Areas, or regions. For example, the Kōloa-Po'ipū-Kalāheo Planning Area addressed those communities as well as Lāwa'i and 'Ōma'ō. The Kapa'a-Wailua Development Plan addressed the urban corridor between Wailua and Kapa'a but did not address the homestead areas. One of the key functions of the original Development Plans was to establish zoning districts within urban areas. While future Development Plans may address zoning issues, there is no need to adopt an entirely new set of zoning maps.

The planning system policy set forth in Section 1.4.2 above does not explicitly refer to the pre-existing Special Development Plans (Chapter 10, R.C.O) – commonly known as the “Development Plan Ordinances.” Each of the six DP Ordinances is based on, but includes only limited elements of, the actual Development Plan reports. The ordinances omit the information, illustrations, and detailed planning provided in the DP Reports. Though outdated, the original DP reports remain a useful resource for future planning.

The DP ordinances are a hybrid combination of (a) policy elements – e.g., broad goals and objectives; and (b) land use regulations specific to each of the DP area. The DP land use regulations actually amend and supersede certain CZO regulations. The explicit amendment of one ordinance by another continues to be a source of confusion, as does the codification of zoning regulations outside of Chapter 8, the Comprehensive Zoning Ordinance. To remedy this problem, Implementing Action 1.4.3 (b) below calls for centralizing the zoning regulations in the CZO. The remainder of the DP Ordinances will remain in effect unless and until replaced by more recent plans.

### **1.4.3 Implementing Actions**

Following are actions needed to implement the Kaua‘i Planning System.

- (a) The Planning Department shall prepare amendments to the Comprehensive Zoning Ordinance and the zoning maps to carry out the policies of the General Plan. The Planning Department shall transfer the portions of Chapter 10, Special Development Plans, that are regulatory in nature into the CZO.
- (b) To centralize the zoning regulations in a single chapter, the Planning Department shall prepare an ordinance transferring to Chapter 8, the Comprehensive Zoning Ordinance, those provisions of Chapter 10, the Special Development Plans, that modify or affect the CZO, making such other revisions to Chapter 8 as may be necessary. The policy provisions of the Development Plan ordinances may remain until such time as they are amended or superseded by a new Development Plan.
- (c) The Planning Department shall collaborate with community organizations in developing indicators and benchmarks to measure progress relative to the General Plan and to other community goals.
- (d) County service agencies, including the Department of Water and the Department of Public Works, shall prepare public facility plans to guide Capital Improvement Programs and the appropriation of funds.

## **1.5 CITIZEN PARTICIPATION IN PLANNING AND LAND USE DECISIONS**

This section sets forth policies concerning citizen participation in planning and land use decisions. Representative and broad-based participation is integral to the development of effective plans and an effective planning system.

## 1.5.1 Overview

The County needs effective means for gaining input from local communities on government plans and actions, as well as on applications for land development.

Looking beyond individual projects and actions, the County needs to develop a process for developing special area plans for specific communities. Special area planning demands collaboration between the Planning Department and local residents and businesses. Finally, County and State agencies and public utilities need a process that will involve the public in locating sites for potentially controversial facilities – e.g., an electric power generating plant, wastewater treatment plant, sanitary landfill, or airport expansion.

The Kaua‘i 2020 Vision, presented in Chapter 2 below, includes a section on Community Participation. Key values cited in the Vision include trust, mutual respect and a determination to maintain open dialogue. Local organizations have a responsibility to inform community members and hold forums. Government agencies have a responsibility to provide equal access to information and assistance and to conduct open meetings.

## 1.5.2 Policy for Citizen Participation

### 1.5.2.1 Early Consultation

Government agencies and private applicants proposing new projects should consult with and solicit input from community organizations and public meetings at the earliest possible time. Although project developers and community members may not always reach agreement, at least there should be a free and open exchange of information and opinion concerning community issues and concerns, project location and design decisions, and potential project impacts.

### 1.5.2.2 Information and Input Program

- (a) The County shall administer an ongoing program of community information and input, whose purpose is to enable nonprofit organizations representing Kaua‘i’s various towns and communities to understand and influence County decisions that affect their communities.
- (b) The objectives of the information and input program shall be as follows:
  - (1) To strengthen the role and capabilities of organizations representing the various towns and communities of Kaua‘i, particularly their ability to inform community members about proposed County actions and issues and to provide timely input to County agencies.
  - (2) To provide more direct contact and free flow of information between the government and citizens without creating a new layer of bureaucracy or the need for additional staff resources.
  - (3) To provide community organizations early notice and access to environmental assessments, application materials and other relevant documents about proposed land use actions and County-funded projects in their communities. For land use

applications, early notice shall generally mean at the time an application is accepted.

- (4) To disseminate through posting, fax, news release, or electronic means public notice of all major land use applications and State- and County-funded projects to organizations and the general public.
  - (5) To provide citizens with information and training about County land use plans and permit regulations.
  - (6) To provide other organizational and funding support to community and islandwide organizations, as the County deems appropriate. Such support may include training organizational and meeting facilitation skills, assistance in staging community forums and workshops, and support for copying and other expenses associated with a community newsletter or other efforts to disseminate information to grass-roots community members.
- (c) Community organizations participating in the program shall be registered nonprofit associations and corporations which represent a specific geographic community, have open membership, and hold open meetings. Participating community organizations shall publicize their meetings in advance and keep meeting minutes.
  - (d) The Planning Department shall have the lead responsibility for information and input on planning and land use issues. The Mayor will delegate responsibilities to other County agencies as appropriate.

### **1.5.2.3 Preparation of Development Plans**

- (a) The County shall prepare and adopt a Development Plan for a specific town or community where the community has demonstrated a need, clear objectives, and the ability to organize a broadly representative steering committee.
- (b) A Development Plan may be initiated by the Planning Department or a community organization in collaboration with a representative coalition of community interests.
- (c) Development Plan Projects
  - (1) Prior to initiating a Development Plan project, community members should form a steering committee to co-lead the project with the Planning Department. The steering committee should be broadly representative, including the various neighborhoods, the business community, and relevant organizations.
  - (2) To request funding for a Development Plan project, the Planning Department and the community steering committee shall first: (1) demonstrate the need for a plan by documenting the issues and opportunities facing the community; and (2) agree on a set of objectives for the planning project.
  - (3) Development Plan projects shall be funded and prepared according to priorities established by the County Council, considering the recommendations of the Planning Department and community organizations.

#### **1.5.2.4 Location of Public Facilities**

The County shall sponsor and support community participation processes, with access to technical expertise, for the design and location of new public facilities or major improvements to existing facilities that are considered to be “locally undesirable land uses” (LULUs) and/or have islandwide or regional impacts. Examples include a wastewater treatment plant, sanitary landfill, electric power generating plant, and an airport expansion. The County shall encourage the State and Federal Government and public utility companies to sponsor and support community participation processes in siting LULUs on Kaua‘i.

### **1.5.3 Policy Rationale**

**Information and Input Program.** The purpose of this policy is to meet the need expressed by CAC members and others for meaningful citizen participation. The emphasis is on building the capacity of organizations at the community or grass-roots level to inform their community and provide timely input on proposals affecting their community. “Early notice” means notice that the Planning Department has accepted an application for a land use permit. The information and input program would replace the prior County-administered Improvement Advisory Committee mandated under previous planning ordinances. This program was functional only for a brief period because the County lacked adequate resources to organize and staff five ongoing committees.

**Preparation of Development Plans.** Rather than covering entire regions, future Development Plans should focus on specific towns and communities. Many have longstanding community associations and other organizations rooted in the area led by individuals well-informed about planning issues. The people in each community share a common history, common daily experiences, and detailed knowledge of the area. A Development Plan could also be organized according to a natural watershed. Whatever boundaries are proposed, a self-defined community is the best unit around which to orient more detailed planning on Kaua‘i.

Boundaries need not be set in advance. Rather, the Planning Department and the community steering committee should propose boundaries for a particular Development Plan project, as dictated by the plan objectives.

Not every community needs or desires a plan. Many good planning policies are already incorporated in the General Plan and codified as regulations in the CZO and other ordinances and rules.

**Location of Public Facilities.** County and State agencies and public utilities need a process that will involve the public in locating sites for potentially controversial facilities. Sponsorship and participation by the County gives a process legitimacy that it might not have if conducted solely by the proposing agency. The objective is to engage interest groups in developing the decision criteria and factual basis for selecting a site. If the points of view and factual questions of potential proponents and opponents are discussed and debated in advance, then the proposing agency can modify the project so that it reflects the widest degree of agreement. A related objective is to avoid costly and time-consuming litigation.

## 1.6 ECONOMIC AND POPULATION GROWTH

### 1.6.1 Historic Trends

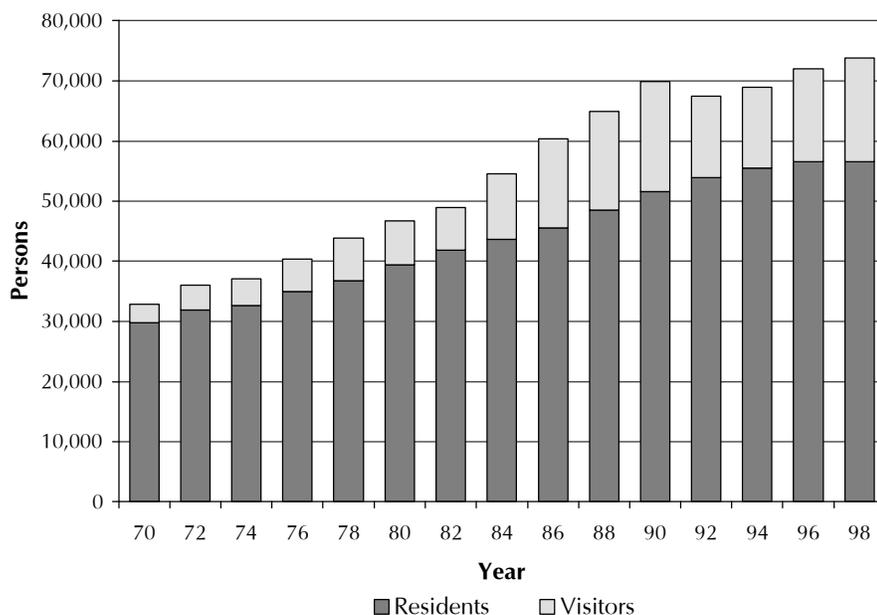
According to the population estimate by the State of Hawai'i Department of Business, Economic Development, and Tourism (DBEDT), Kaua'i County had approximately 56,600 residents in 1998. Compared to the 1970 Census population of 29,800, this represents a 90 percent increase over almost 30 years. During this period, Kaua'i grew at a faster annual rate than the State as a whole – 2.3 percent compared to 1.6 percent. Between 1970 and 1998, Kaua'i County's share of statewide resident population increased from 3.9 percent to 4.7 percent.

Kaua'i's infrastructure and service needs are determined not only by the number of residents, but also by the number of visitors who spend time on the island. Between 1970 and 1998, the defacto population (residents and visitors combined), more than doubled, from about 32,800 to 73,800 (see Figure 1-2). Between 1970 and 1991 (pre Hurricane Iniki), visitors' share of defacto population increased substantially, from about nine percent to over 25 percent. In 1998, visitors comprised about 23 percent of Kaua'i's defacto population.

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**Figure 1-2**  
**Resident and Visitor Population**  
**Kaua'i County, 1970 - 1998**

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Source: State of Hawai'i Department of Business, Economic Development, and Tourism, *Hawai'i State Data Book*, various years; and Hawai'i Visitors & Convention Bureau.

Historically, employment trends for Kaua'i County reflect the national recession of the early 1980s, the weak State economy during the 1990s, and the damaging effects of two hurricanes. Despite these economic setbacks, Kaua'i wage and salary jobs increased at an

annual rate of approximately 3.0 percent between 1970 and 1998. In 1998, Kaua‘i had about 24,900 wage and salary jobs.

## 1.6.2 Projections to 2020

### 1.6.2.1 Overview

For the purposes of long-range planning for roads, utility systems, and other public facilities and services, the County needs to have official projections of employment and population extending over a period of at least 20 years. One of the Planning Department’s functions in the Planning System is to adopt projections for the use of other County and State agencies (see Policy 1.4.1(h)(1) above).

Historically, the County Planning Department has relied upon the official State projections for islandwide growth. During the 1998-’99 General Plan Update, however, the State projections were found to be unsatisfactory; and an alternative set of projections was generated through the Update project.

Early in the 1998-’99 GP Update process, the Citizens Advisory Committee reviewed the State’s official 2020 population and economic projections, which at that time assumed that the number of daily visitors on Kaua‘i would increase from a historic high of 19,000 (1989) to 40,600 in 2020.<sup>1</sup> The CAC agreed unanimously that the State’s assumption of 40,600 daily visitors on Kaua‘i in 2020 was both unrealistic and undesirable. This led to the Planning Department developing a set of 2020 economic and population projections through the GP Update project.

Faced with the need to develop a new 2020 projection to replace the unacceptable State projection, the Planning Department worked with the CAC to study alternative scenarios. Sections 1.6.2.1 through 1.6.2.3 describe the CAC/Planning Department study of growth issues during the 1989-’99 Update process. Section 1.6.2.4 describes County projections current as of the Final Draft of this Plan.

A projection has been described as a “prediction of future conditions that will occur if the assumptions inherent in the projection technique prove true.” Projections are generally developed through mathematical models that relate various factors. Some models are complex, such as the State of Hawai‘i’s Input-Output Model. Others are simpler, such as the model used in the Kaua‘i General Plan Update. Both simple and complex models, however, are driven by assumptions about key variables. Since tourism is the State’s largest industry and the source of some 40 percent of Kaua‘i jobs, the average daily visitor census (ADVC) is a key variable in both the State and the GP Update models.

Actual growth occurs as the result of complex interactions of many factors, including national and international economic conditions, the airline industry, and the investment of private capital in resort facilities. The County government can influence some factors but cannot determine future growth. Faced with the need to develop a new 2020 projection to

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<sup>1</sup> *Population and Economic Projections for the State of Hawaii to 2020: Report of Results and Methodology*, Department of Business, Economic Development and Tourism (DBEDT), State of Hawai‘i, May 1997. In February 2000, DBEDT adopted a new set of projections, extended to 2025. This updated series shows the 2020 Kaua‘i daily visitor count at 30,500 – effectively cutting in half the previously projected amount of growth between 2000 and 2020.

replace the unacceptable State projection, the Planning Department studied alternative scenarios and asked for the CAC’s advice.

In discussing the 2020 economic growth assumptions, the CAC used the term “growth targets.” The term “growth target” acknowledges that economic and population projections, though developed using mathematical models, are fundamentally influenced by assumptions such as the number of tourists that will visit Kaua’i. The assumptions are a matter of choice and should reflect the values and goals of the community.

### 1.6.2.2 Studies of Alternative Growth Scenarios

In considering alternative levels of growth, the CAC’s Visitor Industry Task Group identified two key areas: (1) impacts on highway traffic and the need for highway expansion; and (2) impacts on beaches, major parks and wilderness areas and the quality of the user’s experience. These were considered to be important for several reasons. First, highways and major parks are financed and developed by government, as opposed to other facilities that are often provided by developers – e.g., water, sewer and electrical utilities. Second, highways and parks are experienced daily by both residents and visitors. The amount of traffic and the condition of parks are easily observed and often discussed, unlike water and similar facilities that are noticed only when broken.

To develop information, the consultant team undertook two studies using three alternative scenarios of economic and population growth to 2020: (a) a projection of traffic and major roadway improvements; and (b) a survey of park and site managers and visitor activity businesses.

The alternative scenarios, summarized in Table 1-1, were based on different assumptions of economic growth – primarily visitor industry growth. Scenario A was based on the 2020 growth assumption originally suggested through the CAC – a range of 19,000 to 24,000 average daily visitors. The higher figure was used as the growth assumption for Scenario A. (Since the lower figure was so close to historic traffic levels, no projection was needed.) Scenario C – the highest – was based on the official State 2020 projections. Scenario B was built around the assumption that Kaua’i would host 32,000 daily visitors by 2020 – a number halfway between those of Scenarios A and C.

**Table 1-1  
Alternative Projections of Resident and Visitor Populations on Kaua’i 2020**

	Historic		Projected 2020		
	1989	1998	Scenario A	Scenario B	Scenario C
Resident Population	49,850	56,600	65,260	79,490	82,800
Average Daily Visitor Population	19,140	17,220	24,000	32,000	40,600

**Highway Transportation Analysis.** Kaku Associates, a transportation planning company, was contracted to analyze traffic growth and needed transportation improvements for Scenarios A and B. These were compared with the current Kaua’i Long-Range Transportation Plan (LRTP), which was prepared by the State DOT in conjunction with the

County in 1994. The LRTP was based on a State-generated set of 2020 economic and population projections approximately the same as the Scenario C projections.

Projected population and economic activity were detailed according to 56 Traffic Analysis Zones and entered into the travel demand-forecasting model. The resulting 2020 travel forecasts were compared with existing capacity at critical points on major roads around the island.

The table “Summary of Major Roadway Improvements Needed by 2020” (see Appendix Table A-1) lists those improvements which, according the LRTP, are required in order to meet the 2020 traffic demand for Scenario C. For purposes of comparison, the table indicates which improvements would also be needed to meet the traffic demands of Scenarios A and B. The total cost of improvements under each scenario ranges from \$317 million for Scenario A to \$330 million for Scenario B and \$399 million for Scenario C.

Many improvements, including some of the most important and costly ones, are warranted under all three scenarios. They include a new Wailua-Kapa‘a Bypass; widening Kaumuali‘i Highway to six lanes in the Hanamā‘ulu-Wailua corridor; a new road connecting Po‘ipū and Port Allen; a new road connecting Po‘ipū and Kīpū (through the mountain); and widening of Kaumuali‘i Highway to four lanes from ‘Ele‘ele through Waimea. Improvements not needed under Scenarios A and B are confined to smaller projects in the vicinity of Līhu‘e and Kapa‘a. In summary, the transportation analysis shows that substantial highway improvements will be needed under all three growth scenarios.

The magnitude of improvements needed under all three scenarios reflects already-existing road capacity problems. In other words, there is an existing deficit in highway laneage, particularly in the more-populated central parts of the island. If growth occurs without the highway improvements, then traffic congestion will worsen.

**Parks and Natural Areas.** The GP Update working paper “Summary of Conclusions on Survey: Visitor Activities, Parks & Natural Resource Areas” sets forth the results of a consultant-led survey of parks and resource managers and visitor activity businesses. The survey specifically focused on the level of sustainable use of each site in relation to projected patronage under the three growth scenarios. Key conclusions are as follows:

- Kaua‘i’s wilderness areas and nature centers (Hā‘ena State Park, Kōke‘e State Park, Nā Pali Coast State Park, Polihale State Park, Waimea Canyon State Park, and Kīlauea Point National Wildlife Refuge) are heavily patronized by visitors to Kaua‘i. Off-island visitors account for upwards of 80 percent of total patrons. Presently, these parks collectively receive approximately 1.86 million visitors per year. The adjoining parks of Hā‘ena, Nā Pali, Kōke‘e, and Waimea Canyon receive about 1.42 million visitors annually.<sup>2</sup>
- Of the 20 parks and other sites for which managers returned surveys, five (5) or one-fourth are already considered to be serving the highest level of patronage that is sustainable, unless improvements are made and operational funding increased. They are Hā‘ena State Park, Kōke‘e State Park, Kīlauea Point National Wildlife Refuge, Polihale State Park, and Wailua River State

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<sup>2</sup>Attendance figures based on survey of parks managers. See Appendix, Table A-2.

Park. With improvements, these sites could sustain higher levels of patronage. Five sites could sustain patronage under Scenario A but would need improved facilities and/or operational funding to handle more. Survey results for 11 of the most heavily used parks and sites are summarized in Appendix Table A-2.

- County parks and State parks, forestry, and boating functions are under-funded for operations, repairs, and capital improvements. Managers warn that further growth without improvements and increased operational funding would lead to deterioration of the patron's experience and/or deterioration of the site or function.

### **1.6.2.3 Conclusions**

The growth targets discussion was joined by various community organizations and individuals represented on the CAC's Visitor Industry Task Group. Business-oriented organizations supported a range of growth up to 32,000 ADVC in 2020 (Scenario B).

The results of the Task Group discussions and the highway and parks studies were reported back to the CAC. Task Group and CAC members generally agreed on the following points: (1) there will be growth in the visitor industry, as well as in other industries; and (2) infrastructure and public facilities need to be improved, whatever the level of growth.

In reviewing the highways and parks studies, CAC members' predominant reaction was one of concern at the magnitude of needed road improvements and at the problems that parks would face with increasing patronage and declining budgets. It was noted that impacts would be even greater on "peak" days when the number of visitors exceeds the annual average.

When asked to identify the appropriate range for the average daily visitor census in 2020, CAC discussion groups arrived at three different recommendations: 19,000 to 28,000 ADVC; 19,000 to 24,000 ADVC; and 24,000 to 32,000 ADVC.<sup>3</sup> CAC members recommended that the term "growth targets" be dropped and that 2020 "planning growth ranges" be used instead.

The Planning Department used available information, including CAC discussion, to establish the range of 24,000 to 28,000 daily visitors as the assumption under which overall projections were prepared.

### **1.6.2.4 Planning Department Projections**

In December 1999, the Planning Department adopted islandwide economic and population projections based on a range of 24,000 to 28,000 visitors per day in 2020. The Planning Department directs that the higher end of the range should be used for the purposes of public facility planning. The projections are summarized in Table 1-2 below. More detailed tables may be found in Appendix B.

The projections are subject to revision by the Planning Department. The Planning Department will review the projections and make revisions as necessary when new information becomes available, such as new official State projections or new Census information. Otherwise, the projections should be reviewed at least every five years.

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<sup>3</sup> CAC Meeting No. 19, held on October 5, 1999.

**Table 1-2  
Kaua'i 2020 Projections**

Resident Population	65,260 – 74,320
Average Daily Visitor Population	24,000 – 28,000
Total Population	89,260 – 102,320
Total Jobs	40,370 – 45,010

The projections were prepared using the model developed for the GP Update. It was assumed that agricultural employment will grow at an annual rate of 3.6 to 5.3 percent. High technology employment is assumed to grow at an annual rate of 3.3 to 4.0 percent. The average annual rate of growth in total employment of 1.0 to 1.5 percent is strongly related to the assumed range of 24,000 to 28,000 visitors per day. This range of visitor growth represents a 1.5 to 2.2 percent average annual rate of growth. It was chosen as a realistic projection which falls in the middle of the range of growth advocated by different members of the CAC.

What does the projected employment growth rate mean for the health of the Kaua'i economy? This can only be approximated since there is no economic model specific to the County of Kaua'i; and, moreover, the State publishes critical data such as annual gross excise tax receipts only for the state as a whole. It is possible to approximate growth in the economy by drawing on statewide statistics. Hawai'i's Gross State Product – the most widely used measure of the total economy – has recorded annual growth rates over the past 20 years that are on average 0.8 percent greater than the annual employment growth rates. Based on this relationship, an annual employment growth rate of 1.0 to 1.5 percent would yield average annual growth in Kaua'i's total economy of 1.8 to 2.3 percent.

Compared to the previous three decades, total jobs and population on Kaua'i are expected to grow at a slower pace between 1998 and 2020. Historically, total jobs between 1970 and 1998 increased at an annual rate of 3.3 percent. This compares to projected growth of 1.0 to 1.5 percent per year between 1998 and 2020. Kaua'i's resident population increased at an annual rate of 2.3 percent between 1970 and 1998. Over the next two decades, population growth on Kaua'i is expected to be in the range of 0.6 to 1.2 percent per year.

The Kaua'i 2020 Projections are not intended to be “targets” or “limits” for growth. They are intended to be guideposts, against which to measure actual growth and impacts. The projections will be used in forecasting land supply and infrastructure needs and, subsequently, in developing land use plans and long-range plans for public facilities and services.