

INDUSTRIAL

INTRODUCTION AND ANALYSIS

Industrial development includes manufacturing and processing, wholesaling, large storage and transportation facilities, power plants, and government baseyards.

There are two distinct types of industrial development. One sector is service-oriented and is affected by population and the level of activity of other business activities. The other sector, basic industries, is mostly influenced by outside markets. The location of industrial developments is important for many reasons. In the case of service types of industrial development (non-basic), areas designated for industrial uses must be close enough to population and/or commercial areas for efficiencies but still distant enough to avoid traffic problems. Some industrial districts consist of enterprises and facilities [which] **that** are not necessarily compatible with commercial areas. Businesses included in this district are generally more noxious than those in general commercial areas. [Presently, industrial] **Industrial** developments in many communities are located adjacent to these areas and **could** result in environmental problems such as noise, air and water pollution.

Basic industrial activity is usually found close to raw products or other key resources. Both kinds of industries are affected by the availability of transportation facilities. Other factors equally important are the [existence] **availability** of public utilities, the cost of land, and internal and external circulation.

A [significant] portion of the County's industrial activity is related to agriculture. [The major user of industrial lands is the processing of sugar and related industries. There are two sugar plantations on the island which operate mills located in the district of North and South Hilo, Hamakua, and Kau. Other] **These** agricultural industrial activities include the processing of coffee, macadamia nuts, meat products, tropical fruits, [and] vegetables[.], **and timber**. The processing of these export products is expected to expand. [There is also a small lumber industry.]

Recently, there have been new endeavors in alternate energy and [aquacultural] **aquaculture** activities at Keahole **in the North Kona district** and geothermal- related development in the district of Puna. Both of these developments are utilizing resources not previously tapped creating the possible need for new forms of land use management and control. [Similarly, high-tech parks in other jurisdictions have evolved new district regulations which seek to promote and preserve the attractive campus-like atmosphere desired by those industries.]

Service-oriented industries, such as wholesaling, government facilities, printing, and bakeries, are located close to population centers. [South Hilo contains more than half of the island's population, and the] **The** majority of such facilities are located within [this] **the South Hilo** district. **North Kona, with its growing population, has also seen the number of its service industries increase quite rapidly.**

There are [3,858] **approximately 6,000** acres of industrially zoned lands in the County; [1,107 acres of which are vacant. The County's land use inventory indicated that in 1985 there were 2,099 acres] **Many of these Industrial-zoned lands are** used for manufacturing, manufacturing services, and wholesaling. [These include] **There are other** lands zoned for agricultural, commercial, and other uses[.] **that are used for industrial purposes.** The existence of non-conforming uses which are incompatible with industry creates an undesirable land use pattern. In fact, the physical appearance of many of the island's industrial areas needs improvement.

There are three industrial zoning districts within the Zoning Code: General Industrial (MG); Limited Industrial (ML); and Industrial – Commercial Mixed District (MCX). The MG district applies to areas for uses that are generally considered to be offensive and noxious. These noxious heavy industrial uses must be separated from residential and other incompatible uses in the zoning process. The ML district applies to areas for business and industrial uses that are generally in support of, but not necessarily compatible with those permissible activities and uses in other commercial districts. The MCX district allows a mix of some industrial uses with commercial uses. The following areas are identified for industrial – commercial mixed uses: Keaau (Gateway Center); Hawaiian Paradise Park; Hilo Iron Works; Waiakea Houselots; Kona Industrial Subdivision and the adjacent area to the north; and Honokohau (south of the existing Kaloko Industrial Subdivision).

The following goals, policies and standards are set forth to guide the development of industrial areas in the best interest of the County and its residents. The residents must be [also] made aware of the circumstances resulting from industrial development. Citizen participation, awareness, and most of all, citizen understanding are vital in the development of industrial areas, as in all phases of the planning process.

GOALS

- Designate and allocate industrial areas in appropriate proportions and in keeping with the social, cultural, and physical environments of the County.
- Promote and encourage the rehabilitation of industrial areas [which] **that** are serviced by basic community facilities and utilities.

POLICIES

- [The County shall support] **Support** the creation of industrial parks in appropriate locations as an alternative to strip development.
- [It shall be the policy of the County to achieve] **Achieve** a broader diversification of local industries by providing opportunities for new industries and strengthening existing industries.

- [Through its zoning powers, the County shall locate] **Locate** industrial areas convenient to transportation facilities, and provide a variety of industrial zoned districts and lot sizes, depending on the needs of the industries and the communities.
- [The County shall attempt to improve] **Improve** the aesthetic quality of industrial sites and protect amenities of adjacent areas by requiring landscaping, open spaces, buffer zones, and design guidelines.
- [• The concept of a "floating zone" shall be used to allow for the future development of industrial areas.]
- Industrial development shall be located in areas adequately served by transportation, utilities, and other [amenities.] **essential infrastructure.** [Redeveloping or newly developing areas shall be developed in concert with programmed public and privately funded infrastructure to meet the expected needs.]
- [The County shall review] **Provide flexibility within** the Zoning Code [in light of] **to accommodate** emerging new industries [and shall establish new land use regulations as necessary].
- **Industrial-commercial mixed use districts shall be provided in appropriate locations.**
- **Require developers to provide basic infrastructure necessary for development.**

STANDARDS

- Industrial development shall maintain or improve the quality of the present environment.
- Industrial activities may be located close to raw materials or key resources.
- Topography of industrial land shall be reasonably level.
- Industrial development shall be conveniently located to its labor resource.
- Buffer zones shall be established between industrial and adjacent [noncompatible] **incompatible** uses of land.
- The direction of wind patterns and the absence of tradewinds shall be considered in [locating industrial designations.] **the siting of industrial areas.**

DISTRICTS

The following is an analysis by district with reference to industrial development. The brief analysis of each district is intended to bring into focus the relationship of the district to the County as a whole.

PUNA

Profile

[The major industrial activity in Puna is a large macadamia nut processing plant, northeast of the sugar mill. Other industrial activities include a kim chee factory, quarrying of lava materials, slaughter houses, bakeries, flower packaging, papaya processing and packing and several cottage industries. The proximity to Hilo limit service-oriented industrial activity in this district.

There are plans for a new industrial subdivision near the Puna and South Hilo district boundaries. This subdivision with highway access to both districts will increase the availability of sites significantly.

Geothermal related activities will create the need for industrial sites, though the magnitude of this need has not yet been established.]

There are approximately 490 acres of industrial zoned lands in the Puna District.

The 488-acre W.H. Shipman Industrial Park is located near the Puna-South Hilo District boundary. It is being developed as another major industrial center for East Hawaii. Industrial uses in the area range from warehousing to construction yards. W.H. Shipman Ltd. also has plans for additional mixed use industrial-commercial zoned lands in close proximity to the industrial park.

The Puna District includes various agricultural industrial activities including the Mauna Loa Macadamia Nut Corporation's processing facility, flower packaging, and papaya processing and packaging. Other industrial activities in the area include cinder and rock quarrying and certain cottage industries.

The Puna Geothermal Venture power plant began operation in 1993. It currently produces 30 megawatts of energy from the use of geothermal steam.

The Puna geothermal resource subzone is identified on the General Plan Land Use Pattern Allocation Guide map. Activities associated by the use of the geothermal by-products may be established within and/or in close proximity to the geothermal resource subzone.

[Course] Courses of Action

- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**
- **Industrial-commercial mixed use districts may be provided in appropriate locations.**
- **Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in Pahoa although the area is not currently identified in the LUPAG map.**

SOUTH HILO

Profile

The South Hilo district has approximately 2,185 acres of industrial zoned lands. With almost [75%] **36 per cent** of the island's [industrially] **Industrial**-zoned lands, South Hilo is the major industrial center on the island [of Hawaii]. The principal industrial areas are the Kanoelehua area, Hilo [port and the surrounding area,] **Harbor**, and the [sugar processing areas at Pepeekeo.] **Hilo International Airport area.**

[Industrial activity in the rural areas is confined to sugar processing and related uses. Small pockets of population centers are located close to these plantations and these communities contain a few minor industrial services.]

Industrial development in [the city of] Hilo is primarily due to its available transportation facilities, the harbor and airport, and its concentration of population. [The harbor facility is the primary shipping point for the island's sugar industry. Numerous businesses which service the sugar industry, such as industrial equipment manufacturing, fertilizer plant, and machine shops, are located in the city.]

There are also industries involved with the processing and packaging of locally grown products. [Several plants process tropical fruits into puree, juices, jams and jellies.] Papaya grown in Puna is inspected, fumigated, and packaged in [the city.] **Hilo**. Major processors of livestock products are located in South Hilo.

Other industrial activities include quarrying, garment manufacturing, storage, wholesaling facilities and numerous other population service-oriented activities.

Besides transportation facilities, major advantages of [the city of] Hilo include the availability of labor, a full range of community facilities and the availability of utilities and land. Industrial activities in both service and non-service categories [is] **are** expected to expand in [the city of] Hilo.

Courses of Action

- [Through its zoning powers, the county shall encourage] **Encourage** the centralization of industrial activities in the Kanoelehua Industrial area. Noxious industries shall be located away from residential and related areas.
- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**
- [The County shall encourage] **Encourage** the State and the Department of Hawaiian Home Lands to develop industrial zoned lands in the Kanoelehua Industrial area and airport industrial area.
- [The County shall allocate] **Allocate** appropriately zoned lands.
- **Industrial-commercial mixed use districts may be provided at appropriate locations.**

NORTH HILO

Profile

There are approximately 38 acres of industrial zoned lands within the North Hilo district. These industrial zoned lands were primarily used by the former sugar companies for the processing of sugar.

[The sugar mill at Ookala owned by the Hamakua Sugar Company and the related facilities comprise the bulk of industrial activities in North Hilo.] Limited industrial facilities such as warehousing are [also] located in Laupahoehoe.

Courses of Action

- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**
- **Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in the Laupahoehoe-Papaaloa area although the area is not currently identified on the LUPAG map.**

HAMAKUA

Profile

[Sugar processing is the major industrial activity in Hamakua. There is one factory at Haina.

Haina is also the site of one of the island's macadamia nut processing plants. This facility is owned by Hawaiian Holidays. Industrial activity in macadamia nut processing is expected to expand.

A feedlot and slaughterhouse has been developed in the Hamakua district which has the potential to become a major activity in itself while increasing the productivity of livestock operations on the island generally.]

There are approximately 15 acres of industrial lands within the Hamakua district. These industrial zoned lands were primarily used by the former sugar companies for the processing of sugar. The macadamia nut industry utilized some of these industrial zoned lands in the later years. The recent completion of a 60 megawatt co-generation power plant at Haina will encourage other manufacturing activities by providing thermal energy (waste heat) that could be utilized for drying of macadamia nuts or aquaculture activities.

There are [numerous other] **some** industrial developments in Hamakua, most of which are small [and] family-operated[.] **operations.** These industries include [dairying,] **dairy operation,** miscellaneous food processing, sawmills [and] wood carving, and other service-oriented endeavors. The bulk of industrial activity is in the Honokaa-Haina area.

In terms of level topography, there is a limited amount of suitable lands for industrial use. The Zoning Code [and Special Permits allow] **allows** agriculture-related industrial facilities to be built in agricultural [zones.] **zoned districts.** **Further, Special Permits may also be secured within the State Land Use Agricultural District.**

Courses of Action

- [The County shall identify] **Identify** sites suitable for future industrial activity[.] **as the need arises.**
- [The County shall encourage] **Encourage** the rehabilitation of existing service-oriented industrial [activities.] **areas.**

NORTH KOHALA

Profile

Industrial activity in North Kohala consists of small agriculturally [-] related services [and include a cottage industry which produces preserved vegetables for export]. **There are approximately 59 acres of industrial zoned lands within the district.**

[Course] **Courses** of Action

- [The County shall identify] **Identify** sites suitable for future industrial activity[.] **as the need arises.**
- **Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in the Hawi area although the area is not currently identified on the LUPAG map.**

SOUTH KOHALA

Profile

There are 291 acres of industrial zoned lands within the South Kohala district.

There are two [general] areas where most of the industrial activity in South Kohala takes place: Waimea and Kawaihae Harbor. Many of the industrial activities in Waimea are linked with agriculture and include a vacuum cooling plant, the preserving of vegetables, warehousing, and [dairying.] **dairy operation.** These industrial activities, however, are scattered throughout the Waimea area.

The Kawaihae Harbor is [being developed into] a port facility for West Hawaii. Industrial use of the area consists of storage facilities.

Several service-oriented industrial activities are located in this district. Among these activities are government baseyards, utility installations and development of specialized equipment for the astronomy facilities. **Several quarrying operations were established within the district. The West Hawaii Concrete quarry and processing facility is located in mauka Waikoloa. The General Plan Land Use Pattern Allocation Guide map designates this facility and lands in the immediate area for industrial and its related uses.**

Courses of Action

- [The County shall encourage] **Encourage** the development of a regional industrial park at Kawaihae and centralize limited industrial activities in Waimea.

- Industrial development should be in harmony with surrounding uses and the environment.
- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**

NORTH KONA

Profile

There are 2,909 acres of industrial zoned lands in the North Kona district.

Most of Kona's industrial development is service oriented and located [near Kailua.] **in the northern portion of the North Kona district from Kailua to the Kona International Airport at Keahole. The Kona Industrial Subdivision in Kailua-Kona has transformed into a mixed use industrial-commercial area over the years. Newer industrial areas, including the Kaloko Industrial subdivision, are being developed to the north of Kailua-Kona.** [There are industrial parks just north of Kailua, and some industrial use at Keahole.] The industrial activities **within these newer areas** include warehousing, lumber storage yards, auto body shops, **wholesaling** and other service oriented activities.

The energy and [aquacultural] **aquaculture** activities **at the Natural Energy Laboratory of Hawaii** at Keahole have [potentials for expansion and may] become major employment generators in the district. Though located in industrial zoned districts, these alternate energy and aquaculture activities are not the traditional uses usually found in industrial areas.

Major factors to be considered for the existing industrial areas and other new developments are their visual effects on motorists and passengers using Queen Kaahumanu Highway and the views from the residential areas above.

Courses of Action

- [The County shall identify] **Identify** sites suitable for future industrial activities.
- [Industrial] **Additional industrial** acreage should be provided at [Ke-ahole] **the Kona International Airport at Keahole** for support facilities for the airport.
- Industrial development should be in harmony with surrounding uses and the environment.
- **Industrial-commercial mixed use districts may be provided in appropriate locations.**

- **Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in the Kainaliu-Honalo area although the area is not currently identified on the LUPAG map.**

SOUTH KONA

Profile

There are no Industrial zoned lands in the South Kona district.

The major industrial export activity is coffee and macadamia nut milling and roasting. Other activities include slaughterhouses, fish packing and processing and ancillary agricultural services. **Many of these industrial activities are located on Agricultural-zoned lands and approved through the issuance of Special Permits.**

Other service related industrial uses such as warehousing, garages and auto body shops are located in pockets along the Mamalahoa Highway. Because of its topographic condition, however, level land necessary for development is limited in the mauka areas.

Courses of Action

- [• Through its zoning powers, the County shall encourage the centralization of industrial development in suitable areas in South Kona.]
- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**
- **Service oriented Limited Industrial and/or Industrial Commercial uses may be permitted in the Kealahou-Captain Cook area although the area is not currently identified on the LUPAG map.**

KA'U

Profile

There are approximately 52 acres of industrial zoned lands in the Ka'u district.

[Sugar processing and macadamia nut milling in Ka'u constitute the majority of the industrial development in Ka'u.] **Aside from the macadamia nut industry, there are no other dominant industrial activity within the Ka'u district.** There are miscellaneous activities, such as County **and State** baseyards, public utilities stations, and fish [and meat] processing. The distance from port facilities in Hilo creates **somewhat of** a problem for the movement of goods to and from this district. **Approximately 13 acres of Industrial zoned lands that**

accommodate a gas utility, telecommunications, auto repair and soil remediation facilities are located in Naalehu.

C. Brewer and Co., Ltd. is considering development plans for the former Pahala Sugar Mill site. Preliminary plans identify the former mill site as the industrial service center of Pahala, providing agricultural processing and light industrial uses. Uses being contemplated include wood milling, lumber storage, research facilities, food processing, and other limited industrial uses. These plans would require the increase of Industrial-zoned lands surrounding the former Pahala Mill site from its current 33.6 acres to 81.5 acres.

[Course] **Courses** of Action

- [The County shall identify] **Identify** sites suitable for future industrial activities[.] **as the need arises.**
- **Service oriented Limited Industrial and/or Industrial-Commercial uses may be permitted in the Naalehu area although the area is not currently identified on the LUPAG map.**