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From: Braman, Eva
Sent: Tuesday, October 01, 2019 3:30 PM
To: Yee, Michael; Morrison, Bethany
Cc: [REDACTED]
Subject: RE: Draft General Plan - Agency Review Request
Attachments: DRAFT Gen Pln w DPW Comments.pdf

Forwarding DPW's comments/questions/concerns regarding the Draft General Plan. Our apologies for missing yesterday's deadline.

If you have any question, please let us know.

Mahalo,

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*'A'ole hana ma ke ala 'ae
No task is too big when done together by all*

2019 OCT 2 AM 8 21
PLANNING DEPARTMENT
COUNTY OF HAWAII

From: Ley, Rachelle
Sent: Wednesday, August 14, 2019 4:56 PM

[REDACTED]

Subject: Draft General Plan - Agency Review Request

Good afternoon,

The Planning Department is requesting your assistance in reviewing the Draft General Plan. Please see the attached memo for details and an invite to a coffee hour session on either August 29th or 30th in Hilo.

If you have any questions and/or concerns please feel to email us at generalplan@hawaiicounty.gov or call (808) 961-8138.

Mahalo!

Rachelle Ley

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General Plan 2040

August 2019 Draft

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HOW TO READ THIS PRELIMINARY GENERAL PLAN DRAFT

This draft is the first draft of General Plan 2040. The purpose of the draft is to elicit feedback from the general public as well as various agencies and organizations. During the months of August and September, input from County agencies, the public, and other relevant stakeholders will continue to be gathered and compiled to inform any necessary research, consultation, or revisions to the draft General Plan prior to submission to the Planning Commission and the County Council. Since further edits are anticipated, this draft document has not been formatted as a final document. Once revisions are incorporated, the document will be formatted to include the graphic components such as synergistic links between policies, pictures, tables and maps.

The General Plan contains Goals and measurable Sustainability Objectives along with Policies and Actions to achieve these objectives.

The plan utilizes policies that are sometimes overarching and aspirational, while other policies are more specific and directive. Rationale has been provided in brackets [] following the policies that have the more specific, directive language.

The plan utilizes two types of actions; Actions necessary for the County to implement the policies, and Agency Actions to coordinate efforts with State, Federal, private, or community entities. These actions guide County efforts in implementing the General Plan but are not mandatory or self-implementing and may need further analysis or collaboration during application.

INTRODUCTION

PURPOSE OF THE GENERAL PLAN

The County of Hawaii's General Plan is the policy document for the long range comprehensive development of the island of Hawaii. The General Plan has a 20-30-year planning horizon. The General Plan also:

- Guides the pattern of future development in this County based on long-term goals;
- Identifies the visions, values, and priorities important to the people of this County;
- Provides the framework for regulatory decisions, Capital Improvement priorities, acquisition strategies, and other pertinent government programs within the County organization and coordinated with State and Federal programs.
- Improves the physical environment of the County as a setting for human activities; to make it more functional, beautiful, healthful, interesting, and efficient.
- Promotes and safeguards the public interest and the interest of the County as a whole.
- Facilitates the democratic determination of community policies concerning the utilization of its natural, man-made, and human resources.
- Effects political and technical coordination in community improvement and development.
- Injects long-range considerations into the determination of short-range actions and implementation.

With the adoption and ratification of the County Charter in 1969, the General Plan was instituted as the main County policy document. The Charter also states:

- (a) The Council shall enact zoning, subdivision, and other such ordinances, which shall contain the necessary provisions to carry out the purpose of the General Plan.
- (b) No public improvement, project, or subdivision, or zoning ordinance, shall be initiated or adopted unless the same conforms to and implements the General Plan.
- (c) Amendments to the General Plan may be initiated by the Council or the Planning Director.

The General Plan represents the first level and encompasses long-range goals, policies, standards, and courses of action for the entire County. The General Plan also provides the legal basis for all

the other elements of the County's planning structure. As such, the General Plan is the highest order, or "umbrella" plan. It establishes the boundaries within which the County must operate.

The planning system shall consist of a comprehensive Countywide General Plan, and include Community Development Plans, urban development plans, Special Area Plans, and agency functional plans as implementation mechanisms that carry out the goals, objective, policies or standards, and actions of the General Plan.

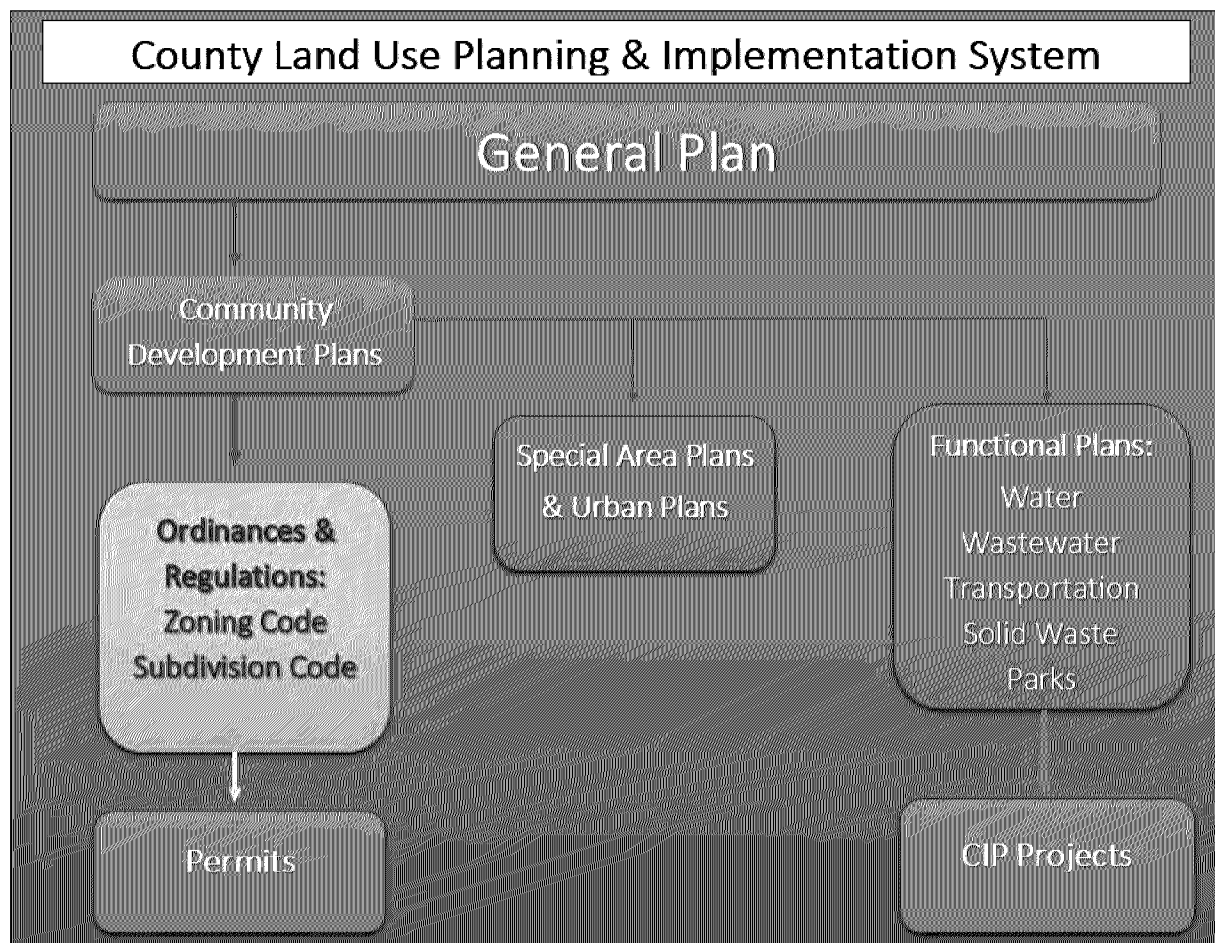


Table 1: Land Use Planning & Implementation System

The purpose of a Community Development Plan (CDP) is to further define the General Plan's goals, objectives, and policies in order to identify and implement, as needed, more specific goals, objectives, policies and strategies for community-based actions especially applicable to the planning area's unique characteristics. The CDPs are adopted by County ordinance and seek to address local and regional issues and opportunities related to cultural and natural resources,

watershed planning, directing, managing and regulating growth, and improving the coordination and delivery of government services and infrastructure.

Urban development plans are a means of implementing the policies and objectives of the General Plan and/or Community Development Plans within towns, villages, and other areas of existing urban development or within areas specifically intended for new or more intensified urban development. They comprise a minor portion of a larger, regional community planning area. They shall be consistent with and implement the visions, objectives and policies of the General Plan and applicable Community Development Plans. If there is a direct conflict between provisions of an urban development plan and those of an applicable Community Development Plan, or the General Plan, provisions of the latter, superior plan shall be controlling.

Special Area Plans provide the basis for regionally-scaled programs for the protection, restoration, or recreational and educational use of specific, natural and/or cultural-historic resources and features identified in the General Plan or an encompassing Community Development Plan as highly valued community natural assets.

Functional Plans address specific County agency needs, programs, or issues and may include organizational or management initiatives, facility or physical infrastructure development initiatives, initiatives for programs and services, or legislative proposals. The functional plans and programs of departments and agencies of the County shall conform to the General Plan. Thus, the provision of County facilities, infrastructure and services shall be in accord with the policies and objectives of the General Plan.

CONSISTENCY AMONG PLANS

Where the director has determined a conflict between any of the plans, the General Plan shall prevail over any Community Development Plan, and the General Plan and community developments plans shall prevail over any functional or Special Area Plan. The director shall initiate plan amendments to resolve any inconsistencies that arise.

CONSISTENCY WITH PLANS

After a General Plan, or element or portion thereof, has been adopted in conformity with the State Planning Act and the County Charter, all actions, programs, or projects and land use decisions, shall be consistent with such plan or element as adopted.

An action, program, or project is consistent with the General Plan if, considering all its aspects, it will further the objectives and policies of the General Plan and not obstruct their attainment. In determining whether any action relating to a proposed public improvement or development project is consistent with the General Plan or Community Development Plan, the responsible agency shall take into consideration the following factors:

1. Whether the public improvement or development project is consistent with the land use map or policies in the General Plan and applicable Community Development Plan.
2. Whether the public improvement or development project supports the implementation and priorities in the General Plan and the applicable Community Development Plan.
3. Whether the place and time at which the public improvement or development project is proposed to be undertaken is consistent with the planned location and sequence for constructing public facilities and infrastructure within the applicable planning area.
4. A land use decision shall be consistent with the General Plan if the land uses, densities or intensities, and other aspects of development permitted by such order, code or regulation are compatible with and further the objectives, policies, land uses, and densities or intensities in the General Plan and if it meets all other criteria enumerated by the General Plan.

TRENDS AND FORECASTS

The General Plan comprehensive review requires an understanding of demographic, economic, and real estate trends and forecasts that can be used to anticipate and plan for impacts on land use, infrastructure, and services. The Trends and Forecasts Report is intended to meet that need by providing both trends and forecasts for a set of variables relevant to the County of Hawai'i's General Plan review. The Report was prepared by Honolulu-based SMS Research & Marketing Services, Inc. (SMS).

Apart from the report, SMS provided data both at the County-wide level and by the following Forecast Analysis Zones (FAZs), which are groupings of census tracts based on the geographic location of population centers in Hawai'i County:

- Hilo (Hilo and Wainaku)
- North Hilo - Hāmākua Coast Villages (Pauka'a to Laupāhoehoe)
- Honoka'a-Pa'auilo
- North Kohala
- Waimea
- Waikoloa Area (Kawaihae-Puakō-Waikoloa-Waikoloa Resorts)
- North Kona
- South Kona
- Ka'ū
- Upper Puna (Volcano to Mountain View)
- Kea'au-Kurtistown
- Hawaiian Paradise Park-Orchidland

- Lower Puna.

Historic data are generally provided from 1990, and forecasts are provided to 2040, which is the year through which forecasts are provided by the state Department of Business, Economic Development, and Tourism (DBEDT).

In addition to informing the Trends and Forecasts Report, these data were used for the development of planning scenarios reflecting baseline conditions, build-out, growth capacity, growth trends, and alternatives to the trend.

SUMMARY OF KEY FINDINGS

Hawai'i County is rural. Only 60% of Hawai'i County's population is within its eight urban areas, and population density is low in both urban and rural areas.

The County is expected to grow by 50% by the year 2040. Visitors make up about 15% of the population, and during peak periods, 70% of the growth is from immigration. A disproportionate number of residents from 2025 and beyond will be seniors.

Rates of job growth are expected to match population growth, but due to the economy's reliance on lower-paying service sector jobs, median incomes are likely to remain low. Moreover, roughly half the households find housing unaffordable, and many are struggling to make ends meet, often living in overcrowded conditions. Much of the affordable housing is not located in or near job centers, so commutes are getting longer.

Visitor units are clustered primarily in West Hawai'i, and steady growth is expected to continue, though the makeup of that growth (hotel vs. vacation rental) is unknown.

DEMOGRAPHIC KEY FINDINGS

Population Centers are both Rural and Urban

The Census Bureau identifies "urban areas" as densely developed territories adjacent to areas with low population density. The Census Bureau identifies the following "Urban Clusters (UCs)" of at least 2,500 and less than 50,000 people in the County of Hawai'i:

Urban Cluster	Population	% of Population	Population Density (Pop/Sq Mile)
Hilo	43,925	23%	1,791
Hōlualoa	28,850	15%	2,013
Captain Cook	4,175	2%	999
Hawaiian Paradise Park Area	20,503	11%	635
Waimea	6,960	4%	1,475
Waikoloa Village	4,089	2%	3,799
Kapaʻau	3,597	2%	888
Honokaʻa	2,667	1%	1,699

Table 2: Urban Clusters, County of Hawaii, 1990-2015

Population Density is Low

By the Census definition, the majority (60 percent) of the County's population has been classified as urban throughout the last 25 years, and no change is expected through 2040. In contrast, nationwide, 80.7 percent of the population lives in urban areas.

In both urban and rural areas, the County of Hawai'i has relatively low population density. It has an average of 1,300 people living in every square mile in urban areas and an average of 18 persons per square mile in rural areas. By contrast, urban Honolulu had over 5,500 persons per square mile in 2010.

Roughly 50% Growth by 2040

In 2013, there were 194,190 residents living in the County of Hawai'i. Over the next 25 years, the population growth rate is expected to decline from an average 1.7 percent per annum to about 1.4 percent per annum. In 2040, the County resident population is forecast to be approximately 296,322, which is a 53% increase since 2013.

The *de facto* population is the sum of the resident population and the average daily visitor census. The average daily visitor census was around 29,000 in 2013 and is expected to rise to approximately 36,000 by 2040, bringing the *de facto* population from about 221,000 to about 333,000 – a 51% increase.

Immigration Outpaces Resident Population Growth

During the last two decades, there has been an average of 2,218 births and 1,269 deaths per year in the County, resulting in a net increase of almost 950 people annually. Also contributing to population growth are the approximately 2,300 individuals, on average, who choose to move to Hawai'i County each year. In other words, about 70% of the growth on average is through immigration.

Senior Tsunami is Imminent

In 2013, about half the County's population was between the ages of 45 and 64. Another quarter was age 65 or older, and there were similar numbers of residents from birth to 44 years of age. By 2025, the large middle cohort will be retiring. As this subset of the population continues to age, it will present a variety of opportunities and challenges with regard to housing, economic development, and public services.

GROWTH AND DEVELOPMENT KEY FINDINGS

Housing is a Burden for more than 50% of Households

The housing guidelines from the federal Department of Housing and Urban Development suggest that households should devote no more than 30 percent of their income to pay monthly housing expenses; otherwise, a household is considered "shelter burdened" and may have difficulty affording necessities such as food, clothing, transportation and medical care.

In Hawai'i County, the percent of households that is shelter burdened has been steadily increasing since 2000. In 2000, 36.9 percent of owner households with a mortgage and 43.0 percent of all renter households were paying more than 30 percent of their income for housing. By 2010, this had increased to 48.0 percent and 51.2 percent, respectively, and by 2013 it had risen to 50.1 percent and 57.2 percent.

Nationally, 35.3 percent of households paid more than 30 percent of their income on housing in 2014. For the State of Hawai'i, the comparable figure is 42.8 percent, the third highest nationally.

Housing Remains Unaffordable

SMS considered housing affordable if its price (asking rent or sales price) is affordable to households with annual household incomes less than 80 percent of the Area Median Income (AMI) (\$41,177 in 2014), which includes the very low, low, and moderate income thresholds established by the federal Department of Housing and Urban Development each year. Between 2009 and 2013, roughly 56 percent of all housing units available to residents of Hawai'i County were classified as affordable.

Households Remain Overcrowded

A household is considered overcrowded when the ratio of household members to rooms in the housing unit exceeds 1.0. A household is classified as extremely overcrowded when that ratio exceeds 1.50. Crowding is considered to be a negative indicator of the health of a local housing market, a sign that the market is unable to supply the number and types of housing units needed.

Hawai'i has one of the highest overcrowding rates in the country, and at 5.6 percent of owner-occupied units, the level of overcrowding in Hawai'i County's owner-occupied units is the highest among all of Hawai'i's counties. The percentage of overcrowded renter-occupied units, however, is notably higher at 12.6 percent of rented units.

Affordable Housing can be Found Island Wide

The availability of affordable housing varies by region. Relative to the Countywide average, the rural communities – particularly Puna, Ka'ū, Honoka'a, Pa'auilo, and North Kohala – have largest percentages of housing that is affordable. At the same time, most of the County's total stock of affordable housing is in Puna (22.5%), Hilo (23.9%), and North Kona (22.5%).

Forecasted Growth Rates Vary by Community

The number of housing units in the County of Hawai'i in 2015 was estimated to be 87,310. Among those, approximately 80 percent were single-family dwellings, and the remainder were multi-family units. 64 percent of housing units were owner-occupied.

Growth rates have varied considerably by region, and that trend is expected to continue. Relative to the Countywide estimate of 59% growth in housing units from 2010 to 2040, Hilo (29%) and the North Hilo-Hāmākua Villages (36%) are expected to grow more slowly. Others are expected to grow more quickly: Waimea (60%), Ka'ū (93%), and Puna – Kea'au-Kurtistown (72%), Upper Puna (101%), and Hawaiian Paradise Park-Orchidland (171%).

These differences in growth rates are forecasted to result in shifts in the relative population centers. For example, half of the housing is currently in Hilo (24%) and North Kona (25%), while only about 13% is in Upper Puna and Hawaiian Paradise Park-Orchidland. But by 2040, only 42% of the units are forecasted to be in Hilo and North Kona, while 19% is estimated to be in Upper Puna and Hawaiian Paradise Park-Orchidland.

There is also variation among forecasted growth rates in non-residential square footage (i.e., commercial and industrial), but the variation is less extreme. Relative to the Countywide estimate of 34% non-residential growth from 2010 to 2040, the North Hilo-Hāmākua Villages (28%), Upper Puna (28%), and the South Kona Villages (29%) are expected to grow more slowly, and Ka'ū (43%) and Hawaiian Paradise Park-Orchidland (65%) are expected to grow more quickly (assuming the availability of appropriately-zoned land).

Visitor Unit Growth Steady, but Types are Shifting

The vast majority of visitor units are in the Waikoloa Area and North Kona. With the upward trend in visitor arrivals expected to increase through 2040, increasing demand for visitor units is likely. With this growth comes the challenge of planning for their impact on the local economy, especially with regard to accommodations. Hotel rooms account for the majority of the visitor

accommodation units in the County of Hawai'i (59.5%). A distant second and third are timeshare properties and Visitor Rental Units (VRUs), with 13 and 12 percent of the total visitor units, respectively.

One of the significant difficulties in keeping track of visitor accommodations units on Hawai'i Island is that the number of housing units being let to visitors as short term vacation rentals is unknown. Residential units used for this purpose were referred to as Transient Vacation Rentals (TVRs) in the Hawai'i Tourism Authority's annual Visitor Plant Inventory and their numbers are reported based on tax records. However, it is strongly suspected that significant numbers of homeowners rent all or parts of their units to visitors as short term rentals without registering their rental activity and without paying the required taxes.

There is no estimate for the number for those properties. A study commissioned by HTA in 2014 (Individually Advertised Units in Hawai'i, 2014) reported that there were 9,986 vacation rental units in the County of Hawai'i. That would bring the total of visitor accommodations units up from 10,666 to 13,969. The DBEDT 2040 forecast for the County of Hawai'i was 11,600 units.

ECONOMIC KEY FINDINGS

Poverty Persists

Household income rises and falls along with economic cycles. The median household income on Hawai'i Island has not yet recovered to its 2007 high.

The percentage of persons in poverty was 15.7 percent in 2000 and was on a downward trend, falling to a low of 13.1 percent in 2007. Since that time, the percentage in poverty has increased to a record high in 2013 of 18.3 percent for individuals. The official poverty rate nationwide was 14.8 percent, and statewide it was nearly 11 percent.

Self-Sufficiency is Out of Reach for Many

The poverty rate is a national measure and is hardly a living wage, especially in Hawai'i. The poverty line for a family of four in 2013 was \$23,834. The State Department of Business, Economic Development & Tourism publishes an annual Self-Sufficiency Income Standard. In 2014, Hawai'i County had the lowest self-sufficiency income requirements (\$58,874 for a family of four with a preschooler and one school-age child), but that income is well above the poverty line. A family of four needed to earn a combined hourly wage of \$27.88 (or \$13.94 each on average) to be economically self-sufficient. That was 92.2 % above the state minimum wage level and 114.6% above the federal poverty threshold for Hawai'i.

Job Growth Mirrors Population Growth

The average annual growth rate for jobs averaged 1.7 percent since 1990, mirroring population trends, and it is expected to remain at that level for the next several decades.

80% Employed in the Service Sector

The three primary economic sectors of the Hawai'i Island economy are the services producing sector, the goods producing sector (construction and manufacturing), and agriculture. The services producing sector (education, health, accommodation, entertainment, food, professional, financial, real estate, public, etc.) is by far the largest, representing over 80% of employment. The agriculture sector represents about 6% of employment.

More than two-thirds of workers are employed in one of five key industries: educational service, healthcare, and social assistance (~19%); arts, entertainment, recreation, accommodation, and food services (~18%); retail trade (~13%); professional, scientific, management, administrative, and waste management (~10%); and construction (~9%). Tourism drives the arts, entertainment, recreation, accommodation, and food services industries and much of the retail trade, representing ~25% of total employment.

Job and Population Centers Mismatch = Longer Commutes

Data varies by source and date, but in general, about 1/3 of jobs in Hawai'i County are in Hilo, another quarter in North Kona, 5-10% in the Waikoloa area, 5% in Waimea, and about 1-7% in each of the other population centers.

It is useful to compare these job centers with the County's population centers. Hilo and the Waikoloa area have a surplus of jobs relative to their population, reflecting the fact that residents commute there from other communities. At the other end of the spectrum, the Hawaiian Paradise Park-Orchidland area has a working population that far exceeds the number of nearby jobs.

These mismatches are reflected in the increase in the Census measure of "mean travel time to work" from 24.5 minutes in 2000 to 27.1 in 2013. The national average is 25.5 minutes, and the Hawai'i average is 26.0 minutes.

Competitive Advantages Vary

In contrast to employment and occupation data, which are from the Census and therefore tie data to the physical location of the *resident*, jobs data are collected from employers and therefore tied to the physical location of the *employer*.¹ Hawai'i County has the greatest number of jobs in

¹ This explains the slight differences between employment and jobs data.

government (20.2%); retail (14.8%); business, professional, and other services (13.2%); health and social assistance (10.9%); dining (9.5%); and hotels (8.8%).

Because jobs data are geographically linked to the place of employment, they can be used to identify characteristics of job centers. A location quotient (LQ) quantifies how concentrated jobs are within a geographic area relative to a larger area. A high location quotient in a specific industry may translate into a competitive advantage in that industry for the local economy. The Trends and Forecasts Report considered the LQ of Hawai'i County vis-à-vis the State and each FAZ population center vis-à-vis the County.

Hawai'i County has a much higher concentration of agricultural jobs relative to the State as a whole – more than three times higher. Hawai'i County also employs about 1.5 times as many residents in utilities and in hotel professions as the rest of the State. On the other hand, professional services in Hawai'i County are underrepresented as compared to the rest of the State (LQ = 0.54). Employment in the finance and insurance industry has also been relatively low in Hawai'i County compared to the State (approximately two-thirds).

The competitive advantages of population centers relative to the County are provided below (LQ provided in parentheses). The urban centers are the seat of government and the center of professional, service, and retail trades. Agriculture, food processing, and related wholesale trade are centered in the most rural areas and Waimea. Tourism and related industries are centered on the leeward side and in North Kohala and Honoka'a. Interestingly, Lower Puna's economy is quite diversified despite its limited number of jobs, and the HPP-Orchidland area appears to be a small hub for the information industry.

SUSTAINABILITY FRAMEWORK

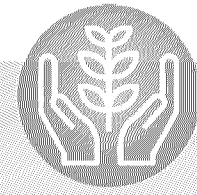
The General Plan's processes and strategies (objectives, policies and actions) are intended to respect the culture, character, beauty and history of the Island of Hawai'i while attempting to integrate balance between environmental stewardship, social and community equity and economic sufficiency in order to meet the needs of the present without compromising the ability of future generations of this island to meet their own needs. This sustainability framework has guided the development of the plan.

The General Plan endorses the goals of the Hawai'i 2050 Sustainability Plan. These goals give guidance and have been integrated throughout the goals of this General Plan. The Hawai'i 2050 Sustainability Plan goals are as follows:

1. Living sustainably is part of our daily practice in Hawaii.

2. Our natural resources are responsibly and respectfully used, replenished and preserved for future generations.
3. Our Kanaka Maoli and island cultures and values are thriving and perpetuated.
4. Our community is strong, healthy, vibrant and nurturing, providing safety nets for those in need.
5. Our diversified and globally competitive economy enables us to meaningfully live, work and play in Hawai'i.

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Section 1: Natural Resource Planning

GOALS

1. Hawai'i will integrate traditional knowledge and practice with progressive planning strategies to maintain environmental quality at the highest standards, address a changing climate, protect natural resources, and restore ecosystem health for the benefit of present and future generations:

- a) The resources and environmental quality of our air, noise, geology, waterways, groundwater, forests, native habitats and wildlife, and coastal areas are protected and enhanced. The integrity of our ecosystem services is enhanced to foster the resilience of natural systems and to ensure their preservation and sustainable use for future generations.
- b) Proactive and adaptive land use and design standards will be used to protect life and property from hazards and a program of mitigation and post-disaster redevelopment will be maintained to increase public safety, reduce damages, and ensure resilient public investments.
- c) Climate impacts are addressed in the built environment by efficient public investment in green development, increasing renewable energy production, reducing greenhouse gas emissions, fossil fuels, energy consumption, and waste, and by educating the community in adapting for climate change.

PROTECTING NATIVE HABITATS & WILDLIFE

SUSTAINABILITY OBJECTIVE

Increase native habitat restoration on County owned or managed land.

POLICY

1. Priority habitat restoration sites shall be identified as those disturbed areas whose restoration will result in the greatest habitat benefit.

2. Maintain a program for acquiring and maintaining native habitat to implement the recommendations in the Hawai'i State Wildlife Action Plan (SWAP).
[Rationale: Based on identified gaps in implementing recommendations from the DLNR SWAP of 2015.]
3. As part of any permit application to the County Planning Department, the following natural and cultural resources shall be considered sensitive and therefore shall be inventoried with identified mitigation measures:
 - a) Critical habitat areas as identified by the U.S. Fish & Wildlife or County General Plan;
 - b) Predominantly native ecosystems, which may not be considered endangered but are valued because of their nearly pristine condition;
 - c) Anchialine ponds;
 - d) High-level groundwater recharge areas;
 - e) Historic trails; and
 - f) Archaeological and historic sites subject to protection under HRS Chapter 6E
[Rationale: Based on identified gaps in identification and mitigation for sensitive areas. See also Kona CDP ENV 1.5]
4. Development shall not disturb the following:
 - a) Anchialine pools;
 - b) Freshwater wetlands;
 - c) Shoreline setback area;
 - d) Plant species listed by the US Fish and Wildlife Service as threatened and endangered
 - e) Exceptional trees;
[Rationale: Based on identified gaps in protecting natural resources from development impacts.]
5. Hawai'i County shall discourage developments and limit clearing of vegetation within Habitat Overlays.
[Rationale: Based on identified gaps in protecting natural resources and native habitats. See also General Plan Policies 8.3 (a, j).]
6. Establish Habitat Overlay Districts for:
 - a) Natural areas including old and new growth upland native vegetated areas with minimal existing development and/or infrastructure.
 - b) Vacant land which can be restored to connect upland native habitat patches and reduce further fragmentation of upland native habitat.

- c) Lands required to provide an undeveloped buffer between natural areas and development to reduce secondary impacts; roadways, depending on size may form a boundary that removes the need for the buffer or reduces its depth.
- d) Lands designated for acquisition by public agencies for conservation and natural resource protection.
- e) Known or potential locations of threatened and endangered species and species of greatest conservation need.
- f) Lands designated as conservation on the SLU, Future Land Use maps or Zoning maps or within a buffer/restoration area as appropriate.
- g) Identified wetlands

[Rationale: Based on identified gaps in protecting natural resources and native habitats. See the General Plan 8.2 Goals and Policies 8.3 (a-x.)]

7. Hawai'i County shall require clustering of any developments within Habitat Overlay Districts to avoid sensitive areas.
[Rationale: Based on identified gaps in protecting natural resources and native habitats from development. See also Hāmākua CDP Policy 8.]
8. Maintain and restore native habitat including marine, wetland, shoreline, and native upland systems on County owned or managed lands.
[Rationale: Based on identified gaps in protecting natural resources and native habitats]
9. Manage land uses to protect nesting areas and any bird species federally or state listed as endangered, threatened, or a species of special concern.
[Rationale: Based on guidance from SWAP 2015.]
10. Assess and prioritize County-owned areas for restoration in consultation with State, Federal, and private entities.
[Rationale: Based on identified gaps in restoring natural resources and native habitats]
11. Protect and provide for restoration of significant natural and cultural features and ecologically sensitive lands, including but not limited to mountain areas, shoreline and coastal communities/areas, wetlands, fishponds, forests, natural gulches, riparian areas, streams and drainage ways.
12. Partner with the Big Island Invasive Species Committee (BIISC) and the University Hawai'i to develop a program for identification and protection of plant species of special status. Include plants designated as threatened and endangered by the US Fish and Wildlife Service and plants significant for cultural practitioners.
13. Partner with State and Federal agencies to support seedbanks of native and endemic plant species, especially species that are threatened or endangered.

14. Partner with the State Land Use Commission to establish a conservation buffer to accommodate shifting native habitats impacted by climate change, particularly wetlands and high-elevation forests.
[Rationale: University of Hawai'i at Mānoa Sea Grant College Program. June 2014 Climate Change Impacts in Hawai'i - A summary of climate change and its impacts to Hawai'i's ecosystems and communities.]
15. Incentivize the planting of threatened and endangered endemic plants species within their native ranges and during development activities.
16. Incentivize the removal of invasive species during development activities.
17. Partner with State, Federal, and private entities to support programs designed to avoid the introduction and establishment of invasive species and the control and eradication of invasive species; particularly that serve as disease vectors.
18. Partner with State, Federal, and private entities to support protection of native wildlife and habitat.
19. Support the implementation of a Habitat Conservation Plan (HCP) for Protected Species on Hawai'i Island.

ACTION

- 1.1 Coordinate a program to actively control invasive wildlife on County-owned property, particularly invasive species that serve as disease vectors.
- 1.2 Coordinate a program to remove invasive vegetation from County-owned or managed lands.
- 1.3 Partner with State and Federal agencies to implement the State of Hawai'i Aquatic Invasive Species (AIS) Management Plan, and coordinate with the Hawai'i Invasive Species Council, the Coordinating Group on Alien Pest Species (CGAPS) and the Big Island Invasive Species Committee to eradicate invasive species on County-owned or managed lands.
- 1.4 Create a County nursery to maintain a stock of native species to be used in County landscaping.

SUSTAINABILITY OBJECTIVE

Increase percentage of forest and woodland cover.

POLICY

20. Prioritize urban tree inventories for primary urban areas such as Downtown Hilo, Waimea, and Kailua-Kona.
[Rationale: Based on U.S. Forest Service Urban Tree Canopy (UTC) Assessment, the U.S. Climate Resilience Toolkit, and City and County of Honolulu Urban Reforestation Master Plan 2006.]
21. Include reforestation elements in Community Development Plans, Special Area Plans, and community conservation projects.
[Rationale: Based on recommendations from the U.S. Climate Resilience Toolkit and the City and County of Honolulu Urban Reforestation Master Plan 2006. See also General Plan Policy 8.3 (x)]
22. Explore the feasibility of adopting a No Net Loss of Forest policy.
23. Encourage the planting of native trees, shrubs, and grasses in appropriate areas to increase forest buffer functions, forest diversity, and to reduce storm water runoff.
24. Continue to promote and support programs for community reforestation.

ACTION

- 1.5 Invest in public grounds by tree planting, buffer conservation, and habitat restoration.
- 1.6 Conduct and maintain an urban forest inventory of all trees on County lands.
- 1.7 Establish a street tree planting program to include:
 - a) street tree planting typologies scaled with street typologies
 - b) design guidelines
 - c) maintenance plan
- 1.8 Prepare Forest Health Assessments and implement Forest Management Plans for large County-owned forested properties.
- 1.9 Develop & adopt a comprehensive and integrated Landscape and Tree Ordinance in the Hawai'i County Code and Ensure Consistency with Other Codes (Zoning & Subdivision, Roads, etc.)

PROTECTING COASTAL RESOURCES

Coastal Habitat

SUSTAINABILITY OBJECTIVE

Measure coastal habitat to track potential habitat gains/losses and study the effectiveness of mitigation measures.

POLICY

25. Implement education programs and actions to prohibit the destruction of, and work toward the recovery of, monk seals, whales, and marine turtles, as well as their natural habitats.
[Rationale: Based on research and identified gaps in providing education and comprehensive strategies to protect or restore marine habitats.]
26. Priority shoreline acquisition shall include sites with:
 - a) Documented nesting sites for designated endangered or threatened species;
 - b) Public recreation uses without adverse impacts on sensitive natural resources.[Rationale: Based on General Plan 2005 Section 4: Environmental Quality, Goals; Section 8 Natural Resource and Shoreline Goals, Policies 8.3 (a), (c), (i); Standard 8.4(a)]
27. Maintain shoreline setback policies pertaining to permitted uses, siting of structures, disturbances, removal of invasive vegetation, and restoration of native vegetation in shoreline areas.
[Rationale: Based on General Plan Policy 8.3(d); Coastal Zone Management Act/Shoreline Protection Act, and the Special Management Area]
28. Evaluate the minimum shoreline setbacks currently in use in Hawai'i County in coordination with CDP recommendations. Setbacks shall be developed to accomplish the following:
 - a) Protect natural shoreline vegetation;
 - b) Protect marine turtle nesting beaches/areas;
 - c) Protect water quality;
 - d) Protect structures from the effects of long-term sea level rise;
 - e) Protect beaches and shorelines from erosion; and
 - f) Allow redevelopment of existing waterfront commercial structures consistent with the existing community character and preserve overwater views.

[Rationale: Based on General Plan Policy 8.3(d); Coastal Zone Management Act/ Shoreline Protection Act, and the Special Management Area. See Kona CDP LU-1.5b; Policy ENV-2.1; Ka'ū CDP Policies 28, 30; Hāmākua CDP Policy 18, 39, and 40]

29. No new bulkheads, seawalls or other hardened vertical shoreline structures shall be permitted on unaltered shorelines.

[Rationale: Based on existing policy HRS Ch. 205A-2 and the Shoreline Hardening Policy and Environmental Assessment Guidelines 1998. It is widely recognized that shoreline hardening leads to increased erosion and further prevents coastal ecosystems from adapting to sea level migration]

30. Maintain a program for acquiring undisturbed shoreline resource areas.

[Rationale: Based on Charter Section 10-15 PONC; General Plan 2005 12.3 (k)]

31. Regularly coordinate with Federal, State, regional and research agencies and organizations responsible for monitoring impacts to coral reefs.
32. In coordination with relevant agencies, the County will contribute to and participate in the development and implementation of marine zoning plan(s), Marine Managed Areas (MMA's) or other appropriate tool(s) which incorporate resilience-based concepts to provide maximum protection for all reef types and associated habitats.
33. Support the acquisition of undisturbed shoreline resource areas for conservation.
34. Support actions consistent with the State of Hawai'i Ocean Resources Management Plan.

ACTION

- 1.10 Implement education programs and actions to prohibit the destruction of, and work toward the recovery of, monk seals, whales, and marine turtles, as well as their natural habitats.

PROTECTING COASTAL RESOURCES

Wetland Habitat

SUSTAINABILITY OBJECTIVE

Increase protections and restoration of wetland habitats.

POLICY

35. Priority wetland restoration sites shall be those disturbed wetlands having the greatest functional value as determined through quantitative wetland assessment.
[Rationale: Based on identified gaps in identifying and assessing wetlands; General Plan 2005 5.3(n); and Clean Water Act Section 404.]
36. No fill or structures shall be permitted in wetlands.
[Rationale: Based on Section 404 Clean Water Act and Army Corps of Engineers guidance.]
37. Require minimum wetland setbacks of 50 feet to be maintained as an open space buffer for development occurring adjacent to all types of wetlands.
[Rationale: Based on Section 404 Clean Water Act and Army Corps of Engineers guidance.]
38. Maintain a program for acquiring and/or restoring high quality wetlands and anchialine pools.
[Rationale: Based on Charter Section 10-15 PONC; General Plan 2005 12.3 (k); and Section 404 Clean Water Act.]
39. Develop and implement regulations to reduce disturbances to wetlands and mitigate impacts of development to wetlands.

ACTION

- 1.11 Develop an Anchialine Pools Management Program.
- 1.12 Develop a Wetlands Evaluation Procedure (HIWEP) to determine the functional capacity of wetlands and a Uniform Mitigation Assessment Method (UMAM) to determine mitigation requirements for impacts to wetlands.
- 1.13 Identify potential wetland (fishpond- anchialine pools, shore ponds- salt & inland ponds brackish or fresh) restoration sites and identify high quality wetland

(fishpond & anchialine) sites for possible future acquisition by the County, State and/or private non-profit conservation organizations.

MANAGING STREAMS AND WATERSHEDS

SUSTAINABILITY OBJECTIVE

Reduce impaired inland and marine waters.

POLICY

40. The environmental quality of the island's surface waters, riparian areas, streams, and associated resources shall be maintained and, wherever possible, improved or restored.
[Rationale: Based on General Plan 4.2 (b); 4.3]
41. Lands necessary for the protection of watersheds, water sources and water supplies shall be protected and conserved.
[Rationale: Based on General Plan 8.3 (j) and 8.4 (d).]
42. Hawai'i County shall require that, to the greatest extent practicable, development activity, such as land clearing, grading and filling will not disturb natural drainage patterns.
[Rationale: Based on General Plan 4.3 (l); 5.3 (n), (p), and 8.2 (f), and consultation with DPW engineering staff.]
43. Limit clearing and impervious surfaces for developments located in identified priority watershed areas.
[Rationale: Based on General Plan 5.3 (n); 8.2(e and f), 8.3 (j).]
44. Continue to coordinate with State, Federal, and private entities to document pollutant loads for Hawai'i Island streams and coastal waters.
45. Practice watershed protection in furtherance of ahupua'a principles.
46. Participate in watershed partnerships to identify priority watershed areas and develop watershed management plans and projects.
47. Partner with State, Federal and with other Counties to address water management practices and engage in comprehensive watershed planning, including identifying priority watershed areas.

48. Explore the feasibility of incentive methods such as property tax dedications, conservation easements, or transfer of development rights to protect the defined zone of influence of existing or proposed public and private wells.
49. Collaborate with the Department of Health, the USDA Natural Resource Conservation Service, and the Soil and Water Conservation District to reduce runoff, maximize soil and water conservation, and protect and effectively manage watersheds and natural areas.
50. Encourage the County and the State to investigate and implement alternatives to the use of herbicides for weed control on public properties.
51. Work to identify areas where nutrient pollution is having the greatest impact on overall water quality.
52. Support the DOH and DLNR in its effort to have an implemented conservation plan for all agricultural operations and a nutrient management plan for application of all animal and chemical nutrients.
53. Establish riparian protection areas around streams, ponds, perennial flowing natural springs, and all springs and reservoirs serving as water supplies.

ACTION

- 1.14 Develop and implement watershed management programs to reduce runoff pollutant concentrations and volumes from existing development:
 - a) Identify priority local and/or regional watershed pollutant reduction opportunities, e.g., improvements to existing urban runoff control structures;
 - b) Contain a schedule (CIP) for implementing appropriate controls;
 - c) Limit destruction of natural conveyance systems; and
 - d) Where appropriate, preserve, enhance, and establish buffers along surface waterbodies and their tributaries.
- 1.15 Amend code to include riparian protection areas. [Code]
- 1.16 Create incentives for landowners to retain and re-establish forest cover in upland watershed areas with emphasis on native forest species.
- 1.17 Develop a Water Quality Monitoring Program.
- 1.18 Identify and map lands necessary for the protection of watersheds, water sources and water supplies.

- 1.19 Conduct a feasibility study of incentive methods such as property tax dedications, conservation easements, or transfer of development rights to protect the defined zone of influence of existing or proposed wells.
- 1.20 Identify and evaluate water well protection zones to determine if land uses are impacting or have the potential to impact drinking water.
- 1.21 Conduct a study on the impacts from subdivision build-out based on predictions related to: native ecosystems; potential potable water well sites; and flooding due to loss of forest.

AGENCY ACTION

- 1.22 FUND: State Legislature: Fund stream maintenance.
- 1.23 State DLNR: Update Hawai'i Stream Assessment (HAS)

MANAGING GEOLOGIC RESOURCES

SUSTAINABILITY OBJECTIVE

Initiate an inventory of soil, mineral and unique geologic resources.

POLICY

- 54. All (geologic and mineral) resource extraction shall follow State and Federal safety and health regulations.
[Rationale: State and Federal regulations are mandatory for County to follow. Mining is a particularly hazardous industry that was listed as the most dangerous industry for workers until 2001- U.S. Bureau of Labor and Statistics.]
- 55. Protect caves, including lava tubes, and the unique cultural and natural resources inside them.
[Rationale: Based on existing HRS 6D Protection of Caves]

ACTION

- 1.24 Adopt revisions to the Hawai'i County Code (HCC) which establish health and safety standards for caves, including lava tubes.
- 1.25 Partner with state, federal, and cultural practitioners to develop criteria used to define significant caves needing further protection.

- 1.26 Prepare an inventory of active and abandoned resource extraction sites.
- 1.27 Partner with state, federal, and private entities to develop a plan for the reclamation and productive reuse of abandoned resource extraction sites.

ENSURING AIR & NOISE QUALITY

Air Quality

SUSTAINABILITY OBJECTIVE

Maintain air quality to adhere to standards set by the State and Federal Agencies.

POLICY

- 56. Continue to meet all air quality standards set by the State of Hawai'i and the U.S. Environmental Protection Agency (EPA), including noxious odors and industrial emissions [Rationale: Based on the Federal Clean Air Act, 42 USC Section 7401.]
- 57. Continue to enforce; maintain and expand as needed a "Dark Sky" Ordinance(s). [Rationale: Based on existing HCC Chapter 14, Article 9; HRS 226-13(4); HRS 262-4.5; HRS 201-8.5; 2011 Hawai'i Session Laws, and Act 287.]
- 58. Partner with State and Federal agencies in air quality hazard events (e.g. eruption events) to increase monitoring, public reporting, and mitigation recommendations.

ACTION

- 1.28 Review and consider revising protocols for air quality events in our emergency management system.

ENSURING AIR & NOISE QUALITY

Noise Quality

SUSTAINABILITY OBJECTIVE

Maintain noise quality to adhere to standards set by the State and Federal Agencies.

POLICY

59. Continue to meet all noise quality standards set by the State of Hawai'i and the U.S. Environmental Protection Agency (EPA).
[Rationale: Based on the Federal Clean Air Act, 42 USC Section 7401, which includes noise quality as part of air quality.]
60. During site plan approval, require appropriate buffers or other noise abatement measures for land uses with potential noise impacts in the vicinity of residential or commercial areas.
[Rationale: Based on the Clean Air Act, and the Quiet Communities Act and General Plan 4.3 (f)]
61. Partner with State and Federal agencies to continue monitoring and mitigating aircraft noise.
62. Future land uses in the vicinity of industrial areas, including airports, should have an adequate open space buffer and/or be compatible with the anticipated aircraft noise exposure levels for that vicinity.

ACTION

- 1.29 Evaluate/implement code changes for noise abatement and/or mitigation in plan approval.

MITIGATING & ADAPTING TO HAZARDS & CLIMATE CHANGE

Hazards

SUSTAINABILITY OBJECTIVE

Risks are lowered using hazard mitigation strategies.

POLICY

63. Reduce developments in identified high risk hazard areas.
[Rationale: Based on General Plan Standards 14.5.4 (d); Standards 14.8.4 (c); 5.3 (a, b, q, r); and on recommendations from FEMA/Homeland Security's National Mitigation Framework 2nd Ed. June 2016.]

64. Prioritize drainage and flood studies for high risk urban areas within the Urban Growth Area.
[Rationale: Based on General Plan 5.3 Policies. There are gaps and outdated flood data around the island and recent flooding events were particularly damaging and life-threatening in urban areas.]
65. Drainage standards shall incorporate cumulative upslope development patterns.
[Rationale: Based on gap noted in MHMP 2015 update: Current drainage standards, which are based on 10-year storms, need to be reevaluated to better account for cumulative upslope development.]
66. Hawai'i County shall review and evaluate floor elevation requirements, as necessary, for all new construction in vulnerable areas.
[Rationale: Due to sea level rise projections, building code elevation requirements should be reassessed and amended in vulnerable areas. See also General Plan 14.5.4(d).]
67. Require the consolidation of contiguous parcels that do not conform to current code (non-conforming) in high risk hazard areas.
[Rationale: Based on General Plan Standards 14.5.4 (d); Standards 14.8.4 (c); 5.3 (a, b, q, r); and on recommendations from FEMA/Homeland Security's National Mitigation Framework 2nd Ed. June 2016.]
68. Hawai'i County building code shall be updated to maintain consistency with the Hawai'i State Building Code no later than two years after adoption of the Hawai'i State Building Codes.
[Rationale: Based on recommendation from MHMP 2015 update; HRS 107-28; the last Hawai'i County building codes from HAR State Building Code were adopted in 2009.]
69. Coastal High Hazard Area is the area including tsunami inundation, sea level rise and special flood hazard areas. The Coastal High Hazard Area shall be shown on the Future Land Use Map.
[Rationale: Based on the need to integrate the various hazard modeling tools to provide cohesive and clear hazard area guidance. See also General Plan 5.3 (b).]
70. The "Drainage Master Plan" shall be revised and updated to include the new studies and to provide a watershed perspective in managing floods using both structural and non-structural methods.
[Rationale: This is based on recommendations from the General Plan 5.3 (c), Hāmākua CDP Policy 95, and the Kona CDP Action ENV 1.7]
71. Discourage infrastructure investments in high risk hazard areas and incentivize infrastructure expenditures outside high risk hazard areas.

72. Incorporate hazard mitigation strategies into policies and planning decisions and use the most conservative models in defining hazard areas.
73. Partner with State, Federal, and private entities to improve urban flood prediction by developing real-time field-monitoring systems.
74. Evaluate ownership and/or maintenance responsibility for flood corridors that serve regional multiple benefits.
75. Utilize Hawai'i Wildfire Management Organization (HWMO), Wildfire Community Hazard Assessment/ Hazard Mapping and Wildland/Urban Risk Assessment in its process of determining Fire Hazards and Risk to guide appropriate areas for development.
76. Implement best management practices for wildfire control and reclamation.
77. Natural resources that provide buffers from hazards are protected and conserved, including aquifers, watersheds, streams, coastal waters, forest and coastal ecosystems, lava tubes, and rare and endangered native species and habitats.

ACTION

- 1.30 Adopt natural hazard overlay zones and set appropriate conditions for land use, siting, and design within high risk zones. [Code]
- 1.31 Identify redevelopment opportunities within or adjacent to Urban Growth Areas but outside of high risk hazard areas.
- 1.32 Update existing, or map new potential hazard areas for consideration in long term planning decisions.
- 1.33 Map nuisance flooding with NOAA model to include the following:
 - a) 6 years and within planning horizon
 - b) Base policy guidance on nuisance flooding which comes first with high tide
 - c) Model is exportable based on existing tide gauge data/spreadsheets
- 1.34 Seek funding and support continued scientific research relating to hazards (e.g. research on erosion rates, slumping rates, slope stability studies, sea-level rise rates, tsunami inundation mapping and coastal stream flood mapping, etc.).
- 1.35 Amend Chapter 25 of the Zoning Code to establish building setbacks for inland cliffs. Recommended factors to consider for establishing setbacks include:
 - a) Slopes greater than 40%;
 - b) Cliff height and geology type;
 - c) Cliff identification and mapping strategies. [Code]

- 1.36 Update the building code to cost-effectively resist hazards, including wind standards and green building criteria for new residential and commercial development.
- 1.37 Establish guidelines for Adopt-a-Corridor Program for flood corridors.
- 1.38 Amend Charter to revise land acquisition and preservation regulations and criteria (PONC) to include lands impacted by climate change or those with beneficial attributes for climate adaptation and mitigation.

AGENCY ACTION

- 1.39 State: Research Shoreline Dynamics
- 1.40 FEMA: Conduct Studies to Help Refine Flood Zone Maps
- 1.41 NOAA: Incorporate urban flood prediction into Hawai'i Flash Flood Response Tool

SUSTAINABILITY OBJECTIVE

Pre-disaster and post-disaster plans increase resilience.

POLICY

- 78. Ensure emergency response plans are adequate for each community.
[Rationale: Based on identified gaps for rural communities; Ka'ū CDP Policy 118, Hāmākua CDP Policy 92]
- 79. Ensure emergency evacuation routes are adequate for each community vulnerable to hazard.
[Rationale: Based on a combination of Puna CDP 4.3.1.a, Hāmākua CDP 1.8.1 Objective 7, Ka'ū CDP 1.5.1 Objective 8.]
- 80. In coordination with State agencies, maintain shelter capacity and condition records to ensure that evacuation shelters are adequate for each community.
[Rationale: Based on General Plan 10.3.2 (I) and the Multi-Hazard Mitigation Plan.]
- 81. Hawai'i County shall ensure warning siren coverage is adequate for each community.
[Rationale: Based on acknowledged gaps between concurrency requirements for siren and other development approvals, such as subdivision, SMA, PUD]
- 82. Prioritize hazard mitigation projects in the Capital Improvements Program.
[Rationale: Based on General Plan 10.3.2 policies and identified challenges with prioritizing proactive mitigation projects in the CIP process].

83. All emergency response critical facilities and communication systems shall be designed and maintained to be resilient and remain operational during hazard events.
[Rationale: Based on recommendations from the 2015 Multi-hazard Mitigation Plan]
84. All emergency facilities shall be located outside the 100-year flood-prone areas.
85. Hawai'i County shall continue to participate in the National Flood Insurance Program (NFIP) Community Rating System (CRS) to the maximum extent possible and shall seek to improve its current CRS Class rating (to maximum extent feasible to reduce insurance costs).
[Rationale: Participating in CRS is known to increase community resilience. Increasing our CRS rating makes communities more hazard resilient. See also General Plan 5.3 (c).]
86. Require hazard disclosures in all real estate conveyance transactions.
[Rationale: Based on General Plan 5.5.1.2 (d), 5.5.8.2 (e); 5.5.9.2 (d), and identified gaps in hazard disclosure reporting.]
87. Guidelines for development contained in the Post-Disaster Redevelopment Plan shall be incorporated within the General Plan by plan amendment after a natural disaster.
[Rationale: Based on identified gaps between planning efforts and the need for the General Plan to be dynamic to reflect changing events and circumstances.]
88. Address and monitor known hazards along transportation routes.
[Rationale: Based on consultations with Civil Defense and a combination of Puna CDP 4.3.1.a, Hāmākua CDP 1.8.1 Objective 7, Ka'ū CDP 1.5.1 Objective 8.]
89. Encourage the development and implementation of Community Wildfire Protection Plans and Firewise Community Certification for communities with high wildfire risk.
90. Increase public education related to hazard zones, including evacuation routes and procedures for visitor accommodations.
91. Develop the capacity for hazard preparedness of non-governmental organizations, businesses, and neighborhood groups.
92. Partner with the State to assess and plan for alternative routes and possible relocation of coastal roads.
93. County public expenditures within identified hazard areas should be limited to the restoration or enhancement of natural resources and parklands, expenditures required to serve existing development such as the maintenance or repair of existing infrastructure, and expenditures necessary for public health and safety.

ACTION

- 1.42 Develop and maintain a Post-Disaster Redevelopment Plan which specifies the following:
 - a) Roles and responsibilities;
 - b) Procedures for implementing programs for immediate repair, replacement, and cleanup;
 - c) Long-term rebuilding and redevelopment;
 - d) Procedures for the identification of damaged infrastructure and consideration of alternatives to its repair or replacement in the CHHA;
 - e) Evaluation of climate impacts.
- 1.43 Prepare Post-Disaster Reconstruction Guidelines and Protocols.
- 1.44 Prepare and Implement Wildfire Protection and Prevention Plans.
- 1.45 Develop Community-Specific Hazard Mitigation Plans.
- 1.46 Develop a standard for requiring an emergency response plan for larger developments.
- 1.47 Amend Hawai'i County Code Chapter 14 to require emergency and hazard information to be prominently displayed in all transient accommodations. This information should include information regarding the monthly Civil Defense siren tests, evacuation routes, and directive to reach appropriate services and agencies. [Code]
- 1.48 Assess the feasibility of hazard mitigation strategies such as impact fees, TDR, tax incentive, evacuation rate-based build-out, portable housing, zoning and overlay zones, acquisition during updates to the Multi-Hazard Mitigation Plan.
- 1.49 Adopt a Land Acquisition program for purchase of hazard-prone locations with potential lease back options.
- 1.50 Define and map critical facilities, necessary for community disaster response and recovery that are too important to fail.
- 1.51 Establish, map, and maintain alternative and emergency evacuation routes in each high-risk hazard area.
- 1.52 Amend the Subdivision Code to require warning sirens for 25 or more lots (consistent with concurrency requirements) as part of Subdivision improvements. [Code]
- 1.53 Conduct a Safe Growth Audit as part of comprehensive review of General Plan or Community Development Plans.

- 1.54 Create/improve secondary access roads for those communities with only one means of ingress/egress.
- 1.55 Install emergency phones along roadways in isolated areas of lower cellular connectivity.
- 1.56 Adopt incentives, such as tax deductions, to encourage retrofitting of existing structures for resilience against earthquake, hurricane, tsunamis, and floods.

AGENCY ACTION

- 1.57 Hawai'i Health Services: Harden Honoka'a Hospital
- 1.58 State Department of Transportation: Mitigate Rockfalls and Road Closures
- 1.59 State DOT: Address and monitor known hazards along transportation routes
- 1.60 State DOT: Key nodes shall be designed or retrofitted as needed, to withstand seismic effects.
- 1.61 State DOT: Study and address port vulnerability related to the liquefaction risk
- 1.62 BIISC: Albezia management plan is needed.
- 1.63 State: Establish guidelines for emergency shelters, including analysis of climate change impacts on sheltering need, and administer a state retrofit program to harden public facilities to serve as hurricane evacuation shelters.
- 1.64 State DOE: Harden public facilities to serve as hurricane evacuation shelters.
- 1.65 State HEMA: Develop a warning siren standard based on the audible range of the sirens
- 1.66 Community: Build CERT Teams
- 1.67 Department of Defense, Pōhakuloa Training Area (PTA): Build Firebreaks & Remove Unexploded Ordnance
- 1.68 Army Corps of Engineers: Remove Unexploded Ordnance
- 1.69 State of Hawai'i, Governor: Release Waipi'o Disaster Funds
- 1.70 Telecom: Provide Emergency Phones
- 1.71 State: Require Hazard Disclosure during Real Estate Transactions

MITIGATING & ADAPTING TO HAZARDS & CLIMATE CHANGE

Climate Change

SUSTAINABILITY OBJECTIVE

Partner with community stewardship groups, local stakeholders and intergovernmental agencies to reduce island-wide greenhouse gas emissions (GHGEs) by at least 80 percent from 2005 levels by 2050.

POLICY

94. Prioritize energy efficient designs, energy efficient systems, and waste reduction/reuse at County facilities.
[Rationale: Based on identified need for the County as an entity, and as a major employer and energy consumer to lead by example in reducing waste and conserving energy. Also see General Plan 3.3 (a & k); Hāmākua CDP Policy 110.]
95. Include the useful life of the infrastructure and the cost savings related to reduced energy needs in Capital Improvement Projects.
96. Partner with County, State, and private entities to develop comprehensive and coordinated strategies promoting energy and water conservation to strive for climate change resilience.
97. Consider values of natural areas for sequestering carbon and providing climate adaptation and mitigation strategies in evaluating public investments, including acquisition, siting, and design.
98. Evaluate the need and opportunities to reduce vehicle miles traveled (VMT), such as offering a range of transportation choices in new development or redevelopment projects; incentivizing connectivity between differing modes of transportation to increase modal split and linking residential and employment center land uses to reduce the need for single vehicle trips.
99. Support the development of carbon-emission standards and an incentive program aimed at achieving County carbon-emission goals.

ACTION

- 1.72 Adopt policies and strategies across all County departments to reduce GHGEs and become more resilient to the impacts of climate change, including establishing

video conferencing capabilities to allow residents and employees to participate in meetings without having to drive long distances; evaluating the feasibility for continued installation of renewable energy systems on County owned facilities; and increasing the use of alternatively fueled vehicles. [Code]

SUSTAINABILITY OBJECTIVE

Reduce vulnerability to sea level rise (SLR) for all vulnerable communities and infrastructure.

POLICY

100. Implement a minimum sea level rise assumption of 3.2 feet for budgetary, land use, and other decision-making processes.
[Rationale: Hawai'i Climate Change Mitigation and Adaptation Commission. 2017. Hawai'i Sea Level Rise Vulnerability and Adaptation Report.]
101. Use accurate and up-to-date scientific predictions and observations related to climate change impacts to guide adaptation policy and future land use decisions.
102. Support local and regional climate change modeling and monitoring programs. This may include but is not be limited to the programs designed to monitor:
 - a) Surface water quality (including temperature);
 - b) Sea level rise;
 - c) Hydrologic and geologic conditions;
 - d) Groundwater quality and levels;
 - e) Precipitation and groundwater changes.
103. Evaluate Capital Improvement Projects for resiliency, including but not limited to, sea level rise, flood and storm surge, and assure that the project's useful life and service expectations can be met in the face of projected climate change impacts.
104. Coordinate with appropriate agencies to monitor impacts which may be specific to Hawai'i County due to its unique exposure to climate change and sea level rise impacts.
105. Partner with communities to develop adaptation strategies (protection, accommodation, managed retreat, and preservation) for vulnerable areas including conducting vulnerability assessments and assessing land use and land availability.

ACTION

- 1.73 Conduct detailed vulnerability mapping of existing and planned infrastructure.

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Section 2: Infrastructure Planning

GOALS

2. Hawai'i will use progressive planning strategies to ensure communities are adequately served by safe and efficient infrastructure networks based on sound design principles that reflect a focus on environmental sustainability, social equity, and preserving community character. Infrastructure investment will be prioritized to implement land use goals.

- a) Each community is connected with multimodal options and a modernized transportation network that provides a system for safe, efficient, and comfortable movement of people and goods via well-maintained roads and integrative mass transit options.
- b) Integrated water resource management is practiced at all levels to ensure that water is treated as a resource to be conserved and reused in sanitary, equitable, and sustainable ways. Water conservation, recharge, and reuse are addressed in policy and design to focus on the use of natural systems, or engineered systems that mimic natural systems, to ensure the highest quality of water is reserved for the most valuable end use. Adequate, efficient, and dependable public and private drinking water and wastewater services are available to each community.
- c) A resource-based approach to waste management is fostered to ensure progression toward the County's zero-waste goals while ensuring adequate, safe, and sanitary disposal of waste materials.
- d) Telecommunications facilities continue to be developed or improved to provide opportunities for universal and reliable access at affordable levels of service.
- e) Energy production is progressively moving towards 100% renewable, and the County leads by example in promoting and developing energy efficient facilities and programs.

MANAGING WATER SYSTEM RESOURCES

Drinking Water Conservation

SUSTAINABILITY OBJECTIVE

Reduce water use by 130 gallons per day per person.

POLICY

106. Ensure the highest quality of water is reserved for the most valuable end use.
[Rationale: Based on Dept. of Water Supply's Water Use and Development Plan.]
107. The County shall require water conservation, recharge, and reuse measures for new large development projects in the North Kohala, South Kohala, and North Kona Districts.
[Rationale: This is adapted from a South Kohala CDP Policy 5.2.]
108. The withdrawal rate from groundwater aquifers shall not exceed 80% of the sustainable yield, until regional studies determine lower sustainability thresholds.
[Rationale: This policy is proactively addressing the issue that 80% of the sustainable yield may need assessment by the Commission on Water Resources Management (DLNR).]
109. New large developments with private water systems shall be required to follow the domestic use guidelines including appropriate limits on average daily demand.
[Rationale: According to the Department of Water Supply, domestic water use above 400GPD is considered excessive.]
110. Require developments seeking land use entitlements with private water systems to report monthly ground water use including quantity pumped, chloride (and/or conductivity) concentrations, temperature, and (pump off) water-level data.
[Rationale: The usage information on private public water systems is not complete, because not all wells are reporting to the Commission on Water Resources Management (CWRM)].
111. The County shall require verification of a long-term, reliable supply of water before applicable subdivisions are approved.
[Rationale: Based on the purpose of Maui's Water Availability Code, this will ensure future subdivisions will have a sustainable water source. This would require an assessment of water use over the life of the development.]

112. Work cooperatively with the State DLNR and communities to ensure the protection and availability of an adequate water supply in all aquifers to meet the needs of the population and anticipated growth of Hawai'i County.
[Rationale: Based on General Plan 11.2.2 (d and f).]
113. Evaluate and amend the fee schedule for water use to take into account high water use and aquifer recharge projections. Use the funds generated to pay for conservation measures and infrastructure.
114. Evaluate developing a land use overlay for water conservation areas.
115. Support implementation of leak detection programs throughout the DWS water systems.
116. Improve County water conservation practices to lead by example.
117. Support the Commission on Water Resource Management's effort to improve monthly reporting on ground water use.

ACTION

- 2.1 Develop water conservation and stormwater management guidelines for commercial, industrial and residential properties.
- 2.2 Initiate regional studies that examine aquifer system area sustainable yields and water transfers in greater depth and on a broader scale.
- 2.3 In collaboration with National Oceanic and Atmospheric Administration (NOAA), conduct further research on localized rainfall modeling to accurately assess future precipitation trends.
- 2.4 Amend the County Code to require water use reporting. [Code]
- 2.5 Develop standards for landscape and irrigation design that emphasizes water use efficiency.
- 2.6 Amend plumbing code to require the use of low-flow devices. [Code]
- 2.7 Expand water conservation programs, primarily aimed at demand-side measures in order to reduce the average consumption per user.

AGENCY ACTION

- 2.8 CWRM: Regional studies should be initiated that examine aquifer system area sustainable yields and water transfers in greater depth and on a broader scale.
- 2.9 CWRM: In collaboration with NOAA, conduct further research on localized rainfall modeling to accurately assess future precipitation trends.

MANAGING WATER SYSTEM RESOURCES

Drinking Water Quality

SUSTAINABILITY OBJECTIVE

Achieve 100% of all public and private water systems meeting safe drinking water standards.

POLICY

- 118. All new water systems (public and private) shall meet the level of standards of DOH, DWS, Fire, and subdivision code.
[Rationale: Based on General Plan 11.2.2 (b and g) and the recognized gap between various departments codes relating to water systems.]
- 119. Improvements to County water systems to meet the standards of DOH, DWS, Fire, and subdivision code shall be prioritized to serve designated urban areas.
[Rationale: Based on General Plan 11.2.2 (a, e).]
- 120. Encourage all new catchment water systems to include purification systems.

ACTION

- 2.10 Develop a pilot study to explore a monitoring and certification program in areas with high private drinking water uses including catchment water systems and private wells.
- 2.11 Develop and adopt standards for individual water catchment units.
 - a) Adopt an annual minimum rainfall requirement and amend Planning Department rules to be consistent
 - b) Amend Planning Department Rule 22 to include all variances from Section 23-84 of the Subdivision Code.

AGENCY ACTION

- 2.12 State DOH: develop standards for water catchment and private wells

MANAGING WATER SYSTEM RESOURCES

Drinking Water Prioritization

SUSTAINABILITY OBJECTIVE

Increase public water service to all urban areas.

POLICY

121. Water system improvements, including exploratory wells, shall correlate with the County's desired land use development pattern.
[Rationale: Incorporates recommendation from the General Plan Infrastructure Assessment Study with existing GP Policy 11.2.2 (a).]
122. The County Water Board shall prioritize infill development and focus source development to serve designated Urban Growth Areas.
[Rationale: Based on General Plan 11.2.2 (a, e).]
123. Water demand projections shall include all demand, including non-potable use.
[Rationale: Based on recognized gaps in water demand projections.]
124. The Department of Water Supply and the Planning Department shall coordinate priorities prior to the adoption of any new water development or land use plans.
[Rationale: Based on General Plan 11.2.2 (a, e) and on identified previous collaboration gaps between the Planning Department and the Department of Water Supply.]
125. Prioritize replacement of surface potable water sources with groundwater potable water sources.
[Rationale: Based on Federal Safe Drinking water Act (SDWA) and General Plan 11.2.2 (k)]
126. All County potable water systems should have back-up standby sources.
127. Treat all water as a public resource in community design, and integrate designs for drinking water, storm water, and recreational water needs.
128. Support community financing of private potable water systems for communities that rely on catchment and private wells for drinking water.
129. Manage water, stormwater, and wastewater as the same natural resource and related utility.

ACTION

- 2.13 Investigate alternative financing options for expanding water systems to support infill growth consistent with the County's desired land use development pattern.
- 2.14 Adopt a standard for reviewing water variance applications.
- 2.15 Develop, coordinate, and maintain a water resource program collaboratively managed by a working group of water resource and utility professionals that convenes regularly to address watershed, aquifer, and related resource issues comprehensively.
- 2.16 Amend Department of Water Supply rules to no longer issue "out of bounds" service, unless the required system improvements are provided.
- 2.17 Amend the County Water Board guidelines for issuing water commitments to consider:
 - a) Setting aside a certain reserve (e.g., 25%) of present capacity for infill development and to provide sufficient lead time to expand capacity;
 - b) Preferential facilities charges for infill development where existing facilities are underutilized;
 - c) Consistency with zoning and General Plan growth policies.
- 2.18 Amend Hawai'i County Code to require new developments to connect to existing water systems; develop longer minimum distance thresholds requiring connections and develop incentives to ensure that subdivisions connect to nearby water distances at the desired density in accord with zoning and infrastructure services. [Code]
- 2.19 Amend Planning Department Rule 22 to increase the number of allowable lots with a water catchment variance, in consideration of zoning, the size of the existing lot, and other site-specific characteristics.

AGENCY ACTION

- 2.20 DHHL: install water systems to serve beneficiaries.
- 2.21 DHHL: expand water systems to serve beneficiaries on DHHL lands located within designated Urban Growth Areas

MANAGING WATER SYSTEM RESOURCES

Storm Water Management

SUSTAINABILITY OBJECTIVE

Increase use of Low Impact Development Practices.

POLICY

130. The County shall ensure sites are planned, designed, and developed to:

- a) Mitigate direct impacts of the land development process through the use of green infrastructure or low impact site planning techniques;
- b) Protect areas that provide important water quality benefits and/or are particularly susceptible to erosion and sediment loss;
- c) Limit land disturbance activities such as clearing and grading, and cut and fill to reduce erosion and sediment loss; and
- d) Manage post-construction stormwater runoff rates, through the use of green infrastructure or low impact development stormwater management practices.

[Rationale: Based on existing HRS 226-11(2); 226-11(3); 226-11(4); 226-11(7); 226-11(8); 226-13(2); 226-13(3); 226-14(2); 226-108(2)]

131. The County shall ensure that golf course developments develop and implement grading and site preparation plans to:

- a) Develop nutrient management guidelines appropriate to Hawai'i for qualified superintendents to implement so that nutrients are applied at rates necessary to establish and maintain vegetation without causing leaching into ground and surface waters.
- b) Develop and implement an integrated pest management plan. Follow EPA guidelines for the proper storage and disposal of pesticides.
- c) Develop and implement irrigation management practices to match the water needs of the turf.

[Rationale: Based on General Plan 4.3 (j), HRS 226-11(2); 226-11(3); 226-11(4); 226-11(7); 226-11(8); 226-13(2); 226-13(3); 226-14(2); 226-108(2)]

132. Hawai'i County shall minimize impervious areas on development sites and parking areas and promote the use of permeable surfaces and landscaped areas in project designs including:

- a) porous materials

- b) natural drainage,
- c) filtration pits,
- d) Infiltration trenches, vegetated bioswales, permeable pavers

[Rationale: Based on green infrastructure best practices and recommendations and the recognition that urban runoff can be greatly reduced, and infiltration maximized by installing rain gutters and directing them to permeable surfaces, and drywells or other retention structures to collect and store runoff for reuse.]

- 133. Incorporate green infrastructure or passive alternatives that maximize land preservation over impervious or active infrastructure.

ACTION

- 2.22 Develop incentives for new development/redevelopment to pursue certification for “green” site planning, construction, and post-construction practices.
- 2.23 Adopt Low Impact Development Practices to address small-scale stormwater management.
- 2.24 Adopt code amendments to require the use of recommended best management practices (BMPs), including incentives, in all new large developments as well as large commercial sites. [Code]
- 2.25 Prior to the County reaching Municipal Separate Storm Sewer System (Ms4) requirements, conduct a feasibility study to create a County Stormwater Utility under the Department of Water Supply.
- 2.26 Update the Department of Public Works Storm Drainage Standards (1970) to reflect current data and to incorporate strategies of green infrastructure and low impact development.

MANAGING WATER SYSTEM RESOURCES

Recycled Water Expansion

SUSTAINABILITY OBJECTIVE

Increase the use of non-potable water systems for irrigation.

POLICY

- 134. Require installation of non-potable water systems for large developments.
[Rationale: Based on water conservation best practices.]
- 135. Encourage and incentivize the collection of rainfall for non-potable use.
- 136. Facilitate greywater reuse systems through code amendments and through partnering with DOH for regulatory changes and incentives. [Code]

ACTION

- 2.27 Develop a water resource strategy for efficient agricultural and urban water use and reuse.
- 2.28 Install non-potable systems, such as reclaimed wastewater, brackish groundwater and untreated surface water in the proximity of priority Urban Growth Areas for non-potable water uses.
- 2.29 Conduct supply and demand studies to determine a Level of Service for non-potable water needs.
- 2.30 Amend the concurrency requirements to require installation of non-potable water systems for large developments. [Code]
- 2.31 Increase Water Reuse through code requirements for large developments and retrofitting existing systems.

MANAGING WATER SYSTEM RESOURCES

Wastewater & Environmental Quality Prioritization

SUSTAINABILITY OBJECTIVE

Reduce sewage spill events.

Achieve 100% of all priority area cesspools upgraded to a septic system or connected to a sewer system.

POLICY

- 137. **Hawai'i** County shall not allow municipal or private wastewater systems to negatively impact watershed quality or shoreline resources.

[Rationale: Based on Clean Water Act, Safe Drinking Water Act, and General Plan 4.4(a); 11.1.3(a); and 11.6.3(f)]

138. Ensure municipal wastewater systems serve designated Urban Growth Areas with the capacity to accommodate projected population growth.

[Rationale: Based on identified affordable housing development constraints, urban service gaps, and existing General Plan Policy 11.6.2 (a); the Sewerage Study for All Urban and Urbanizing Area of the County of Hawai'i (1970); and the Water Quality Management Plan for the County of Hawai'i (1980)] .

139. The Department of Environmental Management and the Planning Department shall coordinate priorities prior to the adoption of any new wastewater development or land use plans.

[Rationale: Based on General Plan Policy 11.6.2 (a) and identified previous collaboration gaps between the Planning Department and the Department of Environment Management.]

140. Prioritize developing a multipronged approach to wastewater infrastructure funding, including proactively seeking grant funding for wastewater system expansion, improvements, and new development.

[Rationale: Based on identified funding gaps and General Plan policy 11.6.2 (d).]

141. Enforce existing sewer hookup requirements.

[Rationale: Based on consultation with Department of Environmental Management and identified gaps in sewer hookup percentages in certain serviced areas, and lack of enforcement of existing Hawai'i County Code Section 21-5].

142. Ensure wastewater fees reflect actual costs for service, maintenance, and future improvements.

[Rationale: Based on consultation with Department of Environmental Management. Hawai'i County currently has some of the lowest sewer rates in the country and the department subsequently does not have an adequate budget to address facility or service expansion to meet projected growth.]

143. Ensure that wastewater systems and improvements are designed and functioning to maximize system efficiencies, prevent accidental leaks or spills, and provide sanitary, reliable wastewater treatment that is not negatively impacting natural resources.

[Rationale: Based on Clean Water Act, Safe Drinking Water Act, and General Plan 4.4(a); 11.1.3(a); and 11.6.3(f)]

144. Partner with the Department of Health to better monitor private wastewater resources and advance progressive wastewater technology and regulations.

145. Integrate stormwater and wastewater management into Department of Water Supply to strive for water resource management that is comprehensive and as efficient as possible.

ACTION

- 2.32 Review, assess, and amend codes relating to sewer connection requirements (Hawai'i County Code Section 21-5, 21-6, 23-85 and 25-2-46 Concurrency) to ensure wastewater issues and requirements are addressed in a sustainable and socially equitable way. [Code]
- 2.33 Develop a wastewater master plan with a clear prioritization method for wastewater system expansions and improvements based on criteria involving land use, projected growth, social equity, and environmental factors.
- 2.34 Perform a study to assess individual wastewater systems (IWS) in unsewered urban coastal communities (within the SMA) for pollution impacts from private wastewater systems and develop plans to improve, connect, or develop new wastewater systems for impacted communities.
- 2.35 Perform a study to assess individual wastewater systems (IWS) in unsewered urban growth areas to assess rate of failures/negative impacts, determine rates of large capacity cesspool still in use, and to develop plans to improve, connect, or develop new wastewater systems for unsewered urban communities.
- 2.36 Develop plans and funding mechanisms to improve capacity/expand existing municipal wastewater systems to accommodate future growth;
- 2.37 Proactively seek opportunities for public-private partnerships for wastewater development;
- 2.38 Facilitate the use of infrastructure improvement districts and other types of localized funding mechanisms to fund improvements.
- 2.39 In coordination with Department of Health Wastewater Branch, amend Hawai'i County Code (23-85(a)) to extend the minimum distance required for subdivisions to connect to existing sewer systems. The recommended requirement is: "sewer lines shall be installed where the subdivision is within one thousand three hundred twenty lineal feet (1/4 mile) of the existing sewer system." [Code]
- 2.40 Review and amend Hawai'i County Code Section 21 39-45 (develops a sewer connection loan program) for legal implications to facilitate implementation. [Code]

- 2.41 Develop wastewater cost valuation in service fees (similar to water model fee structure).
- 2.42 Develop a criteria-based infrastructure prioritization tool to develop new or expand existing municipal wastewater systems. Base these priority areas on designated urban growth boundaries, urban zoning and density, population trends and anticipated growth, health/safety, and environmental factors.
- 2.43 Develop innovative wastewater systems at a cost-effective scale for small communities.
- 2.44 Amend Hawai'i County Code (including developing criteria and exceptions) to require connecting to accessible private sanitary sewer treatment facilities (PUC regulated and with existing capacity) to Section 21-5 (a) instead of only requiring connection to public sewer. [Code]
- 2.45 Amend Hawai'i County Code Section 21-26-1(a) requiring "all sewer extensions shall be approved by resolution of the County council" to read, "all sewer extensions outside of Urban Growth Areas shall be approved by resolution of the County council." [Code]
[Rationale: reducing sewer development hurdles is imperative to developing adequate infrastructure within urban area. This ensures that if for some reason, sewer extensions are proposed outside of the UGA, Council will have discretionary oversight.]
- 2.46 In coordination with Department of Health Wastewater Branch, reevaluate the development threshold for requiring new wastewater treatment plants and other requirements set forth in section HAR 11-62-31.1(a) (1) (B) and amend County sewer requirements accordingly. [Code]

INCREASING RESOURCE RECOVERY & REDUCING WASTE

SUSTAINABILITY OBJECTIVE

Waste reduction, resource reuse and recycling are maximized to achieve 50% diversion of recoverable materials from landfills.

POLICY

- 146. The County shall proactively pursue funding that will ensure continued progression toward zero-waste goals.

[Rationale: Based on recommendations from the Zero Waste Implementation Plan (2009), the County of Hawai'i Integrated Resources and Solid Waste Management Plan Update: The Path to Zero Waste (2009).]

147. Optimize recoverable material diversion from landfill disposal by increasing percentage rates for diversion through waste reduction, recycling, and reuse.
148. Develop and promote take-back programs for appliances and other difficult to dispose of materials.
149. Composting at farms should be encouraged and facilitated.
150. Encourage salvage and reuse of building materials and elements when demolition is necessary or appropriate.
151. Support expansions to the organic material (green waste) recycling program to include drop-off and pick-up locations at all rural transfer stations.
152. The County should consider EPA's Comprehensive Procurement Guideline program as a model for purchasing products that use materials recovered through recycling.
153. Continue to evaluate the feasibility of waste to energy technology.
154. Promote opportunities for a circular economy.

ACTION

- 2.47 Develop and incentivize economic opportunities for diverted materials.
 - a) Continue to develop, manage, and partner with community groups in managing recycling and reuse centers at County facilities
 - b) Contract with, and or, make space available for cottage recycling operations in close proximity to transfer stations and County landfills.
- 2.48 Evaluate and amend Hawai'i County Code as appropriate with the following strategies to maximize landfill diversion and deal with materials:
 - a) Source Separation Ordinance: Revise Section 20-43 to reflect resource recover objectives and material separation rules, including evaluating the size restrictions reflected in Section 20-43 (b) (1), and the prohibited materials from Section 20-43 (b) (2).
 - b) Codify prohibition of organic material (green waste) disposal at the landfill.
 - c) Construction & Demolition (C & D) Recycling Ordinance
 - d) Consider Take-back Ordinances (for items that are difficult to recycle or compost).

- e) Develop an E-Scrap ordinance: all electronic discards should be designated as reuse items which essentially bans anything with a plug from being landfilled.
 - f) Codify County facility ordinance to require recycling at all County offices, facilities, and base yards.
[Rationale: Based on HRS 342G-15(a)4; and COH Resolution 30-07 “Requesting that the Mayor issue a Directive to Implement Recycling Programs at all County Agencies and Departments”]
 - g) Transition to eliminate the sale or use of polystyrene foam (Styrofoam) and single-use plastic food containers and other single-use plastics. [Code]
- 2.49 Develop programs to require advance disposal fees for specific products such as e-waste and new vehicles purchased in or shipped to Hawai‘i. The fees from this should be used to fund resource management and disposal costs. (An example of a currently successful advance disposal fee (ADF) is the State Beverage Container Deposit Program).
- 2.50 Conduct pilot studies to facilitate waste recovery and increase diversion rates. The following types of pilot programs are recommended:
- a) Curbside waste, recycling, and resource pick-up in priority urban areas;
 - b) Partner/coordinate to facilitate the private use of large recycling roll-off bins in rural areas.
- 2.51 Reevaluate and initiate code changes to the fee structure for solid waste for residential and commercial uses. [Code]
- 2.52 Facilitate UH and/or Forest Service to complete necessary studies on local materials for use in construction.

AGENCY ACTION

- 2.53 Amend Hawai‘i Revised Statutes to include green waste, composting, and fertilizer yards (utilizing only manure and soil) for commercial use as permitted uses on agriculturally zoned land.

COMMUNITY ACTION

- 2.54 Host composting and recycling workshops in collaboration with agencies /organizations such as Department of Environmental Management, Recycle

Hawai'i, and the University of Hawai'i College of Tropical Agriculture & Human Resources (CTAHR) Cooperative Extension Service.

- 2.55 Partner with the County to manage recycling/reuse centers at County Facilities.

SUSTAINABILITY OBJECTIVE

Eliminate illegal dumping sites.

POLICY

155. Ensure that redesign plans for landfill and transfer stations provide adequate space for Resource Recovery (RR) Stations and ensure that new transfer stations are sited and developed with capacity for Resource Recovery.

- a) Resource Recovery Stations provide organic material (green waste) and recycling options.
- b) All drop-off and transfer stations must be designed/redesigned with a flow pattern and educational signage.

[Rationale: Based on recommendations from the Zero Waste Implementation Plan (2009), the County of Hawai'i Integrated Resources and Solid Waste Management Plan Update: The Path to Zero Waste (2009), and General Plan policy 10.5.2 (c)]

156. Ensure waste and resource recovery facilities and equipment do not harbor, spread, or introduce harmful or invasive species.

[Rationale: Based on community concerns expressed at public meetings and existing General Plan policy 4.3 (i).]

157. Site new solid waste/resource recovery facilities in appropriate areas that serve the needs of population centers but that do not negatively impact the environment or surrounding neighborhood.

158. Increase education programs for waste recovery options.

159. Reduce illegal dumping and littering through education programs and code enforcement.

ACTION

- 2.56 Develop and implement an environmental control program that includes the following:

- a) Regularly monitor and test for polluted runoff and leachate at waste recovery facilities, and develop effective mitigation protocols for

eliminating pollution at these sites, especially those located near sensitive receptors such as streams;

- b) Regularly monitor and implement protocols to mitigate for vector control and invasive species management to ensure that all solid waste facilities, transport vehicles, and equipment are not harboring or spreading harmful species that pose risks to human or environmental health.
- 2.57 Revise enforcement protocols and revise code to empower police officers to fine litterers and illegal dumpsites and junkyard owners.
 - 2.58 Revise Hawai'i County Code Section 20-45 (b) and Zoning Code Section 25-2-31 requiring conviction of violation by a jury trial. [Code]
 - 2.59 Develop a Litter Abatement Program aimed at education and community group participation in reporting and preventing littering and illegal dumping.
 - 2.60 Develop a County clean-up program for special waste areas, i.e. junkyards, to ensure proactive removal of materials that pose environmental and public health hazards.

COMMUNITY ACTION

- 2.61 Educate neighborhood watch groups and other community groups about how to actively identify and report littering and illegal dump sites to the Police Department and to the Department of Environmental Management. Raise awareness of the issue through the use of outreach and social media tools to report sites and offenders. (See more on how to report littering and dumps sites here: <http://www.Hawaiiizerowaste.org/info/illegal-dumping>)
- 2.62 Organize community clean-up events for illegal dump sites and other polluted areas

IMPROVING TRANSPORTATION SYSTEMS

Transportation Planning & Financing

SUSTAINABILITY OBJECTIVE

Reduce individual vehicle miles traveled (VMT) by 3% by facilitating walking, bicycling, and other energy-efficient and safe alternative modes of transportation.

POLICY

160. The County shall use performance targets, measures, and reporting to allow transparency for decision makers and the public as the County transitions to the Performance-Based Planning and Programming approach mandated by the US DOT and HDOT.

[Rationale: Based on identified gaps between County of Hawai'i practices and the Department of Transportation recommendations. See also MAP-21.]

161. There shall be coordinated planning of Federal, State, and County street systems to meet program goals of the other elements such as historic, recreational, environmental quality, and land use.

[Rationale: Based on General Plan 13.2.3 (g).]

162. Plan for present traffic and future demands, including the programmed development of mass transit programs for high growth areas.

[Rationale: Based on identified gaps in County transportation planning, particularly in addressing mass transit needs in high growth areas and on existing General Plan policy 13.1.3 (b).]

163. At a minimum, the County shall plan, site, and develop roads, bridges, and highways to:

- a) Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss;
- b) Limit land disturbance such as clearing, grading and cut and fill to reduce erosion and sediment loss; and
- c) Limit disturbance of natural drainage features and vegetation, including mitigating impacts of stream crossings.

[Rationale: Based on HRS 226-11(2); 226-11(3); 226-11(4); 226-11(7); 226-11(8); 226-13(2); 226-13(3); 226-14(2); 226-108(2); 226-17(10).]

164. Prioritize transportation investment to expand the multimodal transportation system.

[Rationale: Based on Maui 2012.]

165. Evaluate all alternatives to preserve quality of life before widening roads.

[Rationale: Based on Maui 2030.]

166. Require new developments to contribute their pro rata share of local and regional infrastructure costs.

[Rationale: Based on Maui 2030.]

167. In planning, designing and constructing highway and road improvements, transportation agencies should balance conservation of the area's natural, historic and scenic qualities with transportation objectives. In some cases, it will be preferable to accept a lesser

design speed or capacity in order to maintain the rural character and appearance of the Island.

168. Incorporate pollution prevention procedures into the operation and maintenance of roads, highways, and bridges to reduce pollutant loadings to surface waters.
169. Support designing all transportation facilities, including airport, harbor, mass-transit stations, etc., to reflect local and/or Hawaiian architecture.
170. Promote transportation options to encourage the use of multimodal travel.
171. Develop an Asset Management Program aimed at utilizing maintenance plans for pavement, bridges and other road infrastructure to prolong the life of our transportation system as well as reduce its whole life cost.
172. Utilize transportation-demand management as an integral part of transportation planning.
173. Encourage civic participation in an Adopt-a-Street program where moderate landscaping and street cleaning can be done by community groups.
174. Use the road improvement program in conjunction with the Asset Management program in developing priorities for the six-year Capital Improvement Program, including phased implementation.
175. Work with various non-profit agencies to coordinate transportation and multimodal opportunities.
176. Identify and evaluate transportation strategies to address energy and climate issues.
177. Investigate various methods of funding transportation improvements, including private sector participation, to meet the growing transportation needs of the island. (Including but not limited to impact fees, taxes, fare adjustments, dedicated sources of funding, improvement districts, and assessments).
178. Support and provide technical assistance to assist in the development of 'road improvement districts' in order to finance road improvements.

ACTION

- 2.63 As part of the Asset Management Program, create inventory databases for transportation facilities, with information including but not limited to pavement section thickness and type, street lights, street signs, signals, bridges and bridge types, drainage facilities and landscaping to use as a basis of development and implementation of Maintenance Plans, such as a Pavement Preservation (Paving

Cycle) Plan, Bridge Rehab and Replacement plan, Culvert Cleaning Plan and Landscape Maintenance and Grass Cutting Plan.

- 2.64 Develop a roads-in-limbo improvement and adoption process according to population, usage, alternative route/connectivity needs, and safety assessments.
- 2.65 Amend the Hawai'i County Code to increase bicycle and pedestrian-friendly development. [Code]
- 2.66 Provide more emergency call boxes along State highways.
- 2.67 Work with the owners of private roads and local community groups to help identify and develop road management agreements that mitigate road closures and access disagreements for public access and/or residential use.
- 2.68 Collaborate with the State to establish a clear agreement of the ownership and maintenance of the old homestead roads.
- 2.69 Develop a financing plan for improvements and identify tools for maintenance programs.
- 2.70 Investigate appropriate parking fees in urban and commercial locations.

AGENCY ACTION

- 2.71 Partner with Department of Transportation to identify areas vulnerable to rockfall and shoreline erosion in the highway right-of-way and prioritize funding for mitigation.
- 2.72 Request that the State allocate in the State Transportation Improvement Plan (STIP) a larger share of Federal "flex funds" (i.e., the Section 402 program funds) for projects related to highway capacity improvements, transit-related and alternative travel mode improvements, including pedestrian and bicycle safety.

IMPROVING TRANSPORTATION SYSTEMS

Transportation Safety

SUSTAINABILITY OBJECTIVE

Strive to achieve zero traffic deaths and serious injuries on County of Hawai'i roadways.

POLICY

179. Prioritize interdepartmental coordination and accountability of traffic safety through education, enforcement, engineering, encouragement, and evaluation. Focus on systemic transportation changes rather than on individual behavior changes in improving road and pedestrian safety.
[Rationale: Based on recommendations from Vision Zero.]
180. Commit to an equitable approach and outcomes, including prioritizing engagement and investments in traditionally under-served communities and adopting equitable traffic enforcement practices.
[Rationale: Based on recommendations from Vision Zero.]
181. Develop a Freight Masterplan to focus on safe reliable cross island truck movement to support the County's economic development.
182. Improve public health and safety by reducing speeding-related fatalities and injury.

ACTION

- 2.73 Partner with Federal, State, and private entities to develop demographic, geographic and modal -specific safety outreach materials including Safe Routes to School, Be Super Safe and Pedestrian Safety for Seniors.
- 2.74 Develop a safety improvement program that identifies high crash locations, hazardous substandard sections of roadway, and drainage problems.
- 2.75 Create a 20 MPH Zone Program, reducing speed limits on residential and local streets with high collision (crash) history to 20 MPH. Most 20 MPH Zones will be installed near schools and parks.
- 2.76 Review arterial speed limits and Reduce to 30 mph or lower paired with traffic calming devices.
- 2.77 Map and regularly update the County's fatal and serious injury crash locations, to use and guide priority action and funding.
- 2.78 Develop educational programs to increase safety for motorists, pedestrians and bicyclists.

IMPROVING TRANSPORTATION SYSTEMS

Roadway Design

SUSTAINABILITY OBJECTIVE

Achieve a roadway system that employs all modes of transportation for the safe, efficient and comfortable movement of people and goods across our island.

POLICY

183. Roadway designs and improvements shall accommodate pedestrian-friendly, multimodal design, and landscaping.
[Rationale: Based on existing General Plan 13.2.3 (l), Kona Action TRAN-3.3b, Hāmākua CDP Policy 70.]
184. Prioritize roadway drainage improvements in flood-prone areas and incorporate Low Impact Development/Green Infrastructure strategies, as appropriate.
[Rationale: Based on identified drainage issues during flooding events and existing General Plan 13.2.5.9.2(b), and Kaʻū CDP Policy 95.]
185. Ensure that roadway-design criteria and standards are compatible with surrounding neighborhoods and the character of rural areas.
[Rationale: Based on Kaʻū CDP Policy 74, 75, and 77, Hāmākua CDP Policy 72, and Maui 2030]
186. Provisions for on-street parking shall be evaluated during the design of road systems.
[Rationale: Based on identified parking issues in urban areas, including Hilo Downtown Multimodal Plan recommendations and General Plan 13.2.3 (h).]
187. Highways shall not be wider than four lanes and should be limited to the most populated areas typically connecting residential areas with employment centers.
[Rationale: Based on the Kauai General Plan.]
188. Develop rural road standards to ensure appropriate levels of public safety.
[Rationale: Based on identified issues related to road standards in rural areas, General Plan 13.2.3 (m), Kaʻū CDP Policy 74, 75, and 77, Hāmākua CDP Policy 72.]
189. Incorporate, where appropriate, bicycle routes, lanes, and paths within road rights-of-way in conformance with The Bikeway Plan for the County of Hawaiʻi.
[Rationale: Based on identified gaps in bicycle accesses, Bikeway Plan for CoH, General Plan 13.4.3 (c), Hāmākua CDP Policy 66, and Kona CDP TRAN-1.1.]

190. Use native landscaping for highway improvements and connectivity points, emphasizing the retention of native vegetation.
[Rationale: Based on Hāmākua CDP Policy 72, Kaʻū CDP Policy 77, North Kohala CDP Strategy 4.8, and Puna CDP 4.4.1.c.]
191. Landscaping shall be provided along streets where regular rainfall or reclaimed water are available for irrigation, and arid species or xeriscape landscaping shall be the preference where reclaimed water and rainfall are not available.
[Rationale: Based on Kona CDP TRAN–3.2, 3.3; Kauai GP, and Environmental Protection Agency Greenspace recommendations.]
192. Street Standards
- a) Primary Arterial: Includes major highways and parkways that move vehicles in large volumes and at higher speeds from one geographic area to another; highest traffic volume corridor. Designed as a limited access roadway. Primary arterials shall have a minimum right-of-way of 120 feet.
[Rationale: Gp13.2.4.a]
 - b) Secondary Arterial: A street of considerable continuity that is primarily a traffic artery between or through large areas; interconnect with and augment primary system. Designed as a limited access roadway. Secondary arterials shall have a minimum right-of-way of 80 feet.
[Rationale: Gp13.2.4.b]
 - c) Major Collector: Any street supplementary to the arterial street system that is a means of transit between this system and smaller areas; used to some extent for through traffic and to access abutting properties; collect and distribute traffic between neighborhood and arterial system. Major collectors shall have a minimum right-of-way of 60 feet.
[Rationale: Gp13.2.4.c]
 - d) Local Streets-commercial/industrial: Local streets within commercial and industrial areas shall have a minimum right-of-way of 60 feet.
[Rationale: Gp13.2.4.d]
 - e) Minor Collector and Local Streets: Minor collectors are used at times as through streets and for access to abutting properties. The principal purpose of a local street is to provide access to property abutting the public right-of-way.
[Rationale: Gp13.2.4.e]
193. All subdivisions, including condominium property regimes (CPRs) and planned unit developments (PUDs), shall conform to connectivity standards in HCC 23 of the Hawaiʻi County Code to disperse traffic and integrate new development with the existing fabric

of the community.

[Rationale: Based on Ka'ū CDP Policy 94, Hāmākua CDP Policy 65, and Kona CDP Policy TRAN-2.1.]

194. Prioritize intersection improvements with roundabout designs to incorporate safer access through intersections, steady flow of traffic, lower traffic speeds, and safer pedestrian crossings.

[Rationale: Based on current transportation design best practices, Smart Growth America recommendations, and Puna CDP 4.4.1.a.]

195. County of Hawai'i roadway design standards should be updated and revised to accommodate pedestrian-friendly, multimodal design (including non-motorized facilities), future technologies, traffic calming design, and include low-impact development/green infrastructure strategies.
196. Incorporate traffic-calming features into highway design in preference to signage and signalization, where possible.
197. Incorporate Low Impact Development (LID) and green infrastructure strategies to address drainage in roadway design.

ACTION

- 2.79 Reevaluate on-site and off-site parking requirements in commercial town centers and amend code appropriately. [Code]
- 2.80 Amend Hawai'i County Code Chapter 23 Subdivision Code to incorporate connectivity standards, updated roadway design standards, and various related policies from the Community Development Plans and town/village plans. [Code]
- 2.81 Develop guidelines for a right-of-way landscaping program, including maintenance. Landscaping along public rights-of-way should be of native species appropriate to the location and natural environment.
- 2.82 Collaborate with Department of Transportation to make intersection improvements along highways to allow safer access, giving preference to the use of roundabouts; and to incorporate traffic-calming features into highway design in preference to signage and signalization, where possible.
- 2.83 Encourage Department of Transportation to incorporate passing zones, turn lanes, and merge lanes where feasible to improve safety.
- 2.84 Collaborate with Department of Transportation to develop and use right-of-way landscape guidelines for highway improvements on State owned routes.

IMPROVING TRANSPORTATION SYSTEMS

Multimodal Transportation & Connectivity

SUSTAINABILITY OBJECTIVE

Improve roadway connectivity to increase efficiency, walkability, and alternative routes for emergency access.

POLICY

198. The County shall establish a corridor planning/management program that is data driven and uses performance-based targets and outcomes to help prioritize various multimodal projects. Design and selection of these projects shall use a context sensitive process utilizing the various Community Development Plans as guidance to increase access to opportunity while promoting health and wellness through active transportation options. [Rationale: Based on Hele Mai Maui 2040 -Maui Metropolitan Planning Organization.]
199. The Bikeway Plan for the County of Hawai'i (1979) shall be updated to include the development of a safe and usable bikeway system throughout the island; or incorporate the bikeway into an island wide comprehensive transportation plan. [Rationale: The current bike plan is from 1979. See also Downtown Hilo Multimodal Master Plan 2018, General Plan 13.2.3 (p) and 13.4.3 (c).]
200. Develop alternative means of transportation to provide alternative mobility for minors, non-licensed adults, low-income, elderly, and people with disabilities.
201. Create a multimodal circulation network plan for each urban community to best direct future improvements and needs. This network plan could be created in coordination with a CDP process.
202. Develop intermodal connections to facilitate the transfer between modes of travel, such as Automobile/Transit and Bike/Transit Transfer. Transit stations or transit hubs and nearby park and ride facilities (including bicycle storage) must be built to ameliorate the traffic congestion in key urban centers.
203. Improve the integration of transportation and land use planning in order to optimize the use, efficiency, and accessibility of existing and proposed transit systems.
204. Designate new connectivity points for local traffic roads and create redundant routes for existing highways, utilizing existing routes where possible, that can also serve as emergency and evacuation routes.

205. Use traffic demand management to aide in reducing traffic congestion.

ACTION

- 2.85 Develop a comprehensive, performance-based, island-wide multimodal transportation circulation plan and program that identifies the location and operation of automobiles, proposed arterials and collectors, mass transit facilities, bicycle and pedestrian systems, in coordination with appropriate Federal, State, and County agencies. The plan should show intended interconnections, plan and preserve transportation corridors, budget public improvements, etc.
- 2.86 Establish and coordinate the setting of multimodal transportation performance targets and measures with the designated responsible parties from Planning, Transit, and Department of Public Works (Engineering & Traffic Divisions) to ensure that the data measured is consistent, significant, measurable, achievable, reasonable and timely.
- 2.87 Establish bicycle, pedestrian, and equestrian travel ways to link up communities while also establishing alternative travel ways within individual communities.
- 2.88 Identify government roads (including roads-in-limbo, 'paper roads' and train infrastructure remnants) with public access value for trails. If these are being obstructed by private parties or other agencies, collaborate to remove the obstructions.

AGENCY ACTION

- 2.89 Partner with Federal, State, and private entities to identify and establish alternative routes and connections.
- 2.90 Encourage improvements to pedestrian access to and around schools and between residential areas and school and library facilities.
- 2.91 Encourage businesses to promote alternative transportation options for resident and visitor use.
- 2.92 Implement Bike Plan Hawai'i.
- 2.93 Implement Statewide Pedestrian Master Plan.

IMPROVING TRANSPORTATION SYSTEMS

Bridges

SUSTAINABILITY OBJECTIVE

Develop an island wide bridge maintenance program that clearly sets safety and functional priorities for bridge maintenance, improvements, and replacements.

POLICY

- 206. Maintain the unique features of historic bridges, while balancing safety needs and preserving historic and scenic character.
[Rationale: Based on Hāmākua CDP Policy 67, and Kauai General Plan.]
- 207. Prioritize the replacement of deficient and inadequate bridges and maintain pedestrian/bicycle access across bridges.
[Rationale: Based on identified County bridge deficiencies listed in the Federal registry, and Hāmākua CDP Policy 67.]
- 208. Design new bridges and bridge improvements to accommodate and not negatively impede identified scenic resources.

ACTION

- 2.94 Create a both bridge repair/replacement and historic preservation priority list to balance safety with the preservation of historic sites and scenic character.

AGENCY ACTION

- 2.95 Encourage safe pedestrian/bicycle access on new or rehabilitated highway bridges.

IMPROVING TRANSPORTATION SYSTEMS

Mass Transit

SUSTAINABILITY OBJECTIVE

Achieve a reliable mass transit system that serves the transportation, employment and social needs of our County to attract a 50% increase in ridership.

POLICY

209. Prioritize expansions to the paratransit and shared ride taxi programs for the growing elderly and disabled populations to ensure equitable access to services is available for all.
[Rationale: Based on identified needs and projected future needs for aging populations. Also see Puna CDP 4.2.2.b, Expanding Transportation Opportunities in Hawai'i Island (2014 Kohala Center); Mass Transit Authority 2018, General Plan 13.4.3 (d).]
210. Bus maintenance facilities shall be developed at or near transit hubs.
[Rationale: Based on Mass Transit Agency 2018, Kona Action TRAN-1.4c, and General Plan 13.1.3 (e).]
211. Transit infrastructure (e.g., bus stops, bus pullouts, waiting benches and shelters, signs) shall be adequate and upgraded along existing and future transit routes.
[Rationale: Based on policies from Hāmākua CDP Policy 75, 76, Kauai GP, Mass Transit Agency 2018, and M2012.]
212. Identify, preserve, and/or acquire corridors for future transit use, including but not limited to multimodal corridors and require new development to provide rights-of-way (ROWs) to accommodate transit services.
213. Create transportation hubs and bus stops with amenities that provide riders comfort and safety and that help support community and village gathering places.
214. Facilitate the transfer between modes of travel, such as bike/transit transfer, and install racks on all buses to carry bicycles and surfboards, and develop bicycle lockers at transit hubs.
215. Maximize regular and paratransit service to the following:
- a) Town centers, commercial districts, and employment centers.
 - b) Airports and cruise ship terminals.
 - c) University and adult education centers
216. Coordinate mass transit schedules and routes so as to accommodate school schedules such as after school activities and sports.
217. Public transportation is improved and expanded in communities with the highest socioeconomic needs, according to the Hawai'i Health Matters
218. The County's public transit system accommodates redeployment for emergency evacuations.
219. Develop a program to replace all fossil-fuel vehicles in the mass transit fleet with renewable energy alternatives.

ACTION

- 2.96 Fund and implement the Transit and Multimodal Transportation Master Plan (2018) and/or most recent County transit master plan.
- 2.97 Launch a public education campaign promoting transit services, tailoring them to target populations such as youth, commuters, and the elderly.
- 2.98 Expand the staff of the Mass Transit Agency to provide greater support for public relations, route planning and coordination, technical operations, and fleet management.
- 2.99 Investigate other incentives to increase ridership, such as convenient bus ticketing systems, reduced monthly rates for residents and special needs populations, adding airport and post office service, tourist passes, and purchase tickets online or mobile applications.
- 2.100 Provide alternative services, such as park-and-ride service, express commuter routes, shuttle vans, circulation routes, flex service, zone paratransit service, and hub and spoke service.
- 2.101 Identify locations, design, and services to be provided at the major transit hubs and stations.
- 2.102 Amend the County subdivision and development regulations to require, where appropriate, transit-supportive roadway infrastructure. [Code]
- 2.103 Create and fund a purchasing schedule to replace and expand the County's bus fleet, including alternative energy options for all vehicles in the fleet.
- 2.104 Upgrade equipment on all buses, such as bicycle racks and technology for transit mobile application.
- 2.105 Develop a bus stop program and schedule to implement upgrade of bus stops each year, to include benches, rider information, and shelters as needed.
- 2.106 Identify alternative funding sources and create a stable level of funding for operating and capital programs.
- 2.107 Upgrade and expand maintenance facilities as needed to accommodate upgraded and expanded fleet.
- 2.108 Implement technology to provide real time mass transit information.

AGENCY ACTION

- 2.109 Increase inter-agency coordination in planning for future transit needs between MTA, the Department of Planning, State Department of Transportation, Department of Public Works, Future Island MPO, and other applicable agencies.
- 2.110 Cultivate public-private partnerships to reduce operational expenses and develop programs, such as employer and school sponsored bus passes.
- 2.111 Promote staggered work hours and telecommuting with major employers and institutions to reduce peak period traffic, starting with state and County agencies and including UHH.
- 2.112 Implement Rideshare Program for County employees and promote ride-sharing, van-pools, and car-pooling.

IMPROVING TRANSPORTATION SYSTEMS

Airports & Harbors

SUSTAINABILITY OBJECTIVE

Improve airports, harbors and navigation aids to address recreational and tourism opportunities that serve passengers, freight movement and general transport.

POLICY

- 220. Future land uses in the vicinity of airports and harbors should have an adequate open space buffer and/or be compatible with the anticipated noise exposure and industrial nature in the vicinity.
- 221. Explore all options to protect the traditional, subsistence, and recreational uses of small boat harbors and mitigate harbor-upgrade impacts to uses where feasible.
- 222. Support the State's objectives to acquire rights within the runway clear-zones, limit heights within approach zones, and restrict noise-sensitive uses within designated noise contours determined by the State.
- 223. Encourage pedestrian-oriented gathering places around harbors and small boat harbors.
- 224. Explore and encourage appropriate reuse for former airport facilities.

225. Encourage economically thriving and environmentally sensitive small boat harbors accommodating resident and business activity, including fishing, recreation, and tour boats.

ACTION

- 2.113 Partner with the State to upgrade and maintain smaller recreational boat launches island wide.
- 2.114 Create a strategic improvement plan for County owned and/or managed boat harbors and develop an island wide needs assessment to better serve regional gaps in ocean accesses.

AGENCY ACTION

- 2.115 Implement State plans for transportation terminals and related facilities in conjunction with the overall transportation system.
- 2.116 The State Department of Health should enforce and strengthen pollution regulations and programs at harbors and ports, including reduced disposal of waste and prevention of spills.
- 2.117 The State should provide efficient, adequate, and affordable parking and transit connections within and around airports and cruise ship harbors.
- 2.118 Encourage the modernization and maximized use/capacity of airports and harbors, including resistance to damage from natural hazards and disasters and separation of cargo and passenger uses.
- 2.119 The State should support and provide adequate facilities for secondary airports and small boat harbors.
- 2.120 The State should provide boat owners with adequate pier slips, utilities, repair facilities, waste-disposal capabilities, and yacht berthing/launch/recovery services.

EXPANDING TELECOMMUNICATION ACCESS

SUSTAINABILITY OBJECTIVE

Increase broadband options to provide affordable access to service all communities.

POLICY

226. Hawai'i County shall continuously improve County government's use of broadband communications and digital technology to educate and provide public services with a focus on digital access to County geographic information systems, health, permitting services, public safety, emergency communications, and to ensure that all County policies, plans, ordinances, departmental rules, and other jurisdictional information is available online.
[Rationale: Based on identified gaps in County online communication and recommendations in USDA Broadband initiatives and the Federal Communications Commission.]
227. Prioritize broadband access and seek to progressively improve speeds to keep pace with technological advances.
[Rationale: Based on identified gaps in network services and recommendations in USDA Rural Broadband initiatives and the Federal Communications Commission. See also Hāmākua CDP Kōkua Action 64, and Puna CDP Goal 3.4.1 (b).]
228. Hawai'i County shall advocate for and seek grant funding to support service diversity, redundant network capacity, and to provide improved communications to outlying rural areas and other underserved or unserved communities.
[Rationale: Based on identified gaps in network services in rural areas and recommendations in USDA Rural Broadband initiatives and the Federal Communications Commission.]
229. Telecommuting and home-based businesses that rely on the internet shall be considered permitted accessory uses to residential uses when operated in compliance with cottage industry performance standards. [Land Use][Econ]
[Rationale: Based on identified needs and economic opportunities, particularly in rural areas. See also Hāmākua CDP Community Objective 9, Ka'ū CDP Community Objective 11.]
230. Hawai'i County shall coordinate and collaborate with State of Hawai'i Cyber Security Team of the Information & Communications Services Division to maintain and improve cyber security and informational security of telecommunication facilities.
[Rationale: Based on recognized increases in cyber security threats within the County and County of Hawai'i Information Technology Department recommendations.]
231. Treat broadband access as a basic utility that is affordable, neutral, and available to all communities

232. Encourage broadband infrastructure development for new multi-residential and commercial developments within the urban growth area.
233. Work with stakeholders to remove regulatory barriers and seek funding to completing the island's fiber optic loop in an environmentally and economically appropriate manner.
234. Continue active collaboration with State and Federal agencies under the State Broadband Initiative (SBI) to further telecommunication planning and funding initiatives, including:
 - a) The American Recovery and Reinvestment Act of 2009 and other federal grant programs;
 - b) State Broadband Data and Development Program (SBDD), administered by the National Telecommunications Information Administration (NTIA),
 - c) Hawai'i Department of Commerce and Consumer Affairs (DCCA), and the National Telecommunications Information Administration (NTIA)
235. Continue and seek to improve County's partnership role in the Hawai'i Healthcare Transformation Initiative (HHIT) and implementation of the Healthcare Transformation Plan.
236. Pursue partnerships and funding for broadband initiatives and deployments by USDA/EDA.
 - a) Action Platform: Cool & Connected is a planning assistance program (pilot stage?) that helps community members develop strategies and an action plan for using broadband to create walkable, connected, economically vibrant main streets and small-town neighborhoods that improve human health and the environment. <https://www.epa.gov/smartgrowth/cool-connected>
 - b) Action Platform: USDA's Rural Utilities Service (RUS) administers programs that provide much-needed infrastructure or infrastructure improvements to rural communities. <https://www.rd.usda.gov/about-rd/agencies/rural-utilities-service>
237. Work with the telecommunications industry to increase the availability of fiber, broadband, wireless, and emergency telephone service throughout the island.
238. When opportunities develop to negotiate telecommunication franchise agreements that involve the use of County rights-of-way or other assets, the County will seek to ensure providers include socially equitable service options to nearby communities.
239. Provide technical planning assistance to communities and community based organizations interested in offering communications services for public, education and government purposes.

- 240. Develop and support a program of free, public-use broadband services at appropriate County-owned facilities and other community anchor institutions.
- 241. Include an analysis of the availability of telecommunication infrastructure with other basic utilities during appropriate planning processes.
- 242. Incentivize communications infrastructure improvements and expansion as a means to reduce transportation impacts.

ACTION

- 2.121 Create and maintain inventory and mapping of communications infrastructure, to include but not be limited: wireline, wireless, cell tower locations, and known proposed facilities.

SUSTAINABILITY OBJECTIVE

Reduce impacts and visual clutter of telecommunications infrastructure.

POLICY

- 243. Require concealment or screening strategies to minimize visual impacts of towers within views of scenic highways, public parks, cultural facilities, and coastal scenic areas. Concealment strategies and/or increased setbacks shall be used to ensure community compatibility.
 - a) An alternatives analysis may be required at the time of application that documents why the proposed project is the best way to accomplish project alternatives while minimizing project impacts.
 - b) Support structures shall be designed to minimize their visibility with a preference towards each of the following in the order so listed:
 - 1) use of existing structures,
 - 2) stealth designs for concealment, and
 - 3) monopoles.
 - c) Component parts, equipment cabinets, buildings, and security fencing shall be designed to achieve a minimum profile through painting, screening, landscaping, and architectural compatibility with surrounding structures.
 - d) Photo simulations or balloon tests with views from various vantage points may be required to show visual impact of the proposed facility.
 - e) Hawai'i County shall require the timely removal of communications towers and equipment that are no longer needed or in active use, as a condition of approval.

[Rationale: Based on identified visual clutter in scenic areas and Ka'ū CDP Policy 58 Hāmākua CDP Policy 34 and 108, and General Plan Policy 11.3.2 (a), (c).]

244. Siting of new communications facilities shall comply with the following standards:

- a) Performance Standards. Develop standards for siting design, visibility, construction impacts, noise, on-going operation, and other characteristics that affect the compatibility and environmental and safety impacts of proposed facilities.
- b) Site Co-location. When at all feasible, communications facilities shall be located adjacent to, on, or incorporated into existing or proposed buildings, towers, or other structures. The County shall require new facilities to accommodate future co-location to the maximum extent feasible. [mapping]

[Rationale: Based on identified visual clutter in scenic areas and Ka'ū CDP Policy 58 Hāmākua CDP Policy 34 and 108, and General Plan Policy 11.3.2 (a), (c).]

245. Manage the environmental, cultural heritage, visual and social impacts of telecommunications infrastructure.

246. Incentivize or require underground siting of electrical and telecommunications facilities within public rights-of-way, especially in urban centers and along designated scenic corridors.

247. Establish wireless and telecommunication design and siting standards to mitigate the visual impact of telecommunications and broadcast facilities.

ACTION

2.122 Develop and codify design and removal standards for telecommunication towers.

2.123 Undertake a study and environmental review to determine appropriate places to deploy wireless communication facilities that would provide reliable coverage to every community within the County.

2.124 Adopt a Communications Facilities Ordinance.

STRENGTHENING ENERGY DIVERSITY & CONSERVATION

SUSTAINABILITY OBJECTIVE

The County of Hawai'i should lead the State in reaching its goal of 100% renewable energy. (30% by 12/31/2020, 40% by 12/31/2030, 70% by 12/31/2040, 100% by 12/31/2045)

POLICY

248. Public utility facilities shall be designed to complement adjacent land uses and minimize conflict with the natural environment and minimize pollution.
[Rationale: Based on General Plan Goal 11.1.2 (c), Policy 11.1.3 (a, c), and Hāmākua CDP Policy 62.]
249. The County shall remove barriers for energy systems that improve resiliency, such as microgrids, combined heat and power (CHP), backup generation and storage, and other decentralized electricity systems.
[Rationale: Based on General Plan Policies 3.3 (a, c, e, g, k, o), Kaʻū CDP Policy 142 and Community-Based Collaborative Action 6.4.5, and Hāmākua CDP Community Action 55.]
250. The County of Hawaiʻi shall increase its energy efficiency by upgrading its vehicle fleet to alternative energy vehicles, where practical.
[Rationale: Based on the Kaʻū CDP Policy ENGY-1.7 (f), and the vehicle priority lists of the Hawaiʻi State Energy Office <https://energy.hawaii.gov/vehicle-purchasing-guidelines> and recommendations from Sustainable Transportation Coalition of Hawaiʻi, A U.S. Department of Energy Clean Cities Coalition.]
251. To encourage the use of electric vehicles, the County of Hawaiʻi shall install electric vehicle chargers at community facilities in urban centers, for both County vehicles and public parking.
[Rationale: Based on Kona CDP Policy ENGY-1.7 and Hāmākua CDP Policy 110. See also General Plan Policy 3.3 (g, k).]
252. Maintain tax incentives for renewable energy improvements and continue to revise incentives as energy technologies progress.
[Rationale: Based on General Plan 3.3 (g, m).]
253. The County shall advocate the Public Utility Commission in support of the following types of strategies and initiatives:
- a) Programs and fee structures that promote renewable energy;
 - b) Consumer incentives to utilize renewable alternatives;
 - c) Social Equity analysis of proposed energy projects to ensure residents are protected as energy consumers in regards to rates, grid planning, utility compensation, and energy project siting.
- [Rationale: Based on the Hāmākua CDP Kōkua Action 65 and General Plan Policy 3.3 (o).]
254. Require special or use permits for all energy producing facilities that distribute power beyond their own use.
[Rationale: Based on General Plan Policies 3.3 (e).]

255. Increase the County of Hawai'i's role in ensuring energy facility production and distribution is adequate, efficient, and dependably available to each community to support present and future demands.
256. Promote and support increased energy efficiency measures and the proportion of electricity generated by alternative and renewable energy, including, but not limited to solar, wind, biofuels and other sources.
257. Coordinate with energy providers to encourage investments that increase reliable, equitable, efficient, and affordable energy for Hawai'i residents and businesses.
258. Continue to participate at the State level to provide feedback on all energy related initiatives and proposed revisions to comprehensive Integrated Resource Plans.
259. Encourage energy efficiency designs in all new County facilities and upgrade existing facilities with energy efficient systems as practical.
260. Continue to support building codes that require solar hot water and other energy efficient designs.
261. Encourage large developments to meet Leadership in Energy and Environmental Design (LEED), Low Impact Development (LID) or similar energy sustainability certification standards.
262. County strives for Leadership in Energy and Environmental Design (LEED), Low Impact Development (LID) or similar energy sustainability certification for new buildings or when renovating existing buildings for County use.
263. Encourage use of technologies, techniques, and materials in building design, construction, and removal that result in the least environmental impact over the life cycle of the structure.
264. Increase the amount of electric vehicles used on the Island.
265. Determine realistic targets for the appropriate mix of variable renewables and firm renewables within the energy network.
266. Partner with both government and private sources for research and development of alternative/renewable energy resources.
267. Support innovative heating and cooling technologies such as sea water cooling, heat pump technology, and low carbon systems that serve multiple buildings.
268. Support local training and education programs to develop green job growth; especially in renewable energy and natural resource management.
269. Support the development of commercially produced energy to meet the needs of the County of Hawai'i in a culturally sensitive manner.

- 270. Promote biomass energy and fuel production using wood chips from exotic/invasive trees.
- 271. Monitor and advocate for discounted off-peak electrical rates.
- 272. Encourage eco-districts, where multiple partners work together to achieve sustainability and resource efficiency goals at a neighborhood/district scale.
- 273. Encourage and promote development that uses renewable resources, such as solar, wind, and water to generate power on-site and to contribute to the energy grid.
- 274. Support renewable energy producing incentives through local utility programs such those developed for community-based renewable energy systems, customer grid-supply, customer self-supply, smart export, interconnection agreements, net energy metering, and other similar incentives for independent energy producers.

ACTION

- 2.125 Identify appropriate renewable energy resource zones and support commercial renewable energy facilities in these resource zones.
- 2.126 Develop a County purchasing policy that incorporates energy saving principles for its own buildings, facilities and services.
- 2.127 Incorporate appropriate green building or climate resilient specifications into competitive bids.
- 2.128 In partnership with State and Federal agencies, develop and codify standards for overhead utility and broadcast facilities, including requirements for underground siting, co-location of services, incorporating visual mitigation strategies in design, and accommodations for future expansions.
- 2.129 Identify utility corridors for high voltage transmission lines. Route selection for high voltage transmission lines should include consideration for setbacks from major thoroughfares and residential areas.
- 2.130 Develop and implement incentives for energy efficient/green design standards.
- 2.131 Develop or participate in programs for improving consumer energy efficiency and conservation through advanced metering infrastructure installations (also known as *smart meters*).
- 2.132 Define appropriate criteria for renewable energy resource zones for commercially produced energy. These could include, but are not limited to:
 - a) Solar Farm;
 - b) Wind Farm;

- c) Hydroelectric Sources;
 - d) Geothermal Sources;
 - e) Wave Energy Locations;
 - f) Develop an electric vehicle charging station network map and identify regional gaps in service.
- 2.133 Revise code to require new thresholds for, and/or incentivize, electric vehicle charging stations. Incentives may include reducing minimum parking requirements in exchange for the development of charging stations in high use areas, multi-family residential developments, or in areas identified as underserved in the network maps. [Code]
- 2.134 Reevaluate vehicle charging station requirements in the code to determine if the parking lot threshold for requirements should be lowered, and determine if additional requirements or incentives are warranted to facilitate electric vehicle use.
- 2.135 Revise code to set criteria for underground siting of utilities to minimize conflict with the natural environment and preserve viewshed resources.
- 2.136 Develop code to address commercial energy development.
- 2.137 Develop standards and principles for reviewing PUC applications.
- 2.138 Conduct a feasibility report for using renewable sources to generate power for public water system infrastructure.



Section 3: Economic & Opportunity Planning

GOALS

3. Hawai'i's local economy is diverse, stable, innovative, and complements the Island's unique ecology, community character, and cultural heritage. We strive for residents to be economically self-sufficient while focusing to reduce import dependence.

- a) Agriculture is a robust, diversified sector that emphasizes food security and includes a broad range of agricultural-based businesses, and agricultural tourism.
- b) Residents have physical and economic access to sufficient, safe, nutritious, and locally produced food to meet their dietary needs and food preferences for an active and healthy life.
- c) Residents have physical and economic access to adequate and affordable housing in various types, sizes and price ranges to meet that meets the needs of the population and provides equitable opportunities for household flexibility and mobility.
- d) The visitor industry thrives by exposing guests to authentic cultural representations and by providing interactive experiences with the 'āina and **Hawai'i's** natural wonders, while maintaining a high quality of life for residents.

FOCUSING ON ECONOMIC DIVERSITY & INNOVATION

SUSTAINABILITY OBJECTIVE

Progressively increase percentage of residents that are economically self-sufficient.

POLICY

275. Prioritize economic diversity, stability, and innovation in County programs, plans, and research.

[Rationale: Based on Kona CDP Strategy 4.8.2, Hāmākua CDP Community Objective 8 and Ka'ū CDP Community Objective 11, and General Plan Goal (2.2 (c, f).]

276. Evaluate new business proposals for potential community and cultural impacts and negative impacts are identified and properly mitigated.
[Rationale: Based on Puna CDP Goal 2.1.1, and General Plan Goal 2.2 (h).]
277. Eco-Industrial Parks shall be available to areas within the Urban Area zoned MG, ML, or MCX, to encourage the feasibility testing of the concept of an eco-industrial park, which is a community of firms that exchange and make use of each other's byproducts.
[Rationale: Based on a need identified in the Kona CDP process to increase industrial land use availability and form collaborative, mutually beneficial enterprises. Kona CDP ECON-1.8. See also General Plan Policy 14.4.3 (a)]
278. Invest in infrastructure and facilities that support economic development.
279. Promote sustainable business development opportunities focusing on diversified agriculture, educational and institutional research-based tourism, green technologies and building, and sustainable tourism.
280. Support subsistence-based businesses and economies and preserve opportunities to "live off the land".
281. Collaborate to expand the research, development, energy, and small and high technology industries.
282. Assist in the development of creative industries to market local sites and coordinate event activities.
283. Promote Hawai'i Island as a center for natural scientific research.
284. Monitor trends and identify business needs, strengthen existing industries, and diversify the economy by attracting emerging industries.
285. Support education, training, and workforce development.
286. Support apprenticeships and mentorships to strengthen the entrepreneurial skillsets and networks.
287. Collaborate with the private sector to identify business needs, strengthen existing industries, and diversify the economy by attracting new endeavors.
288. Partner with business associations, realtors, and the chamber of commerce to recruit small-scale manufacturers to establish retail locations in village and town centers to support reinvestment.
289. Partner with business associations, realtors, and the chamber of commerce to match potential tenants with local landowners.
290. Shared workspaces, including certified kitchens and industrial co-work buildings, are encouraged in appropriate locations.

291. Maintain a program for updating zoning code to accommodate emerging industries and technologies consistent with other goals, objectives and policies of this General Plan.
292. Partner with business associations, realtors, and chamber of commerce to remove regulatory barriers and create incentives for urban renewal, rehabilitation, and/or redevelopment programs in cooperation with communities, businesses and governmental agencies, instead of developing new commercial areas.
293. Promote use of the incentives offered by the opportunity zones and enterprise zones partnership programs to attract businesses.
294. Partner with business associations, University of Hawai'i at Hilo, and other agencies and private entities to host local fairs, markets, and networking events in target communities.
295. Plan for and identify appropriate areas for business incubation/innovation districts and industrial/ business parks.
296. Remove regulatory barriers that restrict entrepreneurial endeavors, such as zoning restrictions for home-based businesses that do not negatively impact the infrastructure network or the character of the neighborhood.
297. Encourage land uses that allow for small-scale manufacturers in retail establishments that enhance and are balanced with the County's natural, cultural, and social environments.
298. Encourage partnerships that leverage existing infrastructure and financial resources as well as projects that provide for additional infrastructure resources desirable for development of sustainable local industries.

ACTION

- 3.1 Pilot a program to secure community payments for ecosystem services.
- 3.2 Study the feasibility of economic and financial impact reviews.
- 3.3 Develop an inventory of the following commercially zoned lands:
 - a) Undeveloped commercial, industrial, and resort zoned areas in order to evaluate their land use designations and consider reallocating these land uses to more appropriate areas for development;
 - b) Actively developed industrial and resort areas to provide data for future land use decisions and economic market research.
- 3.4 Identify incentives and other economic development tools to promote reinvestment in underperforming commercial corridors.

- 3.5 Identify public lands within designated village and town centers that could serve as assets for economic development. This could also include parking areas, pocket parks, art parks, and public gathering spaces.
- 3.6 Develop a tiered tax program for commercial properties within special districts to facilitate tenant retention, occupancy rates, and to discourage derelict vacant buildings.
- 3.7 Identify and maintain an inventory of blighted areas, as defined in HRS 53, for urban renewal, rehabilitation, and/or redevelopment programs.
- 3.8 Identify and maintain an inventory of potentially polluted lands to determine qualifications and feasibility for renewal, rehabilitation, and/or redevelopment through the Environmental Protection Agency's Brownfields Program.
- 3.9 Develop business improvement districts and Main Street programs to fund revitalization efforts.
- 3.10 Provide technical support to develop Town Revitalization Plans to preserve historic and cultural village character and support local businesses.
- 3.11 Develop a masterplan and feasibility study for Ho'olulu Complex redevelopment into an athletic-exhibition-conference facility.
- 3.12 Develop a masterplan and feasibility study for a civic auditorium and/or performing arts center for the Kona area.

AGENCY ACTION

- 3.13 UH and Workforce Development: Develop workforce for emerging industries
- 3.14 State: Appropriate and release funds for Capital Improvements in visitor areas
- 3.15 State: Invest in infrastructure, terminals, and facilities that support economic development

PRIORITIZING AGRICULTURE & FOOD SECURITY

SUSTAINABILITY OBJECTIVE

Increase locally owned and operated agricultural businesses.

POLICY

299. In order to provide a means for local agricultural producers to market their products, the County shall interpret HRS 205 liberally to allow the establishment and continued operations of open farmers' markets and road-side stands in the State Land Use Agricultural district without a Special Permit. If the project qualifies for Plan Approval, a market management plan containing provisions for adequate on-site parking, on-site and off-site traffic management, and adequate sanitation facilities must be approved by the Planning Department prior to the operation of the open farmers market.
[Rationale: Based on Hāmākua CDP Policies 116 and 117, Ka'ū CDP Policy 139, and General Plan 2.3 (u).]
300. Educate landowners about agriculture, ranch, and forestry land preservation programs and encourage participation in these programs.
301. Assist in the expansion and promotion of the agricultural industry through the protection of viable and productive agricultural lands.
302. Partner with appropriate state and federal agencies, and other groups for programs, training, and building community capacity in the promotion of the agricultural industry.
303. Support the development and stability of marketing plans, programs, cooperative groups, and other networking organizations that promote the agricultural industry.
304. Support the development of private and state agricultural parks to make agricultural land available for agricultural activities.
305. Support the University of Hawai'i at Hilo and Hawai'i community college aid in their development of education, training, and workforce development programs that assist agriculture.
306. Support apprenticeships to strengthen the skillset and networks of industry leaders.
307. Incentivize small-scale farming, such as taro production, through expanded tax credits for small farms.
308. Support the sustainable development of the fishing industry, various forms of aquaculture, and other fresh and marine-based activities.
309. Support research and development of viable biofuel projects that will supply renewable transportation fuels or power for Hawai'i Island in ways that are community-supported, sustainable, ecologically sound, and complimentary to food production.
310. Promote operations that utilize local materials and secondary byproducts from agriculture, agroforestry, silviculture, and aquaculture.

311. Promote the development of a local timber industry through support of timber processing and building code flexibility for locally produced building products.

ACTION

- 3.16 Develop distinctive, regional identities to enable public and private industries to promote Hawai'i agricultural products as unique within the state of Hawai'i.
- 3.17 Update the County of Hawai'i's tax reduction programs to provide tax incentives for commercial agriculture operations, and community gardens.
- 3.18 Update the County of Hawai'i's tax reduction programs to ensure that tax incentives for agricultural land use result in actual public benefits and promote local agricultural production where possible.
- 3.19 Create a real property tax exemption (perhaps 4 to 6 years) for farmers entitled to Federal crop loss insurance.
- 3.20 Amend code to remove barriers to allow for off-site directional signage to promote local farms engaged in direct sales and other permitted visitor-related businesses, while minimizing scenic impacts. [Code]
- 3.21 Revise grubbing and grading ordinances as they pertain to agriculture including the creation of exemption categories for water storage and aquaculture.

AGENCY ACTION

- 3.22 State Department of Agriculture: Support programs to prevent harmful alien species from becoming established and impacting commercial agriculture.
- 3.23 State legislature: Amend Hawai'i Revised Statutes to include green waste, composting, and fertilizer yards (utilizing only manure and soil) for commercial use as permitted uses on agriculturally zoned land.
- 3.24 State of Hawai'i, Department of Agriculture: Support the development of agricultural parks in areas with adequate infrastructure for agriculture and processing.
- 3.25 State DLNR: Support the establishment of community-based subsistence fishing areas.

SUSTAINABILITY OBJECTIVE

Increase total acres of active food production.

POLICY

- 312. Develop and maintain a food self-sufficiency strategy for Hawai'i County to serve as a mitigation and adaptation strategy that decreases Hawai'i's food carbon footprint (via imports) while increasing community resilience to climate and natural hazards.
[Rationale: Based on recommendations from the University of Hawai'i at Mānoa Sea Grant College Program: June 2014 Climate Change Impacts in Hawai'i - A summary of climate change and its impacts to Hawai'i's ecosystems and communities.]
- 313. Prioritize restoration of traditional agricultural uses.
[Rationale: Based on the recognized need to increase local food production and Kona CDP Policy section related to CR-3.1 and Action CR-3.3b.]
- 314. Increase public-private partnerships to strengthen the local food system.
- 315. Reduce County greenhouse gas (GHG) emissions by improving food system waste management.
- 316. Support training related to the requirements of the food safety modernization act.
- 317. Support the development of community-based food systems.
- 318. Allow for and encourage urban agriculture uses such as on-site sales and small-scale animal husbandry.

ACTION

- 3.26 Develop a program to monitor local food production and consumption.
- 3.27 Conduct regional community food-system assessments.
- 3.28 Develop and implement an emergency food plan which could be deployed in the event of a natural or economic disaster.
- 3.29 Adopt procedures to allow for the development of community gardens and edible landscaping on public lands, maybe through Friends of the Park agreements.
- 3.30 Amend Hawai'i County Code, Section 15-72 to allow farmers' market permits to include parks in rural areas that lack appropriate commercial zoned lands for farmers markets. [Code]
- 3.31 Pilot a project to restore at least one ahupua'a using traditional knowledge and innovative strategies to produce enough food to be self-sustainable.

AGENCY ACTION

- 3.32 State Legislation: Seek State legislation or rule-making to allow local agricultural producers to make direct sales to consumers at County-designated farmers markets at the 0.5% general excise tax rate rather than the 4.0% rate that applies to retail sales.
- 3.33 State department of agriculture: apply for specialty crop block grants to strengthen taro production.
- 3.34 State DOE: Develop and support Farm to School programs and other programs designed to provide locally produced food to Planning Area schools.
- 3.35 Coordinate with University of Hawai'i at Mānoa College of Tropical Agriculture and Human Resources' to increase the farm food safety coaching program and farm food safety certifiers.

SUSTAINABILITY OBJECTIVE

Increase availability of infrastructure (agricultural water, transportation systems for product and equipment access, and packing and processing facilities for ranching, agricultural crops, timber, and value-added products) to areas of high agricultural production.

POLICY

- 319. Support the creation of water cooperatives supported with County revenue bonds and other sources. Cooperative users should be responsible for development, maintenance and repair of the agricultural water systems.
- 320. Where the County has replaced surface water sources with groundwater sources to meet Safe Drinking Water standards, the County should consider allocating the surface water sources for agricultural use.
- 321. Support expanding the capacity of air and sea port facilities and staffing for the exportation of agricultural crops.
- 322. Promote agricultural processing, including the development of non-profit or private commercial kitchens, processing, storage, and distribution facilities, using existing facilities as appropriate for the development of value-added local products.
- 323. Support the continued operation of the USDA's Pacific Basin Agricultural Resource Center facility.
- 324. Incentivize and remove barriers to allow the agricultural industry to provide or develop employee housing and workers quarters.

325. Evaluate code and statutory amendments to allow agricultural worker housing to be developed without requiring the housing be sited on the same parcel (TMK) of the working subject farm. [Code]

ACTION

- 3.36 Map existing and proposed agricultural infrastructure.
- 3.37 Expand programs to provide for agricultural irrigation water.
- 3.38 Develop criteria to determine appropriate places for agricultural parks, including the availability of potable water.
- 3.39 Expand County programs to provide for water for designated Agricultural Parks and prime agricultural areas.
- 3.40 Encourage the Board of the Department of Water Supply (DWS) to include agricultural water planning in County water system expansion plans.
- 3.41 Amend Hawai'i County Code to include provisions for suitable agricultural infrastructure projects financed by County bonds and liens on real property of participating agricultural stakeholders, whether or not such assessments on TMKs involve contiguous parcels of lands encumbered under an "Agricultural Improvement District". [Code]

AGENCY ACTION

- 3.42 State DHHL, DOA and ACD: expand agricultural water systems in prime agricultural areas.
- 3.43 DOA- Restoration of the ditch systems should be investigated and planned to meet anticipated future agricultural needs.

DEVELOPING A PLACE-BASED VISITOR INDUSTRY

SUSTAINABILITY OBJECTIVE

Increase visitor expenditure or length of stay.

POLICY

- 326. Encourage, where appropriate, the establishment of visitor-related uses and facilities that directly promote the agriculture industry.
- 327. Support the promotion and development of programs, festivals, and events that engage visitors and residents in unique and authentic ways
- 328. Support the development of a place-based tourism industry that emphasizes the preservation of our unique cultural, natural, and built environment assets.

ACTION

- 3.44 Continue to seek funds from the State Capital Improvement Program to help develop visitor industry support facilities in accordance with the County's General Plan.

AGENCY ACTION

- 3.45 Hawai'i Tourism Authority: Encourage the development of a visitor industry that promotes small business development in harmony with the character of Hawai'i Island and with the environmental and social goals of residents.

PROVIDING EQUITABLE AND SAFE HOUSING OPTIONS FOR ALL

SUSTAINABILITY OBJECTIVE

Increase in number of newly constructed housing units (1,300 du/year to reflect needed housing units referenced 2014 Rental Housing Study).

POLICY

- 329. Hawai'i County shall expand its participation in Federal, State, and Hawaiian housing assistance programs to rehabilitate owner and rental housing for very low, low, median, and moderate income residents by seeking grants, loans, and technical assistance in conjunction with public and private stakeholders.
[Rationale: Based on General Plan Policies 9.3 (a, c, j, l, s, v).]
- 330. Maintain an affordable housing and property inventory system consistent with 201H-6 HRS.
[Rationale: Based on HRS 201H-6, and General Plan 9.2 (e, h).]

331. All affordable housing projects which receive development benefits from Hawai'i County, including but not limited to land use/ zoning approvals, special approvals, conditional uses, and density bonuses, shall be required to maintain the project (or portion thereof) as affordable for a period of 40 years pursuant to deed restrictions or other mechanisms specified in the HCC.
[Rationale: Based on Kona CDP Policy HS- 5.2]
332. Affordable and transitional housing shall be prioritized on vacant urban land already zoned for multifamily development and around transit hubs.
[Rationale: Based on General Plan Goal 9.2 (d, g) and Policy 9.3 (t, x). See also the McKinsley Global Institute (MGI) report.]
333. Limit the locations of government facilitated or mandated affordably priced housing units to Urban Service Areas.
[Rationale: Based on the ongoing trend to locate affordable housing developments in agricultural areas that lack basic infrastructure; thereby shifting the infrastructure development, maintenance, and service costs to populations that can least afford it. See also General Plan 9.3 (x).]
334. Partner with Federal, State, and nonprofit housing entities and housing trusts to fund and support community-based non-profit organizations in their efforts to provide adequate affordable housing.
335. Incorporate reasonable flexibility in codes and ordinances to achieve a diversity of socio-economic housing mix and to permit aesthetic balance between single-family residential structures and open spaces.
336. Support collaborative partnerships that address homelessness, work toward immediate solutions to house and service homeless populations and work toward long-term strategies to reduce homelessness.
337. Encourage use permits for innovative and experimental housing types to address homelessness, temporary, and transitional housing located close to services, job centers, transit hubs.

ACTION

- 3.46 Create incentives and remove barriers to reduce cost of building residential units.
- 3.47 Remove barriers to the use of local building materials, traditional 'island appropriate' construction techniques, recycled materials and other alternate building materials.
- 3.48 Evaluate and revise inclusionary zoning and housing requirements.

- 3.49 Develop rules and criteria for the County's administering the State's affordable housing incentive program as per HRS 201H.
- 3.50 Revise code to determine maximum developable area based on lot size and zoning designation.
- 3.51 Develop criteria for the elimination or reduction of off-street parking requirements.
- 3.52 Change zoning regulations to increase allowable residential densities in Urban-designated locations.
- 3.53 Change zoning regulation in Urban-designated locations, to require a minimum and maximum level of residential density.
- 3.54 Revise the following financial mechanisms in HCC:
 - a) Revise Big Island Tax Increment Financing (TIF) ordinance.
 - b) Housing Trust Funds (as ongoing renewable source of revenue for AH, capitalized with other sources such as commercial linkage fees and in-lieu fees).
 - c) Tax incentives to facilitate affordable housing owners to recoup the costs of repairs.
- 3.55 Revise County Code Chapter 11 to implement rules and criteria for administering the State's affordable housing incentive program as per HRS 201H.
- 3.56 Perform a feasibility study to explore mechanisms to ensure affordable housing development is progressive and to ensure adequate affordable housing stock remains in a tiered approach.
- 3.57 Form an Affordable Housing Advisory Committee at County level to complete an island wide Affordable Housing Plan, including the following:
 - a) Barriers assessment survey
 - b) Define, assess, craft, and/or initiate, where appropriate, research opportunities to identify promising strategies to maintain adequate rental housing stock.
- 3.58 Amend Chapter 25 of the Zoning Code and Chapter 23 of the Subdivision Code to allow Clustered Rural Subdivisions as an alternative to Cluster Plan Developments (C.P.D.) Section 25-6-20. [Code]

SUSTAINABILITY OBJECTIVE

Increase in various housing types.

POLICY

338. Require residential and mixed-use developments to incorporate a variety of housing types within a single development project.
[Rationale: Based on General Plan Goal 9.2 (c) and Policy 9.3 (I).]
339. Support the development of a variety of housing types, uses and models, including experimental housing and compact housing communities. (Ex: modular/pre-fab; work/live arrangements; co-housing, limited equity cooperatives, etc.)
340. Incentivize the development of compact and energy efficient housing types that minimize use of resources such as smaller detached homes, accessory dwellings, and attached homes.
341. Encourage housing construction to take into consideration the need for ADA accessible-housing as well as the needs of the growing elderly population who have mobility impairments.
342. Consider broadening current real property tax reductions or exemptions as financial incentives for a private property owner's provision of a certifiable affordable housing rental unit as a second dwelling unit where allowable.

ACTION

- 3.59 Revise code to facilitate Accessory Dwelling unit development.

SUSTAINABILITY OBJECTIVE

Eliminate housing determined to be structurally unsound.

POLICY

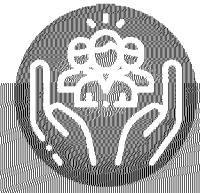
343. Hawai'i County shall develop minimum standards for structural safety and coordinate to monitor and inventory housing conditions. Standards for evaluation of the structural condition of the housing stock are summarized below:
- a) Sound: Most housing units in this category are in good condition and have no visible defects. However, some structures with slight defects are also included.
 - b) Deteriorating: A housing unit in this category needs more repair than would be provided in the course of regular maintenance, such as repainting. A housing unit is classified as deteriorating when its deficiencies indicate a lack of proper upkeep.
 - c) Dilapidated (Substandard): A housing unit in this category indicates that the unit can no longer provide safe and adequate shelter or is of inadequate original

construction including being constructed below the minimum required elevation by FEMA or the County's Floodplain Regulations.

[Rationale: Based on identified quality issues with current housing stock and General Plan Goals 9.2 (a, e, l) and Standards from 9.4 (a-f).]

ACTION

- 3.60 Adopt a program including necessary staffing to inventory, monitor, and enforce safe housing conditions.



Section 4: Community Placemaking

GOALS

4. Hawai'i is a safe, healthy, and diverse community deeply connected to the 'āina, our historical roots, and in sustaining our multicultural heritage for future generations. We are invested in enhancing public spaces, natural and cultural assets, and our social systems.

- a) Communities are safe and protected and residents have access to quality, integrative health and social services to support a high quality of life, decrease health and social problems, and extend life expectancies.
- b) Public infrastructure and facilities effectively service community needs, are sustainably built and maintained with innovation and pride, promote a sense of community, and support a high quality of life.
- c) Health is prioritized by providing access to a wide variety of options and facilities that promote physical activity and healthy lifestyle choices for residents and visitors of all ages.
- d) Responsible and reasonable public access for spiritual, religious, cultural, recreational, and subsistence practices is assured and protected.
- e) An interconnected, island-wide multimodal trail system is developed and maintained to encourage healthy living and provide links between people and their natural environment.
- f) Our Hawaiian and multi-ethnic cultural values are preserved and perpetuated in celebration of the evolving diversity that enhances our island way of life.
- g) The historical integrity and character and scenic assets and open spaces of our communities are protected, restored, and treated as unique assets with significant social and economic value and managed in perpetuity.

MAINTAINING EDUCATION FACILITIES AS ANCHOR INSTITUTIONS

SUSTAINABILITY OBJECTIVE

Increase the opportunities for collaboration with State and community organizations on community events at school facilities.

POLICY

344. Partner with State and community organizations to ensure that school facilities, including their surrounding area open spaces, are community-centered, designed for multiple uses as appropriate (aka: joint-use facilities) and serve as anchor institutions in the community.

[Rationale: Based on General Plan 10.2.2 (a, b, c).]

345. Design enrollment guidelines for new schools are:

- a) Elementary (preK-5) 400 to 750 students 8 to 15 usable acres
- b) Middle (6-8) 500 to 1,000 students 15 to 20 usable acres
- c) High (9-12) 800 to 1,600 students 45 to 55 usable acres

In existing urban areas where the availability of land is limited to infill sites and where new housing developments require the construction of new school facilities, design enrollment guidelines for new schools are:

- d) Elementary (preK-5) 400 to 750 students 2.5 to 3 usable acres
- e) Middle (6-8) 500 to 1,000 students 5 to 6 usable acres
- f) High (9-12) 800 to 1,600 students 8 to 10 usable acres

[Rationale: Based on Hawai'i Board of Education Policy 301-2.]

346. School sites are identified in master plans for all new town developments or major expansions to ensure coordination with roads, water, sewer and recreations infrastructure and other support facilities and considerations such as traffic and safety, and access for vehicle, bicycle, and pedestrian.

[Rationale: Based on General Plan 10.2.2 (a).]

347. Establish and maintain joint-use of public facilities in close proximity to each other, including: schoolyards, parks, libraries, and other public facilities for community use for recreational, cultural, and other compatible uses.

[Rationale: Based on General Plan 10.2.2 (b, c), 12.3 (g), Hāmākua Policy 101; Ka'ū CDP 5.9.3.2.]

348. Support the continued expansion of the University of Hawai'i at Hilo and Hawai'i Community College campuses, including the creation of satellite campuses.
349. Coordinate with the State Department of Education to develop public schools in underserved communities.
350. Advocate to the State to locate its community facilities, such as public schools and libraries, in designated village/town centers, and to design them to be compatible with the existing village/town center.
351. Encourage the Hawai'i State Library System to establish a public library in underserved communities.
352. Support the development of Charter and other public schools to meet district needs and consistent with adopted school siting criteria.
353. County should develop master plans and consider land use designations surrounding existing educational campuses outside of urban areas for residential and commercial support uses.
354. School buildings should be designed, or at times retrofitted, to serve as emergency shelters.
355. Facilitate the use of libraries as a means to disseminate public information and engage civic participation, and to site libraries or satellite facilities for convenient access to all age groups and disabilities.
356. Advocate to the State and private agencies to use existing and new facilities to offer place-based and distance education opportunities to adults.

ACTION

- 4.1 Adopt standards to be met for siting of new or substantially expanded public and private schools such as close to arterial roads, sites free from flooding, drainage problems, excessive slopes, and not in high hazard areas. Site design should incorporate appropriate street and driveway design and location to minimize traffic interference, pedestrian hazards, and enable safe and easy access for vehicles, bicycles, and pedestrians.
- 4.2 Participate in the development of student and faculty housing for the university and other joint-use facilities.

SUSTAINABILITY OBJECTIVE

Increase the participation in Safe Routes to School program.

POLICY

- 357. Prioritize the development of sidewalks, pedestrian walkways, and bike paths around school complexes to increase walkability and pedestrian safety for a range of users.
[Rationale: Based on General Plan Action 10.2.4.4.3 and 10.2.4.3.3 and Hāmākua CDP Kōkua Action 60 and 61.]
- 358. County shall develop a master plan for Safe Routes to Schools for a 1-2 mile radius around existing and proposed schools and shall require new developments in the vicinity of schools to provide safe pedestrian facilities and additional school zone signage.
[Rationale: Based on a recognized long-term need to add bike/pedestrian routes to/from schools and from Hāmākua CDP Kōkua Action 60-61 and Community Action 37, Puna CDP 4.5.2a, Kona Trans-3.5. See also the 2005 General Plan Infrastructure Report.]
[Transportation]
- 359. Implement a Safe Routes to School (SR2S) programs for all schools.
- 360. Private and public college campuses should be master-planned to approve appropriate scales of residential, commercial and minor light industrial uses (e.g., storage)

ACTION

- 4.3 Collaborate with Department of Education to create Safe Routes to School Plans.
- 4.4 Develop the master plan for the surrounding areas of the University in coordination with the adjoining Pālanuanui project.

KEEPING OUR COMMUNITIES HEALTHY & SAFE

Police Services

SUSTAINABILITY OBJECTIVE

Police personnel increase to a minimum of 1.6 per 1,000 residents.

POLICY

361. Crime Prevention through Environmental Design (CPTED) shall be incorporated into village design guidelines.
[Rationale: Based on HRS 226-58(b)(1) & HRS 226-26(c)(1), and Kona CDP Action PUB-2.2e.]
362. Maintain and improve rural police service ratios adjusted for geographic distance travel times to provide adequate service response.
[Rationale: Based on General Plan Policies 10.3.2 (b, e), Hāmākua Policy 95, and Kaʻū CDP Policy 110.]
363. Maintain police staffing to 2.5 police officers per 1,000 residents in all districts.
[Rationale: Based on General Plan Policy 10.3.3 (a), Kona CDP PUB-2 Public Safety and PUB-2.1, and includes the industry standard ratio (2.5/1,000).]
364. Police headquarters shall be near the geographic center of the service area and near concentrations of commercial and industrial use.
[Rationale: Based on General Plan 10.3.2 (d).]
365. Police stations in outlying districts shall be based on the population to be served and response time rather than on geographic district.
[Rationale: Based on General Plan Policy 10.3.2 (e).]
366. Support the development and expansion of community policing programs, including neighborhood and farm watch programs in urban, rural and agricultural communities.
367. Enhance security and orderliness in downtown areas through Business Improvement Districts or other organizational tools, and partner with downtown businesses.

ACTION

- 4.5 Review County lighting and landscaping ordinances to implement CPTED.
- 4.6 Develop a public safety audit checklist and conduct neighborhood and downtown safety walks to identify potential crime spots or unsafe areas.
- 4.7 Consider reinstating bicycle patrol programs in downtown areas.
- 4.8 Allocate additional funding to the County Police Department to consistently monitor traffic operations along safe routes to schools/parks and enforce traffic code.
- 4.9 Actively expand Community Policing programs such as Neighborhood, Farm, and Business Watch programs.

KEEPING OUR COMMUNITIES HEALTHY & SAFE

Fire and Emergency Services

SUSTAINABILITY OBJECTIVE

Achieve 100% of on time fire and emergency response times.

POLICY

- 368. The establishment of a fire/police facility shall consider site size and locations that permit quick and efficient vehicular access.
[Rationale: Based General Plan Policy 10.3.2 (b).]
- 369. Establish a minimum level of service for fire stations to provide a response time of 8 minutes in Urban Areas and 12 minutes in the rural areas.
[Rationale: Based on Kona CDP PUB-2.3.]
- 370. Rescue services should be provided by ground and sea by at least one station in each district and maintain an appropriate number and type of emergency helicopters, including appropriate aero medical capabilities.
[Rationale: Based on General Plan Policy 10.3.2 (i) and Kona CDP PUB-2.3.]
- 371. Ensure HazMat service in each district.
[Rationale: Based on a recognized gap in HazMat service in rural areas and on General Plan 10.3.3 (c) and Kona CDP PUB-2.3.]
- 372. Prioritize securing 4x4 emergency vehicles for service in remote communities.
[Rationale: Based on an identified gap in providing emergency service in rugged areas and Hāmākua CDP Policy 98.]
- 373. The County shall maintain staffing for a Board of Appeals for the Fire Department (Hawai'i County Code 26-3) to ensure public concerns are addressed and there is an adequate mechanism to increase transparency and consistency in the application of the Fire Code as per Section 26-6.
[Rationale: The Board of Appeals for the Fire Department is a mandated commission through HCC 26-3 but it has not been active since 2011. Without a board of appeals for the Fire Department, the public has no other recourse for appeals apart from litigation.]
- 374. All fire stations should provide Emergency Medical Services (EMS).
- 375. Development of police and fire facilities should entail joint-use structures whenever feasible.

- 376. Support and expand volunteer fire facilities and capacity.
- 377. Lifeguard stations should be located at all County and State beach parks.
- 378. Support code amendments that address fire safety issues while also accommodating flexibility in design and provisions for alternate water sources when adequate public water is not available. [Code]

ACTION

- 4.10 Assess code amendments to consolidate the Fire Board of Appeals with the Board of Appeals in order to provide sufficient and efficient staffing and resources. [Code]
- 4.11 Prioritize budget increases for technology improvements for emergency services; including HazMat service, 4x4 vehicles, and other equipment or software to improve emergency response times.
- 4.12 Amend building codes to require fire-supply catchment tanks accessible from street frontages. [Code]
- 4.13 Establish public or private firefighting water systems in large water-catchment subdivisions and other priority areas as identified by the Fire Department.
- 4.14 Amend Real Property Tax code to include incentives for providing common catchment tank access for community firefighting purposes. [Code]
- 4.15 Study, assess, and design private common access-distribution systems of private catchment water for firefighting purposes in rural catchment communities.

KEEPING OUR COMMUNITIES HEALTHY & SAFE

Health & Social Services

SUSTAINABILITY OBJECTIVE

Each community has access to healthcare facilities, programs, or community-based care.

POLICY

- 379. Ensure that hospitals are sufficiently hardened to remain in effective use through natural disasters.
[Rationale: Based on identified gaps in facility hardening, Multi-Hazard Mitigation Plan, and General Plan 10.3.3 (I).]

- 380. Support the establishment or expansion of community health centers, rural health clinics and mobile clinic services for the medically underserved population, especially in rural areas.
- 381. Advocate for programs serving the elderly, disabled, and homeless persons.
- 382. Support the establishment of centrally-located, 24-hour, full-service medical facilities, with trauma care, to service rural areas.
- 383. Serve as a point of community access for information and referral for health, education, and social services.
- 384. Support the establishment of home and community-based care.

ACTION

- 4.16 Establish an Aging and Disability Resource Center in Kailua-Kona.
- 4.17 Work with community to establish One-Stop Community Resource Center to serve as point of community access for information and referral for health, education and social services.
- 4.18 Increase funding for the Healing Our Island Program.
- 4.19 Coordinate with the County of Hawai'i Healthcare Crisis Plan.
- 4.20 Amend County zoning and building codes as necessary to accommodate home and community-based care elderly care. [Code]
- 4.21 Amend the Hawai'i County Code to include land uses for substance abuse and/or medical rehabilitative facilities and determine appropriate criteria for siting in communities. [Code]
- 4.22 Amend Hawai'i County Code to designate a lead agency for coordinating and responding to outbreaks of life-threatening, highly communicable diseases pursuant to Department of Health direction. [Code]
- 4.23 Develop medical center TOD master plan and rezone as a Regional Center TOD.
- 4.24 Develop and implement a cemeteries master plan for the siting of future cemeteries.

COMMUNITY ACTION

- 4.25 Establish a comprehensive network of health and wellness services.
- 4.26 Expand the use of mobile health centers and services (health, screening, vision, dental, etc.) to rotate through the rural communities on a regular basis.

SUSTAINABILITY OBJECTIVE

Reduce substance abuse, domestic violence and other social problems through social programs, education, and intervention services.

POLICY

- 385. Partner with State and private service providers to develop a consolidated services facility plan for victim and offender treatment, counseling and other rehabilitation services (and other social services) in major urban centers (Hilo, Kailua-Kona, Waimea).
- 386. Correctional facilities should emphasize rehabilitation and coordinate programs and partnerships to successfully reintegrate individuals back into society.

ACTION

- 4.27 Expand partnerships among substance abuse treatment providers and improve coordination and integration of services.
- 4.28 Develop public showers and restroom facilities in strategic locations to serve the homeless and meet public sanitation needs.

AGENCY ACTION

- 4.29 Provide effective and readily accessible substance abuse treatment and prevention services.

PROMOTING ACTIVE LIVING THROUGH RECREATION, TRAILS, & PUBLIC ACCESS

Recreational Facilities & Programs

SUSTAINABILITY OBJECTIVE

Every resident of Urban Service Areas are within a 10-minute walk to a quality park.

POLICY

- 387. Maintain and/or improve park facilities and programs based on community needs assessments to ensure County services are meeting the social, recreational, and activity

needs of our communities.

[Rationale: based on status of existing park inventory and General Plan 12.3 (a-i)]

388. Implement a proactive maintenance program to ensure that park facilities and trails are safely maintained for optimum usage.

[Rationale: Based on identified challenges of park maintenance, and General Plan 12.3 (b, j)]

389. Facilitate and prioritize the co-location of schools, parks, and senior centers to promote interactivity between community members of all ages.

[Rationale: Based on research on active living, National Recreation and Park Association 10-Minute Walk to A Park recommendations, Hāmākua CDP Policy 100, Puna CDP 3.5.2.b, and General Plan 12.3 (d, g, h, l).]

390. Prioritize maintenance and necessary improvements at existing park facilities over developing new park facilities within each district (this does not preclude accepting lands for future park development or acquiring properties for the intent of preserving open space, scenic areas, natural hazard areas, or cultural/historic areas from development).

[Rationale: Based on consultation with Parks and Recreation Department and in recognition of the challenges in maintaining the parks lands currently in the County inventory. See also General Plan 12.3 (q).]

391. Continue to improve parks and recreation outreach efforts to ensure program and facility information is adequately available, promoted online through accessible websites and through other mediums, and kept up-to-date to facilitate maximum community participation.

[Rationale: Hāmākua CDP Policy 106, and General Plan 12.3 (p).]

392. Prioritize park acquisition and improvements that involve under-represented open recreation and healthy living activities (outside the scope of organized sports), such as:

- a) Walking and biking trails;
- b) Skate/roller blade parks;
- c) Dog-friendly parks;
- d) Parks that offer camping opportunities;
- e) Botanical and community garden parks, pocket and art parks;
- f) Equestrian/rodeo arenas;
- g) Archery and shooting ranges;
- h) ATV and motorized recreation areas;
- i) And other types of active and passive recreation that enhance the quality of life for visitors and residents.

[Rationale: Based on park inventory research and identified recreation gaps. Also based on Kona CDP Action PUB-6.2a, Hāmākua CDP Policy 129 and General Plan 12.3 (g, o).]

- 393. Existing and new parks are designed with features that accommodate and encourage meaningful levels of physical activity according to level of service criteria.
- 394. Recreational facilities should be planned and located where they will best facilitate and support active-living communities.
- 395. Partner with State, Federal, and private entities to increase funding sources for park, recreation, and trail development and maintenance.
- 396. Encourage the State to continue with the establishment of Kekaha Kai State Park reaching into Mahai'ula, Awake'e, and Manini'ōwali Ahupua'a.
- 397. Seek to combine recreation facility improvements projects with other needed facility improvements (e.g., ADA improvements with facility hardening, etc.)
- 398. Partner with and initiate joint agreements with State, Federal, and private entities for funding, management, and maintenance for recreation and public access priorities.
- 399. Support and enhance recreational facilities by developing additional recreational offerings in underutilized areas of County properties, such as the Pana'ewa Recreation Complex.
- 400. Consider amending Hawai'i County Code Section 23-26 to develop criteria for assessing community needs and allow flexibility for park types to include open space areas, green space (buffers) and allowances for the publicly dedicated lands to be used as community gardens, art parks, etc. [Code]
- 401. Establish, in cooperation with the State Department of Education, joint-use of schoolyards, County parks, and other public facilities for community use for recreational, cultural, and other compatible uses.

ACTION

- 4.30 Develop a network of pedestrian access trails to places of scenic, historic, natural or recreational values. Provide, at a minimum, an island wide route connecting major parks and destinations.
- 4.31 Conduct Park facilities condition assessments and keep the County of Hawai'i Recreation Plan updated to reflect newly identified recreational priorities. The updated Recreation Plan should develop a strategic management plan for upgrading facilities and establish a level of service standards for parks.

- 4.32 Amend Hawai'i County Code to better address park and recreation issues in the following ways:
- a) Amend subdivision code (Ch. 23) to be consistent with Dedication of Land code (Ch. 8) in providing land area for park and recreational use or pay a fee in lieu thereof. (q)
 - b) Develop and adopt an Impact Fees Ordinance. (r)
 - c) Amend Dedication of Land code (Ch. 8) to include "net useable acreage." [Code]
- 4.33 Perform a review and audit of the inventory resulting from the subdivision requirements within Hawai'i County Code Section 23-26 (Reservation for parks, playgrounds, and public building sites). [Code]
- 4.34 Amend Hawai'i County Code Section 23-26 to ensure that land area is not only set aside for recreational/public use, but that there are funds or a funding mechanism to develop the land for its intended purpose. [Code]
- 4.35 Develop a center/complex for major cultural, educational and recreational activities.
- 4.36 Expand and map Friends of the Park programs to manage and improve County parks and facilities.
- 4.37 Develop facilities and safe pathway systems for multimodal use such as walking, jogging, and biking activities.
- 4.38 Develop walking paths around existing ballparks and other park grounds, as feasible. These walking paths should be level footpaths that meet accessibility requirements whenever possible.
- 4.39 Expand active open recreational opportunities at the Pana'ewa Rainforest Zoo and Equestrian Center properties such as: bike/walking trails, horse trails, dog-friendly trails, and other outdoor recreation that would complement the Pana'ewa complex.
- 4.40 Enter into partnership agreements with the State and private groups (such as Friends of the Park) to make improvements and assist in maintenance of essential but poorly maintained urban parks such as Wailoa State Park.
- 4.41 Advocate to the State to improve Wailoa State Park complex in the center of Hilo.
- 4.42 Identify shoreline areas suitable for coastal access points, including boat launches, small boat harbors, etc.

COMMUNITY ACTION

- 4.43 Collaborate with Friends of the Park groups to manage and improve County parks and facilities.

SUSTAINABILITY OBJECTIVE

Existing and all new regional urban centers include multi-use natural open space and corridors.

POLICY

- 402. Establish topographically-sensitive active living corridors throughout portions of the urban centers.
[Rationale: Based on Active Living Research and recommendations from Urban Land Institute, Rails to Trails Conservancy. See also Hāmākua CDP Policy 66, 104, 107, and General Plan 12.3 (m, o)]
- 403. Active living corridors should be where: (i) travel way gradients are low enough to be appropriate for general recreational and bike/pedestrian commuting purposes, and (ii) infill development and/or urban core extensions are planned.

ACTION

- 4.44 Amend Hawai'i County Code 22 (Streets) to establish Complete Streets active-living corridors in the primary urban areas. [Code]
- 4.45 Adopt Complete Streets Code for new & expanded developments. [Transportation]
- 4.46 Create and adopt budget-inclusive active living corridor plans for the primary urban centers.
- 4.47 Provide funding for planning and acquisition, if necessary, of key corridor segments after corridor-zone plans are adopted.
- 4.48 Revise zoning code to include a requirement for zones/corridors within both the environmental report and the project master plan already required in zoning code for all urban use rezones of 50+ acres.

PROMOTING ACTIVE LIVING THROUGH RECREATION, TRAILS, & PUBLIC ACCESS

Public Access & Trails

SUSTAINABILITY OBJECTIVE

Number of public access sites created through acquisition or easement or enhanced with assistance from CZM funding or staff.

POLICY

404. The County of Hawai'i shall establish: public access to and along the shoreline to significant historic sites, public transit along the top of cliff, streams and other natural water courses, mauka trails, facilities, and access to sites for gathering, hunting, and other recreational purposes and in accordance with Hawai'i County Code Chapter 34.
[Rationale: Based on existing County Code 34, General Plan Policy 12.3 (l, m), Ka'ū CDP Policy 81, and Hāmākua CDP Policy 48]
405. Subdividers of six or more lots, parcels, units, or interests shall be required to dedicate land for public access for pedestrian travel from a public highway or street to the land below the high-water mark on any coastal shoreline or to areas in the mountains where there are existing facilities for hiking, hunting, fruit-picking, ti leaf sliding, and other recreational purposes, and where there are existing mountain trails.
[Rationale: Based on existing HRS 46-6.5 and HCC 34-4(c).]
406. Prior to disposing of, leasing, or transferring public lands, including public roads or trails, public access potentials shall be assessed, documented and protected if public access use is in the public's interest.
[Rationale: Based on existing HRS Section 46-1.5, Hāmākua CDP Policy 50, and General Plan 12.3 (n).]
407. Ensure that publicly owned historic trails and roads are properly identified, and consultation occurs to protect the public's interests.
[Rationale: Based on the Highways Act of 1892, Hāmākua CDP Policy 50, and the General Plan 12.3 (n).]
408. Alignment of coastal trails shall consider flexibility for realignment for sea level rise and other dynamic shoreline changes. [Climate Change]
[Rationale: Based on current status of some impacted coastal areas and research relating

to projected sea level rise impacts on coastal assets. See also California Coastal Commission Sea Level Rise Policy Guidance.]

409. Determine the location and ownership of historic trails and roads as early as possible in the land use application process.
[Rationale: Based on identified challenges with ownership of historic trails and roads and the subsequent legal implications. See also General Plan Policy 13.2.3 (q)]
410. Where a subdivision is traversed by a natural water course, drainage way, channel, or stream, the Planning Director should require a pedestrian, equestrian, and/or bicycle path when the opportunity exists to connect to existing or future drainage or trail corridors.
411. Trails may also be used as emergency access routes, where appropriate.
412. Support the development of a Rails to Trails type program to facilitate the conversion of old railway segments to a public trail network.
413. Seek private-public partnerships to manage and maintain public access to the shoreline, public trails, hunting areas, scenic places and vistas, and significant historic sites, buildings, and objects of public interest. [Public Access]
414. Explore options and collaborate with community groups to increase access to former sugar cane roads to be used as non-motorized trails where feasible and appropriate.

ACTION

- 4.49 Amend code to require bicycle and walking path easements be developed in urban areas to increase walkability and multimodal transportation options. [Code]
- 4.50 Work with the State and adjacent landowners in establishing old railroad right-of-ways as pedestrian and bicycle trails.
- 4.51 Identify by GPS coordinates all existing historic trail alignments that (a) have been recommended for preservation by SHPD, (b) appear on historic maps and/or are known by oral tradition, and incorporate these into the County GIS database.
- 4.52 Actively implement the Ala Kahakai National Historic Trail Memorandum of Understanding.
- 4.53 Appropriate, finance, allot, and encumber Capital Improvement Projects in support of trail development as part of a regional trail system.
- 4.54 Add public access requirements as listed in Hawai'i County Code Chapter 34 Public Access to apply to Chapter 23 Subdivision Code, SMA review, zoning code, special permits, etc. [Code]

- 4.55 Develop and implement a public-private program to establish and manage specific access points and trails.

SUSTAINABILITY OBJECTIVE

Develop and maintain a public access program that integrates recreation, subsistence, and cultural access priorities.

POLICY

415. Integrate Public Access into County department priorities in the following ways:
- a) Incorporate public access and development into a program overseen by the Planning Department as per Chapter 34.
 - b) Integrate PONC property management and maintenance into the Parks and Recreation code in Chapter 2: Article 11 and Chapter 15: Parks and Recreation.
 - c) Develop adequate staff to carry out the provisions of Chapter 2 Article 42, relating to the PONC maintenance fund (as per: Section 2-214.2 (b). Pursuant to section 10-16(c) of the Charter, the maintenance fund shall be administered and managed by the department of parks and recreation. Adequate staff to carry out the provisions of this article and section 10-16 of the Charter shall be provided in the department of parks and recreation.

[Rationale: Based on identified gaps in addressing or applying public access regulations and procedures consistently between the various County Departments. The County lacks capacity to fulfill its existing public access objectives without increasing staff capacity, maintenance capacity, and without having clearer directives between the various departments to implement a cohesive public access program.]

416. Integrate County public access priorities in all aspects of land use decisions and permit reviews.
417. Consistently integrate public access development and maintenance into Parks and Recreation department priorities.
418. Support facility development for access management at access points and along trail corridors.

ACTION

- 4.56 Establish a County of Hawai'i Public Access and Trail Program with sufficient staff and resources. Staff will be required to consult/consider recommendations of this program in all permit reviews. Elements of this program may include:

- a) A comprehensive access inventory;
- b) A public access rating system to help with prioritization;
- c) Comprehensive reviews of projects (on public or private lands) that will affect public accesses and trails;
- d) Inventory of ancient trails, cart roads, and old government roads in coordination with appropriate State agencies.
- e) Public outreach and coordination element.
- f) Identify agencies/groups to develop, administer, and maintain public accesses, including developing County capacity for this purpose;
- g) Identify funding sources to purchase and manage public access easement to priority areas;
- h) When public access goals will involve several landowners, acquire the public access incrementally as opportunities arise to do so;
- i) Public accesses that cross private land will be acquired and held until appropriate management of the accesses is in place;
- j) Collaborate with State and Federal agencies on public accesses that require multi-agency involvement;
- k) Develop a standardized template to promote consistency and comprehensiveness in the public access plans required by landowners;
- l) Partner with community organizations capable of assisting with public access management;
- m) Work with State agencies (particularly with DOFAW) to coordinate, survey, develop, and manage public trails and roads leading to forest reserves;
- n) In co-sponsorship with the State when possible, acquire land for public access to historic sites and objects and to the shoreline where safe transit does not already exist;
- o) Reinstitute a Public Access Wayfinding program managed by the Planning Department to assist interested community groups in maintaining appropriate signage at public access points;
- p) Provide cultural and safety information at trailheads;
- q) Provide for substantive community input to the County Planning Department and the County Council in order to finalize and accept priority access. Include community input in program policy.
- r) Whenever the County assumes the responsibility for posting and maintaining signage and maintaining public accesses and other public infrastructure, a specific County agency will be identified and assigned the aforementioned responsibilities. [Code, Public Access]

- 4.57 Amend the subdivision code to better address public access issues in the following ways:
- a) Revise/Develop enforcement protocols for public access violations, including fines for noncompliance and mechanisms to remove private obstructions from public accesses;
 - b) Review Hawai'i County Code Chapter 34 requirements for public access standards, including design that fits into surrounding community, environment, and conditions. Establish parameters for requiring appropriate right-of-way, parking, and comfort stations for various types of public accesses/trails and incorporate these into Chapter 34;
 - c) Amend Hawai'i County Code Chapter 34 to develop a clear methodology to modify public access routes in order to adapt to sea level rise, landslides and erosion, and other impacts related to environmental impacts and climate change;
 - d) Amend Hawai'i County Code Chapter 34, Rule 21, Chapter 23, and Chapter 25 CA 1.1.1 to ensure access and trail rights-of-way during subdivision. [Code]
- 4.58 Complete an inventory and database of significant natural resource areas with recreational and trail connectivity value.
- 4.59 Adopt an on-going program of identification, designation, and acquisition of areas with existing or potential recreational resources, such as land with sandy beaches and other prime areas for shoreline recreation in cooperation with appropriate governmental agencies.
- 4.60 Develop procedural rules and templates for public access agreements and Grant of Easement (GOE) to facilitate consistency and to provide mechanisms for tracking, follow-through, and geographic information system (GIS) identification in County of Hawai'i systems, etc.
- 4.61 Develop procedural guidelines for renegotiating access agreements.
- 4.62 Renegotiate public accesses that were developed prior to Chapter 34 to be consistent with Chapter 34.
- 4.63 Evaluate and initiate Charter & code amendments related to Public Access, Open Space and Natural Resource Preservation (PONC). These may include:
- a) Clearly distinguish categories of PONC property, such as active or passive use, conservation, restoration, natural buffer areas, access uses, etc. (for

instance, lands acquired to provide access versus lands acquired to preserve from development that may not be appropriate for public access).

- b) Amend Charter Section 10-5 c & f to allow PONC funds to be used for the planning, design, development of new buildings, facilities, (including comfort stations) or infrastructure such as roads, paths, bridges, culverts, ramps, or drainage features if such improvements are necessary to meet the objectives of public safety and to meet the purposes outlined in Hawai'i County Code 2-214.1. [Code]
 - c) Interpret or amend Charter Section 10-15 (c) 3 and County Code Section 2-214.1 c) 3 referring to natural resource buffer zones to include buffer zones for natural hazard areas, such as properties facing sea level rise, lava inundation, steep slopes, or identified priority viewsheds. [Code]
 - d) Include assessments of tax revenue implications for lands nominated for PONC consideration.
 - e) Amend Charter section 10-15 (c) and County Code Section 2-214.1 (c) to be consistent with each other. For example, the County Code allows PONC funds to be used for "significant habitat or ecosystems" but the Charter does not include those terms. [Code]
- 4.64 Amend Chapter 15 to include PONC and trail development as part of the Parks and Recreation Department's priorities to be consistent with Chapter 34 in partnership with the Planning Department.[Code]
- 4.65 Conduct a performance review of the PONC Maintenance Fund and Stewardship Grant program to identify and implement ways to improve PONC management system.
- 4.66 Amend Hawai'i County Code Section 2-218 Prioritized list of qualifying lands worthy of preservation to establish a means to evaluate the socio-environmental equity of the lands nominated by district. Such as:
- a) When there are multiple lands under consideration at any one time, priority shall be given to coastal lands and lands where matching funding is available to leverage the County contribution;
 - b) Consideration should be given to lands within districts under-represented by PONC preservation program. [Code]

AGENCY ACTION

- 4.67 Coordinate with State agencies to improve access and access/trail management resources (including policies, conditions, identification, cataloguing, enforcement, maintenance, etc.).
- 4.68 Consider establishing a working group with surrounding land owners and the user-community to educate users and manage ATV use to ensure that non-pedestrian allowances are not permitted within sections of modern trails that overlap, are congruent, or correspond to ancient or historic trails and its associated features.
- 4.69 Coordinate with hunting associations and other land stewards, to establish clear hunting policies and disseminate education regarding these policies.
- 4.70 To facilitate greater public access to and along the shoreline and elsewhere, amend Hawai'i Revised Statutes 520, Hawai'i's Recreational Use Statute (RUS), to make it less ambiguous and to discourage frivolous lawsuits.

PRESERVING OUR CULTURAL & HISTORIC LEGACIES

Native Hawaiian Values & Practices

SUSTAINABILITY OBJECTIVE

Native Hawaiian language, values and practices are integrated into all County processes.

POLICY

- 419. Ensure Native Hawaiian access rights are clearly expressed in County code, policies, and procedures.
[Rationale: Based on identified gaps in County code and an over-reliance on State statutes to address Native Hawaiian rights. See HRS Section 1-1, 7-1 and Article 12 Section 7 of the Constitution of the State of Hawai'i.]
- 420. Protect all rights, customarily and traditionally exercised for subsistence, cultural, and religious purposes and possessed by ahupua'a tenants who are descendants of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights. [Public Access, Natural Resources, Health]
[Rationale: Based on identified gaps in County code and an over-reliance on State statutes to address Native Hawaiian rights. See HRS Section 1-1, 7-1 and Article 12 Section 7 of the Constitution of the State of Hawai'i.]

- 421. Prioritize and maintain an education and awareness program for County employees regarding Native Hawaiian culture, values, and resource management.
[Rationale: Based on identified gaps in County capacity to sensitively address Native Hawaiian issues.]
- 422. County shall staff include qualified personnel versed in Hawaiian language, Hawaiian history, and historic preservation to provide dedicated expertise in support of the objectives, policies, and actions stated in this plan.
[Rationale: Based on identified gaps in County capacity to sensitively address native Hawaiian issues.]
- 423. Ensure access for cultural practitioners in areas that may not be appropriate for public access (e.g. Burial sites, specific heiau).
[Rationale: Based on examples of sensitive areas that may need special treatment based on cultural protocol.]
- 424. Support festivals and events that promote Native Hawaiian history and culture.
- 425. Support the development a multi-sector public education program regarding historic sites that target the hospitality industry, real estate agents, site developers, consultants, schools, youth groups, civic organizations, etc.

ACTION

- 4.71 Codify protections of Native Hawaiian customs and gathering rights related to access and cultural preservation.
- 4.72 Identify and inventory important Native Hawaiian cultural and historic places, traditional cultural properties, traditions, and practices, through the use of architectural, archaeological, ethnographic surveys, and oral histories. [Mapping]
- 4.73 Develop an inventory of Native Hawaiian cultural resources and practices with potential to be impacted by sea level rise. Work with Native Hawaiian communities to determine steps they want to take regarding climate impacts. [Climate Change]
- 4.74 Amend the County building code to add standards for structures utilizing traditional Hawaiian building design and construction methods. There may be certain limitations placed on the occupancy or use of these structures, such as for cultural purposes, accessory uses and/or occasional gatherings only. [Code]

PRESERVING OUR CULTURAL & HISTORIC LEGACIES

Multi-Cultural Heritage

SUSTAINABILITY OBJECTIVE

At least one yearly cultural event is supported by the County in each district.

POLICY

- 426. Support festivals and events that promote the island's multi-cultural heritage.
- 427. Represent Hawai'i as a place that embraces not only its own multi-cultural heritage, but all world cultures in inclusive and celebratory ways.
- 428. Promote educational and celebratory opportunities for cultural exchanges with other world cultures.
- 429. Promote opportunities for 'sister city' and other types of place-based cultural enrichment opportunities with international communities.

ACTION

- 4.75 Establish and maintain a County Program (including grants) to support festivals and events that promote history and culture.

PRESERVING OUR CULTURAL & HISTORIC LEGACIES

Historic Preservation

SUSTAINABILITY OBJECTIVE

Achieve 100% preservation of sites identified for preservation by State Historic Preservation Division.

POLICY

- 430. Historic Preservation shall represent the full range and diversity of the multi-cultural heritage of Hawai'i Island.
[Rationale: Based on General Plan Goals 6.2, and Policies 6.3 (a-o).]

431. The County shall maintain an inventory of significant cultural and historic sites and districts compatible with that of the State Historic Preservation Division. The inventory shall identify the location of sites on the Hawai'i and National Register, the State Inventory of Historic Places, and may also include sites of community significance identified as being:

- a) Important in the life or activities of a major historic person;
- b) Associated with a major group or organization in the history of the island or community;
- c) Associated with a major historic event (cultural, economic, military, social, or political);
- d) Associated with a past or continuing institution that has contributed substantially to the life of the community;
- e) Unique example of a particular style or period;
- f) One of the few of its age remaining;
- g) Original materials and/or workmanship that can be valued in themselves;
- h) Sites with a preponderance of original materials in context and complexes rather than single isolated sites unless they are of great significance; and
- i) Sites of traditional and cultural significance.

[Rationale: General Plan 6.3 (a-o).]

432. Preservation plans shall be completed for all subdivisions with cultural or historical properties (sites, buildings, objects, landscapes) identified for preservation prior to approval of the final plat map or any site work.

[Rationale: Based on identified issues where development commences prior to County permit approvals, thereby possibly damaging historic sites or areas. See also General Plan 6.3 (a-o).]

433. The County shall develop a comprehensive management plan for historic and cultural resources that are on County owned properties or on properties managed by the County.

[Rationale: General Plan 6.3 (a-o).]

434. Require completion of preservation plans for all significant sites identified for preservation.

[Rationale: Based on identified issues where development commences prior to County permit approvals, thereby possibly damaging historic sites or areas. See also General Plan 6.3 (a-o).]

435. Require completion of mitigation plans for identified sites, or resources that have been identified as historic but will not be preserved.

[Rationale: Based on identified issues where development commences prior to

completion of mitigation plans, thereby possibly damaging historic sites or areas. See also General Plan 6.3 (a-o).]

436. Require stewardship and/or protection of sites, buildings, objects, and landscapes of significant cultural and historical importance to the County.

[Rationale: Based on General Plan 6.3 (b).]

437. Partner with DLNR-SHPD to outline how each agency will cooperate to ensure historic and cultural protections, verify that approved Preservation Plans are being implemented, and promote appropriate restoration of historic sites and cultural landscapes.

[Rationale: Based on identified needs for further collaboration between State and County agencies and on General Plan 6.3 (a).]

438. Through the Hawai'i County Cultural Resources Commission, the County shall engage in consultation with Section 106, National Historic Preservation Act, and shall use this opportunity to engage the community, especially those with generational and traditional environmental knowledge, in the consultation process.

[Rationale: Based on Section 106 National Historic Preservation Act and the HCC Chapter 2 Article 44.]

439. Subdivisions subject to cultural or historic surveys shall have all sites approved for preservation, including any required buffers or access easements, identified on the plat maps of the subdivision prior to granting of final subdivision approval. The metes and bounds descriptions of the preservation easements and all applicable covenants and restriction pertaining to the preservation easements, shall be added to applicable deeds prior to the transfer of subdivided properties. [code/mapping]

[Rationale: Based on consultation with Administrative Permit Division of Planning Department and identified gaps in comprehensive recordkeeping in subdivision files. See also General Plan 6.3 (g).]

440. Outstanding natural or cultural features, such as scenic resources, water courses, fine groves of trees, heiau, and historical sites and structures, shall be identified and preserved during subdivision.

[Rationale: Based on preserving public trust, and Hawai'i County Code Section 23-26, and General Plan Goals of 6.2, 6.3 (g).] [Mapping]

441. The County shall use and promote the use of interpretive signage and/or other appropriate methods to recognize landscapes, sites, buildings, and objects of significant historical and cultural importance.

- 442. Partner with Community Development Plan Action Committees and the Cultural Resource Commission to develop design guidelines for designated communities containing significant historic buildings, sites, or landscapes.
- 443. Partner with DLNR's State Historic Preservation Division to increase, maintain, and regularly update the State inventory of Historic Places database with significant historical and culturally important sites, buildings, objectives, and landscapes on Hawai'i Island.
- 444. Seek private-public partnerships to maintain and steward the preservation of sites, buildings, objects, and landscapes of significant cultural and historical importance.
- 445. For new County community facilities, incorporate and consider cultural design elements appropriate for the region.
- 446. Establish Historic Districts, Heritage Landscapes, Corridors, Areas, and Centers as land use designations for purposes of preserving, conserving, or restoring historic properties for the benefit of communities' sense of place and appropriate adaptive reuse for future generations.

ACTION

- 4.76 Identify and map valued cultural and historic places, structures, traditions, and practices, and Hawai'i's multi-cultural heritage through the use of architectural, archaeological, ethnographic surveys, and oral histories. [Mapping]
- 4.77 Compile and maintain a list of cultural/historic experts by island districts who may be consulted, as needed.
- 4.78 Complete community-level historic surveys.
- 4.79 Amend the subdivision code, Section 23-69 to include a requirement that the final plat map reflect information from the preservation plan, including any required buffers or access easements. [Code]
- 4.80 Down-zone identified State and County-owned parcels that have special cultural and/or scenic value.
- 4.81 Amend the zoning code to include criteria for requiring cultural preservation plans prior to development. [Code]
- 4.82 Adopt rules that establish when ethnographic Surveys or Cultural Impact Assessments will be required and what standards should be followed.
- 4.83 Develop County-wide Cultural Resource Commission processes for reviewing permit applications that relate to identified cultural or historic resources.

- 4.84 Develop protocols for receiving community input during capital project siting and design. Consult with and solicit input from community members with generational knowledge to minimize the impact of proposed changes to the use of land on cultural practices, cultural sites, and culturally significant areas, including burials.
- 4.85 Adopt design guidelines for designated communities containing significant historic buildings, sites, or landscapes.
- 4.86 Prepare Cultural Landscape Reports, prioritizing Historic Districts to articulate preservation goals, objectives, and policies that provide the basis for making sound decisions about management, treatment, and use of historic and cultural resources. [Report]
- 4.87 Promote the real-property tax incentives for preservation of historic properties.

PROTECTING SCENIC RESOURCES

SUSTAINABILITY OBJECTIVE

Increase participation in scenic preservation programs (Heritage Corridors, Scenic Byways, Scenic Corridors and Exceptional Trees)

POLICY

- 447. Hawai'i County shall use the following place types as guidelines for designating sites and viewsheds that shall be protected:
 - a) Distinctive and identifiable landforms distinguished as landmarks and/or cultural landscapes, e.g. Mauna Kea, Waipi'o Valley.
 - b) Coastline areas of striking contrast, e.g. Laupāhoehoe Point
 - c) Vistas of distinctive features
 - d) Natural or native vegetation attractive to a particular area.
 - e) Landscapes that are harmoniously developed, enhanced by man while maintaining their natural appearance, e.g. Pu'ukoholā, 'Akaka Falls.
 - f) Lands with a general slope of 20 percent or more that provide open space amenities or possess unusual scenic qualities.

[Rationale: Based on the Standards from General Plan 7.4 (a-e) and 8.4 (c).]

- 448. Visual impact assessments shall include photo simulations or balloon tests with views from various vantage points to show visual impact of a proposed project.

[Rationale: Creating visual modeling through photo simulations or balloon tests are

common strategies used in visual impact assessments in other municipalities. These visual impact assessment tools would help achieve General Plan 7.2 Goals and policies 7.3 (b, e, h, i).]

449. Prioritize maintaining the views at scenic overlooks with a frequently maintained vegetation management program which includes eradication of invasive species. Coordinate this work with regular roadway vegetation management maintenance program.

[Rationale: Based on identified challenges with vegetative management of existing scenic overlook and the prevalence of the views being obstructed by invasive species or other vegetation. See also Hāmākua CDP 38, Kōkua Action 9, and General Plan 7.2 (b), 7.3 (a, b, c, f).]

450. Maintain a continuing program to identify and inventory exceptional trees, forest areas, or groves/stands of trees.

[Rationale: Based on Standards from General Plan 7.3 (g) and policies 7.4 (a-e) 8.3 (j, k, m.)]

451. Maintain the Exceptional Tree Program for the recognition and protection of trees with significant or unique historical, ecological, cultural and/or aesthetic significance.

[Rationale: Based on General Plan policy 7.3 (g).]

452. No variance shall be granted unless appropriate conditions are imposed to minimize adverse impacts on public views to, from, and along the shoreline.

[Rationale: Based on Hāmākua CDP Policy 17, General Plan goals 7.2 (a-c), and policies 7.3 (b), 8.3 (c, d). See also HRS 205A.

453. Do not allow incompatible development in areas of natural beauty that have been identified through the Scenic Resources Protection Program.

[Rationale: Based on an identified need to identify natural beauty areas through a scenic resource protection program and restrict development appropriately to ensure scenic resources are not lost to development. Based also on General Plan policies 7.3 (h, i).]

[Mapping]

454. Applications for Special Permits and environmental assessment reports for proposed changes of zone on property that may impact open space, viewsheds, and areas of natural beauty shall include visual impact assessments and propose conditions to mitigate scenic impacts.

[Rationale: Based on identified needs to protect scenic resources, open space and natural beauty in the special permit process. Also based on Hāmākua CDP policy 33 and Ka'ū CDP policy 57.]

455. Hawai'i County shall seek to minimize, any development which would substantially interfere with or detract from the line of site toward the sea from the State highway nearest the coast.
[Rationale: Based on Hāmākua CDP Policy 35, Ka'ū CDP Policy 54, General Plan policy 7.2 (b) and 7.3 (f).]
456. Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline.
[Rationale: Based on an identified need to ensure that development is managed appropriately to protect natural landforms and viewplanes. Based also on General Plan policies 7.3 (h, i).] [Land Use]
457. Preserve roadway corridors that have historic, scenic, or unique physical attributes that enhance the character and scenic resources of communities.
458. Support the development and promotion of Heritage Corridors and Scenic Byways where appropriate.
459. Support the designation of scenic byways through the State Scenic Byway Program.
460. In reviewing Special Permit applications, rezoning, and other land use changes in the Agricultural District, appropriate conditions should be determined to preserve existing viewsheds to and along the coastline. [Land Use]

ACTION

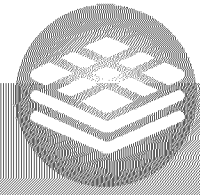
- 4.88 Develop and establish viewshed regulations to preserve and protect from obstruction scenic resources, vistas, viewsheds, open space, prominent landscapes, and areas of natural beauty identified in the General Plan.
- 4.89 Develop and maintain a program to identify, inventory, preserve, acquire, and develop (where appropriate) viewing sites on the island. [Transportation]
- 4.90 Collaborate with the State to modify zoning on publicly-owned parcels that have been identified as having special cultural and/or scenic value. [Land Use]
- 4.91 Identify valued scenic resources in the Coastal Zone Management area. [Land Use, Mapping]
- 4.92 Identify and develop scenic lookouts along highways to ensure important views (coastal, mountain, and waterfall) are preserved from development, create various opportunities to view these scenic resources, and develop a vegetation maintenance program.

- 4.93 Establish a Scenic Resources Protection Program to identify, inventory, and protect areas of significant beauty. The program would include:
- a) Rate viewsheds and roadway corridors documented in the Scenic Resources Inventory and Mapping Project (June, 2016)
 - b) Develop scenic resource and viewshed corridor maps
 - c) Develop administrative rules to implement Hawai'i County Code section 25-6-60
 - d) Develop Scenic Corridor Management Plan(s) for specific corridors identified. Scenic Corridor Management Plan(s) should include permit conditions, such as design guidelines, landscaping, screening, or structural setbacks from major thoroughfares and highways, to mitigate any visual impacts from development.
 - e) Prepare Urban Design and Scenic Resource Protection Guidelines
 - f) Staff and Planning Commission Training;
 - g) Set Guidelines for Development Compatibility Standards. [Program]
- 4.94 Develop, maintain, and implement design standards to protect important viewsheds and ensure structural setbacks from major thoroughfares and highways.
- 4.95 Develop Scenic Corridor Management Plans.
- 4.96 Adopt administrative rules to implement Hawai'i County Code for Scenic Corridors.
- 4.97 Perform a feasibility study on developing a scenic route from Waipi'o Valley Lookout extending mauka to connect Mud Lane at the entrance of Waimea and a scenic park with a viewing area of Hi'ilawe Falls.
- 4.98 Coordinate with the State to upgrade the viewing site from the rim of Pololū Valley.

AGENCY ACTION

- 4.99 Encourage the State to develop and maintain scenic lookouts along highways where appropriate to ensure ocean, mountain, pastoral, and waterfall views are preserved from development, and coordinate a regular roadway vegetation maintenance program.
- 4.100 Consider adding/improving viewing locations and interpretive signage near the scenic bridges for safe parking and views of the areas' waterfalls and coastline and along Saddle Road (Route 200) for views of the summit.

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Section 5: Land Use Planning

GOALS

5. Hawai'i will strategically use progressive planning strategies to direct and manage growth and development to protect natural resources, ensure the safety of residents and visitors, and enhance the quality of life. The principle land use strategy for design and implementation will focus on achieving a sense of place by protecting and enhancing community character through natural systems planning, smart growth strategies, and compatible land use planning that incorporates culture and equity into the planning and decision-making process.

- a) Direct growth and increase density towards urban and village centers;
- b) Prioritize infill of the underutilized areas within existing urban and village centers;
- c) Focus and prioritize future investments in new infrastructure that will facilitate the opportunity to direct growth to the designated urban areas;
- d) Discourage sprawl outside of designated urban centers;
- e) Provide multimodal transportation to and within urban and village centers;
- f) Encourage a mix of uses to build livable communities that provide residents with opportunities for employment near affordable housing, together with access to commercial and recreational opportunities.

ENSURING LAND USE COMPATIBILITY

POLICY

461. Plan approval and related conditions shall consider forest and coastal ecosystems, agricultural lands, open space, viewscales, areas of natural beauty, archeological and historic sites, and historic buildings when assuring that proper siting is provided for, proper landscaping is provided, unsightly areas are properly screened or eliminated, and natural and man-made features of community value are preserved.

[Rationale: Based on HCC 25-2-77(a) & 76, HCC 23-26, Ka'ū CDP Policy 14; see also General Plan 8.2 Goals and 8.3 Policies.]

462. The County shall reevaluate projects for consistency with the General Plan and applicable Community Development Plans during review of time extension requests for discretionary approvals.
[Rationale: Based on consultation with Planning Division staff regarding issues with approved project proposals that remain undeveloped and are allowed to retain entitlements in perpetuity that were approved for a specific project and specific circumstances. At times, this may ‘tie up’ infrastructure commitments that aren’t being used, it can impact desired density for land use areas, and it has been used as a speculative real estate strategy to resell the undeveloped property with the enhanced entitlements. See also Maui County Planning Commission Chapter 202 Special Management Area Rules.]
463. Require a study of the significant cultural, social and physical impacts of large developments prior to approval.
[Rationale: Based on General Plan 2.3 (d)]
464. Zoning requests shall be reviewed with respect to General Plan designation, district goals, regional plans, State Land Use District, compatibility with adjacent zoned uses, availability of public roads and services, utilities, and public need.
[Rationale: Based on General Plan 14.1.4 Standards (b).]
465. Focus higher density residential and commercial areas in communities that can sustain a higher intensity of uses and where these residential and commercial uses are consistent with the existing town character.
466. Zoning may be recommended on an incremental basis depending upon construction schedule, development of supporting services and facilities, and other pertinent factors bearing upon the performance of the petitioner.
467. Proactively allocate zoning as per Urban Growth Areas and Urban Service Areas to facilitate preferred land use development.
468. The County should carefully evaluate and condition, as appropriate, any rezoning that would negatively impact agricultural lands or culturally, visually and environmentally important open spaces or resources.
469. Applicable ordinances should be reviewed and amended as necessary to include considerations for urban design, aesthetic quality and the protection of amenities in adjacent areas through landscaping, open space and buffer areas. [Code]
470. In those cases where provisions of the zoning and subdivision code are inconsistent with the character of surrounding neighborhoods, variances or PUDs that maintain consistent village/town character should be encouraged.

471. Explore innovative methods to reduce property speculation, such as elevated tax rates associated with rapid resale, and/or district-wide rezoning.

ACTION

- 5.1 Amend zoning code and/or administrative rules to set up criteria for incremental zoning approvals to be reviewed and develop criteria for these approvals to be revoked, including expiration deadlines, etc. [Code]
- 5.2 Amend zoning to be consistent with the General Plan to facilitate preferred land use development. [Code]
- 5.3 Amend zoning code and administrative rules to add criteria for Plan Approval requirements. [Code]
- 5.4 Establish a program of continuing review of the Zoning Code in light of emerging new industries and technologies and incorporate revisions to land use regulations as necessary.
- 5.5 Develop subdivision standards that make a distinction between agricultural rural, and urban land uses.
- 5.6 Seek State legislation to impose a higher conveyance tax rate and/or capital gains taxes on properties that are re-sold within a short period, with exceptions for properties providing affordable housing.
- 5.7 Seek State enabling legislation to allow County retention of lots that are in foreclosure for delinquent real property tax payments rather than having them auctioned for sale to the highest bidder, so that they can be removed from real estate circulation if located in identified high hazard areas, or so they can be used for relocation purposes when other properties are acquired for future rights-of-way, public facilities, land assembly related to village/town center development, or other objectives of the Community Development Plan.

ENSURING LAND USE COMPATIBILITY

Urban

SUSTAINABILITY OBJECTIVE

Increase residential density within Urban areas to an average density of 10 units per acre and increase the mixed use development pattern.

POLICY

472. The Urban Growth Areas shall have a regulatory boundary that is intended to separate land uses from Agriculture or Rural. Areas that are clearly beyond the designated Urban Growth boundaries shall be preserved as Rural or Agricultural lands to maintain open space, scenic view planes, and natural beauty areas.
[Rationale: Based on Hāmākua CDP Policy 5] [Agriculture]
473. Do not allow strip or spot commercial development on the highway outside of designated urban areas.
[Rationale: Based on General Plan policies 14.3.5.3.2 (c), 14.3.5.5.2 (d), 14.3.5.6.2 (c), 14.3.5.8.2 (a), 14.3.5.9.2 (b), and Ka'ū CDP Policy 2.]
474. Provide adequate access for multi-family residential projects to arterial streets, shopping facilities, schools, employment centers, and other services. Multi-family residential areas shall be located in such a manner that traffic generated by high density development will not be required to travel through areas of lesser density to access principal community facilities.
[Rationale: Based on General Plan Standards 14.5.4 (a), (c).]
475. Major traffic routes shall not be located through single-family residential areas.
[Transportation]
[Rationale: Based on the County's Vision Zero goals for pedestrian safety and General Plan Standards 14.6.4 (b).]
476. No new single-family residential lots should have direct vehicular access from major streets. [Transportation]
[Rationale: Based on consultation with administrative permits division and the County's Vision Zero goals for pedestrian safety.]
477. Multi-family residential development shall not be permitted in high risk hazard areas unless proper on-site improvements are provided. [Hazards]
[Rationale: Based on General Plan 14.5.4 Standards (d).]

478. Multi-family residential development shall be located in areas where public utilities can be economically provided at a level adequate to meet the demand for the concentrated service.

[Rationale: Based on General Plan 14.5.4 Standards (e).] [Infrastructure]

479. Proposed designations for new commercial community centers shall include a market study to demonstrate the proposed center is necessary to meet neighborhood, community, and regional needs.

[Rationale: Based on General Plan 14.3.3 Policies (c)]

480. Within the "medium-density" area, commercial development shall be focused on major streets, while interior blocks should be zoned primarily for single and multifamily residential use.

[Rationale: Based on General Plan 14.3.5.2.2 (f).]

481. Waimea is the regional commercial center for northern Hawai'i.

[Rationale: Based on General Plan 14.3.5.6.2 (a).]

482. Standards: There are three basic types of commercial centers:

a) Neighborhood Centers

- 1) Provide: Convenience goods, e.g., foods, drugs, and personal services.
- 2) Major Shops: Supermarket and/or drug store.
- 3) Number of Shops: 5 to 20.
- 4) Approximate Market: 3,000 people.

b) Commercial Community Centers

- 1) Provide: Convenience goods, plus "soft line" items, such as clothing, and "hard line" items, such as hardware and small appliances.
- 2) Major Shops: Variety or junior department store.
- 3) Number of Shops: 20 to 40.
- 4) Approximate Market: 15,000 people.

c) Regional Centers

- 1) Provide: Full range of merchandise and services.
- 2) Major Shops: Full size department store.
- 3) Number of Shops: 40+.
- 4) Approximate Market: 50,000 people.

[Rationale: Based on General Plan 14.3.4 Standards.]

483. Village Types Defined—Transit-Oriented Developments (TODs) vs. Traditional Neighborhood Developments (TNDs). Both TODs and TNDs are compact mixed-use villages, characterized by a village center within a higher-density urban core, roughly equivalent to a 5-minute walking radius (1/4 mile), surrounded by a secondary mixed

use, mixed-density area with an outer boundary roughly equivalent to a 10-minute walking radius from the village center (1/2 mile).

[Rationale: Puna CDP Table 5-1, Kona CDP TODs.]

484. Town and village center standards. See Table 4.

[Rationale: Puna CDP Table 5-1, Kona CDP TODs.]

	Regional Town Center (TOD)	Village Center (Kona neighborhood TOD)	Neighborhood Center
Service Area Population	20,000-50,000 residents	10,000-20,000 residents	3,000-10,000 residents
Approximate Land Area	More than 30 acres	20-30 acres (20 acres or more Kona TND)	Up to 20 acres (20 acres or less Kona)
Typical Components	Mixed uses and higher density residential, multi-family residential, retail, commercial, light industrial uses; regional park; schools (all grades); community hall, theater; outdoor events area; elderly or other special needs housing; transit hub; medical facility with emergency room; police and fire station; walking and bicycling paths.	Neighborhood oriented retail uses, and mixed-use intended to serve the needs of the Village residents, community park, elementary or middle school, community center and outdoor events area; bed-and-breakfast homes and small inns; elderly or other special needs housing; transit stop; medical clinic; walking and bicycling paths.	retail and personal services; neighborhood park, elementary school, multi-purpose meeting room or (minimum) place to congregate or post community notices; outdoor events area (e.g., barbeques and farmer's markets); transit (or paratransit) stop; connections to walking and bicycling paths.
Access	Access to one or more paved roads; commercial or public uses without direct driveway access to highway. 5-minute walking radius (1/4 mile)	Access to one or more paved roads; commercial or public uses without direct driveway access to highway; no "drive-thru" commercial use.	Access to a paved road, except that there should be no direct access or visibility from highway; no "drive-thru" commercial use.

Table 3: Town and Village Center Standards

485. Use criteria for proposed village/town center masterplans. Criteria to include:

- a) Mix of residential and commercial zoning/uses
- b) Mix of housing types (single-family and multifamily)
- c) County roads
- d) Road/intersection density
- e) Public or private water system
- f) Public or private wastewater system
- g) Public facilities investment (school, park, or community center).

[Rationale: Kona CDP Action LU–2.1a, Puna CDP 3.1.2.b., 3.1.3.b.]

486. Ensure that any cul-de-sacs approved are consistent with Hawai'i County Code Section 23-48. [Transportation]

[Rationale: Based on consultation with administrative permits division. Currently, cul-de-sacs are not necessarily developed consistent with HCC Section 23-48, which requires that they not be more than 600 feet in length or serve more than 18 lots. See also Kona CDP Policy TRAN-2.1 (1) and (2).]

487. Establish Urban Growth Areas as land that is envisioned as future areas of urban and suburban and should include only those lands that meet the following criteria:

- a) Are characterized by urban development that can be efficiently and cost effectively served by roads, water, sanitary sewer and storm drainage, schools and other urban governmental services within the next 20-40 years;
- b) Do not extend beyond natural boundaries, such as watersheds, which impede provision of urban services;
- c) Respect topographical features that form a natural edge, such as watercourses and ridge lines;
- d) Are sufficiently free of environmental constraints to be able to support urban growth without major environmental impacts;
- e) Do not unnecessarily overlap into State Land Use Agricultural.

[Rationale: makes the distinction that until the land designation is changed, some edge areas in the Future Land Use Low Density Urban overlap with SLU Ag currently]

- f) Shall not overlap with State Land Use Conservation District.

[Rationale: South Kohala CDP Chapter 5: Waikoloa Village Plan; Kona CDP; Maui County Guided Land Use Principles Draft.

<https://www.mauiCounty.gov/DocumentCenter/View/10471/GPAC--Directed-Growth?bidId>

Urban Growth Boundaries Overview South Carolina Department of Environmental Control
https://conservationtools-production.s3.amazonaws.com/library_item_files/1685/1892/UrbanGrowthBoundary.pdf?AWSAccessKeyId=AKIAIQFJLILYGVD4AMQ&Expires=1554845189&Signature=Ri1KPWjix3MIPtcJLhk0Zut1gZg%3D

488. New subdivisions shall prioritize connectivity with other existing roadways. When topographical challenges, such as minor gulches or streams, lead to dead-end streets within a subdivision, seek to find alternative connectivity points and/or require stub-out connections be developed, as appropriate, for future connectivity.
[Rationale: Based on consultation with administrative permits division.]
489. Sidewalks shall be required for new developments within the Urban Service Areas.
[Rationale: Based on consultation with administrative permits division and Kona CDP Guiding Principle 2 and Policy PUB-3.4, and Hāmākua CDP Policies 70 and 73.]
490. Bike lanes and sidewalks are required for new or improved arterial and collector streets in Urban Growth Areas.
[Rationale: Based on General Plan Policy 13.2.3 (f, n).]
491. Utilize incentives and other strategies to ensure that residential development meets established minimum and maximum densities of zoning and infrastructure services available.
[Rationale: This policy is based on consultation with administrative permits division regarding the recent development trend where residential subdivisions often aren't developed at the zoning density allowed in order to avoid other development requirements. This often leads to sprawl and increases infrastructure costs.]
492. The County shall proactively initiate change of zones within the Urban Service Area to facilitate the County's desired land use development.
[Rationale: Based on Planning Department Rule 5-3 and the acknowledgment that the County needs to initiate these changes in order to facilitate appropriate density development in order to minimize sprawl and efficiently manage public investment expenditures on infrastructure.]
493. Establish Urban Service Areas within Urban Growth Areas serviced by existing water and wastewater infrastructure services at a community level of distribution (public or private).
[Rationale: Based on Maui County Guiding Land Use Principles, and similar UGB guidance from Oregon, Washington, Tennessee, Florida, Maryland, and California. See also General Plan Policies 14.1.3 (a, b, and j)]

494. Large urban development will only be allowed within the Urban Growth Area when water and wastewater can be provided.
[Rationale: In order to implement General Plan 14.1.3 (a, b, c), managing urban development within the Urban Growth Area and ensuring adequate infrastructure is available for urban uses is vital. Doing so will facilitate the development of affordable housing and the basic commercial and public services needed for complete towns. See also South Kohala CDP Chapter 5: Waikoloa Village Plan; Kona CDP; Maui County Guided Land Use Principles Draft.]
495. Future growth within the Urban Growth Area should be encouraged in a pattern of compact densities that support public transit.
496. Encourage special design districts within historic towns to promote and enhance the history and culture of the area.
497. Support the development of a master plan for lands within the vicinity of the University of Hawai'i at Hilo to incorporate a "college town" concept utilizing an appropriate mixture of residential, commercial and other land uses to complement the university's infrastructure.
498. Develop, or facilitate the development of underutilized private and public properties within existing towns to be used as gathering places, community gardens, open squares and markets, auxiliary parking lots (including park and ride areas), and parks (including pocket and art parks, and outdoor amphitheaters, etc.).
499. Discourage the use of "flag lots" (lots with little or no street frontage, accessed by a driveway easement or narrow strip of land, and typically located to the rear of another lot) when subdividing residential property. [Transportation]
500. Discourage the use of cul-de-sacs when subdividing residential property.
501. Large oversized blocks in new subdivisions should be avoided in favor of smaller blocks and enhanced pedestrian networks.
502. Village and town centers should serve as the hub of retail, service, dining, entertainment, and visitor accommodation activity.
503. Facilitate multi-family zoning in designated regional or community village/town centers.
504. Low- to medium-density residential development and/or low-impact office uses should serve as transitional densities between lower-density neighborhoods and more intensive commercial and residential uses.
505. New development adjacent to areas of lower intensity or incompatible uses [non-residential] should provide effective physical buffers to avoid adverse effects. Buffers

may include larger setbacks, landscaped or forested strips, transition zones, fencing, screening, height and/or density step downs, and other architectural and site planning measures that avoid potential conflicts.

506. In Urban-designated locations, encourage residential and mixed-use developments to be submitted under more flexible development processes (i.e. as a Planned Unit Development versus a standard Subdivision) in order to achieve increased residential densities.
507. Encourage the concentration and rehabilitation of commercial uses within and surrounding a central core area.
508. Expanded commercial services should be encouraged in Kea'au to meet the needs of population growth in the Puna district.
509. Regional retail uses, including big box and regional shopping centers should not be located adjacent to areas designated for low to medium density residential use on the Zoning Map or Future Land Use map or areas currently developed for such use.
510. Develop a Community Commercial Center for Waikoloa Village with shops, stores, and small business opportunities
511. Facilitate land use entitlements and other tools for the development of existing and future village/town centers and special design districts.
512. The County may impose incremental and conditional zoning based on performance requirements to curb speculation and resale of undeveloped lots only.
513. Facilitate commercial areas to develop on an axis perpendicular to the highway.
514. Consider typology of village town centers such as along a highway, commercial main street, crossroads, or junction, etc.
515. Facilitate Urban renewal, rehabilitation, and/or redevelopment programs for existing town and village centers in cooperation with communities, businesses and governmental agencies.
516. Develop and implement a schedule for periodically evaluating zoning and land uses in places of transition to proactively initiate change of zones to accommodate growth and facilitate the County's desired land use development.
517. A complementary integration and mixture of land uses should be provided within all town centers and developments to maintain the areas' livability, manage future growth, and provide walkable and transit accessible destinations.

- 518. Promote the redevelopment of aging and high vacancy shopping centers, or strip type developments into mixed-use developments with housing and public recreation facilities.
- 519. In redeveloping areas characterized by vacant, abandoned, and underutilized older buildings, generally encourage rehabilitation and adaptive use of existing buildings rather than demolition.
- 520. Facilitate the development of vacant infill lots within Urban Service Areas that have historically been difficult to develop due to infrastructure or access problems, inadequate lot dimensions, fragmented or absentee ownership, or other constraints.

ACTION

- 5.8 Proactively initiate change of zones in the Urban Service Area to facilitate the County's desired land use development.
- 5.9 Re-evaluate the Urban Service Area boundary every 5 years to determine any boundary amendments needed.
- 5.10 Amend zoning and subdivision code to be consistent on criteria for allowing flag lot subdivisions, require that the 'flag' area not be used as part of the minimum buildable lot size, determine when it is appropriate to allow multiple properties to access off the same 'flag', revise minimum widths for flag accesses to ensure minimum widths are consistent with minimum requirements set in road standards, and to determine maximum lengths for flag lot roads. [Code]
- 5.11 Amend zoning and subdivision code in relation to cul-de-sac developments to ensure consistency between subdivision code and zoning code and to set criteria for maximum cul-de-sac street lengths and number of lots served, and when to require road reserves for future connections. [Code]

ENSURING LAND USE COMPATIBILITY

Rural

SUSTAINABILITY OBJECTIVE

Increase Rural land use designations.

POLICY

521. In order to minimize potential conflicts between agricultural and urban uses, the areas designated as Rural shall serve as a well-defined buffer area to separate uses between Urban to Agricultural.

[Rationale: Based on General Plan 14.2.3 (f).]

522. In order to preserve larger lot agricultural lands for productive agricultural use, lands shall be designated for rural land use development concentric to urban areas where an intermediate land use between residential and productive agricultural areas is consistent with the surrounding uses and rural character.

The intermediate land use between residential and productive agricultural areas is intended to serve as:

- a) A low-density area that provides a transitional use buffer area between strictly residential and commercial productive agriculture areas, and;
- b) A mix of personal or family-scale productive commercial or subsistence agricultural use on all newly established parcels in the Rural area, and;
- c) Parcels having a median size of between 1 – 5 acres but in no case less than 1/2 acre in size.
- d) Areas beyond both the Urban Growth Boundary and Rural areas are to be preserved for agricultural uses, open space, scenic viewsheds, and natural beauty areas.

[Rationale: Based on Hāmākua CDP Policy 4, and General Plan Policy 14.2.3 (g. and i).]

523. Future growth in the rural designation area shall be located concentrically around existing Future Land Use Map low density urban areas.

[Rationale: Based on Kona CDP Policy LU-1.3; General Plan 14.2.3 Policies (g), and Hāmākua CDP Policy 4.]

524. The County shall proactively initiate State Land Use (SLU) amendments to establish Rural designations in appropriate locations consistent with General Plan policies and map, and desired land development patterns.

[Rationale: Based on premise that County-initiated SLU amendments would be necessary to implement General Plan Policy 14.2.3 (g).]

525. Allow appropriate flexibility for the development of small bed and breakfast or hosted vacation rental type visitor accommodations in rural areas, especially those with heritage, agriculture, wellness, or similar themes.

ACTION

- 5.12 Amend the zoning districts currently listed as Family Agricultural District (FA) and the Residential and Agricultural Districts (RA) to be consistent with Rural designation objectives and to allow for home occupations that do not negatively impact rural character. [Code]

ENSURING LAND USE COMPATIBILITY

Industrial

SUSTAINABILITY OBJECTIVE

Industrial uses are designated in appropriate locations.

POLICY

526. Industrial development shall be located in areas adequately served by transportation, utilities, and other essential infrastructure.
[Rationale: Based on General Plan Policy 14.4.3 (e), Hāmākua CDP Policy 6, and Kaʻū CDP Policy 4.]
527. Developers shall provide water and wastewater service and any other basic infrastructure necessary for industrial development.
[Rationale: Based on General Plan Policy 14.4.3 (h).]
528. Industrial centers include Kanoiehua, Kawaihae, and Keāhole airport.
[Rationale: Based on General Plan Policies 14.4.5.2.2 (a), 14.4.5.6.2 (a), and 14.4.5.7.2 (b).]
529. Light Industrial may be permitted in Pahoa, Laupāhoehoe-Pāpaʻaloe, Hāwī, Waimea, Waikoloa, Kainaliu-Honalo, Kealahou-Captain Cook, Nāʻālehu
[Rationale: Based on General Plan Policies 14.4.5.1.2 (c), 14.4.5.3.2 (b), 14.4.5.5.2 (b), 14.4.5.6.2 (a), 14.4.5.7.2 (e), 14.4.5.8.2 (b), 14.4.5.9.2 (b), Hāmākua CDP Policy 6, and South Kohala CDP Strategy 4.2.]
530. Improve the aesthetic quality of industrial sites and protect amenities of adjacent areas by requiring landscaping, open spaces, buffer zones, and design guidelines.
[Rationale: Based on General Plan 14.4.3 (d).]

531. Industrial parks shall only be developed within existing water and wastewater service areas or in conjunction with new water and wastewater service.

[Rationale: Based on General Plan Goal 14.4.2 (b) and Policy 14.4.3 (e).]

532. Industrial Site requirements:

- a) Industrial development shall maintain or improve the quality of the present environment.
- b) Industrial activities may be located close to raw materials or key resources.
- c) Topography of industrial land shall be reasonably level.
- d) Industrial development shall be conveniently located to its labor resource.
- e) Buffer zones shall be established between industrial and adjacent incompatible uses of land.
- f) The direction of wind patterns and the absence of trade winds shall be considered in the siting of industrial areas.
- g) Industrial zoned land shall be located in areas with existing water and wastewater service or, if locating an industrial facility outside an urban service area provides a more appropriate location for a specific industrial use, water and wastewater service shall be developed privately and concurrently to serve the industrial facility.
- h) Industrial parks shall only be developed within existing water and wastewater service areas or in conjunction with new water and wastewater service.

[Rationale: Based on General Plan Goal 14.4.2 (b) and Policies 14.4.3 (a-h).]

533. Industrial Standard Types:

- a) General industrial (MG) district applies to areas for land uses that are generally considered to be offensive and noxious. These noxious, heavy industrial uses should be separated from residential and other incompatible uses in the zoning process.
- b) Limited Industrial (ML) district applies to areas with land uses for business and industrial uses that are generally in support of, but not necessarily compatible with activities and uses in other commercial districts.
- c) Industrial – Commercial Mixed District (MCX) The MCX district allows a mix of some mix of light industrial uses (not considered noxious, or heavy industrial) with commercial uses.

[Rationale: Based on General Plan Standards 14.4.4 (a-f).]

534. Industrial and commercial mixed-use districts may be provided in appropriate locations.

535. Provide flexibility within the Zoning Code to accommodate emerging new industries.

- 536. Support the creation of industrial parks in appropriate locations as an alternative to strip development.
- 537. 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.
- 538. Industrial development should be in harmony with surrounding uses and the environment.
- 539. Discourage retail uses in industrial zones to maintain viable industrial areas.
- 540. Support land use policies that protect opportunities to locate industrial and warehouse sites near major transportation corridors and the airport. [Econ]
- 541. Prevent or mitigate the effects of industrial sprawl around harbors and industrial areas.
- 542. Identify industrial sites as the need arises.
- 543. Encourage the rehabilitation of existing service-oriented industrial areas.
- 544. Industrial uses may be permitted outside Future Land Use-designated areas through the Change of Zone or Special Permit regulatory review processes.

ACTION

- 5.13 Amend Industrial zoning permitted uses and categories and Industrial Future Land Use designations to clearly distinguish between types that are light-industrial, service-industrial, and industrial-commercial, to uses that are heavy industrial (noxious, etc.). [Code]

AGENCY ACTION

- 5.14 Work closely with the State and the Department of Hawaiian Home Lands to provide adequate land close to Kawaihae Harbor for industrial activities.
- 5.15 Work closely with the State and the Department of Hawaiian Home Lands to develop industrial areas in Kanoelehua Industrial area and airport industrial area.

ENSURING LAND USE COMPATIBILITY

Resort

SUSTAINABILITY OBJECTIVE

Supply meets and does not exceed projected demand of visitor accommodations in all scales of accommodations.

POLICY

545. Resort Area Standards:

The following established standards shall guide the development of resort areas.

a) Major Resort Area

A major resort area is a self-contained resort destination area that provides basic and support facilities for the needs of the entire development. Such facilities shall include sewer, water, roads, employee housing and recreational facilities, etc. A major resort area is designated as a Resort on the Future Land Use Map.

- 1) Visitor unit range: 1,500-3,000 units.
- 2) Resort acreage: 90 acres minimum.
- 3) Open space: 50 acres minimum.
- 4) Either participate in an off-site housing program or provide adequate acreage and develop employee residential uses on-site.
- 5) The required employee housing ratio and method of provision shall be determined by an analysis of housing needs of each district or relative area and with the adoption of the resort zoning; provided that the ratio shall not exceed one employee unit for every two visitor units built.

b) Intermediate Resort Area

An intermediate resort area is a self-contained resort destination area that provides basic and support facilities for the needs of the entire development on a smaller scale than a major resort area. Such facilities shall include sewer, water, roads, employee housing and recreational facilities, etc.

- 1) Visitor unit range: 500-1,500 units.
- 2) Resort acreage: 45 acres minimum.
- 3) Open space: 25 acres minimum.
- 4) Either participate in an off-site housing program or a maximum of 320 acres for residential use when other zoned lands are not available in close proximity for support use.
- 5) The required employee housing ratio and method of provision shall be determined by an analysis of housing needs of each district or relative area and with the adoption of the resort zoning; provided that the ratio shall not exceed one employee unit for every two visitor units built.

c) Minor Resort Area

A minor resort area is a self-contained resort destination area that provides basic and support facilities for the needs of the entire development on a smaller scale than a major resort area. Such facilities shall include sewer, water, roads, employee housing and recreational facilities, etc.

- 1) Visitor unit range: 50-500 units.
- 2) Open space area commensurate with the scale of development.
- 3) Either participate in an off-site housing program or provide adequate acreage and develop employee residential uses on-site.
- 4) The required employee housing ratio and method of provision shall be determined by an analysis of housing needs of each district or relative area and with the adoption of the resort zoning; provided that the ratio shall not exceed one employee unit for every two visitor units built.

[Rationale: Based on General Plan Standards 14.7.4 (a-d).]

546. Permit time shares and un-hosted short term vacation rentals only within designated resort areas.

[Rationale: HCC Section 25-4-16 and South Kohala CDP Chapter 3: District-wide Policies 1.4.]

547. Prioritize the rehabilitation and utilization of designated resort areas that are presently serviced by basic facilities and utilities before allowing new resorts in undeveloped coastal areas.

[Rationale: Based on General Plan Policy 14.7.3 (c) and Ka'ū CDP Policy 5.]

548. Short-term vacation rentals with an owner or operator living on the same building site of the rental unit may be permitted outside resort areas and will be treated as bed-and – breakfast establishments, using the process outlined in Chapter 25-4-7. The following additional requirements should apply to both Bed and Breakfast and short-term vacation rental establishments:

- a) Limitations on special permits for bed and breakfast establishments:
 - 1) Shall not be located on SLU Agricultural Lands with Land Study Bureau land classification as overall productivity rating class of A or B (HRS 205-4.5);
 - 2) Maximum number of hosted short-term vacation rental permits granted by region: special permits granted cannot exceed 3% of the population within any census tract; based on annual American Community Survey/ U.S. Census Bureau estimated profiles. The County will establish a waiting list for applicants once the use permit cap has been met in a census tract;
 - 3) Incorporate appropriate items from ordinance 18-114 (Short-term vacation rentals- un-hosted) related to enforcement;

- i) Maximum occupancy for hosted short-term vacation rentals: Number of tenants cannot exceed the occupancy limit of two adults per bedroom, as determined by building permit records.

[Rationale: Based on Kauai County Ordinance 1002 Homestays; Nashville STR Ordinance; APA: Regulating Short Term Residential Rentals PAS EIP-37 (2015). This policy seeks to strike a balance between facilitating entrepreneurial activities in a place-based visitor industry and preserving the character and integrity of neighborhoods by ensuring that there is a mechanism for local residents to host guests in their home and also ensuring that neighborhoods remain predominately occupied by local residents.]

- 549. Prioritize the development of small-scale visitor accommodations (10 guests and under), owner-occupied short-term vacation rentals, and bed-and-breakfast visitor accommodations, in particular those with heritage, agriculture, wellness, or similar themes in rural areas and near points of interest.

[Rationale: Based on General Plan 14.7.5.1.2 (b), 14.7.5.3.2 (a), 14.7.5.4.2 (a) and (b), 14.7.5.5.2 (a) and (b), 14.7.5.8.2 (b), 14.7.5.9.2 (b), Ka'ū CDP Policy 149, and Hāmākua CDP Policy 124.]

- 550. Require new resort development to develop or connect to water reuse facilities.

[Rationale: Based on General Plan Policies 11.6.2 (b and f).]

- 551. The designation of any new resort areas shall require analysis of the character of the area; the immediate and surrounding environment, natural resources and beauty, cultural practices and cultural resources; shoreline public access; and nearby affordable housing concurrent with the demand created by the development.

[Rationale: Based on General Plan Policies 2.4.9.2 (a & c), 9.3(g), 14.7.2(c), 14.7.3(i), 14.7.5.9.2(a)), and Ka'ū CDP Policy 6.]

- 552. The development of visitor accommodations and any resort development should complement the character of the area, protect the environment and natural beauty, cultural practices, and cultural resources, provide shoreline public access, and provide affordable housing to meet demand created by the development.

- 553. Designate and allocate future resort areas in appropriate proportions and in keeping with the social, economic, and physical environments of the County.

- 554. The County may impose incremental and conditional resort zoning that would be based on performance requirements.

ACTION

- 5.16 Amend zoning code definition and requirements for Lodges and reconcile similarities and inconsistencies with the special permit provisions for Retreats. Clearly articulate in code zoning districts appropriate for Lodges. [Code]
- 5.17 Conduct a market and land use study of the bed and breakfast and short-term vacation rental industry, the impacts of County regulations, and provide recommendations for future land use policy decisions. The study should explore:
 - a) Determine market supply and demand;
 - b) Determine impacts of County land use STVR rules on visitor industry, local employment factors, community character, and affordable housing impacts;
 - c) Assess impacts at County-wide and regional levels;
 - d) Consider other municipalities regulatory approaches and impacts to regulating STVR industry;
 - e) Provide recommendations for land use policy regarding un-hosted and hosted STVR at regional and County-wide levels.

ENSURING LAND USE COMPATIBILITY

Agricultural

SUSTAINABILITY OBJECTIVE

Increase in agricultural land preserved.

Increase processing facilities on agricultural land.

POLICY

- 555. Agricultural lands shall not be rezoned to parcels too small to support economically viable farming units.
[Rationale: Based on General Plan Policy 14.2.3 (s), Ka'ū CDP Policy 36.]
- 556. Rezoning of areas currently zoned Agricultural that are outside of the Urban Growth Area and Rural designation shall not be allowed, unless the rezoning is to permit a Planned Unit Development or a clustered development that preserves the majority of the property in non-residential use dedicated to agriculture, open space, or other conservation purposes, and does not have the primary effect of allowing subdivision into

lots smaller than allowed by existing zoning.

[Rationale: Based on Kona CDP Policy LU-3.8; and Puna CDP 3.2.2.a.]

557. Development and construction in “Productive Agricultural” and “Pastoral” areas shall be limited to agriculture, related economic infrastructure and cottage industries, renewable energy, open area recreational uses, and community facilities unless otherwise permitted by law.

[Rationale: Based on Ka’ū Policy 38, Hāmākua Policy 21.]

558. When considering applications to consolidate and resubdivide pre-existing lots of record, lots less than one acre in size in the State Land Use Agricultural district shall only be permitted if that land utilization is improved relative to the objectives and policies of the General Plan.

[Rationale: Based on Hāmākua CDP Policy 22, Ka’ū Policy 43, HRS 205-5(b)) and General Plan Policy 14.2.3 (s).]

559. A maximum developable area shall be established for lots designated as Productive Agricultural Land. Maximum Developable Area (MDA): Means the total floor area in square feet allowed under the approved land use. The floor area computation shall include: all floor areas under roof, including first, second, and third story areas, decks, pools, saunas; garage or carport, and other above ground structures.

- a) For lots up to 14,000 square feet, the maximum developable area is 25 per cent of total lot area.
- b) For lots over 14,000 square feet to one (1) acre, the maximum developable area is 3,500 square feet.
- c) For lots larger than one (1) acre, the maximum developable area is 5,000 square feet.

[Rationale: This policy is based on the maximum developable area used for single-family residence in the State Land Use Conservation district.]

560. Through permit conditions, development agreements, deed restrictions, and/or other means, ensure that areas in the “Productive Agricultural Lands” and “Pastoral” Future Land Use Policy Map categories continue to be utilized for agricultural uses and not for speculative or other residential development.

[Rationale: Based on Ka’ū CDP Policy 44 Policy 35; Puna CDP Objective 3.1.2 (f), and General Plan Policy 14.2.3 (j).]

561. Farm labor housing projects shall be developed in a clustered manner that minimizes the use of Productive Agricultural lands and is consistent with the character of surrounding land uses.

[Rationale: Based on General Plan Policy 2.4.5.2 (q).]

562. Agricultural land uses consistent with HRS 205-2(d) shall be considered permitted uses and do not require an agricultural-based commercial-operations certification.
[Rationale: based on the intent to apply HRS 205-2(d) consistently and simplify regulatory barriers to agricultural activities.]
563. Certified, incubator, or community kitchens in the Rural or Agricultural District that are under 1,000 square feet and do not provide for on-site tours and/or on-premises sales shall be considered a permitted use (agricultural processing) to be treated the same as agricultural processing minor. Any certified kitchen in the Rural or Agricultural District exceeding 1,000 square feet needs to apply for plan approval.
[Rationale: Based on HRS 205-2(d)6; 25-5-72(a)(2); 25-5-62 (a)(1);25-5-52(a)(2) & the agricultural products processing definitions from HCC Section 25-1-5.]
564. In order to minimize the potential conflicts between agricultural and non-agricultural uses, standards and guidelines for buffer areas located adjacent to agricultural lands shall be developed. Natural open spaces, gulches, and/or rural designations may serve as agricultural buffer areas in appropriate areas.
[Rationale: Based on recommendations from the Hāmākua Agriculture Plan: Sustaining Rural Hāmākua through Agriculture 2006.]
565. Designate agricultural lands as areas to be preserved for agriculture and open space and protected from urban encroachment.
566. Advocate to State to allow building sites smaller than one acre on lands in the State Land Use Agriculture District under certain criteria so as to increase the flexibility of the PUDs and the Clustered Rural Subdivision provision to enable clustering for preservation of open space, productive agricultural lands, conservation areas, coastal areas, and other important natural features.
567. Protect agricultural lands, especially fallow agricultural lands, through community land trusts or with tax incentives for farmers.
568. Discourage speculative residential development on agricultural lands.
569. Any subdivision of Productive Agricultural land involving 30 acres or more currently zoned at densities between Ag-1a to Ag-5a and FA are encouraged to cluster development.
570. Consider access to infrastructure and crop suitability when recommending lands to be designated State Important Agricultural Lands. Explore designating small portions (community -scale) as Important Agricultural Lands before embarking on an island-wide initiative.

ACTION

- 5.18 Create larger lots for agricultural use in existing small-lot subdivisions through land pooling and other methods.
- 5.19 Establish agricultural subdivision standards that:
 - a) lower barriers to the creation of viable farmsteads by reducing infrastructure requirements and expenses;
 - b) ensure public safety with appropriate rural water systems and roads; and
 - c) mitigate against speculative development.
- 5.20 Amend the zoning code to limit the maximum developable area for dwellings and accessory uses that are allowed in agriculturally-zoned subdivisions to discourage excessive lot clearance and speculative building practices. [Code]
- 5.21 Educate landowners interested in subdividing agricultural lands on the option to subdivide as a farm subdivision pursuant to Hawai'i County Code section 23-112.
- 5.22 Amend the Hawai'i County Code and associated administrative rules to establish reporting and inspection requirements, as well as enforcement and fine protocols, for additional farm dwellings to ensure that dwellings are used for farm-related purposes. [Code]
- 5.23 Amend the Zoning Code to require Plan Approval for commercial open area recreational uses in the uses in the "Productive Agricultural Lands" and "Pastoral" designations. [Code]
- 5.24 Evaluate County Zoning Code Section 15-5-72(a)(17) relating to "livestock production of piggeries, apiaries, and pen feeding of livestock shall be [...] located no closer than one thousand feet away from any major public street or from any other zoning district."
 - a) Clearly define what qualifies as an "apiary" and consider adopting an urban beekeeping ordinance;
 - b) Determine if the minimum distance of 1,000 feet from any public street or other zone is appropriate for each use referenced; recommend revision to minimum distance if research justifies adopting new minimum distances. [Code]
- 5.25 Evaluate the nine categories used for the agricultural-based commercial operation certification evaluations and simplify the process to ensure facilitation and compliance with HRS 205-2(d)(15).

AGENCY ACTION

- 5.26 State Legislation: Appropriate funds to the County of Hawai'i to develop recommendations of lands to be designated Important Agricultural Lands.
- 5.27 State LUC: Reconsider the State's agriculture land capability class designations to better protect viable taro growing lands.
- 5.28 State legislation: Pass legislation enabling land banks that counties can use to acquire tax-delinquent properties and use them to preserve agricultural land and open space.
- 5.29 State: Amend Hawai'i Administrative Rules 13-5-40(b) to require that public hearings before the State Land Use Commission either be held in the judicial district in which the land is located, or be live web streamed with the ability for testimony to be taken live from the streamed location.
- 5.30 State Department of Agriculture: Support the development of agricultural parks to make agricultural land available for agricultural activities.
- 5.31 DHHL: Expand the Lālāmilo Farm Lots.

ENSURING LAND USE COMPATIBILITY

Conservation & Open

SUSTAINABILITY OBJECTIVE

Increase in open space preserved.

POLICY

- 571. Public Lands with unique resources shall be maintained for public use.
[Rationale: Based on General Plan Policy 14.9.4 (a).]
- 572. Development and construction in the State land Use Conservation areas shall be minimized and, when necessary, limited to recreation, research, and education facilities unless otherwise permitted by law.
[Rationale: Based on HRS 205-2, Ka'ū CDP Policy 52, and Hāmākua CDP Policy 33.]
- 573. The following shall be considered for the protection and conservation of natural resources.

- a) Areas necessary for the protection and propagation of specified endangered native wildlife, and conservation for natural ecosystems of endemic plants, fish and wildlife.
- b) Lands necessary for the preservation of forests, park lands, wilderness and beach areas.
- c) Lands with a general slope of 20 per cent or more that provide open space amenities or possess unusual scenic qualities.
- d) Lands necessary for the protection of watersheds, water sources and water supplies.
- e) Lands with topographic, locational, soils, climate or other environmental factors that may not be normally adaptable or required for urban, rural, agricultural or public use.
- f) The Coastal Zone and Special Management Area as defined by statute and in accordance with the adopted objectives and guidelines.

[Rationale: Based on HRS 205-2 (e) and General Plan Standards 8.4.]

574. Zoning, subdivision and other applicable ordinances shall provide for and protect open space areas.

[Rationale: Based on General Plan 14.8.3 (b and d).]

575. General Plan Natural designations shall include:

- a) Steep slopes
- b) Natural Areas and Reserves
- c) Open Space Recreation Areas
- d) Scenic Vistas and Viewplanes
- e) Areas set aside for cultural and/or natural resource preservation purposes

[Rationale: Based on General Plan Standards 14.8.4.]

576. Agricultural land may be used as one form of open space or as green belt.

577. Support the expansion of public preserves.

ACTION

- 5.32 Amend the zoning code to create a conservation designation for lands (or portions thereof) that should be kept in a largely natural state, but that may not be in the Conservation District, such as certain important viewsheds, riparian buffer area, gulches, and very steep slopes. [Code]
- 5.33 Amend zoning and subdivision code to include open space requirements. [Code]

- 5.34 Develop Parks and Roadways as Urban Open Space
- 5.35 Develop a networked system of appropriate access to all significant open space resources that enhances opportunities for residents and visitors for recreational, educational, subsistence, or gathering purposes.
- 5.36 Identify priority shorelines for increased setback as part of Open Space Network Program.
- 5.37 Identify corridors to be recommended for public open space.
- 5.38 Identify high priority areas for acquisition.
- 5.39 Identify and secure in public trust (fee simple or by easement) priority lands that achieve community objectives:
 - a) Seek to use conservation easement or acquisition opportunities through funding sources such as PONC, etc., once critical habitat areas are identified as priorities to protect.
 - b) Seek to protect with easements or acquire suitable important coastal lands that would protect viewsheds, provide the public with access to scenic viewing areas, or otherwise promote appropriate coastal recreation and subsistence.
 - c) Support the efforts of landowners in establishing conservation and agricultural easements to preserve important resources in perpetuity.

PROTECTING THE SPECIAL MANAGEMENT AREA

SUSTAINABILITY OBJECTIVE

Minimize development within Special Management Area.

POLICY

- 578. Development in the SMA, including subdivision, shall only be approved if it is first found that it will not have any substantial adverse environmental or ecological effect.
[Rationale: Based on Hāmākua CDP Policy 17, HRS 205A-22(3), and 205A-26(2)(A).]
- 579. Prohibit the complete clearing of vegetation of a parcel within the SMA.
[Rationale: Based on HRS 205-A, General Plan Goals from 8.2, Policies 8.3 (a, d).]

580. Prohibit the installation of future injection wells in Special Management Areas if wastewater is not treated to an R-1 level of water quality.
[Rationale: Based on South Kohala Policy 5.4.]
581. Require all black wastewater disposal systems in the SMA to be contained, pumpable units, or be connected to a collective treatment facility.
[Rationale: Based on Puna CDP Policy 2.3.3e.]
582. New urban designations shall be located away from coastal areas and the Special Management Area.
[Rationale: Based on Hāmākua CDP Policy 2 and Kaʻū CDP Policy 27.]
583. In new subdivisions in the Special Management Area, subdivisions should be encouraged to develop as Cluster Plan Developments (C.P.D.) pursuant Hawaiʻi County Code Section 25-6-20, or Clustered Rural Subdivisions.
584. The County should explore alternatives (e.g., density transfer based on gross density) for the applicant of a Special Management Area (SMA) Major Permit to dedicate to the government or land trust or encumber as open space for the purpose of realizing a shoreline linear park along as much of the coastline as possible.
585. Designate coastal areas to be preserved, protected, and connected to the rich network of natural and cultural resources.
586. Encourage those developments that are not coastal dependent to locate in inland areas.

ACTION

- 5.40 Amend County code to include Special Management Area use regulations as defined in Hawaiʻi Revised Statutes 205A. [Code]
- 5.41 Amend and/or create County Code and administrative rules to develop shoreline and building setbacks to address environmental, health, and safety priorities. [Code]
- 5.42 Develop objective guidelines for determining and defining the "top of cliff" [HRS 205A-1, and HAR Section 13-222-2, Planning Department Rule 11] and add references to "top of cliff" to Criteria for Shoreline Setback Variances in Planning Commission Rule 8.
- 5.43 Develop and implement Best Management Practices designed to reduce the impacts of shoreline development in the Special Management Area.
- 5.44 Seek funding and support continued scientific research relating to coastal hazards (e.g. research on erosion rates, slumping rates, slope stability studies, sea-level rise

rates, tsunami inundation mapping and coastal stream flood mapping, subsidence, etc.).

- 5.45 To further protect coastal resources in the Special Management Area, review SMA boundaries and initiate appropriate amendments to further protect known recreational, historic, open space, ecosystem, beach, near-shore riparian, and/or marine resources as well as scenic views toward the coastline from the highway;
- a) Consider proximity to coastline and assess vulnerabilities to coastal changes;
 - b) Consider including within the SMA boundaries appropriate near-shore riparian corridors.

PROTECTING MAUKA FORESTS

SUSTAINABILITY OBJECTIVE

Reduce land disturbance activities such as clearing and grading of forested areas.

POLICY

587. No lands above the 2,500-foot elevation in the districts of North Kona and South Kona shall be re-classified to any zone district having a minimum lot size of less than 20 acres except where contiguous lands held under the same or a cooperative ownership are concurrently placed in a lower density zoned district with a net effect of maintaining or reducing overall density levels and enhancing the integrity and value of the region's watershed and forest systems.

[Rationale: Based on General Plan Policy 8.3 (w), and Council Resolutions 330-96 and 58-97.]

588. Designate mauka forests to be preserved, protected, and connected to the region's rich network of natural and cultural resources.
589. Discourage complete clearing of vegetation of a parcel with predominantly native trees and forest.

ACTION

- 5.46 Evaluate each district to determine appropriate elevation threshold to ensure appropriate recharge rates in order to enhance the integrity and value of region's watershed and forest systems.

AGENCY ACTION

- 5.47 Federal: Continue to pursue acquisition priorities and advance legislation for the expansion of National Parks and Wildlife Refuges.
- 5.48 State DLNR: Identify and Designate Natural Area Reserves for unique wildlife habitat areas of native flora and fauna.
- 5.49 State: amend Hawai'i Administrative Rules 13-5-40(b) to require that public hearings before the State Land Use Commission be held in the judicial district in which the land is located.
- 5.50 State: Designate forest and watershed areas into the Conservation District during State land use boundary comprehensive reviews.

LAND USE PLANNING TOOLS

Designating Special Places

POLICY

- 590. Designate Special Design Districts with detailed planning, design standards and review procedures for the following areas and all identified village and town centers including Banyan Drive:

- a) Banyan Drive Redevelopment Area
- b) Downtown Hilo
- c) Kailua-Kona Village
- d) Volcano Village historic core;
- e) Pāhoa Town;
- f) Kea'au Town;
- g) Kurtistown-to-Mountain View corridor
- h) Hāwī
- i) Kapa'au

[Rationale: Based on Puna CDP 2.1.3.a. and GP 14.3.5.5.2 (c).]

591. Waipi'o Valley shall be retained for agricultural and limited recreational uses.
[Rationale: Based on General Plan Policy 5.5.4.2 (d) and see also Hāmākua CDP section 4.9.2 Waipi'o Valley as a Wahi Pana.]
592. Encourage the integration of best management practices and an understanding of cultural values and experiences during the land use application process for any business plans requiring Planning Department plan approval within Waipi'o Valley and other identified important places.
[Rationale: Based on Hāmākua CDP Policy 57. See also General Plan Goals 6.2 (a and c) and Policies 6.3 (g, n, and o).]
593. Establish a Wahi Pana designation that addresses the following:
- a) Designate Waipi'o and Pololū Valley, including their rims, as Wahi Pana and create a Special Area Plan that will protect the natural resources, preserve their storied past and perpetuate agricultural traditions and unique rural lifestyle;
 - b) Designate the summits of Mauna Kea, Mauna Loa, Hualālai, and Kīlauea summit areas as Wahi Pana.
 - c) Establish buffers on undeveloped lands around Kealahou Bay to assure preservation of the region's unique environment and cultural resources.
- [Rationale: Based on General Plan Action 2.4.8. (f), and Hāmākua CDP Sections 4.9.2 and 4.9.6.]

ACTION

- 5.51 Develop criteria and public process for designating special places as Wahi Pana. Consider the following recommendations:
- a) Create a Natural Resource Overlay Zone;
 - b) Prepare viewshed siting guidelines in the County Zoning Code;
 - c) Collaborate with Community Groups to develop long range management plans that address public access, carrying capacity, resource management, and potential funding sources for on-going maintenance of natural resources and any relevant infrastructure
- 5.52 Develop Special Area Plans for identified areas that need extra protections due to sensitive environmental or cultural aspects, such as wahi pana areas.
- 5.53 Adopt an overlay district for the Volcano Village area. The designation should consider the following provisions and other supporting measures:
- a) Standards for maximum land disturbance;
 - b) A system to monitor the 'ōhi'a forest canopy and presence Rapid 'Ōhi'a Death;

- c) A set of economic incentives designed to reduce forest clearance and the number of developable lots;
 - d) Mitigation standards and procedures that provide guidelines for the restoration and re-planting of disturbed areas;
 - e) A study to mitigate localized flooding in ecologically friendly ways, such as using vacant, forested lots to absorb floodwaters;
 - f) Use of “small-footprint” septic tanks to reduce lot grading;
 - g) An expert advisory committee to assist in developing standards, project reviews and public education programs;
 - h) Designation of unencumbered State-owned lands near Wright Road for either Natural Area Reserve or Forest Reserve status;
 - i) Within the Volcano area, propose re-zoning agricultural- and residential-zoned lots to an appropriate designation to prevent further subdivision.
- 5.54 Amend code and rules to develop a regulatory provision for Special Area Plans for natural resource protection for areas designated as Wahi Pana. [Code]

LAND USE PLANNING TOOLS

Preservation Tools

POLICY

- 594. Prioritize the implementation of tools for reshaping the pattern of future development to prevent further sprawl such as transfer of development rights, overlays, clustering requirements, and land pooling.
[Rationale: Based on Kona CDP Policy LU-3.3, Puna CDP Objective 3.1.2 a, and Hāmākua CDP Policy 13.].
- 595. Collaborate with community-based land pooling associations concerning legal and financial aspects of land pooling as they relate to County or State legal requirements and tax policies.
- 596. Encourage innovative uses of land with respect to geologic, topographic conditions, and to reduce infrastructure costs using clustering developments and planned unit developments.

ACTION

- 5.55 Amend the code to enable Rural Cluster Developments to provide a flexible procedure to allow clustering of development on Rural or Agricultural lands in exchange for perpetual protection of contiguous blocks of land for crop production.
 - a) Protection of significant ecological, cultural, scenic, recreational, and agricultural areas in perpetuity;
 - b) Prevention of flooding, erosion, and water pollution, and protecting the quality and quantity of drinking water;
 - c) Promoting a more compact form of development. [Code]
- 5.56 Develop incentives for Cluster Plan Developments and Clustered Rural Subdivisions that leave natural, open space buffer areas along the shoreline, streams, and gulches, or adjacent to forest, conservation areas, or other culturally/environmentally sensitive areas.
- 5.57 Conduct a feasibility study for a County-wide Transfer of Development Rights (TDR) and/or Save Land for the Future (SLF) program. If feasible, adopt any necessary enabling County legislation.
- 5.58 Amend the Code to facilitate lot consolidation. [Code]

LAND USE PLANNING TOOLS

Special Permits

POLICY

597. Special Permits for Overnight Accommodation may be allowed for the following types:

- a) Bed and Breakfasts/Hosted Short Term Vacation Rentals
- b) Inns/Boutique Hotels
- c) Retreat (Lodge)

[Rationale: Based on HCC Section 25-2-76 and 25-4-7, Hāmākua Policy 124, Puna CDP Objective 3.2.2h, Kaʻū CDP Policies 40 and 149, General Plan Actions 14.7.5.1.2(b), 14.7.5.4.2 (a and b), 14.7.5.5.2 (a and b), 14.7.5.8.2 (b), 14.7.5.9.2 (a and b). It is worth noting that bed and breakfasts, small hotel development, or small-scale retreats are encouraged in the 2005 General Plan for the Puna, Hāmākua, North Kohala, South Kona, and Kaʻū districts.

598. Retreat Standards:

A retreat is generally located in an area that provides the user with rest, quiet, and isolation for a natural and environmental experience. Such facilities shall have sewer, water, roads, and provide open space recreation to users. Retreats are permitted uses in Resort zoning (V), or may be permitted through the special use permit process in the Rural or Agricultural district. The following standards shall apply:

- a) Maximum visitor units: 50 units without individual kitchens.
- b) Provide open space area commensurate with the scale of development.
- c) Shall not be located on SLU Agricultural Lands with Land Study Bureau land classification as overall productivity rating class of A or B (HRS 205-4.5)
- d) Shall not be accessed through substandard roads or roads-in-limbo unless an adequate traffic impact analysis report (TIAR) demonstrates accesses are safe and proposed use would not significantly impact existing neighborhood.

[Rationale: Based on a revision to the General Plan Standards 14.7.4.]

599. On Pastoral designated lands, a special permit for an ecotourism-related or other non-agricultural use may be considered provided the proposed project is consistent with the General Plan.

ACTION

- 5.59 Amend the Code to facilitate lot consolidation. [Code]
- 5.60 Amend land use criteria for Special Permits involving overnight accommodations on agricultural land to ensure compliance with Hawai'i Revised Statutes 205-4.5 while still allowing appropriate entrepreneurial endeavors that promote agriculture and do not negatively impact the natural resources, infrastructure, or character of the area. [Code]
- 5.61 Revise Planning Commission Rule 6, and/or to the Special Permit Application form (for Special Permits in the Agricultural District) to include clarity on the potential impacts to be evaluated in the application process and to clearly articulate the types of mitigating conditions that may be required. (HRS 205-6(c) and Planning Commission Rules 6-3(a)(5)(G), 6-7, & 6-8).

FUTURE LAND USE MAPS

Future land use designations are designed to reflect the preferred future development pattern for the County. The boundaries indicated are graphic expressions of the General Plan policies,

particularly those related to land uses. They are long-range guides to general locations and will be subject to existing County zoning and state land use districts.

REVISIONS FROM THE 2005 GENERAL PLAN LUPAG

These future land use designation boundaries have been refined from the 2005 General Plan Land Use Pattern Allocation Guide (LUPAG) Map with input from the CDPs and the use of neighborhood analysis areas. These neighborhood analysis areas were established using criteria such as subdivision boundaries, census block groups, place types, zoning designations, state land use designations and CDP guidance. The refinement of the future land use designations using the neighborhood analysis areas provides for a more predictable and transparent interpretation of those boundaries. Any interpretation of the future land use boundaries should be reviewed using the same criteria that created the neighborhood analysis areas.

The 2005 General Plan used the LUPAG Map to provide a broad, flexible design intended to guide the direction and quality of future developments in a coordinated and rational matter. These concepts and maps were reviewed during the development of the future land use designations and accompanying maps. Revisions to the designations were guided first with the land use goals and policies from the adopted CDPs (Puna, Hāmākua, North Kohala, South Kohala, North and South Kona, and Kaʻū). Further revisions were made using the following factors:

- *Accommodate projected population growth*
- *Align with infrastructure – Potable Water*
- *Align with infrastructure – Roadway Network*
- *Align with infrastructure – Wastewater*
- *Ensure that commercial designations are appropriate*
- *Ensure that industrial designations are appropriate and consistent*
- *Minimize new coastal development*
- *Minimize encroachment onto agricultural lands*
- *Align with State Land Use District Boundary*
- *Align with County zoning*

FUTURE LAND USE DESIGNATIONS

Future land uses are designated generally on the map in reference to the following categories:

- Urban Designations:
 - High Density: General commercial, multiple family residential and related services (36 to 60 units per acre).
 - Medium Density: Village and neighborhood commercial and single-family and multiple family residential and related functions (7 to 35 units per acre).

Low Density: Residential, with ancillary community and public uses, and neighborhood and convenience-type commercial uses; overall residential density may be up to six units per acre.

University: Public university, including ancillary public uses, residential, and support commercial uses.

Resort Area: These areas include a mix of visitor-related uses such as hotels, condominium-hotels (condominiums developed and/or operated as hotels), single-family and multiple family residential units, golf courses and other typical resort recreational facilities, resort commercial complexes and other support services.

- Industrial Designations:

Light Industrial: Uses in this category include, but are not limited to, business parks, research and development centers, product assembly, distribution centers, laboratories, cottage industries, and light service industrial uses.

Heavy Industrial: Uses in this category include, but are not limited to, landfills, quarries, chemical plants, heavy equipment baseyards, towing yards, and other uses with the potential to create public nuisance conditions (e.g., noise, environmental impacts).

- Rural Designation:

Rural: Areas are situated outside of the urban growth areas. Except where noted, these areas should retain their rural character with low density residential development, supporting small scale commercial development, and agricultural land uses. Rural areas should not be targeted with the development of major public infrastructure or the extension of public sewer service except where a documented health, safety, and/or welfare condition warrants such an expansion. (1/2 to 5 acre lot sizes)

- Agricultural Designations:

Productive Agricultural Lands: Productive agricultural lands are those with better potential for sustained high agricultural yields because of soil type, climate, topography, or other factors. (5 acre minimum lot size) Productive agricultural lands were determined by including the following lands:

- Lands identified as “Important Agricultural Lands” on the 2005 General Plan Land Use Pattern Allocation Guide maps.
- Lands identified in the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification system as “Prime” or “Unique”.
- Lands classified by the Land Study Bureau’s Soil Survey Report as Class B “Good” soils. (There are no Class A lands on the Island of Hawaii) Lands classified as at least “fair” for two or more crops, on an irrigated basis, by the USDA Natural Resource Conservation Service’s study of suitability for various crops.

- In North and South Kona, the “coffee belt”, a continuous band defined by elevation, according to input from area farmers.
- State agricultural parks.

Pastoral: Includes lands that are not capable of producing sustained, high agricultural yields without the intensive application of modern farming methods and technologies due to certain physical constraints such as soil composition, slope, machine tillability and climate. These lands are better suited for other less intensive agricultural uses such as grazing and pasture. (40 acre minimum lot size)

- Other Designations:

Conservation: Forest and water reserves, natural and scientific preserves, areas in active management for conservation purposes, areas to be kept in a largely natural state with minimal facilities consistent with open space uses, such as picnic pavilions and comfort stations, and lands within the State Land Use Conservation District.

Recreational Area: Parks and other recreational areas, such as golf courses, historic sites, and shoreline setback areas.

Natural Area: Lands not considered suitable for productive agriculture; areas to be kept in a largely natural state with minimal facilities consistent with open space uses. Includes areas vulnerable to natural hazards, steep slopes, lava fields, and areas set aside for cultural and/or natural resource preservation purposes.

POLICY

- 600. Interpretation of the Future Land Use Map shall be reviewed against the following criteria: subdivision boundaries, census block groups, place types, County zoning designations, state land use designations and CDP guidance.

LAND USE REGULATIONS

All land use regulations enacted or amended shall be consistent with the adopted General Plan, or element or portion thereof and any land development codes/regulations existing at the time of adoption which are not consistent with the adopted General Plan, or element or portion thereof, shall be amended so as to be consistent.

Hawai'i County shall adopt a schedule for bringing the land use regulations into conformity with the provisions of the most recently adopted General Plan, or element or portion thereof. During the interim period when the provisions of the most recently adopted General Plan, or element or portion thereof, and the land development codes and regulations are inconsistent, the provisions

of the most recently adopted General Plan, or element or portion thereof, shall govern any action taken in regard to an application for a development order.

Land use regulations consist of development and use standards, application and review procedures, and criteria for granting permits or other approvals. Such regulations, as amended from time to time, shall be consistent with the policies of the General Plan. They include but are not limited to the following:

1. Zoning Code
2. Subdivision Control Code
3. Special Permit Rules and regulations pursuant to HRS 205-6
4. Special Management Area Rules and Regulation pursuant to HRS 205A
5. Transfer Development Rights Code (when adopted)

MASTER PLAN STANDARDS

Master plans for the use and development of private lands prepared by or on behalf of private land owners shall be part of the planning system when such plans propose to provide public facilities or infrastructure elements specifically identified in a public development plan and such facilities or infrastructure are either (i) proposed in an application to the County for a change in state land use district boundaries, zoning district, or other permit pursuant to the Zoning Code, or (ii) agreed and committed to execution by the land owner as a condition of approval of any such application or its later amendment or as a condition of a development agreement pursuant to Chapter 30 of the Hawai'i County Code.

Community Master Plan

The community master plan is intended to provide complete neighborhoods with varied housing options, services, and amenities needed for daily living, including public schools, parks and open spaces, shops, and services, all within a convenient walking or biking distance. The community master plan is also intended to provide convenient access to public transportation and employment areas.

Criteria:

- Mix of residential and commercial zoning/uses
- Mix of housing types (single-family and multifamily)
- County roads
- Road/intersection connectivity

- Public or private water system
- Public or private wastewater system
- Public facilities investment (school, park, or community center).

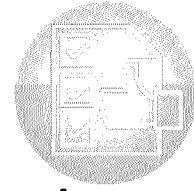
Institutional Master Plan

The institutional master plan is intended to facilitate an efficient and flexible review process for development of institutions which control large areas of land, contain a greater intensity of development than surrounding areas, are a source of substantial employment, and are usually located adjacent to residential neighborhoods. An institutional master plan is intended to permit flexibility, while providing a level of understanding by the community and neighboring properties about the future growth of the institution.

Employment Master Plans

The employment master plan is intended to provide a method by which the County may permit a variety of commercial and/or industrial development types, designs or arrangements that may not be permissible under traditional zoning regulations yet still provide for the ability to plan for full build-out of large employment centers. The employment master plan will provide a mechanism to achieve development which will contribute to the diversification of the County's economic base.

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Section 6: Implementation Priorities & Actions

GOALS

6. Hawai'i will strive for efficiency and coordination as vital to implementation.
 - a) The fiscal budget is stable, transparent, and adequately funded to provide for public services and infrastructure for current and future needs based on long range planning assessments and priorities.
 - b) Plans will regularly be evaluated and monitored for consistency and integration opportunities.
 - c) Hawai'i County Code is comprehensively reviewed and updated to ensure consistency with long range plans.

BUDGETING FOR IMPLEMENTATION

SUSTAINABILITY OBJECTIVE

- Regularly analyze all viable financing tools.
- Regularly seek opportunities for revenue diversification.
- Infrastructure investment priorities implement land use policies of the General Plan.

POLICY

601. The County shall seek opportunities to leverage multiple sources of funding during its Capital Improvement budget preparation.
[Rationale: GP Infrastructure Report]
602. The County shall advance alternative financing and funding mechanisms such as community development financial institutions, public-private partnerships, revolving funds, tax increment financing, and other innovative methods for projects exceeding (1 million)
[Rationale: This would establish a threshold for agencies to do an analysis of finance options for certain projects.]
603. The County shall develop a debt financing plan to schedule bond issuance.

[Rationale: GP Infrastructure Report]

604. The County shall conduct a comprehensive review of the real property tax structure to assure compatibility with General Plan goals and policies.

[Rationale: All County codes will need to be evaluated after the adoption of the General Plan to be sure they are consistent with and helping to achieve our long-range goals for the County.]

605. The County shall develop and adopt an impact fees ordinance that considers district specific needs and excludes urban core areas where infill is encouraged.

[Rationale: GP 10.1.3 (d)]

606. The County shall seek to increase economic efficiency by regular review of the fee and fine schedules.

[Rationale: One of the ways to diversify revenue is to look at opportunities to adjust fee and fine schedules to recover costs associated with providing the services.]

607. The County shall establish infrastructure priorities based on the following criteria:

- a) Within the Urban Growth Area;
- b) The area contains a mix of residential and commercial zoning;
- c) The area lacks a core infrastructure component (municipal or community water, wastewater, or roadways) deemed necessary to accommodate infill or redevelopment;
- d) Redevelopment options (including the renovation of historic structures) and/or projected commercial and residential growth (including affordable, multi-family housing) is hindered by the lack of core infrastructure;
- e) Highest priority should be given to areas that contain existing built-out parcels facing regulatory constraints relating to parcel size, areas with historic buildings and structures in need of renovation, and areas where affordable housing is lacking and development is impeded by the lack of necessary infrastructure.

[Rationale: HCDP Policy 80]

608. The County shall develop and implement rural infrastructure standards.

[Rationale: North Kohala CDP 4.8]

609. Ensure change of zone and concurrency compliance review during subsequent subdivision and plan approval applications.

[Rationale: Kona CDP LU 2.8b]

610. The County shall invest in asset management systems to develop a complete inventory and periodic measurement of the physical condition and existence of all capital assets.

[Rationale: A central repository of all fixed assets with pertinent information such as

repair, maintenance, replacement schedules would be useful in identifying CIP priorities.
GP Infrastructure Report]

- 611. The County should calculate the full cost of the different services they provide.
- 612. The County should provide and improve existing infrastructure where high density uses are permitted and encouraged.
- 613. The County shall explore financing options and provide technical assistance for infrastructure in underserved areas.
- 614. The development of County facilities should be designed to fit into the locale with minimal intrusion while providing the desired services. Implement protocols for receiving community input during Capital Improvement Project siting and design.

ACTION

- 6.1 Establish financing districts for new facilities and services in areas designated as urban growth areas.
- 6.2 Build infrastructure to support affordable housing development in urban areas targeted in the GP.
- 6.3 Establish infrastructure and design standards for rural areas and special districts.
- 6.4 Conduct a review and re-evaluation of the real property tax structure to assure compatibility with land use goals and policies.
- 6.5 Establish concurrency requirements that would impose reasonable and fair infrastructure concurrency requirements on all developments.
- 6.6 Develop and monitor level of service standards for all County public services provided.
- 6.7 Conduct a Countywide facility inventory and maintenance schedule.
- 6.8 Establish memorandums of agreement to partner with community groups for facility improvements and on-going maintenance opportunities.

BUDGETING FOR IMPLEMENTATION

Capital Improvement Program

POLICY

615. Pursuant to the County Charter, all public improvements, which primarily consist of Capital Improvements, shall conform to and implement the General Plan. As all Capital Improvements are sanctioned and primarily funded by way of the County's Capital Improvement Program and budget pursuant to specification in the County Charter, the Capital Improvement Program and budget shall be prepared as follows:

- a) The Capital Improvement Program and budget shall clearly set forth the qualification and priority of each budgeted item with regard to its identity and priority in the General Plan, and/or Development Plans or special purpose plans which may more specifically implement the General Plan.
- b) The program shall integrate projects of semi-autonomous agencies and the several sources of funding for improvements, including fuel tax, revenue sharing, subsidies and grants from other government entities, and funding from semi-autonomous agencies. The program shall also include projects committed to the County in private development master plans.
- c) To prioritize the lists of proposed Capital Improvements contemplated by County agencies as required by the Charter, the director shall consider:
 - 1) Funding source. The capacity of a funding source available to a proposed improvement may be a factor in determining priority. Potential funding sources include general obligation bond, general revenues, special fund, land-secured financing, State revolving fund, block grants, federal sources, or other reliable source. The capital budget shall not exceed prudent debt service limits for general obligation and other sources that affect the borrowing capacity of the County.
 - 2) Action Committee recommendations. The Action Committees may provide their priorities for the fiscal year to the director which the director may add to the agency lists, if not already included, upon the director's determination of consistency with the Community Development Plan.
 - 3) Project delivery phases. All phases of a project – including planning, land acquisition, design, construction, equipment and furnishing—shall be

addressed in the multi-year Capital Improvements Program. Priority shall be considered to complete projects that are ready to be constructed.

- 4) Deferred maintenance. Deferred maintenance of existing facilities, as determined by the responsible agency, should be considered a high priority for those facilities intended by the responsible agency to remain in active, long-term service.
- 5) Level of service. The General Plan's Level of Service standards should be considered to equalize the delivery of services among the planning areas.
- 6) Land use policies. Higher priority may be given to improvements that influence growth patterns consistent with the General Plan or Community Development Plans.
- 7) The director shall provide opportunity for community review of the proposed program prior to referral to the mayor, for the mayor's review and referral to the Council.

ACTION

- 6.9 Amend Hawaii County Code to adopt procedures for the development of the Capital Improvement Program. [Code]

AGENCY ACTION

- 6.10 State: Coordinate Capital Improvements with the County.

EVALUATION AND MONITORING

5-YEAR STATUS REPORT

The Planning Director shall prepare an implementation status report every five (5) years serving to monitor progress towards achieving the goals and objectives identified within community planning system and suggestions for improvement or amendments.

To the extent possible, the report should contain measurable indicators related to the goals and objectives of the plans that make-up the County Planning System. The report will also provide the status of any urban development plans, functional plans, Special Area Plans, and master plans. Action Committees shall participate in the preparation of the report, by providing implementation reports for their respective Community Development Plan. The director shall include information

regarding the implementation of such master development plans in the implementation status reports.

Each department or agency shall prepare a status report on its implementation programs and projects of the General Plan, which shall be transmitted to the Planning Director at the same time the agency submits capital budget. The Planning Director shall include the annual status reports in the 5-year Implementation Report. The Planning Director shall submit the report to the planning commissions for review. The planning commissions shall afford opportunity for public comments thereon and shall forward the report to the mayor with or without the commission's comments and recommendations; the mayor shall review and forward the report, with or without additional comment, to the council for its review and information.

COMPREHENSIVE REVIEW

A comprehensive review of the General Plan shall be initiated by the planning director not more than twenty years after the date of adoption of the previous amendments resulting from a comprehensive review.

The comprehensive review shall assess the achievement and/or effectiveness of the goals, objectives, policies, standards, and maps of the existing plan, research current trends and conditions, and incorporate progressive planning approaches.

A comprehensive review may also be initiated by the Planning Director in order to address certain changes such as significant population growth changes, or events such as sea level rise occurring at a faster pace than anticipated, a natural disaster resulting in regional impacts, or natural resources nearing their carrying capacity.

INTERIM AMENDMENTS

Between comprehensive reviews, an amendment to the General Plan may be initiated by the Planning Director.

The County Council may by resolution request the director to initiate an amendment to the General Plan.

IMPLEMENTATION PRIORITIES

Upon adoption of this General Plan, the County will need to prioritize updates to each of the Community Development Plans to bring them into alignment and consistency in form.

A comprehensive review of the Hawaii County Code will also need to be initiated to begin full implementation of the General Plan and the overall planning system.

GLOSSARY

Accessory Dwelling Unit or **‘Ohana Dwelling** means a second dwelling unit permitted to be built as a separate or an attached unit on a building site, but does not include a guest house or a farm dwelling, as defined in the Hawai‘i County Code.

Actions specify how a plan policy will be implemented. Actions are meant to be refined during the process of implementation in consideration of available resources, more detailed analysis, feasibility, and other factors. Thus, these actions are not legally binding but are meant to provide specific directional guidance for plan implementation and to be implemented in good faith.

Action Committee (AC) is a citizen-composed committee established for an adopted community development plan and administered by the Planning Department.

Affordable Housing means dwelling units which may be rented or purchased at cost levels which can be afforded by persons or families who are within the definition of “qualified households” and whose total household income is within the affordable housing income guidelines, as defined in the Hawai‘i County Code.

Agricultural Parks are areas set aside by the State Specifically for agricultural activities to encourage continuation or initiation of such agricultural operations. The State’s Agricultural Parks Program makes land available to small farmers at reasonable cost with long-term tenure.

Agroforestry is the intentional integration of trees and shrubs into crop and animal farming systems to create environmental, economic, and social benefits.

Ahupua‘a is Hawaiian Land division usually extending from the uplands to the sea.

‘Āina land, earth. Literally can be translated to, “that which feeds.”

Aquaculture means the production of aquatic plant or animal life for food or fiber within ponds and other bodies of water, as defined in the Hawai‘i County Code.

Biofuel is a fuel that is produced through contemporary biological processes, such as agriculture and anaerobic digestion. Biofuels can be derived directly from plants, or indirectly from agricultural, commercial, domestic, and/or industrial wastes.

Biomass plant material, used for the production of such things as fuel alcohol and nonchemical fertilizers. Plant biomass can be used by power plants to produce thermal energy, then steam to generate electrical power.

Blighted Areas means an area, whether it is improved or unimproved, in which conditions such as: the dilapidation, deterioration, age, or obsolescence of the buildings or improvements thereon;

inadequate ventilation, light, sanitation, or open spaces, or other insanitary or unsafe conditions; high density of population and overcrowding; defective or inadequate street layout; faulty lot layout in relation to size, adequacy, accessibility, or usefulness; diversity of ownership; tax or special assessment delinquency exceeding the fair value of the land; defective or unusual conditions of title; improper subdivision or obsolete platting; existence of conditions which endanger life or property by fire or other causes; or any combination of these factors or conditions predominate, thus making the area an economic or social liability, or conducive to ill health, transmission of disease, infant mortality, juvenile delinquency, or crime, or otherwise detrimental to the public health, safety, morals, and welfare.

Brownfield is an abandoned or underused site where redevelopment or reuse is complicated by the presence or perceived presence of contamination.

Capital Improvements comprise all forms of physical structures intended for long term use by the public and include roads, water and sewer systems, communication systems, flood control structures, other forms of infrastructure, and facilities such as active recreation areas and buildings, meeting rooms, public safety operation centers, government service centers and other structures supporting public activities.

Capital Improvements Budget is the budget for Capital Improvements adopted by ordinance for the ensuing fiscal year.

Capital Improvements Program (CIP) is the planned Capital Improvements provided to County Council for information purposes for the ensuing six fiscal years.

Cesspool any buried chamber including but not limited to any metal tank, perforated concrete vault, or covered hollow or excavation, which receives or discharges sanitary sewage from a building sewer for the purpose of collecting solids or discharging liquids to the surrounding soil. Cesspools are not an approved method of sewage disposal under these regulations and all existing cesspools are substandard.

Coastal Zone Management Area means all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea.

Coastal Zone Management (CZM) program means the comprehensive statement in words, maps, or other permanent media of communication, prepared, approved for submission, and amended by the State and approved by the United States government pursuant to Public Law No. 92-583, as amended, and the federal regulations adopted pursuant thereto, which describes objectives, policies, laws, standards, and procedures to guide and regulate public and private uses in the coastal zone management area/

Planning Commission is either the Leeward Planning Commission or the Windward Planning Commission.

Community Development Plan (CDP) is a regional community plan for a specific planning area, typically comprising, but not necessarily bounded by, one or more of the County's judicial districts.

Coastal High Hazard Area is the area including tsunami inundation, sea level rise and special flood hazard areas.

Cottage Industry is a small-scale industry that can be carried on at home generally by family members using their own equipment.

Critical Facilities include those public and private facilities that need to be operational during and after a hazard event to meet public health and safety needs, or to speed economic recovery.

Critical Habitat is described by the US Fish and Wildlife Service as, "When a species is proposed for listing as endangered or threatened under the Endangered Species Act (Act), we must consider whether there are areas of habitat we believe are essential to the species' conservation. Those areas may be proposed for designation as "critical habitat. It is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery."

Development is the placement or erection of any solid material, grading, grubbing, or extraction of any materials, change in density or intensity of use of land, or construction, reconstruction, demolition, or alteration of any structure.

Development Rights the right to develop land by a land owner who maintains fee simple ownership over the land or by a party other than the owner who has obtained the rights to develop. Such rights usually are expressed in terms of density allowed under existing zoning. (see also Transfer of Development Rights).

Director is the Planning Director unless otherwise specified.

Ecosystem Services is any positive benefit that wildlife or ecosystems provides to people. The benefits can be direct or indirect – small or large.

Eco-industrial parks a community of firms that exchange and make use of each other's byproducts.

Endemic Species is a species that is only found in that region and nowhere else in the world. As such, they are of conservation concern because they are not widespread and may be confined to only one or two areas.

Energy Producing or Producer means any entity that produces energy of any kind, including (without limitation) gas or oil fueled, coal, nuclear, hydro, chemical reaction, electromagnetic, wave or tidal action, biofuels-based, geothermal and renewable energy production.

Functional plan is a plan that addresses a specific need, program, or issue usually prepared by the agency responsible for implementation that may but is not required to be adopted by resolution.

General Plan is the county's policy document for the long-range comprehensive development and preservation of the island of Hawaii pursuant to provisions for its purposes and contents, as set forth in Hawaii Revised Statutes and the County Charter.

Green Infrastructure uses vegetation, soils, and other elements and practices to restore some of the natural processes required to manage water and create healthier urban environments.

Goal indicates the desired long-range direction.

Guideline is a statement by which to determine a course of action. A guideline aims to streamline processes according to a set routine or sound practice. Guidelines are not binding and are not enforced with the exception of land use guidelines and sensitive land use issues that require discretion.

Harden, or Hardening refers to physically changing infrastructure or structures to make them less susceptible to damage from extreme wind, flooding, or flying debris. Hardening improves the durability and stability of facilities, making them better able to withstand the impacts of hurricanes and other natural events without sustaining major damage or losing functionality.

High Risk Hazard Areas are areas within the Coastal High Hazard Area or Lava-flow Hazard Zones 1 or 2.

Impact Fee a fee levied on the developer or builder of a project by the County or other public agency as compensation for otherwise unmitigated impacts the project will probably produce.

Impervious Surface or Area any hard-surfaced, man-made area that does not readily absorb or retain water.

Incompatible Development or Incompatible Land Use the transfer over a property line of negative economic or environmental effects.

Inclusionary Zoning a regulation which requires a minimum percentage of housing for low-income, and sometimes moderate-income, households in new housing developments.

Infill or Infill Development is development of vacant land – or rehabilitation of existing structures – in already urbanized areas where infrastructure and services are in place.

Integrated Resource Plans is the identification of the resources or the mix of resources for meeting near and long term consumer energy needs in an efficient and reliable manner at the lowest

reasonable cost including the need and timing of any new generation and new cross-island transmission lines.

Important Agricultural Lands - State designation (IAL): Enacted as Article XI, Section 3, of the Constitution of the State of Hawai'i, the State is required to conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands. The process for identifying State IAL is outlined at: <http://hdoa.hawaii.gov/chair/new-agriculture-initiatives/important-ag-lands-ial/>

Land Study Bureau (SLB) Detailed Land Classification is based on the Land Study Bureau of the University of Hawai'i's inventory and evaluation of the State's land resources. The Bureau grouped all lands in the State, except those in the urban district, into homogeneous units of land types; described their condition and environment; rated the land on its over-all quality in terms of agricultural productivity; appraised its performance for selected alternative crops; and delineated the various land types and groupings based on soil properties and productive capabilities.

Large Development is the creation of 25 or more residential units, or commercial, industrial, or resort space of 30,000 square feet of gross floor area or any combination greater than 35,000 square feet of gross floor area. (see also Development)

Leachate is the liquid that drains or 'leaches' from a landfill.

Level of Service (LOS) Standard a measure of the relationship between service capacity and service demand for public facilities.

Low-Impact Development (LID) is the general term for a wide array of site planning principles and engineered treatment practices used to manage both water runoff volume and water quality. (see also Green Infrastructure)

Master Plan is a private land-use plan focused on one or more sites within an area that identifies site access and general improvements and is intended to guide growth and development over a number of years, or in several phases.

Metes and Bounds a system of describing and identifying land by measures (metes) and direction (bounds) from an identifiable point of reference.

Microgrid is a local energy grid with control capability, which means it can disconnect from the traditional grid and operate autonomously.

Mixed Use is a land use pattern that integrates compatible residential, commercial, industrial, office, institutional, or other uses.

Mixed Use Development means a structure with multiple functions, such as residential and commercial

Multimodal or **Multimodal Transportation** is the practice of integrating multiple forms of transportation into the planning process (pedestrian, cycling, automobile, mass transit, etc.)

Mauka is toward the mountain.

Objective indicates a specific measurable result or outcome of implementing policies and actions in order to pursue a goal.

Open Space undeveloped land or water body which is free of structures and equipment, except for those incidental to the land's open space uses. Open space may include the following: flood protection, creating a sense of special separation from incompatible land uses, areas for agricultural operations, passive recreation, active recreation, conservation uses, or historical site preservation.

Paratransit is special transportation services for people with disabilities and the elderly, often provided as a supplement to fixed-route bus systems by public transit agencies.

Project District is a comprehensive planning method which provides for a flexible planning approach and incorporates a variety of uses as well as open space, parks, and other project uses, as further defined in the Hawai'i County Code.

Permeable a pavement system with traditional strength characteristics, but which allows rainfall to percolate through it rather than running off.

Placemaking is a multifaceted approach to planning, design, and management of public spaces that capitalizes on a local community's assets, inspiration, and potential to promote the health, happiness, and well-being of residents.

Planning Areas are the geographical regions that define the community development plan boundaries.

Policies are statements that guide decision-making. The policies that use the word "shall" are mandatory directives legally binding on County agencies.

Pu'u is the Hawaiian word for any protuberance, used in this plan to describe a hillside.

Regional Centers are intended for mixed-use and higher-density residential, retail, commercial, employment, and/or regional one-of-a-kind facilities, such as major civic, medical, educational, and entertainment facilities.

Shoreline means the upper reaches of the wash of the waves, other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves.

Shoreline Setback Area means the land area between the shoreline and the shoreline setback line established by the Planning Department running inland from and parallel to the certified shoreline at a horizontal plane.

Silviculture the development or maintenance of a forest or wooded preserve.

Special Area Plans include plans prepared by a county department or agency for a specific area for the purpose of master planning, redevelopment planning, or other purpose that may but is not required to be adopted by resolution or ordinance.

Special Management Area is an area along the shoreline designated for special protections. The Office of Planning (OP) administers Hawai'i Revised Statutes (HRS) Chapter 205A, the Coastal Zone Management (CZM) law, and the purpose of HRS Chapter 205A is to "provide for the effective management, beneficial use, protection, and development of the Coastal Zone." The Special Management Area (SMA) permitting system is part of the CZM Program approved by Federal and State agencies.

Sprawl low-density land-use patterns that are automobile-dependent, energy and land consumptive, and may lead to an inefficient and undesirable distance between residences and their needed infrastructure and services.

Standards are indicators of acceptable levels of service, performance, or design.

Sustainable or **Sustainability** is the community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Tax Increment Financing (TIF) means the plan for tax increment financing for a district submitted to and approved by the County Council, as further defined by the Hawai'i County Code.

Traditional Neighborhood Development (TND) a compact, mixed-use neighborhood where residential, commercial and civic buildings are within close proximity to each other.

Transit Oriented Development (TOD) a development of high-density mixed land use that uses a transit facility as a focal point and thereby seeks to encourage the use of public transit.

Transfer of Development Rights a process by which development rights may be transferred from one parcel of land to another. (see also Development Rights)

Urban Growth Boundary is the line designating a town's current or future desired urban boundary. Generally, this is where the Low Density Urban (LDU) designation ends, and either the Rural or Agricultural designation begins.

Urban Development Plan is a plan having a local scale primarily comprising one or more existing or proposed urban areas including towns, villages, resort-residential nodes and/or suburban

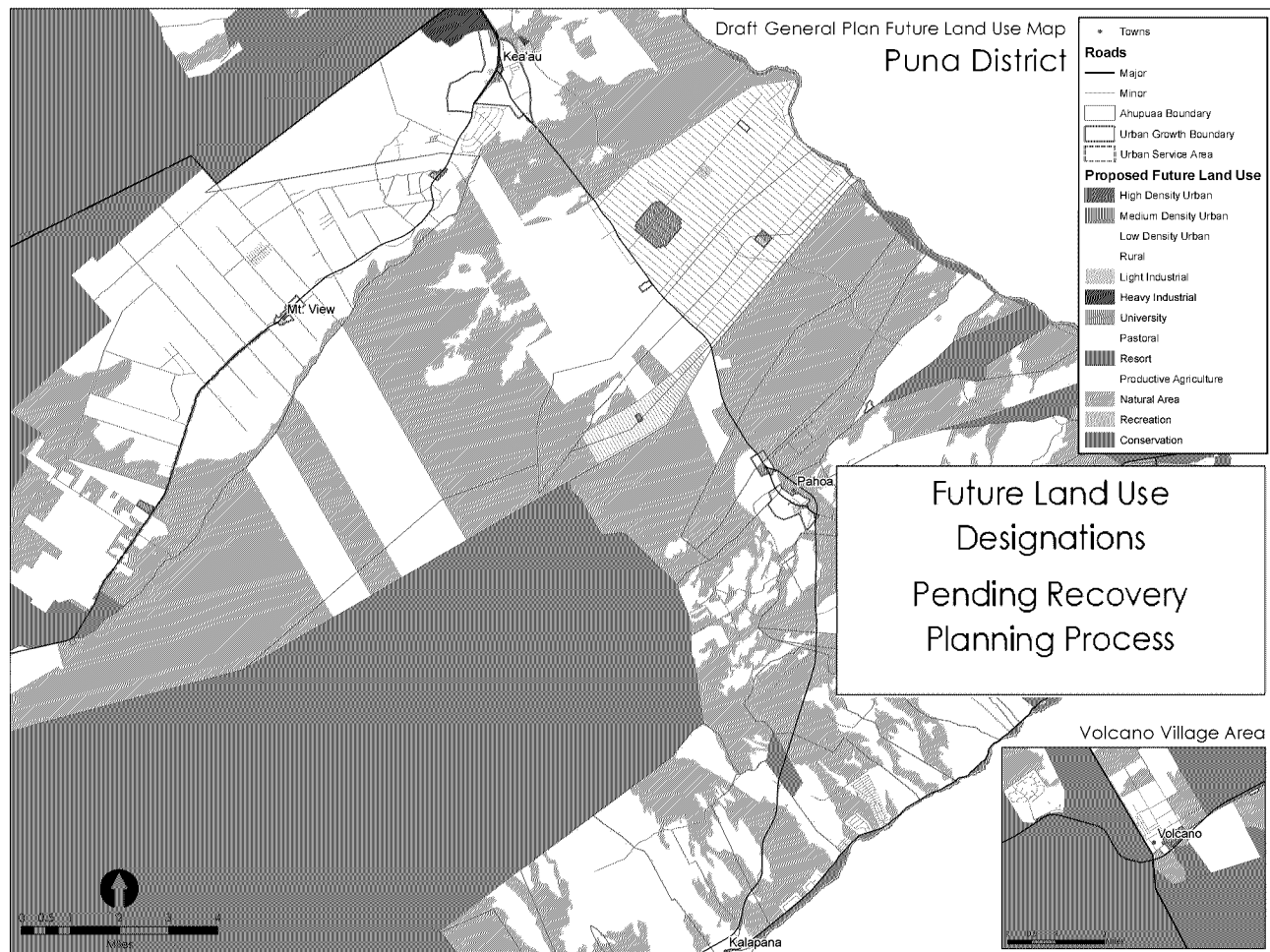
residential neighborhoods where more intensive uses are contemplated. These may include redevelopment plans for all or part of such urban areas.

Urban Service Area an area that defines the geographical limits of government-supplied public facilities and services.

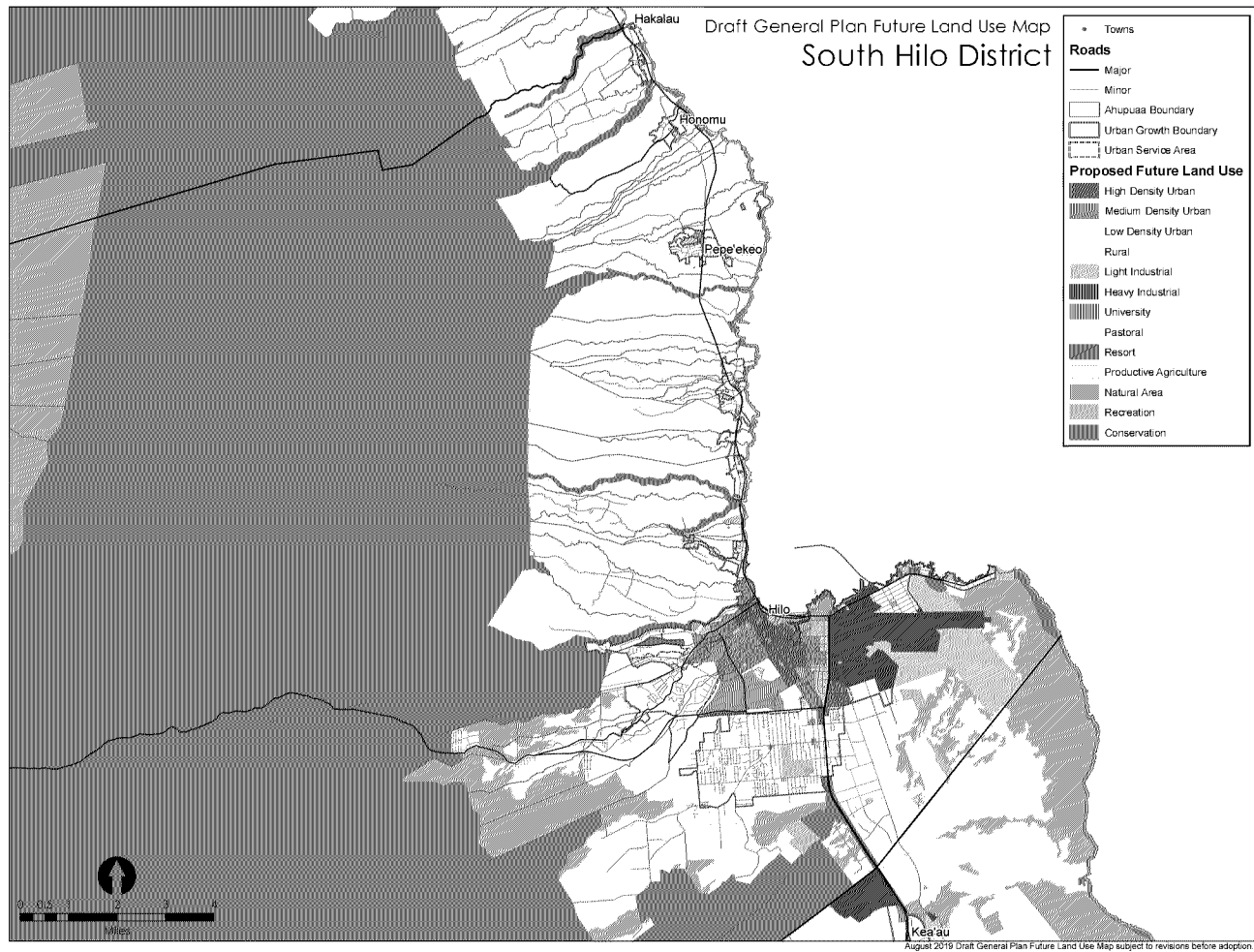
Viewshed the area within view from a defined observation point. Usually used to define a view scenic quality such as a pu'u or the coastline.

Water Systems is any water system, whether publicly or privately owned and managed, that provides water for human consumption to at least 15 connections or regularly serves at least 25 individuals.

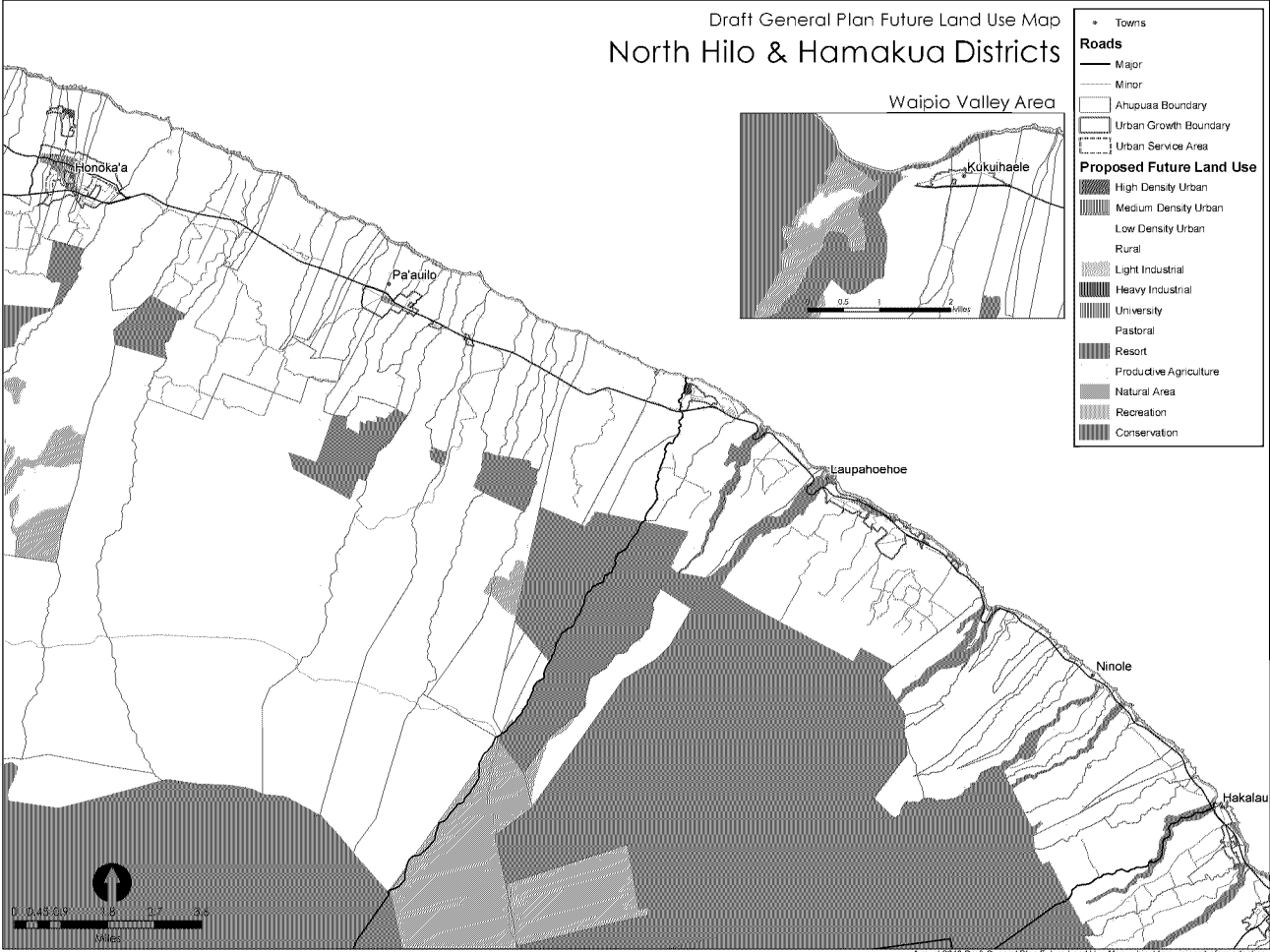
Wahi Pana are celebrated and storied places in the cultural traditions of Hawai'i.



August 2019 Draft General Plan Future Land Use Map subject to revisions before adoption

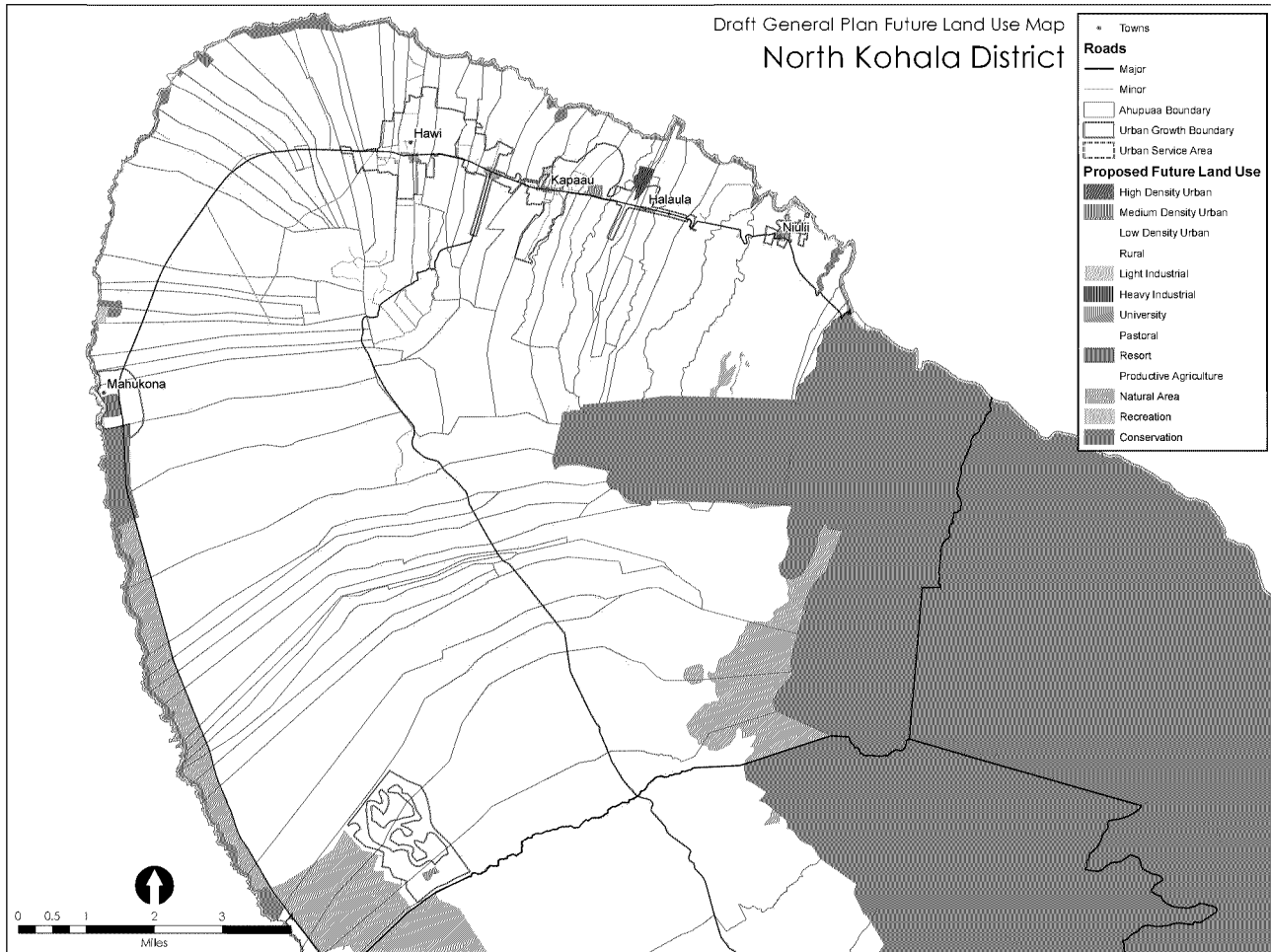


Draft General Plan Future Land Use Map
North Hilo & Hamakua Districts

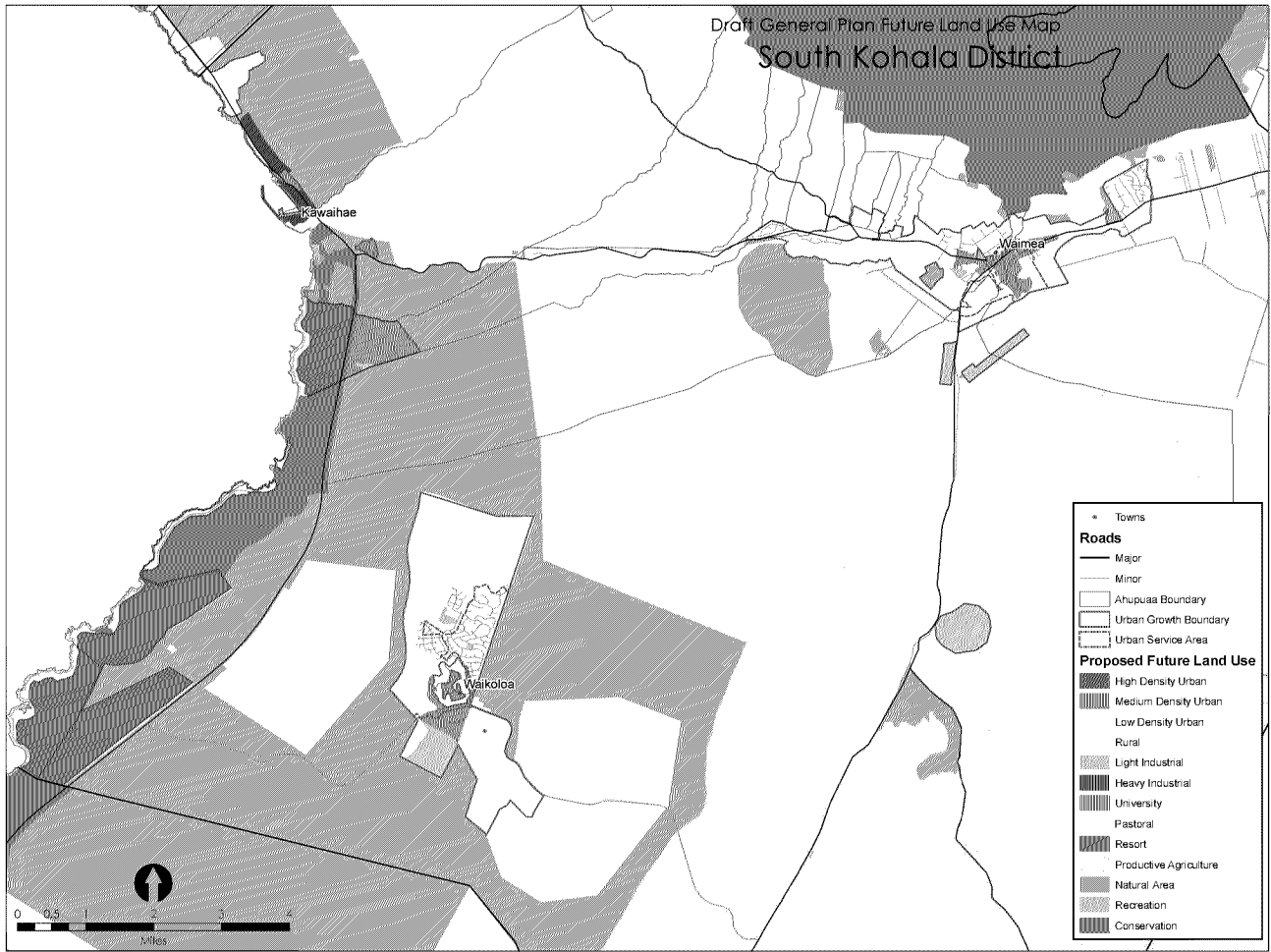


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Draft General Plan Future Land Use Map North Kohala District



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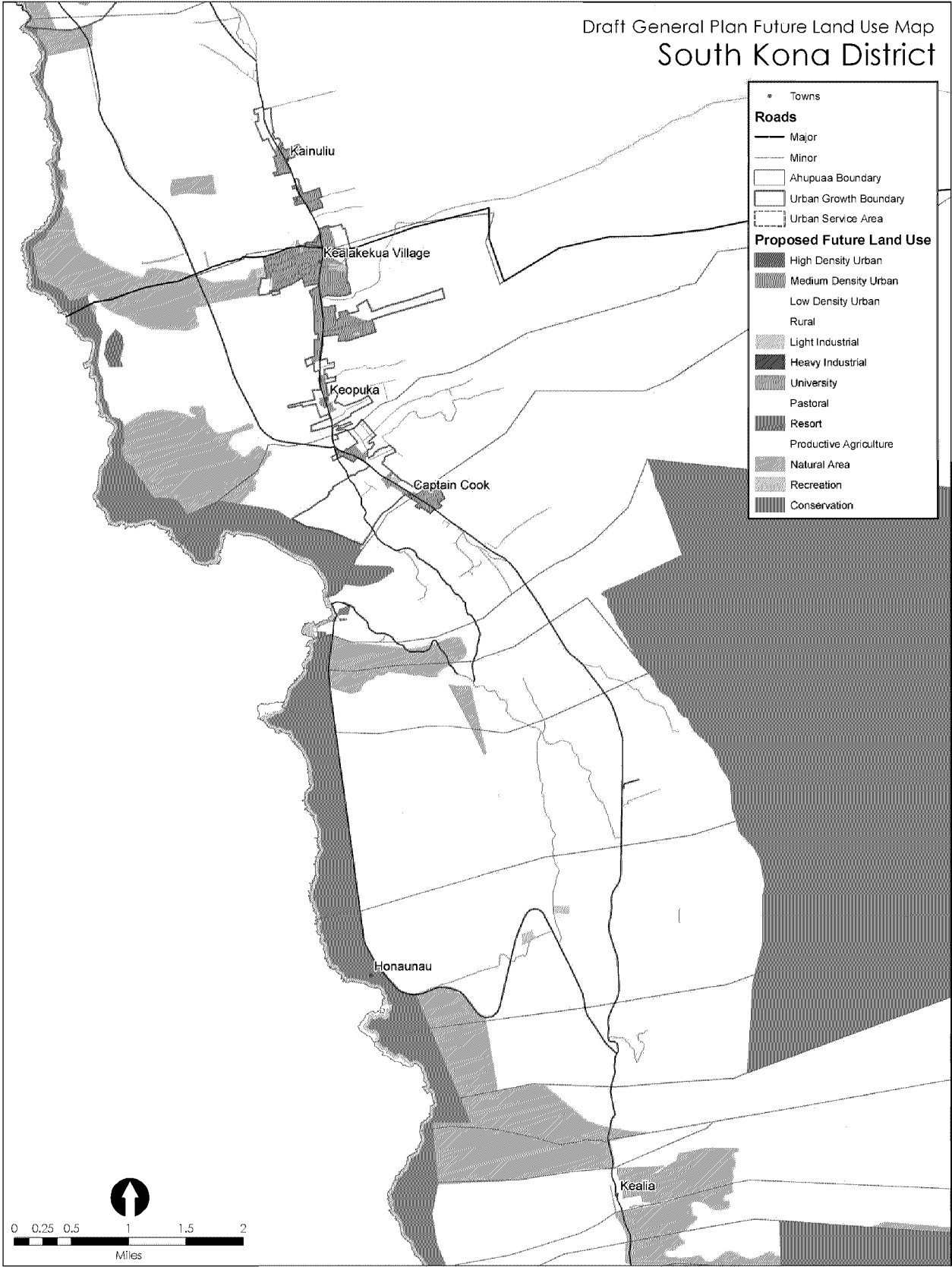


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Draft General Plan Future Land Use Map North Kona District



Draft General Plan Future Land Use Map
South Kona District





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