Presentation

Mapping Kona’s Future

Kona Community Development Plan
Transit Oriented Development
and
Form Based Code
Kona Community Development Plan
8 Guiding Principles

1. Protect Kona’s natural resources and culture.
2. Provide connectivity and transportation choices.
3. Provide housing choices.
4. Direct future growth patterns toward compact villages, preserving Kona’s rural, diverse, and historical character.
Kona Community Development Plan

8 Guiding Principles

5. Provide infrastructure and essential facilities concurrent with growth.

6. Encourage a diverse and vibrant economy emphasizing agriculture and sustainable economies.

7. Provide recreation opportunities.

8. Effective Governance
Kona Community Development Plan

- Kona CDP enacted September 2008 with development to be based on:
  - Form Based Code (FBC)
    - Form Based rather than Use Based Code,
    - Emphasis on urban design, charrettes, community engagement
  - Transit Oriented Development (TOD)
    - Transit based development, less auto dependent, walkable, bike friendly
Key Differences

- Traditional Zoning
  - Use Based Districts
    - Single Category of use for property
    - Segregation of land uses
    - Rigid requirements for lot size & building placement

- Form Based Codes
  - De-emphasizes Use Neighborhood/Streets
    - Mixed Uses
    - Emphasizes building relationship to neighborhood
    - Fits buildings to its use & surrounding public areas
Key Differences

- Traditional Zoning
  - Uniformity in Neighborhoods
    - Limited ability to effect change
    - Limited design standards
    - Setbacks
  - Focus on site; little on right-of-way

- Form Based Codes
  - Diversity in Neighborhoods
    - Ability to Transform or Preserve
    - Focus on building/site form
    - Build-to lines
  - Attention to street & streetscape
Use-Based Zoning makes Compact, Walkable, Urban, Mixed Use, Transit-Based Communities Difficult

Use-Based Zoning Codes:
- Promote large single-use development
- Restrict mixing of uses
- Encourage dispersed uses with few distinct centers (sprawl)
- Encourage spatial separation of key daily activities
- Encourage excessive land consumption
- Encourage streets designed for cars rather than people
- Aren’t designed for public transit
- Limit choice in housing supply
- Limit density
Kona Community Development Plan

Within the Kona Urban Area Transit Oriented Development (TOD) is the

- model for future large scale land development

- foundation for legislative and administrative decision-making regarding land use
What is a “TOD”?  
Transit Oriented Development Concept:

■ TODs are designed to be compact villages:
  ❑ Located along the regional transit system
  ❑ To live, work and play

■ Each TOD has:
  ❑ A centrally located transit station/center/stop
  ❑ Core commercial area
  ❑ Accompanying residential and/or employment uses within walking distance.
What is a “TOD”? 

Features of a TOD:

- Provides access to a full range of transportation options:
  - Walking
  - Bicycling
  - Public Transportation
  - Automobile
What is a “TOD”? 

Features of a TOD:

- Transit Station or Center or Stop with thoughtfully designed community spaces.
- Development around the transit station/center/stop is high to medium density.
- Height and density decreases with distance from the transit station/center/stop.
What is a “TOD”? 

**TOD Dimension:**

- The area within \( \frac{1}{4} \) mile (a five minute walk) of the station forms the TOD Core Area. This is often referred to as the “primary Pedestrian Shed”.

- Development includes a mix of residential and commercial (office / retail) land uses.

- Uses are mixed horizontally (side by side) or vertically (within same building).

- Development includes civic or community land uses (e.g. library, school, recreation facility).
What is a “TOD”? 

TOD Dimension:

- The Secondary Area located between ¼ to ½ mile (a ten minute walk) from the Transit Station is the support area for the TOD.
- More residential in character
- Has the role of transitioning between the dense TOD core and the less intense area beyond the TOD boundary.
What are the Benefits to “TOD”?  

- Offers an Alternative to Auto-dependent Developments  
- Provides Opportunities (since TODs are pedestrian-friendly)  
  - Wider Variety Housing Types and Housing Prices  
  - Options for walking to work  
  - Increases mobility for the young, elderly and disabled.  
- Maximizes Transit Ridership: The economic viability of local and regional transit is enhanced by having a sufficient number of riders living and working near the transit stations.  
- Provides Retail Opportunities: Retail activity and small business viability can be supported by improving transit linkages  
- Supports Environmental Quality: TOD refocuses growth in a way that reduces the amount of land consumed by development, preserves open space, and helps protect air and water quality.  
- Reduces Infrastructure Costs.
TODs – An Opportunity for Missing Middle Housing

Source: Opticos Design Inc.
TODs depend on Mass Transit
Kona Community Development Plan
Form Based Code Adopted as “Village Design Guidelines”

The Kona CDP, Attachment A, adopted the Village Design Guidelines as the County’s framework to plan, review, and administer TOD Villages as a new zoning designation.

The Village Design Guidelines are based on a Form Based Code called “SmartCode”.

![Diagram of zoning areas]
ARTICLE 1. GENERAL TO ALL PLANS

ARTICLE 2. PROCESS

ARTICLE 3. VILLAGE SCALE PLANS
  3.1 INSTRUCTIONS
  3.2 TRANSECT ZONES
  3.3 COMMUNITY TYPES
  3.4 DENSITY CALCULATIONS
  3.5 ENVIRONMENTAL REQUIREMENTS
  3.6 STREETSCAPE REQUIREMENTS
  3.7 CIVIC FUNCTIONS
  3.8 SPECIAL REQUIREMENTS

ARTICLE 4. INFILL PLANS
  4.1 INSTRUCTIONS
  4.2 TRANSECT ZONES
  4.3 COMMUNITY TYPES
  4.4 CIVIC FUNCTIONS
  4.5 SPECIAL REQUIREMENTS
  4.6 PRE-EXISTING CONDITIONS

ARTICLE 5. BUILDING SCALE PLANS
  5.1 INSTRUCTIONS
  5.2 BUILDING DISPOSITION
  5.3 BUILDING CONFIGURATION
  5.4 BUILDING CONFIGURATION
  5.5 BUILDING FUNCTION
  5.6 PARKING AND DENSITY CALCULATIONS
  5.7 PARKING LOCATION STANDARDS
  5.8 LANDSCAPE STANDARDS
KCDP Village Design Guidelines Article 1

The Village Design Guidelines (VDG) were adopted as one of the instruments of implementation of the Kona Community Development Plan (KCDP) to provide standards of development for:

-Traditional Neighborhood Design (TND) villages

-Regional Center Design (RCD) villages

-Transit Oriented Development (TOD) villages.

The VDG is a form-based code, meaning it envisions and encourages a certain physical outcome at the community, block, or building level. This form is compact, walkable, and mixed-use, and is meant to be comfortable, safe, and ecologically sustainable.
Regional Center Design (RCD)
Primarily serves as a major employment and/or cultural centers:
- County Civic Center
- Regional Hospital or University
- Historic or Tourist area
- Major private industry employer

Traditional Neighborhood Design (TND)
- Neighborhood commercial & offices
- Multi-family residential buildings.

Transit Oriented Development (TOD)
- RCD or TND may qualify as a TOD.

TODs are designated on the KCDP Official Land Use Map and are intended to be served by regional public transit system routes.
Village Design Guidelines provide for a “mix” different types of development within one pedestrian shed.

- A new TND Village ranges from 80 to 160 acres.
- A new RCD Village may exceed 160 acres.

(This example from the Hampstead Regulating Plan includes three separate “pedestrian sheds” within one 415 acre site.)
Honokohau Village TOD
Honokohau Village TOD

Theoretical Pedshed

Real Pedshed
Honokohau Village TOD Regulating Plan
Transect Illustration
Honokohau Village TOD
Illustrative Master Plan

- Outdoor gathering with playground to be integrated
- Streets with enhanced dryland forest landscape
- Semi-formal square may have storm water function
- Community gathering point with covered pavilions at walkways
- Gateway Plaza
- Gateway Planes
- Future connection & connectivity
- Right in, Right out
- Future connections
- Formal event square and outdoor
- Multi-function Community Hall
- Open space
- Waiapu Street with angled parking
- Civic site reserved for a school or other future Civic use
- Civic Center Commercial to be moved pending vehicular connection with Civic Center
- Right in, Right out
University Village TOD – Palamanui – Regulating Plan
University Village TOD - Palamanui Roadways
Kaloko Makai Village TOD
Kamakana Villages-
Keahuolu Village TOD
Kamakana Villages
Keahuolu Village TOD
Kamakana Villages
Keahuolu Village TOD
Kamakana Villages
Keahuolu Village TOD

SMARTCODE: CIVIC ZONES
Kamakana Villages at Keahuolu
Kealakekua, Hawaii

November 9, 2024
Kamakana Village - Keahuolu Village TOD
KCDP Village Design Guidelines

What do Form Based Codes do?

FBCs establish development standards for aspects of TOD Village Plans related to:

- The street layout
- The character and size of streets
- The relationship of buildings to the street and each other
- The uses of buildings in certain areas
- The nature and location of public and civic space
c. (ST) For Street: This frontage has raised curbs drained by inlets and sidewalks separated from the vehicular lanes by tree wells or continuous Parkways, with parking on one or both sides. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced Allée.
KCDP Village Design Guidelines

Building & Frontage Types

a. Common Yard: a planted Frontage wherein the Facade is set back substantially from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The deep Setback provides a buffer from the higher speed Thoroughfares.

b. Porch & Fence: a planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence at the Frontage Line maintains street spatial definition. Porches shall be no less than 8 feet deep.
KCDP VDG Smart Code Summary

- Allocation of Zones
- Residential Density
- Block Size
- Thoroughfares
- Civic Spaces
- Lot Occupation
- Setbacks
- Building Disposition
- Frontages
- Building Configuration
- Building Function
2.1.1. Application Types. The Kona CDP Village Design Guidelines allow types of applications depending on the level of scale:

- **Project District** rezoning application for a TND/RCD Village Plan meeting the requirements of Article 3;

- **a Site Plan for a Subdivision or Building Permit** approval within an approved TND/RCD meeting the requirements of Article 5 together with Hawaii County Code section 25-6-46 (review and approval of Project District site plans).

- **a Planned Unit Development - PUD** may be sought - in the case of on Infill Village, Article 4, if the land is already zoned for Urban use.
2.1.2. **Pre-Application process - Design Center**. Applicant may discuss informally the proposed plan with the Design Center.

- **Pre-Application Conference**
  - Familiarize the Planning Department with the proposed Plan
  - Familiarize applicant with the development procedures
  - Applicant shares sketch plans and data showing existing site conditions and the proposed layout and development of the plan.
  - Pre-Application Conference allows both parties to identify potential challenges, opportunities and items that need to be addressed.

2.1.3. **Charrette**.

- Multi-disciplinary input from various agencies and/or the public is used to formulate the community or building scale site plan
- Design Center may assist the applicant to organize this meeting(s).
2.2.2. Preparing a Village Scale Plan for a New Village.

**Project District rezoning.** The village scale plan is adopted by ordinance as a Project District.

- Submitted to the Planning Commission for recommendation.
- Submitted to the County Council for an amendment to the zoning code which changes the district boundaries in accordance with the individual project district.
- Minor adjustments to the plan may be done administratively by the Planning Director.
- Major changes must be adopted legislatively as an amendment to the rezoning ordinance.
2.2.2. Steps to Prepare a Village Scale Plan

a. The KCDP Official Land Use Map has identified the location and **VILLAGE UNIT** type of future TODs. A TOD has a transit station or area at its center and allows for a higher density.
2.2.2. Steps to Prepare a Village Scale Plan

b. **Allocate Transect Zones.**
TRANSECT ZONES (T-ZONES) organize the density, complexity, and intensity of the land use within the village. It is a classification system that delineates zones at various stages through the continuum of rural to urban landscapes.
Village Scale Plan Transects Zones

The Transect provides standards for each zone within a community. It defines the permitting process for traditional neighborhood developments across main landscape zones. Each Transect Zone set parameters within which designers and planners work.

GB  T-3  T-4  T-5
Village Scale Plan Transect Zones

Each KCDP Transect Zone has its own parameters for plot sizes, setbacks (distance of building from street), building types, building height and building function. The details of all this are set out in the Tables within the Village Design Guidelines.

Urban Core Area

- **T5 Urban Center Zone** consists of higher Density Mixed-use buildings that accommodate Retail, Offices, attached homes and apartments. It has a tight network of streets and small Blocks, with wide Sidewalks, regularly spaced street planting, and buildings set close to the Sidewalks.

- **T4 General Urban Zone** consists of Mixed-use but primarily Residential urban fabric. It may have a wide range of building types, such as single-family, apartments and attached homes. Setbacks and landscaping are variable. Streets with Curbs and Sidewalks define medium-sized Blocks.

Secondary Area

- **T3 Sub-Urban Zone** consists of low-density residential areas, adjacent to higher density zones that include some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and Setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.

Green Belt

- **GB Zone** consists of open space outside of T-3, as a means of providing green separation between Villages.
Village Scale Plan Transect Zones

The gradation in color from low to high T-zones makes it obvious where the neighborhood center is and where the higher density is to support it. Note that usually the same T-zone is applied on both sides of a street, so "like faces like" and an immersive environment is maintained.
What is the Regulating Plan?

The act of preparing the Regulating Plan establishes the physical configuration of the public realm and the allowable building types/uses and densities of land in the private realm, civic spaces, which together determine the look, feel, and function of the entire neighborhood.
Functions of the Regulating Plan:

- The TOD/RCP/TND Village Scale Plan, once approved as part of the Project District rezoning, becomes the legal Regulating Plan for development taking place within the Project District.
- The Regulating Plan include of a number of the maps that identify at a minimum, T-Zones with Pedestrian Sheds, Thoroughfare Network and Assignment, and Civic Zones and Allocation.
- Comparable to the Zoning Map, the Regulating Plan determines the place-specific development regulations.
- The Regulating Plan establishes the uses within the Private Realm and Public Realm.

See Table 1. Transect Zone Description
See Table 12. Transect Zone Summary
### Village Design Guidelines

#### Transect Zone Descriptions

<table>
<thead>
<tr>
<th>Transect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB1</td>
<td>Greenbelt Zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.</td>
</tr>
<tr>
<td>GB2</td>
<td>Rural Zone consists of sparsely settled lands in open or cultivated states. These include woodland, agricultural land, grassland and irrigable desert. Typical buildings are farmhouses, agricultural buildings, cabins, and villas.</td>
</tr>
<tr>
<td>T3</td>
<td>Sub-Urban Zone consists of low density residential areas, adjacent to higher zones that have some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and setbacks are relatively deep except on steep slopes. Blocks may be large and the roads irregular to accommodate natural conditions.</td>
</tr>
<tr>
<td>T4</td>
<td>General Urban Zone consists of a mixed use but primarily residential urban fabric. It may have a wide range of building types: single, sideyard, and Rowhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks define medium-sized blocks.</td>
</tr>
<tr>
<td>T5</td>
<td>Urban Center Zone consists of higher density mixed use building that accommodate retail, Offices, Row-houses and Apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transect</th>
<th>General Character</th>
<th>Building Placement</th>
<th>Frontage Types</th>
<th>Typical Building Height</th>
<th>Type of Civic Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB1</td>
<td>Natural Lanscape with some agricultural use</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Parks, Greenways</td>
</tr>
<tr>
<td>GB2</td>
<td>Primarily agricultural with woodland &amp; wetland and scattered buildings</td>
<td>Variable Setbacks</td>
<td>Not applicable</td>
<td>1- to 2-Story</td>
<td>Parks, Greenways</td>
</tr>
<tr>
<td>T3</td>
<td>Lawns and landscaped yards surrounding detached single-family houses; pedestrians occasionally</td>
<td>Large and variable front and side yard Setbacks</td>
<td>Lawns, fences, naturalistic trees, planting</td>
<td>1- to 2-Story with some 3-Story</td>
<td>Parks, Greenways</td>
</tr>
<tr>
<td>T4</td>
<td>Mix of houses, Townhouses and small Apartment buildings with scattered Commercial activity; balance between landscape and buildings, presence of pedestrians</td>
<td>Shallow to medium front and side yard Setbacks</td>
<td>Porches, fences, Dooryards</td>
<td>2- to 3-Story with a few Mixed Use buildings</td>
<td>Squares, Greens</td>
</tr>
<tr>
<td>T5</td>
<td>Shops mixed with Townhouses, larger Apartment houses, Offices work place and Civic buildings; predominantly attached buildings, trees within the public right-of-way; substantial pedestrian activity.</td>
<td>Shallow Setbacks or none; buildings oriented to street defining a street wall</td>
<td>Stoops, Shopfronts, Galleries</td>
<td>2- to 3-Story by Right, with up to 5-Story by Warrant, with some variation</td>
<td>Parks, Plazas, and Squares, median landscaping.</td>
</tr>
</tbody>
</table>
Table 12

Village Design Guidelines

Transect Zone Summary
Functions of the Regulating Plan:

Once Adopted, the Regulating Plan identifies where different standards apply for development within the Village. These are the steps followed to determine allowable uses within a previously approved Regulating Plan:

- Locate property, then
- Identify applicable T-Zone; then
- Refer to the T-Zone requirements in the KCDP Village Design Guidelines.
KCDP Village Design Guidelines

Article 5. Site and Building Plans

a. For site and building approval, Village Design Guidelines shall determine:
   - Building Disposition
   - Building Configuration
   - Building Function
   - Parking and Density Calculations
   - Parking Location Standards

b. Currently, existing County standards shall determine:
   - Drainage Standards
   - Architectural Standards
   - Landscape Standards
   - Signage Standards
   - Lighting Standards
   - Utility Standards
City of Hope Transect Zones
City of Hope Pedestrian Sheds
City of Hope Civic Zones
City of Hope Thoroughfare Network
Why do FBCs make sense?

- One of the most effective land use tools for shaping pedestrian-scaled, mixed-use and active urban communities.
- More concerned with the arrangement and form of buildings rather than the use that goes on inside them.
- Represent an innovative response to prevent undesirable urban sprawl.
Why do FBCs make sense?

- Because they are prescriptive (they state what you want), rather than prohibitive (what you don't want), form-based codes (FBCs) can achieve a more predictable physical result.

- FBCs could work well in established communities such as Downtown Hilo and Kailua Village because they effectively define and codify an existing neighborhood's desired existing urban form or "DNA." Vernacular buildings with desired architectural types and functions can be easily replicated, promoting infill that is compatible with surrounding structures.