health, safety and general welfare of the populace. It accounts for future growth and trends within all Kaua'i communities and covers a wide range of development needs such as housing, education, recreation, land use, heritage and environmental resource protection, and public infrastructure and facilities. It was last updated in 2000 by PlanPacific.

The Land Use Map and Heritage Resource Map for the Līhu'e Town Core from the 2000 General Plan are shown in Figure 3-21 and Figure 3-22, respectively. All but two areas of the Līhu'e Town Core project neighborhoods are designated as "Urban Center" according to the General

Plan Land Use Maps.

The two areas outside of the Urban Center land use designation within the project site are (see left, numbered in red):

- Agriculture Designation: the area opposite Kūhiō Highway from the Līhu'e Civic Center, and
- 2. Open: a small portion of the Lower Rice Street Neighborhood off Kalena Street.

Overall, the recommendations of the Līhu'e Town Core Urban Design Plan are consistent with the

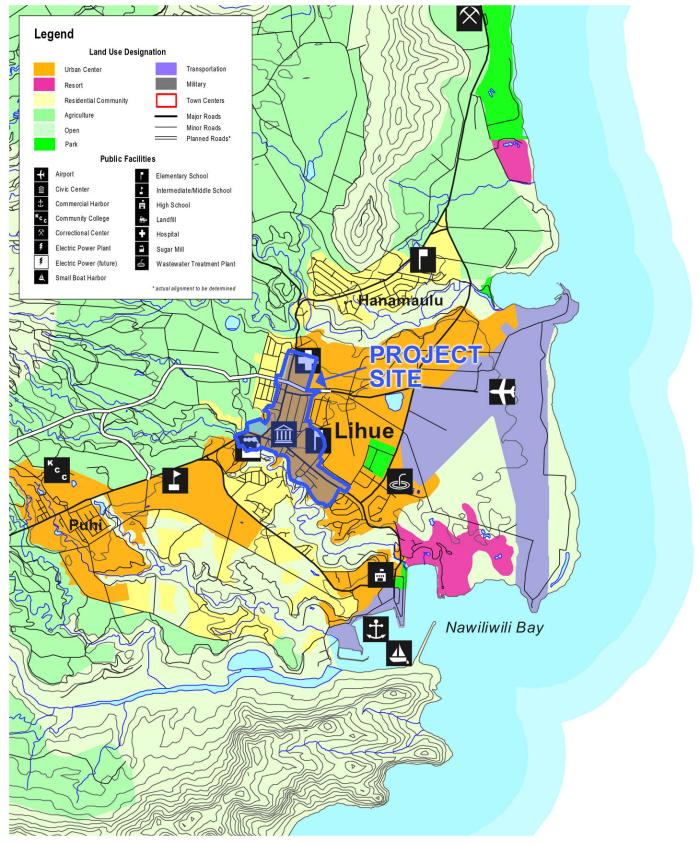
General Plan. However, consideration should be given to revising at least one of remaining areas to Urban Center when appropriate. One idea proposed by the community was to develop a parking structure in the gulch opposite Kūhiō Highway from the Civic Center at location #1. It could be built into the grade below the level of the roadway and hidden from view. It could serve as an alternative site for public parking and

support Civic Center parking needs. However, the costs of building such a structure could be a factor in determining feasibility. Additional discussion is provided in Section 4.2.

The open area near Kalena Street contains a steep bluff area which should be maintained as undeveloped. The adjacent R-20 zoned area, however, was recently adjusted in this area and the overlay district proposed in this

R-20 Portion of Location #2 off Kalena Street

plan should apply only to the flat area at this site (location #2, see photo).



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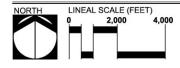
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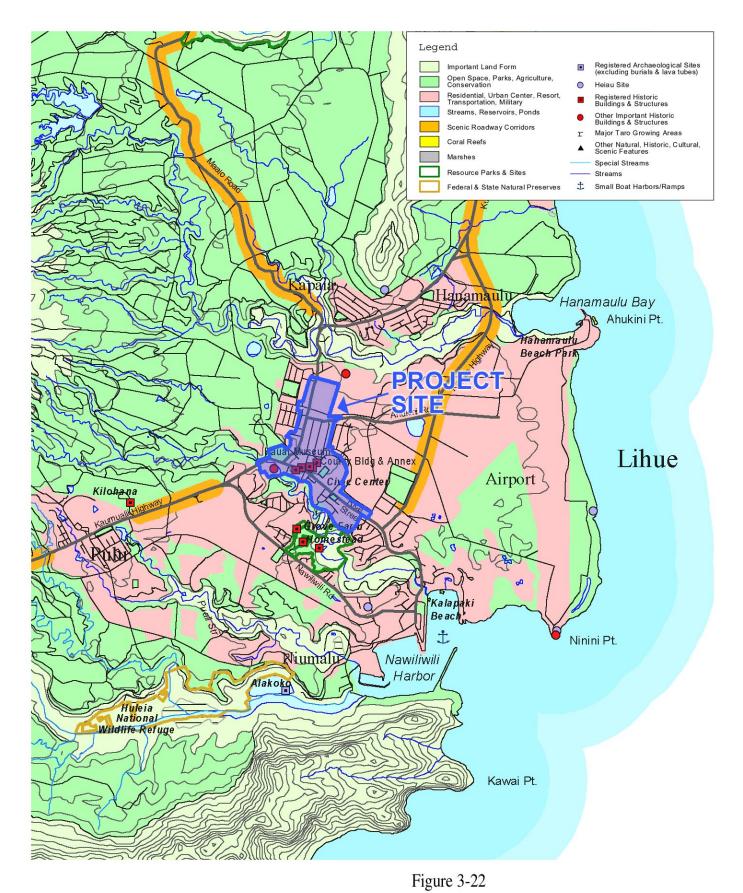
County of Kauai General Plan 2000

Figure 3-21 Kaua'i General Plan - Land Use Map

LĪHU'E TOWN CORE URBAN DESIGN PLAN

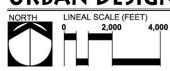






Kaua'i General Plan - Heritage Resource Map

LĪHU'E TOWN CORE URBAN DESIGN PLAN





Disclaimer: This graphic has been prepared for general planning purposes only.

Source: County of Kauai General Plan 2000 The six historic resources identified on the General Plan (GP) Heritage Resource Map are also noted as important resources in the Līhu'e Town Core Urban Design Plan. They are the:

- Līhu'e Post Office
- Albert Spencer Wilcox Memorial Building (Kaua'i Museum)
- Historic County Building
- County Annex
- State Courthouse
- Līhu'e Mill

Not specifically listed in the GP Heritage Resource Map but should be added since they are listed in on the National and State Registers of Historic Places is:

• Līhu'e Civic Center Historic District (includes the Historic County Building, County Annex, State Courthouse, and County Lawn)

There are two parks and two open areas identified in the General Plan Heritage Resource Map. They are:

- Līhu'e Park
- Kalena Park
- The agricultural area opposite Kūhiō Highway from the Līhu'e Civic Center
- The open area along the bluff in the Lower Rice Street Neighborhood off Kalena Street

Līhu'e Park has also been identified as an important resource by the community in the Līhu'e Town Core Urban Design Plan process (see Figure 3-20) and the agricultural and open areas are discussed above.

3.5.2 COMPREHENSIVE ZONING ORDINANCE

Chapter 8 of the Kaua'i County Code (KCC) is the Comprehensive Zoning Ordinance (CZO) for the County of Kaua'i. It regulates the type of land uses permitted on the island and their locations. The CZO is specific in its regulation of permitted uses and building construction. The existing zoning map for the Līhu'e Town Core is shown in Figure 3-23.

For the areas specified in this Līhu'e Town Core Urban Design Plan, the existing zoning designations will remain intact and will not require a zoning amendment. The regulations and procedures established in the CZO apply within the areas specified in this Līhu'e Town Core Urban Design Plan except where the land uses and development guidelines specified in this Urban Design Plan conflict. When this occurs, the

provisions of this Līhu'e Town Core Urban Design Plan and the special design districts described in this report should supersede those specified in the CZO.

3.5.3 LĪHU'E DEVELOPMENT PLAN

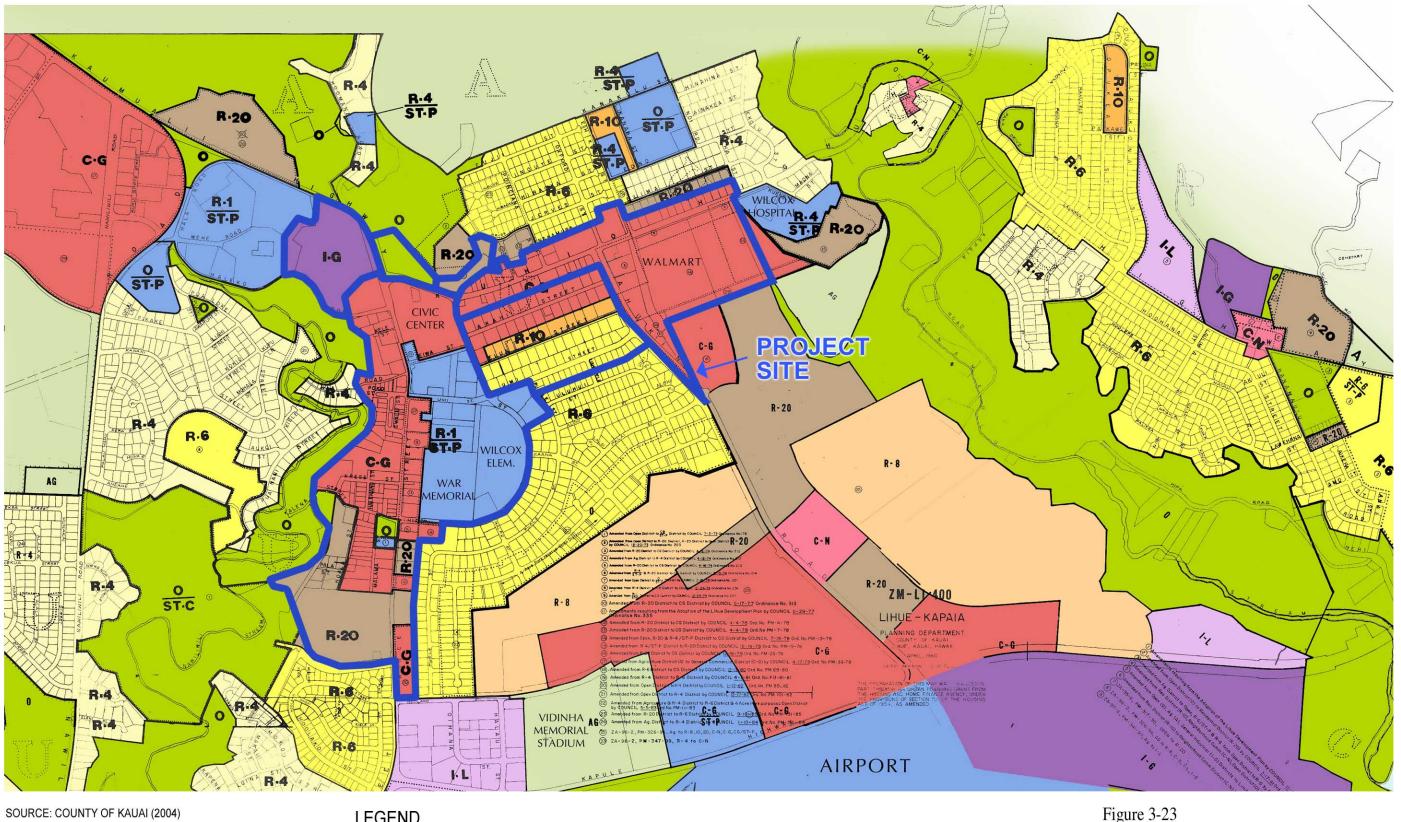
Section 10-5 of the KCC is the Līhu'e Development Plan (DP). It was prepared in 1976 by EDAW Inc. and Muroda & Associates and was created to coordinate the future development and growth of the Līhu'e District including the need to expand the Civic Center. The DP ranked the Civic Center as the most important priority and cited the following goals and objectives for its development:

- A. Develop a Civic Center plan showing the placement of buildings, design, landscaping
- B. Provide area for Civic Center growth
- C. Design of Civic Center should reflect the image of the Garden Island
- D. Expand and maintain a cultural center

An overlay of the development controls and the illustrative plan for the Līhu'e Town Core from the EDAW/Muroda report is shown in Figure 3-24. Completed just ten years after the Līhu'e Shopping Center was built, the 1976 DP showed the shopping center remaining in its location at Kūhiō Highway and Rice Street as it could not foresee the County's acquisition of the property by the late 1980s. Instead, it recommended expanding the Civic Center to the east—positioning new government offices over a portion of Līhu'e Park. It also showed 'Eiwa Street realigned to intersect with 'Akahi Street at Hardy Street and Wa'a Road at Rice Street. This realignment would require a significant reduction in the size of the historic County Lawn in front of the Historic County Building and the removal of some of the large monkey pod trees.

Other highlights of the plan for the Town Core included alternating building frontages in the 'Akahi/'Elua Streets neighborhood with shared parking area, reduced parking requirements for shared public/customer lots and provision of pedestrian access ways, new public facilities and government office buildings, proposed common parking areas and landscaping.

3-26



SOURCE: COUNTY OF KAUAI (2004)

DISCLAIMER: THIS MAP HAS BEEN PREPARED FOR GENERAL PLANNING PURPOSES ONLY.

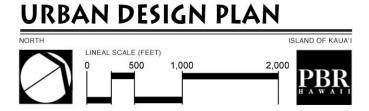
LEGEND

C-G:General

Residential Districts **Industrial Districts** R-4 I-L: Limited R-6 I-G: General R-10 Agricultural District R-20 A or AG **Commercial Districts** Open District C-N: Neighborhood

Special Treatment Districts ST-C: Cultural/Historic ST-P: Public Facilities

Līhu'e Town Core Zoning Map LĪHU'E TOWN CORE



The Lihue Core Area Development Plan is the land use development guide delineating:

Uses and Densities -

MF Multi-family
10 du/a (10 dwelling units per acre)

MF Multi-family
20 du/a (20 dwelling units per acre)

C Commercial

Pb Public

Pk Par

Special Planning Area Boundary

Use Area Boundary

Development Controls -

Building Envelope (shown for critical future buildings only).

Common Parking Areas (shown for commercial areas and Civic Center only).

^^ Access Points

← Common Rights of Way (20' width)

---- Pedestrian Access Ways (10' width)

Major Existing Trees to be preserved

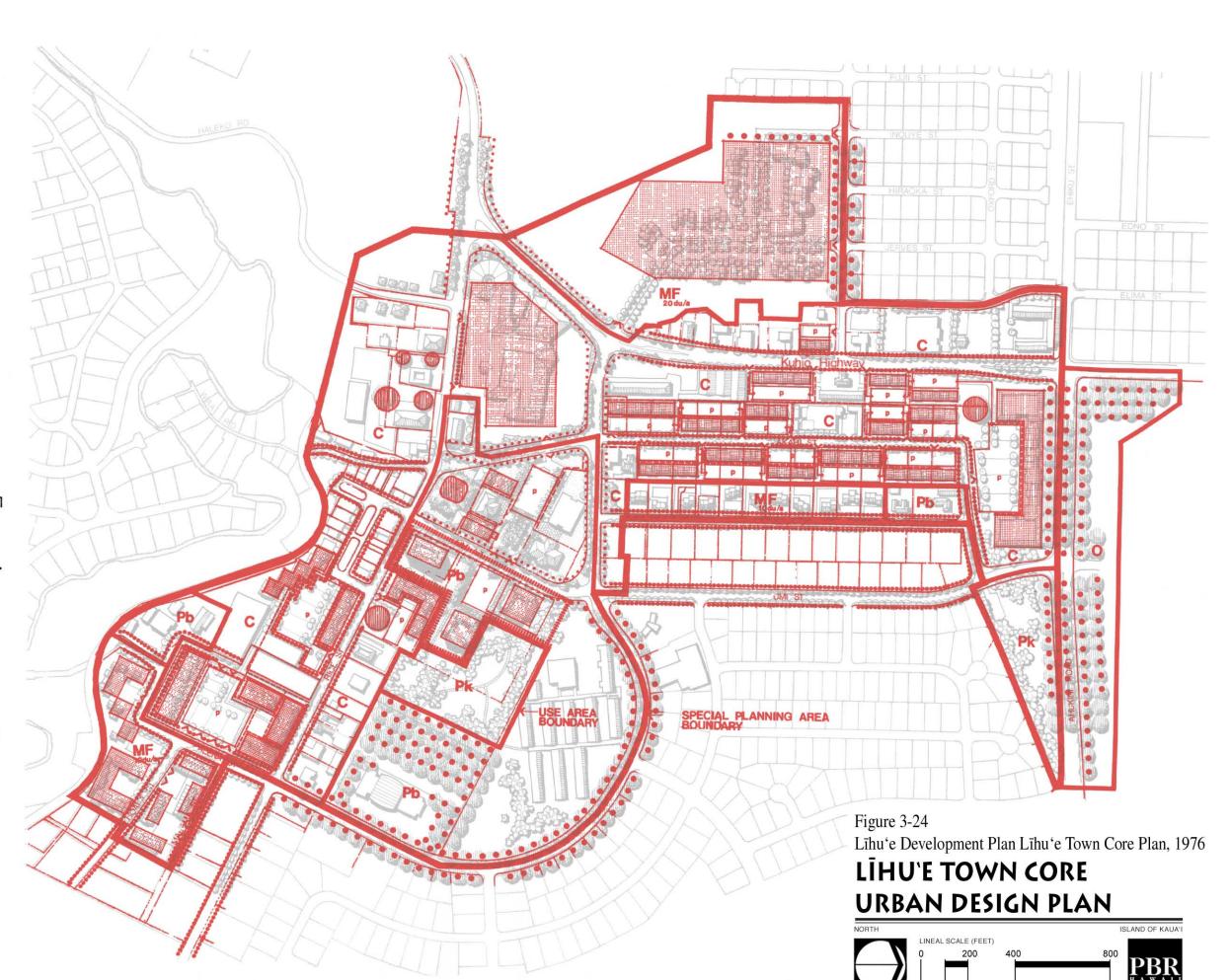
Proposed Large Canopy Trees

••••• Proposed Medium Canopy or Dome Trees

• • • Proposed Vertical Trees

SOURCE: COUNTY OF KAUA'I LIHUE DEVELOPMENT PLAN (1976)

DISCLAIMER: THIS MAP HAS BEEN PREPARED FOR GENERAL PLANNING PURPOSES ONLY.



Since an update of the Līhu'e Development Plan is designated for funding in 2009-10, the following is a preliminary list of revisions that should be incorporated into the DP Update:

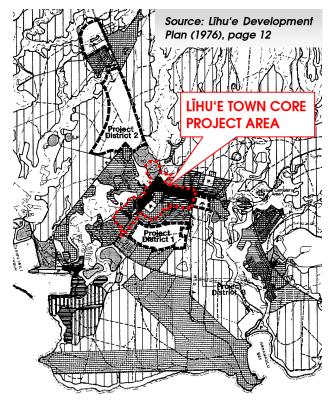


Figure 3-25: Līhu'e Development Plan Proposed Land Use

- Revise the Līhu'e Town Core planning boundary and addition of the five project neighborhoods
- Revise applicable design guidelines and standards
- Integrate the Līhu'e Civic Center Site Improvements Master Plan (County Department of Public Works-Building Division)
- Districts 2 and 3 (see Figure 3-25, pages 11-12 from the 1976 DP). Project District 1 was removed by County of Kaua'i Ordinance No. PM-326-96 as part of the zoning amendment granted for the Līhu'e-Hanamā'ulu project. Project District 2 is outside of the Town Core in Puhi and has been significantly completed. Project District 3 is the current Wal-Mart site in Līhu'e.

3.5.4 OTHER COUNTY OF KAUA'I DESIGN CONTROLS

Other County of Kaua'i ordinances and regulations that control land use and development in Līhu'e include:

- <u>Subdivision Ordinance</u>: Similar to the CZO, the existing regulations and procedures established in the Subdivision Ordinance apply except where they conflict or differ with the proposed Līhu'e Town Core Urban Design Plan. When this occurs, the provisions of the Līhu'e Town Core Urban Design Plan supersede those of the Subdivision Ordinance (KCC, Chapter 9).
- Outdoor Signs: Nothing recommended in the provisions of the Līhu'e Town Core Urban Design Plan should be construed to conflict or override any of the provisions in the Outdoor Signs Ordinance (KCC, Chapter 15, Article 4).
- Exceptional Tree Ordinance: The large Tropical Almond or False Kamani (K-1, *Terminalia Catappa*) is designated as an important tree and is preserved in the Urban Design Plan (KCC, Chapter 22, Article 5).

3.5.5 STATE LAND USE AND LONG-RANGE PLANS

The State Land Use Districts for the Līhu'e Town Core is shown in Figure 3-27. The entire Līhu'e Town Core project and the entire Nāwiliwili Stream gulch are located within the State Urban Land Use District.

Only four to five percent of Kaua'i Island is classified as Urban by the State Land Use Commission. Līhu'e is one of the largest urban areas on the island. No State Land Use Boundary Amendments would be required to fulfill the Līhu'e Town Core Urban Design Plan.

Other State long-range plans that may need to be updated based on the findings and recommendations of this plan include:

- Kaua'i Long Range Land Transportation Plan (1997)
- Līhu'e Airport Master Plan (1990, in the process of being updated)
- Kaua'i Commercial Harbors Master Plan (2001)
- Hawai'i State Bike Plan (2003)

View of Halekō Road at Rice Street and Distant View of Hāʻupu Range

The State long-range planning effort that is most affected by the recommendations of this plan is the State Department of Transportation (DOT) Kaua'i Long Range Land Transportation Plan. It was last updated in 1997 and is currently in the process of being updated. Future updates should include the following



recommendations and priorities identified in the Līhu'e Town Core Urban Design Plan:

- Construction of the Līhu'e Bypass Road and realignment of Ahukini Road east of Kūhiō Highway to meet with 'Ehiku Street and the Līhu'e Bypass.
- Importance of Halekō Road as a historic roadway (see photo above). Require maintenance of the roadway as a two-lane road rather than expanding it to four lanes. Provision for pedestrian and bicycle access via possibly a shared path or shoulder lanes where there is adequate right-of-way. Include interpretive signage and identification of Halekō Road as the historic link between the old

3-30

mill and Līhu'e Town. Appropriate landscaping and preservation of larger, significant trees. Removal of invasive species.

Another long-range plan that is affected by the recommendations in this plan is *Bike Plan Hawai'i*, a comprehensive bicycle master plan for the state completed in 2003 by Kimura International for the DOT. It describes existing facilities as well as identifies implementation strategies and future projects to improve the bicycle network for each island. Figure 3-26 shows the proposed bicycle network for Līhu'e.

Within the Līhu'e Town Core planning area, the Bike Plan recommends installing striped bike lanes in Ahukini Road and Hardy, Rice, and 'Umi Streets and posting signs along Kūhiō Highway indicating that it is a shared roadway. Halekō Road is also recommended to have a bike lane. A bike path separated from vehicular traffic and identified as the Līhu'e Community Pathway is proposed along Nāwiliwili Gulch from Halekō Road to Nāwiliwili Harbor. Kapule Highway is shown as an existing signed shared roadway.



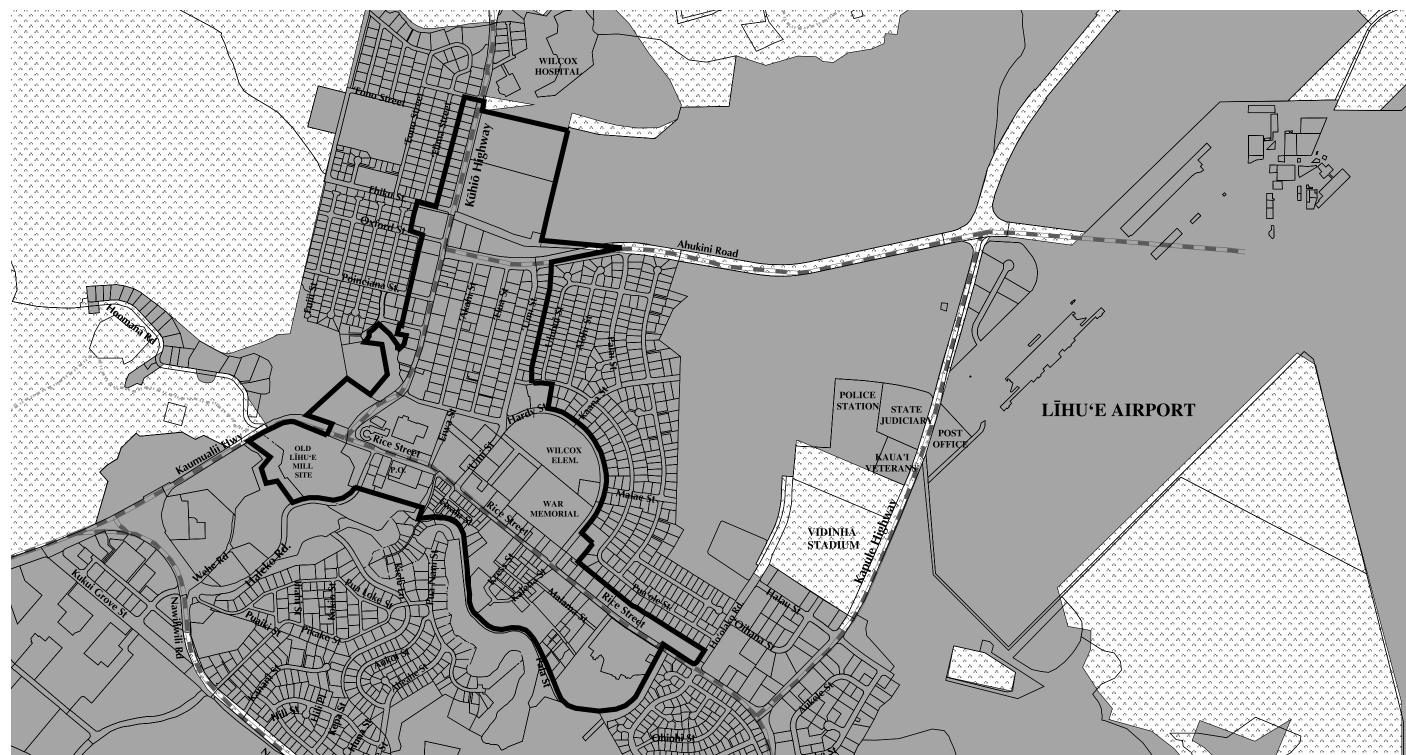
Figure 3-26: Bike Plan Hawai'i Līhu'e Area Map

Future updates should include the following recommendations identified in Section 4.2.5 of this Līhu'e Town Core Urban Design Plan:

- Bike path or lane in Ka'ana Street
- Bike/pedestrian path behind Wilcox Elementary School

3.6 LAND OWNERSHIP

A map showing the major land owners within the Līhu'e Town Core area is provided in Figure 3-28. The County of Kaua'i and State of Hawai'i own the lands upon which most of the public facilities are located. The Weinberg Foundation, HRT Ltd., and their associated companies own much of the land on Kūhiō Highway as well as a few properties along Rice Street. They also own several parcels in the Līhu'e Industrial Park near Rice Street and Kapule Highway. Līhu'e Land Company owns the Wailani project area (Līhu'e-Hanamā'ulu infill) as well as much of the land further mauka of Līhu'e Town. Pacific Funds, LLC out of Seattle, WA recently purchased the old Līhu'e Mill Site and the Nūhou Corporation (Grove Farm Homestead Museum) owns much of the land along Nāwiliwili Stream including several segments of the old railroad right-of-way.



LEGEND

State Land Use Districts
Conservation Agricultural

Rural

Urban

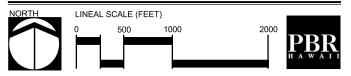
₩Project Site Boundary

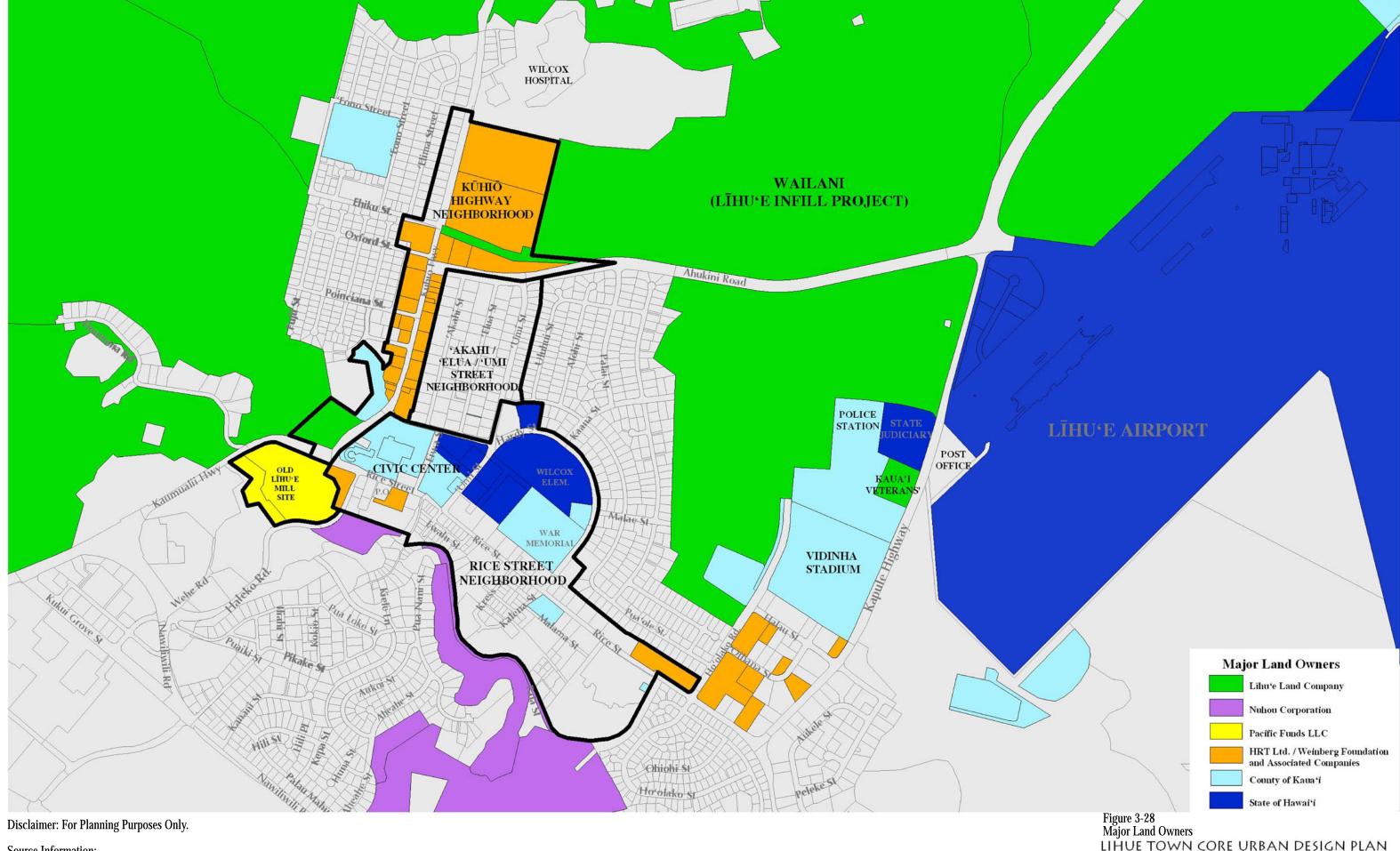
Disclaimer: This graphic has been prepared for general planning purposes only.

Source: State GIS-Land Use Commission (2006)

Figure 3-27 State Land Use Districts

LĪHU'E TOWN CORE URBAN DESIGN PLAN





Source Information: -County of Kaua'i GIS, Real Property Maps

LIHUE TOWN CORE URBAN DESIGN PLAN





3.7 EXISTING URBAN FORM AND STREET CHARACTER

Information on existing land uses along with photographs and details obtained during the site analysis and site visits were used to document the existing urban form and street character of the Līhu'e Town Core. Figure 3-29 shows the resulting Urban Form and Street Character Map. The map identifies various issues as they relate to existing pedestrian environments in the town core. The map identifies sidewalk characteristics, crosswalks, major parking areas, buildings that are pedestrian friendly (built up to the street front, with a pedestrian conducive frontage), parks and open spaces. Nine areas within the five project neighborhoods are described in the analysis, each with their own distinct character.

3.7.1 RICE STREET NEIGHBORHOODS

There are four distinct areas along Rice Street between Kūhiō and Kapule Highways, each with its own identity and character. These areas are labeled A through D on Figure 3-29 and described in more detail below.

Rice Street was recently widened in 2002 from a three-lane road with a center two-way left turn lane to a four lane roadway. Additional land was acquired from several properties along Rice Street to widen the right-of-way and install sidewalks from Halekō Road to Kapule Highway. The overhead utilities were left as overhead lines and Kou trees were planted in small 12-inch square tree wells.



3.7.1.1 <u>Area A: Historic/Civic Center (Kūhiō</u> <u>Highway to 'Umi Street)</u>

The Rice Street Historic/Civic area is the historic commercial and government center of Līhu'e Town. It includes the area around Rice Street from Kūhiō Highway to 'Umi Street. The area to the north (Kapa'a side) of the

roadway includes the Civic Center (see Figure 3-30 and Figure 3-14), while the area to the south (Nāwiliwili side) includes a number of commercial/retail properties. There are several historic buildings as noted earlier in this report. The County of Kaua'i Department of Public Works Building Division is also in the process of finalizing a master plan for the Līhu'e Civic Center. Portions of that master plan are referenced in this report. The following section describes the current condition of the Civic Center and not those proposed in the master plan.

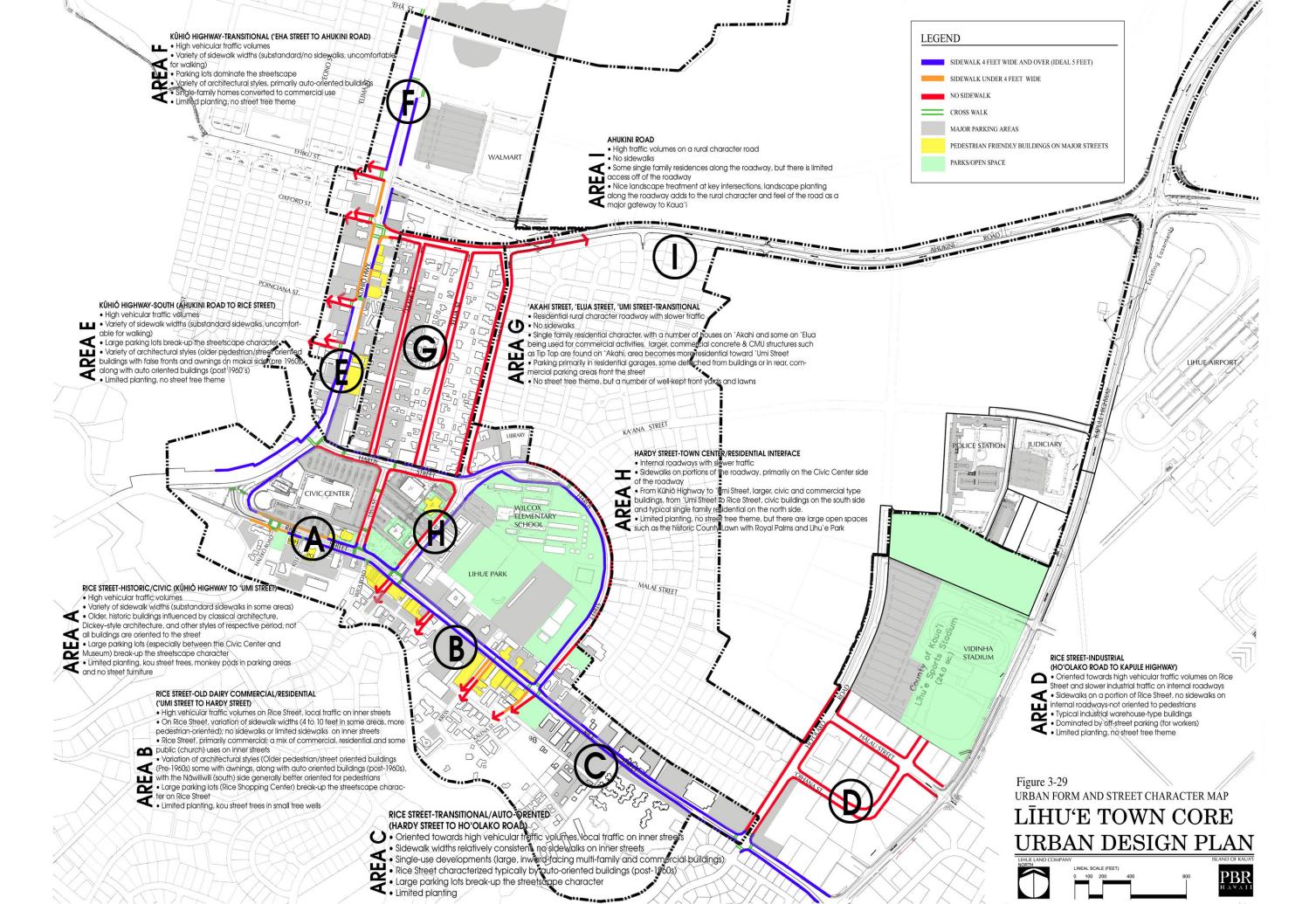




Figure 3-30: Historic County Building and Royal Palms

Figure 3-31: Modern Moʻikeha County Building



Figure 3-32: Narrow Sidewalks on Rice Street

Figure 3-33: Līhu'e Post Office



Figure 3-34: Large Monkey Pod Tree in Parking Lot behind Bank of Hawai'i

Rice Street within Area A is characterized by high vehicular traffic volumes that make crossing the street difficult and create an environment that is not conducive for walking. A popular crosswalk in front of the Post Office was removed to discourage people from parking in the Civic Center parking lots and crossing Rice Street to the Post Office. Some

people still try to cross the street at this location (Figure 3-35).

Figure 3-35: Pedestrian Crossing Rice Street Where Former Crosswalk was Located

The area contains a variety of sidewalk conditions—some areas have wide sidewalks, some narrow sidewalks



(under four feet wide) (Figure 3-32). Other areas in the Civic Center do not have any sidewalks such as the south side of Hardy Street and all of 'Eiwa Street (Figure 3-36). Utility poles and even some of the street trees intended to beautify the area often obstruct pedestrian paths where the sidewalks are narrow.



Figure 3-36: No Sidewalks on 'Eiwa Street

In other areas of Rice Street, such as near the Post Office and First Hawaiian Bank, wider sidewalks with large shade trees provide more pleasant pedestrian environments (Figure 3-15 and Figure

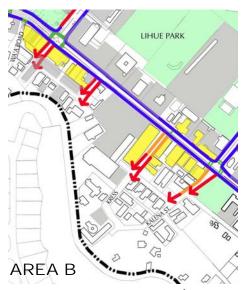
Figure 3-37: Parking Lot in front of Big Save

The area is characterized by a mix of architectural styles ranging from neoclassical to traditional



Dickey-style architecture, as well as post-1960s Modernist buildings. The older buildings constructed prior to the 1960s are oriented towards the street while the newer buildings such as the Civic Center (which was a former shopping center, Figure 3-37) and the First Hawaiian Bank face parking lots. The large parking lots in the Civic Center dominate the area and break-up the streetscape, making the area less conducive to walking.

Although there are some large canopy trees by the Post Office, in the County Lawn and behind the Bank of Hawaii (Figure 3-34), the Civic Center parking lots have limited landscaping and are mainly asphalt (Figure 3-37). There is also no coordinated street tree theme for the area except for the kou trees that were planted along Rice Street as part of the road widening but many of these trees are struggling. The landscaping varies along the roadway fronting the various buildings. There is a general lack of street furniture and places for people to sit which makes the area less inviting for pedestrian activity.



3.7.1.2 <u>Area B: Old Dairy Commercial/Residential</u> ('Umi Street to Hardy Street)

The Old Dairy Commercial/Residential area along Rice Street includes the area from 'Umi Street in the west to Hardy Street in the east. The north side of Rice Street includes commercial uses (office and retail) fronting Līhu'e Park. The south side of Rice Street is primarily commercial (office and retail) with some residential units (mostly one-story single-family homes and small apartment buildings), a recently renovated hotel, Rice Shopping Center, and churches scattered throughout

the area. It includes a

variety of commercial areas such as the 'Ewalu Street area (Figure 3-38) and the Fairview area (Kress and Kalena Streets, Figure 3-39), and Deco Row.

Figure 3-38: Views of the 'Ewalu Street Commercial Area

High vehicular traffic volumes on Rice Street make the street difficult for pedestrians to cross. The only crosswalks on Rice Street in this area are at the 'Umi, Kress and Hardy Street intersections. The distance between the 'Umi and Kress Street crosswalks is well over 860 feet. Ideally the maximum distance between crosswalks for pedestrian-friendly environments is between 250 and 300 feet.





Figure 3-39: Fairview Commercial Area

Smaller internal roadways provide access to the commercial areas on the south side of Rice Street such as 'Ewalu, Kress, and Kalena Streets. They are narrow and cater to local traffic. In some areas, the right-of-way is only 30 feet wide. The separation between public and private property is not clear and parking in these areas is ad hoc.

Figure 3-40: Pedestrian-Oriented Shops along South Side of Rice Street

Sidewalks on Rice Street in Area B also vary in width, as they do within the Rice Street Historic/Civic Core (Area A). Generally, the sidewalks tend to be narrower on the north side of Rice Street (about 4 feet wide) and wider on the south side of Rice Street (about 10 feet or more, see Figure 3-40). However, there are also areas on the south side of Rice Street where sidewalks are narrow and utility poles obstruct pedestrian access (Figure 3-41).

Figure 3-41: Rice and Hardy Street Intersection, Utility Pole Blocking ADA Ramp

Within the 'Ewalu Street and Fairview commercial areas south of Rice Street, there are no continuous sidewalks. Cars are often parked right up to the front of buildings making pedestrian and ADA access to the entrances difficult (Figure 3-42 and Figure 3-39).

Figure 3-42: Ad Hoc Parking near Hamura's Saimin on Kalena Street (Fairview Commercial Area)











Traffic is generally slow through these areas. However, the lack of sidewalks and blocked storefronts make it difficult for pedestrians to navigate these areas.

Figure 3-43: Former Dairy Queen Turned Used Car Dealership on Rice Street



Figure 3-44: Auto Dealership and Large Parking Lot on Rice Street

There is a wide variety of architectural styles in this area due to the mix of uses and the era in which the structures were built. Many of the older commercial buildings

(pre-1960s) were built facing the public streets and are relatively simple warehouse-type structures that added character to their storefronts. Some used Western-style false fronts with awnings (Figure 3-39) while others such as the old Kress Store and former Royal Theater built art deco façades and entries (Figure 3-45).



Figure 3-45: Former Theater with Art Deco Details at the Entry on Rice Street

In the 1960s-80s, most of the commercial buildings were modern, flat- or slightly pitched-roofed boxes built of concrete or concrete masonry units (CMU, Figure 3-46). These buildings tend to be set back from the street and fronted by parking lots (Figure 3-43 and Figure 3-44). Some of the newest buildings such as the Kaua'i

Government Employees Federal Credit Union and Kokua Professional

Building are built in the plantation revival style, donning traditional double-pitch and hipped roofs.

Figure 3-46: Doctors Offices with Decorative CMU, 'Ewalu Street



Figure 3-47: Kauaʻi Government Employees Federal Credit Union on 'Ewalu Street

Many of the single family homes that still exist are typical plantation-style homes (Figure 3-49) and the churches are built in a

variety of styles. The Līhu'e Christian Church on Kress Street is a local version of a Romanesque church with lava rock walls and double-pitch gable roofs (Figure 3-48).

Figure 3-48: Līhu'e Christian Church on Kress Street

Overall, the neighborhood has a disjointed feel as buildings do not relate to one another in style or scale except in specific areas such as Deco Row and the Westernstyle buildings on Kress and Halenani Streets. There is a general lack of landscaping in the area and some of the kou trees on Rice Street are growing into the overhead utility lines.

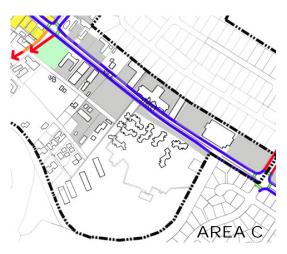
Figure 3-49: Plantation-Style House on Kress Street





3.7.1.3 Area C: Rice Street Transitional/ Auto-Oriented (Hardy Street to Hoʻolako Road)

Further east on Rice Street, between Hardy Street and Ho'olako Road, the street character changes to one that is far more auto-oriented. The area is characterized by high vehicular traffic volumes along Rice Street and buildings turned inward away from Rice



urned inward away from Rice Street. There are also large parking lots that dominate the streetscape.

Figure 3-50: Līhu'e Town Plaza Strip Commercial

The sidewalks on this portion of Rice Street also vary in

width. Some sidewalks are wide and comfortable to walk; others are narrow and squeezed between the roadway and buildings but the sidewalks are continuous throughout

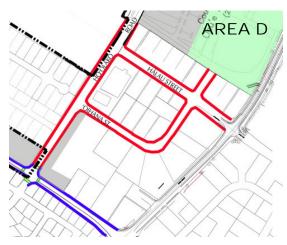
the area. Like the other portions of Rice Street, architectural styles and building patterns vary along this roadway. However, the majority of this area is characterized by large, modern single-use buildings such as Dani's Restaurant, the UPW offices, and Midas. Some developments have landscaping along their street fronts to help soften the streetscape but there is no coordinated street tree theme.



Figure 3-51: Views of Single-Use Commercial Buildings along Rice Street (Area C)

There are also large multi-family complexes in this area with buildings turned inward away from Rice Street and long, blank walls along the roadway. None of the buildings relate to each other in Area C which creates a disjointed streetscape.





3.7.1.4 <u>Area D: Industrial (Hoʻolako</u> Road to Kapule Highway

The Rice Street Industrial area is bordered by Rice Street to the south, 'Oihana and Halau Streets to the north, Ho'olako Street to the west and Kapule Highway to the east. The area is characterized by high traffic volumes on Rice Street and Kapule Highway, with slower industrial traffic on the inner roadways.

Figure 3-52: View of Halau Street (Area D)

There are sidewalks on portions of Rice Street, but no sidewalks on the internal



roadways, making these roadways not conducive for pedestrian activity. This area is characterized by industrial warehouse-type buildings and is dominated by off-street parking for workers of the industrial subdivision. There is limited landscaping and no bicycle lanes. There are no design

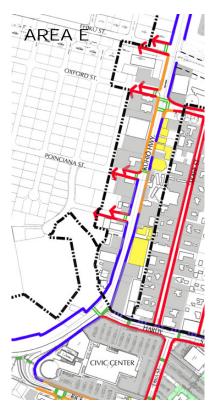


controls coordinate building and driveway locations so streetscapes are inconsistent and designed mainly for vehicle and truck access to the industrial businesses in the area.

Figure 3-53: View of 'Oihana Street

3.7.2 KŪHIŌ HIGHWAY NEIGHBORHOODS

There are two main areas along Kūhiō Highway. The first area is adjacent to the Civic Center and includes the historic Kūhiō Highway commercial area near the Līhu'e Theater. The second is further north between Ahukini Road and 'Ehā Street. Similar to Rice Street, the Kūhiō Highway streetscape differs between the two areas. The older commercial areas of Kūhiō still have a few historic buildings that were designed to address the street with articulated storefronts facing Kūhiō Highway, while the newer commercial developments have buildings set back from the street and parking lots fronting the highway. More details are provided below.



3.7.2.1 <u>Area E: Kūhiō Highway-South (Rice Street to Ahukini Road)</u>

Kūhiō Highway-South includes the area along Kūhiō Highway from Ahukini Road in the north to Rice Street in the south. Kūhiō Highway is characterized by high vehicular traffic volumes and a variety of sidewalk widths, some of which are narrow (under four feet wide). The sidewalks are typically located at the edge of the roadway, sometimes with landscaping pushing pedestrians dangerously close to the vehicles passing by and creating uncomfortable places to walk (Figure 3-54). In some places, safety rails have been installed to help protect pedestrians



(Figure 3-55). Part of the problem occurred when Kūhiō Highway was widened to four lanes. In order to reduce the amount of land taken from the adjacent properties, minimal sidewalks were installed close to the travel lanes.

Figure 3-54: View of Kūhiō Highway Where Sidewalk Partially Blocked by Landscaping

In other places along Kūhiō Highway, the sidewalks jog around parking stalls which are accessed directly from the highway. Visually, the parked cars seem obtrusive but the sidewalks are continuous and connect to storefronts. In these areas, the walkways feel relatively safe since they are sheltered from the moving vehicles along Kūhiō Highway by the parked vehicles (Figure 3-56).

Figure 3-55: Safety Rails Along Kühiö Highway Sidewalks

A variety of architectural styles characterize this area. On the makai side of the highway, there are several historic buildings such as the art deco Līhu'e Theater (Figure 3-13) and the Western-style Garden Island Motors and Garden Island Publishing buildings built of concrete (or veneered with stucco to look like concrete) with false fronts and walkways sheltered by awnings (Figure 3-57).

Figure 3-56: Sidewalk Sheltered from Traffic by Parked Vehicles

Further north, there are a few commercial buildings that echo this Western-style false front architecture, but were built with the more typical building material used in historic Hawaiian towns— wood. These buildings were constructed in the early 1990s and are oriented towards the street with parking lots behind the buildings

(Figure 3-58). Architectural details which make these and the other historic buildings on the makai side of Kūhiō Highway pedestrian-friendly are their scale and articulated storefronts, broad awnings, large picture windows and stallboards below the windows.

In contrast, many of the buildings on the mauka side of the highway are modern, auto-oriented structures. Some look like warehouses modified for retail. Store entries typically face inwards towards parking lots rather than the street. There are several fast food restaurants and gas stations with standard national building designs. Large parking lots and large















expanses of pavement are common and break up the streetscape. Sidewalks are also narrow and adjacent to the traffic lanes, making it uncomfortable to walk along the street.

Figure 3-57: Historic Garden Island Publishing Building on Kūhiō Highway

Figure 3-58: New Commercial Buildings on Kūhiō Highway with Western-Style False Fronts

The area is also characterized by a general lack of landscaping and no consistent street tree theme. Where there is landscaping along the street, the design is often uncoordinated and do not shelter pedestrians from either traffic or the elements.

Figure 3-59: Views of Modern Auto-Oriented Commercial Buildings on Kūhiō Highway

However, there are beautiful views along Kūhiō Highway of Hā'upu to the south, Mt. Wai'ale'ale to the west and Kālepa Ridge to the north.



3.7.2.2 <u>Area F: Kūhiō Highway</u> <u>Transitional ('Ehā Street to</u> <u>Ahukini Road)</u>

The Kūhiō Highway Transitional area stretches from 'Ehā Street to Ahukini Road. The area is characterized by high vehicular traffic volume on Kūhiō Highway.

There are a variety of sidewalk conditions in the area, ranging from wide, comfortable sidewalks over 4 feet on the west side of the roadway

(Figure 3-60) to no sidewalks on portions of the east side (Figure 3-61). Pedestrians were witnessed walking in the traffic lane in this area since

the area was impassable due to the overgrown brush and there were no crosswalks at this intersection.

Figure 3-60: View of Kūhiō Highway, West Sidewalk (Area F)

The area is also characterized by a variety of architectural styles and building types, due to the transitional nature of the neighborhood. They range from smaller commercial structures and single-family residences on the west side of the roadway to large big box retail establishments, including Wal-Mart and Hilo Hatties, on the east side of the roadway.

Figure 3-61: No Sidewalk on the East Side of Kūhiō Highway between 'Ehiku Street and Ahukini Road





Most of the single-family homes are one-story wooden structures built in the traditional plantation style with hipped and/or double-pitch roofs. Similar to the homes on 'Akahi and 'Elua Streets, many of these buildings are converting to commercial uses and businesses (see Figure 3-62). Because they have retained the original form and landscaped front yards of the former residences, this area provides a nice transition between the



heavily urbanized commercial areas on Kūhiō Highway and the residential areas to the north and west.

Figure 3-62: Residences Converting to Commercial Uses on the West Side of Kūhiō Highway

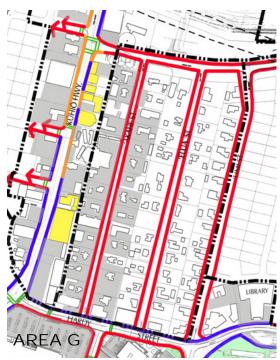


Except for the extensive landscape buffer fronting the Wal-Mart parking lot, the landscaping along Kūhiō Highway is not coordinated and reflects the transitional nature of the area.

Figure 3-63: Landscape Buffer Fronting Wal-Mart

The character of Kūhiō Highway in this area is split between the auto-

oriented east side of the roadway and the transitional commercial and plantation cottage residences on the west side.



3.7.3 OTHER NEIGHBORHOODS

3.7.3.1 <u>Area G: 'Akahi Street, 'Elua</u> Street, 'Umi Street Transitional

The 'Akahi, 'Elua and 'Umi Streets area is a neighborhood in transition. This area is bounded by properties along 'Akahi Street to the west and residential properties on 'Umi Street to the east. It includes the area between the existing and realigned Ahukini Road to the north and Hardy Street to the south.

All of the roadways within this area are local streets with a rural residential character. There are no sidewalks along

any of the roadways, and many of the property owners have grassed or paved the shoulders within the right-of-way where cars are often parked.

Figure 3-64: Views of Plantation-Style Residences on 'Akahi Street Built in the 1930s

Historically, the area has been a residential neighborhood. In the 1930s and 1940s, plantation- style cottage homes were built on 'Akahi and 'Elua Streets as the Civic Center and commercial areas on Kūhiō and Rice Street flourished. The homes

built in the 1930s are characterized by steep double-pitch hipped roofs, vertical wooden siding, and small covered entries or front porches with lava rock detailing (Figure 3-64). The homes built in the 1940s tend to have simpler and flatter hippedroofs but are also wood-sided and elevated. The entries are often shielded from view of the street. Some have attached carports wide enough for a single car (Figure 3-65).





Many of the historic homes have low lot coverage and landscaped front







yards with mature trees and trimmed hedges fronting the property. The landscaping adds to the small-town character of the neighborhood.

Figure 3-65: Views of Residences along 'Elua Street Built in the 1940s

In 1965-6, tract homes were built on 'Umi Street. These homes are different architectural form and character from those on 'Akahi and 'Elua Streets. They are built on slabs atgrade, have larger footprints and are built of CMU blocks. The roofs have flatter pitches with gabled ends and the two-car carports are the most prominent features of the homes along the street (Figure 3-66). Landscaping is sparse.

By the 1960s and 1970s, several commercial uses began replacing some of the cottage homes on 'Akahi Street with large, modern

buildings that do not relate to the surrounding neighborhood (Figure

3-67). Many are built of CMU blocks with flat roofs and designed to maximize building size and footprint.

Figure 3-66: 'Umi Street Residences





Figure 3-67: New Commercial Buildings on 'Akahi Street

Given its close proximity to the Civic Center and Līhu'e businesses, the area seemed appropriate for infill commercial

development and the County changed the zoning of 'Akahi Street to General Commercial (C-G) and the west half of 'Elua Street to multifamily residential (R-10) to allow for higher density development. 'Umi Street remains residentially zoned (R-6). Also, the County is receiving a growing number of requests for variances for businesses on 'Elua Street and there is momentum building to also change 'Elua Street to commercial zoning. However, many in the community and at the County feel that the residential character of the neighborhood is worth preserving, particularly the historic homes on 'Akahi and 'Elua Streets. They are part of one of the last remaining historic residential neighborhoods of Līhu'e Town.

Some of the businesses that have moved into the area have preserved the residential character of the neighborhood. Some kept the historic structures (Figure 3-64). Others have remodeled or rebuilt the structures but maintained the residential character and scale of the buildings by keeping them to one-story and including pitched roofs, entry porches, and wood siding. Another important feature is the landscaping—maintaining the lawns in the front yard, the low hedges or rock walls along the street and even the mailboxes help to preserve the character of this historic neighborhood (Figure 3-68).

Figure 3-68: Commercial Uses in Structures Remodeled to Retain their Residential Character





3.7.3.2 <u>Area H: Hardy Street-Town</u> <u>Center/Residential</u> Interface

The Hardy Street-Town Center area includes Hardy Street from Kūhiō Highway to its southern terminus at Rice Street. The area overlaps with Area A (described earlier) by the Civic Center and includes a number of public and quasi-public uses along Hardy Street, including the State Office Building and old



Courthouse (Figure 3-69), Līhu'e Public Library (Figure 3-70), the Kaua'i War Memorial Convention Hall (Figure 3-71), Līhu'e Park, and Wilcox Elementary School. There are also several commercial uses (retail and office) such as Hale Pumehana, Kaua'i Community Federal Credit Union, the Salvation Army (Figure 3-72) and ILWU as well as a church, St. Michaels.





Figure 3-69: State Courthouse

From Kūhiō Highway to 'Umi Street, there are larger, civic and commercial type buildings. From 'Umi Street to Rice Street, there are civic buildings on the south side of Hardy Street and typical 1960s-70s single family residential on the north side. Architecturally, there is a wide variety of styles mostly from the modern, post-1960s era.

Figure 3-70: Sculptural Form of the Līhu'e Public Library



Figure 3-71: Kauaʻi War Memorial Convention Hall

Figure 3-72: Residentially Scaled Salvation Army

Traffic on Hardy Street tends to be local and primarily related to the nearby businesses and the Civic Center. It can be heavy specifically due to the arrival and departure of public workers in the Civic Center during the morning and afternoon peak hours and at lunchtime as well as the vehicles exiting the library. There also may be some regional traffic using the local streets and parking lots as shortcuts to bypass Kūhiō Highway.

Figure 3-73: Residence on Hardy Street





Between Kūhiō Highway and 'Umi Street, there are sidewalks on the north side of Hardy Street but not the south adjacent to the Civic Center (Figure 3-74). Between 'Umi and Rice Streets, there are sidewalks along the school side of Hardy Street but not in front of the residences on the makai side of Hardy Street. Sidewalks are especially critical for this area due to the high volume of pedestrian activity associated with the Civic

Center, Wilcox Elementary School and

Līhu'e Park.

Figure 3-74: Views Looking East and West, Respectively, Down Hardy Street by the Civic Center

Landscaping is minimal in this area. There are no coordinated street trees planted on Hardy Street, but there are

a few large monkey pod trees by 'Umi Street several and Poinciana trees around Kauaʻi War the Memorial and Wilcox Elementary School. There are mauka views from most areas along Hardy Street.





3.7.3.3 Area I: Ahukini Road



The Ahukini Road area includes Ahukini Road from Kūhiō Highway to Kapule Highway. This roadway is characterized by a high volume of traffic on what is currently a two-lane rural roadway. Due to the future Wailani (Līhu'e-Hanamā'ulu infill) project bordering both sides of the roadway and its increasing use by regional traffic, Ahukini Road is expected to be expanded to a four-lane divided roadway and is included as such in the State DOT's Kaua'i Long Range Land Transportation Plan (KLRLTP). In addition, the KLRLTP includes a realignment of its western portion to intersect with 'Ehiku Street at Kūhiō Highway (Figure 3-61) since it is planned as the major connector road for the proposed Līhu'e

Bypass.



Figure 3-75: Historic Kuhn House

Currently, there are no sidewalks on Ahukini Road and no bike lanes. However, bike lanes are expected to be added during the expansion to four lanes. There are no actively used accesses for cars and other vehicles from

the internal roadways except at the Wal-Mart driveway and 'Akahi, 'Elua, 'Umi and Palai Streets. However, additional connections will be made with the development of Wailani.

Single family homes as well as vacant lands are located along the roadway. There is a historic property between the existing and proposed alignments for Ahukini Road, the Kuhn House, which is currently used as office space (Figure 3-75). One of Kaua'i's Exceptional Trees, a grand false kamani, is also located here. With the Līhu'e Gateway landscaping improvements, a consistent landscape theme has been established for this roadway and adds to the rural character of the area, enhancing this roadway as the gateway to Līhu'e.

3.8 EXISTING TRAFFIC

Phillip Rowell and Associates prepared a traffic study for the project. They analyzed existing traffic conditions and several alternatives generated from public input, CAC discussions and the project team as well as conditions proposed for the Līhu'e Civic Center Site Improvements project and findings from the traffic study prepared for that project. The traffic study for this project is provided in its entirety in Appendix E.

The traffic study for this project includes existing traffic volumes for the morning and afternoon peak hours taken in the first week of November 2004 and the resulting level-of-service (LOS) analysis.

The study area included the area bounded by Kapule Highway, Rice Street, Kūhiō Highway and Ahukini Road. The intersections studied for the report are shown in Figure 3-76 and listed below:

- 1. Kūhiō Highway at Rice Street
- 2. Halekō Street at Rice Street
- 3. 'Eiwa Street at Rice Street
- 4. 'Umi Street at Rice Street
- 5. Hardy Street/Kalena Street at Rice Street
- 6. Ho'olako Street at Rice Street
- 7. Kapule Highway at Rice Street
- 8. Kūhiō Highway at Hardy Street
- 9. 'Akahi Street at Hardy Street
- 10. 'Eiwa Street at Hardy Street
- 11. 'Elua Street at Hardy Street
- 12. 'Umi Street at Hardy Street
- 13. Kūhiō Highway at Oxford Street
- 14. 'Akahi Street at Ahukini Road
- 15. 'Elua Street at Ahukini Road
- 16. 'Umi Street at Ahukini Road
- 17. Palai Street at Ahukini Road
- 18. Kapule Highway at Ahukini Road
- 19. Kapule Highway at Ka'ana Street

All of the streets within the study area are two-lane, two-way roadways except Kūhiō Highway and Rice Street, which are both four-lanes wide, two in each direction.

Along Rice Street, parking is allowed along both sides of the street during the off-peak hours, limiting much of the roadway to two lanes. However, during peak traffic periods on weekdays, parking is prohibited from 7:00 AM to 9:00 AM and from 3:00 PM to 5:00 PM.

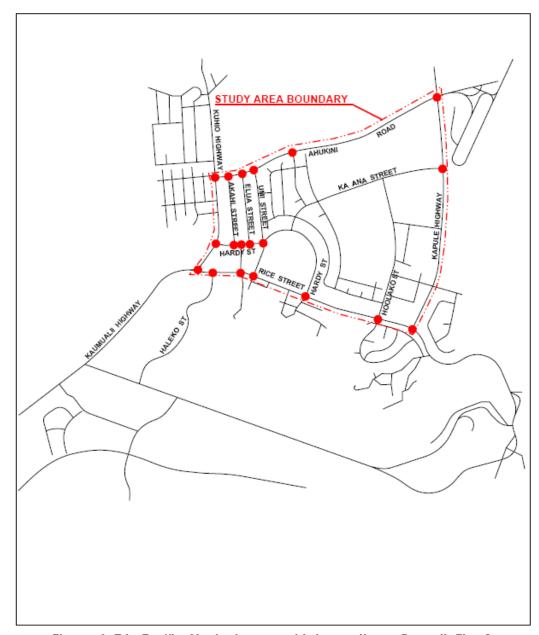


Figure 3-76: Traffic Study Area and Intersections (Rowell, Fig. 1)

LOS is a qualitative measure that involves a variety of factors such as speed, travel time and delays, traffic interruptions, freedom to maneuver, safety, and driving comfort. It uses a scale of A to E to describe overall traffic conditions and has different criteria for signalized and unsignalized intersections.

LOS D is typically considered acceptable for peak hour conditions in urban areas. To be consistent with the conclusions of the TIAR for the Līhu'e Civic Center Master Plan, LOS E will be considered acceptable under certain circumstances such as for minor left turn movements when the main through traffic is moving at acceptable levels or there are no appropriate mitigating measures to improve the minor movement without sacrificing the quality of the major movements. The summary table for the existing LOS for the study area is provided in Table 3-2.

Table 3-2: Existing Level of Service

Na	Indone a dian	Cambrala	LOS	LOS	Conclusions/Commonts
No.	Intersection	Controls	AM	PM	Conclusions/Comments
]	Kūhiō Hwy at	Signalized	В	В	All movements are C, or
	Rice St		_		better.
2	Halekō St at Rice St	Unsignalized	С	С	All movements operate at B and C.
3	`Eiwa St at Rice St	Unsignalized	E	F	Southbound left operates at E during AM and F during PM. Remaining movements operate at C, or better.
4	`Umi St at Rice St	Signalized	В	В	All movements operate at B, or better.
5	Hardy St at Rice St	Signalized	Α	Α	All movements operate at A and B.
6	Hoʻolako St at Rice St	Signalized	В	В	All movements operate at B, or better.
7	Kapule St at Rice St	Unsignalized	Е	F	Southbound left operates at E and F during AM and PM, respectively. Intersection is to be reconfigured and signalized by DOT. Design is underway.
8	Kūhiō Hwy at Hardy St	Unsignalized	F	F	Westbound left operates at F during AM and PM.
9	`Akahi St at Hardy St	Unsignalized	С	С	All movements operate at C, or better.

No	Intersection	Controlo	LOS	LOS	Canalysians/Comments			
No.	Intersection	Controls	AM	PM	Conclusions/Comments			
10	`Eiwa St at Hardy St	Unsignalized	Е	D	Northbound left operates at E during AM (39.3			
	Tididy 3i				seconds per vehicle), but			
					is acceptable for short			
					periods during peak			
					periods. All other			
					movements operate at D,			
					or better.			
11	`Elua St at	Unsignalized	С	С	All movements operate at			
	Hardy St				C, or better.			
12	`Umi St at	Unsignalized	F	F	Northbound approach			
	Hardy St				operates at F during AM			
					and PM. All other movements operate at D,			
					or better.			
13	Kūhiō Hwy at	Signalized	В	С	Westbound left operates			
	Ahukini Rd	oigi idii20d			at E during AM and F			
					during PM. All other			
					movements operate at D,			
					or better.			
14	`Akahi St at	Unsignalized	С	С	All movements operate at			
1.5	Ahukini Rd	11. '		_	C, or better.			
15	`Elua St at Ahukini Rd	Unsignalized	С	D	All movements operate at D, or better.			
16	'Umi St at	Unsignalized	F	F	Northbound left operates			
	Ahukini Rd	or isignalized	'	'	at F during AM and PM.			
17	Palai St at	Unsignalized	D	D	All movements operate at			
	Ahukini Rd				D, or better.			
18	Kapule Hwy	Signalized	D	D	Eastbound left and			
	at				westbound left operate at			
	Ahukini Rd				F and E during AM.			
					Eastbound left operates			
					at F during PM and northbound thru and			
					southbound left operate			
					at E during PM. All			
					remaining movements			
					operate at D, or better.			
19	Kapule Hwy	Signalized	Α	Α	All movements operate at			
	at				D, or better.			
	Ka`ana St	4)	(D-: " :	2007				
From	From Table 4, "Existing (2004) Levels-of-Service" (Rowell, 2006).							