



RESOLUTION

APPROVING THE AIEA-PEARL CITY NEIGHBORHOOD TRANSIT-ORIENTED DEVELOPMENT (TOD) PLAN.

WHEREAS, the Revised Ordinances of Honolulu (ROH) Sections 21-9.100 through 21-9.100-4 of the Land Use Ordinance, enacted by Ordinance 09-4, establish a procedure for the creation of special districts known as transit-oriented development (TOD) zones, and accompanying development regulations, around rapid transit stations to encourage appropriate transit-oriented development; and

WHEREAS, ROH Section 21-9.100-2 provides that for each TOD zone, a neighborhood TOD Plan shall be approved by the Council and shall serve as the basis for the creation or amendment of a TOD zone and the TOD development regulations applicable thereto; and

WHEREAS, plans for the Honolulu rail transit project call for one station in Aiea near the intersection of Kamehameha Highway and Kaonohi Street (Pearlridge station), and two transit stations in Pearl City--one near the intersection of Kamehameha Highway and Kuala Street (Pearl Highlands station), and another on the Leeward Community College campus; and

WHEREAS, the Department of Planning and Permitting (DPP) and its consultant, Van Meter Williams & Pollack, have prepared the Aiea-Pearl City Neighborhood TOD Plan (March 2014) to serve as the basis for the creation of TOD zones around the Pearlridge, Pearl Highlands, and Leeward Community College rail transit stations; and

WHEREAS, the process of creating the Aiea-Pearl City Neighborhood TOD Plan was inclusive, open to residents, businesses, landowners, community organizations, government agencies, and others; and

WHEREAS, the process considered population, economic, and market analyses and infrastructure analyses, including capacities of water, wastewater, and roadway systems; and

WHEREAS, the Aiea-Pearl City Neighborhood TOD Plan does not ignore past planning for either community, but builds on the objectives of the Aiea-Pearl City Livable Communities Plan (May 2004); and

DPPAPTOD.R14



RESOLUTION

WHEREAS, the Aiea-Pearl City Neighborhood TOD Plan is consistent with the Primary Urban Center Development Plan and the Central Oahu Sustainable Communities Plan established by ROH Chapter 24, Article 5; and

WHEREAS, the Council desires to approve the Aiea-Pearl City Neighborhood TOD Plan; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that, pursuant to ROH Section 21-9-100-2(f), the Council hereby approves the Aiea-Pearl City Neighborhood TOD Plan (March 2014) attached hereto as Exhibit A and incorporated herein by this reference; and

BE IT FURTHER RESOLVED that, pursuant to ROH Section 21-9.100-3(a), the Director of the DPP is directed to submit to the Planning Commission, within 120 days of the adoption of this Resolution, a proposed ordinance establishing TOD zones for the Pearlridge, Pearl Highlands, and Leeward Community College rail transit stations, and the TOD development regulations applicable thereto; and



RESOLUTION

BE IT FINALLY RESOLVED that copies of this Resolution be transmitted to the Mayor, the Director of the Department of Planning and Permitting, and the Honolulu Authority for Rapid Transportation.

INTRODUCED BY:

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(br)

DATE OF INTRODUCTION:

APR 8 2014
Honolulu, Hawaii

Councilmembers



AIEA-PEARL CITY NEIGHBORHOOD TOD PLAN

DRAFT FINAL PLAN

MARCH 2014

PREPARED FOR:

THE CITY AND COUNTY OF HONOLULU
DEPARTMENT OF PLANNING AND PERMITTING

PREPARED BY:

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EXHIBIT A

AIEA-PEARL CITY NEIGHBORHOOD TOD PLAN

Table of Contents

I	EXECUTIVE SUMMARY	5
	A. The Vision	6
	B. Leeward Community College Station Area	8
	C. Pearl Highlands Station Area	10
	D. PearlrIDGE Station Area	12
II	PROJECT OVERVIEW & EXISTING CONDITIONS	15
	A. Background	16
	B. What is TOD and Smart Growth?	19
	C. Ongoing and Previous Plans	21
	D. Planning Area Overview	29
III	PLAN PRINCIPLES	35
IV	DRAFT STATION AREA ALTERNATIVES	43
V	PLAN OVERVIEW	47
VI	LEEWARD COMMUNITY COLLEGE STATION AREA PLAN	51
	A. Overall Structure	53
	B. Connectivity and Circulation	55
	C. Parks and Open Space	57
	D. Urban Form	59
	E. Land Use	61
	F. Prototypical Phasing	63
	G. District Boundaries	69
VII	PEARL HIGHLANDS STATION AREA PLAN	73
	A. Overall Structure	75
	B. Connectivity and Circulation	77
	C. Parks and Open Space	79
	D. Urban Form	81
	E. Land Use	83
	F. Prototypical Phasing	85
	G. District Boundaries	89
VIII	PEARLRIDGE STATION AREA PLAN	93
	A. Overall Structure	95
	B. Connectivity and Circulation	97
	C. Parks and Open Space	99
	D. Urban Form	101
	E. Land Use	103
	F. Prototypical Phasing	105
	G. District Boundaries	111
IX	IMPLEMENTATION RECOMMENDATIONS	115
	A. TOD Special District	116
	B. Revision to Previous Plans	124
	C. Environmental Design	124
	D. Affordable Housing	125
	E. Streets and Connectivity	126
	F. Open Space	128
	G. Maintenance of Public Improvements	130
	H. Implementation Partners	131

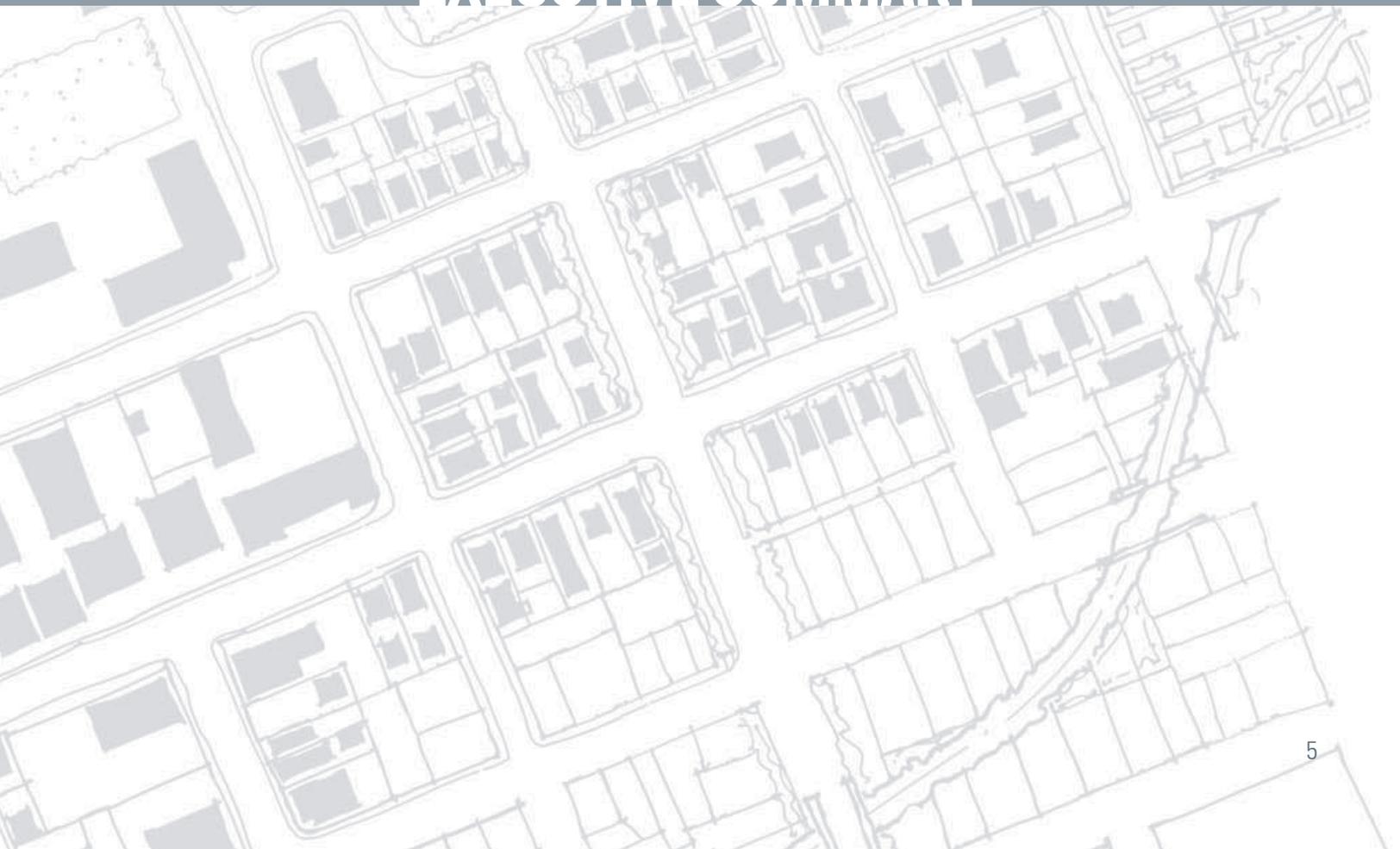
AIEA–PEARL CITY NEIGHBORHOOD TOD PLAN

List of Figures

<i>FIGURE 1 - Honolulu Rail Transit Project Alignment Map</i>	16
<i>FIGURE 2 - Aiea–Pearl City Neighborhood TOD Plan Areas</i>	17
<i>FIGURE 3 - Primary Urban Center Development Plan Land Use Map</i>	20
<i>FIGURE 4 - Aiea–Pearl City Livable Communities Plan</i>	24
<i>FIGURE 5 - Pearl Harbor Historic Trail Master Plan</i>	26
<i>FIGURE 6 - Existing Land Uses</i>	28
<i>FIGURE 7 - Existing Zoning</i>	30
<i>FIGURE 8 - TOD Issues and Opportunities</i>	32
<i>FIGURE 9 - Aiea–Pearl City Neighborhood TOD Planning Principles</i>	36
<i>FIGURE 10 - Aiea–Pearl City Neighborhood TOD Plan Overview</i>	48
<i>FIGURE 11 - Leeward Community College Station Area Illustrative Plan</i>	52
<i>FIGURE 12 - Leeward Community College Station Area Circulation Diagram</i>	54
<i>FIGURE 13 - Leeward Community College Station Area - Existing Land Uses</i>	60
<i>FIGURE 14 - Leeward Community college Station Area - Proposed Land Uses</i>	60
<i>FIGURE 15 - Leeward Community College Station Area: Existing Conditions</i>	62
<i>FIGURE 16 - Leeward Community College Station Area: Phase 1</i>	62
<i>FIGURE 17 - Leeward Community College Station Area: Phase 2</i>	64
<i>FIGURE 18 - Leeward Community College Station Area: Phase 3</i>	64
<i>FIGURE 19 - Leeward Community College Station Area: Phase 4</i>	66
<i>FIGURE 20 - Leeward Community College Station Area - Recommended TOD Special District</i>	68
<i>FIGURE 21 - Leeward Community College Station Area - Existing Allowable Heights</i>	70
<i>FIGURE 22 - Leeward Community College Station Area - Proposed Allowable Heights</i>	70
<i>FIGURE 23 - Pearl Highlands Station Area Illustrative Plan</i>	74
<i>FIGURE 24 - Pearl Highlands Station Area Circulation Diagram</i>	76
<i>FIGURE 25 - Pearl Highlands Station Area - Existing Land Uses</i>	82
<i>FIGURE 26 - Pearl Highlands Station Area - Proposed Land Uses</i>	82
<i>FIGURE 27 - Pearl Highlands Station Area: Existing Conditions</i>	84
<i>FIGURE 28 - Pearl Highlands Station Area: Phase 1</i>	84
<i>FIGURE 29 - Pearl Highlands Station Area: Phase 2</i>	86
<i>FIGURE 30 - Pearl Highlands Station Area: Phase 3</i>	86
<i>FIGURE 31 - Pearl Highlands Station Area - Recommended TOD Special District</i>	88
<i>FIGURE 32 - Pearl Highlands Station Area - Existing Allowable Heights</i>	90
<i>FIGURE 33 - Pearl Highlands Station Area - Proposed Allowable Heights</i>	90
<i>FIGURE 34 - Pearlridge Station Area Illustrative Plan</i>	94
<i>FIGURE 35 - Pearlridge Station Area Circulation Diagram</i>	96
<i>FIGURE 36 - Pearlridge Station Area - Existing Land Uses</i>	102
<i>FIGURE 37 - Pearlridge Station Area - Proposed Land Uses</i>	102
<i>FIGURE 38 - Pearlridge Station Area: Existing Conditions</i>	104
<i>FIGURE 39 - Pearlridge Station Area: Phase 1</i>	104
<i>FIGURE 40 - Pearlridge Station Area: Phase 2</i>	106
<i>FIGURE 41 - Pearlridge Station Area: Phase 3</i>	106
<i>FIGURE 42 - Pearlridge Station Area: Phase 4</i>	108
<i>FIGURE 43 - Pearlridge Station Area - Recommended TOD Special District</i>	110
<i>FIGURE 44 - Pearlridge Station Area - Existing Allowable Heights</i>	112
<i>FIGURE 45 - Pearlridge Station Area - Proposed Allowable Heights</i>	112
<i>FIGURE 46 - Leeward Community College Station Area - Implementation Partners</i>	131
<i>FIGURE 47 - Pearl Highlands Station Area - Implementation Partners</i>	132
<i>FIGURE 48 - Pearlridge Station Area - Implementation Partners</i>	133



EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

A. THE VISION

The Aiea–Pearl City Neighborhood Transit-Oriented Development (TOD) Plan (the Plan) presents a community vision for the existing neighborhoods surrounding the Leeward Community College, Pearl Highlands, and Pearlridge rail stations. The Plan is intended as both an overall framework for growth and a guide for local decision making in the three station areas. The Plan is **conceptual in nature**, showing possible improvements on both public and private property. In order to ensure positive change in the station areas, it is essential that stakeholders work together on future projects.

Located along the rail transit line that will connect Ala Moana Center with the East Kapolei region, the Aiea–Pearl City station areas are envisioned as compact, pedestrian-friendly environments that provide numerous housing, employment, and recreational opportunities. Each station area plan has been developed through an inclusive community-based planning effort to ensure that the goals and ideas of area stakeholders have been integrated into the Plan.

The goal of the Plan is to foster more livable communities that take full advantage of the benefits of transit—specifically, creating new transportation options while encouraging economic growth and attractive redevelopment.

The Plan recognizes that traffic congestion on area streets and highways has become a very pronounced problem. By improving and encouraging alternative modes of transportation in Aiea and Pearl City, both residents and visitors will have new mobility choices. The impact of such transportation improvements will be even more pronounced when coupled with new development within walking distance of the rail stations. Transit-oriented design uses land more efficiently and provides walkable, healthy, economically vibrant neighborhoods, safe bicycling environments, convenient access to daily household needs, and enhancement of local culture, history and character.



With improved access, maintenance and adjacent development, the Pearl Harbor Historic Trail could become a great community asset, much like the False Creek Trail in Vancouver, BC.



Pedestrian plazas at the entry/exit of train stations help activate the station area.

Each of the station areas provides unique development opportunities. The Plan aims to enhance the local identity of each station based on both current conditions and future needs:

- Leeward Community College (LCC) station area is envisioned as a college-oriented neighborhood catering to new residents and businesses, as well as students and faculty from the adjacent college.
- Pearl Highlands station will be a major intermodal facility and connection point for riders coming from ewa and mauka directions. Ongoing revitalization of the shopping district can carefully balance the needs of passengers and shoppers arriving via transit, on foot, and via automobile.
- Pearlridge station area is a major urban center and regional destination with opportunities for new development, the future revitalization of Pearlridge Center, and improved access to the Pearl Harbor Historic Trail and shoreline.

While taking into account the individual needs of each station area, the overall vision of the Neighborhood TOD Plan is a connected urban environment that fosters sustainable living and neighborhood identity across the three station areas.

Plan Principles:

- Create Access and Views to Water and Pearl Harbor Historic Trail
- Encourage Workforce Housing
- Create a Comfortable and Lively Pedestrian Environment
- Provide Multimodal Access to and from Stations
- Develop New and Enhance Existing Open Space Amenities



Transit stations should be accessible by bus, car, foot, and bicycle and include both housing and employment opportunities within walking distance.



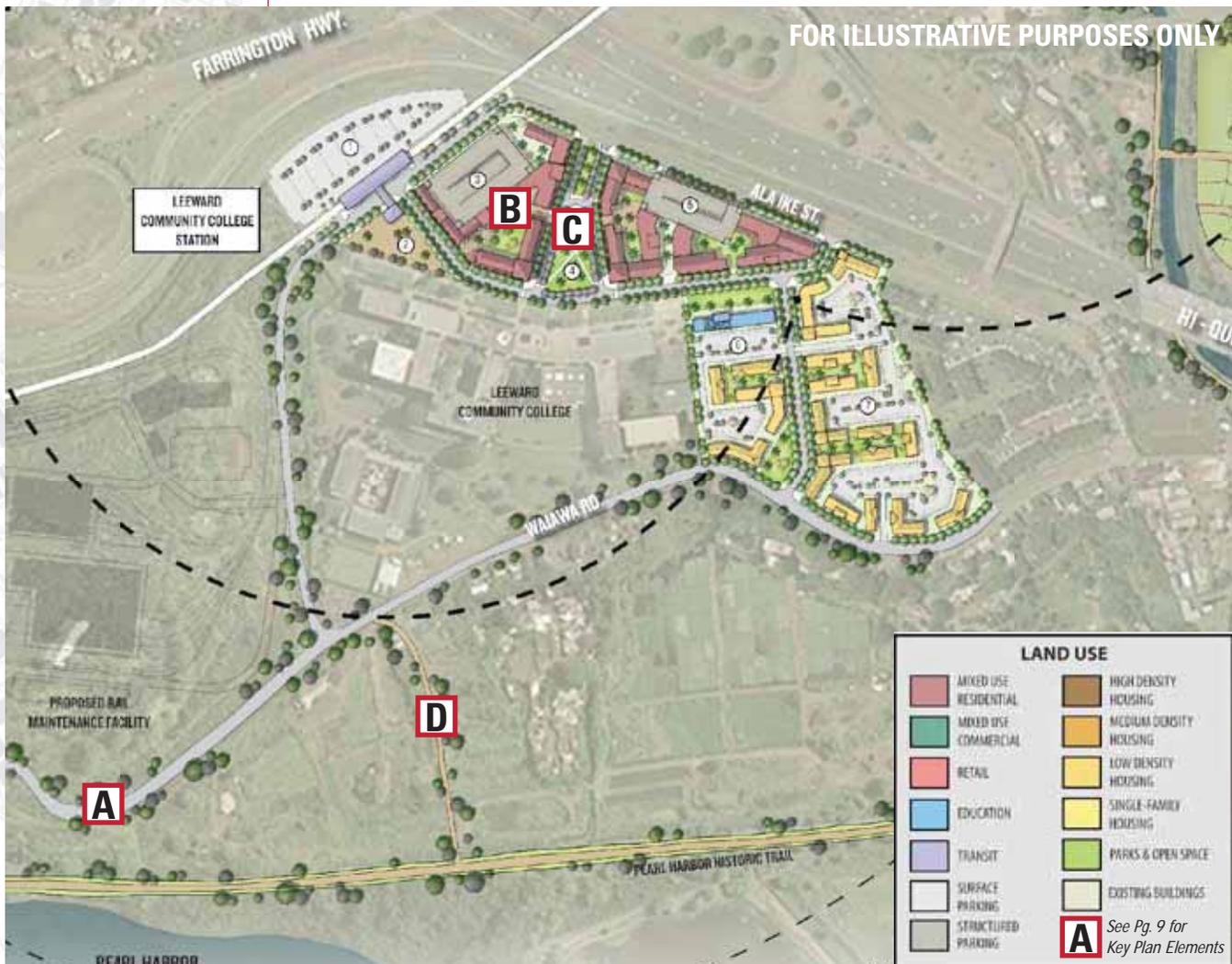
Stores and restaurants that open to the sidewalk help to bring vitality and business activity to the pedestrian realm.

B. LEEWARD COMMUNITY COLLEGE STATION AREA

EXECUTIVE SUMMARY

I. SUMMARY OF RECOMMENDATIONS

- New bicycle paths along the extension of Ala Ike Street and along Waiawa Stream
- Pearl Harbor Historic Trail improvements
- Mixed-use development on existing surface parking area mauka of LCC campus
- Central green park mauka of LCC campus
- Lower-density housing diamond head of LCC campus
- Neighborhood mini park diamond head of campus in conjunction with new development
- New streets and sidewalks within the station area in conjunction with new development
- Wider sidewalks and landscaping on existing streets
- Secondary access road connecting the station area to Farrington Highway
- Surface parking mauka of the station
- Structured parking in conjunction with mixed-use development
- Transit plaza adjacent to station
- Private open spaces on the interior of blocks



Leeward Community College Station Area Illustrative Plan



2. NEXT STEPS AND PRIORITY PROJECTS

The following steps should be taken cooperatively by the City and County of Honolulu in consultation with area stakeholders in the near (1–5 years) and midterm (5–10 years) in order to put the Plan into action and ensure the framework for TOD follows the vision and principles defined by the community. Priority projects are labeled on the Illustrative Plan (page 8).

- A** Secondary access road
- B** Development of catalyst site (closest to station)
- C** Development of open space adjacent to campus
- D** Pearl Harbor Historic Trail connection makai of campus



Existing green spine and surface parking mauka of LCC campus



FOR ILLUSTRATIVE PURPOSES ONLY

Leeward Community College could integrate new active uses surrounding existing and new open spaces.

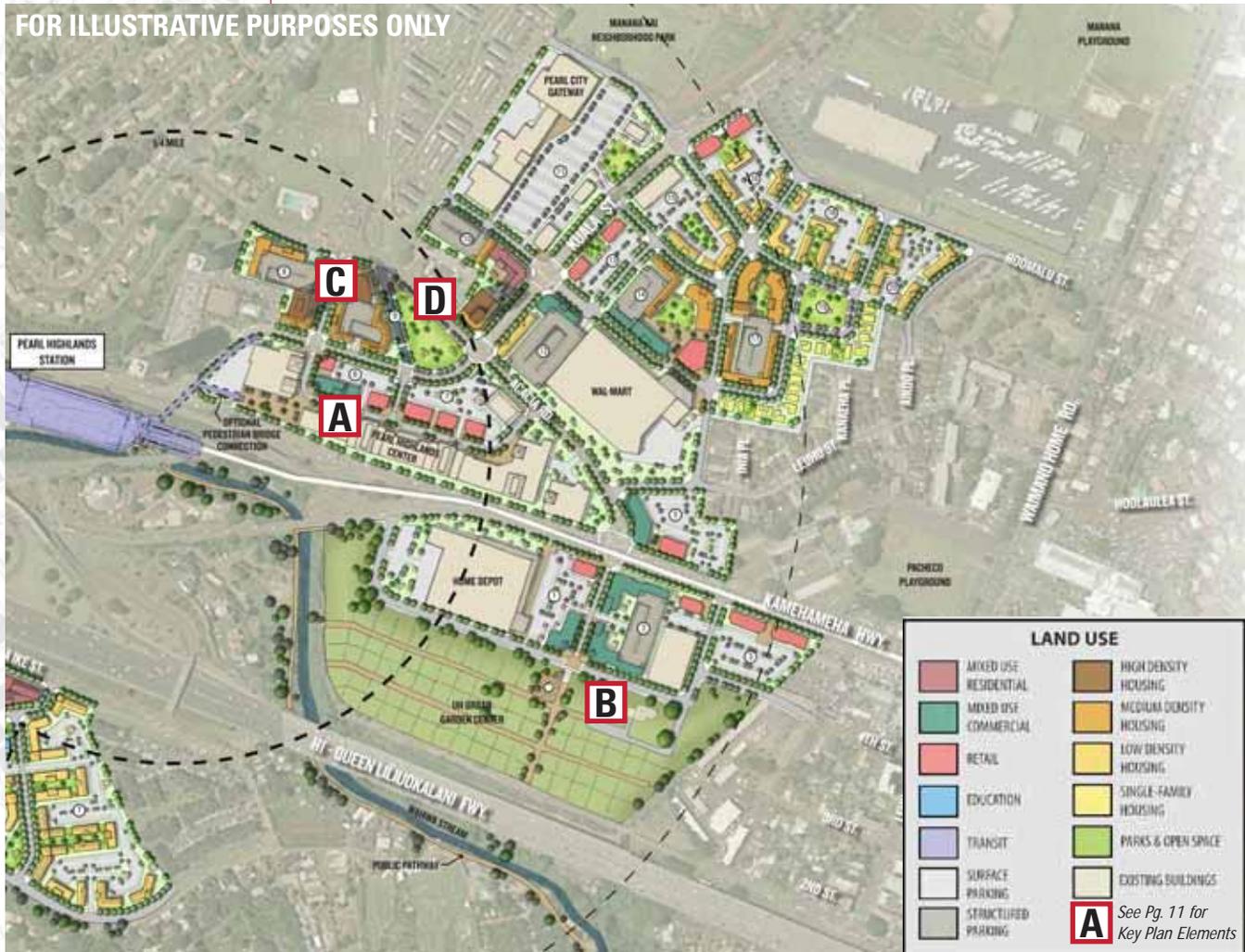
C. PEARL HIGHLANDS STATION AREA

EXECUTIVE SUMMARY

I. SUMMARY OF RECOMMENDATIONS

- New bicycle paths along Waiawa Stream
- Tallest buildings in close proximity to station and lower development on perimeter
- Medium-density housing within 1/4 mile of the station and at the NW corner of Acacia Road and Kuala Street
- Neighborhood park on triangle property makai of Acacia Road
- Medium-density housing and neighborhood mini parks mauka of Walmart
- Low-density housing adjacent to Kanaeha Place along diamond head border of Plan area
- New Main Street within existing Pearl Highlands Center
- New streets and sidewalks within station area in conjunction with development
- Structured parking in conjunction with mixed-use development
- Development above rail transit station parking garage
- Transit plaza at the NW corner of Pearl Highlands Center
- Improved public access and enhancements to UH Urban Garden Center

FOR ILLUSTRATIVE PURPOSES ONLY



Pearl Highlands Station Area Illustrative Plan



2. NEXT STEPS AND PRIORITY PROJECTS

The following steps should be taken cooperatively by the City and County of Honolulu in consultation with area stakeholders in the near (1–5 years) and midterm (5–10 years) in order to put the Plan into action and ensure the framework for TOD follows the vision and principles defined by the community. Priority projects are labeled on the Illustrative Plan (page 10).

- A** Pearl Highlands Center pedestrian improvements
- B** Access and improvements to University of Hawaii Urban Garden Center
- C** Development of catalyst site (mauka of Pearl Highlands Center)
- D** Creation of triangle park



Existing view of Kuala Street looking towards Pearl Highlands Center



High density housing envisioned on Kuala Street within close proximity of Pearl Highlands station

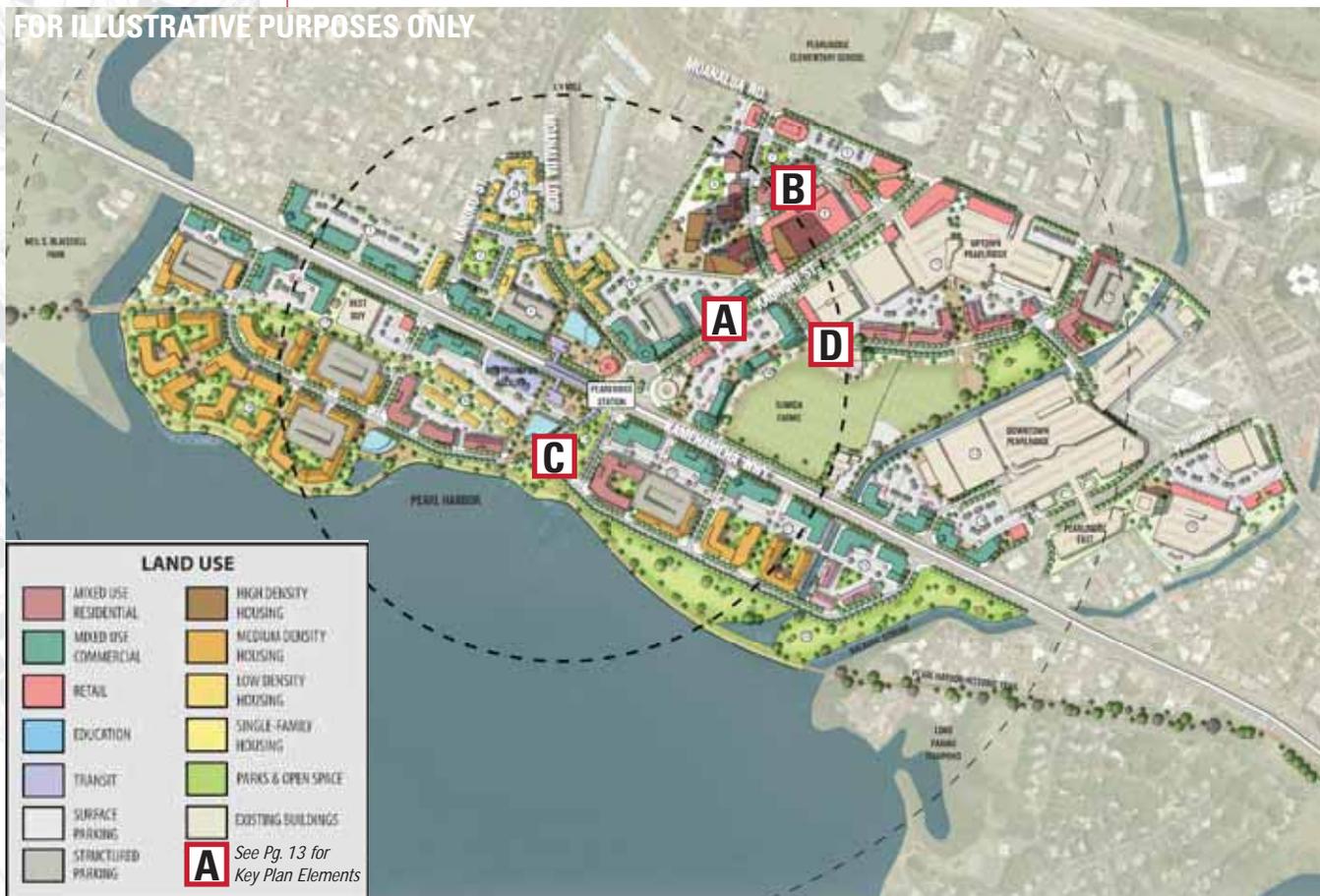
D. PEARLRIDGE STATION AREA

EXECUTIVE SUMMARY

I. SUMMARY OF RECOMMENDATIONS

- New Pearl Harbor shoreline path ewa of Kaonohi Street
- Pearl Harbor Historic Trail improvements
- Medium-density housing makai of Kamehameha Highway, potentially above proposed bus transfer facility
- High-density housing mauka of Kamehameha Highway
- Low-density housing along Moanalua Loop
- Pedestrian trail along the upper perimeter of Sumida Farm with overlook
- New Main Street connecting Moanalua Road and Kaonohi Street
- New streets and sidewalks within station area in conjunction with new development
- Wider sidewalks and landscaping on existing streets
- Structured parking in conjunction with mixed-use development
- Transit plazas on either side of Kamehameha Highway at station
- Additional waterfront park along Pearl Harbor shoreline
- “Window to Pearl Harbor” park at the terminus of Kaonohi Street
- Neighborhood mini park mauka of Sumida Farm
- Private open spaces on the interior of blocks

FOR ILLUSTRATIVE PURPOSES ONLY



Pearlridge Station Area Illustrative Plan



2. NEXT STEPS AND PRIORITY PROJECTS

The following steps should be taken cooperatively by the City and County of Honolulu in consultation with area stakeholders in the near (1–5 years) and midterm (5–10 years) in order to put the Plan into action and ensure the framework for TOD follows the vision and principles defined by the community. Priority projects are labeled on the Illustrative Plan (page 12).

- A** Kaonohi Street pedestrian and bicycle improvements
- B** Development of catalyst site (Kamehameha Drive-In)
- C** New bus transfer facility, incorporating mixed-use development, a transit plaza, and a pedestrian connection/view corridor from the station to the Pearl Harbor Historic Trail
- D** Sumida Farm trail/overlook



Existing view of Kaonohi Street looking towards Kamehameha Highway



Proposed Kaonohi Street improvements would create an attractive pedestrian area, including new mixed-use development that activates the sidewalk.





PROJECT OVERVIEW & EXISTING CONDITIONS



PROJECT OVERVIEW & EXISTING CONDITIONS

- The Aiea–Pearl City Neighborhood TOD Plan focuses on three rail transit stations: Leeward Community College, Pearl Highlands, and Pearlridge.
- The Plan addresses connectivity and circulation, parks and open space, urban form, land use, phasing and zoning.

A. BACKGROUND

I. PROJECT OVERVIEW

The people of Oahu are making an important investment in their future by funding a \$5.2 billion fixed guideway system connecting Aiea and Pearl City with East Kapolei to the west and Ala Moana Center to the east. This project will give residents a fast and efficient alternative to the private automobile and curb the growth of an already burdensome traffic problem in this corridor. The rail transit system also creates an opportunity to address growth and development pressures on Oahu without consuming rural land or forcing residents to drive far distances to reach daily destinations such as jobs, schools, shopping, and services. New infill development near the rail stations can help create compact, walkable neighborhoods that provide housing, travel, and lifestyle choices for generations to come. Household benefits of being located near rail include reduced housing and transportation costs, more time to spend with family and friends, more physical activity, and higher quality communities. This strategy of investing in and growing around transit stations—often referred to as transit-oriented development or TOD—is the focus of this report.

The Aiea–Pearl City Neighborhood Transit-Oriented Development Plan (the Plan) is one of a series of community-based planning efforts led by the Department of Planning and Permitting for station areas along the planned rail transit line. The Plan focuses on the areas within 1/2 mile (roughly a 10-minute walk) of the Leeward Community College, Pearl Highlands, and Pearlridge rail stations. The Plan offers an overall vision for TOD in Aiea and Pearl City and recommendations for each station area in terms of overall structure, connectivity and circulation, parks and open space, urban form, land use, prototypical phasing, and station area zoning. These recommendations are based on research about current transportation, infrastructure, and real estate market conditions, as well as extensive public outreach and best practices for TOD. The Plan will take decades to be fully realized and will be implemented in various ways: the Department of Planning and Permitting will create new TOD zoning districts; public agencies will invest in infrastructure improvements; and private landowners will redevelop their properties consistent with the vision and details laid out in the Plan. The Plan is illustrative and shows how the area could develop over time. For example, prototypical phasing strategies are given for each station area, but actual phasing will depend on variables such as available funding, land acquisition, community support, economic conditions, and more. The goal of the Plan is to present the community's long-term vision for how these station areas should grow and evolve around transit.



FIGURE 1 - Honolulu Rail Transit Project Alignment Map

2. LOCATION AND CONTEXT

Aiea and Pearl City are centrally located within the island’s existing and planned urban areas. Businesses and residents have good access to downtown Honolulu, Central Oahu, Ewa, and Windward Oahu via the H-1, H-2 and H-3 freeways, Moanalua Road, Kamehameha Highway, Farrington Highway, and the City’s extensive bus transit system.

Aiea and Pearl City are excellent locations for:

- Residents working in Aiea and Pearl City, as well as those commuting to jobs in Honolulu, Ewa and Central Oahu
- Students attending Leeward Community College and UH West Oahu
- Military personnel and civilian defense workers living in the area and commuting to nearby military facilities
- Retail stores and office complexes serving Aiea, Pearl City and the surrounding region

The Aiea–Pearl City Neighborhood TOD Plan focuses on three rail transit stations: Leeward Community College (LCC), Pearl Highlands, and Pearlridge.

- Leeward Community College is the western-most station addressed in this study. This station will serve the campus and provide students with fast, frequent rail transit service to and from school.
- The Pearl Highlands station, situated along Kamehameha Highway north of the H-1/H-2 interchange, will be a major park-and-ride location for the fixed guideway system.
- Pearlridge is the most urban of the three stations covered by the Plan. The major attraction near the Pearlridge station is the existing Pearlridge Center, which is the largest indoor shopping center in Hawaii. Pearlridge Center features a monorail system that transports customers between Uptown and Downtown Pearlridge Center and overlooks historic Pearl Harbor and the



FIGURE 2 - Aiea–Pearl City Neighborhood TOD Plan Areas

PROJECT OVERVIEW & EXISTING CONDITIONS

- The planning process was initiated in June, 2009.
- Community Workshop 1: October 21, 2009
- Community Workshop 2: December 1, 2009
- Community Workshop 3: April 21, 2010
- Community Workshop 4: November 17, 2010

3. PROJECT SCHEDULE AND COMMUNITY PARTICIPATION

The Aiea–Pearl City Neighborhood TOD Plan was developed through an extensive outreach process, including a series of four community workshops. Beginning in June of 2009, the planning process included identification of issues and opportunities, the creation of draft station area alternatives, refinement of the alternatives, and creation of preferred station area plans. Additionally, the planning team has made recommendations on phasing, implementation, and revisions to development standards for the area around the three stations.

A Project Advisory Committee, comprised of individuals from a broad range of interests and affiliations, was created to serve as an advisory body and sounding board to the City's planning team. The Committee also networked with the larger Aiea–Pearl City community to disseminate information and encourage attendance and participation at the community workshops.

Successful transit-oriented development depends on the participation of, and broad-based support from, government, residents, businesses, community organizations, landowners, developers and the financial sector. High quality TOD projects emerge after listening to the concerns and needs of all parties and result from a common set of goals.

PROJECT TIMELINE



The Aiea–Pearl City Neighborhood TOD Plan was developed through an outreach process that included a series of four community workshops.

B. WHAT IS TOD AND SMART GROWTH?

Transit-oriented development is compact, mixed-use development situated near transit. TOD concentrates a mix of land uses, such as residential, office, retail, civic uses and entertainment, within easy walking and biking distance of a transit station (generally 1/4 mile to 1/2 mile, or a 5 to 15 minute walk). This mix of uses, combined with thoughtfully designed community spaces, plazas and parks, forms a vibrant village-like neighborhood where people can live, work, and play. Transit-oriented developments encourage transit ridership while discouraging sprawl, reducing impacts on the environment and helping to foster a sense of community. Other benefits include reduced household transportation costs, healthier lifestyles, and the increased ability of seniors, youth and the disabled to reach goods and services.

“The urban design principles associated with TOD are:

- *Organize growth on a regional level to be compact and transit-supportive.*
- *Place commercial, housing, jobs, parks, and civic uses within walking distance of transit stops.*
- *Create pedestrian-friendly street networks that directly connect local destinations.*
- *Provide a mix of housing types, densities, and costs.*
- *Preserve sensitive habitat, riparian zones, and high-quality open space.*
- *Make public spaces the focus of building orientation and neighborhood activity.*
- *Encourage infill and redevelopment along transit corridors within existing neighborhoods.”*

- Peter Calthorpe

The Next American Metropolis

PROJECT OVERVIEW & EXISTING CONDITIONS

- Transit-oriented development is compact, mixed-use development situated near transit.



TOD contains a mixture of uses along with thoughtfully designed community spaces, plazas, and parks which form a vibrant village-like neighborhood.



Successful TOD depends on participation of all stakeholders including government, residents, business and community organizations, landowners, developers, and the financial sector.

- Lower-Density Residential
- Medium and Higher-Density Residential/Mixed Use
- Community/Neighborhood Commercial
- District Commercial
- Industrial
- Resort
- Institutional
- Major Parks and Open Space
- Preservation
- Military
- Urban Community Boundary
- Pedestrian Network
- U** College/University
- +** Hospital/Medical Center
- EL** Elementary School (State)
- INT** Intermediate School (State)
- HS** High School (State)
- ⚓** Small Boat Marina
- ⚓** Harbor
- ✈** Airport

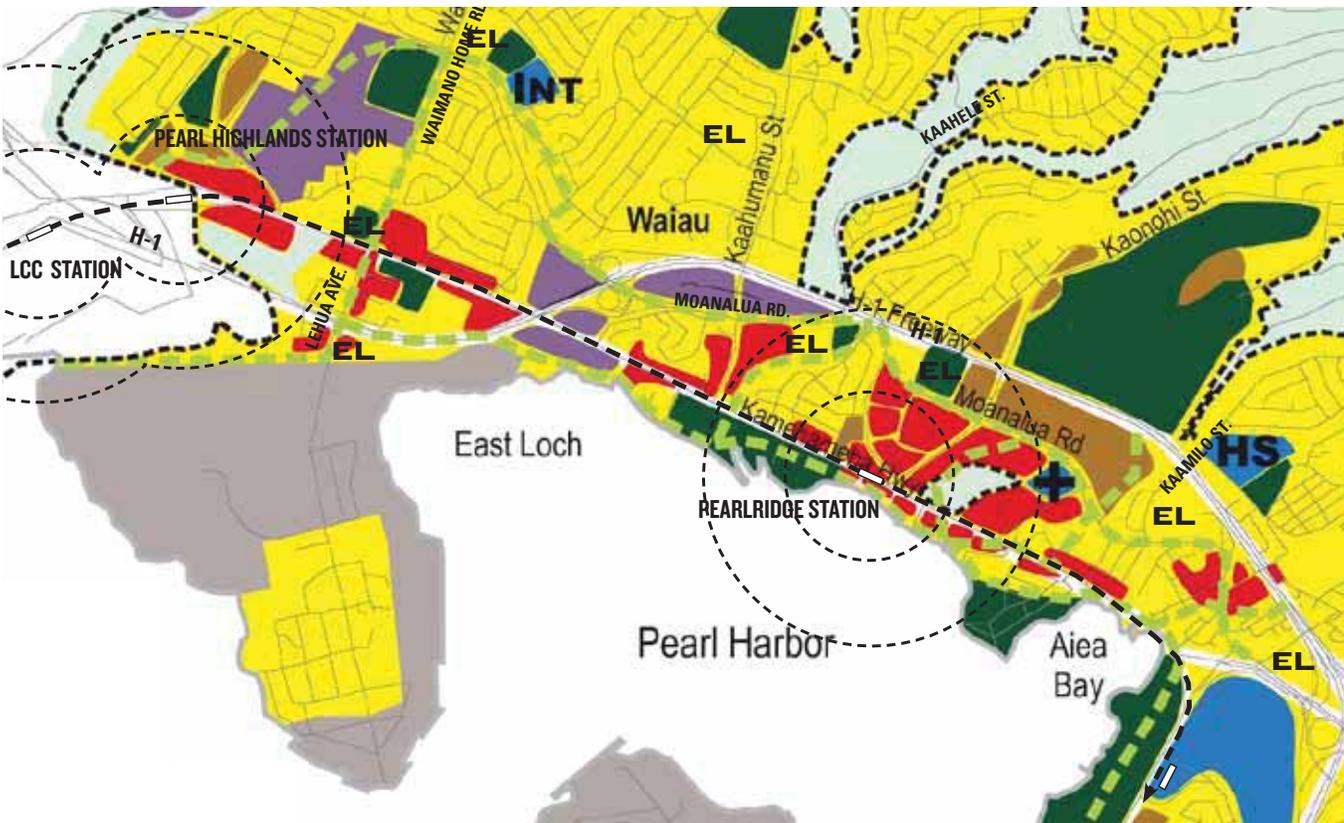


FIGURE 3 - Primary Urban Center Development Plan Land Use Map



C. ONGOING AND PREVIOUS PLANS

I. GENERAL PLAN

The General Plan for the City and County of Honolulu is a comprehensive statement of objectives and policies which sets forth the aspirations for the future of Oahu and the strategies to achieve them. The General Plan addresses the following areas of concern: population, economic activity, the natural environment, housing, transportation and utilities, energy, physical development and urban design, public safety, health and education, culture and recreation, and government operations and fiscal management. Policies support a diverse economy, public transportation options, affordable housing, adequate public facilities/resources and energy resources, well-designed buildings and public spaces, safety from natural and man-made disasters, community health and education opportunities, multi-ethnic culture, and historic and cultural resources.

The General Plan also distinguishes planning areas within the island. The communities addressed in the Aiea–Pearl City Neighborhood TOD Plan lie within the Primary Urban Center and Central Oahu planning areas.

2. PRIMARY URBAN CENTER DEVELOPMENT PLAN

The City's Primary Urban Center (PUC) Development Plan (DP) consists of policies and guidelines intended to guide land use and infrastructure decisions in a manner consistent with applicable General Plan (GP) provisions. It outlines the vision for Oahu's most populous region, which stretches from Kahala to Pearl City. The Pearl Highlands and Pearlridge station areas are located on the western end of the PUC (long-range land use patterns are shown in Figure 3 on page 20). The DP emphasizes retaining the qualities that attract both residents and visitors while encouraging the full development of the PUC, consistent with the General Plan projections showing the PUC accommodating approximately 46% of the island's population by 2025. As of 2010, the actual population was 435,118 or 45.6%. The TOD Plan projects roughly 1,400 and 2,400 dwelling units could be shifted to the area around the Pearl Highlands and Pearlridge stations, respectively, from other areas. Using an average household size of 2.61, the population in the station areas could increase by roughly 10,000. However, it is important to note that this increase will be market driven and will occur incrementally over many years.

The DP identifies several Aiea and Pearl City town centers where the focus is to stimulate a strong sense of community with people-oriented town centers. The Pearl Harbor Town Center, which includes the Pearlridge station, should include a greater diversity of uses than the other town centers, integrating medium or higher-density residential and commercial development with proper transitioning to adjacent residential neighborhoods with compatible building forms and street connections. The Pearl City Town Center, which includes the Pearl Highlands station, should serve as a more localized activity and service area. The TOD Plan encourages mixed-use development with increased density nearest both station areas, and higher allowable heights in the Pearlridge area.

Also, the DP calls for the creation of public open spaces along the waterfront and strengthening of the physical and visual connections to the water. It recognizes the shoreline as a principal organizing element in the PUC, and sees waterfront development as an economic and social asset for the surrounding community. The TOD Plan recommends new bicycle and pedestrian paths leading to the Pearl Harbor Historic Trail, with added parks and open space for community

PROJECT OVERVIEW & EXISTING CONDITIONS

- The General Plan supports transit-oriented development.
- The Primary Urban Center Development Plan encompasses the Pearlridge and Pearl Highlands station areas and supports TOD.

PROJECT OVERVIEW & EXISTING CONDITIONS

- The Central Oahu Sustainable Communities Plan encompasses the LCC station area. It supports completion of the Pearl Harbor Historic Trail and focusing new development around transit.

recreation and waterfront access. Mixed-use development with a housing emphasis is proposed between the waterfront and Kamehameha Highway.

The DP calls for the development of a balanced transportation system, offering pleasant and efficient travel choices. Other travel modes, such as walking and bicycling, should be supported with proper facilities and connections to transit. Complementary to the rail transit system, the TOD Plan encourages safe and convenient connections to and from each station to promote transit use, including new and/or improved streets, sidewalks, bicycle facilities, active transit plazas, and landscaping.

3. CENTRAL OAHU SUSTAINABLE COMMUNITIES PLAN

The Leeward Community College (LCC) station area is situated just within the southeastern boundary of the Central Oahu Sustainable Communities Plan (SCP) (December 2002). The SCP consists of policies and guidelines consistent with General Plan (GP) provisions that encourage residential development near employment centers, recreational and commercial uses. The production of a range of housing choices is encouraged, including the provision of affordable rental housing.

The SCP promotes the location of colleges and new development in urban areas near transit nodes, commercial centers, or high-density residential areas. Focusing residential development near transit stations helps Central Oahu maintain its unique character and lifestyle, and supports economic opportunities along the rail corridor. The TOD Plan recognizes the potential for an active college town community adjacent to the LCC station, including offices, businesses and services that could cater to the university's needs. In addition, approximately 820 multifamily housing units could be provided as a convenient housing option for students and faculty, which would also help to reduce overall vehicle usage.

Transportation issues are also identified in the SCP as a primary concern that impacts the Pearl City and Aiea areas. Central Oahu experiences traffic congestion and bottlenecks, especially where H-2 joins H-1 (near the LCC and Pearl Highlands transit stations). Traffic volume on H-2 at Kipapa is projected to increase almost 40% by 2020, and H-1 traffic is projected to increase by 10%. The SCP suggests that projected demand for peak-hour transportation in Central Oahu should be met by increased use of transit. The Plan states that "Central Oahu will be developed with a transportation system which provides easy access to transit, uses traffic calming design, and encourages people to walk and bike, reducing the need for the use of the automobile." The TOD Plan envisions rail transit as a part of a larger multimodal transportation network. By creating better connected communities, residents and visitors will have a range of transportation choices, allowing them to choose the most direct, efficient, and economical way to get around. The TOD Plan promotes new streets, paths, and trails to accommodate access by the appropriate mode.

The GP also encourages opportunities for recreational and educational use and physical contact with Oahu's natural environment. The SCP recognizes the Pearl Harbor Historic Trail, envisioned to travel from Aiea to Nanakuli, as a recreational and cultural landmark for the area. Consistent with its planning principle to create access and views to the water and Trail, the TOD Plan proposes new paths and enhancements to the trail from all three stations, allowing for increased pedestrian and bicycle recreation, as well as immediate views and access to the shoreline. Appropriate mixed-use development along the waterfront could increase access, usage, and safety of the waterfront trail and its adjacent open spaces.

4. AIEA–PEARL CITY LIVABLE COMMUNITIES PLAN

The Aiea–Pearl City Livable Communities Plan, completed in 2004, is a community-based Special Area Plan that focuses on transportation, community design, and implementation to lay out a vision for the future of these communities. This plan is intended to “improve traffic-congested roadways, provide a more pedestrian-friendly environment, and revitalize the livability and character of the neighborhoods.”

Many key components of the Livable Communities Plan are consistent with TOD and are highlighted in Figure 4 on page 24. Shoreline connections, both physical and visual, are promoted, especially pedestrian and bicycle connections across Kamehameha Highway. Town centers are emphasized for establishing the desired small-town feeling in Aiea and Pearl City. Urban trails are proposed to better utilize the streams and drainageways that run from mauka residential areas to the shoreline. Landscape improvements and beautification of Kamehameha Highway and other major streets are proposed to help with traffic calming, pedestrian-friendliness, and a sense of community. Expanded open space and views to the Pearl Harbor shoreline are desired, as well as expanded use of the Pearl Harbor Historic Trail.

Generally, higher density commercial and residential mixed-use developments are proposed mauka of Kamehameha Highway, while lower densities and building heights are desired makai of Kamehameha Highway to preserve views of Pearl Harbor.

Both the Aiea and Pearl City communities have identified specific areas as “Town Districts.” Both communities wish to recapture and enhance the small town character, create a more pedestrian-oriented atmosphere and create more open space around Pearl Harbor.

PROJECT OVERVIEW & EXISTING CONDITIONS

- The Aiea–Pearl City Livable Communities Plan is intended to “improve traffic-congested roadways, provide a more pedestrian-friendly environment, and revitalize the livability and character of the neighborhoods.”



The Aiea–Pearl City Livable Communities Plan identifies the Pearlridge station area as a regional town center.



Expanding use of the Pearl Harbor Historic Trail is an important component of the Aiea–Pearl City Livable Communities Plan.

GENERAL LAND USES

-  Low-Medium Density Residential
-  Medium-High Density Residential/
Commercial Mixed Use
-  Commercial
-  Industrial
-  Open Space/Public Parks
-  Public Facilities

KEY PLAN FEATURES

-  **Mauka/Makai Streets**
Restore/Add Landscaping
Install Theme Trees
Provide Accessible Paths
Integrate Bike-ways
-  **Waiawa/Molokai Streets**
Restore/Add Landscaping
Install Theme Trees
Provide Accessible Paths
Integrate Bike-ways
-  **Pearl Harbor Shoreline Trail**
Implement Pearl Harbor Historic Trail
Integrate Mixed Uses
-  **Mauka/Makai Urban Trail**
Extend Pearl Harbor Historic Trail
Implement Street Restorations
Integrate Multi-Use Trails
-  **Neighborhood Trail**
Connect Existing Neighborhoods
Utilize Existing Public Parks & Open Spaces
Integrate Natural Areas
-  **Community Facility**
Community Cultural Center
Senior/Youth Day Care Center
Interpretive/Eco-Center
-  **Major Intersection Enhancements**
Pedestrian/Bike Crossing
Traffic Improvements
Landscaping

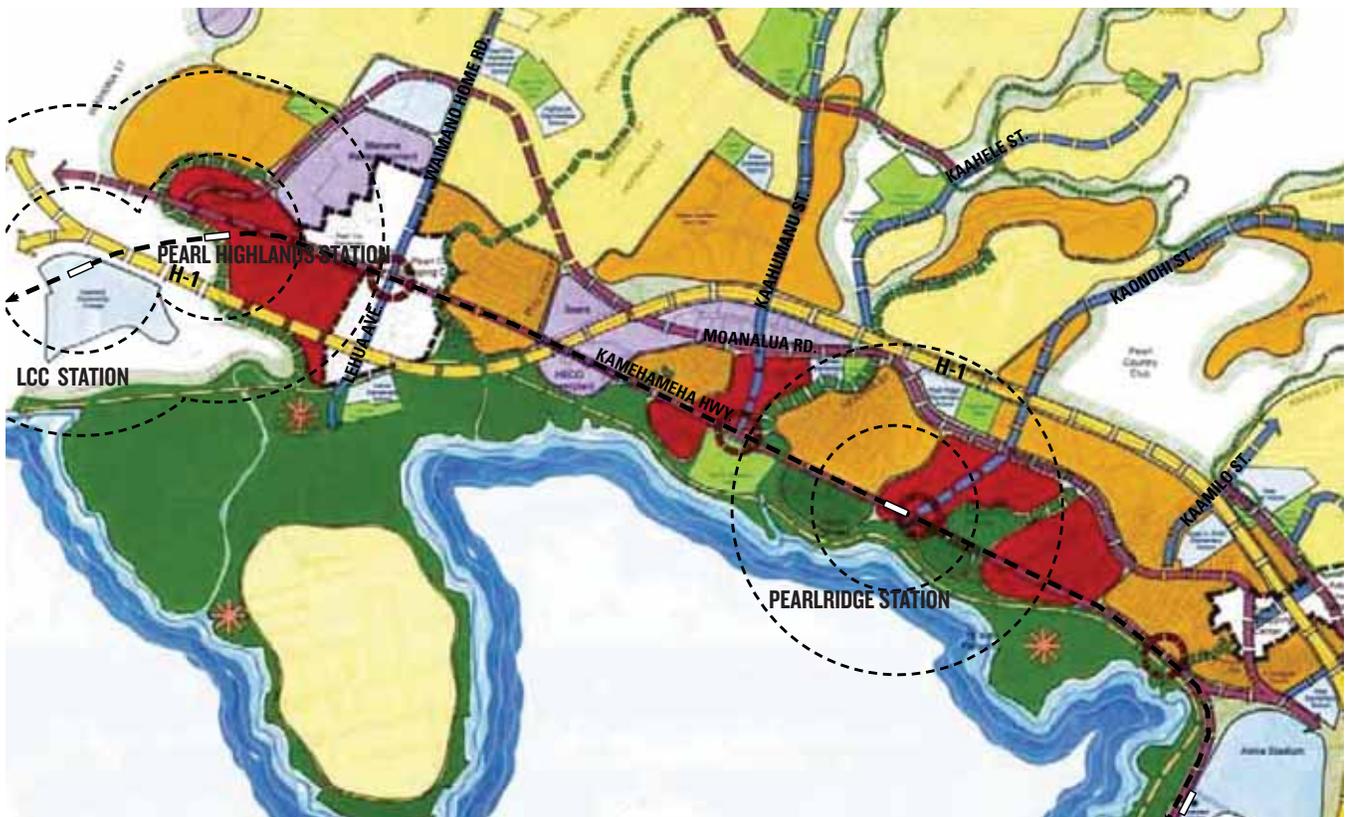


FIGURE 4 - Aiea-Pearl City Livable Communities Plan



5. PEARL HARBOR HISTORIC TRAIL MASTER PLAN

The vision laid out in the Pearl Harbor Historic Trail (PHHT) Master Plan (Figure 5, page 26) is to develop the historic Oahu Railway and Land Company (OR&L) right-of-way as a world-class heritage and recreational corridor that enhances and connects the communities from Aiea to Nanakuli. This plan focuses on the community's four key goals for the Pearl Harbor Historic Trail: outdoor recreation/physical fitness, historic preservation and education, economic revitalization, and environmental preservation and education.

The trail connects several major urban centers with the natural resources surrounding Pearl Harbor. Traveling primarily along the coast, it is planned to weave through various existing and proposed attractions such as nature overlooks, historic fishponds, Rainbow Bay Marina, and the Pearl Harbor National Wildlife Refuge. The path comes within a block of the Pearlridge rail transit station, and this proximity could further strengthen the viability of alternate modes of transportation in this neighborhood. In addition, the trail is proposed to connect the Leeward Community College campus into the larger trail network.

While the PHHT Master Plan proposes to restore the historic railway tracks and run train cars adjacent to the pedestrian/bicycle path, research indicates that existing utilities in the right-of-way preclude restoration of historic rail operations. This plan also has a proposed ferry connection to take travelers across the harbor, which would provide another amenity for transit-oriented development near the Pearlridge station.

PROJECT OVERVIEW & EXISTING CONDITIONS

- The Pearl Harbor Historic Trail Master Plan outlines a world-class heritage and recreational corridor that enhances and connects the communities from Aiea to Nanakuli.



The Pearl Harbor Historic Trail is an important regional amenity.



The Pearl Harbor Historic Trail Master Plan identifies trail improvements in both Aiea and Pearl City.

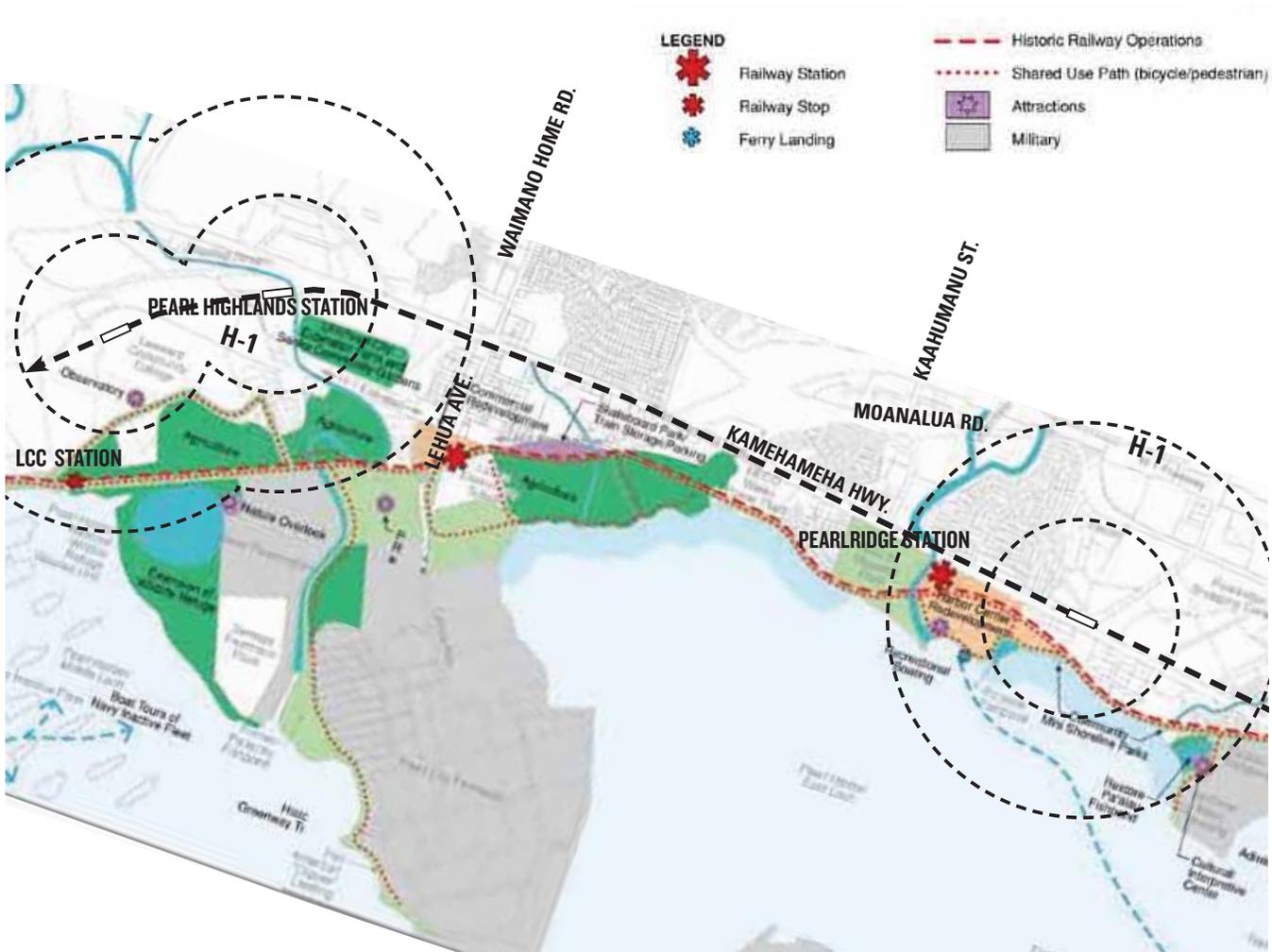


FIGURE 5 - Pearl Harbor Historic Trail Master Plan

6. HONOLULU RAIL TRANSIT PROJECT

The Honolulu Rail Transit Project involves the planning, design, and construction of an elevated rail line between East Kapolei and Ala Moana Center, with possible future extensions to Kapolei, University of Hawaii at Manoa, and Waikiki. The length of the corridor is approximately 20 miles. The project is being constructed in phases, with the portion of the corridor serving the Aiea–Pearl City neighborhoods being operational by 2017. The final phase is expected to be operational by 2019.

The Leeward Community College station will be located at the north west end of campus and the only at-grade station in the system. The Leeward Community College station is not expected to have the high passenger access demands of other station locations because it is physically isolated and will have neither a park-and-ride lot nor a bus transit center nearby. No bus stops, taxis or other significant access provisions are anticipated at this station.

The Pearl Highlands station will include a 1,600-space parking structure on 11 acres of land west of the station. The station will be elevated above the road just east of the intersection of Farrington and Kamehameha Highways. The vehicle entrances to the parking structure will greatly influence local traffic circulation and TOD planning considerations. The Pearl Highlands station will also be served by numerous bus routes. About half of these routes are express bus services now serving the Alapai Transit Center. There will be a high volume of bus-related traffic combined with high-volume peak-period vehicle traffic. Direct ramp connections with the H-2 freeway are likely to be for joint bus and high-occupancy vehicle use.

The Pearlridge transit station will be elevated above Kamehameha Highway, and station entrances will be provided on both sides of Kamehameha Highway. The station will be served by 12 bus routes using the planned bus transit center identified in the Aiea–Pearl City Livable Communities Plan. The bus transit center should be considered an integral part of station area TOD planning even though it is not being constructed as part of the rail project.

PROJECT OVERVIEW & EXISTING CONDITIONS

- The portion of the rail project serving Aiea–Pearl City neighborhoods is expected to be operational by 2017.



The rail transit line will run down the median of Kamehameha Highway.



Significant redevelopment can occur within 1/4 mile of the rail stations.

D. PLANNING AREA OVERVIEW

I. EXISTING LAND USES

Within 1/4 mile of the Leeward Community College station, the primary existing land use is the educational facility which houses numerous buildings and parking lots near the H-1 freeway. Makai of the college are military land and open space. Just makai of Waiawa Road, there are some scattered single family homes and agricultural properties. The shoreline and the Pearl Harbor Historic Trail are within 1/2 mile of this station.

The Pearl Highlands station will sit in an area of vacant land where Kamehameha Highway and Farrington Highway meet. Within a 1/4 mile of the proposed station location, there is a Home Depot (just diamond head) and a Sam's Club and shopping center (just mauka). Mauka of Kamehameha Highway, there is a multifamily residential community, while the makai side consists of scattered single family homes and some agricultural uses. The Pearl Harbor Historic Trail, Walmart, a post office, more single and multifamily housing, and the UH Urban Garden Center are within 1/2 mile of this station.

The Pearlridge station is located at the intersection of Kaonohi Street and Kamehameha Highway near, Pearlridge Center. On the mauka side of Kamehameha Highway, there is a mixture of single and multifamily residences, miscellaneous business services including automobile services and retail, and Sumida Watercress Farm. The Pearl Harbor Historic Trail is within 1/8 mile of the transit stop and provides direct access to the shoreline. Other uses makai of the transit stop and Kamehameha Highway include a Best Buy and other retail services, automobile repair services and industrial warehouses (adjacent to the Harbor), and some scattered multifamily residential buildings.

PROJECT OVERVIEW & EXISTING CONDITIONS

- ▣ Leeward Community College station area: primarily educational
- ▣ Pearl Highlands station area: primarily retail and residential
- ▣ Pearlridge station area: primarily commercial



Both commercial and multifamily residential uses are found near the Pearlridge station.



Existing multifamily residential buildings are located adjacent to Pearl Harbor, makai of Kamehameha Highway.

PROJECT OVERVIEW & EXISTING CONDITIONS

Existing zoning encourages single-use districts. The TOD areas should include new zoning standards to encourage mixed-use development.

2. EXISTING ZONING

Land Use Ordinance (LUO) zoning designations are generally consistent with existing land uses in the station areas. Existing zoning designations are shown below. The Plan recommends changes to the LUO, as described in Chapter IX: Implementation Recommendations.

	A-1 Apartment		I-1 Limited Industrial
	A-2 Apartment		I-2 General Industrial
	A-3 Apartment		I-3 Waterfront Industrial
	AMX-2 Medium Density		IMX-1 Industrial Mixed Use
	AMX-3 High Density		P-1 Restricted Public
	AG-1 Agricultural Restricted		P-2 General Public
	AG-2 Agricultural Restricted		Public Precinct
	B-1 Neighborhood Business		R-10 Residential
	B-2 Community Business		R-20 Residential
	BMX-3 Community		R-3.5 Residential
	F1 Military and Federal		R-5 Residential
			R-7.5 Residential

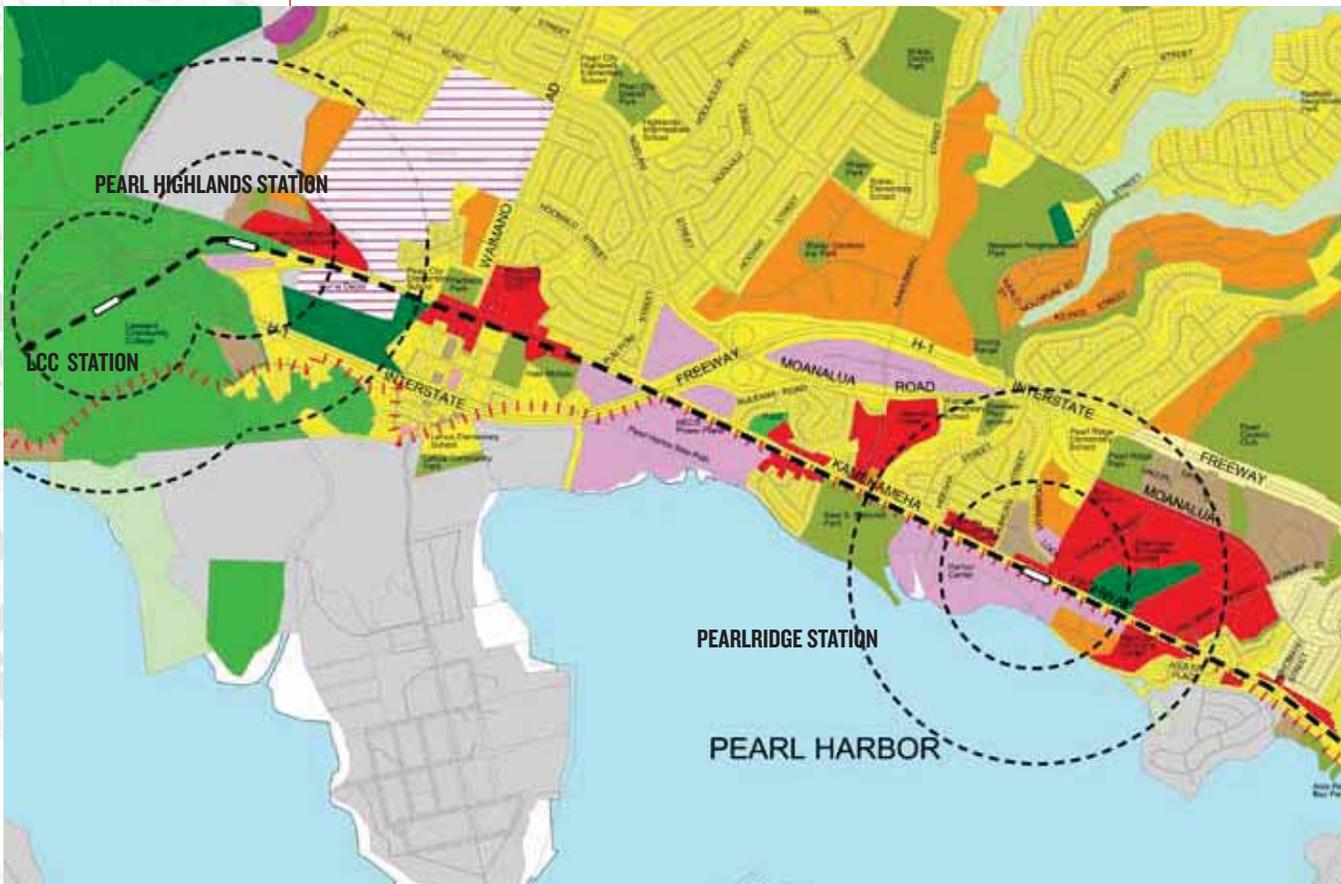


FIGURE 7 - Existing Zoning



3. TOD ISSUES AND OPPORTUNITIES

The issues and opportunities associated with transit-oriented development in Aiea and Pearl City are summarized below and represented in Figure 8 on page 32.

The Leeward Community College station area is primarily one land use: the college. With rail transit on the way, it is very important to plan for a mixture of uses that support the college, enhance transit ridership, and encourage placemaking. This will require a new and innovative approach to campus planning. The campus, perched on a bluff, offers great views of Pearl Harbor and could be connected to the Pearl Harbor Historic Trail and waterfront. The expansive existing surface parking lot is a prime opportunity for new development. With great visibility from H-1 and Farrington Highway, this site has a lot to offer in terms of potential for transit-oriented development, but currently access is a hindrance to new growth.

The Pearl Highlands station area also has both TOD issues and opportunities. A major constraint is the floodway, which runs east to west through this station area. The proposed park-and-ride facility adjacent to the station provides an opportunity for high intermodal activity in this station area, especially during peak hours but could also exacerbate existing traffic problems. A pedestrian bridge is proposed from the station to the existing shopping area, which is crucial for successful TOD in the area of the touchdown. Most development potential is within 1/2 mile of the station, however, Kuala Street and Kamehameha Highway bisect these areas. The areas near Kuala Street could become a mixed use environment with an active, vibrant feel. The larger area just makai of Kamehameha Highway, surrounding the existing Home Depot, might be better suited for commercial development with access and visibility from H-1 and Kamehameha Highway. It is important that both of these areas, identified as areas of opportunity in Figure 8, connect seamlessly to the town center district along Lehua Avenue that was envisioned in the Aiea–Pearl City Livable Communities Plan. Additionally, development right at the station above the park-and-ride facility should be explored.

PROJECT OVERVIEW & EXISTING CONDITIONS

- Leeward Community College station area: the surface parking lot is an opportunity.
- Pearl Highlands station area: a well-developed pedestrian connection is crucial for successful TOD.
- Pearlridge station area: has the most opportunity for TOD of the three station areas



Waimalu Shopping Center, while active and vibrant, suffers from poor pedestrian access.



Several shopping centers near the proposed transit stations will be key opportunity sites for TOD.

The Pearlridge station area has the most opportunity for TOD of the three stations covered by the Plan. This area, which includes both Pearlridge Center and Pali Momi Medical Center, is both a local and regional destination. There are many areas suited for transit-oriented development. These areas are called out as areas of opportunity on the map below. The land makai of Kamehameha Highway and adjacent to Pearl Harbor offers access to the water, great views, and connections to the Pearl Harbor Historic Trail. New development should be pursued in this area in conjunction with a planned bus transfer facility. The areas mauka of Kamehameha Highway have potential for redevelopment in a dense, mixed-use pattern. New jobs, retail and housing opportunities exist in this area. Another opportunity is to take advantage of Sumida Farm by turning development towards this amenity, instead of away from it; restaurant lanais could overlook this urban oasis. Views of the mountains can be enjoyed from many parts of this station area. Connections to the canal along the diamond head side of Sumida Farm could also be beneficial for walking and jogging.

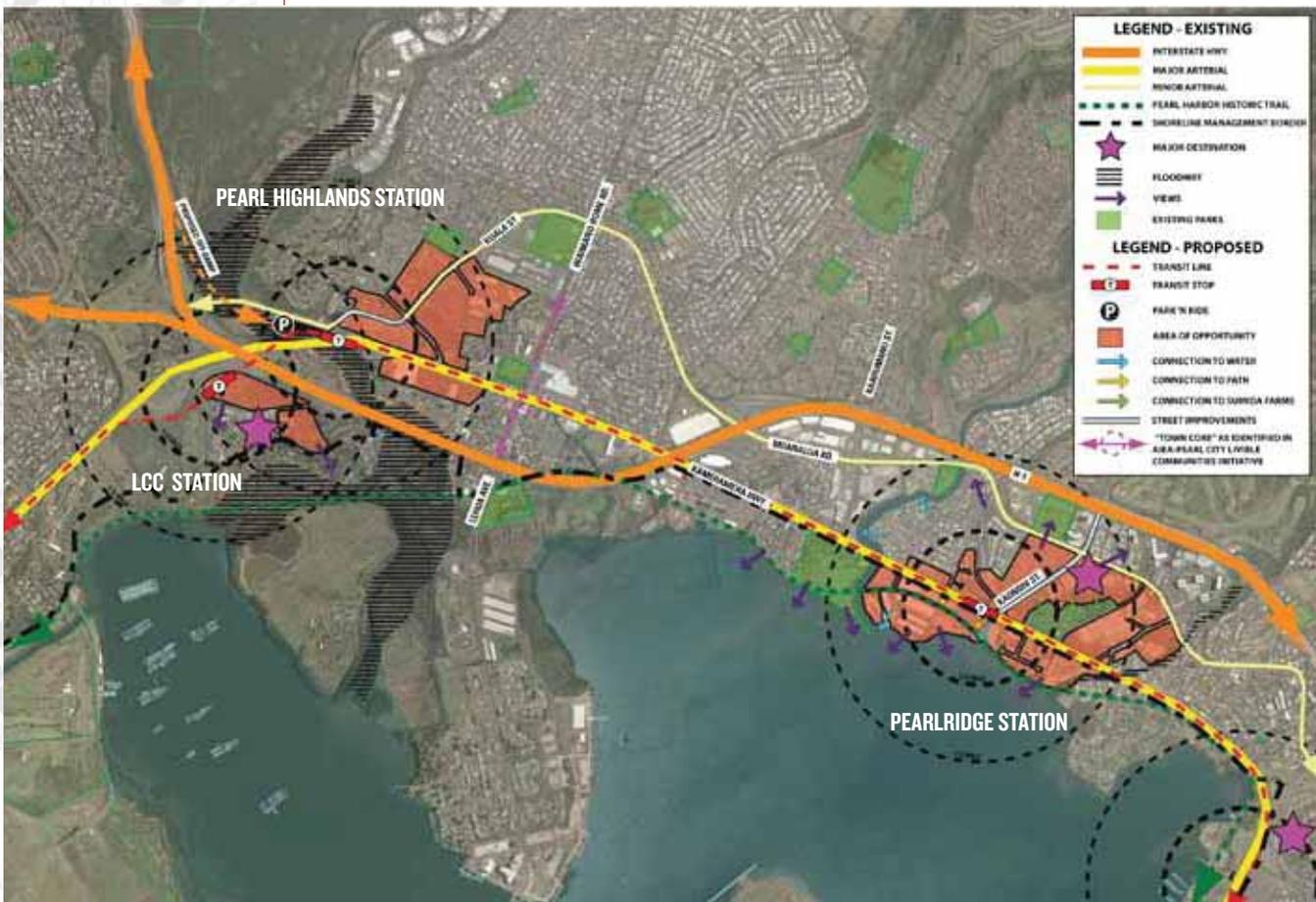


FIGURE 8 - TOD Issues and Opportunities



PROJECT OVERVIEW & EXISTING CONDITIONS

□ A greater degree of change can be expected within 1/4 mile of the stations, with less intensive effects moving outward toward the 1/2 mile radius and beyond.

4. PRESERVATION AND CHANGE

Development of the rail transit system and stations creates an opportunity for change, but not everything will change or should change. Figure 8 shows the areas of greatest opportunity for positive change, but it also shows areas that will be preserved, including parks, floodways and most residential areas. Typically, single-family neighborhoods and areas with small parcel sizes and a large number of land owners are least affected by change. Community-oriented open spaces, historic buildings, and other cultural places should remain also relatively unchanged. The alternatives that have been developed through the planning process focus primarily on the areas of opportunity while protecting adjacent single-family neighborhoods and other areas of preservation.

Historically and culturally significant features within the planning area include the Waiawa Separation Bridges, the Waiawa Booster Pump Station and the Waiawa Stream Bridge near the Pearl Highlands station, and the Sumida Watercress Farm and Kalaulao Spring Bridges near the Pearlridge station. These features are among those recognized as places to preserve for future generations.

5. INFRASTRUCTURE

Existing water and sewer infrastructure in the TOD areas is sized for current zoning, which is approximately equal to the proposed commercial and residential projections for TOD. Exceptions include the Leeward Community College station area, which is zoned AG-2, however, the proposed growth in this area is modest. Another exception is the Pearlridge station area where a modest increase in sewer flow will occur, and because of this, trunk sewers should be expected in the TOD overlay area to absorb additional flows.



Industrial buildings makai of Kamehameha Highway could be transformed into new uses.



Sumida Farm is an important community resource to be celebrated and preserved.

An aerial map of the Pearl City and Aiea area in Honolulu, Hawaii. The map shows a grid of streets, building footprints, and green spaces. A dark grey rectangular block is visible in the upper left corner of the map. A vertical red line is positioned to the right of the map, separating it from the text.

6. MARKET DEMAND

The market analysis completed for this study explains that Aiea and Pearl City are excellent locations for TOD due to their central location between Ewa and Downtown Honolulu and access to major freeways and arterials, as well as the addition of rail transit and extensive bus service. In addition to its central location, Aiea and Pearl City serve students attending Leeward Community College and UH West Oahu, as well as military personnel and civilian defense workers. Job creation and affordable housing will assist these demographics.

7. TRANSPORTATION

Existing transportation modes in the planning area include bus, private automobile, bicycles, and walking. Pearlridge is the most bus transit-served station area due to Pearlridge Center and other area destinations. Existing Pearlridge bus routes include: A, 11, 20, 32, 40, 42, 53, 54, 62, 71, and 90. Pearl Highlands and LCC are both served by the same routes, including A, 40, 42, 62, and 73.

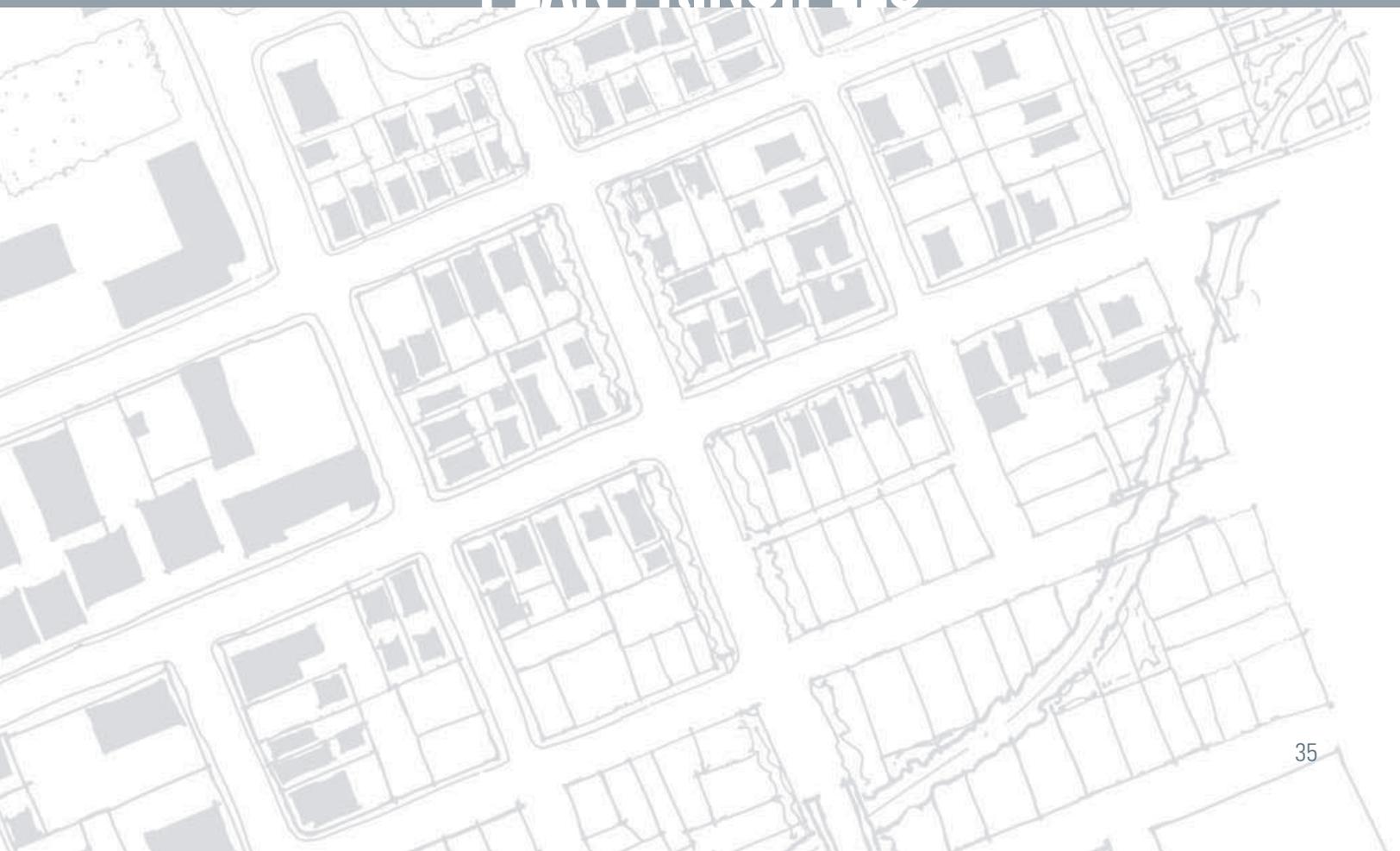
Currently, the only bikeway facilities in the Aiea–Pearl City area include the Pearl Harbor Historic Trail and bicycle lanes along the new Kuala Street extension in Pearl City. The need exists for bicycle connections from residential areas to activity centers, schools, recreation areas, and major transit stops. An integrated bikeway system is needed to link these places together and provide safe access for biking to be considered a viable transportation option.

Current pedestrian facilities are also lacking. Sidewalks are provided throughout the Aiea–Pearl City area, although many of them are not adequate and need improvement to encourage pedestrian activity. Safer pedestrian crossings are also needed in the TOD areas, especially near Moanalua Road and Kamehameha Highway in the vicinity of Pearlridge Center.

More detailed information related to existing transportation conditions is available in the Existing Conditions Report.



PLAN PRINCIPLES





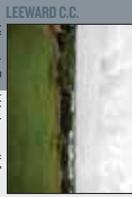
PLANNING PRINCIPLES

“PLACE-MAKING STRATEGIES FOR AIEA-PEARL CITY”

AIEA - PEARL CITY NEIGHBORHOOD TOD PLAN

VAN METER
WILLIAMS
POLLACK

1. CREATE ACCESS AND VIEWS TO WATER AND PEARL HARBOR HISTORIC TRAIL



LEEWARD C.C.
View to Pearl Harbor trail from 2nd street. Water and trail is very limited.



PEARL HIGHLANDS
Views to Pearl Harbor illustrated by H-1. No access trail to water and Pearl Harbor Trail.



PEARLRIDGE
Views to Pearl Harbor are great. The water and trail to harbor is available but limited.



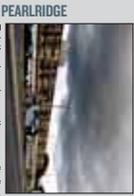
2. ENCOURAGE WORKFORCE HOUSING



LEEWARD C.C.
No housing is available on campus. Most empty spaces to be considered.



PEARL HIGHLANDS
Recent sites near transit have potential for workforce housing.



PEARLRIDGE
Existing housing options are limited within the TOD area.



Attractive workforce housing can be mixed with market rate housing. Blending household incomes also allows for greater diversity within the neighborhoods.



3. CREATE A COMFORTABLE AND LIVELY PEDESTRIAN ENVIRONMENT



LEEWARD C.C.
Many students get off at the bus stop across H-1 from campus and have to walk 1/2 mile to campus.



PEARL HIGHLANDS
Existing site of proposed transit stop is not pedestrian-friendly.



PEARLRIDGE
Existing site of proposed transit stop is not pedestrian-friendly.



Making the station areas pedestrian and bicycle friendly will increase land use and promote economic development and transit ridership.



Placing bus stops adjacent to the rail stations will allow transit transfers easy, and thus more likely to be utilized.



4. PROVIDE MULTI-MODAL ACCESS TO & FROM STATIONS



LEEWARD C.C.
Student have no designated sidewalks from the bus stop to campus.



PEARL HIGHLANDS
The site of the proposed transit stop will need to accommodate the train, buses, cars, bikes and pedestrians.



PEARLRIDGE
Current conditions for bicyclists and pedestrians are very limited.



Waterfront parks and trails will enhance the character of the neighborhood and strengthen the sense of place.



Celebrating the streams by bringing them back to their natural state is more aesthetically pleasing and better for the environment.

FIGURE 9 - Aiea-Pearl City Neighborhood TOD Planning Principles

PLAN PRINCIPLES

INTRODUCTION

The following plan principles were developed by community stakeholders, neighborhood residents and property owners through the Aiea–Pearl City Neighborhood TOD Plan process. They are intended to serve as overall objectives for both the Plan and the subsequent TOD zoning regulations. Recommendations made in the Plan relate directly to these important principles for how the Aiea–Pearl City neighborhoods should grow around the new rail stations:

- ▣ Create Access and Views to Water and Pearl Harbor Historic Trail
- ▣ Encourage Workforce Housing
- ▣ Create a Comfortable and Lively Pedestrian Environment
- ▣ Provide Multimodal Access to and from Stations
- ▣ Develop New and Enhance Existing Open Space Amenities



Principles were developed early in the outreach process in order to set the goals and objectives for the overall neighborhood TOD vision and plan.

PLAN PRINCIPLES

I. CREATE ACCESS AND VIEWS TO WATER AND PEARL HARBOR HISTORIC TRAIL

Water has always been important to this area, from the time of the ancient Hawaiians to the sugar plantation era to the modern military presence in Pearl Harbor. This principle recognizes the important link between the station area neighborhoods and the nearby streams, springs, wetlands, and Pearl Harbor shoreline.

Much of Aiea–Pearl City is directly adjacent to Pearl Harbor. Over time, the area has generally developed mauka of Kamehameha Highway, leaving the shoreline areas for light industrial uses because access and flooding issues have limited development potential. A main goal of the Plan is to reconnect the residents of Aiea–Pearl City to the incredible natural resource of Pearl Harbor. The Plan promotes creating new open spaces along the waterfront, ensuring view corridors from mauka areas, ensuring improvements to the Pearl Harbor Historic Trail, and developing new waterfront neighborhoods along the shoreline. The Pearlridge station area has the most potential to reconnect to Pearl Harbor Harbor, while Pearl Highlands and Leeward Community College can strengthen connections with new pedestrian and bicycle paths leading to the Pearl Harbor Historic Trail and protect existing view corridors to the water.



Pearl Harbor as seen from Pearlridge Center



Current condition of the Pearl Harbor Historic Trail

2. ENCOURAGE WORKFORCE HOUSING

This principle emphasizes a mixture of housing choices around the transit stations, which includes a variety of price options, housing types, and unit sizes to support a wide range of households. Much of the affordable housing currently located in Aiea–Pearl City was developed in the 1960s and 1970s and is in need of repair, renovation, or redevelopment. A main goal of this principle is to increase the quantity of workforce housing, while also increasing the overall quality of these residences.

Households living near the rail transit stations may be able to reduce vehicle usage or the number of cars that they would normally own and operate—possibly owning one car instead of two or three. A portion of the resulting savings in transportation costs can be applied to paying for a mortgage or rent on a home that may be larger and have more amenities than they would otherwise be able to afford. The future mix of housing types near the transit stations is expected to be more diverse than is currently the case.



Housing density does not necessarily entail high-rise towers. Low and mid-rise multifamily housing can provide adequate densities to support transit.



A variety of housing types should be located within station areas, including workforce housing.

PLAN PRINCIPLES

3. CREATE A COMFORTABLE AND LIVELY PEDESTRIAN ENVIRONMENT

Current development in the area typically auto-oriented. The introduction of rail transit can be the impetus for creating a true pedestrian-first environment. In the near future, residents and visitors to Leeward Community College, Pearl Highlands and Pearlridge will arrive at transit stations, without cars. A more connected street system will enhance circulation by providing increased route options. New sidewalks, street trees, and streetscape elements will create a more comfortable walking environment. Streetscape elements should be accompanied by new buildings with street level retail and other active uses, outdoor seating, and pedestrian-scaled features such as lighting and awnings.

It is important to have a diverse mix of uses in the station areas since different uses will ensure that these areas are active and safe at different times of the day and week. Future development in the station areas will be designed in a way that focuses on the sidewalk and pedestrian realm while accommodating automobiles in parking structures or surface lots behind buildings. New parks and open spaces will create destinations for walkers of all ages.



Current developments in Aiea–Pearl City are typically auto-oriented.



The introduction of rail transit can be the impetus to creating a true pedestrian-first environment.

4. PROVIDE MULTIMODAL ACCESS TO AND FROM THE STATIONS

The new rail stations will be part of a larger multimodal transportation network that should be enhanced in the surrounding neighborhoods. Existing streets should be improved and new streets designed to accommodate access by the appropriate mode, which could include pedestrians, bicyclists, kiss-and-ride drop-offs, park-and-ride traffic, and local through traffic. Off-street paths and trails are also important for creating vehicle-free environments for walking, jogging, and biking.

By creating more connected communities and employing “complete streets” design principles, residents and visitors will have a range of transportation choices allowing them to choose the most efficient, economical, and enjoyable way to get around. The Plan emphasizes that rail, buses, cars, bicycles, and pedestrians be accommodated in safe and convenient ways.



The new rail stations will be part of a larger multimodal transportation network.



By creating more connected communities, residents and visitors will have a range of transportation choices.

PLAN PRINCIPLES

5. DEVELOP NEW AND ENHANCE EXISTING OPEN SPACE AMENITIES

Rail transit and TOD provide the opportunity to create great public spaces at the stations and in nearby neighborhoods. This principle emphasizes the creation of a network of public open spaces and linkages through the station areas. This network should include parks, plazas, paths, trails, and shaded neighborhood streets in order to soften development and provide opportunities for residents to feel more connected to the natural environment. The increase in families living within the station area communities may necessitate the expansion of existing schools or new school facilities, which should also be integrated into the neighborhood open space network.



The introduction of rapid transit provides the opportunity to create great public spaces at the stations.



The green network should include parks, paths, trails, and shaded neighborhood streets.



DRAFT STATION AREA ALTERNATIVES





Leeward Community College Station Area - Alternative A: "Campus Village"
 Pearl Highlands Station Area - Alternative A: "Corridors"



Pearlridge Station Area - Alternative A: "Corridors"



Leeward Community College Station Area - Alternative B: "Transit Village"
 Pearl Highlands Station Area - Alternative B: "Nodes"



Pearlridge Station Area - Alternative B: "Nodes"



Leeward Community College Station Area - Alternative C: "Campus Extension"
 Pearl Highlands Station Area - Alternative C: "Special Districts"



Pearlridge Station Area - Alternative C: "Edge"

DRAFT STATION AREA ALTERNATIVES

I. LEEWARD COMMUNITY COLLEGE STATION AREA

1. Alternative A: “Campus Village”

- Focuses high-intensity development on the existing surface parking lot mauka of Leeward Community College and adjacent to the transit station. The proposed high-intensity development will be mixed-use in nature and help to form a “campus village” around a new community green.

2. Alternative B: “Transit Village”

- Focuses high-intensity development on the existing surface parking lot mauka of Leeward Community College and offers a new park adjacent to the transit station, linking the college to transit both visually and physically.

3. Alternative C: “Campus Extension”

- Creates an extension of Leeward Community College. This scenario would encourage the school to grow towards the transit station instead of locating temporary buildings on valuable open space on the makai side of the current campus.

2. PEARL HIGHLANDS STATION AREA

1. Alternative A: “Corridors”

- Focuses high-intensity development along the Kuala Street corridor mauka of the Pearl Highlands station and along the Kamehameha Highway corridor diamond head of the station to the proposed town center along Lehua Avenue, as identified in the Livable Communities Plan.

2. Alternative B: “Nodes”

- Locates high-intensity development at the intersection of Kuala Street and Acacia Road to create a new mixed-use node within a five-minute walk of the station.

3. Alternative C: “Special Districts”

- Focuses high-intensity development along the Kuala Street corridor mauka of the Pearl Highlands station. This alternative incorporates existing shopping centers into future redevelopment concepts.

3. PEARLRIDGE STATION AREA

1. Alternative A: “Corridors”

- Focuses high-intensity development along the important corridors of Kamehameha Highway ewa and diamond head of the station and Kaonohi Street mauka of the station.

2. Alternative B: “Nodes”

- Focuses high-intensity development directly adjacent to the new rail transit station along Kamehameha Highway and around the existing Pearlridge Center. In this alternative, Pearlridge Center would be preserved as a regional shopping destination and enhanced with infill commercial uses.

3. Alternative C: “Edge”

- Focuses higher-intensity development immediately adjacent to the station at the intersection of Kamehameha Highway and Kaonohi Street. Development would include mixed-use commercial (office above retail) and/or mixed-use residential (residential above retail) buildings.

DRAFT STATION AREA ALTERNATIVES

- The Draft Station Area Alternatives were presented to the Aiea–Pearl City community at Workshop 2 on December 1, 2009.
- Elements of the Draft Station Area Alternatives have been incorporated into the Plan for each station area.





PLAN OVERVIEW





FIGURE 10 - Aiea-Pearl City Neighborhood TOD Plan Overview



PLAN OVERVIEW

The Aiea–Pearl City Neighborhood TOD Plan outlines a long-term vision for three vibrant station area nodes along the proposed rail transit line at the Leeward Community College, Pearl Highlands and Pearlridge stations. The Plan outlines a long-term vision for focusing development intensity within a 1/4 mile of each station (also referred to as the TOD Precinct) in order to create highly walkable and attractive transit communities. These core areas provide the foundation for each station area’s unique but integrated identities. Each station area provides varied development opportunities. The Plan aims to enforce the local identity of each station area based on both current conditions and future needs:

- The Leeward Community College (LCC) station area is envisioned as a college-oriented neighborhood catering to new residents and businesses, as well as students and faculty from the adjacent college.
- The Pearl Highlands station will be a major intermodal facility and connection point for riders coming from ewa and mauka directions. The station should be tied to a revitalized shopping district which carefully balances passengers and workers arriving via transit, on foot, and via auto.
- The Pearlridge station area is seen as continuing its role as a major urban center and regional destination through new development opportunities, regeneration of Pearlridge Center, and improved access to the Pearl Harbor Historic Trail and the shoreline.

The areas between 1/4 mile and 1/2 mile from the stations (also referred to as the transit influence zone or TIZ Precinct) would experience less intense but still active and diverse development since they are within walking distance of rail transit. The development will step down in both building height and intensity to be compatible with the less dense, residential neighborhoods surrounding the station areas.

The density and diversity of proposed uses would contribute to a pedestrian environment and strong sense of place, both qualities that allow residents and visitors to travel to many nearby destinations without an automobile, including schools and open spaces. Streets will need to be designed to also support bicycles and low speed traffic.

PLAN OVERVIEW

- The Neighborhood TOD Plan envisions three vibrant nodes along the proposed rail transit line at the Leeward Community College, Pearl Highlands and Pearlridge stations.



LEeward COMMUNITY COLLEGE STATION AREA PLAN

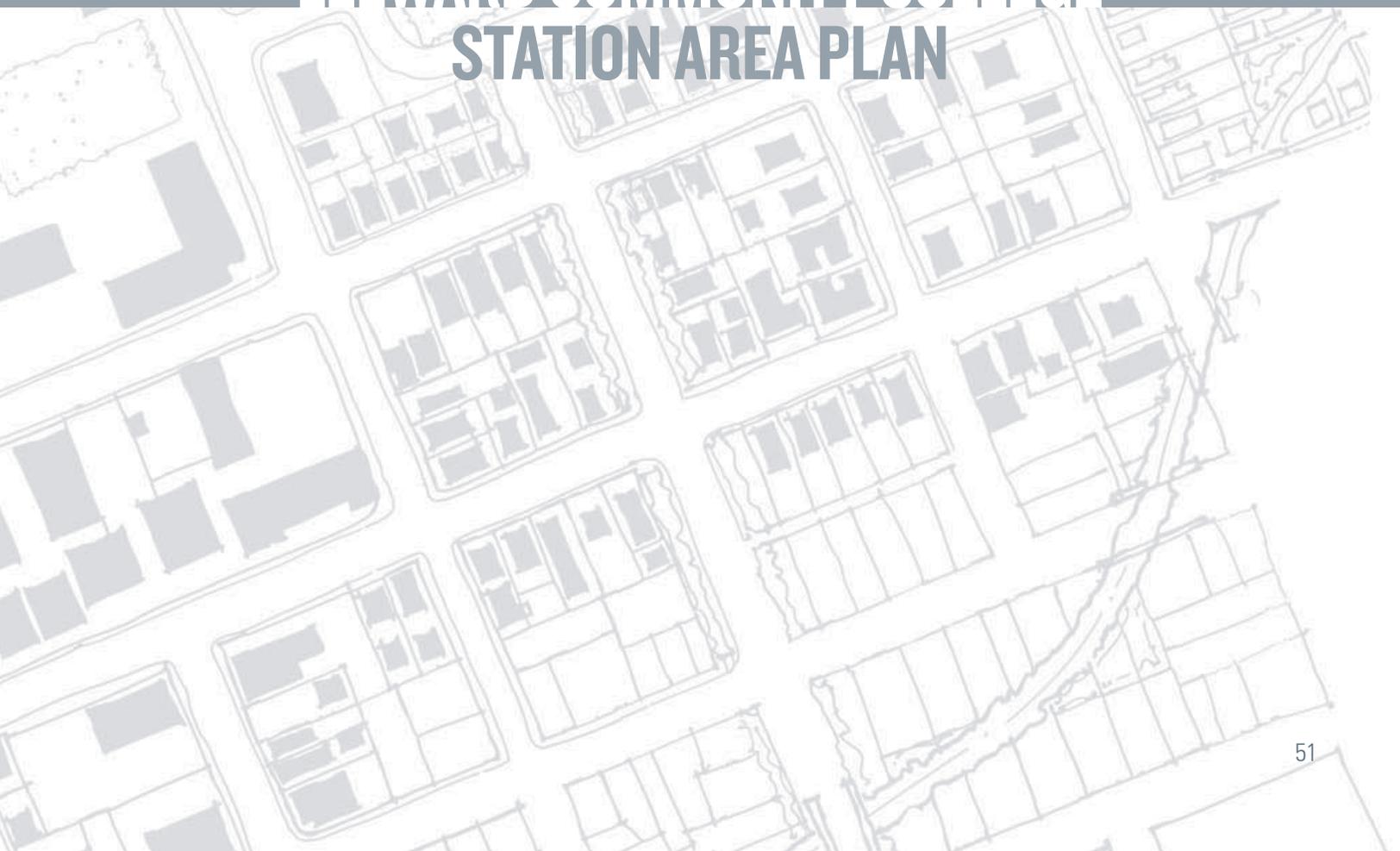




FIGURE 11 - Leeward Community College Station Area Illustrative Plan

A. OVERALL STRUCTURE

Leeward Community College (LCC) station area is envisioned by the community to become a college-oriented neighborhood with educational facilities, residences, and retail and services catering to students and faculty from the adjacent college, as well as new residents. The current LCC Master Plan envisions a new educational building on the diamond head side of campus. Tremendous potential exists for new transit-oriented development due to the large surface parking lot that currently serves all students and faculty. With a new rail station serving the college, many visitors will be able to easily arrive by train, potentially freeing up space in the surface parking lot for new uses.

The overall structure of the station area plan is focused around a new central green park, as well as a transit plaza adjacent to the station. Medium-density mixed-use development would surround the green, mauka of the existing campus. This area would have a mix of educational facilities, housing, office, restaurants, and convenience retail.

Currently, the area just diamond head of the campus is used as overflow parking. In the future, this area is envisioned as a new lower density neighborhood of townhouses and apartments. This area will provide needed housing for singles and families, helping to fulfill the plan principle of “Encourage Workforce Housing.”

LCC Program (Existing)

- Total Site Area: 27.3 Acres
- Total Residential: 0 Units
- Total Institutional: 48,000 SF

LCC Program (TOD Plan)

- Total Residential: 820 Units
- Total Institutional and Commercial: 88,000 SF (including retail/office/industrial)

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- Leeward Community College station area will be a college-oriented neighborhood catering to students and faculty from the adjacent college, as well as new residents.



Leeward Community College should integrate new active uses surrounding existing and new open spaces.

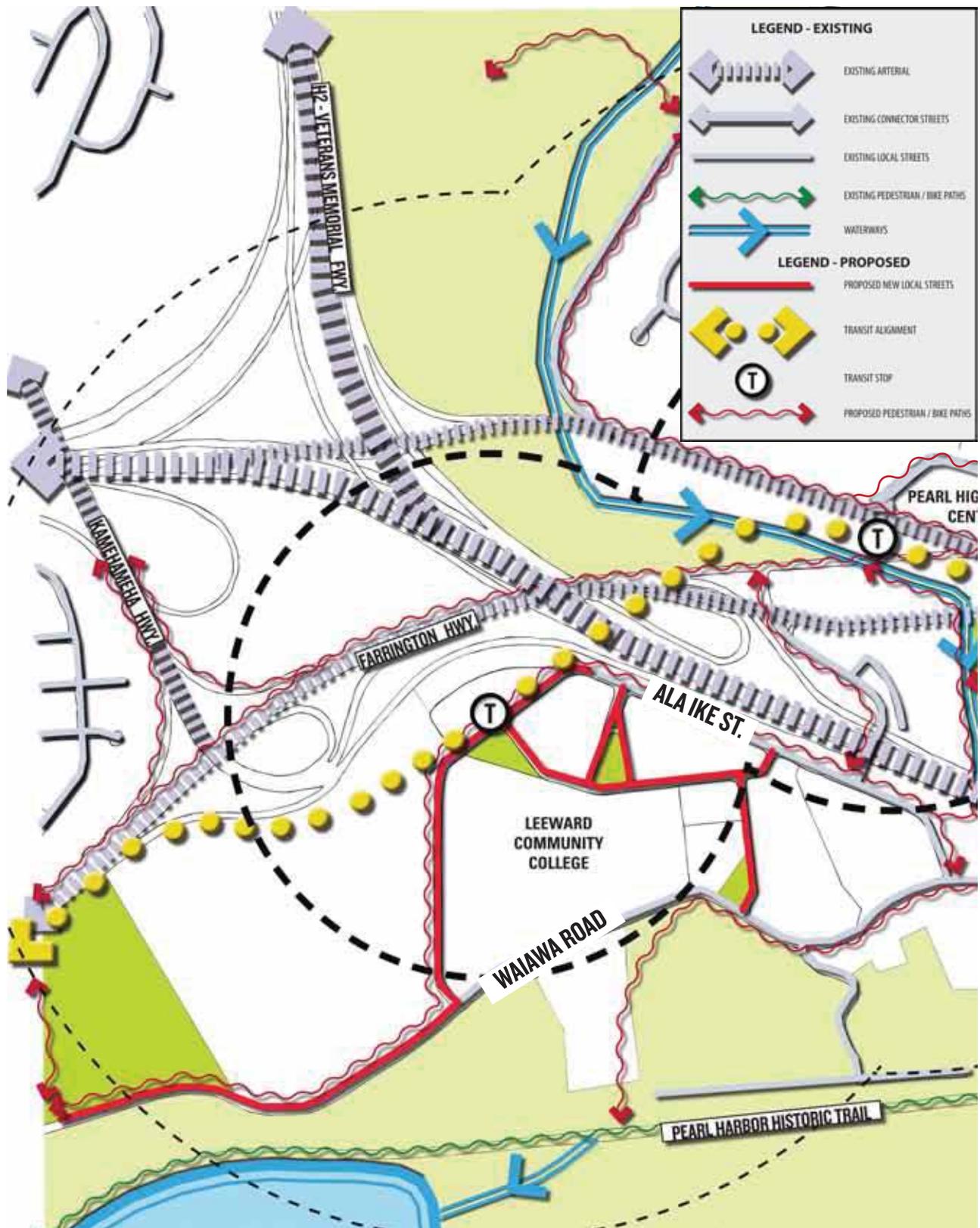


FIGURE 12 - Leeward Community College Station Area Circulation Diagram



B. CONNECTIVITY & CIRCULATION

Along with the rail line and station, the primary circulation improvement that is recommended in this area is a secondary access road connecting the LCC area with Farrington Highway in the ewa direction. This secondary access would improve connectivity to Leeward Community College, as well as the adjacent rail maintenance facility. The secondary access will also provide an impetus for new transit-oriented development surrounding the campus while helping to fulfill the plan principle of “Provide Multimodal Access to and from the Stations.” The secondary access road could be combined with the maintenance facility driveway and should be designed as a complete street for use by pedestrians, bicyclists, and automobiles.

There are currently 1,200 parking spaces in the existing surface parking lot mauka of the LCC campus. The proximity of this parking lot area to the rail transit station makes it an opportunity for new development in the future. A new proposed street pattern would help to break up the large surface parking lots into smaller blocks for new development, and new buildings with active ground floor uses would help create visual interest for pedestrians walking between the station and campus.

A new bicycle path is recommended along the proposed extension of Ala Ike Street on the ewa side of campus traveling makai alongside the rail maintenance yard and past Waiawa Road to the Pearl Harbor Historic Trail and Waipahu High School. Another bicycle path is proposed along Waiawa Stream in order to connect the Pearl Harbor Historic Trail to the Pearl Highlands area. These improvements help to fulfill the plan principle of “Create Access and Views to Water and the Pearl Harbor Historic Trail,” among others.

Mauka of the transit station is an area that will become more isolated from the rest of the campus area due to the rail infrastructure. The Plan envisions this area as a good location for new surface parking. The rail line will pass through this block, but access can be provided for cars to use this lot as dedicated or overflow campus parking or transit parking. The new surface parking mauka of the station, as well as new parking structures, could accommodate and replace 85% of the existing spaces (a 15% reduction factor was applied due to the introduction of new transit service).

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- The primary circulation improvement recommended in the LCC station area is a secondary access road connecting LCC with Farrington Highway in the ewa direction.



New bicycle paths are recommended within the station area.



New streets should be designed for pedestrians, automobiles, and bicycles.



Existing view of Pearl Harbor from area diamond head of campus



Proposed neighborhood mini park overlooking Pearl Harbor and surrounded by lower-density residential development

C. PARKS & OPEN SPACE

In order to fulfill the plan principle of “Develop New and Enhance Existing Open Space,” the Plan envisions several new parks and gathering spaces in proximity to the Leeward Community College campus.

A new mixed-use environment with a central green and private courtyards is recommended to take the place of the large existing surface parking lot. This development would create new gathering space for both campus users and residents to enjoy. The existing campus spine should be retained and incorporated into the larger open space network. This concept is consistent with the current LCC Master Plan.

In tandem with lower-density residential development east of campus, a new one-acre neighborhood mini park is proposed to provide open space and views to Pearl Harbor. The new bicycle paths described in the previous section will enhance connections to the Pearl Harbor Historic Trail and help to create regional bicycle access to both the LCC campus and the rail station. These improvements are intended to fulfill the plan principle of “Create Access and Views to Water and the Pearl Harbor Historic Trail.”

A transit plaza is proposed adjacent to the station as both a gathering place and a gateway to the LCC area. The transit plaza would open up views and access to the LCC campus, making the college prominent from the rail station. This transit plaza should be an active space for students, residents, faculty, and visitors. Directly connected to the existing green campus spine, this plaza should include wayfinding devices and amenities such as a fountain and public art.

Park dedication and publicly accessible open space requirements should be contingent on specific development proposals within the station area.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- A new mixed-use environment with a central green and private courtyards is recommended to take the place of the large existing surface parking lot.
- The Plan proposes approximately two acres of public open space (including the transit plaza) and two acres of semi-public and private open space in the LCC station area.



Proposed lower-density residential area adjacent to campus, surrounding a neighborhood mini park - before and after illustrations from the perspective of the red arrow above are shown on page 56.

FOR ILLUSTRATIVE PURPOSES ONLY



Existing green spine and surface parking mauka of LCC campus



View of the proposed campus spine with surrounding mixed-use development

D. URBAN FORM

The intent of the proposed urban form in the Leeward Community College area is to encourage the plan principle of “Create a Comfortable and Lively Pedestrian Environment.” The Plan conceptualizes buildings around a new central green in order to create a lively and vibrant college-town atmosphere.

Quality building design is essential to achieving this vision. Buildings should relate directly to their surroundings and should be oriented to both existing and planned parks and public spaces. Entries should be clearly defined from the sidewalk, and corner elements should be given prominence through additional height or massing.

Buildings should be oriented to the sidewalk and pedestrian spaces. Shade should be provided both by landscaping and architectural elements such as awnings and overhangs.

Parking for new development should be situated within structures wrapped with active uses or behind buildings in order to create an attractive and safe streetscape.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- The Plan focuses buildings around a new central green in order to create a lively and vibrant college-town atmosphere.



Proposed mixed-use development and open spaces mauka of the main campus entrance - before and after illustrations from the perspective of the red arrow above are shown on page 58.



FIGURE 13 - Leeward Community College Station Area - Existing Land Uses



FIGURE 14 - Leeward Community College Station Area - Proposed Land Uses



E. LAND USE

The proposed land uses described in this section are based on the plan principles and direct community feedback on early versions of the Plan. The land uses described below are recommendations; the TOD zoning developed for the station area will allow a flexible mix of urban uses. Proximity to a new transit station, multiple proposed access points to the Pearl Harbor Historic Trail, and excellent access to H-1 and Kamehameha Highway will make the station area a strong location for new workforce housing, helping to fulfill an important plan principle.

Two mixed-use residential blocks are envisioned mauka of the LCC campus. These blocks could include active uses such as non-profit organizations and college-oriented retail, restaurants, and coffee shops at strategic locations. Ground floor uses could also include services such as banks, college offices, and other educational facilities. Upper stories could include for-sale housing, apartments, student housing, and office uses for LCC and businesses that want to take advantage of faculty, students and technology transfer. Small courtyards and private open space are envisioned within these blocks for residents to enjoy. Parking structures, shown on the interiors of blocks, could accommodate the parking requirements for this development, as well as some replacement parking for LCC students and faculty.

An Education Department building is planned by Leeward Community College directly diamond head of the existing campus and is incorporated into this Neighborhood TOD Plan. The long, slender building will be an extension of the campus spine and adjacent to the existing Performing Arts building plaza. This building will house classrooms and offices, as well as a green roof with an outdoor lanai/reception room.

Envisioned just makai and diamond head of the new campus building is a lower-density residential neighborhood between the college and existing multifamily housing to the east. The topography of this area slopes toward Pearl Harbor. A neighborhood mini park is proposed at the terminus of a new street. This park should be surrounded by residential uses on both sides, which will help to provide “eyes on the park” and enhance safety. The placement of the park should allow for uninterrupted views of Pearl Harbor in the distance, creating a unique community space which ties directly to the surrounding natural environment.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- The proximity to a new transit station, multiple proposed access points to the Pearl Harbor Historic Trail, and excellent access to H-1 and Kamehameha Highway will make the station area a strong location for new workforce housing.



Mixed-use development is envisioned adjacent to Leeward Community College.



Lower-density development is proposed diamond head of campus.



FIGURE 15 - Leeward Community College Station Area: Existing Conditions



FIGURE 16 - Leeward Community College Station Area: Phase 1

F. PROTOTYPICAL PHASING

Appropriate development phasing will maximize investments in infrastructure and guide development in critical areas while accomplishing the plan principles. Below is a sample phasing program for a prototypical block in the LCC station area. The goal of the hypothetical phasing study is not to show a specific design but to illustrate how development can occur in an area over time. While the LCC property is used as an example, the phasing strategies described below can be applied to similar blocks throughout Aiea and Pearl City.

EXISTING CONDITIONS

The Existing Conditions diagram at left (Figure 15) shows the large surface parking lot adjacent to Leeward Community College. It also shows the nearby H-1/H-2 interchange and how it isolates the LCC area from the surrounding Pearl City neighborhood. The large expanses of surface parking are all owned by Leeward Community College (State of Hawaii).

PHASE I

Phase 1 (Figure 16) involves the construction and opening of the rail transit station (the only at-grade station in the entire system). The rail guideway will be elevated over the H-1/H-2 interchange towards the intermodal Pearl Highlands station to the east. The LCC station will be just mauka of the west end of the LCC campus, replacing several temporary structures currently in the area. Ideally, Phase 1 would also include the new transit plaza, helping to connect the campus to the station and acting as a gateway and gathering place. Creating a strong connection between transit and the college will make riding the train an attractive alternative to driving to LCC, potentially freeing up a portion of the current surface parking area for higher and better uses.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- The goal of the phasing study is not to show specific development design, but to illustrate how development can occur in an area over time.



The transit plaza should be an active gathering place.



New pedestrian improvements should help connect the station to the LCC campus.



FIGURE 17 - Leeward Community College Station Area: Phase 2



FIGURE 18 - Leeward Community College Station Area: Phase 3

PHASE 2

Phase 2 (Figure 17) illustrates the first mixed-use development, ideally directly adjacent to the rail station. The new mixed-use buildings could provide housing and space for commercial or educational uses while still preserving a large portion of the current surface parking lot. Along with the mixed-use buildings, a parking structure would provide spaces for the residents and businesses of the new development, parked at a lower ratio than traditional auto-oriented development.

Along with new development, new circulation routes should connect to the transit station and provide access on the diamond head side of campus. The roadways along both sides of the parking lot should be upgraded into a complete street for automobiles, pedestrians, and bicyclists.

Phase 2 also illustrates the a new central green directly in front of the main LCC entrance. This green space could become a major focal point for the campus, as well as an amenity for new uses in the area.

PHASE 3

Phase 3 (Figure 18) depicts the second block of mixed-use development on the diamond head side of the central green. By completing this block, the park would have active edges on all sides, creating a sense of enclosure and intimacy for the space. Because of reduced parking usage and the structures built in phase 1, the development of the second block could occur without providing additional parking.



Phase 2 includes a new central green and mixed-use development.



Phase 3 includes additional mixed-use development.



FIGURE 19 - Leeward Community College Station Area: Phase 4

PHASE 4

Phase 4 (Figure 19) illustrates build-out of the LCC surface parking lot with new development surrounding a second parking structure. Mixed-use development would front onto the current LCC campus and create an attractive edge and pedestrian environment. The buildings could contain uses such as housing, retail, restaurants, and educational facilities and offices.

The parking structure shown in Phase 4 would function as a shared parking facility for the surrounding development and Leeward Community College uses, including theater patrons, students and faculty.

The full build-out of this site represents a dynamic and cohesive transit-oriented development. Commercial uses are supported by both residents and visitors, and streets are pedestrian-friendly and activated throughout the day.



Active uses should front the central green.



Phase 4 illustrates a full build-out of the surface parking lot.

- TOD PRECINCT
- TIZ PRECINCT



FIGURE 20 - Leeward Community College Station Area - Recommended TOD Special District



G. DISTRICT BOUNDARIES

The Plan recommends a TOD Special District intended to ensure the community vision for the station area through zoning standards that enable and promote transit-oriented development. Figure 20 illustrates the recommended boundaries of the TOD Special District for the Leeward Community College station area. Recommended zoning standards for each station area are described in the Implementation Recommendations chapter.

The recommended Special District boundaries around the Leeward Community College station take into account distance from the transit station, natural topographic and man-made barriers, extent of market interest in development, planned land uses, and the overall benefits of TOD, including the potential to increase transit ridership.

The TOD, or transit-oriented development, Precinct is generally within 1/4 mile of the LCC station and includes the areas with greatest development potential. These areas will likely be redeveloped in the near (0-10 years) to mid-term (10-20 years) and should include larger buildings and higher intensity mixed-use environments.

The TIZ, or transit-influence zone, Precinct is located beyond the TOD core between 1/4 mile to 1/2 mile from the Leeward Community College station. The TIZ Precinct should be less intense by nature, generally stepping down from the higher-density TOD precinct. Properties within the TIZ Precinct are more likely to develop in the long-term (20-30 years) and should be compatible with the existing lower-density residential neighborhoods on the periphery.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- Special District boundaries take into account distance from the station, natural and man-made barriers, market interest, and planned land uses.
- The TOD Precinct is generally within 1/4 mile of the LCC station.
- The TIZ Precinct is generally located between 1/4 and 1/2 mile from the LCC station.



The large surface parking lot adjacent to LCC is located in the TOD Precinct.



The TIZ Precinct includes areas diamond head of the LCC campus.

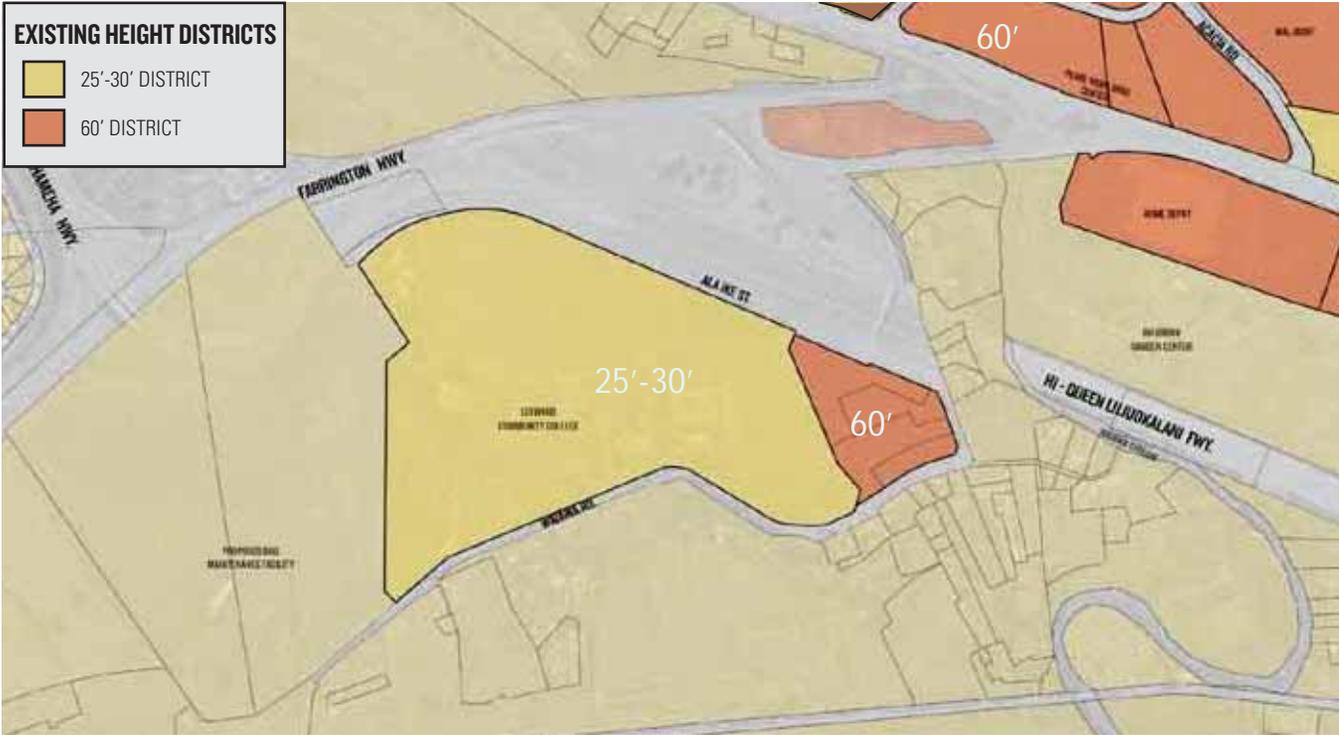


FIGURE 21 - Leeward Community College Station Area - Existing Allowable Heights

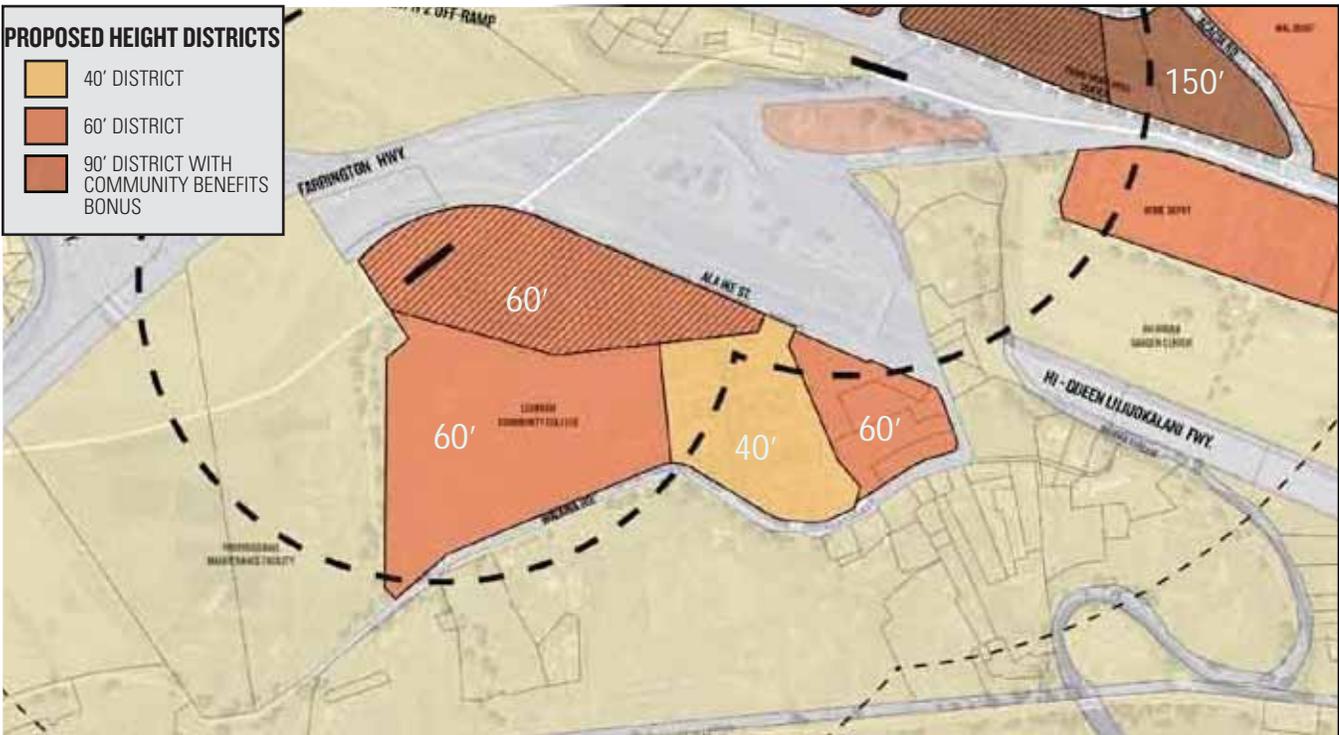


FIGURE 22 - Leeward Community College Station Area - Proposed Allowable Heights



2. EXISTING ALLOWABLE HEIGHTS

There are currently two height limit zones surrounding Leeward Community College station: a height limit of 25'-30' for the majority of the campus site and 60' for the existing residential area diamond head of campus.

3. PROPOSED ALLOWABLE HEIGHTS

New buildings in the station area should generally be taller near the station and step down in height further from the station. Stations should serve as focal points and hubs for more intense development.

The Plan recommends two base height zones surrounding Leeward Community College. The first zone, which recommends a maximum of 40', is restricted to the area envisioned for multifamily housing diamond head of campus. The existing surface parking lot, which is envisioned to transform over time into a mixed-use "campus village," and the existing campus have a recommended base height limit of 60'. A community benefits bonus for hatched areas on Figure 22 would allow greater heights in exchange for community amenities, as recommended in the Implementation Recommendations chapter. These amenities could include a central green to preserve views and create an identity for campus.

LEEWARD COMMUNITY COLLEGE STATION AREA PLAN

- The Plan recommends base height limits of 40' and 60' within the planning area.



The recommended base height in the TOD Precinct is 60'.



The TIZ Precinct is recommended for lower-density development.





PEARL HIGHLANDS STATION AREA PLAN



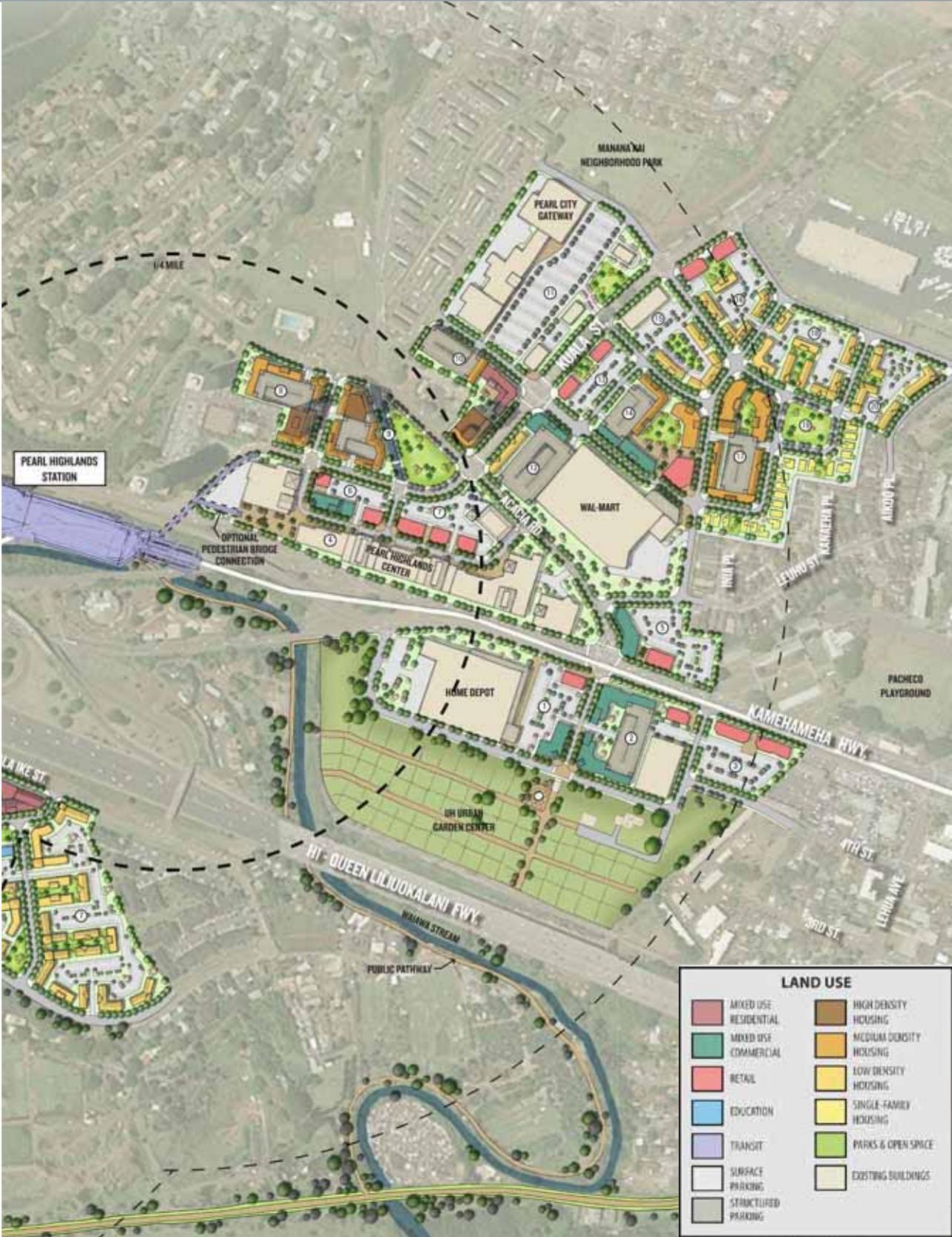


FIGURE 23 - Pearl Highlands Station Area Illustrative Plan



A. OVERALL STRUCTURE

The Pearl Highlands station will be a major intermodal facility and connection point for riders coming from ewa and mauka directions. The station area is envisioned as a revitalized shopping district that carefully balances passengers and workers arriving via transit, on foot, and via automobile.

Over time, the Pearl Highlands station area could transition from a suburban commercial center to a thriving pedestrian-friendly district complete with a mixture of commercial, residential, and community uses. The intent of the Plan is to demonstrate how this auto-dominated area can redevelop in the future while retaining many of the recently built “big-box” stores along Kamehameha Highway and Kuala Street. Along with how to retrofit existing stores to encourage pedestrian use, the Plan also identifies possible catalyst sites for new high, medium and lower-density housing around the Pearl Highlands station. While some of the current property owners may not have plans to redevelop their properties, it is anticipated that in the long run, retail activities will cater to both auto-based and transit-based customers.

Pearl Highlands Program (Existing)

- ▢ Total Site Area: 100 Acres
- ▢ Total Residential: 90 Units
- ▢ Total Commercial: 985,000 SF (retail/office/industrial)

Pearl Highlands Program (TOD Plan)

- ▢ Total Residential: 1,500 Units
- ▢ Total Commercial: 1,105,000 SF (retail/office/industrial)

PEARL HIGHLANDS STATION AREA PLAN

- ▢ The Pearl Highlands station area is envisioned as a thriving pedestrian-friendly district.



High-density housing envisioned within close proximity of the Pearl Highlands rail station

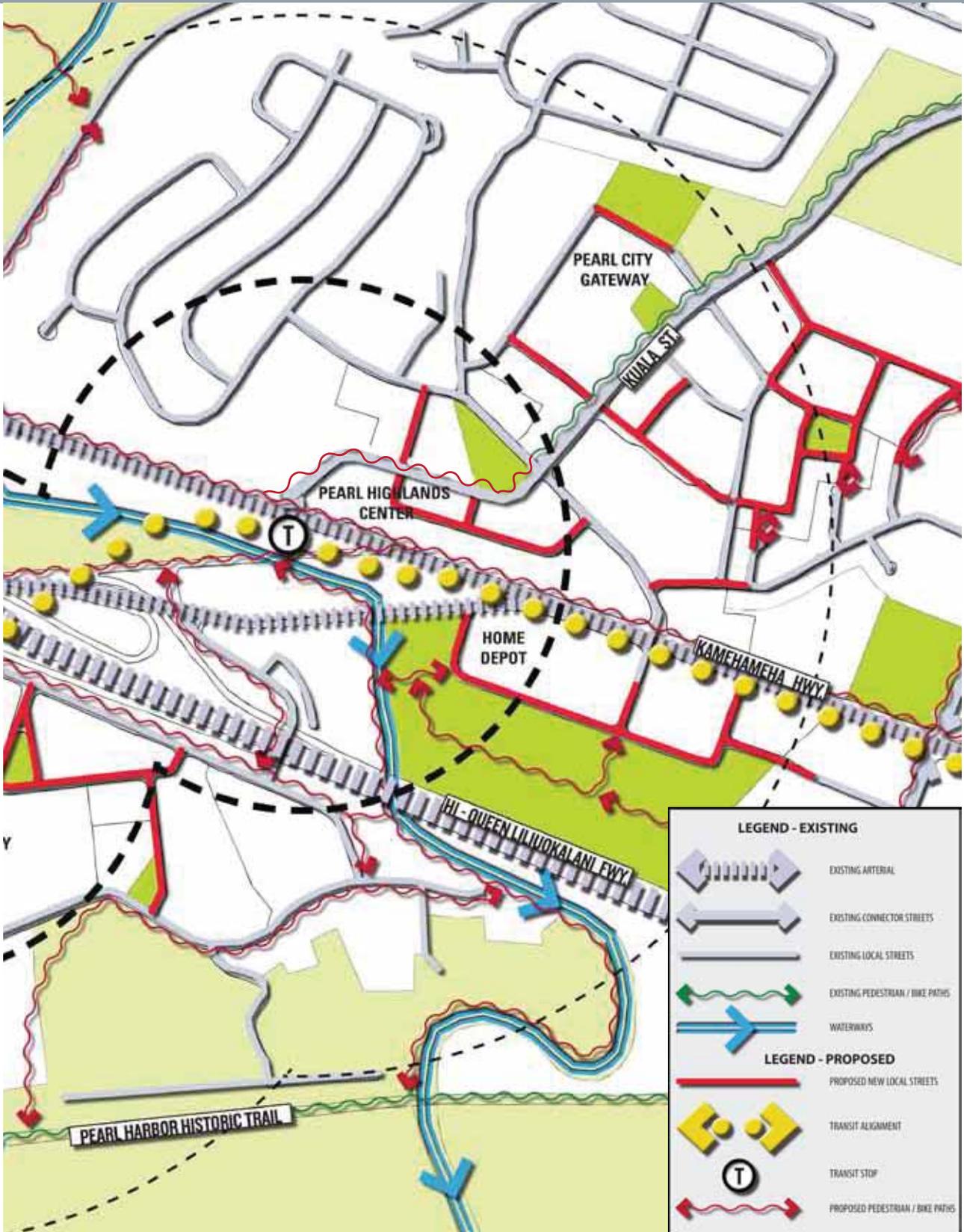


FIGURE 24 - Pearl Highlands Station Area Circulation Diagram



B. CONNECTIVITY & CIRCULATION

A critically important plan principle for the Pearl Highlands station area is to “Provide Multimodal Access to and from the Stations.” The Pearl Highlands station will serve as a major park-and-ride location along the rail transit line, with access to H-1, H-2, Kamehameha Highway and Farrington Highway. The park-and-ride will have 1,600 parking spaces and a bus transit facility serving 10 bus routes, resulting in rail ridership estimated at 22,000 riders per day. The station will also be connected to the H-2 freeway via a dedicated off-ramp.

The Plan envisions a new bicycle lane along Kuala Street that will link riders to the Pearl Highlands station from the upland neighborhood. New multi-use paths are also proposed from the station, along Waiawa Stream, connecting to the Pearl Harbor Historic Trail and LCC. A new walkway along the edge of the UH Urban Garden Center could also connect to the proposed Waiawa Stream path. All of these improvements would help to fulfill the plan principle of “Create Access and Views to Water and Pearl Harbor Historic Trail.”

The station area is divided by heavily trafficked Kamehameha Highway. Pedestrian upgrades, such as improved sidewalks and crosswalks with pedestrian countdown signals, are recommended to help increase safety in the area. Pedestrian upgrades are also important for students walking between the station area and Pearl City Elementary School on Waimano Home Road.

New street connections are envisioned to be built as development occurs over time. These improvements will help to create a complete streets network that allows multiple travel routes and modes, alleviating some of the local traffic on Kamehameha Highway. New street connections should be designed for slow speeds with traffic calming measures that deter their use as a bypass of higher capacity roadways, such as Acacia Road and Kamehameha Highway.

To provide a safe and attractive pedestrian connection to the Pearl Highlands station, the Plan recommends a direct bridge connection from the station into Pearl Highlands Center. By routing pedestrians in this manner, existing businesses such as shops, restaurants, and the movie theater will benefit from direct customer access. This pedestrian bridge would also encourage employees of Pearl Highlands Center to arrive via transit.

PEARL HIGHLANDS STATION AREA PLAN

- The Pearl Highlands station will serve as a major park-and-ride location along the rail transit line.



New street connections should be multimodal in nature.



A trail along Waiawa Stream could connect the station area to the Pearl Harbor Historic Trail.

FOR ILLUSTRATIVE PURPOSES ONLY



Existing view of the Home Depot parking lot and mauka boundary of the UH Urban Garden Center



Pedestrian gateway to the UH Urban Garden Center envisioned along with adjacent infill development on existing surface parking lot

C. PARKS & OPEN SPACE

The Plan envisions new and enhanced open spaces in the Pearl Highlands station area. As a centerpiece to neighborhood redevelopment and improvement of the overall green network, the Plan recommends improvements to the existing UH Urban Garden Center. The Garden Center is a tremendous resource and an oasis of beauty and green space that is currently underutilized by the surrounding community. It is recommended that the Center be enhanced by providing safe pedestrian access through the current Home Depot parking lot, creating a connection to the proposed Waiawa Stream trail, and allowing new development to highlight the Center. Providing additional public access to the Garden Center will allow the University of Hawaii to promote awareness of their agricultural programs while helping to create a strong identity and amenity for the surrounding area.

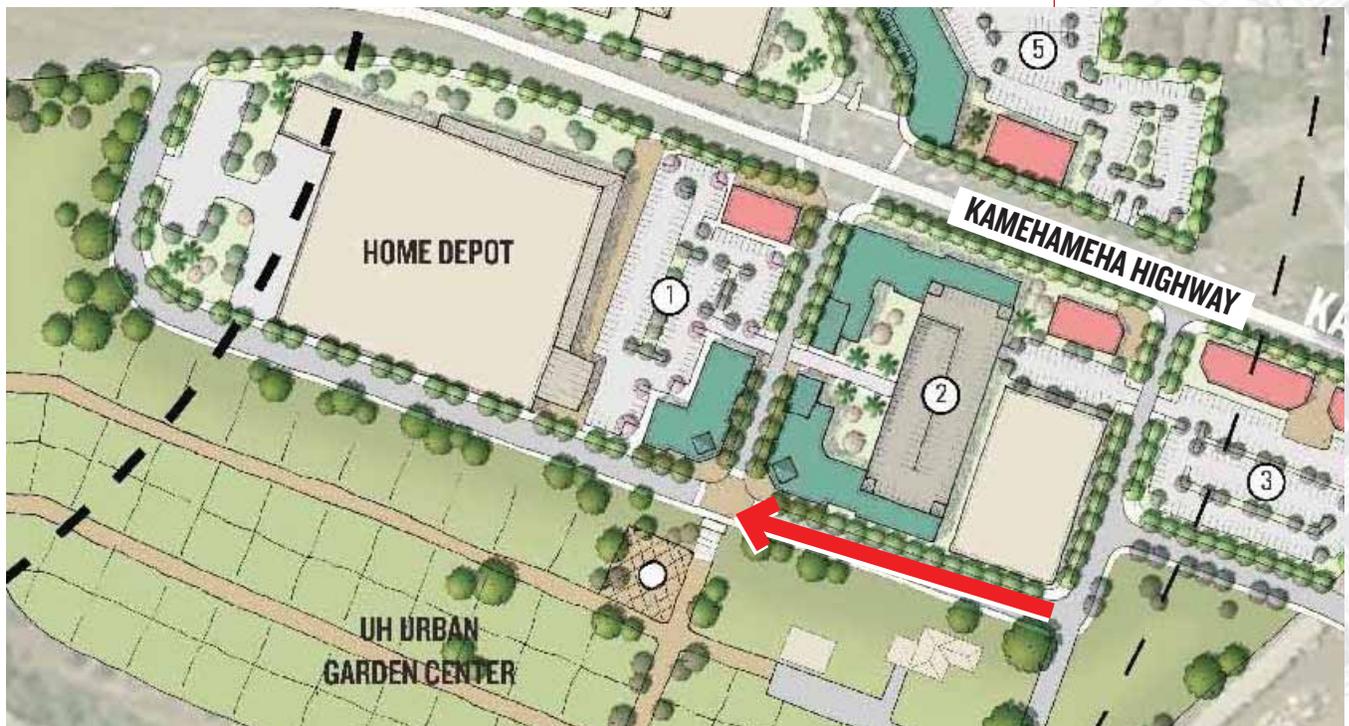
Additionally, new neighborhood mini parks are proposed mauka of the station to serve as community gathering places and small recreation areas. A larger open space is envisioned on the triangle-shaped parcel at the corner of Kuala Street and Acacia Road that could act as a new front yard for adjacent transit-oriented development. The intent of the illustrative Plan is to generally show where new parks are recommended, not necessarily specific locations or designs.

The Plan also envisions a new transit plaza at the northwest corner of Pearl Highlands Center. This important neighborhood gateway could be an outdoor open space, as illustrated in the Plan on page 81, or an interior connection through the Center. The transit plaza should be an active environment, with people coming from and going to the station throughout the day.

Park dedication and publicly accessible open space requirements should be contingent on specific development proposals within the station area.

PEARL HIGHLANDS STATION AREA PLAN

- As a centerpiece to neighborhood redevelopment and improvement of the overall green network, the Plan recommends access improvements to the UH Urban Garden Center.
- The Plan proposes approximately 4 acres of public open space and 3 acres of semi-public and private open space in the Pearl Highlands station area.



Improvements and public access to the UH Urban Garden Center - before and after illustrations from the perspective of the red arrow are shown on page 78.

FOR ILLUSTRATIVE PURPOSES ONLY



Existing view of Pearl Highlands Center looking west towards the Pearl Highlands rail station



A new Main Street environment is envisioned, helping to keep the Center vital in the future and creating a direct link to the rail station.

D. URBAN FORM

The recommended urban form in the Pearl Highlands station area encourages the plan principle of “Create a Comfortable and Lively Pedestrian Environment.”

A pedestrian-first environment is the intent of a new Main Street concept envisioned within the existing Pearl Highlands Center. By creating a direct connection from the station, a more pedestrian-friendly environment can be created and the Center can benefit from new customers. This concept would help Pearl Highlands Center adapt for the future, when many customers will arrive by rail transit. The Plan focuses on creating a stronger identity for the Center and ensuring a true sense of place.

Other shopping centers and “big box” retail in the area are also encouraged to create stronger connections to transit in order to adapt a suburban auto-oriented environment into an urban pedestrian-oriented community. As new, walkable development in the area emerges, surface parking can be replaced by structured parking and new mixed-use buildings can be constructed along street edges to enhance the pedestrian nature of the station area.

PEARL HIGHLANDS STATION AREA PLAN

- A pedestrian-first environment is illustrated by a new Main Street within the existing Pearl Highlands Center.



The creation of a new Main Street environment within Pearl Highlands Center, including a direct connection to the Pearl Highlands station - before and after illustrations from the perspective of the red arrow are shown on page 80.



FIGURE 25 - Pearl Highlands Station Area - Existing Land Uses



FIGURE 26 - Pearl Highlands Station Area - Proposed Land Uses



E. LAND USE

The proposed land uses described in this section are based on the plan principles and community feedback on draft alternatives. The land uses described below are recommendations, and the TOD zoning developed for the station area will allow a flexible mix of urban uses.

The Plan focuses the most intense high and medium-density development within 1/4 mile of the Pearl Highlands station. Medium and lower-density housing is envisioned further away, mauka of Walmart. Generally, housing densities and building heights should step down as they approach existing single-family neighborhoods. Workforce and senior housing should be incorporated throughout the station area.

The Plan envisions many of the existing and newly-constructed retail establishments in the area to remain for the foreseeable future yet growing and adapting over time. Retail and mixed-use infill development is envisioned along Kamehameha Highway, Kuala Street, and Acacia Road to create a more lively pedestrian environment and provide new jobs and services for area residents.

PEARL HIGHLANDS STATION AREA PLAN

- The Plan focuses the most intense high and medium-density development within 1/4 mile of the Pearl Highlands station.



Retail liner buildings at the sidewalk can help to create an attractive pedestrian edge for larger big box stores



Medium-density housing on smaller infill sites can help to create a vibrant neighborhood.



FIGURE 27 - Pearl Highlands Station Area: Existing Conditions



FIGURE 28 - Pearl Highlands Station Area: Phase 1

F. PROTOTYPICAL PHASING

Appropriate development phasing will maximize the investments in infrastructure and guide development in critical areas while accomplishing the plan principles. Below is a sample phasing program for a prototypical block in the Pearl Highlands station area. The goal of the hypothetical phasing study is not to show a specific design but to illustrate how development can occur in an area over time. While the Pearl Highlands area is used as an example, the phasing strategies described below can be applied to similar blocks throughout Aiea and Pearl City.

EXISTING CONDITIONS

The Existing Conditions diagram at left (Figure 27) shows an existing apartment complex along Acacia Road, previously vacant parcels along Kuala Street (The Plaza at Pearl City assisted living facility has since started construction), and the surface parking lot at the corner of Acacia Road and Kuala Street. These sites offer opportunities for new housing and mixed-use development while creating a public amenity that acts as a gateway and gathering space for the community.

PHASE I

Phase 1 (Figure 28) begins with the construction and opening of the rail transit station. The Pearl Highlands station will be a major intermodal facility and will have an automobile off-ramp from the H-2 freeway. The station will sit in a small valley, separated from the station area by high-speed roadways. Therefore, an elevated pedestrian bridge is proposed to help connect to the mauka side of Kamehameha Highway. This bridge could touch down at the northwestern corner of Pearl Highlands Center. During Phase 1, a new pedestrian pathway could also be created to help connect the existing multifamily housing mauka of Kuala Street to the new rail station.

PEARL HIGHLANDS STATION AREA PLAN

- The goal of the phasing study is not to show specific design, but to illustrate how development can occur in an area over time.



Previously vacant lot along Kuala Street mauka of Pearl Highlands Center (now the site of The Plaza at Pearl City assisted living facility)



Triangle lot at the corner of Kuala Street and Acacia Road



FIGURE 29 - Pearl Highlands Station Area: Phase 2



FIGURE 30 - Pearl Highlands Station Area: Phase 3

PHASE 2

Phase 2 (Figure 29) illustrates infill of the previously vacant parcels with higher-density housing and mixed-use development. A new residential tower is envisioned adjacent to the existing twin towers. The new tower could step down from the existing 400' towers at approximately 250'. A second building could include a parking structure to accommodate the parking needs for both buildings. Access could be provided by a new street, which is proposed in the following phase to connect to Acacia Road. To provide access to natural spaces for residents, the existing drainage canal should be restored to its natural state and enhanced with a pedestrian pathway. Also during Phase 2, Kuala Street streetscape upgrades should be incorporated to create a safer and more attractive pedestrian experience near the Pearl Highlands station. Phase 2 should also include improved pedestrian crossings of Kuala Street.

PHASE 3

Phase 3 (Figure 30) could entail redevelopment of the existing apartment complex on Acacia Road. The units could be replaced with higher-density development, creating more housing for area residents. Using lower parking standards than typical development due to direct transit access, Phase 3 would include a parking structure to accommodate the parking needs for the two additional buildings. The new street that bisects the property could be completed in this phase to connect Kuala Street and Acacia Road. Also in Phase 3, a new triangle park could provide a gathering space for area residents.



Pedestrian walkways should help to connect residents to area amenities.



Higher-density housing should include new public open spaces.

- TOD PRECINCT
- TIZ PRECINCT

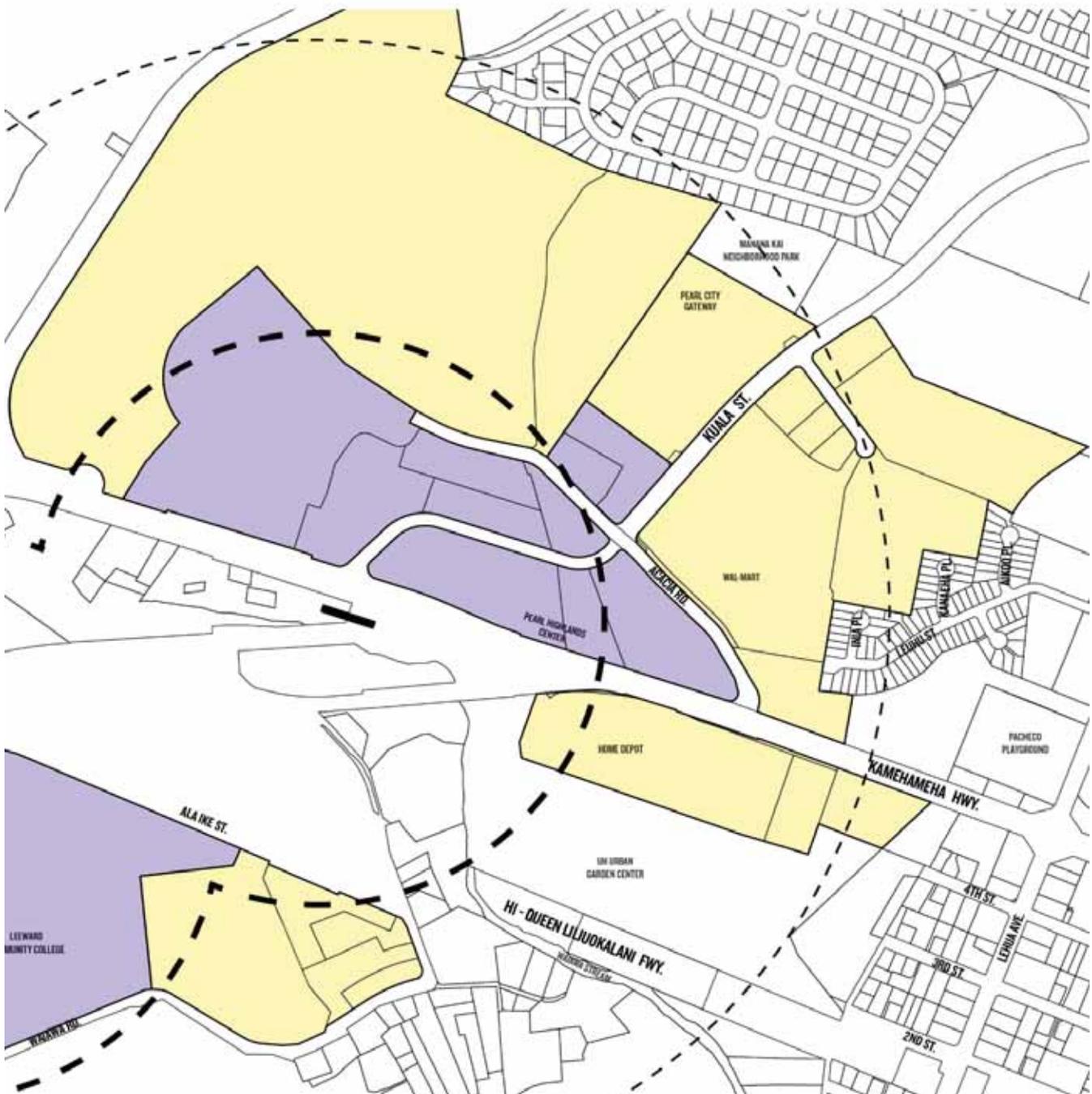


FIGURE 31 - Pearl Highlands Station Area - Recommended TOD Special District



G. DISTRICT BOUNDARIES

The Plan recommends a TOD Special District intended to ensure the community vision for the station area through zoning standards that enable and promote transit-oriented development. Figure 31 illustrates the recommended boundaries of the TOD Special District for the Pearl Highlands station area. Recommended zoning standards for each station area are described in the Implementation Recommendations chapter.

The recommended Special District boundaries around the Pearl Highlands station take into account distance from the transit station, natural topographic and man-made barriers, extent of market interest in development, planned land uses, and the overall benefits of TOD, including the potential to increase transit ridership.

The TOD, or transit-oriented development, Precinct is generally within 1/4 mile of the Pearl Highlands station and includes the areas with the greatest development potential. These areas will likely be redeveloped in the near (0-10 years) to mid-term (10-20 years) and should include larger buildings and higher intensity mixed-use environments.

The TIZ, or transit-influence zone, Precinct is located beyond the TOD core, between 1/4 mile to 1/2 mile from the Pearl Highlands station. The TIZ Precinct should be less intense by nature, generally stepping down from the higher-density TOD Precinct. Properties within the TIZ Precinct are more likely to develop in the long-term (20-30 years) and should be compatible with the existing lower-density residential neighborhoods on the periphery.

PEARL HIGHLANDS STATION AREA PLAN

- Special District boundaries take into account distance from the station, natural and man-made barriers, market interest, and planned land uses.
- The TOD Precinct is generally within 1/4 mile of the Pearl Highlands station.
- The TIZ Precinct is generally located between 1/4 and 1/2 mile from the Pearl Highlands station.



The TOD Precinct includes the immediate station area.



The TIZ Precinct includes more outlying areas, including properties makai of Kamehameha Highway.

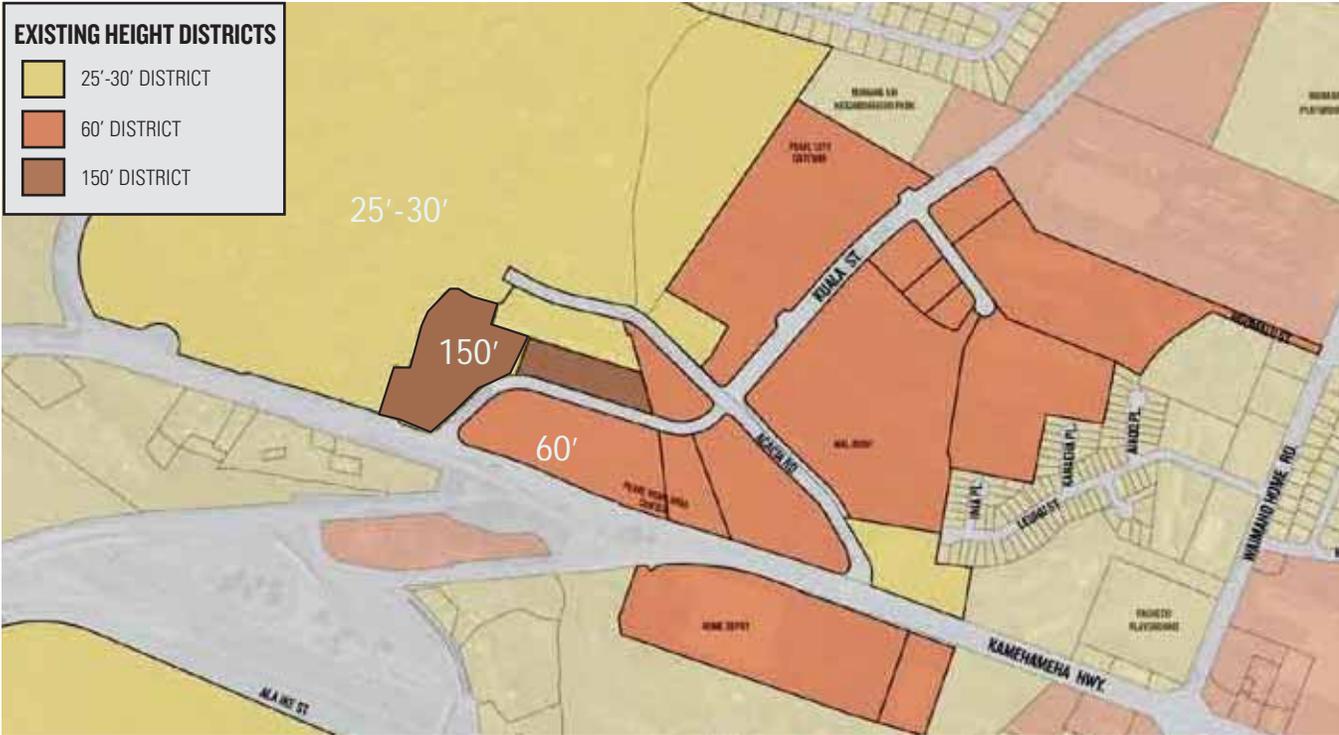


FIGURE 32 - Pearl Highlands Station Area - Existing Allowable Heights

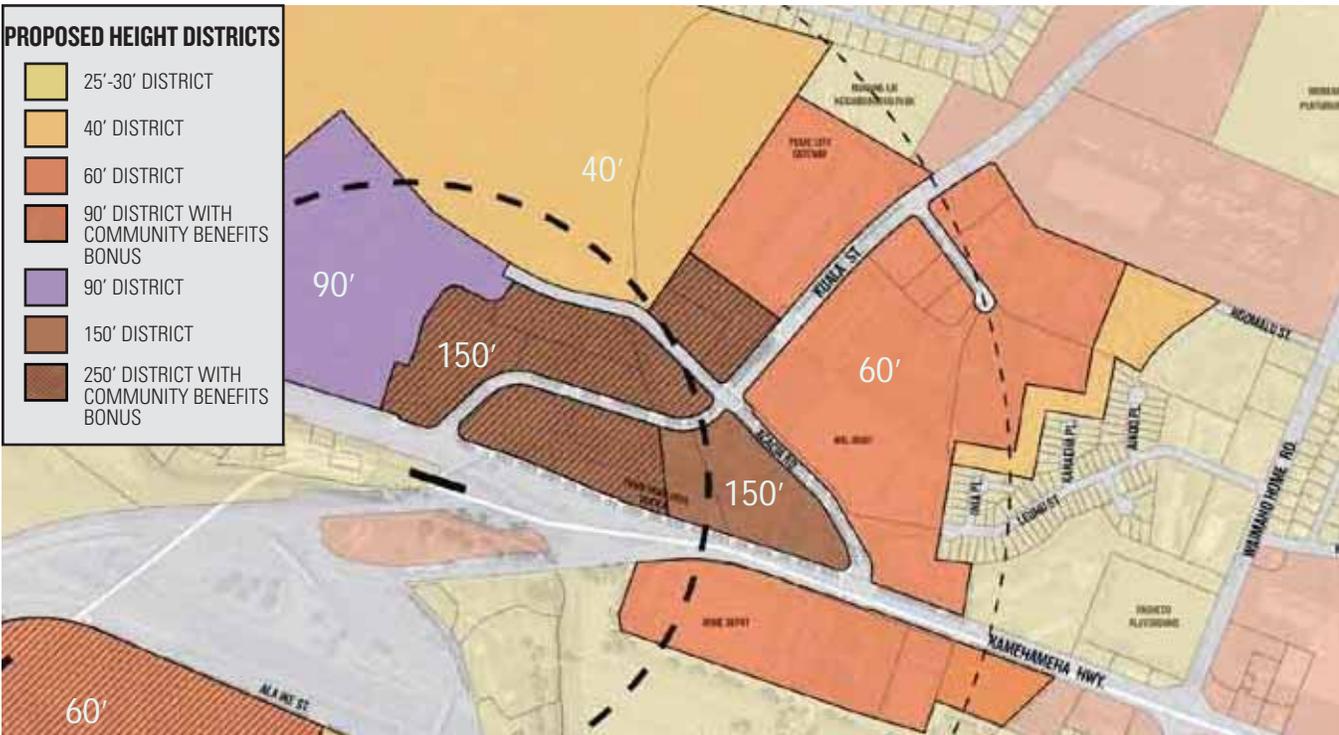


FIGURE 33 - Pearl Highlands Station Area - Proposed Allowable Heights



PEARL HIGHLANDS STATION AREA PLAN

- The Plan recommends base height limits of 40', 60', 90', and 150' within the planning area.

2. EXISTING ALLOWABLE HEIGHTS

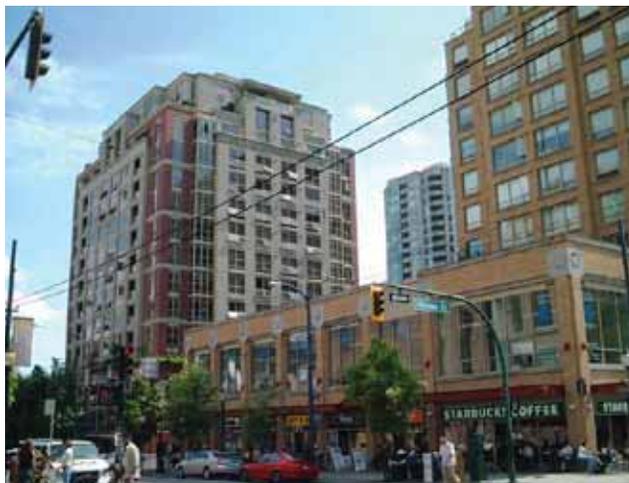
There are currently three height limit zones surrounding the Pearl Highlands station: a height limit of 60' for the majority of the area, a height limit of 150' mauka of Pearl Highlands Center, and a height limit of 25'-30' for the existing residential areas diamond head and ewa of the core station area. Adjacent to Pearl Highlands Center are two residential high-rises of approximately 400' (40 stories). These buildings greatly exceed both the existing and proposed allowable heights.

3. PROPOSED ALLOWABLE HEIGHTS

New buildings in the station area should generally be taller near the station and step down in height further from the station. Stations should serve as focal points and hubs for more intense development.

The Plan recommends that the 150' height limit zone be expanded to include Pearl Highlands Center and areas mauka of Kuala Street in order to incentivize transit-oriented development. Also envisioned is a 90' height limit in areas immediately north of the station. The surrounding housing area should have a height limit of 40' while areas mauka of Acacia Street along the Kuala Street corridor should have a maximum height limit of 60', stepping down to 40' diamond head of Walmart.

The hatched areas on Figure 33 are recommended for higher allowable heights in exchange for community benefits, as described in Chapter IX: Implementation Recommendations.



Taller buildings may be appropriate within the TOD Precinct.



Areas mauka of Walmart are generally proposed to have a height limit of 60'.





PEARLRIDGE STATION AREA PLAN





FIGURE 34 - Pearridge Station Area Illustrative Plan



A. OVERALL STRUCTURE

The Pearlridge station is located at the intersection of Kamehameha Highway and Kaonohi Street in Aiea. The nearby Pearlridge Center is the second largest mall in Hawaii and a major economic driver for this area. The Plan envisions the Pearlridge station area as a major urban center and regional shopping destination.

Central to the Plan's recommendations is improvement to the pedestrian and bicycle experience on Kaonohi Street, a key mauka–makai connection between the transit station, Pearlridge Center, and existing higher-density upland neighborhoods.

In addition to public improvements, the Plan identifies a major opportunity site at the previous Kamehameha Drive-In at the intersection of Kaonohi Street and Moanalua Road. This site has the potential to reposition regional shopping opportunities in the neighborhood while also providing much needed housing in the Pearlridge area.

A major goal of the Plan is to “Develop New and Enhance Existing Open Space” in this station area. Two primary open spaces identified for enhancement include Sumida Farm and its immediate environs and the Pearl Harbor shoreline, including the existing Pearl Harbor Historic Trail connected to a new transit plaza. Blending new development with quality public space will create a truly unique and livable urban center.

Pearlridge Program (Existing)

- Total Site Area: 180 Acres
- Total Residential: 460 Units
- Total Commercial: 2,900,000 SF (retail/office/industrial)

Pearlridge Program (TOD Plan)

- Total Residential: 3,900 Units
- Total Commercial: 2,990,000 SF (retail/office/industrial)

PEARLRIDGE STATION AREA PLAN

- The Plan envisions the Pearlridge station area as a major urban center and regional shopping destination.



The Plan envisions new development and a pedestrian pathway overlooking Sumida Farm.

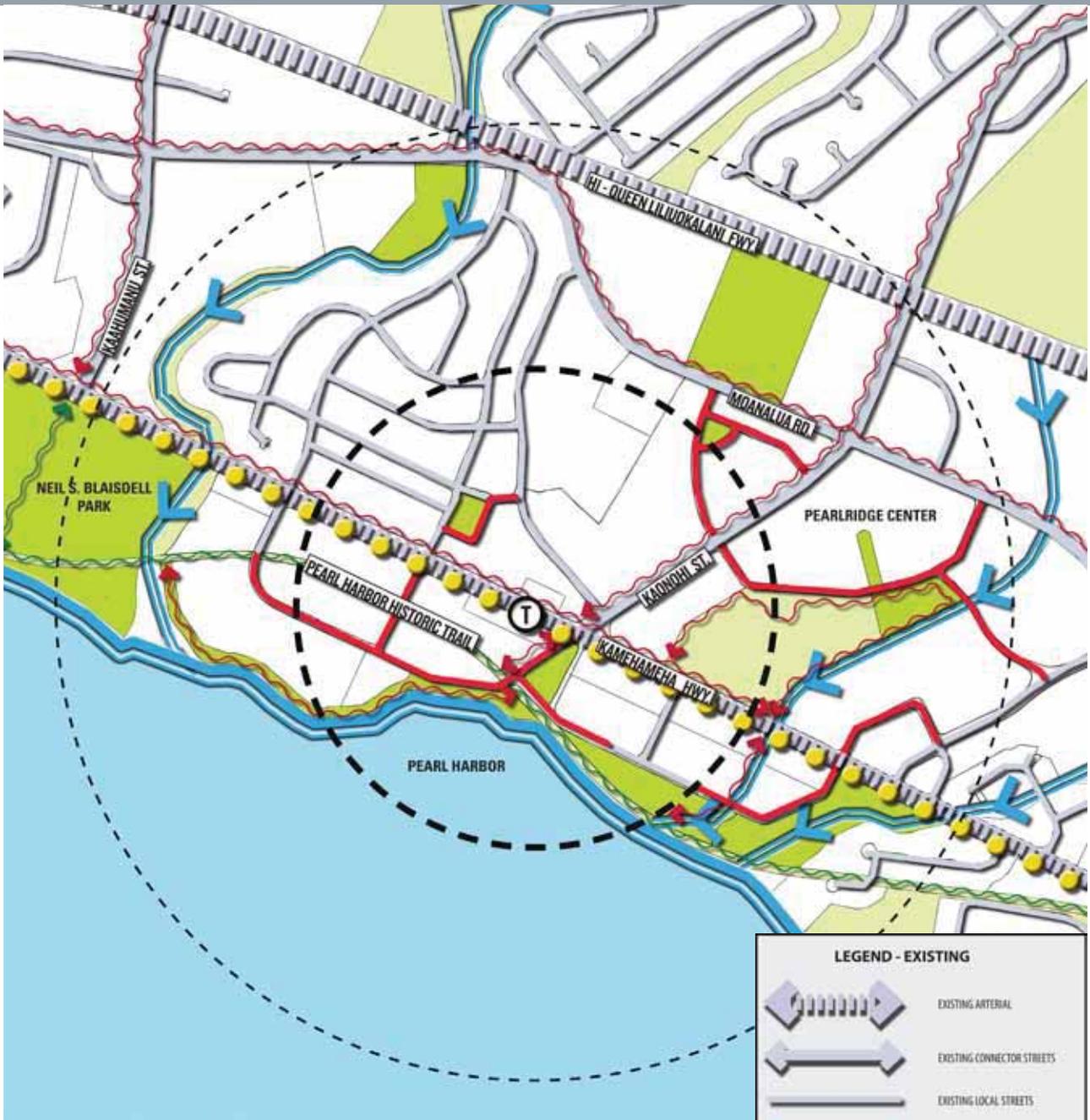
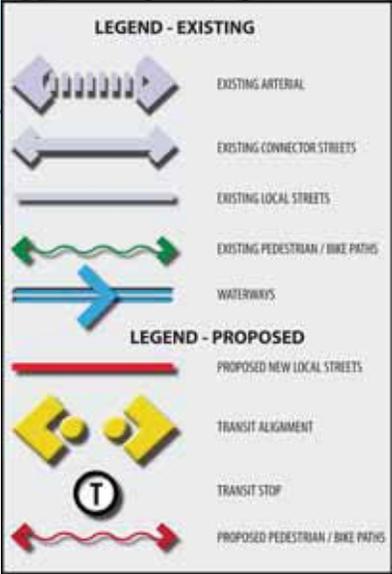


FIGURE 35 - Pearlridge Station Area Circulation Diagram



B. CONNECTIVITY & CIRCULATION

A primary principle of the Plan is to “Provide Multimodal Access to and from Stations.” The City envisions that the Pearlridge rail station will experience heavy pedestrian-based ridership. Streetscape improvements, including wider sidewalks, street trees, crosswalks and seating areas along Kaonohi Street and Kamehameha Highway, are essential to creating safe and convenient connections to area jobs, shopping, and residences.

The Plan also recommends a bus transit facility makai of the station. This facility will provide easy connections between rail and local buses, improving access to surrounding residential neighborhoods. A pedestrian and bicycle path should connect through the bus facility directly to the Pearl Harbor Historic Trail, and mixed-use development above the facility should be explored.

Other bicycle facility improvements are also recommended throughout the area. A dedicated bicycle lane is proposed along Kaonohi Street to provide a safe biking experience from mauka neighborhoods to the station. The Pearl Harbor Historic Trail should be improved to create a more attractive environment for pedestrians and bicyclists along the shoreline and to re-affirm the trail as a “special place” and regional amenity. Maintenance is especially important in ensuring that the trail remains clean and safe, helping to draw new users and encouraging healthy activity for neighborhood families.

New streets are recommended in tandem with redevelopment in the station area. One of the most important of these is a new Main Street connecting from Moanalua Road and the Pearl Ridge Elementary School, through the old Kamehameha Drive-In site, across Kaonohi Street, and through the Pearlridge Center parking lot back to Moanalua Road. This Main Street has the potential to provide a strong identity for transit-oriented development, as well as a pedestrian-friendly connection through the neighborhood.

It is recommended that a strong connection also be provided from the station to the Pali Momi Medical Center, including a shuttle service for seniors and the disabled.

PEARLRIDGE STATION AREA PLAN

- ▣ Streetscape improvements, including wider sidewalks, bicycle lanes, street trees, crosswalks and seating areas, along Kaonohi Street and Kamehameha Highway are essential to creating safe and convenient connections to area jobs, shopping, and residences.



Sidewalk and streetscape improvements can help to create a more attractive pedestrian environment.



Strengthening connections to the Pearl Harbor Historic Trail is a key element of the Plan.

FOR ILLUSTRATIVE PURPOSES ONLY



Existing view of Pearl Harbor Historic Trail, showing limited and unattractive access from adjacent housing



Improvements to the trail, as well as adjacent properties, could create a valuable waterfront gathering place.

C. PARKS & OPEN SPACE

Central to the community’s vision for the Pearlridge station area is the principle of “Creating Access and Views to Water and the Pearl Harbor Historic Trail.” It is the intent of the Plan to ensure public access and open space opportunities along the Pearl Harbor shoreline, helping to re-establish the Pearlridge area as a waterfront neighborhood.

The Plan envisions a new community open space at the terminus of Kaonohi Street—a “window to Pearl Harbor.” Over time, as redevelopment occurs in the surrounding area, this view corridor should be created and protected to ensure a direct visual and physical connection with the heart of the Pearlridge area.

Station area open space opportunities should be enhanced by creating a pedestrian pathway around the existing Sumida Farm. The watercress farm is valued by the community as a cultural resource that should be recognized. New development in the Pearlridge Center area is encouraged to provide an attractive edge along the farm with outdoor seating areas and windows to overlook this important amenity. Improving visual access to the Farm will foster neighborhood identity while providing an important awareness of current agriculture practices and the area’s heritage.

In addition to these primary open spaces, new neighborhood mini-parks are proposed mauka of the station to serve as community gathering places and small recreation areas. The intent of the illustrative Plan is to show generally where new parks are recommended to be incorporated into future development, not necessarily specific locations or designs. The Plan also envisions two new transit plazas, one on each side of Kamehameha Highway. The transit plazas should be designed as active spaces which will act as community gateways from the rail station.

Park dedication and publicly accessible open space requirements should be contingent on specific development proposals within the station area.

PEARLRIDGE STATION AREA PLAN

- It is the intent of the Plan to ensure public access and open space opportunities along the Pearl Harbor shoreline, helping to re-establish the Pearlridge area as a waterfront neighborhood.
- The Plan proposes approximately 15 acres of public open space (includes transit plaza/excludes Sumida Farm) and 10 acres of semi-public and private open space in the Pearlridge station area.



Pearl Harbor Historic Trail improvements and a new waterfront open space will help to connect the Pearlridge area to the waterfront - before and after illustrations from the perspective of the red arrow are shown on page 98.

FOR ILLUSTRATIVE PURPOSES ONLY



Existing view of Kaonohi Street looking towards Kamehameha Highway, showing surface parking along the sidewalk and a lack of bicycle facilities



Proposed Kaonohi Street improvements would create an attractive bicycle and pedestrian environment, including new mixed-use development that activates the sidewalk.

D. URBAN FORM

The intent of the recommended urban form for the Pearlridge station area is to encourage the plan principle of “Create a Comfortable and Lively Pedestrian Environment.” The Plan focuses on creating a stronger identity for the neighborhood and a true sense of place. By integrating this concept directly with transit, the area can gain vitality in the future, growing transit ridership, and establishing a pedestrian lifestyle.

Consistent with this vision, new development in the station area should be oriented directly to the sidewalk, placing parking to the rear or in wrapped parking structures. Buildings that abut Sumida Farm should be oriented to look out over it with lanais, cafe seating and large windows.

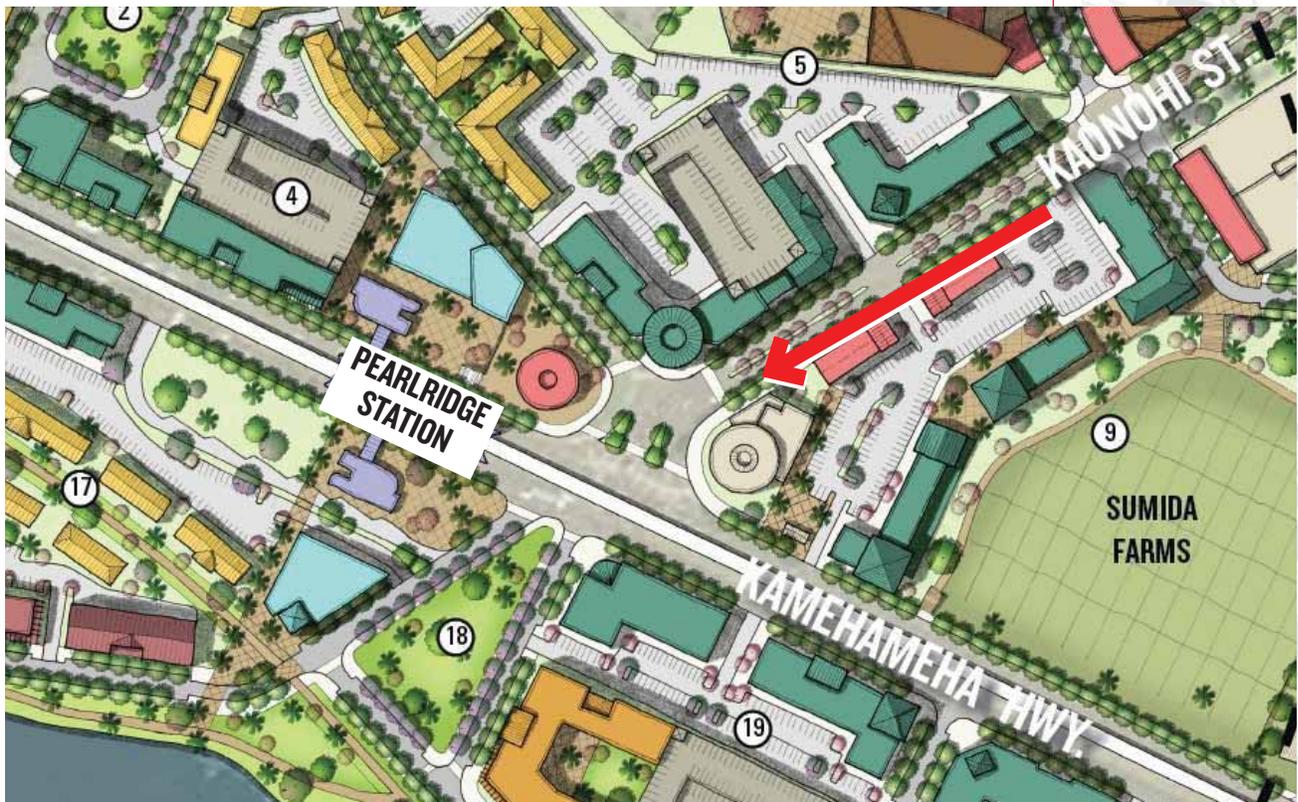
New development at the catalytic Kamehameha Drive-In site should be mixed-use in nature, with internal connections, as well as attractive edges that integrate the development into the surrounding neighborhood.

The existing Pearlridge Center should be re-oriented from a traditional shopping mall to a more urban, outwardly-focused mixed-use destination. Anchor stores can remain vital while secondary areas are redesigned to create a town center atmosphere.

Also central to the Plan’s vision is a signature building adjacent to the station and a new waterfront neighborhood along Pearl Harbor. By revitalizing existing buildings and encouraging new development, workforce housing can be created that embraces the existing Pearl Harbor Historic Trail and future park space along the shore.

PEARLRIDGE STATION AREA PLAN

- The Plan focuses on creating a stronger identity for the Pearlridge neighborhood and a true sense of place.



Before and after illustrations of Kaunohi Street improvements, looking towards Pearl Harbor and the Pearlridge station, are shown on page 100.



FIGURE 36 - Pearlridge Station Area - Existing Land Uses



FIGURE 37 - Pearlridge Station Area - Proposed Land Uses



E. LAND USE

The intent of the Plan is to encourage a mixed-use regional center surrounding the Pearlridge station. Existing properties are typically single-use in nature with retail and commercial uses along Kamehameha Highway and Kaonohi Street and residential uses in the surrounding neighborhoods.

The Plan envisions mixed-use development along Kaonohi Street and Kamehameha Highway. Immediately adjacent to the station, new civic uses could help to emphasize the area as a major destination for the region.

The Pearl Harbor shoreline is envisioned with medium-density housing and mixed-use residential development.

Pearlridge Center should remain the anchor for a vital retail district, enhanced by new shopping opportunities across Kaonohi Street at the Kamehameha Drive-In site. High-density housing is also envisioned for the Drive-In site. By providing additional residences in this area, workforce housing options will increase, transit ridership will improve, and nearby retail stores and restaurants will have a stronger customer base.

Areas adjacent to Moanalua Loop could also be redeveloped in the future with lower density residential uses, helping to transition to adjacent single-family neighborhoods.

New residences will also increase the number of school-age children in the community and may require new schools or the expansion of existing facilities. Schools should be centrally located and connect to surrounding neighborhoods with safe walking and biking routes.

PEARLRIDGE STATION AREA PLAN

- The intent of the Plan is to create a mixed-use regional center surrounding the Pearlridge station.



Retail uses should be oriented to the sidewalk.



Housing can be integrated with new commercial development in the Pearlridge station area.



FIGURE 38 - Pearlridge Station Area: Existing Conditions



FIGURE 39 - Pearlridge Station Area: Phase 1

F. PROTOTYPICAL PHASING

Appropriate development phasing will maximize investments in infrastructure and guide development in critical areas while accomplishing the plan principles. Below is a sample phasing program for a prototypical block in the PearlrIDGE station area. The goal of the hypothetical phasing study is not to show a specific design but to illustrate how development can occur in an area over time. While the PearlrIDGE area is used as an example, the phasing strategies described below can be applied to similar blocks throughout Aiea and Pearl City.

EXISTING CONDITIONS

The Existing Conditions diagram at left (Figure 38) shows the existing PearlrIDGE Center mauka of Kamehameha Highway. The shopping center currently surrounds Sumida Farm and includes both surface and structured parking. A monorail system connects the Uptown and Downtown portions of the Center. Kaonohi Street provides the primary access to the Center from the station and is currently auto-oriented in design.

PHASE I

Phase I (Figure 39) shows the introduction of the PearlrIDGE rail transit station into the neighborhood. The station, which will be located in the median of Kamehameha Highway, will include elevated walkways touching down on both the mauka and makai sides of the highway. The initial phase will also include a bus transfer facility adjacent to the makai rail station, with potential for housing or mixed-use development above it, and an expanded transit plaza that connects to the Pearl Harbor Historic Trail. In order to provide safer and more attractive access to the station from surrounding retail and residential uses, it is recommended that Kaonohi be redesigned in the short term (1-5 years) to be a complete street that accommodates pedestrians, bicyclists, buses and autos while maintaining access to PearlrIDGE Center. Another key short-term improvement is a new intersection at the existing driveway for PearlrIDGE Center on Kaonohi Street. This intersection would allow the Main Street to connect through the Center and the Kamehameha Drive-In site in future phases.

PEARLRIDGE STATION AREA PLAN

- The goal of the phasing study is not to show specific design, but to illustrate how development can occur in an area over time.



Kaonohi Street currently lacks pedestrian amenities such as wide sidewalks, lighting, and seating areas.



Sumida Farm is a tremendous open space asset to the PearlrIDGE area.



FIGURE 40 - Pearlridge Station Area: Phase 2



FIGURE 41 - Pearlridge Station Area: Phase 3

PEARLRIDGE STATION AREA PLAN

PHASE 2

Phase 2 (Figure 40) incorporates new mixed-use development in the area closest to the station, adjacent to the existing Anna Miller's restaurant. This infill development would create an attractive pedestrian-focused environment for transit riders to explore and add shopping, dining, and living opportunities in the station area. Along with new development, Phase 2 also envisions a new multi-use trail overlooking Sumida Farm. This trail would reinforce the Farm as an important neighborhood resource, while also providing an off-street pedestrian and bicycle route between Pearlridge Center and the station. The final element of Phase 2 is infrastructure for the Main Street between Uptown Pearlridge Center and Sumida Farm. It is recommended that the current parking lot drive be upgraded to street standards in order to create a physical framework for future infill development surrounding the Center.

PHASE 3

Phase 3 (Figure 41) envisions additional infill development along the newly-created Main Street. Commercial mixed-use development could be introduced into existing surface parking areas to create a town center character for Pearlridge Center. Currently, most buildings in the area turn their backs to Sumida Farm. A key element of new development in the area should be orientation of buildings to look out over Sumida Farm and the proposed multi-use trail. Lanais, cafe seating and large windows should provide views of the Farm, the elevated rail, and Pearl Harbor. This recommendation is consistent with the plan principle of "Creating Access and Views to Water and the Pearl Harbor Historic Trail."



New retail uses would help preserve the Pearlridge area as a major regional shopping destination.



Housing above retail shops can help to create a more active mixed-use environment.



FIGURE 42 - Pearlridge Station Area: Phase 4

PEARLRIDGE STATION AREA PLAN

PHASE 4

Phase 4 (Figure 42) envisions the completion of Main Street to Moanalua Road, creating a new street connection from the existing higher-density residential areas through Pearlridge Center to lower Kaonohi Street and the rail station. Phase 4 could include additional infill development at the Moanalua Road entrance to the Main Street, including a new parking structure. Additional development is also encouraged along Moanalua Road, mirroring the existing residential uses across the street, and at the important corner of Kaonohi Street and Moanalua Road to create a front door to Pearlridge Center. These prototypical phases illustrate the transformation of an auto-oriented environment into a pedestrian-oriented place that competes economically with other regional shopping areas and provides neighborhood amenities that benefit local residents and workers.



Retail liner buildings can be developed on existing surface parking areas surrounding Pearlridge Center.



Safe crossings would allow pedestrians to easily move across Kaonohi Street.

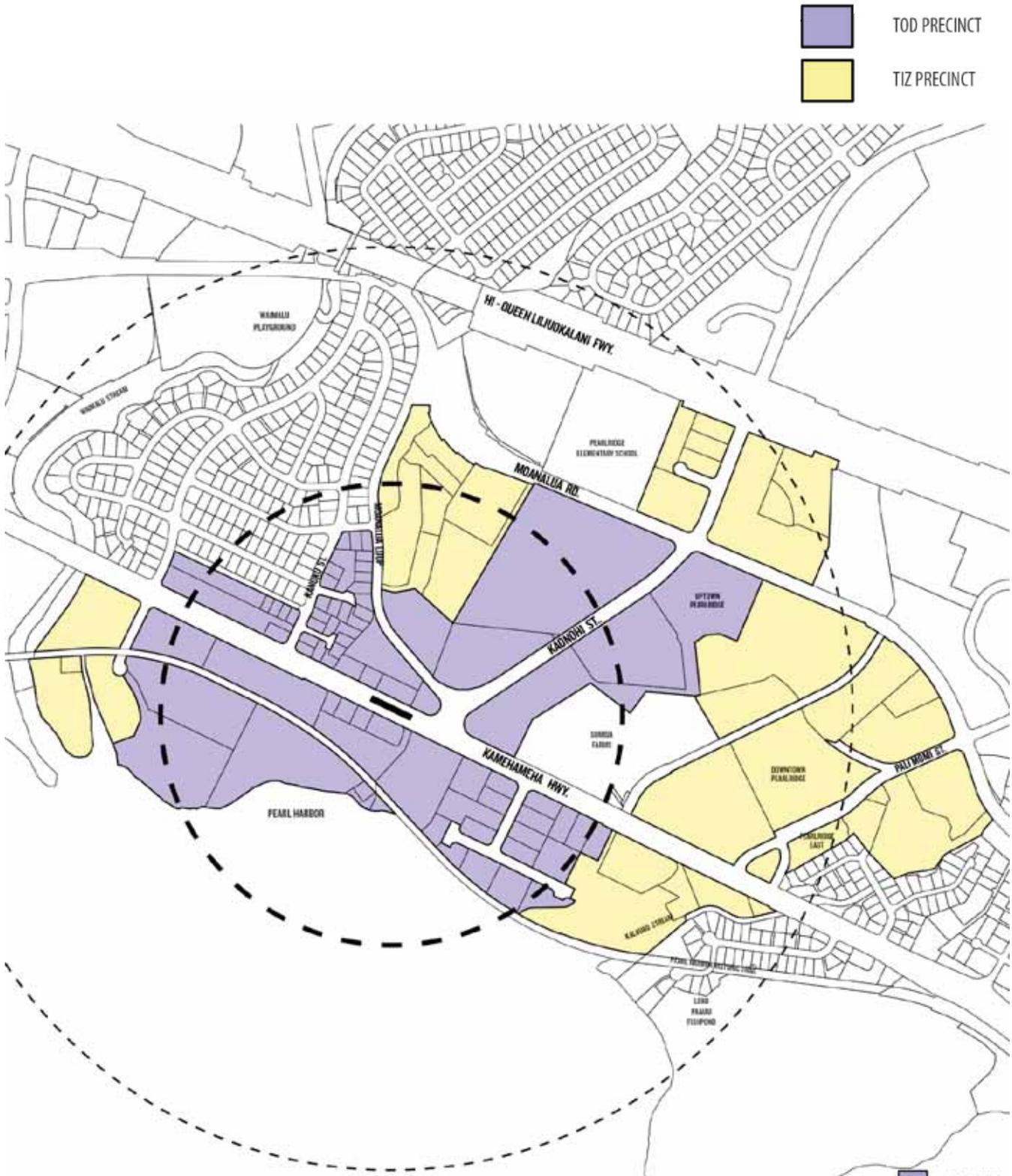


FIGURE 43 - Pearlridge Station Area - Recommended TOD Special District

G. DISTRICT BOUNDARIES

The Plan recommends a TOD Special District intended to ensure the community vision for the station area through zoning standards that enable and promote transit-oriented development. Figure 43 illustrates the recommended boundaries of the TOD Special District for the Pearlridge station area. Recommended zoning standards for each station area are described in the Implementation Recommendations chapter.

The recommended Special District boundaries around the Pearlridge station take into account distance from the transit station, natural topographic and man-made barriers, extent of market interest in development, planned land uses, and the overall benefits of TOD, including the potential to increase transit ridership.

The TOD, or transit-oriented development, Precinct is generally within 1/4 mile of the Pearlridge station and includes the areas with the greatest development potential. These areas will likely be redeveloped in the near (0-10 years) to mid-term (10-20 years) and should include larger buildings and higher intensity mixed-use environments.

The TIZ, or transit-influence zone, Precinct is located beyond the TOD core, between 1/4 mile to 1/2 mile from the Pearlridge station. The TIZ Precinct should be less intense by nature, generally stepping down from the higher-density TOD Precinct. Properties within the TIZ Precinct are more likely to develop in the long-term (20-30 years) and should be compatible with existing lower-density residential neighborhoods on the periphery.

PEARLRIDGE STATION AREA PLAN

- Special District boundaries take into account distance from the station, natural and man-made barriers, market interest, and planned land uses.
- The TOD Precinct is generally within 1/4 mile of the Pearlridge station.
- The TIZ Precinct is generally located between 1/4 and 1/2 mile from the Pearlridge station.



Kaonoʻhi Street is within the core of the TOD Precinct.



Areas makai of Kamehameha Highway are also within the TOD Precinct.



FIGURE 44 - Pearlridge Station Area - Existing Allowable Heights



FIGURE 45 - Pearlridge Station Area - Proposed Allowable Heights



2. EXISTING ALLOWABLE HEIGHTS

Currently, the areas closest to the Pearlridge station primarily have a height limit of 60'. Properties on the makai side of Moanalua Loop have a height limit of 150', as do areas mauka of Moanalua Road near Kaonohi Street. A small portion of the neighborhood adjacent to the Pearl Harbor Historic Trail, the area ewa of Kamehameha Drive-In, and a parcel mauka of Sumida Farm currently have height limits of 25'-30'.

3. PROPOSED ALLOWABLE HEIGHTS

In order to promote transit-oriented development within the station area, particularly along Kaonohi Street, height limits of 150' are recommended. Stepping down to Pearl Harbor, the Plan recommends a base height limit of 60' makai of Kamehameha Highway.

In order to transition from the existing residential towers mauka of Moanalua Road, on the diamond head side of Pearlridge Center, the Plan recommends a base height limit of 90' on the makai side of the road, stepping down to 40' and 60' closer to Kamehameha Highway.

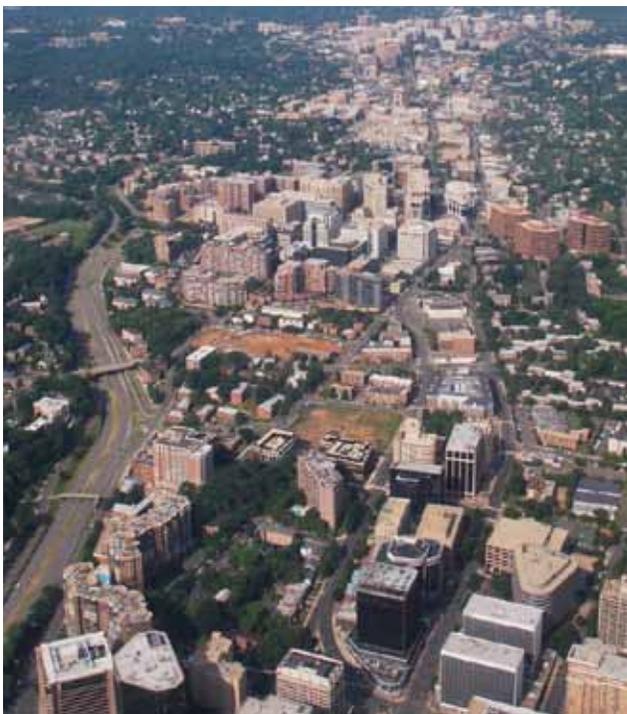
A portion of the residential area that currently has a 150' height limit along Moanalua Loop is envisioned for lower density development with a height limit of 60' in order to gradually step down to the adjacent single-family homes.

The property near the intersection of Moanalua Road and Moanalua Loop is generally within a five to ten minute walk of the rail transit station and has a recommended height limit of 60'.

The hatched areas on Figure 45 are recommended for higher allowable heights with a community benefits bonus, as described in Chapter IX: Implementation Recommendations.

PEARLRIDGE STATION AREA PLAN

- The Plan recommends base height limits of 40', 60', 90', and 150' within the planning area.



Taller buildings and higher density development, as shown here outside of Washington, DC, should be clustered around transit stations.



Buildings should step down in height away from the station to be compatible with the surrounding single-family neighborhoods.



IMPLEMENTATION RECOMMENDATIONS



IMPLEMENTATION RECOMMENDATIONS

- The TOD Special District is intended to ensure the community vision for the station areas through zoning standards that enable and promote transit-oriented development.
- Land uses are proposed to be similar to those set forth under the existing BMX-3 Community Business Mixed Use zoning district.

A. TOD SPECIAL DISTRICT

The Plan recommends a TOD Special District intended to ensure the community vision for the station areas through zoning standards that enable and promote transit-oriented development.

I. APPLICABILITY

Special District regulations would be mandatory, not optional. The proposed TOD Special District regulations may supplement or modify the underlying zoning district regulations in the Land Use Ordinance (LUO). If any TOD Special District regulation conflicts with any provision contained in Article 3 of the LUO (Establishment of Zoning Districts and Zoning District Regulations), the more restrictive regulation takes precedence. A property owner must follow the provisions of the TOD Special District in order to develop property. In doing so, the property may be subject to different permitted and conditional uses and modified densities, building heights, yard, and parking requirements. Increased entitlements, such as higher building heights, could be granted in exchange for providing community benefits or meeting additional design-related criteria. All applications would be subject to design review.

2. DISTRICT BOUNDARIES

The recommended Special District boundaries around each rail station take into account distance from the transit station, natural topographic barriers, extent of market interest in development, planned land uses, and the overall benefits of TOD, including the potential to increase transit ridership.

The TOD, or transit-oriented development, Precincts are generally within 1/4 mile of the stations—areas with greater development potential. These areas will likely be developed sooner and should include larger building forms and higher-intensity mixed-use, employment, and residential options.

The TIZ, or transit-influenced zone, Precincts are located beyond the TOD core, between 1/4 mile and 1/2 mile from the stations, and should be less intense in character. Properties within the TIZ Precincts will most likely redevelop over a longer time frame and should include smaller buildings that step down to meet surrounding lower-density neighborhoods.

For specific TOD and TIZ boundaries, please see Section G for each station area.

3. LAND USES

The station areas should contain a mix of complementary uses. Complementary land uses are those that offer goods and services at different times of the day and week and provide a consolidated one-stop area for people to live, work, shop, and participate in entertainment and community activities in close proximity to one another. Complementary land uses located in a neighborhood designed to accommodate pedestrians, bicycles, buses and trains reduce dependence on the automobile and, thereby, the need for standard provisions of parking. This is consistent with the principle of “Create a Comfortable and Lively Pedestrian Environment” in the core station areas. These uses can be mixed horizontally within a neighborhood or block and/or vertically in multistory buildings.

Within the TOD Special District, uses are proposed to be similar to those set forth under the City's existing BMX-3 Community Business Mixed Use zoning district. However, the exclusion of auto-oriented uses should be considered, including automobile service stations, automobile sales, drive-thru facilities, and self-storage facilities. The TOD regulations would not eliminate the requirement for discretionary permit approval, including Plan Review Use (PRU) approval for certain uses such as for colleges and universities, as specified in the LUO.

4. DENSITY & FLOOR AREA RATIO

According to the Primary Urban Center Development Plan, areas close to transit lines and the major east-west arterials should be zoned for medium-density residential, which may range from 13 to 90 units per acre, or high-density residential mixed use, which may go up to 140 units per acre. Neighborhoods in these zones should also include uses which support resident lifestyle choices, such as convenience or neighborhood stores, dining establishments, professional and/or business services, and other similar activities.

- Current underlying zoning does not specify FAR limits (floor area ratios, which limit development density) in the Leeward Community College TOD Special District. It does, however specify a maximum building area of 10 percent of the lot. The low coverage standard is due to its current AG-1 (Agricultural, Restricted) zoning designation. Overall intensities proposed in the Plan far exceed this current standard.
- Current underlying zoning specifies FAR limits in the Pearl Highlands TOD Special District in I-2 (Industrial, Intensive) zones (2.5 FAR). A maximum building area of 50 percent of the lot is specified in R-5 (Residential) zones. Overall intensities proposed in the Plan exceed the current R-5 standard.
- Current underlying zoning FAR limits in the Pearlridge TOD Special District are specified in I-2 zones (2.5 FAR), B-2 (Business, Community) zones (2.5 FAR, up to 3.5 with open space bonus), and AMX-3 (Apartment, Mixed-use, High-density) zones (0.6-2.8 FAR). Overall intensities proposed in the Plan generally fit within these current standards.

It is recommended that a **maximum FAR of 2.5, or up to 3.5 with a community benefits bonus** (as described in Section 9 - Community Benefits Bonus), be applied to all areas within the TOD Precincts.

It is recommended that a **maximum FAR of 1.0, or up to 1.5 with a community benefits bonus**, be applied to all areas within the TIZ Precincts.

Allowing a higher FAR in the station areas helps to promote the plan principle of "Encourage Workforce Housing" in the station areas. The intent of the Special District FAR regulation is to focus more intense development in the TOD Precincts and less intensity in the TIZ Precincts. Greater allowable FAR should be considered as a community benefits bonus, as described in Section 9 - Community Benefits Bonus.

IMPLEMENTATION RECOMMENDATIONS

- According to the Primary Urban Center Development Plan, areas close to transit lines and the major east-west arterials should be zoned for medium and high-density development.

IMPLEMENTATION RECOMMENDATIONS

- New buildings in the station areas should generally be taller near the station and step down in height farther away.

5. MAXIMUM BUILDING AREA

Transit-oriented development is most efficient when buildings optimize lot coverage in order to create active, urban street edges and opportunities for structured parking. Buildings set far back from the street within large open spaces or surface parking lots should be avoided. With this in mind, it is recommended that the maximum building area (coverage) standard not be regulated for the TOD Special Districts. This is consistent with the standard for the B-1 (Business, Neighborhood), B-2, BMX-3, and BMX-4 (Business, Mixed-use, Central) zones.

6. MAXIMUM BUILDING HEIGHTS

New buildings in the station areas should generally be taller near the stations and step down in height farther away. Stations should serve as focal points and hubs for more intense development.

According to the Primary Urban Center Development Plan, allowable building heights should be based on view plane studies to preserve views of natural landmarks. Otherwise, the maximum building height for districts zoned low-density apartment should be approximately four stories, or 40 feet. For areas zoned medium-density apartment, the maximum desired building height should be either 60 feet, or the present height of the building occupying the lot. The Neighborhood TOD Plan generally incorporates these standards, with the addition of allowing additional height close to rail transit stations.

Greater allowable heights may be considered in exchange for community benefits, as described in Section 9 - Community Benefits Bonus. For specific height recommendations, please see Section G for each station area.

7. YARDS

Yards should foster an attractive environment while relating directly to the principle of “Create a Comfortable and Lively Pedestrian Environment.” The recommended yard standards proposed below for the Aiea–Pearl City station areas are generally consistent with existing standards set forth in the BMX-3 Community Business Mixed Use district.

- Front yards in the station areas should foster a strong pedestrian-oriented character.
- New buildings should generally maintain a frontage with the building face adjacent and parallel to the front yard and should address or open directly on to the sidewalk. Small variations in yards should be used to create small open spaces, delineate pedestrian pathways and emphasize main building entries.
- Front yards for buildings with dining and retail uses on the ground floor should include additional pedestrian space and seating areas. It is recommended that outdoor dining and cafes be allowed in both the TOD and TIZ Precincts within the front yards in order to encourage an active, vibrant pedestrian environment. Retail uses on the ground floor should have a high degree of transparency with storefront windows, along with recessed building entries and glass doors.
- In order to encourage active street edges and create wide sidewalks buffered from traffic by street trees and planting strips near the curb, development may be allowed to provide the required landscaping within the public right-of-way fronting the site rather than within the front yard.

- Front yards for buildings with residential uses on the ground floor should include landscaping and entry walks, along with porches and stoops within the yard. Low transparent fences, no higher than 4', should be allowed to help delineate public and private space within the front yards.
- Front yards for buildings with industrial uses on the ground floor should include landscaping along with ground floor windows along the front facades in order to avoid blank walls along the street.
- Buildings within the station areas should avoid blank walls facing streets or pedestrian pathways.
- To avoid the appearance of top-heavy buildings, development should step back on upper levels and include large lanais with transparent railings for both residential and office uses.

8. PUBLICLY ACCESSIBLE OPEN SPACE

Open space is a key component of a healthy transit-oriented community. Publicly accessible open spaces, gathering spaces, and parks with seating, recreation areas, shaded areas, and WiFi service are elements that help create a sense of place and community.

The TOD Plan recommends that new developments on parcels of 20,000 square feet or larger provide usable, publicly accessible open space consistent with the neighborhood TOD vision. Alternatively, payment to improve existing public park space in the station area is also acceptable. Additional information is described in Section F - Open Space.

IMPLEMENTATION RECOMMENDATIONS

- Publicly accessible open spaces help to establish an identity and focus for new developments, as well as provide an important resource for the surrounding community.

IMPLEMENTATION RECOMMENDATIONS

- A community benefits bonus is a development policy that can both shape development in the station areas and realize community goals.

9. COMMUNITY BENEFITS BONUS

The use of a community benefits bonus (CBB) is one of several development policies that can be used both to shape growth and development in the Aiea–Pearl City station areas and realize community values and goals. In their most basic form, community benefits bonuses are a means by which new development is authorized to exceed a baseline level of FAR and/or building height in exchange for providing support for community goals. A well-defined, but flexible, CBB program for transit-oriented development has the potential to provide a more predictable, efficient, and equitable process for development interests and more direct and meaningful benefits for the community.

Community benefits need to relate to the amenities desired and/or needed by a community or in a specific area. Improvements created through a community benefits strategy should focus directly on the following key plan elements:

Leeward Community College Station Area

- Secondary access road
- Development of open space adjacent to campus
- Pearl Harbor Historic Trail connection makai of campus

Pearl Highlands Station Area

- Pearl Highlands Center pedestrian improvements and bridge connection to rail station
- Access and improvements to University of Hawaii Urban Gardens
- Creation of public park space

Pearlridge Station Area

- Kaonohi Street pedestrian and bicycle improvements
- Transit plaza and pedestrian connection/view corridor from station to Pearl Harbor Historic Trail
- Pearl Harbor Historic Trail improvements
- Sumida Farm trail and overlooks

General

- Local jobs/workforce training
- Student and faculty housing
- Affordable housing
- Locally-owned retail support
- Sidewalk and streetscape upgrades

As the community's needs evolve over time, the bonus system should be reviewed and updated to meet the changing needs and wants of stakeholders.

Bonus systems are a widely accepted and integral part of many present day zoning and planning standards in urban locales throughout the US. The following cities have developed different versions of community benefits bonuses, usually premised on a community's specific priorities and needs.

- Seattle allows downtown residential buildings higher than 8 stories if developers contribute to an affordable housing fund at a certain cost per additional square foot.
- Austin is developing a model for a CBB as a menu system where developers can earn additional square footage for their buildings by providing certain predefined community benefits, including parks, open space and other urban amenities.
- Tyson's Corner, VA has developed a basic matrix for community benefits as a way to achieve a livable, walkable community.
- San Diego is in the final stages of approving new municipal codes with incentives relating to workforce/affordable housing, urban open space, and employment uses.
- Miami offers incentives to encourage street-level retail.
- Anchorage provides incentives for climate-controlled courtyards.
- Cincinnati gives incentives for historic preservation.
- San Francisco offers zoning bonuses to encourage rooftop observatories.

Some benefits/amenities are simpler to qualify, value, and administer than others. Many cities are separating administrative functions based on the level of review necessary in granting the bonuses. Bonuses for easily quantifiable amenities can be made available on an as-of-right basis and approved without extensive site plan review. The proposed project must demonstrate it will incorporate the bonus benefit/amenity and meet minimum design guidelines. For those benefits/amenities requiring consideration as part of complex design criteria, bonus incentive approvals will need to undergo more extensive site plan review.

In exchange for these community benefits, the following bonuses are recommended:

- Allowing greater building heights over the maximums defined in Section G for each station area. These additional allowable heights would need to strongly take into account adjacent properties and neighborhood context, as well as the principles defined in this Neighborhood TOD Plan.
- Allowing a density bonus (greater FAR) in both the TOD and TIZ Precincts, as described in Section 4 - Density and Floor Area Ratio.

IMPLEMENTATION RECOMMENDATIONS

- Community benefits need to directly relate to the amenities desired and/or needed by a community or in a specific area.

IMPLEMENTATION RECOMMENDATIONS

- The Plan recommends reduction in the required number of off-street parking spaces in order to reflect and encourage lower automobile ownership in transit-oriented districts.
- It is recommended that on-street parking be counted towards the required guest parking spaces for multifamily housing, as well as the required off-street spaces for restaurant and retail uses.

10. PARKING REQUIREMENTS

The Plan recommends reduction in the required number of off-street parking spaces in order to reflect lower automobile ownership in transit-oriented districts, as well as the negative impact parking facilities can have on urban quality. Parking should also be reduced to encourage transit ridership, lessen urban runoff, and make more efficient use of land. Additionally, lower parking requirements can lower overall construction costs, resulting in improved financial performance of development projects and more affordable housing development.

Reducing required parking promotes the plan principles of “Encourage Workforce Housing” and “Create a Comfortable and Lively Pedestrian Environment” in the station areas.

Parking requirements in the TOD Precincts should be consistent with parking requirements in the existing BMX-4 Central Business Mixed Use district.

Parking requirements in the TIZ Precincts should be consistent with existing standards although requirements for housing, office and retail uses should be lowered.

11. MAXIMUM PARKING STANDARDS

In certain transit-oriented developments it may be appropriate to implement maximum parking standards. Typically, maximum parking standards are equal to 125% of the minimum required amount, based on research from other communities. Maximum parking standards can help to ensure that transit-oriented developments are not parked at suburban standards and that they focus on the principle of “Creating a Comfortable and Lively and Pedestrian Environment.”

It is recommended that a maximum parking standard in Aiea–Pearl City be studied in greater detail.

12. ON-STREET PARKING

It is recommended that on-street parking in both the TOD and TIZ Precincts be counted towards the required guest parking spaces for multifamily housing, as well as the required off-street spaces for restaurant and retail uses. The spaces could be on either public or private streets and should be available for all uses in the area.

On-street parking is essential to creating Main Street retail environments and promoting the plan principle of “Create a Comfortable and Lively Pedestrian Environment.” By providing on-street parking along public and private streets, the more intense TOD uses in the station areas will have less need for costly on-site structured and surface parking.

On-street parking also provides an important buffer between the sidewalk and automobile travel lanes, thereby making the pedestrian realm more safe and comfortable.

13. SHARED PARKING & PARKING DISTRICTS

Shared parking is publicly and/or privately-owned parking that is used by two or more distinct land uses without conflict. The success of shared parking depends on the specific uses and the interaction between them. In particular, shared parking works best when adjacent land uses have different peak activity periods (e.g., an office building and a cinema).

District parking is the large-scale application of shared parking and is usually implemented in urban commercial and retail areas using multiple common parking facilities. District parking can be particularly beneficial to new development as it can reduce the marginal costs of new construction. When coupled with mobile app-based wayfinding and reservation systems, a district-wide approach can better manage existing spaces while improving traffic operations by reducing the number of people driving around to find an available space.

District parking can also provide public or privately managed spaces for commuter park-and-ride use. This, along with time restrictions on other public spaces, can help avoid parking abuse by commuters. Many districts allow developers to contribute a set amount of cash on a per space basis in lieu of providing parking themselves. It is recommended that a parking district be studied for the Aiea–Pearl City area, especially in the area surrounding the Pearlridge station.

14. BICYCLE PARKING

To help foster a multimodal transportation network, bicycle parking should be provided in secure areas for workers, shoppers, and residents throughout the TOD Precincts. Bicycle parking should be located at transit stations and may include bicycle storage facilities and lockers. It is recommended that development in the TOD Precincts provide bicycle parking areas holding at least the equivalent of 10% of the required automobile parking.



IMPLEMENTATION RECOMMENDATIONS

- Deviation from the Livable Communities Plan to allow for more intense development around the rail transit stations is intended to help create more active, vibrant neighborhoods while providing additional value to the City.

B. REVISION TO PREVIOUS PLANS

The design guidelines in the Aiea–Pearl City Livable Communities Plan should, where applicable, guide development in the Aiea–Pearl City TOD Special District, with one primary exception. The TOD Plan recommends more intense development than the Livable Communities Plan makai of Kamehemeha Highway near the Pearlridge station. The TOD Plan recommends increasing the maximum building height from two stories or 30 feet to 60 feet (or higher with community benefits bonus), while still providing for Pearl Harbor vistas at mauka–makai view corridors. The goal is to create an active, vibrant neighborhood that also provides additional value to the City to fund public improvements such as new sidewalks, street trees, parks, and open space. A taller building above the bus transfer station would also mark the station location.

The Aiea–Pearl City Neighborhood TOD Plan is generally consistent with the principles of both the Central Oahu Sustainable Communities Plan and the Primary Urban Center Development Plan. According to the Primary Urban Center Development Plan, allowable building heights should be designated based on view plane studies to preserve views of natural landmarks. Otherwise, the maximum building height for districts zoned low-density apartment should be approximately four stories or 40 feet. For areas zoned medium-density apartment, the maximum desired building height should be either 60 feet or the present height of the building occupying the lot. The Neighborhood TOD Plan generally incorporates these standards with the addition of allowing additional height surrounding the rail transit stations.

C. ENVIRONMENTAL DESIGN

1. CLIMATE CHANGE ADAPTATION

Development in the TOD Special District should take into account the best available science on climate change and sea level rise as it relates to on-site uses, building location and elevation, and the design of foundations, ground floors and mechanical and electrical systems.

2. GREEN BUILDINGS

Green buildings are strongly encouraged within the TOD Special District to lower energy and water use, minimize utility costs, create healthier living and working environments, and reduce demands on public infrastructure systems.

D. AFFORDABLE HOUSING

The current affordable housing requirements for the City and County of Honolulu require that 30% of the residential units in all new developments, which require a zone change, must be affordable with:

- 10% affordable to low-income households (earning no more than 80% of area median income);
- 10% affordable to low/moderate-income households (earning between 81% and 120% of area median income); and
- 10% affordable to gap group households (earning between 121% and 140% of area median income).

It is recommended that the City and County of Honolulu create an inclusionary housing requirement for all new housing development (for sale and rental) larger than 29 units within the TOD Special District boundaries. As a community benefits bonus for developers who exceed this base level requirement, an increase of FAR from 2.5 up to 3.5 may be granted. All requirements should incentivize the City's preference for rental affordable housing.

The affordable housing requirements for the station areas could be implemented through a special district zoning overlay or another mechanism. As described above, incentives could be offered for development of affordable housing around the transit stations, including both height and density bonuses and relief from strict development standards like parking ratios.

These incentives would provide flexibility and encourage smaller developers and landowners to redevelop their properties around transit without the financial burden of providing affordable housing, thus making these small, incremental infill projects more feasible.

IMPLEMENTATION RECOMMENDATIONS

- Incentives may be offered for development of affordable housing around the transit stations, including both height and density bonuses and relief from strict development standards like minimum parking requirements.

E. STREETS AND CONNECTIVITY

IMPLEMENTATION RECOMMENDATIONS

- The local street network should accommodate automobiles while also encouraging rapid transit, buses, bicycling, walking, and other non-automobile forms of transport.

I. TRANSIT-ORIENTED COMPLETE STREET NETWORK

In order to support the plan principle of “Provide Multimodal Access to and from Stations,” the local street network should reflect the philosophy of complete streets by accommodating automobiles while also encouraging rapid transit, buses, bicycling, walking and other non-automobile forms of transport in a safe and convenient fashion.

Places where people take transit are places where people walk or bike. Every transit trip starts and ends with a walking trip, and places where walking and biking are comfortable and appealing have a larger catchment area for transit patrons who can access the system on foot or bicycle. For non-transit riders, active, walkable streets are one element of a park-once district, where walking is possible between multiple destinations.

The Plan recommends a number of new streets to help create a highly connected street network. These streets would allow users to circulate freely and provide a structure for neighborhood development. Streets within both the TOD and TIZ Precincts should have frequent intersections and no dead ends. It is envisioned that these street connections would be built over time as new development occurs in the area. New streets can be either public or private and should help to break up large blocks and provide improved connectivity. Smaller blocks between 300’-350’ in length are ideal but not always realistic. Blocks created by new streets should be a maximum of approximately 500’ in length between intersections. It is also recommended that new developments provide internal pedestrian pathways connecting to public streets.

2. URBAN STREET STANDARDS

In addition to connectivity improvements, it is recommended that the City develop more urban street standards for use in TOD areas. These standards would be implemented through various City agencies. They should place a greater emphasis on the pedestrian and bicyclist by calling for wider sidewalks and bicycle lanes. The standards should also help to calm traffic by reducing automobile lane widths and encouraging on-street parking and physical barriers between automobile and bicycle traffic wherever possible.

3. GREEN STREETS

It is recommended that “green street” principles be adopted for new streets and major street improvements within the station areas. A green street is a street that uses vegetated facilities to manage stormwater runoff at its source. A green street is a sustainable stormwater strategy that meets regulatory requirements and resource protection goals by using a natural systems approach to manage stormwater, reduce flows, improve water quality, and enhance watershed health.

Green streets have the potential to:

- Reduce the polluted stormwater entering Aiea–Pearl City streams and Pearl Harbor
- Reduce impervious surface so stormwater can infiltrate to recharge groundwater and decrease surface water run-off
- Increase urban green space
- Improve air quality and reduce ambient air temperature and the urban heat island effect
- Reduce demand on the City and County’s stormwater collection system and the cost of constructing expensive pipe systems
- Address requirements of federal and state regulations to protect public health and restore and protect watershed health

To maximize these benefits, sustainable stormwater management best practices should also be applied at the site development level using Low-Impact Development design strategies.

4. TOD TRANSPORTATION ASSESSMENT

The City’s enabling TOD Ordinance requires that the adopted TOD Special District regulations include “design provisions that encourage use of rapid transit, buses, bicycling, walking and other non-automobile forms of transport that are safe and convenient.” It is recommended that a broader Transportation Assessment approach, including use of Public Transport Accessibility Levels (PTALs), be used as the means to identify those design provisions rather than using the more narrowly focused Traffic Impact Assessment approach. The Plan recommends basing these assessments upon international best practices.

It is also recommended that TOD-related updates to the Land Use Ordinance require or incentivize transportation demand management measures, such as reduced parking, bikeshare and carshare stations, and free transit passes for homebuyers. Mode share targets should be established to demonstrate a commitment to achieve the TOD plan principles. Each project developer should provide a means to assure that efforts to achieve the mode share targets are maintained, monitored, and revised as necessary.

The right type of transportation improvements need to be made in association with the public investment in the rail project for the public sector and the private developer to capture the full value of their investment. If properly crafted, the TOD Special District regulation will provide the necessary framework for a balanced relationship.

IMPLEMENTATION RECOMMENDATIONS

- A “green street” is a street that uses vegetated facilities to manage stormwater runoff at its source.

F. OPEN SPACE

The Plan proposes a series of new publicly accessible open spaces in all the station areas. These improvements are intended to reflect the principle of “Develop New and Enhance Existing Open Spaces.” Parks help to establish an identity and focus for new developments, as well as provide an important resource for the surrounding community. Parks, plazas, and other public spaces should be sited and designed to be versatile, secure, and easily maintained.

I. MINI PARKS

The predominant form of new open spaces in the Plan are the neighborhood mini parks and urban plazas. A mini park would generally be smaller than existing neighborhood parks in the Aiea–Pearl City area. The mini parks should provide passive recreational and social gathering space with benches, landscaping, and picnic tables, as well as play areas for children.

The parks proposed in the Plan are generally 0.5 to 5 acres in size. These smaller parks are appropriate for dense urban areas near transit and are consistent with standards for Community and Neighborhood Park facilities in urban areas, as recommended in the City and County of Honolulu’s 2004 *Standards and Design Precepts for Future Park Development*.

2. FINANCING NEW PARKS, STREETS, AND URBAN INFRASTRUCTURE

The City and County of Honolulu requires park space dedication for all residential developments of more than one dwelling unit. In case these requirements (350 sf per single-family unit and 110 sf per multifamily unit) do not provide for the amount of park and open space called for in this plan, additional financing options are available.

Tools for raising park and open space revenues at the local level are diverse and expanding. In some cases, usual options, such as local income tax and cell phone tax, are being tapped. In other cases, traditional revenue sources, such as the sales and property tax, are being broadened. In Nevada for example, the state legislature recently authorized Carson City to impose a quarter-cent “quality of life” sales tax for park development and maintenance and open space acquisition. Private maintenance and management of park space is also gaining popularity as a means to provide high-quality spaces in residential and commercial developments.

Depending on the available options for infrastructure, the needs of the community, and the tolerance of the electorate, local public financing often takes the form of a pay-as-you-go measure, long-term borrowing, or a combination of the two. With the pay-as-you-go approach, government spends revenues from general appropriations or a dedicated funding source. This funding source, which can include property assessments, sales tax set-asides, real estate transfer taxes, and even one-time environmental fines and budget surpluses, can be attractive to debt-resistant voters and public officials. Pay-as-you-go means year-by-year accountability and no borrowing costs. It also means relatively small annual revenues (sometimes too small to pay for large capital projects) and funding that can be difficult to sustain as the politics and leadership of a community changes.

Borrowing presents its own set of opportunities and obstacles. On the opportunities side, it can provide a community with the revenue and flexibility it needs up-front to fund large-scale park and open space projects, the cost of which is less today than it will be tomorrow. Bonds are typically paid off over twenty years with low, tax-exempt interest rates. Financing charges are part of the package, however, and convincing voters of the merits of incurring debt can be challenging.

Often, the two techniques are combined by bonding pay-as-you-go funds in order to bring in more up-front cash. These revenue bonds can combine the most attractive elements of both methods.

Many taxing tools are increasingly being supplemented with non-tax sources such as user fees and impact fees, as well as different types of special taxing districts. With these techniques, the level of service can be increased according to special needs or the willingness or ability of park uses to pay.



IMPLEMENTATION RECOMMENDATIONS



IMPLEMENTATION RECOMMENDATIONS

- City maintenance resources may need to be expanded for additional infrastructure in the TOD areas.
- It is recommended that a memorandum of agreement between various City agencies be developed to determine maintenance jurisdiction of City-owned improvements.

G. MAINTENANCE OF PUBLIC IMPROVEMENTS

To ensure the continued safety and quality of new public improvements, memoranda of understanding should be developed between various City agencies to determine maintenance jurisdiction of City-owned improvements. City maintenance resources will also need to be expanded for the additional infrastructure proposed in the Aiea–Pearl City station areas.

New public spaces and right-of-way improvements will also need to be constructed in accordance with City and County standards in order to be dedicated to and maintained by the City.

H. IMPLEMENTATION PARTNERS

Like any other successful community project, high-quality transit-oriented development depends on the participation and support of all stakeholders. Innovation in building design, parking, public amenities, and financing are often part of successful TOD projects. Partnerships involving the public and private sectors make these new approaches possible.

The following tables summarize the public and private partners that are required to realize the plan principles and specific plan recommendations for each station area. The black dots represent those partners with lead roles, and the white dots indicate those who must support them.

IMPLEMENTATION RECOMMENDATIONS

	City and County of Honolulu	State of Hawaii	Federal Govt.	Private Developer / Property Owner
<ul style="list-style-type: none"> ● - Lead ○ - Support 				
LEEWARD COMMUNITY COLLEGE STATION AREA				
Principle 1: Create Access and Views to Water and Pearl Harbor				
New bicycle paths along the extension of Ala Ike Street and along Waiawa Stream	●	○		
Pearl Harbor Historic Trail improvements	●		○	
Neighborhood mini park diamond head of campus in conjunction with new development	●			○
Principle 2: Encourage Workforce Housing				
Mixed-use development on existing surface parking mauka of LLC	○	○		●
Lower-density housing diamond head of LLC campus	○	○		●
Principle 3: Create a Comfortable and Lively Pedestrian Environment				
New streets and sidewalks within station area in conjunction with development	○	○		●
Wider sidewalks and landscaping on existing streets	●	○		
Principle 4: Provide Multimodal Access to and from Stations				
Secondary access road connecting station area to Farrington Highway	●			
Pearl Harbor Historic improvements	●		○	
Surface parking mauka of station	○	●		
Structured parking in conjunction with mixed-use development	○			●
Principle 5: Develop New and Enhance Existing Open Space				
Central green mauka of LLC campus		●		○
Transit plaza adjacent to station	●			
Private open spaces on the interior of blocks				●

FIGURE 46 - Leeward Community College Station Area - Implementation Partners

- - Lead
- - Support

	City and County of Honolulu	State of Hawaii	Federal Govt.	Private Developer / Property Owner
PEARL HIGHLANDS STATION AREA				
Principle 1: Create Access and Views to Water and Pearl Harbor				
New bicycle paths along Waiawa Stream	●		○	
Principle 2: Encourage Workforce Housing				
Higher-density housing within 1/4 mile of station and at corner of Acacia Road and Kuala Street	○		○	●
Lower-density housing mauka of Walmart	○			●
Low-density housing along Kanaeha Place	○			●
Single-family housing along diamond head edge of station area	○			●
Principle 3: Create a Comfortable and Lively Pedestrian Environment				
Taller buildings in close proximity to station and lower development on perimeter	○			●
New Main Street within existing Pearl Highlands Center				●
New streets and sidewalks within station area in conjunction with new development	○			●
Wider sidewalks and landscaping on existing streets	●	○		○
Principle 4: Provide Multimodal Access to and from Stations				
Direct pedestrian connection between station and Pearl Highlands Center	●			○
Structured parking in conjunction with mixed-use development	○			●
Bicycle lanes on Kuala Street leading to station	●	○		
Principle 5: Develop New and Enhance Existing Open Spaces				
Improved public access and enhancements to UH Urban Garden Center	○	●		●
Transit plaza at corner of Pearl Highlands Center	●			●
Neighborhood park on triangle property makai of Acacia Road	●			○
Neighborhood mini parks mauka of Walmart	●			○
Private open spaces on the interior of blocks				●

FIGURE 47 - Pearl Highlands Station Area - Implementation Partners

- - Lead
- - Support

	City and County of Honolulu	State of Hawaii	Federal Govt.	Private Developer / Property Owner
PEARLRIDGE STATION				
Principle 1: Create Access and Views to Water and Pearl Harbor				
New Pearl Harbor shoreline path ewa of Kaonohe Street	●	○		○
Pearl Harbor Historic Trail Improvements	●	○		
Principle 2: Encourage Workforce Housing				
Medium-density housing makai of Kamehameha Highway	○			●
High density housing mauka of Kamehameha Highway and ewa of Kaonohe Street	○			●
Low-density housing along Moanaloa Loop	○			●
Principle 3: Create a Comfortable and Lively Pedestrian Environment				
Taller buildings mauka of Kamehameha Highway	○			●
Pedestrian trail and overlooks along the perimeter of Sumida Farm	○			●
New Main Street connecting Moanaloa Road ewa and diamond head of Kaonohe Street	○			●
New streets and sidewalks within station area in conjunction with new development	○			●
Wider sidewalks and landscaping on existing streets	●	○		○
Principle 4: Provide Multimodal Access to and from Stations				
Bus transfer center makai of transit station	●		○	
Structured parking in conjunction with mixed-use development	○			●
Principle 5: Develop New and Enhance Existing Open Space				
New "window to Pearl Harbor" park	●			○
Transit plazas on either side of Kamehameha Highway to station	●			
Waterfront park along Pearl Harbor shoreline	●		○	○
Neighborhood park mauka of Sumida Farm	●			○
Private open spaces on the interior of blocks				●

FIGURE 48 - Pearlridge Station Area - Implementation Partners

