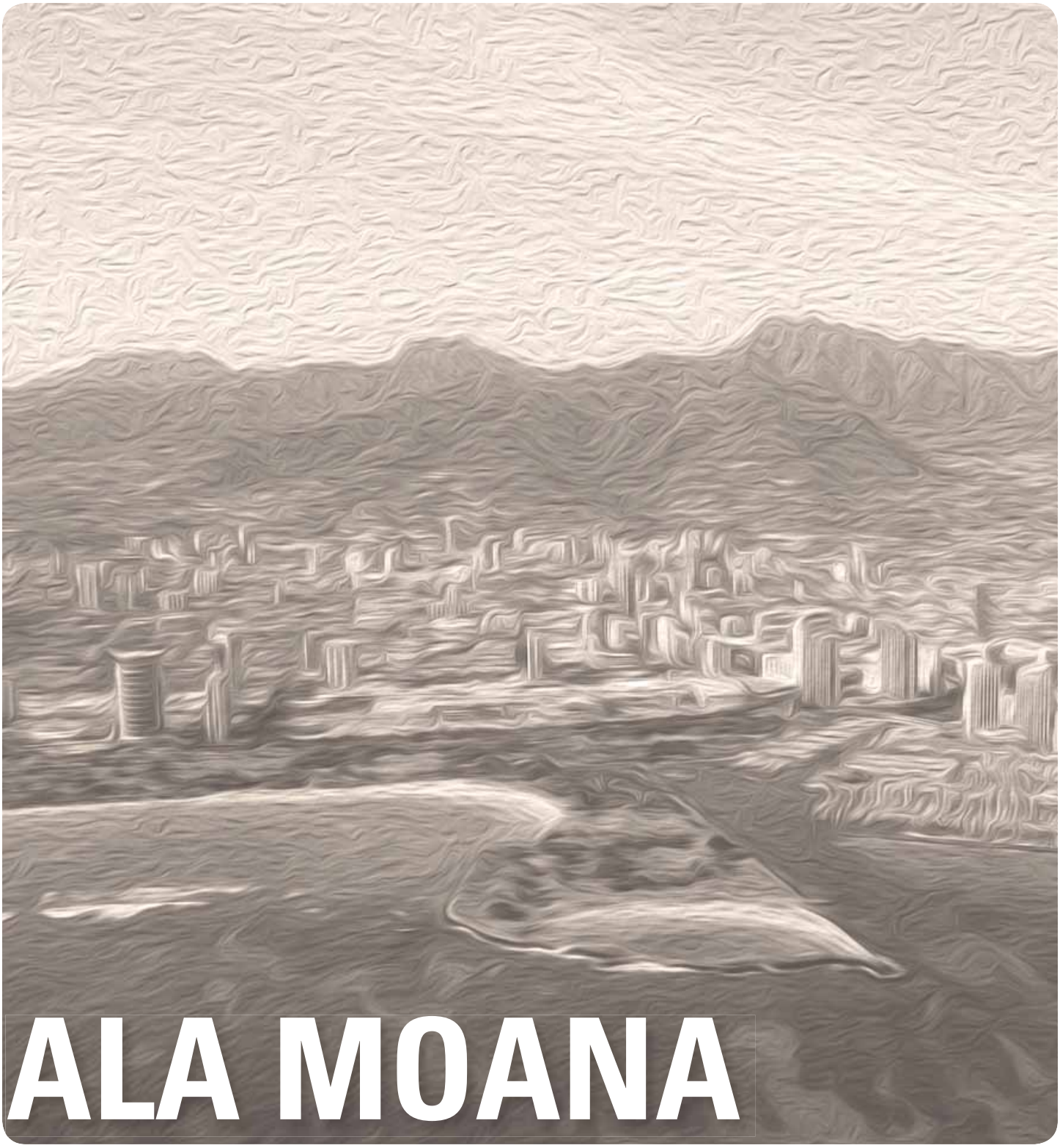


ALA MOANA

Neighborhood Transit-Oriented Development Plan

EXISTING CONDITIONS REPORT

AUGUST 2012

RTKL

AN ARCADIS COMPANY

ALA MOANA

Neighborhood Transit-Oriented Development Plan

Prepared for the *City & County of Honolulu* by:

RTKL Associates, Inc.
Los Angeles - Planning and Urban Design Studio

In collaboration with:
Belt Collins
Fehr & Peers
Keyser Marston Associates

RTKL
AN ARCADIS COMPANY

TABLE OF CONTENTS

TABLE OF CONTENTS (CONT.)

TABLE OF CONTENTS (CONT.)

LIST OF FIGURES & TABLES

1 INTRODUCTION

2 COMMUNITY CONTEXT

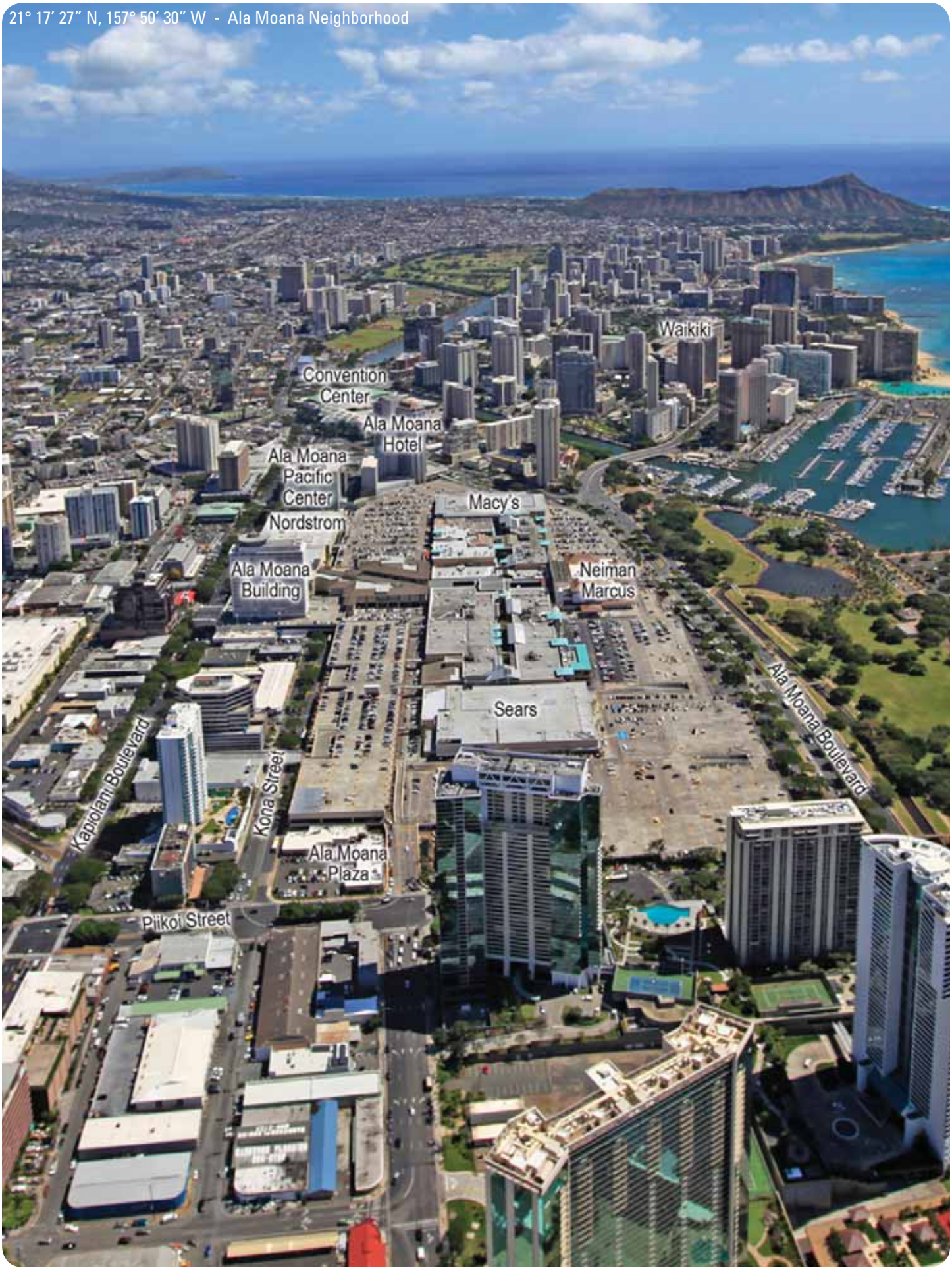
LIST OF FIGURES & TABLES (CONT.)

3 STATION CONTEXT

4 STAKEHOLDER INTERVIEWS REPORT

5 OPPORTUNITIES & CONSTRAINTS

APPENDIX


21° 17′ 27″ N, 157° 50′ 30″ W - Ala Moana Neighborhood
Waikiki
Convention Center
Ala Moana Hotel
Ala Moana Pacific Center
Nordstrom
Macy's
Ala Moana Building
Neiman Marcus
Sears
Ala Moana Boulevard
Kapiolani Boulevard
Kona Street
Ala Moana Plaza
Piikoi Street

1

INTRODUCTION

1 INTRODUCTION

1.1 PURPOSE & INTENT

The City and County of Honolulu has a long history of public transit; streetcars served the City as early as the turn of the century, and the current bus system is one of the most successful in the Nation. As rail transit is reintroduced, the City has engaged in neighborhood planning surrounding the system's rail stations, including the Ala Moana Center Station. The intent is to make the most of the system for the benefit of the community, emphasizing the promotion of transit-oriented development that will support transit ridership, improve pedestrian access, and fund neighborhood improvements.

1) OVERVIEW

The City and County of Honolulu (the City), in partnership with the U.S. Department of Transportation Federal Transit Administration, is building the Honolulu Rail Transit (HRT) project that will bring rail transit service to the island of Oahu. This rail corridor will connect employment and residential centers, starting at East Kapolei in the west and extending twenty (20) miles east to the Ala Moana Center. An elevated fixed guideway system operating in an exclusive right-of-way will ensure speed and reliability and avoid conflicts with vehicles and pedestrians. Feeder buses will link stations (located at approximately one mile intervals) with those areas not directly served by rail. The anticipated completion date of the HRT project is 2019. Overall goals are to improve corridor mobility and reliability, increase access to existing and planned development, and promote transportation equity.

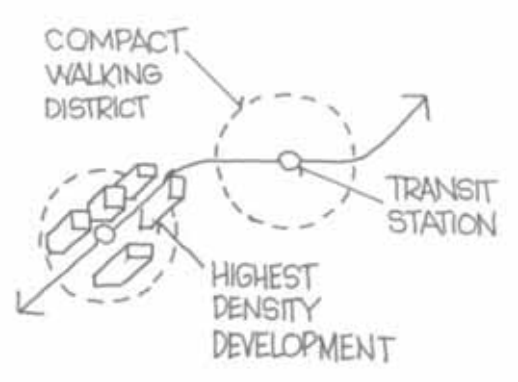
Honolulu Rail Transit Route Map

In conjunction with the HRT project, the City is preparing a series of neighborhood transit-oriented development (TOD) plans that integrate land use and transportation planning around the rail stations. The Land Use Ordinance's (LUO) provisions for TOD special districts adopted by the Honolulu City Council in 2009, authorizes preparation of neighborhood TOD plans – a neighborhood TOD plan serves as the basis for creation or amendment of a TOD Zone and the accompanying development regulations. The LUO specifies that each neighborhood TOD plan shall address the following:

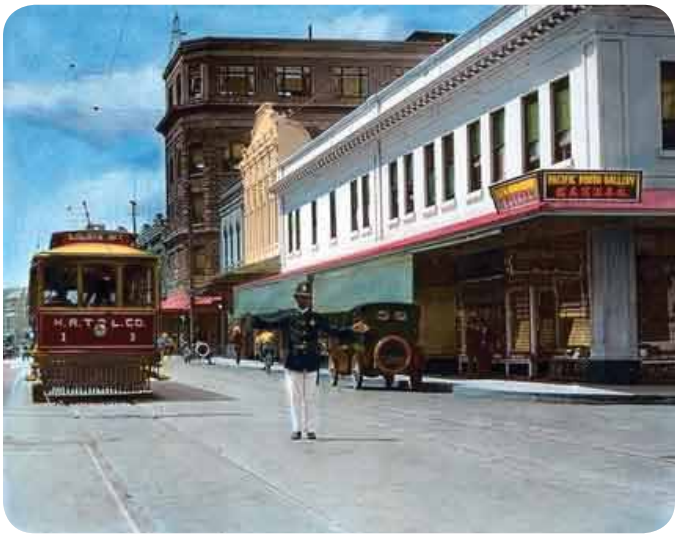
- General objectives supporting *economic revitalization and reinforcing neighborhood character*, including the desired mix of land uses, land use intensities, circulation strategies, urban design forms, and cultural and historic resources.
- *Recommended boundaries for the TOD zone* based on natural topographic barriers, redevelopment potential, and relation to the transit station and potential ridership, normally including properties within 2000 feet of the station.
- *Recommended zoning controls*, including architectural and community design principles, open space requirements, parking standards, and other modifications to existing zoning.
- A strategy for preservation and creation of *affordable housing*.
- A general program for *implementation*, covering phasing, as well as approximate cost and potential financing mechanisms.

The City is currently proceeding with preparation of the Ala Moana Neighborhood TOD Plan. A recent economic study suggests that more than any other station along the line, the Ala Moana station offers the opportunity to capitalize on Honolulu's "Value Capture Strategy" intended to leverage public investment in the rail system. Although not scheduled for operation until 2019, development surrounding this station site is considered a priority. It is located in the midst of a major urban center with considerable potential to increase property values and property tax revenues through transit-oriented

development. The Ala Moana Neighborhood TOD Plan will guide development in a manner that optimizes value capture while ensuring community benefits.



TOD concept diagram



Streetcar running along King St

Honolulu Rapid Transit 1930's streetcar serving dense urban fabric

2) TRANSIT-ORIENTED DEVELOPMENT (TOD)

Transit-oriented development (or TOD) typically refers to development within comfortable walking distance of a major transit stop. This is important because urban transit ridership relies heavily upon pedestrian access within a 5- to 10-minute walking distance, or a roughly ¼- to ½-mile radius from the station. Higher densities are an important characteristic of TOD and may be achieved through development of vacant land or redevelopment of low density sites. Additionally, TOD should focus on the pedestrian scale and contribute to an urban environment that is safe and appealing to persons on foot. Ideally, this involves a vibrant mix of land uses, generally encompassing residential and commercial activities, while featuring ground floor uses that maintain street vitality. Moreover, improved pedestrian and bicycle connections should readily link the transit station with major destinations and activity centers such as shopping centers and schools. Collectively, these measures will promote efficient use of land, encourage transit ridership, as well as support a diverse mix of land uses that are easily accessible on foot and meet daily needs.

3) PUBLIC OUTREACH

The LUO requires that the process of drafting neighborhood TOD plans shall be "inclusive, open to residents, businesses, landowners, community organizations, government agencies and others." Therefore, public input through various outreach programs will be an essential aspect of preparation of the Ala Moana Neighborhood TOD Plan. Key stakeholders and interested groups and individuals will have multiple opportunities to interact with the planning team through a variety of forums as the plan develops. These will include stakeholder interviews, a needs assessment survey, advisory committee meetings, community workshops, as well as ongoing status updates provided through the City's project web page.

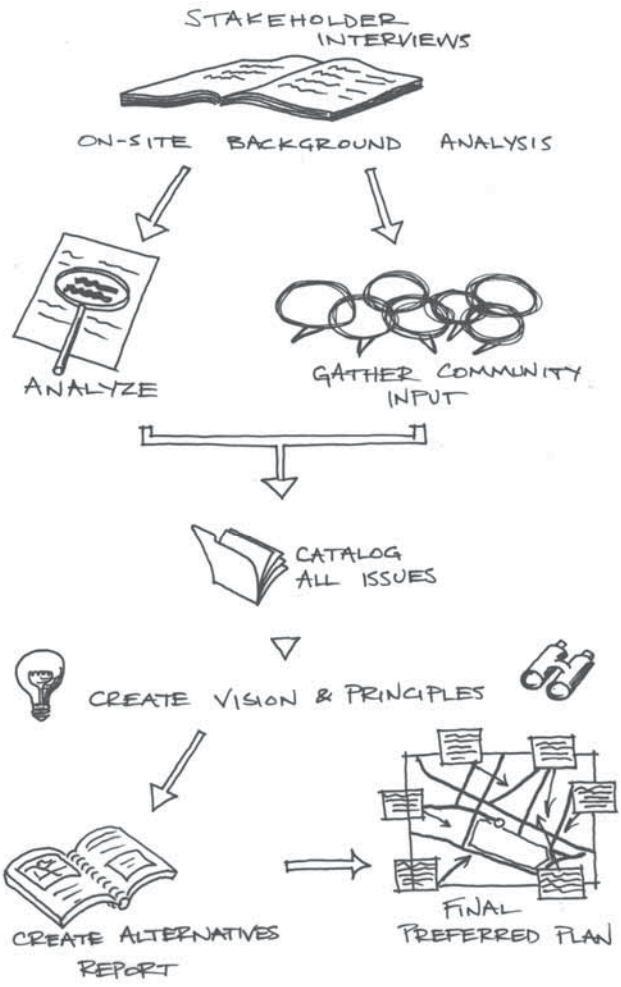
4) EXISTING CONDITIONS REPORT

The LUO also requires comprehensive background analysis for preparation of neighborhood TOD plans, including "population, economic, and market analysis and infrastructure analysis." This Existing Conditions Report represents the initial step in the planning process; it summarizes site conditions and identifies opportunities and constraints related to land use, circulation, open space, infrastructure, and physical design, with an emphasis on exploring the potential for transit-oriented development. A report addressing market conditions and economic factors will be released as a separate, supplementary document. This report is organized as follows:

- ***Chapter 1: Introduction*** includes an overview of the Ala Moana TOD planning area, and a review of existing plans, policies, and programs that pertain to this project.
- ***Chapter 2: Community Context*** describes the planning area and its surroundings according to 1) socioeconomics; 2) land use; 3) development intensity; 4) community character; 5) circulation and 6) environment. This chapter's analysis examines an approximate ½-mile radius surrounding the proposed station.
- ***Chapter 3: Station Context*** takes a focused look at development opportunities and pedestrian access in close proximity to the station. This chapter's analysis examines a ¼ mile to 2000 foot radius surrounding the proposed station.
- ***Chapter 4: Stakeholder Interviews*** discusses major themes relevant to development in the Ala Moana neighborhood based on input received through this initial outreach effort.
- ***Chapter 5: Opportunities & Constraints*** identifies the key issues, opportunities and constraints revealed through the background document review, site analysis and initial outreach. These will be considered further as the planning process moves forward.

5) NEXT STEPS

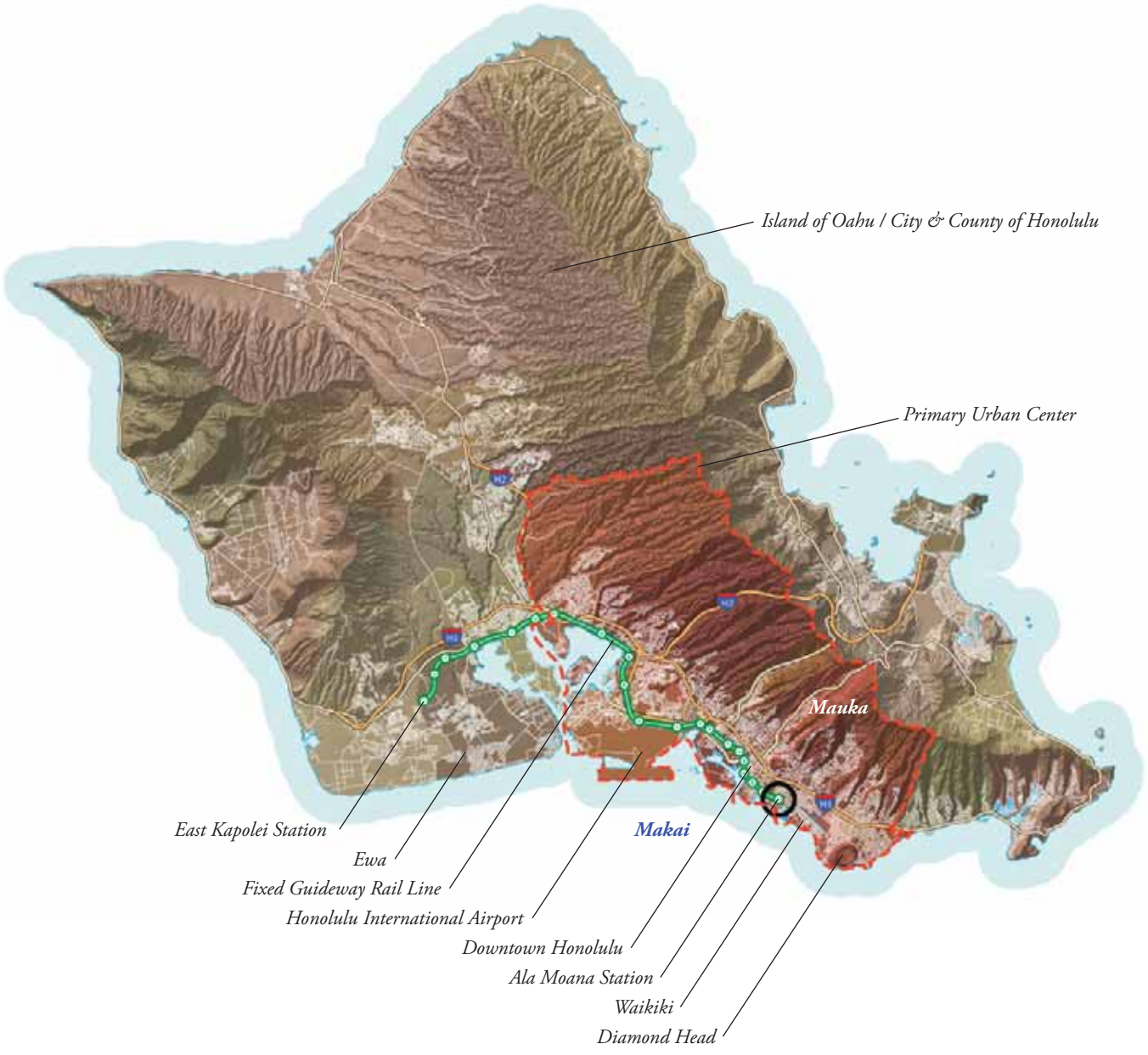
As noted, this document summarizes the research and analysis stage. The planning team will continue to work with the local community and the selected advisory committee to establish the vision and principles that will provide the basis for future development in the Ala Moana station area. Consistent with this vision, the next step will explore alternative concepts and scenarios for development. Relying upon feedback received through on-going public outreach, a preferred plan will be prepared integrating the best ideas from several plan options. This will describe the overall vision, recommended land use mix, proposed circulation, open space, and infrastructure networks, and other key physical design characteristics; zoning recommendations and implementation strategies will also be addressed. The adopted Ala Moana TOD Neighborhood Plan will satisfy LUO requirements, and provide a sound basis for preparation of TOD development regulations applicable to the Ala Moana station area.



1.2 LOCATION & PLANNING AREA

1) SITE SETTING

The Ala Moana Center station is the easternmost in a string of twenty-one stations spanning the 20-mile length of the HRT project. This station will serve the Ala Moana neighborhood, prominently located in the center of urban Honolulu. Ala Moana is strategically situated between Waikiki to the east and Downtown located approximately two miles to the west. Inland (or mauka) is Punchbowl and the Koolau mountains. Seaward (or makai) is the Ala Moana Regional Park with its gently sloping beach.



2) PLANNING AREA

As shown in Figure 1.0, the proposed station site is situated along Kona Street directly adjacent to the Ala Moana Center, Hawaii's largest and most popular shopping center. For the purposes of this Existing Conditions Report, a ½-mile radius around the proposed station site generally defines the study area. This radius roughly approximates the boundaries of the Ala Moana-Sheridan Community Plan, which provides a useful starting point for understanding the makeup of the neighborhood. The Ala Moana-Sheridan Community Plan area is comprised of six quite distinct districts:

- *Civic District* encompasses the block comprised of the adjoining campuses of the Neil Blaisdell Center and McKinley High School.
- *Sheridan District* is characterized by mid-century single detached and multi-family residences that are generally well-maintained. It is also home to the historic Makiki Christian Church and some nonconforming industrial uses.
- *Keeaumoku Corridor* is occupied by a mix of office, retail, dining, and entertainment establishments. Development of the Sam's Club / Walmart superblock suggests that the corridor is prone to change.
- *Kaheka District* is a densely populated mixed use area, including numerous high-rise apartment buildings. It is recognized for the large number of residents of Korean ancestry.
- *Kapiolani Corridor* is a major transportation route undergoing significant transition. Small retail, dining, and entertainment establishments are gradually being replaced by newer, higher value buildings to establish Ala Moana's primary commercial and mixed use corridor.
- *Ala Moana District* located at the edge of Waikiki is dominated by the Ala Moana Center, but also includes the Convention Center. This district attracts a large number of visitors.

The Ala Moana Neighborhood TOD Plan will provide a final recommendation on applicable boundaries based on a thorough understanding of site conditions.

View of the planning area from the Punchbowl overlook

Future rail station location at intersection of Kona St and Kona Iki St

Kapiolani Blvd

FIGURE 1.0: **PLANNING AREA**

N

0 500 1000 Feet

0 1/4 Miles

Fixed Guideway
Rail Stations
H1 Highway
Districts / Neighborhoods
Ala Moana-Sheridan Community Plan Boundary
Buildings
Land Area
Coastline

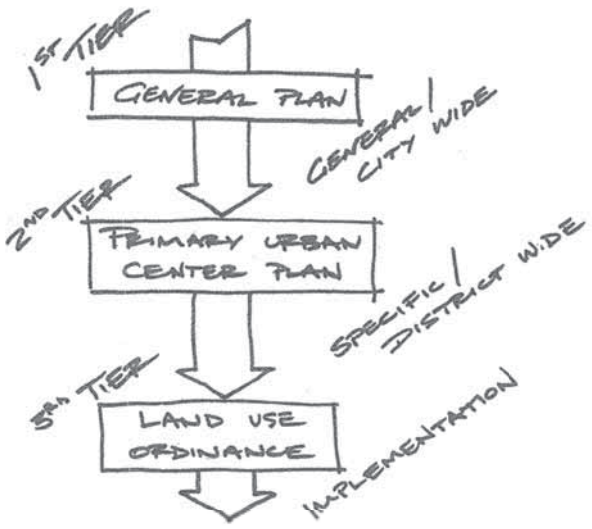
Source: Dept of Planning & Permitting: Honolulu Land Information System

1.3 EXISTING PLANS AND POLICIES

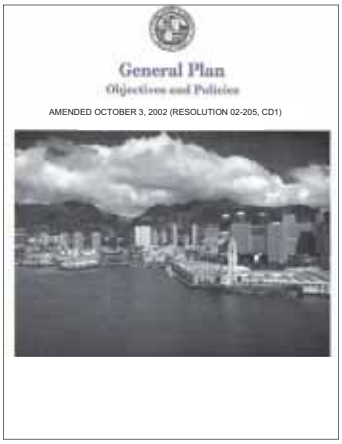
The Ala Moana Neighborhood Transit-Oriented Development (TOD) Plan should respect current plans, as they reflect essential local values. Additionally, it is important that the neighborhood TOD plan maintain consistency with previously adopted plans, policies and programs, especially the General Plan and Primary Urban Center Development Plan described below. Nonetheless, the neighborhood TOD plan may recommend amendments where appropriate. The following is a summary of existing plans, policies and programs, and their relationship to one another.

THE THREE-TIER SYSTEM

The City and County of Honolulu guides and directs land use and growth through a Charter-mandated "three-tier" system, providing "objectives, policies, planning principles, guidelines and regulations." The General Plan forms the first tier of the system, establishing brief statements of objectives and policies that will guide development on the Island of Oahu. The second tier encompasses Development Plans and Sustainable Community Plans addressing eight geographic regions of the island of Oahu, including the Primary Urban Center (PUC) Development Plan. Implementing ordinances and regulations provide the third tier, including the Land Use Ordinance (LUO) and the City's Capital Improvement Programs (CIP). These ordinances constitute the principal means by which the City's General Plan is implemented; they must maintain consistency with the General Plan and the regional Development Plans, and they must be internally consistent as well.



1) OAHU GENERAL PLAN: OBJECTIVES & POLICIES (last amended October 2002)



The General Plan for the City and County of Honolulu is "a comprehensive statement of objectives and policies which sets forth long-range aspirations of Oahu's residents and the strategies of actions to achieve them." Prepared by the Department of Planning & Permitting (DPP), the document establishes long range physical, social, economic, and environmental objectives, as well as supporting policies that will advance the general welfare and prosperity of the people of Oahu.

The General Plan is organized around eleven subject areas, including:

1. *population*
2. *economic activity*
3. *the natural environment*
4. *housing*
5. *transportation and utilities*
6. *energy*
7. *physical development and urban design*
8. *public safety*
9. *health and education*
10. *culture and recreation*
11. *government operations and fiscal management*

Table 1.1 lists policies addressing transportation, as well as physical development and urban design that are especially applicable to TOD planning for Ala Moana.

The DPP is currently engaged in a General Plan Update Program, utilizing a 2035 planning horizon. This update will focus on the topics of growth and development, economic health, tourism, housing, agriculture and sustainability, issues that impact the quality of life and are of greatest concern to Oahu's residents. The movement toward adding sustainability as a fundamental policy will reinforce the emphasis on land use patterns that encourage compact, mixed use development and multi-modal transportation networks.

Table 1.1: Key General Plan Policies

Develop and maintain an integrated ground-transportation system consisting of the following elements: a) public transportation; b) roads and highways; c) bikeways; and d) pedestrian walkways.
Promote the use of public transportation as a means of moving people quickly and efficiently, of conserving energy, and of guiding urban development.
Provide for more compact development and intensive use of urban lands where compatible with the physical and social character of existing communities.
Encourage the establishment of mixed use districts with appropriate design and development controls to insure an attractive living environment and compatibility with surrounding land uses.
Provide special design standards and controls that will allow more compact development and intensive use of lands in the primary urban center.

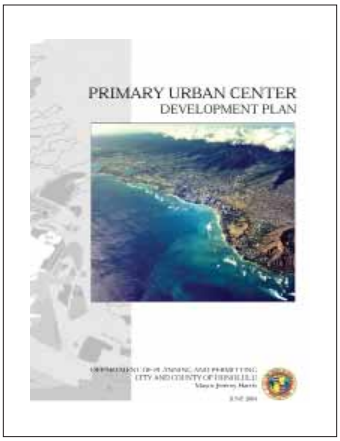
Table 1.2: Key Primary Urban Center Development Plan Policies

Preserve panoramic views of natural landmarks and the urban skyline -- this includes important vistas and focused views of significant natural and urban features and skyline profiles.
Develop a system of collaborative neighborhood planning -- refine and further develop a stakeholder based process for continuing community-based neighborhood planning.
Promote mixed land uses -- encourage compatible mixtures of land use for in-town PUC neighborhoods and districts to support a variety of urban lifestyle choices and to create vibrant and convenient neighborhoods.
Make streets pedestrian-friendly -- create inviting and attractive street-side environments that support and enhance convenient and safe pedestrian use.
Provide incentives and cost savings for affordable housing -- this policy promotes exemptions for regulations to make "affordable" housing available to those needing it.
Provide for high-density housing options in mixed use development around transit stations -- this type of "transit-oriented development" facilitates transit use and allows for increased densities without generating increased vehicular congestion.
Support attractions that are of interest to both residents and visitors in the Ala Moana/Kakaako/Downtown corridor -- develop commercial and cultural attractions and improvements to serve residents and visitor interests.
Implement land use strategies to achieve a balanced transportation system -- to achieve community livability and enable transportation choices, land use strategies that support alternative travel modes such as walking, bicycling and transit should be adopted and implemented.
Enhance and improve pedestrian mobility -- create pedestrian districts, routes and a regional pedestrian network, and address pedestrian safety concerns.

Table 1.3: TOD Development Regulations – Minimum Requirements

Allowances for a mix of land uses, both vertically and horizontally, including affordable housing.
Density and building height limits that may be tied to the provision of community amenities, such as public open space, affordable housing, and community meeting space.
Design provisions that encourage use of rapid transit, buses, bicycling, walking, and other non-automobile forms of transport that are safe and convenient.
Guidelines on building orientation and parking location, including bicycle parking.
Identification of important neighborhood historic, scenic, and cultural landmarks, and controls to protect and enhance these resources.
Design controls that require human-scale architectural elements at the ground and lower levels of buildings.
Landscaping requirements that enhance the pedestrian experience, support station identity and complement adjacent structures.
Incentives and accompanying procedures, which may include minimum standards and financial incentives, to encourage appropriate and necessary transit-oriented development.

2) PRIMARY URBAN CENTER DEVELOPMENT PLAN (June 2004)



Prepared by the DPP, this is one of eight regional plans prescribed by the City Charter and "intended to guide public policy, investment and decision-making through the 2025-planning horizon." The PUC (extending from the core of downtown Honolulu to Pearl City in the west and Waialae-Kahala in the east) is one of the two planning regions (along with Ewa) that will absorb major growth and economic activity.

There are 5 key aspects of this vision for Oahu's most populous region:

1. Protect and enhance Honolulu's natural, cultural and scenic resources
2. Cultivate livable neighborhoods
3. Provide a full range of in-town housing choices
4. Establish Honolulu as the Pacific's leading city and travel destination
5. Develop a balanced transportation system

Although the plan was authored in advance of the proposed rail project, it does promote development of a rapid transit component and supports transit-oriented development. In accordance with this overall vision, the PUC enumerates numerous policies that are applicable to the Ala Moana Neighborhood TOD Plan; those most pertinent are summarized in Table 1.2.

Figure 1.1 depicts the generalized land use designations for the Ala Moana neighborhood and surroundings as provided for in the PUC Development Plan; these land uses are illustrative of the overall policy direction and primarily encompass "District Commercial" and "Medium and Higher Density Residential / Mixed Use." The District Commercial designation accommodates a wide range of commercial uses and related activities intended to serve district, regional, and island-wide populations, and may include office buildings, shopping centers, professional and business services, and mixed use with integrated residential. The applicable residential designation allows low-, mid-, and high-rise multifamily dwellings, as well as the integration of supporting retail, office, and community facilities. These designations encourage and support higher densities making Ala Moana one of Honolulu's central in-town areas, functioning as a retail commercial and tourist hub.

3) LAND USE ORDINANCE (Last Amended 1990)

Occupying the third tier in the planning system, the LUO regulates land use and encourages orderly development in accordance with adopted land use policies, including the General Plan and regional Development Plans. It is also referred to as the Zoning Code. Therefore, while the General Plan and Development Plan are policy documents, the LUO is a regulatory tool that influences the use and character of development; it regulates the use of land within clearly demarcated zones, and sets detailed standards for the height, bulk, and location of buildings.

Figure 1.2 shows the zoning designations for properties within and surrounding the Ala Moana neighborhood. Consistent with the PUC Development Plan designations, the majority of the planning area is zoned for commercial and medium to high density residential use. Residential zoning in the area typically allows for some commercial activity with the intent of accommodating support commercial services, lessening auto dependency, creating more diverse neighborhoods, and optimizing the use of land.

FIGURE 1.1: **LAND USE DESIGNATIONS**

Source: Primary Urban Center Development Plan (2004)

The intent and requirements of each applicable zoning district are further summarized as follows:

- *Medium Density Apartment District (A-2)* provides for medium density, multifamily dwellings within concentrated urban areas. Floor area ratio (FAR) requirements for the district are based on lot area with a maximum FAR of 1.9.
- *High Density Apartment District (A-3)* provides for high density, high-rise multi-family dwellings within central urban core areas. FAR requirements for the district are based on lot area with a maximum FAR of 2.8.
- *Medium Density Apartment Mixed Use (AMX-2)* allows for some commercial uses within medium density apartment neighborhoods. Mixing may occur horizontally and vertically, but controls are established to maintain the dominant residential character. FAR requirements for the district are based on lot area with a maximum FAR of 1.9.
- *High Density Apartment Mixed Use (AMX-3)* allows for some commercial uses within high density apartment neighborhoods. Mixing may occur horizontally and vertically, but controls are established to maintain the dominant residential character. FAR requirements for the district are based on lot area with a maximum FAR of 2.8.
- *Community Business District (B-2)* provides for community-wide business establishments, those serving several neighborhoods and offering a wide range of uses. Typically this zone is applied along major streets and in centrally located urban areas. The maximum FAR permitted within the district is 2.5; an open space bonus may increase the FAR to 3.5.
- *Community Business Mixed Use District (BMX-3)* allows for commercial and residential uses, but at a lower intensity than the Central Business Mixed Use District. Typically this zone is applied to major thoroughfares, and where the land use is already a mixture of commercial and residential uses. The maximum FAR permitted within the district is 2.5; an open space bonus may increase the FAR to 3.5.
- *General Preservation District (P-2)* is assigned to lands designated urban by the state, but well suited as outdoor space for the public's use and enjoyment. This zoning designation is applied to Ala Moana Regional Park.

In addition to these zoning designations, the Waikiki Special District is applicable to properties located across the Ala Wai Canal from the Ala Moana planning area, encompassing the following zones:

1. Apartment Precinct
2. Resort Mixed Use Precinct
3. Public Precinct

The objective of this special district is to guide development and redevelopment of Waikiki, while maintaining its sense of place and position as one of the world's premier resorts.

It is also important to note that properties located east of Piikoi Street and south of King Street (west of the Ala Moana planning area) are part of the State's Kakaako Community Development District, under the jurisdiction of the Hawaii Community Development Authority (HCDA). The City and County of Honolulu have no direct control over development within this district.

Figure 1.3 depicts zoning height limits within the Ala Moana neighborhood and surroundings, including limits established by HCDA for the Kakaako Community Development District. Outside of HCDA properties, the tallest building heights (up to 350 feet) are located in proximity to the Convention Center and the Kapiolani-Kalakaua intersection. By contrast, the Ala Moana Center property is limited to 100 feet; directly north of the Ala Moana Center the maximum height limit increases to 250 feet. Thus, most of the building intensity is directed along Kapiolani Boulevard and Kalakaua Avenue. A height limit of 150 feet applies to the area referred to as the "Sheridan Tract" which is dominated by residential use.

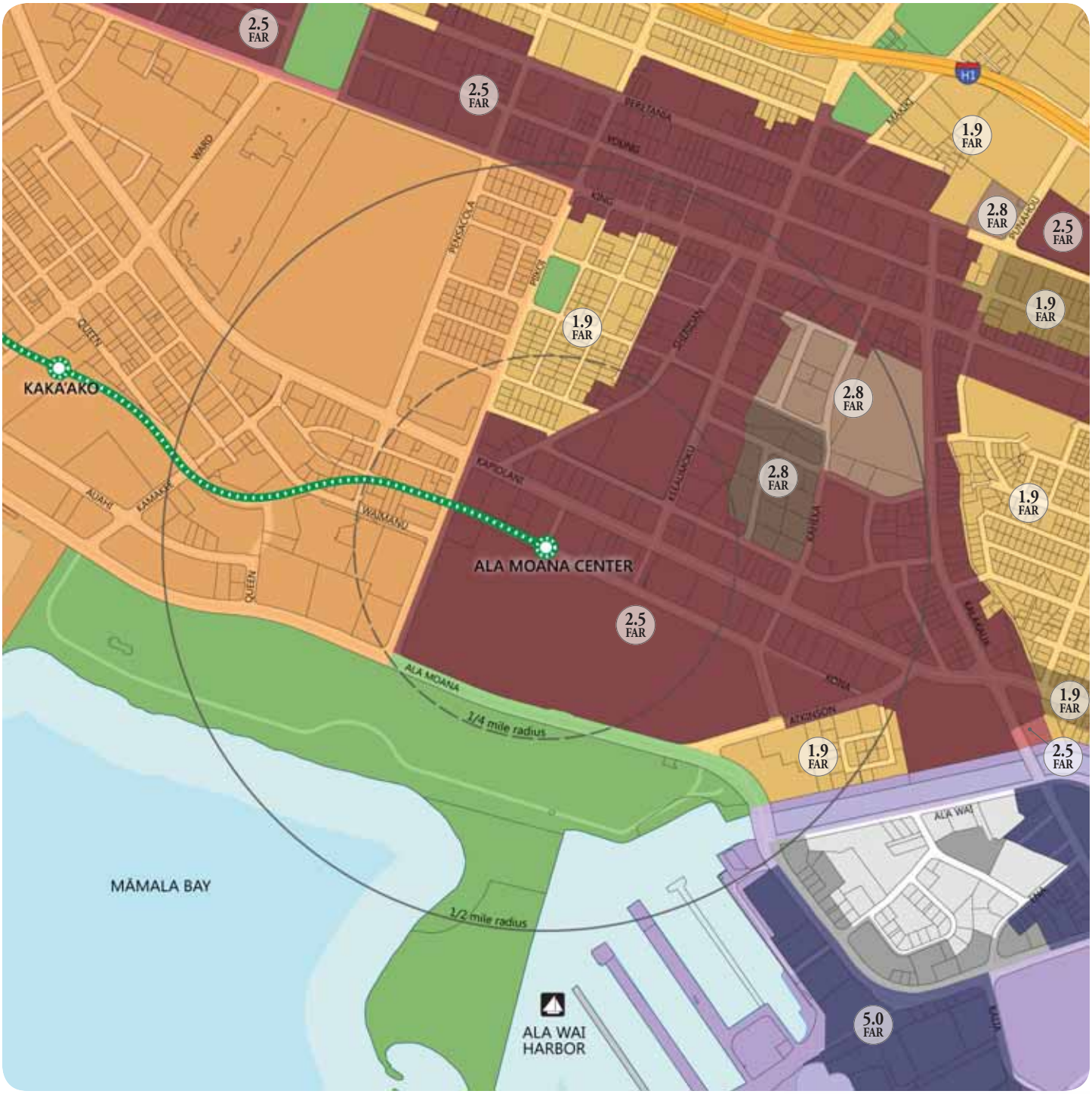


FIGURE 1.2: **ZONING DESIGNATIONS**

Source: Dept of Planning & Permitting: Honolulu Land Information System

4) TOD ORDINANCE 09-4(adopted 2009)


CITY COUNCIL

A BILL FOR AN ORDINANCE

RELATING TO TRANSIT-ORIENTED DEVELOPMENT

Recently adopted zoning provisions allow for the establishment of special districts known as Transit-Oriented Development (TOD) Zones. These zones will be located around rapid transit stations to encourage appropriate transit-oriented development. The purpose is to develop and redevelop station areas to provide additional housing and work opportunities, while increasing ridership and providing livable, walkable communities.

Regulations applicable to a particular TOD zone may supplement and/or modify underlying zoning regulations. Creation of a TOD zone and the associated development regulations will typically follow preparation of a neighborhood TOD plan. Necessary components of the neighborhood TOD plan are specified in the LUO and listed in Section 1.1 at the outset of this Existing Conditions Report. Plan preparation shall be based on comprehensive background analysis (economic, infrastructure, physical character, etc.) and utilize an inclusive, participatory process. It shall be consistent with the regional development plan (i.e., the PUC Development Plan) and other applicable plans. The ordinance also lists minimum requirements for TOD development regulations; these requirements are listed in Table 1.3 and should be fully addressed in the Ala Moana Neighborhood TOD Plan.

SPECIAL AREA & FUNCTIONAL PLANNING

In addition to the three Charter-mandated tiers, development plans may be supplemented by two additional planning mechanisms – the functional planning process and the special area plan. Functional planning provides long range guidance for the development of public facilities; these may be mandated by state or federal regulations. Special area plans offer "specific guidance for neighborhoods, communities and specialized resources."

5) ALA MOANA-SHERIDAN COMMUNITY PLAN (May 2009)

The Ala Moana-Sheridan Community Plan prepared by the DPP presents revitalization strategies for the area; it provides guidance on planning and zoning policies, land development standards, and public infrastructure improvements. It should be noted that this plan has not been finalized due to conflicting viewpoints regarding its proposed strategies.

The plan's policies, principles, and guidelines are structured around three main themes:

1. *Greater mix of housing, commercial and retail uses to strengthen or form neighborhood identity*
2. *Transit- and pedestrian-oriented streets*
3. *Preservation and enhancement of open space and views.*

Proposed initiatives promoting Mixed Land Use and Neighborhood Identity are as follows:

- *Improve Use of Small Lots:* zoning currently encourages assembly of small lots for more efficient development, but little consolidation has occurred and an alternative approach recommends zone changes to facilitate small lot development and improvement of properties.
- *Promote Compatibility of Scale:* zone changes are recommended that require height setback transitions, screening devices, and human scale design elements along streets.
- *Disperse Adult Entertainment Businesses:* zoning amendments are recommended that require separation between adult entertainment uses, as well as minimum distances from residential districts, churches, schools and other protected places.
- *Phase Out Nonconforming Loading Areas:* loading activities associated with larger scale, nonconforming industrial uses create a nuisance for surrounding residences; therefore, zoning regulations are recommended that phase out such use according to an amortization schedule.

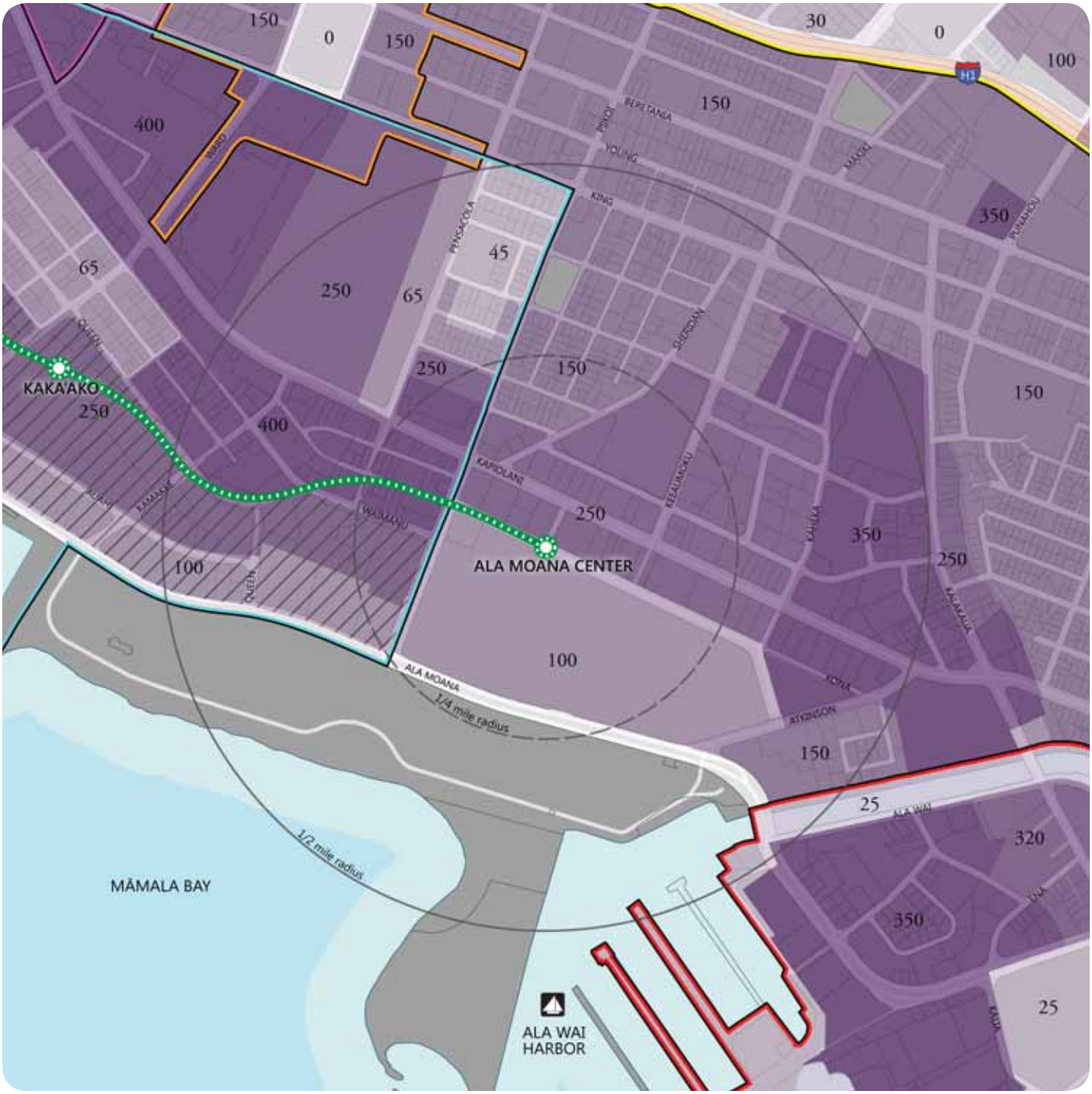


FIGURE 1.3: **ZONING HEIGHT LIMITATIONS**

Source: Dept of Planning & Permitting: Honolulu Land Information System

Proposed initiatives supporting transit- and pedestrian-oriented streets are as follows.

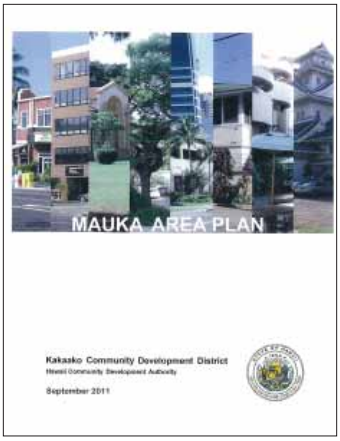
- *Complete the Street Grid and Modify Traffic Flow:* opportunities for extending the street network through redevelopment of "superblocks" should be studied, as should the conversion of one-way streets to two-way traffic.
- *Develop a Street Hierarchy Linked to Land Use:* street design standards based on a street hierarchy that promotes multi-modal movement should be adopted.
- *Improve Transit Service and Connections:* crosswalk enhancements and other measures that promote pedestrian access to the transit station, Ala Moana Center, and Kapiolani Boulevard are recommended.
- *Improve Conditions for Pedestrian and Bicyclists:* street and crosswalk improvements to enhance bicycle and pedestrian movement are recommended, especially at priority intersections.

Proposed initiatives preserving and enhancing Open Space and Views are as follows:

- *Expand Parks and Recreation Facilities:* opportunities for new public recreation sites such as McKinley HS should be pursued; this will require coordination between various government agencies and key stakeholders.
- *Protect Mauka Panoramic and Corridor Views:* lower building height limits and revised setback standards are recommended at specified locations.

This is an especially pertinent reference for preparation of the Ala Moana Neighborhood TOD Plan, as it directly reflects community concerns and expectations. The two planning areas closely approximate one another, and while the Ala Moana-Sheridan Community Plan is not focused on transit-oriented development, it does acknowledge the transit station's future impact on the neighborhood. It will be important that these two documents supplement one another and provide a coherent vision for Ala Moana.

6) KAKAAKO MAUKA AREA PLAN (September 2011)



The Mauka Area Plan prepared by the HCDA, addresses properties located within the Kakaako Community Development District. The Mauka area lies strategically between downtown Honolulu and Ala Moana, with a number of Mauka area parcels falling within a 2000 foot radius of the Ala Moana transit station. While the City has no direct control over properties in the Mauka area, it is important to understand the plan's vision for development. Of particular interest are the height limits for the area, which are illustrated in Figure 1.3. Properties along the Kapiolani corridor, as well as properties generally situated between Kapiolani and Ala Moana Boulevards are permitted development up to 400 feet, which is significantly higher than currently permitted along the Kapiolani corridor as it passes through the Ala Moana neighborhood. Stakeholders understand that this discrepancy gives the Kakaako District a distinct advantage in attracting new development.

7) OAHU BIKE PLAN: A BICYCLE MASTER PLAN (Public Review Draft July 2009)

Prepared by the City and County Department of Transportation Services (DTS), final adoption of the Oahu Bike Plan is anticipated for 2012. It provides a strategy for integrating bicycling into Oahu's transportation system. In today's auto dominated environment, island residents are hesitant to travel by bicycle for fear of excessive vehicular speeds and the lack of dedicated facilities. Investment in a comprehensive and continuous bicycle network will provide a sensible alternative travel mode that will "tread lightly on our natural environment, and yield health benefits."

Oahu's twenty year vision for bicycling is as follows: "Oahu is a bicycle-friendly community where bicycling is safe, viable and popular choice for residents and visitors of all ages." In support of this vision, the plan offers policies and programs based on the five "E's" approach used by bicycle planners to improve safety and increase trips:

1. *Encouragement for changing transportation habits, utilizing marketing, events, and information (e.g., maps)*
2. *Engineering that will support physical improvements, such as bike lanes, routes and signage*
3. *Education to make the community more aware of rules to safely share the road*
4. *Enforcement of traffic laws to ensure safety for all users of the transportation system*
5. *Evaluation of outcomes to improve the bicycle network*

The plan also describes a comprehensive network of bikeways and prioritizes proposed improvements. Section 2.4 of this Existing Conditions Report summarizes and illustrates the proposed bicycle lanes, paths and routes that will serve the Ala Moana planning area. It is important that bicycle network improvements in the neighborhood are integrated with the transit system, as well as the overall bicycle network for the island.

STATION CORRIDOR STUDY

TRANSIT ORIENTED DEVELOPMENT (TOD) ECONOMIC & FINANCIAL STUDY VALUE CAPTURE OPPORTUNITY ANALYSIS (September 2010)

Prepared by Jones Lang LaSalle (JLL), this economic and financial study supports the City's proposed "Value Capture Strategy" to leverage public investment in the rail system. The intent is to help fund additional programmatic needs, such as ancillary station area infrastructure enhancements, affordable housing, and other quality of life improvements. This value capture strategy aims to 1) identify the value of the rail project from the standpoint of environmental, social, and fiscal benefits; 2) quantify value, particularly in terms of the increase in property value and property tax revenue generated for the City through transit-oriented development; and 3) capture value by identifying creative mechanisms or "tools" that will allow the City to participate in value creation associated with transit-oriented development.

Tools commonly used by cities include tax abatement, community facilities districts (CFDs), tax increment financing (TIF), property acquisition, and joint development; according to this study, the City must develop a creative and strategic process by which these tools are used to harness the full potential of TOD. The study offers a phased approach whereby more immediate goals are funded through familiar tax abatement strategies and work toward building consensus around a long term strategy. As development around stations catalyzes, more powerful, but politically volatile strategies such as TIF might be adopted.

Situated in the midst of a major urban center and high employment zone, the Ala Moana station is identified as regionally important. Moreover, according to the JLL study it offers the greatest opportunity for value capture among the 6 stations studied; that value capture could be used to subsidize various community benefits, such as workforce housing, park space, vehicular parking, pedestrian enhancements and area amenities, and infrastructure to support further high density development. A barrier to development around the Ala Moana station is the lack of adequate infrastructure to support high density. Nonetheless, the study adds that more than any other station, "Ala Moana has the capacity to support significant dense development with a mix of uses including residential, retail, and office."

21° 17′ 27″ N, 157° 50′ 26″ W - Ala Moana Tower on left, Ala Wai Small Boat Harbor on right

2

COMMUNITY CONTEXT

2 COMMUNITY CONTEXT

This chapter analyzes existing conditions surrounding the elevated guideway station, generally considering a ½-mile planning radius, but also accounts for key factors lying outside of that radius. It includes an assessment of land use, development intensity, community character, circulation, and the natural environment.

2.1 SOCIOECONOMICS

The Ala Moana neighborhood and environs is known for its commercial and civic uses of regional or statewide significance, including the Ala Moana Center (the largest shopping mall in the state), Ala Moana Beach Park, and the Hawaii Convention Center. The Ala Moana Center in particular is a major driver of economic activity along with the nearby Sam's Club / Walmart. In addition to being a high employment zone, this is also a major residential area which has seen several new high-rise condominiums constructed over the past ten years with price points aimed at high income buyers. Residents of Ala Moana are attracted by the neighborhood's convenient access to numerous amenities, including a range of shopping and services. Census data show a roughly 36% increase in population for Ala Moana (approximated by the four census tracts depicted in Figure 2.0) between 2000 and 2010.

Ala Moana Center

1) DEMOGRAPHIC SUMMARY

Some key demographic findings derived from the summary of census data in Table 2.1 are as follows:

- *Ala Moana has a higher percentage of residents over 65 years of age* and a smaller percentage of children (under 18 years of age) than does the general population of Oahu. This is important because the elderly tend to rely on alternative modes of transportation, including walking and transit.
- *Nearly half (47%) of the area's employed residents use a mode of travel other than driving alone* for commuting to and from work (compared to the 36% for island). A relatively high percentage walks or uses transit.
- *The area features a high percentage of foreign born residents,* many of them immigrants from Korea and the South Pacific. The Kaheka District (largely

Figure 2.0 - Pertinent Census Tracts

depicted by census tracts 36.03 and 36.04), has become a favored location for many Korean owned business.

- *Most households are renters rather than owners,* the reverse of the island-wide pattern. The rental housing supply tends to be concentrated in the Kaheka and Sheridan Districts, as well as the Waikiki end of the Ala Moana District.

2) MARKET INTRODUCTION

According to the TOD value capture study prepared by Jones Lang LaSalle (reference Section 1.3), the Ala Moana area supports a dense employment base, largely due to the presence of the shopping center and nearby office towers. As Hawaii's largest retail mall, the Ala Moana Center features over 290 shops and restaurants and 2.1 million square feet of retail space. Its popularity among locals and tourists, keeps the occupancy rate at 95% while most malls in the US are struggling to attract retailers. The value capture study notes that the area appeals to tourist oriented retailers unwilling to pay Waikiki rents.

While the Ala Moana neighborhood has seen a surge in population over the past ten years, the condo market throughout Honolulu is suffering from an overbuilding phase. Office vacancies in the metropolitan area have also increased due to a rising unemployment rate, although affordable rents make Ala Moana an attractive location for medical office use.

Further details about the area's real estate market and economic conditions will be released as a separate document.

TABLE 2.1 - Demographics for Ala Moana (Census tracts 36.01, 36.03, 36.04, and 37)

The following data was acquired from the 2010 US Census. It highlights different characteristics of the planning study area in comparison to Oahu (the City and County of Honolulu) in general.

Characteristic	Ala Moana District	Oahu
Population	15,014	953,207
Age (Median)	45	38
Population under 18 years old	14%	22%
Population over 65 years old	20%	14%
Male / Female	48% / 52%	50% / 50%
Race		
Asian	63%	45%
Japanese	22%	17%
Filipino	6%	15%
Chinese	10%	6%
Korean	18%	2%
Other	7%	5%
White	18%	21%
2 or more	12%	22%
Native Hawaiian and Pacific Islander	5%	9%
Black	1%	2%
American Indian/Alaska Native and Other	1%	1%
Language spoken other than English	53%	28%
Median household income	$40,789	$70,093
Jobs	6,985	439,691
Housing		
Renter occupied	56%	45%
Average persons per household (Owned / Rented)	1.9 / 1.9	3.1 / 2.7
Education Attainment		
% High school graduate or higher	88	90
% Bachelor's degree or higher	36	31
Transportation		
Mean travel time to work (minutes)	19	27
Commuting to work		
Driving alone	53%	64%
Carpool	10%	16%
Public transportation	15%	8%
Walk	16%	6%
Other means	3%	3%
Worked at home	3%	3%

Source: US Census Bureau: 2010 Census Data

2.2 LAND USE

This section examines existing patterns of land use in and around the planning area. An understanding of existing land use distribution and intensity will allow the formulation of plans that promote economic development, reinforce transit and pedestrian use, and enhance neighborhood livability. It also provides a baseline from which planners are able to assess the impacts of future growth on local infrastructure.

1) EXISTING LAND USE

Ala Moana is an urban district, featuring a balance of commercial and residential use that is well supported by a broad array of civic institutions and community facilities. As a major regional center, commercial and institutional uses promote both a local and tourist economy, highlighted by major shopping nodes, although also characterized by low intensity, underutilized commercial corridors. Residents are attracted by a variety of housing choices, as well as the range of shopping and services that conveniently meet day-to-day needs.

Major commercial activity occurs at select nodes, the most significant being the Ala Moana Center. As Hawaii's largest shopping center encompassing over 2 million square feet, this is one of the island's major economic drivers. A secondary shopping node, located north of Kapiolani, includes the Sam's Club / Walmart block and Don Quijote Supermarket. These quality bargain retailers appeal primarily to the local area population, but are also known to draw tourists. The proposed Ala Moana Center Station, situated on the mauka side of the shopping mall fortuitously straddles these two nodes. Ewa of Ala Moana Center, another important commercial node is the large Ward Centers retail and entertainment development, which will be more conveniently served by the proposed Kakaako Station.

In addition to the above described shopping attractions, *low intensity commercial activity* is found along the area's arterial and collector roadways. Kapiolani Boulevard functions as the area's primary commercial corridor. Its older, low- and mid-rise buildings accommodating small retail, dining, and entertainment establishments are gradually being replaced by newer, higher value buildings and uses, transitioning toward an urban mixed use corridor that will be well served by the rail station. Keeaumoku, Sheridan and King Streets tend to be similarly underdeveloped with small scale commercial uses, as are stretches of Kalakaua Avenue.

Residential use is concentrated east and west of the Keeaumoku Corridor. East of Keeaumoku (also known as the Kaheka District) is developed at a higher density, including the Kalakaua public housing project and a number of high-rise apartment buildings. This area has proved to be popular with seniors. West of Keeaumoku is the Sheridan Tract, characterized by low- to medium-density residential use, including a number of single family dwellings. Further afield, relatively low density housing is found in the Makiki and McCully neighborhoods to the north and east respectively, while pockets of high-rise condominiums are emerging in the Kakaako District to the west.

Looking mauka up the Keeaumoku Corridor

Community facilities and civic institutions in and around the neighborhood enhance livability, and are comprised of parks, schools, places of worship, hospitals, public venues, and government facilities. These include both regional serving and community-based resources, and are further discussed later in this section. Ala Moana Beach Park located makai of the shopping mall is the most substantial open space amenity, providing urban Honolulu with indispensable waterfront access. While a limited number of hotels call Ala Moana home, world renowned Waikiki is heavily populated with hotels and resorts, as well as a considerable stock of high-density residential condominiums. The Hawaii Convention Center prominently situated adjacent the Ala Wai Canal links Ala Moana and Waikiki.

FIGURE 2.1: **EXISTING LAND USE**

Source: Dept of Planning & Permitting: Honolulu Land Information System

2) PROPERTY OWNERSHIP

It is apparent from Figure 2.4 depicting major property owners in the area that a high degree of cooperation between public and private entities will be necessary not only to maximize the "value capture" associated with transit-oriented development, but to also meet the needs of the entire neighborhood. Working with all stakeholders, including the owners of property located near the transit station will be essential to success.

Key private land owners include the following; the Stakeholder Interviews described in Chapter 4 involved representatives from each of these entities (except Don Quijote USA).

- As the owner and operator of the Ala Moana Center, *General Growth Properties (GGP)* is the single largest private land owner in the immediate vicinity. They also own several properties along Kapiolani, including the Ala Moana Hotel. With the proposed rail station located directly mauka of the shopping center, GGP stands to gain from improved access to their mall. Nonetheless, station design, operations, and maintenance will be of direct concern as this will impact the mall visitor experience. Additionally, there may be a substantial development opportunity in building above the shopping center's parking structures, although requiring zoning changes.

Ala Moana Center

- Other major shopping facilities in the vicinity are associated with comparatively large land holding, namely, *Walmart Realty* as owners of the Sam's Club / Walmart block, and *Don Quijote USA*. While these stores also stand to gain from improved access, neither has expressed immediate interest in expansion or redevelopment.

Walmart / Sam's Club

- *Samkoo Pacific* is a Korean based developer with strategically sited land holdings along Kapiolani Boulevard, including a key parcel directly adjacent to the proposed station site. They have expressed an interest in zoning changes that will support greater development potential on their properties.
- *Howard Hughes Corporation* owns and operates the large commercial development known as the Ward Centers located east of the Ala Moana Center, in the makai area of the Kakaako District. Significantly, they also own the air rights above the Nordstrom parking structure along Kapiolani.

Public entities are also major landholders in and around Ala Moana, necessitating coordination between State and local agencies to address such neighborhood concerns as the expansion of park and recreation facilities.

- State Agencies with substantial land holdings include the *Hawaii Community Development Authority,* the *Hawaii Housing Finance and Development Corporation,* the *Hawaii Public Housing Authority,* the *Department of Land and Natural Resources (DLNR),* and the *Department of Transportation (DOT).* Lands under State ownership include Ala Moana Beach Park, McKinley High School, and the Kalakaua Public Housing.

Historic McKinley High School

- *City and County* ownership includes community parks such as Sheridan Community Park and Pawaa Park.
- *Public* ownership (both State and City and County) is also associated with parcels acquired for the purposes of constructing the HRT's elevated guideway, and are located in the Kakaako district. Surplus land may be available for redevelopment following completion of the project.

FIGURE 2.2: **PROPERTY OWNERSHIP** (PUBLIC/PRIVATE)

Source: Dept of Planning & Permitting: Honolulu Land Information System

3) COMMUNITY FACILITIES / CIVIC INSTITUTIONS

An array of civic institutions and community-based facilities serve the Ala Moana neighborhood, as shown in Figure 2.3. Some of these institutions cater to a wide audience, including tourists. However, many serve a more local clientele; this is a key factor in attracting residents to the area as they are able to meet many of their day-to-day needs without a car.

Primary and Secondary Schools: All major schools in the area are found north of Kapiolani Boulevard. The largest of these is *McKinley High School,* a public secondary school with an enrollment of approximately 1800 students, many from economically disadvantaged families. *George Washington Middle School,* located east of Kalakaua Avenue in the McCully District, enrolls approximately 850 students and has been in operation since 1926. There is also the *Kaahumanu Elementary School* and a handful of private school campuses located in the general vicinity.

Higher Education: There are no major colleges or university campuses located within or immediately adjacent to the planning area. Smaller colleges and continuing education facilities in the area include *Honolulu University,* a distance learning institution, *Heald College,* a vocational school, and the *McKinley School for Adults* located on the campus of the high school. The *University of Hawaii at Manoa* is located just over two miles to the east, but is conveniently accessible by bus.

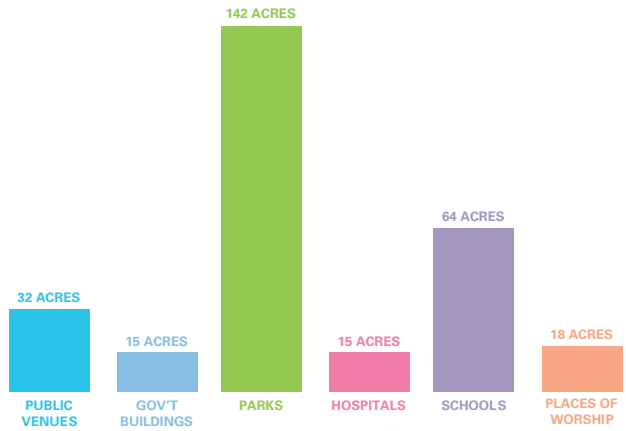
Medical Facilities: There are four major medical facilities within the general vicinity of Ala Moana, all found north of King Street. This is an important resource for the elderly of the area. These facilities include the *Straub Hospital and Clinic,* a 159-bed facility established in 1921; the *Shriners Hospital,* a 24-bed orthopedic hospital geared towards children; and the 207-bed *Kapiolani Hospital,* dedicated in 1890 by Queen Kapiolani. A large *Kaiser Permanente* clinic is located at Pensacola and King Streets.

Kapiolani Hospital

Parks and Recreation Facilities: *Sheridan Community Park* is the most centrally located of the area's community-based parks; at the periphery of the Ala Moana neighborhood are also *Koluwalu Park, Pawaa Neighborhood Park, Cartwright Field,* and historic *Thomas Square Park.* Despite their number, these relatively small parks provide insufficient community-based park acreage and recreational facilities for such a dense, urban area. Recreational facilities are also found at the high school, as well as the expansive *Ala Moana Beach Park,* although not primarily intended for neighborhood residents. Privately owned recreational facilities include the *Central YMCA* on Atkinson Boulevard and the *Honolulu Club* adjacent to the Blaisdell Center. Parks and open space are discussed in greater detail in Section 2.6.

Public Venues: The *Neil Blaisdell Center* located directly west of the high school features an arena, concert hall and exhibition hall. This was Honolulu's major meeting and exhibition facility until the *Hawaii Convention Center* opened in 1998. Providing 1.1 million square feet of exhibition space, the convention center is prominently located at the intersection of Kapiolani and Kalakaua, adjacent to Waikiki.

Other Uses: Emergency services include a fire station on Kaheka Street near Kapiolani, and emergency shelters at a handful of public schools and parks. Government facilities include a youth detention center and the *Hawaii Department of Agriculture* headquarters. The area offers a diversity of religious institutions, primarily Christian denominations and Buddhist temples.



Acreage of major community facilities and civic institutions located within the 1/2 mile planning area, and the near vicinity as depicted by Figure 2.2.

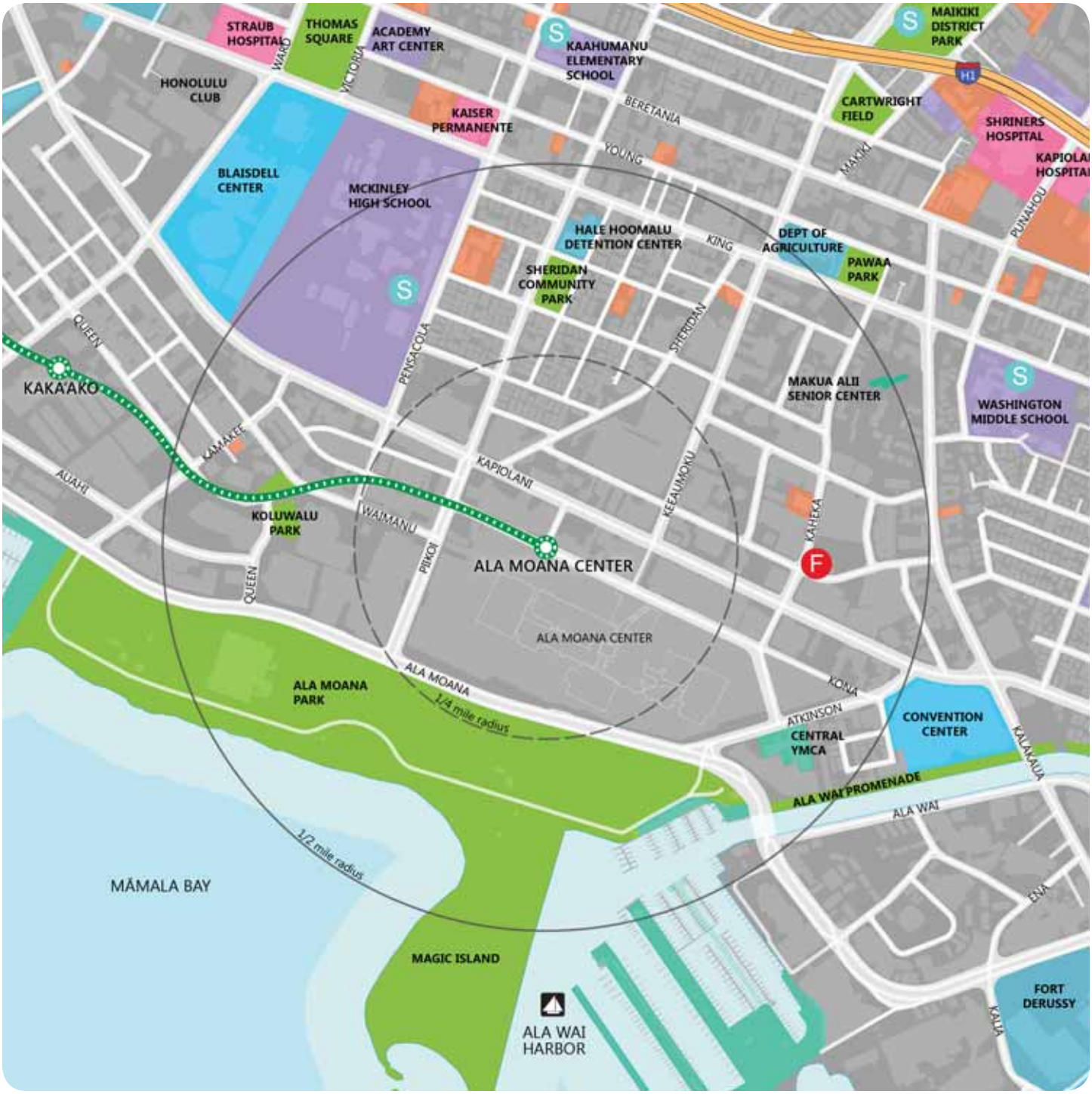


FIGURE 2.3: **COMMUNITY FACILITIES / CIVIC INSTITUTIONS**

Fixed Guideway
Rail Stations
Emergency Shelters
Fire Stations
Government Facilities
Recreational Facilities
Parks
Public Venues
Hospitals
Schools
Places of Worship

Source: Dept of Planning & Permitting: Honolulu Land Information System

2.3 DEVELOPMENT INTENSITY

The intensity of existing development within the planning area is described in this section, focusing on such measures as floor area ratio and building heights. This will provide a base line from which to assess proposals for future development intensities and residential densities, ensuring efficient use of land and compatibility between old and new development.

1) DEVELOPMENT INTENSITY / FAR

Intensity of development is normally measured utilizing a floor-to-area ratio (FAR); this calculates the ratio of total building floor area to lot size. Approximate FARs for non-residential parcels are depicted in Figure 2.4, with the darker shade indicating higher FAR.

Ala Moana's most intensely developed parcels are located along Kapiolani Boulevard, one of the major east-west corridors serving the area. Even so, many properties along this corridor have not realized their full development potential under current zoning provisions. As a result, older low- and mid-rise buildings are gradually being replaced by newer, higher-value buildings that take advantage of their location to achieve the maximum allowable FAR. Underutilized commercial properties are found along other arterial and collector streets where redevelopment has proceeded at an even slower pace.

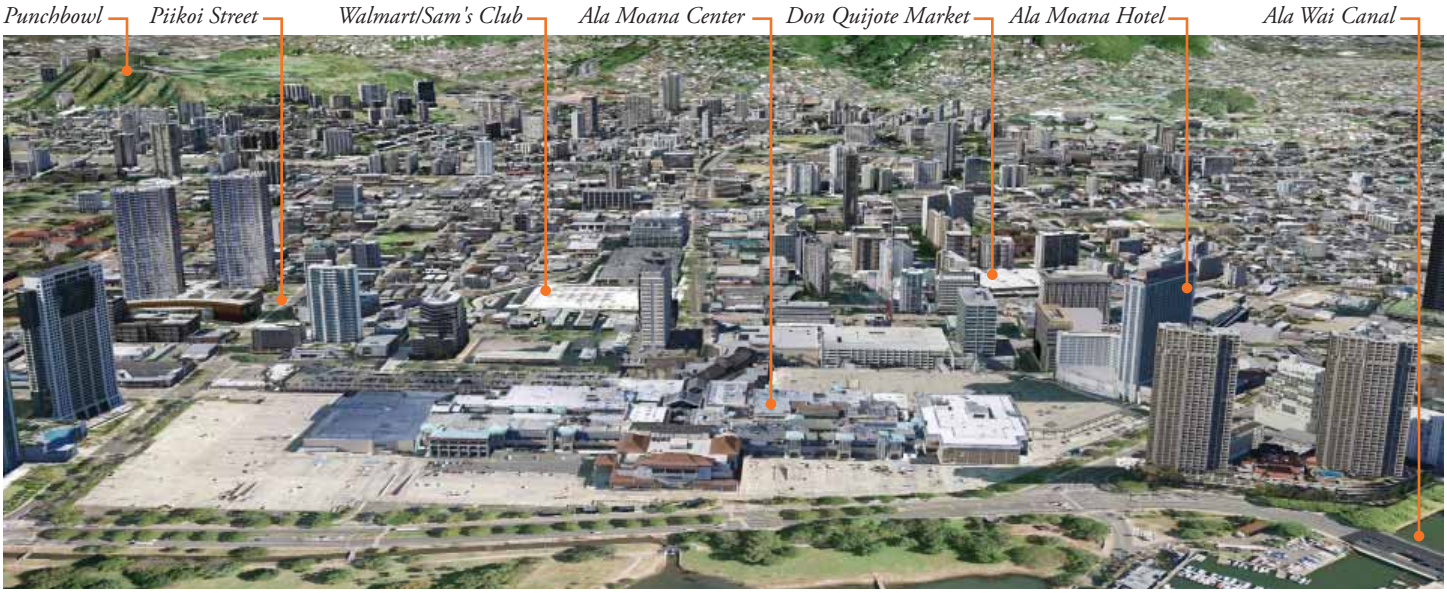
The development community has identified significant barriers to redevelopment, including the prevalence of small lots and artificially high land values. Moreover, the marketplace for development is limited and properties located in the adjacent Kakaako District build under more lenient HCDA regulations that establish higher FAR and height limits. (Reference Figure 1.3.)

2) RESIDENTIAL DENSITY

Residential density measures the number of people or housing units in a given area; the typical measure is dwelling units per acre. Figure 2.4 illustrates the approximate number of housing units per acre for residential parcels, with the darker shades indicating higher density.

Ala Moana's highest residential densities are in the Kaheka District, where there are a number of high-rise apartments and condominiums. This district is known for its large number of elderly residents, including the many senior occupants of the Kalakaua public housing project. The Sheridan Tract is less densely developed, characterized by modestly scaled single and multi-family dwellings. Nonetheless, many of these dwellings have been retrofitted to accommodate as many residents as possible.

The adjacent Kakaako District has seen recent construction of condo towers, while Waikiki is developed at uniquely high residential densities. There is concern that similar redevelopment will lead to the gentrification of Ala Moana, emphasizing luxury high rise developments while reducing the stock of affordable housing.



Ala Moana Neighborhood looking mauka (Source: Google Earth)

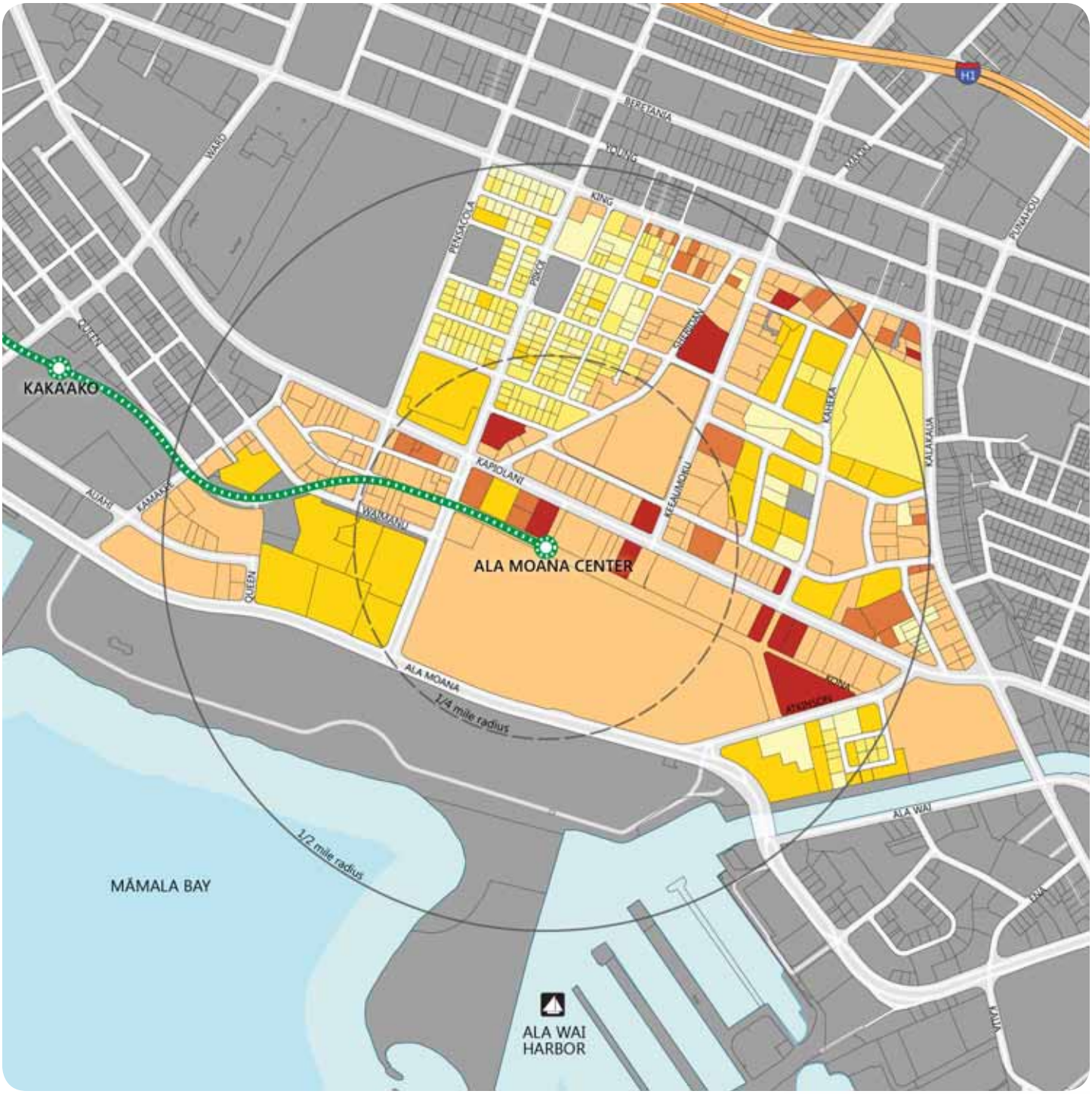


FIGURE 2.4: **DEVELOPMENT INTENSITY**

Source: Ala Moana-Sheridan Community Plan

3) BUILDING HEIGHTS

Figure 2.5 depicts existing building footprints and heights, with darker shades indicating taller buildings. In general, heights of existing buildings within the planning area fall well below established height limitations. (Reference Figure 1.3)

High-rise structures tend to locate along Kapiolani Boulevard, the major east-west thoroughfare linking Ala Moana with Downtown Honolulu and Waikiki, although interspersed with numerous lower scale commercial structures. These underdeveloped commercial properties represent a redevelopment opportunity, as the assigned height limits provide for considerably more development potential. Nonetheless, recent high-rise construction has proceeded west of Piikoi, where more lenient HCDA regulations permit a 400 foot height limit throughout much of the Kakaako District.

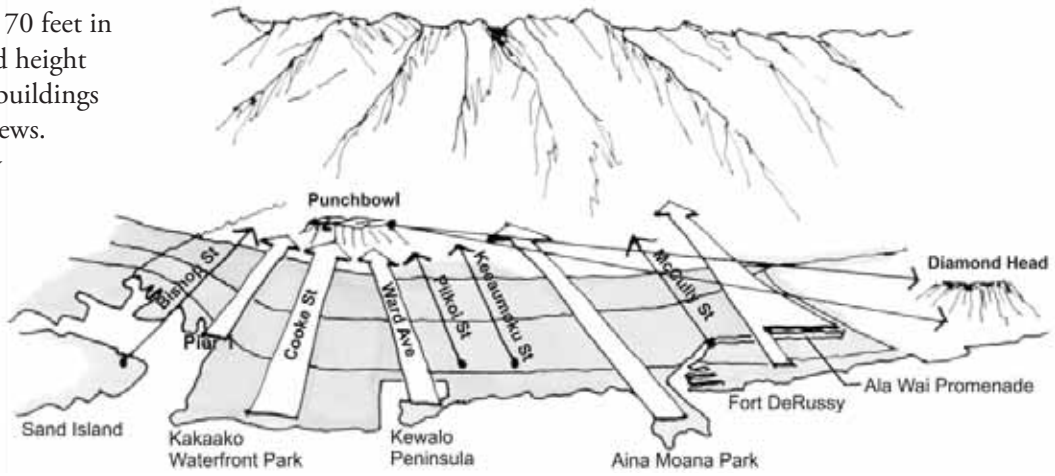
A number of tall commercial and residential buildings are also located east of Keeaumoku, reflecting proximity to Waikiki. Interposed with much smaller scale structures, these towers sometimes overwhelm adjacent buildings, creating abrupt changes in scale and building form. The Ala Moana Sheridan Community Plan discusses the need for regulations addressing transitions in scale.

The Sheridan Tract east of Piikoi generally encompasses modestly scaled residential buildings standing less than 50 feet tall despite a height limit of 150 feet. While this discrepancy has not yet resulted in significant changeover, lowering the height limit would help maintain neighborhood stability and impede gentrification.

The Ala Moana Center, while quite monolithic in scale, generally does not exceed 70 feet in height, in keeping with established height limits and thereby allowing taller buildings located further inland shoreline views. In fact, there is strong community desire to maintain panoramic and framed views of the mountains. Mauka-makai view corridors are especially important, for example, along Keeaumoku and Piikoi and Pensacola Streets; buildings should be oriented to protect these views.

Keeaumoku corridor with mauka views

Incompatible scales of development



View corridors looking up major streets. (Primary Urban Center Development Plan)

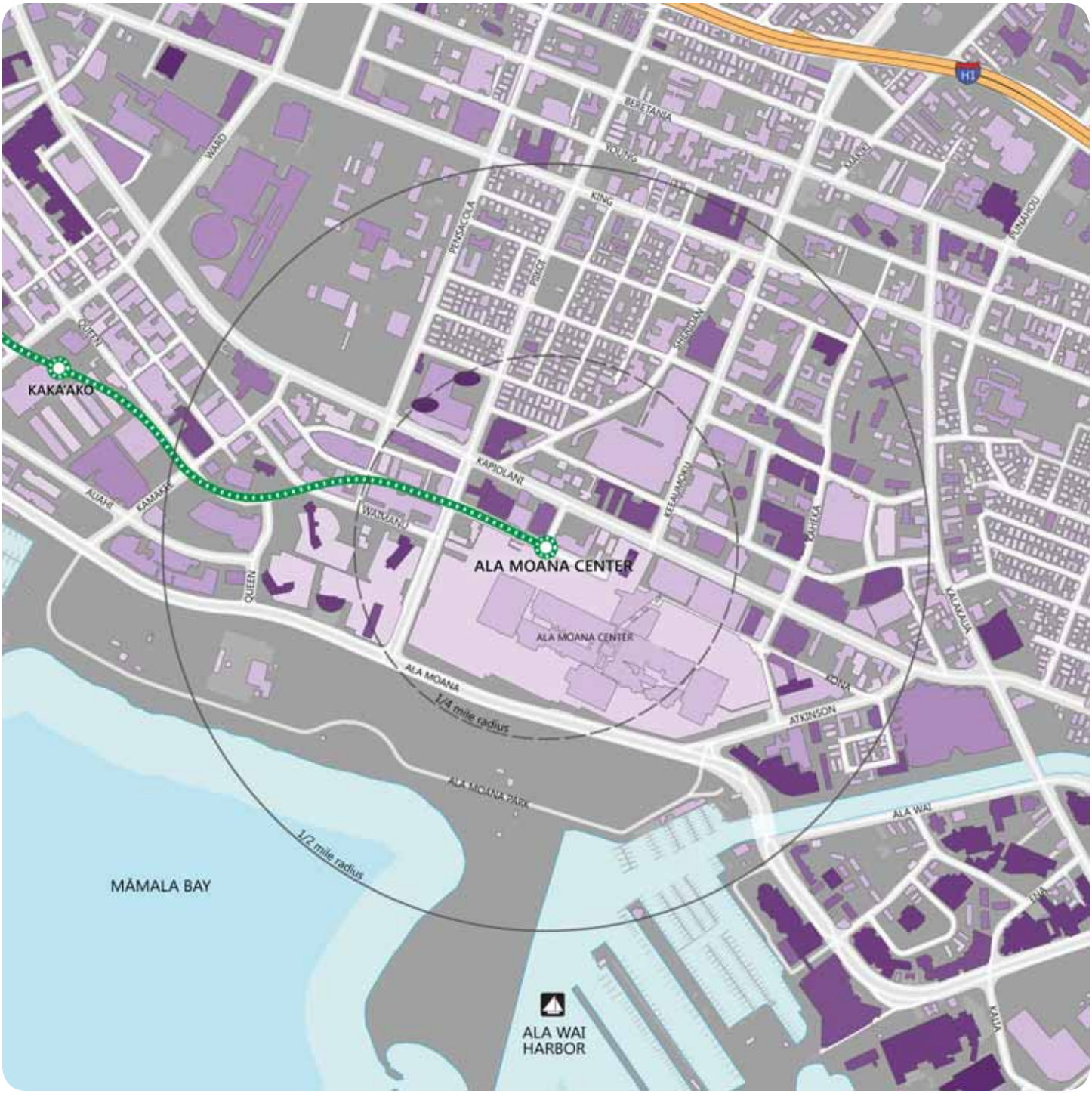


FIGURE 2.5: **EXISTING BUILDING HEIGHTS & FOOTPRINTS**

Fixed Guideway
Rail Stations
0'-25'
25'-50'
51'-75'
76'-100'
101'-150'
151'-200'
201'-300'
301'-400'
401'-500'

Source: Dept of Planning & Permitting: Honolulu Land Information System

2.4 COMMUNITY CHARACTER

The section further describes the physical character of Ala Moana. It maps the neighborhood's basic structure (i.e., districts, nodes, gateways, and corridors), while identifying major site features, as well as historic and cultural resources.

1) COMMUNITY STRUCTURE

Ala Moana Neighborhood: Ala Moana is a regional urban center comprised of a mix of commercial and residential land uses, supported by a broad range of civic institutions and community facilities. Following the precedent set by the Ala Moana-Sheridan Community Plan, the neighborhood may be divided into a number of sub-districts.

- The *Ala Moana District* supports both local and tourist economies, dominated by the Ala Moana Center, south of which is the regional serving Ala Moana Beach Park. The Hawaii Convention Center highlights the eastern gateway to the Ala Moana neighborhood.
- *Kapiolani Corridor* is the major east-west connection through the neighborhood, linking Ala Moana with Downtown and Waikiki. Low intensity commercial enterprises are gradually giving way to higher value, high rise developments that are transforming Kapiolani into a vital mixed use corridor.
- *Keeaumoku Corridor* is a key mauka-makai connection, directly linking the neighborhood with the proposed rail station site and the "front door" of the shopping mall. Also characterized by various small scale commercial uses, the more recent Sam's Club / Walmart development has created a secondary shopping node that serves a more local clientele.

Single family adjacent multifamily

- The *Kaheka District* located east of the Keeaumoku Corridor is a relatively high density residential area that includes the Kalakaua public housing project and a number of high rise apartments. Kalakaua Avenue marks the eastern boundary of the neighborhood.
- The *Sheridan District* is also largely residential, comprised of a mix of older single family residences and more recently built low- to medium-density multi-family dwellings. It is centered around a small community park.

Kakaako District: This major urban district is situated between Ala Moana and downtown Honolulu. The easternmost portion of this district falls within the ½-mile planning radius for the proposed Ala Moana Center Station, and therefore deserves consideration. Mauka of Kapiolani are the adjoining campuses of McKinley High School and the Neil Blaisdell Center, referred to as the *Civic District* in the Ala Moana-Sheridan Community Plan. Makai of Kapiolani features the Ward Centers shopping complex. Closer to the Ala Moana Center, a large concentration of light manufacturing uses is giving way to high-rise condominium development.

View of Kakaako facing Diamond Head with luxury condos in background

Other Neighborhoods: Across the Ala Wai Canal is world renown Waikiki. A major tourist zone, it is densely populated with residential and hotel towers. Premier hotels and resort complexes border Waikiki Beach, while Kalakaua Avenue functions as its primary commercial corridor. According to 2002 estimates, Waikiki generates almost 8% of the state's domestic product, largely due to its tourism industry.

The *McCully District* and *Makiki District* are located to the east and north of the planning area, respectively. These areas are largely characterized by single family homes and multi-family apartments, punctuated by the occasional residential tower. Makiki is unique as it is characterized by the upward slope of Punchbowl Crater and Tantalus.

View of Makiki District

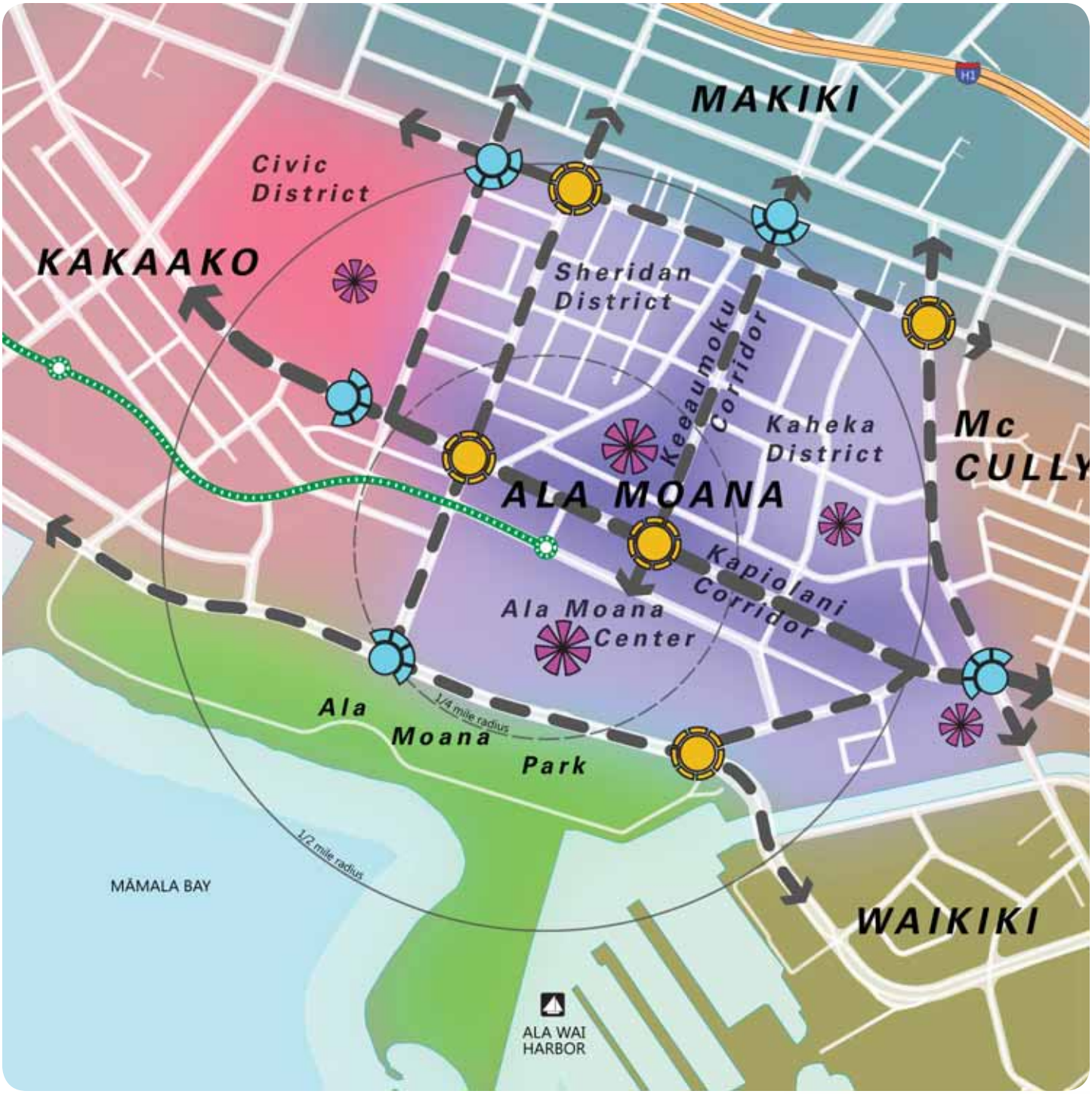


FIGURE 2.6: **COMMUNITY STRUCTURE**

Source: Dept of Planning & Permitting: Honolulu Land Information System; Visual Analysis

2) MAJOR ATTRACTIONS / SITE FEATURES

The Ala Moana neighborhood and its surroundings include a number of scenic, recreational, civic and commercial attractions of regional or statewide significance. These are located in Figure 2.7.

The Ala Moana Center 1 is one of Honolulu's top tourist attractions. Built in 1959, it was once the largest shopping center in the nation and has since expanded several times to encompass two million square feet, making it the largest open air shopping center in the world. The Ala Moana Center receives almost 42 million visitors a year, many of which come from either the U.S. mainland or Asia. Ala Moana Hotel, one of the larger hotels in the vicinity, is connected to the mall.

Immediately makai of the shopping mall is the 76-acre Ala Moana Beach Park. 2 Maintaining shoreline access and panoramic views, the park is extremely popular with the local population and families looking to take advantage of its various amenities and calm waters.

HONOLULU CONVENTION CENTER:
1.1 millon ft² of exhibit space

Mauka of Kapiolani Boulevard are a couple of quality bargain shopping venues that are especially popular with the local population. The more recent Walmart/Sam's Club 3 complex on Keeaumoku Street also attracts tourists, while the Don Quijote Supermarket 4 on Kaheka Street is especially popular with the area's large Asian population.

Located at the intersection of Kapiolani and Kalakaua, the Hawaii Convention Center 5 defines the eastern gateway to Ala Moana and provides an important to link to Waikiki. Opened in 1998, it functions as the principal exhibition center for the State of Hawaii, generating a significant amount of activity in the area during large conventions.

Adjacent to the Convention Center and delineating Waikiki's western edge, the Ala Wai Canal 6 is popular with canoe paddlers and kayakers, while walkers, joggers, and bicyclists enjoy its tree-lined promenade. The canal drains into the Ala Wai Small Boat Harbor; 7 as the largest small boat and yacht harbor in Hawaii, it draws boaters from around the world.


Ala Wai canal

Northwest of the project area is a historically significant grouping of educational and cultural institutions. Historic McKinley High School 8 enrolls almost two thousand students; its large campus also provides an adult learning center. The adjoining campus of the Neil Blaisdell Center, 9 in operation since 1964, is made up of three main venues: a multi-purpose arena, a concert hall, and an exhibition hall. These venues accommodate a variety of activities, including music performances, trade shows, and sporting events. Mauka of these institution is the cultural district centered on historic Thomas Square park. 10 The Honolulu Museum of Art, and its annex the Honolulu Museum of Art School (the historic Linekona School) border the square.

Another large, outdoor retail and entertainment complex is located west of the Ala Moana Center in nearby Kakaako. Known as the The Ward Centers 11, its 550,000 square feet offer national retailers, locally owned "one-of-a-kind" shops, a range of dining experiences, and a 16-plex movie theater.

The vicinity is dotted with numerous hotels, the largest and most popular located beyond the Ala Wai Canal along Waikiki Beach. Given its size and relative proximity, the most notable of these is the Hilton Hawaiian Village. 12 Sitting on over 22 acres, it is the largest hotel in Honolulu and the 17th largest hotel in the world.

FIGURE 2.7: **MAJOR ATTRACTIONS**

N

0 500 1000 Feet

0 1/4 Miles

Fixed Guideway Rail Stations

1. Ala Moana Center
2. Ala Moana Beach Park
3. Walmart/Sam's Club Shopping Center
4. Don Quijote Supermarket
5. Hawaii Convention Center
6. Ala Wai Canal and Promenade
7. Ala Wai Small Boat Harbor
8. McKinley High School & Community Adult School
9. Blaisdell Center
10. Thomas Square
11. Ward Centers
12. Hilton Hawaiian Village

Source: Dept of Planning & Permitting: Honolulu Land Information System; Visual Analysis

3) HISTORIC & CULTURAL SITES

A considerable number of historically or culturally significant sites are found throughout the Ala Moana neighborhood and its surroundings, as shown in Figure 2.8. Neighborhood planning must respect their presence, and moreover, respond favorably to local history and culture. The Ala Moana-Sheridan Community Plan provides a concise history of the area, and informs this discussion.

Several sites are either listed or eligible for listing in the *Hawaii or National Register of Historic Places*. The most noteworthy are currently listed on both State and National Registers:

- *Ala Wai Canal* prominently marks the western end of Waikiki. This artificial waterway was constructed in the 1920s to drain the vicinity of marshy land, thus preparing the way for urban development.
- *McKinley High School's* original quadrangle was constructed in 1923. Featuring historic Spanish Colonial Revival buildings, this is one of the oldest secondary schools in Hawaii.

McKinley High School

- *Shingon Shu Buddhist Temple,* located at 915 Sheridan Street offers one of the most elaborate displays of Japanese Buddhist temple architecture in Hawaii.
- *Thomas Square Park* (the first public park in Hawaii), the Honolulu Museum of Art (formerly the Academy of Arts) and the Honolulu Museum of Art School (occupying the historic Linekona School) form a unique grouping of historic and cultural landmarks. The City created the Thomas Square / Honolulu Academy of Arts Special District to further protect these sites.

There are additional state designated landmarks, including the *Department of Agriculture* building and grounds on S. King Street, and the *1932 Makiki Christian Church*, built in the style of Japan's Himeji Castle as a symbol of peace and protection. *Ala Moana Beach Park* has historic, as well as recreational and scenic significance. Dedicated by President Roosevelt in the 1930s, it contains several structures reflecting the art deco design of that period.

Makiki Christian Church

Other sites of historic or cultural interest include several unique religious structures, such as the Chinese inspired *First Chinese Christian Church* and the art deco style *LDS Church*. Non-religious sites include the *Neil Blaisdell Arena and Concert Hall*, built in 1964. Both are well used to this day. The arena was the venue for Elvis Presley's famous 1973 'Aloha from Hawaii' performance, while the Concert Hall provides a home to the Honolulu Symphony and various theater and opera companies. A unique neighborhood attraction is the *Pagoda Hotel's* circular restaurant that "floats" over a remnant of the ponds that were once characteristic of the area's pre-urban landscape. The pond is now filled with colorful Koi. The row of *monkeypod trees* fronting Kapiolani Boulevard has also been depicted as eligible for landmark status.

An Environmental Impact Statement completed in 2008, evaluated properties that may be directly impacted by construction of the rail project, and determined that a small number of them are eligible for landmark status. Eligible sites include the *Hawaiian Life Building* at the corner of Kona and Piikoi. While there are affected structures with a general historic character, they have been modified beyond what is appropriate for listing in the National Register.

Neil Blaisdell Arena

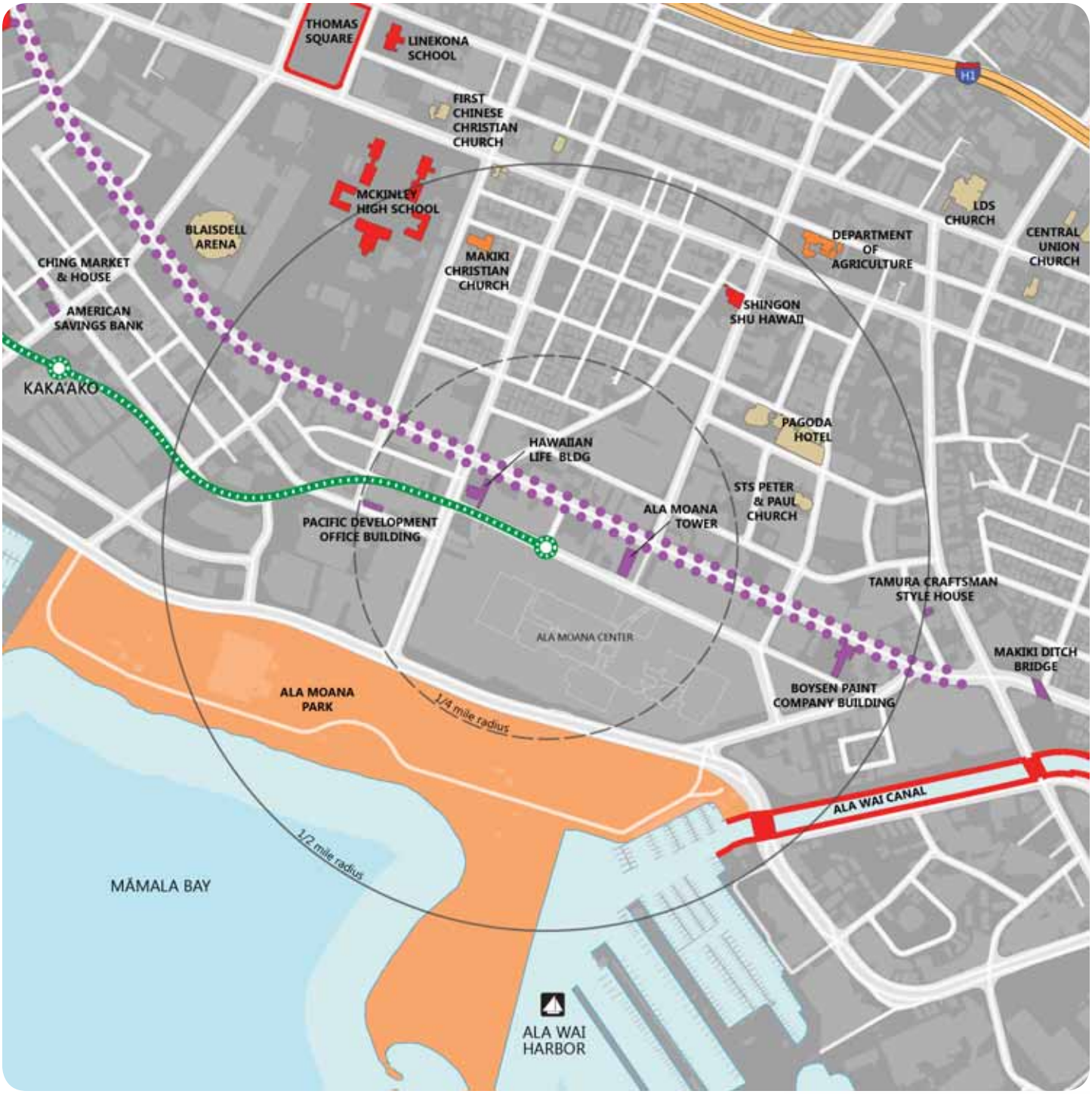


FIGURE 2.8: **HISTORIC / CULTURAL SITES**

Source: Historic Resources Technical Report: Honolulu High-Capacity Transit Corridor Project

2.5 CIRCULATION

This section reviews mobility conditions within the Ala Moana Center Station TOD planning area, including roadways, the transit network, and bikeways. The inventory focuses on conditions within the ½-mile planning radius, however, major components of the transportation network outside of this area are referenced when they play a significant role in the area's overall circulation.

1) ROAD CLASSIFICATION / CIRCULATION

While Honolulu does not have a formal street classification system, Ala Moana's streets may be functionally classified into five general categories based on roadway geometries and traffic characteristics:

1. *Interstate/freeway/expressway (±6 lanes),* referring to the H1 Freeway running in the east-west direction, just mauka of the planning area.
2. *Urban principal arterials (±6 lanes),* identified as Ala Moana and Kapiolani Boulevards, as well as King, Beretania, and Pensacola Streets. These are high volume roadways that are critical links to downtown and Waikiki. As such, they establish the backbone of the area's transportation network, while readily serving its main draw -- the Ala Moana Center.
3. *Urban minor arterials (±4 lanes),* generally running mauka-makai, are identified as, Kalakaua and Keeaumoku Avenues, as well as Piikoi Street and Atkinson Drive. These links provided connections between the principal arterials and connect the H1 highway to the planning area, and immediate access to Ala Moana Center.
4. *Urban collectors (±2 lanes),* comprised of Kaheka and Young Streets, a portion of Sheridan Street, and Queen and Kamakee Streets, these streets connect the local roads with the principal and minor arterials.
5. *Local roads (±2 lanes),* encompassing minor roadways that primarily serve local residents and businesses rather than thru-traffic.

Although this is a generally gridded network of streets, uses occupying large scale "superblocks" interrupt connectivity. In particular, the shopping mall interferes with linkages to Ala Moana Boulevard and the shoreline. The adjoining campuses of McKinley High School and the Neil Blaisdell Center create another superblock; other large blocks that interrupt the street grid include the Sam's Club / Walmart site and the Kalakaua public housing site. Each of these developments entailed street closures.

High volumes of rush hour traffic push the circulation network to capacity, and reverse or contraflow lanes have been employed to increase Kapiolani's ability to move vehicles in and out of the downtown area. As noted in Table 2.1, 53% of the area residents commute to work by car, and as congestion increases along the H1 Freeway, a greater share of the island's commuters look to the Ala Moana's major thoroughfares for alternative routes. However, as prospects for multi-modal movement increase, especially in anticipation of the rail line, a reexamination the area's circulation network is justified. This may include conversion of one-way couplets to two-way streets and better accommodation of alternative modes of travel through the design of "complete streets."

Traffic along Sheridan St behind Walmart / Sam's Club

Traffic along Kalakaua Ave

FIGURE 2.9: **VEHICULAR CIRCULATION**

Source: Dept of Planning & Permitting: Honolulu Land Information System; Dept of Transportation Services

2) TRANSIT NETWORK

Currently, the Ala Moana neighborhood is well served by Honolulu's "The Bus" network, with routes covering most of the area's major thoroughfares, allowing frequent service to Downtown, Waikiki, the University of Hawaii, and other major destinations. (Reference Figure 2.10) Bus stops are conveniently located near neighborhood attractions, and the Ala Moana Center in particular is highly accessible by bus, with "transit centers" along Kona Street (the mauka side of the mall) and Ala Moana Boulevard (the makai side of the mall). The Kona Street stops are especially active; however, waiting areas lack amenities and the convergence of numerous buses can cause delays.

Tourist bus stop near Ala Moana Center

Transit options will expand with the introduction of rail service. As previously, noted, the Ala Moana Station is the easternmost station for the initial phase of the Honolulu Rail Transit project. This fixed guideway system will connect Honolulu's employment and residential centers, operating on an elevated, exclusive right-of-way to ensure speed and reliability, and avoid conflicts with vehicles and pedestrians.

The Ala Moana Center Station is projected as the largest boarding station along the rail line, with 22,000+ daily boardings anticipated. As most of these arrivals are expected by bus, the integration of rail and bus will be critical. The rail station will be located at the intersection of Kona and Kona Iki Streets, adjacent to the Ala Moana Center. For this reason the bus stops along Kona have particular importance and planning should accommodate improved waiting facilities commensurate with a transit center for a major urban district. Following completion of the rail line, many bus routes will need to be reevaluated. For maximum efficiency, redundant bus routes may be converted to feeder routes, providing expanded service in a mauka-makai (perpendicular to rail) direction.

The Bus on Kona St

Riders getting off The Bus at Ala Moana Center

Tourist bus stop near Ala Moana Center

FIGURE 2.10: **TRANSIT NETWORK**

Fixed Guideway Stations
Bus Route
Multiple Bus Routes
Bus Stop
Major Tourist Bus Stop

Source: Dept of Planning & Permitting: Honolulu Land Information System

RTKL AN ARCADIS COMPANY

3) BIKEWAYS / PEDESTRIAN PATHS

Figure 2.11 depicts existing and proposed bicycle facilities within the planning area, as derived from the Oahu Bike Plan. It also shows pathways delineated by the Primary Urban Center (PUC) Development Plan as part of a regional pedestrian network linking key districts and major parks. Pedestrian circulation around the proposed station site is addressed in greater detail in Chapter 3.

The Oahu Bike Plan proposes a comprehensive network of bike paths, lanes and routes that will service the island. A *bike path* (also referred to as a shared use path) is an off-street facility; usually located in parks, the physical separation from vehicular traffic makes these family friendly. A *bike lane* is an on-street demarcation delineated by a wide, white line; typically five- to six-feet wide, they contain pavement stencils indicating bicycle use only. A *bike route* is an on-street demarcation posted with street signage and in some instances, pavement markings; a wide outside traffic lane is preferable for bike routes, thereby enabling cars to safely pass bicyclists.

Existing bicycle facilities in and around the planning area are limited to a few bicycle paths circulating through Ala Moana Park and following the Ala Wai Canal Promenade. There is also a marked bike route along Young Street; this route establishes an east-west connection through the area, although discontinuous as it approaches downtown. Lacking a comprehensive bike network linking the neighborhood and its surroundings, bicyclists are regularly forced to ride in vehicular lanes among heavy traffic volumes, or illegally among pedestrians on sidewalks, simultaneously jeopardizing the safety of bicyclists, pedestrians, and cars.

T*he Oahu Bike Plan,* however, proposes a number of new facilities for the Ala Moana neighborhood. These will provide a continuous network of lanes or routes along many of the area's arterial and collector roadways, including linkages to the Ala Moana Center station. Additionally, each station along the rail line is to include bicycle storage facilities and other services depending on station boardings and the final station design. Such measures are intended to promote cycling as a safe and convenient mode of travel in the near future.

Bike riders along Kapiolani Blvd

Bicyclist using sidewalk along Kapiolani Blvd

Pedestrian crossing at Kapiolani Blvd and Ward Ave

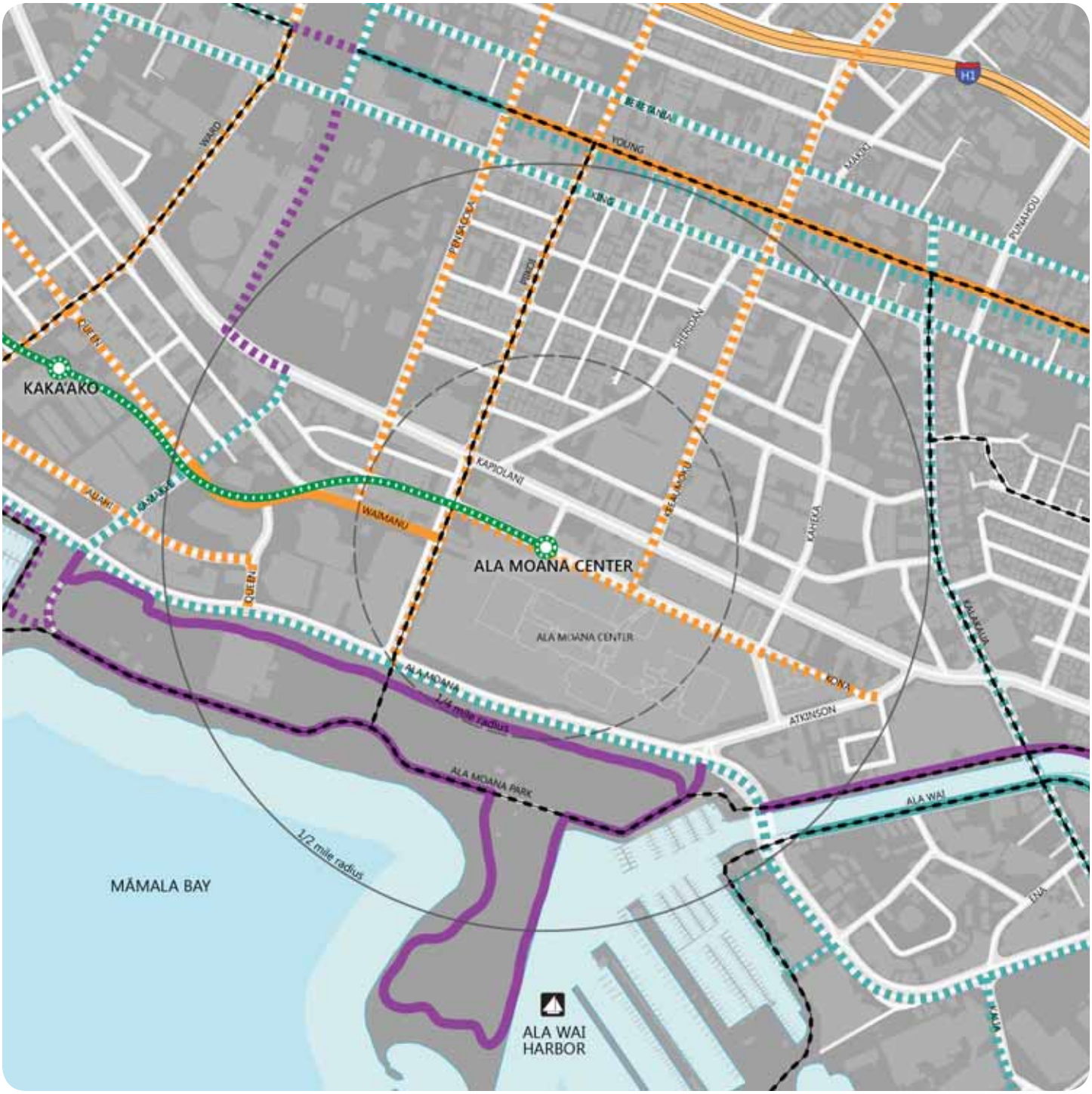


FIGURE 2.11: **BICYCLE/PEDESTRIAN CIRCULATION**

N 0 500 1000 Feet
0 1/4 Miles

Fixed Guideway
Rail Stations
Existing Lane
Existing Path
Existing Route
Proposed Lane
Proposed Path
Proposed Route
Proposed Pedestrian Path

Source: Primary Urban Center Development Plan; Oahu Bike Plan

2.6 ENVIRONMENT

1) PARKS & OPEN SPACE

Honolulu classifies its parks according to 1) community-based facilities and 2) island-wide facilities. Park acreage in the Ala Moana area is heavily skewed toward island-wide facilities with a paucity of community-based facilities geared toward serving the recreational needs of this densely-populated neighborhood. Figure 2.12 depicts the full array of Ala Moana's parks and open spaces.

By far, the largest park in the area is *Ala Moana Beach Park* located on the makai side of Ala Moana Boulevard, across from the shopping mall and just west of Waikiki. This regional park covers 76 acres and while the beach functions as a tourist attraction, it is also frequented by Honolulu residents. Another regional open space attraction is the *Ala Wai Canal* with its alluring tree-lined promenade marking the western edge of Waikiki. The promenade entices cyclists, joggers and strollers, while outrigger crews and kayakers utilize the canal which empties into the Ala Wai Harbor. Together, these two open spaces provide critical waterfront access and offer views of the skyline and such distinctive natural features as Diamond Head, Punchbowl, and the Koolau Mountain Range.

While these regional open spaces highlight the makai periphery of the Ala Moana neighborhood, the only community-based public recreation facilities within the ½-mile planning radius are *Sheridan Community Park,* located along Piikoi Street at the heart of the Sheridan Tract, and the more recently developed *Koluwalu Park* located in the Kakaako District. *Sheridan Community Park's* 1.7 acres include a recreation building, basketball court, children's playground, and an informal grass lawn. However, this falls well short of City open space standards for community-based park acreage.

There are a variety of other local serving parks and recreation facilities dotting the surrounding area -- nearby community parks include *Pawaa Park, Cartwright Field,* and historic *Thomas Square.* Athletic fields are found on the campus of McKinley High School; additional athletic facilities include a baseball diamond at *Cartwright Field,* as well as a series of tennis courts and a lawn bowling green at *Ala Moana Beach Park.* Private recreation facilities include the Central YMCA on Atkinson Drive.

The grounds of various local institutions, such as schools and places of worship, also enhance the neighborhood and provide visual relief. McKinley High School's grand quadrangle with its stately canopy trees is the most striking example. The Makau Alii Senior Center (within the landscaped grounds of the Kalakaua public housing project) includes outdoor recreational space that is a valuable resource for the many older residents of the area.

Some of the area's larger arterials feature a distinctive tree canopy. The best example is the broad canopy of *monkeypod trees* that line Kapiolani Boulevard and also dot the median along Ala Moana Boulevard. The Mahogany trees along Kalakaua Avenue and the Rainbow Shower trees along N. King Street also deserve mention. However, many of the area's major roadways lack a unified planting of street trees (e.g., Keeaumoku Street), and local residential streets are especially devoid of trees. As a result the pedestrian environment is less appealing and the urban heat island effect is more pronounced.

The Ala Moana-Sheridan Community Plan offers some suggestions for expanding and improving parks and recreation facilities in the area. These include upgrading McKinley's athletic complex for joint school-community use, and exploring limited opportunities for creating additional park space on underultized parcels. Streetscapes enhancements are also recommended and discussed in greater detail in Chapter 5.

Pawaa Park

Ala Wai Canal Promenade

FIGURE 2.12: **PARKS & OPEN SPACE**

Source: Dept of Planning & Permitting: Honolulu Land Information System; Visual Analysis

2) HYDROLOGY / FLOOD ZONES

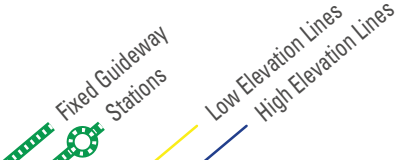
Given Ala Moana's proximity to the coastline, flooding is a matter for concern; those areas most subject to inundation as determined by FEMA are depicted on Figure 2.14. Generally speaking, the mauka side of Kapiolani Boulevard is an area of moderate flood hazard, placing most of the neighborhood's residential areas outside of the 100-year flood plain. On the other hand, the makai side of Kapiolani is considered a high risk area with a greater than 1% annual chance of flooding. While this flood hazard area primarily encompasses Ala Moana Park (which will be under the greatest depth of water in the event of flooding) and the Ala Moana Center, it also includes various commercial, industrial and residential uses, many of which happen to evidence redevelopment potential. Where redevelopment has proceeded, the more recently constructed residential towers advantageously sit on a parking podium. Areas subject to the additional hazard associated with storm waves are limited to the immediate shoreline and do not extend inland -- no structures are impacted by this threat.

Drainage canals are a noteworthy, but overlooked neighborhood landscape feature. The east side of Kalakaua Avenue in particular could be transformed into a highly appealing landscape amenity that incorporates the drainage canal and serves as a neighborhood open space and pedestrian trail. The stormwater catchment running along the makai edge of Ala Moana Boulevard could also benefit from improved maintenance and landscape enhancements that better accommodate pedestrians and cyclists, especially given its location within the park. Ala Wai Canal (which drains a significant portion of central and eastern urban Honolulu) with its tree lined promenade provides a tremendous local precedent, albeit at a loftier scale.

Ala Moana Park stormwater catchment

Makiki valley and stormwater runoff drainage alongside Kalakaua Ave

FIGURE 2.13: **TOPOGRAPHY**



Source: Dept of Planning & Permitting: Honolulu Land Information System

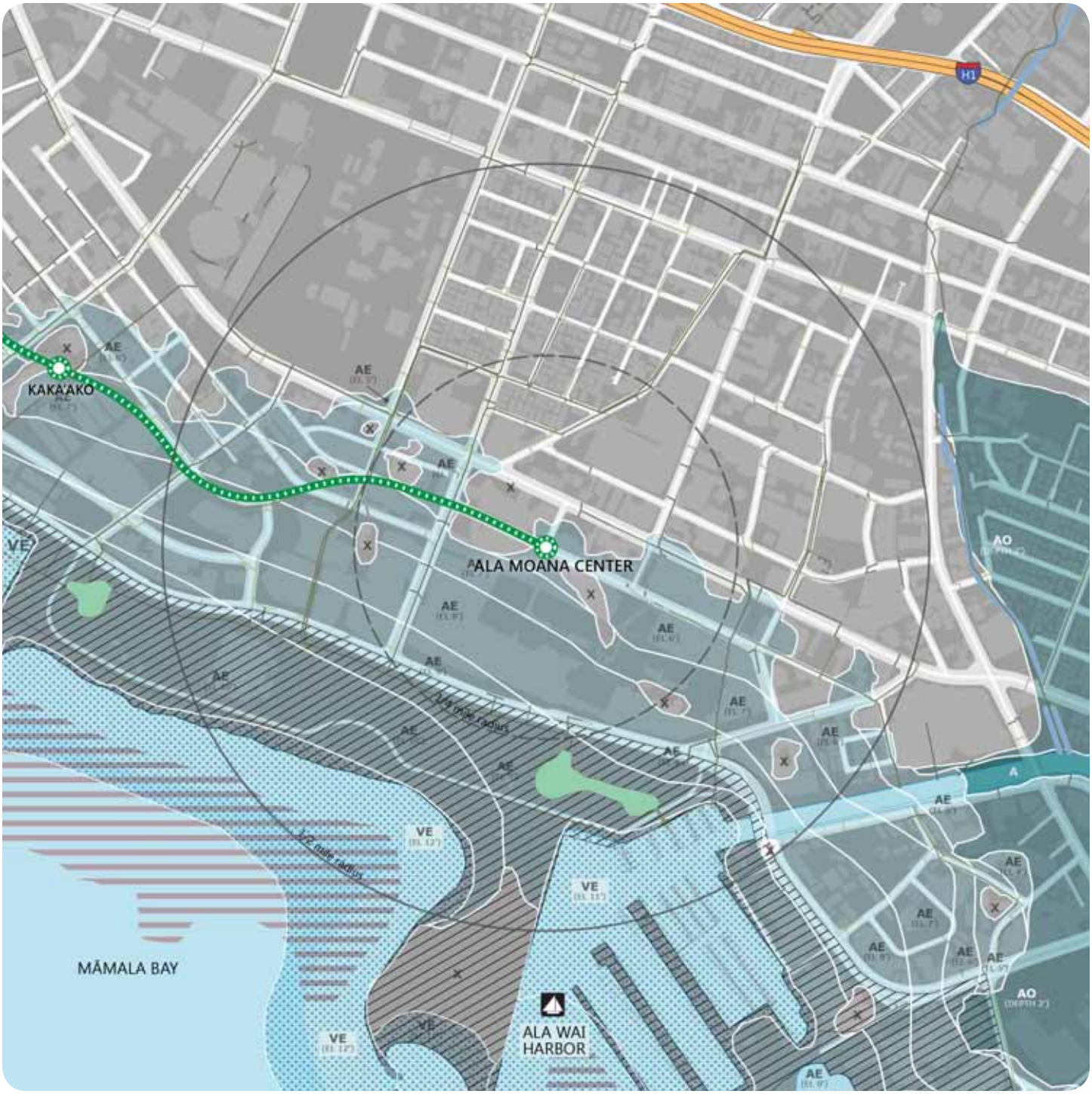


FIGURE 2.14: **FLOOD ZONES AND STORMWATER SYSTEM**

Source: Dept of Planning & Permitting: Honolulu Land Information System

21° 17′ 31″ N, 157° 50′ 38″ W - Magic Island, Ala Moana Center

3

STATION CONTEXT

3 STATION CONTEXT

This chapter examines pedestrian access and development opportunities in close proximity to the proposed rail station, focusing on the area covered by an approximately ¼-mile to 2000 foot radius. Because urban transit ridership relies heavily on pedestrian access within a convenient walking distance from the transit stop, this study examines the interconnectedness of the area's streets, as well as the character of its sidewalks and crossings. Unfortunately, conditions for pedestrians and cyclists in the Ala Moana neighborhood are less than optimal, especially considering the high proportion of residents that rely on walking to get around and that number will only increase with the introduction of transit-oriented development. Higher building intensities are also a key to transit-oriented development, achieved through development of vacant lots and redevelopment of low density sites. While there are no large vacant lots that will serve as a catalyst to development, there is significant redevelopment potential, especially along the neighborhood's major corridors where there are numerous underutilized lots.

3.1 FOCUS AREA ANALYSIS

1) STREETS & BLOCK STRUCTURE

The area is generally covered by a traditional street grid interrupted by a number of "superblocks." The density pattern of local streets varies, with the densest pattern found in the Sheridan District, appropriate to a primarily residential area. By contrast, the largest superblock is occupied by the Ala Moana Center, placing a physical and visual barrier between the neighborhood and the waterfront. The adjoining campuses of McKinley High School and the Neil Blaisdell Center create another superblock. Other large blocks that interrupt the street grid include the Sam's Club / Walmart site and the Kalakaua public housing sites. Each of these large block developments entailed street closures, reducing connectivity and eliminating alternative routes not only for motorists, but for pedestrians and cyclists as well.

The Ala Moana-Sheridan Community Plan addresses these superblocks by conceptually identifying the "missing links" in the street network. It acknowledges the challenge of extending the street network by "breaking up" these superblocks, but does recommend exploring options that will extend pedestrian and bicycle access at strategic locations through these sites. Nonetheless, if pedestrian and cyclists are currently forced on to congested collector and arterial streets due to insufficient connectivity, it is also imperative that these streets and crossings be redesigned to better service multiple users.

Figure 3.0 - Figure Ground

Figure 3.1 - Block Structure

FIGURE 3.2: **STREETS & BLOCK STRUCTURE**

Source: On-site Observations; Visual Analysis

2) SIDEWALKS / PEDESTRIAN LINKS

Conditions are less than ideal for pedestrians due to a variety of factors -- some sidewalks are too narrow or obstructed and most lack sufficient amenities, in particular a consistent canopy of street trees. The safety and comfort of pedestrians is further compromised by many cyclists using sidewalks to avoid the heavy traffic volumes along major roadways. Additionally, crosswalks are insufficiently marked, crossing times tend to be short, and crossing distances at major intersections can be daunting, especially for the elderly. The situation at major intersections is aggravated by large turning radii, enabling right hand turns at too high speeds. Two crossings are of special concern:

- *Kapiolani and Keeaumoku,* which is the main entrance to the Ala Moana Center and will provide a key pedestrian link between the Ala Moana neighborhood and the rail station.
- *Kapiolani and Kalakaua / Atkinson,* which marks the eastern gateway to the Ala Moana neighborhood and a principal connection to Waikiki. The Convention Center is located at this intersection.

As will be discussed in the Chapter 5, there is considerable redevelopment potential associated with properties located at and near these intersections. Other major intersections located along arterial streets and potential mixed use corridors are also problematic and should be addressed, including Kapiolani Boulevard, Kalakaua Avenue, S. King Street, Piikoi and Pensacola Streets, and Ala Moana Blvd.

Figure 3.3 depicts sidewalk widths throughout the Ala Moana area, which are highly variable, but infrequently account for pedestrian volumes, safety and comfort. Unfortunately, sidewalks directly linking to the rail station site (esp. Kona Street) and along major arterials (esp. stretches of Kapiolani Boulevard) are too narrow to accommodate existing and anticipated pedestrian flows. Construction of the rail station, transit-oriented development, and transformation toward mixed use corridors will require "complete streets" featuring more generous sidewalk widths, especially in proximity to the station. A more complete and interconnected bike network is also an important part this strategy. The dearth of street trees is the more significant issue along local residential streets, and is addressed in the next section.

Narrow sidewalk along Kaheka St between Kona St and Kapiolani Blvd

Obstructed pathway at Waimanu St and Pensacola Ave

Canopy street trees along Kapiolani Blvd

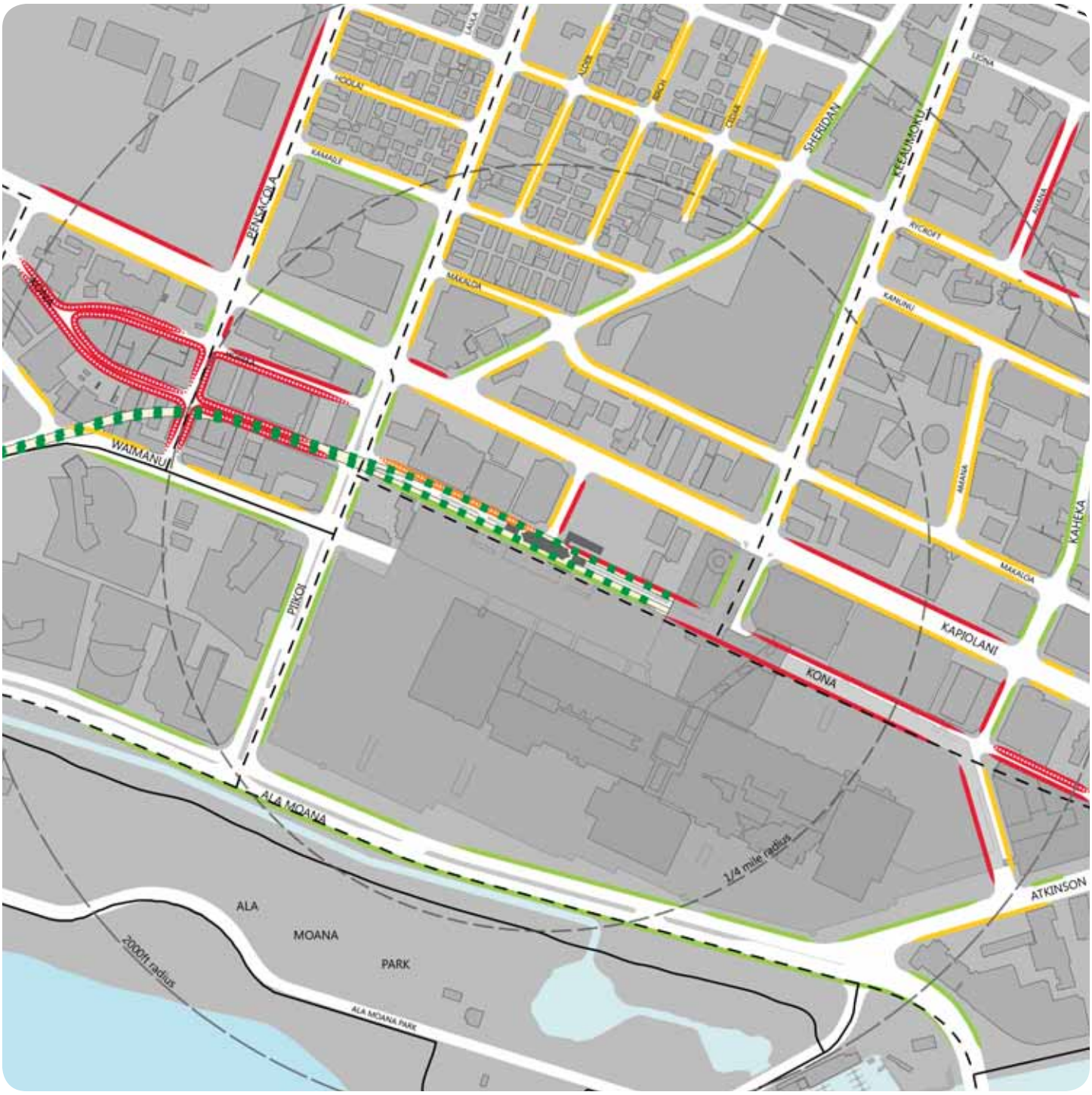


FIGURE 3.3: **EXISTING SIDEWALK WIDTH**

Source: On-site Observations; Visual Analysis; Oahu Bike Plan

3) GREENSPACE / TREE CANOPY

The urban forest serves many purposes, not the least of which are to provide visual relief and promote pedestrian comfort. That street trees are critical in this regard becomes apparent as one travels Kapiolani Boulevard; its exceptional canopy of monkeypod trees is regarded as one of the outstanding features of the Ala Moana neighborhood. The Ficus trees along the Ala Wai Canal are no less striking. However, the tree canopy along most of the neighborhood's streets is considerably less consistent than suggested by these outstanding examples. Local residential streets in particular are generally devoid of street trees, while collector and arterial streets tend to be dotted by an irregular or inconsistent planting, in part due to multiple curb cuts. For example, Keeaumoku Street benefits from streetscape enhancements associated with development of the Sam's Club / Walmart block, but is otherwise marked by few street trees.

Figure 3.4 also portrays the lack of parks and open space in proximity to the rail station site. This shortage of green space and urban tree planting contributes to a rather unfriendly pedestrian environment. Notably, the absence of urban street trees exacerbates the 'heat island effect" throughout the neighborhood. The difference in ambient temperature between Kapiolani Boulevard and any of the local residential streets can rise 10-15 degrees. Pedestrians also lose out on the comfortable sense of enclosure offered by a healthy tree canopy, as well as the physical and psychological separation from passing automobiles established by consistent curb-side tree planting. Mauka-makai thoroughfares such as Keeaumoku, Kaheka, and Piikoi are especially important as pedestrian links to future transit improvements.

Palm tree canopy adjacent to Walmart on Keeaumoku St

Mature monkeypod trees along Kapiolani Blvd

No tree canopy along Birch St

FIGURE 3.4: **GREENSPACE / TREE CANOPY**

Source: Google Earth Aerial 2009

4) DEVELOPMENT OPPORTUNITIES

Figure 3.5 presents the results of a parcel-by-parcel visual analysis of redevelopment potential. This is an interpretive and informal assessment based upon building quality, density of development, and character of the surroundings. Based on this assessment, it is apparent that the highest redevelopment potential is found in non-residential buildings located along Ala Moana's arterial and collector streets. A summary of the analysis follows:

- *Kapiolani and Keeaumoku* corridors are largely populated by underdeveloped lots comprised of a mix of small office, retail, entertainment and dining establishments. While current zoning provisions allow considerably more development potential than realized by most of these parcels, the on-going transition to higher value, higher density buildings and uses has been slow due to substantial barriers to redevelopment. Principal among these are assembling currently small lots to create efficient land holdings, especially with artificially high property values.
- More distant from the station site, *Kalakaua Avenue and S. King Street* are arterial corridors similarly populated by underdeveloped commercial properties. The intersection of Kapiolani and Kalakaua appears to offer considerable redevelopment potential as the gateway to Ala Moana and given its proximity to the Convention Center.
- On the other hand, more recent, larger scale commercial and high-rise residential developments suggest minimal redevelopment potential, for example, the *Sam's Club/Walmart site.* The Ala Moana Center might offer long term potential in the utilization of air rights above its parking structures, although this would entail modifications to the Zoning Code to secure those rights.
- *The Sheridan residential area* is comprised of older, mid-century residences is a generally well maintained and stable neighborhood. While there may be some redevelopment potential, it is recommended that City not actively pursue redevelopment of these properties, especially given its stated policy of not promoting gentrification. The Ala-Moana Sheridan Community Plan identifies an exception in the presence of nonconforming industrial uses that dot the neighborhood.
- There are a handful of *architecturally and/or culturally significant buildings* which are to be preserved, including the Pagoda Hotel. More distant from the station are a number of landmark buildings located near Thomas Square, the campus core of McKinley High School, Makiki Christian Church, etc. The monkeypod trees along Kapiolani and Ala Wai Canal also deserve mention as landmarks worthy of preservation.

Low intensity commercial along Kona St


Vacant parcel along Kalakaua Avenue

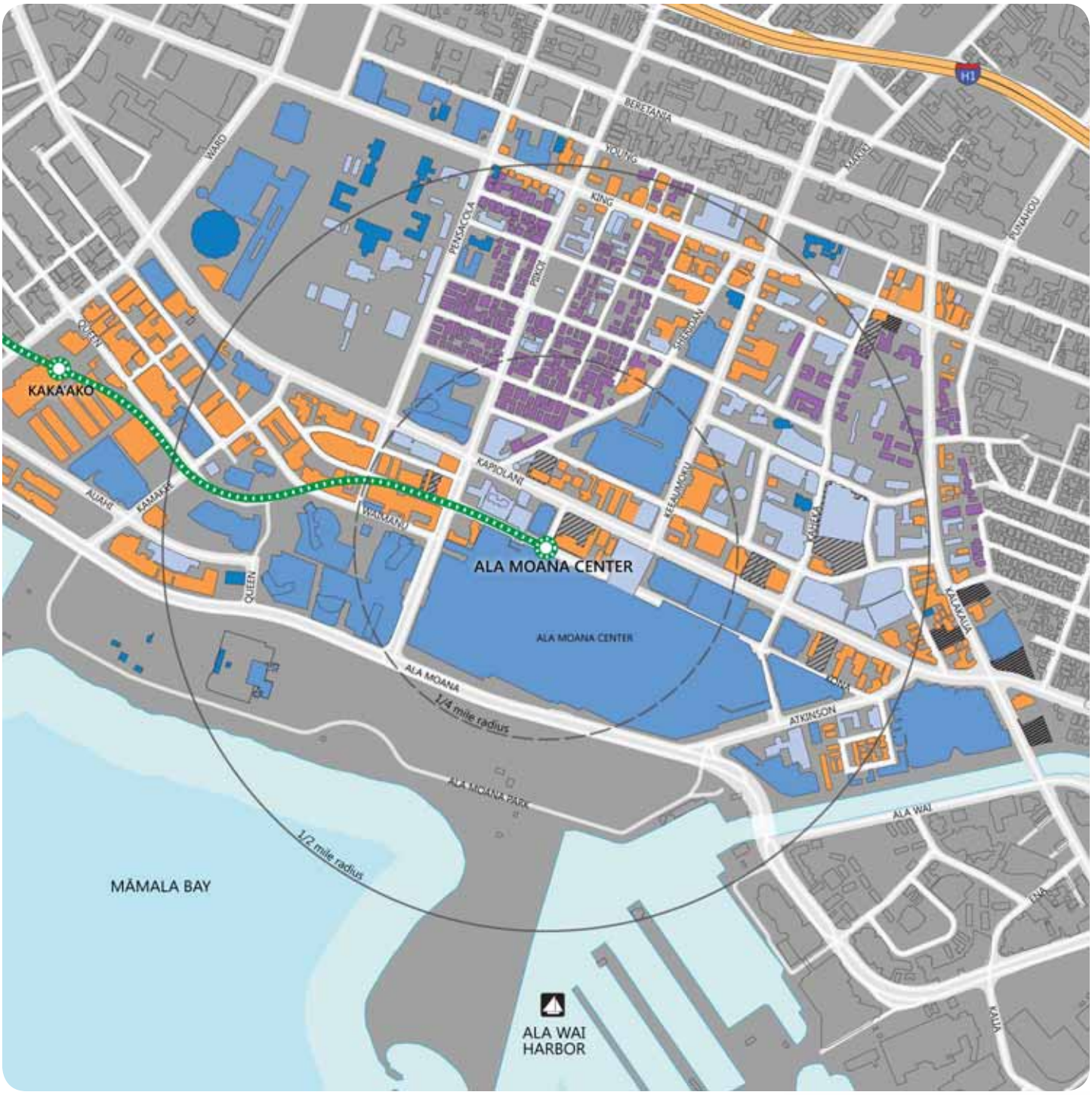


FIGURE 3.5: **HARD / SOFT ANALYSIS**

Source: On-site Observations; Visual Analysis

3.2 CORRIDOR ANALYSIS

1) KAPIOLANI BOULEVARD

The subsequent photos, located on the map (Figure 3.6), represent the different characteristics along the Kapiolani Boulevard corridor. Starting from the Ewa side (Pensacola St), and working towards the Diamond Head side (Kalakaua Ave), variations in the overall street character are noted. These variations create an inconsistent street wall for the pedestrian, and make it difficult to create a sense of place. As noted in Figure 3.5, the majority of opportunity sites for revitalization lie on the mauka side of the boulevard, however there are other inconsistencies within the corridor allowing for potential redevelopment on both sides.

Pensacola St Intersection - This overly wide intersection acts as an informal gateway into the neighborhood as Pensacola St brings many travelers from the H1 highway. Only three crosswalks are present.

Pensacola St Intersection - A variety of scales encircle this intersection. The new Design Center provides a good streetwall and pedestrian scale components, but it is difficult to cross the street.

Makai side facing Diamond Head - A wide sidewalk with good tree canopy and planting strip, along with a consistent line of storefronts provides for a comfortable walking environment.

Mauka side facing Diamond Head - Low scale buildings with closed doors and blacked out windows line the street, along with pockets of surface parking, suggest redevelopment potential especially for pedestrians.

Keeaumoku St Intersection - As a main entry point to the Ala Moana Center, many vehicles and pedestrians come together. Right turn lanes and crosswalk islands create a hectic environment.

Makai side next to Nordstrom parking - A wide vegetation buffer from traffic and shade canopy is mixed with a narrow sidewalk, and a lack of storefronts fronting the street.

Vacant Lots - Currently functioning as surface parking lots, this area breaks the consistency of mid-rise buildings along the makai side of Kapiolani. There is significant redevelopment potential here.

Low scale retail - A series of adult-oriented businesses line Kapiolani, approaching the Hawaii Convention Center, attracting a dangerous and undesirable element to the area.

Kalakaua Ave Intersection - This key intersection acts as a gateway into the neighborhood. A large bus turn lane and island with bus stop are present. A fourth crosswalk is missing.

Figure 3.6 - Kapiolani Corridor

2) KALAKAUA AVENUE

Kalakaua Avenue is a major connection for those going to and from Waikiki. Closer to the intersection of Kalakaua and Kapiolani, the surrounding area is chaotic and characterless, as noted in the photos below. The Mahogany-lined median ends and any surrounding tree canopy is scarce. As a major gateway from Waikiki, the visual appeal is key to attracting visitors and helping retain them within the Ala Moana neighborhood. It is home to many senior citizens who reside in the Makua Alii Senior Center, and many families living across the street in the McCully district; thus many pedestrians are present in this area despite its lack of pedestrian amenities.

Kapiolani Blvd Intersection - A major intersection for vehicular traffic, along with bicyclists and pedestrians. With only three crosswalks, and no markings for bicyclists, it is a confusing intersection.

Properties along the Ewa side of the street are sitting vacant. The heat-island effect is noticeable in this area.

Kalauokalani Way - This alley is home to some small shops and residences. A lack of trees and shade is noticeable in the area.

Kalauokalani Way - More vacant lots are found along this alley. There is an inconsistent mix of residential homes, small shops, and warehouse type buildings.

Ewa side of Kalakaua - The inconsistent character of this side of the street presents the pedestrian with chain-link fences and hard surfaces that reflect the heat of the day.

Mauka side - More vacant lots present the area with lack of shade and vegetation. Drivers and pedestrians can see the mountains, but are presented with empty spaces that do not fit the fabric of the built neighborhood.

Makai side - Adjacent to the senior center, this sidewalk is sandwiched between chain-link fences, and high volumes of traffic, and nothing to buffer it from those using the sidewalk.

Channelized Stream - The runoff from the Makiki Valley is channelized on the Mauka side of the street. It is an amenity that is poorly utilized, has fallen to disrepair.

South King Street Bus Stop - This area of the neighborhood serves as another major entry point. It is poorly designed and barely maintained.

Figure 3.7 - Kalakaua Ave

3) SOUTH KING STREET

The South King Street corridor is a six lane, one-way street travelling toward Diamond Head. It is used by many cars as an alternative to the H1 highway, and is coupled with Beretania Street, which flows in the opposite direction. There is an inconsistent street character along this corridor and has narrow and inadequate sidewalks with minimal buffers from the heavy traffic. Street crossings for pedestrians are challenging, especially for the seniors in the area. The timing for crossing is not calibrated for their slower pace to cross the six lanes of traffic. Parking during off peak hours helps create a buffer between traffic and pedestrians, but during rush hour times there is nothing to protect sidewalk users from the heavy traffic.

Kalakaua Ave Intersection - A major intersection for all modes of transportation. The one-way direction of all 6 lanes on S King Street creates long crosswalks. Wide turn lanes and pedestrian islands create more confusion.

Pawaa Park - This park is flanked on two sides by walls and alleys, connecting S King St and Young St. Active frontage is lacking, and thus it is underutilized.

Kaheka Street - Behind the first line of makai side retail along South King Street are large surface parking lots with unattractive frontage and lack of a tree canopy.

Retail - A series of small retail shops line the makai side of the street directly across from the Pawaa Park. The sidewalk is narrow, and landscaping seems to be neglected along this side of the street.

Department of Agriculture - This historic building is nicely situated between Pawaa Park and a tree shaded open space along Keeaumoku Street. The associated parking disconnects the two open spaces.

Keeaumoku St Intersection - Low intensity commercial buildings line three corners of this intersection. As a major corridor to the Makiki district, there is a lack of gateway or wayfinding features.

The sidewalk along the mauka side of the street is a good width, but the lack of bike lanes make it more comfortable to ride on the sidewalk. Inconsistencies with street front parking create a disruption to the streetwall.

Cedar St - This narrow, one way street into the residential neighborhood lacks a consistent tree canopy. Overhead wires prevent the current trees from growing to full potential.

Piikoi St Intersection - A major one-way corridor running makai-mauka. High volumes of traffic use Piikoi to head toward the H1 highway. Wayfinding and gateways are lacking.

Figure 3.8 - South King Street

4) SHERIDAN STREET

Sheridan Street creates a distinguishing boundary between the residential neighborhood and low intensity commercial on the Ewa side, and the more commercial Diamond Head side. Many residents in the neighborhood will most likely use this connection to walk to the planned transit station, and the urban fabric will need to accommodate all modes of transportation in a safe manner. With the help of Walmart, there is greenery along this corridor and a budding tree canopy, but overhead electrical wires limit the height of future growth. Narrow sidewalks along with utility poles and other obstacles limit the flow of pedestrian activity.

Kapiolani Blvd Intersection - This intersection only allows access to and from the Ewa direction of traffic on Kapiolani. The severe angle creates an odd area in the intersection with a painted island as the only safety for pedestrians.

Makaloa St - The lengthy block between Makaloa and Kapiolani provides a physical barrier for pedestrians on their way to the mall and future rail station.

These towers create a stark contrast with the surrounding residential neighborhood. The Ewa-Diamond Head orientation provides minimum shade, and further accentuates the need for more trees in the area.

Low Intensity Commercial - This small karaoke club with surrounding fence doesn't provide an easy entry for pedestrians, and does not contribute to the pedestrian environment.

Walmart and Sam's Club - Many vehicles, and pedestrians alike, enter the Walmart superblock from this side. The loading dock area prevents pedestrians from cutting the corner to get to Kapiolani Boulevard.

Overhead wires and cables along this street hinder the growth of a full tree canopy, preventing most of the street getting any shade during the day.

Rycroft St Intersection - The Hawaii Medical Service Association Building is located here, and creates a stark contrast with the neighboring residential houses and small shops. The corner is well landscaped, but sidewalks are fairly narrow.

Pedestrian Elements - A portion of Sheridan Street is lined with numerous warehouses which meet the street with unsightly obstacles for pedestrians, and does not contribute to a friendly pedestrian environment.

Shingon Shu Mission - This historic landmark is flanked by a parking lot, and a box style warehouse building. There is no consistent network of uses along Sheridan Street and the area has great potential for revitalization.

Figure 3.9 - Sheridan Street

21° 17′ 15″ N, 157° 50′ 45″ W - Ala Moana Park

4

STAKEHOLDER INTERVIEWS

4 STAKEHOLDER INTERVIEWS

This chapter summarizes the initial outreach effort for the Ala Moana Neighborhood TOD Plan. In order to gather necessary background information about the area, a series of "stakeholder interviews" soliciting input from key community representatives were conducted.

4.1 INTRODUCTION

1) PURPOSE

The primary purpose of these interviews was to get a preliminary take on major issues, ideas, and concerns related to development of the neighborhood, particularly as it relates to the planned transit station. In turn, this will allow the consultants to engage the broader community in a more informed manner with a more comprehensive community outreach program.

2) PROCESS

This effort targeted individuals representing a variety of community interests and organizations; representatives from pertinent public agencies and community organizations, as well as business and property owners from the neighborhood were interviewed in one-on-one or small group settings. The small group nature of these discussions enabled individuals to be more candid than they otherwise might be in a larger community forum. Moreover, discussions could be focused on topics and issues pertinent to each individual and their organization. Participants were also provided the opportunity to supplement their verbal responses by completing a brief written questionnaire. Interviews were conducted in person by Department of Planning and Permitting staff and consultants from RTKL Associates, Inc. on May 23rd and 24th, 2012.

3) PARTICIPANTS

A total of *43 individuals* participated in 16 interview sessions; three interviewees completed the supplementary questionnaire. Stakeholders are identified in Table 4.1. The following summary discusses in a general manner, the major topics addressed by these stakeholders. In order to keep the comments anonymous, specific comments are not assigned to any one participant.

Honolulu skyline looking toward Diamond Head from the Punchbowl lookout

TABLE 4.1 - List of Stakeholders

The following organizations were interviewed as part of an initial community outreach event. While all neighborhood residents, employees, and visitors are "stakeholders" in the area, these initial meetings targeted individuals representing a variety of interests and organizations to facilitate focused discussions on a range of issues and needs.

Stakeholders	Representatives	
AARP	Ron Lockwood	
Anbe, Aruga & Ishizu, Architects, Inc.	Dayne Shinbo	
Architects Hawaii (Central YMCA)	Joe Farrell	
	Lisa Rapp	
Austin Tsutsumi & Associates, Inc. (Walmart)	Don Fujii	
Avalon Development	Christine Camp	
Department of Education	Clinton Wong	Elden Nakamura
	Donna Tamanaha	Heidi Meeker
Department of Education, McKinley High School	Laverne Moore	
Department of Transportation Services	Chris Sayers	Mark Kikuchi
	Wayne Yoshioka	Eileen Mark
Design Partners (Samkoo Development)	Jay Kim	Vernon Inoshita
	Michael Goshi	
Environmental Communications, Inc.	Taeyong Kim	
General Growth Properties	Francisco Gutierrez	
	Joe Francher	
Grubb + Ellis - CBI, Inc	Jackson Nakasone	
Hawaii Community Development Authority	Carson Schutz	
	Deepak Neupane	
Hawaii Public Housing Authority	Jan Mizusawa	
	Kamalani Rodrigues	
Honolulu Authority for Rapid Transportation	Andrew Smith	Ken Caswell
	Bruce Nagao	Ryan Tam
Howard Hughes Corporation	David Striph	
	Nick Vanderboom	
Makiki Christian Church	Gene Kaneshiro	
Makua Alii Senior Citizen Center (City & County)	Stephen Santiago	
pappageorgehaymes partners (Samkoo Development)	Jeff Renterghem	
Plan Pacific (Central YMCA, Samkoo Development)	John Whalen	
Property owner	Henry Ing	
Saints Peter & Paul Church	Daniel O'Leary	
	Geri O'Leary	
Samkoo Development	Jay Ro	
Walmart / Sam's Club	Brian Halsey	
Weslin Transportation Services (DTS)	Linda Frysztacki	
	Wes Frysztacki	

4.2 MAJOR THEMES & DISCUSSION

1) LOCAL & TOURIST ECONOMY

Foremost among Ala Moana's assets, the stakeholders identified its strategic location as part of urban Honolulu, highlighted by proximity to two major economic drivers – the Ala Moana Center and Waikiki. Although expressing unease over the current pervasiveness of massage parlors, hostess clubs, "cheap" retail and similar establishments, they are also well aware of the area's redevelopment potential, and its desirability as an urban district with convenient access to a wide range of shopping and services.

Tourist bus

Strategically located between Waikiki and downtown Honolulu, the Ala Moana neighborhood appeals to both locals and tourists. The Ala Moana Center (Hawaii's largest shopping mall) is the area's chief tourist attraction and regional draw for local islanders. Its proximity to nearby Waikiki makes it a popular alternative shopping destination. The neighboring Convention Center is another magnet, creating surges in activity during conventions, expos, and other events. Residents of the area are also drawn by the neighborhood's affordable and convenient housing options combined with shopping and services located close at hand. In addition to the shopping mall, a major shopping hub comprised of Walmart, Sam's Club and Don Quijote serves various residential zones. This mix of retailers is highly valued, and locals seem to rarely make the trip to Waikiki for more expensive goods.

Despite these assets, there is a considerable stock of underutilized parcels apparently ripe for redevelopment, most notably along the area's major commercial streets -- Kapiolani, Kalakaua, and Keeaumoku. Even so, stakeholders understand that there are numerous barriers hindering redevelopment efforts, but some see new opportunity in the future rail station and associated planning for transit-oriented development.

2) URBAN POPULATION

While noting the area's ethnic diversity, stakeholders identified two key population groups that readily embrace urban living – a burgeoning Korean population, as well as a significant number of elderly residents (from a variety of demographic groups including Japanese, Polynesian, and Korean). Both groups choose the convenience of residing in close proximity to shopping and services, rely on walking and transit to get around, and will likely welcome the benefits that accompany rail service and the urban character of transit-oriented development.

Ala Moana Neighborhood

The recent designation of "Korea Town" speaks to the large Korean population and its influence upon the area. This includes a predisposition toward an urban lifestyle that has attracted many Korean immigrants to the area, and consequently, many do not own or drive cars.

Similarly, the elderly population has established a "senior corridor" along Kalakaua, mainly due to the public housing (catering largely to an elderly and disabled population) and the associated Makua Alii senior center. Many seniors also choose to reside in this area because of proximity to shopping, transportation, and medical services, while available housing opportunities coincide with their wish to downsize. Few of the senior residents within the public housing community own cars, and instead walk to local shops and services.

CURRENT CONDITIONS

Key words from the Stakeholder Interviews describing current conditions

FUTURE OPPORTUNITIES

Key words from the Stakeholder interviews describing future opportunities

In summary, residents decide to live in Ala Moana largely because its dense, urban pattern supports convenient access, allowing them to meet day-to-day needs without reliance on the automobile. A wide range of shopping choices and services (i.e., the Ala Moana Center and businesses along Keeaumoku) are within walking distance, and quality bus service provides access to more distant destinations. It is anticipated that residents will utilize rail and support transit-oriented development to the extent that it reinforces this lifestyle.

3) HOUSING MIX / AFFORDABLE HOUSING

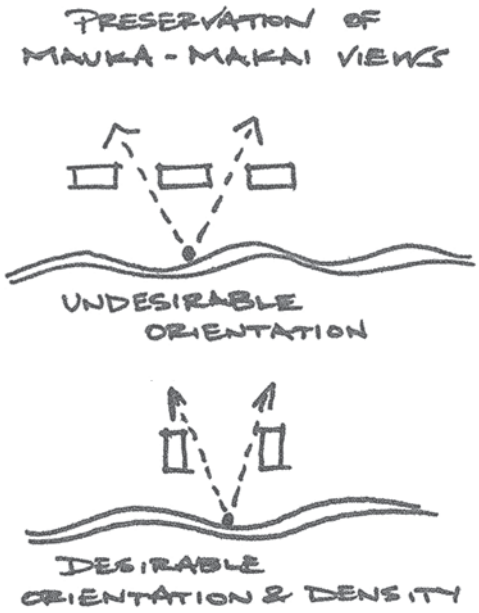
Stakeholders wish to see more diversity in residential product, in particular, the provision of moderate income housing. There is concern that new housing will be dominated by high-rise, luxury condo development. In addition to advocating affordable housing set-asides associated with new high-rise condos, there is at least some interest in exploring the potential for low- and mid-rise housing product.

Moderate density vs high rise residential

While there is a general acceptance among stakeholders that future residential development will entail urban densities, especially in proximity to the transit station, they caution that some resistance to additional density within the area is possible. Stakeholders, however, expressed their concern that new residential development will be uniform in scale and limited to high-rise condos. In fact, they see this as the most likely outcome based on foreseeable market conditions, conditioned by high land values. A preferred outcome comprises a diversity of housing price points, incorporating at least some low and mid-rise dwellings. Although not expressly named as such, gentrification is an important consideration here. Requirements for affordable housing set-asides in conjunction with new residential development are an additional recommendation from some of the stakeholders for addressing the issue.

4) VIEW CORRIDORS

The anticipated densification of Ala Moana shall respect that which is valued by the community, namely mauka-makai (mountain to ocean) view corridors that reinforce the sense of place. Stakeholders agree that the alignment of new high-rise towers must respect view corridors, and as far as feasible, taller, thinner towers (i.e., point towers) are preferred.



5) STATION DESIGN & OPERATION

Stakeholders express concern regarding aesthetics and safety in the design of the rail station; the proposed elevated design concept causes particular uneasiness. These issues are important from both a local and tourist point of view, especially given the proposed station location at the popular Ala Moana Center.

Although there is some petty crime in the area (e.g., graffiti, thefts, etc.), major crime is generally not an issue. Nonetheless, some stakeholders are concerned that the rail station's presence could attract additional crime and become a haven for the homeless. Some of this uneasiness is related to the elevated design creating a dark and foreboding place; other worries include general maintenance and cleanliness. As a result, stakeholders

expect quality design and on-going maintenance. Station appearance and safety is of special interest to the Ala Moana Center and Walmart shopping centers. An additional issue relative to the station location is parking, and the fact that it is the end of the line. Future negotiations will determine the extent to which the Ala Moana Center will accommodate parking for station users.

6) MULTI-MODAL CONNECTIONS

Connectivity is a key issue. Stakeholders regularly raised the following points: 1) the area is well served by the current bus system; 2) existing pedestrian linkages are weak; and 3) bus routes and sidewalks must tie into the rail station to create a seamless network.

Kona St bus stop

Ala Moana is projected as the largest boarding station along the rail line (22,000+ daily boardings anticipated by 2030). As most of these arrivals are expected by bus, the integration of rail and bus transit without a decline in available bus service is critically important to stakeholders. The greatest opportunity lies in an improved feeder bus system. As rail comes online, redundant bus routes may be converted to feeder routes, covering expanded service in a mauka-makai direction.

Stakeholders also expressed strong support for improving pedestrian access to the station. There is considerable concern associated with pedestrian-vehicle conflicts at intersections near the station and throughout the area. These conflicts may be resolved through sidewalk and intersection improvements that will enhance pedestrian comfort and safety. Keeaumoku provides an especially important and direct mauka-makai link to the station, and with its abundance of shopping and services it is viewed as having the potential to become a great walking street.

7) PEDESTRIAN & BICYCLE MOBILITY

Walking and cycling will become increasingly important modes of travel in Ala Moana, yet there are serious constraints on pedestrian and bicycle mobility including unsafe crossings at major intersections. Stakeholders recommend investment in streetscapes to rectify the problem and maximize pedestrian and bicycle circulation.

Cyclists on Piikoi St

As pedestrian volumes increase with the opening up of the rail station and the associated transit-oriented development, it is imperative that the neighborhood become more walkable, and friendlier to those choosing not to drive. While the uniform planting of monkeypod trees greatly enhances Kapiolani, many of the area's streets lack similar identity, shade, or even sufficiently wide sidewalks, including those most frequented by pedestrians, such as Keeaumoku. Unsafe crossings at major intersections present another constraint. High traffic volumes and speeds make crossings daunting and dangerous, especially for the area's elderly. The intersection at Kalakaua and King is among those cited as most hazardous. Piikoi & King, Piikoi & Kapiolani, Piikoi & Ala Moana, Atkinson & Kapiolani, and Kapiolani & Kalakaua are similarly dangerous. Cycling along the area's streets is unsafe, and many cyclists take to the sidewalks, further endangering pedestrians. Stakeholders stress the need for comprehensive streetscape improvements, addressing sidewalks and intersections, as well as suitable bike lanes and bike parking facilities. Adequate bike storage within the station area will be an important asset to promoting ridership. Recent passage of a complete streets ordinance will make it easier to incorporate streetscape elements that promote multi-modal movement.

8) INFRASTRUCTURE / STREETSCAPE IMPROVEMENTS

Stakeholders acknowledge that it will be necessary to upgrade Ala Moana's infrastructure in order to attract and support redevelopment. While some (development interests in particular) addressed the need for additional water and sewer capacity, demand for an improved public realm was perhaps the most widely discussed topic during the interview process.

King St & Kalakaua Ave intersection

Redevelopment in Ala Moana is highly dependent on infrastructure improvements, including increased sewer and water capacity, as well as streetscape improvements that will enhance the area's image and support multi-modal movement. Major residential construction may also impact public schools. However, no public monies (i.e., dedicated funding sources) are currently allocated to support comprehensive infrastructure upgrades. Additional developer exactions are not seen as a potential solution, as they risk a chilling effect on new construction, while typically permitting only piecemeal solutions. Stakeholders propose alternative implementation measures, such as Special Financing Districts, Tax Abatement, and other incentives to induce privately funded improvements.

9) LAND ASSEMBLY / REDEVELOPMENT

Stakeholders recognize a key opportunity in the redevelopment of rundown, underutilized commercial properties, especially along Kapiolani and Keeaumoku. Nonetheless, they also pinpoint critical barriers to such redevelopment, and are concerned that land owners will "sit on property" without proper incentives to develop.

Underdeveloped lots along Kalakaua Ave

Participants enumerated the following barriers to redevelopment of Ala Moana:

- *There is an overabundance of small parcels* -- large, vacant parcels that are ready for development will serve as a catalyst and are nonexistent.
- *Property values in the area are artificially high,* impairing efforts at consolidation and exerting pressure toward significantly higher development yields.
- *The marketplace for development is limited* (especially for residential condos), with the nearby Kakaako as a key competitor. HCDA rules allow more height and density, and thereby provide a competitive advantage.
- *Developer's fees are already high,* with additional fees to secure necessary public improvements likely to further discourage development.
- *Existing streets* perform in a manner that discourages mixed use development and local shopping on foot, and instead emphasizes high speed regional thru-traffic. Sidewalks do not encourage walking due to their narrowness and lack of shade.

Recommendations from stakeholders to overcome barriers include public incentives to consolidate and develop property, noting that the City & County does not directly assist in the assembly and development of land. Additionally, available public assistance should focus on "higher potential" opportunity sites, as defined by location and lot size.

10) IMPLEMENTATION MEASURES

Stakeholders call for multiple measures and incentives to spur development, offering a range of suggestions, and emphasizing those that increase development potential and promote flexibility in the Zoning Code. They caution that some approaches are more politically acceptable than others, and generally recognize that the City and County is limited in its ability to directly fund public improvements.

Kapiolani Blvd

Participants identified numerous tools and incentives to promote development and secure necessary infrastructure improvements:

- *Tax Increment Financing (TIF)* is a common tool for funding public improvements, but regarded as not politically viable in the City and County of Honolulu.
- *Special Financing Districts,* such as 1) community facilities districts; 2) business improvement districts, and 3) parking improvement districts, are widely used mechanisms for funding public improvements and services (e.g., sewer improvements, streetscape enhancements, congregate parking, etc.) and should be considered. Nonetheless, any of these may prove controversial with local property owners, as they require a special tax or fee.
- *Zoning Code Revisions,* particularly increased height and density limits that will compete with Kakaako and take full advantage of the opportunity provided by transit-oriented development are strongly recommended by the development community.
- *Flexible Zoning* is also encouraged; for example, a key recommendation is to reduce parking requirements and promote shared parking in proximity to the rail station.
- Incentive Zoning has a number of advocates; this approach offers height, density or similar development bonuses in exchange for the provision of one or more defined community benefits.
- Modified Park Exactions, allowing park dedications and fees to accommodate streetscape enhancements and urban plazas, is aimed at improving the public realm. This is seen as a potential solution to funding a comprehensive streetscape network.
- Property Tax Abatement is another available tool to support economic development, and is typically used to encourage a business to locate, expand or redevelop within a targeted area. Abatements are often used as an alternative to TIF.

11) COMMUNITY BENEFIT

Most stakeholders see transit and TOD planning as a community building opportunity, linking the concepts of development incentives and community benefits. Questions that arise are as follows: Which incentives are to be provided? What community benefits are needed and desired? While stakeholders offered their thoughts and opinions, they readily acknowledge the need for further discussion and input from the community as part of the TOD visioning process.

The development community is particularly interested in incentive zoning that ties community benefits to greater development potential -- namely increased height and density limits. Desirable community benefits most frequently cited by stakeholders include:

- *Affordable housing set-asides.*
- Funding for *streetscape enhancements,* including sidewalk and intersection improvements.
- Provision of open space, including *urban parks and plazas.*
- Inclusion of *community facilities,* such as community meeting space.


21° 18′ 41″ N, 157° 49′ 28″ W - Ala Moana

5

OPPORTUNITIES & CONSTRAINTS

5 OPPORTUNITIES & CONSTRAINTS

This chapter identifies key issues, opportunities and constraints associated with future development in the Ala Moana neighborhood, with a more precise focus on transit-oriented development potential surrounding the proposed Ala Moana Center Station. This discussion is based on the background document review, site analysis and observations, and stakeholder interviews. Diagrams of key linkages and redevelopment opportunity sites are included, supplemented by a summary discussion of important issues, opportunities and constraints that will guide the planning process as it moves forward. Any diagrams are preliminary and conceptual and intended to facilitate discussion regarding future planning direction.

5.1 ANALYSIS

1) SITE CHARACTER

Figure 5.0 illustrates the Ala Moana neighborhood's physical design character. It pinpoints key places and important linkages, but also those areas of the neighborhood that lack identity and where connections break down. As such, this diagram provides a preliminary visual assessment of development opportunities and constraints, and it begins to suggest appropriate locations for design intervention.

Ala Moana offers a broad range of attractions serving both tourists and locals, including major regional draws and economic drivers (Ala Moana Center, the Convention Center, Ala Moana Beach Park), as well as vital neighborhood destinations (Don Quijote Supermarket, Makua Alii Senior Center, McKinley High School, etc.). Arterial and collector streets link these nodes of activity. Kapiolani Boulevard has a special significance as the main tie between Downtown Honolulu and Waikiki. Keeaumoku Street brings the neighborhood to the Ala Moana Center's front door, while Piikoi Street is the neighborhood's primary connection to the beach and upland neighborhoods.

Unfortunately, these and Ala Moana's other major roadways tend toward underdeveloped commercial corridors that could be described as "formless" or lacking in character. Moreover, they do not adequately support multi-modal movement; roadways generally lack sufficient amenities to encourage safe, convenient and comfortable pedestrian flows. Linkages are further interrupted at major intersections, where wide pedestrian crossings are unfriendly and unsafe. Nonetheless, because these

Ala Moana Beach Park

Underdeveloped commercial properties along Kapiolani Blvd

corridors are generally underdeveloped, they are also the best prospect for neighborhood revitalization. The following sections describe specific opportunities to enhance streetscapes, redevelop low intensity commercial parcels into transit-oriented development, and create a coherent neighborhood identity.

FIGURE 5.0: **SITE CHARACTER**

2) LINKAGE OPPORTUNITIES

Balanced multi-modal movement that supports transit-oriented development would be strengthened through streetscape enhancements along Ala Moana's key arterial and collector roadways. This requires a sidewalk environment with a consistent level of quality, including suitable sidewalk width and a level of amenity that matches anticipated pedestrian flows; other considerations include enhanced crosswalks and bicycle lanes and facilities.

Figure 5.1 shows some initial ideas for roadway enhancements that would emphasize potential redevelopment corridors and key linkages between nodes of activity.

- *Kapiolani Boulevard:* The transformation of Kapiolani into an active mixed use corridor is fundamental to promoting transit-oriented development near the Ala Moana Center Station. While mature monkeypod trees already lend the street a positive identity, future development will also benefit from more generous sidewalks.
- *Mauka-Makai Linkages:* Keeaumoku, Piikoi, and Kalakaua Streets represent critical multi-modal links, directly connecting the Ala Moana neighborhood with the proposed station site and other key attractions such as the shopping center and beach. Wider sidewalks and a consistent planting of canopy street trees along each of these streets will support increased pedestrian activity.
- *Ala Moana Boulevard / Atkinson Drive:* This wide, auto-dominated roadway further isolates the Ala Moana Center and segregates it from the water's edge. Wider sidewalks and more extensive tree planting along both sides of the public right-of way will help integrate adjoining land uses and enhance identity.

Crosswalk enhancements at major intersections along these roadways are no less critical to a strategy focused on strengthening multi-modal linkages. The major intersections are geared towards vehicular traffic, and considerations to enhance pedestrian circulation by reducing the number of lanes and turning radii are crucial. A comprehensive network of bicycle lanes and routes that follows major roadways is also important, and may also take advantage of secondary roadways to expand the network and ensure safe alternative routes.

Kapiolani Blvd - narrow sidewalk

Keeaumoku St - consistent tree canopy only along Walmart block

Ala Moana Blvd and Atkinson Drive - wide intersection

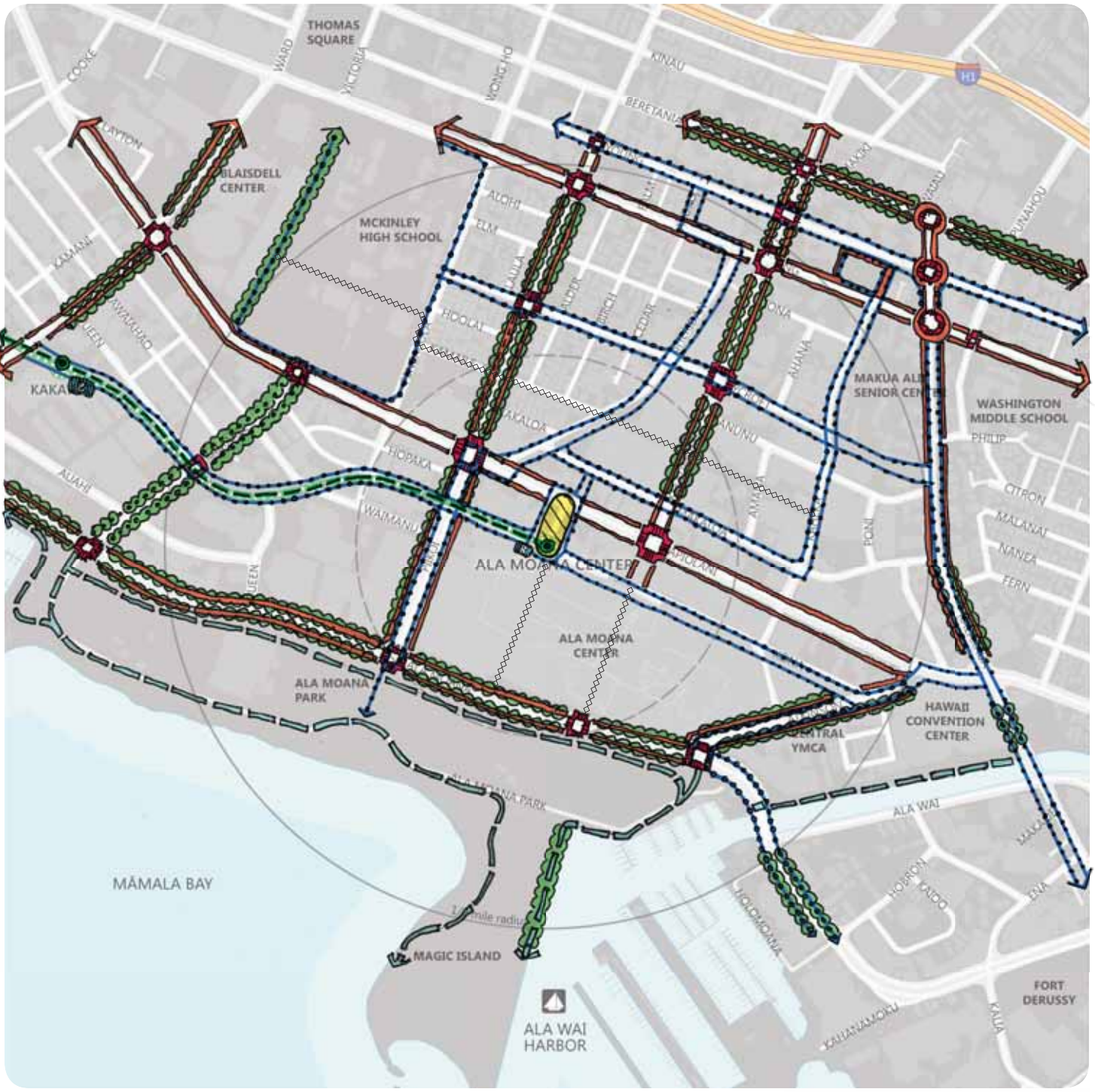


FIGURE 5.1: **LINKAGE OPPORTUNITIES**

3) REVITALIZATION PRIORITY SITES

Figure 5.2 identifies and prioritizes, in a preliminary and conceptual manner, potential redevelopment sites in the Ala Moana neighborhood based on visual surveys and background mapping. The most significant redevelopment potential is assigned to three revitalization nodes, the most important encompassing properties located within a ¼-mile surrounding the proposed Ala Moana Center Station.

1. *Ala Moana Center Station Proximity:* Underdeveloped commercial properties along Kapiolani Boulevard are prime redevelopment opportunities. Redevelopment of these parcels provides the best opportunity for transit-oriented development (i.e., within a ¼ mile of the Ala Moana Center Station) while contributing to Kapiolani's transformation into a highly identifiable, high density mixed use corridor linking downtown Honolulu and Waikiki.
2. *Convention Center Proximity:* Properties located at or near the intersection of Kapiolani and Kalakaua present another important redevelopment opportunity. Although this intersection is located just outside the TOD zone (i.e., beyond the station's ½-mile radius), its situation as an eastern gateway to Ala Moana and the presence of the Convention Center make this a crucial location. Activating this node through redevelopment will capitalize on the presence of the Convention Center and reinforce Kapiolani as a major mixed use corridor.
3. *Kakaako Station Proximity:* Underdeveloped commercial and industrial properties surrounding the proposed Kakaako station site (the next stop along the rail line in a westerly direction) are another transit oriented development opportunity. While it is important to note that the identified properties are under HCDA authority, redevelopment in this area should not only strengthen linkages with the on-going Ward Centers project, but also to the Ala Moana neighborhood and its assets.

Lower priority redevelopment opportunity sites are located along major arterials and collector streets just beyond these nodes. Nonetheless, redevelopment of low intensity commercial properties along Kalakaua Avenue and S. King Street, as well as Keeaumoku and Sheridan Streets, will further promote transit and a pedestrian friendly mix of uses.

Ala Moana Center station proximity - Samkoo site

Hawaii Convention Center proximity - Micronesia Mart

Kakaako station proximity - small warehouses

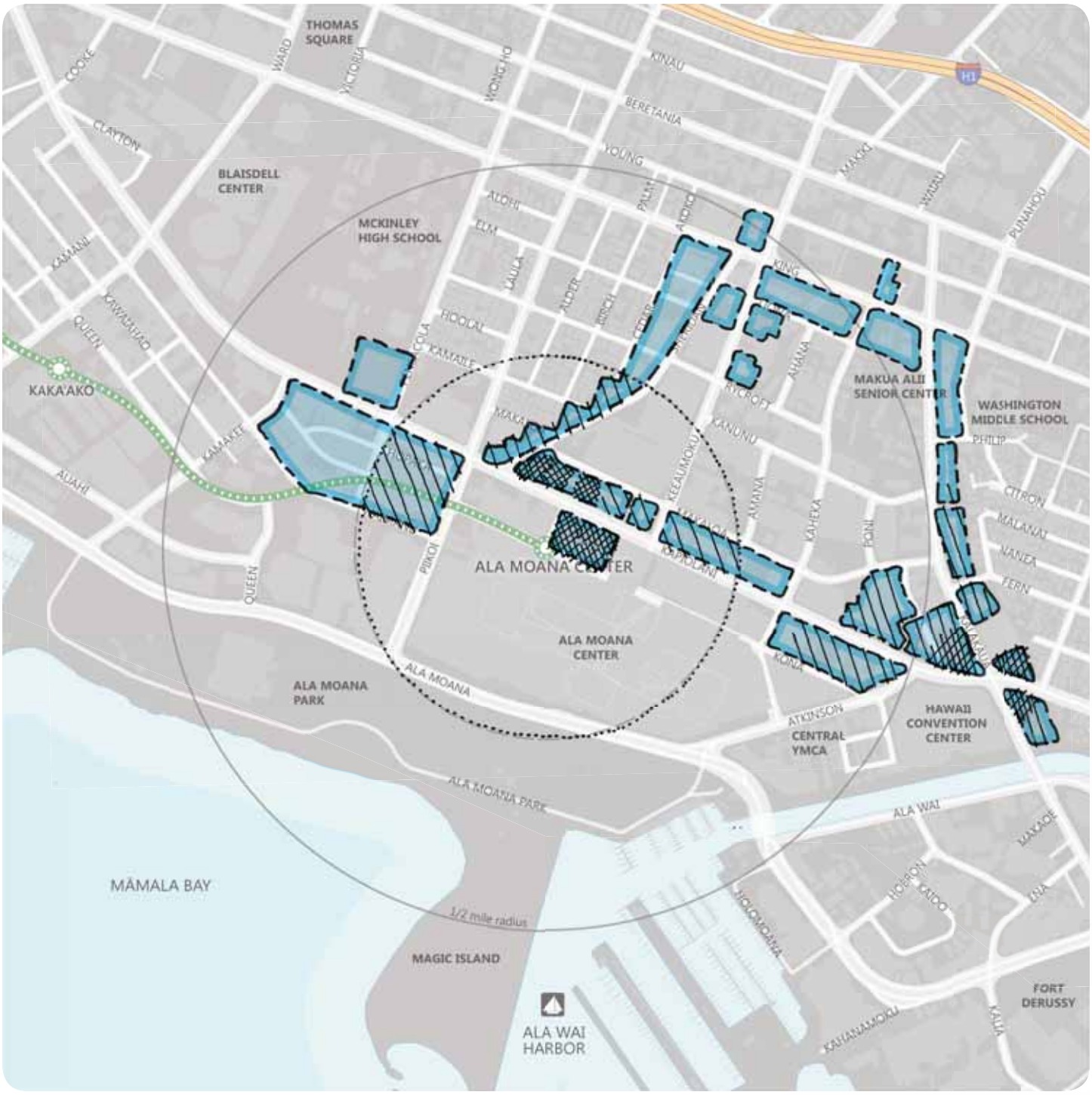


FIGURE 5.2: **REDEVELOPMENT OPPORTUNITY SITES**

5.2 ISSUES, OPPORTUNITIES AND CONSTRAINTS SUMMARY

The following discussion summarizes important issues, opportunities and constraints relative to revitalization of the Ala Moana neighborhood and, in particular, the potential for transit-oriented development surrounding the proposed Ala Moana Center Station. It incorporates findings from the background document review and site analysis contained within this Existing Conditions Report, and is strongly informed by input received through stakeholder interviews. This summary will assist the planning team as it proceeds with preparation of the Ala Moana Neighborhood TOD Plan.

1) REDEVELOPMENT PRIORITIES

The City and County of Honolulu is pursuing a "Value Capture Strategy" intended to leverage public investment in the rail system through transit oriented development. Intensification of land use by way of redevelopment is a primary attribute of transit oriented development, and there is significant development potential in the many underutilized commercial lots that characterize Ala Moana's arterial and collector roadways. While there are significant barriers to redevelopment, the properties situated along Kapiolani Boulevard near the proposed station site offer the best opportunity for "value capture."

- *TOD Node:* Underdeveloped commercial properties along Kapiolani (currently occupied by small scale office, retail, dining and entertainment establishments) situated within a ¼-mile of the proposed Ala Moana Center Station are the prime opportunities for transit-oriented development. Redevelopment of these parcels to higher and better uses will revitalize the neighborhood, support transit usage, and contribute to the transformation of Kapiolani into a high profile, high density mixed use corridor linking Ala Moana with Downtown and Waikiki.
- *Gateway Opportunity:* Properties located at or near the intersection of Kapiolani and Kalakaua present another important redevelopment opportunity. Activating this node through redevelopment will capitalize on the presence of the Convention Center, reinforce Kapiolani as a major mixed use corridor, and revive the eastern gateway to the Ala Moana neighborhood.
- *Redevelopment Barriers:* Stakeholders identified a number of barriers to successful redevelopment. Of particular concern is the inability to assemble small lots into efficient development parcels. Higher than average land values impair efforts at consolidation and exert pressure toward significantly higher development yields. Moreover, Kakaako landowners receive a competitive advantage in a limited marketplace due to more lenient HCDA regulations. Inadequate infrastructure to support higher density development is another barrier, including insufficient sewer capacity, as well as roadways not yet conducive to mixed use and pedestrian oriented development.

2) MULTI-MODAL BALANCE

Support for transit oriented development will in part result from the transformation of Ala Moana's auto-dominated, high volume roadways into multi-modal corridors featuring higher density, mixed use development and enhanced streetscapes. As "complete streets" they would conveniently link the neighborhood's major destinations and local attractions, including the rail station, through quality bus service and improved pedestrian and bicycle mobility.

- *Multi-modal Corridors:* Key to achieving a balanced circulation system is the transformation of Ala Moana's arterial and collector streets into multi-modal, mixed use corridors that link activity nodes. Kapiolani's changeover through more intense mixed use development is a priority, while a series of key mauka-makai links also stand to gain from future redevelopment and treatment as complete streets.
- *Mauka-Makai Connections:* Keeaumoku, Piikoi, and Kalakaua Streets are especially important as future multi-modal links, directly connecting the Ala Moana neighborhood, the proposed station site, and other major attractions, such as the shopping center and beach with the large populations mauka of Kapiolani Boulevard. It is noted that feeder buses will primarily tie into the station along mauka-makai (perpendicular to rail) routes.
- *Pedestrian and Bicycle Mobility:* Walking and cycling are sure to become increasingly important modes of travel, yet there are currently serious constraints on pedestrian and bicycle mobility. The neighborhood needs better sidewalks (e.g., wider and shadier),

safer crossings, and a network of bicycle routes and facilities. Recent adoption of a complete streets ordinance should make it easier to achieve these goals.

3) INFRASTRUCTURE PROGRAM

Redevelopment and revitalization of the Ala Moana neighborhood is highly dependent on infrastructure improvements. Sewer and water capacity, additional community-based open space, and streetscape improvements are necessary to attract and support new construction. However, due to funding constraints, upgrades tend to be piecemeal rather than comprehensive.

- *Water & Sewer Capacity:* This is a key constraint on redevelopment. Increased water and sewer capacity based on a rationally phased, comprehensive program of improvement is required to service higher density development.
- *Public Realm:* Stakeholders have been especially vocal about upgrading the public realm. For example, a complete program of streetscape improvements would promote economic development, enhance the Ala Moana neighborhood's image and support multi-modal movement. Although Ala Moana Beach Park is an excellent resource, its serves a regional population and there is also a need for local serving public parks, urban plazas and civic gathering spaces, and informal pedestrian pathways and trails (e.g., utilizing canals as an amenity).
- *Funding Constraints:* There is no dedicated public funding for comprehensive infrastructure upgrades, while fee exactions typically fund piecemeal improvements. Because additional developer exactions could have a chilling effect on new construction, stakeholders have suggested alternative funding sources (e.g., a community facilities district) to support ample infrastructure improvements for the area.
- *Sustainable Infrastructure:* Infrastructure planning and implementation should consider green solutions that use resources more efficiently by weaving natural processes into the built environment. This may include green street measures (e.g., bioswales, permeable paving) that reduce stormwater discharge and urban forestry to cool urban districts.

4) STREETSCAPE IMPROVEMENTS

Urban transit ridership relies heavily on safe and comfortable pedestrian access within a convenient walking distance of the transit stop; however, conditions across the Ala Moana neighborhood are less than ideal for pedestrians. Not surprisingly, stakeholders have identified streetscape improvements, including intersection enhancements as a necessary step toward neighborhood revitalization. Such improvements will not only improve pedestrian safety and comfort, and generally enrich the neighborhood, but are fundamental to successful transit oriented development.

- *Sidewalk Environment:* Many sidewalks in the neighborhood are too narrow and/or obstructed, and most lack sufficient amenities; direct links to the rail station site (e.g., Keeaumoku and Kona Streets) are especially problematic. Arterial and collector streets that can expect significant pedestrian traffic require wider sidewalks and a consistent planting of canopy street trees. Local residential streets would also profit from street tree planting that combats the conspicuous "heat island effect." Expansion of the urban forest will go far to lower temperatures, provide shade, and improve the visual character of the neighborhood.
- *Intersection Enhancements:* Major intersections are particularly unfriendly and unsafe for pedestrians (especially the area's elderly population) due to high traffic volumes, speed and noise, as well as wide crossing distances compounded by excessive turning radii. In order to improve pedestrian circulation, opportunities to narrow crossing distances and to better mark or enhance crosswalks should be explored.
- *Wayfinding & Signage:* Public signage and wayfinding programs support pedestrian activity and reinforce neighborhood identity. Ala Moana would benefit from the introduction of pedestrian oriented signage that conveniently guides locals and visitors to and from important neighborhood attractions, including the rail station.

5) IMPLEMENTATION TOOLS

Stakeholders have identified and recommended various tools and incentives to promote redevelopment and secure

necessary infrastructure improvements. With this in mind, the planning team will need to explore alternative development strategies and assess the full array of implementation tools with an eye toward optimizing value capture while ensuring community benefits; this process necessarily requires on-going community input.

- *Funding Mechanisms:* Tax abatement is generally accepted by the City and County of Honolulu as a tool for economic development. Special financing districts (encompassing various permutations such as community facilities districts, business improvement districts, and parking improvement districts) are another potential funding source; however, this requires a special tax or fee which may prove controversial with local property owners. Although tax increment financing (TIF) is a powerful tool for funding public improvements, it is currently regarded as politically infeasible.
- *Zoning Revisions / Zoning Incentives:* To spur redevelopment, the development community has expressed strong interest in revisions to the Land Use Ordinance (zoning code) that increase development potential, especially code amendments that raise height and density limits. This may entail zoning incentives offering entitlement bonuses in exchange for the provision of one or more defined community benefits.
- *Community Benefit:* Incentive zoning that ties local benefits to greater development potential might prove to be a viable implementation measure. However, this does require a clear understanding of community needs and priorities, necessitating public participation in the planning process. For example, community benefits could encompass protection of mauka-makai or Punchbowl-Diamond Head view corridors, set-asides for affordable housing, funding for streetscape enhancements, and provision of open space and recreational amenities, including urban parks, plazas and community facilities.

APPENDIX

UTILITY INFRASTRUCTURE

The following analysis summarizes the capacities and requirements for the utility infrastructure relative to revitalization of the Ala Moana neighborhood. Current conditions of the water and sewer systems, and the electric and gas networks, would handle the demand generated by significant development, considering certain provisions and regulations are met.

1) WATER SYSTEM

The majority of the public water system, including fire hydrants, on the island of Oahu is owned and operated by the *Honolulu Board of Water Supply (BWS)*. Potable water is drawn from underground aquifers and to a lesser extent, collected from surface water sources. Raw water is treated and pumped to water reservoirs located at various locations and elevations throughout the island. Transmission pipelines deliver potable water from the reservoirs to the service areas.

The water mains within the study area consist of 8 and 12 inch mains with a limited number of 6 and 16 inch mains. The 12 and 16 mains generally form a backbone network coinciding with the major roadways. The 6 and 8 inch mains serve as local supply lines for individual parcels along the smaller streets. The extent of the water system is quite good with supply lines on virtually every street and a backbone line within a block or two.

The water system within the study area will have capacity to support an intensive urban environment. The water system is typically sized to provide for the maximum density allowed by zoning. The study area is largely zoned with variations of commercial, medium and high density apartments, and commercial/residential mixed use, typically characterized by higher water consumption.

The water infrastructure will deliver a maximum fire flow demand required by code of 2000 gallons per minute. The fire hydrant network is well developed with hydrants spaced at a maximum of 250 feet based on zoning.

The *BWS* must verify that adequate water resources are available to serve new developments. A general request for water availability may be made in the early project planning phase. *BWS* will make a determination if area water system is adequate to support the proposed development. This determination is not a commitment of water resources. Commitments of water resources are made at the time of building permit submittal.

The development will be obligated to pay a *Water System Facility Charge (WSFC)* in accordance with City Council Resolution No. 780, 2007. The *WSFC* is based upon the number and type of plumbing fixtures planned. Credit will be given for plumbing fixtures that exist on the property prior to redevelopment provided they are properly documented on as-built plans.

2) SEWERS

Wastewater in the metropolitan areas of Oahu is typically collected by a system of gravity mains and sewage pump stations and conveyed to the *Sand Island Wastewater Treatment Plant*, located between the Honolulu

FIGURE A1: **EXISTING SEWER SYSTEM**

Source: Dept of Planning & Permitting: Honolulu Land Information System

International Airport and downtown Honolulu. The physical sewer system is maintained by the *City Department of Environmental Services*. The *City Department of Planning and Permitting Wastewater Branch* is responsible for planning and design of the sewer system and manages sewer connection requests.

The sewer system in the study area consists of a combination of local collection mains from 6 inch up to 12 inch diameter pipe and regional trunk sewers of 36, 48, and 69 inch diameter. Three trunk sewers cross the study area, generally parallel to the shoreline, effectively creating three service zones. The upper third is served by the 48-inch *East End Relief Sewer* along Rycroft Street. The middle zone is served by a 36-inch sewer in Kapiolani Boulevard. The makai most zone is served by a 69-inch sewer tunnel in *Ala Moana Regional Park*. These trunk sewers convey wastewater originating from properties east of the study area.

While the existing trunk system in the study area on whole will have adequate capacity to serve new developments, there are capacity limitations in certain reaches of the local collection mains, and in some cases, specific reaches of the trunk sewers. These limitations are typically addressed by construction of local relief sewers, or upsizing of existing mains.

All new developments must submit a sewer connection application with the *Wastewater Branch* to determine if adequate sewer capacity is available for the proposed improvements. Permission to connect to the sewer system will either be granted unconditionally, or if a deficiency exists, granted on the condition certain off-site improvements are made by the developer.

All new connections to the sewer system will incur a *Wastewater System Facility Charge (WSFC)* in accordance with the *Revised Ordinances of Honolulu, Chapter 14, Article 10*. The *WSFC* is a function of the number of units for a residential development and the size of the potable water meter for non-residential units. An *equivalent single family dwelling unit count (ESDU)* is computed for the proposed development. Each *ESDU* carries a dollar amount, varying with the type of development and the year assessed. The construction cost of an off-site improvement may be credited against the *WSFC* provided the improvement will be a benefit to the general population, not just the individual development.

3) DRAINAGE

The municipal drainage system in the study area consists of open drainage channels and underground drainage conduits. It is separate from the sewer system. All storm water runoff ultimately discharges to the ocean at various points along the shoreline.

The *City Department of Planning and Permitting Civil Engineering Branch (CEB)* conducts review of proposed developments to ensure the neighboring properties are not adversely impacted by runoff generated by the improvements, and impacts to the environment by storm water pollutants is minimized. The basis for their review is the *Rules Relating to Storm Drainage Standards, January 2000*.

The capacity of the storm drain system is adequate for the existing condition. Proposed developments must demonstrate the proposed improvements will not discharge runoff to the municipal system in excess of the current condition, commonly referred to as a "no net increase" in runoff. Any increase in storm water runoff in excess of the existing condition is typically retained or disposed of on-site.

A related component of storm water runoff managed by the *CEB* is storm water quality, under the City's *MS4 National Pollutant Discharge Elimination System (NPDES)* Permit. The purpose is to minimize the quantity of pollutants entering the municipal drain system and ultimately the ocean through the use of *Best Management Practices*, or *BMPs*. The treatment criteria and means to provide treatment vary depending on the type and size of development. *BMP* measures could include vegetated swales or structural *BMPs* such as a hydrodynamic separator, targeting solid pollutants such as dirt, road dust, litter, and vegetative debris.

The City will be implementing a more rigorous storm water quality program incorporating *Low Impact Development (LID)* principles specific to storm water runoff. Targeted pollutants will now include liquid contaminants such as petroleum/hydrocarbon by-products. Developments will be required to retain storm water runoff on-site through the use of infiltration or rain harvesting methods, or may be allowed to discharge runoff through an appropriate biofilter such as a rain garden, green roof, or tree box filters. As of July 2012, the new standards are

currently in draft form and are expected to be made official by 2013.

Much of the study area makai of Kapiolani Boulevard is in the *Federal Emergency Management Agency (FEMA)* VE and AE flood hazard district. The flood zone in this particular area is determined by the anticipated impact of flood waters resulting from a tsunami or hurricane. Flood elevations range from elevations 5 inland to elevation 12 at the shoreline. (Reference Figure 2.15)

FEMA regulates the development of residential dwellings in the flood hazard district, requiring flood proofing measures to protect life safety, a flood study to validate proposed developments will not alter the character of the flood zone, and requires owners to purchase flood insurance. Non-residential development within the flood hazard district may be subject to certain flood proofing construction requirements, however, is not required by *FEMA* to purchase flood insurance. Flood insurance may be required by lenders or other parties to the development team. Areas outside of the VE and AE flood zone within the study area are classified as Zone X and are not subject to flood proofing or *FEMA* flood insurance requirements.

4) ELECTRIC / CATV / TELEPHONE SERVICE (E/C/T) & NATURAL GAS

E/C/T services are provided by three major public utilities. *Hawaiian Electric* is the sole electric utility on the island. *Oceanic Time Warner* provides cable TV service as well as broadband internet, and digital telephone service. *Hawaiian TelCom* provides telephone service and is moving toward providing cable TV service as well. The *Gas Company* is the sole supplier of natural gas.

Ala Moana is a primary urban area. Underground and overhead *E/C/T* service and underground gas service is widely available throughout the study area. Gas service can also be provided via above ground storage tanks where underground service is not available. Service requests must be made with the applicable utility provider.