



KAKAAKO MAKAI AREA PARKS MASTER PLAN

FINAL



November 2017

Contents

Figures.....	ii
Tables	iii
Appendices.....	iii
Introduction	1
Purpose & Objectives	1
Need	1
Background	7
History.....	7
Existing Uses	8
Plan Inputs	11
Public Engagement	11
2011 Kakaako Makai Conceptual Master Plan.....	11
Existing Conditions Analysis.....	13
Park Planning Analysis	24
Trends	24
Parking	29
Comfort Stations	30
Draft and Final Environmental Impact Assessment	30
Park Master Plan	32
Park Master Plan Elements	32
Great Lawn & Gateway Features.....	32
Flexible & Open Community Space	32
Lei of Green	33
Waterfront Park Expansion.....	33
Keiki Zone	34
Beach Hale	34
Food Concessions & Biergarten	34
Community Center.....	35
Amphitheater.....	35

Parking	36
Kewalo Basin Park.....	37
Comfort Stations	37
Green Infrastructure and Design	38
Financing Mechanisms	38
Cost Estimates.....	40
Phasing Plan.....	41
References	43

Figures

Figure 1. Kakaako Makai Park Master Plan	3
Figure 2. Surrounding Uses	4
Figure 3. Future Neighbors	5
Figure 4. Typical Park Uses.....	6
Figure 5. Historic Park Photos	14
Figure 6. Slope Aspect Analysis.....	15
Figure 7. Site Characteristics	16
Figure 8. Urban Core Opportunities	17
Figure 9. Strengths	18
Figure 10. Challenges	19
Figure 11. Annual Maintenance Costs.....	20
Figure 12. Active Use Examples	21

Tables

Table 1 Park TMKs	10
Table 2 Public Meetings for the Planning Process	11
Table 3 Kakaako Makai Conceptual Master Plan.....	12
Table 4 Selected Biergartens in Public Open Spaces	27
Table 5 Comparable Outdoor Amphitheaters	28
Table 6 Off-Street Parking Requirements.....	29
Table 7 Existing & Proposed Parking.....	37
Table 8 NewComfort Station Locations and Proposed Sizes	37
Table 9 Phasing Plan.....	41

Appendices

Appendix A Report & Findings on the Public Participation Process

Appendix B Feasibility Studies

Introduction

Kakaako Waterfront Park, Kakaako Gateway Park, and Kewalo Basin Park, (collectively referred to as the “Kakaako Makai Parks” or the “Parks” in this report) are located in the Kakaako Community Development District (KCDD) of Honolulu on the island of Oahu. The Parks total approximately 47 acres and comprise about 90 percent of the public park open space within the KCDD.

This report sets forth the Kakaako Makai Parks Master (Master Plan), a master plan for the Kakaako Makai Parks.

Purpose & Objectives

The primary purpose of the Master Plan is to upgrade and enhance park facilities for family-friendly, uses and gathering places in the Kakaako Makai Parks. Specific objectives include:

- Incorporate the Guiding Principles of the 2011 Kakaako Makai Conceptual Master Plan (2011 Conceptual Plan)
- Activate the park with family-friendly outdoor recreational activities that draw people to the park without fear for personal safety.
- Create spaces that encourage lively uses and quality outdoor experiences that are akin to the world’s best urban parks.
- Plan for uses that sustain themselves financially and provide revenues to support park operations and maintenance without compromising public access to recreational space.
- Propose a phased approach to implementation of the Master Plan elements that is logical with respect to current needs; cost; public health, safety, and welfare; infrastructure availability; environmental impacts; and, population growth.

Need

The need for a master plan that is focused on improvements that promote active uses in the Kakaako Makai Parks is driven by a number of interrelated events and conditions:

- Recognition that the Guiding Principles developed with community support in the 2011 Conceptual Plan are strong organizing foundations for creating gathering places that are both lively and sustainable.
- Transfer of revenue-generating lands adjacent to the Kakaako Makai Parks from HCDA to the Office of Hawaiian Affairs (OHA) in 2012. The revenue stream from parking receipts and leases on those lands had, in part, paid for park upkeep and renovations.
- Consideration of available park development alternatives based on the public’s outdoor recreation needs; public health, safety and welfare; cost; infrastructure availability; environmental impacts; and, population growth.
- On-going development of high density residential housing in the Kakaako District and the need for public park space and the quality of public space for future residents.

- Acknowledgement that the growing transient population within the Parks is a deterrent for recreational park users.



FIGURE 1
MASTER PLAN

KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU





Q:\Oahu\HCDA Makai Park\GIS\Project\GIS Figures no Hawn\HCDA Surrounding Use.mxd

LEGEND

Kakaako Makai Parks

Source: City & County of Honolulu, 2014-2016. Google StreetView, 2016.
 Disclaimer: This graphic has been prepared for general planning purposes only and should not be used for boundary interpretations or other spatial analysis.

FIGURE 2
 SURROUNDING LAND USES

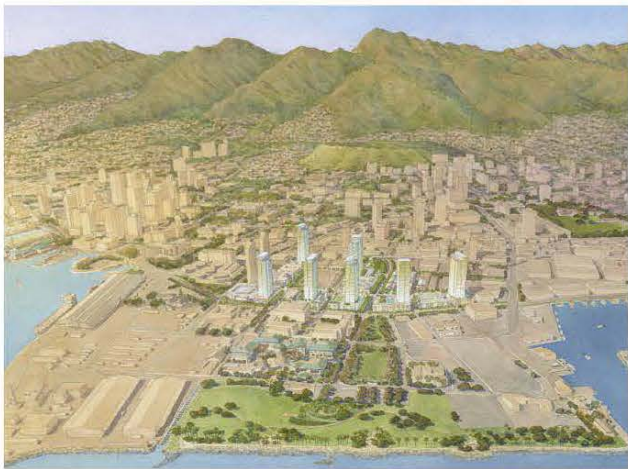
KAKAAKO MAKAI PARKS
 HCDA ISLAND OF OAHU

N

LARGE LANDOWNERS



- Legend
- Future Park Lands
 - Kakaako Makai Parks
 - City and County of Honolulu
 - Hawaii County Authority and
 - JANCO
 - Office of Hawaiian Affairs
 - Kauai County Authority
 - Kauai County Authority
 - Kauai County Authority



PROPOSED DEVELOPMENTS



FIGURE 3
FUTURE NEIGHBORS
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

OCEAN-BASED
ACTIVITIES



LAND-BASED
ACTIVITIES



LAND-BASED
ACTIVITIES



SPECIAL EVENTS
& WEEKENDS



FIGURE 4
TYPICAL PARK USE
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

Background

History

Oahu's original southern coastline in the vicinity of the Kakaako Makai Parks likely ran along the existing Ala Moana Boulevard. The Kakaako Makai district was at or below sea level, but a seawall was constructed between 1913 and 1927 near the current shoreline. Artificial fill material, including ash from burned municipal refuse, unburned refuse, and automobile batteries, was deposited behind the seawall. Two incinerators, one built in the 1927 and the other in the 1945, contributed ash to the fill seaward of Ahui Street until deposition of ash was banned by the City and County of Honolulu in 1971 (The Limtiaco Consulting Group and EnviroServices & Training Center, LLC, 2009). The fill process resulted in the existence of the land upon which the Kakaako Waterfront Park and Gateway Parks are now located. However, the substrate below Kewalo Basin Park was likely created from material dredged from Kewalo Harbor in the 1920s and 1940s. In 1955, workers placed dredged material along the makai side of the Harbor to form the eight-acre land section protected by a revetment, a portion of which is now Kewalo Basin Park (Young P.T., 2013). See Figure 5. Historic Park Photos.

On the Kakaako Peninsula, bordered by the Kewalo Basin and Honolulu Harbor, general leases and revocable permits were issued by the Department of Land and Natural Resources, Department of Transportation, Department of Business, Economic Development & Tourism (Hawaii Community Development Authority, 2005). The Makai Area has been used for maritime and industrial purposes, including maritime break-bulk, limited container cargo operations, ship maintenance, cruise ship facilities, and the Foreign Trade Zone warehouse and offices. Commercial use by car dealerships, recreational use at waterfront parks, research use by the Pacific Biosciences Research Center, and public use for the City and County of Honolulu, State of Hawaii Department of Health, and Ala Moana Wastewater Pump Station have occurred in the Makai Area.

In 1992, the HCDA converted approximately 34.4 acres of former landfill waste into Kakaako Waterfront Park. In later years, the HCDA also constructed the Makai Gateway Park and the Mauka Gateway Park totaling about 7.1 acres, and the nearly 5.5 acre Kewalo Basin Park.

In the years between 2007 and 2011, the HCDA conducted a community-based master planning process for Kakaako Makai. That process included preparation of an overall vision, program, alternatives, and a preferred conceptual master plan supported by 14 guiding principles.

In 2012, approximately 30 acres of revenue-generating lands adjacent to the Kakaako Makai Parks were transferred from HCDA to the Office of Hawaiian Affairs (OHA). The land transfer was unanticipated by the 2011 Conceptual Plan and it affects the parks in two ways. First, land uses anticipated in the 2011 Conceptual Plan may now be subject to a new planning process initiated by OHA. Second, loss of the revenue stream from parking receipts and leases on those lands that

KKCD MAKAI AREA PLAN
LAND USE: PARK (P)

**The Kakaako
Makai Area Plan (2005)
envisions that:**

Generous park lands with direct access to the waterfront remain the centerpiece of the Plan for the Makai Area. Within this zone (P), a variety of park environments will be accommodated. The existing Kakaako Waterfront Park provides a passive park for walking, picnics, and quiet contemplation.

Within the park zone, cultural and educational uses along with a variety of active recreation activities will be allowed and encouraged, to provide additional public resources.

had, in part, paid for park upkeep and renovations. Development in the Makai area has been slow and the only recent developments have been the medical school and the cancer center that do not provide twenty-for seven activities in the area. Due to lack of high level of activities in the area, the neighborhood is also experiencing an influx of homeless individuals and families.

The current effort responds to the rapidly changing Kakaako neighborhood, while upholding the principles set forth in the 2011 Conceptual Master Plan.

Existing Uses

Kakaako Waterfront Park is approximately 34.4 acres in area and includes three separate land parcels. Kakaako Gateway Park is approximately 7.1 acres in area and includes five separate land parcels. Kewalo Basin Park is approximately 5.5 acres in area and includes two land parcel. Park areas and land parcel tax map key (TMK) is provided in Table 1. All of the Kakaako Makai Parks parcels are owned by the Hawaii Community Development Authority (HCDA).

The Kakaako Makai Parks are all currently used as passive parks, which are defined as parks that are generally not actively managed or programmed and require few or no permanent facilities or recreational equipment. Examples of passive recreation include biking, picnicking, jogging, and nature enjoyment.

Kakaako Waterfront Park is defined by its man-made topography – most notably large, grassed mounds that overlook the Pacific Ocean. The mounds are man-made caps to a former landfill that rise from 15 feet above mean sea level (MSL) to 45 feet above MSL at their peaks. Atop the prominent east mound is a memorial to the Ehime Maru incident while an amphitheater is situated at its mauka base.

The Waterfront Park has a network of trails that wind around the mounds and lead to a wide oceanfront promenade surfaced with decorative pavers situated atop a revetment that extends the length of the park's shoreline. Along the promenade are two pergolas planted with hau trees (*Hibiscus tiliaceus*) to provide shade over picnic tables.

Walking along the promenade and fishing from the revetment makai of the promenade are popular activities for park visitors. Support facilities include a 286-space asphalt parking lot located at the main vehicle entry to the park, an approximately 49 space gravel/asphalt parking lot near Point

Panic, two showers, and two comfort stations. Also within the vicinity of the park, there are parking lots with 45 spaces and 41 spaces, respectively north and east of the Children's Discover Center; resulting in a total of 421 existing spaces.

Uses within the Waterfront Park are generally not actively programmed; recreational activities are either spontaneous or organized by community members and approved by permit. The large, grassed mounds are often used for sliding. The taking of wedding photographs along the shoreline (especially near sunset time) is also a popular activity within the park. The amphitheater is used for concerts and music festivals at the rate of approximately one event per month. A grassed, flat area situated in the west side of the park adjacent to the children's museum provides an area for field sports or games, but is not actively used.

The Makai-Diamondhead corner of the Kakaako Waterfront Park, also referred to as Point Panic, is a popular bodysurfing site. The Point Panic name is derived from the rock jetty that surfers may slam into if they don't bail at the right time and is a location designated as an exclusive bodysurfing break. Surfing is popular at the three breaks Ewa of Point Panic: Flies, Incinerators, and In-Between (See Figure 7 for location). Sea steps along the Park provide surfers and swimmers access to the water.

Kakaako Gateway Park consists of two open, flat grass fields situated between Ala Moana Boulevard and Kakaako Waterfront Park. The fields are bound by Cooke Street to the west (Ewa) and Ohe Street to the east (Diamond Head). The fields are bisected by Ilalo Street. The most consistent users of this area in the past have been homeless people, with transient encampments around the edges of the Parks. The HCDA has cleared the transient encampments and expends considerable resources in keeping the transient population from camping in the parks. The more makai field is also often used for field sports and picnicking. On-street parking spaces are located on Cooke, Ilalo, and Ohe Streets adjacent to the Gateway parks.

Kewalo Basin Park is a relatively small park compared to the Waterfront and Gateway parks and runs along a revetment makai of Kewalo Basin Harbor, which is a commercial small boat harbor under the jurisdiction and ownership of HCDA and managed by a private entity (Kewalo Harbor, LLC) with a lease from HCDA. It has a walking path, a comfort station, picnic tables, and a small

KKCD MAKAI AREA PLAN LAND USE: PARK (P)

Although plans are subject to more detailed feasibility studies and further refinement during design development, at this point, general concepts include the following:

- An iconic mixed-use public or cultural facility within the Diamond Head portion of the Kakaako Waterfront Park.
- A large urban "green" area for active play and festivals.
- An interactive children's play area with water features and play apparatus.
- An amphitheater adjacent to the urban "green" area and interactive children's play area.
- Extensions of the current promenade around Kewalo Basin and mauka via the mauka/makai promenade.

green area at the Diamond Head end with a statue of Saint Marianne Cope, who cared for people with Hansen’s disease in Kakaako and on Molokai during the late 1800’s. A former net shed building is located at the west side of the park which HCDA leases to Kupu, a non-profit community organization that provides environmental stewardship service-learning opportunities to youth. It is served by a 109 space parking lot. Surfers are the primary users of Kewalo Basin Park and as a result the relationship between the park and ocean recreation is essential in maintaining and preserving the traditional recreational activity. Surfers access a number of popular breaks just off shore of the Park and hold surf contests during the summer when the waves are larger. While the Kewalos break, located closest to the mouth of the harbor, is one of town’s more popular breaks, Rennicks, Straight-outs, and Marineland are all breaks along the Kewalo Basin Park Makai edge.

Table 1 Park TMKs

Park	Park Area (Acres)	TMK(s)
Kakaako Waterfront Park	34.4 acres	(1) 2-1-060:008 (1) 2-1-060:029 (1) 2-1-060:030 (por.)
Kakaako Gateway Park	7.1 acres	(1) 2-1-060:007 (1) 2-1-059:023 (1) 2-1-059:024 (1) 2-1-059:025 (1) 2-1-059:026 (1) 2-1-060:030 (por.)
Kewalo Basin Park	5.5 acres	(1) 2-1-058:137 (2) 2-1-058:136 (por.)

Plan Inputs

Public Engagement

Understanding public preferences for outdoor recreation facilities is an important step in the master planning process. To that end, several opportunities for public engagement were provided in gathering the community's opinion in preparing the Master Plan. The primary means for public engagement were through public meetings and through an on-line public engagement platform.

Between August 2014 and June, 2015, public input was solicited on the Master Plan on-line and in a series of public meetings. Based on the public's contributions, the Master Plan includes invaluable insights for recreational uses in the Parks. Appendix A, Report and Findings on the Public Participation Process, contains a detailed re-cap of the public participation process and results.

Table 2 Public Meetings for the Planning Process

Meeting	Date	Location
Public Open House Series 1	August 28, 2014 and September 6, 2014	HCDA Office 461 Cooke Street Honolulu, HI
Public Open House Series 2	October 30, 2014 and November 8, 2014	HCDA Office 461 Cooke Street Honolulu, HI
Parks Peek Event	December 6, 2014	Kakaako Makai Gateway Park 461 Cooke Street Honolulu, HI
Environmental Impact Statement (EIS) Kick Off Meeting	April 16, 2015	HCDA Office 547 Queen Street Honolulu, HI
Public Open House Series 3	June 4, 2015 and June 13, 2015	
HCDA Board Meeting	June 24, 2015	

2011 Kakaako Makai Conceptual Master Plan

Considerable community effort was expended in developing the 2011 Conceptual Master Plan. While circumstances have changed since 2011, the vision statement and guiding principles in the 2011 Conceptual Master Plan still provide a valuable framework for considering recreational uses in the Makai Parks Master Plan.

Table 3 Kakaako Makai Conceptual Master Plan – Guiding Principles Summary

Title	Description
Community Cultural Gathering Place	Establish Kakaako Makai as a gathering place where community and culture converge in response to the natural scenic beauty of the green shoreline open space.
Hawaiian Culture & Values of the Ahupuaa	Base the framework for planning, decision-making and implementation of the Kakaako Makai master plan on Native Hawaiian values and traditional and customary rights and practices protected by the State.
Open View Planes	Protect, preserve and perpetuate Kakaako Makai’s open view planes from the mountains to the sea as an inherent value of the Hawaiian ahupuaa and an important public asset for residents, visitors and future generations.
Coastal and Marine Resources	Preserve, restore and maintain Kakaako Makai’s valuable coastal and marine resources for present and future generations.
Expanded Park and Green Space	Ensure expansion of Kakaako Makai’s shoreline parks as significant landscaped open spaces joining the lei of green parks extending from Diamond Head (Leahi) to Aloha Tower.
Public Accessibility	Provide open and full public access to recreational, cultural and educational activities within and around Kakaako Makai’s parks and ocean shoreline.
Public Safety, Health & Welfare	Ensure that Kakaako Makai is a safe and secure place for residents and visitors.
Public Land-Use Legislation - Public Use of Public Lands in the Public Interest	Recognize and respect the effort and intent of the Hawaii State Legislature to uphold the greater public interest by ensuring and sustaining public uses on Kakaako Makai State public lands for the greater public good.
Kewalo Basin	Ensure that the Harbor’s identity is retained with continued small commercial fishing and excursion boat uses, keiki fishing, marine conservation, research and education, and accessible open space expanding the lei of green between Ala Moana Park and Kakaako Waterfront Park.
Cultural Facilities	Offer public enrichment opportunities through both fixed and flexible cultural facilities that celebrate the diverse cultures of Hawai’i and blend compatibly with the shoreline open space.
Small Local Business	Apportion a limited number of small local businesses to assist in cooperatively sustaining Kakaako Makai’s public use facilities.
Site Design Guidelines - A Hawaiian Sense of Place in Landscape, Setting and Design	Ensure that Kakaako Makai’s public use facilities are compatible in placement, architectural form, and functional design within the landscape of the shoreline gathering place.
Community/Government Planning Partnership	The Kakaako Makai Community Planning Advisory Council places the public interest first and foremost, and will strive to uphold the greater good of the community in partnership with the HCDA as the public oversight agency.
Future Funding & Management	Assure and assist viable and sustainable operation of public uses and facilities on State public land in Kakaako Makai through public/private partnerships and 501(c)(3) non-profit management ¹⁷ similar to successful park conservancies and their stewardship programs.

Existing Conditions Analysis

A wide variety of resources were consulted during the planning process. The following is a series of maps and figures that were developed for the planning team, stakeholders, and general public to help frame the context in which the parks are being planned.

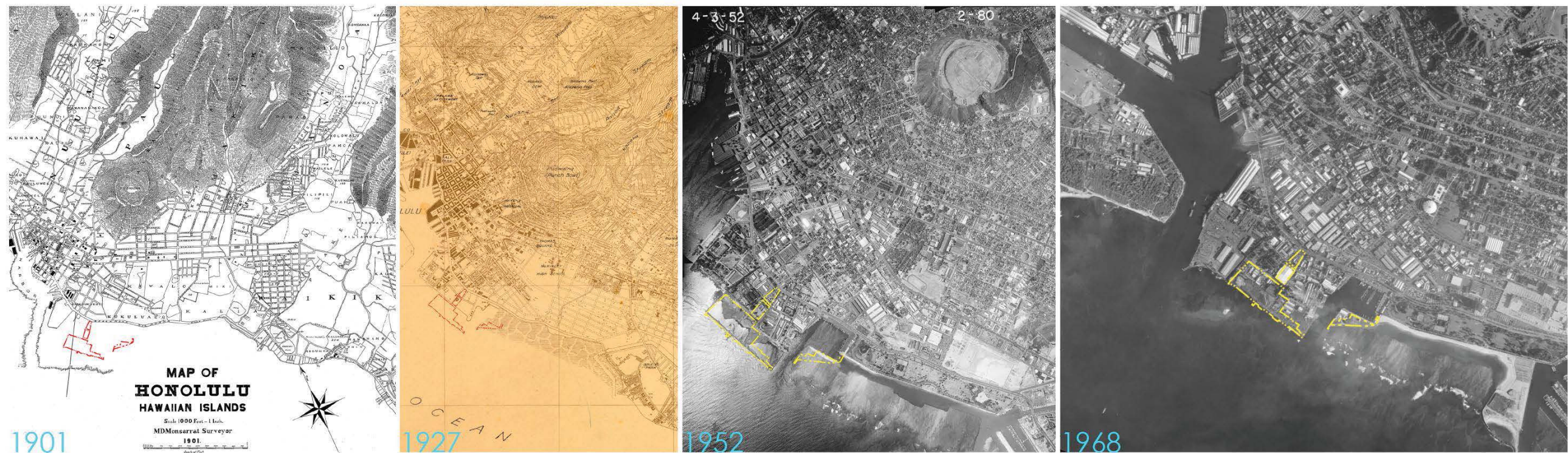


FIGURE 5
HISTORIC PHOTOS

KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

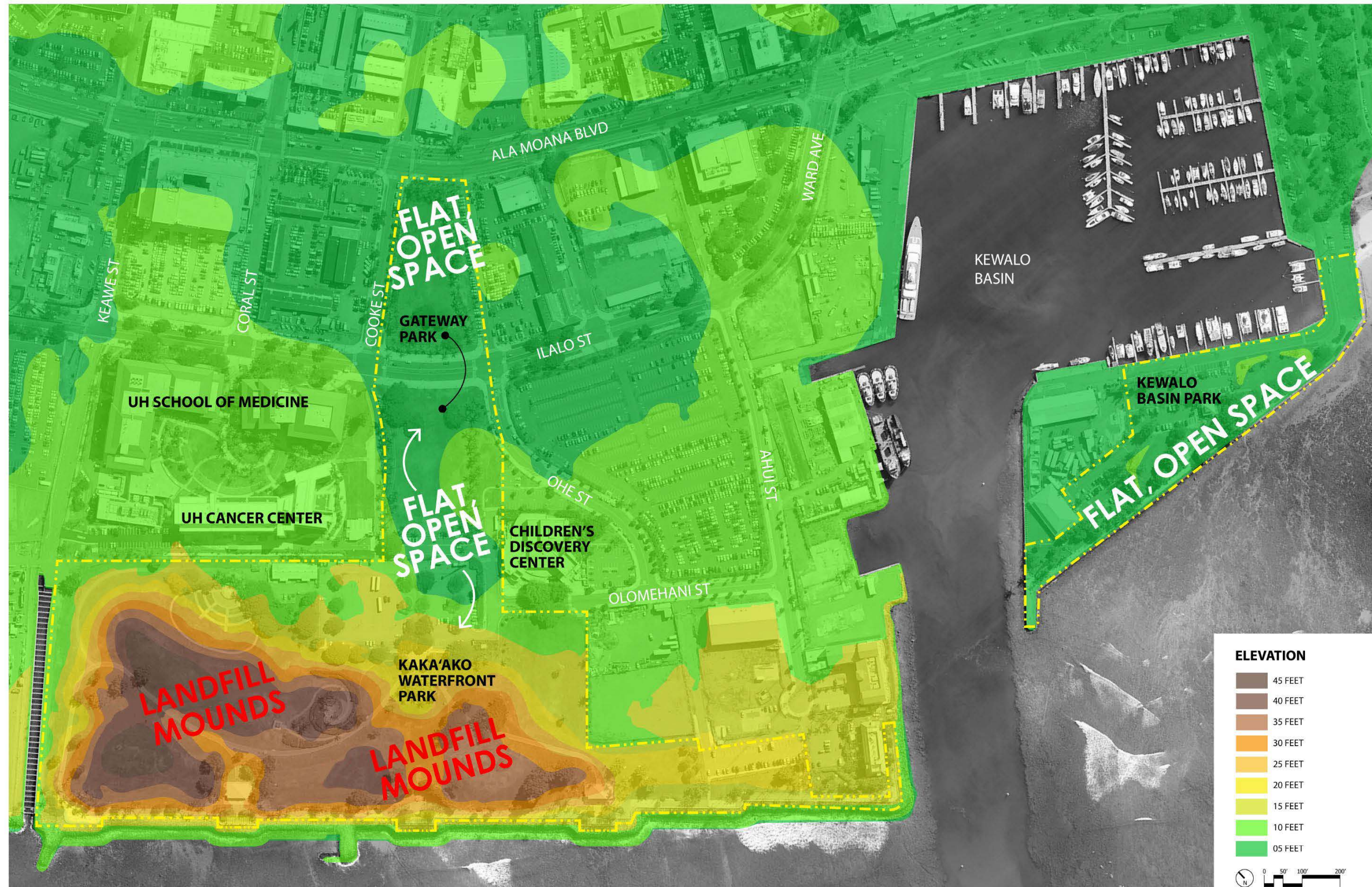


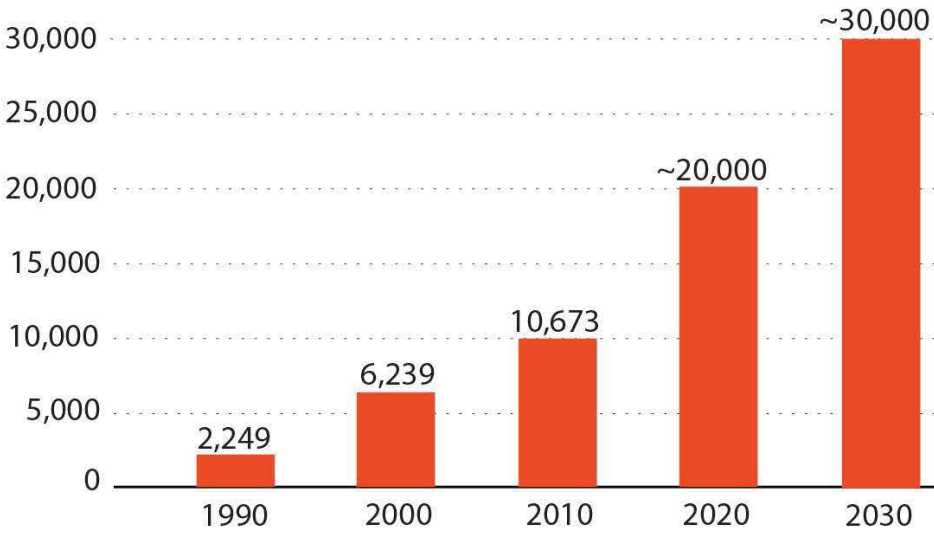
FIGURE 6
SLOPE ANALYSIS

KAKA'AKO MAKAI PARKS
HCDA ISLAND OF OAHU

FIGURE 7
SITE CHARACTERISTICS

KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

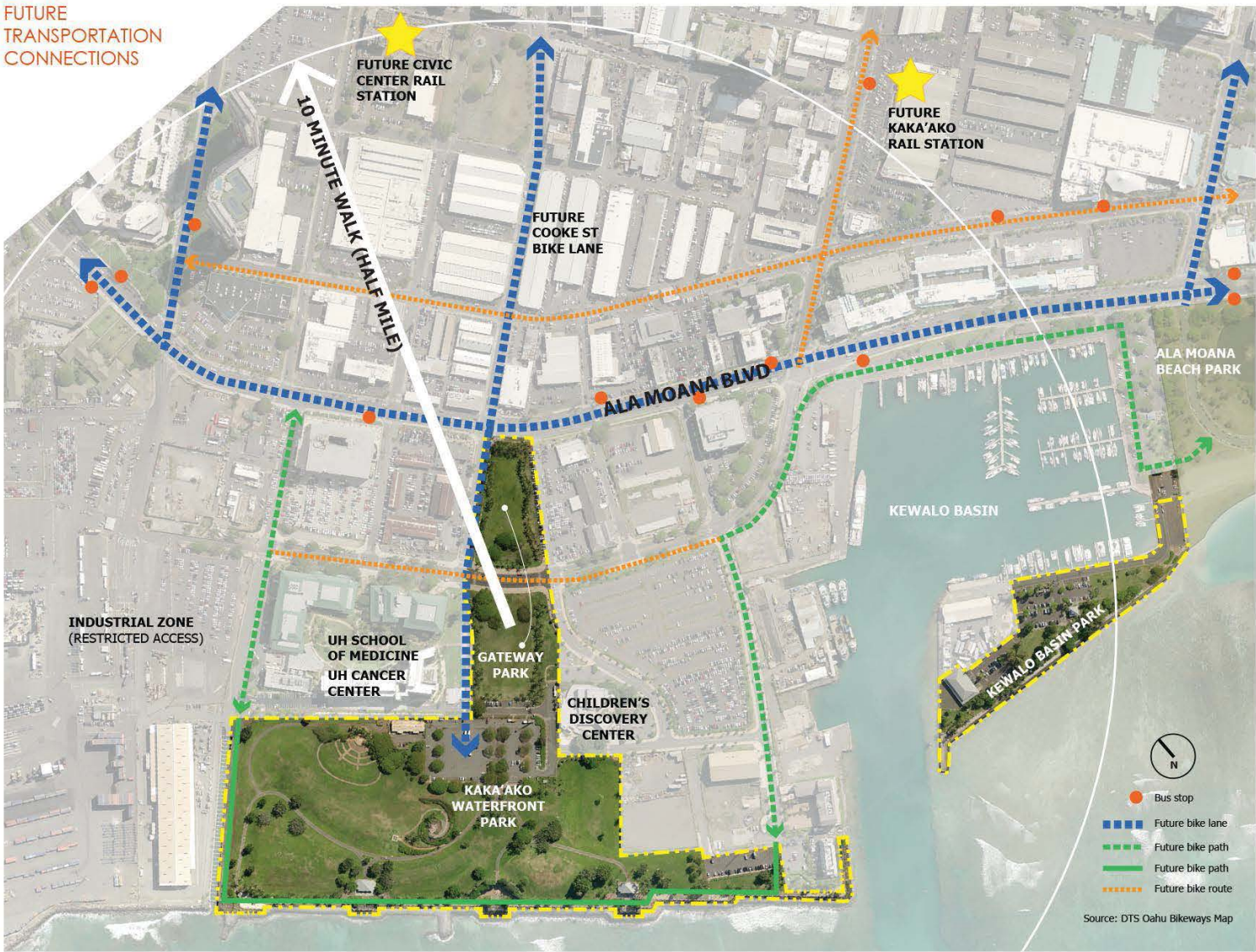
PROJECTED POPULATION GROWTH IN KAKA'AKO (1990-2030)



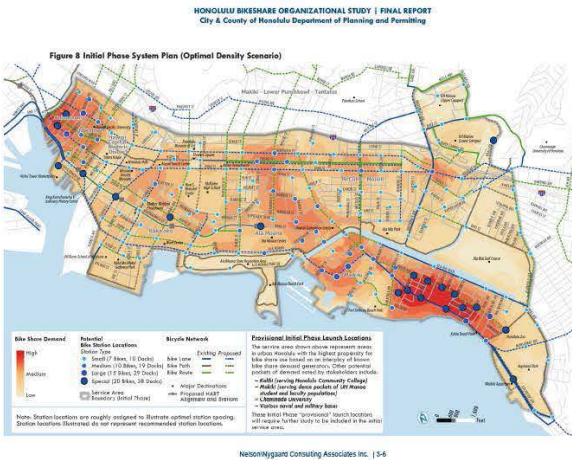
Period	Change	Change in %
1990-2000	3,990	177.4%
2000-2010	4,434	71.1%

Source: Kaka'ako, Urban Core Living | June 2014 | Research and Economic Analysis Division & Department of Business, Economic Development and Tourism

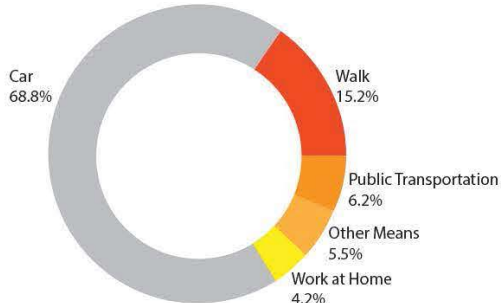
FUTURE TRANSPORTATION CONNECTIONS



FUTURE HONOLULU BIKE-SHARE PROGRAM

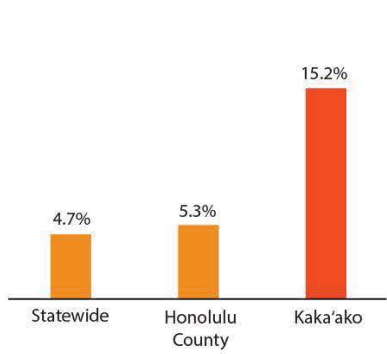


MEANS OF TRANSPORTATION FOR KAKA'AKO RESIDENTS



Source: Kaka'ako, Urban Core Living | June 2014 | Research and Economic Analysis Division & Department of Business, Economic Development and Tourism

PERCENT OF WORKING RESIDENTS WHO WALK TO WORK



PERCENT OF WORKING RESIDENTS WITH < 20MIN. COMMUTE TIME

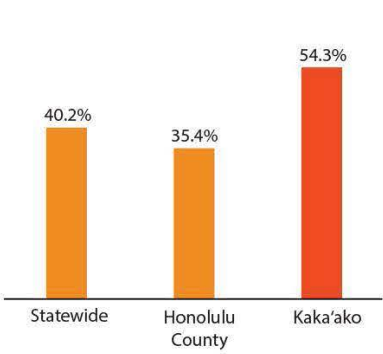


FIGURE 8
URBAN CORE OPPORTUNITIES
KAKA'AKO MAKAI PARKS
HCDA ISLAND OF OAHU

OPEN MAKAI
VIEW PLANES



OPEN MAUKA &
HARBOR VIEW PLANES



WATERFRONT
PROMENADE



LEVEL AREAS



FIGURE 9
STRENGTHS
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

LACK OF VISUAL
& PEDESTRIAN
CONNECTIVITY



VANDALISM &
DETERIORATION



HEALTH & SAFETY
CONCERNS



HOMELESSNESS

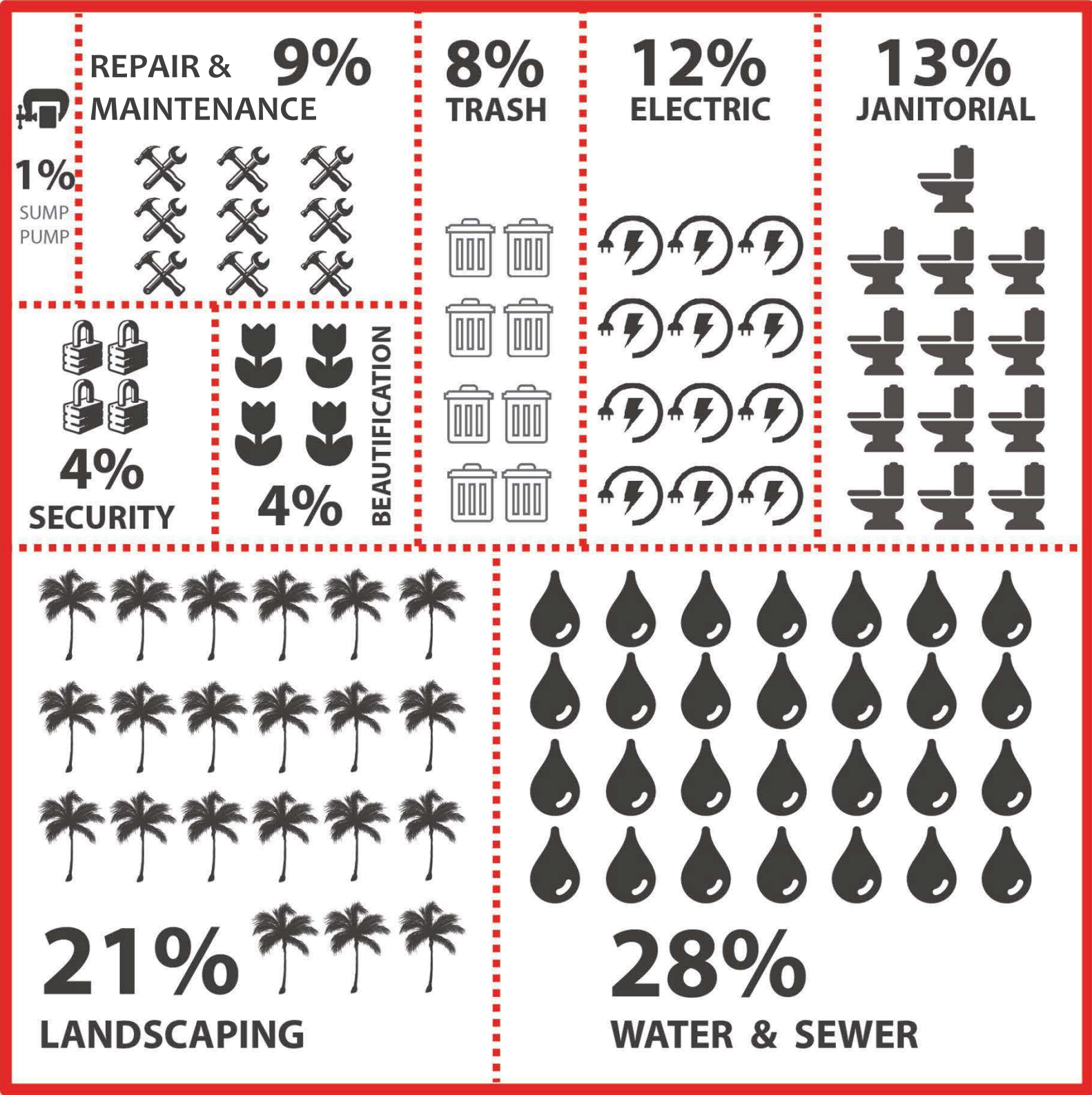


FIGURE 10
CHALLENGES
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

KAKA'AKO MAKAI AREA

TOTAL ANNUAL
MAINTENANCE
COST:

\$1 MILLION



Source: HCDA Kaka'ako Makai Common Area Fiscal Year 2015 Budget

FIGURE 11 Annual Maintenance Costs

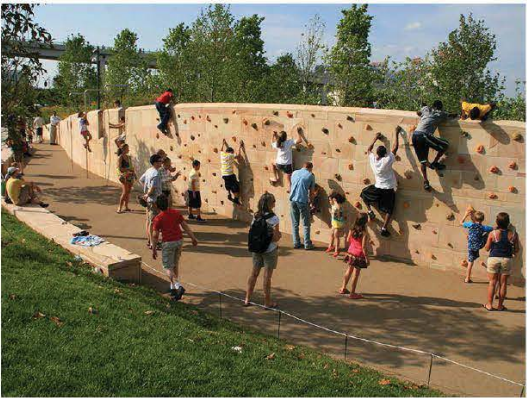
PROGRAMMED
GATHERING
SPACE



INTERACTIVE
WATER FEATURES



INTEGRATED
PLAY AREAS



ACCESSIBLE
RECREATION
AREAS

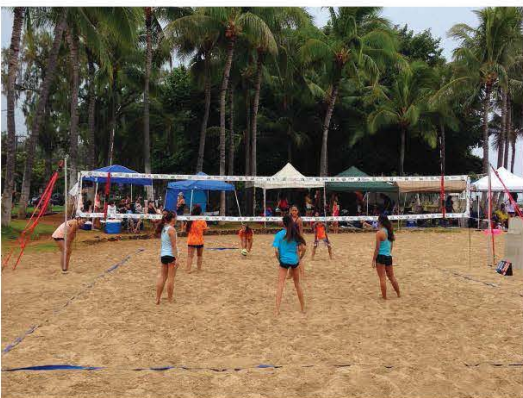
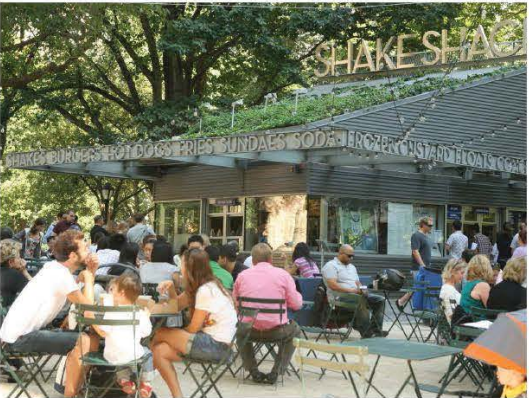


FIGURE 12
ACTIVE USE EXAMPLES
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

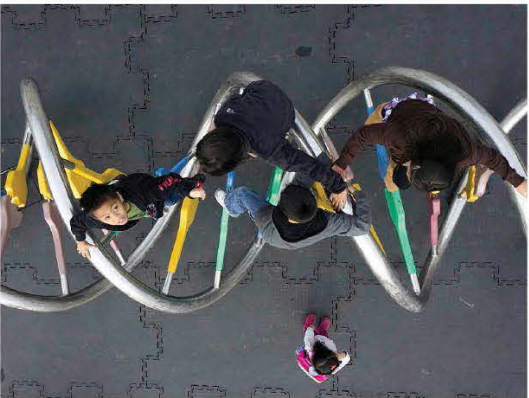
FOOD
CONCESSIONS &
INFORMAL SEATING
AREAS



PROGRAMMED
NIGHT-TIME
ACTIVITIES



CURATED ART
INSTALLATIONS



INTERACTIVE
SCULPTURAL ART



FIGURE 12
ACTIVE USE EXAMPLES
KAKAAKO MAKAI PARKS
HCDA ISLAND OF OAHU

(This page intentionally left blank.)

Park Planning Analysis

Trends

As Kakaako Makai redevelops, the HCDA must adapt the use of its parks to changing conditions. Population in the KCDD is projected to increase from approximately 10,673 people in 2010 to 46,181 people, by 2035 (Kakaako Community Development District, TOD Overlay Plan, Final Environmental Impact Statement, 2015). Park improvements are anticipated to address the need for quality park, open space, and recreational facilities for a growing population. Neither HCDA, nor the City and County of Honolulu Department of Parks and Recreation currently plan to construct additional parks in or near the KCDD (Hawaii Community Development Authority, 2015). Further, the limited availability of land in the KCDD will not allow for a new regional park to be built. Considering these trends, HCDA has to leverage available and existing green spaces. HCDA must focus not only on passive park space but also provide quality public space experiences by offering active recreational uses within the Parks.

Park Transformations

The Kakaako Makai Parks are situated in an urban setting surrounded by commercial and residential developments mauka of Ala Moana Boulevard and a medical school and cancer research center in the Makai area . The planning team looked to examples of other urban parks that have gone through successful recent transformations for potential upgrade and enhancement of Kakaako Makai Parks . Elements of these other parks were considered through the lens of applicability to Hawaii's climate and culture.

Bryant Park, New York City is a six-acre park next to the New York Public Library and surrounded by skyscrapers. While crime, drugs, and violence were prevalent in the park in the 1970s, today Bryant Park is a dramatic example of what can be achieved through renovation and repositioning (Gavin, 2000). The combined efforts of the Bryant Park Corporation (BPC), a not-for-profit, private management company and cooperative business improvement district of neighboring merchants and property owners, funded a four-year renovation. Construction of a café, restaurant, and kiosks generated revenues and activated the park. Through a management agreement BPC provides needed sanitation, security, restroom, and landscaping services. Programming for interests ranging from art, birding, fitness, performing arts, and seasonal festivals and events have made Bryant Park a year-round destination and safe haven for the surrounding community.

Paseo Del Rio Riverwalk, San Antonio is a three-mile trail of waterfront park, considered a green artery, lined with individual businesses, restaurants, hotels, and attractions along a downtown section of the San Antonio River. In 1921 flooding of the river resulted in 51 fatalities, causing engineers to propose paving the area. Outraged, the public demanded the area be transformed into a public park which was later made possible through a cost-sharing agreement between the city and the Works Progress Administration. While Riverwalk's design provides much needed flood control, it also serves as San Antonio's second most important tourist destination (second to the

Alamo) with 9.3 million visitors in 2014 and investments of \$2.4 billion annually that support 31,000 jobs (Nivin, 2014). With 22 restaurants, 12 hotels and various commercial enterprises, Riverwalk is a center for food, entertainment, and nature and a critical part of the local economy.

Millennium Park, Chicago is a 24-acre northwest section of Grant Park, located in the Chicago central business district and established in 2004. Built on former desolate lands used for rail transportation, plans for a modest park evolved to a massive public-private collaboration where the surrounding private sector contributed \$173.5 million of the total \$475 million for the park (Chicago Public Library, 2015). A center piece of the park is the Jay Pritzker Pavilion that hosts a range of music series and annual performances, including rock, classical, and opera singers; movie screenings, as well as recreation activities like yoga. The Pavilion has an 11,000-person capacity with options of great lawn and fixed-seating. The Millennium Park has been recognized for its accessible design and includes an ice rink and theater built below ground, as well as landscaped pedestrian promenades and an iconic monument, the Cloud Gate commonly known as "the Bean." An international garden design competition contributed to the establishment of a five-acre garden that honors the City's transformation from a flat marshland to an innovative green city (Lurie Garden, 2015). Bridge-ways including the 925-foot-long, foot bridge connects Millennium Park to Maggie Daley Park and the Nicholas Bridgeway connects the park to the Art Institute. Despite negative publicity during construction, today the park is a recognized center for world-class art, music, architecture, and landscape design (DK Eyewitness, 2004).

Crissy Field Park, San Francisco is a 28-acre, waterfront park on a former military air field, near the Golden Gate Bridge. Through community-led effort, more than \$34.4 million was raised to transform roads, buildings, and eroded beachfront into a grassy field park with 20 acres of tidal marsh, 22 acres of visitor amenities, and 30 acres of promenade and beach areas. The removal of 86,000 tons of contaminated soil allowed for restoration of ecological processes, providing habitat for flora and fauna, as well as picnic grounds, benches, restrooms, out-door showers, overlooks, boardwalks, and bike lanes for thousands of residents and visitors. One of the primary successes of Crissy Park was mobilizing the community to support on-going public education about wetlands and coastal systems (National Park Service, 2015).

Park Attractions

There are many demands on Honolulu residents' time and many competing venues for leisure-time activities. Parks must compete with alternative venues for exercise and entertainment. Based on public meeting responses, many people do not visit Kakaako Makai Parks, partly out of fear for their personal safety. Absent of a beach or other attraction and coupled with poor sight lines and long distances from parking, vast areas of the Kakaako Waterfront and Gateway parks go unused. Based on observations of current use, provision of green space alone is insufficient to attract people or groups to a park on a continued, regular basis. A balance is therefore sought within the Master Plan between providing open, green space and activities such as exercise, entertainment, and food. Drawing park users to the attractions on top of the mounds is essential, since the views from the

mounds sweep across the ocean from Diamond Head to Kalaeloa offering a unique, breathtaking 360 degree perspective.

Exercise

Kakaako Makai Parks can provide key exercise opportunities that complement the many available fitness centers and condominium gyms and pools. The Parks also offer a free exercise venue for those Oahu residents that cannot afford homes with yards, gyms or pools and may not have the means for membership to a fitness center. The Centers for Disease Control and Prevention has examined the connection between parks, trails, and health, concluding that walkable access to parks increases the likelihood and frequency of physical activity (Centers for Disease Control and Prevention, 2013). Meanwhile, Hawaii’s State Comprehensive Outdoor Recreation Plan sets forth a goal to, “encourage physical fitness and healthy people through outdoor recreation”, by treating outdoor recreation activities and areas as an essential tool in increasing physical fitness (State of Hawaii Department of Land and Natural Resources, 2015). Continuing the Lei of Green is simply the easiest, most impactful improvement that can be implemented to encourage access to the Park. Increased open green space and addition of new recreation facilities like the Keiki Zone, Adventure Zone, and Outdoor Exercise Area promote increased levels of physical activity. Inclusion of hillside slides is considered essential to celebrate a favorite Waterfront Park pastime. Figure 12 includes imagery of innovative play areas and structures that served as inspiration for the Keiki Zone, Outdoor Exercise Area, and interactive water feature.

Food

People are attracted to food and Hawaii residents enjoy outdoor eating facilities and establishments. Planning for food vendors within the Parks is therefore included within the Parks Master Plan. A food and drink concept that is seeing a resurgence in American parks is the biergarten. A biergarten (derived from the German word for beer garden) is an open-air space where beer and food are served. The concept originated as Bavarian breweries planted gardens above cellars to maintain cool conditions for the beer to ferment underground, these spaces were then used for communal gatherings (Brew York, 2012). To consider the viability of a biergarten at the Parks, Colliers International prepared a feasibility study, which is included in Appendix B.

Examples of active biergartens in parks are listed in the following table, and examples of park-based food and beverage facilities are included in Figure 12.

Table 4 Selected Biergartens in Public Open Spaces

Biergarten Name	Park, City, State	More information
Sea Salt Eatery	Minnehaha Park, Minneapolis, MN	https://www.facebook.com/Sea-Salt-Eatery-105406882829148/
Shake Shack	Madison Square Park, NY, NY	http://www.madisonsquarepark.org/things-to-do/shake-shack
The Oval	Philadelphia, PA	http://www.visitphilly.com/events/philadelphia/the-oval-on-the-benjamin-franklin-parkway/
Beekman Beer Garden	Private – on waterfront, NY, NY	http://www.beekmanbeergarden.com/
Spruce Street Garden Park	Philadelphia, PA	http://www.delawariverwaterfront.com/places/spruce-street-harbor-park

The presence of mobile food trucks at Hawaii parks and other outdoor settings has grown in popularity. In addition to providing alternatives to traditional restaurants, food trucks help meet daily food and beverage needs for customers that work, reside, or visit a given area. The diversity of offerings by food trucks and their use of social media to publicize menus and locations help generate interest and loyal patronage. The Kakaako Waterfront Park with its accessible and inviting landscape, has served as a site for food-themed events showcasing multiple food truck vendors and activating the park. Stakeholders have expressed a preference for the inclusion of food trucks as part of the Park Master Plan. As described in the Food Truck Demand Analysis included in Appendix B, there is interest in development of a 10,000 square foot truck food court at the Kakaako Waterfront Park. A truck food court can offer multiple dining options for park users within a minimal footprint, while providing opportunities for local businesses.

Entertainment

Aside from enjoying outdoor eating, Hawaii residents and visitors alike enjoy live-music, theatrical performances, as well as hula and other cultural showcases. Many local forms of entertainment utilize the favorable climate of our islands to hold music concerts and screen movies in outdoor venues, inclusive of our parks, outdoor lawns, and amphitheaters. This type of entertainment activates outdoor spaces and encourages communities to come together.

Entertainment in the form of theater, dance, art-exhibits, craft-making, evening movies, or sunrise exercises create excitement that can transform a park into a neighborhood's leading attraction (Harnik, 2010). Parks continue to be an ideal site to support such outdoor entertainment given the existing facilities, open space, and available parking. Enhancing opportunities for entertainment is an element of the Park Master Plan. Most notably modifying the existing Kakaako Waterfront Park's amphitheater, as it is underutilized and not actively marketed to event and concert promoters for rent (Colliers International, 2015). While the existing amphitheater has a capacity of 10,000, additional investment can add reserved seating, as well as upgrades for power, lighting, and mechanical systems for staging. Appendix B includes an analysis of the demand and feasibility of

investing resources in an amphitheater at the Waterfront Park. Relocating the amphitheater to Ewa, Makai side of the Waterfront Park with exposure to ocean views and flexible open use is strongly supported by the community. However, the feasibility study does not support the financial cost necessary to relocate the amphitheater. Recognizing the financial cost necessary to develop a new amphitheater, as well as recognizing the issue of environmental contamination, the Environmental Impact Assessment for the Kakaako Makai Parks Active Use Facilities Master Plan (PBR HAWAII & Associates, Inc., 2016), completed by the HCDA, acknowledges that additional study will be required to pursue new amphitheater development.

Table 5 Comparable Outdoor Amphitheaters

Amphitheater Name	Location	More Information	Capacity
Rotary Amphitheater	Fresno, CA	http://www.fresno.gov/Government/DepartmentDirectory/ParksandRecreation/ParksandFacilities/Regional+Parks/Ampitheater.htm	3,500
Snow Park Amphitheater	Park City, UT	http://www.deervalley.com/WhatToDo/Summer/Amphitheater	6,000
Les Schwab Amphitheater	Bend, OR	http://www.bendconcerts.com/	8,000
Red Rocks Amphitheater	Denver, CO	http://redrocksonline.com/concerts-events/concertgoers-guide	9,500
Isleta Amphitheater	Albuquerque, NM	http://www.albuquerqueamphitheater.com/	15,000
Nikon at Jones Beach Theater	Jones Beach State Park, Wantagh, NY	https://en.wikipedia.org/wiki/Nikon_at_Jones_Beach_Theater http://www.jonesbeach.com/	15,000
MidFlorida Credit Union Amphitheater	Tampa, FL	http://www.fairgroundsamphitheatre.com/	20,000
Gorge Amphitheater	George, WA	http://www.gorgeamphitheatre.net/	27,500

Maintenance

Urban parks can struggle to attract visitors if they are perceived to be unsafe or unmaintained (Harnik, 2010), and the Kakaako Makai Parks are no exception (see Figure 10, which documents some of these challenges). Cities across the country are challenged to maintain parks and their associated fixtures, playgrounds, restrooms, lawns and paved areas (Maintenance Connection, 2015). While the public realizes multiple benefits of parks that provide for exercise, enjoying the outdoors, as well as serving as a site of community events and entertainment, available funding is often limited as the result of budget cuts and competing priorities that often exacerbate park deferred maintenance.

To address park maintenance the City and County of Honolulu’s Department of Parks and Recreation’s Hoa Pāka—Adopt a Park Program encourages individual and organizational volunteers during monthly, quarterly, or annual intervals to do park cleanups, painting of picnic tables and benches, and other routine service projects (City and County of Honolulu Department of Parks and Recreation, 2016). Public-private partnerships such as these address park maintenance needs, while cultivating community involvement, beautifying community parks, and helping combat vandalism, litter, graffiti, and crime.

Other cities are using public private partnerships for parks on a larger scale. The Central Park Conservancy (CPC), established in 1980 as a not-for profit organization, has a paid management agreement to maintain more than 800 acres of park on behalf of the City of New York. Further, CPC is responsible for raising 75 percent of the Park’s \$67 million annual operating budget and is responsible for all Park maintenance, as well as restoration and capital improvements (Central Park Conservancy, 2015).

The San Francisco Park Alliance (SFPA) utilizes its non-profit status to generate revenue from local businesses and corporate sponsorship to provide technical assistance that empowers local coalitions and neighborhoods to improve Department of Public Works owned properties. These investments have direct positive impacts on San Francisco parks that generate \$1 billion annually in economic benefits (San Francisco Park Alliance, 2015).

Both the CPC and SFPA demonstrate how public-private partnerships led by a non-profit can focus local volunteerism, compliment work of government, and focus corporate philanthropy resources to upkeep, activate, and enhance park safety.

Parking

Per the Kakaako Makai Area Rules, off street Parking Requirements (Section 15-23-68, HAR) are differentiated by principal use. Commercial and all other use category is the primary guideline for the park space. The eating and drinking establishments category and Auditorium/Churches or Theaters category are applicable for off-street parking requirements for the food concessions and biergarten, as well as the amphitheater, respectively.

Table 6 Off-Street Parking Requirements

Use	Parking Requirement
Commercial and all other uses	1 per 400 sf of floor area
Eating and drinking establishments	1 per 300 sf of eating and drinking area plus 1 per 400 sf of kitchen or other area
Auditoriums	1 per 300 sf of assembly area or 1 per 10 fixed seats, whichever is greater
Churches or theaters	1 per 5 fixed seats OR 50 sf of general assembly area, whichever is greater

Location of parking areas are suggested to be disbursed throughout the park rather than centralized to accommodate the accessories that most picnickers carry. Research has found that picnickers will spread lunches on the grass rather than walk 400 feet to a table (Fogg, 1990). For optimal use, parking for surf access areas should be located no further than 500 feet, maximum (Fogg, 1990). After full-build out, the total number of parking spaces at the Kakaako Makai Parks will number approximately 500, which is predicted to be adequate given the proposed active use (Kakaako Makai Parks FEIS, 2016).

Comfort Stations

Comfort stations are proposed to be sited in association with proposed use areas, with convenience and safety of park users in mind. To determine the number and location of comfort stations, a few rules of thumb were used (Fogg, 1990), (County of Los Angeles Department of Parks and Recreation Planning & Development Agency, 2014). For picnic and play areas, comfort stations within 100 feet were deemed optimal, and up to 400 feet away deemed to be acceptable. For surf areas, no more than 500 feet from the surf access point was deemed acceptable. Where picnic and play areas are near surf access areas, a single comfort station was deemed acceptable. Restroom buildings are suggested in locations with high visibility and activity so that the user does not feel isolated and vulnerable when accessing the facility. Accessibility for all should also be a consideration with each comfort station having an accessible approach and an adequate number of accessible facilities (accessibility standards will be reviewed for exact numbers at the time of design drawings).

Park planning conventions for the number of comfort stations, suggest that for every picnic or surf area designed for 100 people, there should be 1 toilet, one urinal, and one sink for men and two toilets and one sink for women (Fogg, 1990). Contemporary park planning suggests that individual, lockable, unisex comfort stations offer greater security and flexibility for the park users (County of Los Angeles Department of Parks and Recreation Planning & Development Agency, 2014).

Draft and Final Environmental Impact Assessment

During the process of developing a draft Master Plan, a draft Environmental Impact Statement (EIS) was prepared to consider positive and potential negative effects of the Plan. The EIS included a number of technical studies including:

- Landfill Assessment
- Sound Modeling and Prediction Report
- Preliminary Engineering Report
- Traffic Assessment Report
- Market and Economic Report
- Biological Resources Survey
- Cultural Summary Report

A 45-day public comment period on the Draft EIS allowed the opportunity for agencies and other interested parties to provide feedback on the Master Plan and environmental impacts analysis. Upon consideration of comments, the Draft EIS was revised into the Final EIS and published (PBR HAWAII & Associates, Inc., 2016). A copy of the Environmental Impact Statement can be obtained from the State of Hawaii Department of Health Office of Environmental Quality Control website at <http://oeqc.doh.hawaii.gov/>.

On November 4, 2016, the Governor officially accepted the Final EIS, thereby affirming the adequacy of the Final EIS under applicable state laws.

Park Master Plan

Based on the purpose, needs, and objectives detailed in the introduction of this report, the Park Master Plan elements are designed to encourage park uses such as gathering, outdoor recreation, experiential learning, nature viewing, physical activity, and water sports. The plan elements also reference the guiding principles set forth in the 2011 Conceptual Plan. The Park Master Plan is shown in Figure 1, followed by a detailed description of the major plan elements.

Park Master Plan Elements

Great Lawn & Gateway Features

The “Great Lawn” is conceptualized to allow unimpeded physical access from Ala Moana Boulevard to the Waterfront Park and the pedestrian promenade along the shoreline. It begins at the Gateway Park which is the primary entryway to the Parks complex. Gateway features that announce arrival and nodes that help draw park uses into the core of the park are proposed. The Gateway Park is proposed to be enlarged along the Cooke Street frontage south of Ilalo Street (in front of JABSOM). A revised drop-off for the medical school is proposed.

To continue the Great Lawn, the existing parking lot at Waterfront Park is proposed to be replaced with a plaza that will eventually include an interactive water feature in the vicinity of the Children’s Discovery Center. Displaced parking stalls (discussed later in this description) are proposed to be located Ewa of the great lawn, along Olomehani Street, and on adjacent parcels of land outside the park generating an overall gain in recreation space. The Great Lawn continues to the ocean by infilling the mound within Waterfront Park south of the plaza and the proposed water feature to create a gentle upslope which completes unimpeded physical access to the pedestrian promenade and the ocean. The sculpture entitled “Lahui” is intended to remain in this corridor, near the ocean.



Flexible & Open Community Space

The Gateway Park’s lawn between Ala Moana Boulevard and Ilalo Street is envisioned as an open space, available for impromptu use and regularly programmed activities. Activities could include plant and craft sales, dog shows, and pop-up sporting events. This space draws the public into the

park complex, thus, it will be important to ensure lively, regularly programmed activities occur here.

Lei of Green

The Lei of Green is a long-running concept with strong support from the community. The objective is connectivity between public resources along the ocean. Thus, the existing promenade is proposed to be upgraded in place. Immediate expansion of the Lei of Green is proposed to extend the promenade from Kewalo Basin Park to neighboring Ala Moana Regional Park. Extension of the promenade along the west side of the park to Keawe Street and continuing to loop back to the great lawn is also proposed. In addition, establishing a community garden in the Ewa portion of the Waterfront park adjacent to the access road along the drainage channel will activate this area. Eventual connection along the shoreline to Honolulu Harbor is also envisioned.

Waterfront Park Expansion

The Kakaako Makai Conceptual Master Plan envisions expansion of the Waterfront park to include the currently unimproved areas around the Look Lab. Consistent with that vision, the Park Master Plan proposes to improve the land next to the Look Lab as additional park space. The Look Lab could be temporarily utilized for farmer's market, food trucks and other activities to activate this portion of the park before construction of the park expansion. There has also been strong support for this area within the Waterfront Park. This area could also accommodate an interest in the community to accommodate a park in this area is included in Phase 2 of the master plan. Courts could also be temporarily constructed. Permanent sand volleyball courts would



Keiki Zone

Active play is encouraged within the interior of the waterfront park in close proximity to the Children's Discovery Center and the sports complex. Artistic, unique play structures that inspire discovery and creativity are proposed at this highly visible location.

Adventure Zone

A popular activity that is proposed to be continued and augmented is impromptu sliding on the park's grassy hills. The slopes of the mound closest to the current parking lot could be utilized to create an adventure area featuring slides that take advantage of the site's topography. The topography could also be used in creative development of rock climbing features or ropes courses.

Beach Hale

A beach hale and parking at Point Panic is proposed. The location has been chosen for views of the surf break and in acknowledgement of the site as an existing gathering place for the strong community of watersport enthusiasts that utilize this place.

Food Concessions & Biergarten

Easy to access food concession is proposed near and adjacent to the makai area of the great lawn extension. At the top of one of the mounds, a biergarten with panoramic views of Leahi (Diamond Head), the Waikiki skyline, surf breaks, and the sunset is proposed. It is anticipated that the concessionaires would be operated by third party vendors. The park venue is envisioned as a satellite, open-air "tap-room" for any one of Hawaii's growing craft brewers, or craft beverage



purveyors. Market analysis indicates that a biergarten between 2,000 and 3,000 square feet in size could be supported by the growing Kakaako neighborhood. It is highly encouraged that the biergarten vendor be subject to a rigorous selection process where high quality customer experience is strongly emphasized. The biergarten should be located on a different mound than the Ehime Maru, to respect the serenity of the memorial which is proposed to remain at the current location.

Further, market analysis has identified interest in development of food concessions in the form of a truck food court with a pad site of approximately 10,000 square feet at the Kakaako Waterfront Park. In addition to providing park users a number of daily food and beverage options, the truck food court could promote a family and community friendly atmosphere as special events are held at the amphitheater and proposed sports complex. The existing Look Lab structure could be repurposed to provide additional venues for food concessions.

Community Center

A flexible-space community center is suggested at Olomehani Street, flanked by the great lawn and keiki zone. The community center is envisioned to be an open, adaptive space that can be used for a variety of purposes, including cultural public market, community education, and auxiliary covered space to adjacent outdoor uses for special events. The community center is envisioned to have a food preparation space (non-commercial) that would include double sinks with a grease trap, counter space and electrical outlets for plugging in cooking appliances.

Amphitheater

The existing amphitheater currently serves as a performance venue. However, when the amphitheater is not being used for large concerts, the stage area should be versatile in order to accommodate a variety of other uses such as: morning yoga, an afternoon picnic for a Kakaako daycare, or an evening JABSOM lecture.

Though there is a strong support from the community to relocating the amphitheater to Ewa, Makai side of the Waterfront Park with exposure to ocean views and flexible open use, market analysis indicates that such a venue would not be financially feasible. The lack of financial success of existing concert venues in Honolulu serves as a harsh reality of the difficulties in



developing a new concert venue that could potentially become financially viable. Despite a strong level of promoter support for a larger concert/event facility (10,000+ seats), the current level of demand does not justify the cost of building a new facility.

The HCDA will focus on active marketing of the existing amphitheater facility and should that result in a healthy increase in booked events, smaller investments such as providing increased electrical power, installing flexible fixed seating, upgrading the staging and lighting equipment and putting up permanent fencing will be considered.

In the meantime, the HCDA will also put effort in staging impromptu events that can occur on the waterfront promenade and utilize the promenade as a makeshift stage. Depending on the success of these events and additional feasibility studies the HCDA will reevaluate the possibility of relocating the existing amphitheater.

Parking

Currently, the parks are served by on- and off-street parking. Off-street parking spaces number approximately 421 in Waterfront Park and 109 in Kewalo Basin Park for a total of approximately 530 spaces. An additional 70-97 parking spaces are located on Cooke and Ohe Streets adjacent to the Gateway parks and approaching Point Panic.

Parking is proposed to be decentralized to improve the park arrival experience, and to allow easier access to a variety of locations within the park (see Table 6). The central parking lot at the Waterfront Park will be reduced to allow development of a continuous park experience from the Gateway Parks to the ocean. Although a reconfigured Ewa parking lot will have 129 parking spaces, additional parking is proposed to be added near Point Panic, resulting in a reconfigured Diamond Head parking lot with 239 spaces.

Parking at Kewalo Basin Park is not proposed to change in number, although the existing parking lot may need some reconfiguration when park community uses are developed.



In total the proposed reconfigured Parks parking lots results a total of approximately 563 spaces, compared to the existing total of 530 off-street spaces.

The Master Plan also anticipates that between 100-150 parking spaces will be available in a new structure in the Kakaako Makai area with the future development of Lot C. This will replace

parking stalls lost with the reduction of the central lot, and augment it when needed for special events. After full-build out, the number of parking spaces will number approximately 500.

Table 7 Existing and Proposed Parking

Location	Existing	Proposed
Main Parking Lot Waterfront Park	286	129
Parking Lot North of Children’s Discovery Center	45	45
Parking Lot East of Children’s Discovery Center	41	41
Point Panic	49	239
Kewalo Basin Park	109	109
TOTAL	530	563

Kewalo Basin Park

Few new elements are proposed at Kewalo Basin Park, aside from continuing the Lei of Green to neighboring Ala Moana Beach Park. The statue honoring Saint Marianne Cope, and the sculpture entitled, “Ano Lani; Ano Honua” are intended to remain. The existing net-shed building currently can host community-supportive uses. Showers are proposed for upgrades, with attention to subsurface materials to facilitate improved drainage.

Comfort Stations

Comfort stations and beach showers are proposed in the following locations:

Table 8 New Comfort Station Locations and Proposed Sizes

Location	Number of toilets (unisex)	Number of showers
Waterfront Park		
1	“Adventure” concession stand	6
2	Biergarten	6
3	Waterfront Park Jetty	3
4	Community Center	6
5	Point Panic	2
Kewalo Basin Park		
6	Kewalo Basin Park	No change to existing

Special events will necessitate additional temporary facilities to accommodate large gatherings of people.

Green Infrastructure and Design

As park improvements are made, existing infrastructure will be replaced with low impact development (LID) techniques to manage stormwater flow in ways that better protects near-shore water quality from non-point source pollution. LID techniques may include installation of bioswales in parking areas, rain catchment from roof surfaces for irrigation water re-use, pervious paving, and rain gardens in landscape areas. However, specific means and methods must be determined at the time of design and construction to best accommodate site conditions such as slope, proximity to resources such as the ocean, and soil infiltration rates at the location of the proposed LID.

When designing new facilities, HCDA will implement water conservation measures (as feasible), which may include low-flow plumbing fixtures, use of non-potable water for irrigation, drought tolerant plants, xeriscape landscaping, efficient irrigation systems, and the use of Water Sense labeled ultra-low-flow water fixtures and toilets. Further, facilities like the food concessions and biergarten will be designed to be as efficient as possible, such that water consumption increases may be offset by installation of new, efficient comfort station fixtures.

Non-potable water is currently not available at any of the Kakaako Makai Parks. However, HCDA will investigate the feasibility of using non-potable water for irrigation, such as condensate from the proposed Honolulu seawater air conditioning facility, when and if the facility is constructed and operational, or if other non-potable sources become available.

Financing Mechanisms

Currently, the HCDA spends approximately \$1 million per year maintaining the Kakaako Makai Parks. The Active Use Master Plan recognizes that the proposed improvements will require funding from a combination of sources encompassing private and public investments. In recognition of the 2012 transfer of State revenue generating lands that previously supported the Kakaako Makai Parks, additional revenue generating enterprises are proposed to provide desired park amenities. In balancing the community's expressed desire for open-space with minimal commercial development, limited revenue generating improvements are proposed in the Master Plan. While the proposed food concessions, biergarten and amphitheater are expected to generate revenues, complimentary sources of funding will be needed for the proposed Park improvements and long-term maintenance.

The following financial mechanisms from the 2011 Conceptual Plan continue to be relevant in providing options to fund the Active Use Master Plan and are described below.

- **Property Tax Increment Financing (TIF):** Facilitates the capture a portion of increased property taxes over a fixed "base amount" within a specified development district. The TIF can be used to sell bonds to fund or reimburse for capital improvements, Implementation of a TIF will require collaboration with the City and County of Honolulu to redirect a portion of the property taxes to support implementation of the Master Plan.

- **Community Facility District (CFD):** Uses tax exempt bonds to finance public facilities within a special district. The debt service of the bonds are paid by property owners within the district through a special tax or assessment above the existing rate that benefits from low interest rates due to the tax exemption.
- **Business Improvement Districts (BIDs) and Other Assessment Districts:** Facilitate the collection of on-going fees from a group of property owners in a district to pay for operation and maintenance costs, and sometimes capital improvements too. Bryant Park of New York City utilized a BID to support transformation of their parks.
- **Common Area Maintenance (CAM):** Charge ongoing fees on property owners to pay for operation and maintenance costs for a project or area. While the majority of public improvements including street and park maintenance, security, and landscaping are paid by the State, the existing Waterfront CAM charge property owners in Kakaako Makai to support a portion of those improvements.
- **Conservancies:** Generally comprised by non-profit organizations dedicated to the implementation, operation, and maintenance of a public purpose asset, such as a park. Conservancies such as those in Chicago, San Francisco, and New York City have demonstrated their effectiveness in raising funds from individuals, corporation, and foundation donors, as well as competing for grants to transform and activate park spaces.

As the Kakaako Makai Parks are a public facility, HCDA will continue to pursue public funding for the Park improvements. Direct funding of the park improvements may be achieved through the State of Hawaii's Capital Improvement Program, public facilities revenue bonds issued by HCDA, and /or rental revenues generated through property leasing by HCDA (Hawaii Community Development Authority, 2005). Such public funding is sought to address major park and public activity areas and other public facilities that generate direct revenues to support bond financing. Direct charitable contributions for construction of proposed cultural and art related elements can also provide necessary funding. Encouraging such public investment brings together resources, and expertise that can bolster programming and activities that are available to park users. The proposed Community Center, Amphitheater, and Great Lawn can serve as attractive venues for events, activities, and workshops that focus on educational, cultural, and entertainment hobbies and interests.

Cost Estimates

Improvements	Order of Magnitude Estimate	
Phase 1 (Do Immediately & Complete in 1-3 Years)	Development Cost	Revenue to HCDA (Annual)
Park Element		
Improve Gateway Park frontage at Ala Moana Blvd to attract people to the park	\$50,000	-
Initiate regular programming of Gateway Park	\$25,000	-
Lei of Green connection between Kewalo Basin Park and Ala Moana Regional Park	\$50,000	-
Regrade contours in Kewalo Basin Park to reduce mounds and improve drainage at showers	\$50,000	-
Improve landscape in Kewalo Basin Park with coastal native plants	\$25,000	-
Open park entry at Keawe Street	\$50,000	-
Lei of Green connection at Keawe Street	\$100,000	-
Repurpose Look Lab building for farmers' market/food truck/community use	\$300,000	\$84,000
Construct Beach Hale & comfort station at Point Panic	\$250,000	
Make improvements to the existing Amphitheater by installing electrical power, flexible fixed seating, upgrading the staging and lighting equipment and putting up permanent fencing	\$1,000,000	\$100,000
Repair and/or replace existing facilities in the parks (Light Poles/Fixtures, Concrete Spalling, Pavers @promenade, Drinking Water Fountains etc.)	\$2,500,000	
Total Phase 1	\$4,400,000	\$184,000
Phase 2 (3-5 Years)		
Park Element		
Waterfront Park Expansion	\$4,000,000	-
New surface parking area at Point Panic and makai of Olomehani Street	\$4,000,000	-
Construct additional parking on the current maintenance shed area	\$2,000,000	-
Once additional parking is available, reconfigure central parking area and replace majority with lawn	\$2,000,000	-
Reconfigure central mound in Waterfront Park to create a continuous green lawn from Ala Moana Boulevard to the waterfront	\$450,000	-
Realign Cooke Street along the Gateway Park frontage	\$500,000	-
Complete Kelikoi Street connection to Keawe Street	\$2,000,000	-
Install splashpad and plaza Ewa of Children's Discovery Center (former parking lot)	\$450,000	-
Add food pavilion/biergarten on the ocean side of the Great Lawn	\$2,400,000	\$152,460
Construct the Community Center adjacent to Great Lawn and accessible keiki play area	\$2,500,000	-
Install slides and play apparatus at the Keiki Adventure Zone.	\$300,000	-
Total Phase 2	\$20,600,000	\$152,460
Total Phase 1 and 2	\$25,000,000	\$336,460

Phasing Plan

Table 9 Phasing Plan

Phase 1 (Do Immediately & Complete in 1-3 Years)		
Park Element	Supporting Infrastructure	Notes
Improve Gateway Park frontage at Ala Moana Blvd to attract people to the park	Install banners or similar features to attract people to the park	Remove trees, except for coconut trees, from Ala Moana Blvd frontage; Install an iconic feature and/or banners to mark the start of the park
Initiate regular programming of Gateway Park	Upgrade and/or install additional electrical as necessary to accommodate added uses	Program examples: sports such as sand volleyball, community activities, food trucks
Lei of Green connection between Kewalo Basin Park and Ala Moana Regional Park	Adjust grades as necessary to ensure storm water from promenade sections sheet flow to lawn for infiltration; Adjust grades at Keawe Street	Provide landscape and walkway connections from Ala Moana Park to Kewalo Basin Park
Regrade contours in Kewalo Basin Park to reduce mounds and improve drainage at showers		Incorporate rain gardens in Kewalo Basin Park to address drainage issues
Improve landscape in Kewalo Basin Park with coastal native plants		
Open a park entry at Keawe Street	Pedestrian pathway from Keawe Street	
Lei of Green connection at Keawe Street	Community garden between the maintenance access road and park walkway on the Ewa end of the Waterfront Park	Regrade entry to allow ADA-compliant connection to existing pathway system, anticipating eventual sidewalks mauka to makai on Keawe Street
Temporarily repurpose Look Lab building for farmer's market/food truck/and other activities	Food Trucks/Farmer's Market/ Other Community Activities	
Construct Beach Hale & comfort station at Point Panic	Connect to water and wastewater lines in Ahui Street	
Construct temporary Sand Volleyball Courts (permanent sand volleyball courts will be constructed as part of park expansion in Phase 2)		
Make improvements to the existing Amphitheater by installing electrical power, flexible fixed seating, upgrading the staging and lighting equipment and putting up permanent fencing		
Repair and/or replace existing facilities in the parks		Includes replacement of Light Poles/Fixtures repair of Concret Spalling, Pavers @promenade, Drinking Water Fountains etc.
Phase 2 (3-5 Years)		
Park Element	Supporting Infrastructure	Notes
Waterfront Park Expansion	Develop the area around Look Lab as additional park space. Incorporate exercise areas within the new expanded par area.	
New surface parking area at Point Panic and makai of Olomehani Street	Grading as appropriate; parking lot storm water to be captured in depressed rain gardens	Incorporate native plants into rain garden
Construct additional parking on the current maintenance shed area		
Once additional parking is available, reconfigure central parking area and replace majority with lawn	Construct bioswales in downsized parking lot to accommodate stormwater	
Reconfigure central mound in Waterfront Park to create a continuous green lawn from Ala Moana Boulevard to the waterfront		
Realign Cooke Street along the Gateway Park frontage		
Complete Kelikoi Street connection to Keawe Street		
Install splashpad and plaza Ewa of Children's Discovery Center (former parking lot)		
Add food pavilion/biergarten on the ocean side of the Great Lawn		
Construct the Community Center adjacent to Great Lawn and accessible keiki play area		
Install slides and play apparatus at the Keiki Adventure Zone.		

(This page intentionally left blank.)

References

- Brew York. (2012, April 12). *What Is and Isn't a Beer Garden*. Retrieved from Brew York: <http://brewyorknewyork.com/post/20975179803/what-is-and-isnt-a-beer-garden>
- Centers for Disease Control and Prevention (CDC). (2013, November). *Parks and Trails Health Impact Assessment Toolkit*. Retrieved 2016, from CDC Healthy Places: http://www.cdc.gov/healthyplaces/parks_trails/default.htm
- Central Park Conservancy. (2015). *Official Caretakers of Central Park*. Retrieved from Central Park Conservancy: <http://www.centralparknyc.org/about/?referrer=https://www.google.com/>
- Chicago Public Library. (2015). Retrieved from Millennium Park Inc. Archives: <http://www.chipublib.org/fa-millennium-park-inc/>
- City and County of Honolulu. (2014). *Honolulu Bikehsare Organizational Study Final Report*.
- City and County of Honolulu Department of Parks and Recreation. (2016, April 5). *Adopt a Park*. Retrieved from City and County of Honolulu Department of Parks and Recreation: <https://www.honolulu.gov/cms-dpr-menu/site-dpr-sitearticles/18317-adopt-a-park.html>
- Clark, J. (1977). *Beaches of Oahu*. Honolulu, Hawaii: University of Hawaii Press.
- Clower, Terry Ph.D. et. al. (2015). *The Economic Impact of Local Parks*. Washington D.C.: National Recreation and Park Association.
- Colliers International. (2015). *Amhitheater Demand and Feasibility Analysis*. Honolulu: Colliers International.
- Colliers International. (2015). *Food Truck Demand Analysis*. Honolulu: Colliers International.
- Colliers International. (2016). *Financial Feasibility Analysis*. Honolulu, Hawaii: Colliers International.
- County of Los Angeles Department of Parks and Recreation Planning & Development Agency. (2014). *Park Design Guidelines and Standards*.
- Cultural Surveys Hawaii, Inc. (2010). *Summary Report on the Cultural Anthropology and Archaeology of the Kakaako Makai Area, Kakaako Ahupuaa, Honolulu (Kona Distric), Oahu TMK: [1] 2-1-015, 058 and 060 various parcels*. Honolulu: prepared for Peter Apo Company.
- DK Eyewitness. (2004). *Top 10 Chicago*. New York: DK Publishing, Inc.

- Element Environmental LLC. (2016). *Kakaako Waterfront Park Ash Landfill Assessment*. Honolulu: Prepared for HCDA.
- Fodor's . (2014). *Germany*. Fodor's Travel Publications.
- Fogg, G. E. (1990). *Park Planning Guidelines 3rd Edition*. National Recreation & Park Association.
- Garvin, A. (2000). *Parks, Recreation, and Open Space A Twenty-First Century Agenda*. Chicago: American Planning Association.
- Gavin, A. (2000). *Parks, Recreation, and Open Space--A Twenty-First Century Agenda*. Chicago: American Planning Association.
- Genz, J.H. & Hammett, H.H. (2010). *Cultural Impact Assessment for the Kewalo Basin Repairs Project, Kaakaako Ahupuaa, Honolulu (Kona District), Oahu, TMK: [1] 2-1-058*. Honolulu, Hawaii: Prepared for Helbert Hastert & Fee.
- Harnik, P. (2010). *Urban Green Innovative Parks for Resurgent Cities*. Washington D.C.: The Trust for Public Land & Island Press.
- Hawaii Civil Beat*. (2011, March 11). Retrieved September 18, 2015 , from A History of Tsunamis in Hawaii: <http://www.civilbeat.com/2011/03/9558-a-history-of-tsunamis-in-hawaii/>
- Hawaii Community Development Authority. (2005). *Kakaako Community Development District Makai Area Plan*. Honolulu: HCDA.
- Hawaii Community Development Authority. (2005). *Kaka'ako Community Development District Makai Area Plan*. Honolulu: HCDA.
- Hawaii Community Development Authority. (2015). *TOD Overlay Plan Final Environmental Assessment, Kakaako Community Development District*. Honolulu, HI: HCDA.
- Hobdy, R. W. (2015). *Biological Resources Survey for the Kaka'ako Makai Parks Project*. Kokomo, Maui: Hobdy, Robert W.
- Honolulu Star Advertiser. (2016, January 19). *Homelessness push earning poor marks*. Retrieved January 2015, from Honolulu Star Advertiser: <https://www.staradvertiser.com/hawaii-news/homelessness-push-earning-poor-marks/>
- Lee Sichter LLC. (2015). *Kakaako Community Development District TOD Overlay Plan Final Environmental Impact Statement*. Honolulu, Hawaii: HCDA.
- Lurie Garden. (2015). *About the Lurie Garden*. Retrieved from Lurie Garden: <http://www.lurigarden.org/about-lurie-garden>
- Maintenance Connection. (2015, December 18). *Parks and Recreation*. Retrieved from Maintenance Connection:

- <http://www.maintenanceconnection.com/website/industries/city-state-government/parks-recreation/>
- MVE Pacific. (2011). *Kaka'ako Makai Conceptual Master Plan Final Report*. Prepared for Hawai'i Community Development Authority.
- MVE Pacific. (2011). *Kakaako Makai Conceptual Master Plan Final Report*. Honolulu, Hawaii: Prepared for HCDA.
- National Park Service. (2015, December 18). *Crissy Field*. Retrieved from NPS Golden Gate National Recreation Area: <http://www.nps.gov/goga/learn/nature/crissy-field.htm>
- National Weather Service. (n.d.). *Honolulu Monthly Rainfall Totals 1947-2008*. Retrieved January 26, 2015, from National Weather Service Forecast Office Honolulu, HI: http://www.prh.noaa.gov/hnl/climate/PHNL_rainfall.php
- Nivin, S. (2014). *Impact of the San Antonio River Walk*. San Antonio: San Antonio Center City Development and Convention & Visitor Bureau and Paseo del Rio Association and San Antonio River Authority.
- Office of Environmental Quality Control. (1997). *Guidelines for Assessing Cultural Impacts*. Honolulu: Environmental Council, State of Hawaii.
- Office of Hawaiian Affairs. (2013). *Kaka'ako Makai Land Management and Development Design Services*.
- Pacific Islands Regional Climate Assessment (PIRCA). (2012). *Climate Change and Pacific Islands: Indicators and Impacts*. Honolulu: Island Press.
- ParEn, Inc. (2004). *Kaka'ako Community Development District Makai Area Sewer Master Plan*. Honolulu: HCDA.
- PBR HAWAII & Associates, Inc. (2016). *Kakaako Makai Parks Active Use Facilities Master Plan Final Environmental Impact Statement*. Honolulu, HI : Prepared for the Hawaii Community Development Authority.
- Portland Rescue Mission. (2011). Retrieved January 2016, from Where Do Homeless Sleep: <http://www.portlandrescuemission.org/learn-more/where-do-homeless-sleep/>
- San Francisco Park Alliance. (2015). *2015 Impact Report*. Retrieved from San Francisco Park Alliance: http://www.sfparksalliance.org/sites/default/files/SFPA_2015%20Impact%20Report_FIN_AL_web_0.pdf
- State of Hawaii Department of Business, Economic Development, and Tourism. (2014). *Outlook for the Economy: 4th Quarter 2014*. Retrieved January 23, 2015, from Research and Economic Analysis: <http://dbedt.hawaii.gov/economic/qser/outlook-economy/>

- State of Hawaii Department of Land and Natural Resources. (2015). *Statewide Comprehensive Outdoor Recreation Plan 2015*. Honolulu.
- Stott, I., Soga, M., Inger, R. and Gaston, K.J. (2015). Land Sparing is Crucial for Urban Ecosystem Services. *Frontiers in Ecology and the Environment*, 387-393.
- The Economic Research Organization at the University of Hawaii. (2014, August 8). Annual Hawai'i Forecast: Public Summary: Hawai'i Growth Slows as Global Risks Rise.
- The Limtiaco Consulting Group and EnviroServices & Training Center, LLC. (2009). *Environmental Hazard Evaluation Kaka'ako Makai District*. Honolulu: Prepared for HCDA.
- The Trust for Public Lands. (2015). *2015 City Park Facts*. New York: The Trust for Public Land Center for City Park Excellence. Retrieved January 2015, from 2015 City Park Facts-Parkland-Density.xlsx: <https://www.tpl.org/2015-city-park-facts>
- U.S. Census Bureau. (2010). *Census 2010*.
- University of Hawaii Coastal Geology Group. (2013). *Oahu*. Retrieved December 15, 2014, from School of Ocean and Earth Science and Technology Coastal Geology Group Coastal Imagery and Data: <http://www.soest.hawaii.edu/coasts/publications/hawaiiCoastline/oahu.html>
- Westervelt, W. (1963). *Hawaiian Legends of Old Honolulu*. Rutland, Vermont: Charles Tuttle Co.
- Wilson Okamoto and Associates, Inc. (2002). *Cultural Impact Assessment in the Final Environmental Assessment, University of Hawaii Health and Wellness Center*. Honolulu, Hawaii: Prepared for University of Hawaii John A. Burns School of Medicine.
- Young, P. T. (2013, 2013 23). *Kewalo Basin*. Retrieved April 2015, June, from Hookuleana: <http://totakeresponsibility.blogspot.com/2013/06/kewalo-basin.html>
- Young, P. T. (2013, July 2). *Kewalo Basin*. Retrieved January 23, 2015, from Hookuleana: <http://totakeresponsibility.blogspot.com/2013/06/kewalo-basin.html>

