

2025
APA HAWAII
AWARDS PROGRAM
HCPO CONFERENCE



The background of the image is a close-up, high-angle shot of water with numerous small, concentric ripples. The water has a light blue-grey hue, and the lighting creates a shimmering effect across the surface. The ripples are most prominent in the center and fade slightly towards the edges.

BEST PRACTICE

AN ANALYSIS OF MANAGED RETREAT STRATEGIES IN HAWAI'I: POLICY AND FUNDING OPPORTUNITIES AND CHALLENGES

Sarah Chang, Hawai'i State Office of Planning & Sustainable
Development, Coastal Zone Management Program

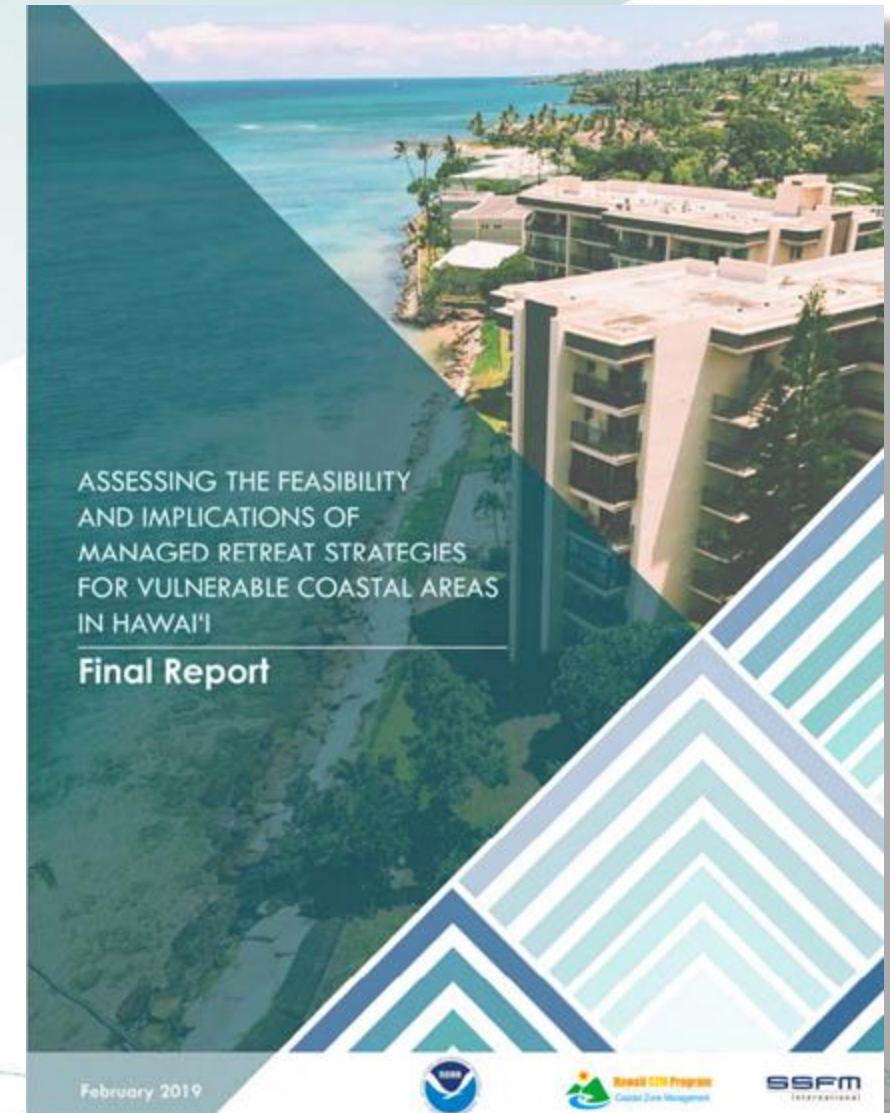
PROJECT PURPOSE

QR Code to 2019
Report



Analyze **policy, legal, and financial implications** of managed retreat for the State of Hawai'i and **recommend strategies and solutions** to implement managed retreat as part of the state's overall climate adaptation strategy.

Managed retreat is defined as an intentional process to shift development away from areas exposed to both chronic and catastrophic coastal hazards, and can be implemented through a variety of tools and strategies.



PROJECT OBJECTIVES

The project and its recommendations seek to uphold and advance the following objectives:

1

Preserving and restoring
public trust resources

2

Protecting public health and
safety

3

Mitigating the risk of coastal
hazards to people and
structures

4

Adapting to climate change
impacts

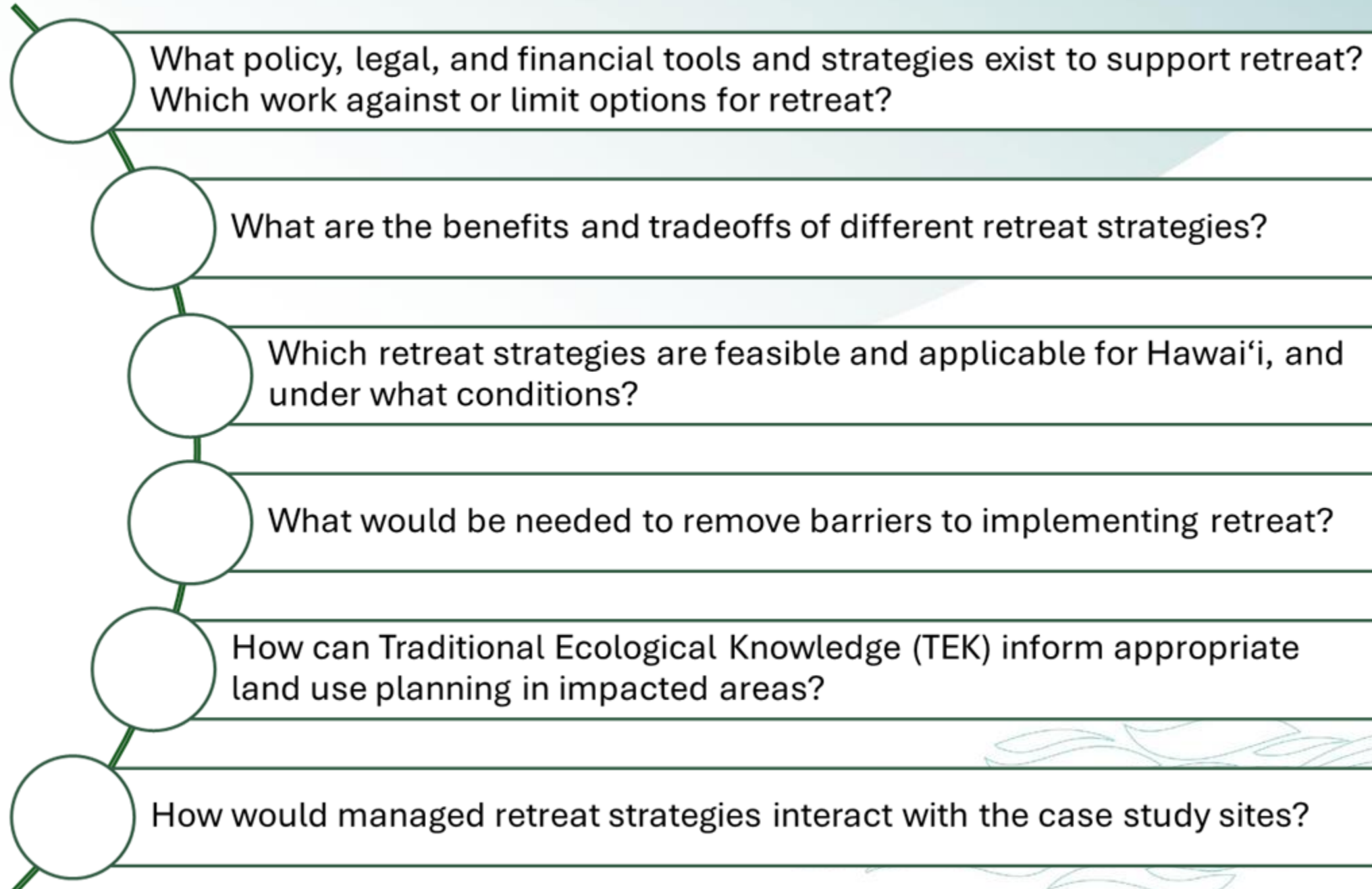
5

Enhancing public access to
coastal areas

6

Minimizing harm to coastal
environments and nearshore
waters resulting from the
breakdown of structures and
infrastructure

PROJECT FRAMING QUESTIONS



KEY TAKEAWAYS

- Disconnect between urgency of sea level rise and political will and resources to address it.
- Opportunities in Hawai'i's strong public trust doctrine, climate adaptation policy, Traditional Ecological Knowledge (TEK), and community values.
- TEK can reframe and offer insights into the design and implementation of managed retreat.
- Lack of framework and agency capacity for planning and implementation of coastal adaptation and beach management.
- Retreat decisions need to be made on a localized scale with planning, scientific/technical study, and community engagement.
- **The main challenge in implementing managed retreat is moving from a piecemeal, reactive, and enforcement driven approach to a system that is proactive, holistic, transparent, equitable, and consistently implemented.**

MAHALO!



DOWNLOAD THE FINAL
REPORT HERE

CONTACT:

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Hawai'i OPSD CZM

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The background of the image is a close-up, high-angle shot of water with numerous small, concentric ripples. The water has a light blue-grey hue, and the ripples create a textured, shimmering effect across the entire frame. The lighting is soft and even, highlighting the peaks of the ripples.

BEST PRACTICE

HONORABLE MENTION

THE MĀLAMA ‘ĀINA PLAN FOR MOKU O LO‘E ISLET:



A Place-Based Framework for Community Engagement, Collaboration, and Climate Adaptation

Hawai'i Institute of Marine Biology (HIMB)

University of Hawai'i Community Design Center (UHCDC)

Principal Investigator:

Phoebe White, Landscape Designer and Researcher

Co-Principal Investigator:

*Priyam Das, Associate Professor of Urban and
Regional Planning, University of Hawai'i at
Mānoa*

Student Project Assistants:

Lahela Mattos

Lynn Mayekawa

Beau Nakamori

Kaimana Tuazon

Jolie Wanger

Hunter Wells

Melissa Yoo

**APA HI Chapter Awards
2025**

*Image Source:
Bishop Museum Archives*

APAHI BEST PRACTICE HONORABLE MENTION

AHUPUA‘A OF HE‘EIA



APAHI BEST PRACTICE HONORABLE MENTION

8 CONSIDERATIONS OF PONO STEWARDSHIP

01 Moana-nui-ākea (Ocean Biome)

The integrity of everything extending from the high tide mark to the horizon as is seen from the highest vantage point on land.

02 Kahakai Pepeiao (Shoreline Ecotone)

The integrity of everything extending from the high tide mark to where the soil (lepo) begins; splash zone for crab, limu, and 'opihi; characterized by sea cliffs, coastal strand vegetation and sand dunes; nesting area for seabirds and turtles.

03 Mauka (Terrestrial Biome)

The integrity of everything extending from the point where the soil (lepo) starts to the highest point of land.

04 Nā Kumuwai (Freshwater Sources)

The integrity of all sources of freshwater – groundwater, rivers, streams, springs, including springs along the coastline that mix with seawater.

05 Ka Lewalani (Atmosphere)

The integrity of everything that is above the land – the sky, the clouds, the winds, the birds, the rains, and the rainbows.

06 Kānaka Hōnua (Sustainability)

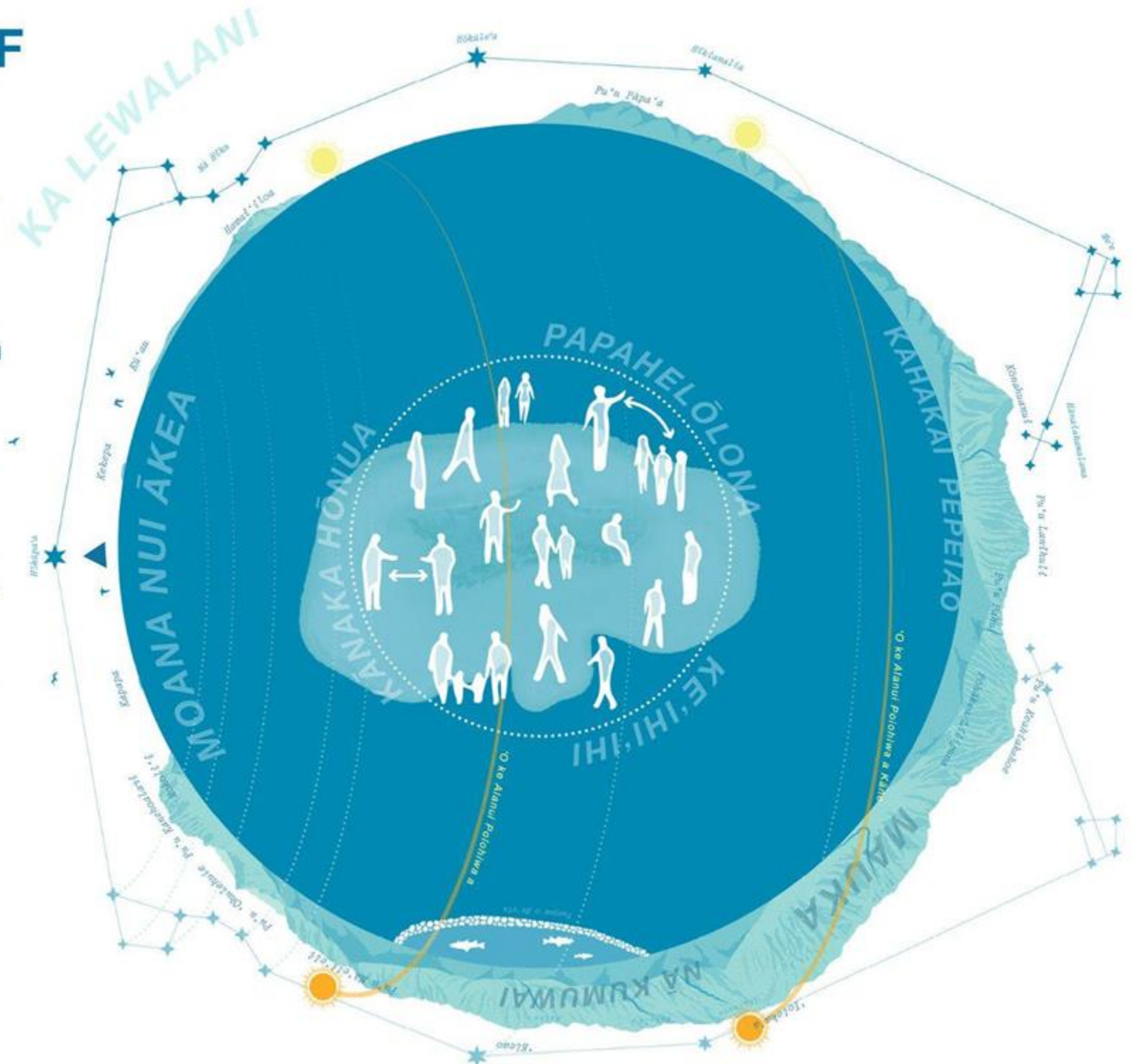
Providing for the needs of the people.

07 Papahelōlona (Indigenous Knowledge Systems)

Maintaining the Indigenous Knowledge system anciently stewarded by kahuna (e.g., history, healing, astronomy, civil engineering and infrastructure, vessel construction, etc.).

08 Ke'ihī'ihī (Spirit of Place)

Caring for that which maintains the pono in the land (e.g., sacred places and practices).



01 ARCHIVAL + FIELD RESEARCH

GOALS:

- Establish a common + accessible knowledge of Moku o Lo'e, HIMB, and the goals of the HIMB 2023 Strategic Plan
- Form Working Groups

MILESTONES:

- 01.30.2023-01.31.2023 HIMB Strategic Planning Sessions 01 and 02
- 06.13.2023 Site Visit: Facilities
- 06.17.2023 Site Visit: Shoreline
- 06.18.2023 Site Visit: Vegetation
- 06.20.2023 Bishop Museum Archives Visit
- 08.15.2023 HIMB Advisory Group review of storymap materials
- 08.17.2023 Documentation of 1936 Christian Holmes Plan of Moku o Lo'e at the UHM Hamilton Library Map Collection
- 08.29.2023 Site Visit: King Tide
- 09.2023 Launch storymap website

SPRING - SUMMER 2023



02 ENGAGEMENT WORKSHOPS

WORKSHOP 01 LISTEN + LEARN:

- Listen and learn from working group members to inform climate adaptation strategies and stewardship approaches
- Translate common themes into design principles and spatial concept designs



DRAFT CONCEPT DESIGN:

- Develop concept design approach and options based on Workshop 01 findings



WORKSHOP 02 CO-DESIGN:

- Interactive co-designing engagement to refine concept design options

MILESTONES:

- 10.06.2023 Workshop 01, Session 01
- 10.13.2023 Workshop 01, Session 02
- 10.28-29.2023, Field School
- 11.03.2023 Workshop 01, Session 03
- 12.01.2023 Workshop 02

FALL 2023



03 DESIGN + FEEDBACK

GOALS:

- Refine and develop final concept design based on findings from workshops
- Gather input from HIMB community members and subject matter experts on final concept design

MILESTONES:

- 02.27.2024 HIMB Advisory Group reviewed draft concept design
- 03.12.2024 draft concept design submitted to HIMB community for comment
- 06.10.2024 concept design submitted to subject matter experts for feedback

SPRING 2024



04 FINAL MĀLAMA 'ĀINA PLAN

GOALS:

- Create an accessible and comprehensive final Mālama 'Āina Plan Report that contains recommendations on concept design principles, climate adaptation strategies, and stewardship programs

MILESTONES:

- 06.18.2024 HIMB Advisory Group reviewed draft Mālama 'Āina Plan Report
- 08.30.2024 Mālama 'Āina Plan share out with HIMB, community, and participants

SUMMER 2024

refine based
on feedback

EXISTING MOKU O LO'E ISLET



EXISTING AMENITIES TO BE IMPACTED BY 6 FT SEA LEVEL RISE

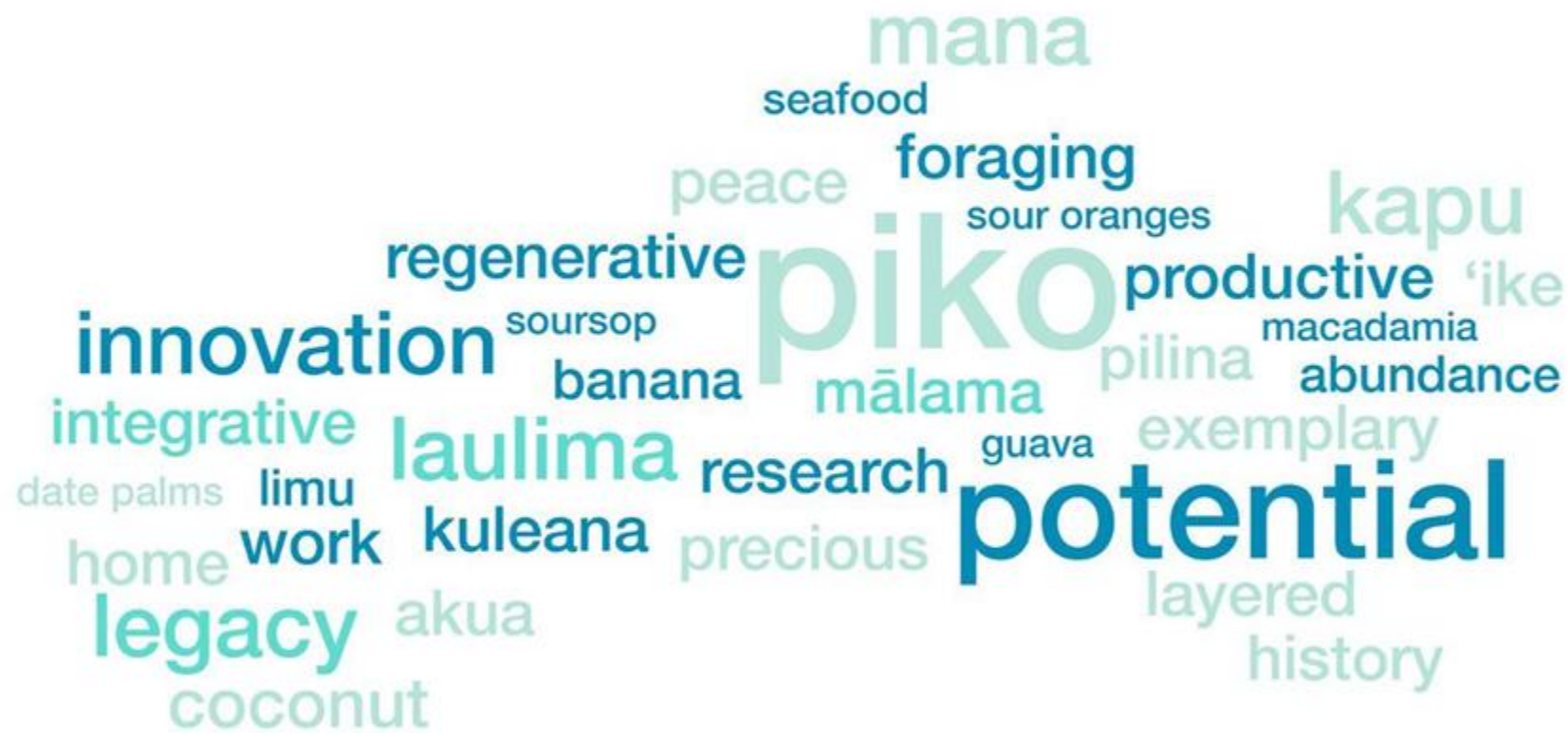
- Submerged Land
- Fire Hydrant
- Kitchen
- Restroom
- Cinderella Toilet
- Seawater Intake
- Waste
- Electric
- Future Utilities
- Utilities
- Affiliated Program Offices
- Lighthouse
- Iwi Kūpuna
- Residences
- Maintenance + Facilities
- Storage
- Outdoor Event Spaces
- Experimental Pools + Tanks
- Classrooms
- Research Labs + Classrooms
- Research Labs



Source: HTRB, Site Observation

02 WORKSHOP 01 OUTCOMES

*What word comes to mind when
you think of Moku o Lo'e?*



CONCEPT DESIGN PRINCIPLES

01

Restore a Hawaiian
Sense of Place

02

Expand Cultural +
Physical Access

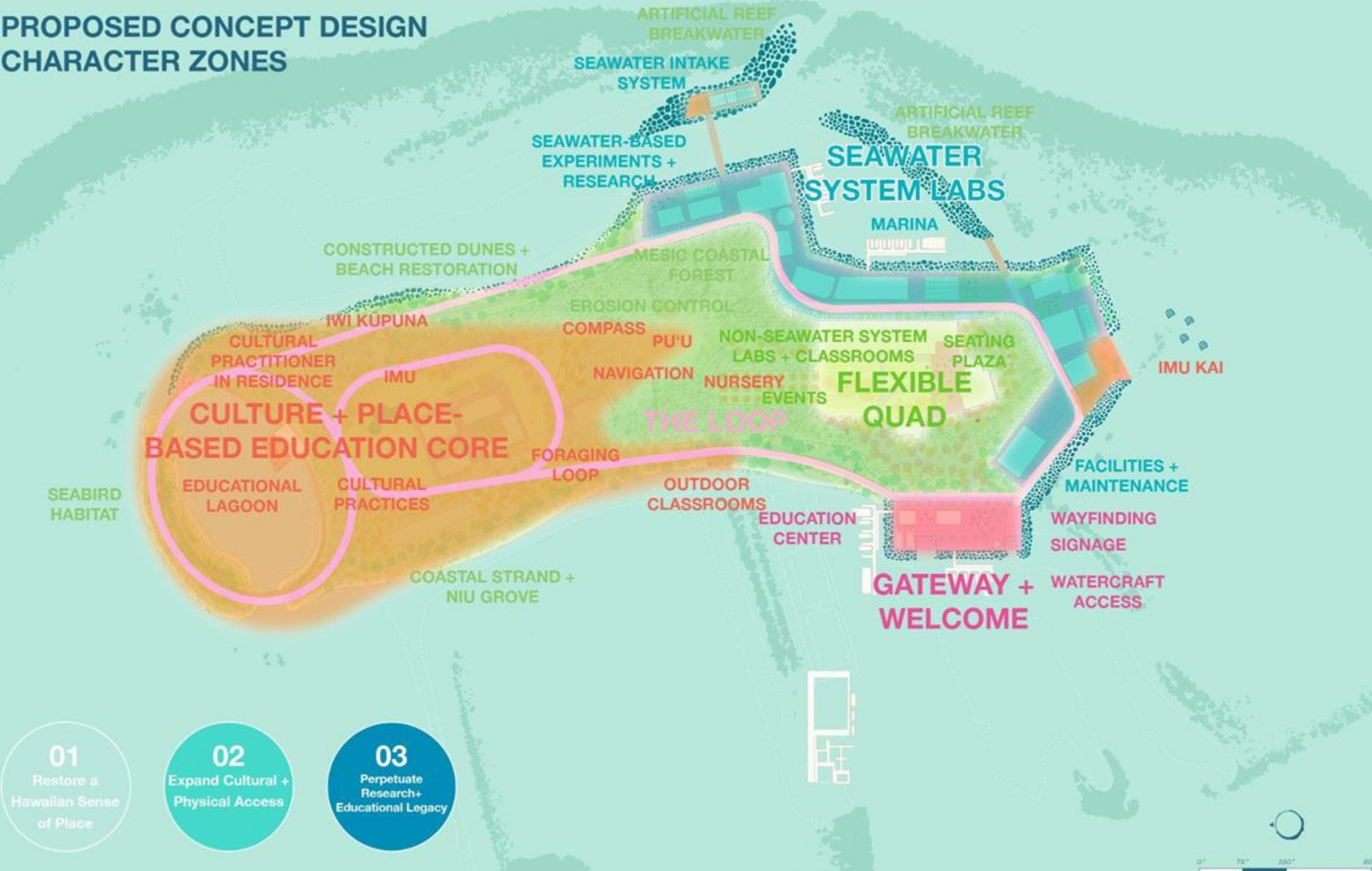
03

Perpetuate Research +
Educational Legacy



APAHI BEST PRACTICE HONORABLE MENTION

PROPOSED CONCEPT DESIGN
CHARACTER ZONES



PROPOSED CONCEPT DESIGN RESTORED PU'U



EXISTING PU'U



APAHI BEST PRACTICE HONORABLE MENTION

PROPOSED PU'U



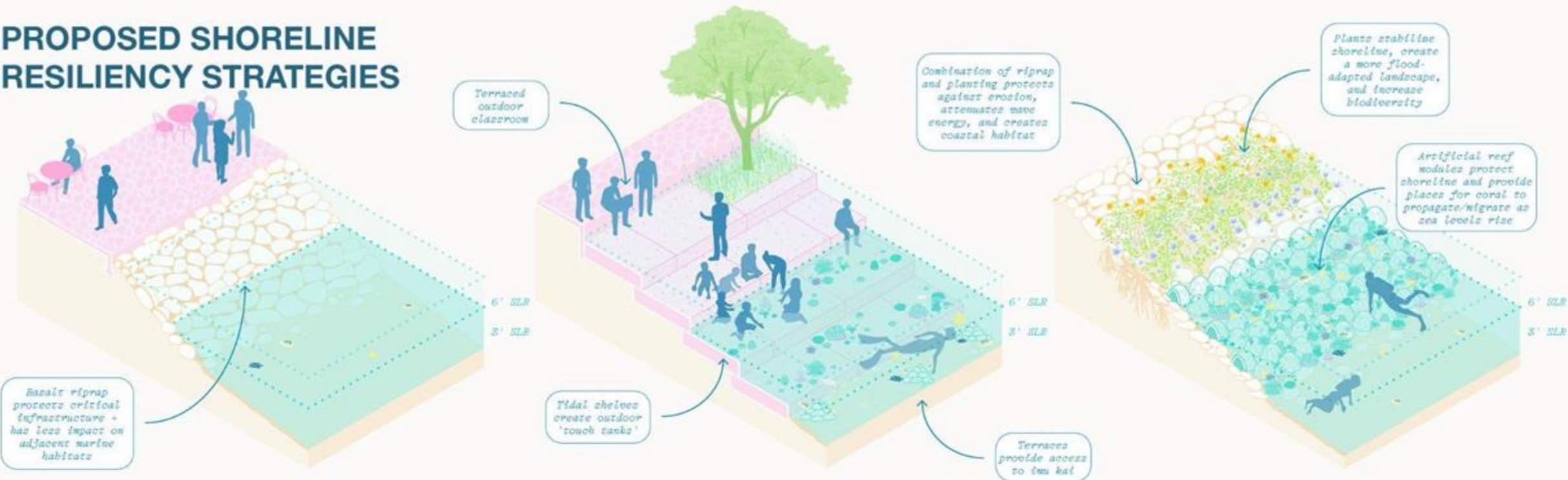
APAHI BEST PRACTICE HONORABLE MENTION

PROPOSED PU'U

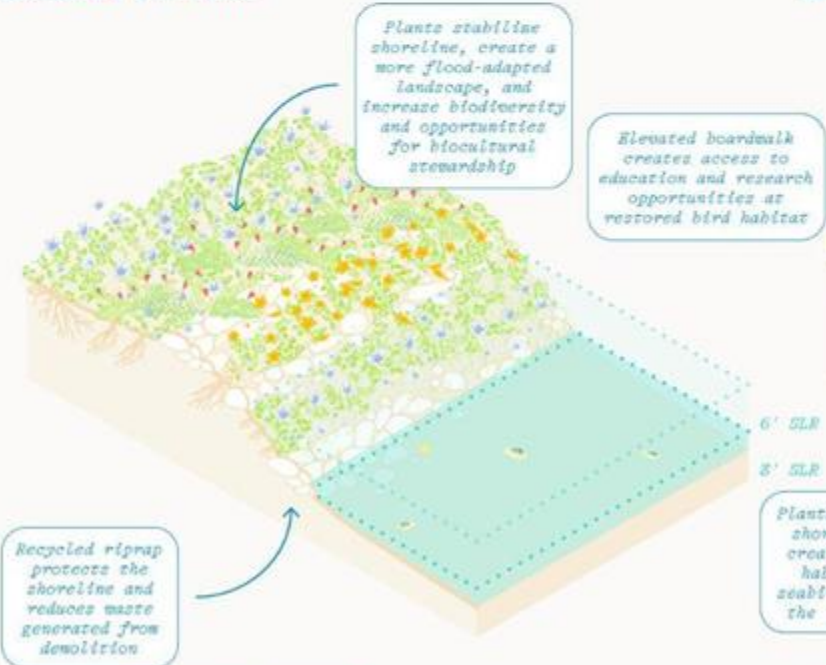


APAHI BEST PRACTICE HONORABLE MENTION

PROPOSED SHORELINE RESILIENCY STRATEGIES

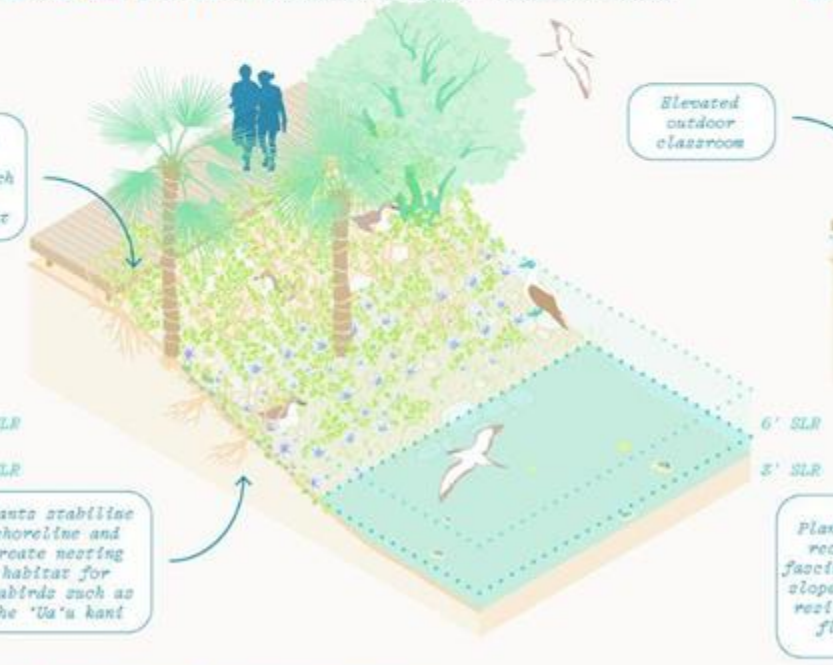


BASALT RIPRAP



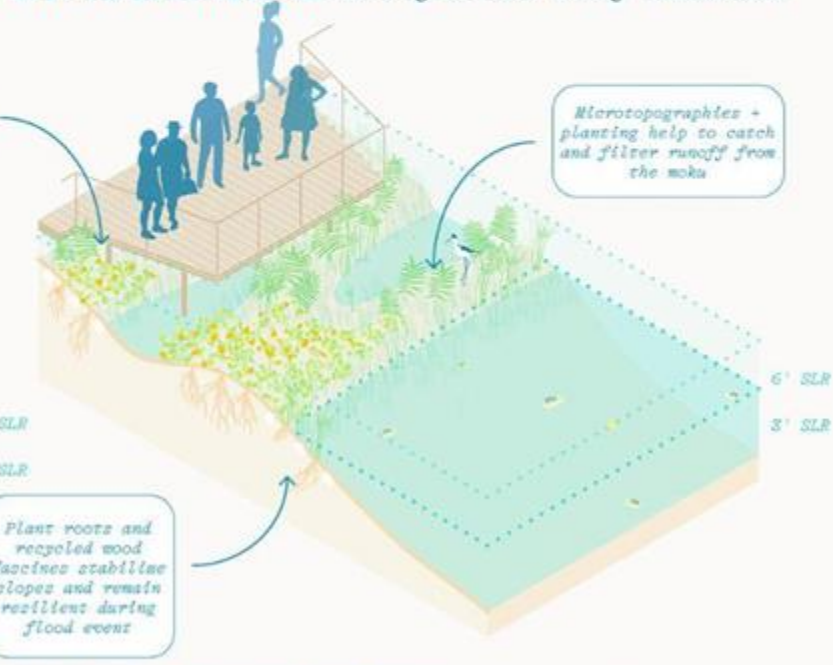
CONSTRUCTED DUNES

BASALT RIPRAP: Intertidal Classroom



FLOOD-ADAPTED HABITAT: Seabird

LIVING SHORELINE: Artificial Reef Modules



FLOOD-ADAPTED HABITAT: Marine Wetland

- 01 Welcome Dock + Education Center
- 02 The Loop
- 03 The Flexible Quad
- 04 The Seawater System Labs + Marina
- 05 The Educational Lagoon + Seabird Habitat
- 06 The Culture + Place-Based Education Core
- 07 The Pu'u

-- 6 FT SLR



COMMUNITY-BASED PLANNING







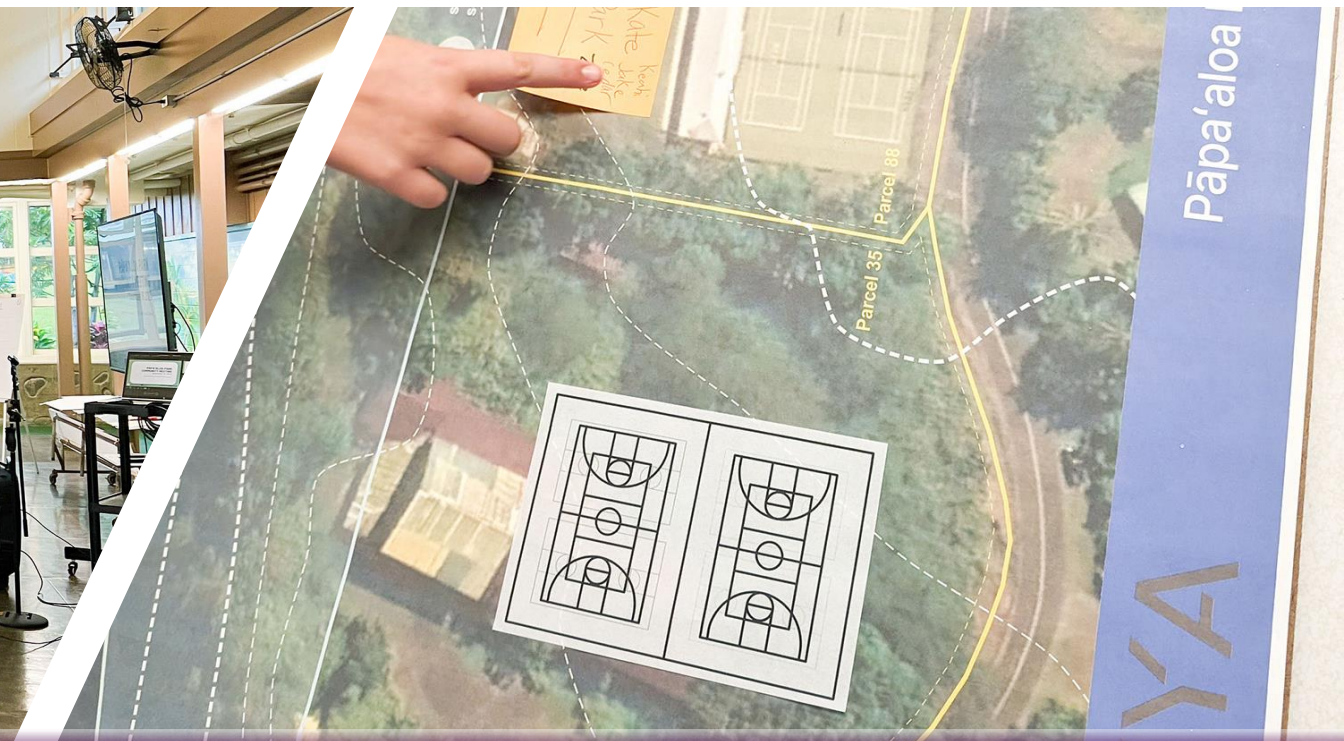
COMMUNITY-BASED PLANNING

HONORABLE MENTION



PAPA'ALOA PARK

APAHI COMMUNITY-BASED PLANNING HONORABLE METNTION



PAPA'ALOA PARK

APAHI COMMUNITY-BASED PLANNING HONORABLE METNTION



PAPA'ALOA PARK

APAHI COMMUNITY-BASED PLANNING HONORABLE METNTION

ENVIRONMENTAL PLANNING

City and County of Honolulu

ENVIRONMENTAL PLANNING AWARD



STORM WATER STRATEGIC PLAN 2023-2028

August 2023

Collection

Envisioning O'ahu's Storm Water Future

City and County of Honolulu
| Storm Water Planning

[Get started](#)



GIVE YOUR INPUT ON
**CITY STORM
WATER SERVICES**

Community Engagement



Storm Water Strategic Plan Goals

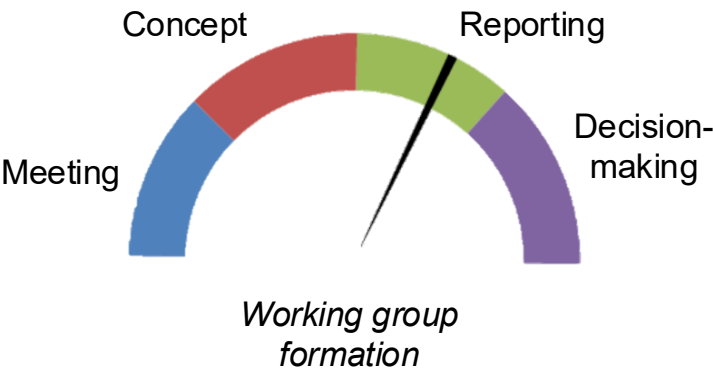
Charting Progress



ENHANCED WATER QUALITY

Support better water quality island-wide using a mauka to makai (watershed) approach, furthering partnerships, and implementing coordinated and sustained monitoring efforts.

Strategy	Measure	Dashboard
Establish guidance on water quality sampling methodology and protocols for partnering organizations.	Partnership(s) established with 1 or 2 organization(s).	Working group formed that includes reps from The Nature Conservancy, Department of Health, Board of Water Supply, ENV, Malama Maunalua, and University of Hawaii
Explore potential on-island water quality testing.	On-island water quality testing explored and, if possible, established.	
Investigate other monitoring approaches, such as biocriteria, surrogate testing, and monitoring technologies.	Report to the Stakeholder Advisory Group on options and technologies.	



Example Progress Indicators

IMPLEMENTATION

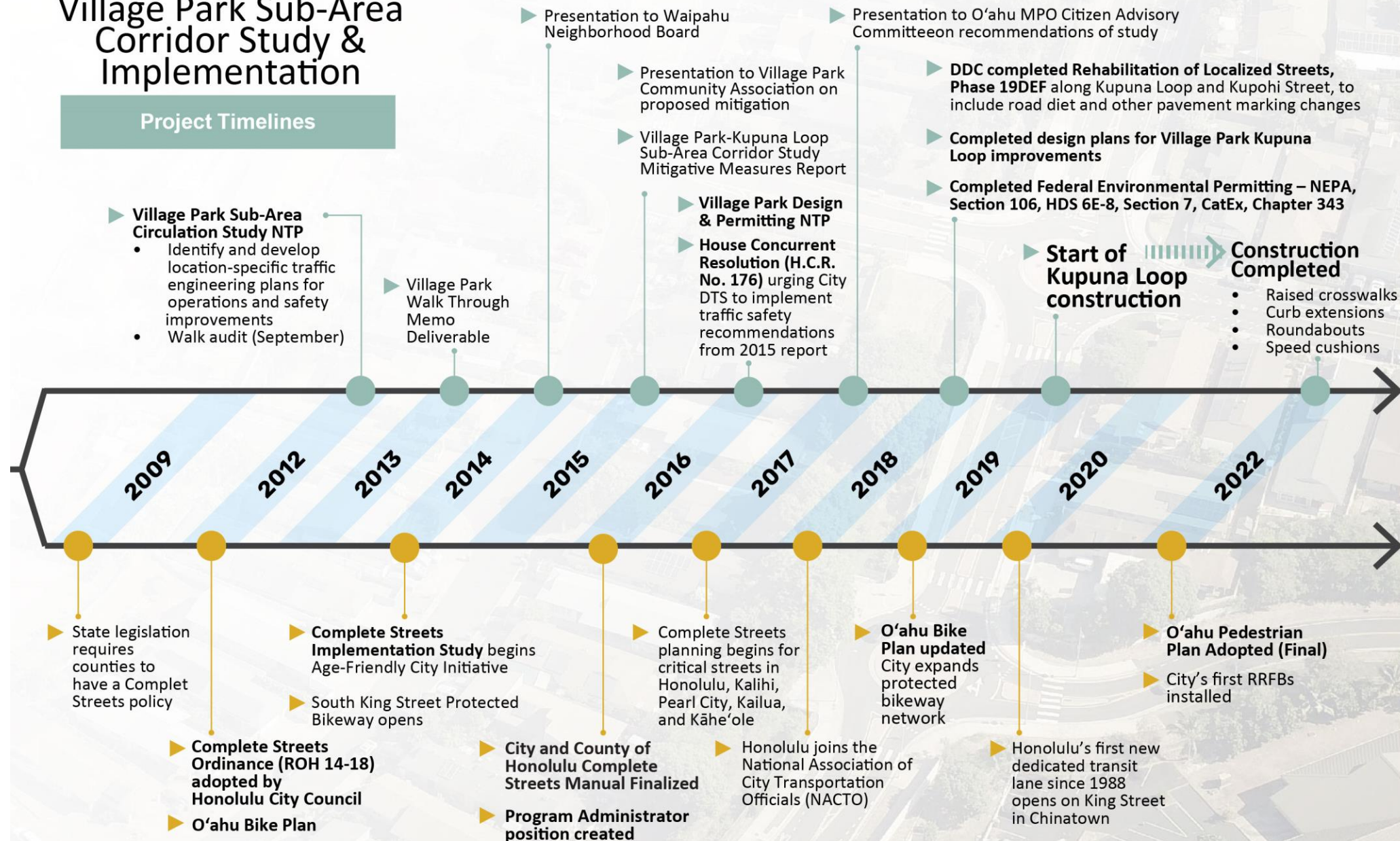
VILLAGE PARK SUB-AREA CORRIDOR STUDY IMPLEMENTATION

Evolution of Honolulu's Complete Streets Program



Village Park Sub-Area Corridor Study & Implementation

Project Timelines



Honolulu's Complete Streets Progress

Major Policy, Planning &
Project Milestones



Village Park Double Roundabouts

TRANSPORTATION PLANNING

Hāna Community Pathway Study

GOAL: To advance the work spearheaded by the Hāna community by developing a study that looks at potential routes and create a guide toward construction.

Identify the Route

- Approximately 9 linear mile study area from Kalo Road in Ka'elekū to Waiohonu Bridge in Maka'alae
- Utilize community feedback to identify desired route

Develop "Road Map" to Implementation

- Guidance on permitting, construction, and long-term ownership and maintenance of the pathway





Hāna Community Pathway Route Map

Proposed Phasing and Design Concepts



TRANSPORTATION PLANNING

HONORABLE MENTION



VISION ZERO

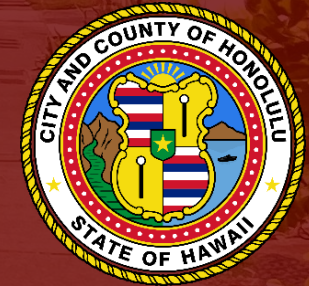


Honolulu COMPLETESTREETS

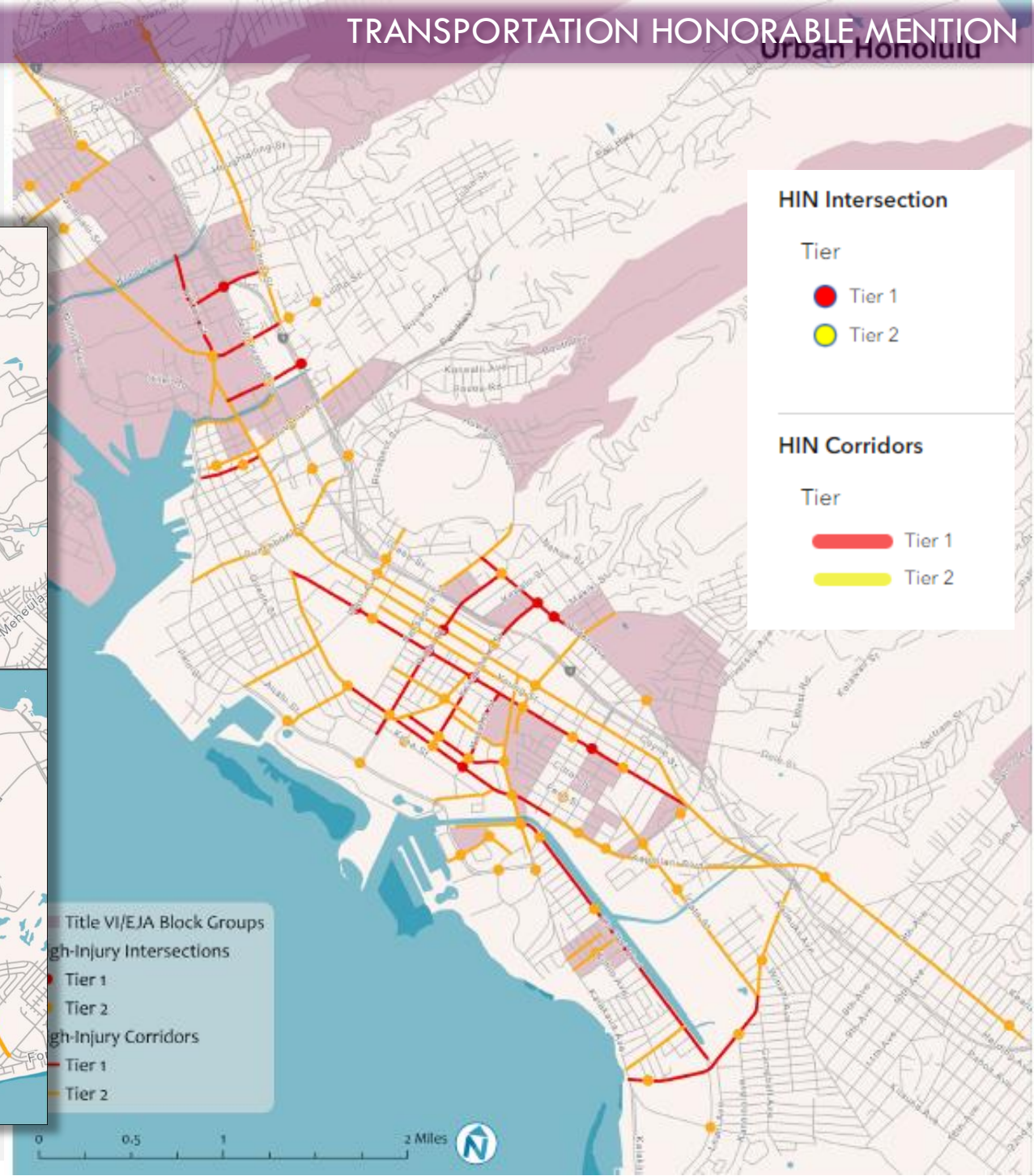
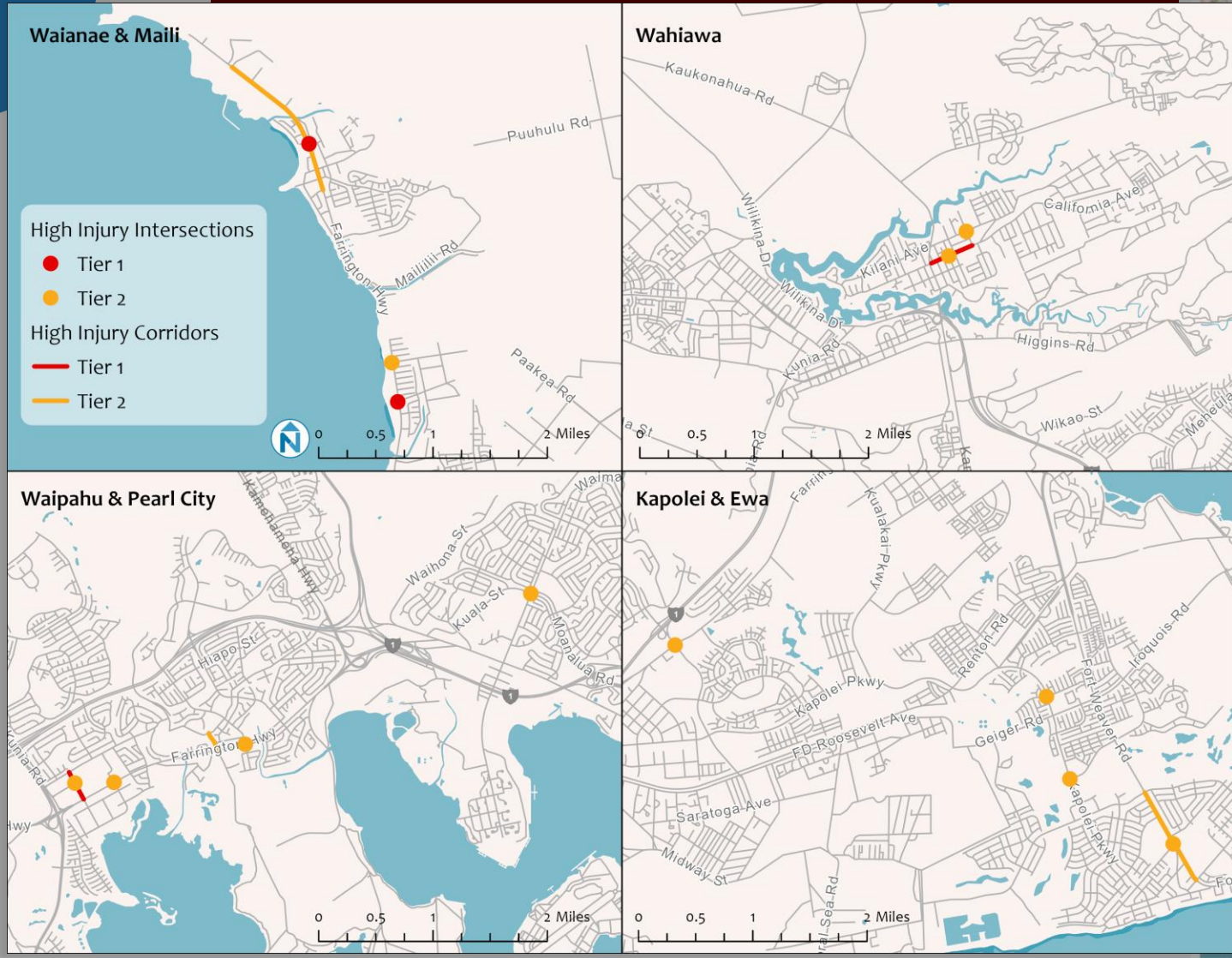
Honolulu Vision Zero and Safety

Project Management Training

August 2025



High injury locations





HONOLULU CITY COUNCIL
KE KANIHELA O KE KALANA O HONOLULU
 CITY AND COUNTY OF HONOLULU

ORDINANCE **24-82**
 BILL **44 (2024), CD2**

A BILL FOR AN ORDINANCE

1. Whether an area is identified as high-risk for pedestrian accidents or where the speed limit is reduced to 20 miles per hour, especially during school hours.
2. Whether a comprehensive traffic safety assessment has been conducted that considers factors such as pedestrian traffic, vehicle speed, and accident history.

The director of transportation services shall notify the local community and school administrations of planned installations and solicit feedback to ensure that the community's needs and concerns are addressed.

~~((e))~~(d) Further, no person shall in any parking area maintained within public parks and public school grounds drive a vehicle recklessly or negligently or at a speed or in such manner as to endanger or injure persons or property.

~~((d))~~(e) Whenever the director of transportation services determines upon the basis of an engineering and traffic investigation that any maximum speed limit hereinafter set forth is greater than is reasonable or safe under the conditions found to exist ~~[at any horizontal or vertical curve]~~ upon any part of a highway, the director of transportation services may post a recommended safe speed thereat which shall serve as a guide to vehicle drivers at all times when they are using the highway and which shall be effectively illuminated or reflectorized for visibility at night.

(f) Whenever the director of transportation services determines, either at the director's initiative or in response to a written request by a representative of a school, that a roadway within 1,000 feet of a school is utilized by students going to, moving within, or leaving the school, the director may post a recommended safe speed thereat, which will serve as a guide to vehicle drivers at all times when students are using the roadway."

SECTION 3. Section 15-7.2, Revised Ordinances of Honolulu 2021, is amended to read as follows:

"§ 15-7.2 Speed limit zones.

No person shall drive a vehicle on a public highway or street at a speed in excess of the following speed limit zones established or hereafter established therefor by ordinance of the city council:

OCS2024-0953/10/28/2024 7:57 AM 2

24-82



Safety in our communities



**IT IS MY KULEANA
TO SLOW DOWN
AND DRIVE SAFELY
OUT OF RESPECT FOR
OUR COMMUNITY.**



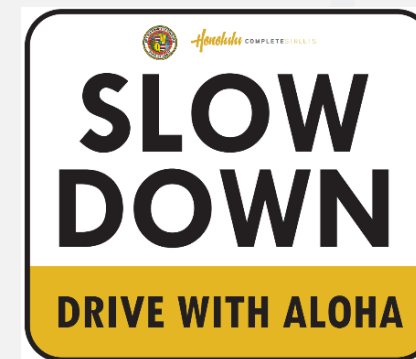
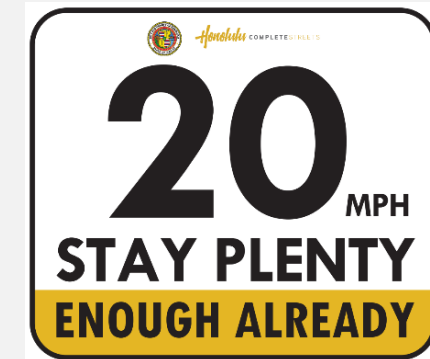
- I will slow down to make the difference between life and death in a crash.
- When I see a person crossing the street, I will come to a stop for them.
- I will avoid parking too close to the street corner, so people can see each other better at intersections.
- I will drive and text, but never at the same time.
- I will never drive if I'm impaired, even slightly, by drugs or alcohol.
- I will remember that when I am behind the wheel, my vehicle can take someone's life or cause serious harm, regardless of which user violated the rules.
- I will tell others about this pledge and ask them to hold me accountable if I'm lapsing in my commitment.

**I take this pledge because I never want to take
someone's life or injure a person because I'm driving
recklessly, impatiently, or selfishly.**

**EVERY PERSON USING OUR ISLAND STREETS IS LOVED,
HAS BEEN LOVED, OR WILL BE LOVED BY THEIR 'OHANA.**

I will remember that each time I turn on my engine, I take on a
life-or-death responsibility. I never want a family to lose a loved
one because I'm rushing, angry, or distracted behind the wheel.

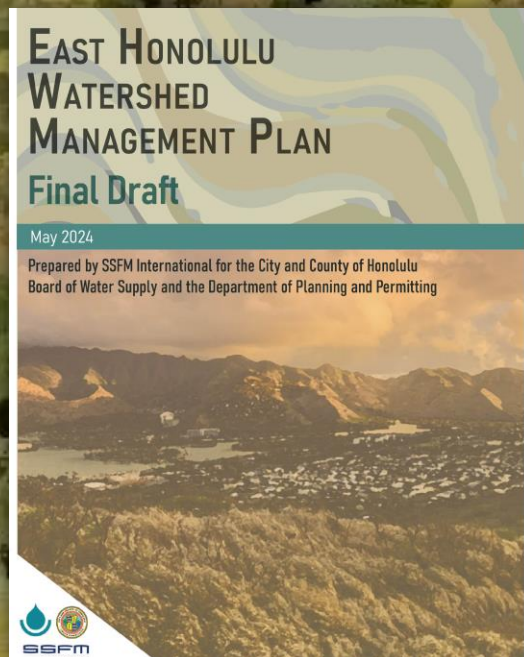
Signature _____ Date _____



OUTSTANDING

East Honolulu Watershed Management Plan



Honolulu Board of
Water Supply



SSFM
International

INNOVATION

Integrates Climate Change

- Integrates sea level rise and changing rainfall/storm patterns to guide adaptive management
- Maps flood-prone areas in East Honolulu and identifies vulnerable sites and infrastructure and mitigation strategies
- Promotes resilience by supporting infrastructure upgrades, shoreline protections, buffer zones, and restoring native marshes, wetlands and fish ponds



Incorporates Native Hawaiian Cultural Values

- Embraces Ahupua'a model integrating holistic watershed management and cultural practices
- Ka Pa'akai Analysis based on stakeholder consultation to recognize and protect key cultural resources, practices and sites



Projects an Ultimate Demand Scenario of Future Water Needs

- Assesses future water needs in East Honolulu by 2100
- Explores two climate scenarios considering climate change and population:
 - a. Decreased rainfall and increased irrigation demand (dry scenario)
 - b. Increased rainfall and flooding (wet scenario)
- Emphasizes flexibility and adaptive management, recognizing uncertainties

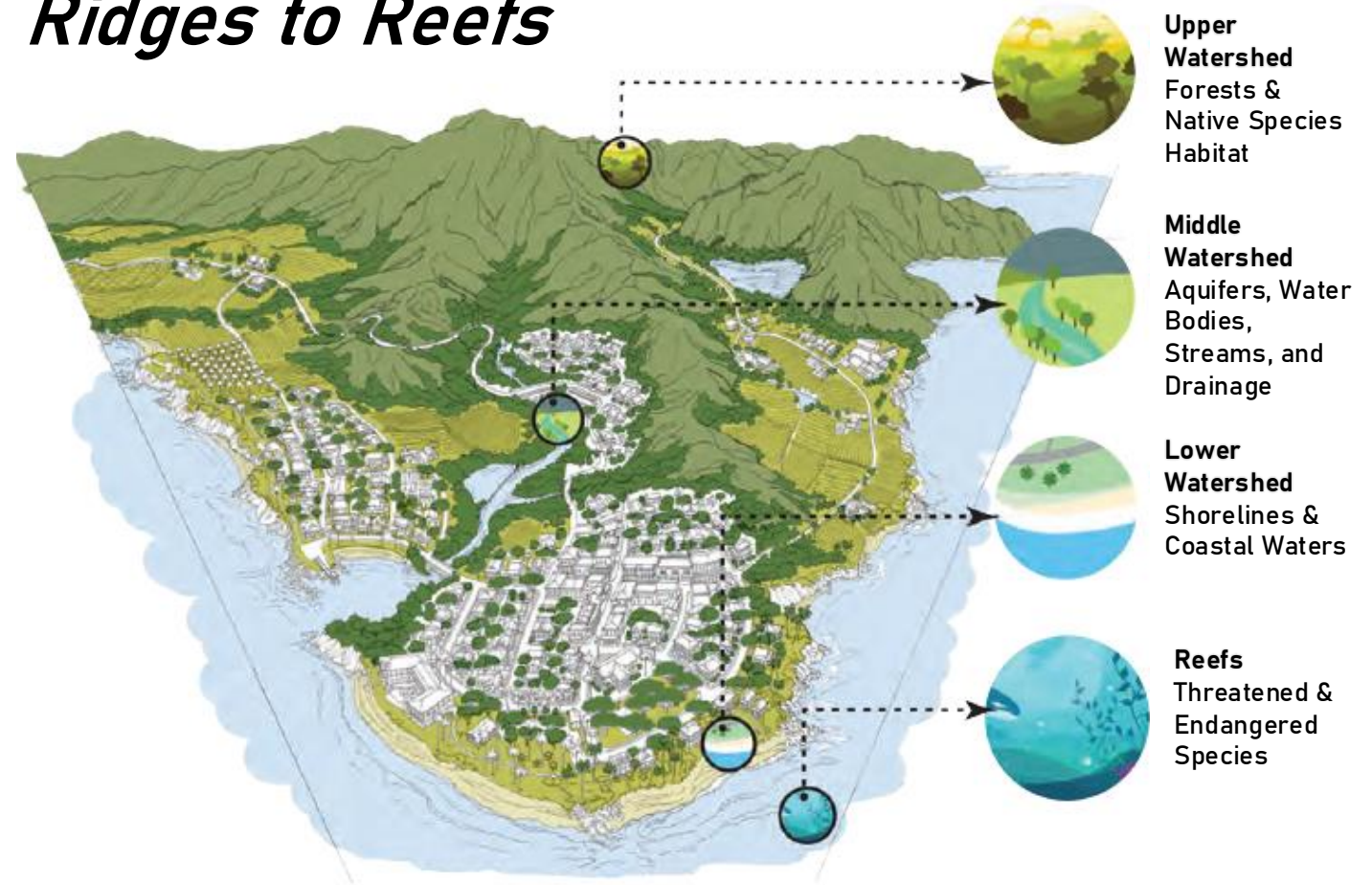
INNOVATION

Ahupua'a Model

Planning concept based on Native Hawaiian Ahupua'a model (systems-thinking), emphasizing:

- Watershed health
- Holistic resource management
- Self-sufficient and sustainable communities
- Inter-relationship of mauka and makai resources
- Stewardship and kuleana of land, people, and culture

Ridges to Reefs

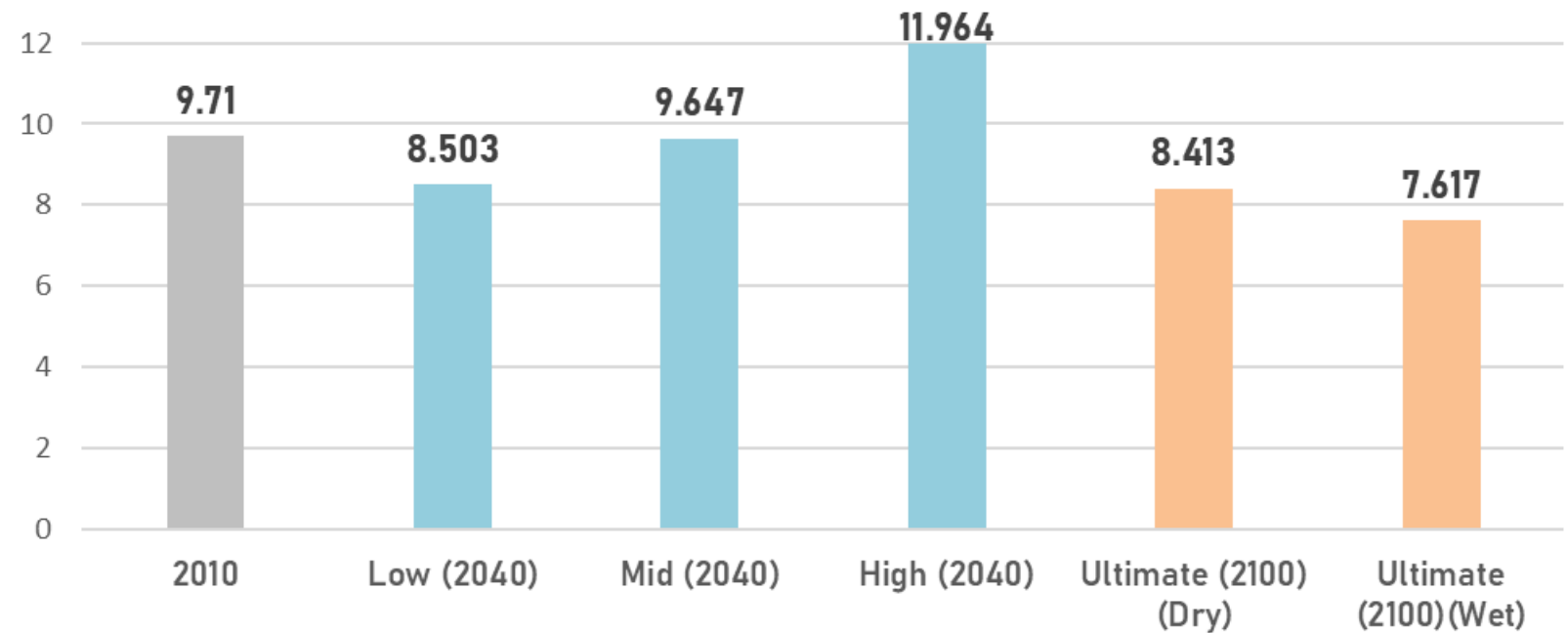


TRANSFERABILITY

Replicable and Transferable for Other Watershed Plans

- Emphasizes transparency, access and participation (incl. 4 community meetings, 20+ stakeholder consultations, and 10+ presentations to neighborhood boards and elected officials)
- Provide a framework for developing water demand and supply scenarios to account for variations in population growth, water use, and implementation of conservation strategies

Total Future Water Demand Scenarios for East Honolulu (MGD)

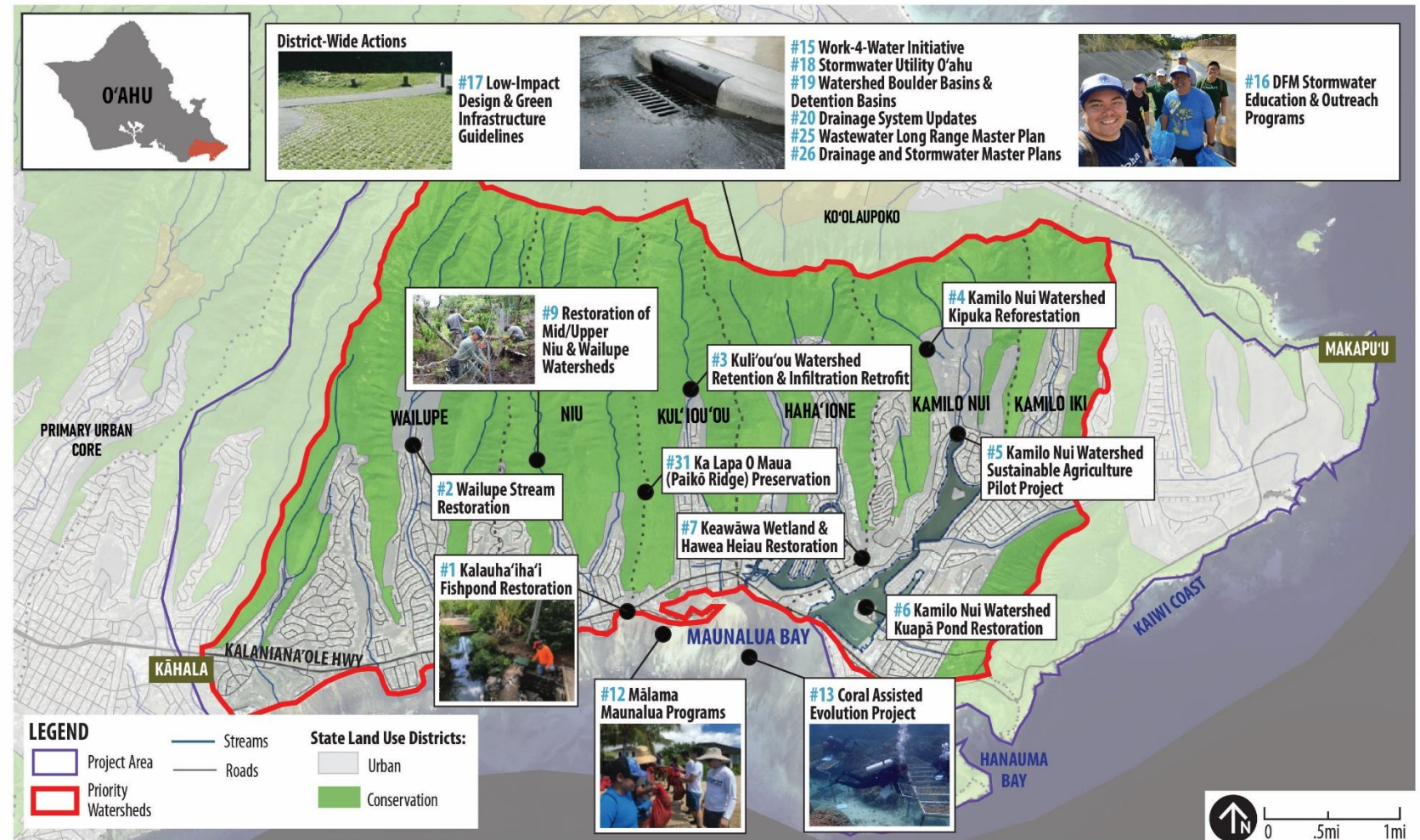


IMPLEMENTATION

Implementation Guidance

- Water Use & Development Plan with management strategies to meet future water demand and supply scenarios through conservation efficiencies
- Identification of priority watersheds and catalyst projects as critical to the EHWMP's goals and objectives through consultation with stakeholders
- Voted on and support by three (3) neighborhood boards resulted in community backing and quick adoption by City Council

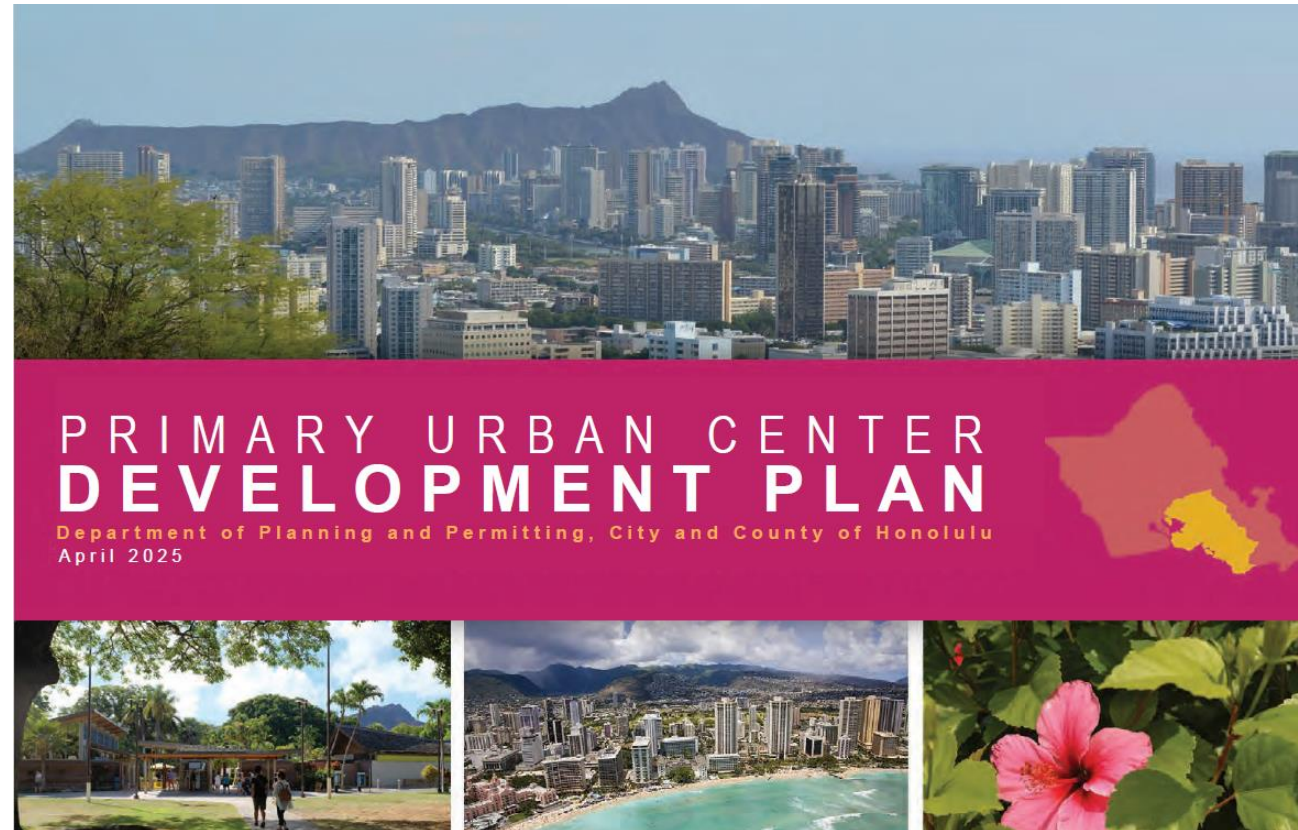
Priority Watersheds & Catalyst Projects





OUTSTANDING

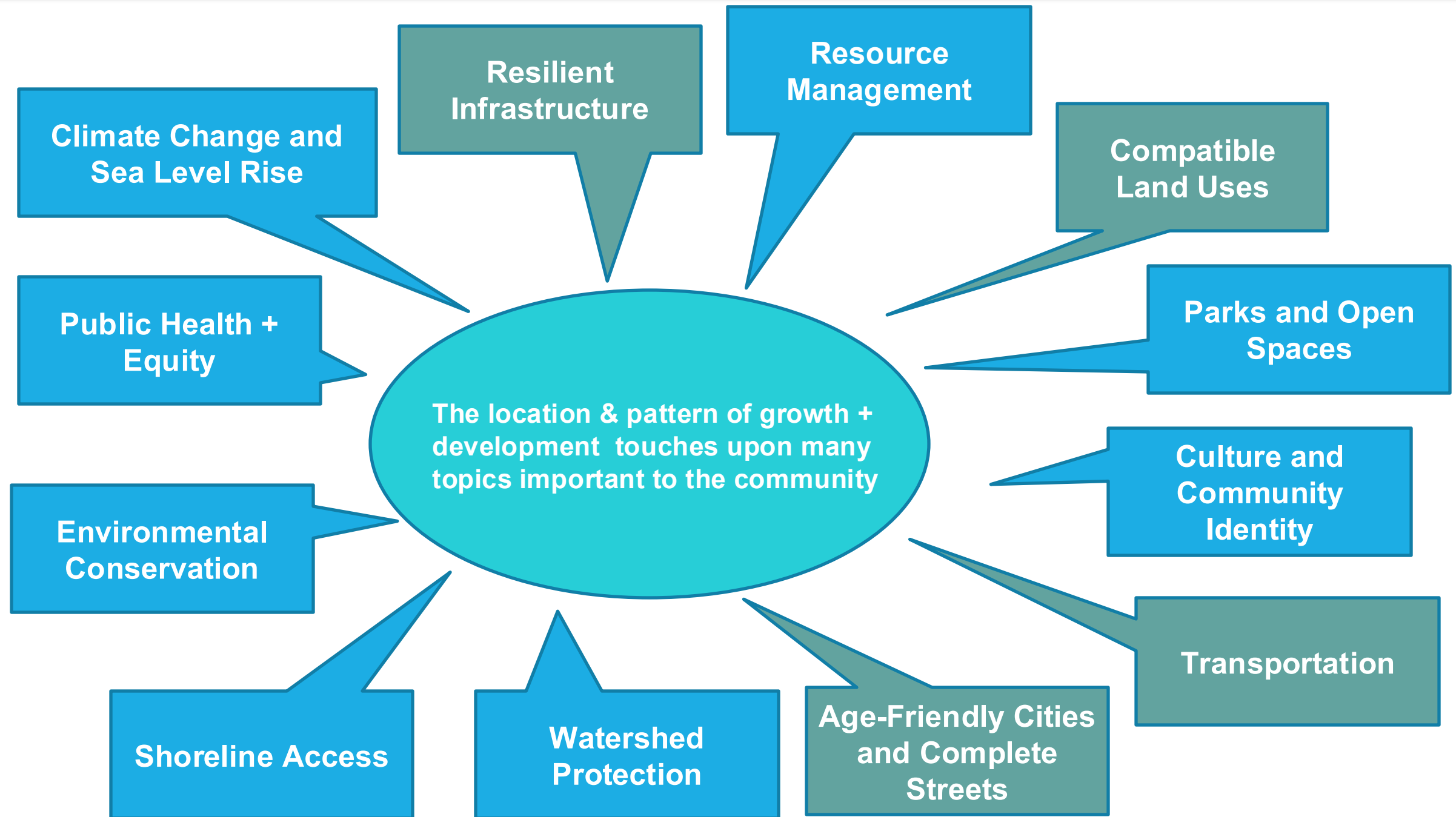
Primary Urban Center Development Plan



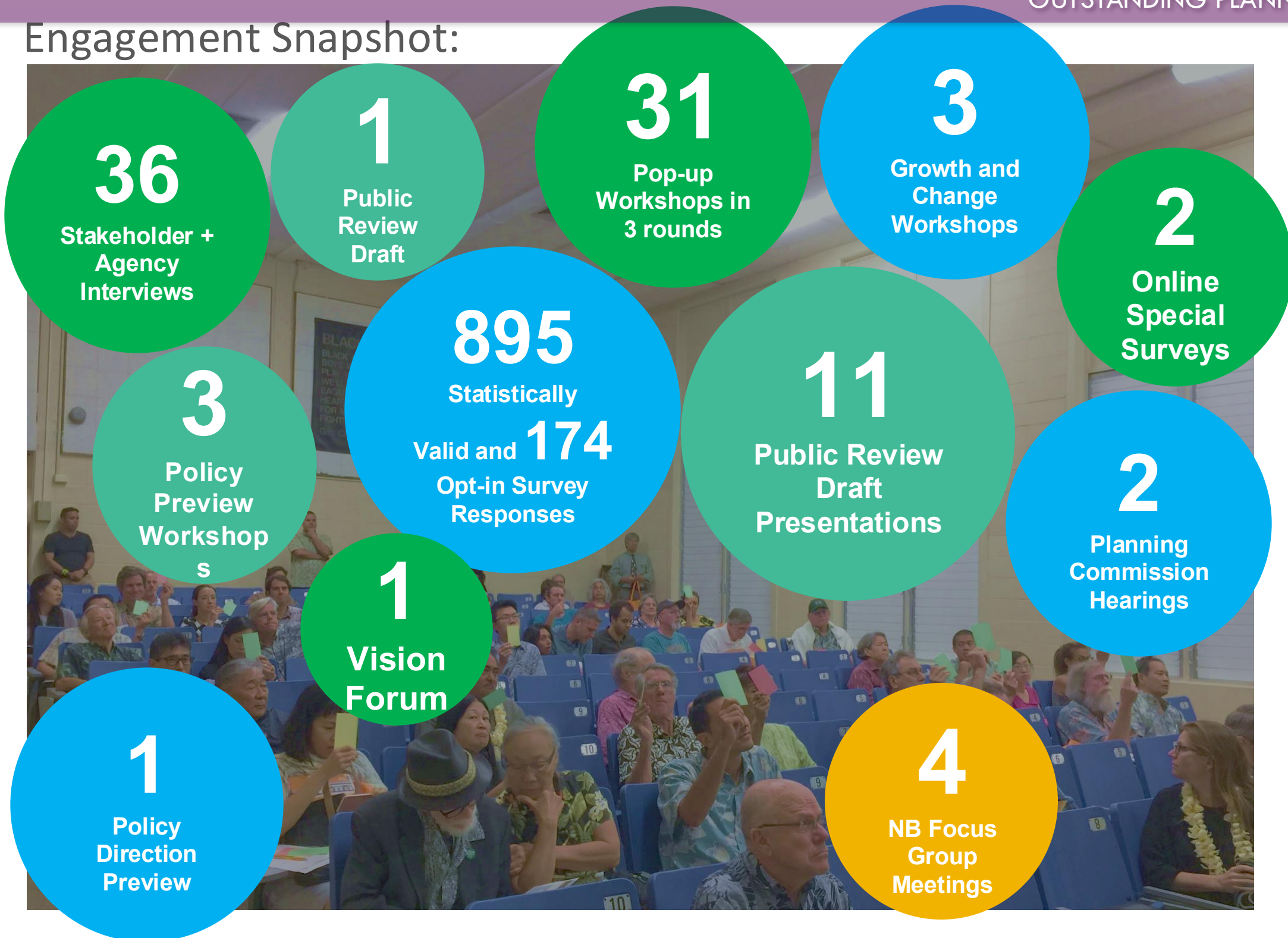
City and County of Honolulu
Department of Planning and Permitting

HCPO, August 2025





Engagement Snapshot:



Big Themes and Issues



Housing affordability,
types and conditions



Mobility improvements
including rail, bus, bicycle,
pedestrian, and roadway
facilities



Setting priorities for
major infrastructure
improvements



Creating livable, "age-
friendly" communities



The location, amount and
type of new development



Planning for climate
change and sea level rise



Creating a diverse and
prosperous economy



Preserving and enhancing
parks, open spaces and
natural features

2025
APA HAWAII
AWARDS PROGRAM

MAHALO

