

2019 AAO Design Matters Conference Top-Down + Bottom-Up

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University of Hawai'i Community Design Center







government interest



= public sector practice

# **Design** Council

"We are an independent charity and the government's advisor on design."



Design's contribution to the UK economy is £71.7bn in gross value added (GVA), equivalent to 7.2% of UK total GVA Workers with a design element to their work were 41% more productive than the average

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### **NEW URBAN MECHANICS**

Year in Review



"We work across departments and communities to explore, experiment, and evaluate new approaches to government and civic life."



#### WHO ARE WE?

The Mayor's Office of New Urban Mechanics (MONUM) was formed in 2010 and serves as the City's research and design lab. Under the leadership of Mayor Walsh, we have expanded the breadth of our research and design work to cover a vast range of issues and mayoral priority areas, including housing, public health, civic engagement, racial equity, city infrastructure, and education. While we work across a variety of topic areas, all of our projects aim to serve the same goal: to improve the quality of life for Bostonians.



### WHAT DO WE DO?

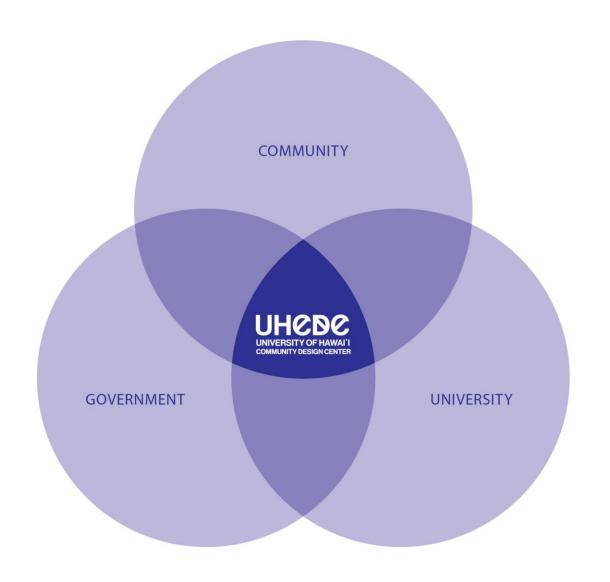
MONUM exists to take risks that traditional City departments might not be able to take. Every experiment we undertake starts with a question. When an experiment works, we partner with departments to make it a permanent service – such as ParkBoston and the Engagement Center. When an experiment doesn't work out, we document what we learned and share our findings with our partners and cities around the world.

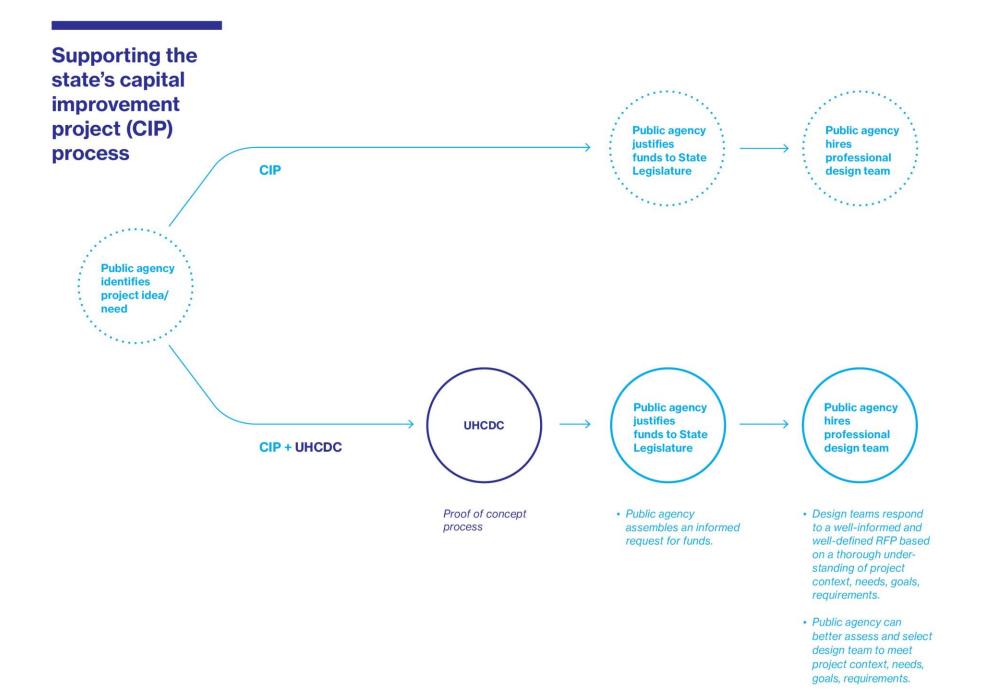


In addition to these experiments, MONUM also acts as a "front door" for start-ups, universities, and residents wanting to experiment with the City. We mentor other cities – as close as Somerville, MA and as far as Cluj, Romania – on specific projects or broadly on innovation offices in their local governments. Our team is a ragtag group of entrepreneurs, just as diverse as our project portfolio; we lend our varied backgrounds, training, and experience to each of our projects.

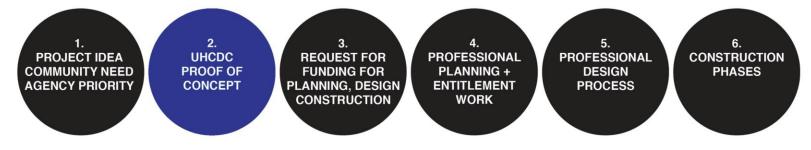








# How does this help architects?



The proof of concept process increases the understanding of the project context, needs, goals, and requirements through:

Stakeholder alignment

Community engagement

Needs assessment

Social research

Cultural research

Ecological research

Urban research

Development studies

Infrastructure assessment

Programming

Prototypes/models

Initial costs and feasibility

Design explorations

Visualizations/renderings

### What is the proof of concept process?



Understand project problem and needs.

· Stakeholder engagement

**Alignment** 

- Literature review
- · Project definition

### **Engagement**

Understand context of project by learning more about the place, people, behaviors, uses, needs.

- Stakeholder interviews
- Workshops
- Surveys
- · End-user research
- Co-design
- User observation
- Field observation
- Programming



### **Applied** Research

Perform and collaborate with university departments and professionals to develop research material applied to the challenges of the project or design problem.

- Urban
- Ecological
- Social
- Cultural
- Political Economic
- · Building Performance Modeling
- Visualization
- Material Research
- Engineering
- Social Sciences



### Design **Options**

Synthesize research through the design process.

- Drawings
- Renderings
- · Models



### **Prototype**

Develop prototypes to test and see.



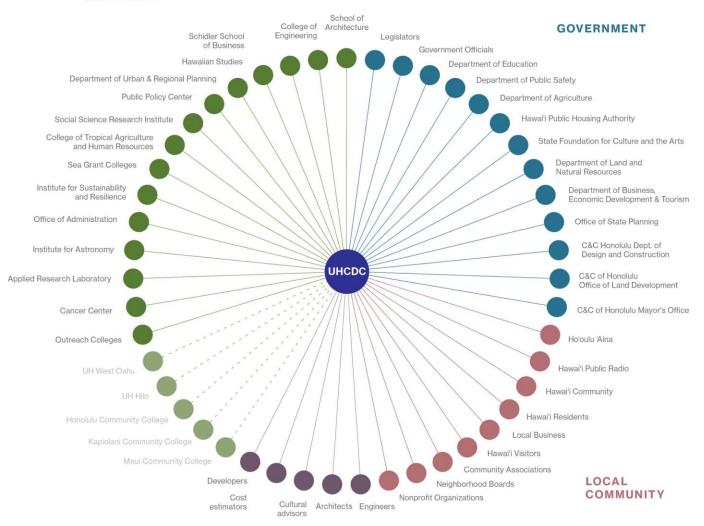
### Output

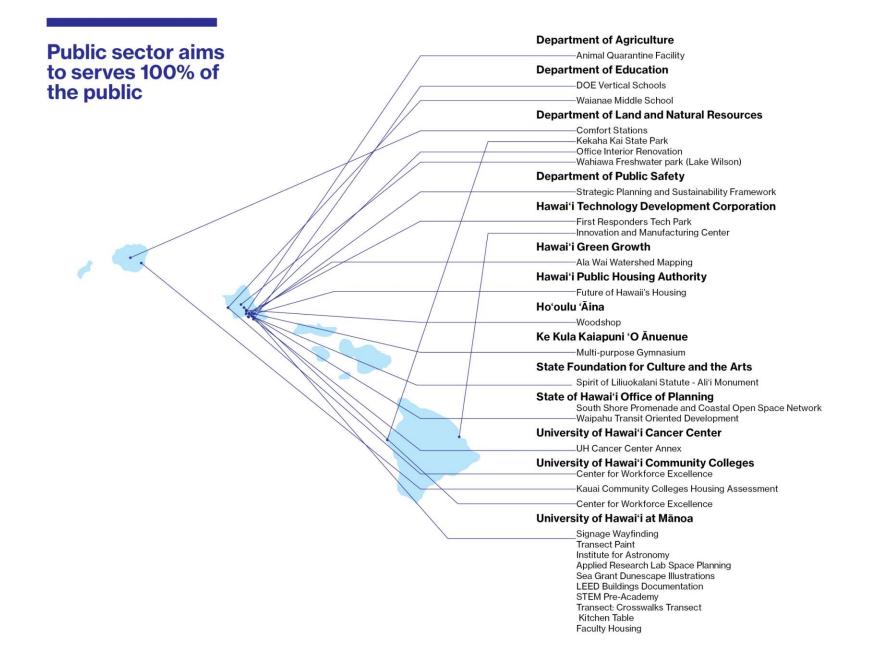
Articulate design options, requirements, or issues for the project based on proof of concept findings and design process.

- Design options
- · Design criteria
- Design standards
- · Presentation
- Exhibition
- Prototype
- · Preliminary Costs

### Who do we work with?

### UNIVERSITY





# Align priorities and strategies

- + convene stakeholders
- + align city and state agencies
- + engage communities



# Assess statewide systems

- + provide needs assessments
- + conduct surveys
- + develop program/space inventories



HCCC Hilo



MCCC Kahului







;



occc Honolulu







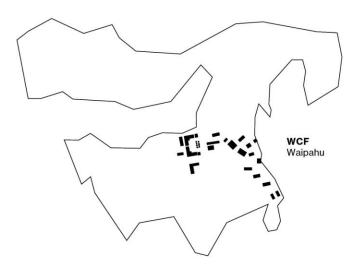
WCCC Kailua



**HCF** Aiea

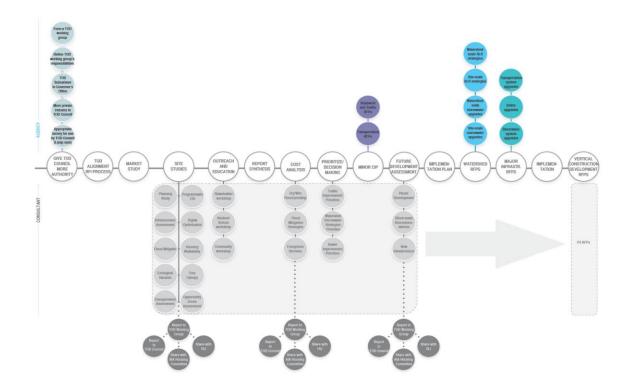


Federal Detention Center Honolulu



### Help organize

- + streamline processes
- + organize data
- + communicate visually



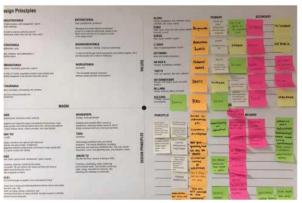


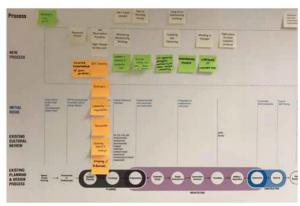


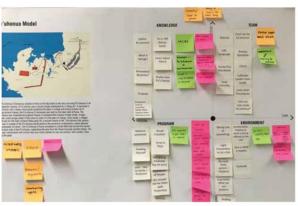


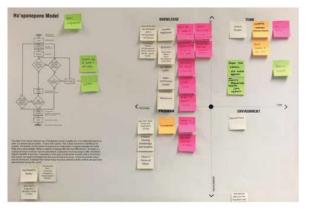
## Connect to research

- + empirical data
- + social science research
- + community engaged research
- + best/new practices















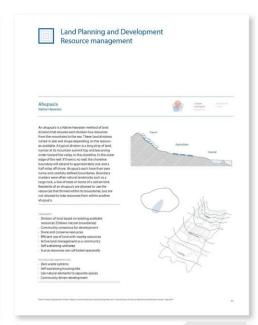


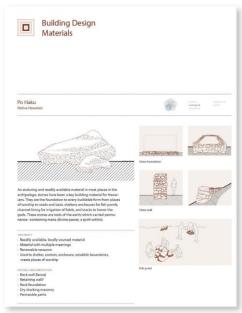


### Develop guidelines, criteria, best practices

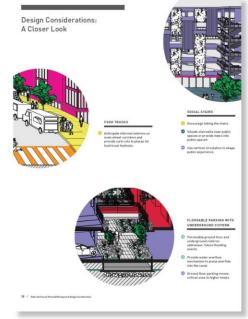
- + performance
- + equity
- + cultural competency
- + placemaking
- + community building

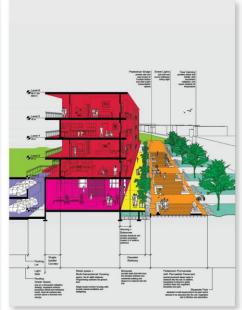






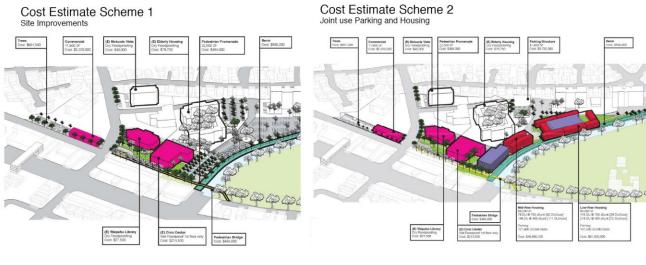






## Visualize scenarios

- + sea level rise scenarios
- + TOD development scenarios
- + zoning envelope studies
- + multi-agency configurations





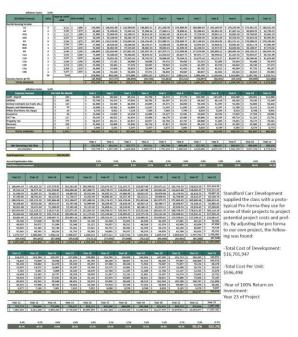
### **Build a business case**

- + pro forma
- + revenue generating ideas
- + revenue neutral



### PRO FORMA AND RETURN ON INVESTMENT

		Budget	% TPC
LAND COSTS			
	Raw Land Cost	\$750,000	4.5%
	Processing/Diligence	\$142,500	0.9%
	Fees	\$301,738	1.8%
	Land Improvements	\$1,706,160	10.2%
	Common Landscaping	\$0	0.0%
	Real Estate Taxes	\$0	0.0%
	Total	\$2,900,398	17.4%
DIRECT CONSTRU	CTION COSTS		
	Production	\$9,736,099	58.3%
	Front Yard Landscaping	\$0	0.0%
	Total	\$9,736,099	58.3%
INDIRECT COSTS			
	Building Permit / Review Fees	\$60,000	0.4%
	Indirect Construction	\$926,805	5.5%
	Insurance	\$194,722	1.2%
	Builder Overhead	\$1,250,000	7.5%
	Marketing Costs	\$15,000	0.1%
	Holding Costs	\$48,000	0.3%
	Contingency	\$850,101	5.1%
	Total	\$3,344,628	20.0%
TOTAL DEVELOPM	IENT COSTS (TDC)	\$15,981,125	95.7%
FINANCING COSTS			
	Land Acquisition Fees	\$0	0.0%
	Construction Loan Fees/Closing	\$0	0.0%
	Loan Administration	\$0	0.0%
	Loan Interest	\$720,822	4.3%
	Total	\$720,822	4.3%
TOTAL PROJECT COST		\$16,701,947	100.0%
TOTAL COST PER UNIT		\$596,498	



### **Prepare RFP/RFQs**

- + compiling base information
- + defining goals
- + establishing guiding principles
- + creating RFP templates

Request for Proposals for Waipahu Transit Oriented Development Affordable Housing Project

Issued by: AGENCY

Issue Date: June 30, 2019

### NOTICE TO INTERESTED PARTIES REQUEST FOR PROPOSALS NO. XXXXXXX

The AGENCY (\*AG\*) is soliciting proposals from qualified real estate developers and ovelopment teams (colectively, \*<u>Toyeropory\*</u>) that are interested in entering into a public-private partnership (\*P3\*) with the AG to design, build, finance, operate and maintain (\*DBECM\*) a Trainal Oriented Design project (the \*<u>Toyer(\*)\*</u> to be located in the day of Wapaha on the istand of Oriented Design project (the \*<u>Toyer(\*)\*</u> to be located in the day of Wapaha on the istand of Oriented (the \*<u>Toyer(\*)\*</u> to be located in the

#	Address	TMK	Owner	Zoning	Existing Use
1	94 830 HIKIMOE 57.	9-4-017:051	HAWAIT HOUSING FINANCE AND DEV. CORP.	BMX-3	COMMUNETY DAY CARE
2	94 333 MOKUOLA ST.	9-4-017:062	HAWAITHOUSING FINANCE AND DEV. CORP.	R-5	MO-RISE RESIDENTIAL
3	94 941 KAUOLU PL.	6-4-017.001	HAWAIT PUBLIC HOUSING AUTHORITY	R-5	MO-RISE RESIDENTIAL - ELDERLY HOUSING
•	Undefined	9-4-017:065	HAWAIT HOUSING FINANCE AND DEV. CORP. FKA HOUSING & COMM DEV CORP. OF HAWAIT	AMX-3	SURFACE PARKING FOR ACAD OF PLANTATION TOWN APTS
5	Undefined	9-4-017:051	HAWAIT HOUSING FINANCE AND DEV. CORP.	BMX-3	SURFACE PARKING
8	94-275 Mokuola St.	9-4-017-052	STATE OF HAWAIT	BMX-3	LIBRARY AND SOCIAL SERVICE- CIVIC CENTER

#### 3.5.2 Multi-modal Circulation



subject to review and final action by the AG Group. The AG will own the fee simple inferest in the Property Introughout the development and operation of the Project and at the time will the AG interest be picked or subcrimated to any Project financing. Lipon the expression of the long-bern ground lease, ownership of the Project will revert back to AG, unless otherwise agreed by the parties.

All RFP documents and correspondence in correction with the RFP will be transmitted conclusively through the Islamia Electrical Procurement System FLHEST) sharehold Developers inferring to resource to the RFP and Integrite with MESS and correspond with the All And Developer that is already registered with HeSP area together to their account at Intelligent Systems (Intelligent Systems And Correspondence submitted through HeSP in accordance with the procedures described into HePP with the conditioned by the All.

All proposals submitted in response to the RFP shall be submitted electronically via 16-PS and by delivery of hard copies to the Office of the Vice President for Administration, 2444 Dole Street, Bachman 106H, Honobut, Hawari 196022, pursuant to the proposal submission restructions set forth in the RFP. All proposals must be received by QFP to later fan 2400 pm, Hawari Standard Imney on February 22, 2419.

Through this RFP the AG seeks to enter into a P3 with an experienced and qualified Developer partner that is committed to DBFOM the Project in order to increase the rental housing inventory for the UHM campus and to activate and enhance an underutilized portion of its property.

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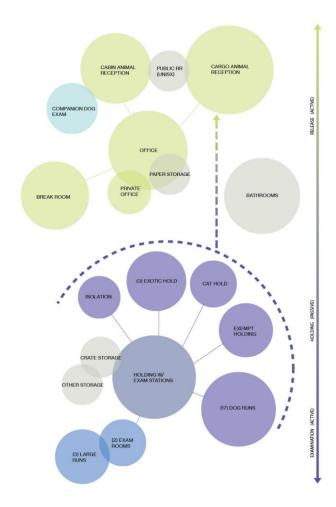
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En	vironmental Review	

4.2 Waipahu TOD Neighborhood Plan



# **Optimize existing resources**

- + optimize
- + repair
- + reprogram
- + re-use







# Impact on teaching



# Community engaged design processes

- community workshops
- · public presentations
- action research



### Multi-departmental team teaching

- Planning + Architecture
- Architecture + Engineering



# Teaching and research integration

- more stakeholder collaboration
- visits, tours
- students continue on projects as interns



# Public Private Partnership driven

- studios explore revenue models
- developer engaged
- pro forma driven

### Government partnered outreach



2017 BUILDING VOICES DESIGN FESTIVAL DESIGN SYMPOSIUM DESIGN COMPETITION DESIGN EXHIBITION April 20-22 2017

The School of Architecture and UHCDC gathered over 40 local and global experts across disciplines for 3 days of conversation featuring an international design competition, exhibition, and full day symposium at the state capitol.

### SUSTAINABLE CITIES INITIATIVE: PANEL February 21, 2018

This panel invited the co-founder of University of Oregon's Sustainable Cities initiative and collaborators from the university to discuss models for university wide collaboration.

#### WAIPAHU TALK STORY April 12, 2018

Community members, state and city representatives, and neighborhood organizations were invited to share ideas and information on the development of the state parcels surrounding the Pouhala rail station

HONOLULU COMMUNITY COLLEGE SUMMER ENGINEERING ACADEMY-VISIT AND WORKSHOP July 2018 UHCDC hosted a half day visit and Paper Design Challenge for high school students participating in the Honolulu Community College Summer Engineering Academy program

#### WAHIAWA FRESHWATER PARK COMMUNITY MEETING July 2018

WAHIAWA FRESHWATER PARK COMMUNITY CHARRETTE October 2018

#### A NEW PLATFORM FOR COMMUNITY DESIGN IN HAWAI'I: APA MONTHLY MEETING November 7, 2018

November 7, 2018

AIA Honolulu Center for Architecture

UHCDC panelists joined APA membership for monthly meeting to share projects and practices that reflect the ways that Hawai'i's context has shaped a unique proof-of-concept model for community design.

#### 2018 DECOLONIZING CITIES SYMPOSIUM November 9-10, 2018

The second Decolonizing Cities symposium focuses on practices of indigenous urbanism, and how the urban is and should be an arena for indigenous placemaking.

This symposium is co-sponsored by Department of Urban & Regional Planning, the University of Hawai'i Community Design Center and the UH Kamakakūokalani Center for Hawaiian Studies.

#### 901 RIVER STREET IDEAS SHARING EVENT November 16, 2018

ARCH 745 students hosted a public workshop to gather ideas on the re-programming of vacant commercial space located near the Chinatown rail station.



### 2018 BUILDING VOICES HONOLULU CONNECTS STUDENT DESIGN COMPETITION AND PRESENTATION

November 14, 2018, Hawai'i Convention Center

HONOLULU CONNECTS: Culture and Performing Arts Corridor is the second iteration of the Building Voices Design Competition. Honolulu Connects is a single-stage student design competition seeking innovative design solutions that address Hawai'i's unique geographic location, cultural richness, global visibility, and ecological diversity. Students projects and winners were presented and recognized by Mayor Kirk Caldwell at the 2018 CSI Pacific Trade Expo.

#### FOREST TO FRAME: INNOVATIONS IN MASS TIMBER

November 14, 2018 Hawai'i Convention Center

Owner and Principal Ben Kaiser, of Kaiser Group and PATH Architecture

#### TIMBER IN HAWAI'I

November 29, 2018 UHM School of Architecture

This talk-story event gathered Ethan Martin, Regional Director, Woodworks, Timothy Schuler, editor, and Philipp LaHeala Walter, DLNR, in a discussion moderated by Kevin Miyamura to discuss innovation in mass timber construction,

#### PROOF OF CONCEPT: PUBLIC-PUBLIC PARTNERSHIPS AT WORK February 19, 2019 Hawaii State Capitol

A presentation and exhibition of University of Hawai'i Community Design Center work in service to the state.

### PAN: PAU WOW

April 12, 2019 UHM School of Architecture

AIAS and UHCDC partnered on a PAN event which gathered students from Architecture, Urban and Regional Planning, and Engineering.

#### BOWLING WITH BOSSES W/AIA YAF June 13, 2019



#### 2019 BUILDING VOICES: HOUSING FOR ALL September 30 - October 1 2019

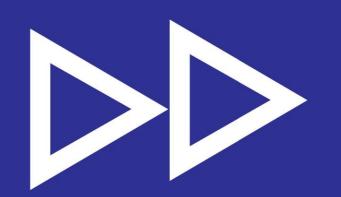
Housing for All gathers Christopher Hawthorne, David Baker FAIA, Marsha Maytum FAIA, Marc Alexander, Councilmember Carol Fukunaga, Hakim Ouansafi, Kevin Auger, Kevin Miyamura AIA, Andrew Neuman, Victoria Takamine, Jonathan Lee AIA, Karla Sierralta AIA, and Brian Strawn AIA to discuss tools that advance access to housing.

### **Evolution**

project client single discipline systems context design solution decision report budget architectural

problem stakeholder multi-disciplinary systems applied

design considerations
alternatives
frameworks
RFP
pro-forma
infrastructural



### **Design with government**

- communicate with legislators
- align priorities with government priorities
- connect to university resources
- leverage design curricula
- reconnect design thinking and environmental design
- advocate-for-design to agent-of-design