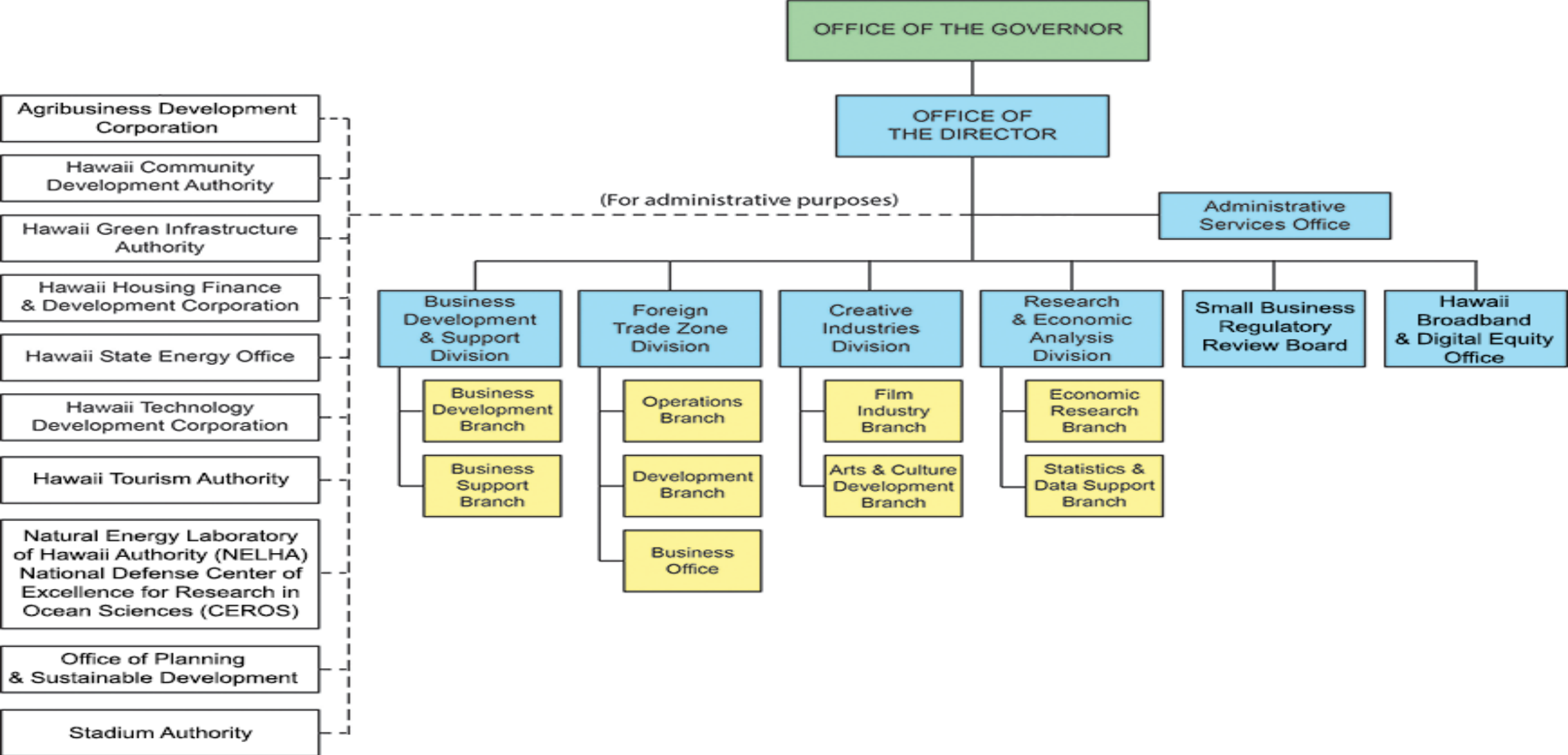


# The Economic Landscape of Hawaii

Strengthening Anchors and Cultivating Innovation

Draft v8  
1/9/2025



What is the State  
of Hawaii's  
Economy?

How do we  
anchor and  
diversify Hawaii's  
economy and  
Reverse Brain  
Drain

DBEDT's  
Framework –  
Cradle to Career

Implementation

# Current Economic State of Hawaii

# U.S. and Hawai'i Industry Structure: % of 2024 Real GDP by Industry

Industry	U.S.	Hawaii	Concentration U.S. =100
Agriculture, forestry, fishing and hunting	0.9	0.5	62.3
Mining, quarrying, and oil and gas extraction	1.4	0.1	3.8
Utilities	1.5	1.8	121.0
Construction	3.7	5.0	135.6
Manufacturing	10.2	1.7	16.9
Trade	11.1	9.9	88.8
Transportation and warehousing	3.1	5.3	173.0
Information	7.1	3.1	43.9
Finance and insurance	6.8	3.8	55.8
Real estate and rental and leasing	13.5	17.3	128.5
Professional and business services	14.9	9.9	66.7
Educational services	1.1	1.1	96.3
Health care and social assistance	7.8	8.0	102.7
Hospitality	3.9	10.7	275.6
Other services	1.8	2.1	118.1
Government	11.2	19.7	175.1
<b>Top 5 Industries</b>	<b>54.6</b>	<b>67.5</b>	<b>123.6</b>

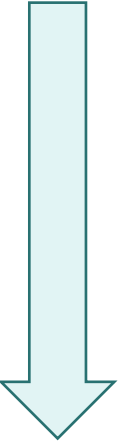
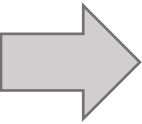
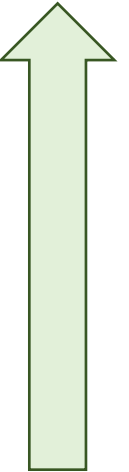
Source: Research Economic Analysis Division

Hawaii's economy is more concentrated than the U.S.



## Hawai'i Industry Share of Real GDP: 2005 and 2024\* (%)

Industry (by NAICS code)	2005	2024
Real estate and rental and leasing	15.4	17.3
Health care and social assistance	5.8	8.0
Professional, scientific, and technical services	4.0	5.3
Transportation and warehousing	4.5	5.3
Information	1.7	3.1
Administrative & support & waste management & remediation services	2.8	3.1
Utilities	1.7	1.8
Management of companies and enterprises	1.3	1.5
<b>Finance and insurance</b>	<b>3.8</b>	<b>3.8</b>
Federal government	11.9	11.2
Hospitality	11.9	10.7
Trade	10.6	9.9
State and local	10.2	8.5
Mining and construction	7.6	5.0
Other services (except government and government enterprises)	2.9	2.1
Manufacturing	1.9	1.7
Educational services	1.2	1.1
Agriculture, forestry, fishing and hunting	0.7	0.5



Source: Research Economic Analysis Division

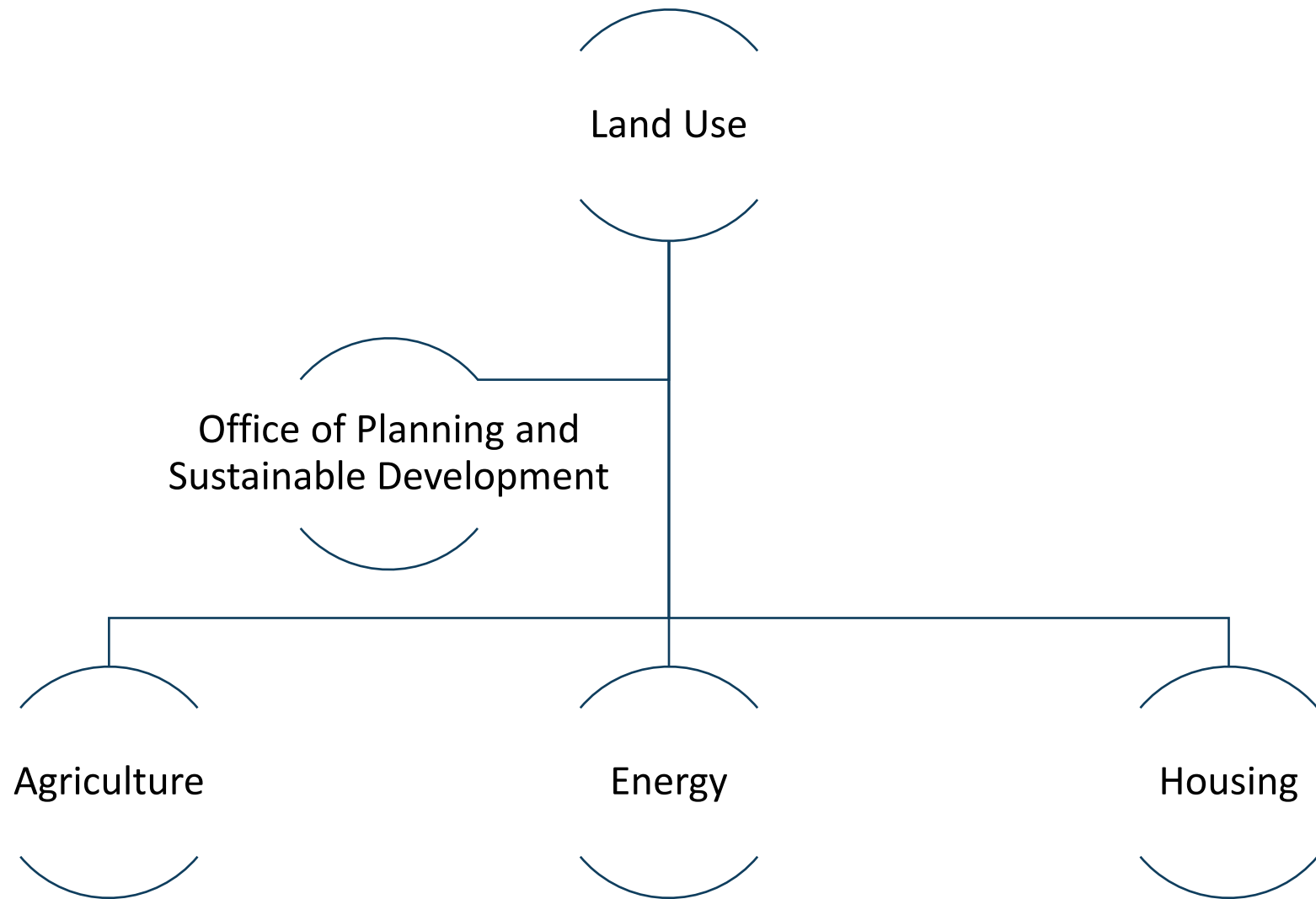
# Hawai'i's Business and Economic Environment Ranking

Ranking Institution	Description	Year	Overall Ranking	Business/ Economy Climate	Business Cost	Workforce	Access to Capital	Cost of Living	Infrastructure	Technology & Innovation
<b>CNBC</b>	American Top States for Business	2024	50	49	50	32	48	48	47	45
<b>US News</b>	Best State Ranking	2024	31	47	49	12	46	41	47	
<b>ITIF</b>	State New Economy Index	2020	46	42		32	40		40	47
<b>Forbes</b>	Best States for Business	2019	47	24	50	32		40		
<b>Wallet Hub</b>	Best & Worst State Economies	2024	50	49		50				50
<b>ALEC</b>	Economic Outlook	2024	41	42	41					
<b>Tax Foundation</b>	State Business Tax Climate Index	2024	42		42					

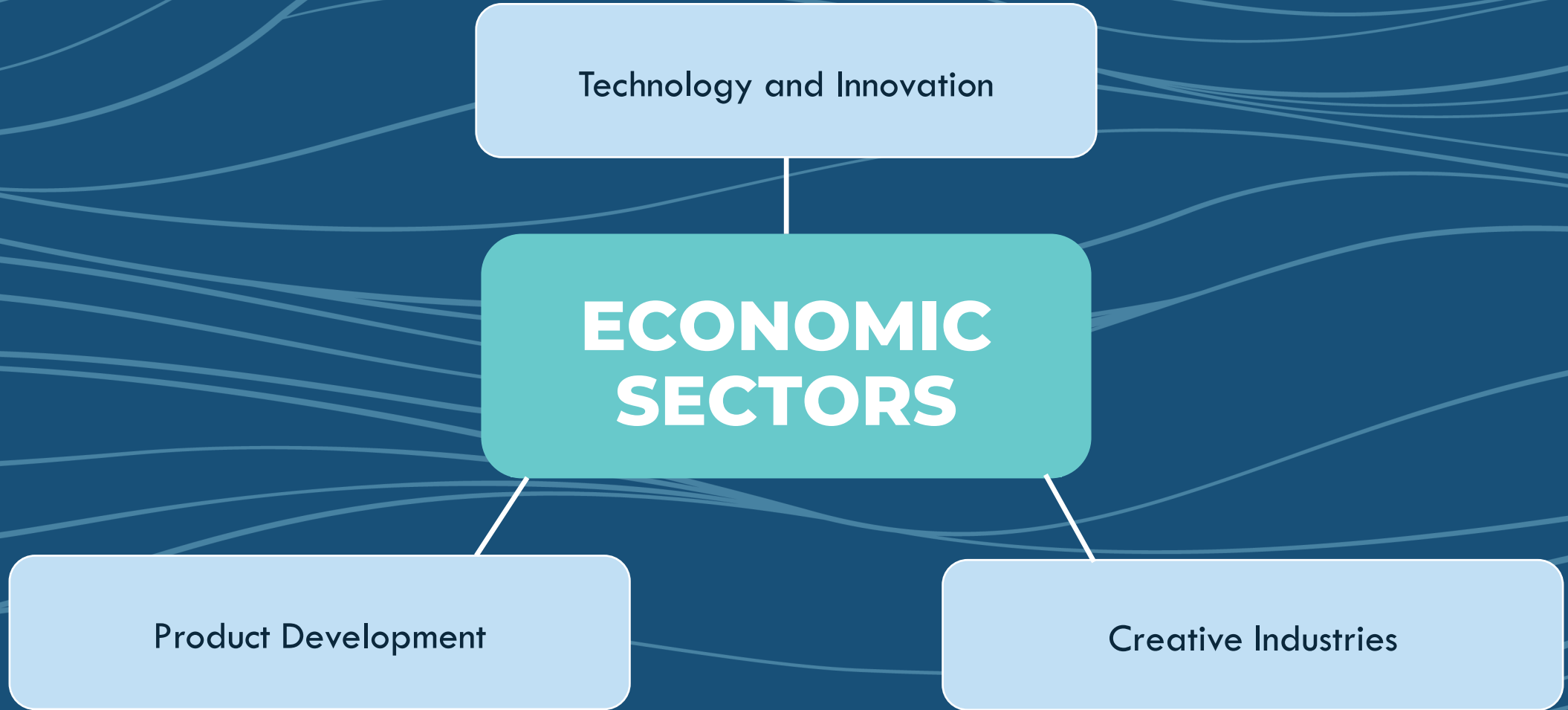
Sources: Consumer News and Business Channel, Information Technology and Innovation Foundation, American Legislative Exchange Council

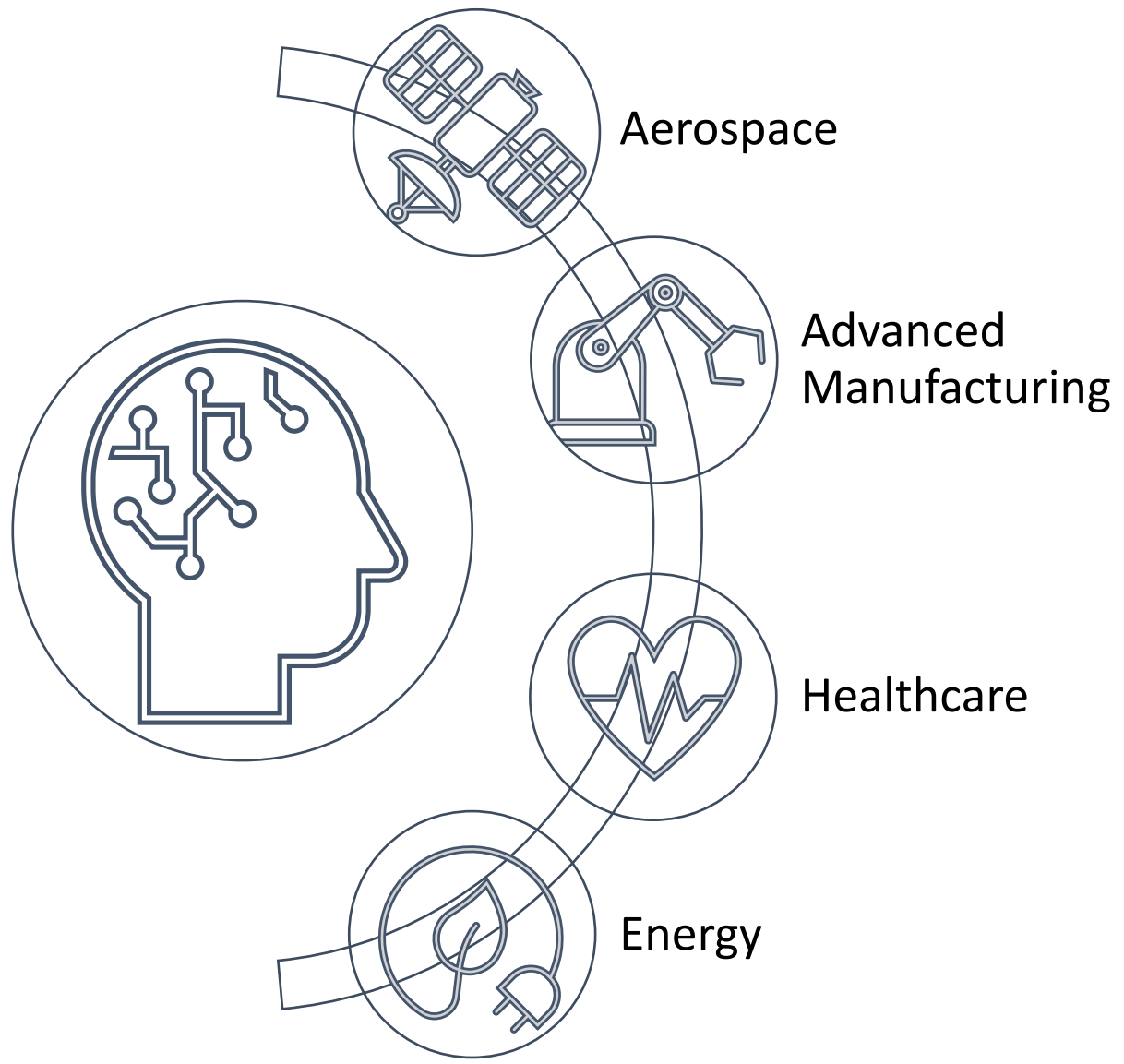
# State Mandates





# Sectors that Diversify Hawaii's Economy



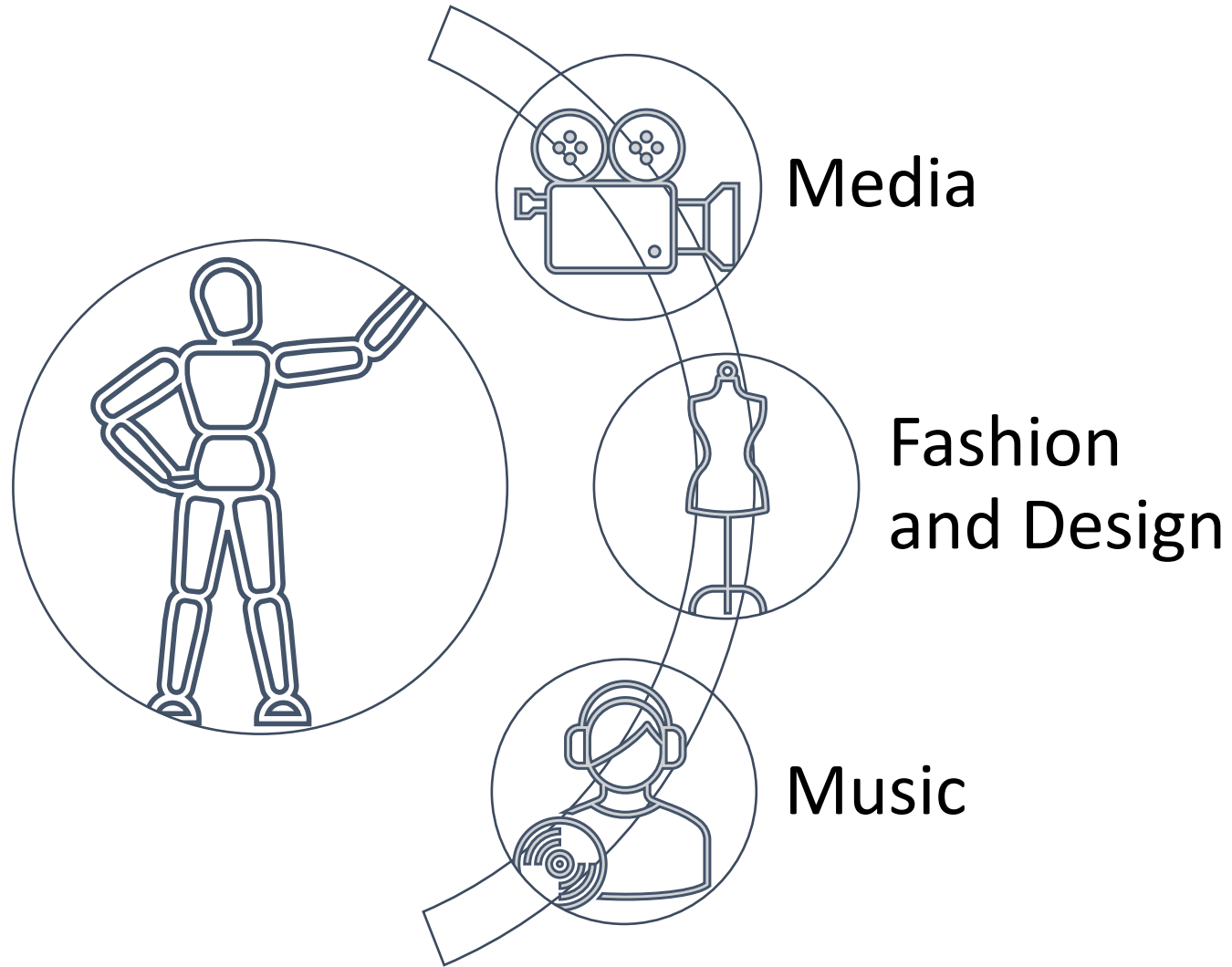


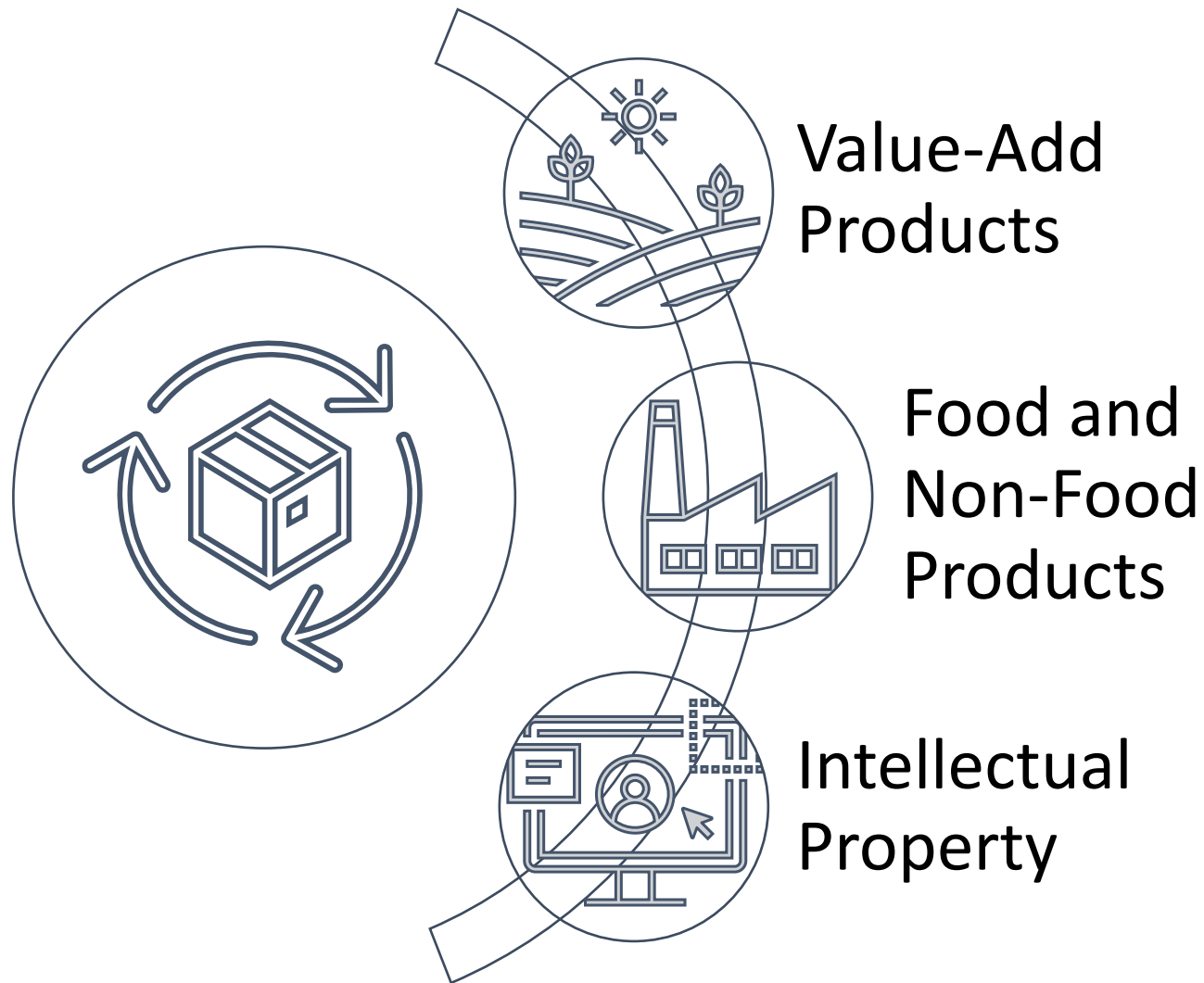
Aerospace

Advanced  
Manufacturing

Healthcare

Energy





# Incubation to Maturity Framework



## **Curriculum to Career**



## **Infrastructure and Facilities**



## **Policy Changes**



## **Layering Incentives**



# CRADLE TO CAREER



Map it Out



Outline Workforce Development



Assessment of Assets

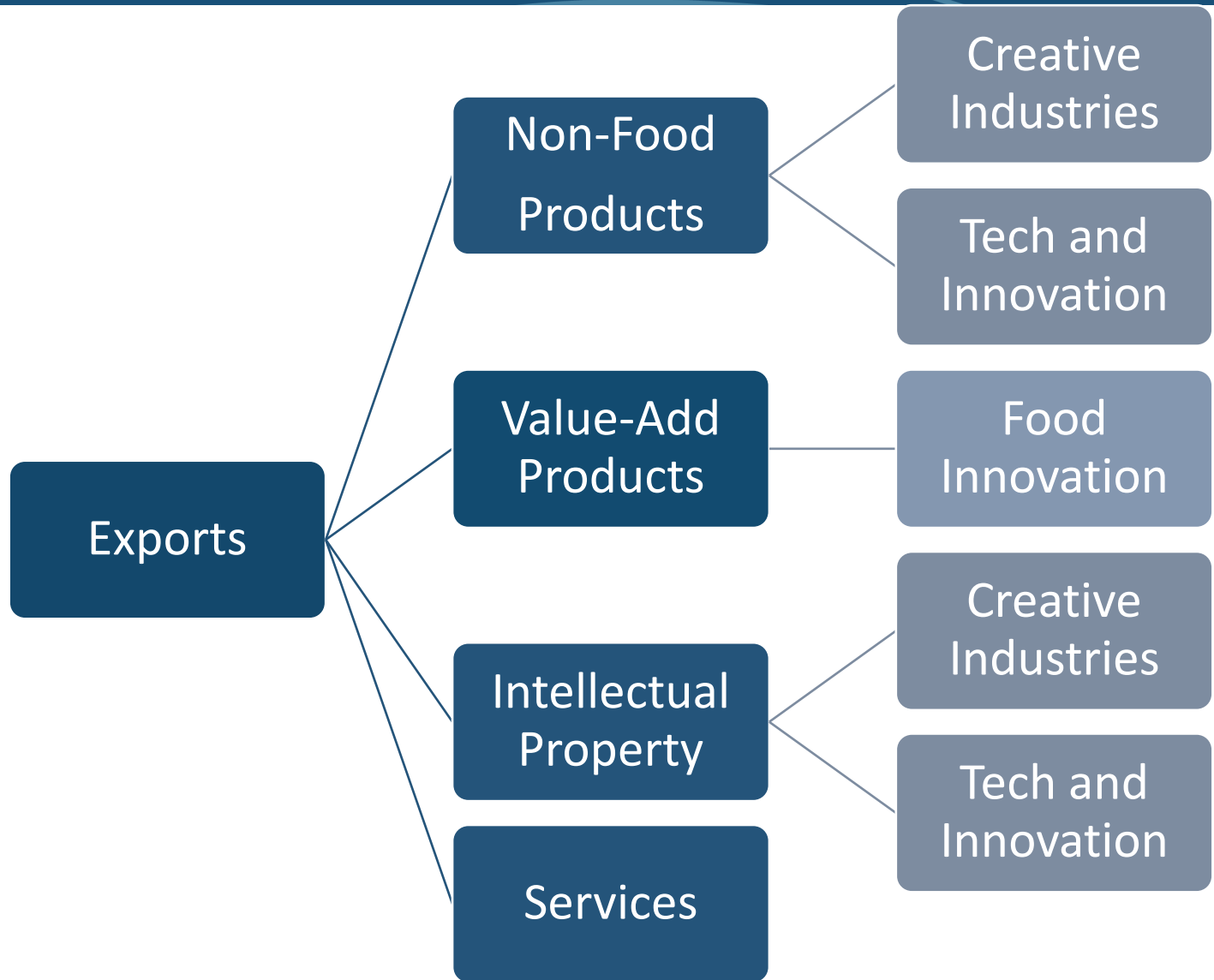


Identify Resources Needed



DBEDT eco-system





# WORKFORCE DEVELOPMENT



DOE  
Complex Area



UH  
Community College



Internships  
Apprenticeships  
DLIR – Workforce  
Development Council



Employers



## Business Management, Finance, and Marketing

- Business Management
- Financial Management
- Entrepreneurship
- Marketing Management
- Supply Chain and Logistics Technology

## Advanced Manufacturing

- Automation and Robotics Technology
- Electro-Mechanical Technology
- Welding

## Energy

- Alternative Fuels Technology
- Power Grid Technology
- Renewable Energies Technology

## Cultural Arts, Media, and Entertainment

- Digital Design
- Film and Media Productions
- Fashion and Artisan Design

## Agriculture, Food, and Natural Resources

- Animal Systems, Food Systems
- Natural Resources Business
- Natural Resources Management

# Manufacturing (Advanced, Additive, Subtractive)



CTE:  
Trades  
Welding  
Machining

DOD Education Programs – DOE High School Teachers



Honolulu Community College:  
DOD Approved Curriculum  
Technicians

College of Engineering:  
Material Science  
Fabrication



Dept. of Defense  
Private Businesses  
Trades



Dept. of Defense:  
Pilot w/ Honolulu Community College –  
Summer 2025

Public-Private Partnership:  
Dept. of Defense  
Private Businesses

# Food and Product Innovation Network



CTE:  
Business Management, Finance, and  
Marketing  
Agriculture, Food, and Natural  
Resources



Leeward Community College  
Maui College  
Kauai Community College  
Hawaii Community College Palamanui



Aina to Makeke  
Mana Up  
Pop-up Makeke



Employers



# Creative Lab Innovation Center



CTE: Cultural Arts, Media, and Entertainment  
Waianae High School  
Campbell High School  
Kapolei High School  
Waimea High School



UH West Oahu Academy for Creative Media  
Honolulu Community College



iCann  
Unions  
Good Jobs Initiative  
Mana Up  
Purple Maia  
Pop-up Makeke  
Creative Lab Immersive



Major Productions  
Independent Productions

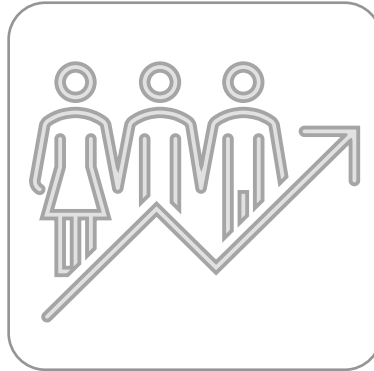
# Implementation





**ECONOMIC FOUNDATIONS**

Building and updating key infrastructure to support growth



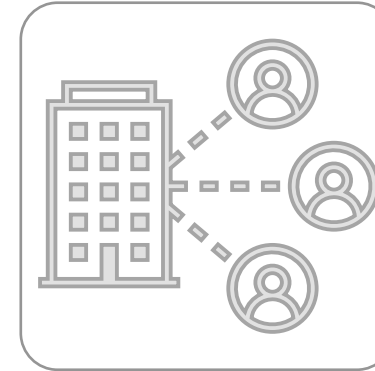
**STRENGTHENING ANCHORS**

Focusing on sectors driving Hawaii's economy and ensuring workforce readiness



**DEVELOPING WORKFORCE & HUMAN CAPITAL**

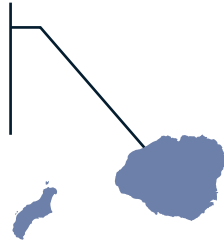
Aligning education with high-need and emerging sectors



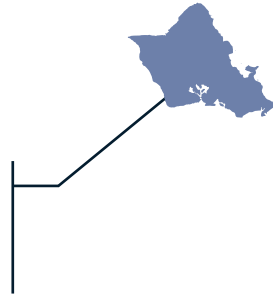
**CULTIVATING EMERGING SECTORS**

High-growth industries

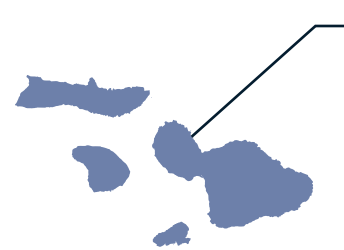
Value-Add (ADC)  
Aquaculture (ADC)  
Aerospace (HTDC)



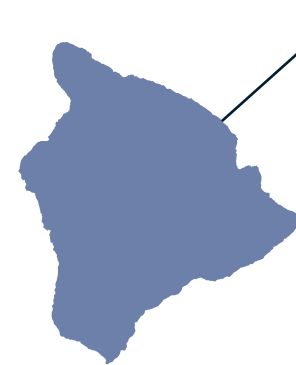
Value-Add (ADC)  
Aquaculture (ADC)  
Fashion Manufacturing (CID)  
Film & Media (CID)  
Energy (HSEO)  
Healthcare (HTDC)  
Advanced Manufacturing (HTDC)



Value-Add (ADC)  
Energy (HSEO)  
Aerospace (HTDC)



Value-Add (ADC)  
Ag-Tech (FTZ)  
Aerospace (HTDC)  
Energy (HTDC)  
Aquaculture (NELHA)





**STARTUP**



**GROWTH**



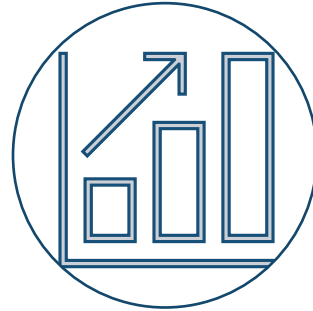
**COMMERCIAL**



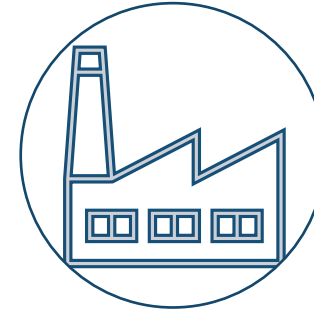
**EXPORT**



**Research &  
Develop**



**Market &  
Scale-Up**



**Expand &  
Export**





Value-Add Product  
Development Center  
(UH-KCC)

Food & Product  
Innovation Facility  
(ADC)

Value-Add Product Development  
Center (UH-LCC)

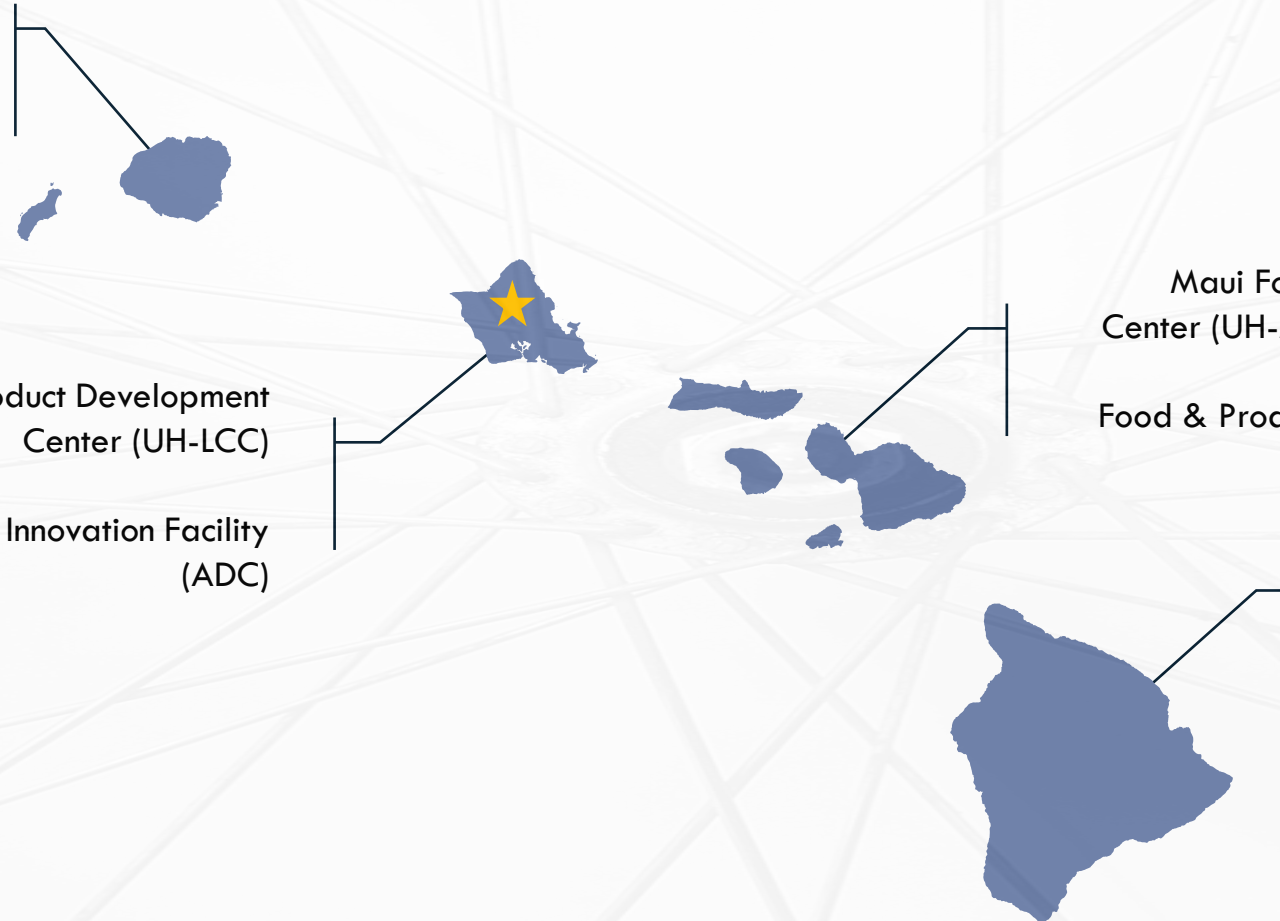
Food & Product Innovation Facility  
(ADC)

Maui Food Innovation  
Center (UH-Maui College)

Food & Product Innovation  
Facility (ADC)

Value-Add Product  
Development Center (UH-  
HCC - Palamanui)

Food & Product Innovation  
Facility (ADC)



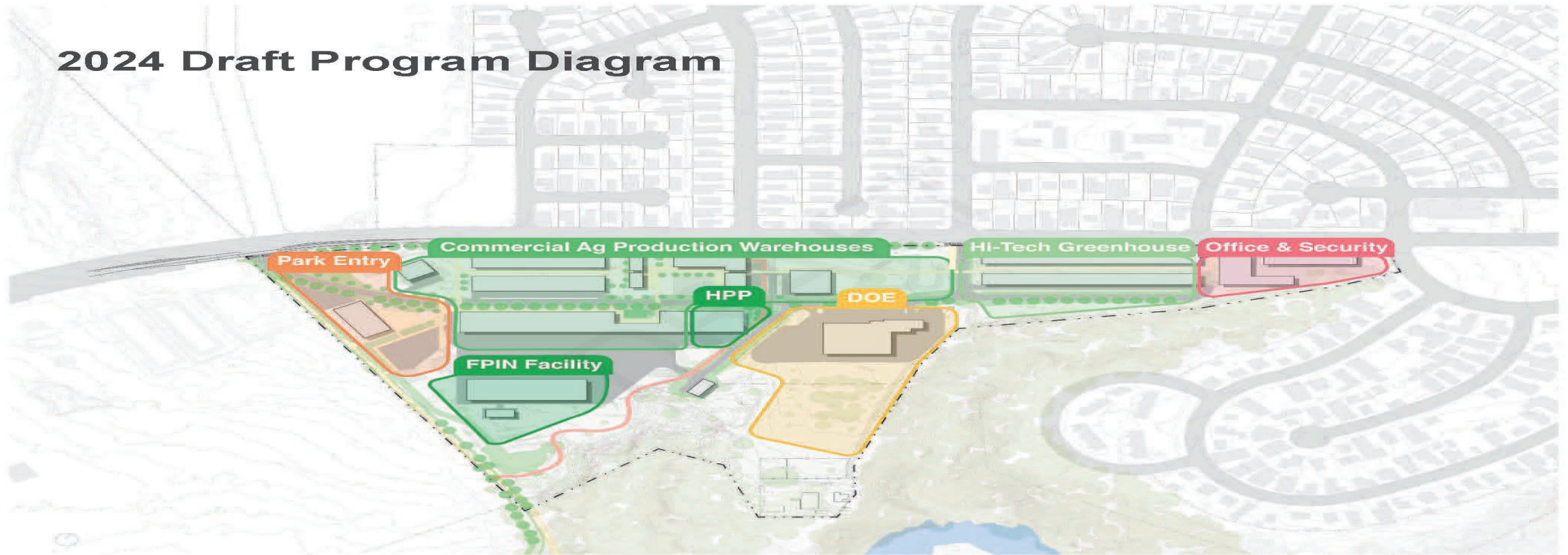


# Infrastructure and Facilities to Help Small Businesses Expand





## 2024 Draft Program Diagram





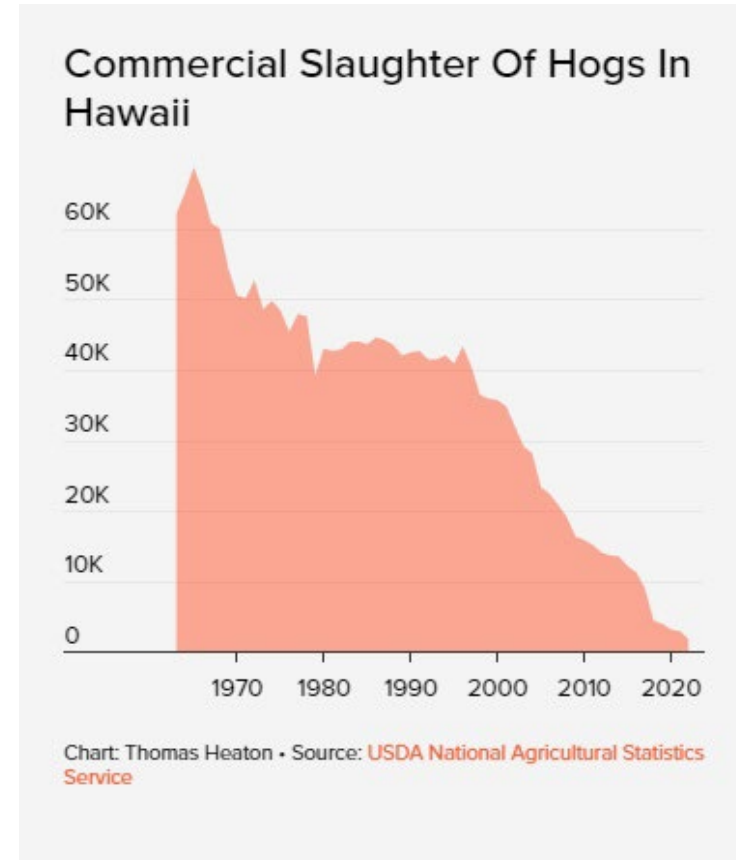
(3) 5-4-009:016

TMK: (3) 5-4-009:016  
Location: 54-364 Kamehameha Park Road  
Owner: Hawaii Conference Foundation  
Size: 40.6730 Ac  
Total Assessed Value: \$534,100  
Land Value: \$449,100

# Infrastructure and Facilities to Support Economic Growth



# Hawaii's demand for pork is on the rise but slaughterhouses cater to beef



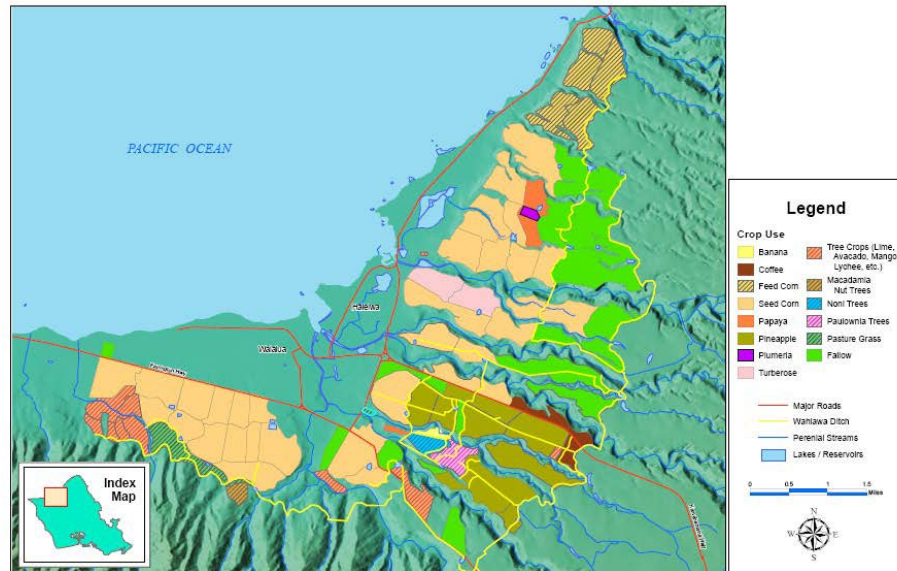


Pioneer Hi Bred

# **Infrastructure and Facilities to Support Economic Growth**

# Economic Impact of the Irrigation Systems

Figure 2. Wahiawa Irrigation System-Serviced Area: Land Use by Crops



15

- Farm Production (2007)
  - WIS enabled \$37.7 million in farm production
  - Supported 569 jobs
  - Generated \$14.4 million in household earnings
  - Direct contribution to Hawaii's GDP was nearly \$28 million
- Total Economic Impacts
  - \$85.2 million in goods and services
  - 980 jobs
  - \$28.7 million in household earnings across various industries (construction sector benefited the most, followed by agriculture, real estate, and health services)
- Regional Impacts
  - Farm operations in the WIS-serviced area also impacted Hawaii, Kauai, and Maui counties, supporting jobs and economic activities beyond Honolulu County

Parcel 10  
TMK: 9-1-013:097  
Owner: Hunt Communities Hawaii  
Size: 3.81 acres  
Total Assessed Value: \$7,145,800  
Land Value: \$6,238,600

TMK 9-1-013:048  
Department of Hawaiian Home Lands  
9.72 acres  
Total Assessed Value: \$14,928,100

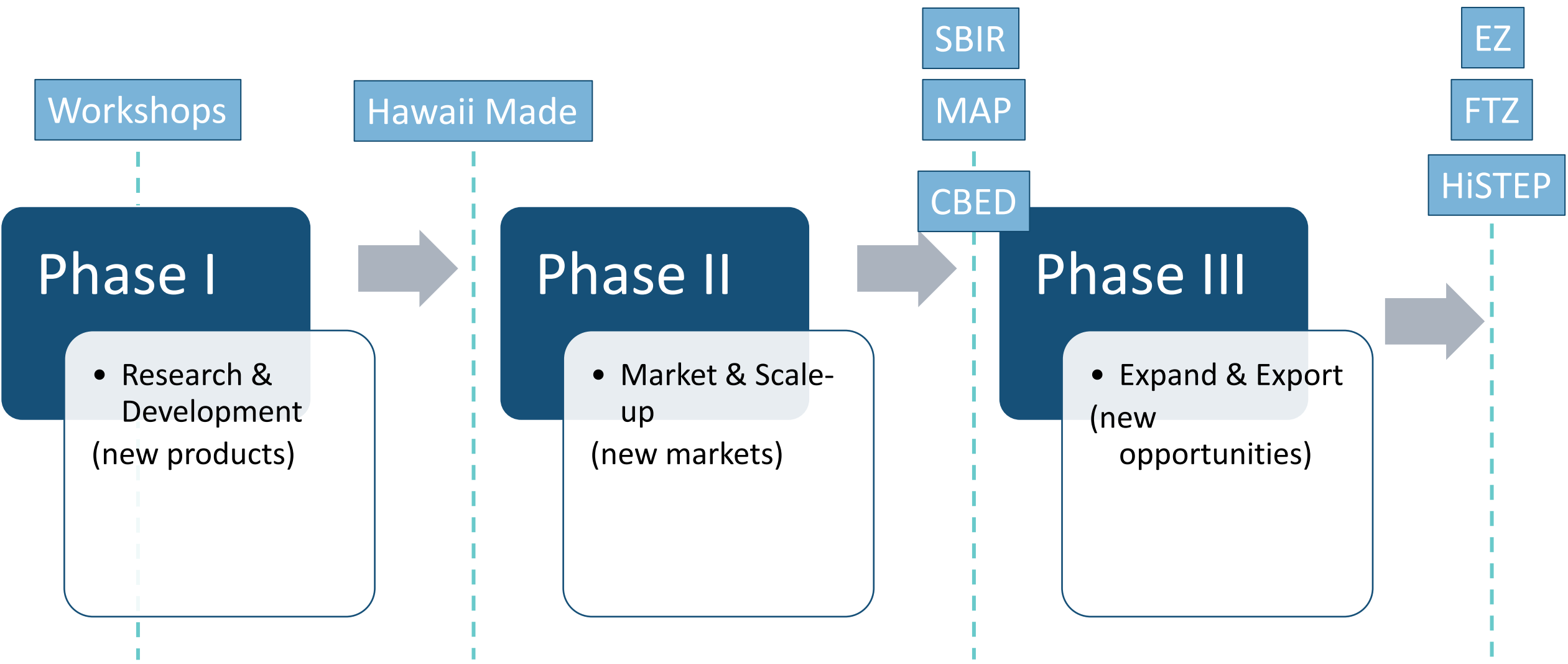
9-1-013:097

9-1-013:110

TMK: 9-1-013:110  
Total Assessed Value: \$33,493,100

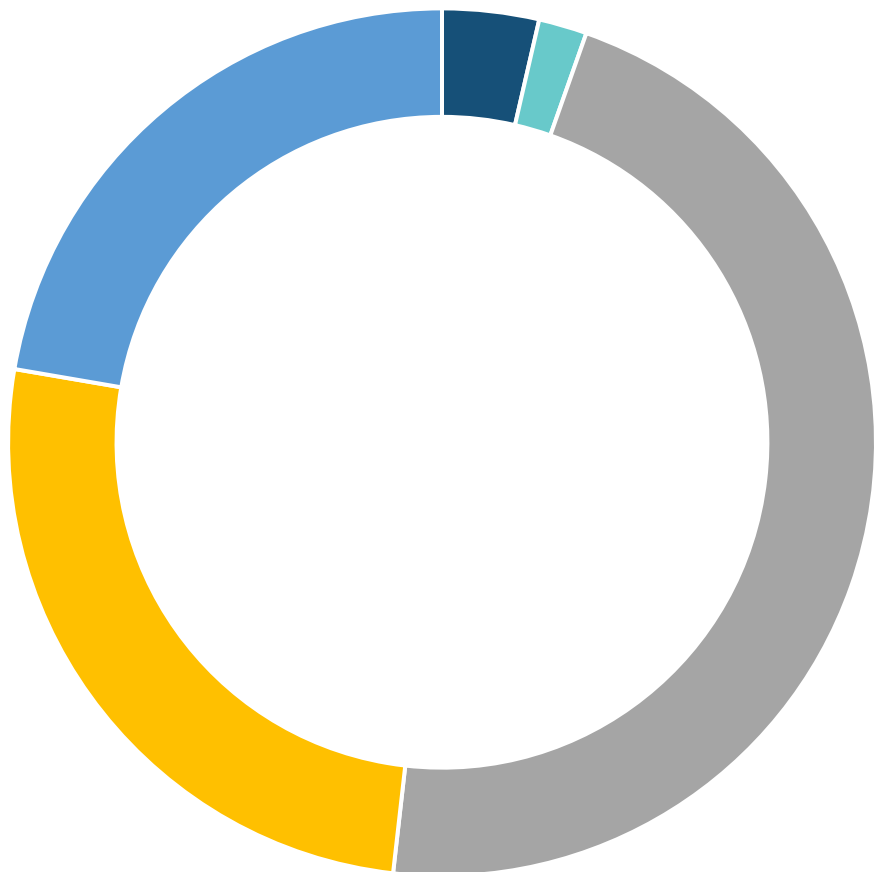
# Infrastructure and Facilities to Support Economic Growth

# Eco-System



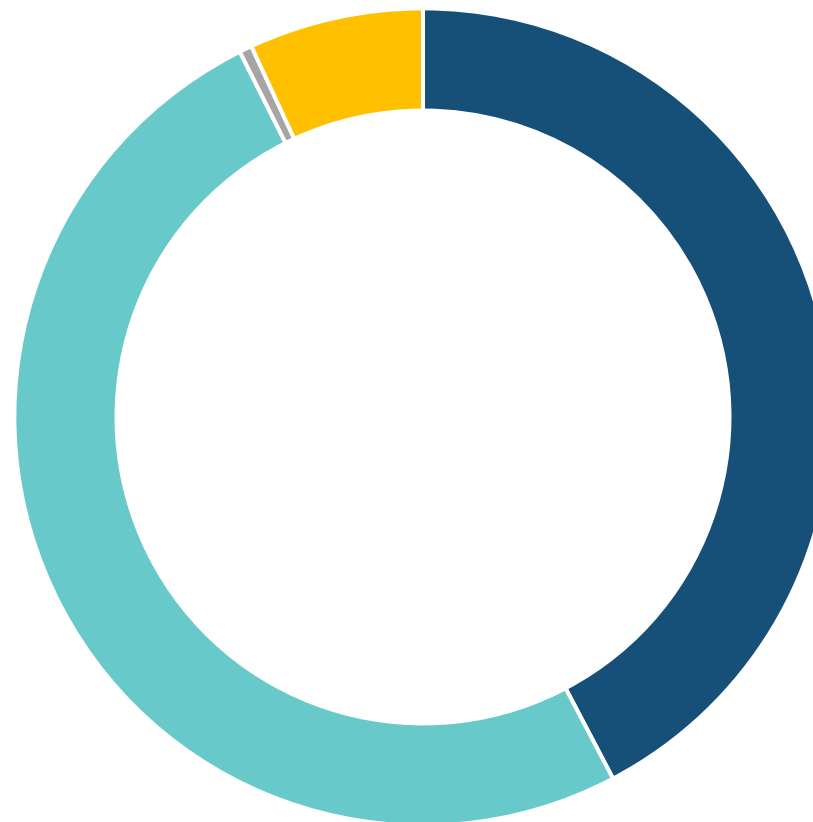


MAP Funding by Industry  
(FY23)

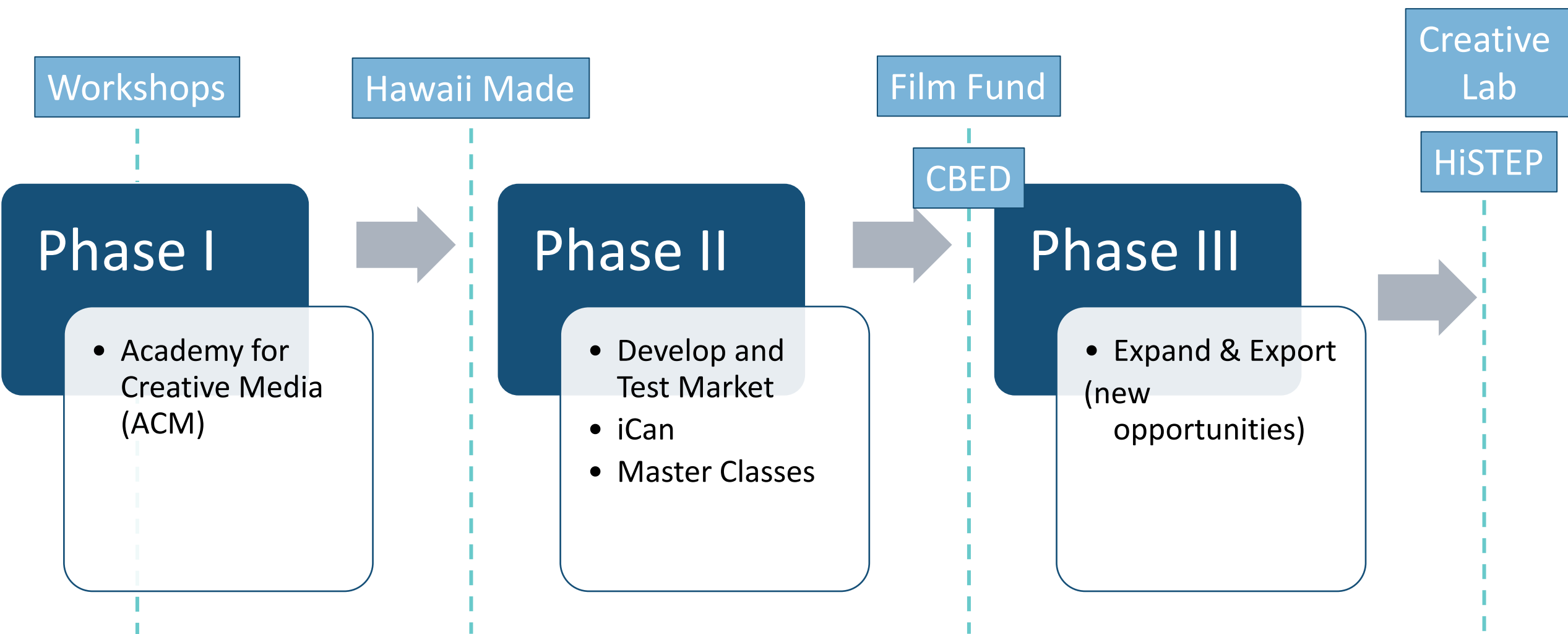


■ Machinery ■ Plastics and Rubber ■ Beverage ■ Food ■ Miscellaneous

HSBIR Economic Impact  
(FY23)



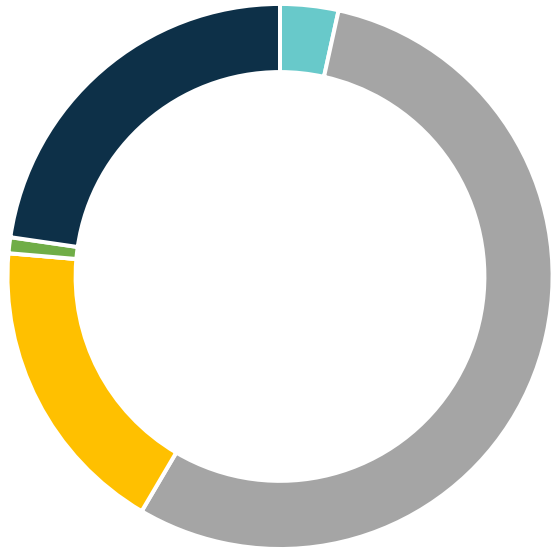
■ High-Paying Jobs ■ New Employees  
■ State Matching Funds ■ Federal Awards



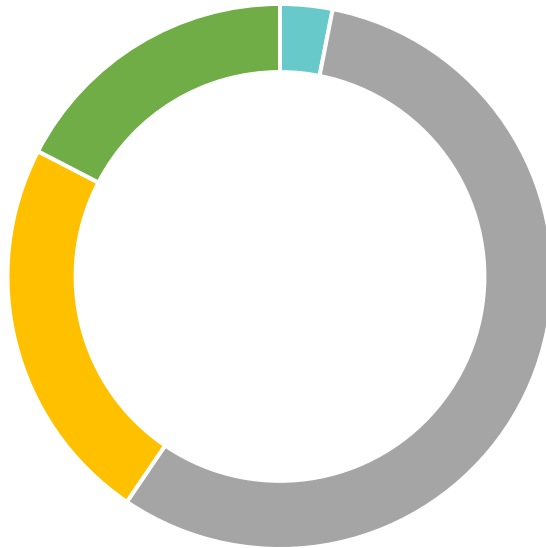
# Energy Stabilization

# Integrated Grid Plan by 2045

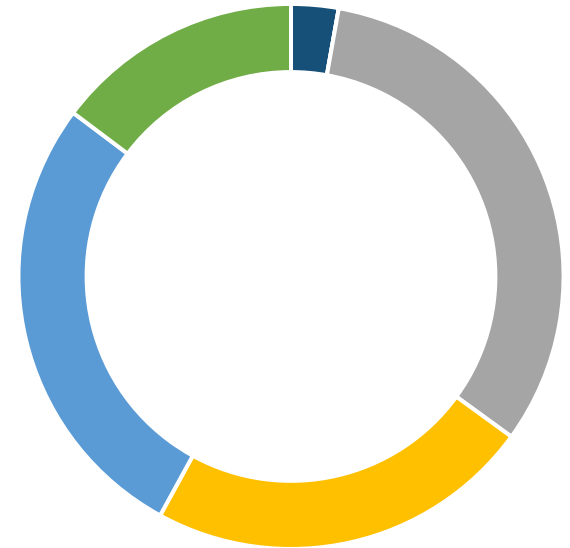
O'AHU



MAUI



HAWAI'I



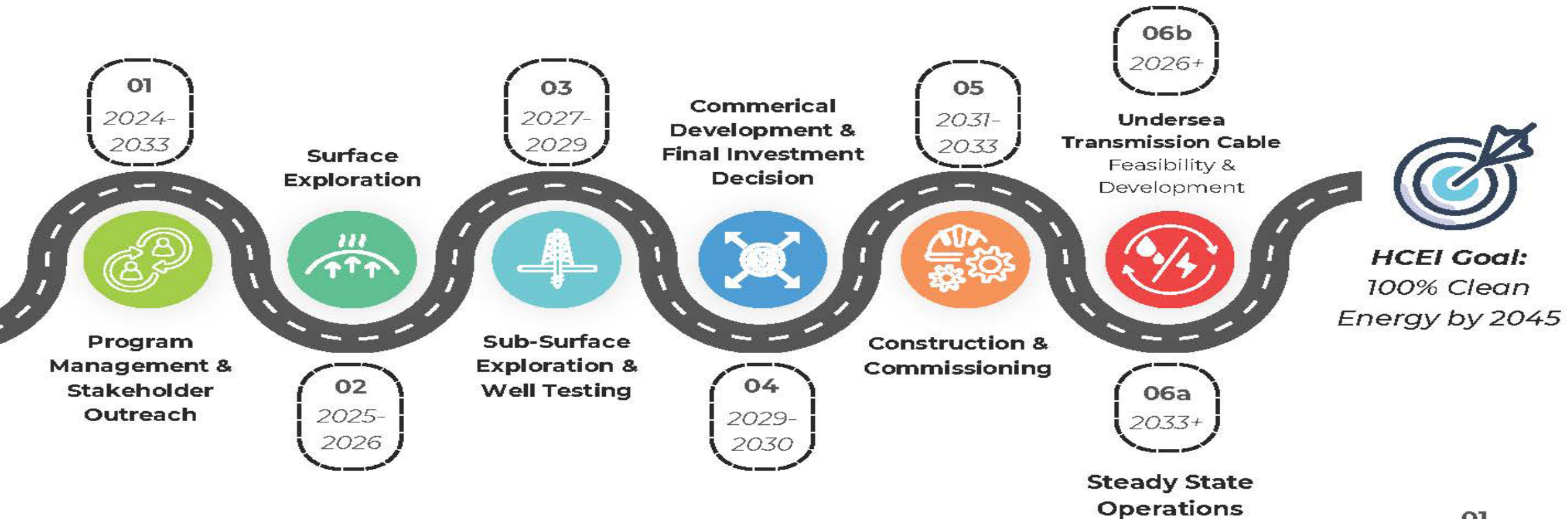
- Hydro
- Biofuels
- Solar
- Customer DER
- Geothermal
- Wind - Onshore
- Wind - Offshore
- Non-Renewables

- Hydro
- Biofuels
- Solar
- Customer DER
- Geothermal
- Wind - Onshore
- Wind - Offshore
- Non-Renewables

- Hydro
- Biofuels
- Solar
- Customer DER
- Geothermal
- Wind - Onshore
- Wind - Offshore
- Non-Renewables

# Integrated Geothermal Development Roadmap

(Proof of Concept / Scale Geothermal of a Utility Scale 50-100MW Power Station)



\*Please note all figures are estimates to be confirmed

# Hawaii Inter-Island Power Supply Development

(On-Going Development Activities for 1000MW+ Geothermal Energy Production )

## Surface Exploration

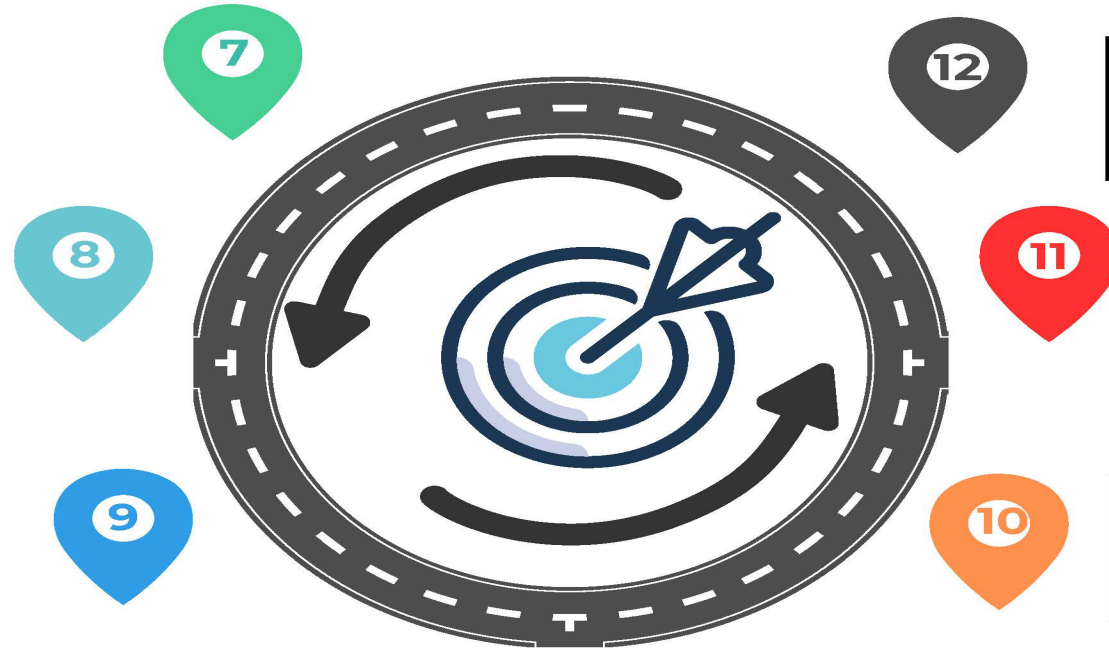
- Continued Activity from Phase 1
- Start as early as 2029
- Run Concurrently with Commercial Development for Stand Alone Power Station

## Sub-Surface Exploration & Well Testing

- Continued Activity from Phase 1
- If Large Scale Geothermal Potential Confirmed Undersea Transmission Cable investigation to begin in 2030
- Undersea Cable = 10 year planning, entitlements & construction period

## Commercial Development & Final Investment Decision

- Utility Scale 50-100MW Power Station
- Continued Activity from Phase 1



## Undersea Transmission Cable Grid

- New Activity in Phase 2
- Statewide Feasibility Study

## Steady State Operations

- Proof of Concept - Scale Geothermal
- Continued Activity from Phase 1

## Construction & Commissioning

- Continued Activity from Phase 1

*On Going Program Management & Stakeholder Outreach*

**2029**

**2033**

**2045++**

• *Undersea Electricity Transmission Cable Option*

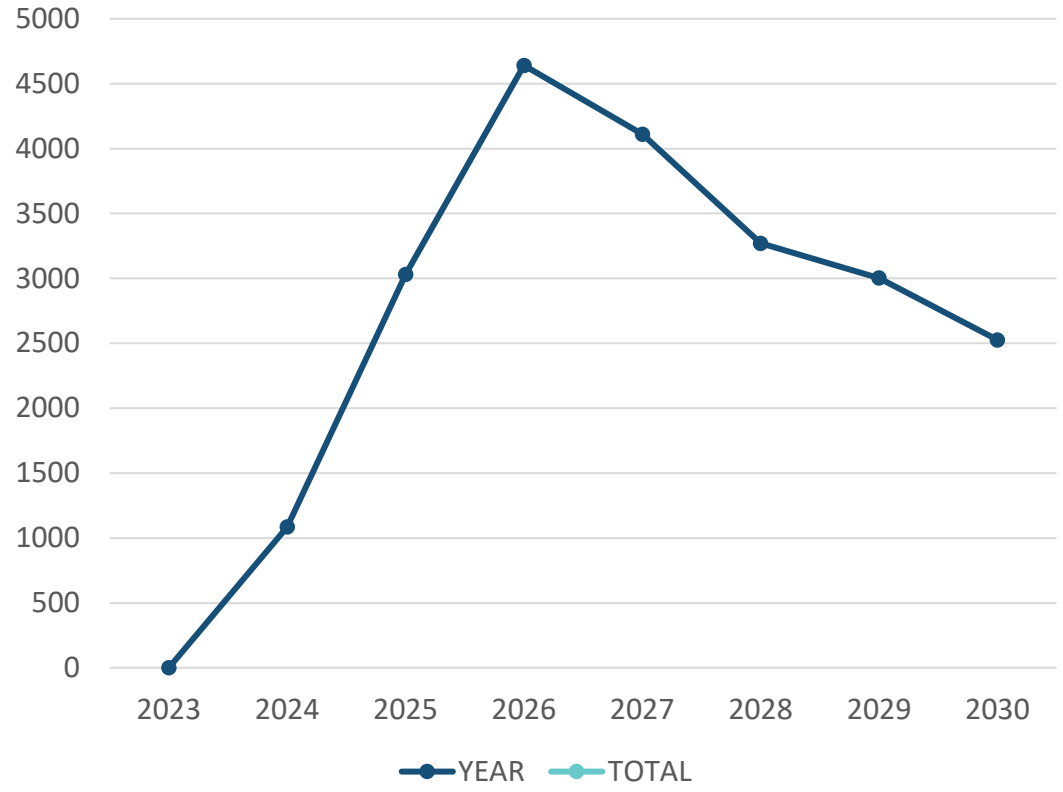
• *Hydrogen Option for Transportation & Energy*

• *Cascading Technologies Feasibility & Development*

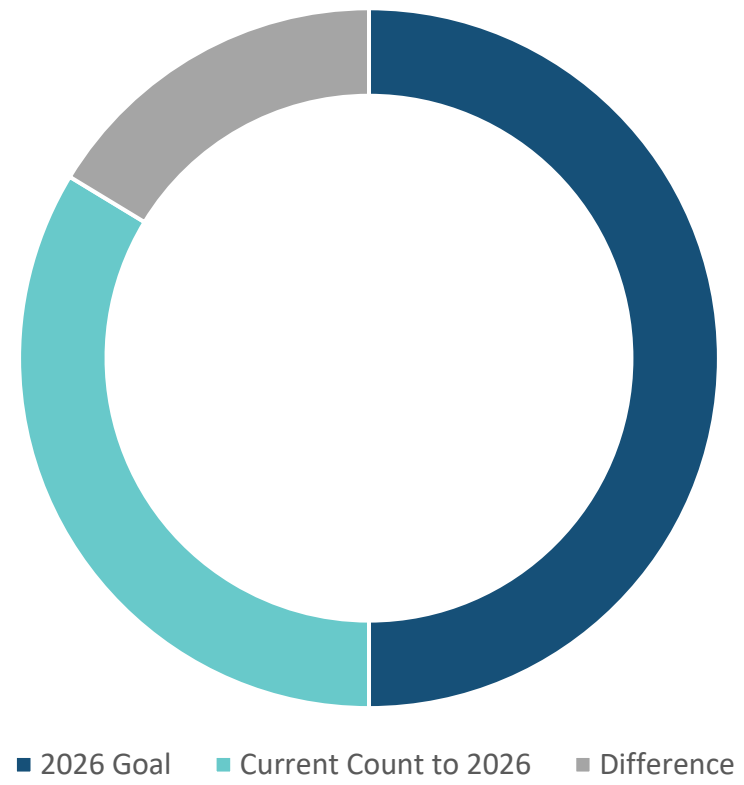
**02**

# Housing

### Housing Units Per Year



### Path to 13,000



48 Sources: Office of Planning and Sustainable Development, Land Use Commission, Hawaii Housing Finance Development Corporation, Hawaii Community Development Authority



**MAHALO**