

The First Fully Fiber-Enabled State

2025 WTA Fall Educational Forum

altafiber

Hawaiian Telcom 

Aloha

Themes with BEAD

- Geography and cultural overview
- Fully fiber enabled
- Strategies and success factors
- Technology to manage growth and construction
- Finding and retaining talent

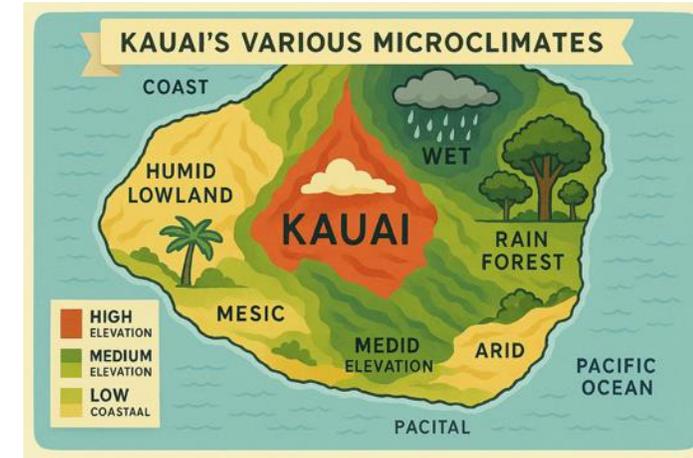


Kauai BEAD FTTP locations

NTIA Project	Locations	Subsidy	Matching	Cost/location
Hawaiian Telcom (FTTP)	5,800	\$29.9M	\$10.0M*	\$6880
Kuiper (LEO)	1,285	\$0.8M	\$0.3M	\$800
State of Hawaii (Middle Mile)	N/A	\$64.2M	\$21.4M	N/A

Hawaii Geography

- 2,500+ miles from any continent
- 6,400mi² land
 - 4,000mi² Hawaii island
 - 550mi² Kauai
 - 1.4 million residents and 640k households
 - 1.0m Oahu with 370k households
 - 74k Kauai with 38k households
- Experience 10 of 14 climate zones
 - 7 Kauai
- Recent natural disasters
 - Wildfire
 - Tsunami
 - Hurricane
 - Volcanic eruption
 - Landslide
 - Flooding



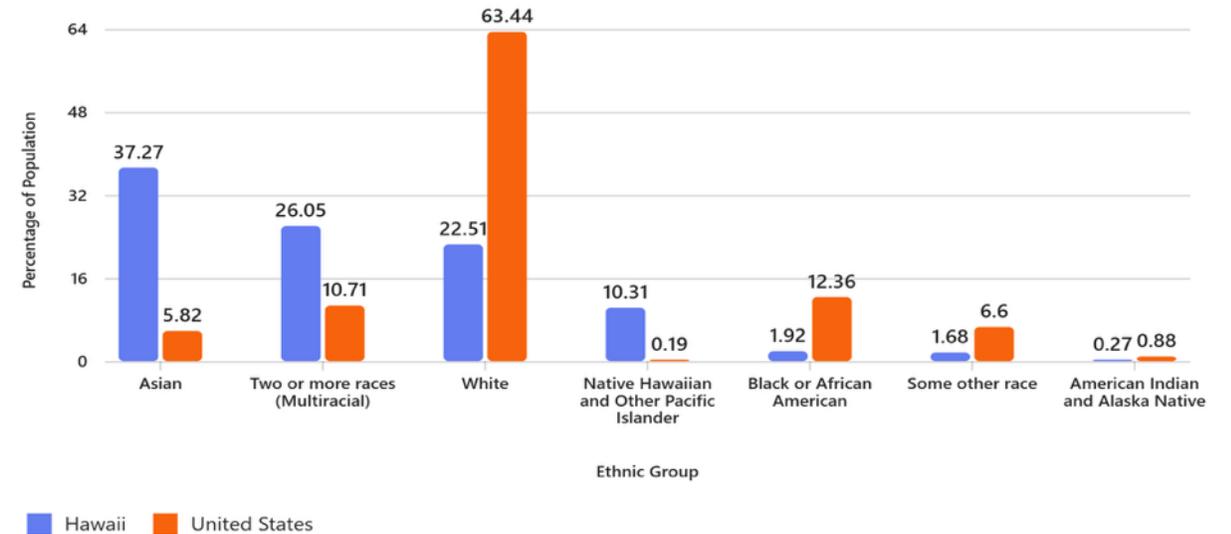
Lahaina Maui central office in 2019



Lahaina Maui central office 2 days after fire

Cultural Overview

- Native Hawaiian vs born in Hawaii
- Hawaii history and modern importance
- Subculture on each island



The Price and Patience of Paradise

Location	Housing sq ft	Milk 1 gal	Electricity kwh	Fiber internet 600/600	Cable splicer Per hour
Kauai	\$778	\$8	42¢	\$40	\$36
Hawaii (State)	\$696	\$7	43¢	\$40	\$36
Montana	\$285	\$4	15¢	\$75	\$33
Wyoming	\$198	\$3	15¢	\$80	\$26

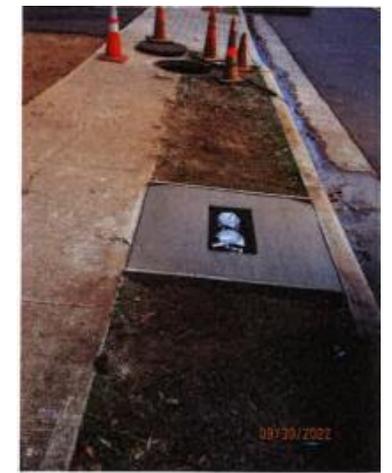
- Cost of living
 - Housing 4x mainland rural areas
 - Food 2x mainland prices
 - Electricity 3x mainland rates
- Goods
 - 90% are imported and come via boat
 - 95% between islands moved by boat
 - Shipping surcharges with some retailers or in some cases, shipping not available at all

The Cost to Build in Hawaii

- Shipping to Hawaii
 - 1-2 weeks from west coast ports
 - Vehicles, poles, and reels don't fit on planes
 - Air is next day at best
 - No ferries
- Between islands
 - 1 week for any materials and vehicles
 - Counter-to-counter air only works for plug-ins
- Terrain
 - Lava rock, coral, bays, and mountains
- Limited talent pool
 - 2.7% unemployment (4th lowest)
 - 1,500 telecom jobs statewide



Inter-island 40' container: \$1,700
Mainland-Hawaii 40' container: \$12,000



FDH pad: \$9,000



Air travel to Molokai: \$114 O/W



Dig a hole in rock: \$3,000

Fully Fiber Enabled



- FTTP availability to SFU, businesses, and government locations by December 2026
- \$1.7B investment
 - 90% private funding
 - 10% federal grants (CAF, RDOF, NTIA middle mile)
- Public-private partnerships
 - \$25M: Hawaii Dept. of Transportation
 - \$6M in-kind: Hawaii Public Housing 5,500 locations
 - Covering 95% of Hawaiian Home Lands (tribal area)

Strategies and Success Factors

- ✓ The business case for all-in
- ✓ Dedicated resources in planning, engineering, and construction with appropriate support
- ✓ Lock-in dedicated contract partners and bigger is not necessarily better
- ✓ Performance objectives and incentives at all levels
- ✓ Local community engagement before, during, and after
- ✓ Constant evolution from mistakes



Kauai Council Chair, Mayor, HT President, Kauai State Rep



Commercial featuring Kauai family and their small business store



Kauai cabinet mural design

Technology

- COTS
- Needs vs wants
- Acquisition
 - Ramp up plan
 - Sales and installation
 - Ramp down plan
- Managing projects
 - Construction management incl. planning and engineering
 - GIS
 - Real-time data to marketing, sales, finance
- Architecture and design principles
 - Fiber is cheap, labor is not
 - Commoditize materials
 - Synergies with other strategic initiatives
 - Centralized vs distributed
 - Simplified network, IT and business processes



Talent

- Recruiting
 - The why
 - Word of mouth and branding
 - Incentives
 - Contractors
- Retaining
 - Employee engagement
 - Milestones
 - Turnover is a positive
- Succession Planning
 - When the build is done



Q & A