

PANEL DISCUSSION

What have we accomplished? What we have learned? What are next strategic actions?



Shari Tavaf
Monterey Bay DART



Tahra Goraya
Monterey Bay
Economic Partnership



Michael Matkin
UCSC Initiative for
Drone Education
and Research



Chris Bley
Airspace
Integration



Brad Barbeau
CSU Monterey Bay



Tahra Goraya, President & CEO Monterey Bay Economic Partnership

Triple Bottom Line: Equity ~ Environment ~ Inclusive Economics



**“If you want to go fast, go alone.
If you want to go far, go together.”**

West African Proverb

**REGIONAL
LEADERSHIP**

**3E'S:
EQUITY
ECONOMIC VITALITY
ENVIRONMENT**

**CATALYST
FOR CHANGE**

**DATA
DRIVEN**



**ACTION
ORIENTED**

Monterey Bay
ECONOMIC PARTNERSHIP

**REGIONAL
SOLUTIONS**

AGILITY

INNOVATION

VISION

A thriving region for all residents.

MISSION

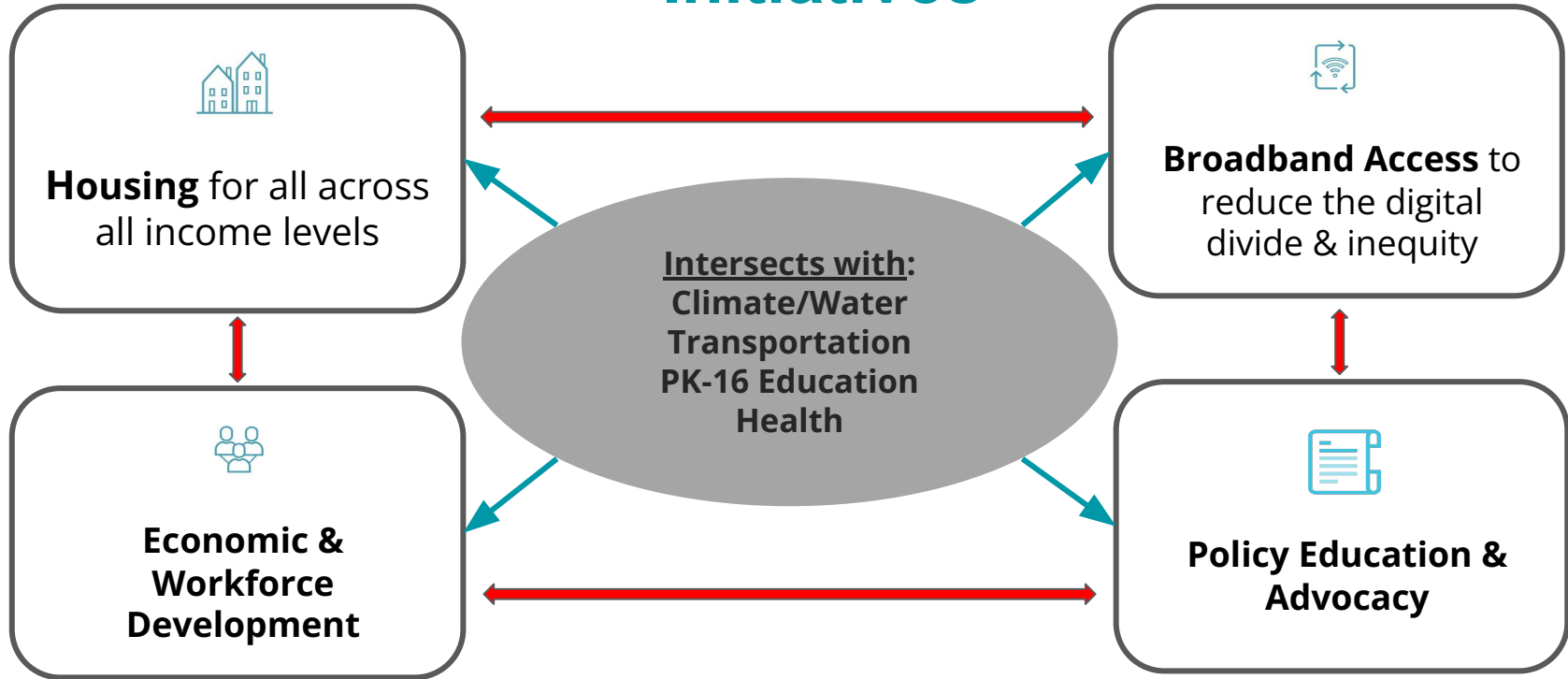
To improve the economic health and quality of life in the region.

MONTEREY ~ SAN BENITO ~ SANTA CRUZ COUNTIES





Initiatives



Triple Bottom Line: Equity ~ Environment ~ Inclusive Economics



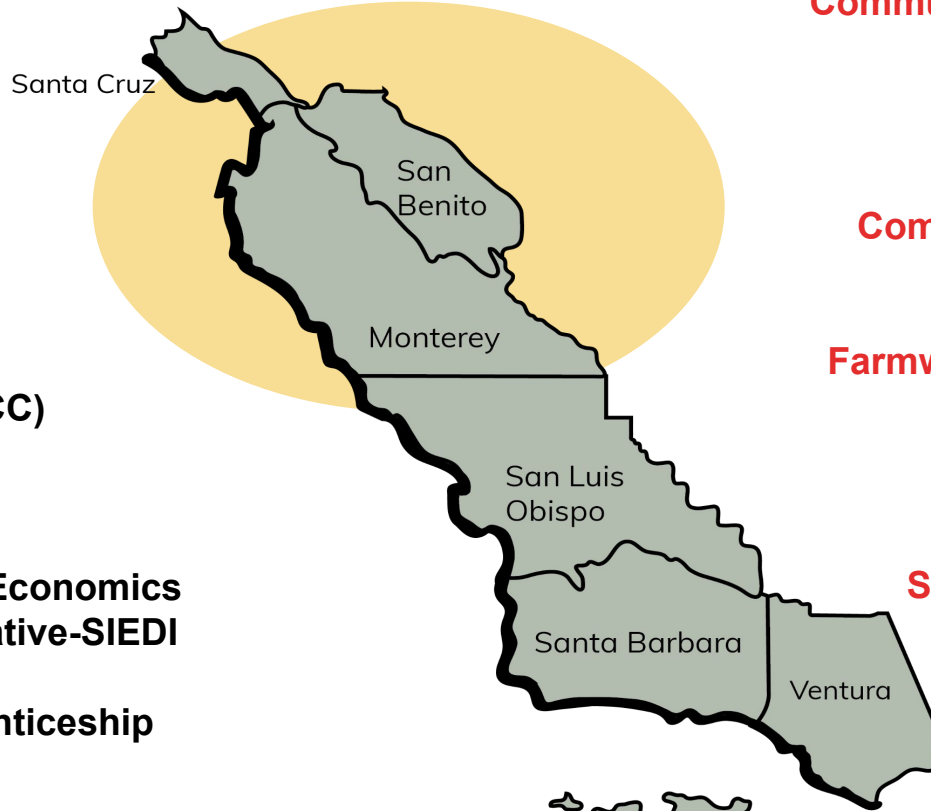
An underwater scene featuring a large school of small, silvery fish swimming in clear blue water. In the foreground, there are large, yellowish-brown seaweed fronds. The background shows more seaweed and the sun filtering through the water, creating a bright, shimmering effect.

Annual State of the Region Conference

Annual Economic Summit

Regional Convenings
(Hosting Member Mixers, Workshops)

Economic & Workforce Development



Regional Climate Collaboratives (RCC)

Rise Together

Salinas Inclusive Economics Development Initiative-SIEDI

DART-Joby Apprenticeship

Community Economic Resilience Fund (CERF)

Regions Rise Together (RRT)

Community Economic Mobilization Initiative (CEMI)

Farmworker Housing Study & Action Plan

Central Broadband Consortia

South Salinas Valley Broadband Authority

Triple Bottom Line: Equity ~ Environment ~ Inclusive Economics



UPLIFT Central Coast Coalition - SIX counties



Co-Convener

To increase the well-being and quality of life of all residents in the tri-county region of Monterey Bay: Santa Cruz, San Benito and Monterey Counties



Fiscal Agent
Co-Convener

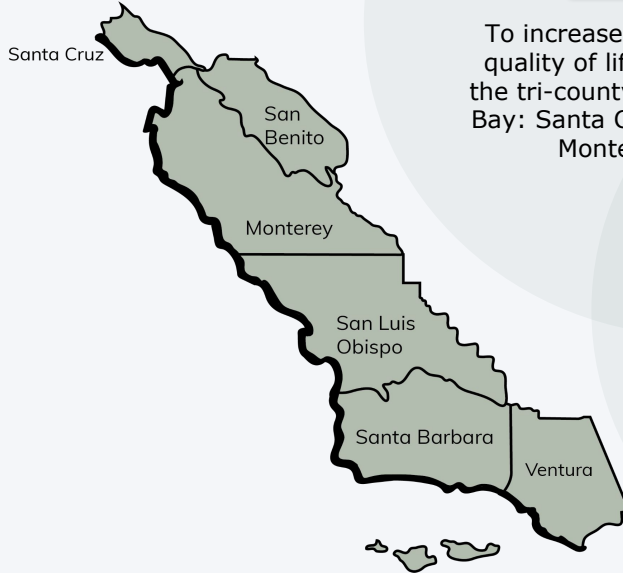
Providing a pathway to business growth, community leadership and economic prosperity for the greater Ventura and Santa Barbara County region.

REACH

Ideas + Action for a Thriving Central Coast

Regional Convener
Co-Convener

To increase economic prosperity for San Luis Obispo and Santa Barbara Counties through big thinking, bold action and regional collaboration.



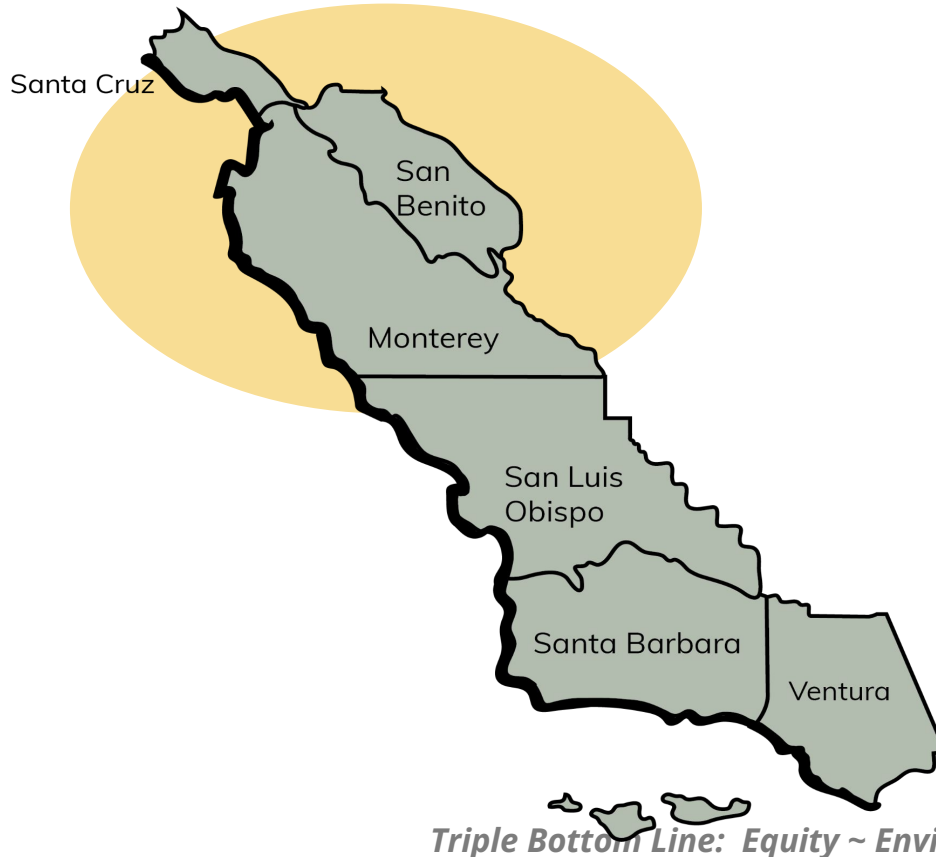


ALIGNMENTS & OPPORTUNITIES

Triple Bottom Line: Equity ~ Environment ~ Inclusive Economics



Opportunities: Economic & Workforce Development



Join as a Member of MBEP

**Community Economic Resilience Fund
(CERF)**

Regions Rise Together (RRT)

**Community Economic Mobilization
Initiative (CEMI)**

Farmworker Housing Study & Action Plan

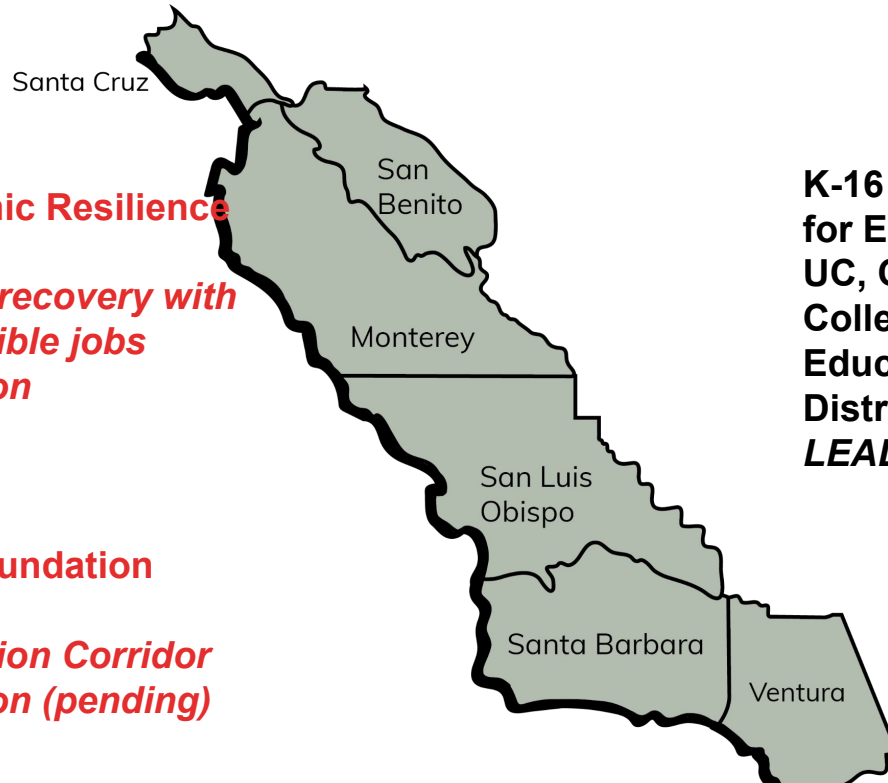
Central Broadband Consortia

South Salinas Valley Broadband Authority

Triple Bottom Line: Equity ~ Environment ~ Inclusive Economics



Monterey, Santa Cruz, San Benito, San Luis Obispo, Santa Barbara, & Ventura Counties



Community Economic Resilience Fund (CERF)
Inclusive economic recovery with high quality, accessible jobs
LEAD: Uplift Coalition

National Science Foundation Economic Engines
Aeronautics & Aviation Corridor
LEAD: Uplift Coalition (pending)

K-16 Regional Collaborative for Educational Pathways
UC, CSU, Community Colleges, County Offices of Education, Local School Districts
LEAD: UCSC & WestEd

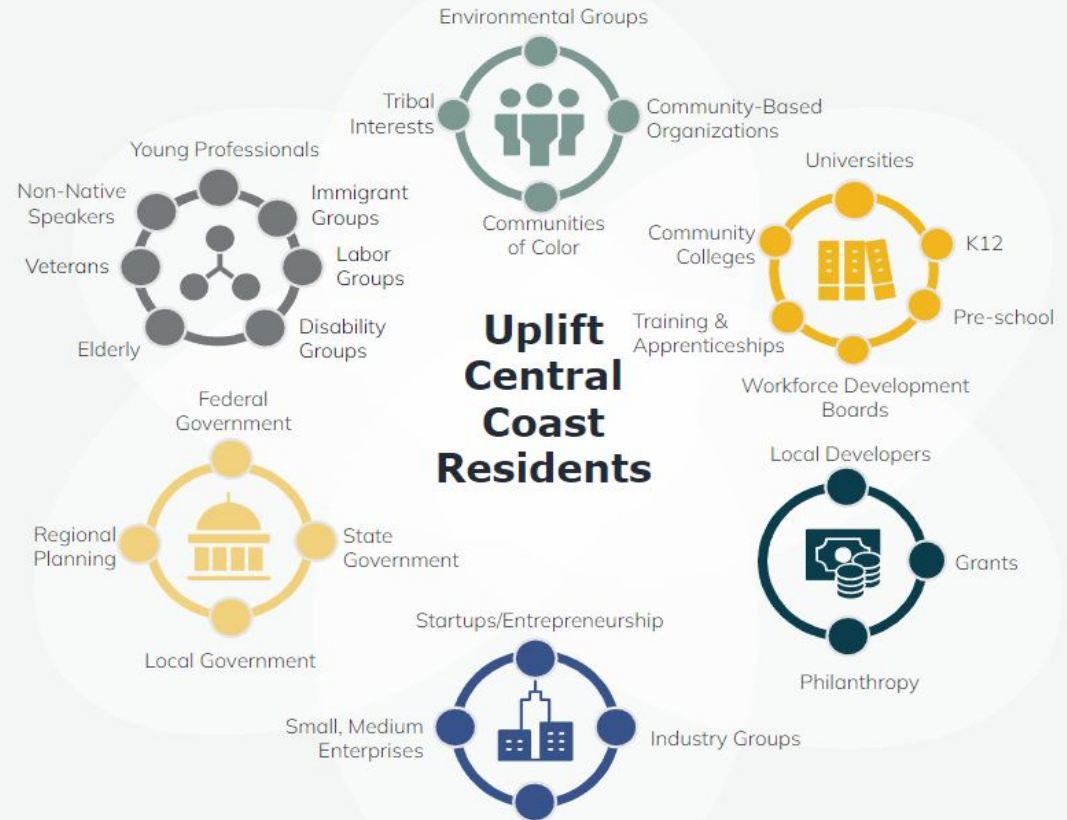
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COMMUNITY ECONOMIC RESILIENCE FUND - Phase 1

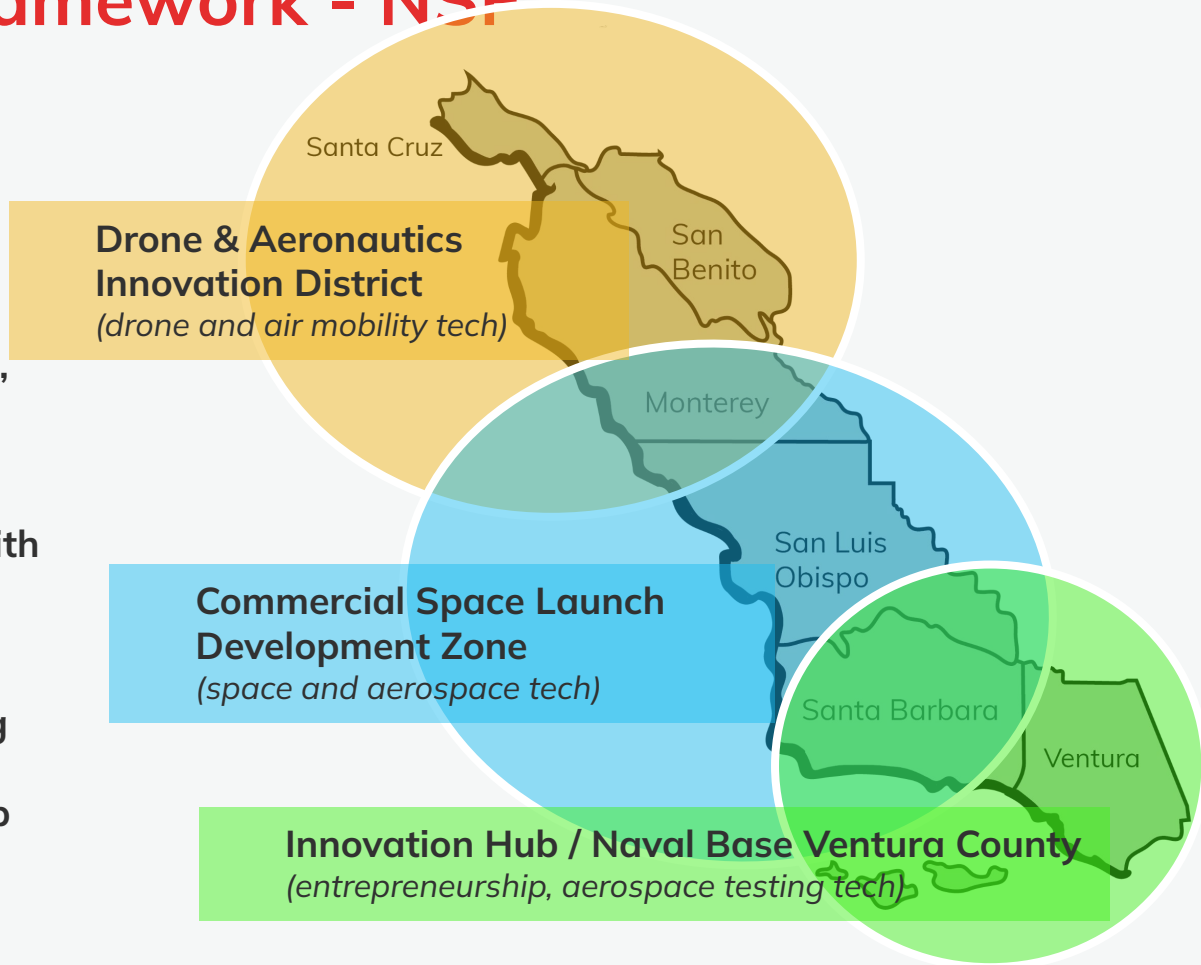
Uplift/High Road Transition Collaborative (HRTC) Constituencies:

- Labor Organizations
- Employers, businesses, and business associations
- Grassroots and CBOs, community organizers and members
- Government agencies
- Economic development agencies
- Philanthropic organizations
- Education and training providers
- Workforce entities
- Environmental justice organizations
- Worker centers
- Disinvested communities
- Native American Tribes
- Other regional stakeholders



Innovation Hub Framework - NSF

- Build on 3 innovation hubs and related sub-regional initiatives
- Each innovation hub to have tech focus area
- Organize workforce training, R&D, and other activities around each hub
- Hubs to be linked together and with other regional assets to build cohesive 6-county ecosystem
- Type-1 grant to enable organizing and feasibility planning to get to 'shovel-ready' stage for scaling up these hubs and surrounding ecosystem



California Central Coast Space and Aeronautics Innovation Corridor

In the next decade, the **six-county California Central Coast region** will be home to a **thriving West Coast space and aeronautics innovation corridor**.

This **ecosystem**, centered around key innovation hubs and assets, will sustain economic growth, accelerate transformational **innovation in future space and mobility capabilities** for the military, commerce and science, and successfully uplift Central Coast residents **by centering and addressing diversity, equity and inclusion and accessibility**. To achieve this vision, the Uplift Central Coast Coalition will harness resources, catalyze, and accelerate the **region's multidimensional technology strengths, stimulate workforce development that increases underserved populations in the talent pool, engage educational institutions, and bridge centers of industry**.

Power of Regional Collaboratives & Partnerships

“Partnership is not a posture but a process—a continuous process that grows stronger each year as we devote ourselves to common tasks.”

John F. Kennedy

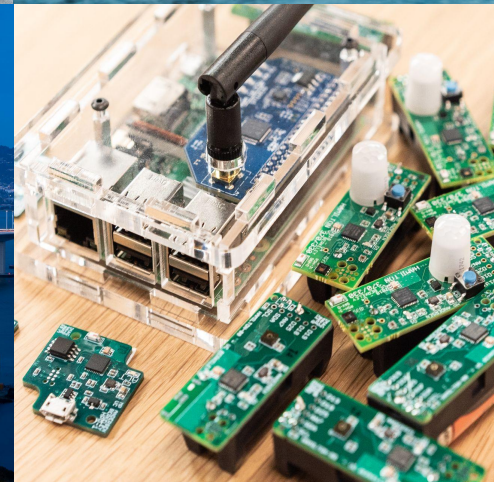
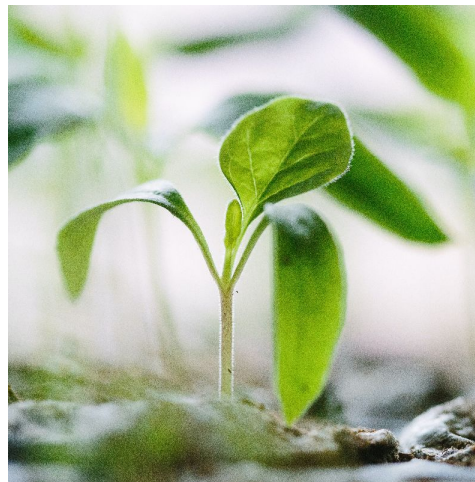




UC Santa Cruz

Campus Director, J.J. Garcia-Luna-Aceves

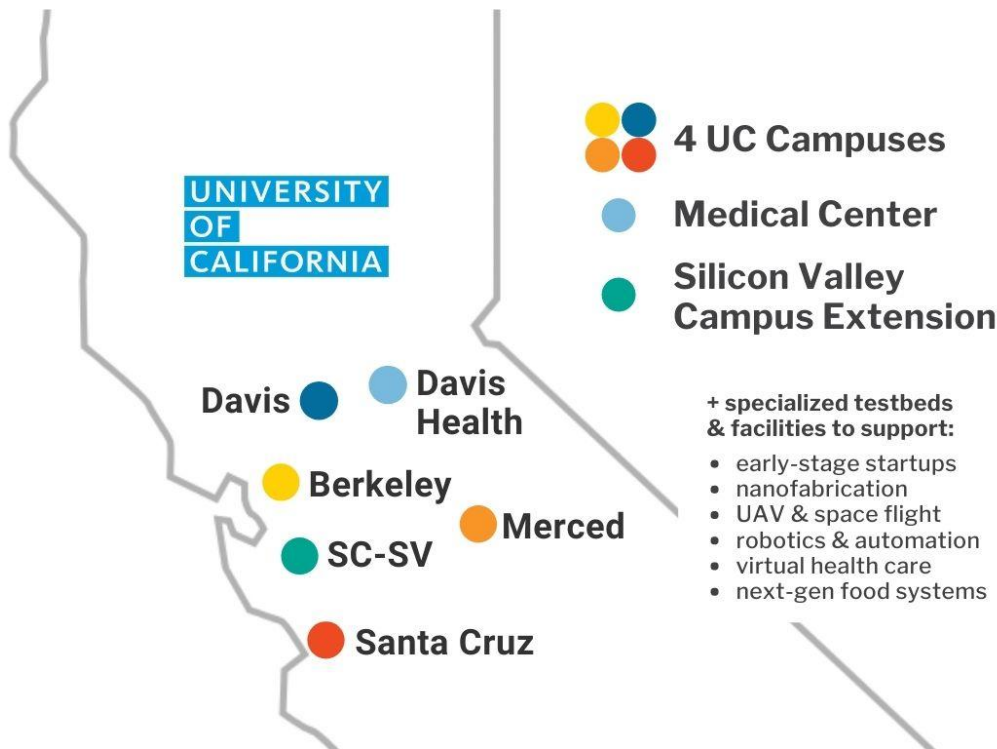
Executive Director, Michael Matkin



Structured for Innovation



A Robust Pipeline with Global Impact



Founded in 2001

Technology-driven

225

seeded projects

\$12M

awarded

Research-backed

450

investigators

15+

disciplines

Entrepreneurial

230

new ventures

12

leading-edge sectors

Pioneering

20+

products

100+

annual events

Research Areas



CITRIS Climate



CITRIS People and Robots



CITRIS Aviation



CITRIS Health



CITRIS Policy Lab



EDGE in Tech

Interdisciplinary work on:

- Smart Cities (grids, buildings, mobility)
- Infrastructure Monitoring & Sensing
- Mitigating Climate Change
- Agricultural Technology
- Data Science
- Artificial Intelligence (AI)
- Robotics
- Aviation and Drones
- Telehealth
- Robotic Surgery
- Healthy Aging
- Expanding Diversity & Gender Equity



Core Seed Funding Program

Catalyzing IT solutions from UC to benefit society



\$12M

awarded
to researchers



4x

multiplier
via follow-on funds



466

principal
investigators



390

PhD, MS, &
BA/BS students



Tech Incubator Program for student and faculty ventures.

Annual cohort open to teams from all 4 CITRIS campuses

<https://citrifoundry.org/>

- Founded in 2013
- 65 projects supported
- Both for- and non-profit ventures
- \$100 Million+ total funding raised
- 79% of projects funded

Workforce Innovation Program



CITRIS
**Workforce
Innovation**

<https://citris-uc.org/labs-programs/citris-workforce-innovation/>

- Founded in 2021
- Paid internships with partner companies and campus labs
- 80 students supported in first year
- Students receive training in leadership and project management
- State-funded for 5 years

CITRIS Partners



SIEMENS

HITACHI



KOMATSU



MITRE

VTT



AirSpace Integration – CA66's Airfield



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Ramp & Staging Area

2,200' X 50' (grass) - 70' Elevation

450 McQuaide Dr

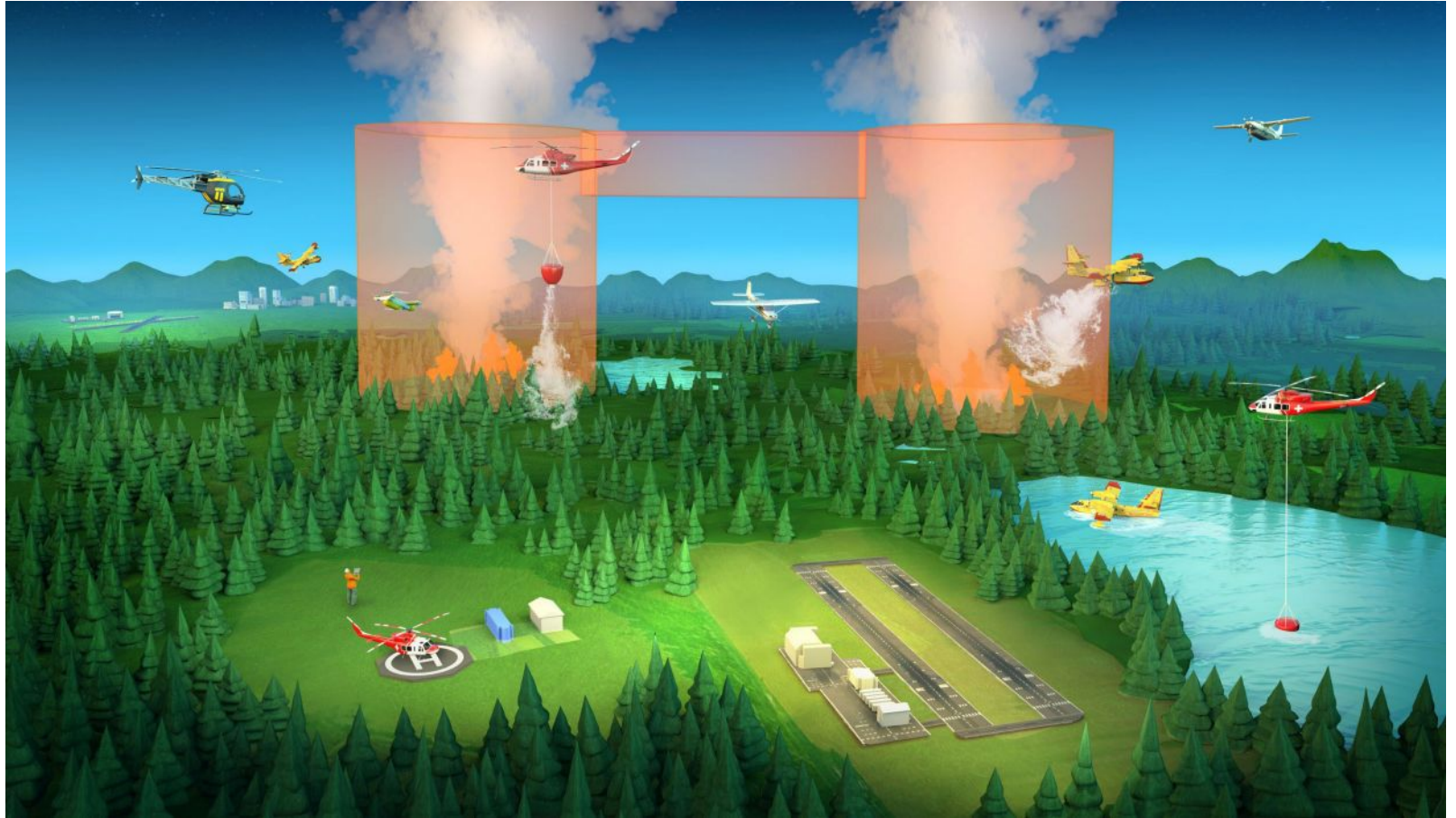
AirSpace Integration

La Selva Beach Spice

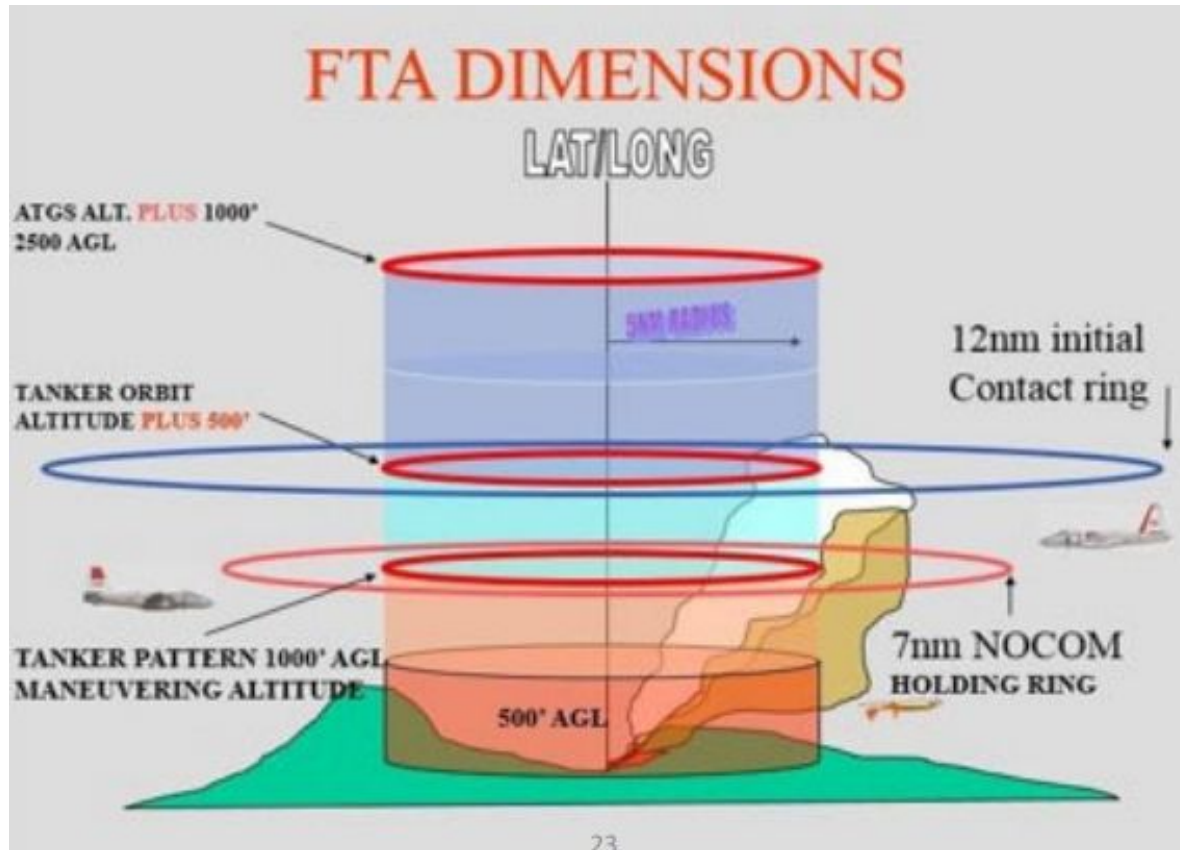
Naval Research Laboratory (NRL)
Coastal Meteorological Site

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Aerial Forest Fighting Example



Aerial Forest Traffic Area



Conceptual Overview Operating Environment

- Location
 - Hollister, CA
- Airspace
 - Class E, Class G
- Reference
 - White Circle – COSTA use case live flight area.
 - Purple Polygon – COA bounds for COSTA.



Safety! Tabletop and Live Flight Testing

Incident Response Operations:

- Aerial Supervisor

- Crewed Aerial Attack

- Uncrewed Fire Survey Vehicles

Civil Operations (non-participants):

- Crewed General Aviation

 - News Helicopters

 - Recreational

- Uncrewed General Aviation

 - Uncrewed Air Cargo

 - Long distance/endurance Survey and Inspection



**Changing Lives and The World
through Entrepreneurship**

10 Years

**1000
Companies**

**3000
Entrepreneurs**

**\$40+ million
raised**

iiED Mission

- **Support entrepreneurs & small businesses in the region**
- **Help build & support the regional innovation ecosystem**



What's Needed

Communication, Coordination, and Collaboration

Existing institutions to be outward-oriented

Anticipate but not control

Keep goals at the forefront - what do we want to accomplish?

New Year's Resolutions for 2023

Keep encouraging innovation

Provide facilitating structures

Do everything we can to make DART successful

Stay Engaged!

- Membership
- Meetups
- Drone Camp
- Collaborations
- DART 2023



MONTEREY BAY



DART

DRONE AUTOMATION & ROBOTICS TECHNOLOGIES

SYMPOSIUM | NOV 30-DEC 1

DAY 2