



Advisory Group Meeting | May 7, 2018

Today's Agenda

4:00 pm	Welcome & Overview
4:10 pm	Introductions
4:30 pm	Berkeley Startup Cluster Roadmap
5:00 pm	Achieving the Vision - Advisor Feedback & Open Forum
5:30 pm	BSC Workplan - Action Items, Discussion, Next Steps
6:00 pm	Official Meeting Adjourns <i>Time for additional networking & refreshments</i>

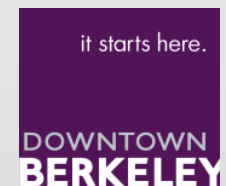
Berkeley Startup Cluster: *History, Impetus, Mission*

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BSC Phase 1: *Launch Phase 2009 - 2011*



- ❑ Spin-out of East Bay Green Corridor partnership
- ❑ Informal collaboration
- ❑ Mission
 1. Biz: Attract startups
 2. Civic: Drive economic vitality
- ❑ Steering team
 1. Do website & e-newsletter
 2. Help startups find space (LocateInBerkeley.com)
 3. Evangelize more IE office space (e.g. QB3 East Bay Innovation Center)
 4. Catalyze IE events in the city



BSC Phase 2: Accelerator Phase 2012 - 2016

☐ Mission expanded

1. Biz: Attract startups
2. Civic: Drive economic vitality
3. Univ: **Bolster research & education**

☐ Advisory Committee

1. Strengthen Berkeley people networks
2. Berkeley residents: tech vets, entrepreneurs, investors
3. Advise steering team & startups

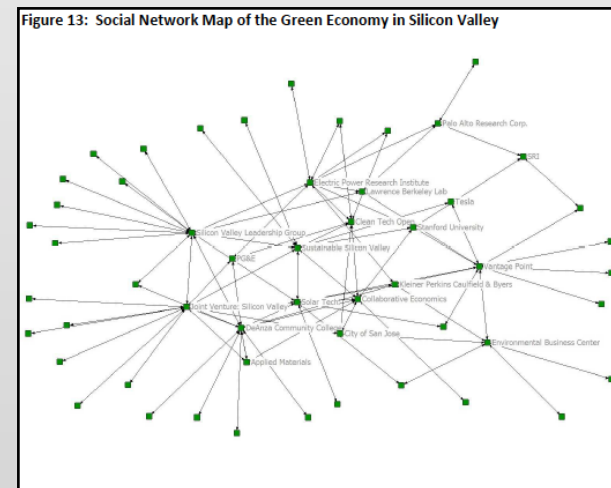
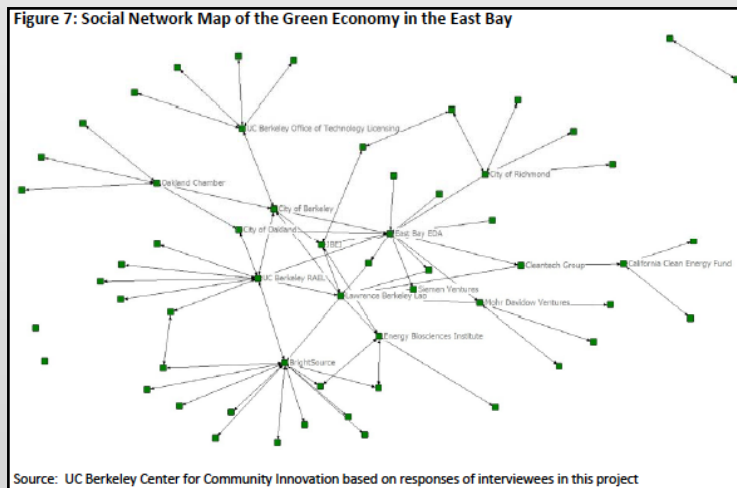
SKYDECK



cyclotronroad



People Network Map: East Bay



People Network Map: Silicon Valley

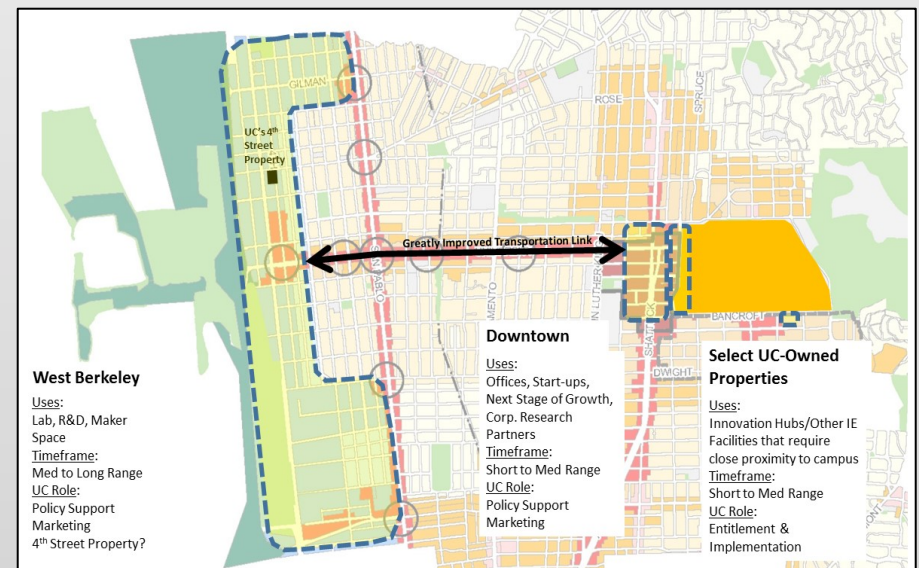
BSC Phase 3: *Vortex Phase 2017 -*

- ❑ Supercritical mass of varied human talent
- ❑ Mission expanded
 1. Biz: Attract startups & keep them as they grow
 2. Civic: Drive economic vitality
 3. Univ: Bolster research & education
- ❑ BSC 2020 work plan: **Vibrant, Accessible, Equitable**



Super Vortex University: MIT

Emerging Vortex University: UC Berkeley



Berkeley Startup Cluster: *History, Impetus, Mission*

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Introductions: Steering Committee



The Berkeley Startup Cluster is a collaborative effort of public and private entities to make Berkeley a more attractive place for new technology companies to locate and grow.

- City of Berkeley Office of Economic Development
- Downtown Berkeley Association
- Berkeley Chamber of Commerce
- UC Berkeley (IPIRA, Local Government and Community Relations, CITRIS Foundry, SkyDeck)
- Berkeley Lab - Innovation and Partnerships Office

Berkeley I&E Ecosystem Timeline

1. 1991 UCB Haas Lester Center for Entrepreneurship
2. 2004 UCB Office of Intellectual Property & Industry Research Alliances (IPIRA)
3. 2005 UCB College of Engineering Center for Entrepreneurship & Technology
4. 2006 Failed ecosystem collaboration between Berkeley Mayor & Haas Lester Cntr
5. 2007 East Bay Green Corridor (Defunct)
- 6. 2009 Berkeley Startup Cluster (BSC)**
7. 2010 QB3 Garage@Berkeley in Stanley Hall (~800 SF of wet lab space)
8. 2011 QB3 East Bay Innovation Center in west Berkeley (~8K SF lab & offices)
9. 2012 UCB SkyDeck startup accelerator (~10K SF office space)
10. 2012 UCB Bakar Fellows Program
11. 2013 CITRIS Foundry
12. 2013 January BSC Advisory Committee
13. 2013 May NextSpace shared office space (~9K SF office space)
14. 2014 LBNL Cyclotron Road
15. 2015 WeWork (45K SF office space, ~650 people)
16. 2016 The House (~7K SF shared office space) & The House Fund (~\$6M)
17. 2017 UCB-Affiliated Berkeley Catalyst Fund (~\$2M)
18. 2017 UCB AB2664 \$2M State of California grant for I&E infrastructure & cohesion
19. 2018 UCB-Affiliated SkyDeck Fund I (~\$20M)
20. TBD 2020 UCB BioEnginuity Hub

People Networks Drive Regional I&E Ecosystems

Published Research Paper in 2010:

Innovating the Green Economy in California Regions

Profs. Karen Chapple and Malo Hutson, Principal Investigators

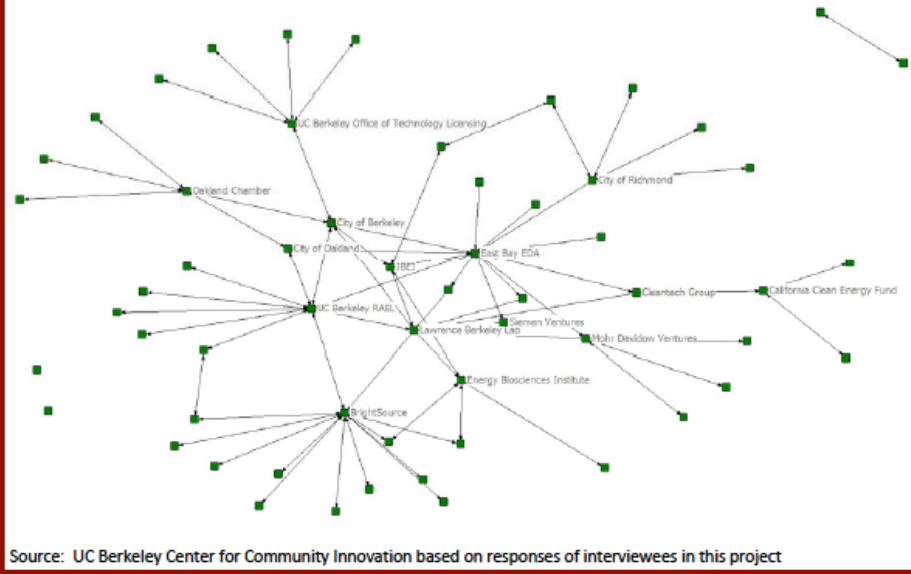
with Cynthia Kroll, Ph.D., T. William Lester, Ph.D., Larry Rosenthal, Ph.D.,
Emilio Martinez de Velasco, Ana Mileva, Sergio Montero, Anita Roth, and
Laura Wiles

University of California, Berkeley

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13863

People Networks Drive Local I&E Ecosystems

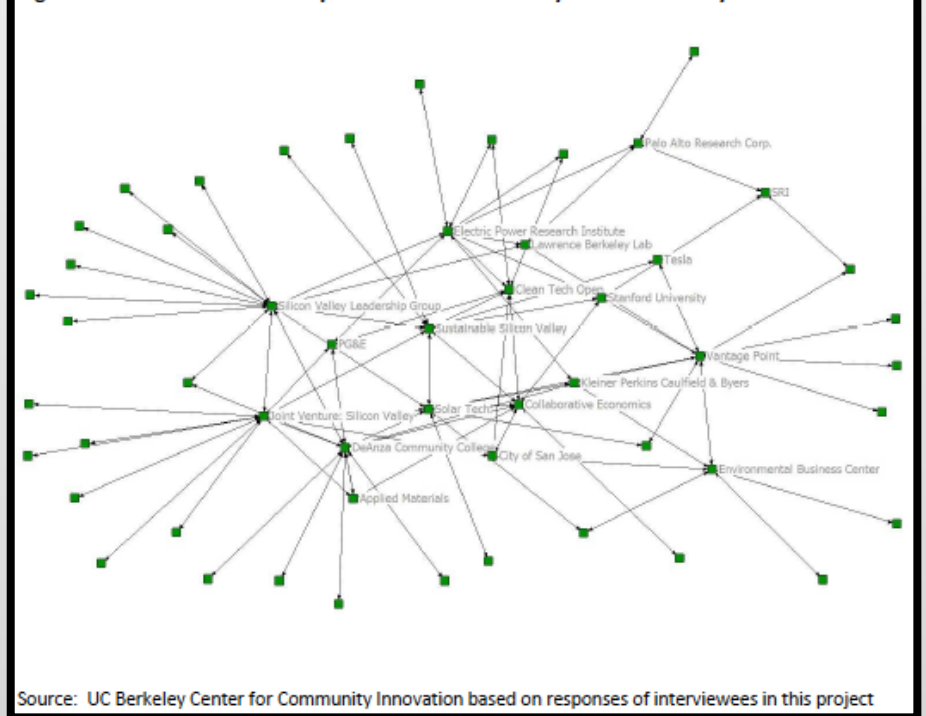
Figure 7: Social Network Map of the Green Economy in the East Bay



Source: UC Berkeley Center for Community Innovation based on responses of interviewees in this project

While the public sector is linked within itself, and the private sector and research groups are linked within themselves, there is very little connection between the two groups. These connections should be strengthened to take advantage of the great and varied resources that make the East Bay a unique place for the green economy.

Figure 13: Social Network Map of the Green Economy in Silicon Valley



Source: UC Berkeley Center for Community Innovation based on responses of interviewees in this project

Among the six regions analyzed, Silicon Valley's social network map has the greatest extent. The emerging clean tech cluster in Silicon Valley is benefiting from the rich existing networks of relationships between public entities and private companies and investors in the Valley.

Robust IE Ecosystem Bolsters Univ Research & Ed

Slide from SkyDeck Justification Presentation in 2011



Deep Integration
into UCB STEM (& LBNL)
Research, Education &
Service Programs

**Berkeley
Skydeck**

Incubator-Accelerator

UC Berkeley Benefits:

- Commercialization of campus innovations (& licensing of Intellectual Property)
- Experiential learning & internships for students
- Entrepreneurship opportunities for graduates
- Collaborations with university faculty
- Mentorship from alumni & UC Berkeley network
- Exchanges with partner university incubators
- Advantages to attract top faculty & students
- Serendipitous discussions that create corps (researchers, entrepreneurs & investors)

2013 Research of University I&E Ecosystems

- ❑ MIT, Harvard, Tufts, Northeastern, Boston University in Boston & Cambridge - especially Kendall Square
- ❑ Stanford, SRI, NASA Ames in Silicon Valley cities - especially Palo Alto, Mt View & Sunnyvale
- ❑ UC San Francisco, Gladstone Institute in San Francisco's Mission Bay neighborhood
- ❑ UC San Diego, Scripps Institute in San Diego county
- ❑ Columbia, New York University, (new) Cornell Tech in New York City
- ❑ UC Berkeley, Lawrence Berkeley National Lab in SF East Bay - especially Berkeley & Emeryville
- ❑ LA (UCLA, USC, Caltech), Austin (UT), Boulder (UC), Pittsburg (CMU) China (Tsinghua), UK (Cambridge, Oxford, Imperial)

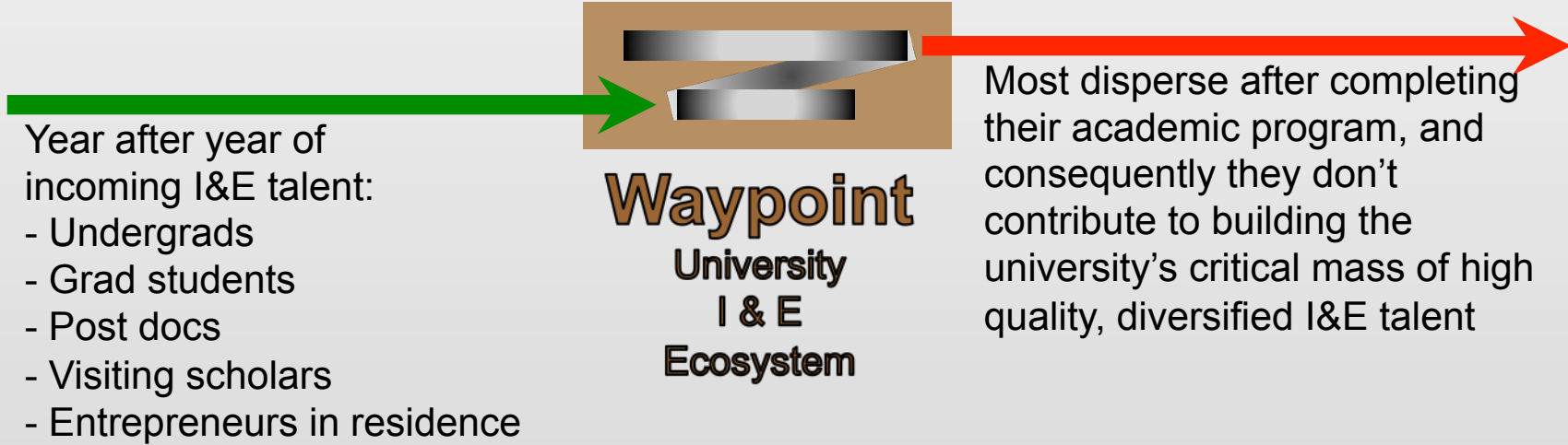
Key Attribute of Top University I&E Ecosystems

**Supercritical Mass
of Varied Human Talent:**
scientists, engineers,
management, manufacturing,
marketing, finance, etc

Question: *How?*

Answer: *Vortex Universities*

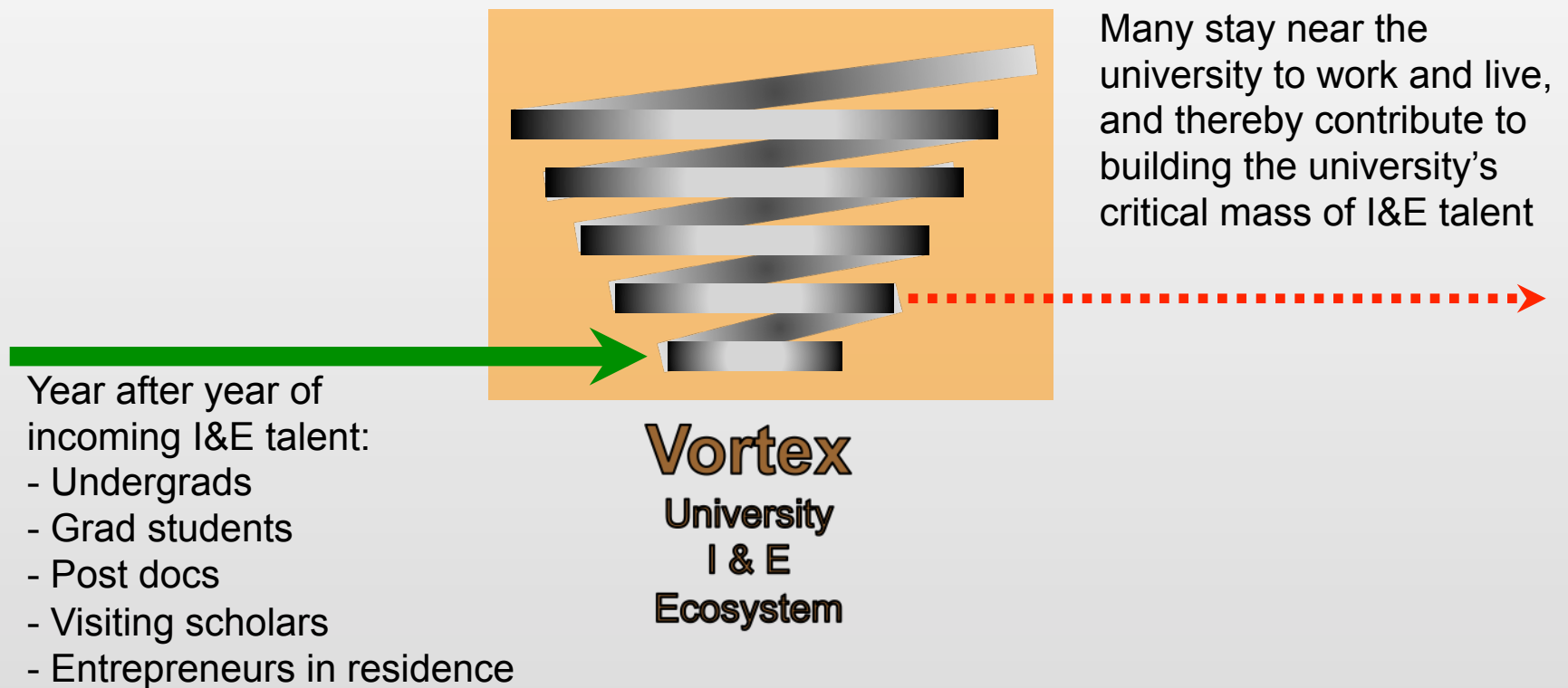
Waypoint University: *Subcritical Mass of I&E Talent*

- 
- Year after year of incoming I&E talent:
- Undergrads
 - Grad students
 - Post docs
 - Visiting scholars
 - Entrepreneurs in residence

Waypoint
University
I & E
Ecosystem

Most disperse after completing their academic program, and consequently they don't contribute to building the university's critical mass of high quality, diversified I&E talent

Vortex University: *Supercritical Mass of I&E Talent*



Vortex University: *World-Class I&E Ecosystem*

