

## 2. Internal and external collaboration

**AESIS**

NETWORK FOR  
ADVANCING & EVALUATING THE SOCIETAL IMPACT OF SCIENCE

### AESIS workshop on institutional structures for societal impact of science

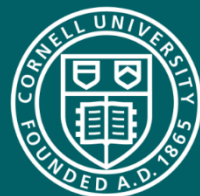
**David M. Lodge**

Francis J. DiSalvo Director

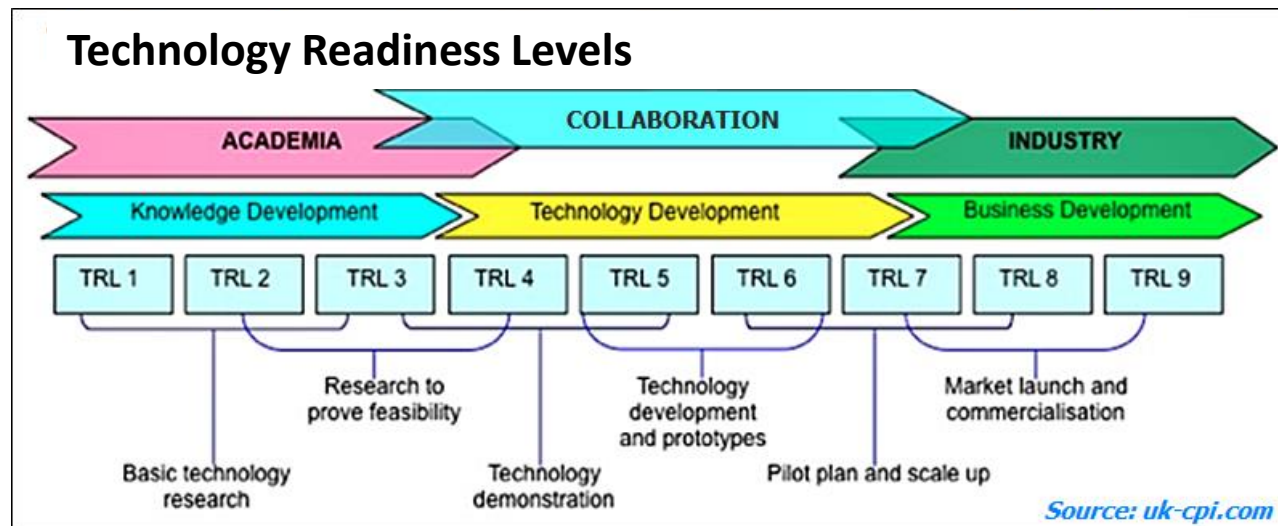
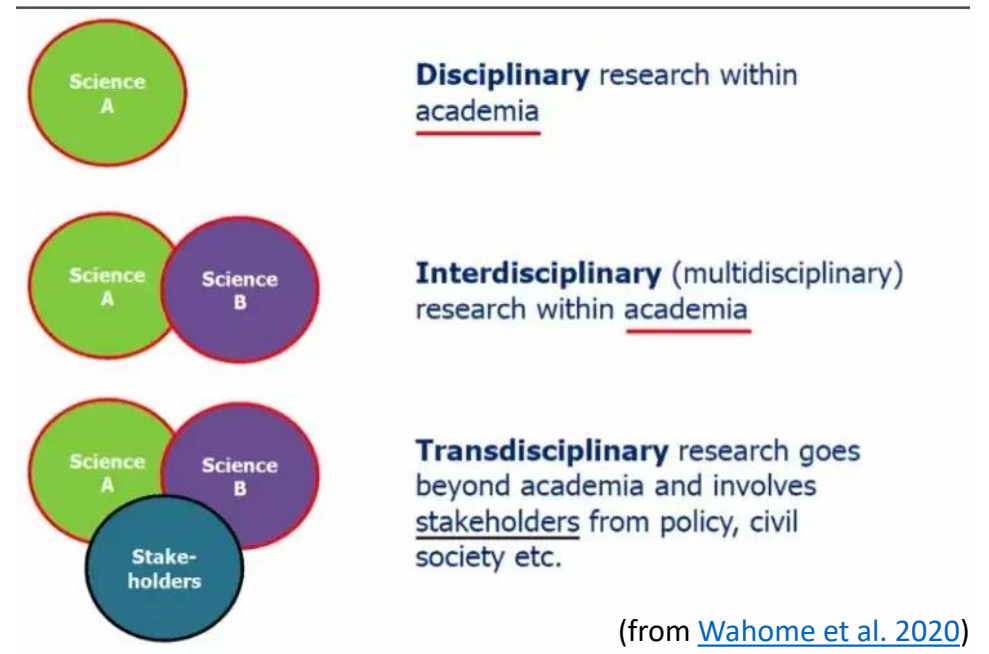
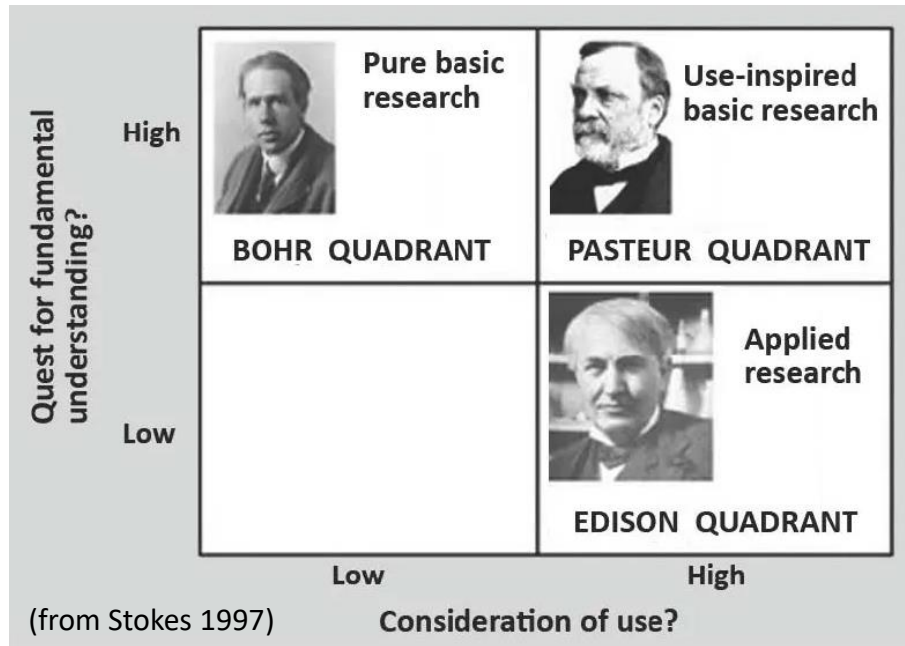
*Cornell Atkinson Center for Sustainability*

Professor

*Dept. Ecology & Evolutionary Biology, Cornell University*



# What Kind of Knowledge do Universities Privilege?



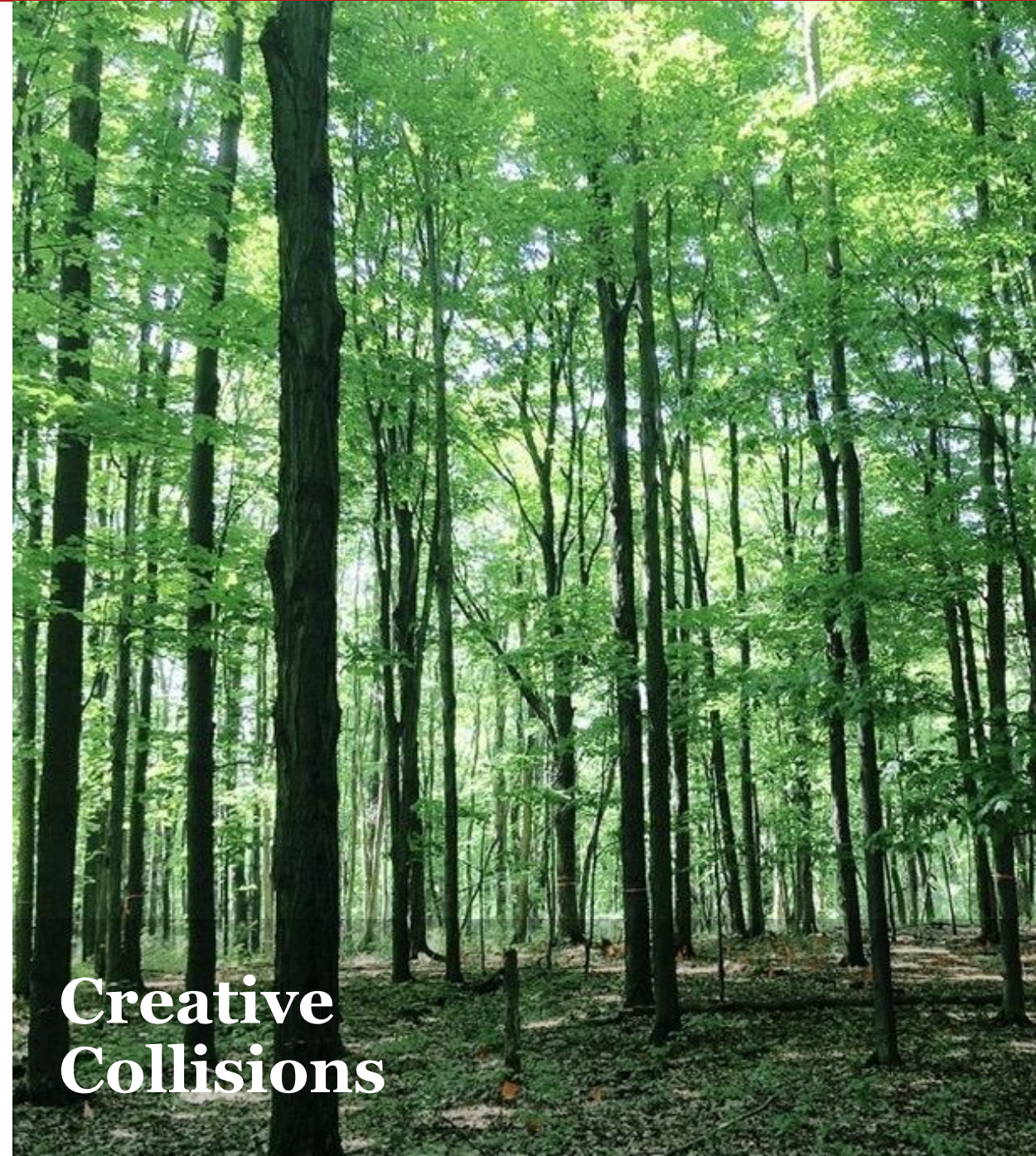
# Breaking down the silos and spanning the boundary between the university and the “real world”







# Co-produced transdisciplinary priority setting



**Creative Collisions**



# Building on Cornell Strengths

Atkinson “Knowledge-to-Action” themes connect transdisciplinary research and practice to build resilient rural-urban systems.

## **Reducing Climate Risks**

Cutting greenhouse gas concentrations and mitigating their impact

## **Accelerating Energy Transitions**

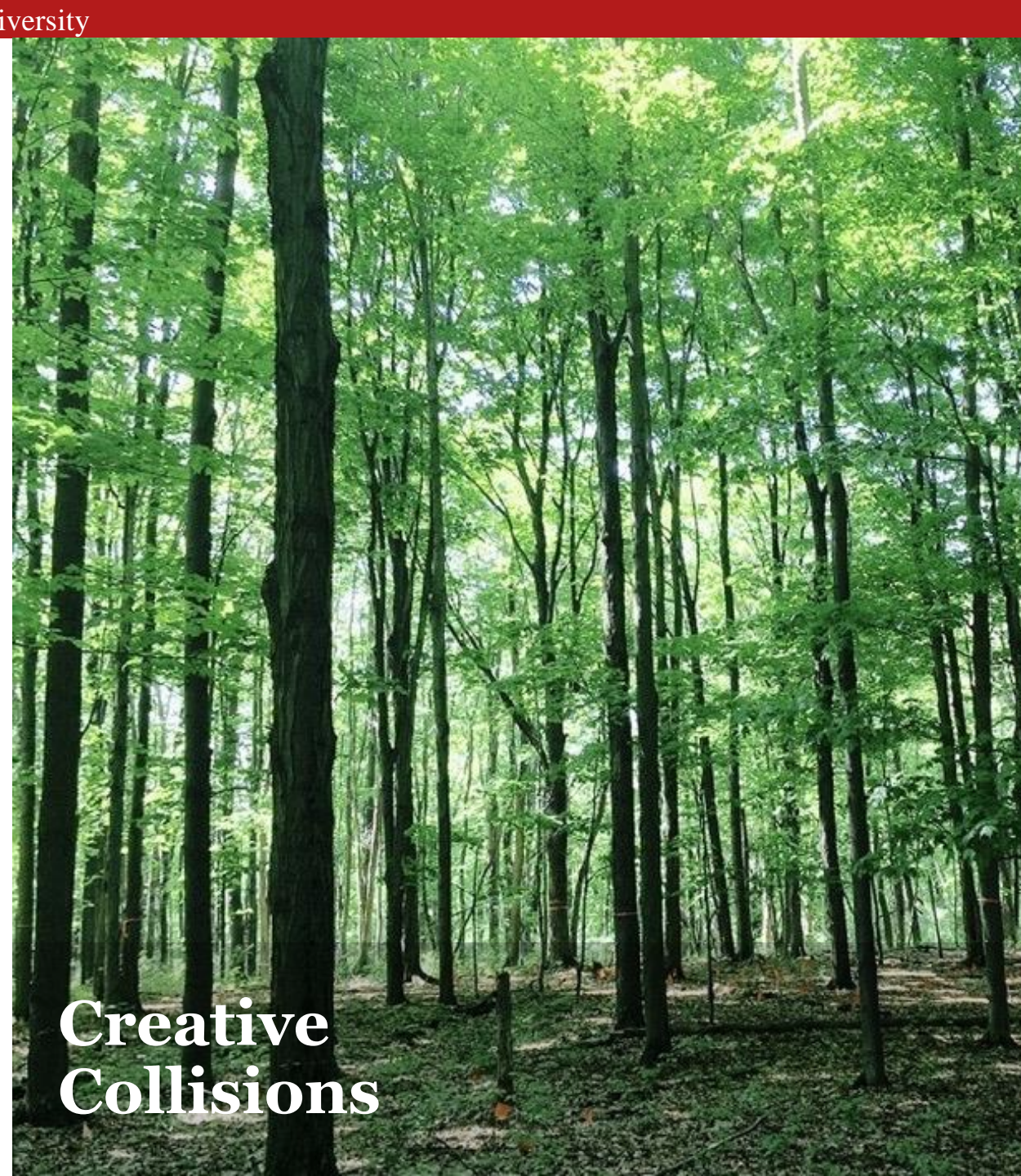
Increasing the demand and capacity for renewable energy and creating a more resilient power grid

## **Increasing Food Security**

Improving food production, processing, and distribution to meet nutritional needs and improve livelihoods and ecosystem health

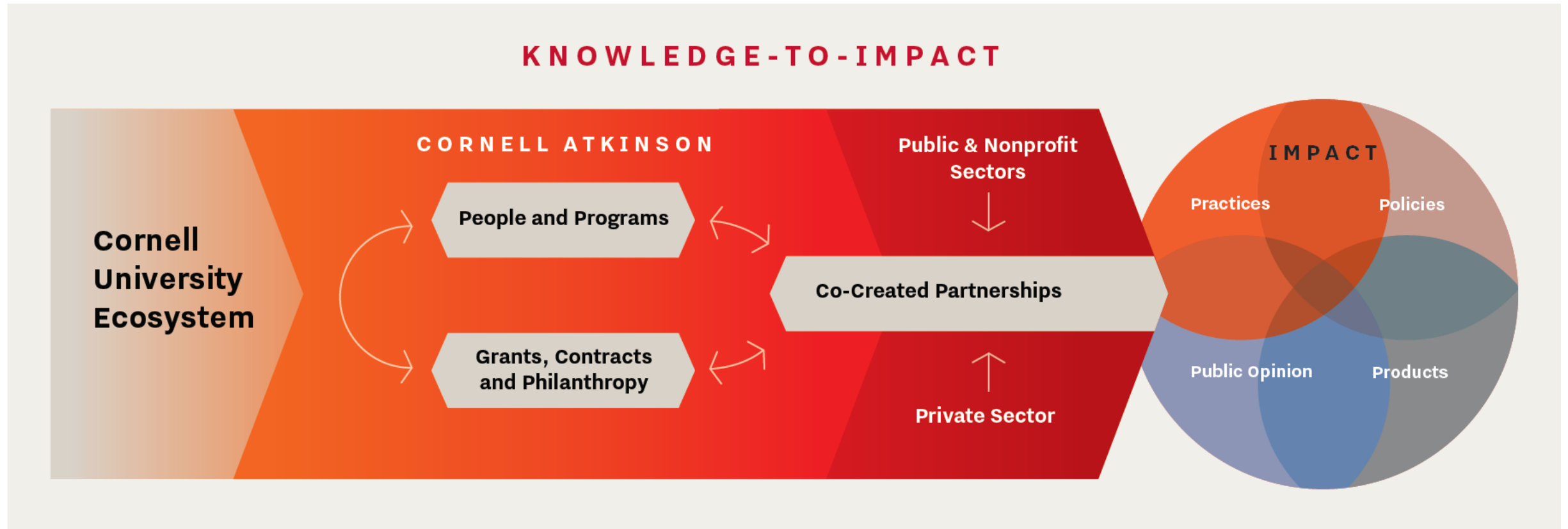
## **Advancing One Health**

Ensuring humans, animals, and ecosystems flourish together

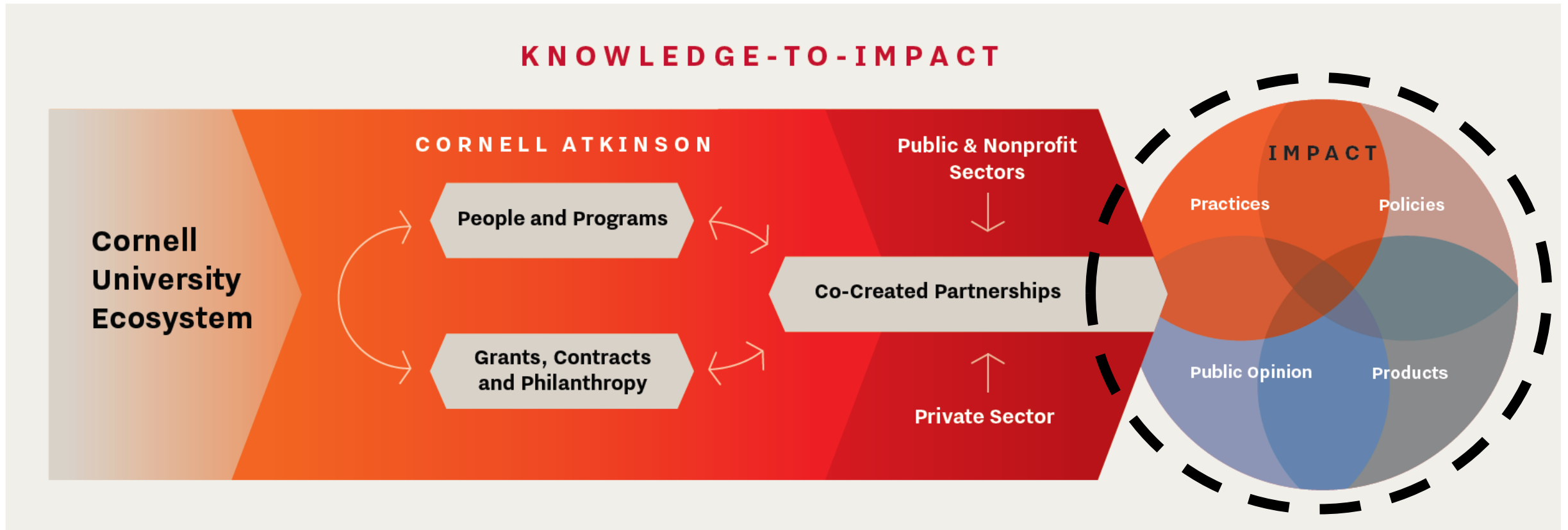


**Creative  
Collisions**

# Cornell Atkinson Center for Sustainability: Theory of Change

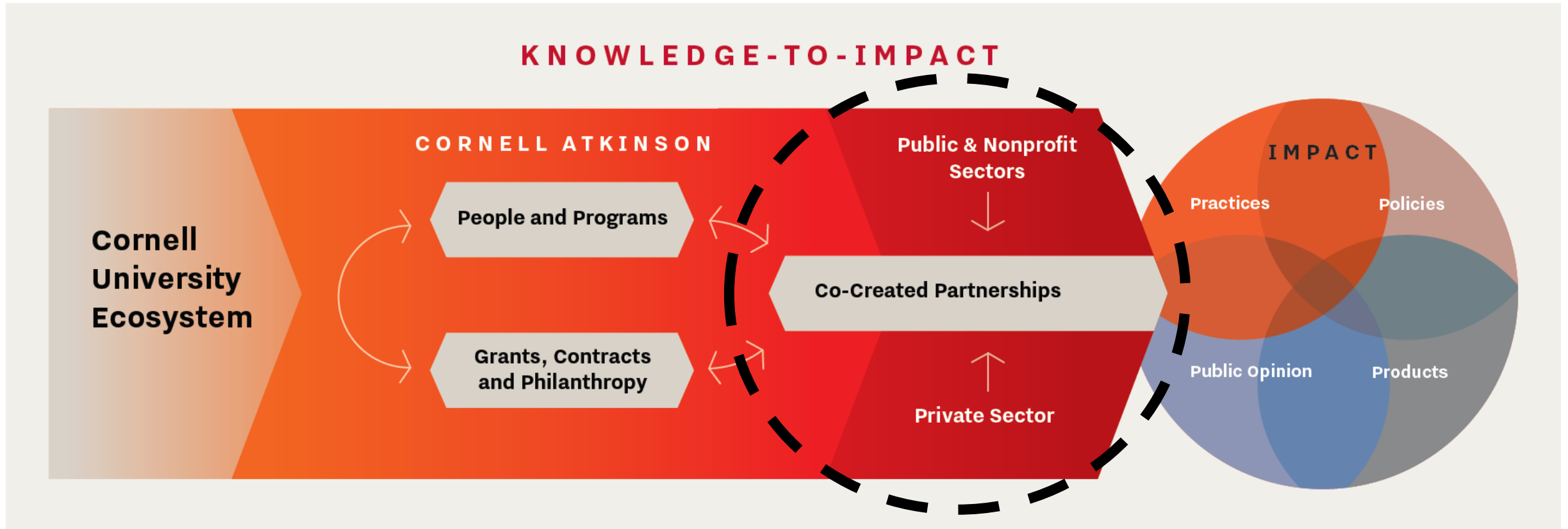


# Impact: Public Opinions, Practices, Products, and Policies

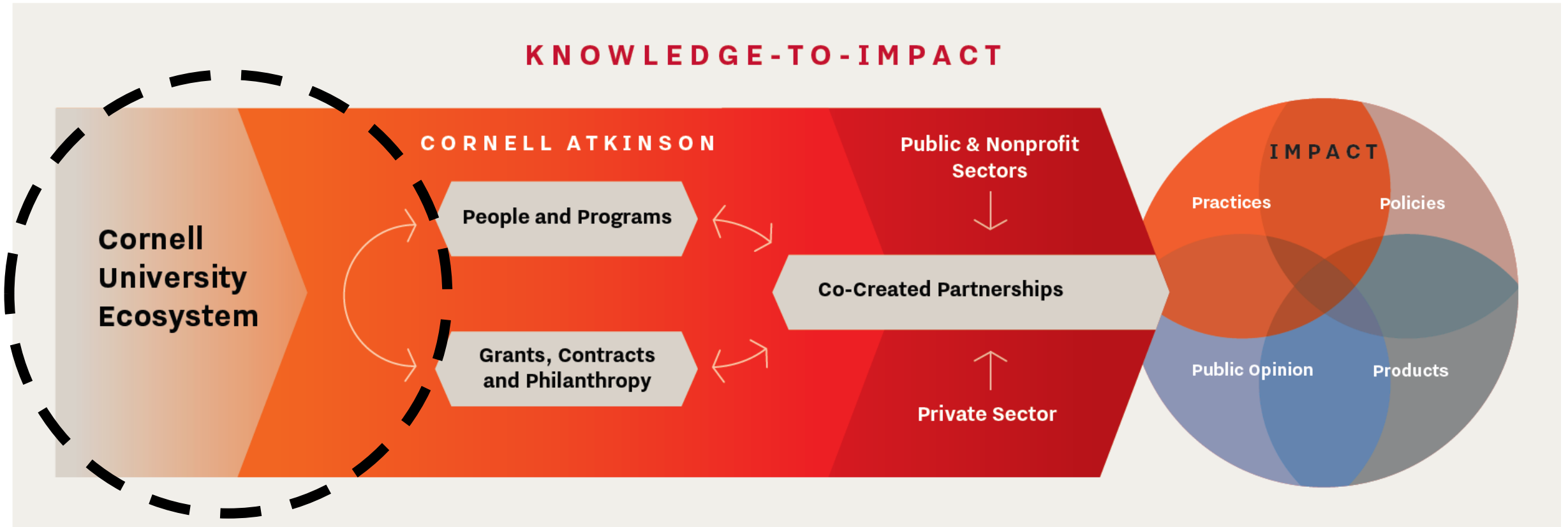




# External Partnerships

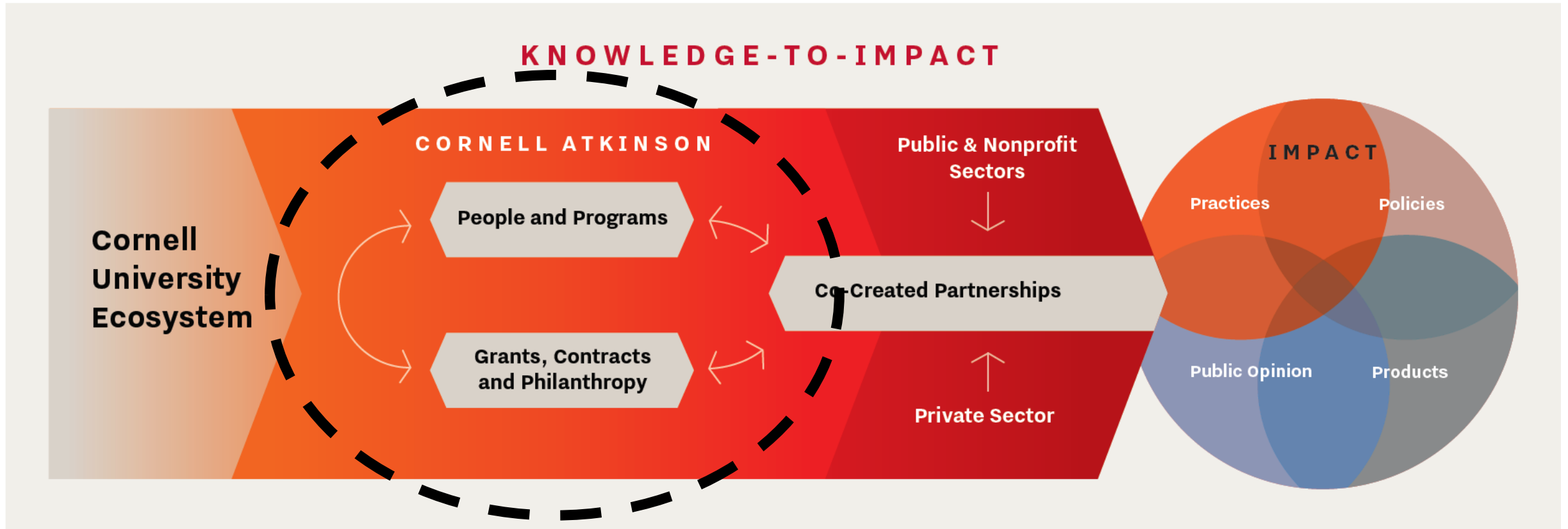


# Traditional University Intellectual and Infrastructure Assets





# Value Add from Cornell Atkinson: Connecting Internally & Externally



# Value Add from Cornell Atkinson: Seed funding programs

## Academic Venture Fund



Our premier funding initiative, this \$1.5 million annual program supports seed grants in the \$50,000-\$150,000 range that are multidisciplinary and have

the potential to propel a good idea forward so that it can make a measurable impact. Projects often include engagement with external partners from industry, government, nongovernmental organizations, and foundations.

## Innovation for Impact Fund



This program links Cornell researchers to leading external organizations working on policy and programs around the world. The IIF builds capacity and

shortens response time to emerging and critical challenges. IIF awards finance joint projects with The Nature Conservancy, CARE, and Environmental Defense Fund to foster sustainable solutions for food security, energy transitions, one health, and economic development.

## Rapid Response Fund



The RRF facilitates urgent or time-sensitive sustainability research, workshops, and other activities. The RRF is a source of funding for smaller projects that cover a broad range of sustainability initiatives. RRF proposals are evaluated by the Atkinson Center's leadership team on a rolling basis.

## Summer Mentored Research Grants



Cornell Atkinson is piloting an initiative to support faculty-led undergraduate summer opportunities in sustainability research, to prepare undergraduates to conduct

independent research in a collaborative environment.

## Cornell Atkinson Postdoctoral Fellowships



This unique postdoctoral program seeks creative and highly motivated early-career researchers to work in tandem with Cornell faculty and external partners to address pressing world needs through research and implementation of sustainable solutions. Up to four postdocs are chosen each year for two-year appointments.

## Graduate Research Grants



Cornell Atkinson's Small Grants Program supports Cornell graduate students and postdocs with funding for research that aligns with our working group themes of increasing food security and reducing climate risks.



Public Opinion, Thought leadership

**John Tobin (Dyson School of Applied Economics & Management)**

- Transition Finance for Regenerative Agriculture Systems - Partnering with farmers to drive sustainable agriculture investment
- 2020: Leads “Financing Nature” report
- 2022: Report provides key framework for Biodiversity COP15 Negotiations

Report and Biodiversity COP15 delegation supported by Cornell Atkinson





Practices: corporate and private

**Peter Woodbury, Christina Tonitto (Integrative Plant Science Soil and Crop Sciences)  
– Cornell FAST-GHG Tool Connects Farmers to Walmart Climate Goals**

Received 2020 Cornell Atkinson Support for Calculator for Soil & Fertilizer Emissions





Product

**David Erickson (Mechanical & Aerospace Engineering) & Tobias Hanrath (Civil & Environmental Engineering)**

**– United Airlines, Dimensional Energy Reach Green Fuel Pact**

Supported by a 2016 Academic Venture Fund Award





Policy (US federal government)

Linda Shi (City & Regional Planning), Todd Gerarden (Dyson School)

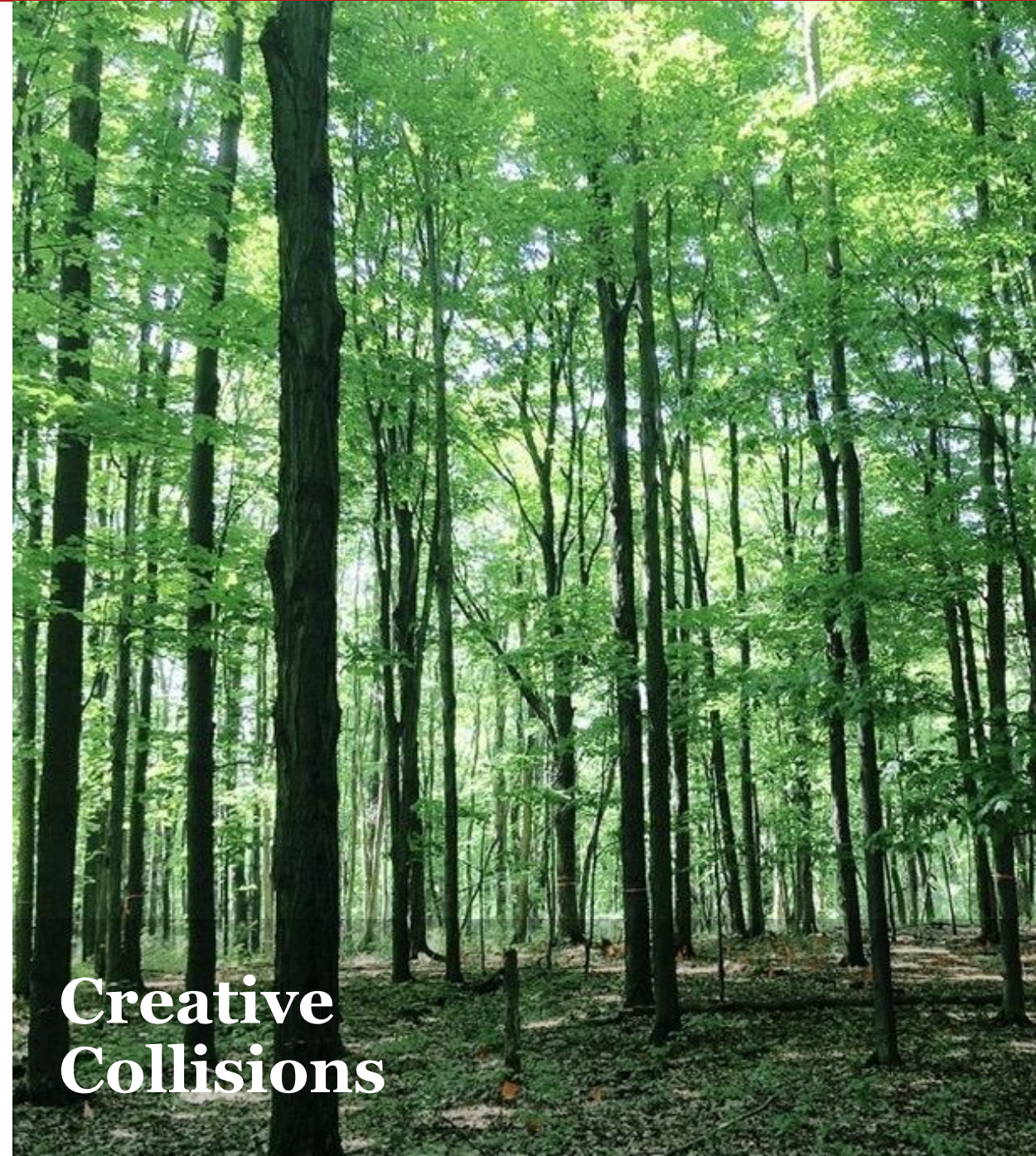
– Cornell Researchers & EDF Staff Highlight Flooding and Environmental Justice

Supported by 2020, 2021, & 2022 Innovation for Impact Fund grants with EDF & TNC



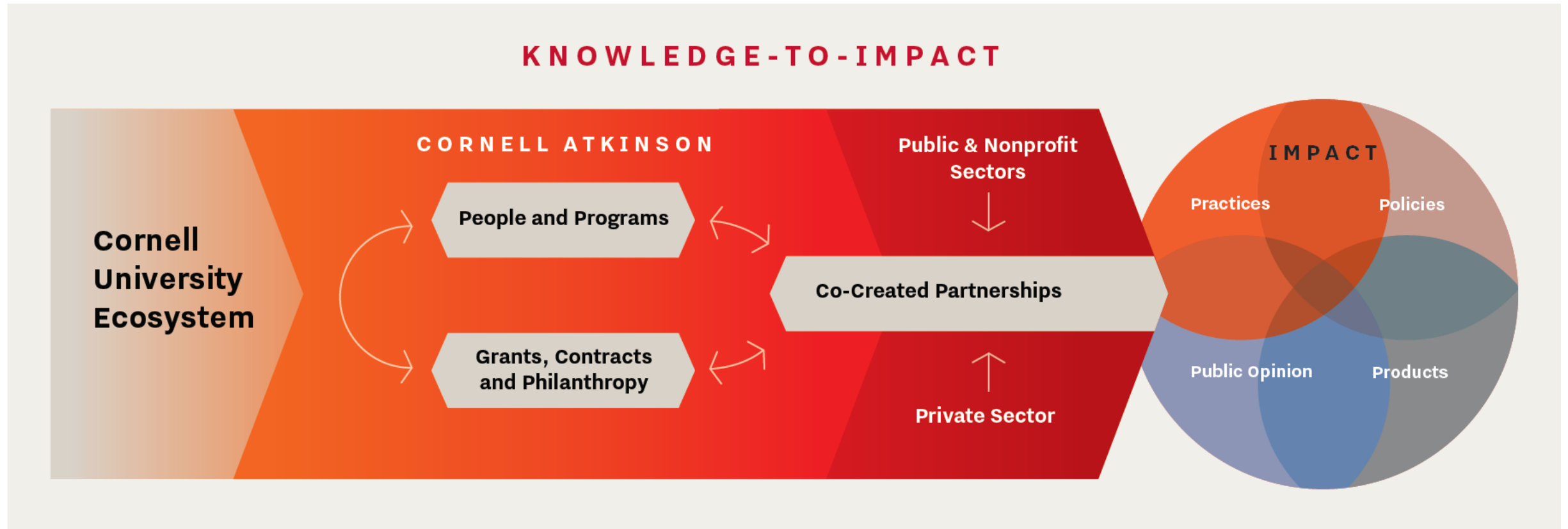


# Co-produced transdisciplinary priority setting



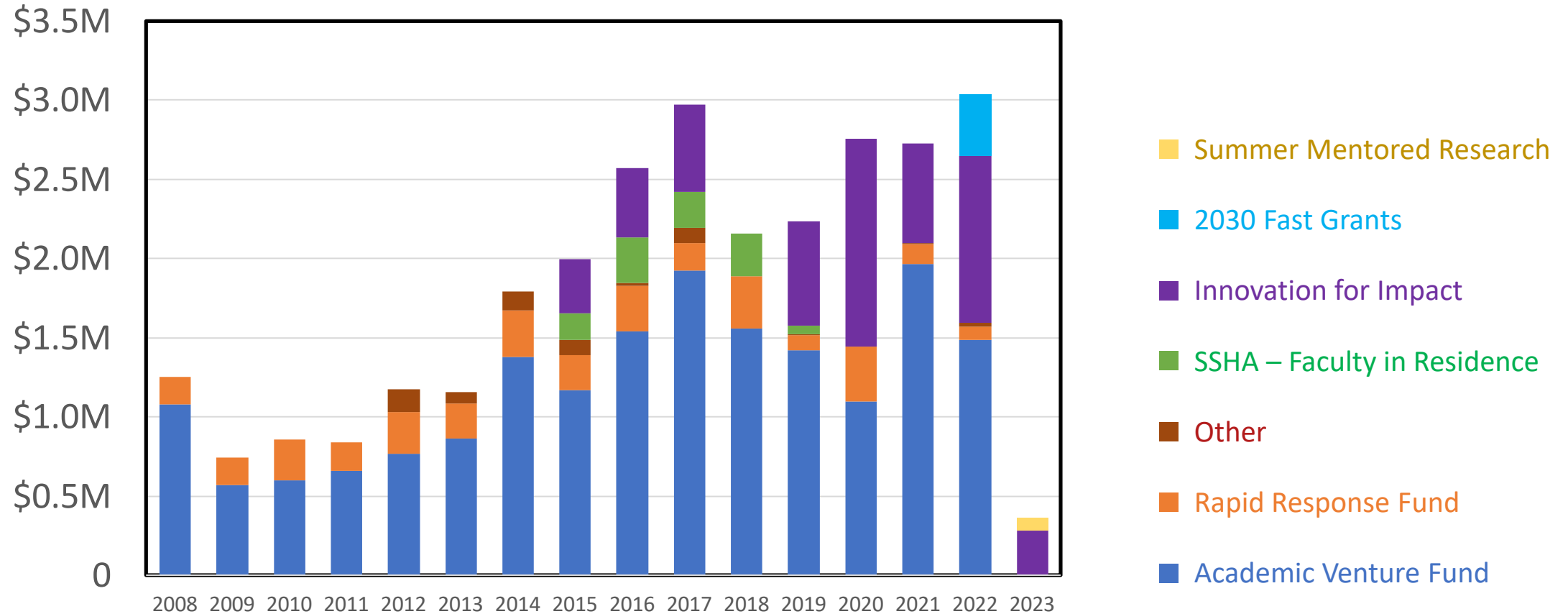
**Creative  
Collisions**

# Cornell Atkinson Center for Sustainability: Theory of Change

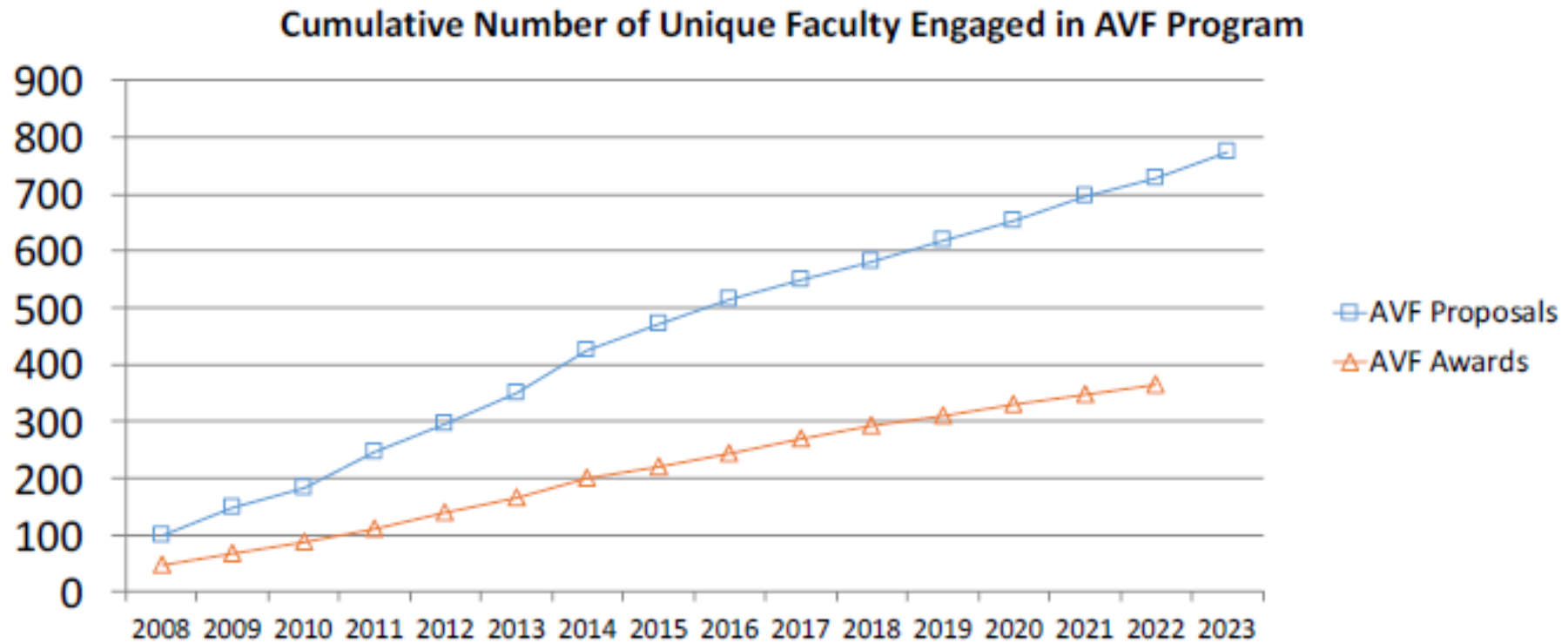




# Cornell Atkinson Grant Programs – proximate metrics (outputs)



# Faculty engagement



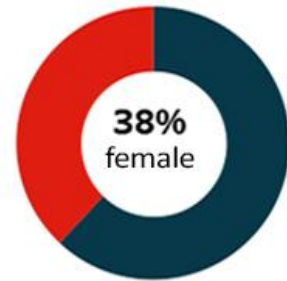


# Faculty Diversity

2008-2022

Cornell Atkinson

Women  
Men



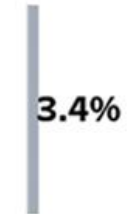
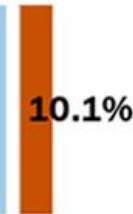
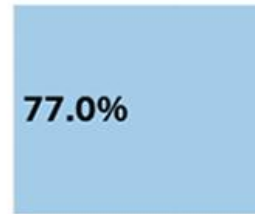
White (U.S.)

Asian or Asian/White (U.S.)

Black, Hispanic, and/or Indigenous (U.S.)

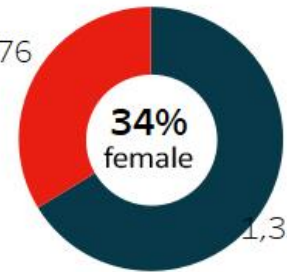
Unknown (U.S.)

International (any race)

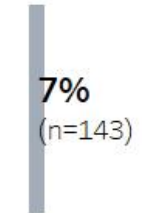
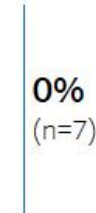
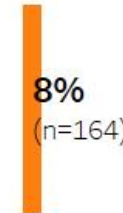
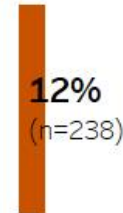
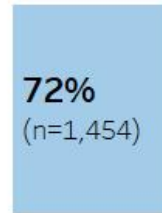


Cornell University

676



1,330



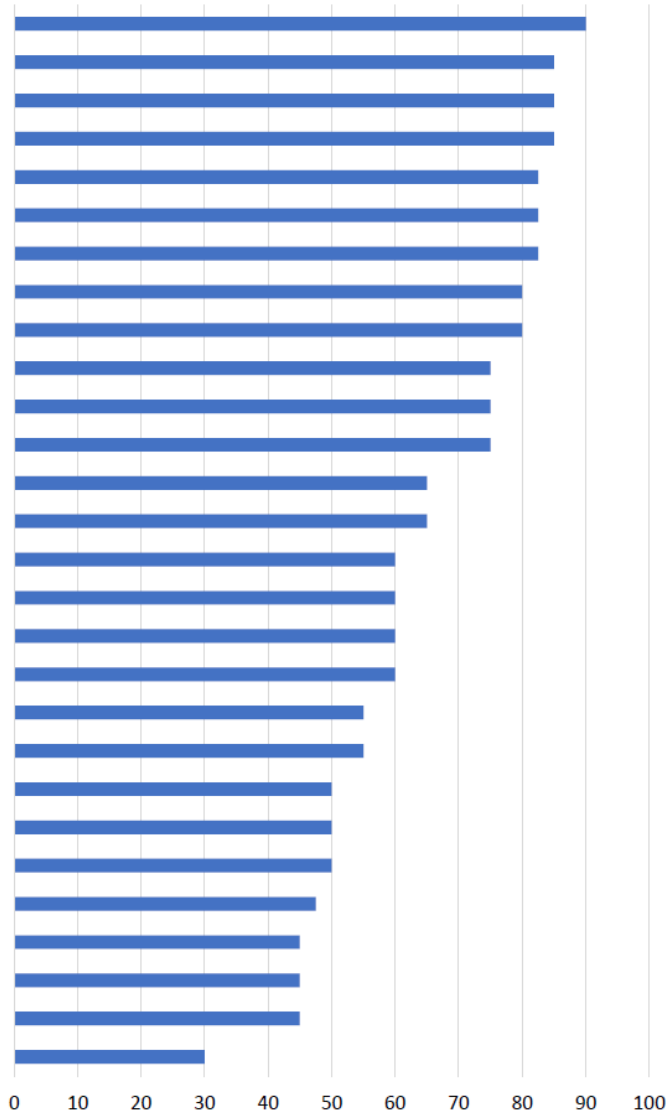
## 2023 Faculty Follow-on Funding Survey

- Total Cornell Atkinson Funding Received: \$13.7M
- Surveyed Funded Faculty Fellows (2017-2022): 221
- Response Rate: 66%
- Respondents Reporting Follow-on Funding: 53%
- Follow-on Funding: \$88.7M
  
- **Return on Investment: 6.5**



# Strategic partnerships

Partner Health Score

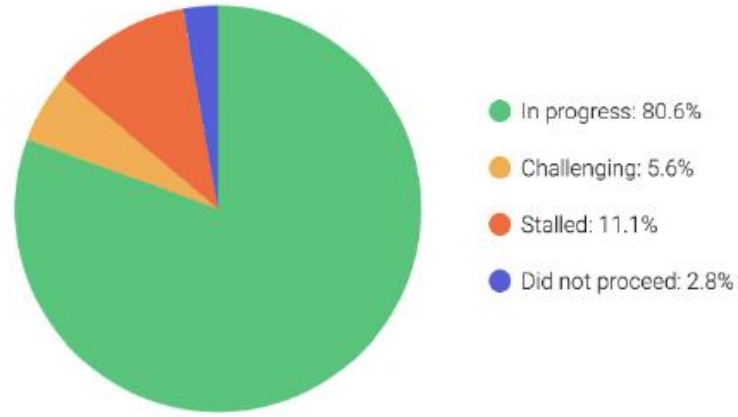


FARM CREDIT EAST

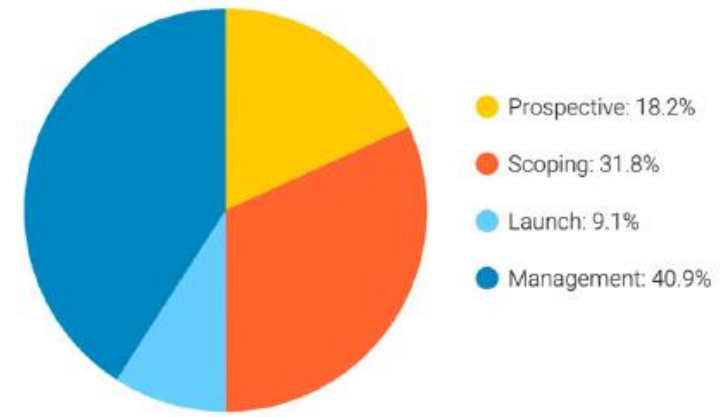


# Partnerships and IIF projects

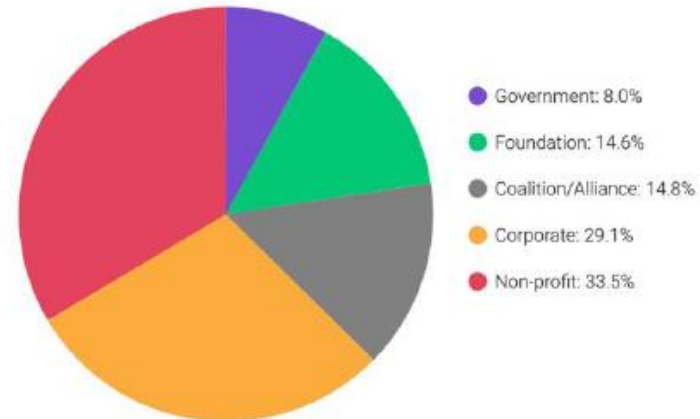
### Project Status (all projects)



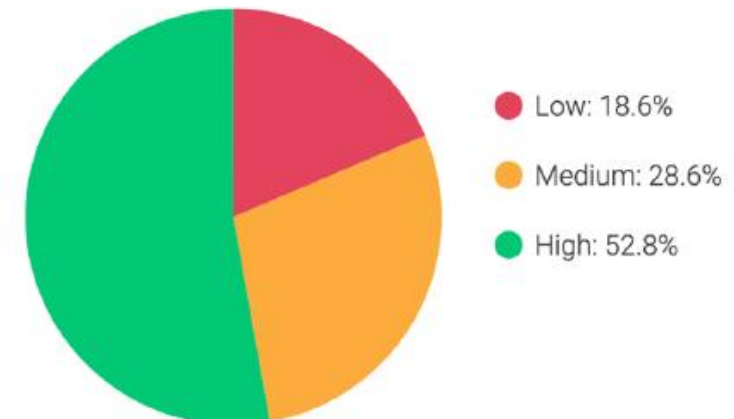
### Project Maturity (active projects)



### Partner Type (Sector) (active projects)









### Partner Level of Engagement (active projects)





# Ultimate metrics (outcomes) are harder to measure

	Instrumental Impacts	This research led to changes to plans, decisions, practices, or policies.
	Conceptual Impacts	This research contributed to changes in people's knowledge about or awareness of an issue.
	Capacity-Building Impacts	This research contributed to enhancing the skills, expertise, or resources of an organization or group of people.
	Connectivity Impacts	This research led to new or strengthened relationships, partnerships, or networks that will endure after the project ends.
	Social Impacts	This research has contributed to beneficial changes to society (often a longer-term impact).
	Ecological Impacts	This research has contributed to beneficial ecological or environmental changes (often a longer-term impact).



Arizona Institutes for Resilient Environments and Societies  
Societal Impacts Assessment Report  
2022

How AIRES Contributes to our Region and the  
World

Alison M. Meadow | Gigi Owen | Nupur Joshi  
Research Impacts and Evaluation

 Arizona Institute for  
Resilient Environments  
& Societies

 THE UNIVERSITY OF ARIZONA  
RESEARCH, INNOVATION & IMPACT  
Societal Impact



Cornell  
Atkinson  
Center for  
Sustainability