



EDA

U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

The Role of Sustainable Nanotechnology in Economic Development

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Sustainable Nanotechnology Organization
First Sustainable Nanotechnology Organization Conference

Arlington, VA

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INNOVATION. REGIONAL COLLABORATION. JOB CREATION.



Setting the Stage for Long-Term Prosperity



EDA's mission is to lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy.

EDA's strategic investments enhance the competitiveness of America's communities, spur innovation, and create jobs.

EDA's flexible programs leverage private-public investments, support "bottom-up" strategies, and build 21st century infrastructure.



Setting the Stage for Long-Term Prosperity



- Support development of technology-driven economic ecosystems
- Support place-based, locally driven initiatives
- Convene stakeholders
- Make strategic hard and soft infrastructure investments
- Promote a regional development and global competitiveness based on leveraging cluster assets
- Promote knowledge sharing across centers of excellence in economic development



Investment Priorities

Collaborative Regional Innovation – Projects that support the expansion and growth of innovation clusters based on a region's existing competitive strengths.

Public/Private Partnerships – Projects that use both public- and private-sector resources and leverage complementary investments by other government/public entities and/or nonprofits.

National Strategic Priorities – Projects that encourage job growth and business expansion related to advanced and innovative manufacturing; information technology (e.g., broadband or smart grid) infrastructure; communities severely impacted by automotive industry restructuring; restoring or improving urban waters; natural disaster mitigation and resiliency; access to capital for small, medium-sized, and ethnically diverse enterprises; innovations in science and health care; or projects that advance science and research parks or other technology transfer or commercialization centers.





Investment Priorities

Global Competitiveness – Projects that support high-growth businesses and innovation-based entrepreneurs to expand and compete in global markets.

Environmentally-Sustainable Development – Projects that promote job creation and economic prosperity through enhancing environmental quality and developing and implementing green products, processes, places, and buildings as part of the green economy.





The Obvious: Resources are limited

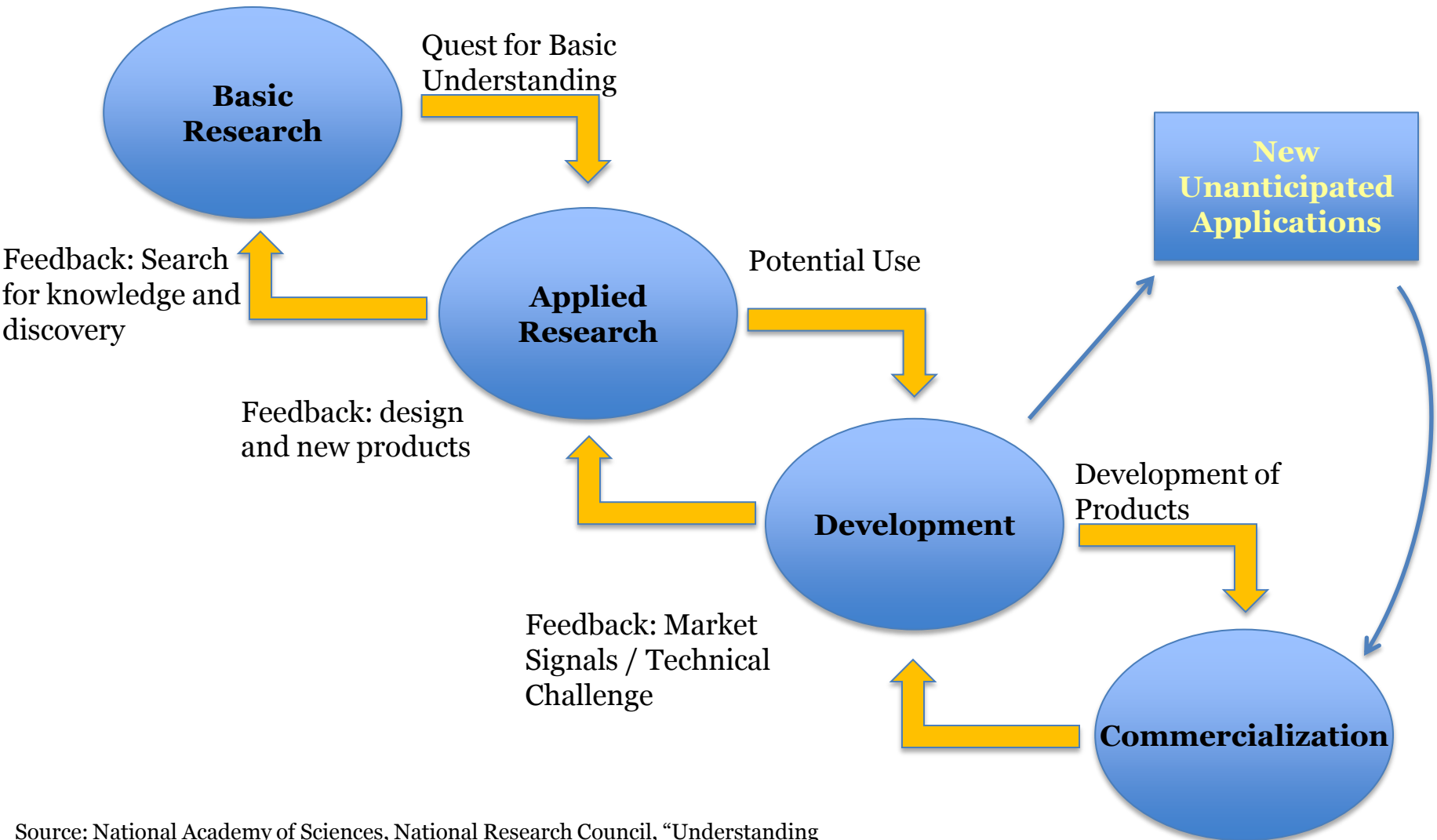
The Not-so-obvious: Sustainability practices are better for individuals, businesses and communities

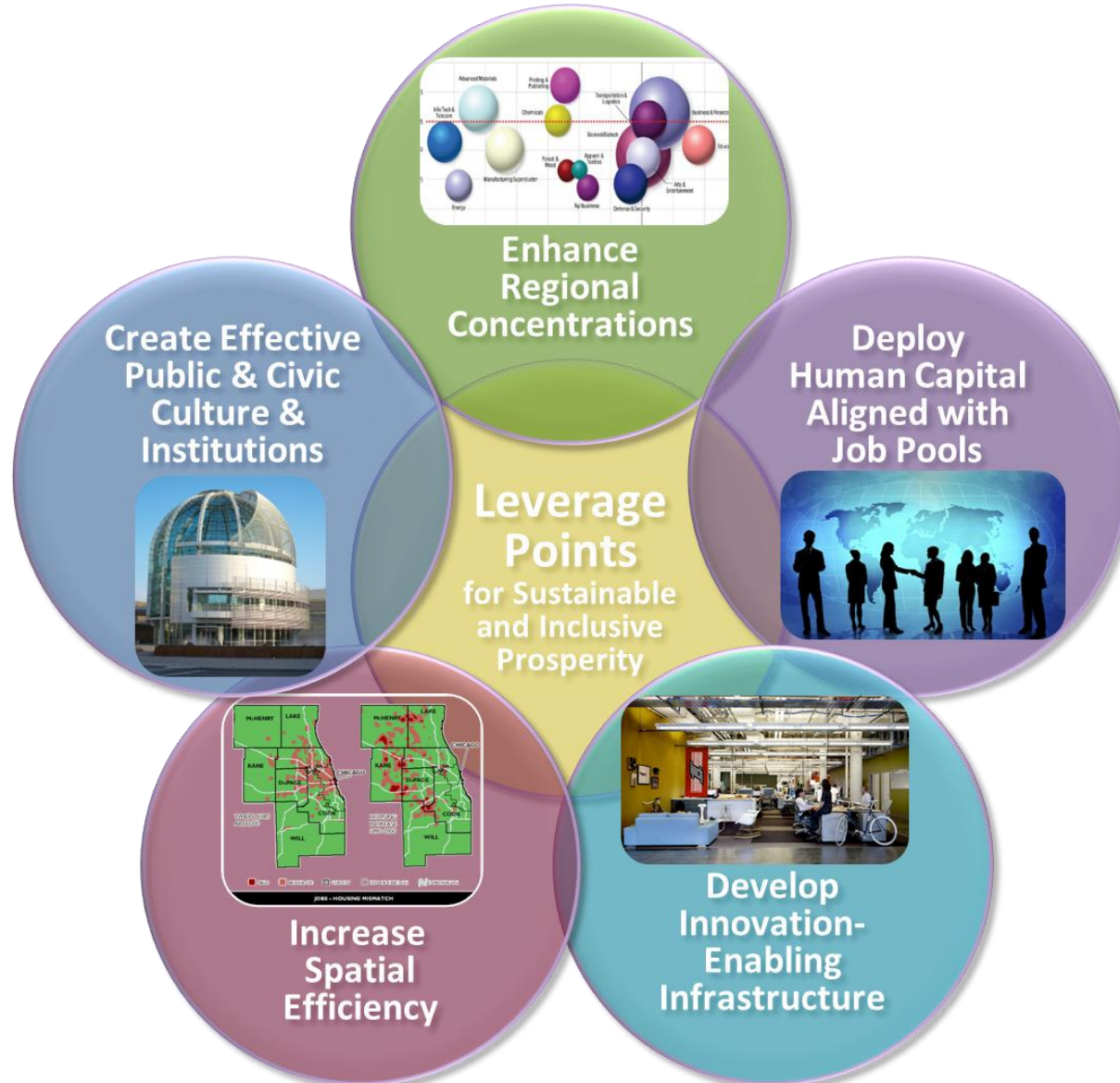
- Quality of life
- Global competitiveness
- Enhancing regional clusters
- Keeping capital and investments closer to home
- Fostering new networks of knowledge and creativity
- Fostering efficiency in resources and process
 - Jobs are harder to outsource





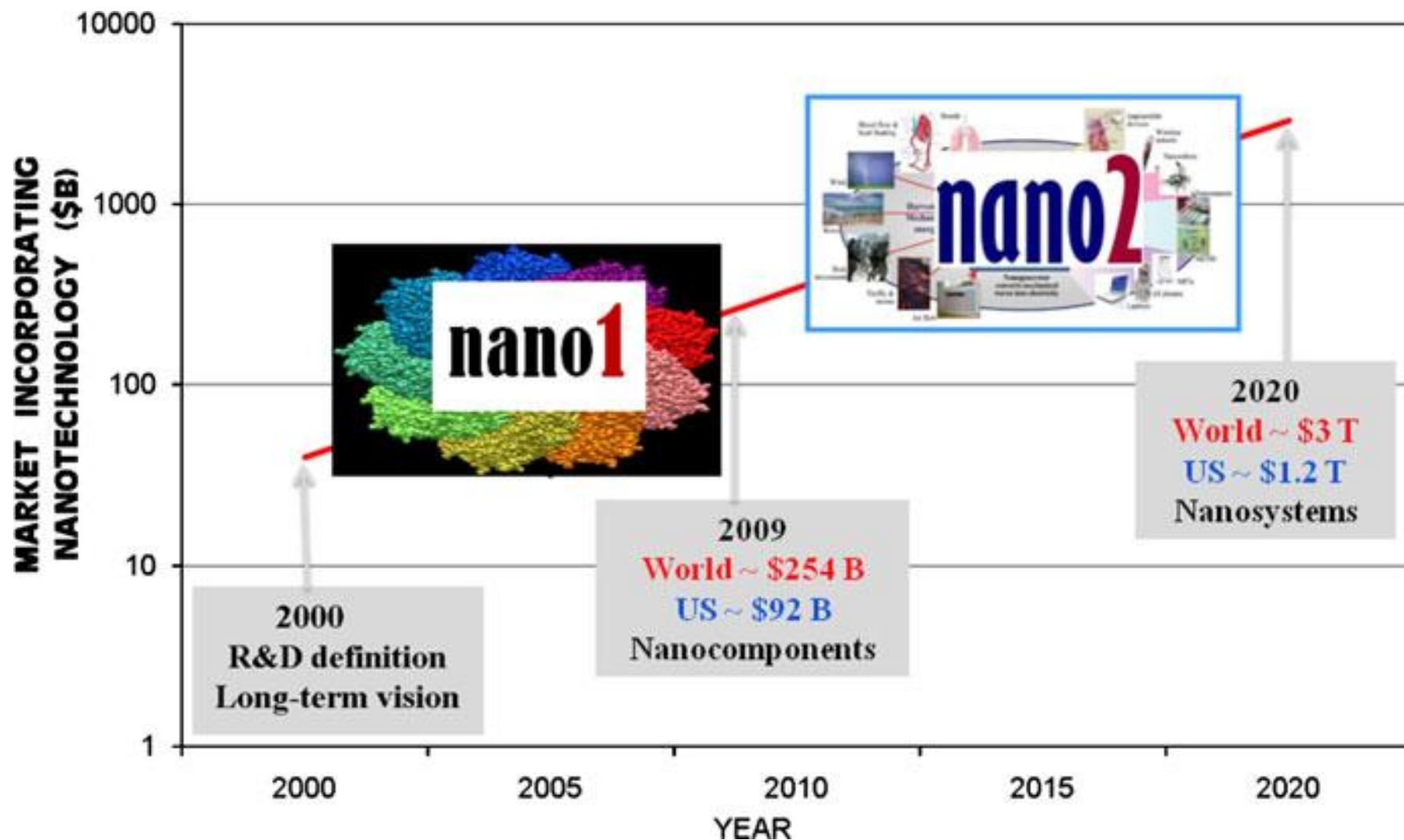
Research Parks and Nonlinear Feedback Model of Innovation







- Between 2001 and 2008 the number of discoveries, inventions, nanotechnology workers, R&D funding programs and markets all increase by an average of 25% annually
- Applications in:
 - Computing and communication
 - Healthcare
 - Refining
 - Power generation and storage
 - Water purification
 - Other
- Estimated 6 million (2 million in U.S.) nanotechnology workers needed by 2020





Launched in 2010, the i6 Challenge is a cutting edge federal grant program that supports truly innovative initiatives to spur innovation commercialization, entrepreneurship and jobs creation at the local level

The \$6 million annual competition funds Proof of Concept Centers and creates a network of experts to:

- Support innovators and researchers
- Spur sustainable startups, small businesses, and new ventures
- Expand access to capital to fuel growth
- Connect mentors and advisors to entrepreneurs
- Spark job creation
- Over the last three years, \$19 million from EDA to 19 winners across the United States to create their own centers for innovation and entrepreneurship
- These centers have raised another \$1-2 million from the private sector to support their efforts



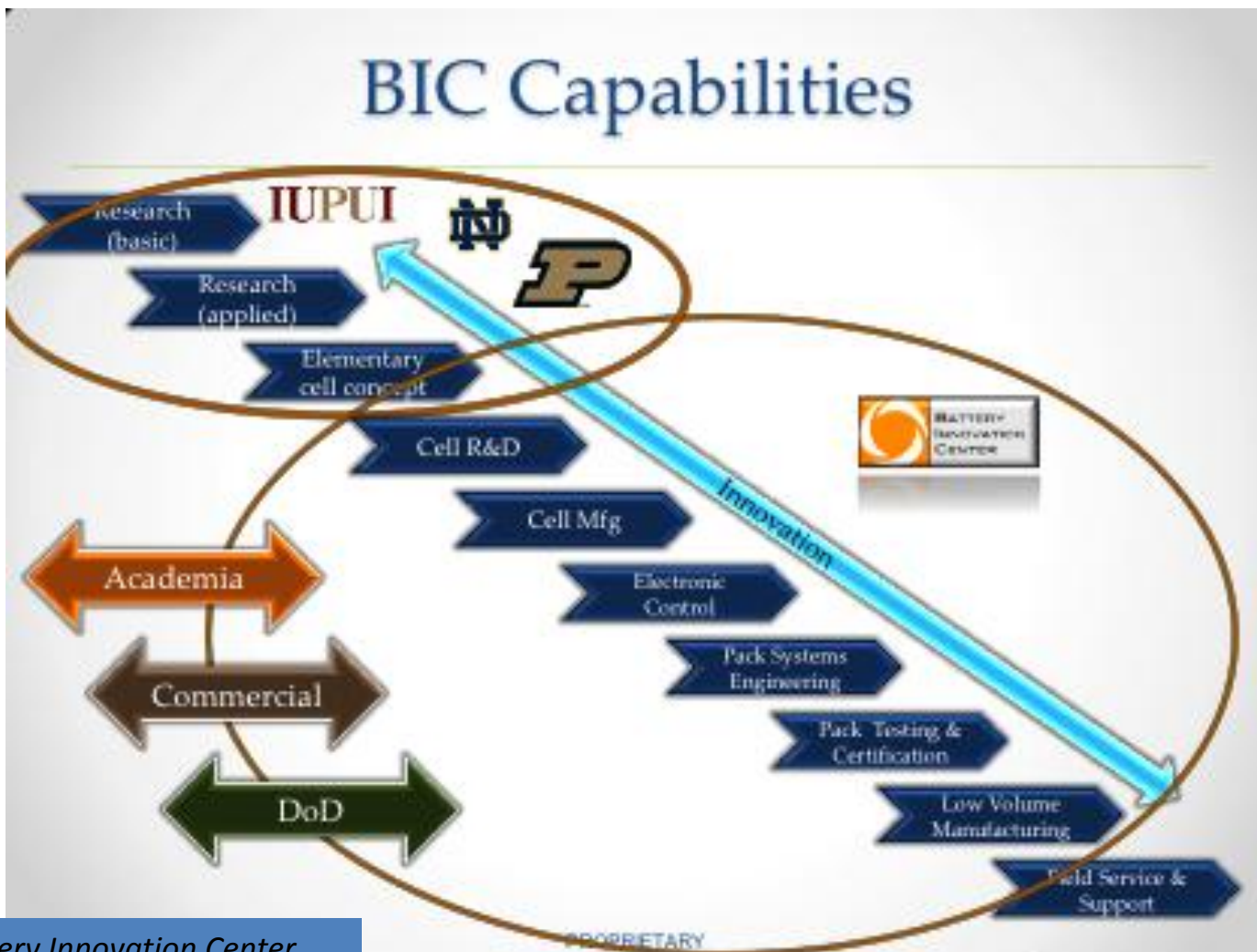
The Jobs and Innovation Accelerator Challenge, a multi-agency competition, was launched to support the advancement of high-growth, regional industry clusters. Investments and technical assistance from federal agencies promote development in areas such as advanced manufacturing, information technology, aerospace and clean technology, in rural and urban regions in 21 states.



- ★ Brings together universities, government and strategic partners
- ★ Accelerate the formation of new, high-growth businesses to create high-quality, high-paying jobs
- ★ Advance the commercialization of research
- ★ Support the deployment of new processes, technologies, and products
- ★ Enhance the capacity of small businesses, including disadvantaged businesses
- ★ Increase exports and business interaction with international buyers and suppliers
- ★ Develop the skilled workforce needed to support growing clusters
- ★ Ensure diverse workforce participation in clusters through outreach, training and the creation of career pathways



The Battery Innovation Center at Naval Surface Warfare Center Crane



Source: The Battery Innovation Center



The Triple Bottom Line Tool

THE
TRIPLE BOTTOM LINE
TOOL

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The Triple Bottom Line Tool helps optimize investments for economic, environmental, and social impact – what's referred to as the triple bottom line or TBL. Investors, economic development professionals, and decision-makers can use the TBL Tool to:

Design economic development investments for maximum returns

Consider an economic development investment's impact on various factors

Compare or **communicate** impacts of investment

www.tblltool.org



U.S. Cluster Mapping Tool



Note: this site is the initial launch version of a project that will be evolving and improving on a regular basis over the coming 12-24 months. Please [give us feedback](#) if you find anything broken or have content or functionality suggestions for us as we make the US Cluster Mapping site the best it can be for you.

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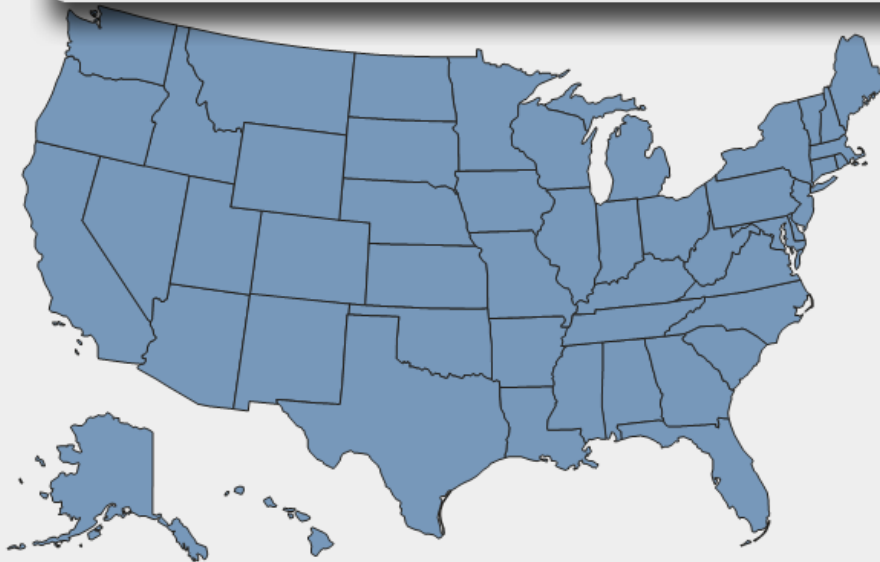
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<http://mvp.clustermapping.us>



Regional Innovation Acceleration Network

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Regional Innovation Acceleration Network

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Building Resilience into America's Regional Economies

RIAN and the community of Venture Development Organizations (VDOs) are transforming regions across the United States through strategic investments in innovation, entrepreneurship, and technology - one company at a time, repeated hundreds of times over. Explore this site to learn more about VDOs, find examples of their client successes, join the discussion for improving regional economic development, and bring new thinking, new practices to your own economy.

Upcoming Events

Conference
Nov 13 - Nov 15
2012 SBIR/STTR National Conference
Portland, OR
[view all upcoming events...](#)

The nation's network of Venture Development Organizations (VDOs) turning innovations into companies with jobs to drive America's economy - **SMARTER, FASTER, FORWARD**



VDOs Making an Impact

Investments Attracted
Since 2002, client companies have raised more than \$166 million in follow-on funding.
Idea Foundry
Pittsburgh, PA

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EDA Contacts

For more information on how EDA can assist your community, and to contact your Economic Development Representative please visit our website www.eda.gov.



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