

Universities & Economic Development

Lessons from The New University of Akron:

*Succeeding by Building
Regional Strength and Capacity:
A New Gold Standard*

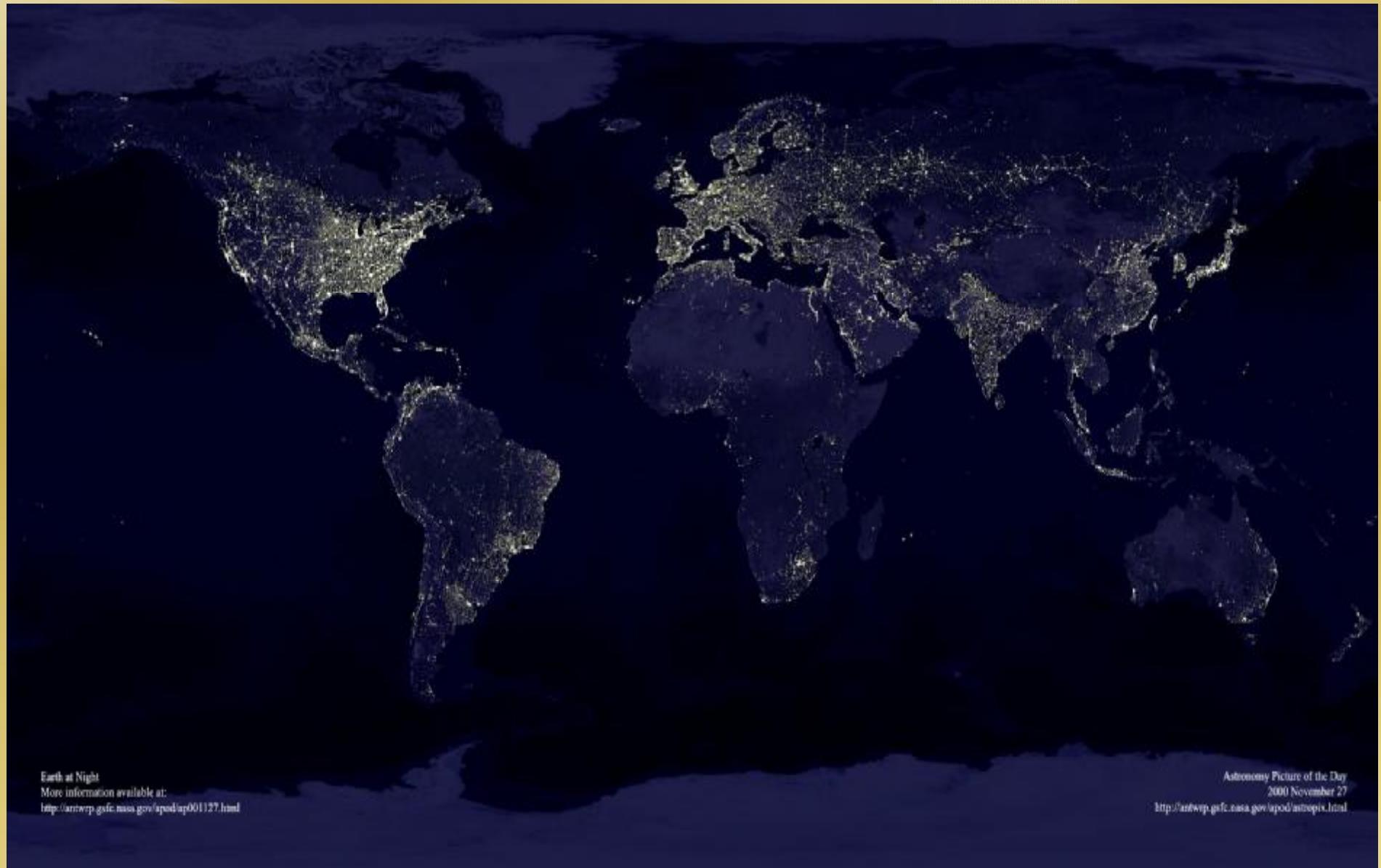
Luis M. Proenza
President, The University of Akron

for the symposium

“E Kamakani Noi`i: Wind that Seeks Knowledge”

U.S. National Academy of Sciences & University of Hawai`i
Waikiki, Hawai`i, January 13, 2011

The economic geography of the world — regional, spiky & clustered not flat !



Earth at Night
More information available at:
<http://antwrp.gsfc.nasa.gov/apod/ap001127.html>

Astronomy Picture of the Day
2000 November 27
<http://antwrp.gsfc.nasa.gov/apod/astropix.html>

The economic geography of the nation clusters around universities, mostly in urban areas . . .

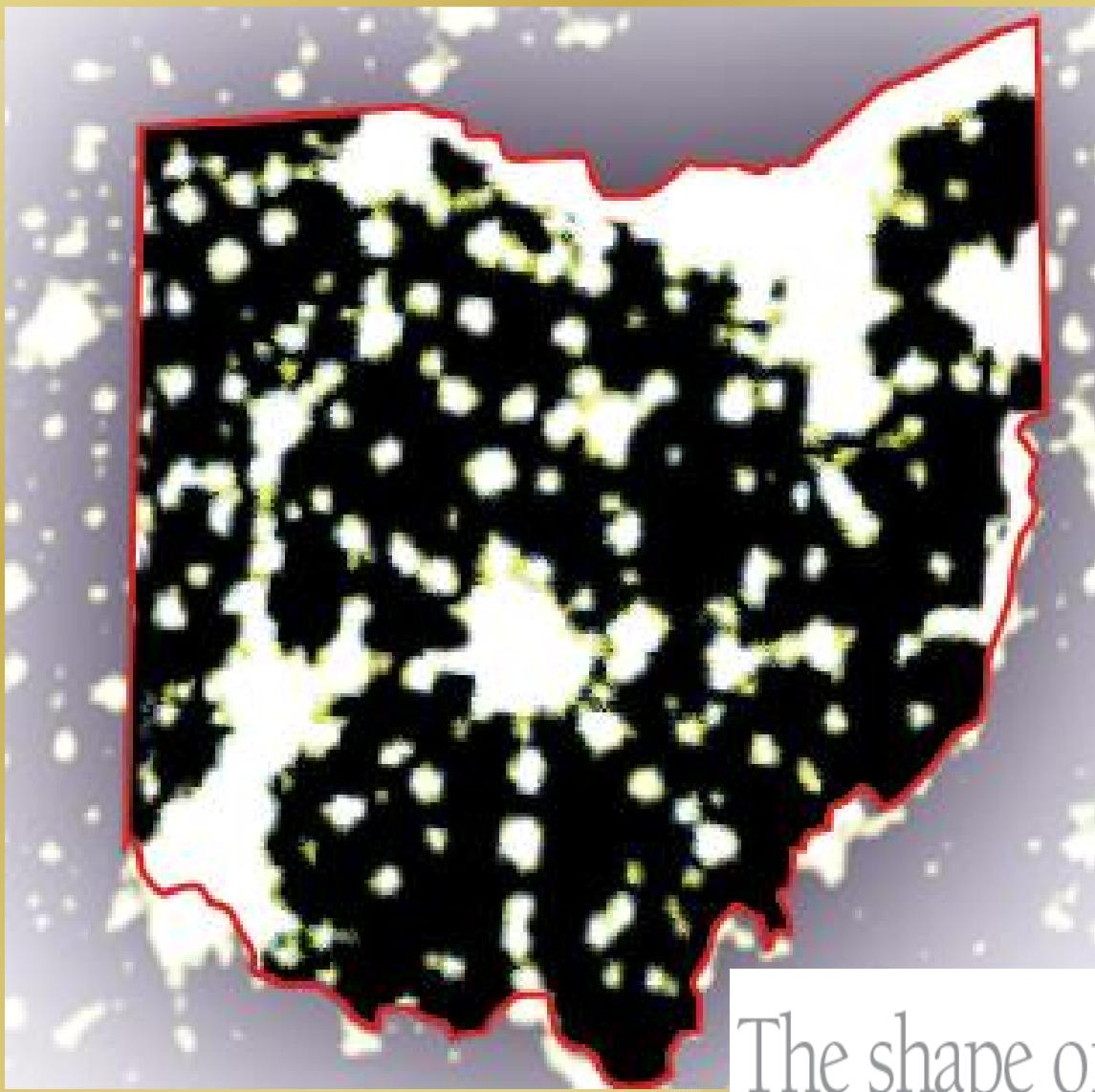


87%
of economic activity

80%
of colleges & universities

83%
of students

Assessing Opportunities & Resources – The UA Experience



The shape of our regional economy.

Regional Assets, Challenges and Opportunities

The Assets . . .

- UA: world's largest polymer program; a top producer of chemistry PhDs; high productivity in IP and start-up businesses
- Strong Industrial Clusters (Advanced Materials)

The Challenges . . .

- Manufacturing base in transition
- Risk averse
- Lack of investment capital

The Opportunities . . .

- Strong (but underutilized) research assets
- Growing entrepreneurship potential
- Globalization
- Converging private and public interests
- Focus on differentiation and productivity

Guiding Framework

Relevance

- Utilize all University disciplines

Connectivity

- Link University to community assets and partners

Productivity

- New Metrics
 - Value added, not exclusion-based
 - Output per unit of input
 - Scaled metrics

The Akron Model of Economic Development



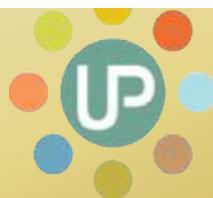


The New Landscape for Learning

A transformational \$500-million campus enhancement initiative:

- 20 new buildings
 - Including 30,000-seat football stadium and two residence halls in University Park
- 50% expansion of building square footage
- 18 major additions and renovations
- 34 acres of new, green space
- 30,000+ new trees, bushes and plantings
- New walkways, plazas, terraces and gardens

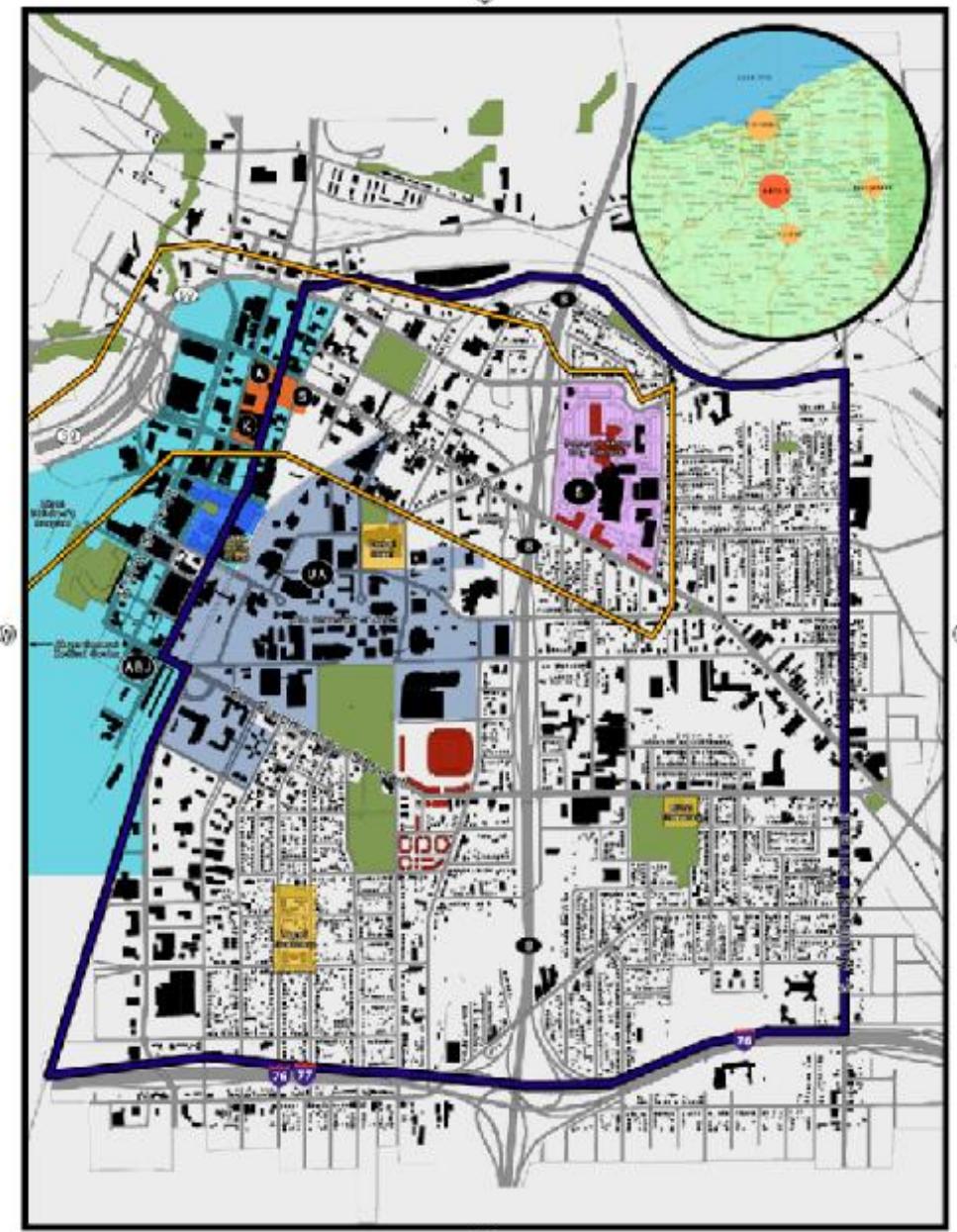
All this – and more – catalyzing our success and benefiting our community



University Park

DO SOMETHING GREAT TODAY

Mission: To revitalize the neighborhood as a vibrant and healthy place to live, learn, work, shop and play – through engaging the community and catalyzing private investment.





University Park

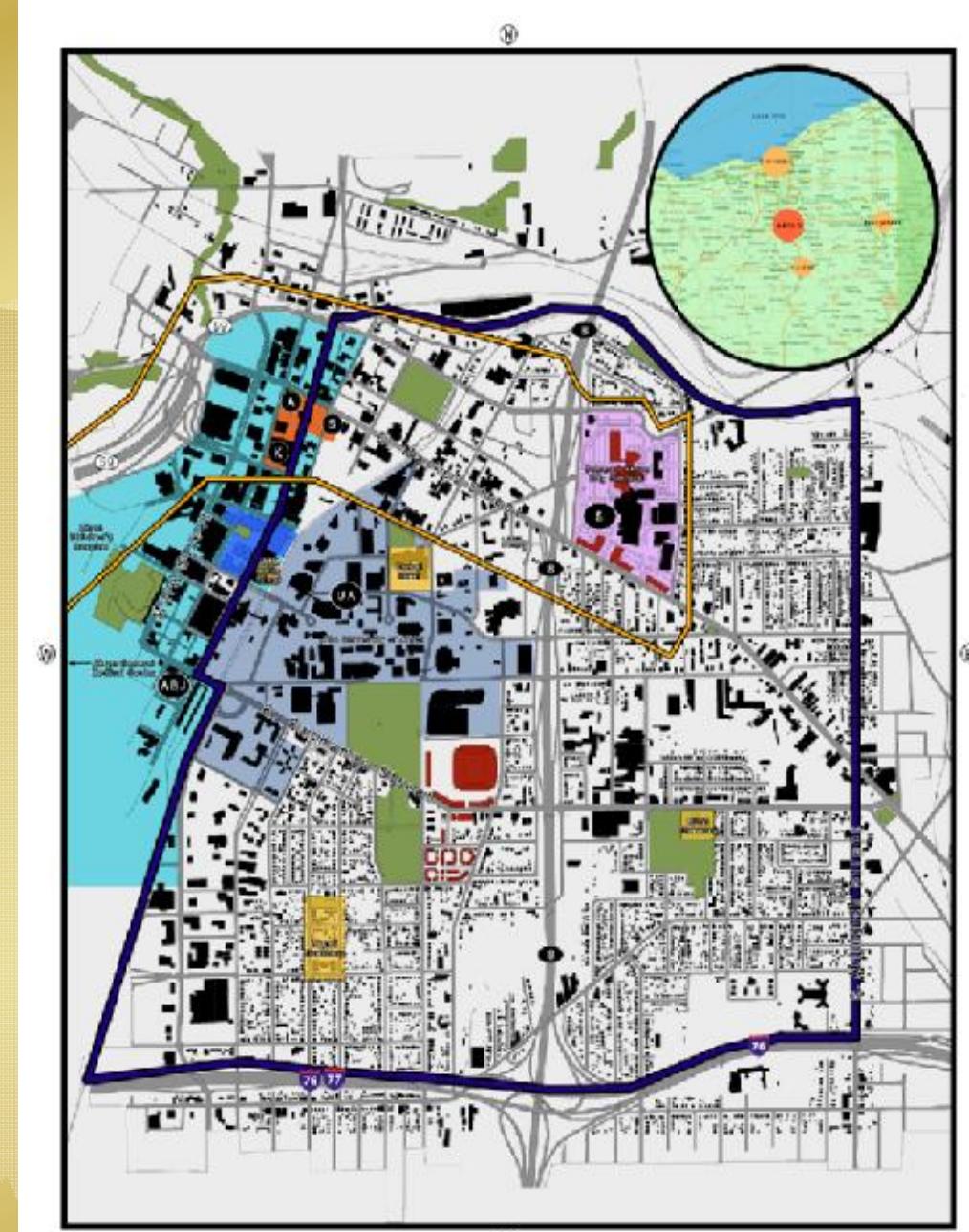
DO SOMETHING GREAT TODAY

Statistics

- 1,000+ acres
- 15,500 residents in 5,200 households
- 300+ businesses with 24,000 employees
- 29,000 UA students (7,000 as UPA residents)

Progress to Date

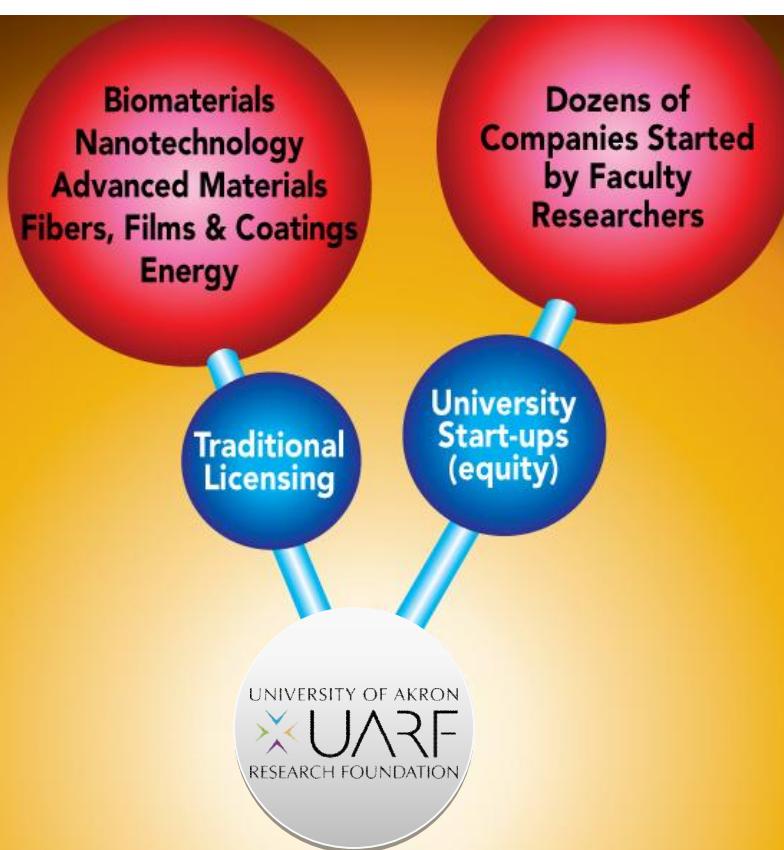
- 920 new jobs
- 80 new housing units
- \$52M in civic investments
- >\$300M in private investments

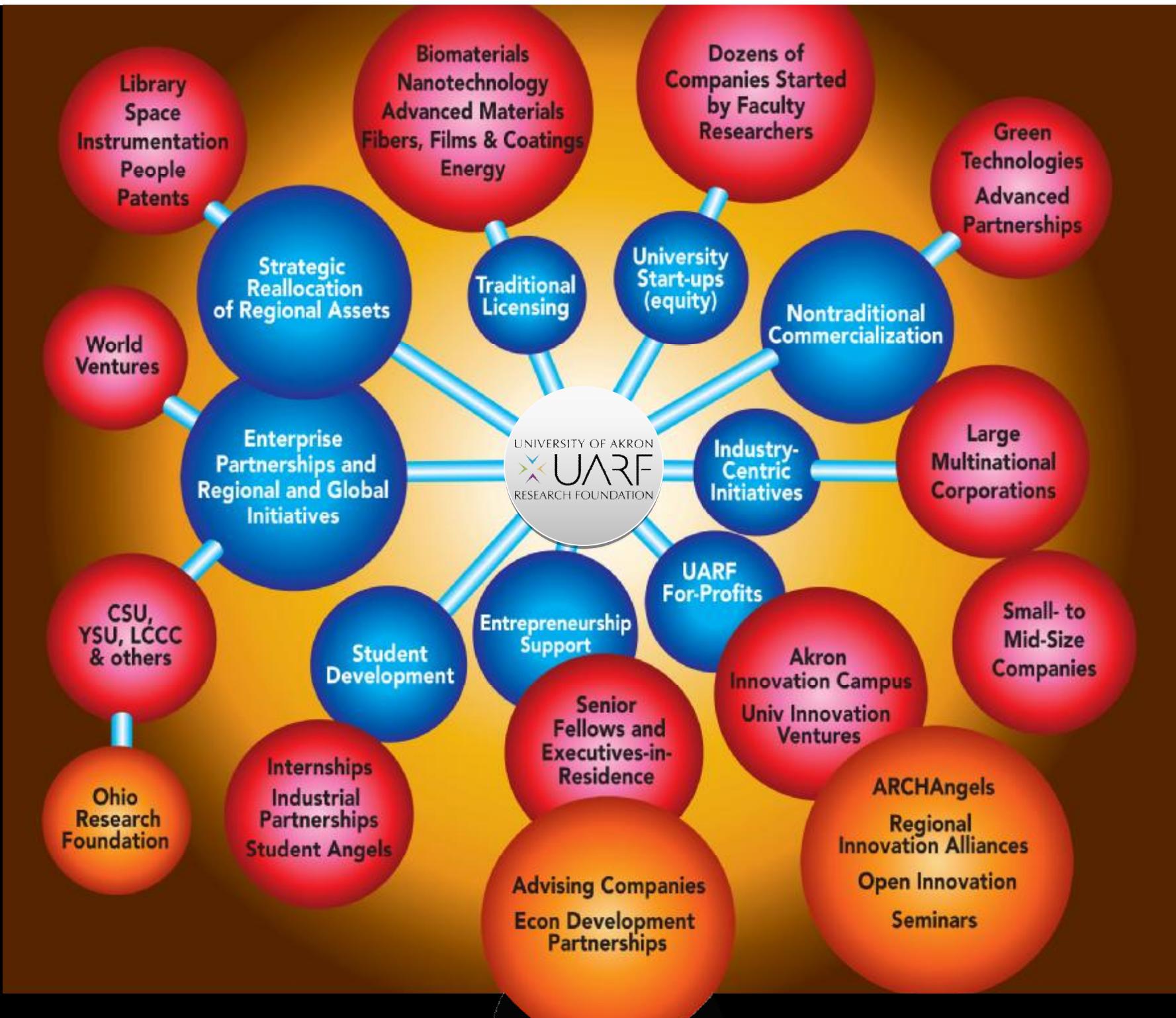


An Independent Entity with a Charter to Benefit UA

UARF is a boundary-spanning organization that links industry and the University

- Assesses public/private resources for mutually beneficial reconfiguration and reallocation.
- Facilitates tech transfer and start-ups, administers industry contracts, houses outreach efforts.
- Provides innovation services to internal and external researchers/organizations.
- Utilizes talents of industry retirees to promote innovation and entrepreneurship.
- Increases research funding and seed capital opportunities.





National Recognition

#1 in Ohio in rate of return per research dollar in tech commercialization, 2007



Winner of 2007 Award of Excellence in Technology Commercialization



OHIO BOARD OF REGENTS

Exemplary emerging university for advanced innovation partnerships, 2007



#1 in patents issued per million dollars in research expenditures, 2000-2004

i6 Challenge Award – in partnership with ABIA – 1 of 6 awarded nationally



1. Educational Efficacy: Increasing Efficiency – Enhancing Operational Excellence

- Business Processes
- Driving Down Costs

2. Job Growth: Discovery to Application

- Accelerating Growth
- The Innovation Fund

3. Talent Growth: Growing Talent - Growing Jobs

- Efficient Degrees – Lower Cost and Less Time
- STEM Education and Career Pathways

\$200-million, 10-year program with five partners:

- The University of Akron
- Akron General Medical System
- Akron Children's Hospital
- Summa Health System
- Northeast Ohio Universities College of Medicine

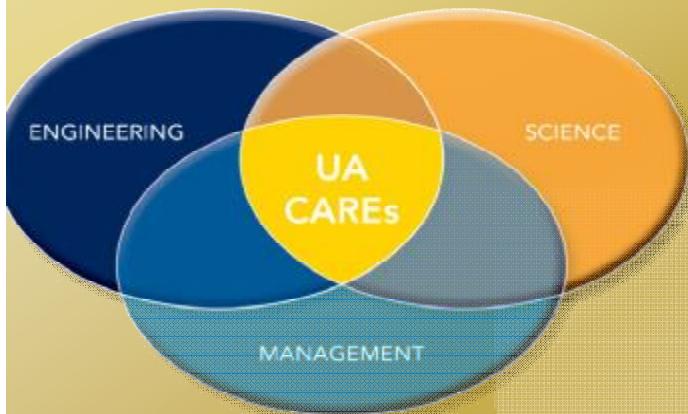
Catalyzed by Knight Foundation grant; matched by state, private and partners' investments

Supporting the city of Akron's Biomedical Corridor

Dedicated to becoming world's #1 biomaterials and orthopedic research program

Five Major Initiatives:

- **Center for Biomaterials and Medicine**
- **Medical Device Development Center**
- **Center for Healthcare Training**
- **Center for Clinical Trials**
- **Community Outreach to the Medically Underserved**



UA CAREs

Addressing corrosion and reliability issues through academics, research and workforce training.

- **1st U.S. baccalaureate degree for corrosion engineering.**
- **Coursework from multiple engineering, material sciences and management disciplines.**
- **Partners include Department of Defense (DoD) NACE International, RPM Int'l/Carboline, BP, Mears Group, PPG Industries and FirstEnergy.**



UA CAREs

- Received +\$8 million from DoD for curriculum development and applied research.
- A partner institution in DoD's University Corrosion Collaboration (UCC) program.
- Named the DoD's National Center for Education and Research on Corrosion and Materials Performance.



NIHF-STEM Middle School

Middle school utilizes problem-based learning for science, technology, engineering and mathematics.

- UA and five public/private sector partners began development of downtown school in 2004.
- In its first year (2009-10), student test scores were among top 3 in Akron Public School system.
- Thomas B. Fordham Institute ranked it 2nd among Ohio's top-performing urban middle schools.
- Featured in Newsweek and on CNN.

The Akron Model of Economic Development



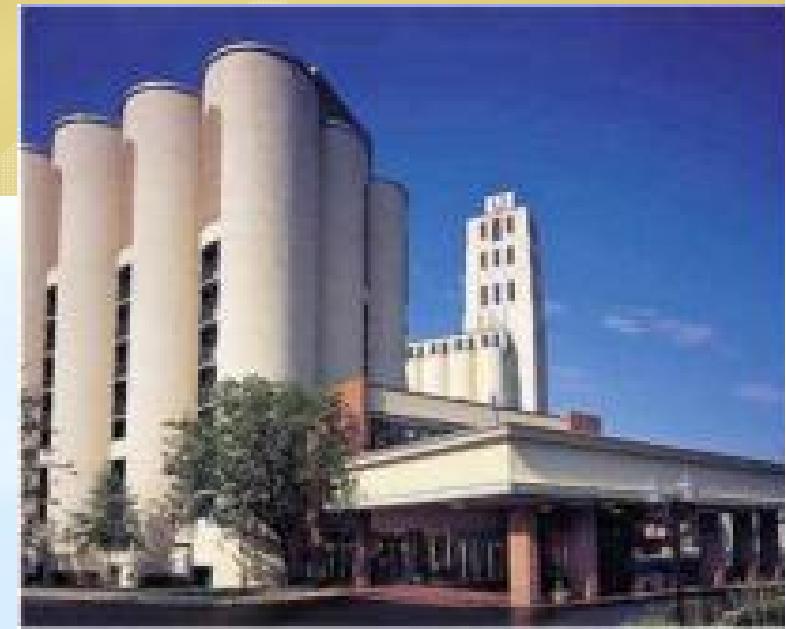
Lessons learned . . .

- 1. Assemble “weak” assets to create strengths.**
- 2. Organize “guerrilla” entrepreneurial talent.**
- 3. Identify and coalesce uncommon, synergistic partners.**
- 4. Involve city and community as integral partners.**
- 5. Coordinate closely with other regional assets to pursue unique opportunities.**

Lessons learned . . .

6. **Expand concept of university's product line and “tool chest.”**
7. **Focus university efforts on relevance, connectivity and productivity.**
8. **Recognize and resolve:**
 - Conflict of egos,
 - “Partnering Paranoia,”
 - Relationship fatigue, and
 - Relinquishing short-term control to gain long-term leverage.
9. **Become “silo busters.”**

Silo Busting



21st Century Role of Universities . . .

- Key role in knowledge-conceptual economy
- Convener
- Developer
- As “Anchor” for Clusters of Innovation
 - Generate creative capital
 - Generate knowledge capital
 - Train human capital
 - Build social capital
 - Attract financial capital
 - Preserve natural capital
- Common challenges and models;
unique opportunities

(from Michael Crow, ASU; Proenza & Zimpher, in preparation)

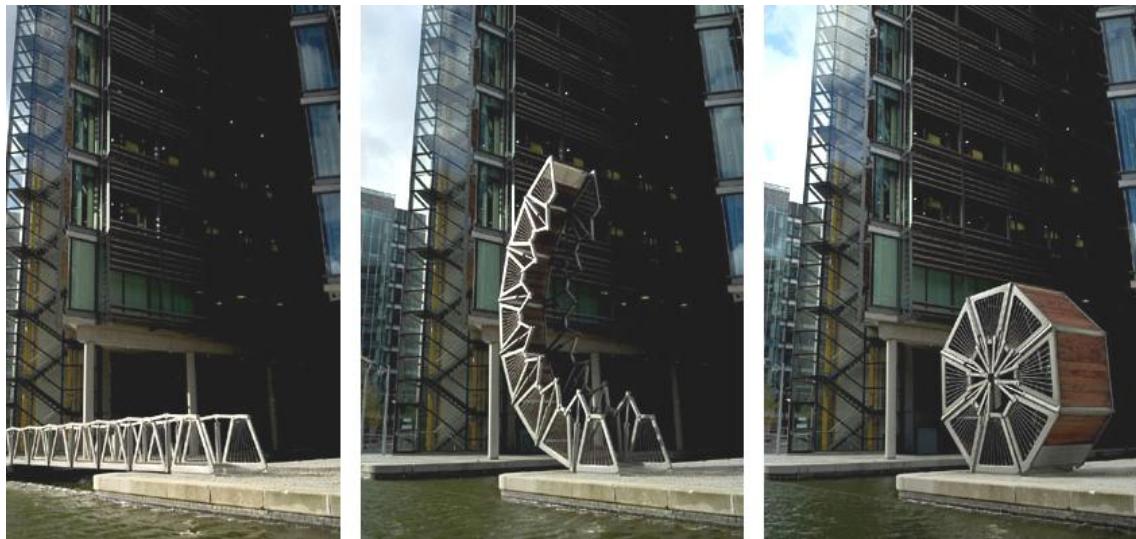
Looking Forward . . .

Vision 2020

Charting the Course
to a New Gold Standard



Wanted: Visionaries and Innovators to build a Bridge to the Future



Aspire. Attain.
Advance.

Thank you

The
University
of Akron

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