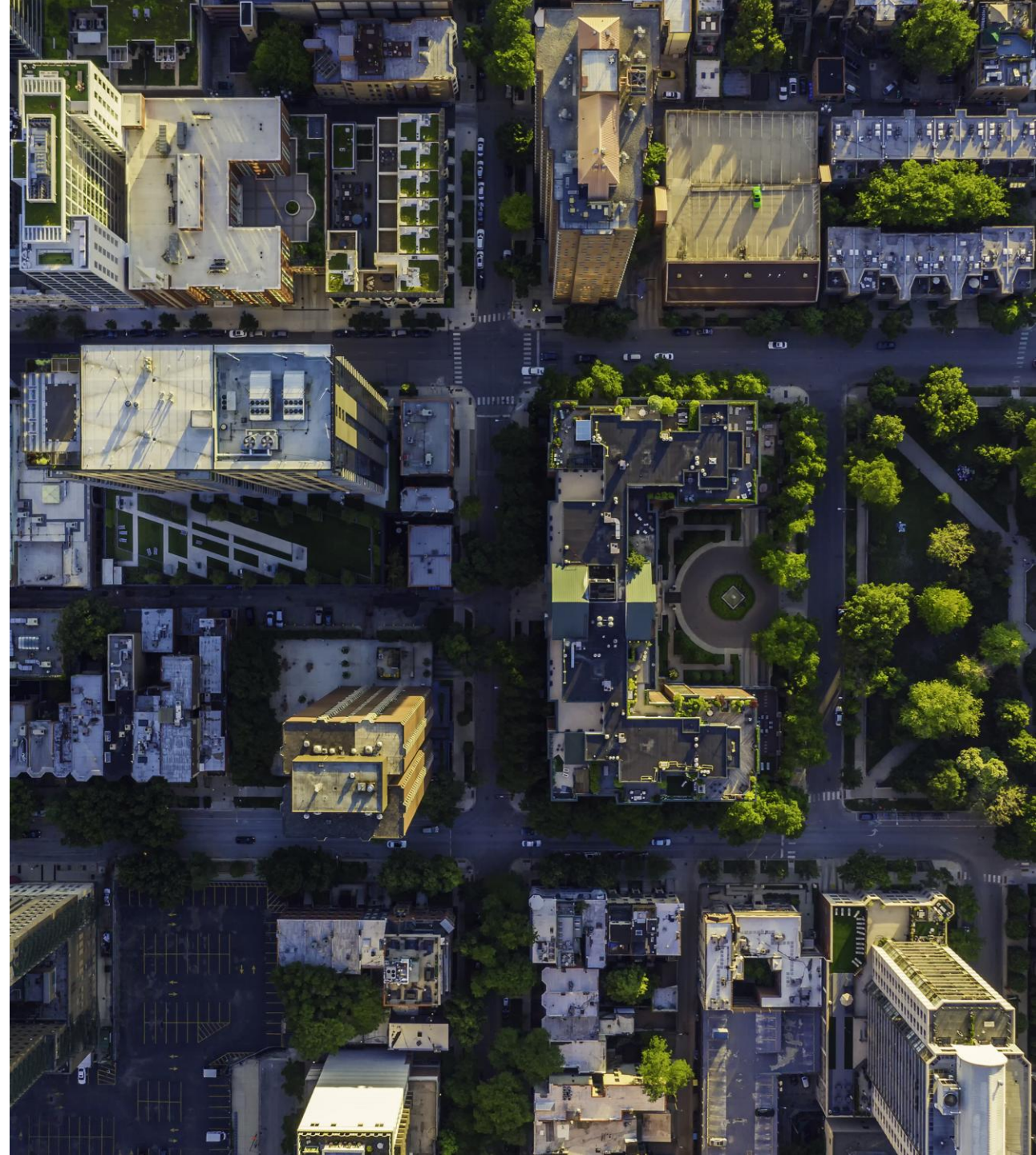


CLUSTER IDENTIFICATION

**Recognizing &
prioritizing
regional industry**

CENTER FOR CLUSTER
DEVELOPMENT





WHY A COURSE ON CLUSTER IDENTIFICATION?

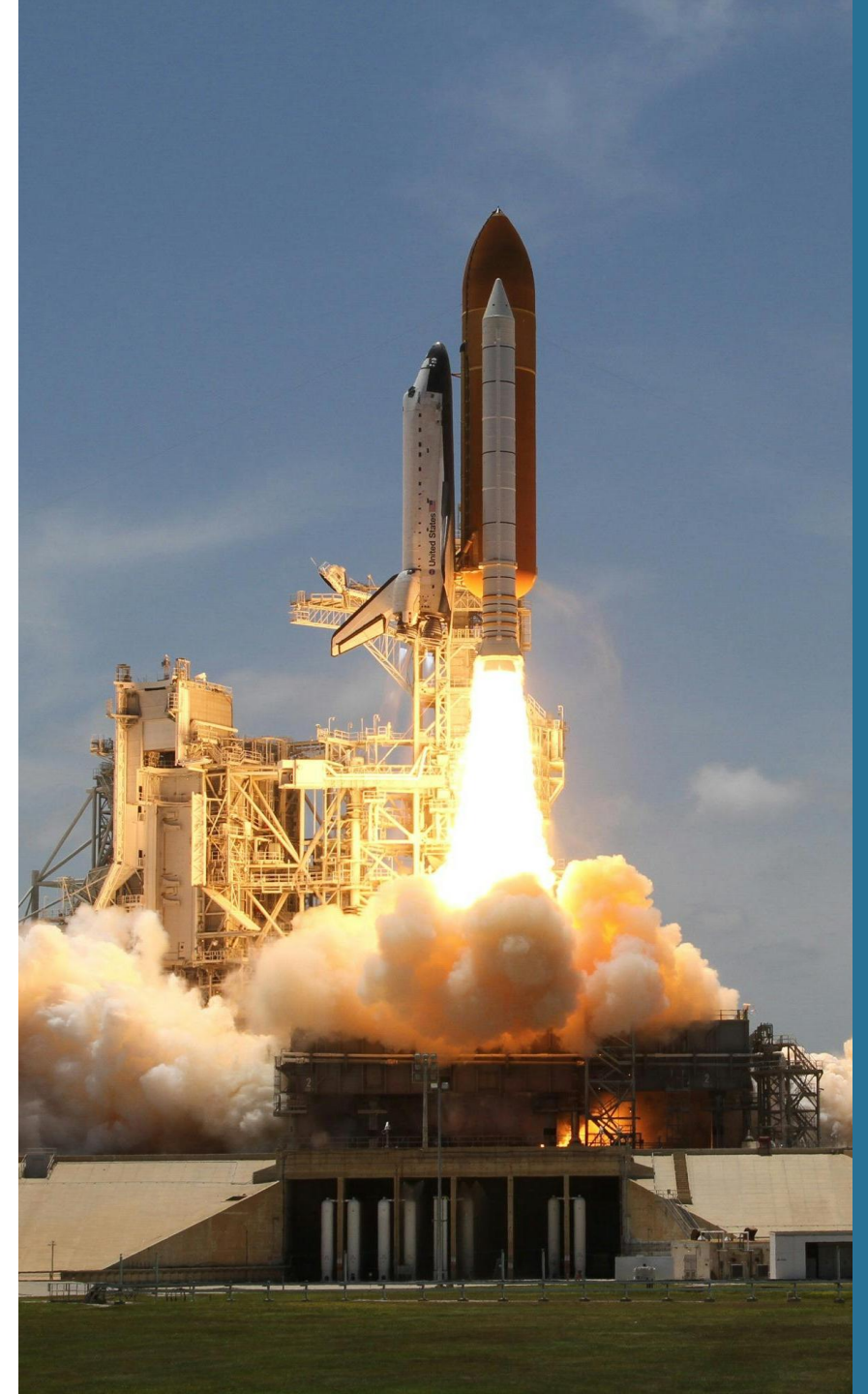


HOW THE COURSE WAS BUILT

- Experience providing technical assistance to, speaking with, clusters
- Assessments of federal cluster funding
- Reviews of academic literature and regional reports
- Interviews with cluster leaders

COURSE GOALS

1. Know how to identify clusters
2. Understand how to prioritize clusters for public support
3. Be prepared to lead your region in cluster identification and prioritization process





COURSE SESSIONS

1. About Clusters
2. Location Quotient
3. Qualitative Assessment
4. Prioritizing Assistance
5. Beyond Identification
6. Report out & Discussion

PARTNERS

EXCEL REGIONAL SOLUTIONS

- Executing foundation grant to the Center for Cluster Development
- Created and testing course content
- Supports regional economic development strategies + program and policy development



EXCEL REGIONAL SOLUTIONS

NADO RESEARCH FOUNDATION

- Association for Regional Development Organizations
- Convening EDD Community of Practice with U.S. EDA support
- Partnering to share this opportunity with the Districts

FACILITATORS



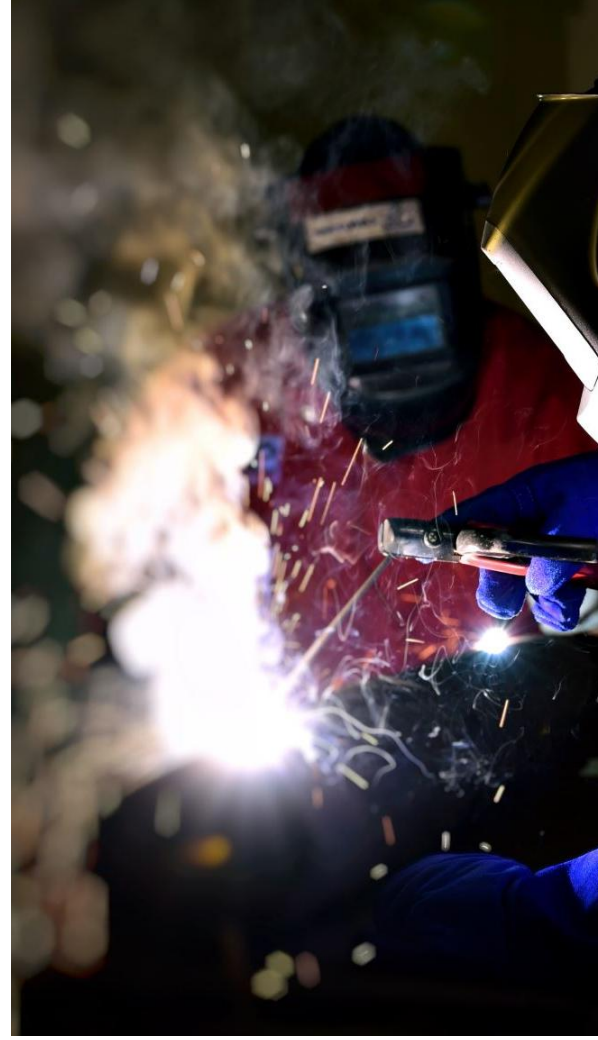
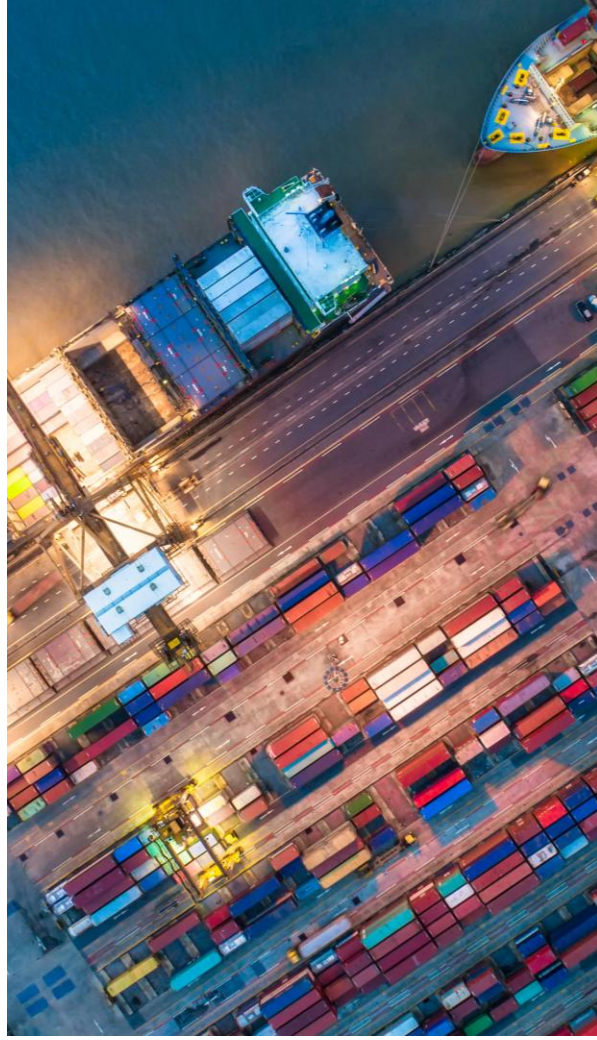
JASON RITTENBERG

Principal, Excel Regional Solutions



ALEX JONES

Consultant to Excel Regional Solutions
Fellow, Brookings Metro
Program Lead, U.S. EDA (***past***)



ABOUT CLUSTERS

INTRODUCTIONS

- Name
- Organization
- Region
- Your interest in cluster development



DAY AGENDA

1. Explaining cluster development's appeal
2. Unpacking jargon
3. Comparing clusters to other economic development approaches
4. Funding cluster development strategies

“The enduring competitive advantages in a global economy lie increasingly in local things—knowledge, relationships, motivation—that distant rivals cannot match.”

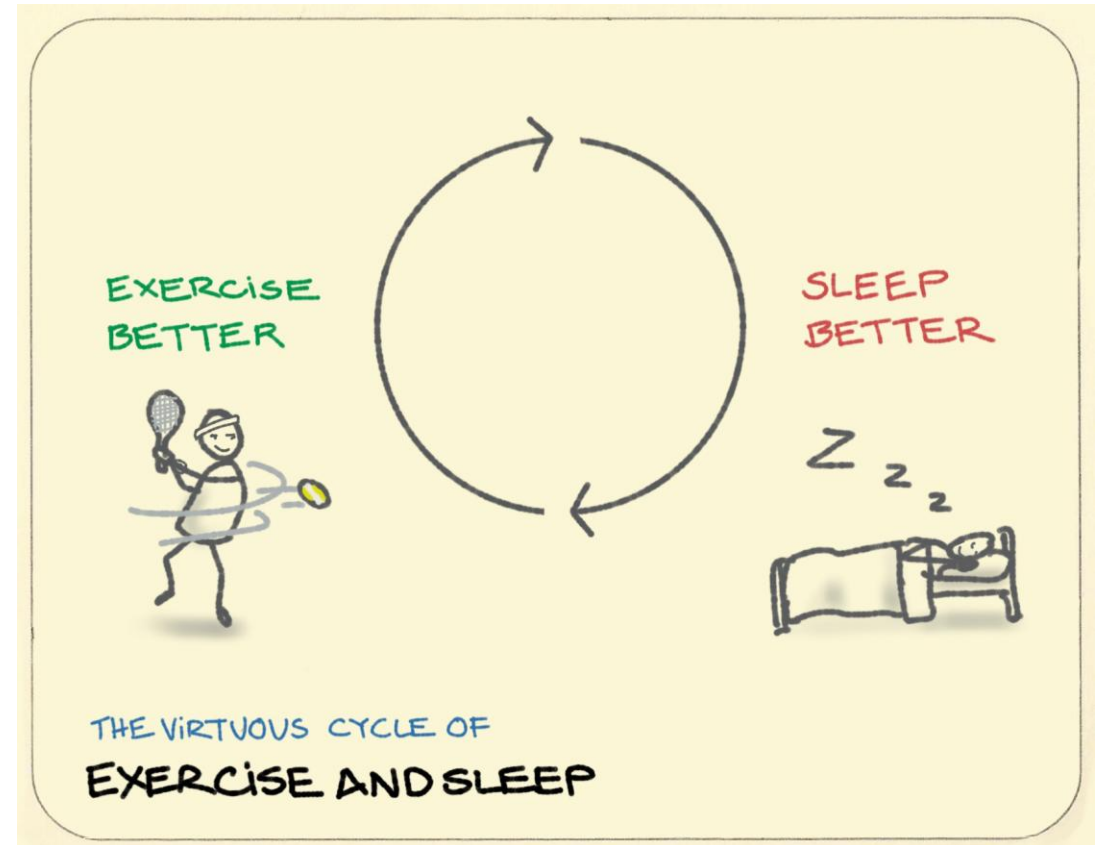
- Michael E. Porter

Porter, M.E. (1998). "Clusters and the New Economics of Competition." *Harvard Business Review*, 76, 6, 77-90. Retrieved: <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>.

CLUSTERS CAN OFFER A VIRTUOUS GROWTH CYCLE

- Improved productivity
- Faster innovation
- Stronger supply chains
- Increased entrepreneurship
- More skilled workforce
- Benefits to other sectors

Example of a virtuous cycle.



Available via CC license from [Sketchplanations](https://www.sketchplanations.com/).

FURTHER READING ON CLUSTER BENEFITS

- De Almeida Tavares, M. S., Gohr, C. F., Morioka, S., & Da Cunha, T. R. (2021). Systematic literature review on innovation capabilities in clusters. *Innovation & Management Review*, 18(2), 192–220. <https://doi.org/10.1108/inmr-12-2019-0153>.
- Delgado, M., Porter, M. E., Stern, S., Center for Economic Studies, & U.S. Census Bureau. (2010). *Clusters and entrepreneurship*. <http://ssrn.com/abstract=1689084>.
- Ketels, Christian & Sergiy Protsiv (2021) Cluster presence and economic performance: a new look based on European data, *Regional Studies*, 55:2, 208-220, DOI: [10.1080/00343404.2020.1792435](https://doi.org/10.1080/00343404.2020.1792435).
- Delgado, M., & Porter, M. E. (2021). Clusters and the Great Recession. *SSRN*. <https://ssrn.com/abstract=3819293>.
- Campi, M., & Dueñas, M. (2022). Clusters and Resilience during the COVID-19 Crisis: Evidence from Colombian Exporting Firms. In Inter-American Development Bank, *IDB Working Papers Series* (No. 1375). <http://www.iadb.org>.

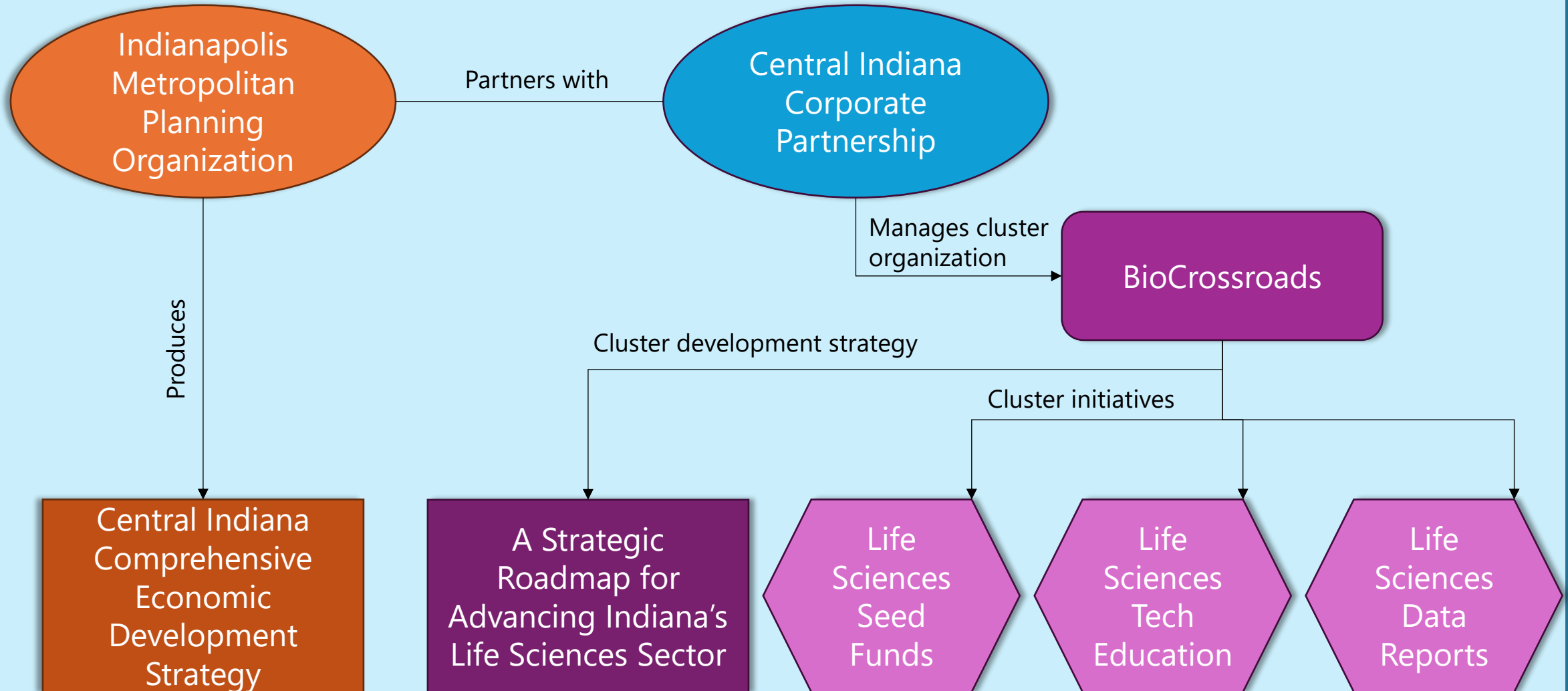
“TECH” IS MORE THAN INFO TECH!

1. When this course talks about “tech”, and when EDA and other entities talk about “tech-based” economic development, we:
 - Do not just mean information technologies or “IT”
 - We are typically referencing any industry that has a high reliance on research, new intellectual property (IP), and/or a STEM workforce
2. Clusters do not have to be in “tech” sectors to deserve support
 - *But* increasing productivity and competitiveness often requires a strong connection to technology & innovation

CLUSTER TERMINOLOGY

- **Cluster** – concentration of businesses and institutions operating in a specific sector within a region
- **Cluster development** – efforts to support one or more clusters
- **Cluster development strategy** – a plan to support one or more clusters
- **Cluster initiative** – a specific effort for cluster development
- **Cluster organization** – an entity that supports a particular cluster

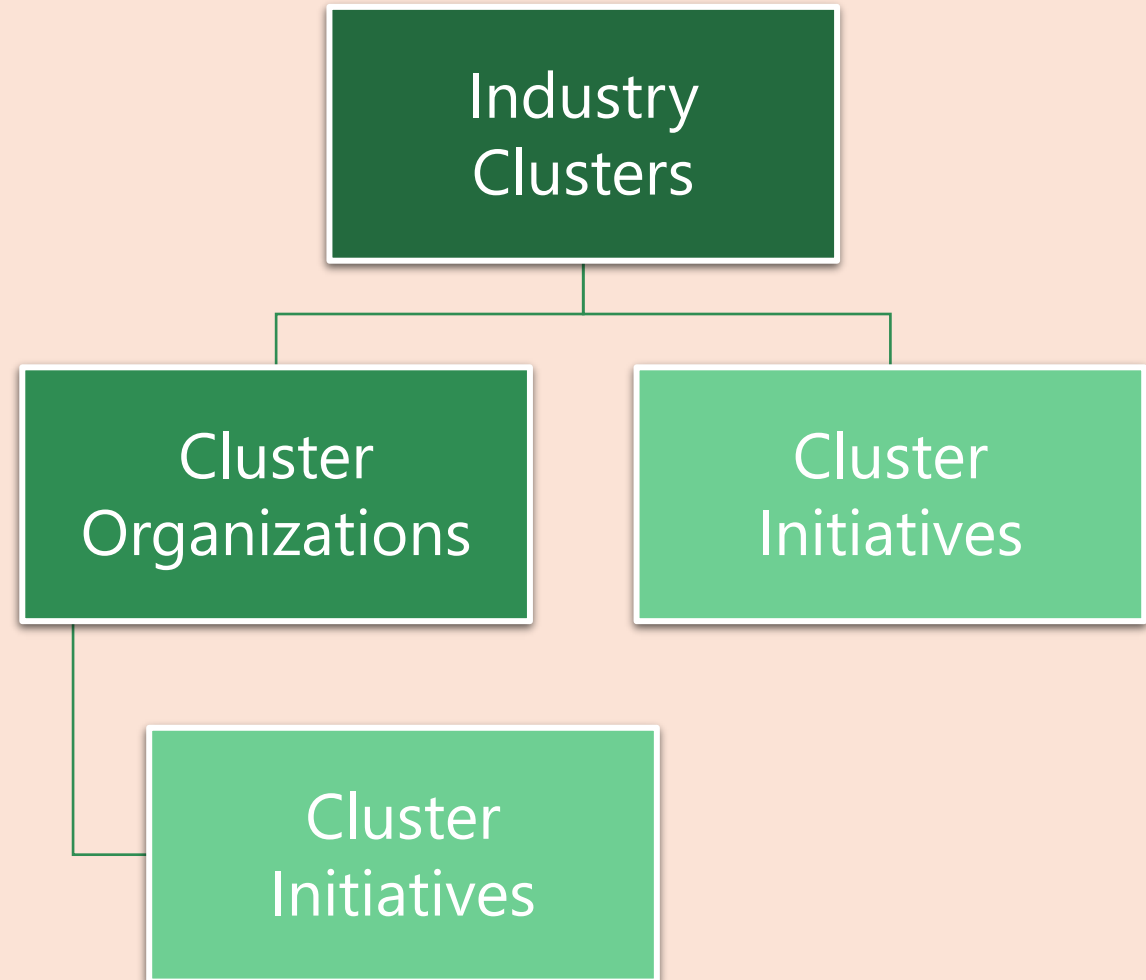
CENTRAL INDIANA & BIOCROSSROADS



CLUSTERS IN YOUR REGION

Take a few moments to write down cluster-related activity in your region

- Industry clusters
- Cluster organizations
- Cluster initiatives



BASIC PRINCIPLES OF CLUSTER DEVELOPMENT

1. Support industries, not companies
2. Engage industry in design and implementation
3. Invest in measurement and evaluation
4. Adapt approach to evolving cluster needs
5. Only do what private sector will not or does not do
6. Design efforts to encourage beneficial private activity / investment

HOW DO CLUSTERS RELATE TO ECONOMIC DEVELOPMENT?

- Clusters are a way to understand your local industry
 - Which sectors have a notable concentration that could / should yield benefits greater than the sum of its parts?
- Cluster development is an economic development approach that fits within a broader regional strategy
 - a) Lean into a competitive advantage by supporting a strong industry
 - b) Diversify your economy by cultivating a locally emerging industry
 - c) Buttress a declining sector through targeted support

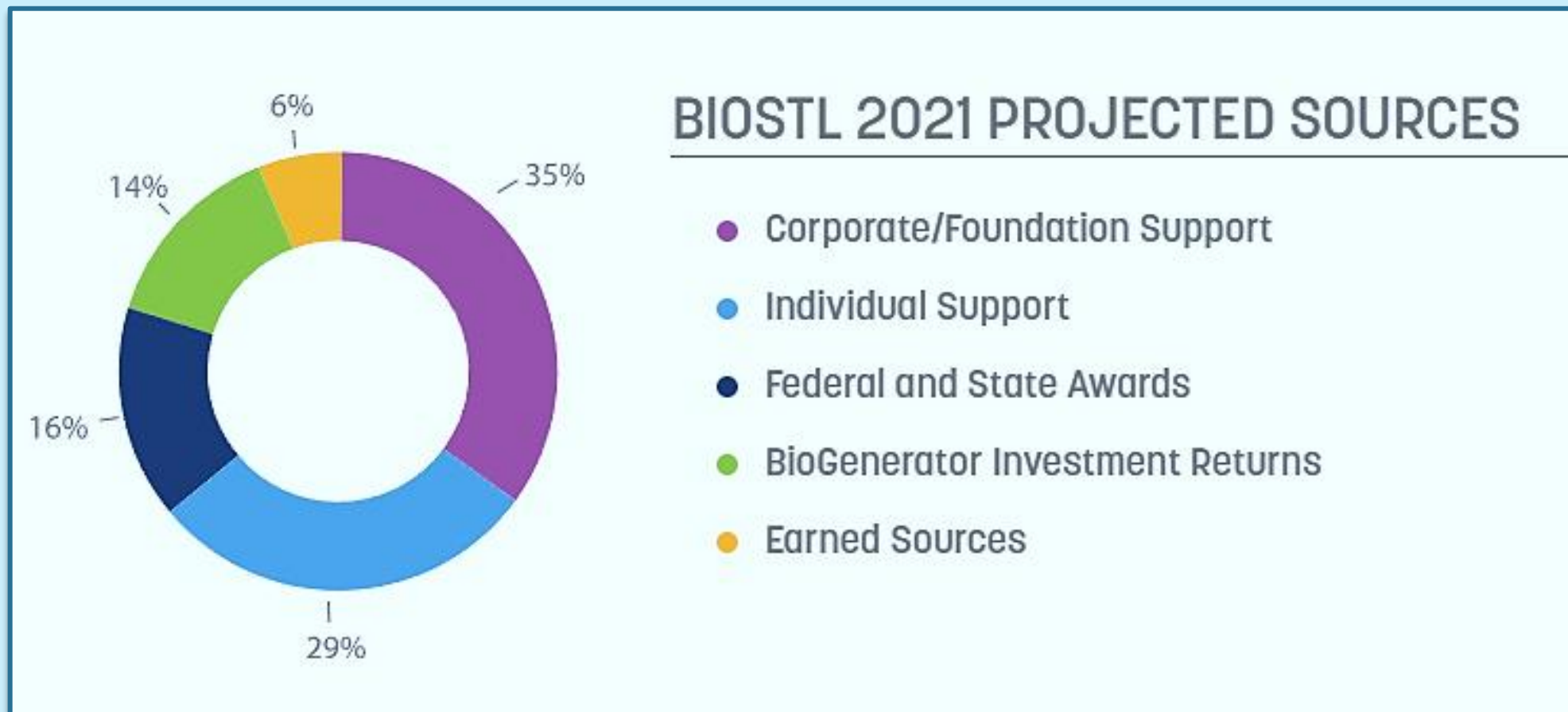
IS CLUSTER DEVELOPMENT “PICKING WINNERS AND LOSERS”?

- Cluster development should support the **industry**, not individual companies
- In most cases, a region should be supportive of all its clusters
- Fiscal realities may mean not all regional clusters can be the subject of a publicly-funded cluster development strategy
- As with any use of public funds for limited purposes, the selection process should be robust and transparent

FUNDING CLUSTER DEVELOPMENT STRATEGIES

- Cluster development can use any tool available to economic development, and often should tap industry support
- Common sources include:
 - State: general fund, infrastructure bonds
 - Local: general fund, special assessments, specific tax/fee
 - Federal programs, including: Regional Innovation Clusters (SBA), Manufacturing USA (NIST, multiple), Regional Technology & Innovation Hubs (EDA), Regional Innovation Engines (NSF), Hydrogen Hubs (DOE)
 - Philanthropy: grants, PRI
 - Industry: membership, sponsorship, fee-for-service

BIOSTL: EXAMPLE OF REVENUE VARIETY



Source: <https://www.biostl.org/what-we-do/impact-report>

ABOUT CLUSTERS: TAKEAWAYS

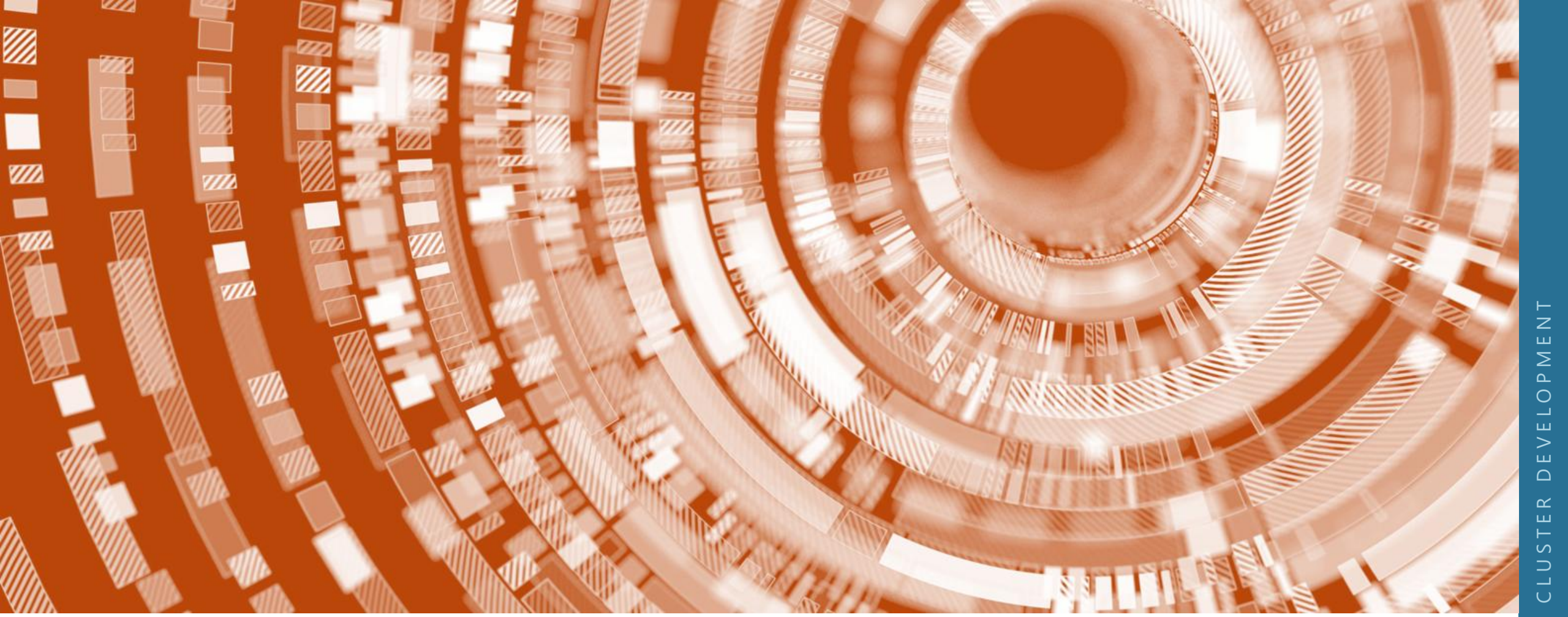
- Clusters are geographic concentrations of interconnected businesses and institutions within a specific sector
- Clusters can achieve productivity, innovation, and employment growth beyond what the businesses alone would be expected to realize
- Cluster development is an economic development approach that cultivates one or more clusters
- There are many means for funding cluster development

A conceptual illustration featuring a glowing lightbulb at the top, enclosed within a large, hand-drawn thought bubble. Below this main bubble are several smaller, empty hand-drawn circles of varying sizes, suggesting a flow of ideas or a brainstorming session. The background is a dark, textured grey.

QUESTIONS & DISCUSSION

PREP TO MAXIMIZE NEXT SESSION

1. Identify at least one industry that you think may be a regional cluster
2. Record NAICS codes associated with potential clusters
3. Download firm and/or employment data from BLS, Census, or proprietary sources for those NAICS codes in your region + U.S.
 - We will discuss steps 2 & 3 in the next session, so do not worry if you run into challenges with these



FEEDBACK SURVEY

<https://forms.gle/NyXRTVgUhS8mXP5g9>

AUTHOR & ACKNOWLEDGEMENTS

Jason Rittenberg, Principal at Excel Regional Solutions, is the primary author of this curriculum.

Excel strengthens America's technological and economic competitiveness by providing expert strategy development, communications, and information services that advance regional, state, and federal policy and programs. Learn more at excelregions.com.



EXCEL REGIONAL SOLUTIONS

Invaluable contributions were provided by:

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- Ellen Marrison
- Melissa Roberts Chapman

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