# Micropolitan Economic Development:

## *Connecting Capacity Building to Long-Term Outcomes*

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# Approach

- Economic development initiatives build regional and institutional capacity, influencing long-term economic outcomes through programs that develop these capacities.[1]
- SRI International developed and tested a generalized logic model that captures the non-linear impact of program activities from capacity-building outputs and outcomes to broad longer-term economic outcomes.
  - Test case: EDA Non-Infrastructure grants for metropolitan and micropolitan regional development

[1] See Feldman, Maryann, Theodora Hadjimichael, Tom Kemeny, and Lauren Lanahan (2014) Economic Development: A Definition and Model for Investment (Economic Development Administration: Washington D.C.)

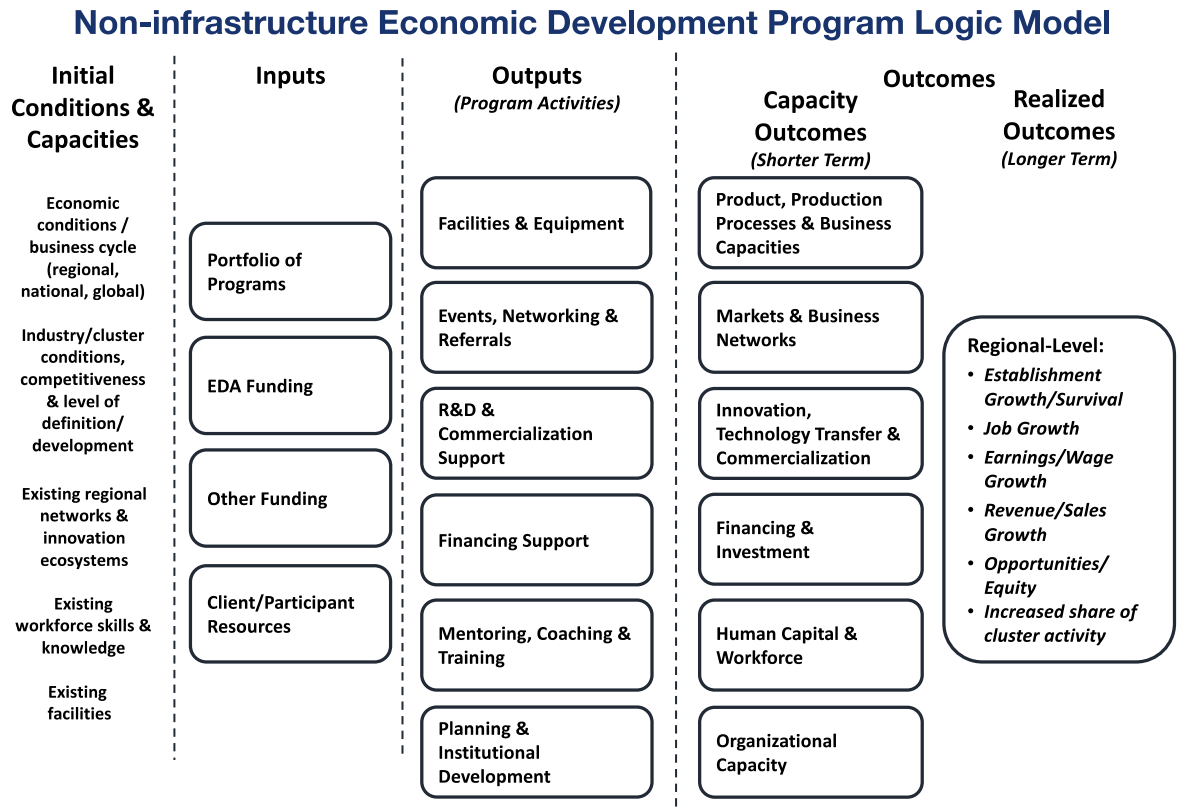
# Summary

- Economic development capacity correlates with desirable long-term economic performance in different ways, depending on the metropolitan or micropolitan nature of the region.
- In micropolitan regions, institutions and regional characteristics of innovation and creativity were correlated with future economic performance.
- EDA grants directly allow clients to increase TRL levels and find investment deals. Investment deals and patents are directly correlated with future economic growth.

# Logic Model

- A logic model captures the progression of a grant program, from inputs to activities to immediate outcomes.
- Different categories of inputs, outputs, and outcomes might occur depending on the program's focus.
- SRI's Logic Model outlines the pathways in support of the following claims:
  - Targeted federal investment can help build or improve institutions that expand local development capacity, and help them operate more effectively.
  - The expansion of these capacities has long-term impacts on economic performance (growth in earnings, employment, and income).

# Logic Model for Non-Infrastructure Economic Development



# Data Used

- The dual level approach depends on directly collected data to capture program outputs and aggregate data to capture trends and long-term impacts
- Survey Data: SRI piloted a survey to directly collect data from EDA's Regional Innovation Strategies (RIS) grantees and their clients from 2014 and 2015:
- Econometric Data: Economic indicators at the Metropolitan and Micropolitan regional level
  - Data from 2000 to 2016

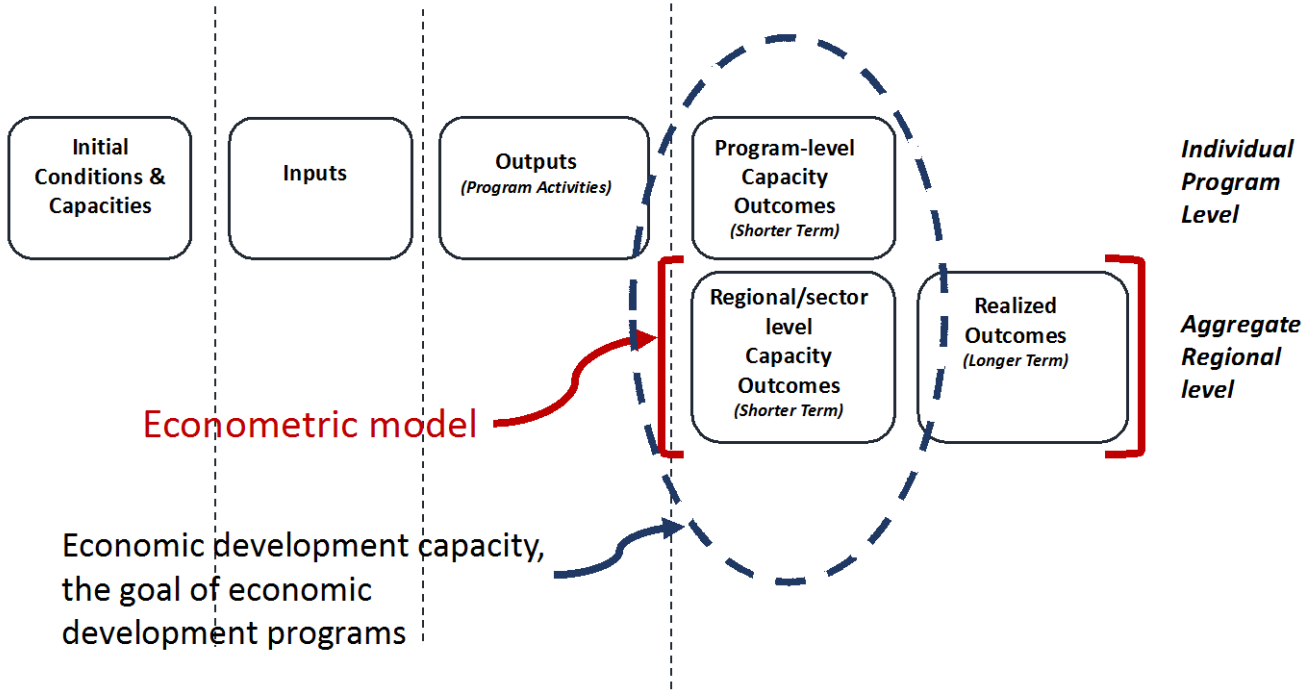
# Controls and Capacity Indicators

## Figure 1: Controls

| Variable Abbreviation | Description | Source |
|---|---|---|
| Employment 2000 | Employment levels of the MSA in 2000 | BLS LAUS |
| Earnings, 2000 | Average annual pay of wage and salary workers, in 2000 | BLS QCEW |
| Log Pop, 2000 | Log Population count of the MSA | Census |
| Mfg. Share, 2000 | Manufacturing jobs as a percent of total jobs in the metropolitan/micropolitan economy | BLS QCEW |
| % Bachelors Plus, 2000 | Portion of the population 25+ that has a bachelor's degree | Census |
| Per Capita Inc, 2000 | Personal income per capita, as defined by BEA | BEA Local Area Personal Income |
| Unemp Rate, 2000 | Annual average unemployment rate, not seasonally adjusted | BLS LAUS |
| % Non-Working Age | Percent of the population not between 25 and 64 years of ages | Census |
| Population Change, 97-00 | Population Change between 1997 and 2000 | Census |
| Total # of Establishments | | |

## Figure 2: Capacity variables

# Logic Model: Dual Level Approach to Assessing Impact



# Long-Term Growth in Micropolitan Regions:

- Inventiveness and creativity of micropolitan regions, as indicated by the level of patent activity, the presence of a creative class, and high-tech non-employer firms, were important indicators for future economic growth.
- For micropolitan regions, the composition and nature of the region was a more relevant indicator of future economic growth than the level and quantity of new business activity.
- These results suggest that regions with strong network capacity effectively allocate the resources from investment and interventions.
  - Investments that foster improved regional characteristics and capacities, such as EDA's non-infrastructure grants, are particularly useful in micropolitan regions.

# Grantee and Client/Beneficiary Survey

SRI piloted a survey to directly collect data from EDA's Regional Innovation Strategies (RIS) grantees and their clients from 2014 and 2015:

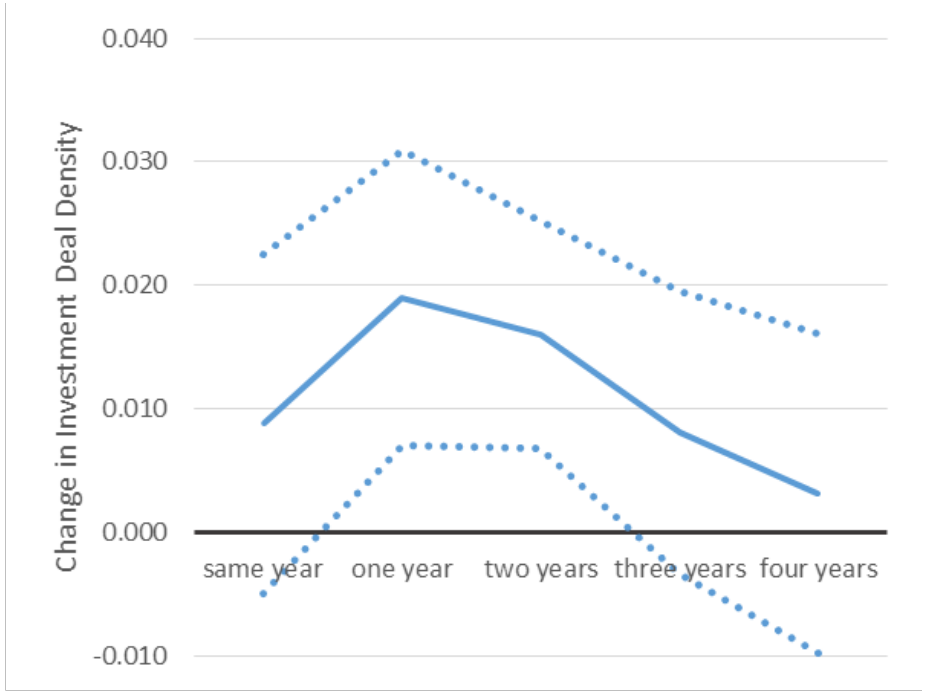
- 56 clients reported increasing the TRL of a product or products through services supported by EDA grants, with an average TRL increase of 3.39
- 88 respondent clients accessed venture capital, seed, and/or angel funding through the services supported by the EDA grant

**This survey cements the connection between EDA non-infrastructure programs, program outputs, and the development of economic capacities**

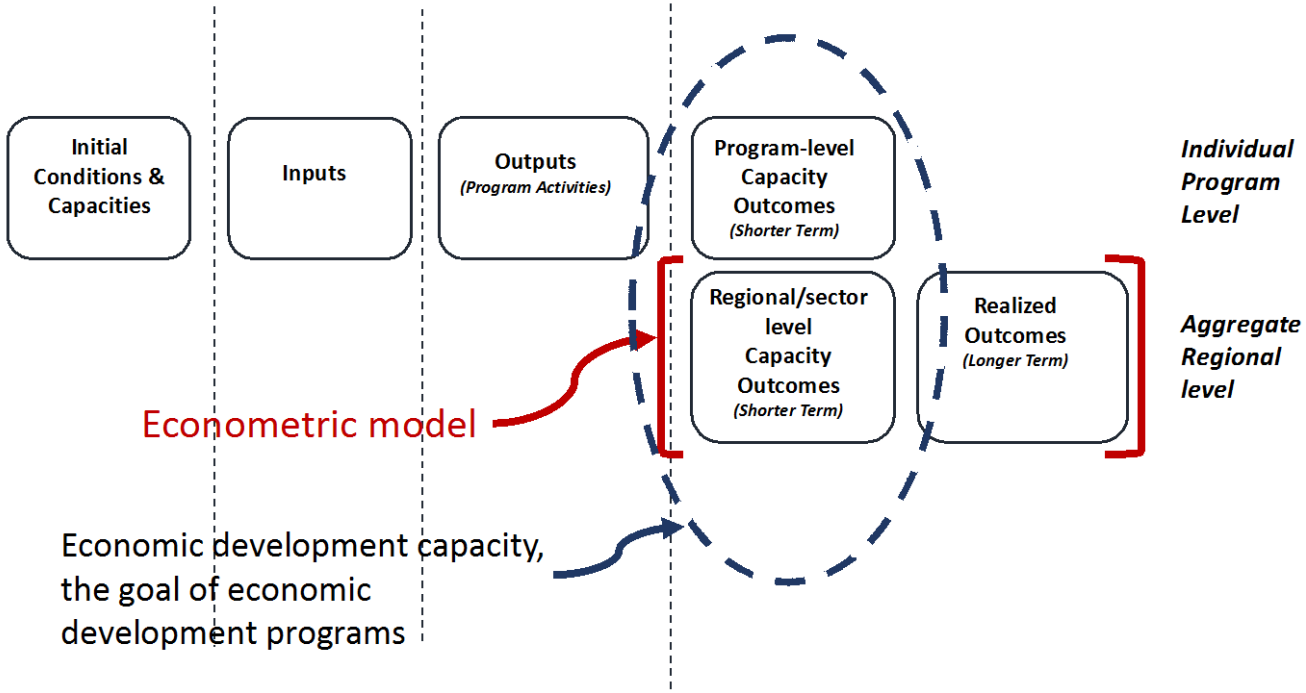
# Micropolitan Results:
# PDL Model (Grants -> Short-Term Capacity Development)

- EDA non-infrastructure grants also appear to have a small, but positive, influence on the relative volume of investment deals in a region

Short-term impact of EDA non-infrastructure spending (per $100,000) on Investment Deals (per 1,000 establishments) in Micropolitan Areas



# Conclusions and Implications




- Micropolitan development requires developing regional and institutional capacities
- The dual-level approach is a novel way to:
  - Frame the impact of capacity building
  - Conceptualize program evaluation
  - Communicate, and justify the impact of programs on long-term measures

# Key Questions to Consider for Program Directors and Evaluators

- What short-term capacities does your program build?
- What proxies and indicators can be used to measure these capacities in aggregate?
- What long-term outcomes do those aggregate proxies and indicators connect to?

# Thank You

Roland Stephen, Ph.D., has more than 20 years of leadership and project management experience in policy analysis, strategic planning, and program design and evaluation. His work focuses on evaluation and assessment, using refined logic models, new metrics, and innovative methods for defining skills.  He has completed a skills-based analysis of the energy engineering workforce. He has also led projects focused on economic development, including recommendations economic development strategy, and diversification plans industrial cities.

Dr. Stephen holds a Ph.D. in international and comparative political economy from UCLA, and a B.A. in history and economics from the University of Cambridge (UK).

**Nikhil Kalathil**, B.A., Research Analyst, Center for Innovation Strategy and Policy, SRI International. Nikhil Kalathil specializes in research on the economics of innovation and technological change. His recent work on regional economic systems has focused on developing new logic models and metrics for assessing the impact of grant programs on innovation and long-term economic growth, and designing a skills-based analysis of the energy engineering workforce for the Advanced Manufacturing Office, Department of Energy.

Mr. Kalathil graduated from Oberlin College with high honors and a triple major in Economics, Mathematics, and Politics.