

The Role of Community Capital in Rural Renewal

Andrew J. Van Leuven

June 8, 2023



DEPARTMENT OF
AGRICULTURAL ECONOMICS

- 1 About Us: Rural Renewal & the Research Team
- 2 Background: The Community Capitals Framework
- 3 This Study: Where, What, Why, and How?
- 4 Study Findings
- 5 Implications & Extension Programming

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- **Vision:** a future with hope-filled, evidence-based rural renewal movements growing in every state and nation



Research Team



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- **Raquel Taylor:** Ph.D. Student in Agricultural Leadership, Education, and Communications, University of Nebraska



Research Team



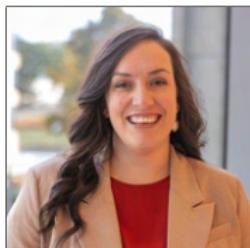
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- **Shane Robinson:** Professor of Agricultural Education & Associate Director of Institute for Teaching and Learning Excellence, Oklahoma State University



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- The results provide insights for rural counties to (re)focus their approach to community economic development.



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Community Capitals Framework



Community Capitals Framework

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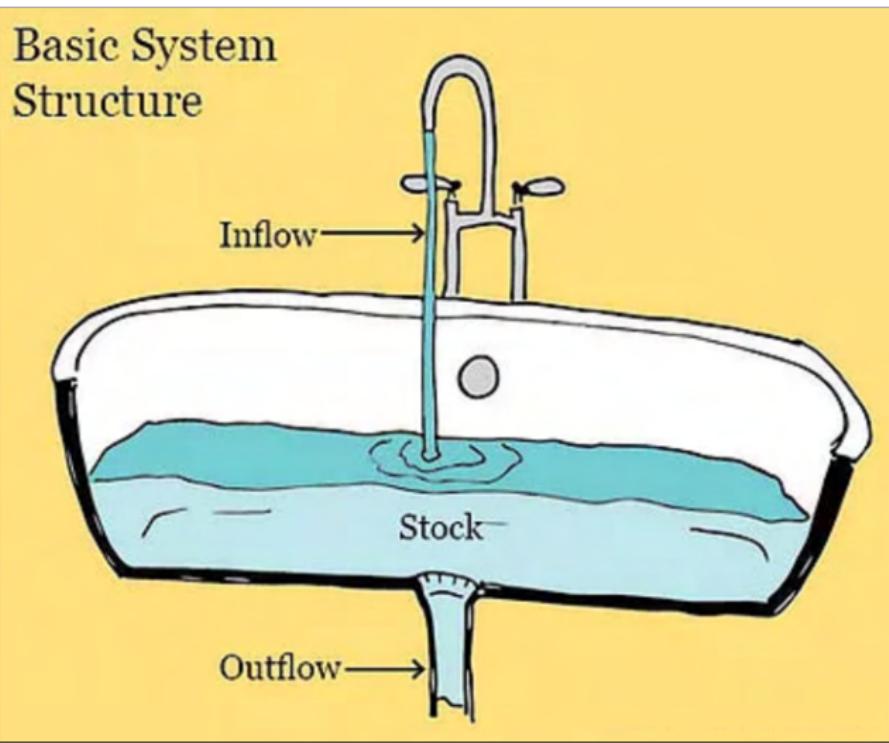
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 - natural capital
 - cultural capital
 - human capital
 - social capital
 - political capital
 - financial capital
 - built capital

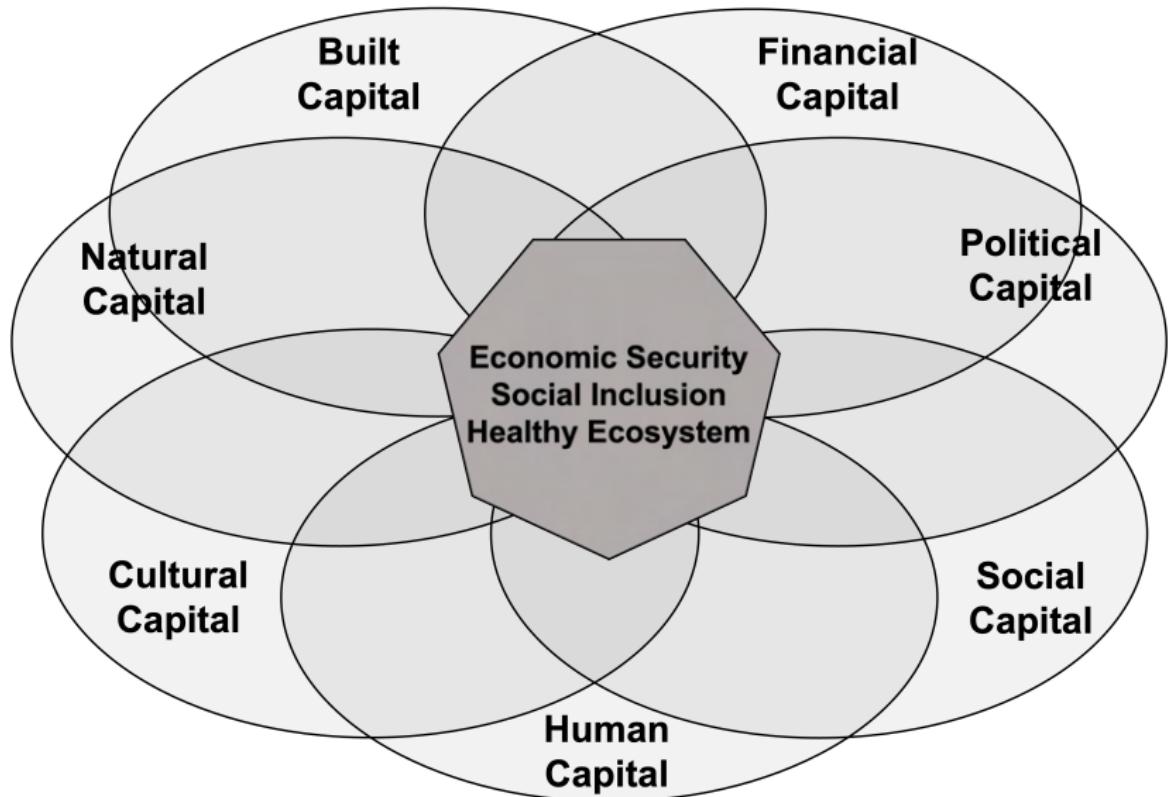
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- Each type of capital has been theorized and studied long before the “community capitals framework,” but rural sociologists Emery & Flora were the first to combine them all and study them in terms of **systems**.

Stock & Flow of Community Capitals



Community Capitals Framework



Natural Capital



Natural Capital



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- Natural capital is not always a positive asset: aspects of the natural environment are key enablers *or* constraints of how the built environment was developed

Cultural Capital



EXTENSION

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- Traditions and customs that are unique to a given place or community (often shaped by its natural capital)



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- **Examples:** language, food, artistic & creative expression, heritage, celebrations
- Unique culture can be an attractive feature of a community, yet culture can also isolate or repel potential visitors



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Human Capital



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- Public health and cultural norms (such as loyalty and punctuality) both play a significant role in the value of human capital, as sick/injured or lazy workers are not as productive.



EXTENSION

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- Entrepreneurs require social capital in order to fulfill their vision or business ventures; community economic developers can help them tap into relevant networks.

Political Capital



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- Political capital also refers to the ability of people to “find their own voice and to engage” in the civic sphere
- Government is geographically defined: spending needs to happen *somewhere*. Places with political capital usually happen to find themselves as beneficiaries of federal expenditures.

Financial Capital



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- Interacts with social capital to help match entrepreneurs with willing investors (the “character loan” of old)
- Also consists of a communities capacity to raise funds for necessary local expenditures, such as infrastructure improvements and other economic development strategies

Built Capital



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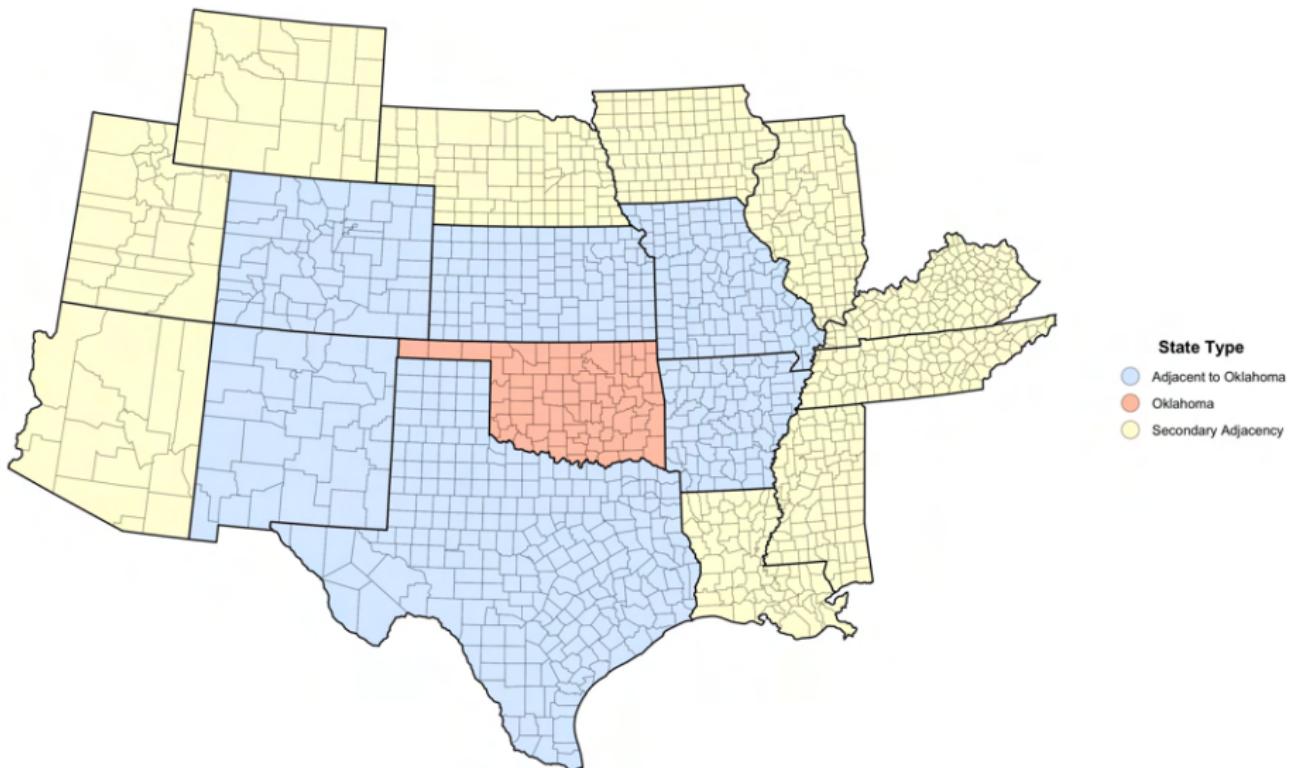
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 - **Functionality:** how well does it work? will it need replacing soon?
 - **Distinctiveness:** does it look identical to other nearby communities?
 - **Sense of Place:** are the buildings, landmarks, and infrastructure integrated neatly into the urban fabric? do streetscapes they provide pedestrians with a sense of “completeness” or enclosure?



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WHERE? The Study Area



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- Explore the correlation between capital levels and economic vitality, primarily measured through job growth

WHY? Motivation for the Study



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- Better understanding the relationship between community capital interact and local economic outcomes → **recognize and harness their existing assets** to counteract decline
- As a practical matter, a quantitative measurement and econometric analysis of community capital is warranted. Highlights how well the theory matches up with the empirical (on-the-ground) reality.

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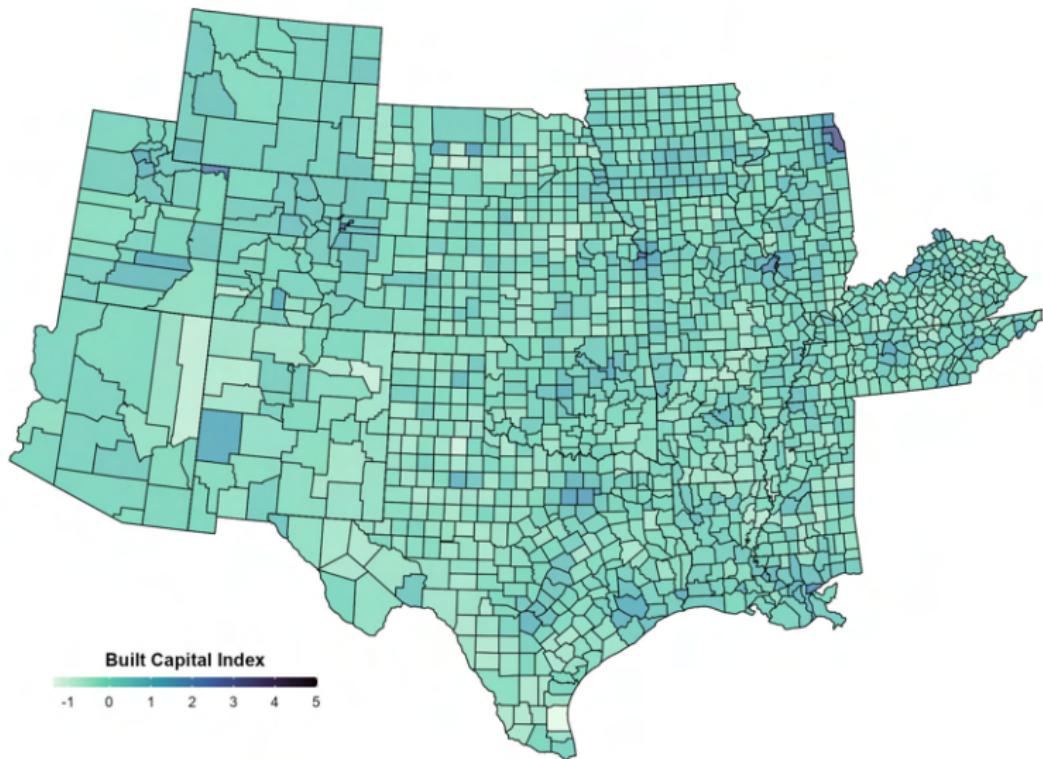
- Identify between 2 and 5 variables that match well with the conceptual definition of each type of capital (example: “Number of Arts Venues, Museums, & Historical Sites” as a *cultural capital* variable)
- Generate an index for each capital type
- Use basic ordinary least squares (OLS) regression to model the relationship between each capital and economic growth (measured in terms of % change in employment, 2010–19)

Community Capital Index Variables

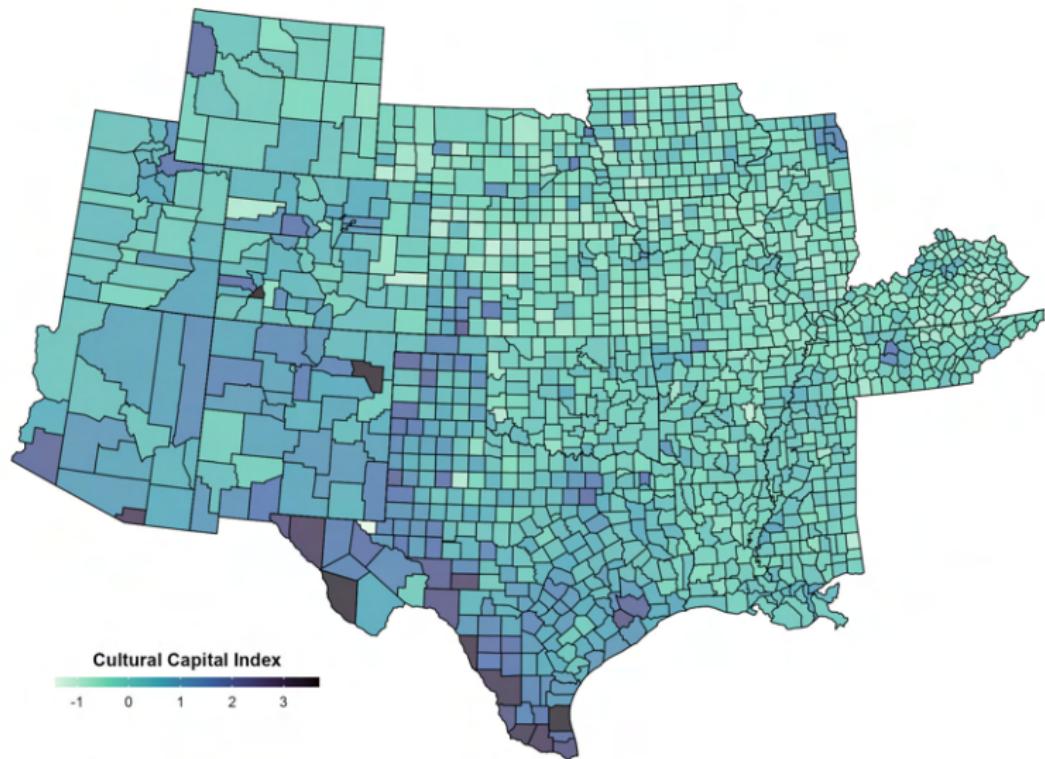
Type of Capital	Variable Description	Variable Source	Which is Better?
Built	Linear Mileage of Roadways in County	Census TIGER	Higher
Built	Median Age of Housing Stock	ACS	Lower
Built	Route Miles of Freight Railroad	BTS County Transportation Profiles	Higher
Built	Primary and Commercial Airports	BTS County Transportation Profiles	Higher
Cultural	Number of Arts Venues, Museums, & Historical Sites	Data Axle	Higher
Cultural	Percent of Minority and Non-English Speakers	ACS	Higher
Cultural	Percent of Family Units	ACS	Higher
Financial	Number of Financial Institutions	FDIC	Higher
Financial	Municipal Debt-asset Ratio	Census Survey of Local Government Finance	Lower
Financial	CRA Small Business Loan Originations	FFIEC	Higher
Human	Average High School Test Scores	Stanford Education Data Archive	Higher
Human	Percent With Bachelors or Higher	ACS	Higher
Human	Percent of Adults Medically Uninsured	CDC BRFSS	Lower
Natural	Irrigated Agricultural Land Acres	USDA-NASS	Higher
Natural	Natural Amenities Scale	USDA ERS	Higher
Political	Voter Registration Levels	Census	Higher
Political	Number of Political Donors	FEC	Higher
Political	Census Response Rate	Census	Higher
Social	Social Capital Index	PSU/NERCRD	Higher

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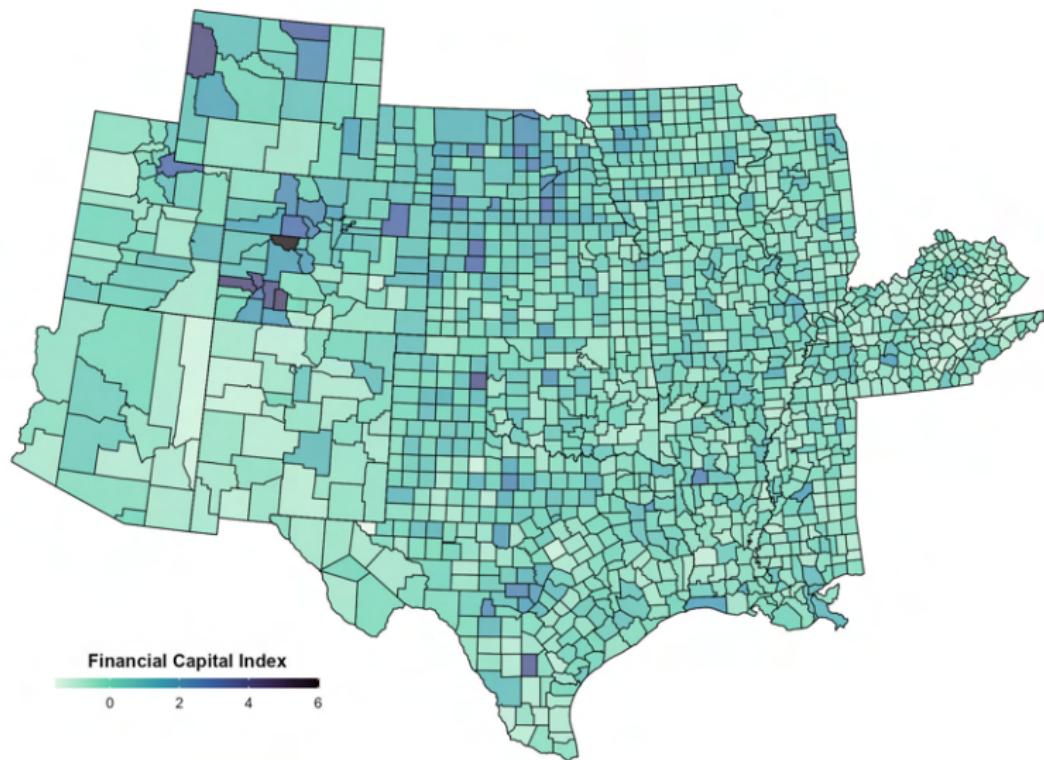
Built Capital Index



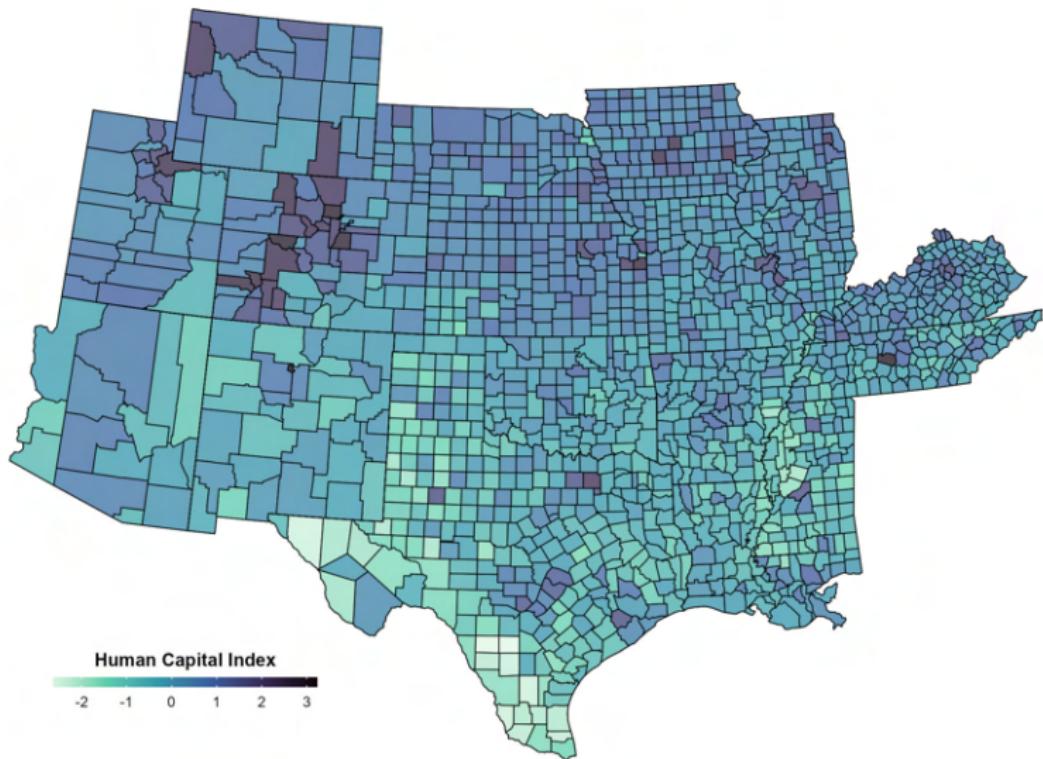
Cultural Capital Index



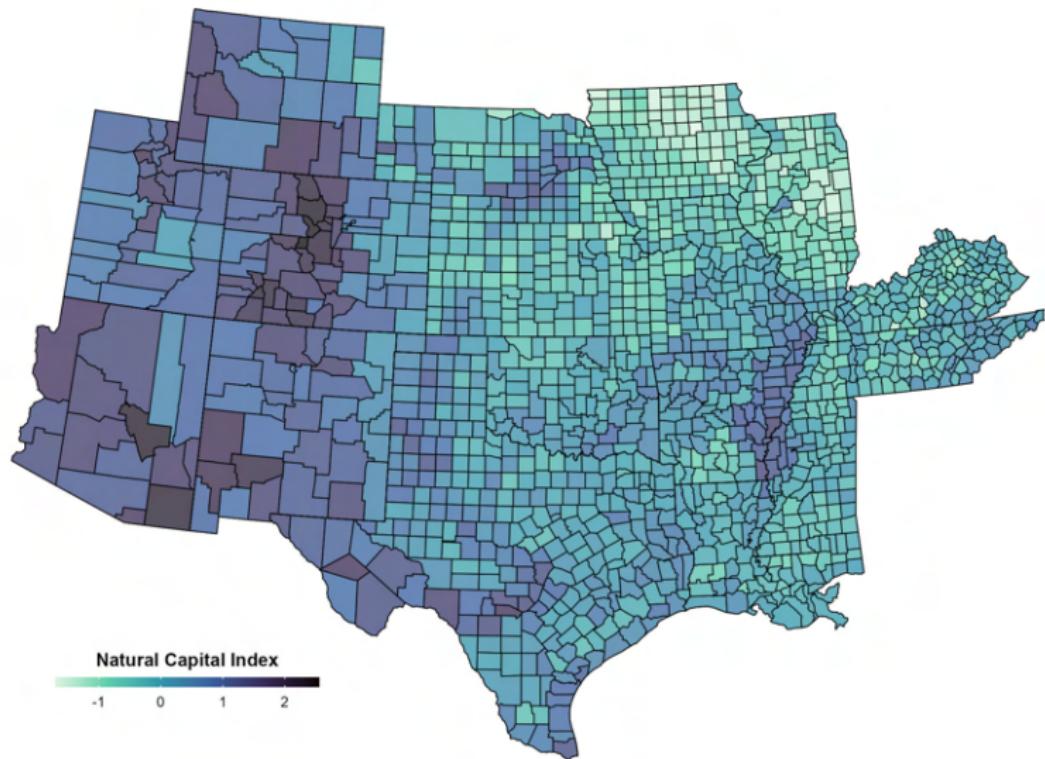
Financial Capital Index



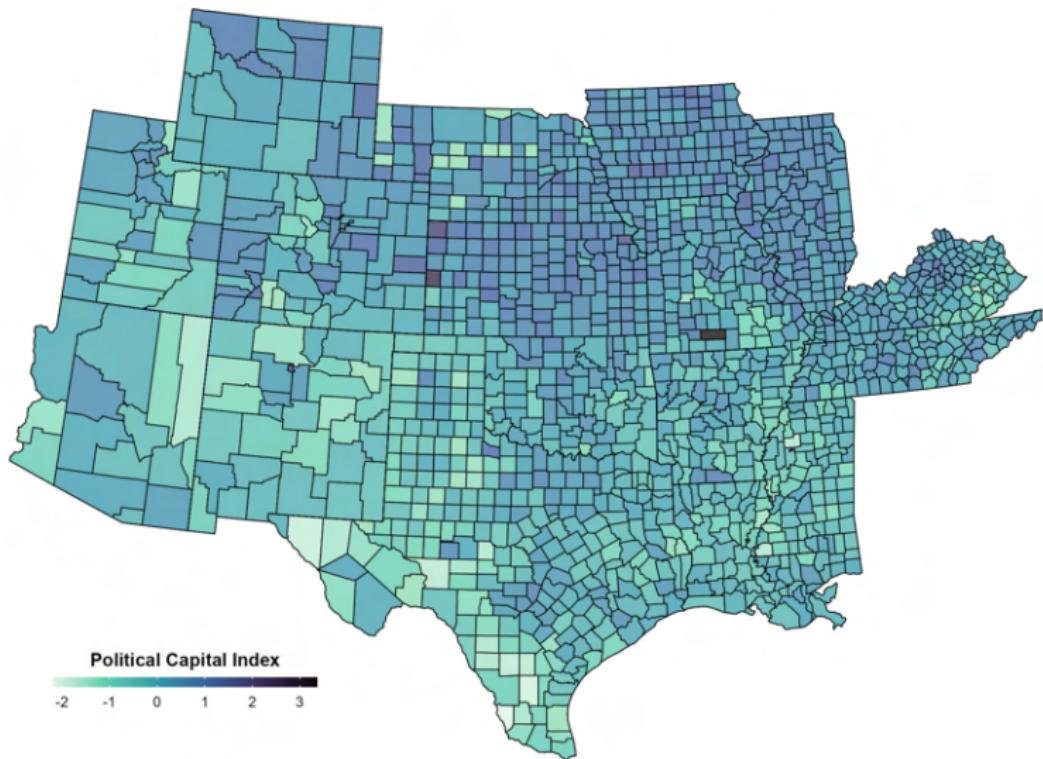
Human Capital Index



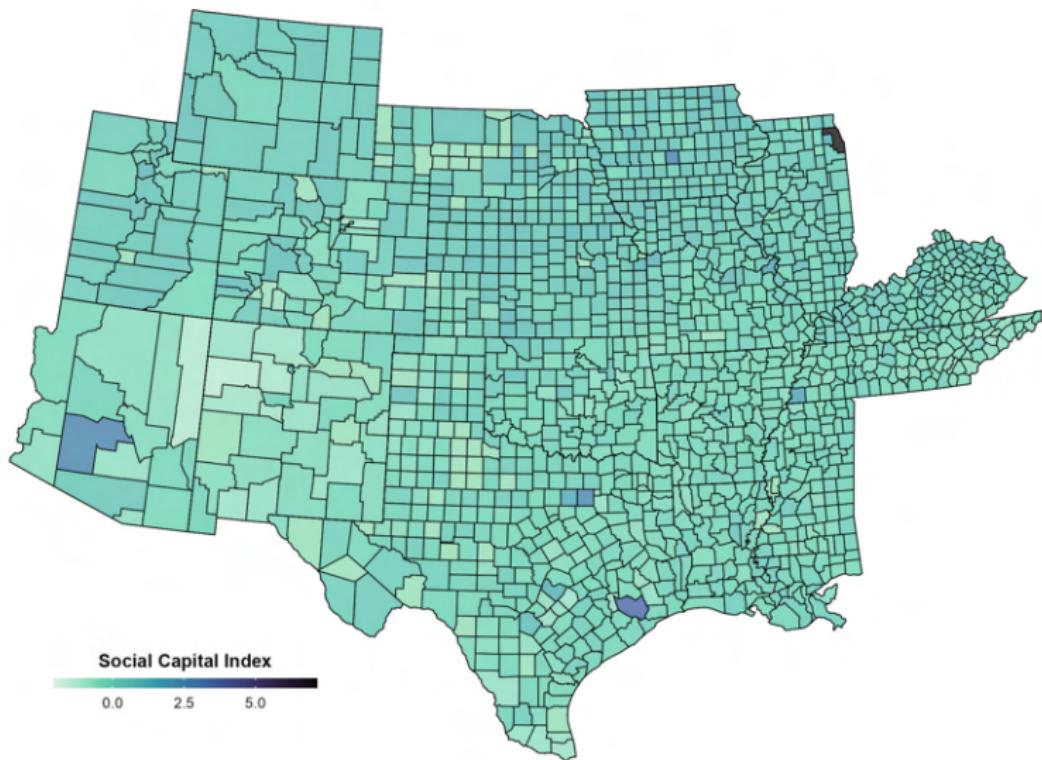
Natural Capital Index



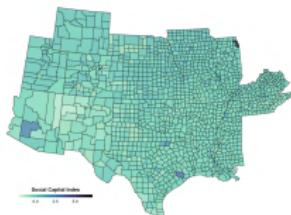
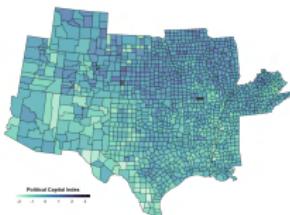
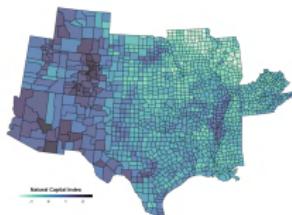
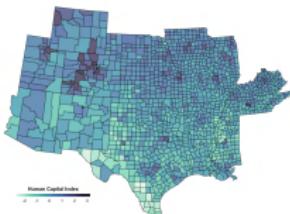
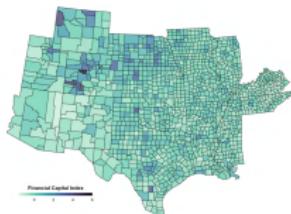
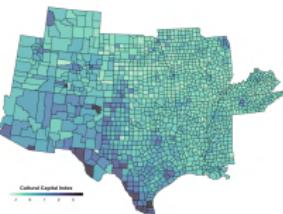
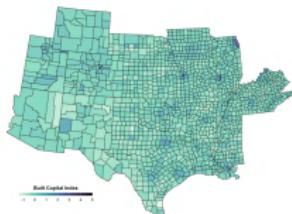
Political Capital Index



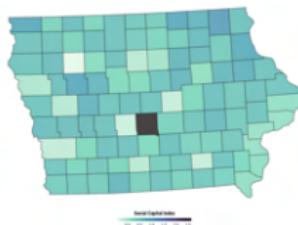
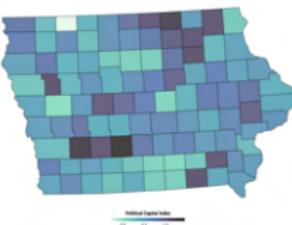
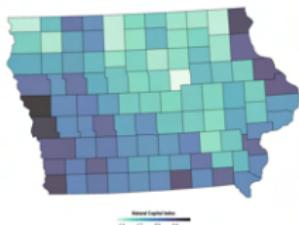
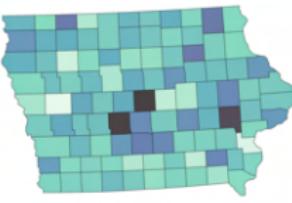
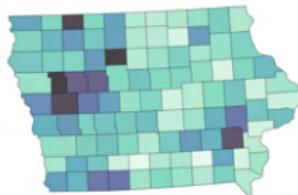
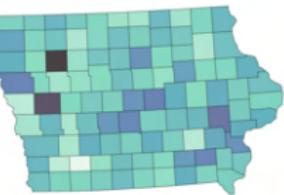
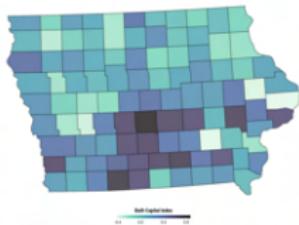
Social Capital Index



Community Capital Index Maps



Community Capital Index Maps: Iowa



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- Natural capital is negatively associated with employment growth in the metro-only subset (insignificant otherwise).
- Finally, we looked at two additional outcome variables—pct. change in population and pct. change in per-capita income (both 2010–19). Not much difference from the original model except social capital was positively associated with income growth.

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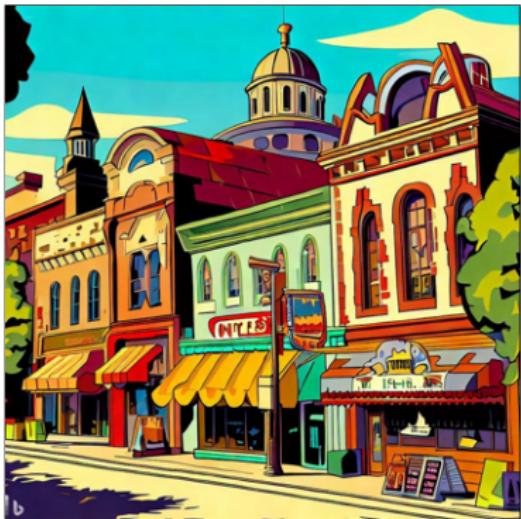
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- Political capital not significant (but we unfortunately cannot measure the most relevant aspect of political capital!)
- “Goodness of fit” stats (R^2) indicated that the stock of community capitals explained about 35% of the variation in job growth and over 58% of employment growth. A good chunk of this variation is thus attributable to “something else” (that we’re not measuring)



EXTENSION

Extension Programming Application(s)



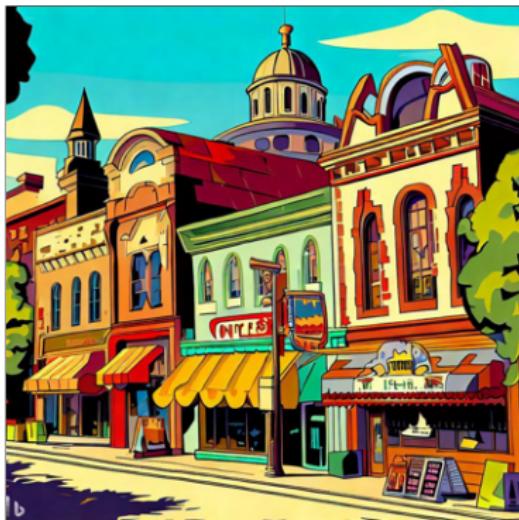
Extension Programming Application(s)

- Extension is strongly embedded in every county and well-positioned to provide additional resources and raise awareness about the influence of community capitals on rural economic renewal.



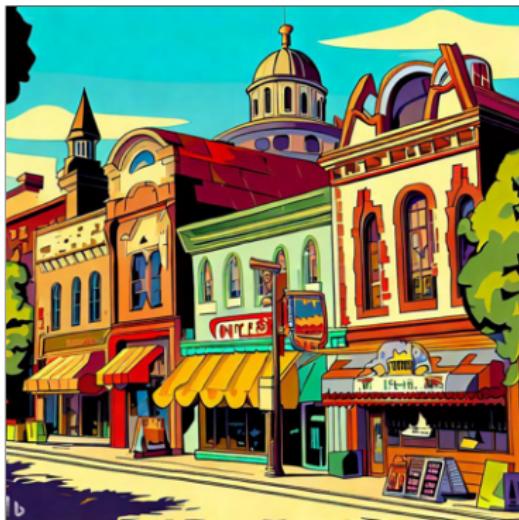
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- Communities can be provided with a tailored report of their county's strengths and weaknesses with respect to community capital. This data can be regularly updated when possible.



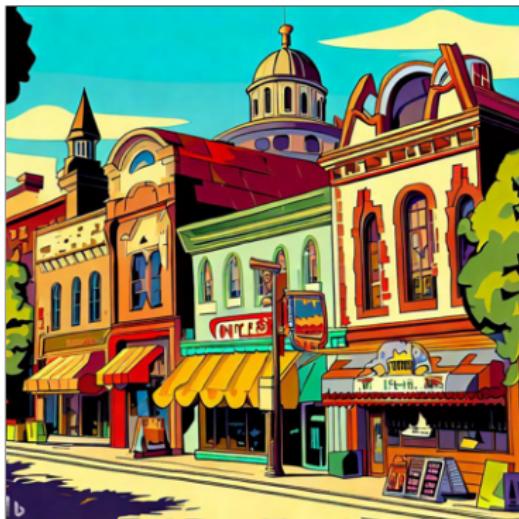
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- Programming may be designed around instructing rural community members how to conduct an inventory of their community capitals, complementing the study's findings with more nuanced qualitative measures.
- I want to know what else *you* think would make for good Extension programming around this topic!



Thank You!

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