

The Role of Community Capital in Rural Renewal

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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

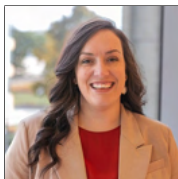


The OSU Rural Renewal Initiative (RRI)

- **Mission:** to catalyze the renewal of rural communities and places in Oklahoma and beyond through interdisciplinary research, student mobilization, and community engagement.
- **Activities** to support interdisciplinary research:
 - funding seed grant projects seeking to improve the lives of people in rural communities
 - providing them with trained student research scholars to lead community-engaged and participative research
 - hosting an annual Rural Renewal Symposium to raise awareness of rural research needs and foster a network of collaborating faculty, students and community leaders
- **Vision:** a future with hope-filled, evidence-based rural renewal movements growing in every state and nation



Research Team



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



- **Andrew Van Leuven:** Assistant Professor of Agricultural Economics & Extension Specialist in Rural Development, Oklahoma State University



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



Overview

- The community capitals framework evaluates community development efforts by assessing existing assets and examining capital investment within a community.
- The framework offers a promising alternative strategy for rural communities with limited high-dollar development opportunities, focusing on incremental approaches to slow down economic decline and achieve sustainable renewal.
- The study utilizes publicly available data sources to quantify each type of capital across 1,400+ counties in 17 states.
- OLS regression models are employed to estimate the relationship between community capital levels and county economic growth—job creation, population growth, and income growth—from 2010 to 2019.
- The results provide insights for rural counties to (re)focus their approach to community economic development.



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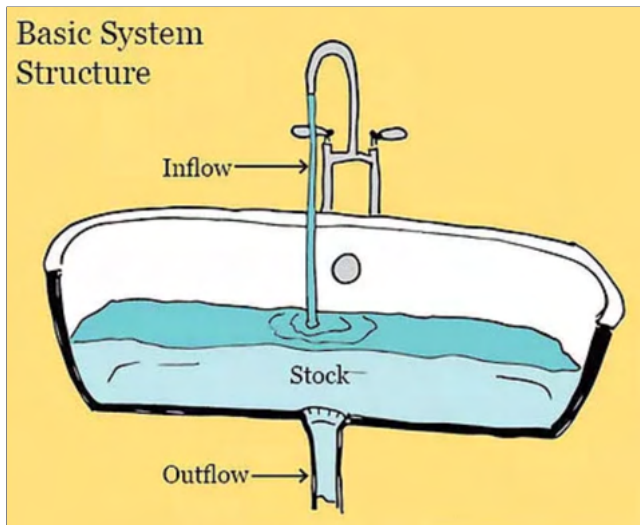


Community Capitals Framework

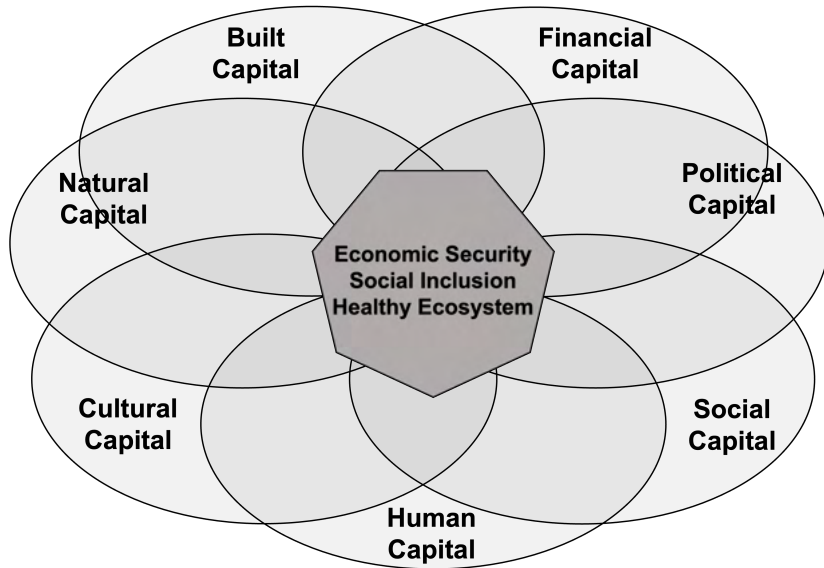
- “Offers a way to analyze community and economic development efforts from a systems perspective by identifying the assets in each capital (stock), the types of capital invested (flow), the interaction among the capitals, and the resulting impacts across capitals’.”
 - natural capital
 - cultural capital
 - human capital
 - social capital
 - political capital
 - financial capital
 - built capital
- 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



- Assets that are located in a particular geographic place, not man-made
- **Examples:** weather, geographic isolation, natural resources/amenities, and natural beauty
- Subject to residents & visitors' preferences (“beauty” is subjective)
- 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



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

Human Capital



- The skills, experience, and knowledge of those within a community, as well as the capacity of those institutions that contribute to *increases* in local skills, experience, and knowledge.
- People can invest in their own human capital (public and higher education); firms can invest in the human capital of their workers (training, etc.)
- 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.



Social Capital



- Social capital is the glue—the relationships among people who live and work in a particular society—that holds civic life together (Putnam, 2000)
- **The strength of weak ties** (Granovetter, 1973):
 - *Strong ties*: close friends typically move in the same circles as us...thus, their information “overlaps considerably with what we already know.”
 - *Weak ties*: our mere acquaintances receive more novel information because they interact with different circles.
- 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



- Access to and reputation with larger political “players” such as higher level (county, state, or federal) elected officials or bureaucrats
- 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



- Financial resources available to invest in business creation, support civic & social entrepreneurship, and
- 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



EXTENSION

Built Capital

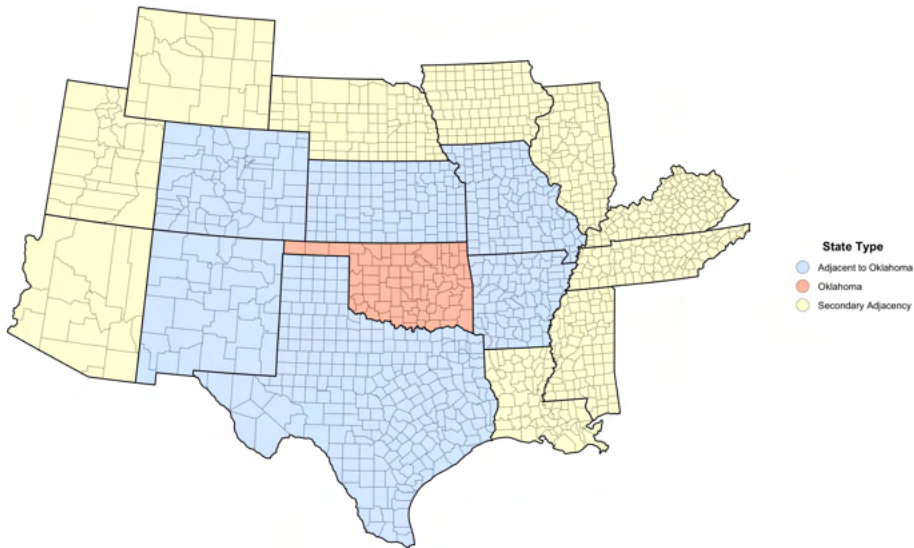


- Simply refers to the built environment of the community
- **Examples:** housing stock, infrastructure, telecommunications and utilities, buildings
- Three key dimensions
 - **Functionality:** how well does it work? will it need replacing soon?
 - **Distinctiveness:** does it look identical to other 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



WHAT? Study Objectives

- Quantitatively assess the various types of capital—built, cultural, financial, human, natural, political, and social—across all counties within and adjacent to the Southern Great Plains.
- Explore the correlation between capital levels and economic vitality, primarily measured through job growth



WHY? Motivation for the Study

- Rural areas face a wide range of challenges related to food, education, employment, healthcare access, etc.
- Struggling communities may already possess valuable assets that can contribute to their own economic revitalization, even if they are currently unaware of this potential
- 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.



HOW? The Study Approach

- 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)

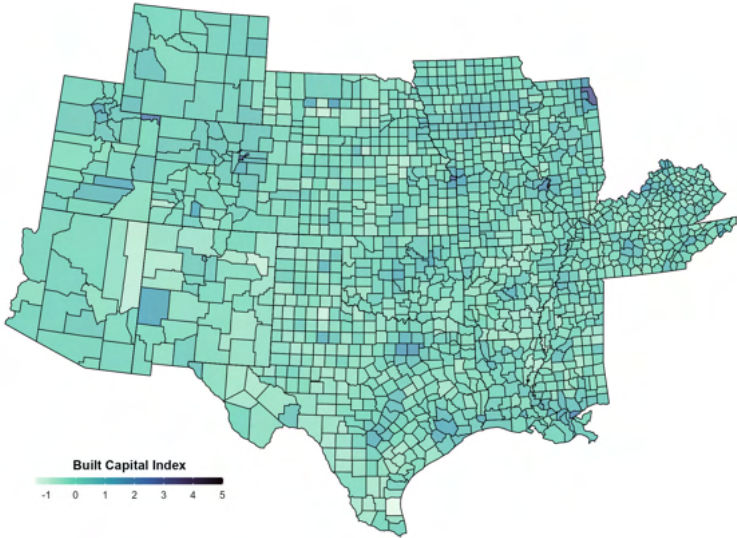
Community Capital Index Variables

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

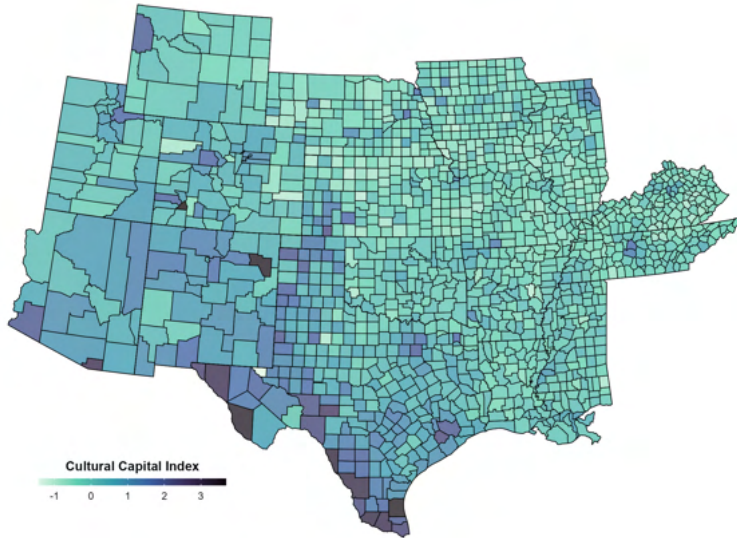
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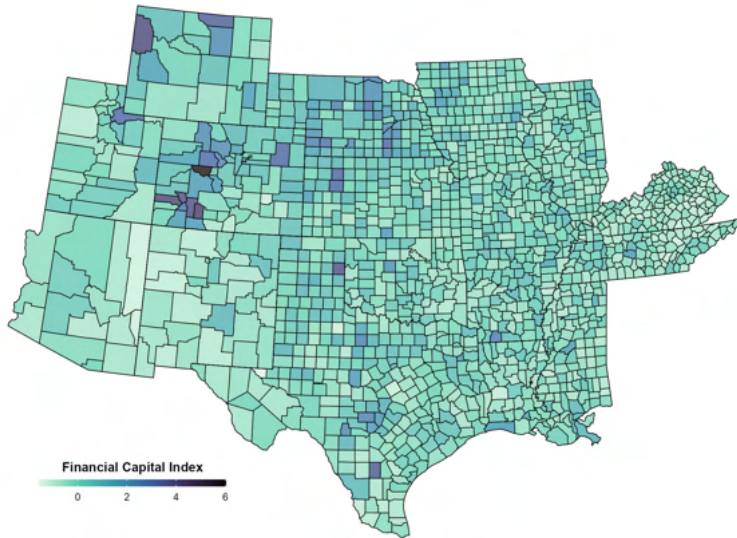
Built Capital Index



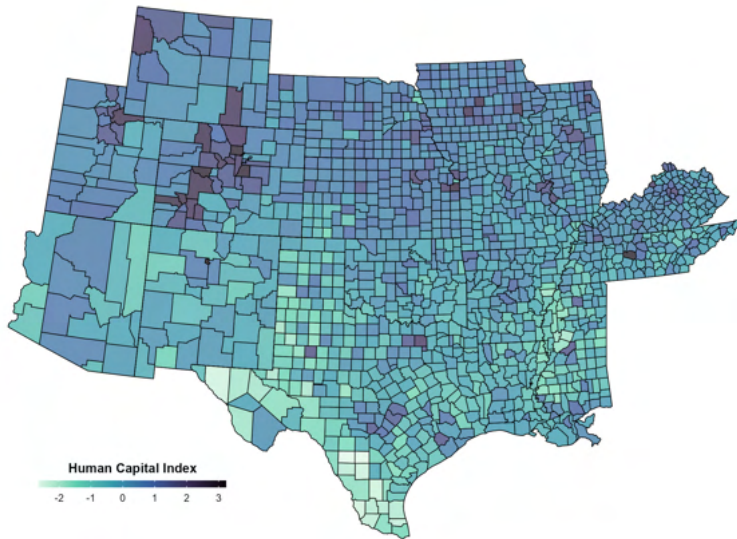
Cultural Capital Index



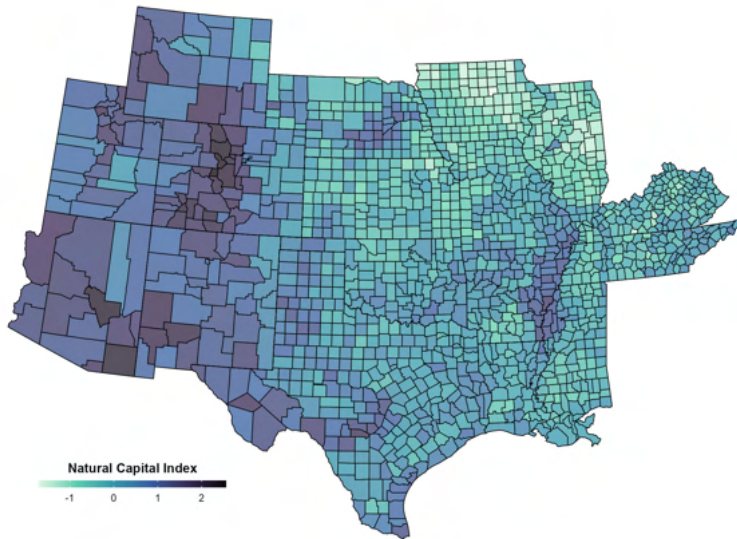
Financial Capital Index



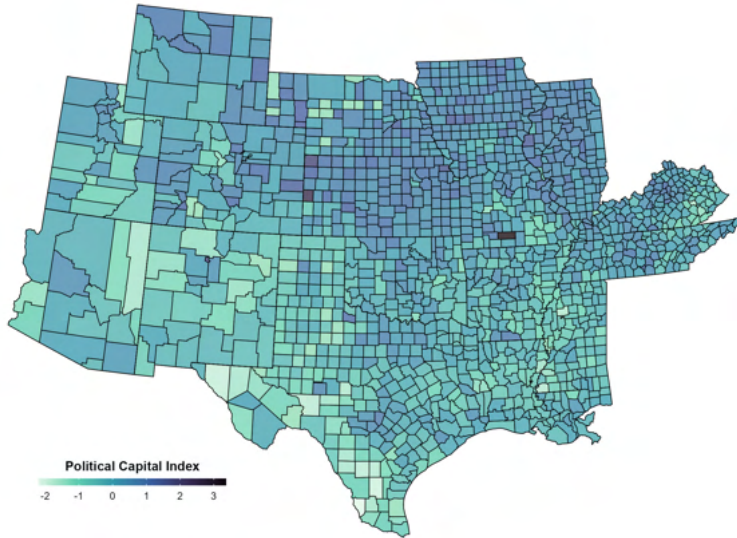
Human Capital Index



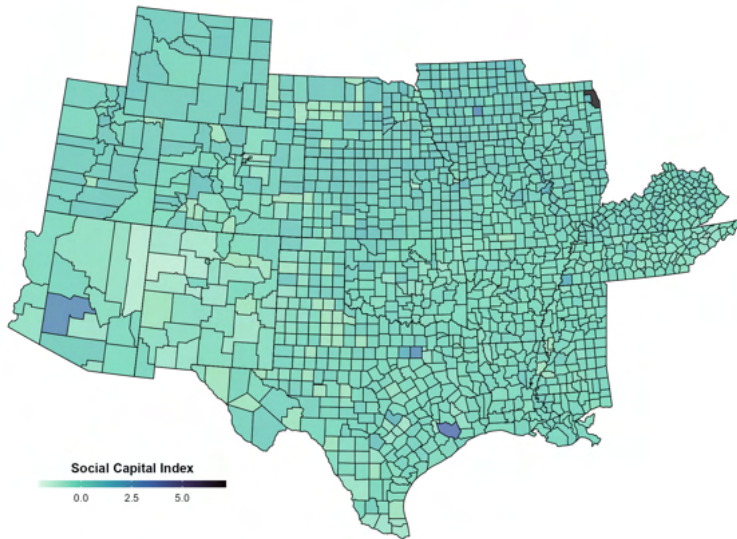
Natural Capital Index



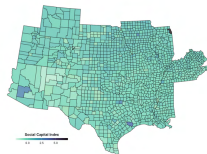
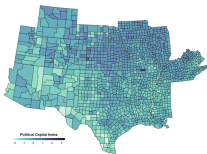
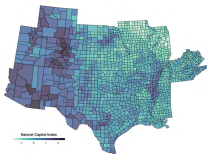
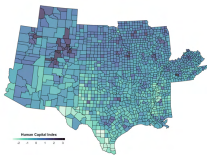
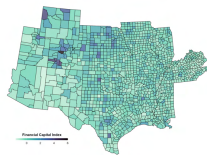
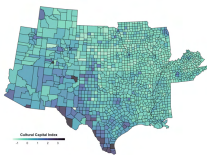
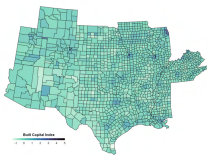
Political Capital Index



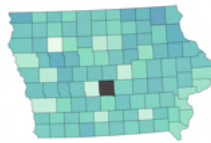
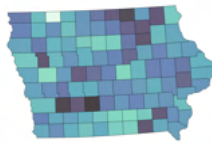
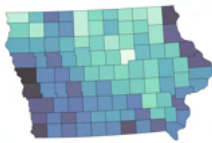
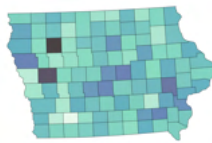
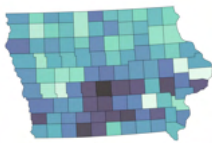
Social Capital Index



Community Capital Index Maps



Community Capital Index Maps: Iowa



Main Results

- Built capital, cultural capital, financial capital, and human capital all positively associated with employment growth (2010–19)
- Natural capital and political capital *not statistically associated* with employment growth
- Social capital **negatively** associated with employment growth; rurality also had a negative association with employment growth

Additional Findings

- When we broke our model into specific subsets of counties—metro counties only, nonmetro only, and farm-dependent only—we saw that the negative relationship between social capital and job growth only applies to metropolitan counties
- In nonmetro counties, social capital had a strong & *positive* statistical association with job growth. In farm-dependent counties, the relationship between the two was not significant.
- 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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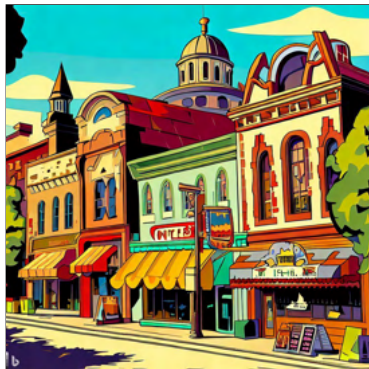
Discussion & Implications — *So What?*

- Social capital is a mixed bag! Much more valuable resource in rural communities than in metropolitan areas.
- Despite mixed findings, no evidence to suggest communities should ever *stop* developing community capitals. Rather, this study shows some areas where community development efforts can be best targeted.
- Lack of statistically significant evidence for farm-dependent counties. Larger # of observations might help future research.
- 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 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.
- 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.
- 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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