



DEVELOPING REGIONAL ECONOMIC CONNECTIVITY

Key Factors and Strategies for Urban and Rural Communities

Urban and rural areas are often interdependent and perform better when they are economically connected within their regions. Robust connectivity, demonstrated through markets for goods and services, entrepreneurship, workforce and supply chains that span urban and rural areas, helps align the diverse strengths and assets present within regions.

While connecting to regional economies has been proven to benefit local growth, less is known about the factors and the strategies to help urban and rural communities connect. With support from the U.S. Economic Development Administration and the Robert Wood Johnson Foundation, the National League of Cities (NLC) and the Rural Community Assistance Partnership (RCAP) have worked to fill this gap with new research on factors related to connectivity, and the impact of connectivity on equity. Developing Regional Economic Connectivity: Key Factors and Strategies for Urban and Rural Communities also provides case studies and recommendations for practitioners and leaders to advance an economic connectivity framework that not only drives growth but also contributes to more equitable economies in which all people can participate, prosper and reach their full potential. This brief provides practitioners with a primer on this new research about economic connectivity as a strategy for equitable growth and development.

FIGURE 1: KEY CONCEPTS



URBAN

in high density areas; 40% of all counties are urban.



MIXED URBAN-RURAL

<50% of the population living in high mixed urban-rural.



22% of all counties are rural.



REGION

The regional economic market



INDUSTRY CLUSTER

workforce and suppliers and generate economic specialization in a region.



CONNECTIVITY

When the economic specializations, or clusters, driving the regional economy have a strong presence locally.

What is economic connectivity?

AN URBAN OR RURAL COMMUNITY IS "CONNECTED" IF THE ECONOMIC SPECIALIZATIONS DRIVING THE BROADER REGIONAL ECONOMY ALSO HAS A STRONG PRESENCE LOCALLY.

A local economic developer can understand their community's connectivity landscape by identifying:

- all economic specializations, or industry clusters, that are present outside of each locality but within the community's broader economic region; and
- the extent to which the locality itself participates in those regional clusters, indicated by locallevel employment concentrations in the industry clusters.

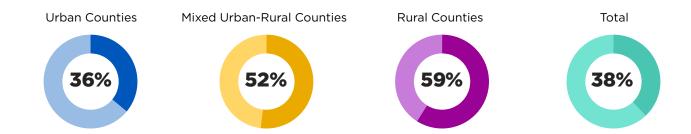
Economic connectivity is grounded in a solid understanding of one's regional industry clusters. Clusters are firms and supporting organizations within regions that leverage the benefits of their proximity through assets such as a skilled, aligned workforce and suppliers that are specialized to the needs of regional industries. Industry clusters operate at a regional scale, tend to include urban and rural parts of regions and depend on strong inter-industry linkages throughout their regions. They are proven to improve overall wages, wage growth, employment growth and innovation.²

For example, if the region is strong in biopharmaceuticals, a county can examine its current profile of jobs, as well as businesses, workforce and other assets related to biopharmaceuticals, to gauge whether the seeds of an economic relationship between the community and the region can flourish in the biopharmaceuticals industry cluster. If the

cluster has an employment concentration in both the county and the rest of the region outside of the county, the county is considered to be connected to the regional cluster.³

Overall, our research indicates that nearly four in 10 county jobs are connected to regional industry clusters and, as such, to the businesses, services, workers and institutions that lie outside of county boundaries and within the economic region.⁴ This means that in many instances economic activity in the county is helping to drive regional clusters and, in turn, to provide economic opportunities back to local residents. When we look across urban and rural communities, we find that the share of county-level jobs connected to regional industry clusters is highest in rural counties (59%), followed by mixed urbanrural (52%) and urban (36%) counties.⁵ In these counties, a high share of jobs are in industry clusters that are also specialized and competitive in the region outside of the county.

SHARE OF JOBS CONNECTED TO REGIONAL INDUSTRY CLUSTERS, BY COUNTY TYPE





Does connectivity matter?

Prior research documents the impact of connectivity on growth. In one study examining the relationship between inner cities and their metropolitan regions, the strength of industry clusters in metropolitan regions had a positive impact on the employment growth of the same cluster in the inner-city of the region.⁶ This connectivity between local employment and regional clusters indicates that the drivers of economic growth such as skilled labor, sophisticated and demanding local customers, niche markets, suppliers, and related industries, are at work regionally and have an influence on local development. Similarly, another study extended this connectivity framework to examine urbanrural relationships within broader regions.⁷ Specifically, local employment grows faster when those jobs are part of broader regional industry clusters. The magnitude of the relationship between growth and connectivity varies across the urban-rural hierarchy, with particularly strong impacts for rural communities.

ALTHOUGH CONNECTIVITY IMPACTS GROWTH, THE SUCCESS OF ECONOMIC DEVELOPMENT STRATEGIES IS DEFINED NOT ONLY BY GROWTH BUT ALSO BY HOW GROWTH IS DISTRIBUTED AMONG PEOPLE AND PLACES.

Developing Regional Economic Connectivity offers an initial analysis of the relationship between connectivity and geographic and racial equity in regions. To assess whether the benefits of economic connectivity are associated with improvements in equity, the research analyzes employment outcomes and finds that connectivity is associated with a reduction in employment disparities over time between high and low employment counties and between people of color and those who are white. While there are limitations to this analysis, these initial findings suggest that connectivity strategies may be a pathway to strengthening regions for all.

REGIONS WITH INCREASES IN GEOGRAPHIC EQUITY HAVE GREATER ECONOMIC CONNECTIVITY

Average share of jobs in region that are connected (%)

43%

Regions where equity improved **39** %

Regions where equity declined **REGIONS WITH INCREASES IN RACIAL EQUITY HAVE GREATER ECONOMIC** CONNECTIVITY

Average share of jobs in region that are connected (%)

Regions where equity improved **38** %

Regions where equity declined

What influences connectivity?

This research highlights four main factors that drive local economic connectivity to regional economies:



BUSINESS ECOSYSTEMS



PLANNING SUPPORT AND FUNDING



INFRASTRUCTURE



We break down each factor into several categories for our analysis. We find that the relationship between these local assets, or factors, and regional connectivity varies for different types of counties in the U.S., including urban, mixed urban-rural and rural counties. Specifically, health and transportation infrastructures are associated with economic connectivity for all county types. For urban communities, factors driving connectivity include strong small business presence, a workforce aligned with industry needs, reasonable cost of doing business and participation in regional planning. These same factors as well as drinking water safety support connectivity for mixed urban-rural communities. For rural communities, latent innovation relates positively to economic connectivity. These varying results indicate that policymakers and practitioners seeking to increase economic connectivity between urban and rural counties should carefully choose factors that will generate the most beneficial, widely felt outcomes within policies meant to incentivize broader regional approaches.

FACTORS IMPACTING CONNECTIVITY, BY COUNTY TYPE

	Description	Urban Counties	Mixed Urban-Rural Counties	Rural Counties
Business Ecosystem	A strong business ecosystem is a critical ingredient in the success of regional economies, it demonstrates the capacity for entrepreneurship and innovation in an area.	Small business, Workforce alignment Cost of living	Small business Cost of living	Latent innovation
Infrastructure	Robust physical infrastructure is necessary to make a place desirable to start a business and allows businesses to connect with one another throughout their region.	Hospitals Highways	Safe drinking water Hospitals Highways	Safe drinking water Broadband Hospitals Highways
Planning and Funding Support	The presence of an Economic Development District indicates a significant positive relationship with connectivity in our model. Similarly, experienced stakeholders emphasized the importance of third-party facilitators of regional coordination, such as regional development organizations and business associations.	EDD	EDD	
Housing and Quality of Life	Housing and amenities represent the extent to which workers will be able to own a home or afford stable housing, and have access to amenities, making an area a desirable place to locate and grow business.	Home ownership Libraries Farmer's markets Clean air	Home ownership Clean air	Affordable rent Libraries Clean air

How can communities build connectivity?

Layers of investment, capacity building and government economic support can connect local economies, in turn promoting economic prosperity for residents of urban and rural communities. To help economic development practitioners, policymakers and leaders put these findings into practice, we offer the following four recommendations, which are detailed in the fuller report:

Develop an inclusive innovation ecosystem.

Align innovation assets to regional clusters. To promote connectivity and grow and support a more diverse pipeline of entrepreneurs and small businesses, government and business support organizations can help businesses owned by people of color to expand by connecting them with other firms in regional clusters and opportunities to engage as suppliers. Local sourcing of goods and services to regional businesses is one pathway to a more equitable ecosystem, and also builds local wealth and bolsters economic resilience. Economic developers can also engage with small business and entrepreneurial support organizations to increase participation by people of color in tech entrepreneurship and to increase access to capital.

Ensure access to broadband and digital inclusion.

Reduce the consumer cost of adoption and support digital literacy. Efforts to ensure access to broadband connect residents to more employment opportunities, educational resources and health care, and allow businesses to reach new markets and apply new technologies to improve and expand. They also promote digital inclusion and greater access to regional opportunities for people of color and businesses owned by people of color, as well as poor communities, all of whom have lower rates of broadband access, on average.

Align workforce skills with industry needs.

Communities with strong workforce development programs aligned to industry needs can better tap into and support regional cluster growth. Discussions with practitioners confirm that this is of particular importance to rural communities, which might have less-specialized and more-limited labor pools than urban communities, as well as urban communities. Economic developers can serve as conveners of communities, businesses, universities, community colleges and technical colleges to develop and refine workforce programs, such as apprenticeship programs or tailored technical skills programs, to meet local and regional demand.

Enable strong regional organizations and business participation.

Regional development organizations (RDOs) can help localities overcome competition and perceived cultural and political divisions to collaborate and strengthen their shared regional infrastructure and economy. For example, RDOs have been instrumental in a model called WealthWorks that focuses on increasing local ownership and connecting natural assets and existing resources to market demand. Policymakers and officials can convene business associations, development organizations, and nonprofits to share perspectives and help design regional plans for collaboration.

These strategies are not new or unique to regional connectivity; they are common strategies related to developing economic strength and specialization. However, applying them in the context of connectivity provides strategic direction for developing new economic drivers in lagging places. For example, workforce development programs can develop skills, but for which industries and clusters?

ECONOMIC CONNECTIVITY STRATEGIES ENCOURAGE COMMUNITIES TO LOOK OUTSIDE OF THEIR OWN BORDERS BUT WITHIN THE REGION FOR THIS ANSWER.

Once those clusters are narrowed, policy leaders and practitioners can work to build economic connections within the region and can begin to explore those factors that require additional investment.

Economic development with a connectivity frame provides new insights for the development of local communities that accounts for the full breadth of the region's strengths and assets. Connectivity strategies can be further strengthened by working to address disparate economic outcomes for people and businesses within regions. For example, communities can implement strategies to grow and support a more diverse pipeline of entrepreneurs and to help their startups and small businesses engage with prominent or emerging cluster firms in the region. Ensuring that economic connectivity strategies promote equitable distribution of growth among places and people in regions requires broader stakeholder engagement and a commitment to equitable growth.



Aerospace and the Coeur d'Alene, **ID - Spokane, WA Region**

Few small cities have benefited as much from intentional connectivity with nearby urban centers and each other as the group of small cities in rural Kootenai County: Coeur d'Alene, Post Falls, Hayden and Rathdrum. A trifecta of regional partnerships, targeted industry attraction and desirable amenities have accelerated economic growth in these cities and have integrated them into the fabric of a strong regional economy. Beginning in 2015, regional development experts in the area scoped out and targeted industries growing in larger metro areas nearby.

The aerospace manufacturing industry, which offers relatively high industry wages, was growing in the bordering area of Eastern Washington. Experts and industry professionals came together to come up with a regional strategy to grow that industry in the more rural areas of Northern Idaho. A partnership of service providers convinced the aerospace industry associations of eastern Washington and Idaho to partner together- and together they launched the annual I-90 Aerospace Corridor Conference and Expo. This conference, which allows industry leaders to develop connections with one another annually, was a success. Growing relationships between businesses and organizations throughout the region, especially the opportunities created by the conference for small businesses to foster relationships with procurement officers of large companies, along with local assets and state investments, have driven resilient economic growth in the Coeur d'Alene region.

Recently aerospace manufacturing has slowed down, while the pharmaceutical and healthcare industries have picked up in response to the global COVID-19 pandemic. Specialized precision technology businesses and strong workforce, which were cultivated by the aerospace industry, have proven to be important to economic resilience and adaptability. Additionally, assets that once attracted the aerospace industry to Coeur d'Alene, like a federal Department of Energy lab and a strong local technical college, have continued to promote development in emerging industries. State and federal investments, specialized local education, and especially the strong relationships between Idaho and Washington markets, have proven to be a pathway to success and growth for this small city and surrounding rural region while practitioners are also working to improve access to work and opportunity for residents with lower income by expanding bus service and developing daycare programs.

Conclusion

While urban and rural communities may reflect cultural and political differences, their economies are interdependent. Regional collaboration has never been more important, particularly as U.S. communities rebuild their economies in the wake of the damaging effects of the COVID-19 pandemic. Examining local development and regional economies through a frame of connectivity is important for all communities but especially for those experiencing economic decline, isolation and depleted economic opportunity, as well as those experiencing historic inequities in growth patterns. Expanding the local industrial base to align with and leverage the broader region's economic strengths may offer a path forward. These research and policy recommendations can support economic development practitioners, policymakers and leaders as they act to strengthen economic opportunity and industry in their communities and regions.

Authors

Christiana K. McFarland, PhD, Research Director, NLC Center for City Solutions

Nathan Ohle, CEO, Rural Community Assistance Partnership

Erica Grabowski, Senior Specialist, NLC Center for City Solutions

Laura Landes, Research Manager, Rural Community Assistance Partnership

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Endnotes

- ¹ Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review*. https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition.
- ² Porter, M. E. (2003). The economic performance of regions. Regional Studies, 37(6-7), 549-578. doi: 10.1080/0034340032000108688; Delgado, M., Porter, M. E., & Stern, S. (2016). Defining clusters of related industries. Journal of Economic Geography, 16(1): 1-38.
- ³ Location quotients are used to measure economic specialization or concentration and are commonly used in industry cluster and economic development analysis. The location quotient (LQ) is the ratio of the cluster's share of total county or regional employment (outside of the county) relative to its share of total national employment. A location quotient greater than one indicates a higher-than-average cluster concentration in a location.
- ⁴ This analysis focuses specifically on traded sector jobs, or jobs in industries that serve markets beyond their regions. Share of jobs connected to regional clusters are the proportion of traded sector jobs that are part of county-clusters with location quotients greater than one in both the county and in the rest of the region.
- ⁵ Using population density, physical characteristics, and geography, the Census classifies counties as "mostly urban," "mostly rural" or "completely rural," which represent the share of the population residing in urbanized parts of the county. We use the Census definitions to designate county rurality, but to simplify terminology we refer to "mostly urban," "mostly rural" and "completely rural" as "urban," "mixed urban-rural" and "rural," respectively.
- 6 Delgado, M. & Zeuli, K. (2016). Clusters and regional performance: Implications for inner cities. Economic Development Quarterly, 30(2), 117-136. doi: 10.1177/0891242416637422.
- ⁷ McFarland, C., & Grabowski, E. (2021). Local employment impacts of connectivity to regional economies: The role of industry clusters in bridging the urban-rural divide. Manuscript submitted for publication.