

Asset-Based Economic Development and Building Sustainable Rural Communities

Part 1: Industry and Industry Clusters

A briefing paper from the ICMA Center for Sustainable Communities

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Choosing the right economic development strategy can pose a challenge for small towns and rural communities. When it comes to economic development, rural communities often struggle to reach the critical mass required to attract employers and sustain economic growth. This is particularly true for rural communities that are more sparsely populated or farther removed from metropolitan areas.¹ Difficulty attracting jobs or employers often results in population loss, which in turn results in difficulty attracting employers.

Rural communities, whether facing challenges due to remoteness and population decline, or due to proximity to metropolitan areas and rapid population growth, can benefit from pursuing asset-based economic development strategies.

This is the first in a series of briefing papers that will explore asset-based economic development, focusing on how small towns and rural communities can build on their natural and working landscapes, local institutions, existing infrastructure, historic and cultural resources, industry clusters, and human capital. These papers will highlight case studies of what rural communities have done to leverage their assets into successful economic development.

This briefing paper—the first in the series—will start by defining asset-based economic development and exploring two specific assets: industry and industry clusters and human capital. These will be illustrated with case studies of Pella, Iowa; Lamar and Prowers County, Colorado; and Phillips County, Arkansas.

What is Asset-Based Economic Development?

Asset-based economic development is a bottom-up approach to economic development that builds on existing local resources to strengthen local and regional economies. Asset-based economic development focuses on a community's natural environmental, socio-

Rural communities, depending on their economies and geographies, can look very different from one another. As a result, rural can be a challenging term to define. In fact, there is no one clear definition and most federal agencies define it differently. Yet, how rural is defined has important implications for policy and economic development decisions.

Nearly 75 percent of the nation's land can be considered rural, and this area is home to 51 million people, or roughly 16.5 percent of the population. Between 2000 and 2010, rural communities as a whole saw much slower population growth than during the previous decade. Many agricultural or resource-based economies and those remote from metro areas lost population, while high-amenity counties in proximity to metropolitan areas saw population growth. Over the decade rural America became both older and more diverse.² Rural communities are, in the second decade of the 21st century, varied places, facing different challenges and opportunities.

cultural, and economic advantages and how these can be leveraged into sustained economic growth and productivity. It focuses on building capacity in communities and strengthening connections within regions.³

For asset-based economic development to be successful, it requires strong leadership at both the local and regional levels. It requires innovation, collaboration, and a rethinking of traditional economic development paradigms. And, like any form of economic development, it requires sources of financing.⁴

Asset based economic development differs from more traditional needs-based economic development, which is focused on identifying gaps and deficiencies in the local economy and attracting new investment or industries

to fill those gaps. Needs-based economic development can be more subject to the boom-and-bust cycle, or to changes in the state or federal policy environment.⁵

When pursuing asset based economic development, it is important for communities both to identify assets, and to evaluate them and their potential benefit to the local economy as part of an economic development strategy. When evaluating assets, communities should look at how assets can be leveraged into economic development, what the value of developing on a particular resource will be, who the development of a particular asset will benefit, and what additional inputs will be needed to fully leverage the asset.⁶

Asset-Based Economic Development and Building Sustainable Communities

Asset-based economic development is a strategy for sustainable economic growth, as it builds upon the community's existing assets, making it a strategy for long-term, sustained economic growth and development—one that can build on economic, socio-cultural, or environmental assets. And, because asset-based economic development builds on existing local assets, the return on investment is local.

As with traditional economic development approaches, the benefits of asset-based economic development include retaining existing jobs and creating new jobs, increasing per capita income, and increasing the local tax base. In addition, asset-based economic development can help enhance the community's quality of life or sense of place. It can strengthen community pride by building on local traditions or creating new ones. Asset-based economic development can also help build stronger regional networks.

This briefing paper will explore different types of assets and present case study examples of successful asset-based economic development in communities that have leveraged their existing assets into economic opportunities. Future papers will explore more assets which communities can invest in and leverage for economic development.

Types of Assets—Identifying Your Community's Assets and Building on Them

There are many different types of assets that communities have. These include natural amenities, cultural and

Benefits of Asset-based Economic Development

Asset-based economic development can have many benefits for communities, including:

- Long-term, sustained economic growth
- Local return on investment
- Job creation and retention
- Increase in per capita income
- Increase in local tax base
- Strengthening regional networks

historic resources, and human capital. They include current industries, as well as the potential for new and emerging industries—such as renewable energy. Assets can include the presence of an institution, such as a college or university, or a hospital or medical center. For some communities, their resource base will remain a key asset and central to economic development. It is important for communities to identify and evaluate assets, and to see how these assets complement other economic development policies or programs underway.

The assets discussed and explored through case study examples below are not meant to be exhaustive, but rather to look at some of the more common assets that communities have and how local governments have leveraged them into successful, sustainable asset-based economic development.

Industry and Industry Clusters

Clusters of existing or emerging industry—or geographic concentrations of interconnected companies and related supporting institutions—can result in a competitive advantage for a region as the clustering of industries can reduce costs for firms for many reasons, including workforce availability and a specialized infrastructure that develops to meet the needs of the industry cluster. Companies within an industry cluster both compete with one another and collaborate, fostering innovation. Clustering of industry also leads the development of supporting associations and institutions, such as trade associations and job training programs at local universities or community colleges.⁷

Case Study—Pella, Iowa, Population 10,352

The City of Pella, located in central Iowa, has a strong manufacturing industry cluster. Vermeer Corporation, a



Pella, Iowa has a thriving downtown with many locally owned businesses. The local businesses are supported by both the local manufacturing and tourism industries. The downtown design guidelines emphasize the city's Dutch heritage. Photo courtesy of the city of Pella.

manufacturer of agricultural, environmental, and construction equipment, and the Pella Corporation, a door and window manufacturing company are headquartered in Pella, as well as Precision Pulley, Inc., Van Gorp Corporation, and several smaller manufacturing companies.

The manufacturing base in Pella has provided steady employment—both in manufacturing and in supporting sectors—and the city has continued to see steady population growth over the last five decades, while comparable Iowa communities have had at least one decade of population decline.⁸ Manufacturing jobs attract commuters from communities up to 90 minutes away—an area stretching into northern Missouri and covering 18 counties in Southeastern Iowa.

Manufacturing is the largest employer in the Marion County—where Pella is located—and manufacturing jobs account for 37 percent of all employment in the county and over \$300 million in total gross wages. The average annual wage for manufacturing jobs in the county is \$50,284, compared to \$27,404 in agriculture, natural resources, and mining, and an average of \$22,750 across the service sectors. Between 2009 and 2010, the average annual wage for manufacturing workers in Marion County increased 9.7 percent, while wages in agriculture and construction fell and wages across the service sector increased more modestly. Overall, Marion County has ranked eleventh out of Iowa's 99 counties in average weekly wages, with the most of the counties with higher weekly wages being those with Iowa's major cities.⁹

The Pella Area Development Corporation (PADCO) is working to continue the expansion of current industries, as well as assisting local start-ups.¹⁰ "Growth is really going to come from those small companies and that is what we are trying to cultivate," said Karen

Eischen, the Executive Director of PADCO. "We are really trying to make sure they have what they need here in terms of workforce, suppliers, transportation and infrastructure."

A recent example of success with this strategy is the partnership between Vermeer Manufacturing—a longstanding local manufacturer—and Lely, a Dutch company that chose to open its North American operations in Pella in 2011. After site analyses of several sites in both the US and Canada, Lely formed a partnership with Vermeer. Vermeer built a new facility on its campus, which it leases to Lely.

"The partnership was very positive for both companies and very positive for Pella and for the area," Eischen said. Since Lely began its operations in Pella, two other companies from the Netherlands have inquired about setting up their US operations in Pella.

City Policies Support Industry Clusters

The city of Pella works closely with PADCO to recruit and develop industries that are compatible with the existing local industrial base. "It's a three part strategy: economic development is a component of this strategy from the city's perspective—maintaining and growing the existing industry base and focusing on new companies that complement the existing base," said Mike Nardini, Pella's City Administrator. "The city also works to meet the needs of the existing industry with zoning, transportation, and utilities. The last part of this strategy is providing amenities to attract individuals to come live and work in Pella, Iowa."

Pella updates its comprehensive plan every five years and works to keep a good mix of uses that maintains buffer zones around heavy manufacturing, while also allowing for future growth. To address the transportation needs of local industry, together with the city of Oskaloosa and Mahaska County, Pella is investing in a new regional airport, expected to be completed in the next 10 years. The airport will accommodate business jets and provide easier access to the region—a key consideration for companies making location decisions. Pella is also working with its regional partners to improve connections to Interstate 80.

The city, which operates a municipal utility, is making utility improvements and upgrades to support industry and to remain a competitive environment for industrial operations. These improvements have included burying power lines (70 percent are currently underground and the remaining 30 percent are expected to be underground in the next five years), and investing in new substations and switching stations. One of the major concerns when there



Pella, Iowa has a robust manufacturing industry cluster, with companies that manufacture equipment such as the directional boring equipment seen here. Manufacturing jobs account for 60% of all labor income in Marion County, Iowa, where Pella is located. Photo courtesy of PADCO.

are heavy industrial customers is being able to keep rates competitive. To address this, Pella has entered into a long-term power supply contract with Missouri River Energy Services, a joint action agency. Through this contract, the city is expected to recognize between \$10 million and \$30 million in energy cost savings over the initial 10 years of the contract.

Pella has invested in a number of amenities to make it an attractive place to live. In the 1990s, the Bos Landen Public Golf Course was developed, and was ranked as the number one golf course in Iowa for five years. The city also opened an aquatic center, funded with a local option sales and services tax, and is currently building a sports complex, also funded through the local options sales and services tax. The city's investments have paid off—over the past ten years, the city's property tax valuations have increased by \$277 million and for the last eleven years, the city has been able to maintain its property tax rate at \$10.20 per \$1,000 of valuation. As Nardini sees it, the industrial base is essential to the city's economy and these investments are needed to support the local industries: "If you don't make the investments, you wouldn't have the degree of growth that we've had," he noted.

Pella also has a thriving downtown area with locally owned businesses, which is supported by both its manufacturing industry and the local tourism industry. The city was founded in 1847 by 800 Dutch immigrants. Today, Pella celebrates its Dutch heritage and has long been a heritage tourism destination. The city emphasizes its heritage in downtown design—a set of design guidelines guides new commercial development and designs are reviewed by an architectural review committee—and Pella has a historic Dutch village with the largest working windmill in the United States, and hosts Pella Tulip

Pella, Iowa

Population (2010): 10,352

Asset: Industrial Cluster

Summary: Pella has a manufacturing industry cluster, which provides steady employment and high-wage jobs. The City of Pella is making investments in infrastructure and quality of life to attract and retain industry and the Pella Area Development Corporation is working to support the expansion of existing companies, as well as local start-ups.

Key takeaways:

- Invest in local-start ups that support the existing industrial base
- Make infrastructure investments that support industrial base
- Make quality of life investments that make your community an attractive place for companies to locate and for employees to live
- Look at compatible assets and how these can fit together in an economic development strategy

Time, an annual Dutch heritage festival that draws over 100,000 visitors to the city the first weekend in May.

"The tourism events help recruit employees to industries because the community is very vital and has an overall sense of community, and activities are happening all the time—those factors that really lend themselves to a vital community," Eischen noted. "There are always things for corporate travelers to do. The tourism and manufacturing work hand in hand."

Case Study—Prowers County, Colorado, Population 12,551 and Lamar, Colorado, Population 7,804

In 2003 a site for the Colorado Green Wind Power Project was selected in Prowers County Colorado, just south of the city of Lamar. The county, located in the Arkansas River Valley in the southeast portion of the state, is one of the richest areas for renewable area potential in the country.¹¹ "We feel that we are the Saudi Arabia or Qatar of wind energy here in Prowers County," said Gene Milbrand, Prowers County Commissioner.

The project was initiated by Public Service of Colorado and was selected through a competitive bidding process, which examined wind in comparison to other



At the time of its construction in Prowers County, the Colorado Green Wind Energy Project, which has 108 1.5 MW wind turbines was the largest wind farm in Colorado and one of the largest in the country. Photo courtesy of Prowers County Economic Development, Inc.

forms of energy generation, including coal and natural gas. Wind was found to be the lowest cost alternative.

The Colorado Green Wind Power Project, which at the time of its construction was the largest wind farm in the state and one of the largest in the county, is located on nearly 12,000 acres and was developed by PPM Energy, Inc and Shell WindEnergy, Inc. There are 108 1.5 megawatt (MW) turbines that can produce up to 162 MW of electricity—enough to power 52,000 homes. The power is delivered through a 15-year power purchase agreement with Xcel Energy.¹² The land is leased from local landowners and the turbines do not interfere with ranching, grazing, or dry land farming activity.

Colorado Green brought economic benefits to Prowers County. Individual landowners who leased their land to the project receive annual lease payments. The county receives annual tax revenues, which were \$800,000 the first year and depreciate at a rate of four percent a year down to a capped minimum rate of 20 percent. The installations have also generated 15 full-

time permanent local jobs, in addition to the jobs that were generated during the construction phase. At the height of the Colorado Green construction, the project employed 400 people and many local businesses were contracted for phases of construction, including building access roads, pouring concrete for the bases, and building the substation. A local motel was also booked for much of the construction phase, and other local businesses reported increases in business.¹³

Due to the positive economic benefits associated with Colorado Green, Prowers County is actively trying to incentivize additional growth in the wind energy industry, but is facing challenges related to transmission capacity and finding interested power purchasers. The county is a founding partner and active participant in the Southeast Colorado Business Retention, Expansion, and Attraction (SEBREA) program—a regional economic development commission made up of six counties in Southeast Colorado. Through SEBREA, the county has explored building additional transmission capacity.

Prowers County, however, does not face one challenge that many areas of the country looking to wind encounter: “The aesthetics of wind—that could be a limiting factor in urban areas or coastal development,” Millebrand said. “That is an absolute non-factor in this area of the country. Rather than becoming a nuisance or an eyesore, they [the turbines] have actually become a tourist attraction for us.”

While Colorado Green was under construction, Lamar Light and Power, the city’s municipal utility, decided it was time to undertake a wind energy project of their own. Recognizing the local renewable energy potential as well as the price stability inherent in renewable energy technologies such as solar and wind, Lamar Light and Power commissioned the Lamar Wind Energy Project.

“People hear a lot about wind, and there were lots of inquiries from the public, and we’re publically owned. And at the time gas prices were skyrocketing,” said Houssin Hourieh, the Electric Superintendent for the Lamar Utilities Board. “So we said let’s look into it and see how we can pursue it.”

Equipment was already mobilized for Colorado Green installation and city contacted companies working on that project. In all, the Lamar Wind Energy Project only took six months to bring online. The project is located on leased land to the southeast of the city and consists of four 1.5 MW wind turbines, providing about 15 percent of the utility’s energy needs. The site was selected due to a combination of the wind power potential and the availability of existing infrastructure. Three of the turbines are owned by the Lamar Utilities Board

and one is owned by the Arkansas River Power Authority (ARPA), which is a seven-member joint action agency, of which Lamar is part. There is also a fifth turbine in the nearby community of Springfield, owned by ARPA and maintained by Lamar Light and Power.¹⁴

The community has been very supportive of the installations and the utility offers tours so that residents can learn more about the installation and how wind energy works.

Human Capital

Human capital—the knowledge and skills local workers possess—are two important assets for a community to consider. Higher levels of human capital not only contribute to individual economic success, but also to local economic vitality. Regions with more human capital tend to have more economic activity, see more rapid economic growth, and the workers in these regions tend to be more productive and earn more.¹⁵ Investing in human capital can also help build important connections between rural residents, businesses, and institutions and the surrounding regional networks.¹⁶ Human capital at this larger, regional scale is linked to both economic vitality and long-term economic success.

Prowers County, Colorado

Population (2010): 12,551

Lamar, Colorado

Population (2010): 7,804

Asset: Renewable Energy Potential and Emerging Wind Energy Industry

Summary: Southeast Colorado has significant wind energy potential, and in 2003, the Colorado Green Wind Power Project was initiated in Prowers County. The project has brought land lease revenue to land owners, tax revenue to the county, and inspired the Lamar Wind Energy Project. Prowers County is continuing to pursue wind energy as part of its economic development strategy.

Key takeaways:

- Gain public support, and invest in projects where public support already exists
- Form partnership on the regional level, particularly when looking at major investments
- Use assets and asset-based economic development as an opportunity for community engagement and education



Colorado Green has brought positive economic impacts to Prowers County, Colorado, including land lease revenues to land owners and tax revenues to the county. The county continues to pursue wind and the wind energy industry as an economic development strategy. Photo courtesy of Prowers County Economic Development, Inc.

Case Study—Phillips County, Arkansas, Population 21,757

In 2003, 300 residents in Phillips County, Arkansas worked together over a ten month period to start what would become the *Strategic Community Plan*, a long-range visioning document focused on five key areas: economic development, housing development and redevelopment, education, leadership development, and health care. The plan—initiated by Southern Bancorp Community Partners, a rural community development bank—and adopted in 2005 actively engaged Phillips County residents in the visioning and planning processes and continues to actively engage the community in implementation through its goal team structure.

The *Strategic Community Plan* identified a clear vision for the county: “Phillips County will be a model community for the Delta, one that is economically strong, spiritually enriched, and demonstrates equality among its people by building on the unity of its citizens, strengths of its leadership, its rich history and natural beauty. Phillips County will be a safe community with quality job opportunities for all citizens, excellent housing for all income levels, proactive healthcare and social services, excellent education for its children and workforce, and premier recreational and tourism attractions that promote cultural enrichment for all.”¹⁷

To achieve this vision, Phillips County focused on its “strengths-opportunities” or assets in five key areas: economic development, education, housing, leadership development, and healthcare. The *Strategic Community Plan* was updated again in 2009, this time with the participation of over 600 community members. By the time

the plan was updated, the county had made progress on a number of goals and action items.¹⁸

The Delta Bridge Project's implementation is organized into goal teams, which report to the larger project Steering Committee—also comprised of community volunteers. The goal teams are community based groups who meet and review the goals and look at what has been accomplished in each area, and what they would like to accomplish. “The Delta Bridge project strategic plan is like a menu,” Doug Friedlander, Executive Director of the Phillips County Chamber of Commerce and chair of both the Delta Bridge Project Steering Committee and the Leadership Goal Team said of the Strategic Plan and implementation model. “If you open it up and see something you like, and are willing to take leadership on it, it is eligible for funding and technical assistance from Southern Bancorp Community Partners and other funding partners.”

Each goal team generally has between 11 to 15 regular volunteers, who attend each meeting. Goal teams also have subcommittees, which work on specific projects. Subcommittees can often have larger attendance than the main goal team meetings—for example, the tourism goal team has eight regular meetings, but the civil war project (Civil War Helena) has at least 40 community members who are actively involved.

The Leadership Goal Team, which is chaired by Friedlander, provides an example of how the planning and Goal Team implementation process work. Between February and September 2009, the group met seven times to define leadership, work to understand why existing leaders were no longer engaged in the community, and work to re-engage them, asking, according to Friedlander, “Where do we want to go, why haven't we gone there yet, what is the solution, and how do we get there?”

The team developed a mission statement: “To increase the capacity of individuals to set and achieve goals likely to positively transform the community by: 1) increasing the involvement of those with already strong leadership in community life, 2) developing both existing and potential new leaders, and 3) supporting the work of these leaders toward the betterment of the community.”¹⁹ To support this mission, the team developed six strategic goals and supporting action steps.

The Leadership Goal Team has since prioritized several of the goals and made significant progress on a number of the action steps. Goal four—implementing a training program for new and emerging leaders—has been particularly successful. The Chamber of Commerce is working with a youth entrepreneurship program and with the local schools to offer entrepre-

neurship programs through schools and the Chamber is working to develop a job shadowing program for sixth graders. The Leadership Goal Team has also worked to create a “Leadership 101” class at Phillips Community College. The class, which launched in 2011 with 11 participants (ten of who asked to continue into a second semester), seeks to develop new leaders in the community. The Leadership Goal Team has also been working to attract people to civic leadership, through the Leadership Academy. The first round had eight participants, one of whom is now running for city council.

Community members also serve on the Local Development Council, which advises Southern on the grant making process. Southern makes up to three grants quarterly to support strategic plan activities and Southern staff review grant applications, which are then reviewed by the Local Development Council, which makes recommendations to Southern's board. “It creates a greater sense of investment in the project because we provide real decision making power to a local group of individuals who can tell us if it is a good fit or if we don't need the project right now,” said Julia Nordsieck, Community Development Officer with Southern Bancorp Community Partners, of the importance of the Local Development Council.

For community members who are interested in the Delta Bridge Project, but are looking for a lower level of engagement than goal teams or subcommittees, there are also regular informational meetings, and project information updates are regularly posted on the website (www.deltabridgeproject.com). Southern Bancorp Community Partners is finding that providing different levels of engagement is important and that the community's response to these efforts has been very positive.

To measure project success, Southern Bancorp Community Partners has a metrics program, which looks at community indicators. The three key indicators are employment rate, poverty rate, and educational attainment (defined as the population aged 25 or over with an associate's degrees or higher). The goal that has been set is to reduce the gap between the employment, poverty, and educational attainment rates in Phillips County and the national rates by half by 2020. Through the metrics program, intermediate indicators, which define success in these areas as they relate to the strategic plan's five key goal categories, are being defined.

Between the summer of 2005 and August 2012, The Delta Bridge Project leveraged \$105.1 million in investment in Phillips County. Of this amount, \$10.4 million in grants and loans has been invested by Southern

Phillips County, Arkansas

Population (2010): 21,757

Summary: Through the Delta Bridge Project, a strategic planning and implementation process, residents of Phillips County and the city of Helena-West Helena have been actively engaged in planning for economic development. The plan, which has leveraged significant private sector investment, makes community development and investing in leadership development, education, and healthcare—the existing human capital in the community—central to the economic development strategy.

Key Takeaways:

- Use strategic plans for long-range goal setting and to guide projects and investment, helping the community stay focused on long-term projects and goals
- Offer different levels of engagement for community members, from providing information online to allowing residents to actively engage in the implementation process
- For partnerships between funders, community institutions, and community members
- Use both short-term and long-term metrics to track success

Bancorp Community Partners, \$14.3 million has been contributed in grants and loans by Delta Bridge Partners, and \$80.3 million has been leveraged from other partners and funding sources. Over \$5.4 million of this funding has been invested in leadership development.²⁰

Conclusion

Asset-based economic development can help small towns and rural communities leverage their existing assets into economic opportunities. While all the communities profiled here have focused on asset-based economic development, they have focused on different assets—an existing industrial base in Pella, renewable energy potential in Prowers County, and human capital in Phillips County—and each community's experience offers different lessons. As Pella and Prowers County illustrate, both existing industry and emerging industries can be assets for a community, and local start-ups can be key to continued economic development and growth, and play an important role in supporting existing industries and in growing the

local workforce. These case studies also illustrate that investments need to be made to support assets and asset-based economic development. As the Pella example shows, making infrastructure investments on the local government level can support industry growth, making the community an attractive place for companies to stay or to locate. And making quality of life investments can help employees see the community as a desirable place to live. Ultimately, both of these investments can have positive impacts on job growth and the local tax base.

All three of the case studies show the importance of building partnership and working collaboratively on economic development initiatives. These partnerships can be between local governments and community or economic development organizations, between multiple local governments, or between community groups. Partnerships can be critical in leveraging resources, building stakeholder support, and in turning a great idea or existing community asset into a successful, long-term economic development strategy.

Finally, as the Phillips County example illustrates, community residents—the existing human capital—can be a key part of an asset-based economic development strategy. Not only are the people in your community one of its greatest assets, engaging them in developing an economic strategy can create greater buy-in and can, as a result, lead to greater success in implementation.

Key Takeaways:

- Identify existing assets and evaluate their benefit to the local economy
- Identify how development of assets and an asset-based economic development strategy tie into your existing economic development strategy
- Look at your communities assets, their potential benefit to the local economy, and how they can be leveraged as part of an economic development strategy
- Identify resources that can be leveraged to support asset-based economic development and make investments necessary to grow the asset base, whether those be in infrastructure, quality of life, education, or workforce or leadership development
- Form partnerships between key stakeholders to more fully leverage resources
- Engage the community in the planning and implementation process

Additional Resources

Mobilize Maine: Asset-Based Regional Economic Development. 2011. <http://www.nado.org/mobilize-maine-asset-based-regional-economic-development/>

Putting Smart Growth to Work in Rural Communities. 2010. www.icma.org/ruralsmartgrowth

Putting Transit to Work in Main Street America: How Smaller Cities and Rural Places Are Using Transit and Mobility Investments to Strengthen Their Economies and Communities. 2012. <http://reconnectingamerica.org/resource-center/books-and-reports/2012/putting-transit-to-work-in-main-street-america-how-smaller-cities-and-rural-places-are-using-transit-and-mobility-investments-to-strengthen-their-economies-and-communities/>

Supporting Sustainable Rural Communities. 2011. http://www.epa.gov/dced/pdf/2011_11_supporting-sustainable-rural-communities.pdf

Transitioning to Renewable Energy: Development Opportunities and Concerns for Rural America. 2011.

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Notes

- 1 McGranahan, D.A. & C.L. Beale. 2002. "Understanding Rural Population Loss." *Rural America* 17(4).
- 2 Johnson, K. "Rural Demographic Change in the New Century: Slower Growth, Increased Diversity." Issue Brief 44, Carsey Institute, Winter 2012. <http://www.carseyinstitute.unh.edu/publications/IB-Johnson-Rural-Demographic-Trends.pdf>
- 3 Colopinto, K. "Mobilize Maine: Asset-based Regional Economic Development." *National Association of Development Organizations Research Foundation*, September 2011 and Appalachian Regional Commission. "Appalachia: Turning Assets into Opportunities." October 2004.
- 4 Appalachian Regional Commission. "Appalachia: Turning Assets into Opportunities." October 2004.
- 5 Colopinto, 2011.
- 6 Colopinto, 2011.
- 7 University of Wisconsin Cooperative Extension. "Industry Cluster Analysis of the Northern EDGE Region." <http://www.uwex.edu/ces/cced/economies/northernedge/industryclusterindex.cfm>
- 8 Pella's population was 5,198 in 1960 and had nearly doubled to 10,352 in 2010. Nearby Oskaloosa had a 1960 population of 11,053. The city saw its population increase in 1970, before decreasing for two decades. In 2010 the population was 11,463. For a broader comparison see City of Pella. "Comprehensive Development Plan." <http://www.cityofpella.com/index.aspx?NID=393>
- 9 Iowa Workforce Development Employment Statistics Bureau. "Marion: 2011 Annual County Profile." <http://iwin.iwd.state.ia.us/pubs/countyprofile/marion.pdf>
- 10 PADCO. "About." <http://www.pella.org/aspx/businessdevelopment/aboutpadco/mission.aspx?cid=0&sid=3&n1id=15&n2id=104>
- 11 NREL. "Dynamic Maps, GIS Data, & Analysis Tools." <http://www.nrel.gov/gis/solar.html/> and NREL. "Wind Research." http://www.nrel.gov/wind/resource_assessment.html
- 12 Prowers County Development, Inc. "Renewable Energy." <http://www.procolorado.org/renewable-energy/>
- 13 US Department of Energy. 2004. "Wind Energy for the Rural Economy." <http://www.nrel.gov/docs/fy04osti/33590.pdf>
- 14 Lamar Light and Power. "Generation Portfolio." http://www.lamarlightandpower.com/generation_portfolio.html
- 15 Abel, J.R. & R. Deitz. "Human Capital, Local Economic Development, and the Importance of Colleges and Universities." New York Minute Issue 47. Community and Regional Development Institute, August 2011. <http://devsoc.cals.cornell.edu/cals/devsoc/outreach/cardi/publications/loader.cfm?csModule=security/getfile&PageID=1010549>
- 16 Brown-Graham, A. & W. Lambe. "Measures and Methods: Four Tenets for Rural Economic Development in the Rural Economy." Policy Brief No. 9. Carsey Institute, Fall 2008. <http://carseyinstitute.unh.edu/publications/PB-Brown-Graham-Measures08.pdf>
- 17 The Delta Bridge Project. "Strategic Community Plan, Phillips County, Arkansas: 2005-2010." Summer 2005.
- 18 The Delta Bridge Project. "Phillips County, Arkansas: 2010-2020 Strategic Community Plan." <http://deltabridgeproject.com/assets/2010-2020-Phillips-County-Strategic-Community-Plan.pdf>
- 19 The Delta Bridge Project. "Phillips County, Arkansas: 2010-2020 Strategic Community Plan." <http://deltabridgeproject.com/assets/2010-2020-Phillips-County-Strategic-Community-Plan.pdf>
- 20 Delta Bridge Project. "Funding." <http://deltabridgeproject.com/phillipscounty/funding/>

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About ICMA

Founded in 1914, ICMA, the International City/County Management Association, advances professional local government worldwide. Our mission and vision is to create excellence in local governance by developing and fostering professional management to build sustainable communities that improve people's lives worldwide. ICMA provides member support; publications; data and information; peer and results-oriented assistance; and training and professional development to city, town, and county experts and other individuals and organizations throughout the world. The management decisions made by ICMA's members affect millions of individuals living in thousands of communities, from small villages and towns to large metropolitan areas.



Leaders at the Core of Better Communities

About NADO

The National Association of Development Organizations (NADO) is a national membership organization for the national network of over 520 regional development organizations (RDOs) focused on strengthening local governments, communities, and economies through regional strategies, partnerships, and solutions. Founded in 1988, the NADO Research Foundation is the nonprofit research affiliate of NADO. The NADO Research Foundation identifies, studies, and promotes regional solutions and approaches to improving local prosperity and services through the nationwide network of RDOs. The Research Foundation shares best practices and offers professional development training, analyzes the impact of federal policies and programs on RDOs and their local communities, and examines the latest developments and trends in small metropolitan and rural America. Most importantly, the Research Foundation is helping bridge the communications gap among practitioners, researchers, and policymakers.



For more information about ICMA's Center for Sustainable Communities, contact Tad McGalliard at 202.962.3563 or tmcgalliard@icma.org

