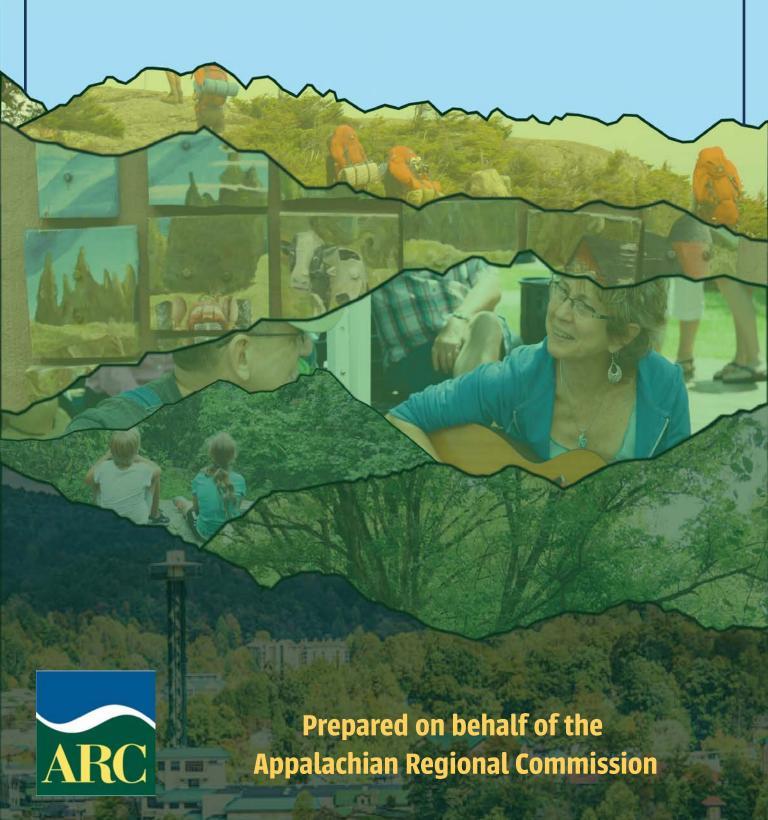
Strengthening Economic Resilience in Appalachia

A Guidebook for Practitioners



Acknowledgements

Report Authors and Contributors

Fritz Boettner, Evan Fedorko, Evan Hansen

Downstream Strategies 911 Greenbag Road Morgantown, WV 26508 www.downstreamstrategies.com

Alan Collins, Brianne Zimmerman West Virginia University **Downstream Strategies Consultants** Stephan J. Goetz, Yicheol Han

The Northeast Regional Center for Rural Development The Pennsylvania State University 7 Armsby Building University Park, PA 16802-5602 https://aese.psu.edu/nercrd

Christine Gyovai, Emily Carlson, Alexandria Sentilles

Dialogue + Design Associates 2573 Pea Ridge Road Charlottesville, VA 22901 www.dialogueanddesign.com







We thank the following Advisory Team members for participating in calls and providing valuable feedback:

Jim Baldwin, Cumberland Plateau Planning District

Shannon Blevins, University of Virginia's College at Wise Dee Davis, Center for Rural Strategies

Eric Dixon, Appalachian Citizen Law Center

Peter Hille, Mountain Association for Community **Economic Development**

Debra Horne, Mayor of Town of Dungannon, VA

Leasha Johnson, Mingo County Redevelopment Authority

Justin Maxson, Mary Reynolds Babcock Foundation

Leslie Schaller, Appalachian Center for Economic Networks

Jennifer Simon, Ohio University

Barbara Wycoff, One Foundation

We thank the following Focus Group participants for their valuable insight:

Jimmie Adkins, LENOWISCO PDC Philippa Belsches, Just Transition Fund Shannon Blevins, UVa-Wise Office of Economic Development Dee Davis, Center for Rural Strategies Eric Dixon, Appalachian Citizens Law Center Peter Hille, MACED Ginny Kidwell, Tennessee Institute of Public Health Jennifer Simon, Ohio University Ada Smith, Appalshop Kent Spellman, Rails to Trails Conservancy

We thank the following interviewees:

Jonathan Belcher, Virginia Coalfield **Economic Development Authority**

Dee Davis, Center for Rural Strategies

Ta Enos, Pennsylvania Wilds Center

Anthony Flaccavento, Rural Scale

Michelle Foster, The Greater Kanawha Valley Foundation Peter Hille, Mountain Association for Community **Economic Development**

William Isom, Sustainable and Equitable Agricultural Development Task Force

Leasha Johnson, Mingo County Redevelopment Authority

Jake Lynch, West Virginia Community Development Hub Deborah Markley, Center for Rural Entrepreneurship Erik Pages, EntreWorks Consulting

Leslie Schaller, Appalachian Center for Economic Networks

Ada Smith, Appalshop

Kent Spellman, Rails-To-Trails Conservancy Bonnie Swinford, Tennessee Chapter of the Sierra Club Tom Torres, Appalshop Board Executive Committee Stephanie Tyree, West Virginia Community Development

Thomas Watson, Rural Support Partners Barbara Wycoff, One Foundation

Executive Summary

Introductions

The economies of many counties and subregions in the Appalachian Region have historically depended on a few dominant industries, such as mining and manufacturing. In recent years, Appalachian coal production—particularly production in the Central Appalachian coal basin-has plummeted. Coal companies have gone bankrupt and jobs have been lost, with devastating impacts on families, communities, counties, and states. The Strengthening Economic Resilience in Appalachia project explored the economic resilience of communities and regions across the country to understand what makes an economy strong enough to rebound from or adjust to major economic downturns. Additionally, we explored best practices, strategies, and policies that local leaders can use to enhance the future economic prospects of coal-impacted communities throughout the Appalachian Region.

Process

The Strengthening Economic Resilience in Appalachia project, sponsored by Appalachian Regional Commission, was conducted by Downstream Strategies, Pennsylvania State University, Dialogue + Design Associates, and other partners. The purpose of this project was to define and quantify economic resilience and understand the underlying factors that allow communities to buffer economic shocks. In addition, our team explored and documented strategies and policies that local leaders can use to enhance the future economic prospects of coal-impacted communities throughout the Appalachian Region. The four goals of this research project were to:

- 1. Develop a comprehensive, quantitative framework to explore economic resilience:
- 2. Identify strategies for strengthening local economic resilience;
- 3. Conduct up to 10 in-depth case studies; and
- 4. Produce a guidebook that interprets and integrates findings of the research, written specifically for local economic development practitioners.

About the Guidebook

This quidebook summarizes project findings, presents case studies, and suggests best practices and strategies for communities to employ in order to build resilience. It is designed for use by economic development practitioners, local government officials, nonprofit organizations, and others working in the Appalachian Region. Finally, this guidebook provides practicable insights into how communities are approaching economic development today.

Table of Contents

Acknowledgements 1

Executive Summary 2		
Summary of Results 4		
National Picture of Resilience 6		
Case Studies of Economic Resilience		
	8	
1.	Fannin, Georgia	
2.	Flathead, Montana	
3.	St. Clair, Alabama	
4.	McCracken, Kentucky	
5.	Holmes, Ohio	
6. 7.	3 ,	
7. 8.	Dickinson, Iowa Lee & Itawamba, Mississippi	
9.	Harrison, West Virginia	
	McKean, Pennsylvania	
20.	mortean, r omojivama	
Best	Practices Introduction30	
Comn	nunity Feedback Process31	
	Practices for Strengthening Economic	
Kesili	ence in Appalachia33	
1.	Invest in advection technology infrastructure and	
1.	Invest in education, technology, infrastructure, and broadband.	
2.	Engage the community over the long term.	
3.	Create communities where people want to live.	
4.	Grow youth engagement and next-generation	
	leadership.	
5.	Identify and grow the assets in the community and	
	region.	
6.	Build networks and foster collaboration.	
7.	Move multiple sectors forward for economic	
	development and grow value chains.	
8.	Cultivate entrepreneurs and develop resources for	
8.	business start-ups.	
	business start-ups.	
Sumn	business start-ups. nary50	
Sumn	business start-ups.	
Sumn	business start-ups. nary50	
Sumn Endno	nary	
Sumn Endno Notes:	business start-ups. nary50	

the Guidebook, it refers to the entire Appalachian Region. When it appears in lowercase, region applies to a smaller

or more specific geographic area.



Economic Resilience Across Appalachian Communities

Summary of Results

We define economic resilience as the capacity of a local economy-town, county, or region—to recover or bounce back from an "economic shock." Economic shocks can come in many forms, such as the Great Recession of 2008 or a major employer shutting its doors. Understanding what makes a community resilient to an economic shock is very important and can help communities in the transitioning Appalachian economy. Economic resilience measures focuses on three data points: (1) time of shock—in many cases, the beginning of the 2008 recession—and how the effects played out, (2) the response of affected counties or regions, and (3) the relationship between the shock and recovery. In combination with stakeholder input, these measures help us identify regions with high resilience while teasing out the underlying and contributing factors that make them resilient. Further exploring those locales provided insight into the types of policies and practices that can be implemented in local communities to promote economic resilience.

Index of Economic Resilience

The three economic resilience measures described above were combined to form an index of economic resilience (see map on page 7). This index paints a picture of where resilience exists and the factors allowing a community to withstand economic shocks. We performed two statistical analyses that explore the determinants of resilience. The first analysis assessed each county across the United States using a total of 35 variables, which are divided into demographic/mobility, economic/industry, and community/health variables.

Demographic and Mobility



Economic and Industry



Community and Health

- Proportion of young adults
- Number of people migrating in and out of the county
- Number of people commuting out of the county
- Population
- Portion of residents with college degrees
- Labor force participation
- Innovation potential
- · Industry diversity
- Availability of educational facilities
- Broadband
- · Recreational opportunities
- Employment in arts, entertainment, and recreation
- Agritourism and direct farm sales

Neighbor Effect

The second analysis provided insight into how investments or policies in one county or region could have a positive or negative impacts on neighboring counties or regions. For example, while certain policies are best dealt with as single-county issues, others may be more efficiently implemented as a joint effort with surrounding counties (or even at the state level).

Policies may be complementary (cooperative) or competitive across county lines. Cooperative strategies strengthen the resilience of surrounding counties, while competitive strategies weaken the resilience of surrounding counties. For example, policies that increase the diversity of industries and innovation potential, and policies that increase participation of the workforce, were found to have strictly county-level impacts. These approaches neither help nor hurt resilience in neighboring counties. On the other hand, competitive and ultra-competitive policies in a county tend to reduce the resilience of surrounding counties and the total region. Examples include those that attract college-educated people and those that increase the portion of the population aged 65 and over.

Learning from Examples

The study identified counties or regions across the United States and within Appalachia that have rebounded after experiencing significant economic shocks. Ten case study areas were selected to provide insight into how communities are evolving their approach to economic development both inside and outside the Appalachian Region. These case studies are mapped and summarized on the following pages, and more details about each location are provided in the following section.

What Does It All Mean?

To create results that will help on-the-ground practitioners, our team conducted interviews; formed an advisory group of community and economic development leaders; and surveyed economic development practitioners, elected officials, and others on best practices and strategies for strengthening economic resilience in the Appalachian Region. Results were synthesized into eight best practices with associated strategies. More detail about these can be found on pages 33 - 49.

- 1. Invest in education, technology, infrastructure, and broadband.
- 2. Engage the community over the long term.
- 3. Create communities where people want to live.
- 4. Grow youth engagement and next-generation leadership.
- 5. Identify and grow the assets in the community and region.
- 6. Build networks and foster collaboration.
- 7. Move multiple sectors forward for economic development and grow value chains.
- 8. Cultivate entrepreneurs and develop resources for business start-ups.

National Picture of Resilience and How it Relates to Appalachia



Chenango County,

New York

Chenango County, New York has drawn upon its rich manufacturing history to recover from the 2008 economic shock.



Holmes County,

Ohio

Holmes County is in the heart of Ohio's Amish Country, presenting a unique cultural landscape for economic resilience.



Dickinson County, Iowa and

the Iowa Lakes Corridor

Dickinson County has worked closely with its neighbors to build a small region of economic resilience in Northern Iowa.



Lee and Itawamba Counties,

Mississippi

These two rural counties are at the heart of a traditional furniture manufacturing industry and experienced significant job loss following the 2008 recession.



Flathead County,

Montana

Like much of Appalachia, Flathead County, Montana has had to diversify its economy in the face of a declining extraction industry (timber).



St. Clair County,

Alabama

Just to the northeast of Birmingham, St. Clair County experienced a jarring halt to economic growth in 2008 but has banded with their neighbors to turn the tide.



Fannin County,

Georgia

Fannin County has made natural assets the centerpiece of its economic planning, recognizing their importance to numerous industries.



McKean County,

Pennsylvania

Rural McKean County in far northern Pennsylvania has made significant investments towards economic transition.



Harrison County,

West Virginia

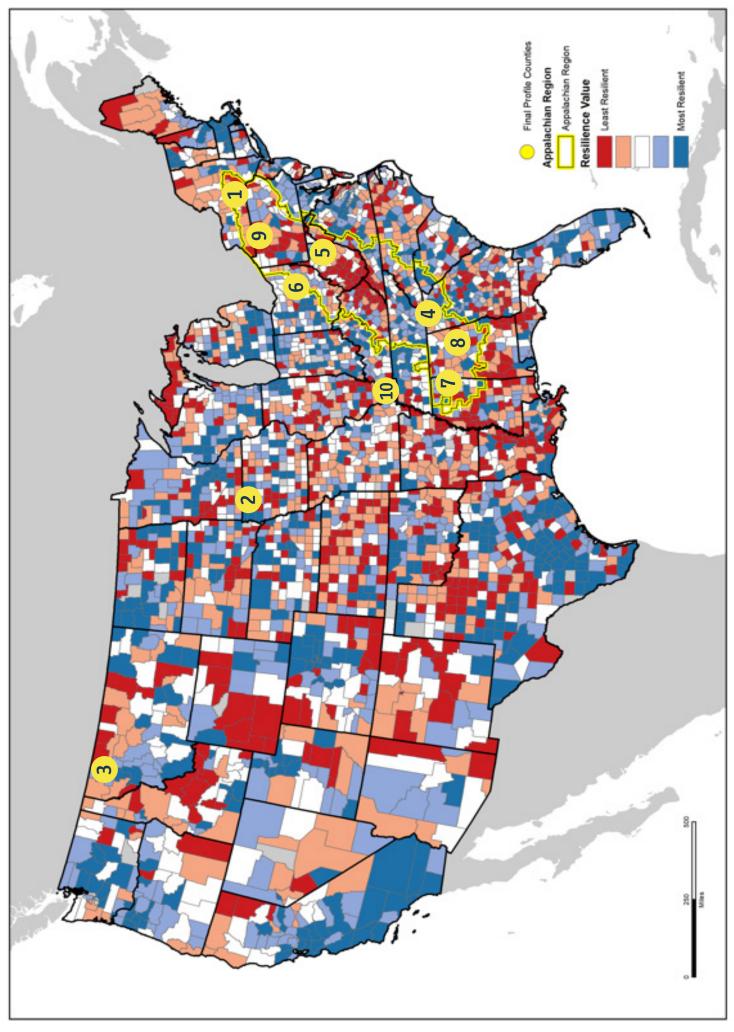
Harrison County was able to shake off the storm of the 2008 economic crisis, losing little, if any, ground.



McCracken County,

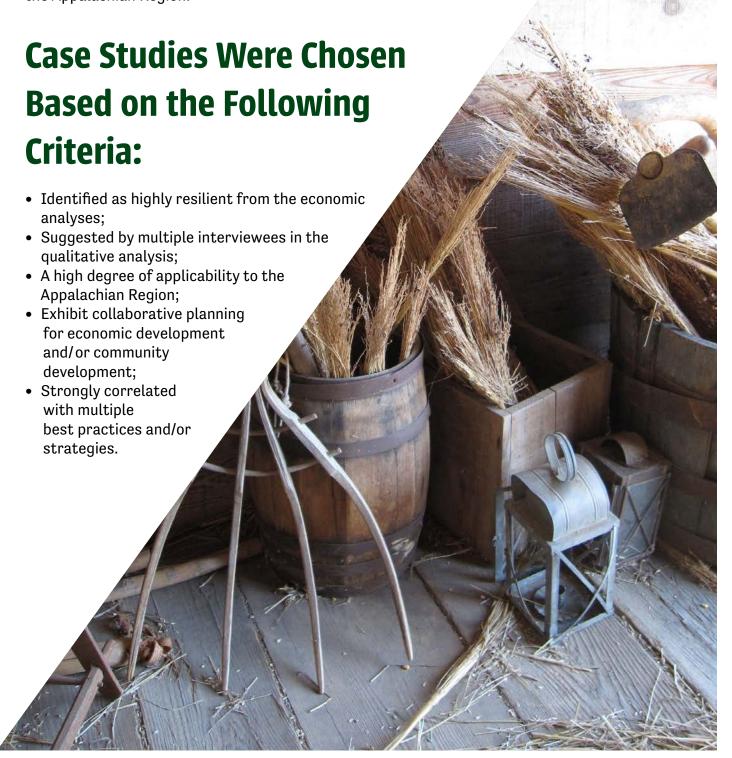
Kentucky

McCracken County has called upon its citizens and river-town heritage to craft a plan for a new economic future.



Case Studies of Economic Resilience in Appalachia

The study identified counties or regions across the United States and within Appalachia that have rebounded after experiencing significant economic shocks. Our team selected ten case studies from 112 candidate counties from across the country. As illustrated below, the case studies were selected to include several characteristics that made them meaningful for practitioners in the Appalachian Region.



Case Studies for Strengthening Economic Resilience in Appalachia

1	Chenango County, New York
2	Dickinson County, Iowa
3	Flathead County, Montana
	The state of the s
4	Fannin County, Georgia
5 H	larrison County, West Virginia
6	Holmes County, Ohio
7 Lee & Ita	awamba Counties, Mississippi
8	St. Clair County, Alabama
9	McKean County, Pennsylvania
10	McCracken County, Kentucky

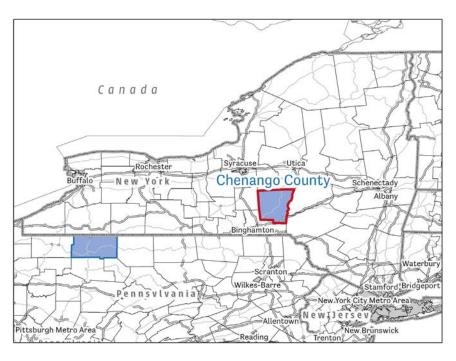
Case Study 1:

Chenango County, **New York**

ntroduction

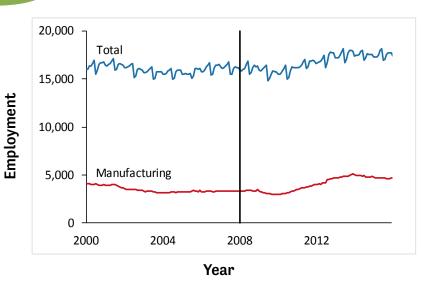
Chenango County is in southcentral New York, approximately 40 miles northeast of Binghamton. It is intersected in the southeast by Interstate 88 but is otherwise served by state and local roads. Chenango County is a relatively sparsely populated county, falling into the bottom third of New York counties in terms of both total population and population density. county The nearly 80,000 acres of public land, including 22 state forests.

Chenango County was found to be the 289th most resilient county (91st percentile) in the United



States according to our quantitative models of resilience. The county's largest economic sectors are agriculture, food processing, financial services, and advanced manufacturing. Chenango County has experienced numerous economic disruptions over the years, but the economy has consistently weathered those storms, making it an ideal candidate for further study on economic resilience.

mployment Trends



Chenango County experienced very little employment loss during the 2008 economic crisis, and has grown since then thanks to growth in the manufacturing sector.

Chenango County's resilience, in light of the economic downturn, appears to be built upon a well-established foundation of small manufacturers. Manufacturing has a long history in the county; the core of the sector was born in the 1880s when numerous products were invented and subsequently manufactured there. Manufacturing's overall share of local employment has decreased since its heyday, but the stability of that sector, as well as a growth spurt around 2010 (as visible in the jobs chart), were the bedrock of the county's resilience following the 2008 economic crisis. Much of the growth in 2010 is directly attributable to two entities: Chobani, which experienced significant growth at that time, and Raymond Corporation, which opted to relocate international capacity to the county.

Strategies for Resilience

Today, county officials and business organizations have begun to recognize the need for careful planning to preserve the steady economy of the area. Chenango County's primary economic development entity, Commerce Chenango, led a large stakeholder group of elected officials and business leaders to develop a strategic plan for economic development in 2011, which was then updated in 2014. The plan outlines a set of six goals and accompanying strategies, all of which are aimed at improving Chenango's business climate as well as improving quality of life for residents, a best practice identified in this study. The plan relied heavily on an analysis of existing conditions in the county. Avoiding "one size fits all" solutions, it identified assets in place that can be supported and moved forward, which is another best practice identified by the study. The plan also recognizes that while the two most historically important sectors—manufacturing and agriculture—within the county have declined, they remain important. Adapting to changes in the global economy for these (and other) sectors will require flexible, responsive strategies. Those strategies are most clearly embodied in this plan's commitment to workforce development, a vital strategy identified by the research team, within the county. Commerce Chenango and partners have made workforce development a priority, and in order to maximize access to these programs for residents, they have included support services such as daycare, transportation, and counseling as components of workforce development offerings.

Applications in Appalachia

Chenango County is within Appalachia, and like much of that region, its economic history is dominated by two large, legacy sectors (agriculture and manufacturing) with uncertain futures. The county's planners recognize both the cultural and economic values of these sectors, and they have engaged in a plan to support them while also expanding the capability of the county's workforce to support diverse growth.

For more information, visit: http://www.co.chenango.ny.us/

Case Study 2:

Dickinson County, Iowa

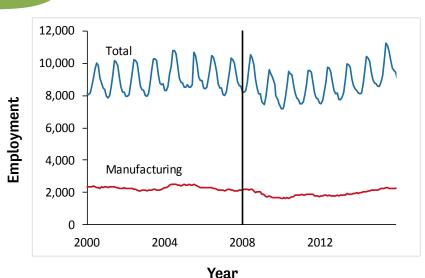
ntroduction

The Iowa Lakes Corridor region, anchored by Dickinson County, is a four-county region in north-central Iowa, bordering Minnesota. The region is well known among Iowans as a vacation spot, due in large part to its numerous lakes, public land, and other tourism amenities. Unlike the Iowa Lakes region as a whole, which has experienced a population decline since the 1990s. Dickinson has grown in population over this time period, and the Iowa Lakes Corridor Development Corporation (ILCDC) and others are working to mimic Dickinson's positive trends across the entire region. Dickinson County's



employment rebounded slowly but steadily following the 2008 economic crisis, and the county was in the top 10% of U.S. counties for economic resilience according to our models.

mployment Trends



As a tourism destination, Dickinson County's employment trends exhibit a very seasonal pattern, and following the 2008 crisis, overall employment dipped. The Iowa Lakes Corridor has established itself as a hub of small manufacturing, and that sector has helped spur growth since the recession.

Dickinson County's ability to overcome the negative effects of the 2008 recession is traceable to several key factors, each of which has been recognized and supported by planners and policy makers within the county and region:

- A well-known and well-established tourism industry,
- A thriving small manufacturing sector (Dickinson County) is 456th of 3,055 U.S. counties in terms of manufacturing employment), and
- Strongly integrated local and statewide institutions of higher education.



Strategies for Resilience

The county, through the ILCDC and other partners, has implemented several strategies that have maintained and improved resilience, including several best practices identified as part of this work: creating communities where people want to live, moving multiple sectors forward, identifying and growing assets in the community and region, and cultivating entrepreneurs. These strategies have been implemented through a number of programs:

- 1. Entrepreneurship support programs. Entrepreneurship development and support is a cornerstone priority of ILCDC's 2016-2020 Strategic Plan. The ILCDC provides resources to aspiring entrepreneurs, as well as specialized programming for youth, such as the Entrepreneurship Academy. One notable and innovative program is the Okoboji Entrepreneurship Institute at Iowa State University. Students from Iowa Lakes Community College, which has locations in the Iowa Lakes region, are among those eligible to participate in an intensive, advanced study of entrepreneurship.
- 2. Housing and quality of life. The ILCDC includes housing as one priority in its 2016-2020 plan. Recognizing that quality of life extends beyond access to parks and other natural amenities, the ILCDC seeks to ensure that the people of the region—both existing and prospective residents alike—have access to high quality, affordable housing. This priority recognizes that there are current housing needs, and no new growth can happen if these needs are not addressed.
- 3. Workforce development for the future. Iowa Lakes Community College is now a leading entity in workforce development for the region.

Applications in Appalachia

Like much of Appalachia, the Iowa Lakes region counts natural amenities among its principal attractions. Economic development professionals have worked hard to promote the region as a welcoming and scenic place to work and live. This promotional effort underlies the joint effort by the counties in the Iowa Lakes region to increase their planning resources, enabling the region to collaborate, plan for success, and continue strengthening their resilience.

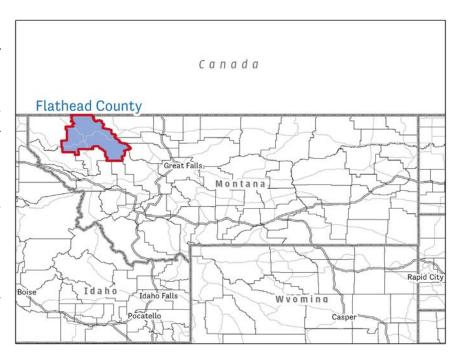
For more information, visit: https://dickinsoncountyiowa.org and https://vacationokoboji.com

Case Study 3:

Flathead County, Montana

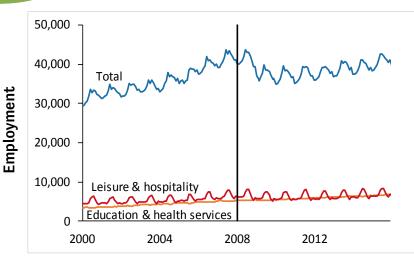
ntroduction

Flathead County borders Canada, and the western portion of Glacier National Park lies within the county. Approximately 94% of the county is national or state forest land, wilderness, agricultural land, or corporate timber land. Timber is very important to the local economy, but production dropped precipitously in recent decades-from 245 million board feet in 1981 to 91 million board feet in 2014. This decline mirrored that of the state as a whole; however, Flathead County remains the largest timberproducing county in Montana.



Employment in Flathead County dropped almost 10 percent during the Great Recession, but then started to grow again, almost reaching pre-recession numbers by 2015. It was included as a case study because its economy has historically been dependent on timber harvests.

mployment Trends



Flathead County experienced significant loss to employment following the 2008 recession, after many years of high growth. Leisure and hospitality have remained a strong (and seasonal) sector, but education and health services employment has emerged as an important component of Flathead County's recovery.

Year

Flathead County's key resilient features are its natural beauty and gateway location. Taking advantage of its proximity to Glacier National Park and Flathead Lake, the largest freshwater lake west of the Mississippi River, the county offers numerous outdoor tourism opportunities and accommodations, including guest ranches.

Strategies for Resilience

The Flathead County Economic Development Authority (FCEDA) has strategically invested in projects to bring a diversity of jobs and economic investment to the county. FCEDA guaranteed funds to attract United Airlines to add a Chicago flight to the Glacier Park International Airport, resulting in additional visitors to Glacier National Park, which has led to additional county revenues.

FCEDA invested in numerous local breweries, thereby supporting those entrepreneurs and developing resources for expansion in that sector, a best practice identified in this project.

Also, FCEDA and business and community leaders are redeveloping Kalispell's seldom-used railroad tracks, which now cuts through the city core. Plans include creating a rail-served industrial park to attract manufacturing and industrial jobs. Additionally, it plans to transform the city center with a new park, which will beautify a blighted strip, attract investment, and revitalize the downtown's commercial center. The goal is also to provide housing for all income levels in the city center to attract a young, educated workforce—thereby creating communities where people want to live, a best practice identified in this project.

Applications in Appalachia

Similar to the decline of the coal industry in much of the Appalachian Region, Flathead County has witnessed a steep decline in the timber industry. Still, it recovered from the Great Recession by taking advantage of its natural beauty and location as a gateway to Glacier National Park. Many parts of Appalachia also boast striking natural beauty and locations within easy reach of millions of U.S. residents.

> For more information, visit: http://www.fcvb.org/ and https://flathead.mt.gov/

Case Study 4:

Fannin County, Georgia

ntroduction

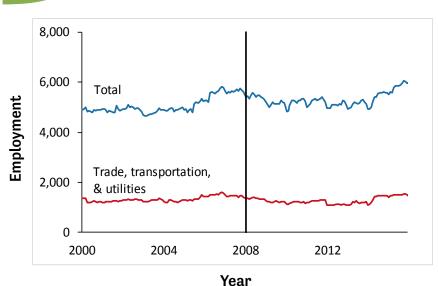
The Appalachian Trail starts in southern Fannin County, and 40 percent of Fannin County's land area lies within the Chattahoochee National Forest. The county borders Tennessee and North Carolina to the north, and Blue Ridge, the county seat, is less than a 100-mile drive from Atlanta. Chattanooga, Tennessee; Knoxville, Tennessee; and Greenville, South Carolina are all within a three-hour drive.

The county is mountainous and largely rural—the largest city, Blue Ridge, has an estimated population of less than 1,400. Even SO. the population the county has approximately

Chattanooga Fannin County South Carolina Augusta Macon Georgia Columbus Alabama Savannah

doubled in the last five decades, from about 13,000 in 1970 to about 25,000 in 2016.

mployment Trends



After a period of intense growth, Fannin County's employment began to drop in 2007, only to be impacted further by the 2008 economic crisis. The drop was tempered, however, by steady employment in the county's largest sectors: trade, transportation, and utilities.

Fannin County was identified for a case study because it showed higher resilience than expected. Self-employment was the dominant sector, accounting for 43% of employment, 56th among all counties in the United States. More than 60 businesses are located in downtown Blue Ridge, despite its small population. Tourism, with a focus on outdoor recreation, is a centerpiece of the economy. In 2005 the county was designated the Trout Capital of Georgia. More than 2 million people visit the Chattahoochee National Forest each year. The Blue Ridge Reservoir provides for flood control, electricity generation, and a variety of recreational opportunities. A marina

provides access to the lake, and a canoe and kayak launch site below

the dam provides access to the Toccoa River. Sunfish, trout, and bass fishing are popular, and Class I-II rapids are found below the dam release. A variety of outdoor-focused businesses are located in and near Blue Ridge, most of which are adjacent to the reservoir: cabin rentals; whitewater kayaking, rafting, and tubing outfitters; an RV park; lodges, motels, and bed and breakfasts; and even a treehouse. Together, these natural and man-made amenities have boosted tourism and helped Fannin County be resilient.

Strategies for Resilience

The 2018 Fannin County Joint Comprehensive Plan describes the county's plans for ensuring economic resilience. A central strategic element of the plan is to take advantage of the county's bountiful natural assets. The county lays out intentions to protect key natural assets, including cold water streams, forests, and agricultural land. Far from relying solely on these things, however, the county outlines intentions to improve the quality of life for residents through affordable housing programs and infrastructure investment. Alongside economic diversification measures, these strategies will help build Fannin County's resilience to future economic shocks.

Applications in Appalachia

Fannin County, located in the Appalachian Region, has capitalized on outdoor recreational opportunities that are available to many counties across the Region, including those that have historically relied heavily on coal jobs.

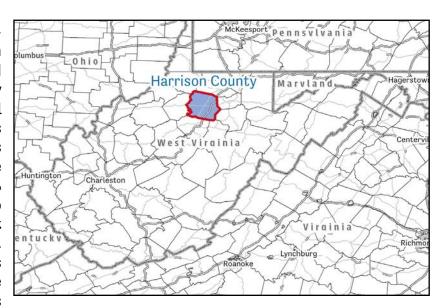
> For more information, visit: www.fannindevelopment.com and http://www.fannincountyga.com/

Case Study 5:

Harrison County, West Virginia

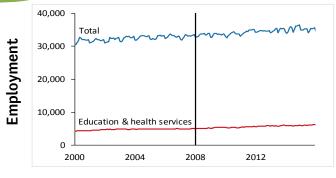
ntroduction

Harrison County is located in northcentral West Virginia, which has been relatively prosperous when compared to other parts of the state. The county has a history of both coal and natural gas production. While it still produces coal, production is down, as it is across the state. In 2002, nine mines in the county produced 6 million tons, or 4% of the state total. In 2015, only two mines remained, which produced just 0.1% of the state's total production. natural contrast, production due to is up development of the Marcellus Shale. In 2015, Harrison County



third-largest for was the gas-producing county in West Virginia, responsible of total production. In 2007, just as the shale gas boom the county ranked seventh in gas production and accounted for only 5% of the state's total production. The county's two largest cities, Clarksburg (the county seat) and Bridgeport, are adjacent to Interstate 79, the major north-south highway that connects north-central West Virginia with Charleston, the state capital. This highway also provides for efficient access to adjacent Marion and Monongalia counties, which, together with Harrison County, are a bright spot in the state in terms of economic diversification, growth, and resilience. Over the last 15 years, including during the Great Recession, employment grew slowly and steadily.

mployment Trends



Harrison County's resilience is demonstrated by employment numbers: growth has continued through the Great Recession with zero impact to total employment. The largest sector, education and health services, has been equally steady, shedding no jobs during the 2008 economic crisis or since.

The education and health services sector led growth after the Great Recession. Clarksburg is home to two major medical facilities: the Louis A. Johnson VA Medical Center and the newly built United Hospital Center. Clarksburg is also home to a U.S. district court and the FBI's Criminal Justice Information Services Division. Development in other north-central West Virginia counties adds to the resilience in Harrison County. West Virginia University, Mylan Pharmaceuticals, NIOSH, and other large employers are located in Monongalia County. The Alan B. Mollohan Innovation Center in Marion County houses the NASA IV&V Facility, MonPower's operation center, and other hightechnology firms.

Strategies for Resilience

While both Clarksburg and Bridgeport have economic development authorities, the Economic Development Corporation was launched in 2015 to consolidate development efforts in the county. The North Central West Virginia Airport, located in Harrison County, is one of the five primary airports in West Virginia. An industrial park adjacent to the airport houses aviation companies, including a service center for Bombardier, one of North America's largest aerospace and transportation companies. The Bridgeport Farmer's Market, in addition to providing fresh, local produce, also serves as a business incubator. Small businesses have started selling at the Farmers' Market before growing to occupy storefronts. This effort therefore cultivates entrepreneurs and develops resources for business start-ups, a best practice identified in this project. Healthy Harrison is "a coalition with a vision to measurably improve the health and wellness of the citizens in Harrison County." It highlights local heroes to motivate, educate, and inspire the community to begin taking micro-steps towards a healthier lifestyle.

Clarksburg's downtown area, like many downtowns across the Appalachian Region, has struggled in recent decades as businesses moved away. The downtown still boasts numerous historical buildings that, if renovated and put to productive use, could be centerpieces of the city's and the county's economic development. The Robinson Grand Theater was purchased by the City of Clarksburg in 2014, and efforts are now underway to restore it so that it can house the Robinson Grand Performing Arts Center—helping create communities where people want to live, a best practice identified in this project.

Applications in Appalachia

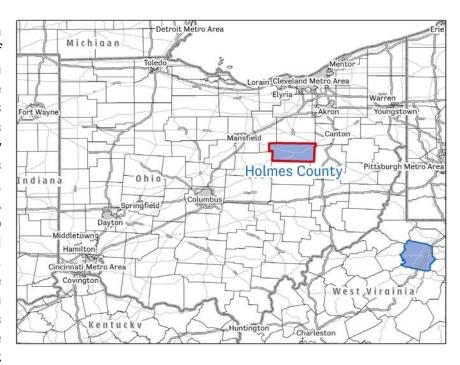
Harrison County is, of course, deep in the heart of Appalachia. Transitioning away from the traditional economic activities of the region has been a long process, and Harrison County has made many intentional efforts to transition. Many efforts undertaken in the county are available to all Appalachian counties, such as developing business incubators, engaging in historic preservation, and working with the state's land grant university.

Case Study 6:

Holmes County, Ohio

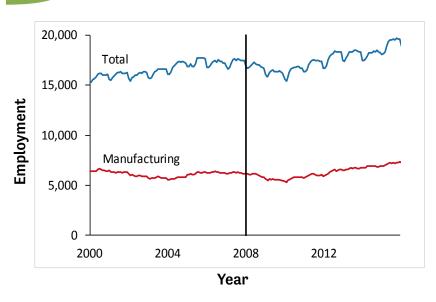
ntroduction

Holmes County lies in northeastern Ohio and is one of the four counties entirely within the Amish Country region of the state. Nearly half of the residents of the county are Amish, and this plays heavily into the identity of the county. Manufacturing is the largest employment sector, but the county also boasts a robust agriculture sector, two industries deeply intertwined with the county's Amish identity. Our models of economic resilience found the county to be the 169th most resilient in the country. As shown in the chart below, the county's employment took a hit



following the 2008 Great Recession but has since rebounded well beyond the total jobs at that time.

mployment Trends



The Amish Country region is well known for agricultural products, as indicated by the seasonal fluctuations in the jobs chart, and also handmade products such as furniture, which are categorized within manufacturing. The county experienced an employment shock in 2008, but, buoyed by manufacturing, has recovered well.

Holmes County's ability to recover from economic shock appears to be largely attributable to the strong manufacturing sector within the county, which accounts for approximately 30% of total employment. The sector experienced only a minor shock in 2008 and remained steady throughout the turbulent period of the Great Recession. Holmes County also boasts a strong tourism sector, supported by its location within the Amish Country region of Ohio. Holmes County's approach to tourism is somewhat unique, however: rather than supporting hotels and other features of multi-day tourism, the county has found that the majority of visitors travel by car for day trips that often focus on shopping for artisan goods, crafts, and other things not readily available in more urban areas.

Strategies for Resilience

Holmes County's officials and residents recognize the stability of their county—and the importance of small manufacturing—and have pursued the recognized best practice of investing in infrastructure to promote growth and expansion of that sector and for the benefit of current and future residents. Most notable are two very large wastewater treatment projects completed in 2012, which tripled the capacity of each facility. More recently, the Holmes County Economic Development Council has collaborated with Ohio State University to study the business climate in the county as well as to plan for the future. Reaching out to the community for feedback has paid dividends and will enable the Council to make informed recommendations to public officials.

Applications in Appalachia

Holmes County lies within Appalachia, but the applicability of Holmes County's successes to the rest of Appalachia is a bit tricky: the economic and cultural conditions of the county are unique and the result of a long history dating back to the Amish settlement of the early 1800s. Still, the county and wider region have demonstrated an intentional plan of identifying the strongest assets of the community and supporting those assets through infrastructure development, tourism marketing, and other activities, all of which have helped produce a resilient economy.

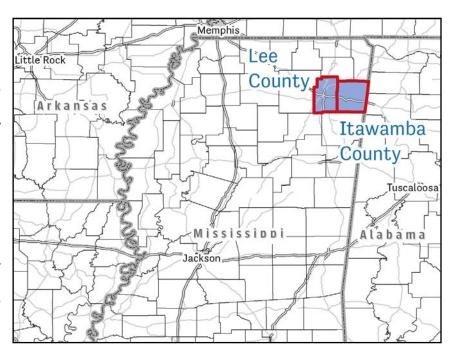
For more information, visit: http://www.visitamishcountry.com/

Case
Study 7:

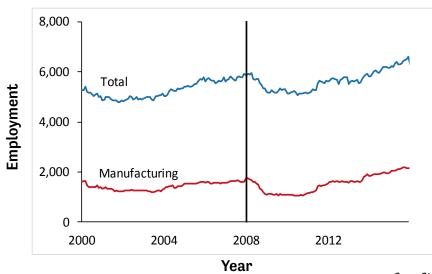
Lee & Itawamba Counties, Mississippi

ntroduction

Lee and Itawamba counties are adiacent counties in northeastern Mississippi, located along the Alabama border and only about 100 miles from Memphis, Tennessee, the nearest major metropolitan both area. In counties, was employment impacted by the Great Recession, counties the recovered relatively quickly. In Lee County, the professional and business services sector continued its gradual growth even through the recession. In Itawamba County, the dominant manufacturing sector saw large job losses during the recession, but the sector quickly recovered.



mployment Trends



These counties experienced significant and sudden job losses after the 2008 recession, mirroring the loss of the area's largest industry (manufacturing). Recovery took some time to begin, but has been significant since.

Lee County is a national hub of the upholstered furniture industry, which began in the 1940s and continues to this day. In 2015, the furniture manufacturer H.M. Richards announced its intention to expand its Lee County plant, which will lead to the creation of an additional 500 jobs. Over the decades, furniture making has not just brought jobs from large employers—it has also spawned numerous entrepreneurs that have started their own furniture manufacturing companies. Tourism attractions in the area include the Mississippi Blues Trail and the Mississippi Country Music Trail, which are collections of historical markers across the state and include locations in both Lee and Itawamba counties. The Natchez Trace Parkway, a 444-mile recreational road managed by the National Park Service, cuts through Tupelo and brings tourists to the region.

Strategies for Resilience

Lee County and its county seat, Tupelo, the subjects of the 1999 book "Hand in Hand: Community and Economic Development in Tupelo," have benefited from decades of intentional, sustained development efforts that continue to this day. Successful economic development efforts in this area have hinged on multiple efforts spanning decades that intentionally linked rural and urban areas to work toward common goals. Investments have been made in the county's workforce by strongly supporting public schools and by expanding the local Itawamba Community College, which now maintains campuses in both Itawamba and Lee counties. Investing in education is one of the best practices identified in this report. According to the "Hand in Hand" report, the Community Development Foundation "has been the single most important driving force for community development in Tupelo and Lee County." The Foundation works to attract new businesses and helps improve the efficiency of existing businesses.

Built in 2006, the Renasant Center for IDEAs is a regional business incubator for Tupelo and Lee County. It provides a variety of services, including business planning, counseling, networking opportunities, workshops on key business development topics, and shared use of business tools. The Renesant Center's efforts help cultivate entrepreneurs and provide important resources for business start-ups, both of which are recognized best practices.

Applications in Appalachia

In the past, Lee and Itawamba Counties recognized the need for investment and planning for future prosperity. Many entities have come to together to invest in the region and these efforts are beginning to bear fruit.

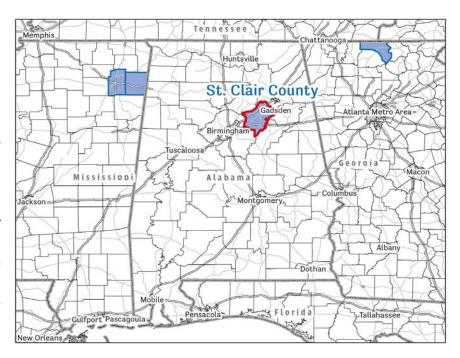
For more information, visit: http://trpdd.com/

Case Study 8:

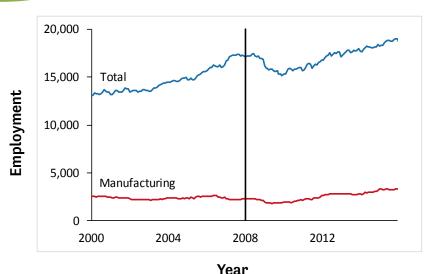
St. Clair County, Alabama

ntroduction

St. Clair County is located in north-central Alabama, just to the northeast of Birmingham. It is crossed by two major interstates (I-59 and I-20) as well as U.S. Routes 411 and 231. The county's population has grown dramatically since the 1980s and continues to grow today; it is among the fastest growing counties in the state. The county's eastern border is formed by the Coosa River and two large lakes, both the result of dams on the Coosa River. The river, lakes, and surrounding area provide recreation opportunities for residents and visitors alike.



mployment Trends



St. Clair County experienced large employment losses after 2008, though manufacturing, the largest sector, stayed relatively constant. Recovery from these employment losses was slow to start but has been significant since then.

St. Clair County performed well in our models of economic resilience. The county experienced a significant employment decline after the Great Recession (see employment chart). The shock had effects across sectors, including the county's well-established manufacturing sector. Prior to the shock, the county had been experiencing steady and relatively rapid employment growth. St. Clair County has the benefit of favorable geography—it is crossed by two interstates and is close to three metropolitan areas: Birmingham to the southwest, Gadsden to the north, and Anniston/Oxford to the west. Recovery from such a shock was made possible by fortuitous geography and wise planning.



Strategies for Resilience

Many of the local governments of St. Clair County have recognized the favorable conditions for growth and taken further steps to enhance resilience and encourage economic growth. First and foremost have been changes to improve the quality of life for residents and create communities where people want to live in order to attract them to the county, both of which are best practices recommended by this study. Pell City built a new library, expanded park offerings, and engaged in proactive infrastructure investment designed to accommodate future growth. Growth is certainly something to plan for in St. Clair County, as Pell City and Moody are in the top ten of the fastest growing regions in the state.

The most active economic development entity in the region is the Birmingham Business Alliance, a seven-county organization devoted to economic development in the counties around Birmingham. The Birmingham Business Alliance has developed and continues to update and improve a strategic plan called Blueprint 2020. The central element of this plan is to identify multiple local economic assets within the region (eight clusters are identified in the current iteration of the plan) and engage in targeted investment and other activities to support the growth of those assets, both of which are recognized as best practices for building resilience to economic shocks. The Alliance's approach largely reflects traditional investment and business growth strategies, but its self-assessment and accountability is notable: the program areas and target clusters are reviewed annually and the region is compared to similar metropolitan areas for performance assessment.

Applications in Appalachia

St. Clair County has worked closely with neighboring Birmingham to ensure that positive developments in that urban area can be taken advantage of within the county. The county maintains a rural character and has worked carefully to improve the quality of life for residents with that in mind, a goal that many Appalachian counties can benefit from.

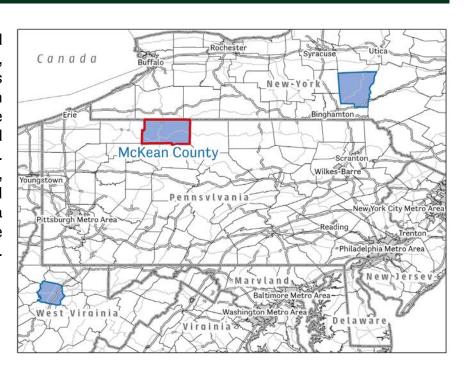
For more information, visit: https://www.stclairco.com/

Case Study 9:

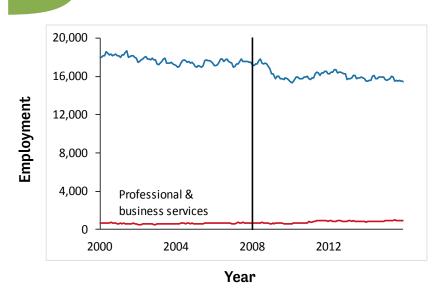
McKean County, Pennsylvania

ntroduction

A rural and sparsely populated county on the New York border, McKean County's economy has traditionally been based oil, timber, and tourism. The county was selected based on feedback from interviews. The Pennsylvania Wilds program, in particular, has heightened McKean County's profile as a tourism destination and base operations for artisans.



mployment Trends



McKean County's total employment has been in a slow decline over the period of the study, and was accelerated by the 2008 recession. Overall employment continues to decline, but business and professional services has shown a slight increase.

The Pennsylvania Department of Conservation and Natural Resources created seven conservation landscapes, including Pennsylvania Wilds, to encourage regions to work together "to drive strategic investment and actions around sustainability, conservation, community revitalization, and recreational projects." This effort is built upon strong natural assets, local buy-in, and state-level investment support. The Pennsylvania Wilds area includes 29 state parks, 50 state game lands, and eight state forests, with more than 2 million acres of public land.



Strategies for Resilience

McKean County benefits from the coordinated Pennsylvania Wilds effort, which includes regional planning, community character and natural resource stewardship, public and private investments, operation of a regional value chain of local products and services tied to the regional brand, and a successful marketing campaign. This campaign is consistent with a best practice identified in this study, to identify and grow the assets in the community and region. The counties of the PA Wilds are bound together through a ground-breaking Intergovernmental Cooperation Agreement, which is recognized under state law. County planners and other officials in the PA Wilds Planning Team, a regional stakeholder group housed at the PA Wilds Center for Entrepreneurship (PA Wilds Center), the coordinating nonprofit for the Conservation Landscape. One of the PA Wilds Planning Team's achievements is the PA Wilds Design Guide for Community Character Stewardship, an award-winning planning resource, which has been the foundation of regional façade and signage grant programs. Many businesses in McKean County have utilized these resources to improve properties and shape development. Elk County, adjacent to McKean County, is the center of the region's elk population and home of the Elk Country Visitor Center, a world-class conservation facility. A sister visitor center, at Kinzua Bridge State Park in McKean County, opened in 2016. Together the sites pull many people to this part of the PA Wilds, with focuses on nature and heritage tourism. The Kinzua Bridge site is home to the first PA Wilds Conservation Shop, a gift shop operated by the PA Wilds Center under a public-private partnership with DCNR, which focuses on selling products from the Center's regional value chain, called the Wilds Cooperative of PA. These stores help grow rural businesses, and profits from the gift shops are earmarked to support regional marketing to ensure continued demand.

Applications in Appalachia

McKean County relies heavily on natural assets and tourism to improve economic resilience. Of important note to other regions

of Appalachia is the regional strategy (Pennsylvania Wilds). Rather than single counties working to promote themselves in a crowded tourism marketplace, an entire region of Pennsylvania has banded together under a cohesive identity and brand. This is a strategy worth considering in other regions.

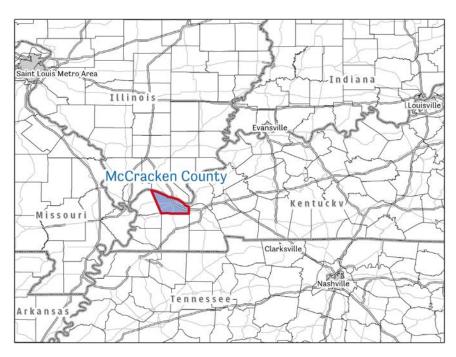
For more information, visit: www.pawilds.com and www.visitANF.com

Case Study 10:

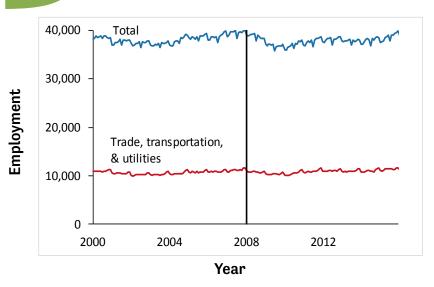
McCracken County, Kentucky

ntroduction

McCracken County is in far southwestern Kentucky, where the Tennessee River joins the Ohio River. The county seat and largest city, Paducah, is situated just downstream of that confluence. Much of the county's culture and history is derived from its history as a bustling river town, where commerce and culture intermingled. The county grew steadily for much of the 20th century, but the population has remained steady since 2000.



mployment Trends



McCracken County experienced a shock during the 2008 recession, but the county's largest employment sectors, trade. transportation, and utilities, have stayed steady throughout the period, providing a bedrock of employment.

Forward Paducah has identified a number of business sectors they believe, with focused support, can lead McCracken County's economy in the future. Those sectors are diverse and encompass a broad swath of livelihoods, from professional sectors such as finance and information technology, to locally traditional businesses such as river transportation support and artisans, to forward-thinking sectors such as advanced manufacturing. But planners have looked beyond traditional brick and mortar projects to find that Paducah's thriving arts culture, with dedicated long-time residents at its core is a major asset to the resiliency of the community. Forward Paducah's focus on diversity and supporting assets in place is the foundation of their drive towards resilience.

Strategies for Resilience

The Forward Paducah effort includes a number of key strategies recommended by this study, including identifying and growing the assets in the community and region, creating communities where people want to live, moving multiple sectors forward for economic development, and engaging the community over the long term. Development of the plan began with a far-reaching stakeholder process that focused on identifying assets and opportunities for growth and development within the community. Paired with demographic research conducted by a consultant, the effort identified a diverse pool of economic sectors poised to grow in the 21st century. This pool was not derived entirely from quantitative analysis; instead, the planning process placed great emphasis on the cultural assets of the community and the desire of residents to maintain their status as a cultural hub of Western Kentucky. The consensus-driven stakeholder process in Paducah helped identify what the community wanted, create strategies to make those ideas a reality, and develop actions that the community would support and contribute to.

Applications in Appalachia

Much like Central Appalachia, McCracken County grew and thrived alongside industries that have all but disappeared from America.

Rather than focus on traditional economic development oriented around attracting a single large employer, Forward Paducah has opted to look inward and celebrate those who call McCracken County home. Given Appalachia's deep culture, history, and population of proud residents, a planning process that seeks to identify and celebrate the assets in place is a natural fit for many locations within Appalachia.

For more information, visit: http://mccrackenky.com/

Introduction to Best Practices: Community Research and Input

The best practices and strategies developed in this project were developed from numerous engagements with practitioners in the Appalachian Region. Two rounds of interviews were held in early 2017 with a variety of leaders and practitioners, and a summary of the interviews is available in the Economic Resilience Technical Report (link below). Interviewees also identified tools, resources, and several other ideas that are included in the interview summary document, with quotes from interviewees interspersed throughout the following pages. In addition, a focus group was held to solicit feedback on the draft best practices and strategies, and an advisory team provided input to the development of the best practices, strategies, and overall approach throughout the project. A survey was also conducted in summer 2017 with practitioners across the Appalachian Region to prioritize the draft best practices and strategies and solicit new ideas, with 151 responses received. The response to one of the questions of the survey is available below, and the best practices and strategies in the guidebook are shown in the order of priority from the survey results. The economic strategies included with each of the best practices were developed by the project team and were drawn from the accompanying economic analysis. The full economic analysis is available in the Technical Report, as well. In addition, the "best practice highlights" included with each best practice were suggested by several interviewees and are included to highlight examples of successful implementation of best practices across the Appalachian Region. For the Economic Resilience Technical Report, visit: www.arc.gov/resilience

Community Feedback Process

Literature Review

Nov. 2016 - Jan. 2017



Initial best practices, strategies, and possible case studies

Advisory Team Call

February 2017



Documents sent in advance for review; feedback shared during and after the call or via email

Initial Interviews

Jan. - March 2017



Draft best practices, strategies, and case study ideas synthesized from interviews in a summary document and prepared for a presentation to a focus group

Focus Group Meeting

April 2017



Suggestion for change of one best practice and for additional interviews to be conducted by the focus group

Secondary Interviews

April - May 2017



Final best practices and strategies were synthesized from additional interviews and focus group feedback via email

Survey

May - June 2017



151 responses were received and responses confirmed the draft best practices and strategy identification by qualitative team

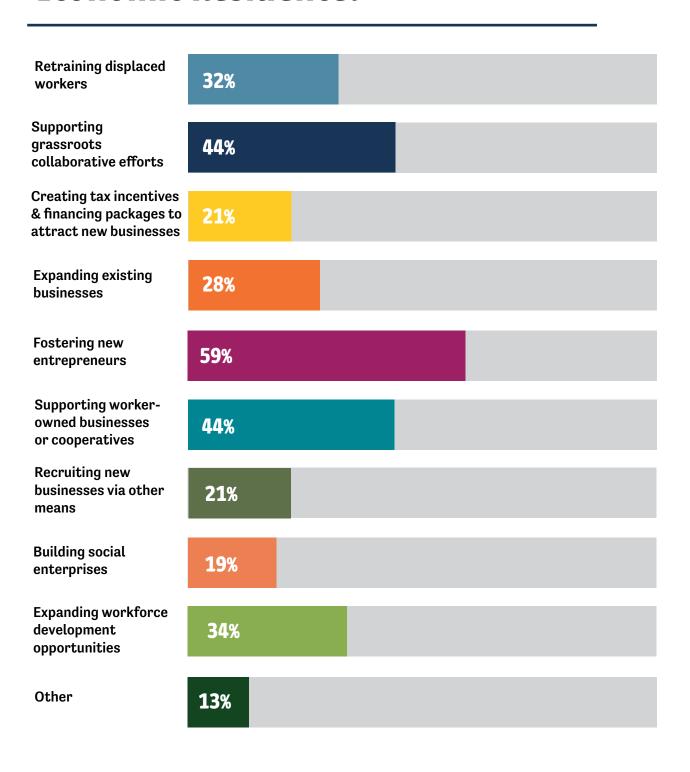
Final Advisory Team Call

June 2017



Ideas were shared about how to synthesize the quantitative and qualitative findings

Which Economic Models and Solutions Are the Most Important to Strengthen **Economic Resilience?**



For full survey summary, visit: www.arc.gov/resilience

Best Practices for Strengthening Economic Resilience in Appalachia



Best **Practice**

Invest in Education, Technology, Infrastructure, and Broadband



Develop broadband accessibility throughout Appalachia.

- Develop training opportunities for communities and organizations on communications, community outreach, and how to effectively use the internet and social media.
- Foster broadband development as a key component for building remote work (telecommuting) possibilities, existing business expansion, and new business location.

Invest in infrastructure including public water, public sewer, energy accessibility, and multi-modal transportation.

- Create renewable energy projects throughout Appalachia as many businesses have a renewable energy requirement to locate in an area.
- Develop public and private partnerships to create needed infrastructure.
- Consider proximity to highways, markets, transportation options, and airports, which are all strong factors in determining the competitive advantage of an area for new build location or existing business expansion.
- Expand public sewers throughout Appalachia using innovative technologies where needed.

Foster educational opportunities from preschool to post-secondary for a wide range of community members.

- Encourage educational attainment as a way to increase community quality of life and entrepreneurship opportunities and to attract high-level employment possibilities.
- Develop free public vocational and higher education classes to prepare and train workers for employment and for entrepreneurship possibilities.
- Develop both general and specialized educational offerings as a way to grow community and economic resilience, to grow needed skill-sets for specific sectors, and to develop new business opportunities and entrepreneurs.

Develop "learn and earn" models of workforce training where workforce training and academic classes are both offered around a specific topic, such as local food or renewable energy.



Grow opportunities around technology in multiple sectors.

Best Practice Highlights



Anchor institutions allow voices to come together and to speak for something greater than themselves. ??

- Project interviewee

Coalfield Development Corporation

Formally unemployed people (especially laid-off coalminers) are hired to work crews that staff different social enterprises. These work crews provide labor on community projects that create assets for local residents. Each week, crew members complete 33 hours of paid work, 6 credit hours of higher education, and 3 hours of personal development mentorship. At the end of their 2.5 year contract, crew members have thus gained invaluable work experience, earned an associates degree, and gained clarity on life goals as well as the personal assets needed to attain those goals. For more information, visit:

coalfield-development.org

The Hive Incubator in Beckley, WV

The Hive Incubator is a small business incubator in Beckley, West Virginia. The mission of the Hive is to connect entrepreneurs with the resources and expertise they need to grow successful businesses. Some of the resources provided include mentoring, coaching, technical assistance, and support tools for aspiring business owners. For more information, visit: wvhive.com



Economic Strategies

The percentage of the population who live within one or more broadband service areas has mixed impacts on economic resilience across the economic regression models — some models show positive impacts, other show negative impacts. The economic analysis models also show consistently and robustly that the share of population with a college degree contributes substantially to economic resilience.





Engage the Community Over the Long Term

Engage under-engaged community members — those affected by decisions need to be part of the solution.

- Develop means for community members to engage with elected officials, to become elected leaders, and to partner in policy creation.
- Create ongoing, neutral spaces for the community to gather across sectors and for all community members to feel valued, welcomed, and heard.
- Welcome community newcomers, or community members that return, by opening up leadership circles and creating the types of communities that will be attractive to them.

Consistently share ideas, challenges, and successes with the broader community.

- Tell stories about other communities that have strengthened their resilience.
- Develop opportunities for people within communities to identify both the problem and solution to community challenges and opportunities. Ideas that emerge from within the community should be prioritized for growing economic resilience.

Cultivate leadership and trust for long-term efforts and success. Create the space where leadership can come forward and flourish to create change together as a community.

- Connect with "sparkplugs and bridgemakers" in the community to sustain leadership, growth, and momentum.
- Foster creative long-range planning and strategic planning.

Develop a consistent forum for community engagement around a specific focus with a long-term facilitator or convener.

• Use innovative ways to engage the community using media, outreach, knocking on doors, sharing ideas, celebrating participant efforts, and making meetings fun.



66 Celebrate what is positive! There are so many reasons for celebration. ??

- Project interviewee

Buckhannon, WV

Almost every Thursday since 2009, Buckhannon residents have gathered at C.J. Maggie's restaurant in Buckhannon for an affordable meal and a 'Create Buckhannon' session. During these sessions, residents meet with one another to discuss different ways to make the town healthier and more prosperous. Some of their most successful initiatives include the creation of a park, a weekly summer music festival and market, a city plan, various downtown improvements, and safe biking and walking routes. For more information, visit:

trythiswv.com/have-a-community-conversation

Chattanooga, TN

Chattanooga went from a divided and dirty city to one of the most livable cities in the United States. One very well-known and successful public engagement process called Vision 2000 was held to engage the community. Vision 2000 resulted in more than 200 projects and programs, created 1,381 jobs and 7,300 temporary construction jobs, served over 1.5 million people, and precipitated a total financial investment of \$793,303,813. The city has won three national awards for outstanding "livability." For more information, visit: hwtcitv. org/watch-online/history-makers/chattanoogaventure-and-vision-2000







Economic Strategies

If other factors stay constant, poverty reduction is a critical long-term strategy to support resilience, as is achieving greater ethnic diversity, higher labor force participation rates, and numbers of college graduates. In addition, poverty reduction promotes economic resilience both within a county and in surrounding counties.





Create Communities Where People Want to Live



Grow community health and wellness. Focus on creating a high quality of life with strong community health and wellness, which attracts new businesses and residents.

- Create opportunities to ensure that basic needs are met for all community members, such as childcare and elder care programs, as well as other amenities geared to assist women, singleparent households, and vulnerable community members.
- Determine barriers and opportunities for community members to access social services, including ways to address addiction.
- Address systemic forms of poverty by reaching out to people where they are and use a grassroots approach to grow economic resilience in communities.

Cultivate a strong sense of place and pride in place through storytelling, arts, and cultural heritage opportunities, and value them as building blocks for a new economy in Appalachia.

- Tell and share stories, including new, positive stories.
- Create peer learning opportunities among community members and leaders through in-person gatherings. Use audio and video to share stories and to identify points of contact to learn more about specific stories, people, and places.



Welcome new and diverse people into communities. Encourage new residents, including telecommuters, young families, and immigrants.

Use an intentional approach to address population decline in communities.



Strengthen anchor institutions and businesses that strengthen thriving communities (i.e. a college, university, hospital, elder/youth co-care opportunities).

- Develop and grow colleges, universities, hospitals, and elder/youth co-care opportunities.
- Develop "third spaces" neutral spaces where community members can come together outside of home and work (such as coffee shops, co-working spaces, and churches.)
- Examine land ownership, including absentee landowners, and how it impacts communities and the broader region.
- Promote local investing via community foundations and seed funding for local ideas.



Tell positive stories and change the narrative.

- Project interviewee

Williamson Health & Wellness Center, Williamson, WV

Williamson, West Virginia experienced a decline in coal mining and economic prosperity as the town began to simultaneously notice numerous health issues, such as hypertension, diabetes, and obesity. In order to combat these growing concerns, the Williamson Health & Wellness Center was created. The Williamson Health & Wellness Center is dedicated to building a culture of health through holistic community and clinical interventions in order to stimulate a thriving local economy centered around wellness for the entire population. The Center provides a comprehensive package of primary care, dental, and behavioral health services to all residents of Mingo County, regardless of age or income. For more information, visit: williamsonhealthwellness.com



- The larger the portion of a county's population that migrated into the county, the more economically resilient that county is. Larger populations promote greater economic resilience. Community members that return to a community after leaving (boomerang migrants) may have even stronger effects on resilience to the extent that they know "how their communities work" better than those who are new to the community. Boomerang migrants may be retirees who spent working lives elsewhere or young families with small children who are seeking to return to their roots. In addition, greater recreational opportunities are robustly associated with greater resilience.
- Population size has positive impacts both within and outside of the county level. Larger populations promote greater economic resilience. This also means smaller communities have a greater uphill battle in seeking to become resilient.
- Greater recreational opportunities (which includes art programming for the creative classes and others) are robustly associated with greater resilience. This is an important result and consistent with findings from a rapidly expanding literature.



Practice

Grow Youth Engagement and Next-Generation Leadership



Identify, mentor, and support young leaders for the next generation.

- Develop mentoring, learning opportunities, idea exchanges, and programs to grow skills and to learn about entrepreneurship (like Appalachian Fellowship Program, with elected leaders, and across generations).
- Encourage youth and provide opportunities for them to be in positions of responsibility.
- Connect to schools and work with teachers, students, and parents in multiple ways.

Keep bright, young people in communities, and bring smart, young, people from outside of communities in and welcome them.

Engage youth in arts, culture, and community-building opportunities.

Welcome new ideas, bold visions, and unlikely partnerships.



Develop programs by youth, for youth.



Build the capacity of local leaders to build the economy, and grow and engage local, diverse leadership across a community.

- Grow peer-to-peer learning networks, coaching opportunities, and leadership development opportunities to build capacity of local leaders.
- Foster opportunities for young leaders to engage with elected officials in policy creation, become elected officials, and to engage with community-based initiatives.



66 Welcome new thinking and ideas from new people; celebrate young leaders. Be willing to experiment to generate new, bold, and crazy ideas. 🦻

- Project interviewee

Mountain Tech Media in Whitesburg, KY

Mountain Tech Media (MTM) is a "missiondriven, diversified technology and multimedia services company born and raised in Eastern Kentucky." MTM is a company that supports organizations and is owned by young, independent professionals.

Generation West Virginia

Generation West Virginia (GWV) is the statewide organization dedicated to attracting, retaining, and advancing young talent in the Mountain State. GWV achieves this by:

- Developing and sustaining an activated network of young people
- Providing accessible programs and educational tools that empower and inspire young leaders
- Identifying and communicating the priorities, motivations, and needs of the next generation of West Virginians
- Serving as a voice and a source of action for young people to impact policy at the local, state, and federal levels

For more information, visit: generationwv.org







Economic Strategies

Having more residents in the 25-44 year old cohort is robustly associated with greater economic resilience. To the extent that these are younger families with children in the early teenage years, they would likely seek out places that provide good opportunities for their growing children (good schools, leadership opportunities, etc.).





Identify and Grow the Assets in the Community and Region

- Tell the stories of the community, especially positive stories, to change the narrative.
- Create intergenerational learning exchanges between elders and youth, including gathering oral histories, as well as learning opportunities between towns and between practitioners.
- Foster interconnection between rural and urban areas, in broader regions around resources, as well as food, recreation, and energy supply connections.
- Identify and promote assets within the region and community through partnerships.
- Focus on integrating arts and creative placemaking into community and economic development efforts across the community.
- Share resources across the region such as marketing resources or research into regional trends.
- Link multiple destinations and activities to create more local business opportunities and encourage longer visits.
- Promote living wage jobs, especially those related to the tourism industry.
- Retain the vibrancy and uniqueness of communities; don't allow the effects of tourism to significantly alter local community character or landscapes.
- Build local philanthropic opportunities, such as creating a community foundation, so that regions can capture and invest in economic development locally.



66 Go to communities that are succeeding - we need a culture of being imaginative. We need sparkplugs that will keep trying new ideas.

- Project interviewee

Lynch, KY

Lynch, Kentucky is using its assets as a former coal-mining town to create successful cultural heritage tourism opportunities. "Lynch is located in far southeastern Kentucky on the border with Virginia and was founded in 1917 by the U.S. Coal and Steel company. The company bought 19,000 acres for the town and built everything from houses and stores to a hospital and baseball field. At its peak, Lynch had about 10,000 residents, but is down to below 1,000 today. Between 1950 and 1970, the population of Lynch dropped by about half as the biggest coal companies left town and jobs declined. Today, there are no working coal mines. Like many coal towns across the region, Lynch and the two former coal towns nearby, Cumberland and Benham, are trying to chart a path forward that might include tourism. The Eastern Kentucky Social Club has long been at the center of African-American life in Lynch, and since 1970, it has hosted meetings for former and current black residents of the town to reunite and honor the contributions of black coal miners." From the article: www.politico.com/magazine/ story/2017/06/22/black-appalachia-215296



- for a community, are associated with greater resilience such that some regression models showed that more agritourism and recreation are both associated with greater resilience. In counties that are home to many farmers, this may be a viable strategy for attracting outside resources and enhancing resilience.
- Natural amenities of a county area have a stronger regional impact on economic resilience than a county-level impact. Thus, unique natural features and amenities should be viewed more broadly than only at the county level.





Build Networks and Foster Collaboration



Use a systems approach to develop a long-term vision and explore community opportunities and needs to grow sectors, develop assets, and foster regional collaboration.

- Engage economists at the regional scale to share knowledge and best practices.
- Cultivate grassroots efforts, community leadership, and effective communication using different tools.
- · Determine the right level of partnership needed for effective engagement.
- Develop networks of communities, both local and regional, working towards a shared understanding of the opportunities, gaps, strengths, and unique elements of each community.
 - Foster opportunities for generational leadership (both in terms of staff and organizations) to grow the work in the future and adapt to changing needs and opportunities of an initiative.
 - Develop structured Memorandums of Understandings (MOUs) between partner organizations, which may result in opportunities for greater funding.



Identify and grow a dedicated long-term entity or anchor organization(s) to:

- Build capacity, move ideas forward, provide a consistent forum for collaboration, develop multiple funding streams, and help implement ideas.
- Identify ways for funders and practitioners to work together as partners to shift the power structure.

Work across silos and sectors; encourage entrepreneurial spirit and mindsets for project growth and development.



Develop long-term staffing capacity to move ideas forward and foster economic transformation.

• Create a training program and a cohort of practitioners on how to accelerate the building of an economic resilience model from the bottom up.



▲ The future will be in partnerships. 9

- Project interviewee

Newport, Tennessee

By collaborating and tapping into different networks, members of the Tanner Preservation Alliance have been working to restore the Tanner School in Newport, Tennessee for several years. Built in the mid-1920s as a Rosenwald School, the facility primarily served the city's African-American students. In a 2016 edition of the newspaper Newport Plain Talk, an article noted that "nearly 5,000 Rosenwald Schools, including Tanner, Allen's Chapel, Dawson's Valley, Gum Springs, and Old Town, were built with money from the Rosenwald Fund, a program established in 1917. These schools were erected in 883 counties in 15 states from Maryland to Texas." Today, Carlene Robinson works with the Tanner Preservation Alliance and Tennessee Picnic to continue the restoration work.

For more information, visit: www.facebook.com/ tannerpreservationalliance







- Migration and commuting can contribute to economic development (and resilience) via networking effects. Specifically, this means that migrants and commuters may bring (back) to the community new ideas and other resources for addressing local issues that might otherwise undermine resilience.
- The more direct measure of collaboration, social capital, has no effect on resilience in either economic analysis our team conducted; see the technical report for additional details. However, social capital does contribute to greater resilience in places with smaller populations, less in-commuting, and fewer individuals in the 25-44 year old age cohort. The latter result may be due to the fact that these (younger) families are preoccupied with raising children, taking care of aging parents, and launching careers and, as such, have less time to contribute to social capital-related collaboration activities and networking in their communities.





Move Multiple Sectors Forward for Economic Development and Grow Value Chains



Connect multiple opportunities to grow a value chain around what is being created locally.

- Use a systems approach to develop value chains; look across a region to determine what levers can grow economic resilience.
- Develop a broader recognition of the interdependence between urban and rural areas. Create a deeper recognition of the value of rural.

Build grassroots support for economic diversification, and collaborate with public and private sectors.

- Engage both non-profit organization involvement as well as market-connected enterprises.

Promising sectors include: advanced manufacturing, health care, renewable energy, outdoor recreation, local food systems and agriculture, technology and others.

- Find ways to focus on ideas that come from within the community around sector-based economic growth (not ideas that are externally imposed on communities).
- Foster tourism and create not only service-sector jobs, but entrepreneurship and job opportunities with high wages and benefits.

Connect to regional markets for sales of products and services.

- Grow and connect with the broader region's economy and to market opportunities in regional urban centers.
- Examine what financial and tax incentives can be made available to encourage businesses to locate in a particular area; expand programs and resources (such as loans and grants) to expand existing businesses and connect with regional marketing opportunities to promote localities and regions.



Develop a coordinated strategy for economic growth.



Learn how other communities and regions build economic growth and share ideas.



66 We need to use systems thinking to generate multiple forms of wealth and wealth creation. 99

- Project interviewee

Opportunity Threads in Morganton, NC

Morganton began as a textile mill town that dwindled when jobs moved offshore. The industrial poultry industry took root, diversifying the local population. Now local residents are bringing it back in a socially innovative, adaptive way, as a worker-owned cooperative, through textiles with coordinated opportunities in a related value chain. An interest in reinventing manufacturing is breathing life into Morganton's increasingly diversified economy. For more information, visit: opportunitythreads.com

WealthWorks Videos

WealthWorks strives to bring together a community's assets in order to meet the market demands for local and regional economic development. In doing so, WealthWorks provides a series of short videos detailing different concepts on how economic development is being achieved across the United States, particularly in Appalachia. For more information, visit: www.wealthworks.org







- Both innovation potential (which reflects greater opportunities for firms to innovate both in process and product spaces [Goetz and Han forthcoming]) and industry diversity lead to greater resilience, all else being equal.
- Having more in-migrants and in-commuters translates into greater resilience in part because they reflect more interregional connections, as mentioned earlier.
- Farming employment within a county has five times the impact regionally compared to the within-county impact on resilience. This suggests important regional spillover benefits from farming.





Cultivate Entrepreneurs and Develop Resources for Business Start-Ups



Create entrepreneurial ecosystems with locally centered markets.

- · Conduct organizing within a community to think about economic development and what opportunities are there; talk to entrepreneurs about what opportunities are emerging.
- Develop entrepreneur resources, business plan competitions, and opportunities to grow local businesses and access capital.
- Identify CDFIs (Community Development Financial Institutions) within Appalachia that could be strong resources for entrepreneurs or community groups.
- Develop statewide programs to promote the growth of new industries within states.
- Build the capacity of communities for entrepreneur-focused economic development through developing multi-year leadership teams; fostering leadership development, training, and coaching mentors; and building on ideas and assets that arise from within the community.
- Connect to the assets of a community around how to transition businesses to a new generation.
- Connect with schools, colleges, and universities for training, mentoring, and research opportunities.
- Advance possibilities for workforce training in specific sectors and industries, including for regional opportunities and displaced workers.
- Use social enterprise resources and tools to develop community-based businesses.
- Cultivate successful business accelerators, co-working spaces, and maker spaces.
- Develop opportunities for remote work and telecommuting.



Change comes from within the community.

- Project interviewee

Opportunity SWVA in Southwest, VA

myswvaopportunity.org

There has never been a better time for entrepreneurs in Southwest Virginia. Significant investments in broadband technology, research facilities, and the region's rich catalog of cultural and recreational amenities make Southwest Virginia fertile ground for new and expanding ventures. SWVA communities are taking their next economic leap and working together to build a prosperous region. Entrepreneurs are a key partner in emerging local and regional strategies, and the stewardship of this place the towns and cities, the rivers and mountainsmake Southwest Virginia a worthy investment. Opportunity SWVA also works with the Clinch River Valley Initiative through the Hometowns on the Clinch program. For more information, visit:



- A clear impact of entrepreneurship (or self-employment) on resilience is evident, but a certain critical mass of entrepreneurs is needed. When there are too few or too many entrepreneurs in the community as a share of the workforce, the beneficial impact of entrepreneurship on resilience is weaker. The effect of entrepreneurship is also greater the closer the county is to a metro area with population of more than 250,000.
- Note that business density impacts resilience at a regional level; cultivating businesses in a community is beneficial for economic resilience not only for a given county, but in surrounding counties as well.





Summary

This guidebook provides best practices, strategies, and case studies for economic development practitioners, local government nonprofit organizations, officials, others working in the Appalachian Region. In this project, we applied integrated research techniques to identify policies, best practices, and associated strategies for growing economic resilience in the Appalachian Region by grounding results with information from practitioners. Through our analysis, we identified 10 case study areas from which we gained further insight into how communities are evolving their approach to economic development both inside and outside the Appalachian Region. We further "ground truthed" our work by conducting interviews, conversing and gaining feedback from an advisory team of economic peers, and gathering community data from an extensive survey.

A technical report document was produced and details our analysis, which can be found here: www.arc.gov/resilience









Outcomes of This Project

This project created the framework to examine, evaluate, and analyze information to draw conclusions on how Appalachia can be more economically resilient, now and into the future. This guidebook offers information that will inform planning, investment, and strategies across Appalachia.

Our team developed a quantitative assessment of conditions combined with qualitative research to ground information in practical strategies and useful information for practitioners. This output was presented through a series of case studies highlighting key factors through real-world examples, which create an understanding of positive transitions through challenging economic times.



Endnotes

Cover Page

- Photo Credit: Sean Pavone, Stock Photo ID: 288322460
- Photo Credit: Matt Asasi: https://creativecommons.org/licenses/by/4.0/legalcode
- Photo Credit: John Ramspott: https://creativecommons.org/licenses/by/4.0/legalcode
- Photo Credit: Chewonski Semester School: https://creativecommons.org/licenses/by/4.0/
 legalcode
- Photo Credits: Christine Gyovai, Dialogue + Design Associates

Table of Contents

• Photo Credit: Christine Gyovai, Dialogue + Design Associates

Case Studies of Economic Resilience in Appalachia

• Photo Credit: Christine Gyovai, Dialogue + Design Associates

Case Study 1

- Chart and Map Credit: Downstream Strategies
- Photo Credits: Doug Kerr: https://creativecommons.org/licenses/by-sa/4.0/legalcode

Case Study 2

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Tom Gustafson
- Photo Credit: David Thoreson

Case Study 3

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Kjell: https://creativecommons.org/licenses/by-sa/4.0/legalcode
- Photo Credit: Sascha Brittner: https://creativecommons.org/licenses/by/4.0/legalcode

Case Study 4

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Jeff Gunn: https://creativecommons.org/licenses/by/4.0/legalcode
- Photo Credit: Fannin County Development Authority

Case Study 5

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Tim Keiser https://creativecommons.org/licenses/by-sa/2.5/
- Photo Credit: Swimmerguy269 https://creativecommons.org/licenses/by-sa/3.0/

Case Study 6

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Alvintrusty https://creativecommons.org/licenses/by-sa/4.0/
- Photo Credit: Maksim https://creativecommons.org/licenses/by-sa/3.0/

Case Study 7

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Lee & Itawamba Counties

Endnotes

Case Study 8

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Chris Pruitt https://creativecommons.org/licenses/by-sa/3.0/
- Photo Credit: Rudi Weikard https://creativecommons.org/licenses/by-sa/3.0/

Case Study 9

- Chart and Map Credit: Downstream Strategies
- Photo Credit: PA Wilds

Case Study 10

- Chart and Map Credit: Downstream Strategies
- Photo Credit: Paul Sableman: https://creativecommons.org/licenses/by/4.0/legalcode
- Photo Credit: Paduch's Visitors Bureau

Best Practices for Strengthening Economic Resilience in Appalachia

• Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 1

- Project for Public Spaces: https://www.pps.org
- ASPEN Institute: https://www.aspeninstitute.org
- KY Valley Educational Cooperative: https://www.kentuckyvalley.org
- Photo Credit: Coalfied Development Corporation
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 2

- Orton Family Foundation: https://www.orton.org
- Next Generation and Art of the Rural: http://artoftherural.org
- Photo Credit: Kate Long, Create Buckhannon
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 3

- Photo Credit: Williamson Health and Wellness Center
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 4

- Appalachian Fellowship Program: http://www.appfellows.org
- Photo Credit: Mountain Tech Media
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 5

- Photo Credit: Sara Hoskins
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Endnotes

Best Practice 6

- Community Leadership Development: http://heartlandcenter.info
- BALLE (Business Alliance for Local Living Economies): https://bealocalist.org
- The Tupelo Model of Community Development: https://www.berea.edu/brushy-fork-institute/ the-tupelo-model-of-community-development/
- Kellogg's Rural People and Rural Policy: www.wkkf.org/~/media/62543624E4AB4D12A001F245CFE056B5.ashx
- Brushy Fork Leadership Development: https://www.youtube.com/watch?v=pJ1B7HvTT0E
- Photo Credit: Courtesy of Christine Gyovai, Dialogue + Design Associates

Best Practice 7

- WealthWorks: https://www.wealthworks.org
- Appalachian Funders Network: https://www.appalachiafunders.org
- Photo Credit: Opportunity Threads
- Photo Credit: Christine Gyovai, Dialogue + Design Associates

Best Practice 8

- Opportunity Finance Network (OFN) with an online Community Development Financial Institution (CDFI) Locator: https://ofn.org/cdfi-locator
- The Geographic Scope of CDFI Activity in the Southeast: https://www.richmondfed.org/
 publications/community_development/community_scope/2016/community_scope_2016_
 no2_p1
- Appalachian Conference on Social Enterprise: http://www.acose.org
- Access to Capital for Entrepreneurs (ACE): https://aceloans.org
- Center for Rural Entrepreneurship: https://www.energizingentrepreneurs.org

Summary and Outcomes

- Photo Credit: Christine Gyovai, Dialogue + Design Associates
- Photo Credit: Fannin County Development Authority
- Photo Credit: Lee and Itawamba Counties

