



APPALACHIAN REGIONAL COMMISSION

POWER AWARDS, OCTOBER 2019

A complete list of all ARC POWER awards is available at www.arc.gov/power

ALABAMA

\$774,912 ARC grant to Tombigbee Electric Cooperative Inc. (TEC) in Hamilton, AL for the *Northwest Alabama Revitalization* project. This project will implement a fiber optic network providing broadband service to areas of Fayette, Franklin, Lamar, Marion, and Winston Counties. More than 925 unserved businesses will have the opportunity to obtain high-speed broadband service, while 30,495 households will potentially benefit from fiber-to-the-premise access. The project capitalizes on an overall expected investment of \$60 million from private and public sources and will enable service expansion to 116,000 residents through 2,000 miles of newly constructed fiber over the next three years.

KENTUCKY

\$1,500,000 ARC grant to the Foundation for Appalachian Kentucky in Hazard, KY for the *Revitalize, Redevelop, and Reinvest (R3) Initiative*. The Foundation for Appalachian Kentucky will partner with the Community Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky to create an Appalachian Impact Fund. The Fund, along with ancillary technical assistance services, will support downtown revitalization and strengthen the entrepreneurial ecosystem across ten counties in Southeastern Kentucky. The Fund will assist downtown real estate development projects through a mixture of grants, low-interest loans, and long-term equity investments, while a large-scale technical assistance program (modeled on the work of CEDIK under a previous POWER grant) will help communities with strategic project investment planning. The project will improve 10 communities, serve 200 businesses, create 60 jobs, and leverage \$7.6 million in private investment. Additional funding is provided by the James Graham Brown Foundation, the Marguerite Casey Foundation, and a major private donor.

\$1,500,000 ARC grant to the Mountain Comprehensive Care Center (MCCC) in Prestonsburg, KY for the *Big Sandy Healthy Workforce* project. This funding will support renovating Osbourne Elementary School in Floyd County, KY to construct a substance abuse treatment center that will serve five economically distressed counties (Floyd, Johnson, Magoffin, Martin, and Pike). The project will create short-term, long-term, and outpatient substance abuse treatment opportunities, as well as wrap-around support services that emphasize workforce training, education, skills development, and post-treatment job placement. Workforce Specialists will collaborate with the Eastern Kentucky Advanced Manufacturing Institute (a prior POWER grantee) and the Kentucky Works Program to ensure that participants have access to the resources and opportunities associated with successful job placement. The creation of MCCC's new facility is expected to create 27 new jobs while serving 200 patients per year.

\$1,500,000 ARC grant to KCEOC Community Action Partnership, Inc. in Gray, KY for the *Workforce Training Center* project. The project will construct a Work Ready Training Center (WRTC) and offer trade, certificate, and post-secondary education provided by Southeast Kentucky Community and Technical College. Fast-track programs will allow local and distance students to receive training in the fields of healthcare, technology, advanced manufacturing, and transportation/logistics. A partnership between KCEOC and the Eastern Kentucky Concentrated Employment Program will enable the WRTC to begin attaining goals and outcomes within the first three months after completion of construction. The new WRTC is expected to create 10 jobs in faculty and staff, while improving 500 workers and serving 1,400 students. Additional funding for the project comes from the U.S. Economic Development Administration and the Commonwealth of Kentucky's Education and Workforce Development Cabinet.

\$1,500,000 ARC grant to the Pikeville Medical Center (PMC) in Pikeville, KY for the *Pikeville Medical Center's Children's Hospital*. Pikeville Medical Center will construct and equip a new facility to provide health care for over 100,000 children in 23 counties in Kentucky, Virginia, and West Virginia. The project will create 50 permanent jobs, while retaining over 100 other pediatric medical and non-medical staff. PMC will work with the University of Pikeville and Big Sandy Community and Technical College to strengthen the regional healthcare workforce. The new facility will bolster the health care industry cluster, diversify an economy that has been heavily dependent on coal, and strengthen the regional workforce. The children's hospital will treat children from birth to age 18, including infants born with drug dependencies. Additional funding for the PMC Children's Hospital comes from the federal Abandoned Mine Lands pilot program.

\$1,150,000 ARC grant to Eastern Kentucky PRIDE in Somerset, KY for the *Restoring Pride in Kentucky's Appalachia-Phase II* project. Eastern Kentucky PRIDE will implement a robust tourism marketing and branding campaign to establish 41 counties in southern and eastern Kentucky as a tourism destination. The destination branding initiative will leverage the region's natural assets and strong cultural heritage to promote new or enhanced traveler experiences in order to increase tourism spending and create tourism as an economic driver for the region, whose economy has been adversely affected by the decline in the coal industry. The campaign will include a new tourism website; print, billboard, television, and online advertising; tourism guides and brochures; and branded merchandise. The marketing efforts are expected to attract 2,000 new day visitors and 200 overnight visitors per year and create 30 tourism-related jobs. The project implements a regional tourism strategic plan that was developed through an earlier POWER grant.

\$50,000 ARC grant to the Whitley County Fiscal Court in Williamsburg, KY for the *Patriot Drug Treatment and Rehabilitative Center* feasibility study. The study will determine the viability of a drug treatment and rehabilitative center with a workforce training component located near Williamsburg, KY. The study will analyze the assets and resources that already exist in the area and will recommend the best practices for implementing this type of facility to meet the community's needs. The proposed Center will be located on property owned by the University of the Cumberlands. It will offer detox,

inpatient residential treatment, and outpatient services, and will promote re-entry into the workforce through close relationships with workforce development organizations. The county will use the study as a roadmap to develop the appropriate programs/services to combat the opioid epidemic, while assisting in increasing labor force participation rates to spur economic growth.

NEW YORK

\$395,000 ARC grant to Southern Tier West Regional Planning and Development Board (STW) in Salamanca, NY for the *Southwest NY Wireless Broadband* project. The project will purchase and install fixed wireless broadband equipment and backhaul fiber. This new equipment will enable delivery of effective capacity and cost competitive Wi-Fi broadband service in underserved and unserved areas of eight rural communities in three New York counties (Allegany, Cattaraugus, and Chautauqua). The counties have been adversely affected by the closure of coal-fired power plants and the decline in freight rail volume due to reduced coal traffic. STW is collaborating with two internet providers to close the high-speed coverage gap, improving access to telehealth, business resources, and economic opportunity. The installation of new antennas on eight existing cell towers and the construction of a new tower will provide high-speed, low latency coverage to over 1,100 locations. This includes 206 small businesses, 121 agricultural locations, and 10 tourism destinations.

NORTH CAROLINA

\$1,932,500 ARC grant to French Broad Electric Membership Corporation (FBEMC) in Marshall, NC for the *Broadband Deployment to Rocky Fork State Park and Surrounding Area* project. This project will address provide broadband access to unserved and underserved sections of Madison County, NC and Unicoi County, TN. Both counties were adversely affected when a decline in coal traffic led to the closure of a rail yard in Erwin, TN. A local survey in 2016 determined that approximately 30 percent of Madison county residents reported limited or no broadband service. FBEMC predicts that Unicoi county exhibits a similar gap in broadband coverage. By designing and installing over 50 miles of critical fiber infrastructure to these areas, increased access will enable greater opportunities for telecommuting lifestyles, business creation, and educational services. FBEMC will use existing right-of-way to expand the infrastructure. The deployed fiber will serve Rocky Fork State Park (a major asset in the region), an estimated 20 businesses, and approximately 1,100 homes (thereby assisting students and strengthening home-based businesses).

\$1,500,000 ARC grant to Triangle Residential Options for Substance Abusers, Inc. (TROSA) for the *TROSA's Expansion to Forsyth County, NC* project. TROSA will establish a substance use recovery program in Forsyth County to serve Appalachian residents. The Forsyth County area has seen supply-chain manufacturing job losses as a result of the decline in the coal industry. Using a "Recovery to Work" model, the program will emphasize job and life skills training for participants with substance use disorder, developing a ready workforce. TROSA's existing program, which is outside the Appalachian Region, is nearing its daily capacity, and the new campus will focus on providing the treatment and recovery services to individuals within Appalachia. The Appalachian campus will have a daily capacity

of 200 residents. The program will open several social enterprises, which will provide hands-on job skills training for residents while generating revenue to keep services cost-free. The new campus is expected to create 18 new staff positions. After completing the program, 100 percent of graduates will leave with full-time employment, and at least 90 percent of graduates from the two-year program are expected to remain sober and employed for at least one year.

\$50,000 ARC grant to Mayland Community College in Spruce Pine, NC for *Creation of the Pinebridge Development Strategic Plan*. The College expects to invest over \$22 million to repurpose the unused Pinebridge Coliseum in Mitchell County into an education, business, and community development support center that can facilitate economic development in the region. The strategic plan will draw on existing data and will examine best practices of similar projects at other colleges and in other communities. The plan will create action steps for adapting and scaling those proven successes to the Pinebridge project.

\$50,000 ARC grant to the Isothermal Planning and Development Commission in Rutherfordton, NC for the *WNC Works: Recovery to Careers* program. The project will assist the six western North Carolina Local Development Districts (LDD) in coordinating existing regional organizations and programs that promote “Recovery to Work” strategies for individuals recovering from substance abuse. The project will compile a database of existing recovery-to-work programs, survey best practices across all 29 western North Carolina counties, and start a regional recovery-to-work working group made up of representatives from each LDD. The goal is to boost utilization of existing programs, increase the number of individuals returning to work, and help meet employer workforce needs in high-demand occupations and sectors.

OHIO

\$2,500,000 ARC grant to the Buckeye Rural Electric Cooperative in Gallipolis, OH for the *Southeast Ohio Broadband Backbone* project. This grant will fund the installation of 168 miles of fiber to create a broadband network reaching unserved and underserved areas in six counties in Southeast Ohio that have been adversely affected by the decline in the coal economy (Athens, Gallia, Jackson, Lawrence, Meigs, and Vinton). The fiber installation will optimize a \$19.8 million distribution system construction project. Buckeye Rural Electric Cooperative will partner with two internet service providers to economically deliver high-speed internet to rural homes, businesses, farms, ranches, and community facilities such as first responders, health care sites, and schools that are currently underserved. The Buckeye Rural Electric Cooperative is matching ARC funds with \$1,100,000 in private investment. The fiber backbone will serve 1,988 households and 70 businesses.

\$1,496,585 ARC grant to Shawnee State University (SSU) in Portsmouth, OH for the *LIGHTS Inclusive (LIGHTS-INC)* project. The project will build on the success of a previous POWER award, Leveraging Innovation Gateways and Hubs Toward Sustainability (LIGHTS), expanding its geographic footprint and broadening its entrepreneurial training program by incorporating substance abuse recovery

support. SSU will extend the LIGHTS Regional Innovation Network by partnering with innovative, existing recovery networks in 26 counties across West Virginia, Kentucky, and Ohio. LIGHTS-INC will combine proven methods of helping those suffering from addiction with entrepreneurial expertise and makerspaces in its Innovation Gateways. The initiative is expected to create 133 jobs and 49 new businesses; leverage over \$1.6 million in private investment; and improve economic opportunities in 38 communities. Partners include Hocking College, Ohio University, the Washington County (OH) Career Center, and the Robert C. Byrd Institute for Advanced Manufacturing at Marshall University.

\$1,235,727 ARC grant to Rural Action Inc. in The Plains, OH for the *Asset-based Entrepreneurship: Trails, Towns, and Tourism in the Appalachian Ohio Economy* project. The project will help diversify and restructure the regional economy by investing in an emergent tourism sector that celebrates Appalachian Ohio's natural, cultural, and entrepreneurial assets. The project's targeted geography is between the northern Hocking Hills and the city of Athens, extending into parts of five counties. The project consists of two major components: 1) construction of 31 miles of the Bailey's Trail in the Wayne National Forest and 2) an integrated package of activities to take economic advantage of the trail, such as collaborative marketing, entrepreneurial training and support, trail town place-making, and workforce development. When complete, the 88-mile mountain bike trail system will attract 181,000 visitors annually, resulting in \$20 million of increased spending. The project will lead to the creation of 25 new tourism-related business and the expansion of 50 existing business, the creation or retention of 190 jobs, and \$5.7 million in leveraged investment. Additional funding is provided by the National Forest Foundation, a Community Development Block Grant from the State of Ohio, and the Sugar Bush Foundation.

\$836,332 ARC grant to Eastern Gateway Community College in Steubenville, OH for the *Tri-State Gateway to Growth Training Center*. The project will establish a training center to serve a 12-county region in Ohio, West Virginia, and Pennsylvania. The new training center will educate a competitive workforce for this region in advanced manufacturing (including welding, machining, electronics, pneumatics, hydraulics, and industrial maintenance), logistics, and energy industries. The area served by the new center has experienced declines in coal mining employment as well as the closure of a coal-fired power plant. Over the three-year grant period at least 650 workers/trainees and 120 students will obtain new positions or enhance their current ones, and six businesses will be improved by the training model.

\$618,150 ARC grant to Washington State Community College in Marietta, OH for the *Robotics & Manufacturing Technology Education Collaborative (RAMTEC)*. The project will expand RAMTEC—a training and workforce development program designed to educate workers in advanced manufacturing, automation, and robotics, as well as CNC machining, welding, and industrial maintenance—to the southern portion of Appalachian Ohio, the only region in the state currently not benefiting from it. This proven instructional model includes industry-led educational programming designed to deliver in-demand credentialed training. The training from this program will bolster a workforce that has been adversely affected by the decline in the coal industry. The project will serve 5 counties in Ohio and West Virginia (Monroe, Morgan, Noble, and Washington in Ohio and Wood in West Virginia). At least 70

workers/trainees, including approximately 20 dislocated and 50 incumbent workers, and 630 students will participate in training activities, and at least six businesses will be improved.

\$27,500 ARC grant to the Trumbull County Planning Commission in Warren, OH for the *Trumbull County Broadband Feasibility Study*. The study will create the road map for the implementation of a fiber network throughout Trumbull County. It will perform a market analysis of adoption rates, competition, and pricing; conduct a needs assessment for area businesses, schools, hospitals, and other anchor institutions; review current trends in telecommunications technologies; and develop a framework for a structure to govern the fiber network as a publicly owned and operated utility.

\$24,500 ARC grant to Washington Electric Cooperative, Inc. (WECI) in Marietta, OH for a *Broadband Feasibility Study*. The study will assist WECI with decisions on whether to pursue deployment of broadband services within its member service territory of Athens, Guernsey, Monroe, Morgan, Noble, and Washington Counties. Major tasks include conducting an initial competitive analysis of market conditions, developing capital expenditure cost estimates, preparing a high-level financial business plan, and conducting a market study to determine the potential “take rate” of broadband services. Through this study, WECI will be able to determine the gaps that exist in the local broadband infrastructure and how to bridge those gaps.

PENNSYLVANIA

\$2,500,000 ARC grant to Tioga County in Wellsboro, PA for the *Northern Pennsylvania Broadband Connectivity Project*. Tioga County, in conjunction with Tri-County Rural Electric Cooperative, will construct over 175 miles of fiber in three counties (Tioga, Potter, and Lycoming) to bring access to reliable high-speed broadband to 60 businesses and 581 households in one the most underserved areas of rural Pennsylvania. From 2007-2017 Tri-County Electric Cooperative’s service area saw a 66 percent decrease in the number of active coal mines, with a drop of 42 percent in mine employment. The new fiber network will help bolster economic development, assist educational institutions, provide telemedicine opportunities for area hospitals, assist healthcare workers in addressing the opioid crisis, and help prevent youth out-migration. Tri-County Rural Electric Cooperative is providing \$3,242,125 for the project.

\$1,500,000 ARC grant to the Venango County Economic Development Authority in Franklin PA for the *Business Innovation Center and Fiber Optic Expansion* project. This grant will fund the development of a new Business Innovation Center, including a co-working and maker space, in Oil City, PA and will expand a fiber optic network throughout the business district served by the Center. The Innovation Center will foster an entrepreneurial ecosystem, serving as a catalyst for economic diversification in the region through innovation and business creation. By eliminating the fiber network “dead end,” the project will enable businesses in this section of the city to compete in a technology-driven economy. Within three years of completion, the Innovation Center will launch the development of 20 new businesses, and at least 29 businesses will connect to the new fiber network. The project is projected to leverage

\$1,200,000 in private investment as entrepreneurs create 12 new businesses using these new community assets.

\$1,223,551 ARC grant to Bridgeway Capital in Pittsburgh, PA for the *Western Pennsylvania Entrepreneur Diversification Fund*. Through a combination of technical assistance to entrepreneurs and the capitalization of a revolving loan fund, Bridgeway Capital, a Community Development Financial Institution, will promote entrepreneurial activity across its 15-county service area of western Pennsylvania, a region whose economy has been adversely affected by the decline in the coal industry. Activities will include business development workshops, one-on-one counseling, support for a regional business incubator, and small grants to entrepreneurs for training and licensure. The project is expected to lead to the creation of 65 new businesses and 200 new jobs, while leveraging \$5,625,000 in private investment. Additional funding is being provided by Penn State University, the Fay-Penn Economic Development Council, and the Connellsville Redevelopment Authority. Private capital for the revolving loan fund is being provided by TriState Capital Bank.

\$725,850 ARC grant to Clearfield County in Clearfield, PA for the *North Central PA Launchbox and Innovation Collaborative*. The project will equip the Collaborative's business incubator to offer three sets of services: a makerspace with sophisticated equipment; research and development services to help manufacturers solve problems; and a training center that offers opportunities in powdered metals, automation, and additive manufacturing. The Collaborative seeks to strengthen the entrepreneurial ecosystem, providing wraparound services that increase access to capital, up-skill local talent to secure advanced manufacturing jobs, and provide technical assistance and specialized manufacturing support services for businesses. The project rests on a broad network of partners, including Penn State Dubois, the Clarion Small Business Development Center, Ben Franklin Technology Partners, and North Central Regional Planning & Development Commission. It will benefit seven counties in North Central Pennsylvania and lead to the improvement of 45 businesses and 60 workers/trainees.

\$500,000 ARC grant to the City of Erie, PA for the *Erie, Pennsylvania Broadband Deployment* program. Grant funds will expand the Erie Innovation District's Secure Smart City pilot initiative by providing free public Wi-Fi access to Erie's eight federally designated Opportunity Zones. This project is part of a larger effort by the city to recruit, retain, and expand business investments and jobs in the Opportunity Zones. Erie has experienced significant job losses in manufacturing as a result of reductions in the coal industry supply chain. The project will leverage the expertise of a private sector digital technology solutions provider for smart cities. The initiative will provide outdoor Wi-Fi access; urban security solutions, including license plate recognition and traffic monitoring; analytics that can be tracked on a visualization dashboard; and the ability to remotely control street lights. An additional investment of \$900,000 from other sources will enable other Smart City components to become operational within the Opportunity Zones. Erie hopes to become an entirely Smart City by 2028.

\$50,000 ARC grant to the Greene County Board of Commissioners in Waynesburg, PA for the *Rural Broadband Coverage and Feasibility Study*. This study will identify county-wide gaps in broadband access and will determine the best technology to fill these gaps (such as fiber, white space, cable, and DSL). When Greene County, which has experienced significant mining job losses, updated its comprehensive plan in 2018, the top-ranked issue identified was a need to expand broadband access. The feasibility study will review the county's broadband assets, conduct a field survey of existing broadband access, determine customer demand, identify the best technology options for service gaps, and develop an implementation matrix.

\$50,000 ARC grant to the Southern Alleghenies Planning & Development Commission in Altoona, PA for a *South-Central Pennsylvania Broadband Infrastructure Assessment*. This feasibility study will identify ways of increasing broadband and cellular services to residents and businesses in an eight-county region of South Central Pennsylvania. These eight counties have experienced economic downturn as a result of the decline of mining and manufacturing industries, and expanded broadband access could create new economic opportunities for the region. The study will identify the broadband assets already in place, assess community broadband requirements, identify the best technology to meet the needs, and provide cost estimates for different deployment strategies.

\$50,000 ARC grant to tecBRIDGE, LLC in Scranton, PA for the *Enhancing Northeastern Pennsylvania's Entrepreneurial Ecosystem - Incubator Optimization* project. This project will assess the business incubation climate and assets in five counties in northeastern Pennsylvania (Lackawanna, Luzerne, Monroe, Schuylkill, and Wayne) and identify proven programs that can be replicated in communities to strengthen the regional entrepreneurial ecosystem and support the successful start-up and expansion of small businesses. The project capitalizes on a broad network of partners, including the NEPA Alliance, Ben Franklin Technology Partners, East Stroudsburg University, the Scranton Chamber of Commerce, and the Wayne Economic Development Corporation.

\$20,000 ARC grant to Fay-Penn Economic Development Council (Fay-Penn) in Lamont Furnace, PA for the *Fayette County Multi-Tenant Spec Building Feasibility Study*. The study will determine the feasibility of constructing multi-tenant speculative ("spec") shell buildings at various locations throughout Fayette County to accommodate and attract new business development. Fay-Penn has received an increasing number of inquiries from companies seeking industrial/commercial space availability. In many cases, especially for larger building size needs, the county does not have readily available, suitable space. The feasibility study will determine priority locations for development, building requirements for those companies, economic impacts of spec buildings, and marketing approaches for new development.

TENNESSEE

\$1,566,927 ARC grant to Northeast State Community College in Blountville, TN for the *Advancing Aviation Technology* project. Through a partnership with the Tri-Cities Airport, the project seeks to build a reliable workforce pipeline of trained and certified aviation maintenance professionals in support of regional economic development priorities. It will expand the community college's Aviation Technology program, relocate the program to a new hangar at the Tri-Cities Airport, and secure FAA Airframe and Powerplant program certification. This includes constructing a new aircraft hangar in the adjacent airport, acquiring instructional equipment, improving program outreach, revising curriculum, and creating jobs by hiring faculty. Over three years, the project will serve eight businesses, while training 72 community college students. The project is also a prerequisite for the success of the Tri-Cities Airport Aerospace Park, which will create up to 2,000 jobs in the aviation maintenance and manufacturing sector. Additional funding for the project is being provided by the Tri-Cities Airport Authority.

\$1,546,400 ARC grant to the East Tennessee Development District (ETDD) in Alcoa, TN for the *Workforce Development and Re-employment Opportunities* project. This project will expand and enhance skills training opportunities in the high-demand fields of allied health, welding, industrial maintenance, construction, diesel repair, and truck driving in East Tennessee and Southern Kentucky. ETDD will partner with Somerset Community College in Kentucky, Tennessee College of Applied Technology-Oneida/Huntsville, and Tennessee College of Applied Technology-Jacksboro. Counselors will work with drug court administrators, jail and prison administrators, and American Job Centers to enroll individuals that normally would not participate in the labor market. The project will develop and promote paid work-based learning opportunities by establishing co-ops, internships, and apprenticeships. Twelve new training programs will be implemented by the three participating colleges, and 465 workers/trainees will obtain a job in their field of study. Additional funding is provided by the Tennessee Higher Education Commission, the York Institute, and USDA Rural Business-Cooperative Services.

\$727,815 ARC grant to East Tennessee State University in Johnson City, TN for the *Create Appalachia Arts & Technology Economic Development Initiative*. East Tennessee State University (ETSU), in partnership with the Johnson City Development Authority and Create Appalachia, will establish a micro-enterprise incubator and professional development center to support the launch and continued success of artists and makers working with digital technologies. To attract and retain younger workers needed for robust economic development, ETSU plans to incubate not only individual businesses but also a thriving digital arts industry. This project will leverage the talent of ETSU and the Tennessee Visual Content Modernization Act to encourage the growth of new businesses. ETSU will provide 1570 students, 200 workers/trainees, 35 businesses, and 38 organizations a state-of-the-art instruction facility that can accommodate continuing education in arts technology, entrepreneurship training, business training, and software certification.

\$862,017 ARC grant to Holston Electric Cooperative in Rogersville, TN for the *Holston Electric Cooperative Rural Broadband* project. The project will install 25.9 miles of fiber optic cable on Holston

Electric's existing power poles to provide up to 1 Gbps service to areas not covered by a broadband or cable provider in the Goshen Valley in Hawkins County, TN. A number of employers in the region use the work-at-home model for portions of their workforce. Holston Electric Cooperative projects that several households in this service area are a part of this model, and greater broadband access will give this community access to online education, training, and/or retraining to expand this job market. The new fiber network will make broadband service available to 133 businesses and 600 households and create 20 new jobs over three years. In addition to farms and businesses, the expanded coverage will serve multiple churches, a school, and a fire department.

\$342,646 ARC grant to Erwin Utilities in Erwin, TN for the *Northern Unicoi County Broadband* project. The project will enable Erwin Utilities to install 16.8 miles of fiber optic cable on existing power poles and provide high-speed broadband to businesses and residential subscribers in areas of northern Unicoi County that are not covered by a broadband or cable provider. With an increasing number of businesses utilizing telework employment, expanded infrastructure will allow more residents to pursue remote work from home. Within three years, the project is expected to expand broadband access for 14 businesses and 488 residents. Erwin Utilities also projects that the expansion will increase the number of businesses in the service area, resulting in three new businesses and 15 additional jobs. The project builds on an existing fiber network, a portion of which was supported by a previous POWER grant.

\$50,000 ARC grant to Rockwood Electric Utility (REU) in Rockwood, TN for the *REU Smart Grid Technology Plan*. As part of REU's goal of building a technology backbone that can support broadband service in parts of Roane, Morgan, and Cumberland Counties, the Smart Grid project consists of two components: a technology analysis and a transition plan. The technology analysis will study characteristics of three different network transport solutions and their suitability for a design to enhance the REU Smart Grid. The transition plan will be a roadmap to improve the Smart Grid and offer broadband connectivity to qualified rural areas that are not currently served, while also creating four to six local technical jobs in the long term.

VIRGINIA

\$1,500,000 ARC grant to the Southwest Virginia Workforce Development Board in Lebanon, VA for the *Recovery Opportunities and Pathways to Employment Success (ROPES)* project. The ROPES program will create a recovery-to-employment ecosystem that combines substance abuse disorder recovery and treatment with workforce development and re-employment opportunities. The program will provide upskilling and work-based learning opportunities while at the same time developing a menu of recovery services focused on the post-treatment to employment continuum. The project will make the workforce of Southwest Virginia healthier and more competitive as the region strives to overcome the opioid crisis and revitalize an economy that has been heavily dependent on coal. Guided by the Workforce Board's Business Services Team, the program will work with employers to foster understanding and support for recovery-safe work environments. ROPES will serve and improve 25 businesses, 90 workers/trainees will obtain new employment, and four new jobs for case managers and certified peer recovery specialists will be created.

\$1,000,000 ARC grant to BARC Electric Cooperative in Millboro, VA for the *BARC Rural Economic Development via Broadband* project. The project will deploy a gigabit last-mile fiber-to-the-premise (FTTP) network to businesses and residents of the Town of Goshen, Virginia, a remote area in Rockbridge County. The area is not currently served by a broadband provider. The reduction in coal rail shipping has caused economic deterioration in the Goshen area. Improved broadband access is crucial for increased economic development, the creation of an entrepreneurial ecosystem, improved educational opportunities, and reduced workforce migration. The eight-mile fiber network will make FTTP available for 301 households and 8 businesses. The network will also further BARC Electric's smart grid strategy by connecting its Network Operations Center to its entire Smart Grid.

\$588,072 ARC grant to Southwest Virginia Community College (SWCC) in Cedar Bluff, VA for the *SWCC Automotive Service Excellence Center*. The project will create a credit-based, fast-track curriculum to prepare students for entry-level automobile technician positions. Students will receive certification from the National Institute for Automotive Service Education (ASE). Rapid changes within the automotive, heavy-duty truck, and diesel engine fields have created a strong demand for workers with training and certification in the latest technologies, but no specialized training opportunities currently exist within an hour's drive of SWCC. These businesses offer employment opportunities in an area that has been heavily dependent on the coal industry. As a result of the grant, at least 59 students will obtain jobs or will still be enrolled in the program at the end of the three-year project period, 25 workers/trainees will have enhanced positions, and five businesses will be improved.

\$50,000 ARC grant to LENOWISCO Planning District Commission in Duffield, VA for the *Technology Innovation Ecosystem for Rural Water Systems* project. This pilot project will identify innovative and emerging technologies that can be scaled to monitor and evaluate small, rural public water systems for potential leaks. It will include a strategic analysis of existing leak detection technologies in both real and simulated testing environments. It can provide an immediate cost savings to the Wise County Public Service Authority, reducing water loss costs that are typically absorbed by the customer base. Partners include the Wise County Public Service Authority, University of Virginia's College at Wise, and the MIT Lincoln Lab.

\$49,940 ARC grant to Appalachian Voices in Boone, NC for the *Taking a Proven Energy Model to Scale* project. The project will provide technical assistance to grow the emerging solar energy cluster in Central Appalachia, helping diversify the regional economy. It will support a commercial-scale solar group purchase program in Southwest Virginia that helps building owners who want to use solar energy navigate the often complex process of a commercial-scale solar installation and pool demand to reduce costs. The project will examine options for expanding the group purchase approach to other states, conduct a multi-state market analysis of solar opportunities, and prepare an assessment of the solar project finance ecosystem.

WEST VIRGINIA

\$1,499,993 ARC grant to Sprouting Farms Corporation in Talcott, WV for the *Growing Capacity: Integrating Agri-Development Centers in Central Appalachia* project. Sprouting Farms, in collaboration with nine key partners, will build upon existing food system work in Central Appalachia by creating a network of Agri-Development Centers in West Virginia and Southwest Virginia. These Centers will support the scaling of agricultural production to meet the needs of additional wholesale markets as well as build a workforce development network that creates a pipeline of skilled, reliable workers. Project activities will support the expansion of a wholesale production incubator program for beginning farmers; the integration of existing post-production and culinary workforce training programs for youth and adults who are unemployed, in recovery, or previously incarcerated; and the development of replicable food enterprise and workforce development programs for partners across Central Appalachia. Sprouting Farms projects that this project will serve 152 business, create 125 new jobs, and leverage \$1.4 million in private investment across 16 counties in central Appalachia. Other federal funding is being provided by the USDA Local Food Promotion Program, a Rural Business Development grant, and the Abandoned Mine Lands pilot program. Additional support for the work in West Virginia is being provided by the Claude Worthington Benedum Foundation.

\$1,055,001 ARC grant to Advantage Valley in Charleston, WV and the Wyoming County Economic Development Authority in Pineville, WV for *Fostering Advantages for Startups and Entrepreneurial Resurgence (FASTER) in West Virginia*. This program is designed to encourage economic diversification, business growth, and job creation within a seven-county region of West Virginia. FASTER will partner with local economic development authorities, educational institutions, and business incubators to foster startups and business expansion. The project consists of two components: technical assistance to entrepreneurs and businesses through Advantage Valley and its contractors (a \$930,001 grant to Advantage Valley); and recapitalizing a revolving loan fund operated by the Wyoming County Economic Development Authority (a grant of \$150,000). The loan fund will be limited to businesses referred by Advantage Valley. Together they will provide entrepreneurial training, business coaching, certifications, and a capital lending fund. FASTER anticipates the creation of at least 50 new businesses, 60 credentialed entrepreneurs, and 150 new jobs, while leveraging \$4.5 million in private investment. Additional funding is being provided by the Claude Worthington Benedum Foundation, Bridge Valley Community and Technical College, and Unlimited Future, Inc.

\$837,970 ARC grant to the WV High Technology Consortium Foundation (WVHTC) in Fairmont, WV for the *3 Steps to Start Up* project. The project will connect, accelerate, and launch new businesses in a 42-county, coal-impacted region of West Virginia by establishing a three-step portal of entry for early-stage startups in the state's growing entrepreneurial ecosystem. WVHTC is partnering with WV TechConnect, INNOVA Commercialization Group, and WV Jobs Investment Trust (WVJIT) to build and spread the entrepreneurial pipeline. The "3 Steps" of the project consist of building awareness and education to develop a pipeline of entrepreneurs; providing access to a network of mentors and professional services for early stage businesses; and making available \$1.2 million in investment capital from WVJIT for entrepreneurs seeking to launch or expand businesses. The project is expected to serve

85 businesses with entrepreneurial support services and create 124 new jobs and 15 new businesses. Additional funding is being provided by the Claude Worthington Benedum Foundation.

\$717,166 ARC grant to the EdVenture Group Inc. in Morgantown, WV for the *Simulated Workplace Entrepreneurship Education Pathway (SWEEP)* program. SWEEP seeks to build entrepreneurial mindsets and support business venture development within West Virginia's Career and Technical Education (CTE) students. It capitalizes on the state's innovative Simulated Workplace initiative, which transforms CTE environments into industry-recognized, functioning workplaces in which students drive their own learning. By providing students with in-depth entrepreneurial training in a simulated workplace environment, SWEEP will equip students with the skills needed to find success within their own communities in six economically distressed counties (Calhoun, Fayette, Gilmer, Lincoln, Mingo, and Wyoming). Key partners include the West Virginia Department of Education, Marshall University, Intuit Education, and Standwatch Academy. The project will expose 1000 students and 75 instructors to entrepreneurship education through project-based learning, and 50 business plans will be developed.

\$650,000 ARC grant to the West Virginia Regional Technology Park Corp. in South Charleston, WV for the *Broadband Infrastructure to Augment Education and Industry Cluster Development at the West Virginia Regional Technology Park* project. The project will construct a fiber ring around 12 buildings in the West Virginia Regional Technology Park. Currently only half of the buildings at the park have broadband access. The project will equip all of the park's buildings for broadband service speeds up to 100 Gbps and will complete a redundant fiber ring. It will add a 288 fiber-count ring around the park and 24 fiber-count drops into each building. This will cover diverse access from selected buildings to the park's network and from the park's network to the provider's broadband network, providing support for all voice, data networking, and internet access services. This expanded broadband access is expected to serve 30 businesses. It will facilitate an expansion by an existing company in the park, adding 150 new jobs.

\$622,280 ARC grant to Appalachian Headwaters in Lewisburg, WV for the *Appalachian Beekeeping Collective Diversification and Expansion* project. Appalachian Headwaters will build on a previous POWER grant by expanding its economic diversification and entrepreneur training program focused on the apiculture (honey and bee products) industry to 17 counties in southern West Virginia and five counties in Appalachian Virginia. The project will provide employment opportunities, training, and business support services to take advantage of significant market opportunities in beekeeping and honey production. The project will serve over 1,000 new and existing beekeeping entrepreneurs, and is expected to create an estimated 150 jobs, retain 145 existing jobs, and create 65 new businesses. It will leverage \$635,580 in private investment, and non-export sales revenues are expected to increase by \$1.4 million after three years. The project will establish a new processing and training hub in southwestern Virginia and develop a training and marketing program for new bee products and services.

\$50,000 ARC grant to Friends of the Cheat, Inc. in Kingwood, WV for the development of the *Mountaineer Trail Network: Preston County Pilot Trail Plan*. This project will produce the first comprehensive trail plan within the newly formed Mountaineer Trail Network, a 10-county bike trail system in north-central West Virginia. Centered on Preston County, the trail plan will map all existing trail resources, highlight existing connection gaps, and identify trail routes that would link existing amenities to other key trails and recreation hubs. The project will also conduct a market assessment and a workforce development assessment, linking the trail to broader economic development efforts. As the first trail plan within the Mountaineer Trail Network, the plan will serve as a model to be replicated in the network's other nine counties. Additional funding is coming from the federal Abandoned Mine Lands pilot program.

\$50,000 ARC grant to the Wayne County Economic Development Authority in Wayne, WV for the *Bio Based Manufacturing* strategic plan. The strategic plan will assess new market and employment opportunities in bio-based manufacturing, and will lead to business formation and job creation in recycling, trucking, logistics, and manufacturing across parts of Ohio, West Virginia, and Kentucky. The project will develop market-ready business plans around bio-manufacturing opportunities in local markets, including upcycling of landfill-destined materials and developing the logistical networks for connecting those opportunities. It will provide the blueprint for further collaboration with Coalfield Development Corporation to create new jobs, rescue and repurpose thousands of tons of materials from landfills, and promote sustainable investment in local economies and infrastructures. Additional funding comes from the West Virginia Specialty Crop program and the Cliff Bar Foundation.

SPECIAL REGIONAL PROJECTS

\$1,431,549 ARC grant to The Consortium for Entrepreneurship Education in Charleston, WV for the *Fostering Self ESTEAM in Appalachia's Emerging Workforce* project. ESTEAM will infuse entrepreneurship into the region's STEAM (Science, Technology, Engineering, Arts, and Mathematics) initiatives to graduate a workforce of entrepreneurially-minded students poised to recognize and create solutions to gaps within their local economy. The project is a collaborative effort between EntreEd, the EdVenture Group, the National Association for Community College Entrepreneurship, the National Center for Resource Development, and local community college and education agency partners. The project will offer professional development programming for educators, award an official "America's Entrepreneurial Schools" designation for participating schools, and provide mini-grants for schools that pursue ESTEAM integration. Targeting middle and high school students across seven Appalachian states, the two-year program will deliver high-quality teacher training and support STEAM-focused entrepreneurship projects to reach 51 Appalachian counties and a potential 75 rural school districts. The project will expand best practices from EntreEd's previously awarded POWER grant. Additional funding is being provided by the Greater Kanawha Valley Foundation.

\$1,423,497 ARC grant to the Southwestern Pennsylvania Coalition (SPC) in Pittsburgh, PA for the *Shale POWER* project. The project will develop regional centers for technical assistance to manufacturers in Pennsylvania, West Virginia, and Ohio that are seeking to expand into the shale energy sector. The

technical assistance and business support will target small and medium enterprises and will include mini-grants, one-to-one counseling, and training. Shale POWER will engage directly with these entities to connect them to the shale-manufacturing sectors, develop business strategies for expanding in these sectors, and support workforce and job development to meet the burgeoning demand in shale-related markets. The project is expected to create 400 new jobs, retain 600 existing jobs, and create 50 new businesses. It builds on an earlier POWER grant that assessed the demand for business technical assistance in this sector and informed the shape and scale of the current project. Anchors institutions for the project are Carnegie Mellon University, West Virginia University, and Belmont College.

\$1,039,500 ARC grant to Appalachian Community Capital (ACC) in Christiansburg, VA for the *Opportunity Appalachia* project. ACC has partnered with five organizations, including the Appalachian Partnership for Economic Growth in Ohio, the University of Virginia's College at Wise, and the West Virginia Community Development Hub, to develop a program that attracts investment funding to federally designated Opportunity Zones located in Central Appalachia. Opportunity Appalachia will cultivate investment deals that both benefit investors and provide robust social returns for communities found with the zones. It will provide technical assistance to develop and structure investable transactions, create investment prospectuses and pitch decks, and lead outreach to potential investors. The project will develop transactions to create a portfolio of Opportunity Zone investments in Central Appalachia. This initiative is expected to bring an estimated \$7.5 million of new private investment to Opportunity Zones in Central Appalachian coal communities, investing in 15 businesses and creating 720 jobs, 70 of which are projected to be for persons in recovery from substance abuse. Additional funding is being provided by the Claude Worthington Benedum Foundation.

\$750,000 ARC grant to the National Institute on Drug Abuse (NIDA) at the National Institutes of Health for continued collaborative research with other federal partners, including the Centers for Disease Control and Prevention and the Substance Abuse and Mental Health Services Administration, on effective interventions for opioid use disorders and related diseases in rural Appalachian coal communities. This is the third year of support for this initiative. Prior work has included research on clinical practices for addressing overdose, HIV, and hepatitis interventions. The new funding will allow the University of Kentucky and West Virginia University (the Appalachian institutions in the NIDA project) to begin implementing clinical programs focused on the substance abuse recovery ecosystem.

\$49,974 ARC grant to Partners in Health Network, Inc. in Charleston, WV for the *Enhancing the Economic Impact of Rural Hospitals and Health Centers* project. The project will prepare a feasibility study for expanding the Appalachian Pulmonary Health Project to additional critical access rural hospital and healthcare facilities in 12 medically underserved counties in Kentucky, West Virginia, and North Carolina that have been adversely affected by the downturn in the coal economy. The study will help members of the Partners in Health Network plan for this large-scale implementation to achieve economic development and recovery by maintaining necessary health services, preserving and expanding the rural health infrastructure, and contributing to a ready and healthy workforce.

RESEARCH

\$500,000 to the Regional Research Institute at West Virginia University in Morgantown, WV for an assessment of the evolving impact of the downturn in the coal economy in Appalachia. This research builds on research reports released by the Regional Research Institute in 2018 exploring the coal industry ecosystem in Appalachia. The new research will provide quarterly updates to Appalachian-based coal employment and production data and forecasts, shift-share analysis of Appalachian counties, and updates to data on power plant retirements and repowerings to reflect recent changes in the industry. It will also provide identification and analysis of existing industrial clusters and causal impacts of coal employment on local education funding, as well as a scan of state treatment and recovery responses to substance abuse epidemic and an examination of entrepreneurship ecosystem conditions for coal-impacted communities.

\$199,665 to Chamberlin/Dunn, LLC of Indianapolis, IN, for a contract to monitor and evaluate the POWER Initiative. Chamberlin/Dunn will continue their work in assessing previous POWER grants. The new scope of work will include two components: an evaluation of three high-priority topics (substance abuse recovery ecosystem projects, Central Appalachia POWER projects, and multi-state/multi-site projects) and an evaluation of POWER projects funded in FY2018-2019, along with an assessment of technical assistance grants from prior years that have not been covered in earlier reviews. Chamberlin/Dunn will work with ARC and its partners to determine the extent to which POWER grantees are progressing toward their stated performance goals. Deliverables include monthly reports that provide a snapshot of grantee performance. The reports will highlight success stories, flag potential challenges, and recommend technical assistance and training needs to ensure grantee success.