

KY PATH: Kentucky's Prosperity through AgriTech Hub

Vision for Regional Economic Development

Studies by the United Nations predict that the growing population of our planet will require 70% more food to sustain the population by 2050. If we continue farming as we do now, we would require a second planet Earth to have enough resources to meet demand. What's more, is that our current food system is not sustainable, and food security, equity, and justice are growing concerns. Climate change, increasing catastrophic weather events and fires, and the distance it takes to ship certain produce are all problems that keep the future of food trending in the wrong direction for humanity. Improvements related to labor practices, production processes and environmental sustainability are possible with AgriTech innovations. A technological solution and significant investment is required to create efficiencies and health outcomes that meet future demands and create a healthy food future for the world.

The Commonwealth of Kentucky's Prosperity through AgriTech Hub (KY PATH) presents a once-in-a-generation opportunity to transform an entire region by attracting thousands of well-paying jobs and directing game-changing investment to one of the most coal-dependent and economically-depressed parts of the country: Eastern Kentucky/Appalachia. The Commonwealth of Kentucky, who will serve as the Lead Institution, is proposing five tightly-aligned projects that will revolve around the construction of a new state-of-the-art AgriTech research and development (ARD) center, focusing on controlled-environment agricultural (CEA) production, horticultural innovation, and technological food chain solutions, in the heart of Eastern Kentucky. KY PATH places equity at the center by focusing its benefits on economically-distressed Persistent Poverty Counties (PPCs) located in the heart of the Appalachian Region. Companion initiatives will activate the ARD, sparking and cultivating ancillary business and educational opportunities through partnerships with a coalition of public, private, academic, and non-profit organizations.

KY PATH will build on a strong foundation and accelerate existing momentum in the Appalachian and proximate region's AgriTech sector, including public and private investment exceeding \$440 million. AppHarvest, 80 Acres, Kentucky Fresh Harvest, AppleAtcha, and other Consortium partners have invested in developing CEA in Kentucky including multiple facilities throughout Eastern Kentucky. The model is inspired by the world's leader in indoor agriculture, the Netherlands, where high-tech greenhouses yield 30-times more crops compared with traditional agriculture, utilize less harmful chemical pesticides, and capitalize on efficient post-processing and distribution chains. KY PATH will propel forward a June 2020 collaborative agreement between 26 U.S. and Dutch entities to establish an "Agriculture Technology Ecosystem" in Kentucky. The opportunity is to capture and promote an estimated \$10 billion AgriTech sector in Eastern Kentucky.

In order to build and sustain an AgriTech cluster in Eastern Kentucky, the physical infrastructure must be matched with equal investment in the development of human capital, high-growth entrepreneurship and vibrant communities where a bold new workforce will live, work, and play. Many of the KY PATH partners are rooted in the region where every day they empower emerging diverse leaders, small businesses, and communities to embrace innovation and build a new sustainable economy for Eastern Kentucky.

The Governor of Kentucky has included \$75 million as a match in the current fiscal year to support KY PATH in addition to \$50 million of additional public investment to support the necessary infrastructure to support this AgriTech ecosystem (see LOS Beshear). A coalition of organizations are committed to collaborating with the KY PATH Leadership Team on planning and execution (see LOS Vaes). The Commonwealth of Kentucky has convened a broad and diverse array of public and private

coalition members and partners from across the state who will lead KY PATH into the future. The following organizations and representatives comprise the KY PATH Team today with an expectation that the coalition will continue to grow. The leadership team is denoted by an asterisk.

- **Government:** The Commonwealth of Kentucky Governor's Office and Workforce Development Cabinet*, Kentucky Cabinet for Economic Development, Dutch Ambassador and Ministry of Agriculture, Nature and Food Quality, Workforce Innovation Boards and Area Development Districts, Local Government: Morgan, Menifee Rowan County (MMRC) Industrial Park, City of Morehead, Rowan County
- **Higher Education:** The University of Kentucky (UK)*, Eastern Kentucky University, Morehead State University, University of Pikeville, Berea College, Kentucky State University, Kentucky Community and Technical College System (KCTCS), University of Louisville
- **Non-Profit Organizations:** Shaping Our Appalachian Region (SOAR)*, KY Horticultural Council, One East Kentucky, Community Farm Alliance, Awesome Inc., Kentucky Science and Technology Corporation
- **Investors:** Access Ventures*, Southeast Kentucky Economic Development (SKED), Launch Blue, Invest606, UK Venture Capital LP, Gill Holland, Brooks Smith
- **Industry:** AppHarvest, KY Fresh Harvest, AppleAtcha, Kroger, Alltech, Rubicon, Black Soil, Scheider Electric
- **Philanthropy:** Foundation for Appalachian Kentucky, Appalachian Impact Fund, James Graham Brown Foundation

The following is an overview of the five component projects that comprise KY PATH.

Project 1: Construct the Kentucky ARD, a controlled-environment agriculture (CEA) research and development facility for sustainable agriculture methods. Kentucky's ARD is "shovel-ready" on property recently donated to the Commonwealth.

Measurable Outcome: Facility is constructed and ready for research and innovation activities

Project 2: The goal of Project 2 is to activate a world-class growing facility specifically designed for cutting-edge, multidisciplinary research in controlled-environment horticulture production. Universities represented within the Dutch/Kentucky Consortium, along with other industry partners, will collaborate within the research spaces of the facility to identify best practices in production for horticulture and floriculture crops.

Measurable Intermediate Outcomes of Project 2: Formation of the Research Technical Advisory Committee, State and federal competitive funding, Industry funding, Peer-reviewed research, new innovations and patents, New industry partnerships, Extension publications, Extension trainings
Metric: Research investment, Cost savings, Patents

Project 3: The Food Chain Global Startup Challenge (Challenge) is a dedicated pipeline development mechanism to ensure that high-growth businesses can form in Eastern Kentucky related to a flourishing industry with unmet needs - the food value chain. The Challenge will launch and manage a best-in-class 12-week accelerator and 6-month incubator program, with physical location in the ARD. Through solicitation of competitive global applications from entrepreneurial teams with food system solutions, the Challenge will ensure that the ARD is activated with innovative ideas and high-growth businesses for job and wealth creation in Eastern Kentucky.

Project 4: Create multiple financing methods to support start-ups, business expansion, and new technology adoption within the AgriTech sector. A Future of Food Venture Fund will be formed, with an investment thesis to place seed investments in startups completing The Food Chain Global Startup

Challenge and establishing business activities in Kentucky. Regionally-focused place-based partners will be engaged to facilitate conditions for entrepreneurs to open permanent offices in the Eastern Kentucky AgriTech Hub geography.

Measurable Intermediate Outcomes of Projects 3 and 4: Number of startup applicants; number of startup accelerator participants; FoF venture funds under management; grants/funding awarded to incubator entrepreneurs/businesses

Metrics: Companies graduating; number of new businesses incubated; follow-on investments; businesses offices established in region; jobs created; PPCs positively impacted

Project 5: EKY DATE (Development of the Agritech Talent Ecosystem) focuses on the development of local talent pipelines and building vibrant communities to support high-tech industries like AgriTech. With success this project will position 21 Eastern Kentucky counties to receive maximal economic benefit from the broader AgriTech cluster.

Measurable Intermediate Outcomes: New students/workforce trained, certificates awarded, an increase in BIPOC leaders, number of new small businesses, number of new residents; local GDP growth;

Metrics: Philanthropic funds raised, number of businesses, number of new leaders, labor force participation rate.

There are five Area Development Districts that are included as part of KY PATH. While each of the strategies and goals across the five CEDS are unique, there are clear commonalities that this proposal addresses. Table 1 provides a summary of the alignment between KY PATH goals and those for each of the ADDs in the region. Each Area Development District provided LOS for KY PATH’s phase 1 application.

Table 1. KY PATH Goals Alignment with Area Development District 2020 CEDS

KY PATH Goals	Gateway ADD	Kentucky River ADD	FIVCO ADD	Big Sandy ADD	Cumberland Valley ADD
Economic Cluster Development	X	X	X	X	X
Workforce Development	X	X	X		X
AgriTech or HighTech Development	X		X		X
Disaster Resilience	X		X		X
Small Business/Downtown Revitalization	X	X	X	X	X

Complementary Activities

In addition to the resources, tools, programs, and facilities to be developed with EDA funding, the coalition is committed to sustaining impact in the Eastern Kentucky coal communities region through enhanced impact potential that will be created through ancillary efforts made possible by KY PATH. There is ample evidence that research, innovation and entrepreneurial ecosystems first initiated by government support can be sustained through economic development inputs from private sector resources. An example of such secondary benefits are the anticipated outputs and resources expected to be formed by private sector interests as next-generation activities after The Challenge and The Trellis are developed and launched. The Future of Food Fund will be a venture fund developed with capital resources of Kentucky-focused and food system-focused private investors, for investment in high-potential startup companies achieving milestones through the Challenge. This fund is indicative of the type of necessary sustainment resource a region like Eastern Kentucky must have to grow and create net wealth generation. The development of jobs alone is not sufficient to sustain prolonged impact, and opportunities to build venture investment life cycles to reinvest returns is critical. The evidence for this

need can be found in other Appalachian communities that have “graduated” from high-need to high-growth trajectories, such as Pittsburgh, Chattanooga, and Asheville. Further, another example of outcomes that may be expected is the development of additional research priorities at the University of Kentucky, which could reflect the growing industry needs of the ecosystem to develop in Eastern Kentucky. As a land grant institution, UK’s research priority areas are focused on unmet needs and industry concentrations of the state and region, and it could be expected that faculty research talent and economic development talent could be harvested to reflect these circumstances resulting from KY PATH. In this light, new research capabilities can spur and sustain activation of the facility to new capacities, continuing the demand for startups around the world to work with and be co-located with such research and innovation work.

In recognition of AgriTech as an emerging cluster in Kentucky, legislation (KRS 198B.010) is under review that defines a Controlled-Environment Agriculture facility as one “that utilizes a technologically advanced form of hydroponic or soilless-based production that includes a combination of engineering, plant science, and computer-managed greenhouse control technologies in growing spaces and all connected sorting, packing, and storage areas to allow complete and stable control of the plant environment, including temperature, light, and carbon dioxide, and includes the immediate sorting, packing, and shipping of fresh, ready-to-consume produce.” The purpose behind this legislation was to define building codes specific to this industry to ensure a safe working environment.

In addition, one of the coalition partners, AppHarvest Foundation, recently expanded its AgTech Educational Outreach Program that places hydroponic growing systems at high schools across Kentucky and Central Appalachia, unveiling a new container farm at Carter G. Woodson Academy located at Frederick Douglass High School in Lexington, Ky. Carter G. Woodson Academy provides an advanced and rigorous curriculum through the lens of African-American history, culture, and culturally responsive teaching and learning strategies.

Timeline

Year 1: Create RFP; ARD Construction begins; Hiring initiated; Agritech Inclusion Coalition established; Project 3 hires Challenge team, launches 1st competitive solicitation and completes first accelerator and incubator cohorts; Extend 1st Challenge Incubator grants; Establish Future of Food Fund

Year 2: ARD space activated with Projects 2-4, workforce programs underway; Complete first research projects; Host first annual conference; Complete 2nd cohorts of accelerator and incubator; Complete first Future of Food Fund investments; First high-growth companies establishing office or implementing solutions in EKY, Complete pilot “People Ready Communities” program, Graduate first Minority Leadership Cohort

Year 3: Complete 3rd cohorts of accelerator and incubator; Complete additional Future of Food Fund investments; High-growth companies receiving investment make 1st hires of Project 5 EKY workforce.

Year 4: Complete 4th cohorts of accelerator and incubator; Exhaust Future of Food Fund 1 and commence raising Fund II; High-growth companies receiving investment make more hires of Project 5 EKY workforce talent; first follow-on investments of Challenge graduating companies.

Year 5: Complete 5th cohorts of accelerator and incubator; Make first investments of Future of Food Fund II; More follow-on investments of Challenge graduating companies, making more hires of Project 5 EKY workforce talent.

Project Region and Assets

KY PATH’s ARD Location (Rowan County, Kentucky; FIPS: 21205). Additional KY PATH Communities: Bell (21013); Breathitt (21025); Carter (21043); Clay (21051); Elliott (21063); Fayette (21067); Floyd (21071);

Harlan (21095); Henderson (21101); Jackson (21109); Jefferson (21111), Johnson (21115); Knott (21119); Lawrence (21127); Lee (21129); Leslie (21131); Letcher (21133); Madison (21151); Magoffin (21153); Martin (21159); Morgan (21175); Muhlenberg (21177); Owsley (21189); Perry (21193); Pike (21195); Union (21225); and Wolfe (21237).

Throughout the Appalachian Region there has been a drastic decrease in good paying jobs and an outmigration in population due to the downturn of the coal industry. The coal industry has been the core economic impact in the Appalachian Region, specifically Eastern Kentucky, for decades however over the last several years, coal jobs declined by 15,000 workers on top of a steady decline over the last decade. As KY PATH is launched within the region we will see a highly skilled coal workforce retrained for new skills reenter the workforce and rewarded through good paying jobs. Over the last year, through the existing AgriTech partnerships and new industry investments there were over 575 jobs created, reclaimed mine sites transformed into agriculture production and coal miners back to work. A study conducted by Wageningen University Research indicated that the horticultural market in the US could have a potential of \$10billion, creating 30,000 jobs in the United States. Additional workforce training and investment within the region will be critical for this growth to occur and for KY to capture as much of that industry potential as possible. The study, specific to building an AgriTech Ecosystem in Kentucky noted that education and training at all levels should have the highest priority. In the short term, basic education and practical training is needed for greenhouse employees to increase their knowledge and skills. In the mid and long term, education on all levels from vocational to academic degree programs is needed, covering different subjects in production and the horticultural value chain, such as crop management, climate control, waste management and logistics.

Kentucky has been identified as an ideal location to establish an AgriTech Hub by Wageningen University & Research and other Dutch entities due to several geographical, economic and natural resources similar to that which have thrived in the Netherlands. Additionally, the downturn of the coal industry has not only directly impacted employees, but the communities where they reside, shop and visit. The economic impacts expand far beyond what the eye can see. Revitalizing communities through new employment and entrepreneurship opportunities offered in the KY PATH proposal will allow the eastern Kentucky region to build back better. The KY PATH proposal will build upon and enhance existing regional assets while developing new assets in the creation of the ARD, innovating related to CEA and Kentucky's horticulture industry, and generating a pipeline of high-growth companies operating here and hiring EKY talent. Our regional assets to cultivate an AgriTech ecosystem include:

Site Located and Shovel-Ready: KY PATH's ARD is located in Rowan County, Kentucky. Located in Eastern Kentucky and the Appalachian Region, The John Will Stacy Morgan, Menifee, Rowan County (MMRC) Regional Business Park is strategically located off Interstate 64, just 60 miles between Lexington, Kentucky and Huntington, West Virginia. The location is 1.5 miles from a regional airport and within six hours' drive of 55% of the U.S. population, 56% of the nation's personal income, 52% of retail sales and 62% of manufacturing employment. In September, Rajant Corporation completed a \$2 million relocation and expansion project located in the MMRC Regional Business Park.

Existing Investment: From January 2021 to February 2022 Kentucky has attracted over \$2 billion in investments in food, beverage and AgriTech. Of that, more than \$440 million dollars in private and \$4.5 million in public investment have been deployed to launch the foundation for cluster acceleration in Kentucky's AgriTech/CEA sector. Over 500 jobs have been created with the potential to add thousands more direct and indirect jobs.

Dutch Consortium: In 2020, 17 entities in the U.S. and the Netherlands entered into a cooperative agreement to establish an “agricultural technology ecosystem” in Kentucky and specifically Eastern Kentucky. The Consortium has now grown to 26 entities. This agreement demonstrates private, public and non-profit collaboration to develop a \$10 billion AgriTech market opportunity and help create the catalyst for the Commonwealth to become a global leader in AgriTech/CEA.

National Logistics Hub: Nearly 70% of the U.S. population lives within a day’s drive of Kentucky, making it an ideal headquarters for three of the country’s largest logistics companies: UPS Worldport, DHL and Amazon Prime. Kentucky is also the nation’s #2 air cargo state. Bolstered by 20 interstates and major highways, over 2,600 miles of railroad track and over 2,000 miles of navigable waterways. This leading edge in logistics enhances sustainable growing practices, reducing fuel consumption by up to 80%.

Manufacturing Leader: Manufacturers across the Commonwealth employ more than 250,000 people, providing high wages and upward mobility for Kentucky families. The sector represents \$37.5 billion of the state’s gross domestic product and employs 13% of the state’s workforce, compared with the national average of 8.5%. At least 70 agriculture-related manufacturers, services and technology providers currently operate in the Commonwealth.

Postsecondary Education and Workforce Development: Six Kentucky colleges and universities, 16 community colleges and vocational schools across 70 campuses and three Dutch universities have partnered to develop the curriculum necessary to educate and prepare young people for meaningful careers in AgriTech and CEA. KY PATH has partnered with the Eastern Kentucky Advanced Manufacturing Institute (eKAMI) to expand workforce training and accreditation programs for incoming jobs. KY PATH will deploy the Eastern Kentucky Concentrated Employment Program (EKCEP), which administers Workforce Innovation and Opportunity Act (WIOA) programs in 23 Appalachian counties, to develop extensive expertise in providing services and careers to dislocated workers and disadvantaged youth in the region.

Research and Development: KY PATH has partnered with the University of Kentucky (UK), a nationally leading state research and land grant institution with research expenditures totaling more than \$429 million in FY 2020 and footprint in all 120 Kentucky counties. UK’s Institute for Sustainable Manufacturing, a national hub for advanced manufacturing research and innovation, will provide KY PATH with a multidisciplinary collaborative research unit whose primary objectives are to develop and advance sustainable manufacturing principles and practices.

Innovation and Entrepreneurship: Through the regional coalition partnerships, KY PATH includes entities specializing in technology development, industry partnerships, social innovation, economic development initiatives, startup accelerators, venture capital funds, startup recruitment and engagement. Kentucky has established incredible momentum related to entrepreneurship, successfully establishing national-stage accelerator programs (Launch Blue) and global startup competitions (Render Competition). KY PATH relies on existing private and public entrepreneurship ecosystem partners and investors including UK Innovate, Access Ventures, Awesome Inc., UK Venture Capital LP, Invest606, Kentucky Highlands Investment Corp., and SKED to identify, support, and invest in regional innovators.

Culture and Tourism: The Foundation for Appalachian Kentucky coordinates eight community foundation affiliates across the region attracting millions of dollars in private investment to then reinvest in local priorities including equity initiatives, entrepreneurship and downtowns.

Private Section Participation

A project with the anticipated impact of KY PATH cannot be successful without the dedicated time, effort, support, commitment and investment from the private sector. For this reason, the KY PATH leadership team has already, and will continue to, secure the interest and commitment from industry, investment firms, and private not-for-profits to ensure sustainable impact from the various component projects and their interrelated activities.

Construction of the ARD – The AgriTech Research and Development (ARD) Center is a unique investment designed to provide the necessary space for concentrated activity to catalyze research, innovation and entrepreneurship in a way that can launch and sustain an ecosystem to benefit the Eastern Kentucky region for decades to come. The idea for, design of, and management of the ARD stems from the deep and committed involvement of numerous industry partners that make up the Dutch-Kentucky Consortium. This coalition includes 26 industry partners from the Netherlands and Kentucky that have reflective interests in seeing a best-in-class facility to advance controlled-environment agriculture and the future of food develop therefrom. This Consortium has worked together for more than a year to solicit input and best practices, including a tour of the HortiCenter in the Netherlands to view the success achieved there. Further, the coalition will continue to advise design, construction and ongoing management of the facility.

Research in the ARD – The ARD must be a world class facility to catalyze research and innovation related to controlled-environment agriculture, fresh food supply, and food system solutions. For this reason, numerous companies will be involved in the development of problem statements, sponsoring research, and collaborating to form industry consortia related to the capabilities generated by the ARD 6-acre greenhouse and research labs. Research programs, in many instances, will be developed in partnership with industry and private sector partners, with many already a part of the Consortium identified above.

Entrepreneurship in the ARD – A startup ecosystem will be generated through the Food Chain Global Startup Challenge. This project requires the committed effort of numerous industry partners. Render Capital, Awesome Inc., and the Kentucky Science and Technology Corporation (KSTC) are private sector, entrepreneurship ecosystem organizations committed to the Challenge leadership team through their time, effort and resources. Kroger, AllTech, and Rubicon, among others (see LOS) serve as industry partners with enthusiastic and committed support of time and resources to advance the Challenge’s goals in the food chain. Further, the Challenge has a roster of committed private sector support from organizations such as Black Soil, to ensure equity and diversity of perspective and inclusion is achieved through the AgriTech Inclusion Coalition (AIC).

Project Sustainability

The KY PATH proposal will allow Kentucky to lead the nation in sustainable food production for a growing population through the advancement and implementation of high tech growing systems while creating new good paying jobs for those in Eastern Kentucky. These systems will create additional opportunities for growing safe and nutritious foods for consumers, while advancing environmental sustainability within the horticulture industry.

Existing Public Support: The Commonwealth of Kentucky had prioritized the development of the AgriTech cluster prior to the BBB Challenge. Governor Andy Beshear (see LOS) recently included \$75 million in the budget to support the ARD to match the State’s Phase 2 BBB Challenge Grant. In addition,

an additional \$50 million has been secured as a match to support projects that enhance physical infrastructure and support for industry.

Investment to Support Industry Growth – The private investment community has stepped up in a big way to build a capital stack that will support the entrepreneurship ecosystem growth that results from KY PATH. Render Capital, Kentucky Enterprise Fund (through KSTC), Hunsicker Investment Management and UK Venture Capital LP, Gill Holland, Rural LISC, Invest606, and Southeast Kentucky Economic Development (SKED), are representative of the private investment firms that have come to the table to commit investment dollars, experience and venture advice to sustain wealth generation from the EDA’s investment in this project (see LOS). A Future of Food Fund of between \$5-\$8 million will be raised with the private dollars of these and other partners, for direct investment in the food solutions high-growth companies that engage with the Challenge and KY PATH.

Industry Sustainability: Established partnerships and collaboration with industry will attract innovation to rebuild Eastern Kentucky. The essential components of a sustainable AgriTech Ecosystem in Kentucky have been studied and identified by Wageningen University & Research, the University of Kentucky, the University of Pikeville along with industry leaders in both Kentucky and the Netherlands. A study completed by Wageningen recommended that establishing relationships to deepen the consortium will enhance the AgriTech Ecosystem. They further suggested adding representation from inside the horticultural value chain, such as producers, logistic and packaging, as well as outside the horticultural value chain, such as providers of renewable energy, waste valuation and the food industry. During Phase 1, the Consortium continues to expand its reach to include representatives from these sectors.

Business Model: The KY PATH proposal will have profound positive impacts at the community and environmental level, but to truly succeed, developing a comprehensive business model will be critical for long-term sustainability. To sustainably activate the facility, a multi-component business model will be developed to include the following revenue streams:

- Startup business recruitment. Through the Food Chain Global Startup Challenge, with relocation incentives through grants and investments.
- Growth of those companies via the investment community, the Food Chain Venture Fund (to be developed), and resources surrounding the facility.
- Research Execution. This would include renting space for Consortium researchers to conduct industry and grant funded research.
- Demonstration space rental. For industry-associated companies to demonstrate products, and have access to meeting rooms and offices.
- Rental space for community events such as workforce training, facility tours, and educational programming.
- Long-term commitment of the state to support workforce training initiatives.

Community Engagement and Quality Jobs

Eastern Kentucky has not emerged from its economically depressed status largely because industry has extracted its natural resources without concern for the sustainability of the region’s land or people. The AgriTech cluster emerged in an effort to create meaningful jobs in the region. For many in this region that means eliminating barriers to work by offering second chance employment opportunities. Substance use disorder has plagued the region and left many wanting to work but challenged to find living wage jobs with a criminal record. Companies, like AppHarvest and AppleAtcha, have prioritized

higher wage employment as they have grown across Eastern Kentucky. The Consortium, and its members, will continue to prioritize the creation of meaningful jobs that are targeted towards Eastern Kentuckians who are without work due to the decline in the coal industry.

The Eastern Kentucky Concentrated Employment Program (EKCEP) is a national leader among workforce development agencies that empowers Eastern Kentuckians to prepare for good jobs. As an example, eKART (Eastern Kentucky Addiction Recovery and Training), was implemented to bridge the gulf between recovery and productive participation in the workforce for individuals in recovery by providing valuable career, training, and supportive services, and by cultivating second-chance job opportunities with Eastern Kentucky employers. As a result, 94 Eastern Kentucky employers either directly hired eKART participants or initiated an on-the-job training (OJT) or Work Experience placement for eKART participants.

KY PATH Partners like EKCEP, the Kentucky Community and Technical College System, regional universities, Area Development Districts, and SOAR are community-based organizations that advocate for the people they serve. Each organization has at its tenets the desire to create a vibrant economy for Eastern Kentucky and for ALL people who live within the region.

Intentionally Inclusive Strategy For Equitable Participation and Benefits

The KY ARD Center will be physically located in Rowan County, Kentucky. This central location was chosen because of its access to necessary infrastructure and proximity to other markets. However, the benefits of KY PATH extend deep across Eastern Kentucky. KY PATH partners are anchored across the region in accessible smaller communities including Perry and Letcher Counties (Southeastern) to Lee, Wolfe and Breathitt (Central) to Martin and Pike (Far East). KY PATH was designed to support those communities most impacted from the loss of the coal industry by intentionally working with partners who serve the people, farmers, businesses and communities across the entire region. The goals associated with Project 5 are to a) build vibrant and resilient communities in Eastern Kentucky to support a diverse tech workforce, b) establish a cluster of high-paying, high-skilled jobs in Eastern Kentucky and c) create a sustainable, remote-enabled workforce in Eastern Kentucky.

KY PATH, through Project 3, will establish an AgriTech Inclusion Coalition (AIC), populated by diverse representatives of the food value chain intentionally formed to ensure equitable and inclusive participation throughout KY PATH's objectives. The AIC will lead a food equity study (U of L Health Equity Innovation Hub partnership) and intentionally solicit input from BIPOC communities of consumers and farmers (Black Soil), in addition to voices from across the various demographics and perspectives affected by the food chain and the various communities it impacts. The AIC will inclusively create problem statements informing KY PATH strategies, and will have earmarked resources (see Challenge CTIA funds; KSTC scope of work) to engage these communities.

KY PATH, through Project 5, will address the fact that the region lacks leaders representative of the inclusive communities this project strives to create which has led to an outmigration of BIPOC communities over the decades. KY PATH Partners like FAKY, AIF, Leadership Kentucky, Invest606, EKCEP, and SOAR are community-based organizations that empower those audiences who have been marginalized to civically engage and participate in the rebuilding of their community. Each organization is driven to create inclusive communities that are necessary to genuinely transform Eastern Kentucky into a region where people want to live, businesses want to operate, and tourists want to visit.

Goals, Outputs, and Outcomes

As a review, within Project 1 and 2 goals, we will construct the Kentucky ARD Center and activate a world-class research program to innovate current AgriTech technologies. Project 3 and 4 goals are to

launch the AgriTech cluster and grow the industry by incentivizing and supporting high-growth innovation and companies, and improving access to creative forms of capital to grow these businesses. Finally, Project 5's goal is to build inclusive communities where the new AgriTech workforce would want to live, work and play. While each of these projects has its own goals, objectives and strategies, the success of KY PATH relies on the integration and alignment of all five projects together. We have highlighted overarching outputs and outcomes below.

Outputs: A state of the art facility that serves all of Eastern Kentucky, AIC established, accelerator cohorts completed, number of Incubator graduates, awarded Trellis funding, number of events, private and public funding to support research, number of workers with new certifications

Outcomes: New patented innovations, new high-growth businesses that hire employees, new jobs that pay above a living wage, new follow-on investment in high-growth businesses, new leaders representing the BIPOC community, new residents moving to Eastern Kentucky

Phase 1 Progress

The KY PATH team has made significant progress in the short time since our proposal was submitted in October of 2021. Our accomplishments are listed below.

- Hired the RECO: Alison Davis, PhD, Professor of Agricultural Economics and Executive Director of the Community and Economic Development Initiative of Kentucky, at UK
- Added nine new Consortium members: Delphy, Royal Brinkman, Arcadis, KSU, Wageningen University & Research, HortiTech, Kentucky Fresh Harvest, AppleAtcha, Kentucky Horticulture Council
- Added new industry partners including Alltech, Kroger, Rubicon, and 80 Acres
- Added new educational partner: Kentucky State University
- Added new investment partners: Rural LISC, UK Venture Capital LP, Gill Holland, Brooks Smith
- Completed an abbreviated feasibility study for the business incubator housed at the ARD
- Completed an Incubator Management Plan and commenced an advisory study to inform best activation of entrepreneurial co-working space
- Acquired the land for the ARD
- Continued preparations for the design and construction of the ARD
- Contributed to new legislation defining Controlled-Environment Agriculture
- Welcomed new AgriTech Companies to Kentucky including Arcadis and 80 Acres
- Kentucky Governor Beshear included \$75 million in his Fiscal Year 2023 budget to support KY PATH

Remaining Phase 1 Activities

- Create an RFP for a firm to design and construct the ARD
- Continue to work with the Consortium to identify how to activate the space within the ARD to generate a world class research center
- Formalize a 5-year strategic plan for the ARD including a detailed plan of work for the first two years
- Complete MOU for coalition managing the Challenge and Trellis
- Finalize plan to form general partnership entity (GP and LPs) for Future of Food Fund
- Launch KY PATH website