



IMPACT REPORT

KSTC

KENTUCKY SCIENCE & TECHNOLOGY CORPORATION

AdvanceKentucky



KEYHORSE
CAPITAL

KY Innovation Hub
Quarterly Update

From the President

“ As the president of KSTC, I am both proud and energized as I share this 2021 / 2022 Impact Report with you. As we exit the depths of the worldwide pandemic, KSTC had a very successful year. I am proud of the hard work that went into expanding and deepening our initiatives — both newer programs and those we’ve executed for years — and energized by the teams behind these initiatives. The momentum they’ve generated will carry us into even bigger accomplishments in the year ahead.

Our programming is focused on the three pillars of growing an innovation-driven economy: **research-driven products and services, access to capital, and talent development**. And, because we know that Kentucky’s innovation ecosystem is only made better by including more ideas and voices, we strive to ensure that **all Kentuckians can access the support, resources and programming we provide**.

You will see program highlights throughout this report, yet know that there are many more that we could not fit into the following pages. I encourage you to explore more highlights through kstc.com or the individual program websites. Thank you for your time and interest in our initiatives. If you have further questions, do not hesitate to contact me at tsamuel@kstc.com.



Terry Samuel | KSTC President



Kentucky Science & Technology Corporation

KSTC is a private, nonprofit corporation committed to accelerating innovative economic development in Kentucky. We are a fast-paced leader developing and managing creative initiatives in education, economic competitiveness and scientific research since 1987.



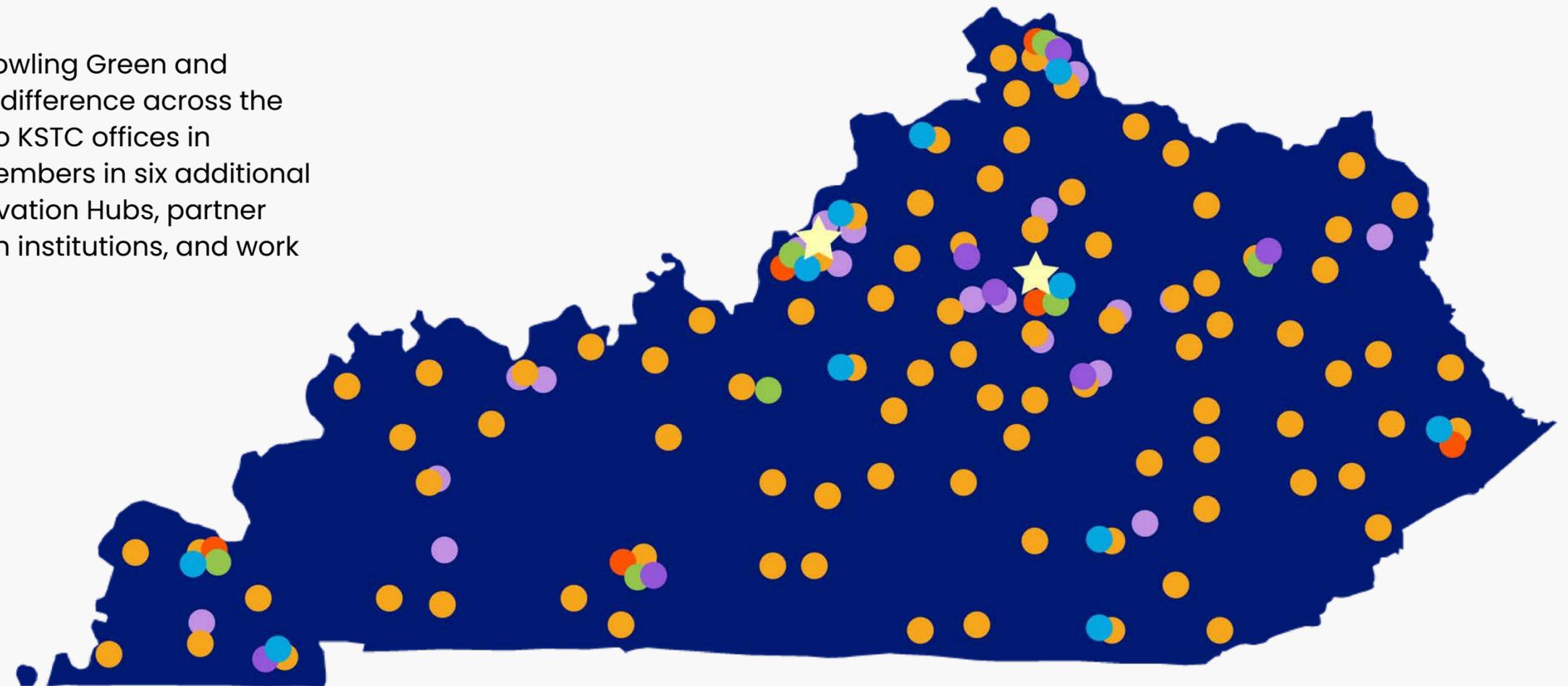
Supporting Technological Achievement

From education and research to capital and business services, KSTC supports innovation at all stages.



Statewide Reach

From Paducah to Pikeville, Covington to Bowling Green and everywhere in between, KSTC is making a difference across the Commonwealth of Kentucky. In addition to KSTC offices in Lexington and Louisville, we have team members in six additional locations, oversee the six regional KY Innovation Hubs, partner with Kentucky's 24 public higher education institutions, and work with K-12 schools in 90 counties.



★ KSTC Offices: Louisville & Lexington

- AdvanceKentucky
- Kentucky Commercialization Ventures
- Kentucky Science & Engineering Foundation
- KY Innovation Hubs
- Keyhorse Capital
- KYPTAC

Long-term Vision and Immediate Impact

This year, KSTC hit big milestones for both decades-long programs and new initiatives. **Three program milestones are highlighted below, and you can read the full Impact Report to learn about the remarkable accomplishments from all KSTC initiatives.**



We celebrated 20 years of investing in Kentucky's early-stage startups with the launch of Keyhorse Capital. This rebrand of our investment arm sets the stage to increase access to capital and expand opportunities for Kentucky's entrepreneurs through collaboration with accelerators, incubators, innovation partners and peer investors throughout Kentucky and the U.S.



Introducing Keyhorse Capital, KSTC's rebranded investment arm



Our Kentucky Commercialization Ventures team facilitated the **first-ever patent application from a Kentucky community college** (a provisional patent for 3D printing innovations at Somerset Community College) and the **first income from a KCV-supported licensing agreement** between Eastern Kentucky University and their faculty-led spinout company, Eastern Scientific.



Pandemic-born innovation spurs first patent filed through Kentucky's community college system **Testing the waters: ECU professor improves access to critical resource with new innovation**



The Veterans Accelerated Learning for Licensed Occupations (VALLO) program wrapped up its 4-year grant through the U.S. Department of Labor and **secured funding for a new initiative, VALOR**, through the Kentucky General Assembly. The new program will put the occupational pathways established through VALLO to work by recruiting and supporting service members as they transition to civilian careers in Kentucky.

Thank You to Our Partners

Public and Private Partners Advancing Innovation Across the Commonwealth

Program Funders

Appalachian Regional Commission with SKED and Advantage Kentucky Alliance
Code.org
GEAR Up with Partners for Rural Impact
Kentucky Department of Education
KY Innovation at the Kentucky Cabinet for Economic Development
Raytheon
U.S. Department of Defense
U.S. Department of Labor
U.S. Small Business Administration (SBA)

- SBA FAST Program
- Growth Accelerator Fund Competition
- Lab-to-Market Inclusive Innovation Ecosystems Competition

Donors

Breeding Henderson & Hord
Central Bank & Trust Company
Eastern Kentucky University
Jane and Terry Samuel
Joanne Lang
Lexmark International
Murray State University
University of Kentucky

With Support From

Amplify Louisville • Blue North • Bowling Green Chamber of Commerce • Brown Foundation • Code.org • CSforALL • Eastern Kentucky University • Fayette County Public Schools • Initiative for Military Families • Kentucky Community & Technical College System • Kentucky Highlands Investment Corporation • Kentucky State University • Kentucky Veteran Business Alliance • Lexington-Fayette Urban County Government • Morehead State University • Murray State University • National Math & Science Initiative • Northern Kentucky University • Representative DJ Johnson • Shaping our Appalachian Region (SOAR) • Somerset Community College • Southeast Kentucky Economic Development (SKED) • Sprocket • Turner Construction • University of Kentucky • University of Louisville • Western Kentucky University



IMPACT REPORT

●●●
AdvanceKentucky

AdvanceKentucky

With support from partners such as the Kentucky Department of Education, National Math and Science Initiative, Code.org and many others, AdvanceKentucky works with school districts across Kentucky to provide professional development, mentoring and student recruitment to increase enrollment and success in STEM classrooms. We focus our efforts on critical areas that provide opportunities for students as they transition through their academic career. Our efforts are focused through **three main initiatives**:

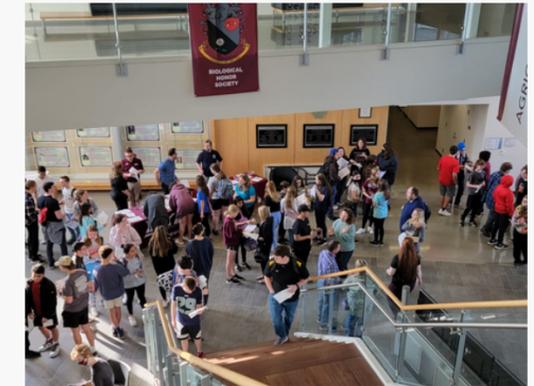


College Readiness Program



AdvanceKentucky's College Readiness Program (CRP) works to increase the number of students enrolling in AP[®] mathematics, science, English, capstone and computer science courses and to strengthen the teaching of those courses. We evaluate the program's success by the number of students taking and earning qualifying scores on AP[®] exams. For the 2021-22 school year, teachers reported 91% of their students intended to take the AP[®] exam. Priority for participation is given to schools and teachers in a position to grow their AP[®] programs for underrepresented student populations.

Key initiatives for teachers include our annual Fall Forum and Spring Mock Exam Scoring. National-level and College Board consultants are brought in for these events to work with teachers to improve their craft. Student initiatives include the Mock Exam and AP[®] Exam Prep Sessions. AP[®] Exam Prep presenters are largely comprised of Kentucky teachers, many of whom are alumni of the College Readiness Program.



Program Impact To Date

135

Schools Served

1,130

Teachers Served

101,500

Student Enrollments

\$5,438,000

Incentives

\$21,752,000

Tuition Savings

"As always, AdvanceKentucky PD is the BEST out there!"

Fall Forum Participant



Growth in AP[®] math, science, and English (MSE) qualifying scores during a cohort's three years of participation is one of our primary metrics. To date, the three-year percentage increase in AP[®] MSE qualifying scores for all students is 133.2%. Looking specifically at the underrepresented populations of minorities and students that qualify for free-and-reduced lunch, those rates are 247.8% and 231.2% respectively.

Access to Algebra

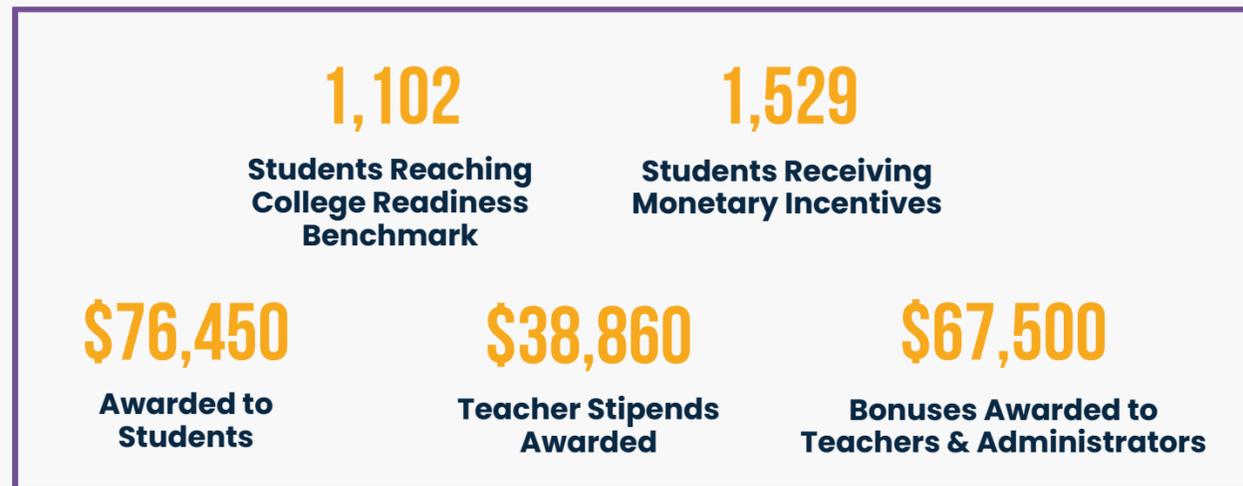


The Access to Algebra program incorporates training, incentives and funding to develop a rigorous middle school math program. Data indicates that without these rigorous programs, students are ill-prepared to pursue STEM coursework and careers. Our mission is to better prepare students by increasing participation and success in eighth grade Algebra and other accelerated math courses, especially for students traditionally underrepresented in advanced courses.

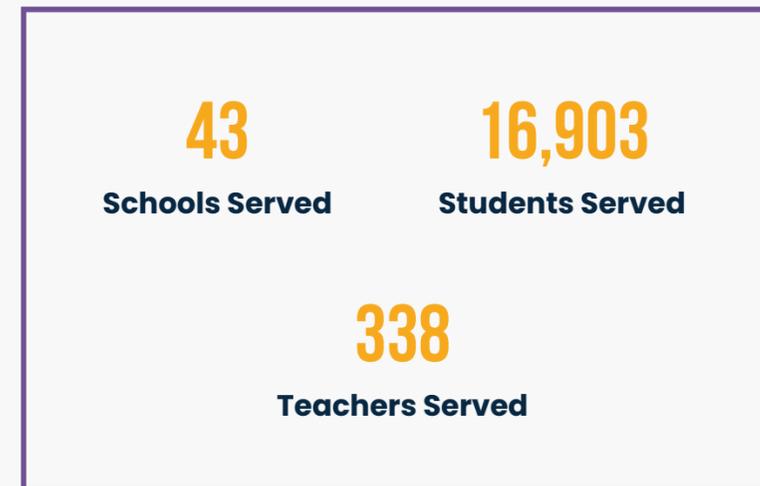
Initiatives for teachers include 72 hours of Laying the Foundation training led by Kentucky teachers who have been endorsed by the National Math and Science initiative (most of whom participated in AdvanceKentucky) and an annual Access to Algebra Leader Assembly that brings together administrators and teachers from across the state to share their experiences and best practices. Student initiatives include the PSAT 8/9 Exam and a Content Review Session.



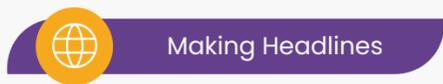
2021-2022



Program To Date



“A2A has given us tools, resources, manipulatives...to advance our students and prepare them for advance coursework. Why would you not take advantage of this?”
South Floyd Elementary Teacher



Money for Math Success Burns Middle Schools honors algebra achievements

Computer Science Initiatives

AdvanceKentucky is working to make computer education available for all K-12 students in Kentucky by:

- Being a hub for computer science planning, advocacy and implementation
- Providing meaningful professional learning opportunities for teachers
- Encouraging students and teachers to pursue professional computer science industry certifications
- Partnering with school districts to create and implement robust computer science plans, and
- Providing support for the growing computer science community

Our key initiatives include serving as the regional partner for Code.org professional learning programs, CSforAll SCRIPT Workshops that provide the tools for a school district to create and enact a K-12 computer science plan, the iCodeKY program that partners with Apple Professional Learning to prepare teachers to teach students to code with Swift, and partnering with the Kentucky Department of Education and Somerset Community College to provide professional learning for teachers to offer courses in additive manufacturing (3D printing) to their students.

This year we revitalized the state chapter of the Computer Science Teachers Association to build community and advocacy for computer science teachers, piloted the new Code.org AP® Computer Science A (object-oriented programming in Java) course through AdvanceKentucky’s virtual learning academy, and worked with the Kentucky Department of Education to develop new pathways in additive manufacturing and engineering.



“AdvanceKentucky has been instrumental in providing guidance and support as Knox County develops its computer science opportunities for all students, K-12. This rapid growth of computer science opportunities for our students is a direct result of our partnership with AdvanceKentucky!”

Dr. Jennifer Mills, Technology Integration Specialist, Knox County Schools

557

Teachers in Code.org

37,402

Students in Code.org

112

Teachers in iCodeKY, ExtendCSA & 3D Printing Programs

120

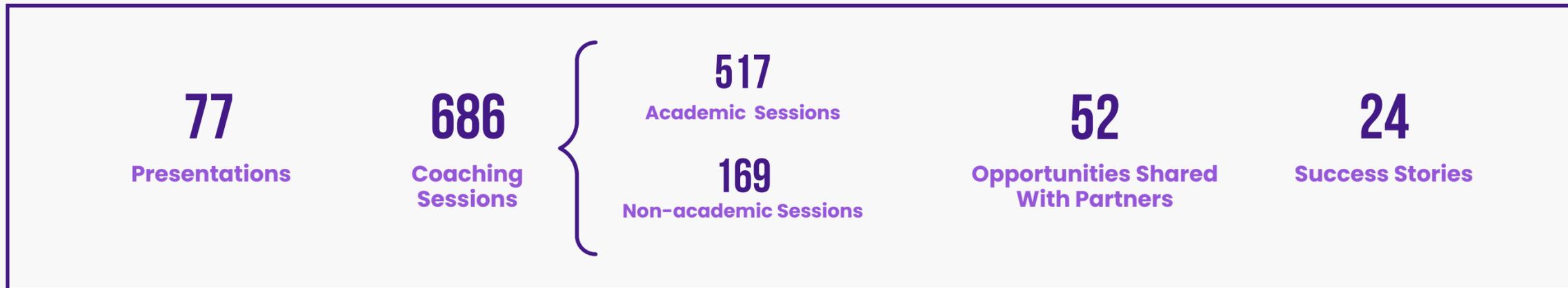
Teachers Earned Approval for Computer Science



Kentucky Commercialization Ventures

Kentucky Commercialization Ventures (KCV) is a public-private initiative, led by KSTC, that unites Kentucky's 24 public higher education institutions to support and increase regional participation in commercialization. KCV has five internal programs and three partner programs to support Kentucky innovators.

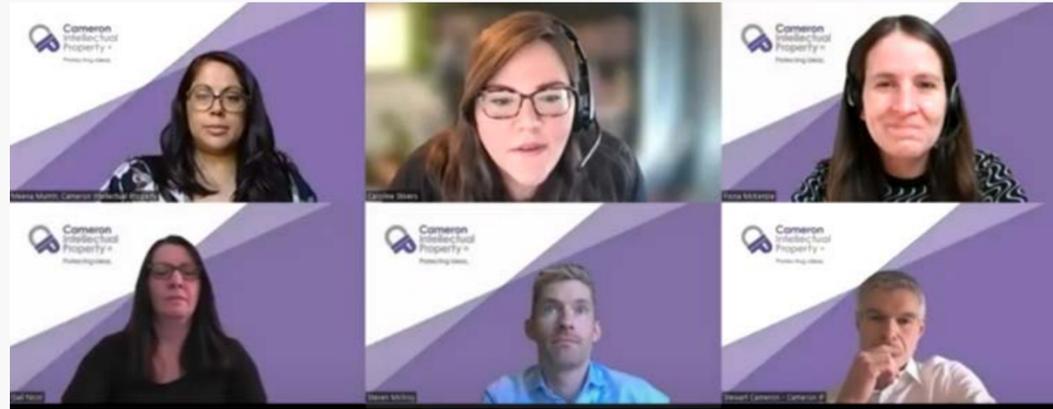
Lives Impacted



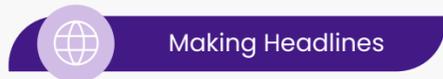
Opportunities Developed



Initiatives to Empower Big Ideas

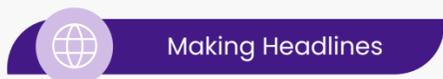


This year, we developed and launched the KCV Innovation Fellowship to provide an experiential learning program focused on commercialization. This program was designed to equip the next generation of ecosystem builders with the practical skills necessary to lead the translation of Kentucky's most innovative solutions into the real-world market. Seven Fellows from several regional institutions graduated from the inaugural cohort in April 2022.



Kentucky Commercialization Ventures names 10 fellows to inaugural innovation program

We launched the **Kentucky Intellectual Property Alliance (KYIPA)** to foster an effective ecosystem and marketplace to facilitate the creation, protection, and advancement of intellectual property in Kentucky by serving as a connecting organization statewide. Partnerships have been made with a wide range of organizations (including Midwest USPTO, Inventors Network KY, Invent Together, WIPO, and Cameron IP) to provide monthly webinars to the public with an average of 25+ attendees each. In its first year, KYIPA gained 81 members (including IP lawyers, academia, corporate partners and entrepreneurs) and hosted five virtual events.



Kentucky among first states to launch an intellectual property alliance – here's why it matters

Initiatives to Empower Big Ideas

To challenge innovators from regional institutions to create solutions relevant to the improvement of the social, health or economic condition of Kentucky, we launched the **KCV IMPACT Competition**. Six innovators from five different regional institutions were awarded up to \$25,000 toward the development of their idea.

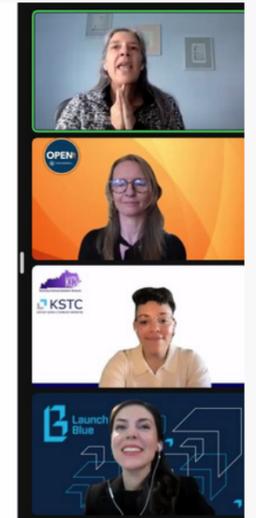
Our **KCV GOAL (Growth, Opportunity, and Learning)** program provided funds to sponsor regional institutions to gain access to and participate in nationally recognized programs for innovation excellence. Over the course of the year, the program supported ten opportunities for regional institutions, including Launch Blue, UAccel, LaunchIt, AUTM Annual, and UIDP Mission in Motion. We continue to search for new opportunities to share with regional institutions as appropriate for their needs.

We on-boarded three interns from regional higher education institutions as part of the **KCV Internship** launch. The program provides students a unique educational opportunity and experience in the field of IP, technology commercialization, business development, marketing, and transactional law.

and the winner is . . .



OPEN



KCV IMPACT Competition

Through the inaugural **KCV IMPACT (Innovative Mobile, Public Health, And Community-Oriented Technologies) Competition**, a total of \$86,000 was awarded to enhance development of innovations at five different regional institutions including Western Kentucky University, Eastern Kentucky University, Northern Kentucky University, Morehead State University and Murray State University.



Dr. Daniel Boamah



Dr. Rachel Tinius



Dr. Nicholas Caporusso



Dr. Jamie Fredericks



Dr. Christopher Lennon



Dr. Kouroush Jenab

First Place Winners
\$25,000

Runners-Up
\$9,000

"We would not be able to move forward with our research efforts without the KCV IMPACT funds."
Dr. Daniel Boamah



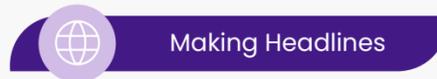
Making Headlines

Here are the winners of the inaugural KCV IMPACT competition

KCV Wins



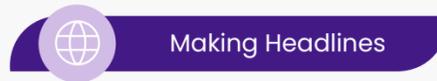
Six teams from KCV partner institutions were awarded a total of **\$229,808 through the KYNETIC** (Kentucky Network for Innovation & Commercialization) grant program.



**KYNETIC selects winners of early-stage commercial grants
KYNETIC funds 9 proof-of-concept projects across Kentucky**



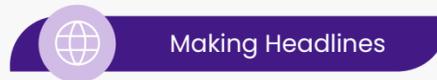
Eastern Kentucky University (EKU) received its **first income from a KCV-supported license agreement** to a faculty-led startup company, Eastern Scientific. Formed in 2020 by an EKU faculty member, Eastern Scientific licensed rights to EKU IP in November 2021 and has already begun making commercial sales of their product, leading to the remittance of funds to EKU.



Testing the waters: ECU professor improves access to critical resource with new innovation



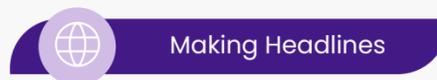
KCV was awarded \$50,000 in the U.S. Small Business Administration's **Growth Accelerator Fund Competition (GAFC)**. The award was announced in conjunction with the Small Business Innovation Research (SBIR) Catalyst competition, a new component aimed at spurring investment in underrepresented communities within the innovation economy at scale.



Four Kentucky organizations win SBA awards supporting entrepreneurship



Kentucky Community & Technical College System filed the **first-ever patent application from a Kentucky community college** with support from KCV. The provisional patent was for innovations in 3D printing developed at Somerset Community College.



Pandemic-born innovation spurs first patent filed through Kentucky's community college system

IMPACT REPORT



KENTUCKY SCIENCE &
ENGINEERING FOUNDATION

Kentucky Science & Engineering Foundation

Historically, the Kentucky Science and Engineering Foundation (KSEF) has had a broad scope – “raise the bar” on Kentucky’s competitiveness in pursuing federally supported research grants and contracts. In the past, KSEF executed the Kentucky Commercialization Fund (CommFund), the Research and Development Excellence (RDE) and the SBIR/STTR Phase Zero and Phase DoubleZero award programs. We were also the first in the Commonwealth to connect SBIR/STTR federal program officers and consultants with Kentucky tech-based small businesses through outreach and training, raising Kentucky’s success rate in winning SBIR/STTR awards from federal agencies.



This year, KSEF was once again awarded the FAST grant from the U.S. Small Business Association to further our mission of increasing Kentucky’s innovation economy through research grants. We also broadened our efforts to raise Kentucky’s success in the SBIR/STTR federal programs.

SBIR/STTR programs are highly competitive, yet they are the sole non-dilutive source of federal funding exclusively available to small businesses. The programs encourage companies to de-risk their innovations and further develop a viable product while also providing basic early commercialization guidance. KSEF consults with these small businesses to prepare them to compete for SBIR/STTR federal awards, a time-intensive effort.

To increase capacity for this support and in order to scale, we are delivering SBIR proposal accelerators and providing microAwards to allow small businesses to prepare a stronger SBIR/STTR application.

79

Companies Served

389.5

Consultation Hours

32

Companies Recruited for NASA & DOD Accelerators

microAwards

Reducing Barriers to SBIR/STTR Funding

This year, we introduced a new microAward program to reduce the barriers that early-stage companies face when seeking SBIR/STTR funding. The program provides grants of up to \$5,000 for expenses related to submitting a competitive proposal.

We exceeded the target goal for the program, providing 125% of planned funding and awarding microAwards to 20 Kentucky companies. This success indicates the urgent need for a program such as this, where companies can have flexibility in use of funds not tied to a specific proposal submission to increase their capacity to submit a successful SBIR/STTR application. Funds were used for a variety of purposes including purchasing materials and supplies, conference and training fees, and hiring expert consultants.



microAwards

Reducing Barriers to SBIR/STTR Funding



Moving from another state to Kentucky was one of the hardest things that our business has ever done... Thankfully, we were welcomed by the Kentucky startup community and introduced to Kentucky Science & Technology Corporation (KSTC) and Kentucky Science & Engineering Foundation (KSEF).

Receiving the KSEF SBIR \$5,000 microAward and ongoing support from KSTC programs has enhanced our ability to make progress and provided a backboard for a smooth transition to entrepreneurship in Kentucky.

The KSEF SBIR microAward has truly removed barriers to our startup's prototype research and design activities. We successfully submitted an SBIR Grant to the NIMHD with the NHLBI sponsoring our application efforts through the ECG NIH application assistance program initiated by our contact with KSEF.



Dr. Bernard V. Miller III,
Founder/CEO of Miller Diversified
Health Partnerships, LLC



**2022 microAward
Recipient**

Agency-Specific Accelerators

Increasing Participation in NASA & DOD SBIR/STTR

Through agency-specific SBIR/STTR proposal accelerators, we collaborate with other service providers to match companies with the appropriate federal agency and help them align with released proposal topics. Accelerator participants then receive intensive coaching and support through the eight-week process of submitting a competitive proposal.



NASA SBIR/STTR Accelerator

16
Companies
Enrolled

1
Submission

Department of Defense SBIR/STTR Accelerators

DOD 22.1



12

Companies
Enrolled

2

Submissions

1

Company Accepted to
GreenTech Accelerator
Challenge

DOD 22.3

8

Companies
Enrolled

4

Submissions

2

Congressionally Directed
Medical Research
Programs Letters of Intent

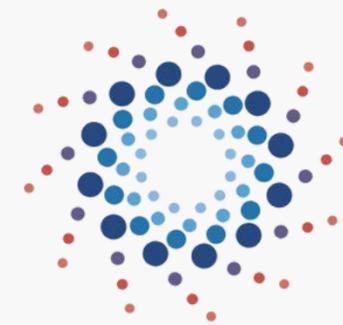
17%

of Enrollees had Business
Case for DOD & Submitted
Proposals

Company Consultations

Supporting Competitive SBIR/STTR Proposals

In addition to agency-specific accelerators, we provide one-on-one consultations to support companies in submitting competitive SBIR/STTR proposals to a variety of federal agencies.



SBIR • STTR
America's Seed Fund™

POWERED BY SBA

40	6	7
Proposals	Federal Agencies	Federal Awards



CDMRP



IMPACT REPORT

KY INNOVATION HUBS
with



KY INNOVATION
CABINET FOR ECONOMIC DEVELOPMENT



KY Innovation Hubs

The KY Innovation Hubs are an integrated network of six, regional centers across the state with the purpose of driving economic development through entrepreneurship and innovation. The Hubs assist local entrepreneurs – those who have started a scalable, innovation-driven business and those considering starting a business – by providing coaching and connections including access to resources in their local community, throughout the state, federal agencies, to other Hubs, post-secondary institutions, and KSTC's statewide programs. Startup resources include access to early-stage capital, strategic connections, potential customers, mentors, startup programming and events to enrich the vibrancy of strong, regional startup communities.

KSTC leads the management of the Hubs, coordinates with the Cabinet for Economic Development, supports the statewide entrepreneurial ecosystem, tracks the appropriate metrics with the Hubs and ensures their implementation. Additionally, we develop and deliver training and tools for the Hubs.

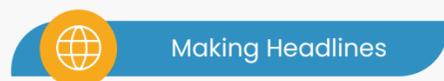
KY Innovation Hubs

[Amplify Louisville](#)
[Awesome Inc.](#)
[Blue North](#)

[CREATE](#)
[GroWest](#)
[SOAR](#)



Toward the latter part of the fiscal year, a new initiative began to unite members of the startup community in Owensboro to establish a satellite office within the Central Kentucky Hub, CREATE (to begin July 1, 2022). Most importantly, as the year progressed, the Hubs continue to work together organically as a team, supporting each other, sharing resources and collaborating for the benefit of Kentucky startups.



[KSTC names new executive to lead innovation hubs](#)

Establishing Metrics

Tracking Kentucky Wins

We established a common set of impactful metrics used to measure the Hubs' outcomes in January 2022 and updated Salesforce records, dashboards and reports to track these efficiently moving forward.

Results are self-reported by each Hub monthly. To increase transparency, results are shared in quarterly, public updates open to the community, media and other entrepreneurial support organizations. Weekly startup success stories are shared on social media, with our media partner KY Inno and in quarterly "State of Startups Kentucky" reports.

[View the KY Innovation Hubs quarterly update recordings](#)

Key Metrics <i>All Hubs</i>	6-Month Goals <i>January - June 2022</i>	6-Month Results <i>January - June 2022</i>	6-Month Results <i>July - December 2021</i>
Number of startups served through 1:1 coaching sessions	1,820	2,069	2,175
Number of startup connections made to appropriate resources	523	995	1,185
Number of startups advanced using the Village Capital viral pathway of 9 Stages of Startup Growth	70	56	New Metric
Number of new startups created or attracted to the state	50	90	New Metric
Number of new jobs created	326	772	589
Number of events / programs	156	357	
Number of event attendees	2,819	8,637	
Number of startups funded	48	50	New Metric
Amount of investment in those startups	\$25,050,000	\$174,911,570	New Metric

Tools & Resources

Helping Kentucky Startups Succeed

Innovation Hub Tools

We provide continued support, training and enhancements to the software tools used by the Hubs to access data about the entrepreneurial support activity they are providing, including Salesforce and PitchBook. All new Hub team members were trained on Salesforce, and everyone received PitchBook training. Salesforce enhancements included startup and founder demographic tracking, a revised capital formation record, new dashboards and reports with Hub-defined goals, and the ability to clone records. Custom Startups Funded reports were created for each Hub both in a shared drive and PitchBook for ease of regional tracking.

Startup Resources Tool Kit

To help the Hubs connect startups in their region to resources they need to be successful, we created a comprehensive tool kit of all statewide startup tools, resources and support programs. The tool kit is designed to be a one-stop digital collection of information and contacts for the Hubs to connect their clients to stage-appropriate help. The tool kit now includes export resources, funding resources, government contracting, intellectual property, market research services, mentorship, tax credits and workshops. We continue to add to these resources, with plans to include accelerators, equipment access, meetups/programs, a resource guide for socially and economically disadvantaged individuals (SEDI), and workspaces.

Kentucky Startups Funded Report

Kentucky now has its own, comprehensive Startups Funded tracking report using verified anecdotal data and PitchBook information. Any anecdotal investment deals not found in PitchBook are reported to PitchBook with documentation and are quickly updated to show a truer sense of Kentucky's investment landscape nationally.

“This is great! Thanks for getting something out there for us to leverage!”

Colby Hall, SOAR, Pikeville
(referencing the new Startup Resources Tool Kit)

IMPACT REPORT



KEYHORSE
CAPITAL

StartUP
Appalachia Regional Business Pitch Competition

PAY TO THE ORDER OF Dakota Hoskins

DATE: June 23rd 2022

\$ **10,000.00**



Keyhorse Capital

Supporting exceptional founders with a vision to go the distance

To celebrate 20 years of investing in Kentucky's early-stage startups, KSTC launched the new Keyhorse Capital brand. This rebrand of our investment arm sets the stage to increase access to capital and expand opportunities for all Kentucky entrepreneurs through collaboration with accelerators, incubators, innovation partners and peer investors throughout Kentucky and the U.S.



Making Headlines

Introducing Keyhorse Capital, KSTC's rebranded investment arm

**Michael Brizendine
of Yornest**

Improves Group
Communication



**Jose Gaztambide
of GoodMaps**

Helps Us Navigate
the Indoor World



**Kristina Rodriguez
of OrgVitals**

Brings Humanity to
the Workplace



Founders Stories

Learn more about founders tackling challenges through innovation and building new businesses in Kentucky.

Kentucky Enterprise Fund

Keyhorse Capital manages the Kentucky Enterprise Fund (KEF) in partnership with KY Innovation. We invest in early-stage, innovation-based, high-growth companies.

Program Totals To Date

\$40M **\$90K** **\$1.5B**

Invested

Average Salary
for New Jobs

In Follow-On
Capital

This year we...

Worked with KY innovation and Innovation Hubs on sourcing, deal preparation, and private investor syndication

Certified 49 awards
(from a pool of 137 applications, requesting over \$35 million)

Invested \$4.68 million in Kentucky companies, with 20% of companies based in rural communities

Assisted, advised, and managed a portfolio of **89 companies** across the Commonwealth

	FY02-19	FY20	FY21	FY22	Total
Applications Reviewed	1,762	29	54	137	1,982
Funds Requested	\$155,919,921	\$6,490,000	\$14,957,000	\$35,343,250	\$212,710,171
Number of Awards	670	8	32	49	760
Amount of Awards*	\$49,370,441	\$1,000,000	\$4,675,000	\$4,848,250	\$59,893,691

**Due to the nature of investment rounds and KSTC's matching requirements, not all investment awards move forward to completed investment transactions.*

Portfolio Milestones

Cloverleaf – A Covington-based automated coaching platform intended to help businesses detect and combine personalities for a team, raised \$9M in a Series A funding round.

First KEF investment in 2018

CLOVERLEAF

FreshFry – A manufacturer of cooking oil filtration pods created to offer a safe and easier way to replenish and extend frying oil life announced a 10K square foot expansion of its headquarters in East Louisville.

First KEF investment in 2016



BehaVR – An Elizabethtown developer of virtual reality therapeutics designed for mental and behavioral health signed a potential \$163M deal to create VR therapies to treat a range of mental health disorders.

First KEF investment in 2018



“KEF and Keyhorse/KSTC have been instrumental in our success. Not only has the capital made growing our business a reality, but the professional insight has proven to be invaluable.”

We have been meeting with KEF management on a regular basis for years and their expertise has been extremely helpful in the growth that has allowed us to create well-paid, high-tech jobs.”

Sam Razor
Hippo Manager Software



Lexington-based **Hippo Manager** was successfully acquired by private equity in 2022, securing a continued growth path for the local company, financial returns for investors, and contributing capital back into the Kentucky Enterprise Fund which fosters evergreen funding for new Kentucky companies.

First KEF investment in 2015



Investing in Scalable Innovations

Providing capital for Kentucky companies at their earliest stages of development

The majority of KEF portfolio clients are working with a Kentucky university or college. Through the end of FY22, 62% of KEF investments had a Kentucky university or college as a partner, meaning that the company has spun out from the partner, is building a product or service based on intellectual property from the partner, or has partnered with the school for development.

Investments by University Partner

University	Amount	%	#	%
University of Louisville	\$13,116,934	33%	86	28%
University of Kentucky	\$8,033,042	20%	57	19%
Northern Kentucky University	\$1,022,498	3%	13	4%
Western Kentucky University	\$938,460	2%	10	3%
Murray State University	\$741,048	2%	3	1%
Bellarmino	\$311,000	1%	4	1%
Not Applicable	\$16,036,488	40%	131	43%
Total	\$40,199,470	100%	304	100%



FY22 Investments

Young companies with the potential to win



**Enviro
Fresh**



Goodmaps



NASCEND™



pramā



**Nexosome
Oncology**



pav*r



XENA



UJOIN

IMPACT REPORT

 **KYPTAC**



Kentucky Procurement Technical Assistance Center

The Kentucky Procurement Technical Assistance Center (KYPTAC) promotes inclusive economic development across the state of Kentucky by assisting companies in the process of providing products and/or services to federal, state and local governments. We accomplish this by coaching, training and equipping businesses with the tools they need to succeed. Our scope of services also includes increasing access to subcontracting opportunities and facilitating opportunities for small businesses to work with large prime contractors.



Expanding Support Statewide

KYPTAC is a statewide program that supports all 120 counties in the Commonwealth, with seven regional offices in Bowling Green, Covington, Elizabethtown, Lexington, Louisville, Morehead and Paducah. We are the only program in the state specifically designated to assist businesses in securing government contracts and/or subcontracts at no cost to the client.

This year we expanded our reach with **two new regional offices in Bowling Green and Elizabethtown** and a communications coordinator.

Additionally, in collaboration with the KY Innovation Hubs, six of our KYPTAC Procurement Consultants have office space co-located with the Hubs. This allows local clients to connect more easily with KYPTAC consultants and Innovation Hub staff. The result has been an increase in new clients and client consulting hours.



★ KYPTAC Headquarters in Lexington



Procurement help available through new local office
New center helps businesses secure federal contracts

Partnerships to Increase Access

KYPTAC partnered with University of Kentucky and Turner Construction to launch a **Construction Diversity Accelerator** in spring 2022. A first for Kentucky, the program is designed to help minority-owned, women-owned, and other underrepresented construction businesses gain access to tools, resources and opportunities to be competitive in the construction industry. The program received national recognition from the Defense Logistics Agency for excellence and innovation in a PTAC-led program. The success of the inaugural cohort was shared with PTAC locations across the U.S. Additionally, both Louisville Metro Government and the Iowa PTAC wish to replicate the program in their areas.



UK to launch new construction diversity accelerator
UK's Construction Diversity Accelerator Program Welcomes Inaugural Cohort

In partnership with Southeast Kentucky Economic Development Corporation and Advantage Kentucky Alliance, we launched a new **SEED (Supplier Education and Economic Development) training event** series to improve the competitiveness of manufacturing companies in coal-impacted counties in Eastern Kentucky. The series kicked off in June 2022 with a goal of helping participants win government and private contracts.



KYPTAC maintains an excellent working relationship with the Kentucky District SBA that includes hosting joint training events and exchanging client referrals. In the past year, we hosted **18 training events with the SBA.**



KYPTAC Client Spotlight

V-Soft Consulting Inc.



V-Soft Consulting has provided superior IT staffing and digital transformation solutions to American businesses since 1997. Headquartered in Louisville, Kentucky, V-Soft has offices across North America and India.

Purna and Radhika Veer founded V-Soft after noticing a gap in the staffing market. Highly skilled and sought-after IT positions were going unfilled and hindering business growth. The Veers built V-Soft to answer businesses' toughest challenges: IT staffing and retention.

For help winning government contracts and expanding their business footprint throughout Kentucky, V-Soft turned to KYPTAC in 2018. They work closely with the KYPTAC consultants to look for bidding opportunities to expand their IT consulting work through government contracts. V-Soft also takes advantage of KYPTAC's monthly schedule of webinars and resources to learn new strategies for winning these contracts. Additionally, KYPTAC assisted V-Soft with reviewing their capability statement to better market themselves to government agencies.

V-Soft is also capitalizing on connections made through the KYPTAC team. The team assisted in finding potential partners in IT staffing to form a partnership agreement for the VA Medical Center in Louisville and made introductions to the Native American PTAC to expand V-Soft's reach with potential Native American vendors interested in subcontracting opportunities. With KYPTAC's help, V-Soft is building a network of partners for subcontracting and contracting opportunities, specifically with minority and disadvantaged businesses.

“Attending the KYPTAC webinars to learn how to contact government agencies won us our bid with Kentucky Housing Corporation...I feel very fortunate to have such qualified people as resources to help grow V-Soft's business.”

Annita Rucker
Sr. Business Development
Manager
V-Soft Consulting



Veterans Accelerated Learning for Licensed Occupations

Credit for Service

Veterans Accelerated Learning for Licensed Occupations (VALLO) is a four-year, \$1.5 million U.S. Department of Labor grant awarded to Kentucky Science and Technology Corporation in 2018. Kentucky is one of three states to be awarded the grant. VALLO works to ease transitions for military service members to civilian employment by overcoming burdensome disconnects between military training and civilian licensure requirements.

Our goal has been to give service members credit for their education, experience and certifications obtained in the military so they may be quickly licensed and employed in Kentucky. Our team worked diligently to create accelerated pathways to licensure in the areas of healthcare, protective services, skilled trades, transportation, education and business. We proposed Kentucky legislation to impact veteran employment and licensure mobility, bridged coursework and degree program curriculum in higher education institutions, and established occupational pathways through public/private partnership.

In the final year of the VALLO grant, efforts have included launching remaining accelerated pathways, documenting pathways for veteran use and documenting program processes for the use of state replication and interstate portability models. Federal Department of Labor grantors recognized our VALLO program as having the highest number of completed pathways as well as pathways that contain the most streamlined processes and/or credit awarded to veterans. Many of our documented processes and policies will be used as a guide for other states looking to replicate licensure reciprocity initiatives.

Finally, as we completed the federal VALLO program, we began working toward a subsequent, Kentucky-specific program, **VALOR: Veterans Accelerated Licensure Occupational Recruitment**.



Veteran-Centered

Our approach to establishing the VALLO pathways upheld the best interest of the service member while prioritizing the shortest, most direct pathways to occupational licensure. To support veterans with different entry points to the civilian workforce, we established “levels” of pathways:

- Pathways such as 68W to A-EMT, where credit is directly applicable towards licensure
- Pathways such as Welding, where several semesters of coursework may be eliminated due to military experience
- Educational pathways that lead to a vast variety of occupations through the Organizational Leadership and Learning Program at University of Louisville. This program credits up to two years of a four-year program for military education and experience.
- Pathways such as Home Inspector that have veteran benefits (such as tuition discounts or mentorship) are open to any military occupational specialties.



"The civilian to military EMS licensure pathway will help hundreds of military personnel to transition from military to civilian life with ease.

This will benefit the person transitioning as well as Kentucky's EMS system that is currently suffering from a critical paramedic shortage."

Robert G. Andrew, II
Director of Education
Kentucky Board of Emergency Medical Services

VALOR

Putting VALLO Pathways to Work

Working with Representative DJ Johnson throughout 2021-2022, KSTC was tasked and funded by the Kentucky General Assembly to establish a two-year program that capitalizes on the accomplishments made under the VALLO grant.

The new program, Veterans Accelerated Licensure Occupational Recruitment or VALOR, aims to use the VALLO pathways to proactively recruit transitioning service members, veterans and military spouses from across the U.S. Armed Services to Kentucky. The VALOR team will help service members navigate accelerated pathways and match these individuals to employers with open positions throughout the Commonwealth.

Maintaining our veteran-focused philosophy, this program will prioritize veterans and their familial needs, the pursuit of purposeful, career-based employment opportunities and initiatives for veteran retention.

“Veterans bring skill sets that will only better [organizations] and if given chances, will shine like no other. I am grateful for the opportunity given to me by the fire department and appreciative that they recognize my education, experience and skill sets that come with being a veteran.”

Austin Reynolds
SSG of 123rd SF in Louisville
940th MP CO veteran, Kentucky Army National Guard

GET INVOLVED

Visit kstc.com to learn more about KSTC and how you can help build an innovation-driven economy for Kentucky.

