

# Institute for Advanced Learning and Research Strategy Report



**FY 2022–2027**

Prepared by IALR



*Photo by Mark Aron/River City TV*

# The Institute for Advanced Learning and Research

has served as a catalyst for economic growth and transformation in Southern Virginia since 2002. We bring together people, talent, mindpower, infrastructure, technology, resources, and so much more to benefit organizations and individuals across the region.

As such, our strategy impacts everyone. Here's why:



## All Businesses

*Provides the confidence and stability to grow and thrive through access to high-tech infrastructure, a ready-trained, highly skilled workforce, and a platform to connect and collaborate with other businesses.*



## The Community

*Offers a connection to the necessary training and employment opportunities in sectors offering above-average wages and the jobs of the future.*



## Local and State Agencies and Other Funders

*Ensures every dollar invested is utilized efficiently with the added benefits of best-in-class facilities and workforce training.*



## Collaborators

*Unites our education and services partners with our forward-thinking team to solve common challenges together and advance the region.*



## EXECUTIVE SUMMARY

Today, the Institute for Advanced Learning and Research (IALR) enjoys a strong reputation built through high-caliber talent, a prestigious board, and excellent facilities. Challenges often stem from untapped potential to better utilize assets to further IALR's mission as a catalyst for economic transformation.

The Institute for Advanced Learning and Research (IALR) was founded in Danville, Va., by the Commonwealth. It was funded primarily through tobacco settlement funds disbursed by the Virginia Tobacco Region Revitalization Commission as well as federal, state, and local sources. Established to diversify, transform, and grow the economy of Southern Virginia, IALR engages the resources of Virginia Tech, Danville Community College, Averett University, and other partners.

Since its founding, IALR has experienced rapid growth marked by extensive infrastructure investment, high-caliber educational programming and workforce development, and applied research supporting economic activity in Southern Virginia and beyond.

With extensive momentum, IALR launched an effort to comprehensively revisit and articulate its strategy for the next five years. This endeavor engaged more than 80 people including the entire board and all employees as well as outside individuals and organizations such as civic leaders, peer organizations, business leaders, and economic development, K-12 education, and higher education centers.

This important and extensive input was channeled through a methodical process starting with revisiting the vision, mission, and values in partnership with the board and employees. From there, the process continued with development of an honest and comprehensive situation analysis in order to develop strategic goals. Finally, we established strategic initiatives to drive toward these goals with specific metrics established to assess the success.

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**With extensive momentum, IALR launched an effort to comprehensively revisit and articulate its strategy for the next five years.**

As a result, we identified six strategic themes outlined in this report: Virginia's Go-To Partner for Business and Economic Growth, Center of Excellence for Education and Workforce Development, Globally Competitive Business Ecosystem, Collaborative Team Success, Excellence

in Board Leadership and Decision Making, Strategic Expansion of Applied Research, and Culture of Learning.

We are excited about the future as we begin the hard work of realizing these strategic priorities. With your continued support and engagement, we can advance our mission as a catalyst for economic transformation to realize our vision of a dynamic economy in Southern Virginia known for its innovative, inclusive, and thriving businesses.



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## Vision and Mission

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### *Vision Statement:*

To realize Southern Virginia as home to a dynamic economy where all can live and thrive.

### *Vision Narrative:*

We envision Southern Virginia as a region of innovation and inclusion that drives growth, contributes to the state and national economies, and serves as a worldwide model for business advancement.

Drawing from our region's agricultural and manufacturing roots, we apply the same work ethic and entrepreneurial spirit to transform Southern Virginia into a hub of business vitality that serves the entire country and beyond. We aspire to build a dynamic economy that attracts innovators and risk takers who know they can thrive here. We strive for an economy that cultivates and enriches businesses seeking growth, evolution, and resilience. And, one that is home to a highly skilled workforce capable of

turning an idea or a vision into reality.

We believe a vibrant regional community is one that provides opportunity for all and thrives because of its diversity of talent, ideas, and perspectives – a place where everyone can succeed. Our vision is for Southern Virginia to be a place where creativity and ingenuity are not only welcomed but expected, and where the desire for progress is never satisfied.

We envision a Southern Virginia transformed by a dynamic economy where all can live and thrive.

### **MISSION STATEMENT:**

The Institute for Advanced Learning and Research **serves as a regional catalyst for economic transformation.** The mission will be accomplished through applied research, advanced learning, economic development, advanced manufacturing, and conference services.

# Strategic Plan

Through close examination we identified six strategic themes, which are outlined in the following plan, to help IALR make its vision and mission a reality, including:

Outcomes



External



### Virginia's Go-To Partner for Business and Economic Growth

*Goal:* Expand into a leading hub for high-value and high-tech companies, growing sectors, and targeted industries for economic development.



### Center of Excellence for Education and Workforce Development

*Goal:* Become the region's epicenter for training and educating a highly skilled workforce.



### Globally Competitive Business Ecosystem

*Goal:* Advance and connect businesses in the Southern Virginia region to ensure they are globally competitive.

Internal



### Collaborative Team Success

*Goal:* Drive cross-divisional collaboration and human capital investments to maximize IALR's impact.



### Excellence in Board Leadership and Decision Making

*Goal:* Optimize board effectiveness to advance IALR's mission.



### Strategic Expansion of Applied Research and Culture of Learning

*Goal:* Expand applied research and establish a culture of learning to serve community and business needs aligned with the organizational and physical assets at IALR.



## Virginia's Go-To Partner for Business and Economic Growth

***Current Situation:*** Unique STEM strengths enable state leadership and complement various industry clusters.

IALR's STEM-related strengths provide unique assets and programming to the region, allowing opportunities for industry leadership and new business growth at both state and national levels. IALR offers leadership in Advanced Manufacturing including both subtractive (CNC) and rapidly emerging additive (industrial 3D printing) manufacturing capabilities, providing rapid launch facilities, inspection, and training environments. This infrastructure is supported by existing training programs such as the Integrated Machining Technology, Haas Technical Education, and Accelerated Training in Defense Manufacturing programs. Additionally, the new Controlled Environment Agriculture Innovation Center adds to the biotechnology infrastructure and knowledge, which is important for both plant and human health research. Likewise, to support this infrastructure, new programs in collaboration with Virginia Tech facilitate work experience for undergraduate data scientists to conduct research at IALR. This momentum sheds light on additional untapped potential to build programs and commercial opportunities connecting regional and IALR-leading capabilities with industry clusters throughout the Commonwealth.

***Future State:*** Future-thinking infrastructure and talent pool provides flexibility in both current and future sectors, including advanced materials and manufacturing, agriculture, life sciences, defense, IT/cybersecurity, and more.

Companies locate to the Southern Virginia region knowing they can launch and train more quickly, fully supported through IALR's services, programming, and network. As a result, other investment and knowledge barriers are minimized, such as access to high-tech equipment, facilities, and a highly skilled workforce. IALR has a proven track record of attracting and graduating companies who are then committed to staying in the region long-term and giving back to the community in which they were built. Additionally, IALR is a trusted collaborator for growing businesses and industry sectors throughout Virginia, providing benefits such as more reliable and efficient supply chains through in-state sourced services.



## Goal: Expand into a leading hub for high-value and high-tech companies, growing sectors, and targeted industries for economic development.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 Expand and grow high-impact programs that have local, regional, state, and national impact and attract individuals and businesses to the region.
- 2 Expand and grow as a primary liaison for state and local economic development initiatives to attract new business to the region.
- 3 Invest in new leading-edge equipment, infrastructure, and related assets that will attract new businesses by engaging in a methodical process of evaluation and informed-decision making.
- 4 Create a comprehensive and high-quality marketing campaign through targeted channels and collaboration with media partners that promotes a positive quality of life in Southern Virginia.
- 5 Collaborate with government agencies and partners to study, inform, and develop various industries supported through the high-tech manufacturing sector in Southern Virginia.
- 6 Expand infrastructure investments in business-ready facilities as demand requires so IALR always has an available space for industry use.

### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

Increase the number of and length of time new companies stay in the region.\*



Meet or exceed Return on Investment (ROI) targets.\*

Meet or exceed projected job growth within new companies.\*

*\*Within strategic sectors that pay above per capita wages and require advanced training/education*

ATDM students  
train on the CNC  
machines at Danville  
Community College's  
(DCC) CNC Lab.



## Center of Excellence for Education and Workforce Development

**Current Situation:** IALR's strength in workforce development serves as an anchor for educational collaboration for training centers, programs, and educators.

IALR uniquely participates as one of five higher education centers in the Commonwealth. In that role, IALR's duties include expanding access to higher education, serving as a resource and hub for all levels of education, and encouraging and coordinating, as appropriate, the development and delivery of programs serving the region. IALR has established a state-leading reputation for workforce development and education support. And it enjoys strong collaboration with educational partners and serves as a known catalyst to launch important educational programs within the region. These efforts are often focused on the STEM-related sectors, most notably in its highly recognized Great Opportunities in Technology and Engineering (GO TEC) program.

**Future State:** In collaboration with higher education centers, university partners, and community colleges, IALR's workforce development programs serve as models for STEM education and training for the Southern Virginia region, the Commonwealth, and beyond.

Individuals complete programs with recognized credentials or certificates to signify their competence in a highly marketable skill. Successful programs such as GO TEC are thoughtfully expanded for IALR and the Southern Virginia region.



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## Goal: Serve as the region's hub for training and educating a highly skilled workforce.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 Maintain strong collaborative relationships with the region's education centers, university partners, community colleges, and school divisions to drive educational programming to meet the needs of current and emerging businesses in the region.
- 2 Support education and training partners in developing new education and workforce initiatives across all divisions to address gaps, barriers, and fill and support talent voids.
- 3 Continue to support and expand high-impact high-quality programs to meet demands of new and existing industry sectors.
- 4 Execute targeted marketing and outreach campaigns to reach prospective students seeking the gap skills needed to meet the workforce needs of industries in targeted sectors with a focus on equity and inclusion.
- 5 Research, develop, and deploy effective learning models with proven student success across all existing and new education and training programs.

#### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

Full program enrollment and 100% job placement following program completion.



Increase number of in-demand and leading-edge programs with education partners.



## Globally Competitive Business Ecosystem

***Current Situation:*** Increasing demand and intentional support from IALR for Southern Virginia businesses.

IALR's conference and business facilities are a natural magnet for startups in industrial manufacturing and STEM-related industries. IALR is already home to the region's economic development center and Chamber of Commerce, making it a hub of business activity. However, there is a need to cultivate and convene existing entrepreneurs and inspire future entrepreneurs who can build their businesses in Southern Virginia. There is limited awareness of IALR's offerings and how they fit with a cohesive set of services offered by others. Successful entrepreneurs thrive in highly connected business ecosystems. The recent IALR expansion will soon result in increased commercial utilization, and correspondingly, increased demand for entrepreneurial support and programming. Without these services, current tenants cannot thrive nor successfully transition into the regional community.

Additionally, there is a desire to direct the economic transformation more as a creative, collaborative, and civically engaged ecosystem vs. recruiting a single-solution large employer. The business community seeks opportunities to develop and inspire young business leaders. Lack of collaboration among businesses and business support throughout the region are cited as a weakness that impedes business growth. IALR's venue space, management flexibility, and capabilities for programming and curriculum development make it poised to successfully provide this support and collaborate with other organizations serving regional businesses.

***Future State:*** In collaboration with K-12 systems, the community colleges and university partners, as well as economic development, local agencies, and business-focused organizations, IALR is a key connector to maintaining and growing existing businesses.

STEM-focused enterprises have direct access to the facilities, knowledge, and services they require to be industry leaders, and IALR actively engages with them to secure their success. Regardless of industry, all businesses in the region feel supported by the available space for convening and training as well as the connections facilitated through IALR. In addition, IALR serves as a credible resource to convene and drive the agenda of actionable issues that will create a vibrant and inclusive ecosystem. There is an intentional effort to identify and address initiatives to improve companies and position them on the leading cusp of research and technology.

Secretary of  
Agriculture Bettina  
Ring joins AeroFarms  
leaders to announce  
their new plant in  
Danville-Pittsylvania  
County.



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## Goal: Advance and connect businesses in the Southern Virginia region to ensure they are globally competitive.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 Actively attract suppliers needed by regional businesses to expand or relocate in Southern Virginia.
- 2 Maintain strong collaborative relationships with partners such as the Chamber of Commerce, The Entrepreneur Ecosystem, SoVA Innovation, The Launch Place, and local economic development centers.
- 3 Develop and provide a suite of resources and contacts to support the growth and success of current businesses.
- 4 Research and disseminate information to support and enhance the region's companies and industries.
- 5 Create targeted marketing to raise awareness of IALR's current activities and resources.
- 6 Provide seminars and networking opportunities that support businesses based on expressed and emergent needs, introducing them to new technologies and connecting them to state, national, and international resources.
- 7 Formalize and expand economic development concierge services to support new and existing industries.

#### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

Growth of existing businesses leading to investments in infrastructure and people based on IALR's efforts.

Increase meaningful relationships with businesses as a valued partner in their success.

Increase reputation as the "go-to" resource for targeted regional businesses, especially for rapid response to support demands in the industry that regional businesses are serving.



## Collaborative Team Success

**Current Situation:** Increased opportunities for collaboration to support talented management team.

IALR leadership has created dynamic pillars of success that overflow with opportunity. As growth and success continue, the increased need for coordination, communication, and collaboration persists in all areas of the organization. The team capacity for this leadership intention is limited; however, opportunities for efficiencies between divisions are underleveraged. There is untapped potential to increase impact due to missed opportunities for inter-divisional collaboration. An unnecessary sense of scarce resources further limits collaboration and regional impact to attract increased funding growth.

**Future State:** Division goals link to IALR's overall strategy and employees understand how they contribute to the overall mission.

Achievement is realized because different areas work together and functions operate with strong coordination due to shared information, known handoffs, and mutual respect. The right structure is in place to fulfill the strategy and its goals. Opportunities and challenges are met together, not solved individually, through leaders who are aware of what is going on throughout the organization. Teams are resourced with the bandwidth to collaborate, capitalize on opportunities, and accomplish the mission in a methodical and measured way. A well-prepared and strong employee base is ready to provide potential successors for management roles. Opportunities and career paths are available.

Members of the Applied Research team discussing current opportunities for collaboration.



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## Goal: Drive cross-divisional collaboration and human capital investments to maximize IALR's impact.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 See ourselves as one team, working together to accomplish the bigger picture.
- 2 Implement project and operational planning principles to ensure inclusion, awareness, and preparedness for all necessary divisions and individuals.
- 3 Develop organizational and divisional dashboards and reporting so everyone in the organization can contribute to and help support one another's outcomes.
- 4 Expand regular staff meetings, communications, and committee reports to ensure all staff are aware of activity across the organization.
- 5 Evaluate, prepare, and add talent to ensure capacity and career paths throughout the organization.

#### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

Increase the number of cross-divisional initiatives that leverage knowledge, resources, and seek collaboration between divisions.



Maintain and increase employee satisfaction and engagement ratings.



Gov. Ralph Northam attends an economic development announcement at IALR.



## Excellence in Board Leadership and Decision Making

**Current Situation:** Strong board can be optimized through enhanced diversity, decision, and engagement frameworks.

The IALR board is extremely strong with intellect, commitment, and influence. This prestigious group is sometimes slowed down by: an undefined process that identifies criteria for investment decisions; unclear priorities defined through a strategic plan; and, lack of delineation between management and board-level decisions. IALR benefits greatly from the board's experience and support for important strategic decisions and guidance. And decisions can be further accelerated by an engagement framework that articulates the involvement of regional community stakeholders, employees, management team, the full board, and the executive team. IALR has increased its focus on board diversity, increasing the number of women, people of color, and individuals of various experiences. These strides are important and meaningful, but not yet fully realized to reflect the regional community its mission serves.

**Future State:** The IALR board is a model for leadership – comprised of individuals with diverse backgrounds and experiences, and full of innovative thinkers.

The board leads the continued fiscal health of IALR using data to drive decisions with clear metrics of success. Limited resources and funding are correctly allocated to advance the mission. The right individuals are involved, informed, and provide input to ensure healthy board involvement and maintain strong decision making. Board members are trained and onboarded with leading curriculum. Succession planning is designed to advance the strategy with continuity and equipped to manage future change. The board and its committees are active with well-defined and clear roles and responsibilities that are separate from and empower the management and their teams to execute the vision. Investment in structure, training, and succession planning will ensure continued strength.



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## Goal: Optimize board effectiveness to advance IALR's mission.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 Develop a consistent process to evaluate priorities, opportunities, and funding decisions that aligns annual strategic review, budgeting process, and outreach with general assembly.
- 2 Continue to develop the board committees as key conduits for guidance, oversight, and consistent communication for continuity during and between board meetings.
- 3 Develop a holistic board succession plan that includes the involvement and development of future leaders, advisory board, outreach with appointing bodies, and healthy attrition with a focus on equity and inclusion.
- 4 Launch comprehensive board training program to address new board member orientation and continued board member knowledge that includes both internal and external components established from a developed curriculum informed by industry leading sources and benchmarking.
- 5 Develop board outreach and engagement plan with other boards and policy makers that aims to strengthen the working relationship, mutual goals, and growth of funds.
- 6 Establish regular program to gather outside data, market trends, and perspectives that can be considered by the board in its continuous strategic analysis related to advanced manufacturing, applied research, and workforce development.

#### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

**Board Performance:**  
Increase performance and satisfaction indicators on new annual board assessment.

**Board Efficiency:**  
Increase speed and ease of communications and decisions.

**Board Diversity:**  
Ensure appropriate board diversity (age, gender, race, etc.) that is representative of the Southern Virginia region we serve.



## Strategic Expansion of Applied Research and Culture of Learning

*Current Situation:* Applied Research potential to expand beyond Agriculture Technology.

Applied research is a broad term that can be applied to all areas of IALR programming. Continued expansion of applied research capabilities may increase opportunities for greater impact in all areas of IALR activity. Applied research provides necessary support in the design and execution of programs, and can also ensure increased opportunities for commercialization. The opportunity exists for applied research to expand beyond agriculture technology.

*Future State:* A long-term research and technology transfer process is strategically informed through outward-facing efforts that identify frontier trends for applied research.

Staff has the time to implement as well as invest in learning and planning for the future, and is rewarded for continuous learning. Investments in state-of-the-art equipment and data systems continue to support that research. IALR continues its development of a professional community that reflects a culture of excellence. Built on existing strengths, IALR provides applied research to a forward-looking agenda in a wide array of applicable industries.

*IALR's senior analytical chemist loads samples onto a gas chromatograph for terpenoid analysis.*



## Goal: Expand applied research and establish a culture of learning to serve community and business needs aligned with the organizational and physical assets at IALR.

### Strategic Initiatives

*Efforts that drive the organization toward the goal*

- 1 Optimize utilization of existing facilities for both research and commercial use by aligning with state and regional priorities for industry development.
- 2 Identify IALR's core strengths and competencies to ensure alignment with potential opportunities.
- 3 Identify regional market needs for applied research for existing and incoming industries.
- 4 Identify collaborative research partners and research funding sources to support identified research initiatives important to targeted industry's needs.
- 5 Expand the existing agriculture resources to make Southern Virginia a destination area for high-tech agriculture companies.
- 6 Utilize IALR's existing subject matter expertise in various arenas to establish a national presence.
- 7 Develop an ROI model for investments in infrastructure, equipment, and human capital that supports strategic goals.

#### KEY PERFORMANCE INDICATORS

*Measures that show our progress toward the goal:*

Increase the number of business-based collaborations that impact Southern Virginia.



Increase initiatives matched with both IALR infrastructure and talent delivery.

Increase professional development for IALR staff to feel part of culture of learning.

# Organizational Values



## Purpose

We believe in our mission and want to surround ourselves with others who share our passion. We believe in supporting colleagues and developing effective partnerships in pursuit of our mission. We are steadfast in our journey to achieve excellence and build a world-class organization, and fervently encourage innovation, risk-taking, flexibility, and learning from our mistakes.



## Partnership

We believe that our vision can only be accomplished through collaboration. Therefore, we actively seek positive relationships and working partnerships with both organizations and the community. We strive to include all necessary groups in our vision. We want to be out there in the community. And, we want to define a relationship that demonstrates what we are doing for them as well as what we are accomplishing together.



## Collective Ownership

We believe that we thrive through teamwork. Therefore, we foster a climate of collective ownership by communicating openly, encouraging participation, and building consensus among parties affected by a decision. We know in this atmosphere, we can develop an invested, results-focused team.



## Diversity and Inclusion

We know the best outcomes are born out of a diversity of talent, ideas, and perspectives. We seek to ensure our organization mirrors the community it serves. Our governance is led by individuals of diverse backgrounds. Our programs and services are designed for and accessible to everyone in the community. And, all act with an awareness and openness to always continue learning and understanding true diversity and inclusion.



## Communication and Respect

We define our relationships and community by valuing and embracing individual differences, constructive conflict, integrity, honesty, fairness, caring, and mutual respect. We actively engage others for feedback and truly listen. We are consistent, frequent, transparent, and intentional in our communication internally, with partners, and with the public.



## Community Engagement

We aim to bring people together. Our active outreach seeks to engage every part of the region. Our transparent communication offers understanding and access. The community is our primary constituent and there is an obligation and honor to engage and convene with them.

# Acknowledgements

The Institute for Advanced Learning and Research would like to thank the following participants for their input on the IALR Strategic Report.

## INPUT FROM INTERVIEWS AND FOCUS GROUPS

*Business, Economic, and Community Leaders*

Rick Barker *President SRI Packaging*

Corrie Bobe *Director of Economic Development at City of Danville, VA*

Clark Casteel *President & CEO at Danville Regional Foundation*

Jessica Edwards *Principal, Regional Entrepreneur Ecosystem Development (Southern Virginia)*

Alexis Ehrhardt *President & CEO at Danville Pittsylvania County Chamber of Commerce*

Greg Feldman *President at Skyline Capital Strategies, LLC*

Mike Grundmann *Senior Vice President, Talent Solutions at Virginia Economic Development Partnership*

Ed Hairston *Owner Hairstons Insurance*

Randy Lail *Independent Consultant and Retired Executive of Peebles Corporation*

Ken Larking *City Manager at City of Danville*

Sean Mallon *VP of Entrepreneurial Ecosystems at Center for Innovative Technology*

Stephen Moret *CEO at Virginia Economic Development Partnership*

Matthew Rowe *Director of Economic Development at Pittsylvania County, VA*

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## EDUCATION LEADERS

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David Matlock *Executive Director of the Southwest Virginia Higher Education Center*

Teresa Petty *Assistant Superintendent of Instruction Pittsylvania County Public Schools*

Brenda Terry *Executive Director Southern Virginia Higher Education Center*

## STRATEGIC PLANNING DIRECTION

IALR Board of Trustees  
IALR Foundation Board  
IALR Management Team  
All IALR Employees and Interns

## STRATEGIC PLANNING SUPPORT

Deaton Group Consulting

