

EXECUTIVE SUMMARY

# Catalyzing Innovation:

Strategies for Missouri to Drive Innovation and Entrepreneurship

Performed For: Missouri Technology Corporation

Performed By: TEconomy Partners, LLC

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*TEconomy Partners, LLC is a global leader in research, analysis, and strategy for innovation-driven economic development. Today, we're helping nations, states, regions, universities, and industries blueprint their future and translate knowledge into prosperity.*

# Foreword

In July of 2019, we began a process to best determine the future of innovation and entrepreneurship in the State of Missouri. At that time, the Missouri Technology Corporation (MTC) launched a national search for a new Executive Director, which I chaired. This search was important because it provided an opportunity for MTC leadership to reflect on the organization's current contributions and the desired future contributions in the cultivation of an entrepreneurial ecosystem in Missouri. That reflection was the beginning of an inflection point—a realization that we should take stock of the successes and lessons learned from our endeavors in spurring entrepreneurial pursuits as background for laying the foundation for the next decade. The next decade will provide tremendous opportunities for investments of time, talent, and treasures in bettering Missouri's entrepreneurial capacity and output. We know that states that recognize the benefits of entrepreneurship and innovation and their role in today's knowledge-based economy are developing policies and programs to establish an inclusive environment that creates, attracts, and retains innovation-based companies and ensures an infrastructure to support them.

In February of 2020, we welcomed the new executive director, Dr. Jack Scatizzi, to MTC and charged ourselves to complete within the next 24-month period a strategic initiative that would lay the foundation for the decade. In January 2021, Governor Parson named me chair of MTC. I accepted the role, having committed much of my career to catalyzing growth and support of innovation and entrepreneurial pursuits. With the support of the Missouri Department of Economic Development and in discussions with the Governor's office, we mapped a 12-month timeline for completing a strategic plan by the Spring of 2022. We established and convened a distinguished steering committee (the Missouri Innovation and Entrepreneurship Strategy Steering Committee) to oversee the design of the Entrepreneurship and Innovation Strategic Plan. The Steering Committee is comprised of a group of 16 talented individuals representing perspectives from entrepreneurs, economic development professionals, academic research and translation, and capital deployment from across the state.

The data show that over the last decade, the MTC has been an essential asset in driving entrepreneurship and economic development throughout Missouri. The organization's successes are a direct result of strategic planning and execution focused on the promotion of entrepreneurship and innovation within emerging high-growth and high-potential markets.

For Missouri to continue to maximize the gains from entrepreneurship, MTC needs a new data-driven strategic plan to support the advancement of entrepreneurship and innovation, create higher-paying jobs, and accelerate economic development on behalf of the State of Missouri. The creation of this strategic plan allows MTC to continue to support and grow Missouri's entrepreneurs and its entrepreneurial-focused ecosystems for the next decade. This plan will help set the direction for policies, programs, and initiatives that foster and support the further growth of entrepreneurs and the advancement of innovation and technology across the State of Missouri.

The desired outcomes for the Missouri Innovation and Entrepreneurship Strategy Steering Committee were:

- A call to action to ensure the State of Missouri prioritizes entrepreneurship and innovation in economic development planning.
- Long-term, statewide entrepreneurship and innovation strategies that leverage Missouri's unique opportunities and help overcome current weaknesses within the state's entrepreneurial ecosystem.
- A detailed, action-oriented roadmap with short- and long-term recommendations for programs, policies, and initiatives aligned with the identified strategic priorities.
- Identification of future processes/performance measures to ensure the strategic plan is responsive to evolving needs.

This report, *Catalyzing Innovation: Strategies for Missouri to Drive Innovation and Entrepreneurship*, represents a milestone in the completion of the strategic plan. A bold set of strategic recommendations and actions have been gathered through the work of our partners TEconomy Partners, LLC under the direction of the steering committee. The background and analysis were data-centered and rooted in objective measures. The engagement across the state was broad and transparent. The outcomes are a bold set of recommendations that will impact the work of MTC and invite other partners across the state to the important mission of advancing innovation and entrepreneurship within the "Show Me" state. While all recommendations may not make it to action in exactly their presented form, the charge was to be bold and unencumbered by current resources. Furthermore, our partners and the committee were tasked to be truly objective and informed by the data in the recommendations for strategic implementation.

I want to thank the members of the steering committee. It was truly a pleasure to convene and chair this body on behalf of the State of Missouri. The dedication and commitment of this group and the many stakeholders from across the state who engaged in this work underscore the energy and enthusiasm for growing the innovation and entrepreneurial ecosystem in Missouri. The engine of innovation seems poised to be aligned, tuned, fueled, and revved. Moreover, the opportunity to reflect on the strong impact of the last decade and the significant potential of the next decade and beyond is inspiring. With this report, we have been charged to Fund, Grow + Scale, Launch + Cultivate, Inspire, and Connect. In the coming months, we look forward to the conversations on key elements of the recommendations for further review and engagement. The final implementation of recommendations will be included in an implementation plan developed by MTC. This report captures an on-time and on-target milestone on our journey to further catalyze innovation in Missouri. We welcome your interest, collaboration, review, and engagement as a partner in this important work. Thank you for your support as we spring forward to a new beginning.

With great hope and optimism for an innovative and entrepreneurial future,

**Dedric A. Carter, PhD MBA**

*Chair, Missouri Innovation & Entrepreneurship Strategy Steering Committee*

*Chairman, Missouri Technology Corporation*



## Executive Summary

Across the nation, states that recognize the benefits of entrepreneurship and the role it plays in today's knowledge-based economy are developing policies and programs to establish an environment that creates, attracts, and retains entrepreneurs, as well as cultivating an infrastructure to support them. With an emphasis on encouraging economic growth that touches all corners of the state, this strategic action plan seeks to inspire more Missourians to participate in the 21st century economy and to foster a resilient state economy for future generations.

From its inception as a state 200 years ago to its status today as a leader in globally significant industries, innovation and entrepreneurship have always played a critical role in driving economic vitality in Missouri by fostering the formation of novel businesses, scaling their operations, and sustaining their growth as they generate new, high-paying jobs. The positive impacts of supporting innovation-based economic development can be viewed in a variety of ways, such as:

- **Driving productivity growth and new-wealth creation:** Innovation-oriented industries in Missouri pay higher wages and stimulate more investment than other sectors. For example, the average earnings of a worker in the State's tech industry were \$112,100 in 2020, nearly double the average earnings for all jobs across Missouri (\$64,000), according to the recent Technology2030 report produced by the Missouri Chamber of Commerce.<sup>1</sup>
- **Commercializing new products, processes, and services:** Missouri has long been synonymous with industries and technologies that help solve key challenges, such as national defense, health and life sciences, food security, environmental sustainability, and other mission-critical topics.
- **Improving the human condition:** Missouri's academic and industrial advancements across the plant, animal, and human health domains have enhanced living standards and quality of life.

Key to advancing innovation are the people who can turn innovation into successful growth-oriented businesses. It is important to note that while most entrepreneurs start by forming small businesses, not all small businesses are entrepreneurial. The needs of small businesses and growth-oriented entrepreneurs may be similar at first, but they quickly diverge. For economic growth to occur, growth-oriented entrepreneurs

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<sup>1</sup> <https://mochamber.com/tech-report/>



must focus on serving customers and markets beyond the residents and businesses in its community—otherwise known as traded-sector activities—in order to drive an increase in a state’s gross domestic product (GDP), which in turn leads to a higher quality of life for its citizens. Business activities that typically focus on meeting the local needs of families and businesses and do not bring new income from outside the region into the region are often referred to as sheltered or locally serving industries. Examples of sheltered industries include restaurants, retail stores, dry cleaners, and state and local government services. While these sheltered industries are critical to Missouri’s quality of life, they rely on purchases from local residents and businesses as their primary market, and so do not generate new income but instead benefit from a growing economy. As noted recently, “Productivity growth in the traded sectors is the primary source of wealth creation and income generation. However, most jobs reside in the non-tradable industries, which are more labor-intensive and less prone to productivity improvements. Productivity growth in the traded sector fuels job growth in the local non-tradable sector through multiplier effects...innovation activities have far higher local multiplier effects than nearly all other sectors, including manufacturing.”<sup>2</sup>

**The Missouri Technology Corporation (MTC) plays a vital role in developing a landscape for innovation-based economic development in the state, which helps support traded-sector entrepreneurs.**

Created by the Missouri General Assembly to promote entrepreneurship and foster the growth of new and emerging high-tech companies, MTC’s mission is to provide leadership and make strategic investments that help entrepreneurs create and grow technology-based businesses in Missouri. MTC supports traded-sector entrepreneurship through high-impact programs such as its support for Innovation Centers, other entrepreneurial support organizations through the Missouri Building Entrepreneurial Capacity (MOBEC) Grant Program, and its investments in Missouri-based, early-stage high-growth technology businesses through the IDEA (Innovation, Development, and Entrepreneurship Advancement) Fund Co-Investment Program. MTC’s portfolio of programs provide strong benefits and positive economic impacts (Figure ES-1).

**Figure ES-1: MTC’s Cumulative Economic Impacts, FY2014-FY2021**



**Source:** Missouri Technology Corporation program data and TEconomy Partners, LLC calculations.

**Note:** Of the 11 Innovation Centers funded over the time period, 9 are still currently operating and providing programmatic services.

2 Emil Malizia, Edward J. Feser, Henry Renski, and Joshua Drucker, *Understanding Local Economic Development: Second Edition*. (Routledge, 2020).

**MTC’s total program portfolio generated an economic activity return of \$100.74 back to the State of Missouri for every \$1 invested—a strong return to the State regardless of the programmatic benefits afforded by the investment.** Furthermore, from a state and local tax revenue return on investment (ROI) basis, MTC’s total program portfolio returned \$2.76 back to the State of Missouri for every \$1 invested. This return indicates that on a direct outlay basis, MTC programs have generated a positive return over the last eight years.

**While Missouri has made significant progress in recent years** (see Appendix A for the complete economic impact analysis of MTC’s investments), **inconsistent funding remains a primary challenge to supporting innovation and entrepreneurship.** Given the importance of innovation and entrepreneurship to economic development in the 21st century, many in the state desire to elevate these themes as policy priorities. Meanwhile, the defunding of MTC in FY18 sent a message throughout the ecosystem that the State of Missouri was not going to expand its entrepreneurial investments that had proven successful, but instead withdraw its support for the ecosystem. This has left founders, programs, and initiatives questioning whether the support and resources they need will be available.

Missouri’s decision to reduce its investments in innovation and entrepreneurship comes at a time when international peers and other competing states are accelerating the pace of new and existing programs, initiatives, and funding streams. At a time when Missouri is not only competing with other nations in the 21st century global economy, but also with many of its peer and neighboring states, its inability to invest in innovation and entrepreneurship could pose future risks to the state’s comparative advantages.

**This strategic plan focuses on developing a systemic entrepreneurial ecosystem with the requisite supports in place to encourage growth in traded-sector industries across the State of Missouri. This study is the culmination of Missouri’s ecosystem stakeholders and partners coming together to form a new, bold strategy for encouraging inclusive, entrepreneurial-led economic growth across the state.** Ultimately, a holistic approach was required to determine how the State of Missouri should promote entrepreneurship, support innovation-based and technology-enabled entrepreneurs, and help drive economic growth through the next decade. As a public-private partnership with leadership covering industry, academia, and economic development, MTC is uniquely situated to help drive this strategy.

Opportunities to encourage innovation and entrepreneurship exist in all corners of the state, and the project team was intentional about soliciting input from throughout the state. At the onset of this strategic initiative, MTC gathered a steering committee of 16 thought leaders from across the state to help guide the effort. Using a multi-pronged, qualitative approach, this effort involved outreach to approximately 500 individuals<sup>3</sup> throughout the state’s innovation and entrepreneurship ecosystem using three distinct components:

- An ecosystem survey to gather input regarding areas such as entrepreneurial culture, risk capital environment, innovation support and physical infrastructure to support entrepreneurs, the business climate, broadband, and other domains. More than 280 individuals participated in this survey, and nearly half (48 percent) of respondents were entrepreneurs.

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3 See Appendix B for a list of stakeholders from across the State of Missouri who informed this effort.

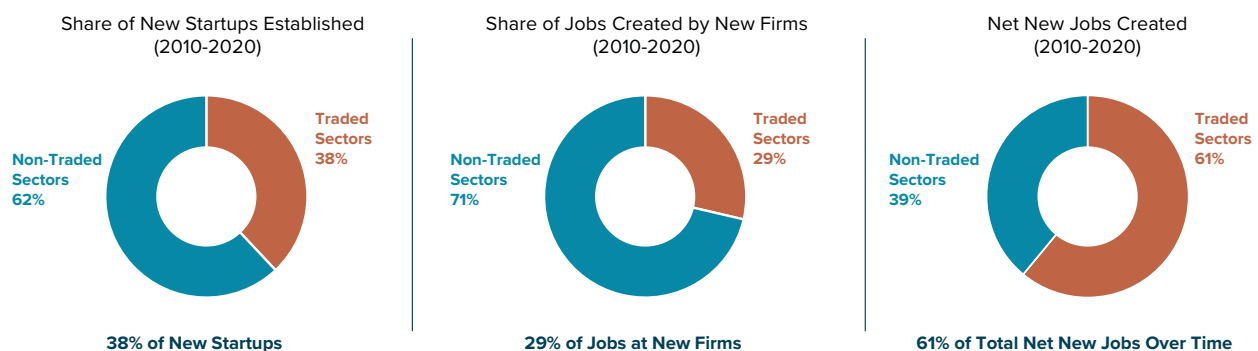
- Targeted interviews with serial entrepreneurs, venture capital providers, leaders of economic development and entrepreneurial support organizations, and other relevant members of the innovation and entrepreneurship ecosystem. In total, there were more than 70 interviews, and many of these discussions included multiple individuals.
- Regional focus groups with more than 120 individuals participating in six, 90-minute discussions to identify how public, private, philanthropic, and educational partners can collaborate in these regions to advance innovation and entrepreneurial development. Beyond these regional conversations, two statewide focus groups were conducted to gain feedback on both the analysis and preliminary recommendations. More than 80 stakeholders from across Missouri participated in these discussions.

## Key Findings That Drive Recommended Actions

Traded-sector firms, those that are serving customers and markets beyond the residents and businesses in their community, play an outsized role in Missouri's economy. By bringing new dollars into Missouri's economy, these traded-sector firms exhibit a strong multiplier effect: new jobs are created as exporting firms buy from local suppliers and as workers buy from local businesses. Economists estimate that traded-sector industries carry a multiplier more than twice as high as non-traded-sector firms.<sup>4</sup>

Over the course of the last decade, most net new jobs created in Missouri were due to the success of the state's traded-sector firms. While the share of new startups established and the share of jobs created by new firms in traded sectors are relatively low—38 percent and 29 percent, respectively—traded-sector firms account for 61 percent of the total net new jobs created over time (Figure ES-2).

**Figure ES-2: Outsized Importance of Traded-Sector Firms to Missouri's Economy**



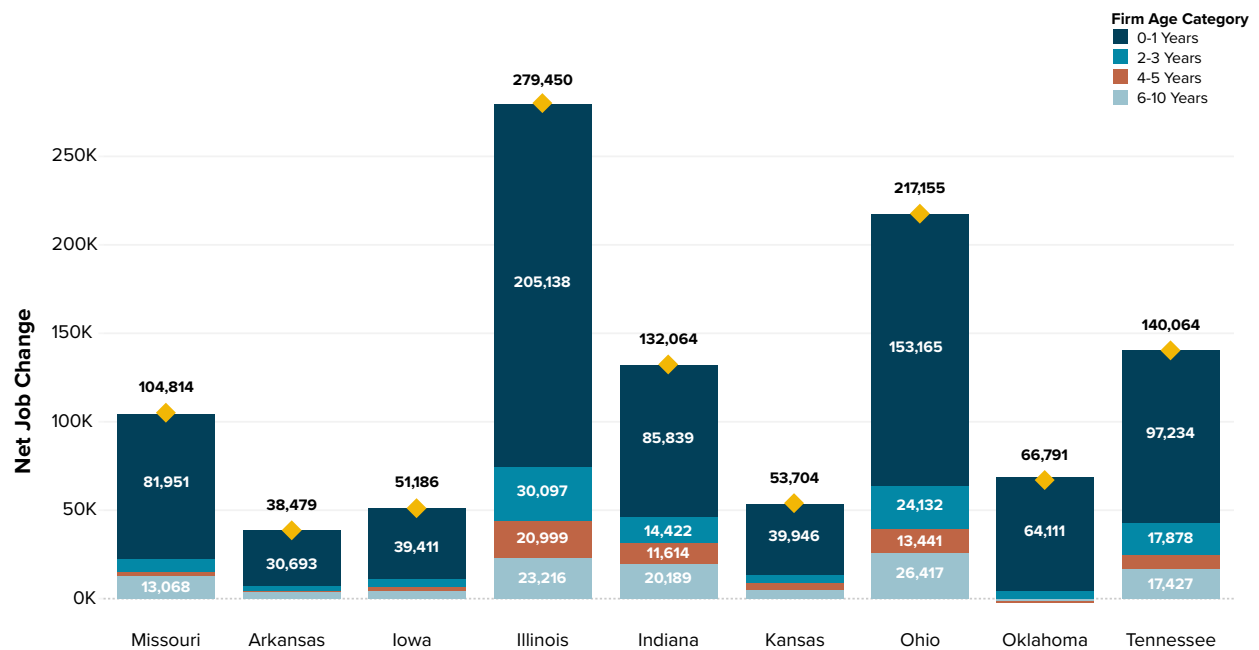
**Source:** TEconomy analysis of BLS Business Employment Dynamics Research and U.S. Census Bureau Quarterly Workforce Indicators Data

4 Timothy J. Bartik and Nathan Sotherland, Local Job Multipliers in the United States: Variation with Local Characteristics and with High-Tech Shocks, (The W.E. Upjohn Institute for Employment Research, March 2019). <https://orcid.org/0000-0002-6238-8181>



However, while traded-sector firms are driving employment in Missouri, relative to all the other benchmark states (with the exception of Oklahoma), the employment contribution from Missouri's young firms is not as robust as they age (Figure ES-3).

**Figure ES-3: Missouri + Benchmark States Traded-Sector Young Firms Total Net-Job Change, 2010-2020**



Source: TEconomy analysis of U.S. Census Bureau Quarterly Workforce Indicators

In many instances, companies are relatively stagnant, not growing in employment once they reach a certain size. Anecdotal evidence suggests that in other instances, companies are growing in employment but are having/choosing to do so in states other than Missouri. This suggests the need for modified or additional resources to encourage economic growth. As a result, **creating opportunities for more traded sector firms to grow and scale in Missouri must be the principal goal of this strategic effort.**

Within Missouri's innovation and entrepreneurship ecosystem, five key challenges were identified as inhibiting entrepreneurial growth. If Missouri is to succeed in creating economic prosperity, it must ensure its competitive position through five means. Each of these approaches directly responds to the primary challenges facing the state's ecosystem (Table ES-1).



**Table ES-1: Recommended Strategic Approaches to Addressing Ecosystem Challenges Facing Missouri**

Challenge Area	Recommended Approach
1. While the amount of risk capital dollars invested in Missouri has grown, the number of deals has declined. This suggests a shift toward larger later-stage investments and fewer early-stage deals, making it difficult for many entrepreneurs across Missouri to access risk capital.	<ul style="list-style-type: none"> <li>• <b>Deploy greater levels of early-stage investment capital</b> to meet the demands of Missouri's growing entrepreneurial base.</li> </ul>
2. Entrepreneurial support services and physical infrastructure remain less accessible, particularly among underrepresented minorities and those living in rural areas.	<ul style="list-style-type: none"> <li>• <b>Foster the growth and scalability of its high-potential, high-growth startups</b> by increasing access to quality entrepreneurial support services throughout the State of Missouri.</li> </ul>
3. There is untapped potential at Missouri's research institutions that is limiting ideation and entrepreneurship.	<ul style="list-style-type: none"> <li>• <b>Launch and cultivate innovative startups</b> by taking advantage of Missouri's research strengths by converting the intellectual assets into market opportunities.</li> </ul>
4. Not enough Missourians are participating in innovative and entrepreneurial endeavors, thereby making access to talent difficult for many startups and growing firms.	<ul style="list-style-type: none"> <li>• <b>Inspire and encourage more Missourians to participate</b> in entrepreneurial endeavors.</li> </ul>
5. There is a lack of connectivity among the various components of Missouri's innovation and entrepreneurial ecosystem, both literally (e.g., broadband) as well as figuratively (e.g., perceived competition and siloed efforts).	<ul style="list-style-type: none"> <li>• <b>Connect</b> as "One Missouri" by overcoming physical and cultural barriers so that Missouri's entrepreneurial ecosystems connect with each other and with the world.</li> </ul>

Source: TEconomy Partners, LLC.

## Missouri's Strategic Framework

To overcome these challenges and help catalyze the innovation and entrepreneurial ecosystem statewide, a series of new initiatives that complement existing efforts are needed across the state. It is recommended that the State of Missouri—along with its strategic private sector, philanthropic, academic, and regional economic development partners— advance a set of five strategies and an associated set of 16 actions to drive innovation and entrepreneurship.



### STRATEGY ONE: FUND

Deploy greater levels of investment capital to help meet the demands of the growing entrepreneurial base.

While recognizing that the amount of risk capital dollars invested in Missouri has grown, it is also important to note that the number of deals has declined. This suggests a shift toward larger, later-stage investments and away from early-stage deals, making it difficult for many entrepreneurs across Missouri to access risk capital. Outreach across Missouri's innovation and entrepreneurship ecosystem raised a range of concerns, including:

- Working capital options needed to grow and scale companies are limited. Because not all businesses are suited for traditional venture capital due to unrealistic ROI expectations, alternative financing options are needed to grow and scale companies.
- Both entrepreneurs and potential investors need more training/education regarding accessing and deploying financial capital.
- The lack of angel investment tax credits (compared to Kansas and other states) is a barrier for both potential investors and early-stage entrepreneurs.
- There is a desire to create new funding mechanisms that address Missouri-specific opportunities, such as investment in industry vertical funds not traditionally financed through equity investments, as well as funds targeting diverse founders.

To address these challenges, three actions are recommended:

#### Action 1. Catalyze additional investment capital funds across the capital stack.

- Support the generation of additional indigenous pre-seed, angel, seed, and early-stage venture capital funds in Missouri managed by resident private fund managers.
- Provide additional nondilutive grant funding by supporting a Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) matching grant program, as well as providing matching dollars for nonprofit organizations that provide direct cash grants.
- Pilot innovative financing options that fill gaps in the state's ecosystem, such as revenue-based financing for business models that do not traditionally attract risk capital dollars, and direct investments for founders from underserved populations (demographic or geographic).

#### Action 2. Incentivize angel investments.

- Create an angel investment tax credit that would provide a qualified investor with a transferable income tax credit equal to 25 percent of an eligible investment in an eligible Missouri company.

- Encourage angel networks by providing funding under Action 1 to offset costs of professional fund management, network administration, and due diligence.

### **Action 3. Evaluate the creation of Missouri Rural Vitality Funds to provide collateral for entrepreneurial loans.**

- A private citizen seeking to invest in their rural community could make a commitment of a personal and/or alternative asset to serve as collateral from which banks could provide loan to local entrepreneurs within the rural region.
- Investors would serve on the Board to oversee the implementation of the program.
- Regional/local banks would conduct due diligence on the loan application, service the loan, and benefit from an increased loan portfolio and potential new customers.



### **STRATEGY TWO: GROW AND SCALE**

**Increase access to quality entrepreneurial support services throughout Missouri to ensure companies are able to grow and scale.**

Over the past decade, Missouri has experienced a significant startup formation rate of traded-sector firms. While Missouri has made many strides in recent years to support these new establishments, there are many concerns that the entrepreneurial support assets and resources are not always equally available. In particular, those Missourians living in rural areas and those who are considered underserved entrepreneurs, including women, veterans, immigrants, rural entrepreneurs, and LGBTQTIA+ individuals, face challenges in accessing essential ecosystem services.

To address these challenges, three actions are recommended:

### **Action 4. Develop a statewide Entrepreneurial Pathways Program.**

- Serve as an intake system for entrepreneurs to learn about and access the various resources within Missouri that are dedicated to assisting entrepreneurs. Missouri can build upon the investment it has already made in the creation of MOSourceLink.
- Enhance the website component by further enhancing a robust wayfinder component that can direct entrepreneurial inquiries to the best resources to help meet their current needs.

### **Action 5. Foster regional efforts to provide quality entrepreneurial support services to high-potential, high-growth, traded-sector startups.**

- In order to support Missouri's high-growth, traded-sector startups as they grow and scale, a comprehensive continuum of value-added programs must be available to all growth-oriented entrepreneurs as they progress through the stages necessary to establish a thriving enterprise. Missouri's high-growth, traded-sector startups must be able to access the following entrepreneurial support service programs regardless of where they are located within the state:
  - **Mentorship Network Program:** to overcome the lack of serial entrepreneurs in Missouri, develop networks of seasoned mentors who provide guidance to promising companies, which in turn make them more attractive to the risk capital community.



- **Entrepreneurs-in-Residence Program:** to ensure consistent, significant, value-added assistance to high-growth companies that are fundable but lack C-level talent.
- **Physical Hub Program:** to support the physical places that serve as a region's entrepreneurial focal point.
- To best assist high-potential and high-growth startups, Missouri should establish two avenues to support the delivery of quality entrepreneurial support services:
  - **Regional Node Funds** are intended to incentivize more of Missouri's communities to successfully coalesce their assets to best support innovation and entrepreneurship through strategic, coordinated partnerships among entrepreneurial service organizations. Funds for Regional Nodes will need to support traded-sector businesses. However, regions will be able to use the funds to support their entrepreneurs, regardless of sector.
  - **Flexible Support Funds** allow Missouri to respond to other areas of need in the state's entrepreneurial ecosystem, including sector-focused efforts and piloting innovative approaches to engage entrepreneurs in rural areas and other underserved communities.

**Action 6. Connect Missouri's corporate partners and anchor institutions with startups, thereby creating a "stickiness" to Missouri for the entrepreneurial endeavor's ultimate success.**

- Provide corporate partnership grants to regional nodes, their strategic partners, and at the state-wide level to develop first-customer programs that support startup growth and educate entrepreneurs on how to best work with corporations (and vice-versa).
- Other examples of support include networking platforms for startups and industry, accelerator programs that link corporations with promising startups and technologies, and programs that support internal innovation efforts at Missouri companies.





### STRATEGY THREE: LAUNCH AND CULTIVATE

Take advantage of Missouri's research strengths by converting the intellectual assets into market opportunities.

Developing a vibrant environment that encourages basic and applied research at colleges, universities, and within industry is essential if Missouri is to catalyze further innovation-led economic growth. It is also critical that Missouri can transfer the intellectual property developed at its colleges and universities into new products, services, and businesses, and ultimately, into new jobs and investment. Currently, there is untapped innovation and entrepreneurial potential within Missouri's research institutions.

To address these challenges, three actions are recommended:

#### **Action 7. Reenergize the Research Alliance of Missouri (RAM) as a mechanism for bringing together the major research institutions of the state to solve common innovation continuum challenges.**

- Reenergize the Alliance to further engage the state's research leaders and break down silos across the state's universities. Activities could include:
  - Streamlining processes that help researchers work with companies across the state and with each other, including partnership agreements, shared-use facility arrangements, and other accommodations.
  - Developing working groups around key sectors related to Missouri's R&D strengths.
  - Encouraging collaborations that help the state's research institutions better compete for federal research funds that require a local match.

#### **Action 8. Leverage the federal I-Corps program and provide startup services statewide to encourage commercialization activity.**

- Continue to coordinate, support, and expand a statewide I-Corps program.  
In particular, the state should:
  - Work with the newly reenergized RAM to scale the program across a greater number of colleges, universities, and research institutions. Expanding this effort statewide would assist an even greater number of researchers, faculty, and graduate students from across Missouri in launching new startups and in validating a technology's market potential.
  - Partner with Missouri's regional entrepreneurial support efforts to provide I-Corps training where the programs are currently unavailable.
  - Identify ways to provide follow-on support services for promising graduates of the I-Corps program.

#### **Action 9. Provide comprehensive assistance for SBIR/STTR awards to further drive commercialization across the state, especially at Missouri's research institutions.**

- Leverage the federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) program to help develop novel technologies into promising young companies. It is recommended that the state develop a comprehensive system to assist potential, current, and past SBIR/STTR awardees. This includes three components:



- Phase 0: Missouri should develop a new program that assists applicants pursuing a Phase I SBIR award.
- Phase I Match: Missouri should support an SBIR matching grant program that provides support for writing applications and serves as a bridge between Phase I and II awards.
- Phase 2 Match: For companies receiving a Phase II SBIR/STTR award, a matching grant could help them further develop commercially viable innovations.



## **STRATEGY FOUR: INSPIRE**

Encourage more Missourians to participate in innovation and entrepreneurship.

Few things are as vital to the long-term prosperity of Missouri's entrepreneurial ecosystem as having access to the talent needed to grow and scale high-potential, high-growth firms. Interviews with key stakeholders suggest that not enough Missourians are participating in innovative and entrepreneurial endeavors either because they have never been connected to these firms and are unaware that they exist, or because they believe that they are not a fit with an entrepreneurial opportunity. Developing these connections will be critical in the state's efforts to support the formation and growth of entrepreneurial firms.

To address these challenges, four actions are recommended:

### **Action 10. Improve access to entrepreneurial programming for students in middle/high school and at community colleges and universities.**

- Develop a statewide effort to improve access to programs that encourage student entrepreneurship through training, contests, and entrepreneurial-focused events.

### **Action 11. Fund an internship program that connects startups with talent.**

- Connect students with paid internship opportunities, thereby providing startups and small businesses the opportunity to recruit their future workforce.

### **Action 12. Offer entrepreneurial education across Missouri through regional partnerships.**

- Deliver nationally recognized approaches to lean startup education while also tailoring each program to the unique circumstances of specific regions and providing an entryway into support services.

### **Action 13. Enhance Missouri's storytelling capacity to encourage more Missourians to be entrepreneurial.**

- Implement a storytelling campaign through aggressive marketing, public relations, and signature events that celebrates successful entrepreneurs who can serve as role models for would-be entrepreneurs currently sitting on the sidelines, unsure how to engage.



## STRATEGY FIVE: CONNECT

Overcome physical and cultural barriers to better connect Missouri's communities with each other and with the world.

Connectivity is missing between the various components of Missouri's innovation and entrepreneurial ecosystem, both literally (e.g., broadband) as well as figuratively (e.g., perceived competition and siloed efforts). Over the last 10 years, while Missouri has made major strides in entrepreneurship/innovation, there is still a sense that the state is not reaching its full potential due to a range of disconnects and other environmental factors that impede further growth.

- **Inter- and intra-regional competitiveness is hindering the ability to realize “One Missouri.”** There is a need for initiatives that encourage greater levels of collaboration across Missouri. Many regions of the state exist in silos, and even within regions, there are further challenges related to coordinating existing resources and working together across silos. The geographic boundaries traditionally used to define some parts of the state may result in a fragmented distribution of resources. For example, within rural Missouri, the large geographic boundaries that define service areas can make it challenging for entrepreneurs to access services as a result of geographic distance. In the state's two largest urban settings, efforts have been taken in recent years to address long-standing inter-regional divisions, but challenges remain.
- **There is a disconnect with internal and external perceptions in the state regarding the importance of innovation and entrepreneurship to Missouri's economy.** There is concern that the defunding of MTC in FY18 sent a message throughout the ecosystem that the State of Missouri does not prioritize investments in innovation and entrepreneurship, but instead has withdrawn its support for the ecosystem. This has left founders, programs, and initiatives questioning whether the support and resources they need will be available.
- **Available and affordable high-speed internet is recognized as the greatest business infrastructure need across Missouri, and the greatest threat to Missouri's innovation climate.** The economic competitiveness of Missouri's communities depends on the widespread availability and accessibility of broadband, for every business and household in the state. To encourage innovation and entrepreneurship, modern technology infrastructure that can handle cloud, data processing, and other capabilities is needed.

To address these challenges, three actions are recommended:

### Action 14. Realize One Missouri: Improve connectivity within and between regions.

- Foster connectivity among and between the various ecosystem partners from across the state via a variety of means, including conferences, technology showcases, pitch competitions, recognition/celebration events, workshops for entrepreneurial-related activities and training, cross-regional mentorship programs, etc.

### Action 15. Link Missouri's innovation and entrepreneurial ecosystem to the world through an external marketing campaign.

- Undertake an external marketing campaign that communicates to key audiences, both domestically and internationally, the depth and breadth of Missouri's unique resources and opportunities that the state provides for advancing the innovation economy.

## Action 16. Deploy broadband infrastructure across Missouri.

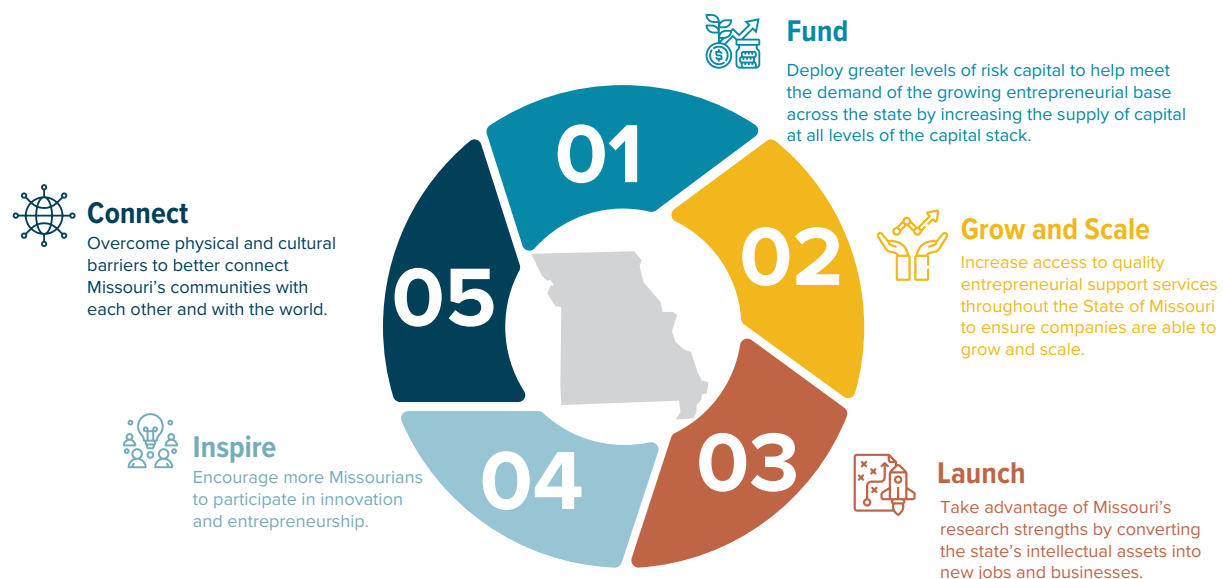
- Leverage federal resources to fund broadband infrastructure in underserved areas of the state. Ultimately, this strategy cannot successfully impact entrepreneurs across the state if Missouri's lack of broadband infrastructure is not addressed.

## Summary

**This strategic action plan for the State of Missouri charts a course for the state to encourage innovation and entrepreneurship over the next decade.** For Missouri to see widespread economic growth across all its communities, there is a need to develop a robust innovation and entrepreneurial ecosystem that can foster the formation of novel businesses, help scale their operations, and sustain their growth as they generate new, high-paying jobs. Developing a robust ecosystem to support innovation and entrepreneurship is an essential part of encouraging economic development in Missouri.

Generating these outcomes does not happen on its own, but rather through a series of intentional, strategic, and proactive decisions. The innovation and entrepreneurial strategy is driven by public-private-philanthropic partnerships that capitalize on Missouri's strengths while ensuring that future innovation and entrepreneurial investments are focused on building the ecosystem that will help ensure the state's economic vitality for years to come (Figure ES-4).

**Figure ES-4: Five Strategies to Support Innovation and Entrepreneurship in Missouri**



Source: TEconomy Partners, LLC.

**A focus on these five thematic areas will help ensure the state's future economic vitality for all Missourians.** Anticipated economic and societal impacts that will be realized from the successful implementation of this innovation and entrepreneurial strategy include better paying jobs with higher growth potential, the ability to weather future economic challenges, and inspired future generations who will reach their full potential.



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