

From Insights to Impact: **Fostering Innovation Through** **Texas Higher Education**

Texas Life Sciences Summit

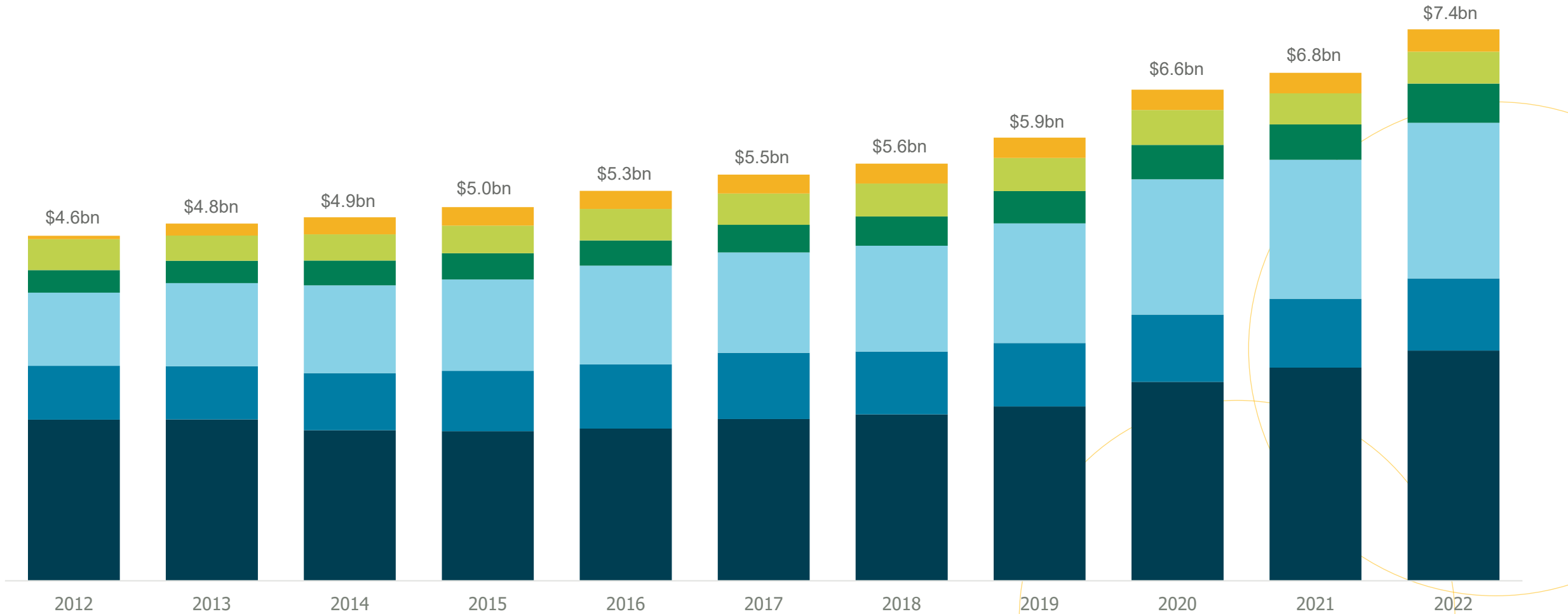


Higher Ed Research Expenditures

Research Funding in Texas

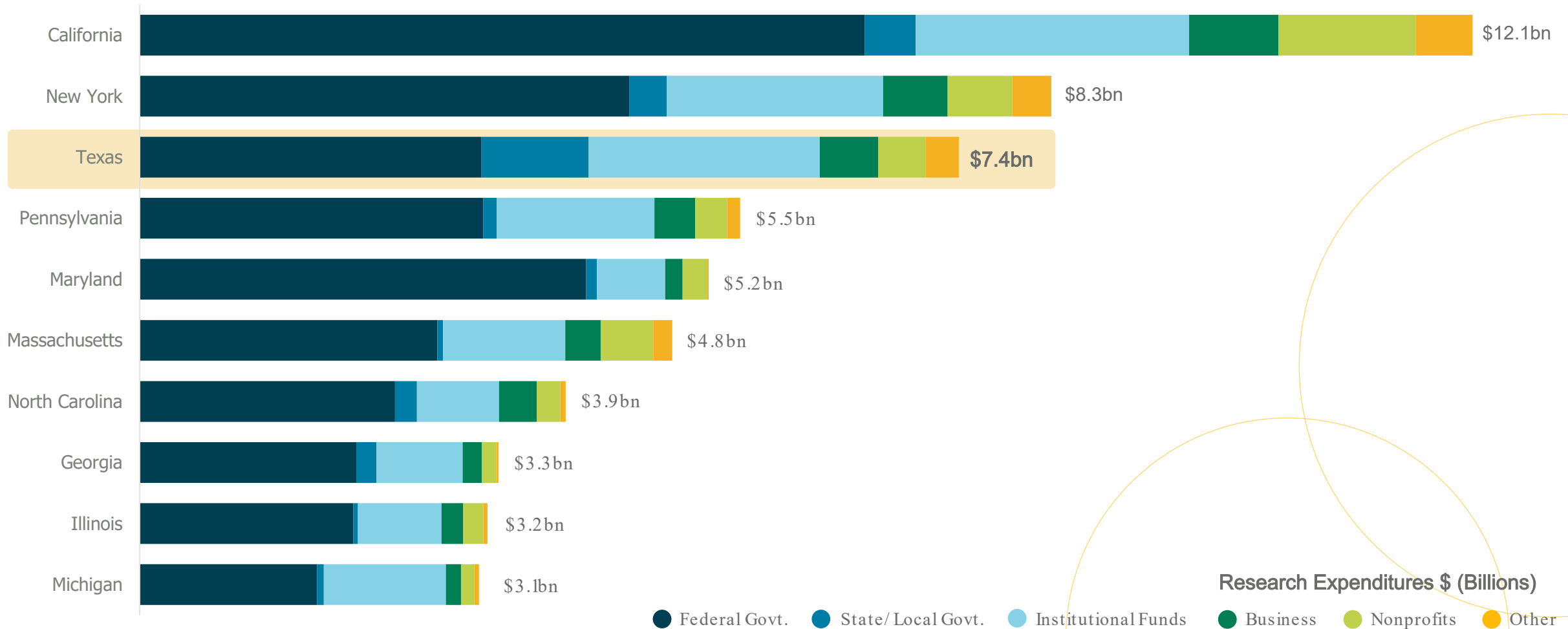
Research Expenditures \$ (Billions)

● Federal Govt.
 ● State/Local Govt.
 ● Institutional Funds
 ● Business
 ● Nonprofits
 ● Other



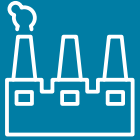
Texas is ranked 3rd in academic R&D expenditures

in the U.S.



Benchmarking Data

5 Takeaways



Business supplied just 7% (\$530M) of 2022 R&D funding for Texas higher education institutions. Over half (55%) came from federal, state, and local government.¹



Life sciences (61% of R&D funding) and **engineering** (16%) make up the top two fields of study for 2022 R&D funding at Texas higher education institutions.¹



Since 2018, **10%** of equity venture funding investments in Texas originated from **in-state investors**. Nearly three fourths (73%) originated from within the US but outside of Texas, and the remaining 17% originated internationally.²



Over the last 10 years, the **Department of Defense awarded over 48% of the total SBIR & STTR funding** (\$601M out of \$1,243M) going to Texas companies.³



In 2022, Texas ranked 6th in number of licenses and options with income (1,270), but **22nd in number of licenses and options with income per \$1M academic R&D performed.**⁴

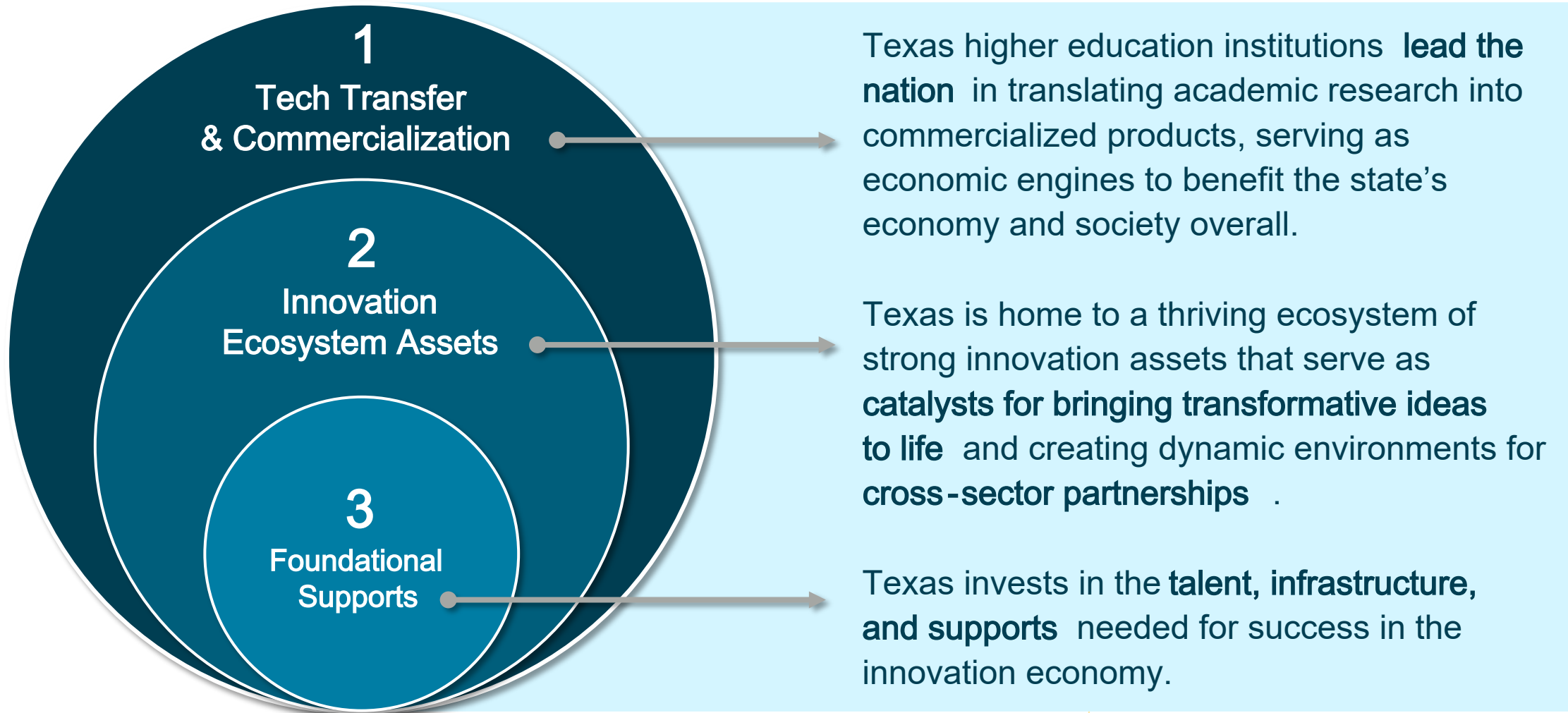
1. National Science Foundation, National Center for Science and Engineering Statics, Higher Education Research and Development Survey 2020; TIP Strategies, Inc.

2. Crunchbase; TIP Strategies, Inc.; Data for 2023 are YTD as of April 11.

3. US Small Business Administration; TIP Strategies, Inc.

4. AUTM Statistics Access for Technology Transfer Database (STATT); TIP Strategies, Inc.

Our Framework



Stakeholder Engagement Themes

REGIONAL FLEXIBILITY

There is no regulatory roadblock from state policy—each tech transfer office values flexibility and steers away from standardization.

DEMAND-DRIVEN COMMERCIALIZATION

Instead of trying to fit IP into a market, we need to increase the “market pull” of IP out of universities.

ADDITIONAL RESOURCES NEEDED

Additional resources like proof-of-concept funding are needed to technically and commercially validate IP.

ADDRESS TALENT SHORTAGES

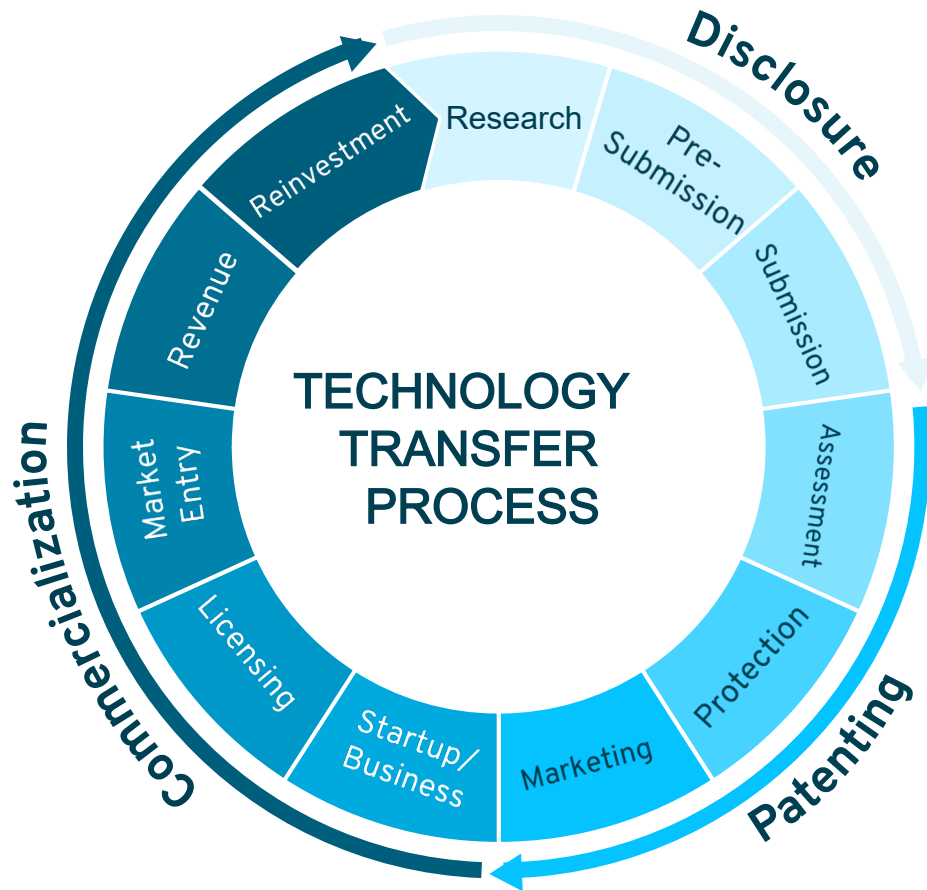
We lack the Texas business talent and serial entrepreneurs to form and run startups dependent on university IP.

CONNECT TO STATE'S MAJOR INDUSTRIES

We have an opportunity to connect this work to the state’s major industries to make our university IP “sticky.”

GOAL 1

Tech Transfer & Commercialization



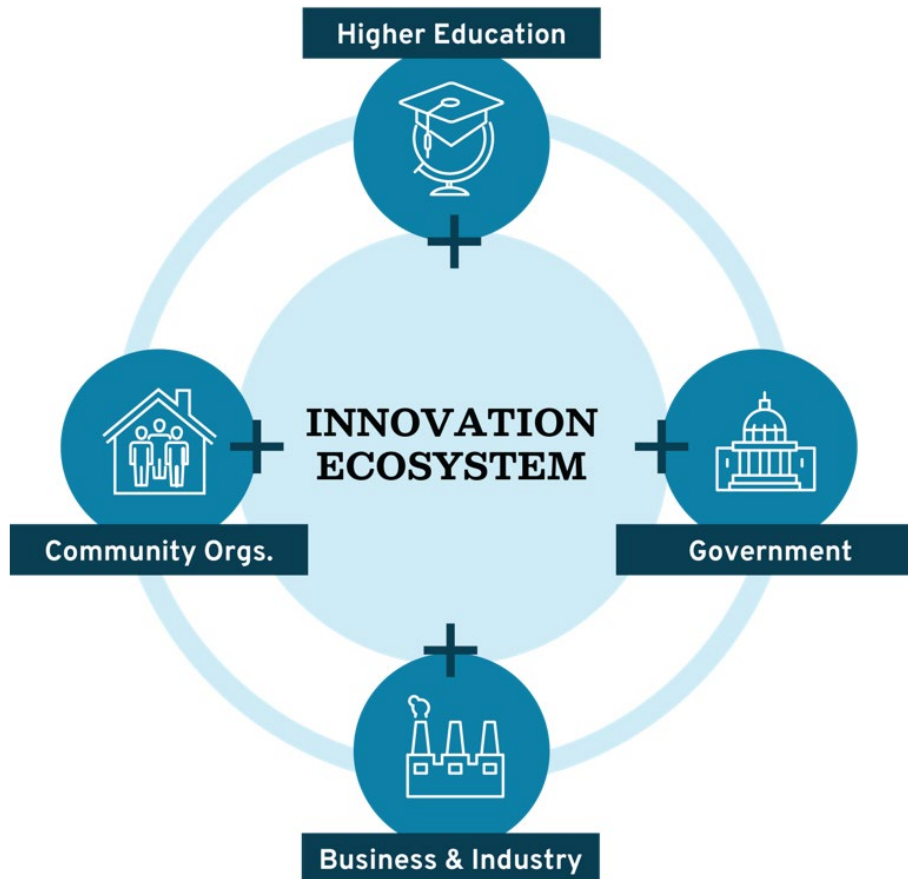
Lab to Market

COMMERCIAL VALIDATION. Support institutions with dedicated resources like proof of concept funding to build capacity for market validation of commercially viable inventions and technologies.

PROCESS IMPROVEMENT Remove friction within the technology transfer process, especially to help applied research efforts respond to market needs in an efficient and effective manner.

R&D RESOURCES Bolster higher education institutions by securing additional resources like R&D funding and specialized research talent to support technology transfer.

GOAL 2 Innovation Ecosystem Assets



COLLABORATION

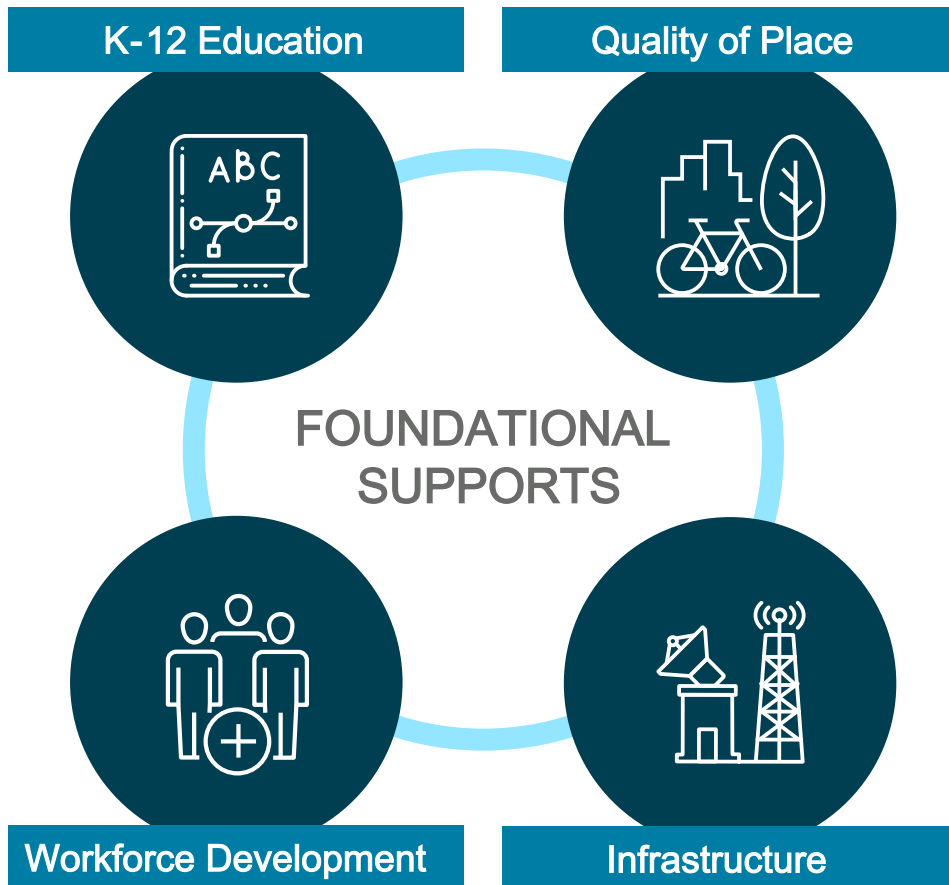
RISK CAPITAL. Increase access to risk capital for Texas companies by matching existing federal grant programs and private investments to make Texas the most attractive environment to grow new businesses.

CORPORATE & ACADEMIC PARTNERSHIPS. Encourage more robust partnerships between businesses and higher education institutions by increasing industry -sponsored research and strengthening their roles as anchors in regional economies across Texas.

INNOVATION SUPPORT SYSTEMS Leverage the ongoing work of existing entrepreneurial supports organizations and physical spaces like research parks and innovation districts to increase collaboration and facilitate of cutting - edge innovation.

GOAL 3

Foundational Supports



TALENT PIPELINE

STEM TALENT. Strengthen workforce education programs at higher education institutions that train students to meet the skilled talent needs of target industries, particularly for STEM careers.

WORK BASED LEARNING. Sustain and expand efforts to provide students with high - quality experiential learning opportunities that equip them with knowledge and skills in demand by employers in core industries.

TEXAS TALENT RETENTION. Add incentives and benefits to programs for Texas higher education students to support graduate retention.

Additional Resources

Scan the QR code to access *From Insights to Impact: Fostering Innovation Through Texas Higher Education*, a summary report.

The **Technical Appendix** includes case studies, implementation steps, and other recommendations for how leaders across the state can collectively strengthen research and innovation within Texas higher education.

From Insights to Impact

Fostering Innovation Through Texas Higher Education



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