



# OCAST

Center for the Advancement  
of Science & Technology



# IMPACT REPORT



## LETTER FROM THE EXECUTIVE DIRECTOR

As the new Executive Director of the Oklahoma Center for the Advancement of Science and Technology (OCAST), I am proud to reflect on our past accomplishments, recap our present status, and excited to announce new opportunities that will lead OCAST into the future.

Since our founding in 1987, OCAST has been committed to promoting and supporting science and technology-based economic development in Oklahoma. Over the years, we have helped hundreds of businesses and researchers bring innovative ideas to life, creating jobs and driving economic growth in the state.

As we look to the future, we are focused on expanding our impact even further.

This move has brought in new partners, new programs, and new possibilities for innovators in Oklahoma. We are proud to announce that the U.S. Treasury has awarded us State Small Business Credit Initiative (SSBCI) funding to support Oklahoma's small businesses and entrepreneurs. This funding will help to provide crucial capital to those businesses in need and allow them to expand and grow. Additionally, we are working to strengthen the Oklahoma Accelerator Program, which provides mentorship and resources to help start-ups and small businesses grow and thrive.

Beyond supporting small businesses, we are also investing in emerging science and technology solutions to ensure that Oklahoma remains at the forefront of scientific discovery and technological innovation. By doing so, we are positioning our state as a leader in addressing global challenges in those core areas Oklahoma is positioned to excel including, autonomous systems, aviation, and defense, biotechnology and life sciences, and energy diversification.



As we move forward, we remain dedicated to fostering collaboration and innovation in Oklahoma's science and technology community. We are grateful for the support of our stakeholders and partners, and we look forward to continuing our work to advance science and technology in Oklahoma.

*Jennifer McGrail*  
Executive Director, OCAST

# IMPACTING INNOVATION IN OKLAHOMA

**Working to grow core industries of  
Aerospace, Autonomous Systems,  
Defense, Biotechnology and Life Science,  
and Energy Diversification**



Oklahoma Innovation propels our state forward,  
accelerates economic growth, and solves society's  
challenging problems.

# OCAST MILESTONES

**1983** The Oklahoma Council on Science & Technology was created

**1986** The Health Research program was created

**1987** OCAST created by the Oklahoma Legislature

**1988** State Question 611 established the Seed Capital program; Small Business Research Assistance was created

**1990** The Oklahoma Applied Research support program was created

**1992** The Industrial Extension System was created  
(Oklahoma Manufacturing Alliance)

**1998** Created the Oklahoma Technology Commercialization Center;  
Inventors Assistance Service transferred to OCAST

# OCAST MILESTONES

- 2003** OCAST surpasses \$1B in Return on Investment for Oklahoma
- 2017** OCAST turns 30!
- 2018** The OCAST supported Oklahoma Catalyst program established
- 2021** Oklahoma Science Technology Research and Development Board (OSTRaD) realigned and moved to 9 members representing industry and academia partners
- 2022** HB4362 Created the STEM Intern Partnership Program as a standalone program in state statute

# RESULTS

TOTAL FINANCIAL IMPACT OF OCAST PROGRAMS

**\$1,413,920,944+** OVER THE  
LAST  
5 YEARS

**\$294M+** INVESTED IN R&D

SINCE INCEPTION

**\$6.5B+** PRIVATE SECTOR &  
FEDERAL FUNDING

OVER THE LAST FIVE YEARS

# RESULTS

## JOBS IMPACTED

OVER THE LAST FIVE YEARS

2000+

## INTERNSHIP JOBS IMPACTED

2022

84

## COMPANIES THAT WILL HIRE THEIR OCAST INTERNS

2022

42



## Oklahoma Applied Research Support (OARS)

OCAST awards funding of up to \$500,000 to companies leading innovation projects that have the potential to create economic impact in Oklahoma.

## Small Business Research Assistance

OCAST provides funding for research projects, facilitates partnerships and collaborations, and assists small businesses in obtaining federal funding.

## Intern Partnership

Companies can obtain up to \$30,000/year for two years to cover student intern salary and project costs for innovative industry projects.

## Technology Commercialization Center

Works with thriving startups to assist with the development of new companies and spur innovation across existing companies.

## Inventor's Assistance Service

Provides guidance and resources to Oklahoma's inventors in the area of preliminary patent searches, market analysis and more.

## Manufacturing Assistance

Is a network of trusted experts working with manufacturers to help them grow and evolve.

*A few of our OCAST trusted partners...*



NEW PRODUCT  
DEVELOPMENT CENTER



OKLAHOMA  
MANUFACTURING  
ALLIANCE





## CENTER FOR INTEGRATED BUILDING SYSTEMS

College of Engineering, Architecture and Technology

Through support from both the Intern and OARS programs, OCAST has provided incredible value to CIBS and its Oklahoma-based manufacturers. OCAST support enabled us to pilot an internship program that continues. In 2022, we were able to expose 86 students to building systems, many of whom were ultimately employed by our members.



**Dr. Craig Bradshaw**  
Director, CIBS

INNOVATIVE FUTURE



GROUND-LOOP AND HYDRONIC SYSTEMS  
photo courtesy of CIBS



Recruiting engineering talent can be a challenge for our companies and we believe that this program will have a positive impact by retaining talent that might not have considered careers in their back yard. We are grateful that OCAST entrusted us to conduct this pilot program and are confident that will result in outcomes that we intended. OCAST has been a great partner for MidAmerica and its companies over the years and continue to innovate to bring value to Oklahoma's economy.

▶ **Scott Fry**  
Director of Workforce Development

▶ **Talia Pearl**, Pryor High School  
Mid-America Industrial Park  
STEM Program



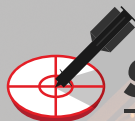
Talia wires a control panel that she helped design at HE&M Saw for a new automated carbide manufacturing center.

I was able to gain hands-on experience in a plethora of fields and even tour businesses, seeing first hand what a day might be like working at that company. Additionally, during these tours I made countless connections that could lead to internship opportunities during college and employment afterwards.

➤ **Benton Raymer**, Pryor High School  
Mid-America Industrial Park  
STEM Program

The MAIP STEM internship program has given me the opportunity to acquire not only skills that I can carry with me into my collegiate career, but also my future job career as well.

➤ **Abby Emert**, Pryor High School  
Mid-America Industrial Park  
STEM Program



**SIGN DART™**  
BY RAM JACK

We had an incredible innovative product that was setting idle on a back shelf waiting for the right people to get behind what would be a revolutionary change in the Federal Highway System. OCAST were those right people. We were able to take this product and build the momentum and funding needed to put Sign Dart up against decade-long systems and showcase the incredible versatility and capacities, it alone could accomplish. The good people that represent OCAST aided in Sign Dart's journey to TTI (Texas A&M Transportation Institute) where Sign Dart successfully passed MASH TL-3 testing and is now being sent both domestically and Internationally to DOTs across the world.

OCAST's mission of continuing innovation for Oklahoma and steadfast determination to grow our economy and compete to be the best in science and technology is clearly prevalent in the work they helped us to accomplish with Sign Dart. Representing our state to the highest standard of manufacturing and quality, we are able to produce a product that is not only faster, more efficient, and completely reusable, the Sign Dart is a safer alternative for our teams maintaining and building our highways systems. The partnership with OCAST made this opportunity possible.



**Justin Presley**  
National Accounts, RamJack

# State Small Business Credit Initiative

Under the American Rescue Plan Act of 2021, OCAST has been allocated \$82M in State Small Business Credit Initiative (SSBCI) funding to improve funding accessibility for startups and small businesses across Oklahoma.

## Oklahoma Accelerator Program

Funded by the State legislature in 2021, this program creates accelerator opportunities across the state. OCAST is proud to be partnering with gener8tor to offer the Oklahoma City accelerator, Techstars to offer the Build in Tulsa accelerator, and the Oklahoma Farm Bureau to offer the AgLaunch Oklahoma rural accelerator program.

## American Rescue Plan Act

Through HB 1018, the Oklahoma Legislature has given OCAST the opportunity to partner with organizations across the state to initiate projects funded through the American Rescue Plan Act. OCAST is excited to work with Fab Lab Tulsa, The University of Tulsa, FISTA, OKC Innovation District, Moore -Norman Aviation Academy, and Central Oklahoma Manufacturing Alliance and maximize the impact of these projects.



OCAST is governed by the Oklahoma Science and Technology Research and Development (OSTRaD) Board of Directors (Title 74, Section 5060.6). This 9-member board of directors consists of the State Secretary of Science and Innovation as the OSTRaD board chair with four members appointed by the Governor and two each by the State Senate and House.



**Elizabeth Pollard**  
CHAIR of OSTRaD



**Blayne Arthur**  
Secretary of Agriculture



**Sean Bauman**  
IMMY



**David Ingram**  
Phillips 66



**Thomas Kupiec**  
ARL/DNA Solutions



**Dan Marticello**  
CymStar



**Kenneth Sewell**  
Oklahoma State University



**Jeff McCormack**  
Oklahoma Christian University



**Brenda Rolls**  
Frontier Electronic Systems

**Jennifer McGrail**  
Executive Director

**Joyce Coleman**  
Executive Assistant

## PROGRAMS

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**Dan Luton**  
Director, Programs

**Heather McDowell**  
Associate Director, Programs  
Tulsa + NE Oklahoma

**Mark Ballard**  
Programs Manager

**Laura Sohl-Smith**  
Programs Officer

**Connie Lake**  
Associate Director, Programs  
Central + Southern Oklahoma

**Sam Snow**  
Programs Officer

## OFFICE OF SCIENCE AND INNOVATION

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**Lyle Walters**  
Policy + Planning  
Legislative Liaison

**Makeba Griffin**  
Communications Manager  
+ Public Information Officer

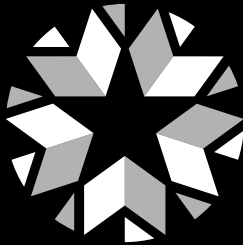
## FINANCE + ADMINISTRATION

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**Elaine Spell**  
Director, Finance + Administration

**Kristi Howes**  
Finance + Business Manager

**Michelle Douglas**  
Office Manager



**OKLAHOMA**

**Center for the  
Advancement of  
Science and  
Technology**

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