

INNOVATING UTAH'S ECONOMIC FUTURE

The Utah Science Technology and Research Initiative (USTAR) is the State's technology-based economic development (TBED) agency. USTAR supports early stage entrepreneurs in Utah's deep tech sectors and helps to build the State's innovation infrastructure.

USTAR Impact & Performance

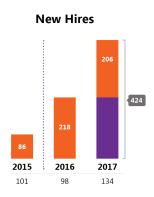
In 2015, the Stanford Research Institute wrote a prospectus outlining the five-year, projected direct impact of USTAR's programs based on the Legislature's 2016 re-write of USTAR's statute and the implementation of new, competitive, commercialization-oriented programs.

	2020 PROJECTED IMPACT DATA	2016-2017 ACTUAL IMPACT DATA
Follow-on Investment	\$123.9M	\$123.1M
Sales	\$27.3M	\$27.0M
Fulltime Jobs Created	200	258

IN JUST TWO YEARS, USTAR
HAS ALREADY MET OR
EXCEEDED ITS FIVE-YEAR
PERFORMANCE METRICS.







USTAR-supported companies have created **258 full-time and 166 part-time jobs** since 2016.



USTAR-supported companies have generated *\$27M* in sales of commercialized products since 2016.



Annual Total

Cumulative Total

"Eliminating USTAR would send a strong message that the State of Utah is retreating from its long-term commitment and investment to the growth of its research- and technology-based sectors at a time when states like Wyoming, Virginia, and Massachusetts are increasing investments in theirs."

- Evaluation of Utah Science Technology and Research Initiative's Strategic Value and Operational Effectiveness, TEConomy Partners 2018

Technology-Based Economic Development

Technology-based economic development (TBED) is a strategic approach utilized by government to promote economic expansion and diversification through technology development and technology commercialization.

TBED programs are designed to grow the economy through innovation and invention—by creating NEW technologies and NEW companies, not just the expansion, retention, or recruitment of existing technologies and companies.

Utah is one of 46 states that actively practices TBED.

"USTAR is funding research that can create jobs and industries and increase our economic competitiveness... If you don't encourage innovation, your economy, I think, is going to die."

- Scott Anderson, President & CEO of Zions Bank



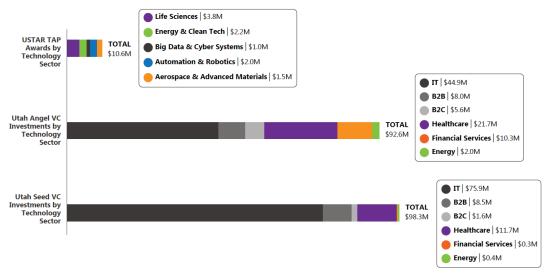
Market Gaps in Utah's Economic Infrastructure

Utah deep tech companies face a significant shortage of available risk capital, especially in the seed stage.

Utah receives a very small percentage of the national deal flow overall, and roughly 90% of that money goes to IT and services companies.

Deep Technology includes: Life Sciences, Aerospace, Energy & Clean Technology, Big Data & Cybersystems, Automation & Robotics

COMPARISON OF SCALE OF CAPITAL PROVIDED BY USTAR TAP GRANTS VERSUS UTAH ANGEL & SEED VC INVESTMENT, 2016-2017



DISTRIBUTION OF VENTURE CAPTIAL



"We've been fortunate with Silicon Slopes that we've attracted businesses in the areas of software and services that have been instant successes and are growing like crazy. But there are also, if you will, deep technology innovators that also need to be attracted to our state. You might say, well, the venture capital guys will take care of that. Well, about 90 percent of venture capital in our state over the last five years has gone to a software and service businesses. Very little actually gets into some of the deep technologies that are so essential to our long-term growth. And these technologies typically take a long time to generate the kinds of returns that venture capitalist often want. And that's of course, where USTAR fits in."

Mitt Romney



Economic Diversification

Utah's tech economy is becoming less diverse.

The Milken Institute's Technology Concentration and Dynamism Composite Index measures the diversity and health of a state's tech economy.

Utah held the top ranking in this index for nearly a decade.

In the last ranking in 2016, **Utah dropped from 1st to 13th** place due to the slower growth of Utah's deep tech sectors vis-à-vis Silicon Slopes.

Diversification makes the economy more resilient. Aerospace and life sciences were the only two sectors that did not have negative growth in 2008 at the start of the Great Recession.

USTAR's programs are designed to support Utah's deep tech industries and increase diversification of the State's tech economy.

THE MILKEN INSTITUTE'S TECHNOLOGY CONCENTRATION AND DYNAMISM COMPOSITE INDEX

Rank	Average Score	Year
1	85.40	2008
1	86.80	2010
1	86.00	2012
1	92.89	2014
13	63.55	2016

Budget & Scale

Utah spends \$71 million on economic development programs and another \$524 million on economic development tax incentives, the majority of which go toward larger or established companies.

However, Utah will spend just \$14 million in FY19 to support the growth of new, home-grown, deep technology companies through USTAR.

USTAR's budget represents only 2.5% of current economic development expenditures.

USTAR's budget represents only .09% of the FY2019 state budget.

BEDL's pass-through expenditures (RFAs) were more than \$20M in the final FY2019 budget.

Utah Small Business Support

Despite the fact that 99% of Utah businesses are small businesses, nearly all of the State's economic development expenditures are targeted at large companies. Among Utah's economic development incentive, loan, or grant programs, only USTAR's grant programs and the TCIP, BEAR, and Rural Fast Track programs at GOED provide direct monetary support to entrepreneurs, startups, and small companies (<50 employees).

"USTAR is a lean, cost-effective, and outcomes-driven organization."

— TEConomy Partners, LLC

TBED SPENDING PER CAPITA





SCALE OF UTAH'S TRADITIONAL ECONOMIC DEVELOPMENT EXPENDITURES VS TECHNOLOGY-BASED ECONOMIC DEVELOPMENT EXPENDITURES



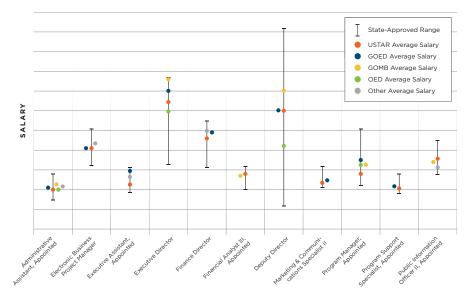




nomic Development Expenditures U



Salary Comparisons



When USTAR is compared to peer organizations in other states, USTAR ranks 7th (out of 10) for total staff size and 10th for average compensation per employee. Despite this, USTAR has attracted and retains a highly technical, experienced, and specialized staff.

USTAR has lower personnel costs as a percentage of total budget (11%) than any other state agency overseen by BEDL.

"Talent drives good organizations, and one of the reasons that USTAR has been effective is that it has been able to attract talented staff who bring a mix of scientific and technical domain expertise, strong program management and outreach skills, and prior academic, government, lab, and industry expertise."

- TEConomy Partners, LLC

USAF Investment



In addition to the exceptional performance of its grants program, USTAR has also been approached by the U.S. Air Force (USAF) to make a major investment in the USTAR Innovation Center at Falcon Hill.

An MOU has already been signed, and contract negotiations are underway, to dramatically expand the Innovation Center at the USAF's expense, outfit it with more state-of-the-art research and rapid prototyping equipment, and make it the USAF's National Center of Excellence for Composites.

"Looking across the country, TEConomy cannot cite any data and is not aware of any best practice that demonstrates increased program effectiveness when a smaller targeted agency is subsumed by a larger agency that operates a more diverse portfolio of programs."

 Evaluation of Utah Science Technology and Research Initiative's Strategic Value and Operational Effectiveness, TEConomy Partners 2018 "Notable among USTAR's achievements is the implementation of its new grant programs since 2016, which are characterized by best practices in its peer review process for making funding decisions and its private sector rigor in monitoring and reviewing grant recipient progress toward commercialization outcomes once awards are made."

 Evaluation of Utah Science Technology and Research Initiative's Strategic Value and Operational Effectiveness, TEConomy Partners 2018