

Issue Brief – USTAR Initiative

NUMBER USTAR-06-01

SUMMARY

During the 2005 General Session, the Legislature allocated funding to the University of Utah and Utah State University to recruit and hire research teams, purchase research equipment, and develop and implement a high technology research and development initiative. This initiative has been named the Utah Science, Technology, and Research (USTAR) Economic Development Initiative. Proponents of USTAR are requesting additional ongoing funding to recruit established first-rate research teams in fields where Utah has a unique competitive advantage, provide these teams with infrastructure, and establish programs that promote technology commercialization. The USTAR research teams are expected to bring new funding to the state through federal and commercial contracts and grants and ultimately generate more technology-based start-up firms and higher-paying job opportunities in Utah with the commercialization of technologies they develop.

OBJECTIVE

This issue brief provides an update on the expenditure of funds appropriated by Senate Bill 192, “High Technology Economic Development Appropriation” (General Session 2005), and outlines the USTAR initiative as presented in the USTAR Economic Development Economic Prospectus, published in October, 2005.

DISCUSSION AND ANALYSIS

Senate Bill 192, “High Technology Economic Development Appropriation”

The following table outlines the appropriations made in Senate Bill 192, “High Technology Economic Development Appropriation” (General Session 2005), which provided the impetus for USTAR. The bill appropriates \$4 million in ongoing funding for recruiting for high technology research and development at the state’s public research universities and \$3 million (one-time) for research equipment and supplies at the University of Utah. In addition, the University of Utah received \$350,000 (one-time) to develop, plan, and implement the USTAR initiative.

FUNDING*	PURPOSE	STATUS
FY 2005 ONE-TIME (intended to be nonlapsing)		
\$3,000,000	To purchase equipment and supplies for high technology research and development at the University of Utah	MRI equipment purchased and installed at the University of Utah
\$350,000	For developing, planning, and implementing a high technology research and development initiative	Initial expenses for developing, planning, and implementing initiative totaling \$333,900; USTAR Economic Prospectus published October, 2005
FY 2006 ONGOING (intended to be nonlapsing)		
\$1,600,000	For recruiting for high technology and research development at Utah State University	(Planned expenditures: \$523,800 team contract, 217,000 high performance computing upgrade, and \$965,000 to complete biomolecular lab space)
\$2,400,000	For recruiting for high technology and research development at the University of Utah	\$412,300 to hire senior bio-defense scientist with start date of January 1, 2006 (planned expenditures: \$800,000 for hiring pending homeland security and bio-defense team candidates and \$1,200,000 for neurosciences imaging diagnostics team start-up, facilities, and personnel)

*From General Fund.

Senate Bill 192 contained intent language requiring Utah State University and the University of Utah to prepare a plan regarding expenditure of the funds appropriated under the bill and to report to the interim Executive Appropriations Committee and consider its recommendations before disbursement of these funds. The bill also called for the universities to present a long-range plan for high technology development to the Executive Appropriations Committee (EAC). The presidents of the universities and business community representatives presented this plan in the form of an economic prospectus to EAC in October, 2005. After hearing this presentation, EAC passed a motion to require the USTAR initiative to report performance and accountability indicators semi-annually to the Committee.

The USTAR Economic Development Initiative

The objective of the USTAR initiative is to invest in the areas of research where Utah has a competitive advantage in order to create new technology-based businesses and jobs to bolster the state's economy. The USTAR economic prospectus identifies three components necessary to achieve this objective: research team recruitment, research facility construction, and technology commercialization.

The first USTAR component involves relocating established laboratory operations and personnel in fields such as gene manipulation, cellular processes, scientific instrumentation, information technologies, and bioengineering. Relocation expenses and start-up funds for these innovation teams, which will consist of principal investigators, technicians, post-doctoral fellows, research assistants, and administrative support staff, are anticipated to total approximately \$3 million per team. Ongoing annual team expenses are estimated to be approximately \$1.5 million per team, with teams becoming self-funding within 4 years of relocation.

The second component of the initiative calls for the construction of laboratory facilities to house USTAR innovation teams. The prospectus states that research teams typically require about 10,000 gross square feet of space. With construction costs for specialized laboratory infrastructure estimated at about \$500 per square foot, costs for research buildings are estimated at \$5 million per team.

Programs that support technology commercialization and knowledge transfer to Utah businesses make up the final component of the USTAR initiative. Proposals for commercialization and knowledge transfer include State provision of matching funds, administered through the University Venture Fund, to encourage private investment in start-up companies based on USTAR technologies and the creation of innovation outreach centers throughout the state. These centers would provide existing businesses with access to USTAR research and technical assistance.

Returns on investment in the USTAR initiative will initially appear in the form of new federal and commercial research grants and contracts generated by research teams. Eventually, the innovations these teams develop are expected to spur the start-up of many lucrative technology-based businesses and high-wage jobs in Utah.

LEGISLATIVE ACTION

The Analyst recommends that the Committee consider funding for USTAR based on the number of teams anticipated to be hired in the coming year. For example, if two teams are to be hired, the analyst recommends prioritizing \$16 million one-time for infrastructure and start-up costs and \$2 million ongoing for personnel expenses (assumes existing 2 existing teams, total of \$6 million in ongoing expenses for 4 teams). It is recommended that USTAR utilize existing programs such as the university technology transfer offices, Centers of Excellence, and Fund of Funds for its commercialization component.