

ATTACHMENT IS AN ARTICLE FROM GOVERNING MAGAZINE USED IN FIR ON SB 2

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FISCAL IMPACT REPORT

SPONSOR Salazar **ORIGINAL DATE** 01/27/06
LAST UPDATED _____ **HB** 127
SHORT TITLE Technology Research Collaborative **SB** _____
ANALYST Williams

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY06	FY07		
	\$5,000.0	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

Duplicates Senate Bill 2

Relates to House Bill 51, House Bill 52

Relates to \$1 million special appropriation in 2005 General Appropriation Act and \$104.5 thousand in Laws of 2005, Chapter 34 (Senate Bill 190)

Relates to original Executive recommendation for general obligation bond funding of \$10 million for biotechnology equipment for research in nanotechnology, bioengineering and environmental engineering at the University of New Mexico.

Relates to separate pieces of legislation seeking general fund appropriations for certain centers recently established under the umbrella of the TRC

SOURCES OF INFORMATION

LFC Files

Response Received From

Higher Education Department (HED)

Economic Development Department (EDD)

SUMMARY

Synopsis of Bill

House Bill 127 appropriates \$5 million from the general fund to the board of regents of New

Mexico Institute of Mining and Technology for the purposes of:

1. supporting the technology research collaborative and
2. providing state matching dollars for federal and private contributions to the collaborative and centers of excellence at participating research and higher education institutions.

FISCAL IMPLICATIONS

The appropriation of \$5 million contained in this bill is a recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of fiscal year 2007 shall revert to the general fund.

The specified funding purposes are vague. It is not clear to what extent funding would be used for research activities versus administration. The mechanism or process to allocate funds between and among the TRC and the centers of excellence is not specified. A required match to obtain state funds for research activities is not specified.

It also appears certain centers recently established by the TRC are seeking general fund appropriations via separate bills introduced in the 2006 session.

SIGNIFICANT ISSUES

Laws of 2005, Chapter 81 (Senate Bill 169) authorized in state statute the Technology Research Collaborative (TRC), with the New Mexico Institute of Mining and Technology acting as fiscal agent. The TRC was formed in 2003. TRC members include the state's national laboratories, major research institutes and three research universities: University of New Mexico, New Mexico State University and New Mexico Institute of Mining and Technology. General purposes of the collaborative are:

- Establishing advanced technology centers
- Developing, creating and commercializing new intellectual property
- Encouraging new opportunities for business and increased jobs
- Creation of a workforce to support new enterprises based on intellectual property

Background information from the TRC website is shown on page 4.

PERFORMANCE IMPLICATIONS

The bill does not specifically place an emphasis on linking the initiative to the state's strategic plans for economic development and higher education and does not include performance accountability components, such as outcomes-oriented performance measures.

ADMINISTRATIVE IMPLICATIONS

See Fiscal Implications above.

TECHNICAL ISSUES

Is the bill language sufficient to address the distinction between existing Centers of Technology Excellence, Centers for Technical Excellence and proposed Advanced Technology Centers?

OTHER SUBSTANTIVE ISSUES

This request for funding was not submitted to the Higher Education Department (HED) by the Board of Regents of New Mexico Institute of Mining and Technology.

ALTERNATIVES

In 2003, the legislation established the technology enhancement fund, administered by the commission on higher education, to support innovative, applied research to enhance the state's economic growth pursuant to the recommendations of the blue ribbon task force on the higher education funding formula. House Bill 391 (Chapter 367) identified specific research areas including agriculture, biotechnology, biomedicine, energy, materials science, microelectronics, water resources, aerospace, telecommunications and manufacturing science.

Grants from the technology enhancement fund are to be made available to the state's research universities collaborating with corporate and nonprofit organizations. The commission on higher education is directed to award grant funds on a competitive basis with review by a panel of scientific and business experts. The award process would consider excellence in research design and innovation in cross-disciplinary, multi-campus and higher education-industry research collaboration. The university must have matching funds from non-state sources. To date, monies have not been appropriated to the fund.

Higher education institutions receive indirect cost revenues from federal contracts and grants. Further, this money is unrestricted in the sense that the governing board of the institution has the flexibility to choose which projects are supported with these funds. One of the purposes of retaining these funds is to provide seed money and matching funds for projects such as those proposed in this bill.

POSSIBLE QUESTIONS

1. What were the performance outcomes and economic impacts of the \$30.9 million of state funds previously provided to the state's Centers of Excellence?
2. Is this program related to existing state government and university initiatives?
3. How does this program compare/contrast with the BioTeP initiative task force?
4. How are specific technology clusters being identified?
5. Does the proposal incorporate best practices evident for economic development initiatives in other states? What examples can be provided?
6. How would the proposed program impact the New Mexico economy? What is the time frame for specific, achievable results?
7. How would rural communities benefit?
8. How are the 2005 appropriations to the TRC being utilized?
9. What is the total estimated cost of the initiative and the state's share?
10. How would funding be allocated? What percentage for the TRC? For the centers of excellence?
11. What percentage of funding would be used for administrative costs overall?
12. Can a non-state funds matching requirement be included in the bill?
13. How would planning and accountability be addressed? How would progress and outcomes be measured and promulgated?

According to www.nm-trc.org:

In 1983, the state of New Mexico had a vision to create five unique Centers of Technology Excellence, to develop new technology and job growth. The state provided the centers with \$30.9 million over the course of six years, with the amount received by each center left to the discretion of the advisory board. The centers were created by the state's universities, and were funded through them and private sources. The original five centers were, the Center for High Technology Materials (CHTM), Center for Non-Invasive Diagnostics (CNID), Center for Explosives Technology Research (CETR), Plant Genetic Engineering Laboratory (PGEL), and the Computing Research Laboratory (CRL).

The overall goal for the Centers of Technical Excellence was to enhance economic development in New Mexico by creating an environment conducive to high technology activities. The concept was to provide a platform for the development of new technology ideas and patents as a means to attract and generate a strong high-tech industry. The centers would help to provide graduates from the universities with challenging employment, making it more likely for them to stay in New Mexico.

One of the initiatives adopted by the TRC is to support the creation of several **Advanced Technology Centers (ATC)**, each center being affiliated with one or more of the state's premier research facilities and each one having collaborative research and development programs that include other TRC members. These new ATCs will serve industry and government in developing new technologies and products.

Twenty years after the original centers were funded, the Technology Research Collaborative has begun work on a next generation of the Centers of Technical Excellence. This legislative session, the TRC will be seeking \$42.9 million from the state of New Mexico to help develop six new centers. The goal of the new centers remains the same, to create high-tech jobs and aid the state in attracting and growing high-technology industry.

Other Information:

TRC identified six advanced technology centers from which advanced technologies will create opportunities for private sector companies, research institutions, investors and entrepreneurs. These are:

1. Art, Research, Technology and Science Laboratory (ARTSLab)
2. New Mexico Center for Isotopes in Medicine
3. Center for Sustainable Natural Resources in the Southwest
4. Hydrogen, Fuel Cells and End-User Technologies
5. Center for Technology Translation, Integration of Security Technologies and Decision Support
6. New Mexico Center for Options

The Business of Government

LEAD STORY

States Go for the Biotech Gold

FLORIDA AND PALM BEACH COUNTY ARE FOUNDING A NEW branch of the renowned Scripps Research Institute, hoping to turn a 1,900-acre orange grove into a home for thousands of high-paying jobs in biomedicine. It is the latest in a series of blockbuster state and local initiatives intended to cultivate biotechnology industries, often from scratch.

As these economic development deals grow in size—the combined

state-county package for Scripps is worth more than half a billion dollars—so too grows the risk that a deal will fall short of expectations. State and local governments see biotech as the Next Big Thing—a high-growth industry producing everything from better medicines to better crops. But it is also a notoriously hit-or-miss business. Companies may need a decade or more to turn a profit—if they ever do—but state or local governments think they have to buy in to the pre-performance hype.

In Florida, for instance, Palm Beach County is spending \$200 million to purchase the land and build Scripps its research facility, while the state is paying \$310 million for the institute's first seven years of operating costs at the site. In exchange, San Diego-based Scripps, famous for its research on cancer and other diseases, has promised to hire at least 545 professors, scientists and administrative workers. Governor Jeb Bush claims that start-up businesses spinning off from Scripps research, combined with pharmaceutical companies who will want to locate nearby, will add 50,000 jobs and \$3.2 billion to Florida's economy in 15 years.



Other states also are making big biotech bets, with similarly rosy predictions of job growth. Arizona put \$120 million of public and private funds into luring the International Genomics Consortium to Phoenix and is selling more than \$400 million in bonds to fund research facilities at state universities. Pennsylvania and Michigan are investing large chunks of their shares of the tobacco settlement in biotech research, and New Jersey last year launched a \$10

million venture capital fund for life science start-up companies.

The push will continue in legislatures this year. An advisory group to Washington Governor Gary Locke suggested in January that the state invest \$250 million in biotech research. Minnesota Governor Tim Pawlenty wants to boost research funding at the University of Minnesota and the Mayo Clinic. And in Kansas, lawmakers are considering a request to put aside \$500 million over 10 years to fund bioscience research at state universities and to set up a state authority charged with the responsibility of commercializing that research. "The 'rob thy neighbor' approach to economic development doesn't work," says Kansas state Representative Kenny Wilk, the bill's sponsor. "This is about growing our own entrepreneurs at home."

But emulating the successes of the three undisputed biotech capitals—Boston, San Francisco and San Diego—may be elusive. "People think biotech is like Krispy Kreme doughnuts," says Joe Cortright, an economist who studied state biotech initiatives for the Brookings Institution. "They think it started in one part of the country but some day will be everywhere." Cortright suggests that the established biotech centers will only grow more concentrated, to the dismay of biotech wannabes. They have the hard-to-find ingredients, such as a base of entrepreneurial scientists and investors who understand the complexities of biotechnology. "The easy part is supporting research," he says. "The hard part is translating that research into companies."

—Christopher Swope