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## FISCAL IMPACT REPORT

ORIGINAL DATE 2/8/08

SPONSOR HBIC LAST UPDATED 2/12/08 HB 262/aSCORC/HBICS

SHORT TITLE New Mexico Research Applications Act SB \_\_\_\_\_

ANALYST Aubel

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY08	FY09	FY10	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
<b>Total</b>		See Narrative			See Narrative	General Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

Relates to Appropriations in the General Appropriation Act

Relates to SB165

Relates to SB53, Technology Development Act

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From\*

Office of the State Auditor (OSA)

Higher Education Department (HED)

Public Education Department (PED)

Department of Information Technology (DoIT)

Economic Development Department (EDD)

Workforce Solutions Department (WSD)

General Services Department (GSD)

Department of Finance and Administration (DFA)

\*Where applicable, prior responses to HB262 are utilized for the HBIC Substitute.

### SUMMARY

#### Synopsis of SCORC Amendment

The Senate Corporations and Transportation Committee amendment changes the composition of the Board of Directors, as follows:

- The governor's science advisor shall serve as Chair of the Board; and
- The governor shall appoint six members, provided that at least one member is from each congressional district and no more than three members are from a single congressional district.

The Legislature appoints six members, as follows:

- The Speaker of the House of Representatives (House) appoints one member;
- The Majority Leader of the House appoints one member;
- The Minority Leader of the House appoints one member;
- The President Pro Tempore of the Senate appoints one member;
- The Majority Leader of the Senate appoints one member; and
- The Minority Leader of the Senate appoints one member.

Language regarding terms for board positions are realigned to this schedule of appointees.

### Synopsis of Original Bill

The House Business and Industry Committee Substitute for House Bill 262 enacts the New Mexico Research Applications Act (Act) that establishes a nonprofit corporation to interact with business and government agencies, universities, private foundations and national laboratories to foster economic development in the areas of technology and intellectual property. The nonprofit corporation is related to the New Mexico Computing Applications Center initiative, or “supercomputer.”

The Act establishes a 13-member Board of Directors, which shall be appointed as follows:

The governor shall appoint seven members, one of which will act as Chair of the Board with the advice and consent of the Senate.

The Legislature shall appoint six members as follows:

- Two members appointed by the Speaker of the House of Representatives;
- Two members appointed by the President Pro Tempore of the Senate;
- One members appointed by the Minority Leader in the House of Representatives; and
- One member appointed by the Minority Leader of the Senate.

The bill specifies that the Board will not receive compensation except for per diem and mileage, subject to availability of funds.

Section 4 (F) specifies that all meetings, minutes and reports of Board—except for business-sensitive information—shall be available and open to the public. In addition, minutes and reports of the Research Applications Center (RAC) shall be provided to the LFC and other interim or standing committees within one month.

Section 5 specifies the powers of the RAC, as directed by the Board, to carry out its business – such as acquiring land and equipment, enter into contracts, enter into business arrangements, deal with property (including intellectual property), enter into license agreements, employ officers and employees, insure against loss, and receive and invest funds.

Section 6 identifies the applicability of others laws to the RAC, as follows:

- Except as otherwise provided in the Act, the RAC shall not be subject to state laws relating to personnel, procurement of goods and services, meetings of the Board, gross receipts taxes, dealing with property transfers;

- The RAC will be deemed an agency of the state when applying laws relating to furnishing goods and services to the state or any other agency, political subdivision or institution of the state; and
- The RAC will be considered a governmental entity for purposes of the Tort Claims Act, provided the RAC may enter into agreements with insurance carriers to mitigate risk.

In addition to an annual audit, Section 7 requires that the Board provide an annual report of the activities during the previous fiscal year to the LFC at least 90 days in advance of each regular legislative session. In addition, upon request from the appropriate committee, the Board – or any Board of Directors of any corporation formed by the RAC – shall appear before any interim committee or standing legislative committee to account for all activities.

Section 8 specifies conflict of interest requirements.

Section 9 limits contracts with public employees to \$20 thousand unless the governor or designee makes a written determination that the services are of higher quality or less expensive than otherwise available.

Section 10 establishes how the transfer of technology developed by an officer or employee from the RAC to commercial and industrial enterprises for economic development, including establishing and maintaining a substantial interest in a private entity that provides or receives equipment, material, supplies or services in connection with the RAC – subject to the approval of the Secretary of EDD under certain conditions.

The last 4 sections amend existing statutes - §10-16-7, §13-1-190, §21-1-17 and §21-1-35. Each of the amended sections relates to existing conflict of interest laws.

The HBIC Substitute for HB 262 contains an Emergency Clause.

## **FISCAL IMPLICATIONS**

While no appropriations are made in the HB 262, appropriations for the supercomputer initiative totaled approximately \$14 million in the 2007 legislative session. The third fastest computer in the world was brought “on-line” January 12, 2008 at a cost of \$11 million. For the 2008 legislative session, the initiative includes a capital outlay request for \$1.8 million for additional equipment to fund “gateways” and a special appropriation to the Department of Information Technology for \$4 million for first year operating expenses. The business plan for the supercomputer initiative includes state support over the next five years until sustainability is projected after FY12.

Most likely the EDD will incur some expense with regard to the creation of the Center; however the amount is unknown.

## **SIGNIFICANT ISSUES**

The business plan for the New Mexico Computing Applications Center (NMCAC) states its mission as follows:

*The New Mexico Computing Applications Center will apply the power of supercomputing to drive high tech business and job growth in New Mexico. The Center will also address important State needs in energy, environment, water, and health. And just as important, the Center will support science and technology education throughout our State.*

This bill provides the mechanism to “stand up” the Center by requiring the Economic Development Department to establish a nonprofit corporation, in similar fashion to the Economic Development Corporation. A Board of Directors will be appointed that reflects relevant experience from state government, local governments, businesses, universities, private foundations, national laboratories and investment advisors.

The NMCAC identifies the following major core components:

- Educational outreach, particularly in science, technology, engineering, and mathematics (STEM);
- Workforce development in high technology;
- Public policy and planning using visualization, modeling and simulation;
- Federal, university, private foundation, and national labs research applications; and
- A unique focus on selling “cycles” or time on the supercomputer for commercial applications.

The New Mexico Information Technology & Software Association summarizes the Center’s potential as follows:

*The NMCAC open-user model catalyzes the New Mexico industrial, scientific, and educational communities with access and computing power. This new model is essential to optimizing New Mexico’s full potential in the next generation of supercomputing utilities.*

Metrics to measure NMCAC’s achievements toward actualizing this potential, including interim start-up goals, are provided as Attachment A.

## **PERFORMANCE IMPLICATIONS**

EDD notes that the proposed Act is compatible with the department’s overarching goals of attracting new investment and new business start-ups by targeting specific initiatives that promise significant return on investment to the State.

The RAC is required to annually report to the LFC on its prior year’s activities. The RAC Board is required to account for its activities upon the request of the appropriate legislative committee.

## **ADMINISTRATIVE IMPLICATIONS**

EDD would establish the nonprofit corporation. The Secretary of EDD would continue to have certain duties relating to the RAC.

The Office of the State auditor (OSA) states that if public funds are appropriated to the nonprofit Board, the Board will be required to comply with Governmental Accounting and Financial

Reporting Standards (GAAP), the State Audit Act, NMSA 12-6-1 to 12-6-14, the State Auditor Rule, 2.2.2 NMAC, and applicable state and federal laws and regulations. Part of that requirement is that an annual financial audit be conducted according to the State Audit Act. This bill includes both the financial audit and an annual “activities” or performance report.

**CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP**

Relates to special appropriations in the General Appropriation Act and requests for capital outlay appropriations.

Relates to Senate Bill 53, Technology Development Act.

**OTHER SUBSTANTIVE ISSUES**

GSD notes that under Subsection B (2) of Section 6, the Center may choose to purchase liability insurance from the Risk Management Division (RMD) of GSD or insure its risks directly with a private sector insurance carrier. GSD maintains that an ordinary private entity that is investing in technology ventures will be exposed to high dollar risks related to allegations of business torts. The Tort Claims Act excludes many otherwise viable actions, including most intentional torts, and limits recovery on actions the immunity from which the statute waives. GSD concludes that private entities transacting business with the NMCAC may find these limitations affect the cost of doing business.

**WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL**

EDD maintains that failure to pass this bill would mean that the New Mexico Computing Applications Center could not be established as a separate entity. Consequently, that would mean the Computing Center would not be able to accept revenues from external sources and would never be able to achieve self-sustainability. That would inevitably lead to failure of the Center with very limited return on the \$14 million investment the State has already made toward this initiative. Furthermore, EDD predicts that failure to pass this bill would limit the ability of the EDD to create future initiatives in technology areas that offer the promise of significant economic growth in New Mexico.

**AMENDMENTS**

Section 8, Part B (page 11) discusses material relating to issuing bonds. However, because the Act does not include a provision for the RAC to issue revenue bonds, then it would appear that this section could be eliminated.

MA/bb

New Mexico Computing Applications Center  
 Success Metrics  
 1/22/08

The success of the Center will be determined by its ability to perform based on metrics that are put in place. We here describe the set of metrics (along with a number of quantitative goals) that will be applied and the approach that will be used in assessing progress.

Measuring the performance of the Center must include metrics for operations, economic development, education, community support, impact, return on investment, and financial viability and sustainability. Full oversight of all these performance measures will be carried out by the Secretaries of EDD and DoIT.

We here split the performance measures into two general areas: operations and impact. Under operations we include:

#	Metric	Goal	Status
1	Complete certification process	7/31/07	Completed 7/15/07
2	Hiring and retention of staff	Meet hiring profile in staffing plan	Requires new appropriations
3	Proper execution of RFPs for Center equipment	a) Supercomputer b) Gateway Equipment	a) Successfully completed b) Underway
4	Cost effectiveness of procurements	a) 15 tflops/\$M	a) Achieved 19 tflops/\$M
5	Incorporation of normal accounting and reporting processes	a) Documentation, reporting for supercomputer	a) Acceptance testing and documentation underway
6	Cost-effective operation and maintenance of the supercomputer and associated equipment	Meet commercial R&D computing cost-effectiveness standards	<i>Get hosting costs from Anna</i>
7	Availability of the computing system for productive work	80% availability after commissioning	Will measure from 3/08 to 7/08
8	Cost-effective operation, maintenance, and physical security of the core building and gateways	Meet commercial R&D computing cost-effectiveness standards	Needs additional funding for core building Will determine performance of gateways once they are stood up
9	Construction of the core building within budget and on schedule	Requires additional capital funding	Requires additional capital funding
10	Ability to meet deliverables on time and within budget	Computer on line by 1/30/08 Computer cost = \$12.5M	Computer brought on line 1/12/08 Computer cost = \$11M

The performance measures for impact are meant to assess the success of the Center in driving economic development, supporting educational and community development goals, and addressing issues of significant importance to New Mexico, the Southwest, and the nation. We split the performance measures in these areas into three stages: input metrics, process metrics, and output metrics. These correspond roughly to leading indicators, performance measurement, and impact.

Within input metrics we include:

#	Metric	Goal	Status
1	Ability to hire the highest quality staff	FY09: 16 hires	
2	Number of corporate members	FY08: 1 FY09: 6 FY10: 12 FY11: 18 FY12: 24 FY13: 30	FY08: Achieved
3	Amount of financial support provided by member institutions	FY08: \$0M (in kind) FY09: \$0.3M (in kind) \$0.22M (direct) FY10: \$2.3M (direct) FY11: \$3.7M (direct) FY12: \$4.0M (direct) FY13: \$5.3M (direct)	FY08: \$3.2M (in kind)
4	Ability to obtain endowments from foundations	FY09: 0 FY10: \$800K SY11: \$1.8M FY12: 3.0M FY13: \$4.3M	
5	Ability to attract joint appointments of first-class staff	FY09: 8 FY10: 20 FY11: 30 FY12: 40 FY13: 40	
6	Ability to partner with external institutions	MOUs in place with external institutions	
7	Ability to draw on volunteer groups (e.g., Santa Fe Alliance for Science)	FY09: Partner with at least 3 groups FY10: 6 groups FY11: 10 groups FY12: 12 groups FY13: 12 groups	

8	Increase above FY08 in Federal dollars invested in computational research and development in NM	FY09: \$5M FY10: \$31M FY11: \$55M FY12: \$79M FY13: \$85M	
9	Ability to attract investments from private companies	FY09: \$0.2M FY10: \$0.8M FY11: \$2.4M FY12: \$3.6M FY13: \$4.9M	
10	Ability to attract income from public agencies	FY09: 0 FY10: \$0.9M FY11: \$1.8M FY12: \$3.0M FY13: \$4.3M	

Within process metrics we include:

#	Metric	Goal	Status
1	Number of patents and disclosures filed	FY09: 0 FY10: 2 FY11: 4 FY12: 6 FY13: 8	
2	Amount of intellectual property developed	FY09: 0 FY10: \$160K FY11: \$370K FY12: \$600K FY13: \$850K	
3	Number of major innovations	FY09: 1 FY10: 2 FY11: 3 FY12: 3 FY13: 3	
4	Continuous analysis of markets and opportunities	Quarterly reports	
5	Marketing performance	Comparison with other state computing centers on per capita basis	
6	Performance improvements (cost savings, reduction of time to solution)	Improvement at least equal to inflation (up to 5% per year)	



7	Number of student fellowships provided	FY09: 5 FY10: 20 FY11: 40 FY12: 60 FY13: 70	
8	Level of teacher development provided	FY09: 5 FY10: 10 FY11: 15 FY12: 20 FY13: 25	
9	Amount of educational and training materials provided	FY09: \$260K	
10	Number of educational outreach programs presented	FY09: 10 FY10: 50	
11	External review by the Advisory Panel	Annually	
12	Number of papers published in recognized journals	FY09: 6 FY10: 15	

Within output metrics we include:

#	Metric	Goal	Status
1	Ratio of externally generated funds to State funds	FY09: 6% FY10: 39% FY11: 127% FY12: 320% FY13: n/a	
2	Progress towards self-sustainability	Compare external funding to that projected in business plan	
3	Financial return from patents, royalties, Intellectual Property	FY09: \$0 FY10: \$160K FY11: \$370K FY12: \$600K FY13: \$700K	
4	Number and value of funded proposals	FY09: 1 / \$10M FY10: 3 / \$30M	
5	Number of jobs created in NM	FY09: 0 FY10: 20 FY11: 30 FY12: 30 FY13: 30	
6	Number and impact of startups in New Mexico	FY09: 0 FY10: 2 / \$2M FY11: 3 / \$3M FY12: 4 / \$4M FY13: 4 / \$4M	

7	Number and fiscal impact of companies recruited to NM	FY09: 1 / \$1M FY10: 3 / \$5M	
8	Number of local initiatives organized through the gateways	FY09: 4 FY10: 10 FY11: 18 FY12: 30 FY13: 40	
9	Number of industrial fellows	FY09: 5 FY10: 20 FY11: 35 FY12: 50 FY13: 60	
10	Number of student interns	FY09: 5 FY10: 20 FY11: 40 FY12: 60 FY13: 70	
11	Number of students instructed	FY09: 10000 FY10: 67000 FY11: 100,000 FY12: 100,000 FY13: 100,000	
12	Number of teachers involved	FY09: 500 FY10: 2200 FY11: 3200 FY12: 3200 FY13: 3200	
13	Number and impact of educational initiatives developed through the Center and gateways	FY09: 3 FY10: 12 FY11: 18 FY12: 20 FY13: 20	
14	Improvement in level of professional development of teachers	FY09: 5 teachers certified FY10: 10 teachers certified FY11: 15 teachers certified FY12: 20 teachers certified FY13: 25 teachers certified	
15	Productivity normalized by capabilities	FY09: 1.0 FY10: 1.05 FY11: 1.05 FY12: 1.05	

16	Awards and recognitions by national groups	FY09: 1 FY10: 3	
17	Leadership of national programs	FY09: 0 FY10: 2	
18	International recognition and visibility	Recognition compared to other computing centers	
19	Leadership visibility of Center staff (membership on national panels, etc.)	FY09: 2 FY10: 5	
20	Citation count of R&D papers, inventions, and disclosures	FY09: 0 FY10: 20	

Detailed performance measures based on the above will be developed by the NMCAC Advisory Committee and implemented and tracked by the Departments of Economic Development and Information Technology.