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FISCAL IMPACT REPORT

SPONSOR Lujan, B ORIGINAL DATE 2/14/2007
LAST UPDATED _____ HB 1084
SHORT TITLE SUPERCOMPUTER TRAINING FOR STUDENTS SB _____
ANALYST Moser

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Non-Rec	Fund Affected
FY07	FY08		
	\$160.0	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

Relates to HB 897

SOURCES OF INFORMATION

LFC Files

Responses Received From

NM Department of Higher Education (HED)

SUMMARY

Synopsis of Bill

House Bill 1084 appropriates \$160,000 from the General Fund to the Board of Regents of New Mexico Institute of Mining and Technology (NMIMT) for expenditure in FY08 for a statewide program that trains middle and high school students on the use of supercomputers, improves the skills and technical knowledge of students, and improves teaching techniques in science, mathematics, engineering, and technology.

FISCAL IMPLICATIONS

The appropriation of \$160,000 contained in this bill is recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of FY08 shall revert to the general fund.

SIGNIFICANT ISSUES

NMIMT is a long-time host of the New Mexico Supercomputing Challenge. The

Supercomputing Challenge is an exciting and successful program that offers a truly unique experience to students in New Mexico. NMIMT co-sponsors this annual conference, now in its seventh year. Supporters for this event include Los Alamos National Laboratory (LANL), Sandia Laboratory, and other universities. More than 300 students attend and will compete in a problem solving exercise that is open-ended and timed. The monies in HB1084 will be used to support travel expenses for students and teachers to attend this supercomputer conference. The purpose of the conference is to excite and interest students in the fields of science and technology. It also offers an opportunity for students to meet professionals and learn more about supporting businesses, companies, and/or public institutions. Aside from generating interest in the fields of science and technology, it also allows participating universities like NMIMT to use the conference as a recruiting tool for New Mexico students who are potentially interested in the technology fields.

According to the Supercomputing Challenge website (<http://www.challenge.nm.org/about/>), students have the opportunity to work on the most powerful computers in the world, and this is currently available to only a few students in the United States. The Supercomputing Challenge is a program encompassing the school year in which teams of students complete science projects using high-performance supercomputers. Each team of up to five students and a sponsoring teacher defines and works on a single computational project of its own choosing (i.e.: last year students developed a simulation of the water flow on the Rio Grande River). Throughout the program, help and support are given to the teams by their project advisors and the Supercomputing Challenge organizers and sponsors. The Supercomputing Challenge is open to interested students in grades 7 through 12 on a non-selective basis from public, private, parochial, and home-based schools in all areas of New Mexico. The important requirement for participating is a real desire to learn about science and computing. The program has no grade point, class enrollment or computer experience prerequisites.

This request was not submitted by NMIMT to the New Mexico Higher Education Department for review and is not included in the Department's funding recommendation for FY08.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

House Bill 897 is related and appropriates \$261,000 from the General Fund to the Regents of NMIMT for expenditure in FY08 for expansion of the MESA program.

OTHER SUBSTANTIVE ISSUES

The New Mexico High School Supercomputing Challenge was conceived in 1990 by former Los Alamos Director Sig Hecker and Tom Thornhill, president of New Mexico Technet Inc., a nonprofit company that in 1985 set up a computer network to link the state's national laboratories, universities, state government, and some private companies. Sen. Pete Domenici, and John Rollwagen, then chairman and chief executive officer of Cray Research Inc., added their support.