

**LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS**

Bill Number: HB 17

51st Legislature, 2nd Session, 2014

Tracking Number: .194763.2

Short Title: NM Tech Supercomputing Challenge Program

Sponsor(s): Representatives Carl P. Trujillo and Kelly K. Fajardo

Analyst: Travis Dulany

Date: January 27, 2014

Bill Summary:

HB 17 makes an appropriation to support the Supercomputing Challenge program.

Fiscal Impact:

\$60,000 is appropriated to the Board of Regents of the New Mexico Institute of Mining and Technology (NM Tech) for expenditure in FY 15. Any unexpended or unencumbered balance will revert at the end of FY 15.

Fiscal Issues:

The fiscal impact report from the Legislative Finance Committee (LFC) reports that this is a recurring expense, and this bill would add funding to an existing program at NM Tech. The current state support for the program, according to LFC, is less than \$20,000.

According to the Higher Education Department (HED), this request was not submitted by New Mexico Tech to HED for review.

Substantive Issues:

Under the Supercomputing Challenge program, according to the Supercomputing Challenge website, teams of students complete science projects using high performance supercomputers. Each team of up to five students, along with a sponsoring teacher, defines and works on a single computational project of the team's choosing. The teams work to address a range of problems in a variety of fields, including astronomy, geology, physics, ecology, mathematics, economics, sociology, and computer science. The teams are encouraged to choose "real world" problems with measurable components. Some sample questions the competing teams may try to answer in their projects include:

- whether the United States will run out of water;
- how attitudes toward self-care in the prevention of disease are changed; and
- what the likelihood is that the deer population in the Bandelier National Monument will run out of grassland.

Registration for the 2013-2014 Supercomputing Challenge began in September 2013, with project evaluations taking place at various postsecondary institutions throughout the state in February and early March 2014. The final judging and awarding of prizes will take place in April 2014.

Background:

According to the Supercomputing Challenge website:

- The program was conceived in 1990 by former Los Alamos National Laboratory Director Sig Hecker and New Mexico Technet Inc. President Tom Thornhill. US Senator Pete Domenici and Cray Research Inc. CEO John Rollwagen also added support.
- In 2000, the program began inviting middle schools to participate in the program.
- In 2001, the Adventures in Supercomputing program, which was formerly housed at Sandia National Laboratories and the University of New Mexico, merged with the Supercomputing Challenge program.
- In 2007, the Supercomputing Challenge program began collaboration with Project GUTS (Growing Up Thinking Scientifically), which is housed at the Santa Fe Institute.

Committee Referrals:

HEC/HAFC

Related Bills:

None as of 1/27/2014