

**LEGISLATIVE EDUCATION STUDY COMMITTEE  
BILL ANALYSIS**

**Bill No:** HB 69

**49th Legislature, 1st Session, 2009**

**Short Title:** NMSU Pre-Freshman Engineering Program

**Sponsor(s):** Representative John A. Heaton and Others

**Analyst:** James Ball

**Date:** February 5, 2009

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**Bill Summary:**

HB 69 makes an appropriation to support the pre-freshman engineering program to enhance recruitment and retention of freshman engineering students at New Mexico State University (NMSU).

**Fiscal Impact:**

\$360,000 is appropriated from the General Fund to the Board of Regents at NMSU for FY 10.

Unexpended and unencumbered funds revert to the General Fund.

**Fiscal Issues:**

According to the Higher Education Department (HED) analysis of HB 69, this appropriation would expand the existing operating budget of the Pre-Freshman Engineering Program (PREP) at NMSU to provide access to the program to secondary school students in Luna and Otero counties. Ultimately, NMSU envisions developing PREP into a statewide program.

HED states that this request was submitted by NMSU to the department for review. HED does not oppose this project's funding for FY 10, if the state's fiscal picture improves.

The Legislative Finance Committee Fiscal Impact Report notes that the committee has concerns about the growth of research and public service projects within the higher education budget, as well as the alignment of these projects with state goals and strategic plans. The committee also continues to have significant concerns about accountability and performance outcomes for these projects.

**Issues:**

Administratively located at the NMSU College of Engineering, Institute for Energy and the Environment, PREP will increase K-12 and community outreach and training programs statewide, according to NMSU. NMSU asserts that intensive training, outreach, and education have proven to be very successful in further changing attitudes and perceptions toward careers in math and science and that attracting future professionals in these fields depends heavily on capturing students' interest early in life.

NMSU also reports that, over the past decade, more than 900 middle and high school students from Hatch, Las Cruces, and Gadsden have successfully completed some level of PREP. Of

those completing a 2007 survey, 100 percent of the students that finish PREP are high school graduates with 90 percent of those in college enrolled at NMSU.

Analysis of HB 69 by the Public Education Department (PED) states that numerous studies show that traditionally underserved students are less likely to attend, to persist, and to graduate from college than other, more fortunate students. Furthermore, three factors bear on access to and success in college:

- predisposition to college;
- early access to academic experiences of high quality; and
- postsecondary opportunities.

### **Background:**

According to HED, PREP began in New Mexico in 1997. The program is sponsored by the National Aeronautics and Space Administration, the Hispanic Association of Colleges and Universities, and Intel, among others. Its goals are:

- to assist in filling the need for qualified scientists and engineers in New Mexico;
- to expose economically disadvantaged students to professional opportunities in science and engineering, as well as innovative technology;
- to prepare students for mathematics, science, and engineering studies at the college level; and
- to increase the retention rate of students in college.

HED further states that PREP has two components:

- an intensive mathematics-based pre-college program that provides educational enrichment for approximately 200 high achieving middle and high school students. Participants learn logic, algebraic structures, physics, and technical writing, and they have hands-on learning experiences. Students in grade 6 and above may participate in PREP for three years before entering college; and
- a seven-week academically intense, summer program on the NMSU campus in Las Cruces.

HED says that there are no tuition costs or fees charged for program participation. Over 90 percent of the students who participate go on to pursue higher education.

### **Related Bills:**

HB 134 *NMSU Science, Math & Aerospace Program*

HB 201 *NMSU Aerospace Engineering Program*

SB 54 *Tourism Education for Public Schools*