WHY ARE WE HERE?

THE FACTS
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• Nearly 2/3 of 17 year olds report taking Algebra II, pre-calculus and/or calculus.

• Girls and boys are taking science and advanced mathematics courses at about the same levels. Girls are as prepared to enter the quantitative professions as boys - but they do not.

• White students are almost twice as likely to take precalculus and/or calculus than Hispanic students and almost four times as likely to do so than African American students.

Source: Upping the Numbers 2002, NCES 2000
Intended Majors of SAT 1 Test Takers, 2000

Source: College Board, 2000 College-Bound Seniors National Report
Bachelors Degrees Granted in Engineering

Source: Engineering and Technology Degrees Granted: Engineering Workforce Commission
Bachelors Degrees Granted in Computer Science

Source: CPST data derived from NSF (US citizens and perm residents only).
Percent in key represents 2000 data.
Doctorate Degrees Granted in Engineering

Source: Engineering and Technology Degrees Granted: Engineering Workforce Commission. Data on Blacks, Hispanics and Native Americans are U.S. citizens or permanent residents only.
Source: CPST data derived from NSF (US citizens and perm residents only)  Percent in key represents 2000 data.
Undergraduate Retention in Engineering

- There is a persistent 20% gap between men’s and women’s completion rates.

- Underrepresented minorities are retained at a 36.5% rate vs. 68.3% for non-minorities.

NACME Research Letter Volume 9, Number 1, September 1999.
Tenured/Tenure Track Engineering Faculty 2001

- Women: 8.9%
- African Americans: 2.1%
- Hispanics: 2.9%

Source: American Society for Engineering Education Database 2001
Engineers & Computer/Math Science Professionals in the Labor Force

Women in Other Professions

Demographic trends indicate that by the year 2005, 62% of the new entrants into the US labor force will be women and 51% will be minorities.

October, 2000 to June 2001:

270,106 petitions for H-1B visas were filed and 154,672 were approved.

Source: Commission on Professionals in Science and Technology.
Job Growth Projections

Calculated % of 22 Year-Olds Who Would Earn S&E Bachelors Degrees