REBUILDING THE FACULTY PIPELINE

THE SITUATION

2020 In just a few years the shrinking number of mining engineering schools and loss of tenured professors could undermine industry growth.

THE CAUSES

TOO FEW Ph.D.s STAYING IN ACADEMIA TO BECOME TENURED FACULTY
95% of Ph.D.s pursue corporate careers. Many cite the lower starting academic salaries and the ongoing challenge to finance the research needed to achieve tenure.

NOT ENOUGH TENURED FACULTY TO BUILD STRONG, ENDURING PROGRAMS
Only one-in-five Ph.D.s achieves tenure, so schools lack the faculty needed to grow. By 2020, 100% of current senior faculty members will be eligible for retirement.

A SHRINKING NUMBER OF DEGREE-GRANTING SCHOOLS IN THE U.S.
The 14 mining engineering schools cannot enroll enough BS/MS students to meet industry demands. And the number of schools has been shrinking since 1982.

THE RESULT? NOT ENOUGH GRADUATES COMING OUT OF U.S. PROGRAMS
While industry demand exceeds supply, our growing industry’s need for trained professionals will only increase in the coming years.

APPROACH PART 1
Four-year Ph.D. fellowships to incent more engineers to pursue academic careers

APPROACH PART 2
Career development grants to make it possible for Ph.D.s to achieve tenure

For more information, contact us at AcademicGrants@smenet.org