

Our Promise

We engineer opportunity for minorities in STEM.

Our Mission

To ensure American competitiveness in a flat world by leading and supporting the national effort to expand U.S. capability through increasing the number of successful African American, American Indian, and Latino young women and men in science, technology, engineering, and mathematics (STEM) education and careers.

Our Vision

An engineering workforce that looks like America.

Our Belief

Diversity drives innovation.

Our Purpose

Through partnerships with like-minded entities, we serve as a catalyst to increase the proportion of African American, American Indian, and Latino young women and men in STEM careers. We inspire and encourage excellence in engineering education and career development toward achieving a diverse and dynamic American workforce.

Shaping an American STEM workforce where diversity drives innovation and global competitiveness

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CLOSING THE ACHIEVEMENT GAP

The National Action Council for Minorities in Engineering, Inc. (NACME) was founded by a group of prescient corporate executives who understood that the lack of diversity in the science, technology, engineering, and mathematics (STEM) fields imperiled business growth and threatened our nation's competitive edge. Since 1974, NACME has provided scholarship support for African American, American Indian, and Latino students (underrepresented minorities, or URMs) pursuing degrees in engineering. To date, NACME has supported more than 24,000 students with more than \$142 million in scholarships and support.

While the primary NACME delivery model has been through scholarships, supported by a preeminent group of *Fortune* 500 companies, NACME has learned that achieving success in increasing underrepresented minority participation in engineering study requires a multifaceted strategy to address the continuum from middle school to workforce entry. The multifaceted NACME strategy integrates:

1. **Scholarships and University Relations** – NACME currently partners with a national network of 51 leading colleges and universities to recruit, enroll, educate, retain, and graduate increasing numbers of URM students. These institutions accounted for 30.5 percent of all engineering bachelor's degrees awarded in engineering to URMs in 2013. NACME is responsible for more than 1,000 scholarships awarded annually to URM students. Through the NACME Scholars Program, NACME provides block grants to colleges and universities that, in turn, award funding as part of financial packages to qualified students enrolled in engineering programs. During the 2013-14 school year, NACME Scholars collectively earned a 3.3 overall GPA, and the six-year graduation rate for the first three cohorts of NACME Scholars was 79.1 percent.

Through our work with colleges of engineering across the country, we've learned that the following factors are crucial for recruiting and retaining underrepresented minority talent in post-secondary institutions:

- a. **Institutional leadership** committed to recruiting and admitting promising students from high schools in underserved communities and two-year colleges.
 - b. Published admissions policies and procedures that reflect a **holistic approach** that goes well beyond SAT/ACT scores and high school GPA in evaluating student potential to complete the baccalaureate degree in engineering.
 - c. **Summer programs** for incoming first-year students designed to enrich intellectual exchange and socialize students for participation in the life of the university and the engineering community.
 - d. A campus community of faculty, students, and administrators designed to increase student engagement and provide **institutional support** for the academic success of all students. Common examples include: **mentoring programs, clustering of students in common sections of key courses, structured study groups, and/or a dedicated student center.**
 - e. Dedicated staff responsible for improving URM engineering student success.
2. **Pre-Engineering** – As founding partners, NACME, Project Lead the Way (PLTW), and the National Academy Foundation (NAF) launched the **Academies of Engineering (AOEs)**, a network of career-themed academies. Through open enrollment, high schools provide students with a strong science and math education to assure college readiness for engineering study. Scholarships are awarded to AOE high school graduating seniors, and NACME's corporate and university partners participate on AOE advisory boards. Additionally, NACME provides a suite of **engineering awareness materials** to middle schools and high schools across the country to inform students, parents, teachers, and guidance counselors about the possibilities of an engineering career.
 3. **Research and Program Evaluation** – With the support of corporations, foundations, government agencies, and individuals who share our vision, NACME has **conducted research and analyzed trends** in education, engineering enrollment, degree completion, and workforce participation for underrepresented minorities since its inception.
 4. **Engineering Public Policy** – NACME has **raised awareness and promoted the discussion of equity and engineering education on Capitol Hill.** To further address the institutional barriers that

contribute to the deficit of women and URM students in STEM, NACME provides research-based recommendations on federal policy in our suite of publications.

Today, NACME's vision of an engineering workforce that looks like America is slowly being realized. Our efforts have contributed to URM students earning more than four times as many engineering bachelor's degrees, nearly seven times as many engineering master's degrees, and nearly eight times as many engineering doctorate degrees in 2013 than they did in 1977 – the first year that data is available by race in the Integrated Postsecondary Education Data System (IPEDS)¹.

Although progress has been made in the production of URM engineering talent, **more work is needed to diversify the pathways to the STEM workforce**. Underrepresented minorities still score lower on their standardized test scores than their peers², and complete high school at comparatively lower rates³. The retention rates for URM students who do enroll as undergraduate STEM majors are lower than their peers' rates as well⁴. As the Education Commission of the States notes, "the gap in achievement that separates economically disadvantaged students and students of color from less disadvantaged students has been the focus of discussion, research, and controversy for nearly 40 years⁵." There are several issues related to closing the achievement gap and

increasing the number of URM students in STEM that need to be addressed, including:

1. College preparation and affordability
2. STEM education and teacher preparation
3. The integration of the Next Generation Science Standards and Common Core State Standards in the classroom

As a leader in the national discussion on the implications of diversity-with-equity in education and careers for U.S. competitiveness in STEM, NACME will explore each of these issues in our new *Point of View* series. Our goal is to **shed light** on how these issues affect the URM community and to **offer policy recommendations** for Congressional leaders to act upon.

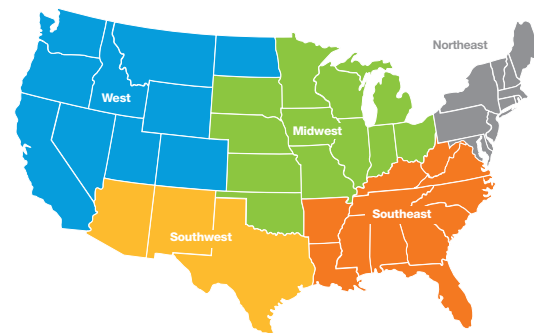
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(as of October 2014)

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Endnotes

1. National Science Foundation, National Center for Science and Engineering Statistics, IPEDS Completions Survey by Race, 1977-2013, Integrated Science and Engineering Resources Data System (WebCASPAR) (<https://webcaspar.nsf.gov>) [12/02/14].
2. College Board, (2012). 2012 College-Bound Seniors: Total Group Profile Report. New York, NY: The College Board; ACT Profile Report, National (Graduating Class 2012). Accessed online at www.act.org.
3. National Center for Education Statistics, 2012. *Digest of Education Statistics*, 2011.
4. NACME Analysis of Beginning Postsecondary Students Longitudinal Study using National Center for Education Statistics PowerStats, June 2011.
5. Education Commission of the States. *Closing the Achievement Gap*. Accessed online at <http://www.ecs.org/html/issue.asp?issueid=117&subissuelD=303>.