Our Grand Challenge

The 10K Movement

NAE Workshop on Engineering Societies Activities
Towards Engineering Inclusion
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National Society of Black Engineers
The National Society of Black Engineers

NSBE MISSION

To increase the number of culturally responsible Black engineers who excel academically, succeed professionally, and positively impact the community.

- Established in 1975
- One of the largest student-governed societies
- ~17,000 active domestic members (Pre-College, Collegiate, and Professionals)
- 15 conferences and conventions
- 500+ Chapters worldwide
- Fosters academic achievement, self-efficacy, career readiness, and leadership development
NSBE’s STRATEGIC GOAL

Drive the strategy to **graduate 10,000 black engineers** ANNUALLY by the year **2025**

A 3-Fold Increase Will Move Blacks Toward Parity
GETTING TO 10K

• Bridge Scholarships
• The Retention Toolkit
• Academic Scholarships
• “Working Smarter”

STUDY SHOWS
NSBE MEMBERS
GRADUATE 10x
MORE THAN
NON-MEMBERS
GETTING TO 10K

NSBE Impact Awards
- Recognized Exemplar Universities
- Sponsored by ExxonMobil

“Paving the Way” White Paper
- Nine Engagement Strategies + 3
- Literature Review, Best Practices & Challenges

Student Retention Toolkit
- Operationalizes the Engagement Strategies
- Print and Kindle Versions available on Amazon.com
- Pre-conference Workshop at ASEE 2018
WHAT WILL IT TAKE TO GET TO SCALE?

**TODAY**

- Total 2000 population: 658,070
  - Age 8: 3,501
    - Graduates: 7,011 (1.1%)
    - 4th grade math proficiency: 36,194 (5.5%)
    - 8th grade math proficiency: 85,549 (13%)
    - Completing Calculus in HS: 125,033 (19%)
    - Freshmen engineering enrollment: 36,194 (5.5%)
    - Engineering Completion: 125,033 (19%)

**NSBE’S 2025 GOALS**

- Total 2000 population: 658,070
  - Age 8: 658,070
    - Graduates: 17,110 (2.6%)
    - 4th grade math proficiency: 144,775 (22%)
    - 8th grade math proficiency: 72,388 (11%)
    - Completing Calculus in HS: 184,260 (28%)
    - Freshmen engineering enrollment: 17,110 (2.6%)
    - Engineering Completion: 10,095 (59%)

www.NSBE.org
REVIEW: GETTING TO 10K

4-Yr FT Engineering (2025)
Total ~ 900,000
Black – 57,393 (6.4%)
  - Male – 28,696 (50%)
  - Female – 28,696 (50%)

8,596 → **16,949** = **97.1%** increase
Assume same increase across all class levels
29,108 x .971 = **57,393** AA enrolled
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What is the 50K Coalition?

The 50K Coalition is a collaborative of 61 diverse organizations using a “Collective Impact” framework to develop an evidence-based approach that will inform management decision-making, coalition member’s program improvements, sharing of information, and collective action driven by coalition members towards achieving the bold national goal of 50,000 diverse engineering graduates annually by 2025.

The 50K Coalition is not a program, but a “Collective Impact” collaboration of engineering associations, colleges and universities, agencies, corporations, and foundations that work toward a common agenda by leveraging their distinctive missions, relationships, and institutional memory.
Develop STRATEGIES which may include the following:

Better understanding the current situation: aligning or overlaying existing data sets or systems with one another.

Learning by trial: identifying an opportunity to start small with willing partners, learn from the experience, and then expand or replicate.

Increasing coordination: finding ways to realign existing programs, protocols, and stakeholders to work together differently to maximize efficacy.

Enhancing services: adopting a previously unnoticed proven practice from inside or outside the community to enhance existing services or programs.

Identifying policy-change opportunities: looking for opportunities at local, state and/or federal levels and relaying these to the Leadership Circle.
Our Goal: Structural Change In Engineering

A Model for the Evolution of Intervention Programs

- Isolated Projects
  - Informal Coordination
  - Soft Money
- Department/ School-based efforts
  - Formal coordination of discrete projects
  - Hard Money
- “Center” for coordination of S&E resources and efforts
  - Institutional Commitment
  - Structural Reform
- Individual Commitment

Questions to be Answered, from Coalition to Alliance

• How do we build on the **momentum** of this movement?
• How do we **foster community and collaboration** across distance?
• How do we capture, store, analyze, monitor, secure, and publish **data**?
• How do we **operationalize** the Action Networks?
• How do we stand up a Backbone? What are the critical components?
• How do we **secure funding** to get to scale?
• How do we **expand** the Coalition?
  o ABET-accredited engineering colleges
  o Engineering associations
• **HOW DO WE CATALYZE CHANGE** TO ACHIEVE OUR MOONSHOT?
LET’S TALK

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