Introduction

This document is intended for use only by candidates applying regional/national collegiate or professional leadership. This document is not the official strategic plan document and should not be distributed.

Solutions: Pathways and Areas of Focus

The NSBE SPTF has charted a path that will start small, scale smart, and lead toward a vision, a path that embodies “think big.” The plan is developed around five lanes, three core programmatic pathways, and two core business areas. The pathways align with our core demographic segments:

- **READY!** (the Pre-Collegiate Engagement pathway)
- **SET!!** (the Collegiate Scholastic Achievement pathway)
- **GO!!!** (the Professional Advancement pathway).

In addition to creating these pathways that call us to BE MORE, the SPTF also explored the opportunities for NSBE to DO DIFFERENTLY: to deliver new ways to offer value and increase its impact on its members, stakeholders, and broader community to realize the promise of its mission and vision. Many of these novel approaches are reflected in the three pathways but also in two other pillars of work that cut across them. We called these two areas:

- **BRAND!** (Growing NSBE’s brand reputation and caliber among internal and external audiences), and
- **GROW!** (strategic investments in NSBE’s future sustainability).

Through these combined pathways and focus areas, NSBE will continue making solid headway toward its aspirational goal of 10K by 2025 and progress in its mission to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community.
Strategic Priorities and Critical Initiatives

In the next sections you will find the suggested changes necessary for NSBE to reach its 2025 goal. For information about current programming or activities, particularly as they pertain to your position of interest, please contact the current person holding the position or someone on the Regional/National Advisory Board.
Ready: Pre-Collegiate

Awareness of STEM (Kindergarten – Grade 2)

The new STEM Awareness Program (SAP) is an introductory program designed to formalize the Informal Science and Engineering introduced through TORCH. SAP will encompass a number of key elements: a curriculum that includes a toolkit with hands-on activities for K–2 students, clear support roles, and responsibilities for key players (i.e., parents, teachers), and a stakeholder engagement plan for Chapter, Regional, and National PCI Chairs and NSBE World Headquarters.

Engagement in STEM (Grades 3-5, SEEK, NSBE Jr.)

The new STEM Engagement Program (SEP) component will focus on successfully converting non-NSBE Jr. members to NSBE Jr. students by capturing them during SEEK. It is imperative that SEEK students are converted to NSBE Jr. students to populate the newest NSBE Jr. demographic as a part of the 10K pipeline. SEP should keep these students immersed in STEM throughout the year. The curriculum should help students begin to develop their engineering identity and will lay the foundation for STEM principles that will be used throughout their matriculation through preparatory school. It is critical that collegiate chapters participate in the SEP as mentors and curriculum administrators.

Development in STEM (Grades 6-8, NSBE Jr.)

The purpose of the STEM Development Program (SDP) is to begin developing the professional skills of 6th–8th grade NSBE Jr. students. Competitions will continue to focus on STEM proficiency while the SDP builds the foundation for the professional component of their engineering identities. New programming should be introduced at FRCs and Convention that reaffirms the skills learned through the SDP. NSBE Professionals should serve as curriculum administrators and engage in the program as often as possible.

Applications of STEM (Grades 9-12, NSBE Jr.)

The STEM Applications Program (SAP) aims to help students in the 9th–12th grade pathway tap into the excitement of engineering and the underlying values of excellence, leadership, technical development, and teamwork that underlie its professional practice.

The STEM Awareness curricula, tool kits, and communications will be differentiated for high school students in this pathway. The communication messages will shift and begin to prepare these students for a professional world that now lacks racial and gender diversity by building upon the relationship with Collegiate and multicultural engineering programs. The SAP will also engage NSBE Professionals and industry partners.
Set: Collegiate

NSBE Retention Program

In addition to having study halls, chapters should also begin to host Facilitated Study Sessions. The implementation of Facilitated Study Sessions in addition to study halls will allow students to increase understanding of course material and challenging concepts. This is especially important for underclassmen engineering students as they adjust to engineering curricula. The sessions should complement the lecture and recitation with supplemental instruction and problem-solving and will be facilitated by graduate students or upperclassmen with demonstrated proficiency in the subject area.

Mentorship is not always formalized in the retention program and is instead observed through improved peer-to-peer relationships among upperclassmen and lowerclassmen. Mentorship and the experience of both the mentor and mentee should be formally tracked to encourage Society-wide participation and quantify the value of these relationships.

As the newest addition to the Retention Program, Mental Health Awareness should encourage students to practice help-seeking behaviors. Chapters should circulate resources from their institutions and should invite any associated staff to Retention Program events such as Semester Check-Ins. On a National level, the Academic Excellence Chair and World Headquarters will work together to identify a partner and establish a memorandum of understanding to further these efforts.

Professional and Leadership Development

Engineering Diversity
A program will be established under Engineering Diversity to introduce collegiate students to various career pathways. The career pathways should include traditional and non-traditional careers in industry and academia. It is critical that this program expose students to careers in academia and to graduate school, as students typically do not fully realize the value of academic research until the end of their undergraduate experience.

Leadership Institute
The NSBE Fellows Shadow Initiative should be expanded to provide guidance and opportunity for members by developing leadership skills applicable both within NSBE and in other leadership roles. A Leadership Toolkit will be created and shared Society-wide to be utilized by chapters and individuals. A method of recognizing internal and external leadership will be determined to encourage toolkit utilization and Shadow Initiative participation.

Engineering Career Academy
The Engineering Career Academy will be expanded to help students understand professional licensure and credentialing as well as the Fundamentals of Engineering Exam. There will also be a graduate component to help students improve upon writing and analyzing scientific papers, maintain relationships in academia, and prepare for the thesis statements. The expansion will boost the professional leadership and confidence of both undergraduate and graduate membership.
Special Interest Groups should help develop and administer curricula that are relevant to members who wish to enter similar fields.

MOUs providing low- to no-cost technical and professional development resources and opportunities for members will also be established and/or renegotiated.

**Community Service and Impact (CSI)**

STEM Community Training will be increased via the establishment of a Technical Literacy Program. The program will be geared towards non-NSBE members of all ages. Chapters should implement the Literacy Program by hosting an event(s) that coincides with or succeeds A Walk for Education.

To drive more community service geared toward civic duty and leadership, R.I.S.E. will be institutionalized as a NSBE initiative. The National TORCH Chair will continue to work closely with the Public Policy Special Interest Group (SIG) while formalizing the initiative.

**Multicultural Engineering/ STEM Program and Faculty Engagement**

Although the Dean and MEP Strategic Roundtable has been highly impactful, its annual format leaves institutions lacking the guidance of NSBE throughout the year. A quarterly forum will be established to maintain the conversation that begins during the Roundtable. In addition, a LISTSERV composed of deans at engineering institutions with NSBE chapters will be established to provide updates regarding NSBE Programs and the progress of Collegiate members. The Retention Toolkit will also be evolved to include best practices for institutions to retain Black engineering students and to help chapters establish formal relationships with pertinent MEP faculty.

**Mentorship**

A formal mentorship program will be established to establish long-lasting relationships between Collegiate and Professionals members. Mentors and mentees shall be paired based on mutual professional goals, technical skills, and life experience. Formal evaluation methods of the program and checkpoints for mentors/mentees shall be established to improve the structure as the program progresses.
Go: Professional Advancement

Technical Development

Refocus the technical development membership experience to promote:

- Increased networking opportunities for technical collaborations between members
- Establishment of “NSBE Grand Challenges” to inspire members to solve technical problems identified by the organization, utilizing its Partners, the 14 Grand Challenges established by the National Academy of Engineering, and/or the 17 Sustainable Development Goals established by the United Nations
- Formalization of an organizational publication that focuses on the technical community impact work performed by members; and
- Increase/renegotiate MOUs that specifically provide low- or no-cost technical development resources and opportunities for members.

Professional Development

Refine our professional development activities and increase offerings where needed by identifying and aligning key content in key places and moments throughout the pipeline, where it can add value and better advance or target development interests.

Leadership Development

- Raise member awareness of nonprofit board service and its application in career development and other nonprofit board service opportunities.
- Formalize the structure for leadership training that includes tracking of topics and hours (transcript) to foster validated recognition of leadership skills by external organizations/stakeholders.

Community Service

- Refine Special Interest Group structure to support community problem solving and involvement.
- Improve/align community service activities at the National, Regional and Chapter levels.
- Explore with Special Interest Groups (SIG) leadership new, different, and more dynamic roles in NSBE Professionals members’ career, professional, and leadership skills development.
- Explore/evaluate how the organization supports the SIGs (financially and with manpower) based on their community service workload.
- Explore the feasibility of and perhaps design new pathways for greater participation of NSBE Jr. and Collegiate members in the SIG model community-wide, with focused access to highly requested SIG areas (i.e., simple opportunities of NSBE Jr. and Collegiate member to join already occurring SIG programming — live and virtually — to other new possibilities).
- Improve/align community service activities at the National, Regional, and Chapter levels.
**Philanthropic Development (Private Donor Development Strategy)**

To establish an effective private donor strategy and philanthropic educational program, we suggest the following:

- Networking opportunities with philanthropists
- Partner-provided educational resources for members that cover topics such as: Giving 101, Charitable Contributions and Taxes, Employee Match Programs, etc.

Establishment of a Donor Pyramid that provides opportunities for members to give throughout their Professionals Journey.

- This approach will provide a recognition element that acknowledges members for consecutive giving years.
- Ultimately, a donor tier structure will be established to recognize large, one-time charitable.

**Mentorship**

Redefine Professionals Mentorship to include:

- Strategic matching based on expressed interests
- Recommended engagement schedule
- Mentorship training and resources
- Exploration of functional mentorship that segments interactions based on technical interests, leadership development, career-level, and/or life stages; and
- Establish a new, reinforcing NSBE Mentorship feedback/learning loop between the Professional and Collegiate strategic directions that better connect NSBE Professionals with NSBE Jr. and Collegiate mentees.