

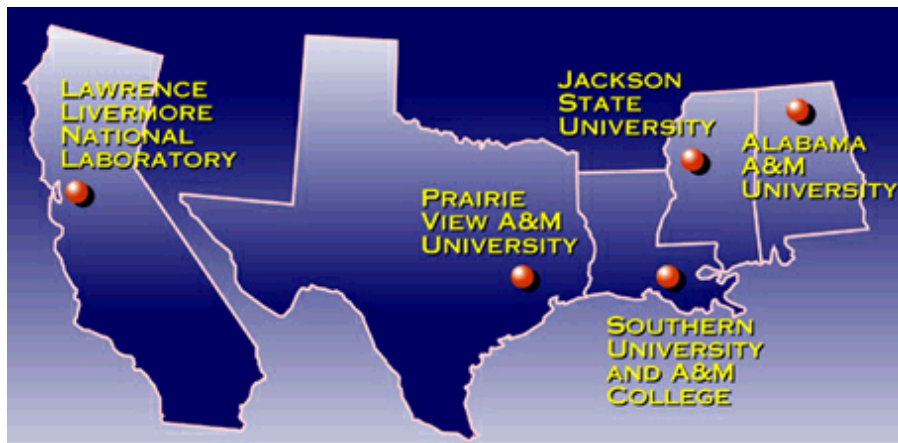


## SCIENCE AND ENGINEERING ALLIANCE (SEA)

*"SEA: Helping America Remain Globally Competitive in Science, Technology, Engineering and Mathematics (STEM)"*

### Five-Year Strategic Plan

2009 - 2013



## MESSAGE FROM THE EXECUTIVE DIRECTOR



I am pleased to transmit the Science and Engineering Alliance's (SEA) Strategic Plan for Fiscal Years 2009 to 2013. In 2010, SEA will celebrate its 20<sup>th</sup> year of operation and this plan describes how we intend to continue our mission. In particular, it discusses our fundamental principles and strategies and sets out performance goals, specific objectives, and measurable targets required for success.

The mission of the SEA is "To help assure an adequate supply of globally competitive American scientists and engineers for the future workforce, while simultaneously using our *"virtual university concept"* to meet the research and development needs of the public and private sectors." In undertaking this mission, the SEA Office of the Executive Director (OED) provides technical leadership in setting direction for SEA activities, establishes measures of effectiveness in advancing the mission of the SEA, serves as primary emissary to external groups on matters relating to the mission of the SEA, and initiates and engages in programs/proposals to acquire funding.

Since the start of the 21<sup>st</sup> Century much has happened and they have continued into this Strategic Plan: global economic recession (2000); 9/11 (2001); Iraq War (2003); the tsunami that devastated Indonesia (2004); Hurricane Katrina (2005); real estate and housing market collapse, and collapse of Wall Street financial markets (2008); economic stimulus package to bailout failing businesses (2009); BP oil spill (2010); all which continue to reduce resources available to organizations like SEA. In the midst of a continuation of historic problems besetting the nation and the world, SEA successfully continued its mission of creating access and opening doors of opportunity so that underutilized and underrepresented individuals, institutions, and

regions were able to participate in a robust manner in federal research programs.

The accomplishment of our Strategic Plan will present some special challenges because the SEA, as will others, must chart its path to the future in a time of significant change. The significant challenges are found in every sector of our society, resulting in the need to restructure and re-think how we do things. We must adapt as appropriate, to the fact that there are changing financial pressures resulting from cutbacks in federal and private funding. Moreover, some adjustments are required based on demographic shifts that have emerged in recent years. Technological innovations like the emergence of Email, Internet and World Wide Web, Social Media, Green Economy, have all brought new operational strategies that continue to take on greater significance in all sectors of the marketplace. A focus on our mission and our performance goals serves as a guide through these turbulent times.

In developing this Strategic Plan, we benefited from input from those we serve and those vitally interested in the next generation of American technical workers. The result, however, is our own, and we will implement it taking into consideration the interest of the SEA members and our supporters.

The Strategic Plan is a living document to accommodate and adapt to this dynamic period of change. Accordingly, we will revise and update this Plan as necessary to reflect change, as well as to respond to future evaluations of our performance. As we continue to assess the changing dynamics of the world in which we live, it is clear that the SEA program will have to adjust as time goes on.

*R.L. Shepard*

Robert L. Shepard  
Founding Executive Director  
Science and Engineering Alliance, Inc.  
July 15, 2009

**SEA: Helping America Remain Globally Competitive in  
Science, Technology, Engineering and Mathematics (STEM)**

**TABLE OF CONTENTS**

**Sections**

	<b>Message from Executive Director .....</b>	<b>2</b>
1	<b>Why Is It Important .....</b>	<b>4</b>
	<b>Need.....</b>	<b>4</b>
2	<b>Program .....</b>	<b>4</b>
3	<b>Accomplishments .....</b>	<b>5</b>
4	<b>Mission .....</b>	<b>5</b>
5	<b>Vision .....</b>	<b>5</b>
	<b>Challenges Facing the SEA .....</b>	<b>5</b>
6	<b>SEA Organization and Responsibilities.....</b>	<b>6</b>
7	<b>Strategic Goals and Objectives.....</b>	<b>7</b>
8	<b>SEA FUNDAMENTAL PRINCIPLES.....</b>	<b>7</b>
	<b>Goal 1. Member Support .....</b>	<b>8</b>
9	<b>Goal 2. Strengthen and Market "Virtual University" Infrastructure.....</b>	<b>8</b>
	<b>Goal 3. Service to the Community.....</b>	<b>8</b>
	<b>APPENDIX</b>	
	<b>DETAILS ON EACH GOAL .....</b>	<b>10</b>
	<b>REFERENCES OF SUPPORTING ANNOTATED BIBLIOGRAPHY.....</b>	<b>13</b>
	<b>ALPHABETIZED REFERENCES FOR SUPPORTING ANNOTATED BIBLIOGRAPHY .....</b>	<b>17</b>
	<b>LINKS TO OTHER SEA DOCUMENTATION.....</b>	<b>18</b>

## Science and Engineering Alliance (SEA): Helping America Remain Globally Competitive in Science, Technology, Engineering and Mathematics (STEM)

*“No matter how full the river, it still wants to grow.” – Congo Proverb*

### Section 1. WHY IS IT IMPORTANT?

Diversity in every area of society will better serve a heterogeneous world. The world being vast and extremely heterogeneous, Science and Engineering Alliance, Inc. (known as SEA) supports underrepresented and underutilized individuals, institutions and regions that desire to participate more fully in federal research programs.

*“The test of our progress is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have little.”--Franklin D. Roosevelt*

### Section 2. NEED

“If the Broad Agency Announcement (BAA) and other Federal opportunities had not been broken down and translated into clear and concise technical language by Science and Engineering Alliance, Inc. (SEA), our institutions would not have been able to participate in the collaboration. We are aware of the array of technical strengths at our institutions, but due to the high teaching load of our faculty, following-up outside the classroom with our students based on their many needs, coupled with limited financial resources and weak research infrastructure, we often are constrained by time and not in a position to respond to Federal opportunities. The services provided by SEA strengthens the ability of historically black colleges and universities (HBCUs) and positions them to add to the technical discussions within the federal sector” – *Dr. Willie F. Trotty, Vice President, Research and Development and Dean of the Graduate School, Prairie View A&M University.*

*“Don't let yesterday use up too much of today.”-- Cherokee Proverb*

### Section 3. PROGRAM

Despite the prevalence of programs aimed at broadening the participation of minorities in scientific initiatives at the federal level, throughout the past three decades many HBCUs have remained woefully underrepresented and underutilized. This is not due to a lack of capability of the scientists and researchers at these institutions, but more so a lack of capacity. Employing a multilayered approach focused on harnessing the collective capabilities of four HBCUs, the SEA was formed in 1990 with the explicit goal of helping these schools increase their capacity to participate in Federal R&D funding. These four institutions, Alabama A&M University, Jackson State University, Prairie View A&M University, and Southern University and A&M College, have since experienced significant increases in federally funded research projects. By strategically partnering these HBCUs with opportunities at renowned research institutions such as Lawrence Livermore National Laboratory (LLNL), the National Institute of Standards and Technology (NIST) and agencies such as the U.S. Department of Energy (DOE), National Science Foundation (NSF), and the Environmental Protection Agency (EPA), SEA has achieved, and in many cases exceeded, its goal of creating access and opening doors of opportunity for underutilized individuals, institutions and regions that historically do not participate in federally funded research at the rates comparable to others. By demonstrating that the *“sum is greater than the individual parts,”* SEA has and continues to exist as a conduit for enhancing the presence and impact of HBCUs in the Science, Technology, Engineering and Mathematics (STEM) fields.

After 22 years serving in this capacity, SEA has emerged as an entity uniquely positioned to now serve the broader research community of small academic institutions. Similar to the four original SEA HBCUs, many of these institutions possess demonstrated technical strengths, but lack the focused attention needed to help them navigate the path towards engagement. To that end, SEA is already functioning in this new role by applying its expertise to engage others in the NSF's newest long-term research program, the National Ecological Observatory Network (NEON) project. Awarded grants from the NSF since 2005, SEA to date is facilitating 15 HBCUs participation in NEON.

*“Pray indeed, but get to work.”—Mexican Proverb*

#### **Section 4. ACCOMPLISHMENTS**

**According to data from the NSF/SRS Survey of Federal Support to Universities, Colleges and Nonprofit Institutions, from 1990 to 2009 the cumulative combined Federal R&D to the four SEA institutions has totaled \$1,011,446,000 Billion dollars.** One of the SEA schools, Jackson State University, ranks second behind Howard University in Federal R&D to HBCUs and all SEA institutions rank in the top 10 of HBCUs receiving Federal R&D.

*“A child miseducated and without support is a child left behind.”—Robert Louis Shepard, PhD*

#### **Section 5. MISSION**

To assist members in support of their research and training goals to help ensure an adequate supply of globally competitive American scientists and engineers, while simultaneously using the combined strengths as a *“virtual university”* to meet the research and development needs of the public and private sectors.

*“Where there is no vision the people perish:...”—Biblical Proverb*

#### **Section 6. VISION**

To serve as a *“Unique Resource for the Nation®”* that is recognized as a model alliance for broadening participation in federal science, technology, engineering and mathematics (STEM) research programs by facilitating the involvement of historically underutilized individuals, institutions and geographic regions for emergence of a globally competitive and diverse technical workforce.

*“If you understand the beginning well, the end will not trouble you.”-- Ashanti Proverb*

#### **Section 7. CHALLENGES FACING SEA**

During our 2004 - 2008 Strategic Plan, unexpected events presented SEA with new challenges as a result of Federal resources being diverted away from SEA-related projects and programs. These unexpected events included Hurricane Katrina (2005), escalation of War on Terror in Iraq and Afghanistan (2006) and passing of the Emergency Economic Stabilization Act with a \$700 billion bailout for the collapse of Wall Street and associated financial institutions (2008). Each of these enormous events placed a financial strain on the already strained Federal budget that is still impacted by 9/11 (2001). These costs associated with these events have trickled down and have had a severe negative impact on the Federal R&D budget. With the magnitude of these impacts, resources were reprogrammed away from R&D initiatives and applied to these areas of great financial need continuing the severe reduction in financial resources available for organizations like SEA.

This new Strategic Plan continues to be negatively impacted by the War on Terror and a recession in 2009 that was almost as devastating as the one during the Great Depression in the 1930s. SEA will face these and other challenges that are sure to come in the future just as it has in the past. The two great challenges will continue to be (1) how to expand SEA as a “virtual university” that combines and markets the distinctive strengths and capabilities of the human and physical resources of the members as a single research enterprise, and (2) securing financial resources sufficient enough to ensure

long-term viability of SEA.

During this period, the SEA management team may wish to consider expanding the Associate and Affiliate membership categories of the SEA. In addition to LLNL and NIST, other national resources may wish to join SEA to assist with achieving the goals and objectives. These national organizations may include, but may not be limited to other national laboratories and technical centers, foundations, major research universities, private sector organizations and Federal and state entities. Other institutions, including majority and minority two- and four-year educational institutions, vocational and proprietary technical training schools and businesses that subscribe to and support the goals and objectives of SEA, may also wish to join.

An expanded membership base brings with it new challenges as well as new opportunities. A major challenge will involve defining the one-time, upfront financial investment for each new member, and the subsequent annual dues thereafter. Additionally, a larger membership will require a larger headquarters staff, but the challenge will be to determine how large a staff it should be, how to define the separation of duties among the enlarged staff, etc. SEA functioned with a two-person staff its first eight years, with the third staff member joining the organization in 1998 and a contractor in 2003. Defining the new functions and blending with the existing workflow will add to the challenge. Effectively dealing with these new challenges is certain to result in an expanded technical capacity for the SEA organization. An expanded technical capacity will lead to SEA becoming more competitive for mainstream research and development grants, contracts, cooperative agreements and various other teaming/partnership opportunities.

We are convinced that dealing with these challenges and approaching the opportunities in an effective and efficient manner will open doors to even greater opportunities. The greatest potential benefit may be an expanded support base, establishing the foundation for creating the financial resource based that will ensure long-term viability of SEA. To be successful in meeting the challenges head on will take focusing on SEA best practices and lessons learned over its 20-year history, and merging some of the old with elements of what is certain to become “the new.”

There is no question that this action will move SEA from its current comfort zone. However, at SEA, we are convinced that successful management of these future changes will provide the best opportunities for maintaining nontraditional colleges and universities as viable entities, supported by stakeholders who believe that SEA-type educational partnerships are essential to the growth of the nation.

This Plan serves as a catalyst for directing SEA resources to those activities, programs and initiatives that are most effective in helping to carryout the mission and to achieve our vision and the strategic goals herein over the next five years.

*“Three helping one another will do as much as six men singly.”—Spanish Proverb*

## **Section 8. SEA ORGANIZATION AND RESPONSIBILITIES**

The SEA is a non-profit, 501(c)(3) tax-exempt organization. The SEA consists of three principal entities, each providing unique value to the overall ability to achieve the stated mission. These entities are (1) the four HBCU academic institutions, (2) two world-renowned national laboratories, and (3) the SEA Headquarters Office of the Executive Director (OED). The SEA management team consists of the Board of Directors, the SEA Steering Committee and the Executive Director.

### **Board of Directors**

HBCU presidents fill four of the seven Board of Directors seats. These individuals, being leaders at their respective institutions, provide educational and strategic wisdom to the SEA. Board of Directors provides an essential part of the success of SEA. Filling the educational pipeline with students in science, engineering and related fields is the responsibility of the SEA academic institutions. A fifth Board of Directors seat is filled by the LLNL executive officer. LLNL, through its membership in the SEA, stimulates collaboration among the academic institutions and serves as a source of scientific knowledge and talent through its involvement in and support of federal and industry-sponsored

research. Non-voting representatives from NIST and SEA legal counsel fill the sixth and seventh Board of Directors seats.

### **The Steering Committee**

A Steering Committee, consisting of two persons (one technical and one administrative) from each of the alliance member academic institutions, a representative from LLNL, and the executive director, implements SEA policy. Steering Committee representatives principally serve as liaisons, which interface with the SEA Office of Executive Director and coordinates SEA activities at the campus level.

### **The SEA Office of the Executive Director**

The SEA Office of the Executive Director (OED) is presently located in 1,241 square feet of space on Connecticut Avenue in Northwest Washington D.C. To provide the maximum opportunity for interfacing with national organizations and Federal agencies, the Washington location ensures that the vision of SEA is maintained at a national and not a regional level. Currently the SEA OED consists of an executive director and two staff persons. SEA supplements its staffing needs by utilizing the resources and expertise of LLNL, paid consultants and volunteers.

Facilitating, coordinating and managing the day-to-day activities of SEA are the primary responsibility of the executive director. This includes seeking and/or creating new opportunities, enhancing existing research activities at each campus and providing other ancillary activities as needed. The national laboratory partner LLNL may augment the Headquarters staffing needs by providing other direct support when needed, especially computer and LAN support.

*“Success is not final, failure is not fatal: it is the courage to continue that counts.”—Winston Churchill*

## **Section 9. STRATEGIC GOALS and OBJECTIVES**

While the SEA was born out of a reduction in resources for education, and the government and industry’s commitment to improve science and mathematics education, it has emerged as a successful multifaceted technical organization that champion the capabilities of its member institutions. The SEA has successfully taken on multiple roles and their associated responsibilities to continue the exposure of the alliance institutions.

Broadening the awareness of HBCU academic institutions as a “pipeline” of highly qualified scientists and engineers, the SEA has provided a potential source of skilled scientists and researchers to the public and private sectors. The SEA will continue educating organizations and firms to the benefits and advantages of tapping the non-traditional source of expertise and talent from non-traditional academic institutions.

### **SEA Fundamental Principles**

In implementing the goals and objectives under this Strategic Plan, the SEA will continue to adhere to its fundamental, core principles:

- Provide value-added benefit to the SEA members and other stakeholders.
- Make the public aware and keep the public informed of SEA’s mission. Thus, we must expose “Who SEA Is and What SEA Does.” Doing this will keep others focused on what SEA is “Best Known For.”
- Create and maintain public and institutional trust through the positive deeds and successful activities implemented by SEA.
- Seek decisions and actions in support of optimum service delivery and cost management outcomes.
- Actively seek partnership with the federal and private sector, and other stakeholders where appropriate, to better



ensure satisfaction of the SEA mission.

- Solicit feedback from stakeholders to judge program effectiveness and acceptance.
- Ensure that the SEA Strategic Plan maintains relevance and is kept current regarding membership institutions' needs and objectives.
- Maintain not-for-profit status.
- Remember that life is about PEOPLE, and that the greatest return on investment (ROI) is PEOPLE.

## **Strategic Goals**

The ambitious goals and objectives contained in this plan serve as the impetus for achieving the SEA mission and vision. The initiatives, actions and activities that support the goals and objectives form the basis for annual action plans, budget documents and annual reports. Achieving the SEA goals and objectives described requires the dedication and commitment of the Board of Directors, Steering Committee, Office of the Executive Director, as well as the support of other stakeholders. Paramount to the success will be the ability to fund adequate infrastructure support, to secure unrestricted resources to create special scientific and engineering student and faculty research programs, and to maintain an adequate level of technological readiness.

The SEA Strategic Plan contains three major strategic areas: (1) Member Support; (2) Strengthen and Market a “Virtual” Infrastructure; and (3) Service to the Community. Each of these strategic areas is of equal importance to the SEA and is considered to be of high priority in this Plan.

### **Goal 1. Member Support**

The SEA will continue its role of aiding the production of Ph.D.s among the member institutions in science, technology, engineering and mathematics (STEM) disciplines.

### **Goal 2. Strengthen and Market “*Virtual University*” Infrastructure**

The SEA will further advance its reputation as a “Unique Resource for the Nation®” by strengthening and marketing a “*virtual university*” that combines the distinctive strengths and capabilities of selected human and physical resources at member institutions as a single research enterprise.

### **Goal 3. Service to the Community**

The SEA will expand its services to individuals and organizations and groups within the Federal and private sectors, by assisting them with implementation of their activities in support of increasing the participation of underrepresented groups in mainstream research opportunities.



# **APPENDIX**

The following tables reflect the specific objectives relative to the goal. The designation “ITF” is defined as *“Implementation Time Frame.”*

### Goal 1. Member Support

The SEA will facilitate production of Ph.D.s among the member institutions in science, technology, engineering and mathematics (STEM) disciplines.

<b>STUDENT AND FACULTY ENHANCEMENT OPPORTUNITIES</b>				
<b>STUDENT ENHANCEMENT</b>				
<b>#</b>	<b>Specific Objectives</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
1	Establish an on-line database of SEA students available to fill summer internship positions at federal agencies, national laboratories and private industry	2012	Database with 100 members	Ongoing
2	Enhance on-line database to support real-time, secure access to students seeking jobs, internships and research opportunities	2013	Active website with secure access	Not yet
3	Expand Travel Program for SEA Fellows and summer interns to attend and present papers at technical conferences.	2011	4 Fellows and 4 Interns to attend one conference per year	Not Yet
4	Enhance SEA website to identify “Where Are They Now” for some Student Technical Conference Program participants.	2011	Highlight technical contribution of some SEA award winners	Ongoing
5	Expand the SEA Scholarship and Incentive Awards Program to support more students	2009	Support 80 Awards	Not yet
6	Identify corporate sponsors to underwrite the SEA Scholarship and Incentive Awards recognition program	2009	Identify one corporate sponsor	Not yet
7	Develop an E-mentoring program plan	2009	Implement program plan	Ongoing
8	Obtain operating resources to support E-mentoring	2009	100% Secured resources	Not yet
9	Establish an E-mentoring program for SEA students	2009	Active website with secure access	Not yet
10	Renew start of SEA Guest Lecturer Series (GLS)	2010	Have 1 round of GLS	Not yet
11	Provide a cutting edge, informative newsletter as a means to relay information	2009	Produce at least 2 issues	Ongoing
12	Obtain small marketing tools for networking purposes and relaying information	2010	Secure tool	Ongoing
13	Secure large material for use at career fairs and networking events	2009	Purchase SEA Banner	Completed
<b>FACULTY ENHANCEMENT</b>				
<b>#</b>	<b>Specific Objectives</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
14	Expand use of SEA Design Team to increase collaborative interactions between SEA research faculty and federal agencies, national laboratories and private industry	2009	Secure 2 new major research projects	Completed activity
15	Enhance the faculty and student internship at the SEA Executive Office in Washington, DC	2009	Support 3 Interns and 1 Faculty Member	Partially completed
16	Develop a database of SEA faculty available to serve as consultants, reviewers and subcontractors on special projects	2010	Have a database of 50 resources	Partially completed
17	Expand faculty proposal development program to enable new and existing faculty to be more productive in grant and contract acquisition	2009	Conduct two proposal development workshops	Ongoing
18	Solicit SEA faculty members to support E-mentoring project	2006	Team of 2 representatives from each institution	Ongoing

## Goal 2. Strengthen and Market “Virtual University” Infrastructure

The SEA will further advance its reputation as a “Unique Resource for the Nation®” by expanding its reach as a “*virtual university*” that combines and markets the distinctive strengths and capabilities of selected human and physical resources at member institutions as a single research enterprise.

<b>EXPAND PARTNERSHIPS</b>				
<b>#</b>	<b>Specific Objective</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
19	Implement a shared resources program to improve SEA faculty grant and contract acquisition	2009	Develop a web-based/electronic collaboration process	Completed activity
20	Develop a Center at the SEA office focused on faculty and student training	2005	Establish a 30-seat Training Center	Completed activity
21	Expand SEA reach by creating new partnerships with Federal and private sectors	2013	Two new research partnerships each year over next 5 years	Ongoing
22	Identify strategic areas of synergy for each SEA institution	2009	List top 2 areas per institution	Partially completed
23	Expand SEA Guest Lecture Series (GLS) to link schools	2013	Develop a course series	Not yet
24	Expand SEA Technical Staff to support Center and shadow Executive Director	2008	Add one (1) FTE	Completed activity
25	Infusion of working capital for partnership support	2009	Secure \$250k of Unrestricted funds	Not yet
26	Increase resources to the Combined Federal Campaign (CFC) & United Way (UW) programs to support partnership efforts	2009	Increase website traffic by advertising CFC/UW in all SEA venues and activities	Ongoing
27	Increase alumni individual giving to SEA.	2008	Secure \$20k in alumni support	Not Yet

## Goal 3. Service to the Community

The SEA will expand its services to individuals and organizations and groups within the Federal and private sectors, by assisting them with implementation of their activities in support of increasing the participation of underrepresented groups in mainstream research opportunities.

<b>FEDERAL AND PRIVATE SECTOR ACCESS</b>				
<b>#</b>	<b>Specific Objectives</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
28	Assist Federal agencies and private industry with implementation of their HBCU research program goals	2008	Partner with 5 new government agencies and 5 new corporate entities	Ongoing
<b>CLEARINGHOUSE FOR HBCU STEM RESEARCH</b>				
<b>#</b>	<b>Specific Objective</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
29	Become a Central focal point for information on research engagement of HBCUs	2006	Active website with secure access	Not yet
<b>DISTRICT OF COLUMBIA PUBLIC SCHOOL INTERACTION</b>				
<b>#</b>	<b>Specific Objectives</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
30	Create linkages and partnerships to expand access and resource base to support science education in the District of Columbia Public School (DCPS)	2006	Establish official agreement with local, regional or national resource to support DCPS	Not yet
31	Expand SEA’s high school recruitment program with DCPS	2009	Submit SEA information package to all 17 DCPS high schools	Ongoing

32	Attend and support DCPS high school research events	2006	Support 4 DCPS high school science events per year	Ongoing
<b>PRIVATE SECTOR ACCESS</b>				
<b>#</b>	<b>Specific Objectives</b>	<b>ITF</b>	<b>Measurement Target</b>	<b>Status</b>
33	Initiate and cultivate stronger relationships with potential corporate supporters and individuals around areas of mutual interests	2008	Attend 3 major conferences to advertise and market SEA and meet with at least 2 potential individual donors	Ongoing
34	Establish corporate partners and advisors	2007	Partner with 10 corporate supporters (financial)	Ongoing
35	Establish special recruitment programs	2006	Provide 40 leads to corporate sponsors	Not yet

## References of Supporting Annotated Bibliography

**Diverse Online Staff (2008). 11 Universities Will Lead New Centers of Excellence. *Diverse: Issues in Higher Education*, 10(29), [http://diverseeducation.com/artman/publish/article\\_10777.shtml](http://diverseeducation.com/artman/publish/article_10777.shtml).**

This article reports that the U.S. Department of Homeland Security announced on Feb. 26 the selection of 11 universities that will be among partner institutions leading five new Centers of Excellence and receiving a multi-year grant of up to \$2 million per year, over a period of four to six years. The *Center of Excellence for Natural Disasters, Coast Infrastructure and Emergency Management: Jackson State University in Jackson, Miss.* and the University of North Carolina at Chapel Hill, NC will co-lead a new center responsible for conducting research and enhance the nation's ability to safeguard populations, properties, and economies as it relates to the consequences of catastrophic natural disasters, including hurricanes, tornadoes, floods, earthquakes, droughts, and wildfires.

**Coleman, Toni (2008). Colleges Encouraged to Improve the Student Experience By Using Identified Best Practices. *Diverse: Issues in Higher Education*, 23(30), [http://diverseeducation.com/artman/publish/article\\_10830.shtml](http://diverseeducation.com/artman/publish/article_10830.shtml).**

This article revealed that Jackson State University discovered through a student survey that students were not feeling engaged at the institution, and despite problematic academic probation and retention rates, were not taking advantage of the support services available. To address these issues, the university realigned departments central to student success, reduced bureaucracy students encountered and trained faculty and staff about services so they can in turn inform students who come to them. The result? A 46 percent increase in students using tutorial services and a 79 percent increase in students using advising and counseling services at the historically Black university in Mississippi.

**Mykerezi, Elton and Bradford F. Mills (2004). Education and Economic Well-Being In Racially Diverse Rural Counties: The Role of Historically Black Colleges and Universities. *Review of Regional Studies*, 34(3), 303-319.**

The role of Historically Black Colleges and Universities (HBCUs) in increasing the education and economic well-being of rural Blacks is not, perhaps, as clear today as in the past given the abolition of formal segregation in public education. This paper presents evidence that HBCUs still play a major role in improving the economic well being of rural counties with high concentrations of Blacks. Further, the impact of HBCUs in promoting college education among Blacks is above and beyond that of other colleges and universities. Increased rates of college education generate, in turn, higher income growth.

**Dervarics, Charles (2005). Senate Committee Approves Plan to Upgrade Technology at Minority-Serving Institutions. *Black Issues in Higher Education*, 22(7), 6-8.**

This article was concerning the action by the Senate Commerce Committee in the 109th Congress. The Senate Commerce Committee showed a huge sign of support for historically Black colleges, Hispanic-serving institutions and tribal colleges by approving the Minority-Serving Institutions Digital and Wireless Technology Opportunity Act. This Act would create a \$250 million-per-year program to support HBCUs, HSIs and tribal colleges that have lagged in technology infrastructure.

**Brainard, Jeffrey (2006). Clark Atlanta Settles Federal Complaint. *Chronicle of Higher Education*, 52(34), 35.**

The article reports that Clark Atlanta University in Atlanta, Georgia, has agreed to pay \$5-million to settle allegations that it misused funds from a U.S. Department of Energy contract that was supposed to help train minority students in environmental science. The university was not able to account for much of the \$24-million it administered from 1990 to 2002 on behalf of a consortium of colleges, a federal prosecutor said last week. Clark Atlanta was the lead partner in the Historically Black Colleges and Minority Institutions Environmental Technology Consortium, a group of 16 historically black colleges and one minority-serving institution involved in the contract.

**Roach, Ronald (2008). Making Strides: HBCUs Make Progress on Digital Divide. *Diverse: Issues in Higher Education*, 12(15), [http://diverseeducation.com/artman/publish/article\\_10774.shtml](http://diverseeducation.com/artman/publish/article_10774.shtml).**

This article describes how since 1980, Dr. Linda Hayden has been able to bring innovation to Elizabeth City State University by seeking out and partnering with entities like the U.S. Navy and NASA. For years, these partnerships allowed faculty, students and administrators in the computer science department and other departments to gain early exposure to cutting-edge hardware and software tools. With NASA funding, ECSU also served as the lead historically Black campus in assisting several HBCUs in North Carolina and Virginia in establishing campus networks during the 1990s.

**Pluiose, David (2006). Civil Rights Panel: Duplication Threatens Black Colleges. *Diverse: Issues in Higher Education*, 23(8), 8.**

This article provides information on a meeting on the effectiveness of historically Black colleges and universities (HBCUs) in a post-segregation era in the U.S. Panelists at a meeting on the effectiveness of HBCUs in a post-segregation era told the commission, which is charged with monitoring and protecting civil rights, that higher education desegregation and anti-duplication requirements were not being enforced.

**Hayes, Dianne (2006). Maryland Faces University Desegregation Fight. *Diverse: Issues in Higher Education*, 23(20), 26.**

The article reports on the charges filed by the Coalition for Equity and Excellence in Maryland Higher Education against the state of Maryland for duplicating at traditionally White institutions programs already available at historically Black colleges and universities. David Burton, the coalition president, says the group's concerns stem from a decision by the Maryland Higher Education Commission allowing traditionally White Towson University to offer a master of business administration degree program.

**HBCUs Among Few Winners In Bush's Budget Plan (2004). *Black Issues in Higher Education*, 21(1), 6-7.**

This article discusses the provisions under the education budget of U.S. President George W. Bush, which benefit historically black colleges and universities (HBCU). By percentage alone, minority-serving colleges and universities were one of the plan's few winners in higher education. The main federal program for historically Black colleges and universities would increase by 8 percent, to \$240 million, next year, while funding for HBCU graduate institutions would rise to \$58 million – 10 percent above current funding.

**Mervis, Jeffrey (2003). Senate Bill Boosts NSF Funds For Underserved Groups. *Science*, 301(5639), 1450.**

The scientific underprivileged moved to the head of the line last week at the U.S. Senate panel took its first review at a 2004 budget for the National Science Foundation (NSF). Programs to serve minority students and institutions received especially favorable treatment in the Senate bill. For example, \$30 million is earmarked to help colleges and universities with large numbers of minorities to purchase computer equipment and train faculty members and students to use wireless and other communications technologies.

**Samuels, Albert L. (2004). Black Colleges and the Politics of Race. *Chronicles of Higher Education*, 50(30), 12-13.**

The article focuses on the difficulty of applying the values of racial equality in higher education and to public historically black colleges and universities (HBCU) in the U.S. Clamor for the maintenance and strengthening of HBCU coming from African-Americans. Because some Americans believe that the struggle for civil rights was fundamentally about eliminating all state-sponsored distinctions based on race, many find it difficult to understand why, for example, many African-Americans urge that HBCU's should not only be maintained but strengthened and enhanced in order to maximize the educational and occupational opportunities of blacks.

**Dervarics, Charles (2005). Wiring Schools For Success: Lawmakers Revive Bill To Assist Minority-Serving Institutions In Upgrading Technology Infrastructure. *Black Issues in Higher Education*, 22(2), 30.**

In a 2000 study conducted by the National Association for Equal Opportunity in Higher Education (JAIR) for the U.S. Department of Commerce found that most HBCUs did not have high-speed Internet access and only 3 percent of colleges said financial help was available to help students purchase computers and close the digital divide. But help may be on the way as a long-delayed plan to improve the technology infrastructure at Black colleges is showing new signs of life in Congress this year. A bill from Senator George Allen, R-Va., would revive the concept, with annual funding of \$250 million for five years.

**Keels, Crystal L. (2004). Investing In Historic Black College and University (HBCU) Leadership: Southern Education Foundation Creates Three-Year Initiative To Facilitate HBCU Accreditation. *Black Issues in Higher Education*, 21(15), 30.**

Many historically black colleges and universities (HBCUs) have either teetered on the brink, suffered or closed entirely following the loss of accreditation from the Southern Association of Colleges and Schools (SACS). The effects of lost accreditation are amplified considering the current national context in which troubling questions often arise about the contemporary relevance of HBCUs. Many people believe that HBCUs are no longer needed because African Americans can go to predominantly White schools.

**Townes, Glenn (2007). FAMU In Trouble With State Auditors And Watchdog Agency. *New York Amsterdam News*, 98(40), 32.**

The article reports on probation placed on the Florida Agricultural and Mechanical University (FAMU), Tallahassee, Florida. It discusses that the Florida state auditors had reported major financial inconsistencies and managerial problems in the school, after which the schools has been kept under watch. It reports views of FAMU president James Ammons along with the report of Southern Association of Colleges and Schools on the status of Historically Black Colleges and Universities.

**Ashley, Dwayne (2007). Are Historically Black Colleges Worth It? *Diverse: Issues in Higher Education*, 24(16), 32.**

The author comments on a study by Drs. Roland Fryer of Harvard University and Michael Greenstone of the Massachusetts Institute of Technology, which concluded that the unique educational services once provided by historically black colleges and universities to African American students have now disappeared. He states that the wage differential proposed by Fryer and Greenstone is a tenuous barometer of educational value for money and not necessarily a measure of overall educational equality. He also explains the complexity of higher education in the U.S.

**Pluiose, David (2006). Dissatisfaction Voiced At HBCU Meeting. *Diverse: Issues in Higher Education*, 23(17), 10-11.**

The article focuses on the issues discussed at the National Historically Black Colleges and Universities (HBCU) Week Conference held in the U.S. in September 2006. A presidential executive order mandates that federal agencies establish an annual plan to help HBCUs improve their respective capacities and compete more effectively for grants, contracts and cooperative agreements.

**Allen, Jodie T. and Michael Dimock (2007). Doubting The Dream. *The Atlantic Monthly*, 27.**

Americans doubt that they live in a land of equal economic opportunity, according to a new study from the Pew Research Center. It reports that Americans are nearly twice as likely as they were 20 years ago to describe the country as divided between haves and have-nots. This change is particularly significant, the authors argue, since Americans have traditionally “turned a deaf ear” to narratives of class warfare, seeing individuals— not society—as responsible for their



economic fate.

## Alphabetized References for Supporting Annotated Bibliography

- Allen, Jodie T. and Michael Dimock (2007). **Doubting The Dream.** *The Atlantic Monthly*, 27.
- Ashley, Dwayne (2007). **Are Historically Black Colleges Worth It?** *Diverse: Issues in Higher Education*, 24(16), 32.
- Brainard, Jeffrey (2006). **Clark Atlanta Settles Federal Complaint.** *Chronicle of Higher Education*, 52(34), 35.
- Coleman, Toni (2008). **Colleges Encouraged to Improve the Student Experience By Using Identified Best Practices.** *Diverse: Issues in Higher Education*, 23(30), [http://diverseeducation.com/artman/publish/article\\_10830.shtml](http://diverseeducation.com/artman/publish/article_10830.shtml).
- Dervarics, Charles (2005). **Senate Committee Approves Plan to Upgrade Technology at Minority-Serving Institutions.** *Black Issues in Higher Education*, 22(7), 6-8.
- Dervarics, Charles (2005). **Wiring Schools For Success: Lawmakers Revive Bill To Assist Minority-Serving Institutions In Upgrading Technology Infrastructure.** *Black Issues in Higher Education*, 22(2), 30.
- Diverse Online Staff (2008). **11 Universities Will Lead New Centers of Excellence.** *Diverse: Issues in Higher Education*, 10(29), [http://diverseeducation.com/artman/publish/article\\_10777.shtml](http://diverseeducation.com/artman/publish/article_10777.shtml).
- Hayes, Dianne (2006). **Maryland Faces University Desegregation Fight.** *Diverse: Issues in Higher Education*, 23(20), 26.
- HBCUs Among Few Winners In Bush's Budget Plan (2004). *Black Issues in Higher Education*, 21(1), 6-7.
- Keels, Crystal L. (2004). **Investing In Historic Black College and University (HBCU) Leadership: Southern Education Foundation Creates Three-Year Initiative To Facilitate HBCU Accreditation.** *Black Issues in Higher Education*, 21(15), 30.
- Mervis, Jeffrey (2003). **Senate Bill Boosts NSF Funds For Underserved Groups.** *Science*, 301(5639), 1450.
- Mykerezi, Elton and Bradford F. Mills (2004). **Education and Economic Well-Being In Racially Diverse Rural Counties: The Role of Historically Black Colleges and Universities.** *Review of Regional Studies*, 34(3), 303-319.
- Pluiose, David (2006). **Civil Rights Panel: Duplication Threatens Black Colleges.** *Diverse: Issues in Higher Education*, 23(8), 8.
- Pluiose, David (2006). **Dissatisfaction Voiced At HBCU Meeting.** *Diverse: Issues in Higher Education*, 23(17), 10-11.
- Roach, Ronald (2008). **Making Strides: HBCUs Make Progress on Digital Divide.** *Diverse: Issues in Higher Education*, 12(15), [http://diverseeducation.com/artman/publish/article\\_10774.shtml](http://diverseeducation.com/artman/publish/article_10774.shtml).
- Samuels, Albert L. (2004). **Black Colleges and the Politics of Race.** *Chronicles of Higher Education*, 50(30), 12-13.
- Townes, Glenn (2007). **FAMU In Trouble With State Auditors And Watchdog Agency.** *New York Amsterdam News*, 98(40), 32.

## **Links to Other SEA Documentation**

Key documents that are linked to and complement this Strategic Plan are: Annual Reports, Financial Audit Reports and Board Decisions on Direction-Setting Issue Conference Call Transcripts.

### **Annual Report**

The SEA Annual Report will be directly linked to the SEA Strategic Plan. The specific goals in this strategic plan sets the framework for developing the annual action plan, which will be reflected in the Annual Report for the Fiscal Year. The Annual Report will be submitted to the SEA Management Team as an account of accomplishments in accordance with the strategic plan. The Annual Report is expected to measure our progress based on decisions regarding what element of the strategic plan is covered during this period.

### **Financial Audit Report**

Financial Reports of audits that are in accordance with generally accepted auditing standards will be directly linked to the SEA Strategic Plan. The Report will provide an accurate picture of the financial position of the SEA, and the changes in its net assets and its cash flows.

### **Board Decisions on Direction-Setting Issue Conference Call Transcripts**

Conference Call Transcripts will be directly linked to the SEA's Strategic Plan. The Transcripts will provide key insights of critical matters requiring broad input from the SEA Management Team. If the Conference Call Transcripts result in decisions that are counter to the Strategic Plan, this will lead to the issue being raised to the entire SEA Management Team.

Board Decisions on Direction-Setting Issue Conference Call Transcripts will be the official record approving any deviation from the Strategic Plan during the annual reporting period. The results of the Direction-Setting Conference Call Transcripts will be one of the factors for modifying the Strategic Plan during the next annual reporting period.