

ASA Strategic Plan  
November 19, 2016

**Vision:** *A world that relies on data and statistical thinking to drive discovery and inform decisions*

**Mission:** *Promoting the practice and profession of statistics*

**Strategic Plan:**

**Theme 1: Enhancing the Diversity and Breadth of our Association**

**Membership Growth**

*Context:* A strength of the ASA is the mix of members from business/industry, government, and education. Serving the needs of traditional constituencies and emerging areas of practice requires continuing vigilance. Membership is growing but most of that growth is in the number of student members and the conversion of student members to regular membership has been difficult. We need to more effectively communicate the value of sustained membership to students and recent graduates and to practitioners in emerging areas (for example, data science).

*Objective:* Increase the diversity and breadth of our membership and make the value of long-term membership evident to all groups that are well represented or ought to be well represented among ASA membership.

*Strategies:* (a) In all strategies, have as an overall aim of increasing the demographic diversity of the association and the profession. (b) Expand our market research capabilities to provide more and better data about the needs and interests of members and potential members; (c) Focus on developing opportunities to involve students in chapters, sections, and committees; on identifying and meeting the needs of statisticians in industry and government and on meeting the needs of applied statisticians; (d) Expand mentorship programs and develop other value-added activities (such as student internship opportunities) for student members and new professionals; (e) Evaluate the accreditation program to determine how to make it meet the needs of a larger proportion of our membership and (g) Identify ways to support members in developing countries;

**Professional Development**

*Context:* The ASA's professional development programs, including meetings, are well-attended and are a major strength of the association. JSM continues to grow the number and diversity of its attendees. However, continual evaluation of the format (including digital formats) and focus of meetings is needed in order to serve an increasing diversity of member needs.

*Objective:* Provide a portfolio of professional development opportunities to serve the diverse needs of our profession and to attract new members.

*Strategies:* (a) Develop programs in collaboration with colleges and universities to ensure that statisticians are prepared for the rapidly evolving data science job market; (b) Increase the availability of local training programs such as the “traveling course;” (c) Augment leadership training courses to help individuals transition upward within their organizations or across organizations; (d) Make public communication training and presentation skills training widely available to members; (e) Develop new modes of meeting participation beyond the standard contributed presentations; and (f) Develop alternative meeting structures including virtual conferences and joint meetings with scientific societies.

### **Publications and Information Needs**

*Context:* The ASA's journals have a worldwide reputation for scientific excellence and are a major asset of the association. The rapid proliferation of journals makes it especially important to maintain the quality and reputation of our journals. The ASA needs to ensure that its range of publications serves the diverse needs of all of its members. Electronic access for members to ASA journals is a valuable benefit. However, it is still not clear how open access to journals will be achievable financially for professional associations. New models for peer review are appearing in the journal landscape.

*Objective:* Offer a diverse portfolio of journals and publications to address the information needs of current and potential members.

*Strategies:* (a) Address challenges faced by our journals in the current publication environment; (b) Consider new models for peer review, where appropriate; (c) Consider creation of new publication venues/modes with fast turnaround for young researchers; and (d) Use the ASA website and social media to engage members and potential members.

## **Theme: Increasing the Visibility of our Profession**

### **Public Awareness**

*Context:* The ever-increasing demands for statistical analysis in the areas of science, government, and business that involve massive databases, have helped to fuel a dramatic increase in the visibility and identity in the fields of statistics and data science over the past decade. Nonetheless, many more people, especially decision makers, need to know that statistics is the science of learning from data and of measuring, controlling and communicating uncertainty. They need to understand what statisticians do and the benefits of engaging a statistician. The need to heighten public awareness remains in sectors

like media, medicine, industry, government and science, but it is also essential to ensure the engagement of statistics in the emerging areas of business analytics and data science.

*Objective:* Elevate public awareness of the role of statistics and the benefits of engaging statisticians, so that ASA is the "face of statistics" to the public and a leader in ensuring public statistical literacy.

*Strategies:* (a) Make our case to the public by developing and highlighting stories about the impact of statistics on people's lives; (b) Enhance collaborations with media; (c) Heighten use of digital platforms and social media to enhance the profile of statistics, (e.g., stats.org, ThisIsStatistics.org, and Stats and Stories); (d) Strengthen the ability and opportunity of ASA members to engage with and advise the media, respond to media requests and create media opportunities for promoting statistics (e.g., statisticians giving TED talks); (e) Identify more opportunities like the p-value statement to communicate the importance of good statistical practice and (f) Enrich our collaborative relationships with statistical and other scientific associations.

### **Visibility and Impact in Public Policy Making**

*Context:* Decision-making discussions in public policy, including healthcare and science policy, must be guided by sound data and competent statistical analysis. The ASA and the statistical profession should actively participate in these discussions to promote the use of appropriate data and effective methods, and to ensure that the statistical sciences receive an appropriate share of public funding for scientific research and education.

*Objective:* Raise the profile of statistics and statisticians through promoting the value of sound statistical practice in public policy decision-making.

*Strategies:* (a) Promote the quality and integrity of government statistics and public policy statistics; (b) Support statisticians and data scientists involved in public policy and help public policy colleagues to strengthen their ability to advocate for increased inclusion of statisticians in public policy decision making; (c) Curate and broadly communicate case studies in public policy which emphasize the value of sound statistical practice in public policy decision making and (d) Provide statistical advocacy at the national, regional, and local level.

## **Theme: Ensuring the Future of our Profession**

### **Education**

*Context:* Ensuring the future of the profession involves ensuring a well-developed pipeline into the profession and that requires that statistical education at all levels be supported and enhanced. Statistics education occurs in a variety of domains, from formal institution-based programs to online and certificate programs. The need for statistics education does not end upon the completion of a degree.

Further, public awareness of the nature and benefits of careers in statistics and data science is insufficient. The growth of the AP Statistics Program and the rapid increase in the number of bachelor degree graduates in statistics speaks to gains in public awareness.

*Objectives:* Provide leadership in all aspects of statistics education, from early grades to PhD, from enhancing public literacy in statistics to developing targeted professional development opportunities.

*Strategies:* (a) In global collaboration with entities internal and external to the ASA, provide guidelines, professional development and information on appropriate statistics education to statistics educators, curriculum developers and educational policy makers at all levels; (b) Revise and implement a plan to provide resources to K-12, community college, and undergraduate teachers to enhance their ability to teach statistics; (c) Provide guidelines for a statistics-focused pathway to a career in data-related sciences; (d) Develop and implement a plan to influence the inclusion of statistical thinking in appropriate disciplines, such as computer science and business analytics; (e) Provide face-to-face, online and hybrid continuing professional development for statisticians who need to augment their professional skills; (f) Provide professional development opportunities for professionals who are moving from other careers to statistics or data-related sciences; (g) Provide statistical training for communities such as journalists, lawyers, and physicians who need to understand statistics for their work and (h) Continue to enhance “This is Statistics” and other media campaigns.

### **Organizational Leadership Development**

*Context:* The ASA depends critically on the volunteer efforts of its members through committees, sections and chapters. Identifying and developing the next generation of ASA leadership and ensuring that leadership reflects the diversity of the association is critical to success.

*Objective:* Ensure that the ASA's structures and processes support the development of future leaders of the association.

*Strategies:* (a) Proactively engage and develop volunteers who reflect the diversity of our membership; (b) Develop a system of mentorship and recognition for volunteers that helps create a pool from which to develop high level leaders of ASA and (c) Continue to promote effective use of and member involvement in existing organizational structures (committees, chapters, sections, interest and outreach groups.)

### **Financial Status**

*Background:* Although the ASA is currently a financially stable organization, lack of growth in the number of regular memberships and the conversion of student memberships to regular membership threatens long term revenue. Ad revenues have plummeted. In order to expand services to an increasingly diverse membership and to increase the visibility of the profession, new sources of revenue need to be developed.

*Objective:* Ensure long-term financial viability and the ability to support the association's strategic activities.

*Strategies:* Continue to (a) seek stable sources of future revenue consistent with the ASA mission; (b) grow the ASA's development program; (c) monitor and control costs; (d) use our reserves to invest effectively in the future of the ASA and (e) ensure initiatives are linked to the strategic plan.