

ASCE TALKING POINTS

**For Region Governors
And Section / Branch Leaders
March 2015**

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- 2. Developing Leaders, 9/2014**
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TALKING POINTS:

9/2014

Best Practices

Summary

ASCE has over 400 Section, Branch or Younger Member Groups that engage in activities that make up the majority of the grass roots efforts at ASCE. Each year, these local affiliates of ASCE conduct thousands of local events and activities that help support and meet the Society's mission to advance civil engineering, and serve the public good.

Each of these activities or events requires hours, days, weeks or even months to plan each year. Before you get started, check out ASCE best practices available that can help you save time, leverage lessons learned and make your event successful.

Key Points

- If you have an idea about a Section or Branch activity, it is likely that another Section or Branch has already thought about it and perhaps already implemented it. Section and Branch best practices are documented for small or large Section and Branches that best fit your needs.
- The Society's Best Practice Guide for Sections and Branches includes short summaries of events, activities or processes that were implemented successfully by a particular Section or Branch. The best practice guide provides examples of specific measures required to make an activity or event successful including contact information to discuss these events with those who were in charge of the activity for their Section or Branch.
- Best practices are not always one size fits all and the guide compiled by the Leader Training Committee provides a variety of best practices for small and large groups.
- Best practices are organized in the guide under topics which include: Communications, Continuing Education, Government Relations, Membership Development, Public Outreach, Section Operations, and Student Outreach.

Resources

- Best Practice Guide For Sections and Branches
<ftp://gsd.asce.org/GeographicServicesResources/Best%20Practices%20Guide/>
- Section and Branch Best Practices Information Request Form
<http://www.asce.org/Regions-Sections-Branches/Publications-and-Resources/Publications-and-Resources/>
- Sustainability Guidelines for Section and Branches - <http://www.asce.org/Sustainability/Get-Involved-in-ASCE-Activities/Sustainability-Guidelines-for-Sections,-Branches---Student-Chapters/>
- Government Relations Resources and Activities for Sections and Branches
<ftp://gsd.asce.org/GeographicServicesResources/Government%20Relations/>
- Younger Member Group resources - <http://www.asce.org/Younger-Member-Groups/Publications--Resources/>

TALKING POINTS:

9/2014

Developing Leaders

Summary

From ASCE's vision to our key forward-thinking strategies, ASCE believes being effective leaders in our organizations, local communities, and on a global scale is crucial for the future of the civil engineering profession and the world's infrastructure. ASCE's "Civil Engineering Body of Knowledge for the 21st Century" recognizes leadership as one of the critical skills for civil engineers to develop and "The Vision for Civil Engineering in 2025" calls for civil engineers to serve as "leaders in discussions and decisions shaping public environmental and infrastructure policy." Finally, ASCE's vision is "civil engineers are global leaders building a better quality of life."

ASCE has resources to assist members in developing leadership skills. Some are through practice and "showing up," and others are training opportunities. Each takes time and commitment. You can begin your leadership journey with your ASCE Section or Branch.

Key Points

- Section and Branch involvement offers many opportunities for members to use and enhance their leadership skills. Being involved in a Section/Branch committee or board can help you improve your:
 - Communication skills – make presentations at meetings and interact with peers
 - Motivation and recruitment techniques – inspire volunteers to fit your event into their busy schedules
 - Team building – collaborate, listen to different perspectives, and problem solve with colleagues
 - Influence others – practice building consensus, leading meetings, delegating tasks, and sharing your vision
 - Management skills to compliment your leadership skills – such as organizing meetings and events and budgeting
- Leaders empower others by mentoring and mentoring facilitates the growth of the mentor, protégé, and the profession. By sharing experiences, insights and ideas, a learning relationship develops that accelerates professional development.
- Everyone has the ability to be a leader. ASCE conducts several types of courses to develop leadership skills.

Resources

- ASCE has two mentoring opportunities: eCareerMentor and resources for Section/Branch mentoring programs. Visit www.asce.org/mentoring for more information.
 - Section/Branch mentoring program – ASCE assists Sections and Branches with starting local mentoring programs. Contact careers@asce.org for tips for launching a program and sample documents for hosting a local workshop.
 - eCareerMentor is an online tool to connect members with common interests and specific expertise. It supports the growth of professional relationships outside of the immediate work environment and expands the opportunity to connect across the globe. Mentors and protégés complete online profiles. The protégé drives the process by searching for and requesting mentors.

- The ASCE Web site lists the following leadership resources and more at <http://www.asce.org/Leadership-Resources/Leadership-Resources/>.
- Emerging Leaders Alliance (<http://www.emergingleadersalliance.org>)
 - ASCE, in conjunction with sister societies, formed the Emerging Leaders Alliance to support rising leaders in effectively leading organizations and addressing 21st century needs.
 - ASCE and other sponsor societies select representatives to attend a 2-1/2 day in-person leadership training conference. The conference occurs in the fall, and ASCE invites interested members to apply in the spring. For more information on representing ASCE, visit www.asce.org/Emerging-Leaders-Alliance.
 - For those who are unable to attend the Conference, ELA also offers On Demand training courses.
- ASCE's Continuing Education Department offers in-person seminars, distance learning, and webinars on leadership topics listed on the Web at www.asce.org/conted.
 - ASCE offers a two-day "Leadership Development for the Engineer" seminar several times throughout the year at various locations.

TALKING POINTS:

9/2014

Establishing Local Institute Chapters

Summary

- Institute Chapters are subsidiary units of a Section or Branch established to help the Section or Branch better serve their membership. A formal affiliation is established with an Institute to provide a direct mechanism for more collaboration.
- Institutes, nationally or at a chapter level, work to serve as a focal point for a discipline within the Society and are a resource on technical and professional issues to local Technical Groups, Sections or Branches.
- Sections and Branches can more effectively serve their membership by having active relations with Institutes.
- Technical Region Directors will work to ensure effective relationships between the Sections and Branches and the Institutes.

Key Points:

Benefits of a Section/Branch Institute Relationship

- Knowledge/Technology Transfer
 - Assistance with resources for local programs
 - Avenue for greater Section or Branch participation in national technical activities
- Collaborative Forums
 - Local home for discipline-specific members
 - Involvement of Institute Only Members
 - Use of the Institute logo, adapted for the chapter

Different Institutes provide differing services such as:

- Annual meeting of chapter/technical group leaders
- Speakers bureaus/resources
- Pre-prepared technical presentations
- Assistance in publishing of proceedings of local events or guidelines
- Web Electronic Service
 - eRoom hosting for local chapters
 - Inclusion of Chapter activities in Monthly institute e-newsletters

Additional Materials:

- Memorandum of Understanding
- Sample Institute Chapter Bylaws

For additional information on the Institute resources, visit the ASCE web site at <http://www.asce.org/Technical-Groups-and-Institutes/Institutes>.

TALKING POINTS:

11/2014

Ethics

Summary

- **Ethical principles and practices** are the foundation on which the public trust in the engineering profession is built and maintained. Given the critical importance of the work performed by civil engineers to the public welfare both now and in the future, it is vital that engineers uphold high ethical standards in their professional lives.
- **Ethics education** is an important element of professional training, both at the undergraduate level and in a professional's lifelong continuing education.
- **Sections and Branches** serve an important role in providing and supporting ethics education opportunities in their local area, facilitating peer to peer discussion of ethical issues, and as a source of information and assistance with ethics investigation activities involving local members.

Key Points

- All ASCE members must conform to the Society's Code of Ethics (ASCE Constitution, § 2.2). It is the duty of every Society member to report to the Committee on Professional Conduct any observed violation of the Code (ASCE Bylaws § 3.0.1).
- ASCE's Body of Knowledge includes "professional and ethical responsibility" and the ability to "justify a solution to an engineering problem based on professional and ethical standards" among
- Corruption in the global construction industry is a huge economic burden, and ASCE is heavily involved in efforts to raise awareness on this issue and to educate professionals on means and methods to combat corruption and promote zero tolerance for bribery, fraud, and corruption.
- ASCE Policy Statement Number 425 encourages all state boards of engineering licensure to institute documented continuing professional development, including ethics training, as a condition for maintaining status as a licensed professional engineer. ASCE Policy Statement Number 130 supports establishment by state licensing boards of codes of professional conduct for engineers that are consistent with ASCE's Code of Ethics.

Resources

- The ASCE Code of Ethics is available online at: http://www.asce.org/code_of_ethics/. Complaint forms and information about the Committee on Professional Conduct and its investigation procedures are also available on this web page.
- ASCE is an official link of the Order of the Engineer, a roster of engineers who have taken a voluntary oath to practice engineering with integrity and high professional standards. Sections and Branches can host their own Order of the Engineer ceremonies with assistance from ASCE Headquarters by contacting professional@asce.org. See more at www.order-of-the-engineer.org or www.asce.org/Order_of_the_Engineer.
- ASCE offers regular live and on-demand ethics seminars and webinars. More information is available on ASCE's web site or can be requested by emailing member@asce.org or calling 800-548-2723 between the hours of 9 am – 6 pm on Monday-Friday.
- Contact professional@asce.org to request additional information on resources available to educate and inform members about ethics issues and responsibilities or to stimulate group discussions on ethics topics.
- *Civil Engineering's* monthly "A Question of Ethics" column features ethics case studies, hypothetical scenarios, and examinations of other ethical issues facing the engineering

profession. See the current and past editions in the monthly "Departments" section of *Civil Engineering* magazine at www.asce.org/cemagazine/.

- ASCE is a cooperating agency in the Global Anti-Corruption Education and Training Project. Its centerpiece is the *Ethicana* project, a case study DVD and training material highlighting ethical challenges in the global construction industry. The DVD can be viewed and training material downloaded for free at <http://www.ethicana.org/>.
- ASCE encourages members to become signatories to the Engineer's Charter, a pledge to abide by and support adoption of anti-corruption principles and a zero-tolerance policy toward bribery, fraud, and corruption. Copies of the Charter in English, Spanish, Chinese, and Arabic are available by request from professional@asce.org. (English version attached.)

COMBATING CORRUPTION IN ENGINEERING AND CONSTRUCTION

AN ENGINEER'S CHARTER

We, the undersigned, as leaders in the global engineering community, recognize that corruption of all forms diverts resources from projects intended to raise living standards, threatens sustainable development, impoverishes communities, and tarnishes the reputation of the profession.

We hereby join in the battle against bribery, fraud, and corruption in engineering and construction worldwide.

We acknowledge, as fundamental principles of professional conduct that engineers as individuals must:

- Ensure that they are not personally involved in any activity that will permit the abuse of power for private gain.
- Recognize that corruption occurs within the public and private sectors, in the procurement and execution of projects, and among employers and employees.
- Refuse to condone or ignore corruption, bribery, or extortion; or payments for favors.
- Urge professional engineering societies and institutions to adopt and publish transparent, enforceable guidelines for ethical professional conduct.
- Enforce anti-corruption guidelines by reporting infractions by any participant in the engineering and construction process.

Further, we pledge to support the formal adoption of these principles by our professional organizations; build professional and public support for zero tolerance for bribery, fraud and corruption; seek transparency in all dealings with public officials and private owners; and coordinate our efforts with the work of Transparency International, the Partnership Against Corruption Initiative of the World Economic Forum, the World Bank, World Federation of Engineering Organizations⁽¹⁾, FIDIC and other local or global organizations seeking the same goal.

Full Name of Signatory (please print):

Employer, Institution, or Organizational Affiliation:

City and State or Province:

Country:

Email address: (optional)

Date:

After signing, please mail the pledge to Professional Activities/ASCE, 1801 Alexander Bell Drive, Reston, VA 20191-4400, USA. Alternatively it may be scanned and emailed to professional@asce.org or faxed to 703 295-6132.

(1) Added May 11, 2007

TALKING POINTS:

9/2014

Government Relations – govwash@asce.org 202-789-7850

Summary

ASCE Government Relations is the Society's voice on Capitol Hill and in the state capitals. We lobby Congress directly on issues of particular importance to the practice of civil engineering. We also work to represent civil engineers in the regulatory process.

ASCE Government Relations lobbies to achieve the Society's strategic goal for improving the nation's infrastructure. Through tools such as the [2013 Report Card for America's Infrastructure](#) and the [Failure to Act economic studies](#), ASCE seeks to inform the public and policymakers about the need to invest in infrastructure to protect public safety, ensure quality of life, and build a strong economy.

In addition, we work with ASCE leaders and members to coordinate grassroots advocacy efforts through the [Key Contact Program](#). We monitor legislative and regulatory activities at the state level and whenever possible, work with ASCE members in the states to lobby and influence state legislative activities. ASCE's State Government Relations program assists Sections and Branches in their efforts to influence state government on issues affecting civil engineering, and advocates for ASCE's [priority issues](#) at the state level.

Key Points

- The success of ASCE's public policy efforts depends on grassroots support from the membership. Section and Branch leaders can help these efforts by becoming involved in, and encouraging their members' involvement in, grassroots public policy efforts through the [Key Contact Program](#). The Key Contact Program provides information and resources to help ASCE members engage directly in the public policy process. Grassroots involvement by individual civil engineers is critical to helping our elected leaders enact laws that benefit society.
 - Any ASCE member can join the Key Contact Program at no additional cost. Sign up online at <http://www.asce.org/keycontacts>

- The 2013 *Report Card for America's Infrastructure* was released in March 2013 and is available as an "app" at www.infrastructurereportcard.org for both tablet and smartphone devices. ASCE's new Report Card covers 16 infrastructure categories, and includes videos, interactive maps, and other multimedia tools.

The 2013 Report Card links to all the recent state and local Report Cards and gives key facts for all 50 states, including examples of initiatives and innovations that are making a difference. We hope every ASCE member will be able to use this great product to get more of their friends and neighbors involved in the conversation around our nation's infrastructure.

- Many Sections and Branches have also produced state and local Report Cards evaluating infrastructure conditions in their local areas, and are available on the [Report Card website](#). In 2011 and 2012, ASCE released the [Failure to Act series of economic studies](#) that examine the economic impact of our nation's continued underinvestment in major infrastructure sectors. The studies focus on surface transportation, water and wastewater, the electric grid, and airports, inland waterways, and marine ports. They answer the question – what does a D+ grade mean for our nation's economic growth? The full reports, as well as accompanying infographics, are available at www.asce.org/failuretoact.
- The public policy positions that ASCE takes are based on [Policy Statements](#) developed under a well-established process and adopted by the Board of Direction. Policy Statements are the basis

for any statements made on behalf of the Society to Congress, federal regulatory agencies, the media and the public. All policies are updated on a three-year cycle, if not sooner. All ASCE policy statements are available online at:

<http://www.asce.org/policystatements/>

- ASCE members are encouraged to seek out opportunities to speak with their members of Congress regarding the 2013 *Report Card for America's Infrastructure* and infrastructure investment in general through [Back Home Visits](#) or at local Town Hall meetings and other gatherings.
- Key Contacts can take advantage of the [Key Contact Briefing Conference Call Series](#), periodic briefing calls on policy issues of interest to the civil engineering profession.
 - [Review and listen to past calls](#) (ASCE member login required)

Resources

- Report Card resources:
 - Download ASCE's [Report Card Outreach Toolkit](#) to access talking points, presentations, materials, and more that you can use to speak with elected officials, decision-makers, as well as your local community groups. Download and access the 2013 Report Card app from your mobile device at www.infrastructurereportcard.org.
 - *Failure to Act* economic studies and infographics are available at www.asce.org/failuretoact.
 - State and local Report Cards – A detailed guide and mentoring is available to help Sections and Branches produce their own local infrastructure Report Card. Email reportcard@asce.org to get started or to find out more.
- *"Is ASCE allowed to lobby legislators?" "How do I invite an elected official to my Section meeting?"* Learn the answers to these and many more questions on how Regions, Sections, and Branches can better influence policy debates through the new **GR University** program. This day-long, in-depth program will get you started on expanding ASCE's government relations presence at the local and state levels. Contact govwash@asce.org for more information.
- The annual [Legislative Fly-In](#) brings ASCE members to Washington, DC to learn about the public policy process, current issues, and how to influence their elected officials. Details on the 2015 Legislative Fly-In will be available in Fall 2014 at <http://www.asce.org/govrel>. The 2015 ASCE Fly-In is scheduled for March 24-26, 2015.
- **State Public Affairs Grants (SPAG)** funding can be used to support Report Card development and grassroots initiatives.
- ASCE's **state legislative tracking tool** allows members to learn about pending issues in their state. Access to the tool is available to ASCE members at: www.asce.org/multistate

Some Things to Remember

- ASCE can be an active voice in public policy debates, even those related to elections – for example, by organizing candidate forums that invite ALL candidates for an elected office to participate equally. However, leaders should remember that as a 501(c)3 tax-exempt organization, ASCE (including Sections, Branches and Regions) is prohibited by the Internal Revenue Service from engaging in political activities (relating to elections and campaigns for office at all levels of government). Violating this prohibition can result in loss of our tax-exempt status. Please contact us for more details on these types of activities.

TALKING POINTS:

9-2014

Life Member Involvement

Summary

- Life Member status is conferred by ASCE when a member reaches age 65 and fulfills a number of years of ASCE membership. There are indications that Life Members are underutilized and few Sections/Branches engage in specific efforts or programs to promote their active involvement.
- These Life Members provide an outstanding opportunity to bring new, untapped resources to a local organization. They have the energy, experience and the enthusiasm to be involved in a great variety of activities and be of significant service to their local organization

Key Points

- Current data indicates that there about 22,000 Life Members, which is about 15% of ASCE membership, and the numbers will certainly grow in the future.
- Many long-time members maintain their Section/Branch involvement as they move to Life Member status, however, many are not involved with local geographic organizations because they relocated to a new area and do not have local contacts.

Resources

- ***Life Member Involvement Guidelines*** provides steps on how a local organization can engage Life Members and includes proposed Life Member activities, organizational options, recruitment and recognition opportunities.
- Large numbers are not needed to start the initiative. The Guidelines show how one person can get it started. Review the Guidelines and see how all organizations can easily benefit from an increase in Life Member participation.
- For a copy of the guidelines, please contact Nancy Berson nberson@asce.org, or 703-295-6010 or visit <http://www.asce.org/Content.aspx?id=30273>

TALKING POINTS:

12/2014

Region/Section/Branch Outreach to Student Chapters

Region Board of Governors (RBOG) and/or Section/Branch Boards should include outreach to Student Chapters as a means to strengthen the relationship between students, professional members and the Society. As professionals, we can set a good example by helping the students with their activities and raising awareness about the benefits of ASCE membership. Ultimately, we want them to understand the value of transitioning smoothly to Younger Members of the society once they graduate from college.

Key Strategic Points

- Successful transition of Student Members to Younger Members is extremely important to the future health of the Society.
- The RBOG and/or Section/Branch Boards' role is to be an engaged, active liaison and point of contact between the Society and the Student Chapters.

Work with the Faculty and Practitioner Advisors

- Sections / Branches are responsible for appointing two Practitioner Advisors to serve as a liaison between the Section / Branch and the Student Chapter. One Advisor should be a Younger Member recently out of school and preferably someone who graduated from the same school.
- Reach out and make regular contact with Faculty and Practitioner Advisors, at least twice a year, typically in the first few weeks of each academic semester or quarter. Encourage Practitioner Advisors to do the same with their respective student leaders. (Find them in the ASCE Official Register <http://www.asce.org/Official-Register/Official-Register/>)
- Act as a mentor to Faculty and/or Practitioner Advisors, particularly if the chapter is struggling.
- Encourage and support Practitioner and Faculty Advisors to attend the Practitioner and Faculty Advisor Training workshop (PFATW) held each year at ASCE headquarters.

Work Directly with the Students

- Make sure that a Director, Governor or equivalent appointee visits each student chapter in your section or branch at least once each year. Make a presentation about ASCE -- standard templates are available from staff. (Find student chapter contacts in the ASCE Official Register <http://www.asce.org/Official-Register/Official-Register/>)
- Request and review each Student Chapter's Annual Report. Annual reports are now in PowerPoint format, so the students could present it to you.
- Hold a section, branch or board meeting on their campus and invite them to attend. Better yet, offer to help the student chapter host a joint meeting of professionals and students.
- Participate in a Workshop for Student Chapter Leaders (WSCL), held in conjunction with the Multi-Region Leadership Conferences (MRLC).
- Attend a student conference or volunteer your help as a competition judge or speaker. A listing of all the conferences and contact information is posted at <http://www.asce.org/studentconferences/>

Provide Financial and Organizational Support

- Consider establishing a student activities subcommittee to coordinate with the Student Chapters.
- Establish and provide financial support for scholarships through Student Chapters.
- Provide financial support for Student Chapter programs and activities such as attending student conferences and the WSCL.
- Provide additional focused support for struggling Student Chapters.

Questions -- contact the Committee on Student Members (CSM) through student@asce.org

TALKING POINTS:

Pre-College Outreach

9/2014

Summary

Pre-college outreach initiatives build interest in careers in civil engineering and help create a population better informed about the essential role of civil engineering in society. Outreach programs are a popular and effective way to engage members and foster collaboration among Sections and Branches, Younger Member Groups and student chapters. Successful pre-college outreach initiatives can also generate positive media coverage and forge valuable community partnerships. Increasingly, states and local school districts are examining ways to incorporate engineering into K-12 formal curriculum. As this trend develops, ASCE Sections and Branches may choose to endorse or otherwise engage in state and local initiatives.

Key Points

- ASCE members can make a difference.
 - With the establishment of new national science standards - Next Generation Science Standards - and their emphasis on engineering practices as a vehicle for STEM learning, ASCE members are in a unique position to raise awareness about the 'E' in STEM through local advocacy of STEM education reform and engagement with students and educational partners delivering informal STEM learning opportunities.
- Sections, Branches and YMF are key organizational links for the individuals delivering the vast majority of pre-college outreach activities
 - ASCE members are eager to serve as engineer mentors. The ability for professional engineers to serve in this way is a worthwhile extension of their engineering careers and provides an authentic, rewarding connection to the ASCE community and the profession of civil engineering.
- Local pre-college outreach programs extend ASCE national programs and initiatives and allow you to tailor your activities to the specific needs of both your volunteers and the community you serve.
 - This army of ASCE member outreach volunteers represents real value to partner organizations. Whether working with science museums for special events, coordinating with other engineering organizations to participate in high school career fairs, or developing a school-wide program for classroom presentations, engineer mentors fill a specific educational need within the community.

Resources

- Visit ASCE's online Outreach Volunteer Center for information and resources to support your outreach efforts: www.asce.org/Outreach/K-12-Outreach/
- ASCE supplies a full suite of K-12 educational resources, aligned with national STEM teaching standards, to help support member programs and initiatives.
 - ASCEville.org is our award-winning Website for kids in grades 3 – 7.
 - Activity guides are available to plan outreach programs and events for kids from preK (Curious George) to elementary school (Fetch!, ZOOM Into Engineering) and middle school (Design Squad, Building Big).
 - Age-appropriate handouts and career brochures are available for grades 3/4, 5/6, 7/8 and high school.
 - A turn-key career fair kit targeting either engineering or civil engineering is available for middle school, high school or outreach to girls.

- Outreach training is offered at regional leadership conferences, through Webinars provided by ASCE's eLearning service, and through online video tutorials about messaging, preparing for a classroom visits and managing student behavior. www.asce.org/Outreach/Pre-College-Outreach-Training/
- Civil Engineering Club™, a high school after-school club program - is attracting the attention of our members and school staff in many locations. If you are interested in launching a club in your area, email jfinton@asce.org
- ASCE pre-college resources including informational brochures, activity guides and branded promotional items may be ordered at: www.asce.org/precollege-resources

For more information, email outreach@asce.org.

TALKING POINTS:

RAISE THE BAR

9/2014

1. Professional Engineers will need greater breadth and depth of **knowledge, leadership, and vision** to address tomorrow's complex challenges and protect the public.
2. The engineering education of the present—a **four-year undergraduate degree**—will not be **sufficient** to prepare the licensed professional engineers of the future. **Credit hour requirements for engineering have actually decreased.** *(See graph on next page.)*
3. Every **other learned profession has recognized the need to address expanding knowledge** by requiring education beyond the bachelor's degree. **Engineering must also recognize that need.** *(See graph on next page.)*
4. Professional Engineers with enhanced technical, leadership, communications, and business skills will give the profession **more effective project teams, generating improved operations and service.**
5. **The organization representing the state engineering licensure boards—NCEES¹—is drafting a position statement in support of advanced education for licensure to require** additional education beyond the bachelor's degree for newly licensed PE continuing nearly a decade of support for Raise the Bar.
6. For the educational requirements for licensure to change, **state legislatures will need to pass updated licensure laws.**
7. **Several organizations** and/or reports of their committees **support** the concept of **postgraduate education for engineers.**
8. **ASCE, NSPE², and NCEES have endorsed Raise the Bar** per se. **A major NAE³ report** says four years of education is not enough. **An NSF⁴ workshop report** says a master's should provide entry into the profession.
9. The **PE license sets the minimum standard for granting individuals the authority to perform engineering services** and direct engineering projects **that affect the public health, safety, and welfare.** The body of knowledge required for entry into the engineering profession has increased substantially and additional education must be a part of future requirements.
10. **Raise the Bar provisions of the NCEES model law:**
 - Requirements for licensure:
 - An **accredited bachelor's degree in engineering**;
 - A **master's degree in engineering or an additional 30 credits** of graduate or upper-level undergraduate courses in engineering, science, mathematics and professional practice topics **completed inside or outside a university setting (flexibility)**;
 - Approximately **four years** of progressive engineering **experience**;
 - Successful completion of the appropriate NCEES-sponsored **written examinations.**
 - The change **will not affect PEs who are already licensed** when the law takes effect.
11. The bachelor's and master's or equivalent combination provides the best solution—it's **impractical to expand or "fix" the B.S. degree.**
12. Engineering competency rests on a foundation of **formal education, experience, examination, and continuing education.** As new knowledge and practice enter the profession, **experienced**

¹ National Council of Examiners for Engineering and Surveying

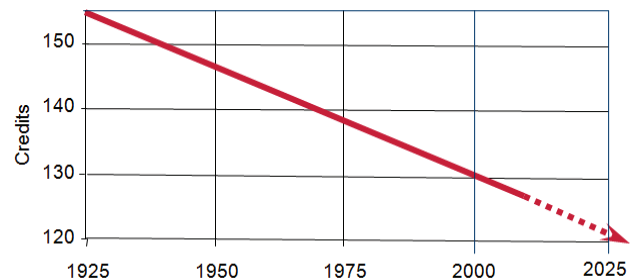
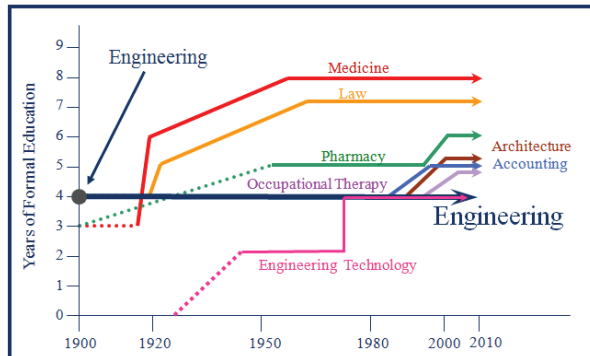
² National Society of Professional Engineers

³ National Academy of Engineering

⁴ National Science Foundation

engineers may not have mastered the new knowledge and therefore can't teach it to their younger engineers.

13. It's **good for business**—highly qualified employees provide better solutions, fewer mistakes, and improved efficiency.
14. It **enhances the stature of the profession**, which helps engineers better serve the public, and should **draw more students** to the engineering profession.
15. Licensure **comity will evolve**, as it has with past changes to the model engineering licensure law. States passing the changes will have adopted the **gold standard** to best position their engineers for **licensure mobility** (reciprocity/comity).



ASCE Involvement History

- Policy 465, Academic Prerequisites for Licensure and Professional Practice, passed in its original form in 1998 and refined through 2007, articulates ASCE's support for the Raise the Bar education requirements.
- ASCE's *Civil Engineering Body of Knowledge for the 21st Century, Second Edition*, released on February 19, 2008, was developed in response to broad stakeholder feedback, as well as the ideas expressed in ASCE's *Vision for Civil Engineering in 2025*. The release was performed at a special event at the National Academy of Engineering.
- The current ASCE focus of the RAISE THE BAR initiative is to pass state licensure laws that include the Raise the Bar requirements for entry into licensed professional engineering practice so that over time, these requirements will be the accepted standard in the United States.

Resources

- ASCE has produced the following information and outreach resources:
 - A Raise the Bar website (www.RaiseTheBarForEngineering.org) with a variety of information and downloadable resources.
 - Both a 3-minute and an 8-minute video that outline why raising the bar for entry into licensed engineering practice is critical for the future, featuring a number of prominent engineering leaders. The videos are available on the Raise the Bar website as well as on ASCE's YouTube channel (www.youtube.com/user/AmerSocCivilEng/).
 - A four-color Raise the Bar brochure, which serves as a leave-behind for personal outreach, provides the core messages and key facts of the initiative.
- To obtain brochures, Raise the Bar presentations or other resources, contact info@RaiseTheBarForEngineering.org.
- Download free copies of the CE Body of knowledge at www.asce.org/CE-Body-of-Knowledge/ and of the Vision 2025 reports at www.asce.org/Vision2025.

TALKING POINTS:

12/2014

Reasons to Attend the WSBL and PGF

Summary

The purpose of the Workshop for Section and Branch Leaders (WSBL) is to provide a venue for upcoming leaders to gain knowledge of the Society and their Region, interact with Younger Members and Students, gain personal leadership skills and learn the importance of networking.

The purpose of the Presidents and Governors Forum (PGF) is to provide a venue for current Section / Branch and Region leaders to gain the knowledge to effectively and efficiently run their local units.

Key Points and Outcomes

WSBL

- Target audience is new, incoming, or potential Section and Branch officers.
- This workshop provides short informative presentations, breakout sessions, and interactive sessions by ASCE staff, Society executive committee members, and other local leaders. It also provides a venue for collaboration amongst local units, including Younger Member Groups and Student Members, within the same geographic Regions. The workshop also includes several professional networking sessions, social events and opportunities to meet and hear from your ASCE Society leaders, Regional leaders, and ASCE peers.
- Become familiar with and gain a basic understanding of how to effectively utilize the resources available to run their Section/Branch.
- Learn how to implement successful activities, or best practices, which other local units have engaged in and have proven successful for them.
- Engage in various networking sessions to meet the Society's leaders and share their experiences.
- Participate in leadership exercises aimed to promote personal leadership within their Section/Branch and in their professional career.

PGF

- Target audience is Section/Branch Vice Presidents, President-Elects, and Presidents in preparation for the upcoming Presidential Year along with Governors and Directors to communicate with Section/Branch members and discuss the abilities of the Regions.
- This workshop provides a summary of various Best Practices discussed by Section/Branch leaders, how to effectively run your Section/Branch, utilizing your Governors and how to be an effective leader in your Section/Branch. The PGF provides a good opportunity for networking with peers and staff at ASCE Headquarters.
- Become familiar with and gain a greater understanding of the resources available from ASCE.
- Discuss Best Practices ideas to take back to your Section/Branch.
- Learn how to utilize your Governors in your Region.
- Learn how to effectively run your Section/Branch and leave the PGF with an implementation plan for your Presidential Year.
- Interact with Younger Members participating in the concurrent Younger Member Leadership Symposium (YMLS).

TALKING POINTS:

Specialty Certification

9/2014

Summary

Specialty Certification is part of ASCE Strategic Initiatives to raise the competency level in professional engineering practice. Specialty Certification is a voluntary, post-licensure credential that provides recognition of advanced expertise in a technical specialty, superior experience, strong ethics and a commitment to life-long learning and continued professional development.

Key Points

- ASCE has three Academies that were founded by practicing engineers of ASCE and its Institutes. These include:
 - The American Academy of Water Resources Engineers
 - The Academy of Geo-Professionals
 - The Academy of Coastal, Ocean, Port and Navigation Engineers
- There are 6 different disciplines that allow a qualified civil engineer to become a Board-Certified Engineer:
 - Water Resources Engineering
 - Geo-Professional Engineering
 - Coastal Engineering
 - Ocean Engineering
 - Ports Engineering
 - Navigation Engineering
- The requirements needed for Specialty Certification include:
 - Formal engineering education consisting of a Bachelor degree in engineering
 - Professional Engineering license
 - Master Degree in engineering or 30 additional advanced credit hours
 - 10 to 12 years of additional professional experience in the field they wish to become Board Certified
- Importance of Specialty Certification:
 - Help to distinguish your staff's professional record
 - Demonstrates the mastery of a specialty in civil engineering
 - Board Certification will be recognized by clients, employers, peers, and the general public

Resources

Find more information at the academies websites.

www.aawre.org

www.acopne.org

www.geoprofessional.org

TALKING POINTS:

9/2014

Developing State Report Cards

Summary

- Success in achieving ASCE's strategic goals to improve the condition and performance of our nation's infrastructure depends on involvement from members across the organization.
- **Sections, Branches and Councils are encouraged to form an Infrastructure Committee to work with ASCE's Government Relations staff to prepare their own State or Regional Infrastructure Report Cards.**
 - ASCE's Infrastructure Report Cards not only complement the nationally focused *Report Card for America's Infrastructure*, but they also allow ASCE to localize infrastructure issues and focus on what is particularly pressing and relevant in each community.
 - By producing an Infrastructure Report Card, you help your community and your local leaders identify issues and suggest solutions that will raise their infrastructure grades to benefit your community.

About the Report Card Program

- ASCE has completed over **50 recent State and Regional Infrastructure Report Cards** providing a wealth of infrastructure knowledge to state and local leaders as they make critical decisions about America's infrastructure
- Each Infrastructure Report Card follows ASCE's methodology and grading scale as outlined in **ASCE's Infrastructure Report Card Guidebook** (available by request to reportcard@asce.org).
- Each Infrastructure Committee is comprised of a team of local civil engineers who volunteer for about a year to research and release their Report Card with the assistance of ASCE's Government Relations and Media Relations staff.
- Generally, ASCE suggests updating your State's Report Card every 2 to 5 years.

ASCE Assistance & Resources

To ensure the success of these efforts, ASCE offers a variety of resources to assist Infrastructure Report Card Committees:

- **Dedicated Government Relations staff focused on Infrastructure Initiatives** to assist Infrastructure Committees through the process and help to promote the State Infrastructure Report Cards.
- An extensive **ASCE Infrastructure Report Card Guidebook** which was developed to assist Sections, Branches and Councils to effectively research, prepare, and release their Report Card.
- Funding through the **State Public Affairs Grant Program (SPAG)** which provides sponsorship funding for Report Card efforts.
- Each Report Card is provided a dedicated review by the **Committee for America's Infrastructure** which also oversees the national Report Card and are assisted by ASCE staff.
- **Press training and media assistance** with the release of the Report Card are provided by ASCE Media Relations staff.
- Additional tools such as **ASCE eRooms** for convenient project sharing and collaboration, assistance with **event planning**, and a basic **literature review** of relevant national sources are provided.

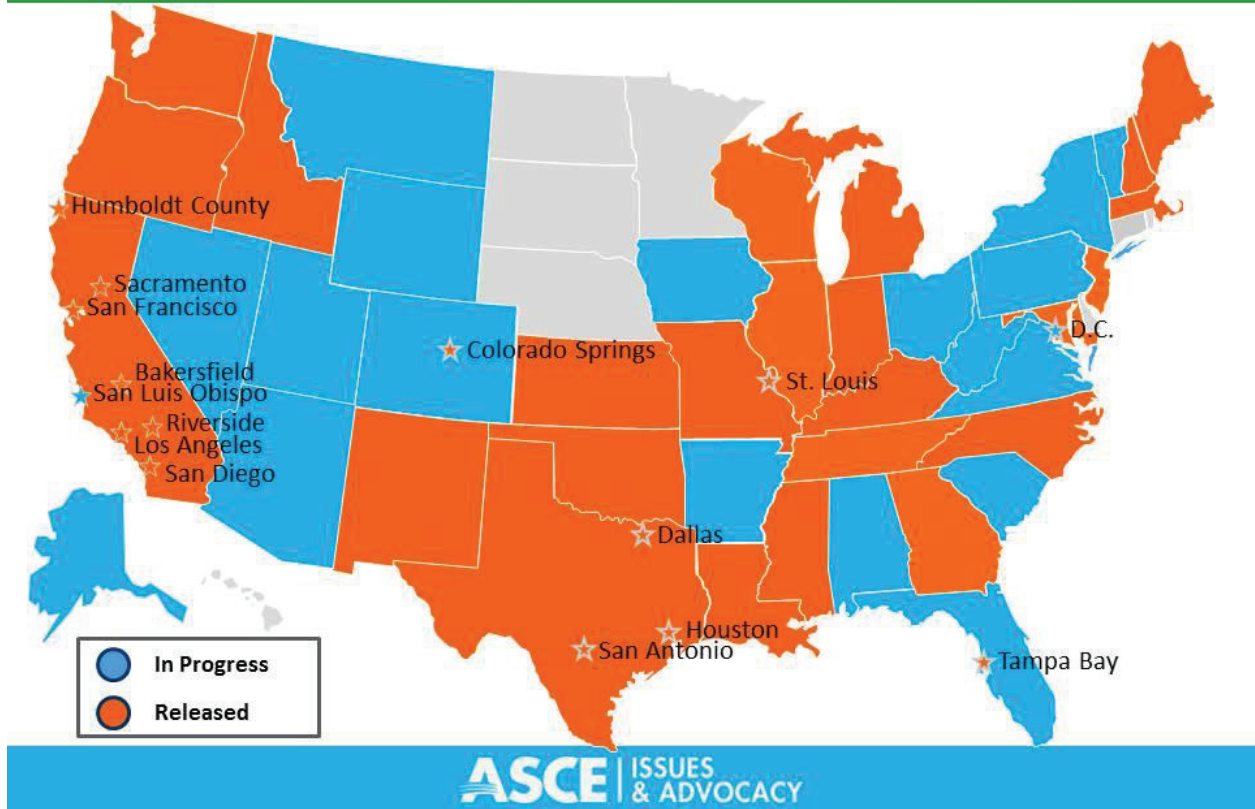
How Can You Get Started?

- **Discuss the effort with your Sections, Branches and Councils leadership** to determine who might be asked to be on your Report Card Committee. From seasoned experts to young professionals, most Report Card Committees retain about 10 to 25 members who help to do

research, release the Report Card publically, and help to put it in the hands of state and local officials.

- Email reportcard@asce.org to get started by getting a copy of the Report Card notification form and access to the Guidebook. The Government Initiatives staff will be in touch to provide you additional resources and assist you with your next steps.

States & Regions Working on Report Cards in 2014



TALKING POINTS:

9-2014

Student Member Transition to Associate Member

Summary

The KEY to helping students transition from ASCE Student Member to ASCE Associate Member is ENGAGEMENT with students. ENGAGEMENT leads to CONNECTIONS between students and professionals.

Key Points

- From the new graduate's point of view, membership in ASCE offers the recent graduate with a strong network of positively focused practitioners of all levels of experience who can support the new engineer in his/her career. Members believe that ASCE is a great place for professionals to engage and to share with each other what works in our challenging professional lives on the professional, technical, and individual levels.
- From the organization's point of view, attracting student members to become associate members after graduation is vital to the continued health of ASCE. It is every member's job to let students know why membership in ASCE is of personal value and important to every civil engineer.
- A sub-committee of the Committee on Student Members has been formed to help direct resources to activities that will engage students and highlight the benefits of ASCE membership beyond graduation to current student members. Integrating students with younger members, Sections, Branches, and Institutes is seen as the means to an end in building a strong community of like-minded individuals with student interests at heart.
- Of particular note, the committee has learned that making connections between students and individual members shows strong potential for attracting new members.
- Desired outcomes: To increase the percentage of student members through engagement who transition to associate members after graduation and to increase the retention rate of those who do.

What You Can Do

- Ensure that your Practitioner Advisors (assigned from branches/sections) are engaged with their Student Chapters. These advisors should be reporting to students what is happening in the local ASCE branch/section and Younger Member Group. They should also be reporting to the ASCE Professional Members on what is happening in the Student Chapter and where opportunities to work together exist.
- Plan for activities to have with students (maybe at the university?). Once at these events, commit completely to engaging with the students. Greet them; introduce them to other professional members; talk with them; ask about what they are doing; ask what they may want to do after graduation; and more. Do things with students. Tell them YOUR STORY about how you found ASCE, got active with your local groups, and how ASCE has helped you and your career. ASK THEM TO JOIN ASCE, and to join you in your local group.
- Consider hosting a "WELCOME TO THE PROFESSION" Ceremony for graduating students during Graduation Week Festivities during which a "promotion" ceremony to move graduating

Student Members to Associate Membership, during which new addresses for all graduates can be gathered to keep in contact after graduation (and to pass along to other sections/branches/younger member groups for students moving out of your local area).

- In everything that you do with students, ensure the messages that “we look forward to you joining us in our profession” and “we want you to join us in ASCE” resonate in both what you say and in what you do.

Resources

For additional information, contact Leslie Payne (lpayne@asce.org) in ASCE Student and Younger Member Programs or Curtis Nunley (cnunley@asce.org) in Membership.

You can also find the 2010 Final Report from the Task Committee on Student Transition in the Region Governors eRoom at https://erom.asce.org/eRoom/GSD/RegionGovernors/0_1d930.

TALKING POINTS:

9-2014

Sustainability and ASCE

Summary

ASCE envisions civil engineers as “entrusted by society to create a sustainable world....” As both the stewards of the natural environment and the designers and builders of the built environment, **we have both the expertise and responsibility** to achieve a truly **sustainable civilization that provides environmental, economic and social well-being**, now and for the future.

- The infrastructure we design and build today will shape society for the next 50 years and well beyond.
- Civil Engineers’ role in sustainability includes policy, leadership, environmental stewardship and life-cycle planning.
- Sustainable infrastructure, designed to consider current and future hazards, plays a crucial role in a community’s resilience and ability to withstand and recover from natural or man-made disasters.

Role of the Committee on Sustainability

- Establish Society leadership role in sustainability.
- Provide support and oversight of ASCE’s role in the Institute for Sustainable Infrastructure (ISI).
- Foster engagement in sustainability among ASCE members.
- Coordinate ASCE’s sustainability initiatives and programs.
- Encourage, develop and support policies, programs, and initiatives. Define the Body of Knowledge and the qualifications of a civil engineer with sustainability expertise.

Key Points

- The civil engineer’s responsibility to practice sustainably was recognized in the ASCE Code of Ethics in November 1996.
- Sustainability was identified by the ASCE Board as a priority strategic initiative in 2008.
- ASCE is providing resources and education to help civil engineers and future civil engineers incorporate sustainability principles into practice, provide leadership on sustainability, and **derive competitive and other benefits** from their expertise.
- Engineers need to be their clients’ trusted advisors and get involved with projects at preliminary planning phase and help determine, “Is this the right project?” and “Are we doing the project right?”
- ASCE is developing a professional certification program, standards, and educational resources to promote widespread implementation of sustainable engineering principles. Two courses, *Fundamentals of Sustainable Engineering* and *Sustainable Project Management*, Ecology are available and 9 others are in development.
- *To advance sustainable design and construction, ASCE is helping civil engineers find new tools to use in their work.* In partnership with ACEC and APWA, ASCE developed a sustainability rating system called Envision which is now managed by ISI, a separate 501c3 not for profit corporation.
- Just two and a half years after ASCE co-founded the Institute for Sustainable Infrastructure over 1800 individuals have the ENV SP credential, and 3 projects have received public awards.
- ISI announced the first and second project to meet its approval **using the Envision** sustainable infrastructure rating system:
 - The **first - William Jack Hernandez Sport Fish Hatchery** in Anchorage earned an **Envision Gold** designation in part for its use of recycled materials and innovative technologies that reduced water and energy consumption significantly, while protecting surrounding Greenfields and freshwater.

- **The second - Placer County Snow Creek Restoration Project** was the Snow Creek Stream environment zone restoration in North Lake Tahoe, Placer County, Calif., has earned the Envision™ Platinum award—the highest level attainable.
 - The third award was for the South Los Angeles Wetland Park in Los Angeles, California, it earned the Envision™ Platinum award—the highest level attainable in the ISI Envision sustainable infrastructure rating system.
- ISI established a student-oriented **Envision™ Sustainable Infrastructure Rating System credentialing program for college and university students**, the provisional Envision Sustainability Professional (ENV PV) credential.

Guiding Principles for ASCE's Sustainability Initiative

- Consider the technical, environmental, economic and social dimensions while ethically and responsibly carrying out the initiative.
- Proactively seek collaborative opportunities domestically and internationally with other disciplines and organizations.

ASCE's definition

Sustainability is a set of environmental, economic and social conditions in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely without degrading the quantity, quality or availability of natural, economic and social resources.

Innovation in Sustainable Civil Engineering Award

- Menomonee Valley Redevelopment and Community Park, Milwaukee, WI, 2011
- GreenLink Windsor, Ontario, Canada 2012
- Chari Chari Bridge, Bolivia 2013

Committee on Sustainability Global Activities

- First International Conference on Sustainable Infrastructure – ICSI 2014 November 6-8, 2014 Long Beach, California, USA; <http://content.asce.org/conferences/icsi2014/call.html>
- Geo Hubei 2014 Conference July 20-22, 2014, Hubei China, <http://www.geoconf.org/>
- WFEO, Singapore Declaration, September 2013 <http://www.wfeo.net/singapore-declaration-engineering-sustainable-future-14-september-2013-2/>
- Civil Engineering Conference in Asian Region (CECAR 6) Jakarta Protocol, August 2013; <http://www.asce.org/asce/news/featured.aspx?id=23622327474&blogid=25769815007>
- Triennial ASCE/ICE/CSCE March 2013, Statement - Global Perspectives on Sustainable Infrastructure: <http://content.asce.org/conferences/triennial/program.html>

ASCE Annual Meetings - International Round Tables

- Sustainable Infrastructure: Civil Engineering Solutions, October 2011, Memphis Tennessee
- Civil Engineers Innovating a Sustainable Future, October 2010, Las Vegas, Nevada, Vision 2025
- Sustainable Infrastructure and Economic Development – From Builders to Integrators – Civil Engineers Leading the Way, October 2009, Kansas City, MO
- Responding to Climate Change – The Role of the Engineer, November 2008, Pittsburgh Pennsylvania
- Infrastructure for All Generations: Plan – Design – Build – Manage, October 2007, Orlando Florida
- Sustainability in Practice and Education: A Global Perspective, October 2006, Chicago Illinois

Global Policies:

- The Role of the Civil Engineer in Sustainable Development – PS 418
- Building Engineering Capacity – PS 506
- Millennium Development Goals – PS 517
- Combatting Corruption - PS 510
- Relationships with International Engineering Organizations – PS 146
- Impact of Climate Change – PS 360

The Vision for Civil Engineering in 2025

Summary

- Civil engineering faces a choice between two futures—one that it creates for itself or one that others create for it.
- To address that challenge, in 2006 ASCE gathered some 60 thought leaders from diverse backgrounds and countries—civil engineers, engineers from other disciplines, architects, educators, and other leaders to answer the questions: What will the civil engineering world be like in 2025 and what roles will civil engineers play in that radically transformed world? The result was *The Vision for Civil Engineering in 2025*.
- The aspirational Vision 2025 challenges civil engineers to rise to a new level of leadership and professionalism—to be entrusted by society to achieve a sustainable world and raise the global quality of life. To earn that confidence, civil engineers, as a body of professionals, must exhibit mastery in five key areas (*see below*).
- Vision 2025 provides the point of future arrival but not the path. As the next step, ASCE developed a Roadmap to achieve the Vision, thereby driving action among civil engineers around the globe.

The Vision

Entrusted by society
to create a sustainable world and
enhance the global quality of life,
civil engineers
serve competently, collaboratively, and ethically as master:

- planners, designers, constructors, and operators of society's economic and social engine—the built environment;
- stewards of the natural environment and its resources;
- innovators and integrators of ideas and technology across the public, private, and academic sectors;
- managers of risk and uncertainty caused by natural events, accidents, and other threats; and
- leaders in discussions and decisions shaping public environmental and infrastructure policy.

The Future Civil Engineer

Civil engineers in 2025, as a body of professionals, should exhibit mastery in these five areas:

Planners, designers, constructors, and operators—As masters of a new, more expansive body of knowledge and skill base, civil engineers will lead multidisciplinary, global, collaborative teams composed of a well-defined hierarchy of professional engineers, technologists, and technicians.

Stewards of the environment—Civil engineers will put new technology, techniques, and financial methods in place for sustainable planning, design, construction, operation, and maintenance. Moreover, civil engineers will routinely encourage owners to adopt new, sustainable approaches to the built and natural environment.

Innovators and integrators of technology—Civil engineers will define the strategic research direction for leading-edge infrastructure and environmental technologies. Civil engineers will promote faster application of new approaches and multinational knowledge exchange, and accelerate the integration of technology through spirited partnerships among diverse sectors.

Managers of risk—Civil engineers will exhibit a mastery in assessing and managing risk and forge new tactics for reducing the incidence and effects of natural and man-made disasters. They will lead enterprise-wide risk management efforts and routinely make project-specific risk decisions while communicating risks and mitigation options to all stakeholders.

Leaders in public policy—Civil engineers will greatly expand their role as public policy leaders, possessing the skills for broad-based policy discussions and serving as opportunity finders as well as problem solvers. They will be the go-to professionals for insights on public policy decisions that shape the built and natural environment.

Achieving the Vision

- Now is the time to embrace the Vision and the Roadmap and put your passion and expertise into play.
- Vision 2025 embodies a number of key outcomes for the future—new states of affairs within the social and civil engineering environment targeted for reality by the year 2025. The Roadmap takes those outcomes, separates them into manageable pieces, and then spells out tactics for achieving each. Consult the Roadmap and find out how you can make a difference today.
- Many have already embraced the challenge:
 - A university shaped its outreach to prospective students around Vision 2025 and saw a big jump in enrollment.
 - The Vision has inspired individual engineers to improve themselves and their firms.
 - Numerous civil engineering organizations around the globe have signed endorsements of the Vision.
 - The Vision reports have been translated into several languages.

By achieving the Vision, civil engineers will reshape their professional stature and remain the force behind their own destiny, discovering a practical reality in what was once just imagined.

Resources

- Order a free hard copy of *The Vision for Civil Engineering in 2025* or download a PDF. Also get the PDF of *Achieving the Vision for Civil Engineering in 2025: A Roadmap for the Profession*. Go to www.asce.org/Vision2025.
- Download free PDFs of Spanish and Chinese translations of the Vision and the Roadmap reports at www.asce.org/Vision2025.
- Order hard copies of the four-color brochure “What Future Will You Build?”, which outlines the Vision 2025 points provided here. Contact Nancy Ibanez at nibanez@asce.org, 703-295-6287.
- Read about a variety of perspectives on the future engineer at www.RaiseTheBarForEngineering.org/future-engineer.