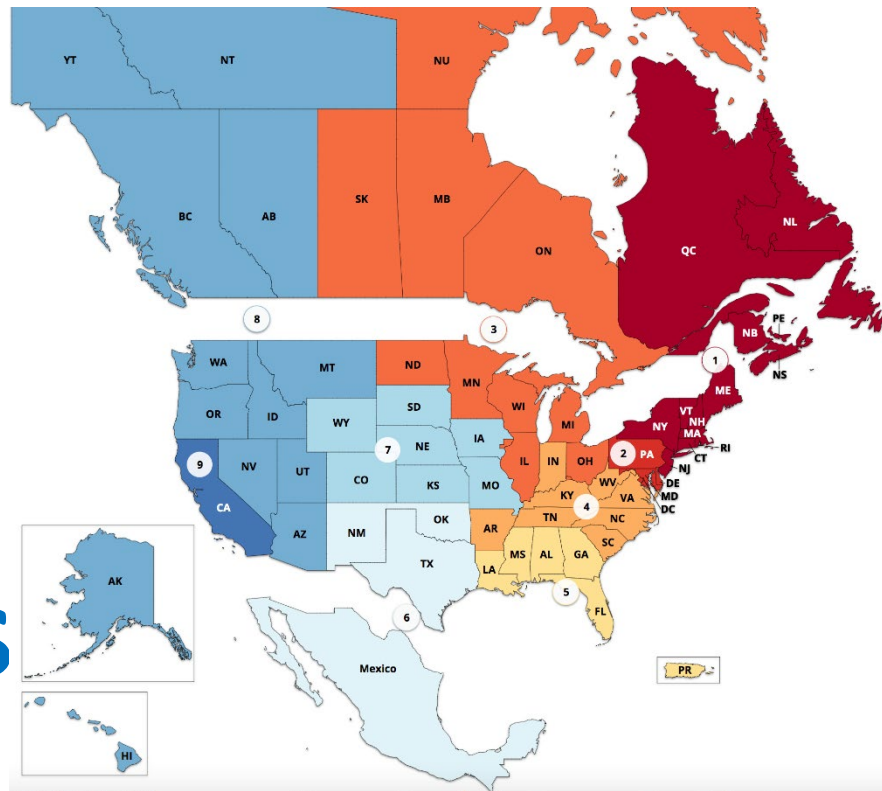


Regions Sections and Branches



Talking Points

Prepared By
Leader Training Committee
Revised August 2020



Phone 1-800-548-2723
1801 Alexander Bell Drive, Reston, VA 20191

EXECUTIVE SUMMARY

The ASCE Leader Training Committee (LTC) has developed a set of Talking Points for Region Governors and Section and Branch Presidents to use when addressing Section/Branches, Student Groups or other constituent groups about ASCE. Each Talking Point and respective PowerPoint slides present information about individual programs/activities/initiatives of the Society.

Starting back in 2010 with 10 Talking Points, LTC is proud to present a total of 18 Talking Points for ASCE leaders to utilize.

HOW TO USE THIS GUIDE

The guide is organized into the following eight categories:

1. **ASCE INITIATIVES / STRATEGIES**
2. **INSTITUTES**
3. **GOVERNMENT RELATIONS**
4. **SECTION RESOURCES**
5. **K-12 STUDENT OUTREACH**
6. **STUDENT RETENTION/TRANSITION**
7. **PROFESSIONAL AND LEADERSHIP**
8. **ASCE SUPPORT PROGRAMS**

The Talking Points are generally organized in the following format: SUMMARY, KEY POINTS, OUTCOMES, and RESOURCES. Each Talking Point has a WORD document and a PowerPoint file associated with it. The WORD document gives the reader information to present the subject and the PowerPoint slides are intended to compliment the WORD document. Some of the PowerPoint slides are full presentations while others are resources for the presenter.

This guide contains the WORD documents and PowerPoint slides for each Talking Point. They may also be downloaded individually in the Section and Branch Presidents Collaborate Community under [Section and Branch Resources\Talking Points](#)

The PowerPoint slides should be personalized for your presentation before using (i.e., title page) Also, some of the PowerPoint slides do have associated notes for presentations.

ACKNOWLEDGEMENTS

The Leader Training Committee acknowledges the ASCE staff and the ASCE volunteers that assisted with the development and maintenance of these Talking Points.

CONTACT INFORMATION

The Leader Training Committee is always looking for new TALKING POINTS to include in its guide. The Committee plans to publish an updated version annually. If you have an ASCE topic that could use some TALKING POINTS and would like to contribute to this guide or have any feedback or comments, please contact **Nancy Berson** at nberson@asce.org or at 703-295-6010.

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Chapter 1 ASCE INITIATIVES / STRATEGIES

1.1 Future World Vision

TALKING POINTS:

08-2020

Future World Vision: *Infrastructure Reimagined*

The need for a new approach

From climate change to autonomous vehicles to global pandemics, civil engineers are confronting environmental challenges, demographic shifts and technological changes requiring a drastic rethinking of how we build, operate, and maintain our infrastructure systems.

To help anticipate the coming changes and their effects on civil engineers and the communities they serve, ASCE has launched a bold, comprehensive project to identify, anticipate and prepare for future change. Known as **Future World Vision: Infrastructure Reimagined**, this project aims to provoke deep thinking about how we will live in the decades ahead and what ASCE members and the design and construction industry will need to do differently now and into the century ahead.

The Future World Vision project will:

- Establish ASCE and civil engineers as bold thought leaders
- Provide a platform to envision the future built environment and ultimately optimize future system performance and the benefit to society
- Be a next-generation tool that resonates with those who will create the future built environment—the next generation of civil engineers

How did the Future World Vision project start?

Using robust future scenario analysis, **six trends** were identified as key drivers of change for civil engineers and the built environment:

- alternative energy
- autonomous vehicles
- climate change
- government regulation
- high-tech construction, including artificial intelligence, drones, 3-D printing, and new materials
- smart cities

The interrelationship of these trends led to our vision of community models that might develop over a time horizon stretching 50 years. Our goal is to highlight the choices that we (the profession and society) will make in building future high tech, resilient and sustainable communities, optimizing the desirable outcomes, and avoiding the undesirable and unintended consequences.

What does this mean for civil engineers?

Armed with these scenarios, ASCE and its members will be better able to position the profession to meet society's future needs. Engineers, planners, and policymakers will need new strategies and engineering standards to adapt to these trends successfully. How should we think through future scenarios in a provocative way and design infrastructure to take advantage of new innovations, as well as respond to environmental challenges? What new engineering specifications and standards will be required for these potential new worlds?

Among the specific things civil engineers will need to do more are:

- Better understand system dynamics, the nature of systems engineering and systems integration
- Incorporate advances in materials, computing power, technologies and engineering/construction processes
- Increase linkages, alignment and collaboration with other engineering disciplines as well as non-engineering partners for non-traditional projects

What can we expect next?

Visualizations will help bring these potential scenarios to life and inspire the industry to be the enablers of the future built environment. At its annual convention in Miami, Florida, in October 2019, ASCE unveiled a proof-of-concept for The Floating City, an interactive, immersive experience, constructed in a 4-D computer simulation model. Created using Future World Vision's combination of future-scenario forecasting and deeply researched hard data, The Floating City allows users to explore a coastal city of the future through a virtual reality experience, and then to drill deeply into the research underpinning the city's design through an interactive touchscreen interface. A fully functional prototype of The Mega City 2070 will be unveiled at the annual convention in October 2020.

This project also will spur the development of **publications, conference and continuing education sessions, and programs** to help ASCE members anticipate and adapt to technology change and growing social and environmental challenges. As one example, The Transportation and Development Institute is forming an Emerging Technologies Council. In addition, engineering curricula, student competitions, and

events will engage the next generation of engineers and planners in leading transformative change in the built environment.

Who is leading this project?

The Future World Vision project was initially spearheaded by the ASCE Industry Leaders Council. Former Strategy Director at Northrop Grumman and ASCE Chief Operating and Strategy Officer Jerry Buckwalter led a diverse panel of leaders from ASCE, the Industry Leaders Council and the Younger Members Council. As with other major initiatives the Society has undertaken, such as the recent IMAX film project, we sought the help of best-in-class consultants to guide the scenario planning and platform development. We continue to engage subject matter experts from ASCE and its technical Institutes, as well as from allied professions and industries. The ultimate success of this initiative and related programming will hinge on how it is embraced and informed by ASCE members.

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FUTURE WORLD VISION

INFRASTRUCTURE REIMAGINED



Event Name

Date

Speaker



Change on this scale can drive confusion and dysfunction unless industries, organizations, and individuals are **prepared to tackle new realities**



Alternative Energy



Autonomous Vehicles



Climate Change



Smart Cities



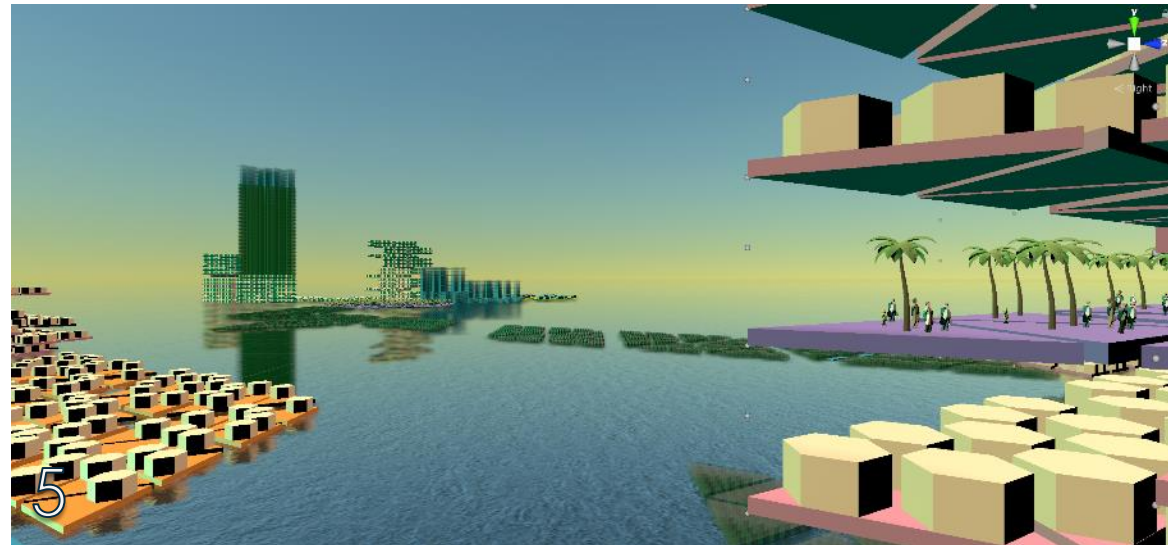
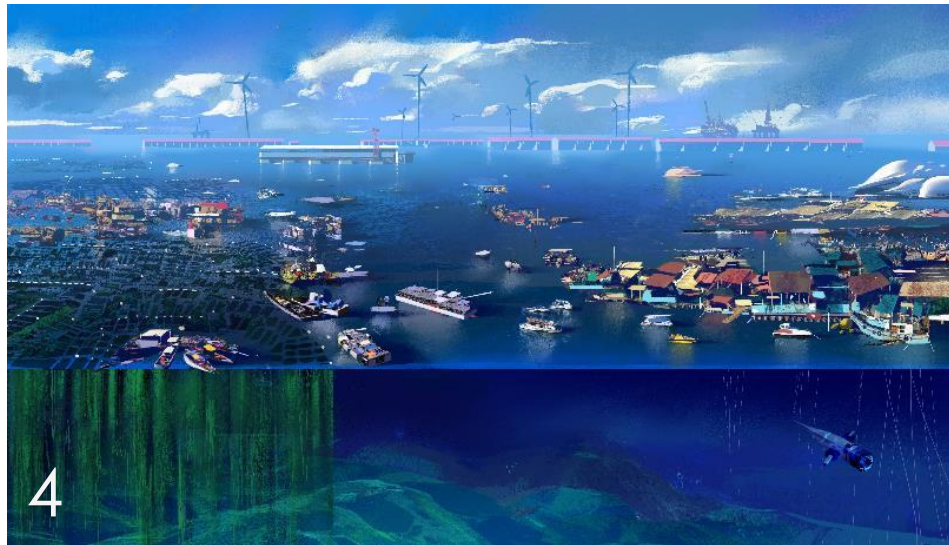
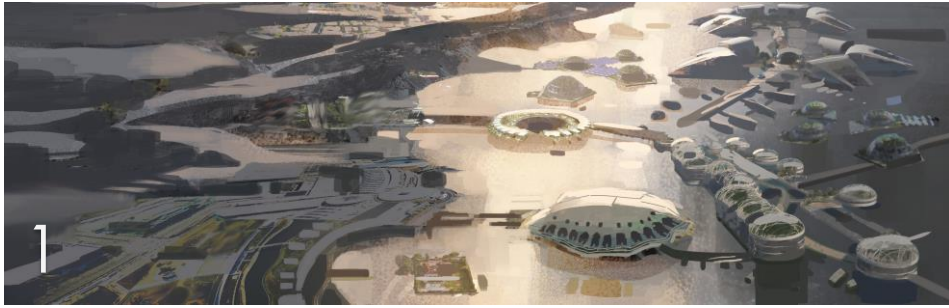
High-Tech Construction
/ Advanced Materials



Policy & Funding







Floating City Example

1. Concept Art for Flooded Cityscape
2. Systems View of Interactive Prototype
3. Floating City Detail Concept Art
4. Concept Art for Floating City Overview
5. Computer Model of City



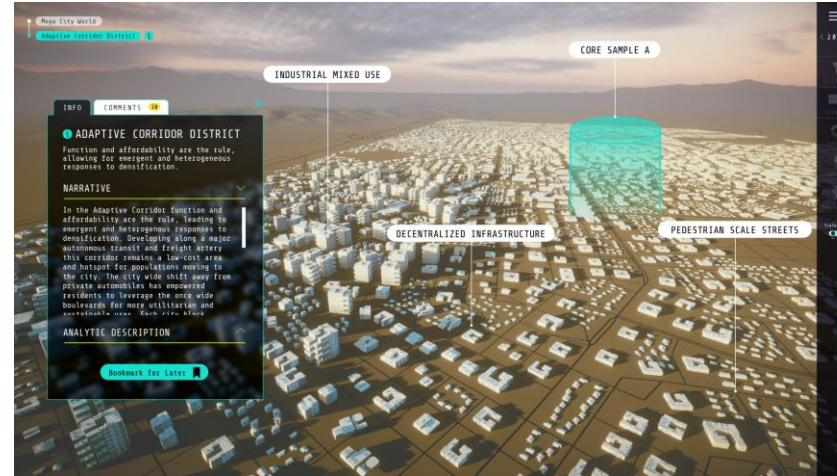
Mega City 2070

Exploring the Mega City

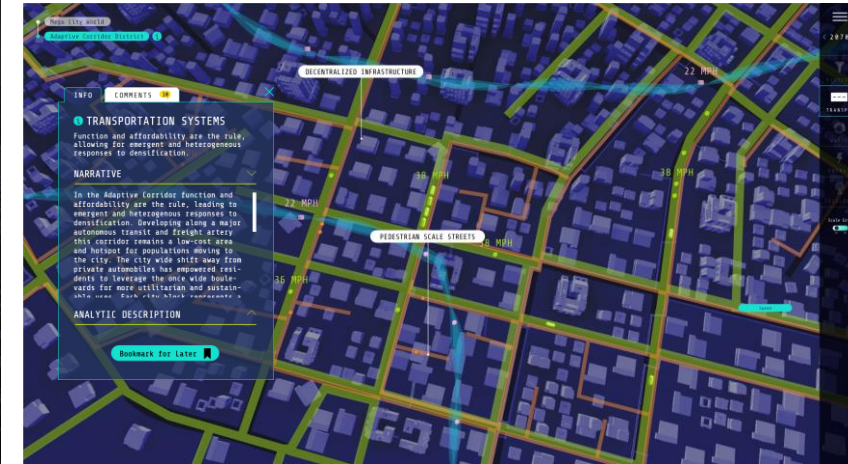
City View



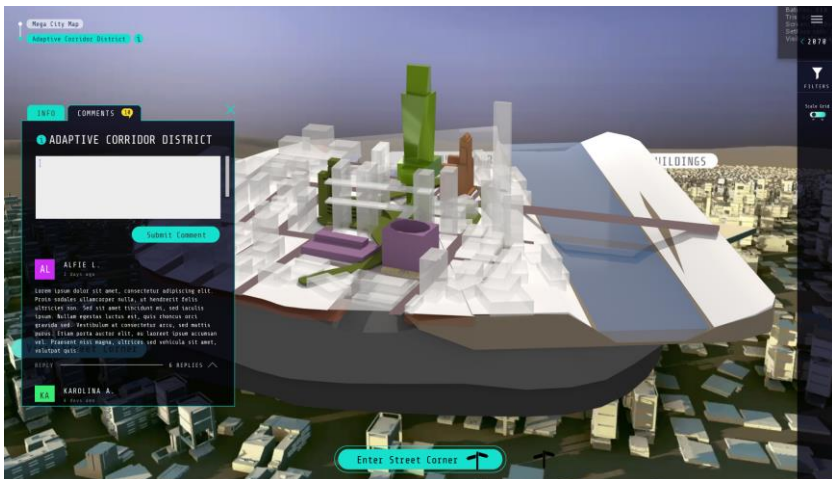
District View



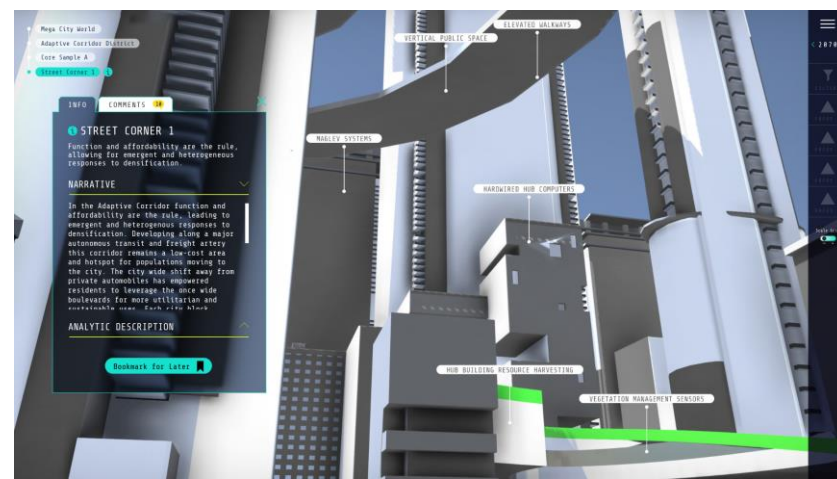
Systems View



Core Sample View



Street View



Human scale view



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FUTURE WORLD VISION

INFRASTRUCTURE REIMAGINED



Thank you!

1.2 Engineer Tomorrow

TALKING POINTS:

Engineer Tomorrow

8/2020

Summary

Civil engineers of tomorrow will design, build, and lead in an environment that is more demanding and unpredictable than ever before. Communities rely on civil engineers to preserve their health, safety, and welfare. The engineers of tomorrow will need to continuously learn and gain advanced problem-solving skills, education, and experience to successfully support their communities for years to come.

ASCE's Engineer Tomorrow initiative is focused on ensuring that today's civil engineers gain the necessary knowledge, skills, and experience to sustain the profession in the future.

Talking Points

We are at an exciting turning point in the world of civil engineering. Innovations in technology, materials, and processes are changing the way we work.

- New technologies can accelerate designs and advance society.
- New materials can help protect our planet and enable us to build sustainable infrastructure.
- New processes can safeguard our environment and enhance our communities to preserve the health, safety, and welfare of the public.
- Along with previously mentioned changes to the civil engineering landscape, outside forces such as threats to licensure, shrinking credit hours and commoditization are affecting the profession.

The body of knowledge defining the knowledge, skills and attitudes needed to practice civil engineering is expanding and more complex than ever.

- Civil engineers will need greater breadth and depth of knowledge, leadership, and problem-solving skills to address tomorrow's complex challenges and protect the public.
- There is broad consensus among engineering leaders that engineers will need additional education to practice in the future.
 - An NCEES¹ position statement and an NSPE² professional policy both support education beyond the bachelor's degree.

¹ National Council of Examiners for Engineering and Surveying

² National Society of Professional Engineers

- A major NAE³ report concluded that the body of knowledge required for entry into the engineering profession cannot fit in the traditional four-year degree.
- An NSF⁴ workshop report said that a master's degree should provide entry into the engineering profession.

We must prepare the civil engineering profession for what is next.

- High professional standards are necessary to build the infrastructure that will protect and sustain our communities today and for generations to come.
- Every other learned profession has recognized the need to address expanding knowledge by requiring additional education. Engineering must also recognize that need. (*See graph*)

We can all help build the civil engineer of the future.

- Young civil engineers need mentors and role models to set expectations for excellence in professional practice.
 - If you are a student or younger engineer, plan today for what you will need tomorrow. Seek advanced education, professional certifications, mentors, and leadership opportunities.
 - If you are further in your career, lead the way and help make a difference by mentoring and supporting the next generation of civil engineers.
- Know that advanced education, professional certifications and licensure are an investment in your future. Education pays off! (*See image*)
- How ASCE Can is preparing the civil engineers of the future:
 - ASCE is deeply committed to its mission of delivering value to its members, advancing civil engineering, and serving the public good.
 - ASCE provides the tools that we need to help develop careers and uphold professional standards through initiatives like Engineer Tomorrow, Future World Vision, Mentor Match and Career by Design
 - ASCE is here for us – supporting us as we acquire knowledge for a changing world.

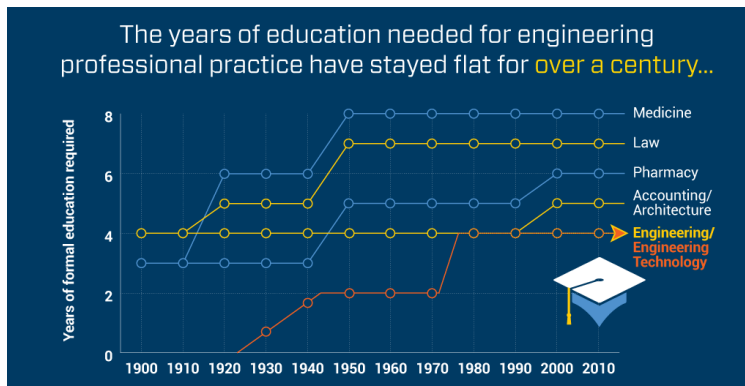
³ National Academy of Engineering

⁴ National Science Foundation

- ASCE supports your professional journey and continuous development by providing certifications, technical and leadership training, mentoring resources, and networking opportunities.

Resources

Referenced graphs & images:



Additional resources:

- Visit the Engineer Tomorrow website: <https://www.asce.org/engineer-tomorrow/>
- Engineer Tomorrow video on YouTube: <https://www.youtube.com/watch?v=UrzZ3sP4QEQ>
- Obtain brochures, presentations or other resources by contacting EngineerTomorrow@asce.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.



ENGINEER TOMORROW

KNOWLEDGE FOR A CHANGING WORLD

Date goes here

The ASCE logo, featuring the letters 'ASCE' in a bold, white, sans-serif font. The 'A' is stylized with three horizontal lines extending from its base. The logo is positioned at the bottom center of the image, overlaid on a background of a city at night with a network of glowing blue lines and nodes.

Overview

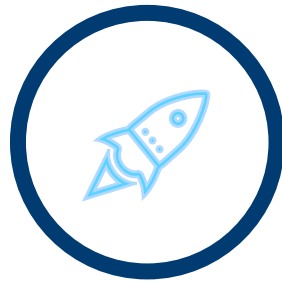
Our world is changing

Building the Civil Engineer of the future

Preparing for what's next

Changing Landscape of Civil Engineering

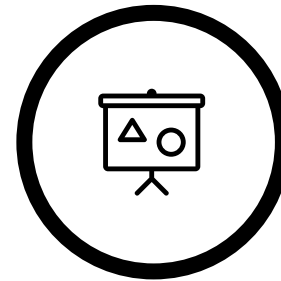
**We are at an exciting turning point
in the world of civil engineering**



New technologies



New materials



New processes

Changing Landscape of Civil Engineering



VIDEO SLIDE HERE

- Embed engineer tomorrow video here
(<https://www.youtube.com/watch?v=UrzZ3sP4QEQ>)

Changing Landscape of Civil Engineering

Outside forces are impacting our Profession



Threats to Licensure

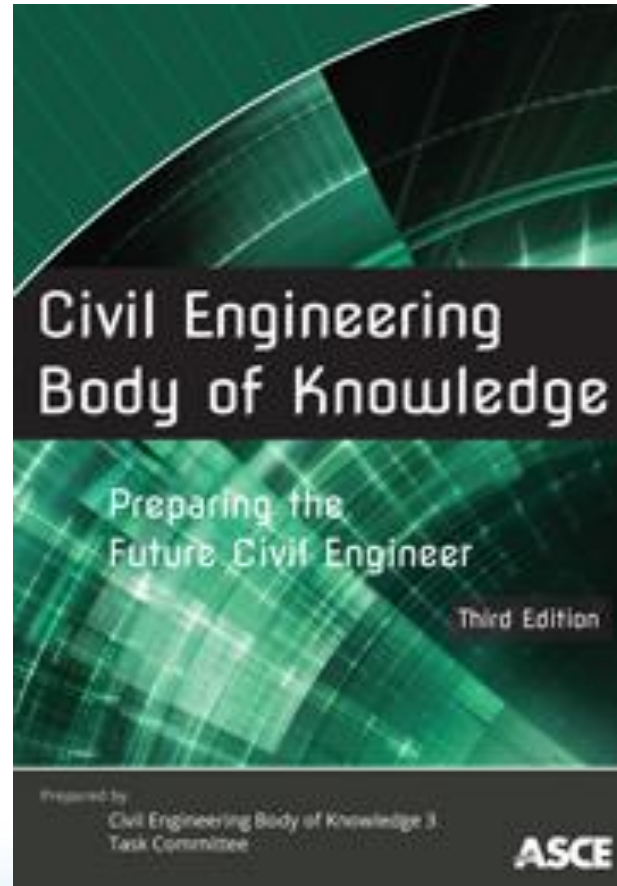


Shrinking Credit Hours



Commoditization

The Civil Engineering Body of Knowledge



Fundamental Principles for the CEBOK

- Define the **knowledge, skills, and attitudes** of the **future** civil engineer...
- Support the **future of the civil engineering profession** and ASCE's goals for...
 - Innovative practices and technologies
 - Safe, resilient, and sustainable infrastructure
 - Advancing educational and professional standards
 - Engaged membership



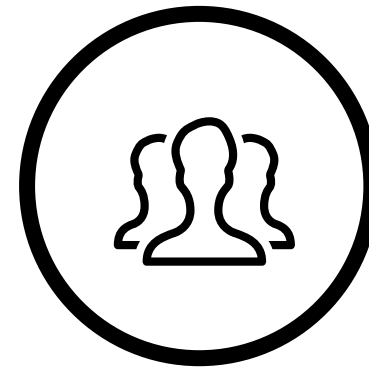
Civil engineers of tomorrow will need the knowledge, skills, and mentored experience to prepare for what's next



Knowledge



Skills



Experience

“Earning my master's in environmental engineering gave me a strong technical foundation, and the leadership skills I'm developing through ASCE will help me be the best engineer I can be.”

*Jazzy Quinabo, E.I.T.,
A.M.ASCE*



Let's chart the course to support all civil engineers and maintain the integrity of our profession



**Education and
Training**



Mentoring



**Professional
Certifications**

Formal education and training are pillars of success



- **Specialized skills for practice areas**
- **Leadership skills to guide teams**
- **Problem solving skills to address new challenges**



Mentoring by respected industry professionals accelerates learning

- Work together to chart the path to success
- Transfer specialized skills and knowledge
- Set work habits the right way

Professional certifications recognize accomplishment

- Reflect continued education
- Highlight accomplishments
- Position for growth and career advancement



Changing Landscape of Civil Engineering



**ASCE is committed to
building the civil engineer
of the future and to preparing
the profession for what's next.**

How ASCE is Educating and Empowering CEs

AMERICAN SOCIETY OF CIVIL ENGINEERS
PRESENTS

FUTURE WORLD VISION

Infrastructure Reimagined



Educating and Empowering Civil Engineers

ASCE MENTOR MATCH POWERED BY ASCE COLLABORATE

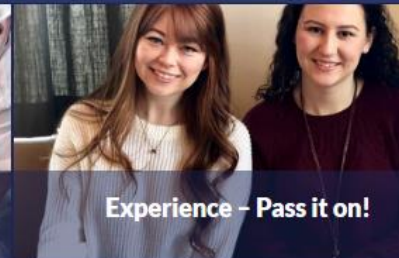


ASCE CAREER
by DESIGN

Code of Conduct ASCE.org Students Younger Members

Member Voices Topics Discussions Events Directory

Make friends. Advance your career. Shape the profession. Stay connected.



ASCE supports your professional journey



- Engage with ASCE
- Get post-graduate education and training
- Pursue professional certifications
- Be a role model and mentor others

Let's work together to engineer tomorrow – today



“ Civil engineering is a people-serving profession, and the public health, safety, and welfare depend on us.

I believe high professional standards, and advanced technical and leadership skills help us better meet society's needs.”

Bobbie Shields, P.E., M.ASCE



Want to stay engaged?

Email: EngineerTomorrow@asce.org

Chapter 2 INSTITUTES

2.1 Professional Board Certification

TALKING POINTS:

May 2020

Summary

Professional Board Certification is part of ASCE Strategic Initiatives to raise the competency level in professional engineering practice. ASCE's Professional Board Certification is a voluntary, post-licensure certification that provides the highest recognition of advanced expertise in a technical specialty, superior experience, strong ethics and a commitment to life-long learning and continued professional development. ASCE's professional board certification is the highest post-licensure advanced certification offered in civil engineering.

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
 - Geotechnical Engineering
 - Coastal Engineering
 - Ocean Engineering
 - Ports Engineering
 - Navigation Engineering
- The requirements needed for Board Certification include:
 - Formal engineering education consisting of a Bachelor's degree in engineering
 - Professional Engineering license.
 - Master's Degree in engineering or 30 additional advanced credit hours OR minimum of 25+ years of professional experience.
 - 8 years of additional post-licensure professional experience in the engineer's specialty.
- Importance of Board Certification:
 - Help to distinguish your staff's professional record and expertise.
 - Demonstrates mastery of a specialty in civil engineering.
 - Board Certification will be recognized by clients, employers, peers, and the general public.
 - Recognizes you as a leader in the engineering profession.

- Academies' board certification is the highest advanced post-licensure certification.

Resources

Find more information on the Academies' websites.

www.aawre.org

www.acopne.org

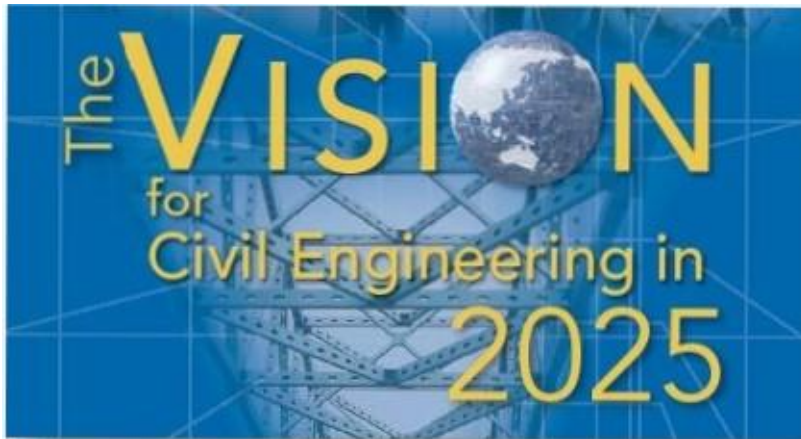
www.geoprofessional.org



Professional Board Certification



The Vision for 2025



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

Master Builders

- Master planners, designers, constructors, and operators of society's economic and social engine - the built environment
- Civil engineering is universally recognized as a "learned profession" characterized by competency and the continued pursuit of knowledge and experience
- Develop and promulgate comprehensive programs of advanced credentialing

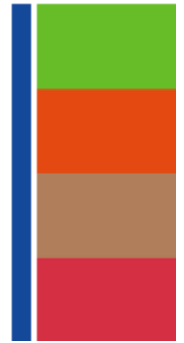


Outline



- What is Board Certification and why do we need it?
- How does Board Certification relate to Licensure?
- Why should you become a board-certified Diplomate?
- How do you become a Diplomate?

Three Academies



AAWRE - The American Academy of Water Resources Engineers



AGP - The Academy of Geo Professionals



ACOPNE - The Academy of Coastal, Ocean, Port and Navigation Engineers

"Being certified by ACOPNE as a Diplomate in Coastal Engineering recognizes my specialized expertise, experience, and leadership in the field. The ACOPNE certification distinguishes those with the credentials to practice in specialized engineering disciplines - such as coastal engineering - from individuals without such credentials."

Christopher J. Bender, P.E., D.CE, M.ASCE
Senior Engineer, Taylor Engineering, Inc.



What is Board Certification ?



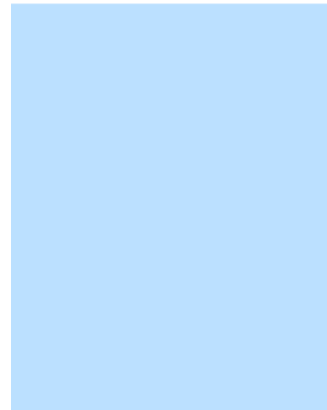
Certification Information



What is a Board Certified Diplomate?



Coastal Engineering = D.CE
Geotechnical Engineer = D.GE
Navigation Engineering = D.NE
Ocean Engineering = D.OE
Port Engineering = D.PE
Water Resources Engineering = D.WRE



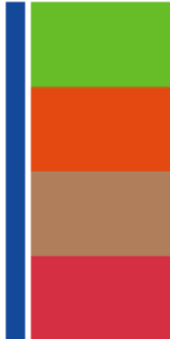
Professional Engineering License

- Protects public health, safety and welfare
- Regulated by state government
- Grants a "permission to act"
- Establishes minimum competence for entry into the profession



**National Society of
Professional Engineers®**

ASCE





"COM Smith is a strong proponent of professional (board) certifications for their technical staff and it was a natural next step in my career...After obtaining a Masters degree, pursue certification for your Professional Engineer (PE) license and specialty certification (such as the AAWRE) as soon as you are eligible."

Lena Rivera, P.E., D.WRE, M.ASCE
Senior Water Resources Engineer, COM
Smith



Board Certification

Board Certification supports licensure. How?
Because board certification *requires licensure*.

- Attests to an individual 's capability to perform a defined task or related series of tasks (Body of Knowledge)
- Offered and controlled by not-for-profit, peer organizations
- Certification is voluntary - no legal requirement
- Doesn't grant permission to practice
- Market conditions may operate to require or give preference to those who have a particular certification (common in medical profession)
- Demonstrates specialty expertise beyond a minimum level of competence

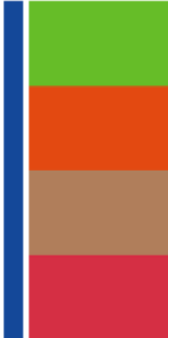
Certification vs Certificate

Certification attests to qualification while a Certificate usually signifies completion.



- Certification:
 - Attests to certain qualifications
 - An earned credential awarded through an assessment process, demonstrated mastery/competence of knowledge and skills
 - Usually has fairly rigorous requirements - coursework, degrees, licenses, progressive experience, examinations, peer review
 - May be withdrawn by the issuing organization.
- Certificates:
 - Certificate programs often award a "certificate of completion"
 - Lower level of rigor and evaluation

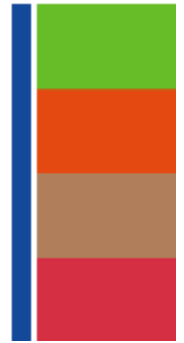
The Value of Diplomate Status (for you and your staff)



- Assures clients that highly qualified professionals are responsible for their projects
 - Technically astute
 - Advanced experience
- Provides a differentiator to competition
- Value to clients
 - Reduced project risk and liability
 - Advanced project analyses
 - Reduced change orders and cost overruns
 - Reduced project initial and life cycle costs



History of Board Certification

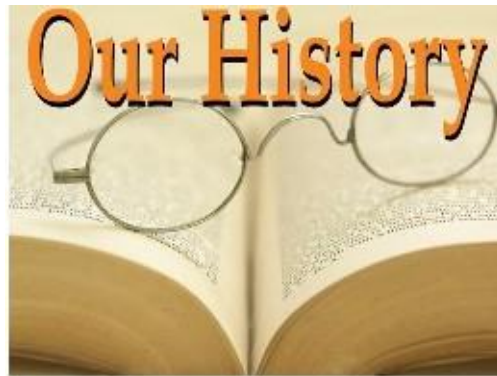




ASCE Policy Statement 524:

Licensure and Academic Credentialing Within the Civil Engineering Profession

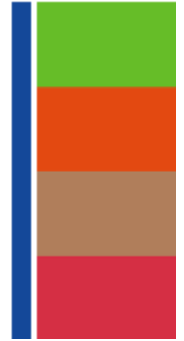




- In 2004, Civil Engineering Certification, Inc. (CEC) was established by ASCE
- 2004 - American Academy of Water Resources Engineers (AAWRE)
- 2008 - Academy of Geotechnical Professionals (AGP)
- 2009 - Academy of Coastal, Ocean, Port and Navigation Engineers (ACOPNE)

All Academy certification programs are accredited by the Council of Engineering and Scientific Specialty Boards (CESB)

Requirements



- Formal Engineering Education Consisting of a Bachelor's Degree in Engineering plus a Master's Degree
- Valid Professional Engineering License (P.E.) or International Equivalent
- 8 years' Professional Experience beyond First Professional Licensure
- Strong Professional Ethics
- Professional References
- Oral Examination
- Commitment to Continuous Professional Development

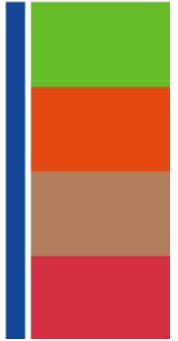


"Looking at the list of the previous inductees, it was a great honor for me to be considered as a Diplomate. We are living in a world that specialization is not a luxury anymore. This new certification will provide an avenue to the engineering community to readily recognize the specialists who are sanctioned by their peers through AGP."

Soheil Nazarian, Ph.D., P.E., D.GE, FASCE
Professor, University of Texas at El Paso



Maintaining Board Certification



- Board Certification is to demonstrate specialized and advanced expertise; it is essential that this expertise be maintained
- Annual Continuing Education
 - Continuing Education requires Technical, Ethics and Sustainability Education
 - 50% of Diplomates are audited for verification
- Continuous Professional Licensure
- Annual Recertification



AAWRE

2009 - Stamford Water Authority in Connecticut

2010 - COM



ACOPNE

2013 - Port of Long Beach

2014 - The Jersey City Municipal
Utilities Authority

AGP

2013 - Kansas City District of the Army Corps of Engineers
- Fairfax Drainage District Floodwall Project

2016 - City of Castroville, TX

Expansion existing Wastewater Treatment Plant



What will board certification do for you?

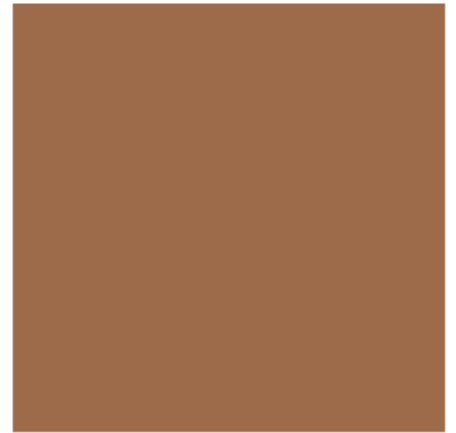


- It recognizes your specialized knowledge and advanced expertise among clients, employers, peers and the public.
- You are recognized as a leader in the engineering profession.
- Board Certification shows you are an expert within your specialty area in Civil Engineering.
- Requirements for board certifications is becoming more common and requested in procurement of engineering services.
- Insurance policies are beginning to recognize the value of board certification and incorporate in their policies.



'Achieving the Diplomate (Board Certification) boosts your professional reputation, as it establishes you as one of the top civil engineers in your specialty. It can also help you differentiate yourself from other civil engineers, and it may give your company a competitive edge on a request for proposals.'

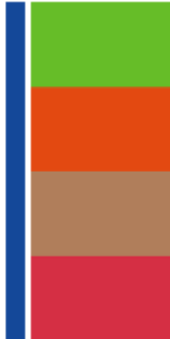
-- 2015 ASCE President Bob Stevens, PhD, PE, FASCE



Civil Engineering Certification, Inc.



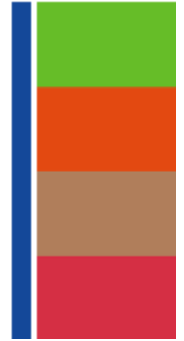
AAW RE



- Launched in October 2004
- Board Certifies Water Resources Engineers
- Granted board certifications for over 750 Diplomate, Water Resources Engineers (D.WRE)
- Certified 80 International professional engineers as Diplomates
- AAWRE in 17th year of operations.
- <http://www.aawre.org/>



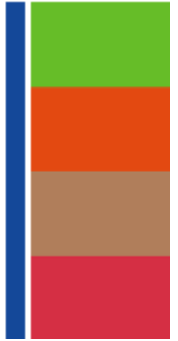
AGP



- Launched in October 2008
- Board Certifies Geotechnical Engineers
- Granted board certifications for over 400 Diplomate, Geotechnical Engineers (D.GE)
- Board Certified 10 International professional engineers as Diplomates
- <http://www.geoprofessionals.org/>

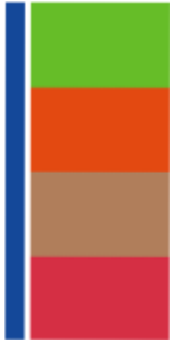


ACOP NE



- Launched in October 2009
- Board Certifies Coastal, Ocean, Port, & Navigation Engineers
- Granted board certifications for over 275 Diplomates in Coastal Engineering (D.CE); Ocean Engineering (D.OE); Port Engineering (D.PE), and Navigation Engineering (D.NE)
- Board Certified 30 International professional engineers as Diplomates
- <http://www.acopne.org/>





QUESTIONS?

2.2 Committee on Technical Advancement

TALKING POINTS:

7/2020

The Committee on Technical Advancement (CTA) is a Society committee (one of four) of the ASCE Board of Direction that is responsible for the supervision of ASCE technical activities that are not located with the Institutes. The Committee on Technical Advancement collaborates with the Technical Region, the Institutes, and the ASCE Academies.

There are seven technical Divisions and two Committees under the direction of CTA, these include:

- Aerospace Division
- Cold Regions Engineering Division
- Computing Division
- Energy Division
- Forensic Engineering Division
- Infrastructure Resilience Division
- Committee on Adaptation to Changing Climate
- Committee on Codes & Standards

Aerospace Division

The Aerospace Division incubates advanced and emerging technologies and promotes their transfer to civil engineering applications. In addition, it applies the art of civil engineering to the exploration and development of the space frontier and other extreme environments.

Technical Committees: Dynamics and Controls
Regolith Operations, Mobility and Robotics
Advanced Materials and Structures

Cold Regions Engineering Division

The Cold Regions Engineering Division is involved in assessing and reporting the effects of civil engineering activities in cold region environments.

Technical Committees: Structures and Foundations
Frozen Ground
Environmental and Public Health Engineering
Hydrology and Hydraulics
Transportation and Infrastructure

Computing Division

The Computing Division advances professional knowledge and improves the practice of civil engineering by promoting the effective use of current and emerging computing and information technologies.

Technical Committees: Data Sensing and Analysis
Visualization, Information Modeling, and Simulation
Global Center for Excellence in Computing

Energy Division

The Energy Division promotes the integrated planning and management of efficient energy systems to advance the role of the civil engineering in the siting, design, construction and operation of facilities for the extraction, conversion, distribution, and use of energy resources.

Technical Committees: Water Power
Power Systems
Oil and Gas
Energy and the Environmental Nexus
Wind Loads for Petrochemical and Other Industrial Facilities

Forensic Engineering Division

The Forensic Engineering Division develops practices and procedures to reduce the number of failures (such as building or bridge collapses), disseminates information on failures and their causes, and provides guidelines for conducting failure investigations and ethical conduct in forensic engineering.

Technical Committees: Forensic Investigations
Forensic Practices

Practices to Reduce Failures

Infrastructure Resilience Division

The Infrastructure Resilience Division develops resources for improving the resilience of civil infrastructure and lifeline systems to all hazards.

Technical Committees: Civil Infrastructure and Lifelines Systems
Emerging Technologies
Risk and Resilience Measurements
Disaster Response and Recovery
Social Science, Policy, Economics, Education, and Decision (SPEED) for Community Resilience

Committee on Adaptation to Changing Climate

The Committee on Adaptation to Changing Climate evaluates the technical requirements and civil engineering challenges for adaptation to changing climate.

Technical Committees: Subcommittee on Hydroclimatology and Engineering Adaptation
Subcommittee on Strategic Planning
Subcommittee on Energy Infrastructure Adaptation
Subcommittee on Windstorm Risk
Subcommittee on Adaptive Risk Management
Subcommittee on Future Weather and Climate Extremes

Committee on Codes and Standards

The Committee on Codes and Standards oversees the Society's Codes and Standards development activities, maintains the American National Standards Institute accreditation, and enforces the ASCE Rules for Standards Committees

Information on the CTA Division can be found at: <http://www.asce.org/routing-page/technical-areas/>



Mission of CTA Leadership Team

The Committee on Technical Advancement (CTA) is a Society committee (one of four) of the ASCE Board of Direction that is responsible for the supervision of ASCE technical activities that are not located with the Institutes. The Committee on Technical Advancement collaborates with the Technical Region, the Institutes, and the ASCE Academies.



Committee on Technical Advancement

FY2020

6 Divisions
2 Committees

ASCE BOARD OF DIRECTION

Committee on Technical
Advancement

Aerospace
Division

Cold
Regions
Engineering
Division

Computing
Division

Energy
Division

Forensic
Engineering
Division

Infrastructure
Resilience
Division

Committee
on Codes &
Standards

Committee on
Adaptation to a
Changing Climate



CTA Technical Committees

Aerospace Division

The Aerospace Division incubates advanced and emerging technologies and promotes their transfer to civil engineering applications. In addition, it applies the art of civil engineering to the exploration and development of the space frontier and other extreme environments.

Technical Committees:

Dynamics and Controls
Regolith Operations, Mobility and Robotics
Advanced Materials and Structures



CTA Technical Committees

Cold Regions Engineering Division

The Cold Regions Engineering Division is involved in assessing and reporting the effects of civil engineering activities in cold region environments.

Technical Committees:

Structures and Foundation

Frozen Ground

Environmental and Public Health Engineering

Hydrology and Hydraulics

Transportation and Infrastructure



CTA Technical Committees

Computing Division

The Computing Division advances professional knowledge and improves the practice of civil engineering by promoting the effective use of current and emerging computing and information technologies.

Technical Committees:

Data Sensing and Analysis
Visualization, Information Modeling, and Simulation
Global Center for Excellence in Computing



CTA Technical Committees

Energy Division

The Energy Division promotes the integrated planning and management of efficient energy systems to advance the role of the civil engineering in the siting, design, construction and operation of facilities for the extraction, conversion, distribution, and use of energy resources.

Technical Committees:

Water Power

Power Systems

Oil and Gas

Energy and the Environmental Nexus

Wind Loads for Petrochemical & Other Industrial Facilities



CTA Technical Committees

Forensic Engineering Division

The Forensic Engineering Division develops practices and procedures to reduce the number of failures (such as building or bridge collapses), disseminates information on failures and their causes, and provides guidelines for conducting failure investigations and ethical conduct in forensic engineering.

Technical Committees:

- Forensic Investigations
- Forensic Practices
- Practices to Reduce Failures



CTA Technical Committees

Infrastructure Resilience Division

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Technical Committees:

Civil Infrastructure and Lifelines Systems

Emerging Technologies

Risk and Resilience Measurements

Disaster Response and Recovery

Social Science, Policy, Economics, Education, and Decision
(SPEED) for Community Resilience



CTA Technical Committees

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Subcommittee on Strategic Planning

Subcommittee on Energy Infrastructure Adaptation

Subcommittee on Windstorm Risk

Subcommittee on Adaptive Risk Management

Subcommittee on Future Weather & Climate Extremes



CTA Technical Committees

Committee on Codes and Standards

The Committee on Codes and Standards oversees the Society's Codes and Standards development activities, maintains the American National Standards Institute accreditation, and enforces the ASCE Rules for Standards Committees.



CTA Information

Information on the CTA Division can be found at:
<http://www.asce.org/routing-page/technical-areas/>

2.3 Utility Engineering & Surveying Institute

TALKING POINTS:

July 2020

The role of the ASCE Utility Engineering & Surveying Institute (UESI) is to become the worldwide leader in generating and promoting excellence in engineering, planning, design, construction, operations, and asset management for utility infrastructure and engineering surveying.

Utility Engineering is defined as:

"Utility Engineering is a branch of Civil Engineering that focuses on the planning, design, construction, operation, maintenance, and asset management of any and all utility systems, as well as the interaction between utility infrastructure and other civil infrastructure"

There are five Divisions under UESI, additional information can be found at (<http://www.asce.org/utility-engineering-and-surveying/utility-engineering-and-surveying-institute/>) The following is a quick summary of each Division:

Pipeline Division: The Pipelines Division will lead in the advancement, environmental development and construction of engineering projects relative to the transmission of liquids, gases or solids by pipelines.

- **Pipeline Division:** The Pipeline Division will advance pipeline engineering, relative to transmission of liquids gases or solids by pipelines
 - Water supply, sewer, reuse and storm water pipelines
 - Trenchless technologies
 - Penstocks
 - Pipeline materials
 - Oil, gas and freight pipelines
 - Seismic and Anchorage of Utilities

Utilities Risk Management Division: The Utilities Risk Division will promote utility engineering and coordination issues as a fundamental technical discipline within civil engineering.

- Utilities Risk Division Technical Committees:
 - Utility mapping and subsurface engineering
 - Utility coordination
 - Cables and conduit packages
 - Utility infrastructure claims avoidance
 - Data and Cyber Security

Surveying & Geomatics Division: The Surveying & Geomatics Division will address surveying for the acquisition and management of spatial data required as part of scientific,

administrative, legal, and technical operations for surveying, and will foster the dissemination of information to everyone involved in the engineering and surveying profession.

- Surveying Division Technical Committees:
 - Education
 - Liaison
 - Spatial Data Applications and Accuracy
 - Surveying Engineering
 - Underwater Surveying Technologies

Utility Asset Management Division: The Asset Management Division address issues involving infrastructure systems owners and stakeholders and enhance the efficiency of operations and maintenance through asset management of infrastructure systems with a focus on collaboration of effective tools, practices, processes and policies.

- Asset Management Division Technical Committees:
 - Operations
 - Maintenance
 - Data Management

Standards Division: The Standards Division will coordinate activities of UESI related to the development, revision or discontinuance of standards

- Standards Division Technical Committees:
 - Standard Design and Construction Guidelines for Micro-tunneling
 - Collection and Depiction of Existing Subsurface Utility Data
 - Standard Design of Water Pipeline Thrust Restraint
 - Utility As-Built Standards

Key Points

- UESI is the newest ASCE Institute, completing its 4th year of operations. (there are 9 ASCE Institutes). We need to inform our ASCE members involved in Utility Engineering, Pipeline, Asset Management and Surveying that there is an Institute that will support them.
- The vision for UESI is to grow the number of activities, events, products and services that UESI will create for the benefit of the profession.
- Consider forming a UESI Chapter with the Sections and Branches. UESI has eleven active Chapters: (Arizona Section, Alberta-British Columbia, Canada, Broward County, FL, Central Ohio, East Central Florida, Greater Toronto Area, Ontario, Canada, Maryland, Miami-Dade, Mid-Michigan (Jackson/Lansing), Orange County, and the Texas Section.
- UESI's upcoming technical conferences include: 2019 Pipelines Conference in Nashville, TN, July 21-24, 2019 (www.pipelinesconference.org); the 2020 Surveying &

Geomatics Conference, cohosted with Cincinnati State in Lawrenceburg, IN, May 31-June 2, 2020 (www.surveyingconference.org); and the 2020 Pipelines Conference in San Antonio Texas August 9-12, 2020.

- If you are an ASCE member the first Institute is free, your secondary Institute is \$30 more.

Summary

In its fourth year of operation, UESI membership has approximately 3,000 active members and student members. The focus will be continuing to drive the news about the institute, our successes, and welcoming new members who see the benefits of networking professionally with others in the utility infrastructure and surveying and geomatics professions.

Information on how to join can be found at www.asce.org/uesi.



Utility Engineering & Surveying Institute (UESI)

ASCE[®]
AMERICAN SOCIETY OF CIVIL ENGINEERS

- UESI is the newest Institute, starting in October 2015
- The Institute focuses on two separate but related aspects of civil engineering practice: Utility Engineering and Surveying
- We have defined Utility Engineering and Engineering Surveying and placed these definitions in the Strategic Plan and on the UESI website.
- The Survey aspect of the Institute is not limited to utilities. It is focused on all aspects of Engineering Survey and Geomatics practice.

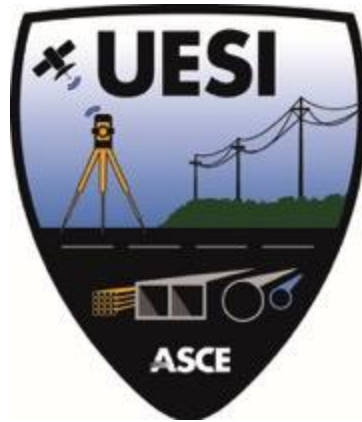


**Water and Wastewater
Pipeline Engineers,
Technicians, & Suppliers**

**Oil & Gas Pipeline
Engineers**

**Electrical and
Communications System
Engineers / Designers**

Subsurface Utility Engineers



CAD Technicians

Utility Coordinators

Licensed Surveyors

Party Chiefs

Field Technicians

Utility Asset Managers

**Pipeline Construction
Contractors**

Vision from Strategic Plan: To be the worldwide leader in generating and promoting excellence in engineering, planning, design, construction, operations, and asset management for utility infrastructure and engineering surveying.

Technology - Be the catalyst in driving development and collaboration of best practice, innovation, and emergent technologies.

Justification - Be the leader for creating, establishing, publishing, supporting, and maintaining the professional standards for utility engineers and surveyors.

Community - Make UESI the valuable and useful professional home for every utility engineering and surveying practitioner.





UESI Board of Governors



Lynn Osborn,
P.E., F. ASCE,
President, UESI

John Campbell,
P.E., SR/WA, M. ASCE
President-elect, UESI



David Totman,
M.ASCE
Past President, UESI



Steven Kramer,
P.E., F. ASCE,
Treasurer, UESI



Graham Bell,
Ph.D., P.E., F. ASCE,
FNAACE

Pat White, P.E.,
ENV SP, M. ASCE



Lawrence Arcand,
P.Eng, M.ASCE



Victor Fernandez-Cuervo,
P.E., F. ASCE

Dan Gillins,
Ph.D., PLS, M. ASCE



Brian McKeehan,
P.E., ENV SP, F. ASCE,
Technical Region
Director



Jarred Jones,
P.E., MBA, M. ASCE,
Younger Member

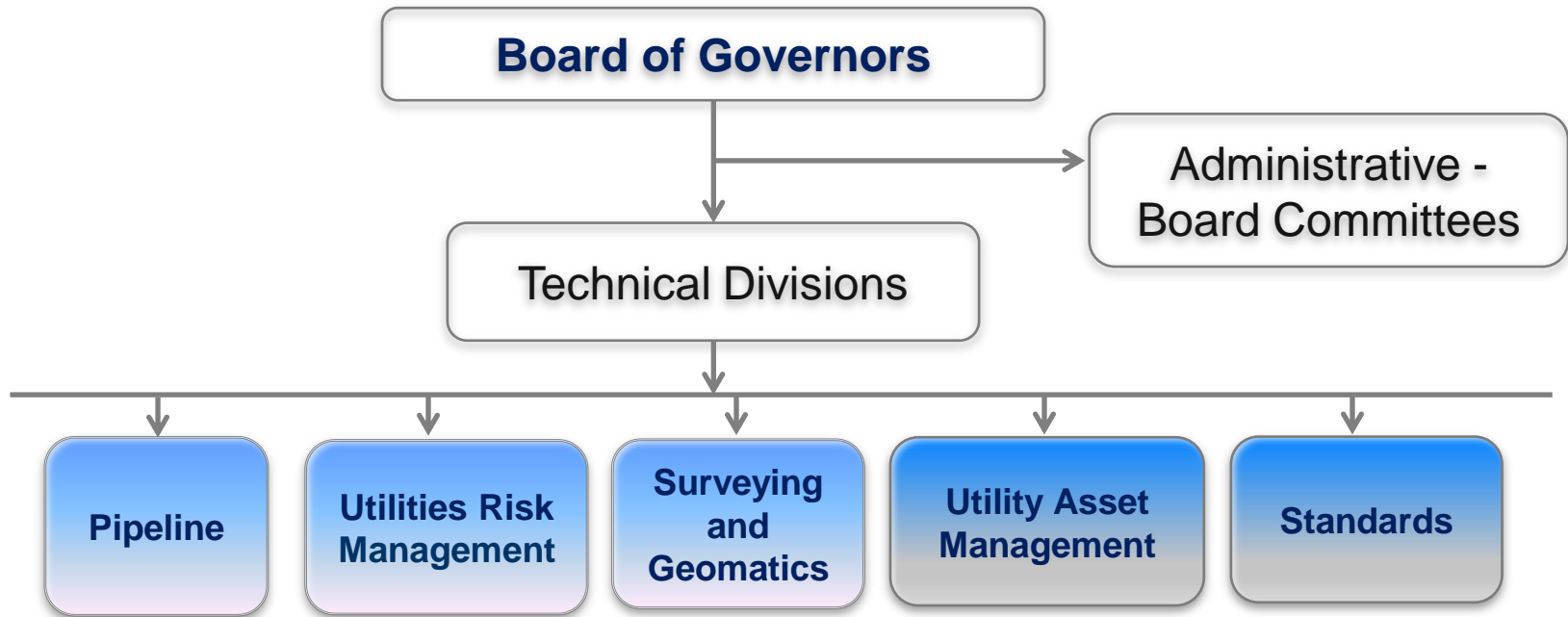


Peter Moore,
P.E., F.ASCE, ENV
SP, LEED AP
ASCE BOD
Representative



BOARD LEVEL COMMITTEES

- Marketing And Membership Committee
- Nominations And Elections Committee
- Public Sector Scholarship Committee
- Student Scholarship Committee
- Younger Member Engagement Committee
- Awards Committee



DIVISIONS

Pipeline

Surveying & Geomatics

Utility Risk Management

Asset Management

Standards

Standing Committees

15

6

5

4

2



PIPELINE DIVISION

- Pipeline Infrastructure Committee
- Lateral Rehabilitation Task Committee
- Pipeline Location & Installation Committee
- Pipeline Planning & Design Committee
- Trenchless Installation of Pipelines Committee

UTILITY ASSET MANAGEMENT DIVISION

- Campus Asset Management & Utility Mapping Committee
- Energy Infrastructure Asset Management Committee
- Water Infrastructure Asset Management Committee
- Condition Assessment of Gravity Sanitary Sewers

SURVEYING AND GEOMATICS DIVISION

- SGD Education Committee
- Spatial Data Applications Committee
- Surveying Committee
- Underwater Technologies Committee

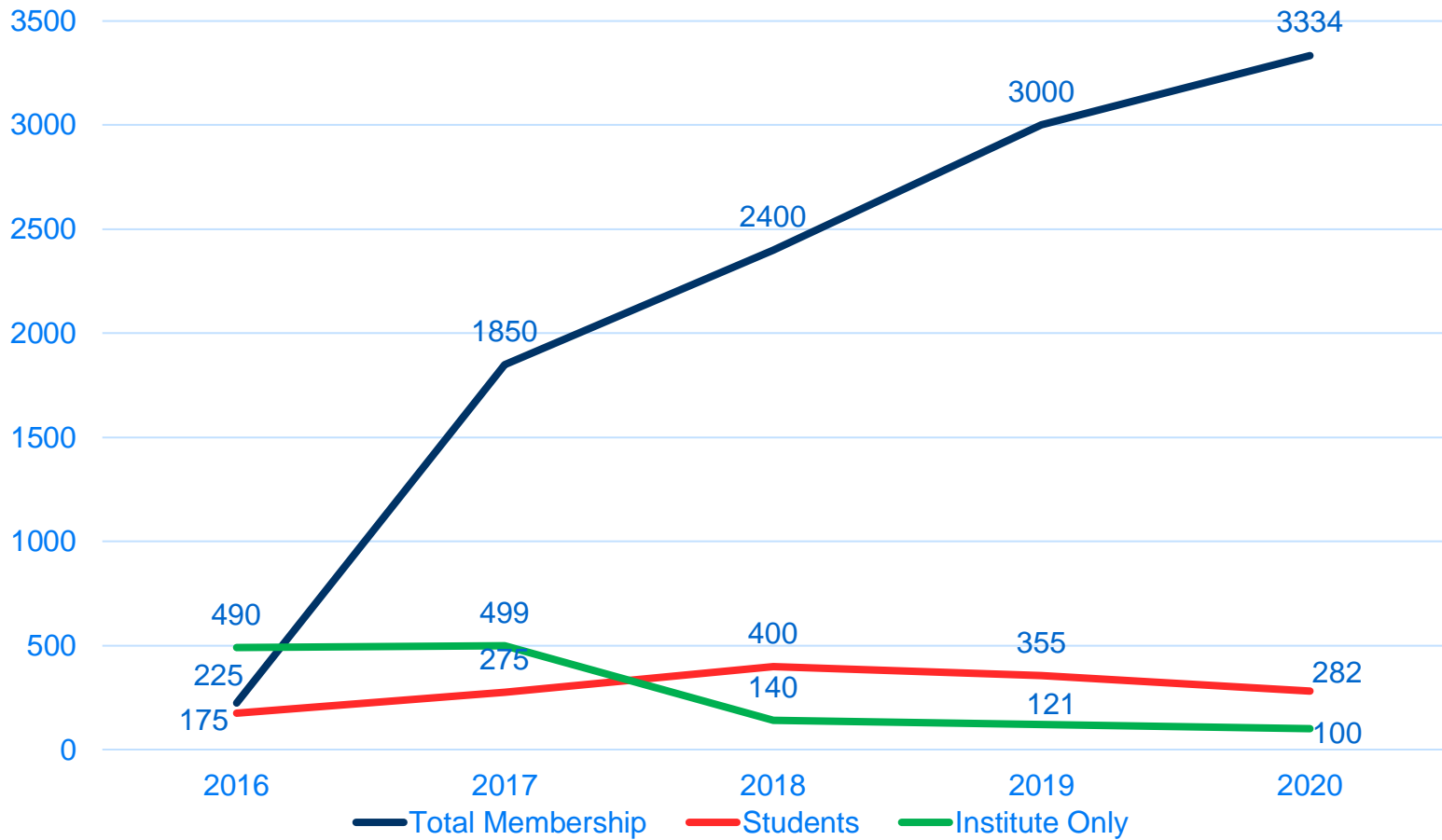
UTILITY RISK MANAGEMENT DIVISION

- Subsurface Utility Engineering & Investigations Committee
- Utility Risk Division Data Management & Security Committee
- Utility Coordination Committee
- Utility Risk Research And Education Council

STANDARDS DIVISION

- Direct Design of Buried Concrete Pipe Box Sections Standards
- Utility Data Collection Standards (ASCE 38)

UESI Membership



Pipelines Conference

Nashville, TN | July 21-24, 2019

~~San Antonio, TX | August 9-12, 2020~~

Rescheduled to virtual delivery

Aug 10 – 12, 2020

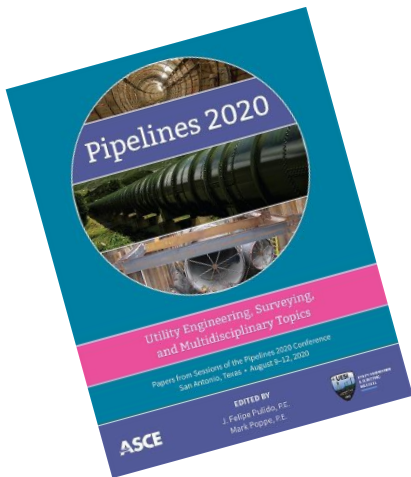
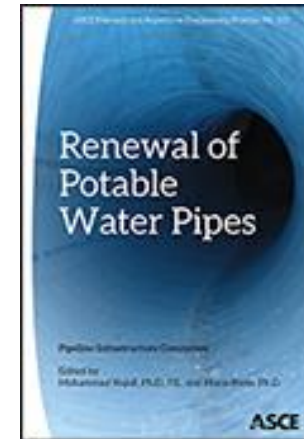
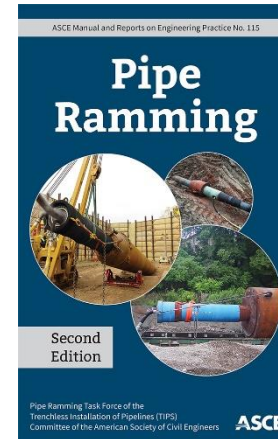
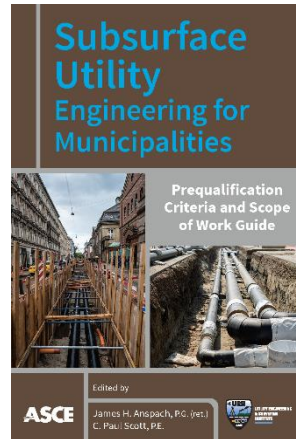
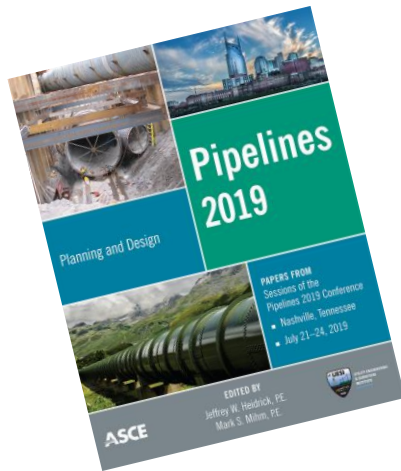


UESI Surveying and Geomatics Conference

Lawrenceburg, IN | ~~May 31 – June 2, 2020~~

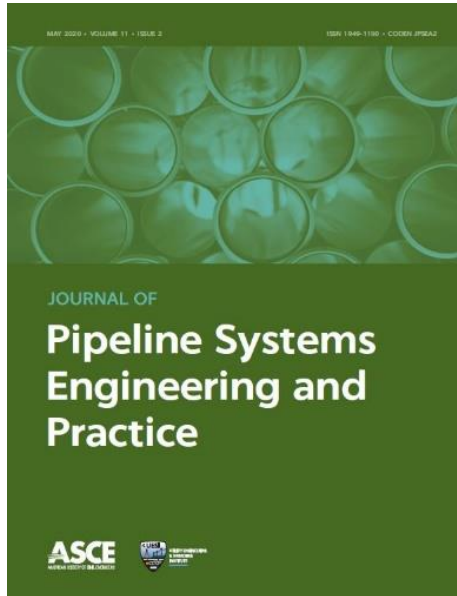
Rescheduled to April 25 -27, 2021





20 Different Publications since 2016 + 19 years of Pipelines Conference Proceedings; generating over \$150,000



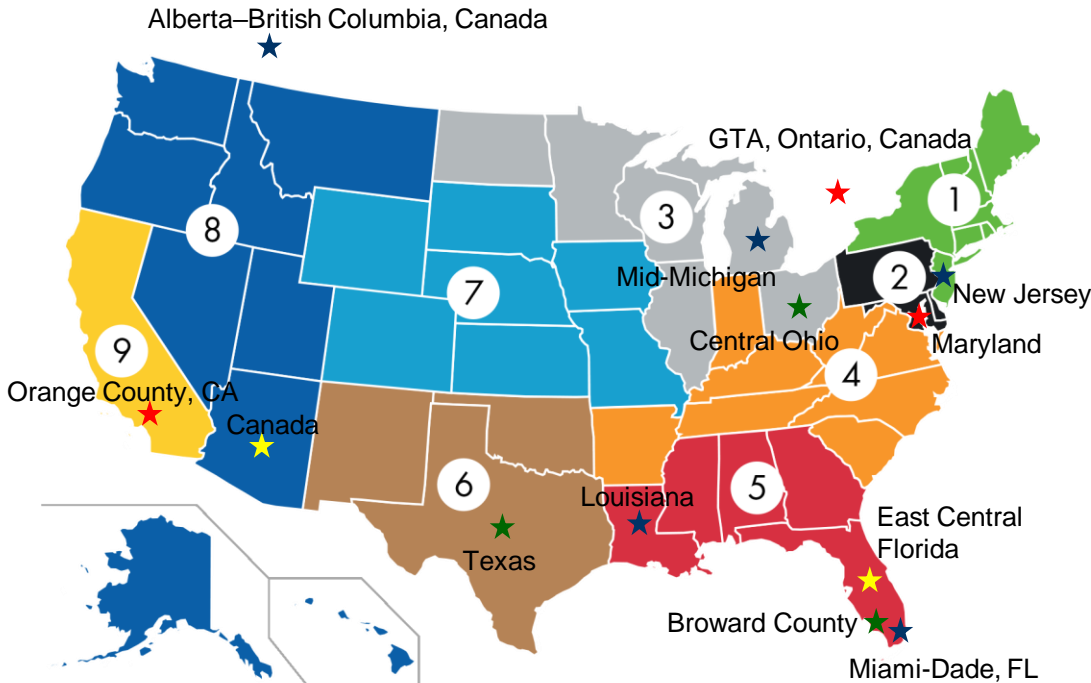


Journal of Pipeline Systems Engineering and Practice - 2010

Journal of Surveying Engineering is one of the original 12 ASCE Transactions since 1872 and then became its own journal in 1956 with the title 'Journal of the Surveying and Mapping Division'

These Journals generated over \$35,000 in FY2019 for UESI





Region 2

- Maryland
- New Jersey

Region 3

- Central Ohio
- Greater Toronto Area, Ontario, Canada
- Mid-Michigan (Jackson/Lansing)

Region 5

- Broward County, FL
- East Central Florida
- Miami-Dade, FL
- Louisiana

Region 6

- Texas

Region 9

- Orange County, CA

Region 8

- Alberta–British Columbia, Canada
- Arizona, AZ





Chapters Under Development

- Arkansas
- Atlanta
- Edmonton
- Houston
- Los Angeles
- Mohawk-Hudson Section (NY)
- Michigan Section
- Northern Virginia
- North Charleston, SC
- Pacific Northwest
- Pittsburgh Section
- Philadelphia Section
- Raleigh, NC
- South Carolina
- Colombia (International)
- India (International)

UESI Texas Chapter

- Two-Day Annual event which last year had over 250 attendees
- Low registration fee
- Sponsors & Exhibit Hall

UESI Ontario Chapter

- Inaugural, all-day event in 2019 hosted 65
- Education Seminar: Utility Risk Mitigation
- Partner: Centre for Advancement of Trenchless Technologies (CATT)
- Speakers from local municipalities and private firms



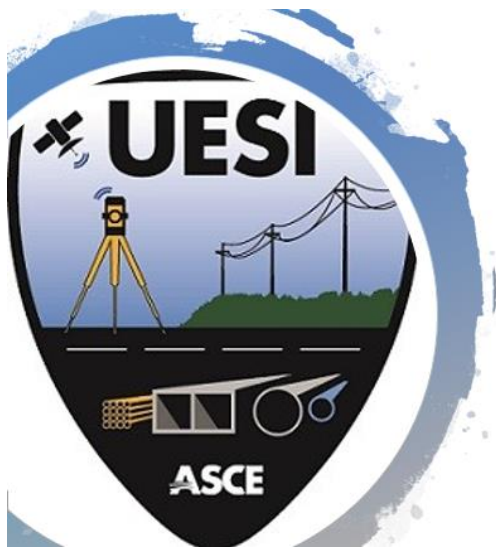
UESI Maryland Chapter

- Inaugural, free all-day event in 2019 hosted over 60
- Presentation and workshop
- Speakers from local municipalities and private firms



- Pipelines Conference, including 100+ Student and Public Sector Scholarships annually
- YOUNGER MEMBER being elevating to voting member on UESI Board
- New STRATEGIC PLAN
- LEADERSHIP SUMMIT June 2019
- Upcoming standards – ballots to come **ASCE 38**, *Standard Guideline for Investigating and Documenting Existing Utilities*; *Standard Guideline for Recording and Exchanging Utility Infrastructure Data*, **(Utility As Installed)**





UESI Pipelines Webinar Series 2020

ASCE Bechtel Pipeline
Engineering Award Winners
2017 -2020

- 2nd Surveying & Geomatics Conference April 2021
- Inaugural UESI - ASCE Student Surveying Competition June 2021
- Bechtel Webinar Series 2020
- First UESI Surveying Engineering Guided Online Course Beginning Aug 2020





- Membership – *Not Exclusively Civil Engineers*
- Diversity in Leadership
- Single Source Revenue-Dependence on Pipelines Conference
- Promotion of UESI

- Relaunching of UESI Magazine
- 2020: Uncertainty of Pipelines Conference - Virtual Delivery
- How to Best Collaborate and Communicate with Industry Organizations to Move in a Consistent Direction with a Consistent Message



- ASCE CEC Board approved the three UESI Proposed Certifications
- Membership in FIG, International Federation of Surveyors
- Other Conference Opportunities, *i.e. ASCE V-Tech Conference*
- Partnerships to help develop Consistent message and continuing educational opportunities
- Student Competition Addition at Pipelines Conference

More info about UESI - use the QR Code to see more on our website?



➤ **Join a Technical Committee**

www.asce.org/utility-engineering-and-surveying/uesi-committees/

➤ **LinkedIn:** www.linkedin.com/showcase/utility-engineering-and-surveying-institute/

➤ **Twitter:** [@uesi_asce](https://twitter.com/uesi_asce)

Interest in other aspects of Utility Engineering?

If so, please contact the UESI staff for ...

- Training needs
- Technical Reports
- Expert Advise and Support

Email: uesi@asce.org



2.4 Establishing Local Institute Chapters

TALKING POINTS:

7/2020

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 between the Section or Branch and 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
 - 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/routing-page/technical-areas/>

Establishing Local Institute Chapters

Summary

- Institute Chapters are subsidiary units of the Section or Branch
- Institutes, nationally or at a chapter level, serve as a focal point for a discipline
- Sections and Branches can have active relations with Institutes
- Technical Region Directors will help

Benefits of a Relationship

- Knowledge/Technology Transfer
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Different Institutes have different assistance:

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

Important additional material:

- Memorandum of Understanding
 - Standard template – customize for each chapter
 - Signed by Institute and appropriate Section/Branch hierarchy
- Sample Institute Chapter Bylaws
 - Standard template
 - Put in place during regular updating of Section/Branch bylaws

Additional help:

- AEI – Catherine Tehan ctehan@asce.org
- CI – Katerina Lachinova klachinova@asce.org
- EMI – Amar Chaker achaker@asce.org
- EWRI – Brian Parsons bparsons@asce.org
- GI – Brad Keelor bkeelor@asce.org
- COPRI – Tom Chase tchase@asce.org
- UESI – Diane Swecker dswecker@asce.org
- T&DI – Muhammed Amer mamer@asce.org
- SEI – Laura Champion lchampion@asce.org

- MD Engineering Programs – Jim Rossberg jrossberg@asce.org

Chapter 3 **GOVERNMENT RELATIONS**

3.1 Developing State Report Cards

TALKING POINTS:

7/2020

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 Report Card Committee, reflective of state boundaries, and to work with ASCE's Government Relations and Infrastructure Initiatives staff to prepare their own State Infrastructure Report Card.**
 - ASCE's Infrastructure Report Cards not only complement the national *Report Card for America's Infrastructure*, 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, identifying issues and recommending solutions that will raise the infrastructure grades.
 -

About the Infrastructure Report Card Program

- ASCE has completed more than **100 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 the methodology and grading scale ASCE uses in the national *Report Card for America's Infrastructure*. State Report Cards typically grade at least 4 infrastructure categories, including Bridges, Drinking Water, Roads, and Wastewater, with additional categories as appropriate.
- Infrastructure Report Cards are prepared by a committee of local ASCE members and civil engineers with expertise across the infrastructure categories being graded. Committee members volunteer for about a year to research, write, and release their Report Card.
- ASCE recommends states update their Report Card every 4 to 6 years.

ASCE Assistance & Resources

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

- An **ASCE Infrastructure Report Card Dropbox toolkit** to help Sections, Branches, and Councils effectively research, prepare, and release their Report Card.
- **Dedicated Government Relations and Infrastructure Initiatives staff** to assist Report Card Committees throughout the process, from an in-person kickoff meeting to release event planning to post-release promotion and outreach.
- Review by the **Committee on America's Infrastructure**, which also oversees the national Report Card.

- **Press training and media assistance** for the release of the Report Card, provided by ASCE Media Relations staff.
- Additional tools such as **online collaboration spaces**, a basic **literature review** of relevant national sources, and **graphic design assistance**.

How Can You Get Started?

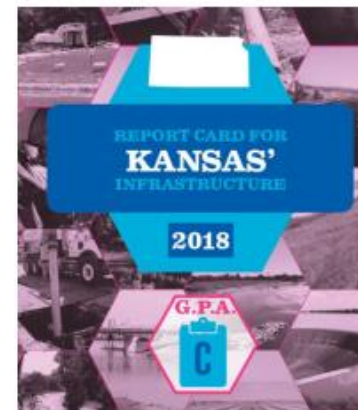
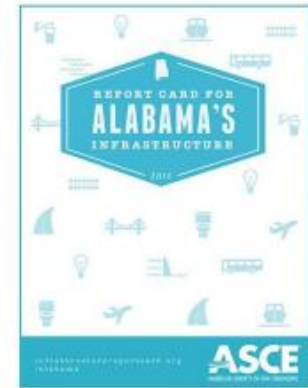
- **Discuss the effort with your Section, Branch, and Council leadership** to determine initial thoughts on timing, categories to be graded, and candidates for a Report Card Committee. From seasoned experts to young professionals, most Report Card Committees consist of about 10 to 25 members who help to do research, release the Report Card publicly, and put it in the hands of state and local officials.
- **Email reportcard@asce.org** to officially get started by requesting the required **Report Card Procedures and Notification Form**, as well as access to the Report Card Dropbox toolkit. The Infrastructure Initiatives staff will be in touch to assist with next steps

State Infrastructure Report Card Program



State Report Card Program

- Be a part of ASCE's growing Infrastructure Report Card program
- Gives legislators and the media a clear look at your area's infrastructure
- Builds ASCE's brand and reputation and encourages ASCE members' interest in Government Relations
- ASCE Staff supports State Report Card Committees throughout the process



State by State

QUESTIONS?

Email Us at
reportcard@asce.org

www.infrastructurereportcard.org



3.2 ASCE Government Relations & Infrastructure Initiatives

TALKING POINTS:

July 2020

Contact: govwash@asce.org

202-789-7850

The resources and information referenced here are available online:

http://www.asce.org/issues_and_advocacy/

Summary

- ASCE Government Relations is the Society's voice in Washington, DC and in the states. We work with Congress and State legislators directly on issues of importance to the practice of civil engineering. We also represent ASCE's interests in the regulatory processes of agencies.
- The Government Relations program actively works to achieve the Society's strategic goal of improving the nation's infrastructure. 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 in the **Key Contact Program** to build relationships with elected officials, influence public policy, and educate our membership about current legislative issues.
- ASCE's **State Government Relations** program assists Sections and Branches in their efforts to influence state governments on issues affecting civil engineering and build support for ASCE's priority issues at the state level. We monitor legislative and regulatory activities at the state level and whenever possible, work with ASCE members in the states to advocate for ASCE's positions and influence state legislative activities.

Key Points

- The success of ASCE's public policy efforts depends on support from the membership. Section and Branch leaders can help these efforts by becoming a Key Contact and encouraging their members' involvement in the Society's advocacy 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. By sharing their expertise in civil engineering, Key Contacts provide decision makers with real-life examples of how policy impacts our built and natural environments.
 - Any ASCE member can join the Key Contact Program and begin receiving communications and action alerts on current legislative issues in their state and at the federal level.
 - To sign up simply email keycontact@asce.org with the subject line “sign me up” and your email signature block or other identifying contact information.
- The [2017 Infrastructure Report Card](#) was released in March 2017. ASCE’s Report Card covers 16 infrastructure categories and includes videos, interactive maps, and other multimedia tools.
- The 2017 Report Card links to all the recent State and Local Infrastructure Report Cards and gives key facts for all 50 states, including examples of initiatives and innovations that are making a difference.
 - ASCE members are encouraged to seek out opportunities to speak with their members of Congress regarding the *Report Card for America's Infrastructure* and infrastructure investment.
 - The next Report Card will be released in February 2021. It will add a new stormwater chapter bringing the total to 17 as well as include a spotlight on broadband infrastructure.
- 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. Policies are updated on a three-year cycle, if not sooner. All ASCE policy statements are available online at: <http://www.asce.org/policystatements/>
- You can read more about the statements, letters, and testimony that ASCE has provided as a means of advancing the Society's policy priorities. The Government Relations Team also works closely with ASCE's nine Technical Institutes to provide guidance to federal agencies as they engage in the rule-making process. <https://www.asce.org/letters-comments-statements/>

Resources

Advocacy & Political Activity Guidance:

- ASCE can be an active voice in public policy debates. However, leaders should remember that as a 501(c)3 tax-exempt organization, ASCE (including Sections, Branches and Regions) is prohibited by 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 at govwash@asce.org for more details on these types of activities.

Infrastructure Reports:

- 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 Report Card tablet app and Save America's Infrastructure phone app at www.infrastructurereportcard.org.
- *Maximizing the Value of Investments Using Life Cycle Cost Analysis* examines the current use of life cycle cost analysis and offers recommendations for ways to further implement the tool. The report is available for free download at http://www.asce.org/life_cycle_cost_analysis_report/.
- *Failure to Act* economic studies and infographics are available at www.asce.org/failuretoact.
- *Changing the Infrastructure Equation: Using Asset Management to Optimize Investment* provides policy recommendations and best practices for asset management implementation including 'lessons learned'. Advances in asset management help policymakers and infrastructure owners to better make use of limited available dollars. https://www.asce.org/infrastructure_policy_reports/
- 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.

Leadership Opportunities and Training:

- The **Government Relations (GR) University** program brings your Region, Section, or Branch an extended educational training on the policy process and how you can get involved as an engineer. This in-depth program can be tailored to your local goals and will get you started on

expanding your ASCE presence at the local and state levels. To request a program, email govwash@asce.org.

- **Public Relations (PR) University** offers Sections and Branches a daylong, interactive workshop as an introduction to public relations and a how-to for working with the media. The training prepares ASCE members to successfully promote the profession to the media by covering topics including: public affairs; the importance of messaging; how to interview with a reporter; and the principles of communication. To request a program, email govwash@asce.org.
- The annual **Legislative Fly-In** brings ASCE members to Congress' offices to share ASCE's policy positions on current issues. The event is held in March in Washington, DC each year and includes a special pre-program for Younger Members. Applications are accepted from Key Contacts the fall prior to the event. The next Legislative Fly-in is March 3-4, 2021. https://www.asce.org/legislative_fly-in/
- The **Key Contact Program** provides information and resources to help ASCE members engage directly in the public policy process. By sharing their expertise in civil engineering, Key Contacts provide decision makers with real-life examples of how policy impacts our built and natural environments. To sign up simply email keycontact@asce.org with the subject line "sign me up" and your email signature block or other identifying contact information.
- Established in 2015, the **Advocacy Captains Program** serves to strengthen the state and federal government relations program by working with ASCE staff to support new and existing Section and Branch efforts at the state capitol, promote the Key Contact program, and forge relationship with Members of Congress and their staff. We're currently seeking at least one Advocacy Captain from each of the 50 states. Contact govwash@asce.org to learn more about becoming an Advocacy Captain.
- 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: <https://www.asce.org/state-legislative-tracking/>



ASCE | ISSUES
& ADVOCACY

Government Relations and Infrastructure Initiatives



Mission:

To serve the public and the engineering profession by:

- **Advocating for the Society's strategic goal** of enhancing infrastructure and environmental stewardship to protect the public health and safety and improve the quality of life.
- Encouraging the use of **innovative, resilient and sustainable practices**.
- Promoting the **understanding and participation of ASCE members** in public policy.
- Developing **pro-active public policy positions** on civil engineering issues.
- **Educating public policymakers** about the impacts of legislative and regulatory proposals on public health and safety, the economy and the profession.



Profession is well respected by policymakers

- Known for *Infrastructure Report Card* and other infrastructure policy reports



ASCE Can and Does lobby!



Advocating for issues, legislation or regulatory action



Giving money to candidates or endorsing candidates

ASCE Public Policy Committee

Committee for
America's
Infrastructure

Committee on
Licensure

State
Government
Relations &
Grassroots
Committee

Energy, Env. &
Water PC

Engineering
Practice PC

Infrastructure
& Research
PC

Transportation
PC



173 policy statements



Approved by Board of Direction



Provide **guidance** on public policy



Give **permission** to act on public policy



Reviewed on 3-year cycle



Survey of members determines 4-5 priority issues at state level



Board approves priority issues

ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

MEMBERSHIP & COMMUNITIES EDUCATION & CAREERS CONFERENCES & EVENTS ISSUES & ADVOCACY PUBLICATIONS TECH AREA!

Issues & Advocacy > Advocacy >

Our Initiatives

- Infrastructure
 - Failure to Act Economic Studies
 - Infrastructure Policy Reports
 - State and Regional Report Cards
- Raise the Bar
 - Raise the Bar Articles and Publications
- Sustainability

Advocacy

- Public Policy Statements
- Priority Issues

Advocacy Programs

- Key Contact Program
- Back Home Visits
- Legislative Fly-in
- Contact Your Legislator

Tools & Training

- PR and GR Universities
- Advocate of the Year Award
- State Public Affairs Grant Program
- Congressional Fellows

PUBLIC POLICY STATEMENTS

SHARE [f](#) [t](#) [r](#) [in](#) [v](#)

To promote the goals of the American Society of Civil Engineers, the Board of Direction has adopted official Policy Statements on major technical, professional and educational issues of interest to the civil engineering community and the nation.

Listed here are the complete texts of the Society's 166 current policy documents. These statements reflect the Board of Direction actions through October 5, 2014.

Download ASCE's policy book.

For more information about ASCE Policy Documents and the Policy Development Program, contact Martin Hight, Senior Manager, Government Relations.

COASTAL ZONES, OFF SHORE AND WATERWAYS

- Policy Statement 162 - Coastal Development
- Policy Statement 218 - Improvement and Maintenance of Ports
- Policy Statement 286 - Waste Assimilative Capacity of Ocean and Coastal Waters
- Policy Statement 330 - Coastal Data Collection Program
- Policy Statement 349 - Coordination of Beach Erosion Control with Channel Maintenance
- Policy Statement 498 - Coastal Wetlands
- Policy Statement 507 - Restoring and Maintaining America's Beaches
- Policy Statement 533 - Offshore Facilities Development

DAMS, FLOOD CONTROL AND LEVEES

- Policy Statement 280 - Responsibility for Dam Safety
- Policy Statement 421 - Floodplain Management
- Policy Statement 470 - Dam Repair and Rehabilitation
- Policy Statement 511 - National Levee Safety Program
- Policy Statement 529 - Levee Certification
- Policy Statement 545- Flood Risk Management

DISASTER MITIGATION AND RESPONSE

- Policy Statement 294 - Cooperation with Government for Failure Investigation
- Policy Statement 300 - Media Interaction Following Catastrophic Failures or Natural

GRIFFIN DEWATERING

Structures, Inc. Parking... Made Better



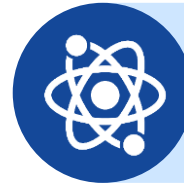
Clean Water, Drinking
Water, Wastewater Issues



Research &
Development Funding



Civil Engineering Education
(Higher Education)



STEM Education &
Support (K-12)



Natural Hazards Mitigation
& Infrastructure Security



Sustainability



Qualifications-Based
Selection



Transportation
Infrastructure



Recent Congressional Successes



Congress repealed a proposed \$7.6 billion rescission of unobligated highway contract authority. This prevented a major loss in existing funding.



Congress fixed the **Harbor Maintenance Trust Fund**, providing **\$34 billion** over the next ten years for dredging.



\$1.638 billion secured for the Clean Water State Revolving Fund and **\$1.126 billion** for the Drinking Water SRF in FY 20, both represent increased funding over FY 19.



\$8.64 billion assigned to **National Science Foundation** for FY 20, an increase from FY 19 levels.



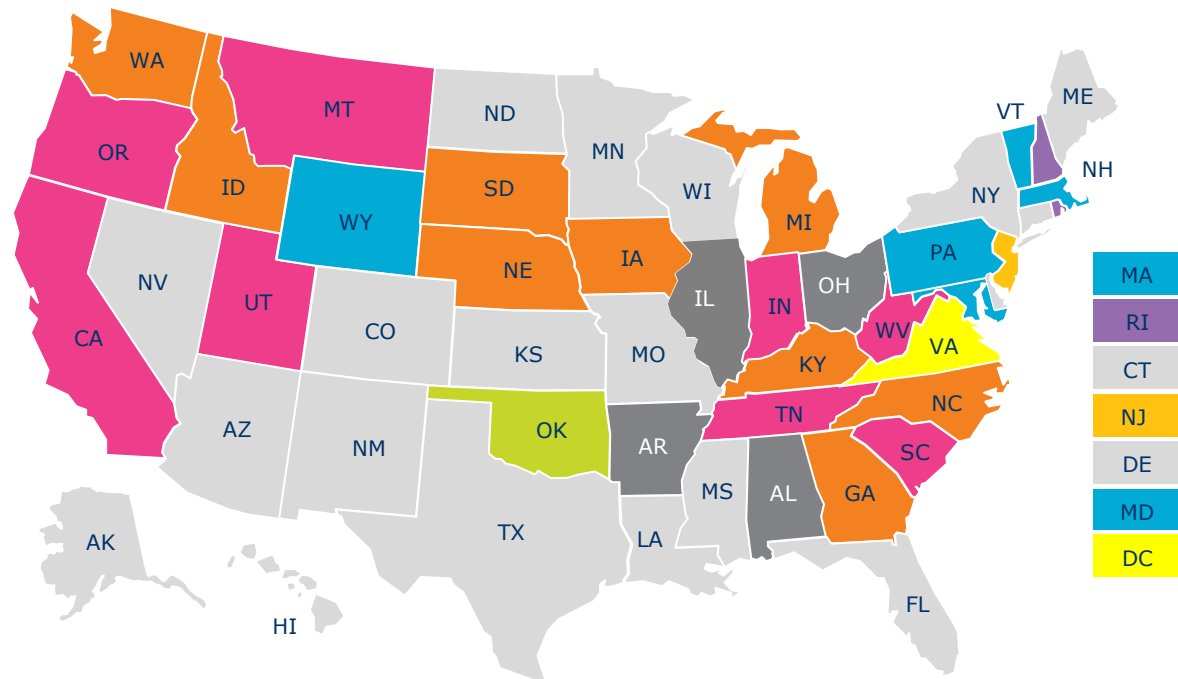
The House passed the Moving Forward Act, a comprehensive **\$1.5 trillion investment** in the nation's infrastructure.



The Senate passed the Great American Outdoors Act, permanently funding the Land and Water Conservation Fund.

-  Continuing Education
-  Licensure
-  Natural Hazards Impact Mitigation
-  Qualifications-Based Selection for engineering services
-  Science, Technology, Engineering and Math (STEM) education & support (K-12)
-  State Support for Civil Engineering Higher Education
-  Sustainability
-  Transportation Infrastructure Funding

- In the past six years, **29 states** have increased their gas tax
- Governors and the business community have played key roles
- Increases have been enacted with bipartisan support
- Voting for gas tax increase does not hurt chances for re-election



■ 2013 ■ 2014 ■ 2015 ■ 2016 ■ 2017 ■ 2018 ■ 2019 ■ 2020 ■ No increase

ASCE Action:

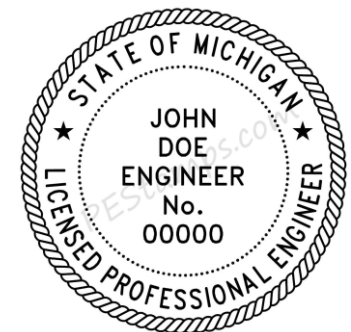
- Founding member of Alliance for Responsible Professional Licensure
- New coalition educates policymakers on the critical nature of licensure
- Members include societies for design professionals and their licensing boards

Group spotlight:

- National groups continue to examine as states take action
- Activity at both ALEC and NCSL/CSG/NGA (jointly)
- Has become viewed as a bipartisan issue
- Efforts to erode or eliminate professional licenses

Federal spotlight:

- Bill introduced in 115th Congress to improve reciprocity and address composition of licensing boards
- Hearing held in 115th to determine impact of occupational licensure and credentialing





“Consumer Choice” bills

Allows for practice without a license if disclosed to public



Requires the review and analysis of licensure requirements

With recommendations to remove any “unnecessary” requirements



Eliminates specific **occupational** licenses



Increases state oversight of occupational regulatory boards



Eliminates the PE licensing board (or cuts funding)



Executive orders requiring review of licensure requirements

With recommendations to remove any “unnecessary” requirements



Sections/Branches lead the effort

- Large membership and Governing Structure presents challenges and opportunities for advocacy
- Very few Sections/Branches have any staff or lobbyists



ASCE relies on volunteers to advocate

- State Government Relations & Grassroots Committee
- Key Contacts
- Advocacy Captains



Society Staff can provide

- Expertise & Guidance
- Tools & Resources

Government Relations Protocol when representing ASCE



If you receive a call regarding an ASCE government relations issue from a policymaker that has not been referred by the ASCE Government Relations Department, contact the department



Uncoordinated contact with policymakers may result in incomplete, inappropriate or inaccurate information being disseminated



Contacts with policymakers must be coordinated with ASCE GR Department.



Examples: Comments on rulemaking, requests to speak at events, requests for information from policy makers and regulators



Reach out to govwash@asce.org or 202-789-7850



Keep your Section informed

- Legislative Tracking
- *This Week In Washington*
- Government Relations University
- Public Relations University



Engage elected officials

- State Government Relations Manual
- State Legislative Day Toolkits
- Staff Support
 - Legislative alerts
 - Media outreach
 - Talking points & Testimony
 - Presentations



Educate the public

- *2017 Infrastructure Report Card*, State Report Cards
- *Failure to Act* economic studies
- Infrastructure Game Changers
- Asset Management Report
- Life-Cycle Cost Analysis



facebook.com/ASCEGovRel



[@ASCEGovRel](https://twitter.com/ASCEGovRel)



facebook.com/SaveUSAInfrastructure



Open to all ASCE members

Visit www.asce.org/keycontacts or email keycontact@asce.org



Develop relationships with elected officials by:

Writing email messages and/or making phone calls

Making “back home” visits

Attending training webinars



Outstanding Civil Engineer Advocate of the Year Award

Individual and Team Award

Nominations due in December each year



Participate in the Legislative Fly-In

By application (opens October 1 each year)

Next Fly-In: **March 3-4, 2021**

10/1

Application available:
October 1 (or earlier)

Nov.

Deadline:
Week prior to Thanksgiving



- Apply online: http://www.asce.org/legislative_fly-in/
- Two days of intensive advocacy training
 - additional programming for Advocacy Captains and Younger Members
- Meet your Congressmen (2 Senators, 1 Representative)

What You Can Do Next?



Incorporate Government Relations into Chapter Meetings



Work with your state's Advocacy Captain



Encourage your Section to Host a State Legislative Day



Engage/Monitor the PE Board



Review your State's Legislative Tracking Page



Read *This Week In Washington*



Take Action on Key Alerts



Follow ASCE GR on Facebook:
www.facebook.com/ASCEGovRel



Follow ASCE GR on Twitter:
[@ascegovrel](https://twitter.com/ascegovrel)



Request a Government Relations or Public Relations University Training

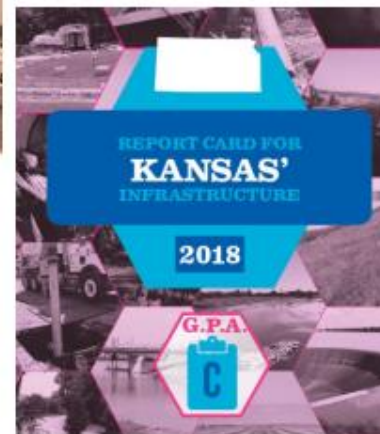
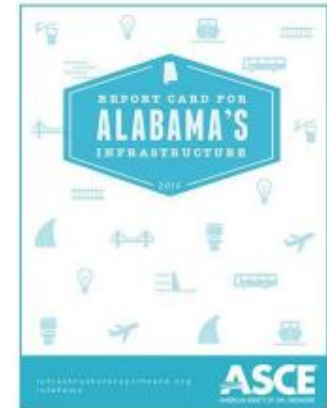
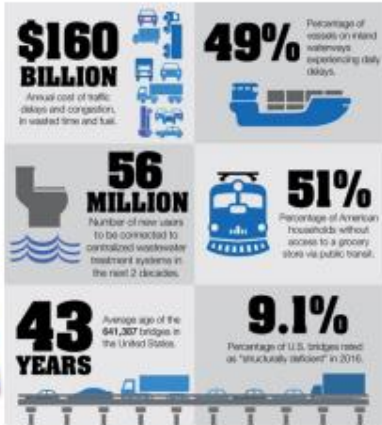
2017 Infrastructure Grades

 AVIATION	D	 PARKS AND RECREATION	↓ D+
 BRIDGES	C+	 PORTS	↑ C+
 DAMS	D	 RAIL	↑ B
 DRINKING WATER	D	 ROADS	D
 ENERGY	D+	 SCHOOLS	↑ D+
 HAZARDOUS WASTE	↑ D+	 SOLID WASTE	↓ C+
 INLAND WATERWAYS	↑ D	 TRANSIT	↓ D-
 LEVEES	↑ D	 WASTEWATER	↑ D+

America's
Cumulative
Infrastructure
Grade



A	EXCEPTIONAL
B	GOOD
C	MEDIOCRE
D	POOR
F	FAILING



State by State



Report Cards
Reach an Audience
Outside Engineers



Report Cards Are
Highly Effective
and Open Doors

Post-Release Outreach with State and Regional Report Cards

RESEARCH & WRITING
(8 months)

REVIEW & RELEASE
(4 months)

OUTREACH
(2+ years)

Evaluation Criteria

- Capacity
- Condition
- Operations & Maintenance
- Funding
- Future Need
- Public Safety
- Resilience
- Innovation

NC infrastructure gets mostly C grades from engineers

Study: N.C. bridges, dams need repair

Jun 5, 2013, 2:52pm EDT
Logistics & Transportation
Report card: NC infrastructure 'increasingly vulnerable to risk'

Report: N.C. gets C on infrastructure report card

NC dams receive 'D' grade in 2013 infrastructure report card



Eric Rysdon
American Society of Civil Engineers



GPA : ?

share

Chapter 4 SECTION RESOURCES

4.1 Best Practices

TALKING POINTS:

07/2020

Summary

ASCE has over 400 Section, Branch or Younger Member Groups that engage our members with a variety of local activities. Each year, these local affiliates of ASCE conduct thousands of events and activities that help support the Society's mission to advance civil engineering profession, and serve the public good.

Each activity or event may require hours, days, weeks or even months of planning and implementation. The Leader Training Committee is continuously documenting the successful activities and events in the Best Practices Guide.

Best Practices Guide

- 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. The guide also includes contact information to discuss the events with those who contributed to its success.
- As of July 2020, the Guide included **96** Best practices, organized into the following nine categories:
 1. Communications
 2. Continuing Education
 3. Government Relations
 4. Membership Development
 5. Section Operations
 6. K-12 Student Outreach
 7. College Student Outreach
 8. Public Outreach
 9. Engineer's Week

Resources

- [Best Practice Guide For Sections and Branches](#)
- [Section and Branch Best Practices Information Request Form](#)

- Membership Resources <http://www.asce.org/champions/>
- Pre-College Outreach
http://www.asce.org/pre-college_outreach/
- Government Relations Resources and Activities for Sections and Branches
http://www.asce.org/issues_and_advocacy/
- Younger Member Group resources -
http://www.asce.org/manage_your_younger_member_organization/

Best Practices

Talking Points

ASCE Leader Training Committee- July 2020



■ Introduction:

- ASCE's Sections and Branches engage members with a variety of local activities each year which support the Society's mission
- These activities require a lot of time to plan and implement
- Why have your group reinvent the wheel?



- **Section and Branch Best Practices Guide:**
 - ASCE's Leader Training Committee has created the Section and Branch Best Practices Guide to document these successful activities
 - Short summaries of successful events, activities or processes
 - Contact information of those involved

Sections and Branches



BEST PRACTICES GUIDE

*Prepared by
Leader Training Committee
Revised February 2020*

■ Best Practice Categories:

- Communications
- Continuing Education
- Government Relations
- Membership Development
- Section Operations
- K-12 Student Outreach
- College Student Outreach
- Public Outreach
- Engineer's Week

EXECUTIVE SUMMARY

April 2019

EXECUTIVE SUMMARY

The ASCE Leader Training Committee (LTC) has collected successful activities of Sections and Branches and compiled them into this Best Practices Guide. The purpose is to provide new ideas and activities that your Section or Branch can use to expand your program initiatives and support the mission, vision, and values of the Society. This summary provides information on how to effectively use the Best Practices Guide, and contact information for comments or suggestions for future releases.

HOW TO USE THIS GUIDE

The guide currently includes 94 Best Practices organized into the following nine categories:

1. Communications
2. Continuing Education
3. Government Relations
4. Membership Development
5. Section Operations
6. K-12 Student Outreach
7. College Student Outreach
8. Public Outreach
9. Engineer's Week

Sections and Branches provided general information and instructions for their activities and have shared the outcomes. They also included changes they would make the next time they organize the same activity. Section and Branch contact information is listed for each activity if you should have any questions about a specific activity. Each Best Practice summary also indicates the general size of the Section or Branch that performed the activity.

ACKNOWLEDGEMENTS

The Leader Training Committee acknowledges all the Sections and Branches that submitted Best Practice summaries and the volunteers that assisted with the development of this document.

CONTACT INFORMATION

The Leader Training Committee is always looking for new Best Practices to include in its guide. The Committee plans to publish an updated version at least annually. If you have a Best Practice and would like to contribute to this guide or have any feedback or comments, please contact Nancy Berson at nberson@asce.org or at 703-295-6010. A Contact Summary of individual Best Practices follows the Table of Contents.

4.2 Reasons to Attend the WSBIL and PGF

TALKING POINTS:

5/2020

Summary

The purpose of the Workshop for Section, Branch and Institute Leaders (WSBIL) 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

WSBIL

- Target audience is new, incoming, or potential Section and Branch officers. Institute Leaders are also invited to attend the WSBIL.
- 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 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.
- The program provides a summary of multiple 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 an excellent opportunity for networking with peers. Society leaders 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.

Reasons to Attend PGF & WSBIL

ASCE Leader Training Committee



■ Target Audience:

- New, incoming, or potential Section and Branch officers
- Technical Region Institute Leaders



Outcomes:

- Gain understanding on how to utilize resources available to your Section/Branch/Institute
- Learn how to implement successful best practices from other local units
- Engage in various networking sessions to meet the Society Leaders
- Participate in leadership exercises to promote personal leadership

■ Target Audience:

- Section/Branch VP's,
President-Elects and Presidents

■ Outcomes:

- Discuss Best Practices with other Section/Branch Leaders
- How to effectively run your Section/Branch and leave with a plan for your Presidential Year
- Utilizing your Governors in your Region
- How to be an effective leader
- Good opportunity for networking with peers and staff at ASCE HQ.



Chapter 5 **K-12 STUDENT OUTREACH**

5.1 Dream Big

TALKING POINTS:

6/2020

Summary

Dream Big is a multi-year, multi-part outreach opportunity. The project consists of a Giant Screen/IMAX film, supported by activity guides, webisodes, a dedicated website, and more.

It is still being shown at museums, in the U.S. mostly to school groups. Outside the U.S., the film is still scheduled to premiere in several museum theaters. You can also see Dream Big on Netflix!

Key Points and Opportunities

Dream Big is more than just one film. It's an entire suite of materials suitable for a wide variety of audiences.

The 42-minute film can be the centerpiece of an outreach event.

Activities bring engineering to life in a way that the film may not.

You can also use one of over 10 short video clips, either alone or in conjunction with the film and activities. All the videos (over 20) are on the 2-disk educational toolkit or on the Dream Big website under the "Media Assets" tab. Topics include autonomous vehicles, clean water, women engineers, earthquake and wind engineering, and more!

Educational materials are provided through the [DiscoverE](http://discovere.org/dreambig) website at <http://discovere.org/dreambig>.

RESOURCES

42-minute film

- Available through Netflix (for personal viewing and for educational groups)
- Home version for purchase through Amazon and Best Buy
- 2-disk educational toolkit sent to all public schools and ASCE Sections/Branches/Student Chapters/Institutes

13 educational webisodes on topics including

- Autonomous Vehicles

- Wind Engineering
- Clean Water
- Meet the Female Engineers of Dream Big
- How Kids Build a Bridge—Great for an icebreaker before a meeting!

65 hands-on activities

- Windy City Tower
- Daylight in a Bottle
- Squishy Circuits
- Most popular activity so far? Designing a Highway Interchange

Program Guides:

- Opening Festival/Engineering Festival. Are you hosting or participating in a community engineering festival/STEM/Career Fair? The Opening (Engineering) Festival guide provides step by step direction
- Girls Night Out—Provides information about girl-centric programming.

Educational Toolkit Distribution

ASCE has put a copy of the acclaimed documentary *Dream Big: Engineering Our World* in every public school in America. A copy was sent to all ASCE Sections/Branches/Student Chapters/Institutes (addressed to the 2019 president) for use in local outreach.

- Each two-disk toolkit includes the full-length feature film *Dream Big: Engineering Our World*, licensed for educational use, available in English, Spanish, and closed-captioning.
- A second DVD will contain the educational webisodes and other videos, as well as the complete Educator's Guide containing lessons for Kindergarten through 12th grade.

Dream Big DVD Distribution Frequently Asked Questions

Q. What does the toolkit include?

- A.** The toolkit includes the full-length feature film in English, Spanish and closed captioned, licensed for educational screenings. The two-disc set also includes the complete teacher's guide, all companion videos, and downloadable files for classroom use.

Q. Can I purchase the \$5 educational toolkit now for a private school?

A. This program was a one-time opportunity and is now concluded.

Q. Instead of a DVD, why not provide a streaming version to reach all schools?

A. A streaming version that includes educational rights is available on Netflix. However, due to different levels of internet connectivity and technical infrastructure, as well as policies set by local school districts, many schools do not have the capacity to stream a feature-length high-definition film. Also, the toolkit contains the teacher's guide and other resources.



MACGILLIVRAY FREEMAN'S

DREAM BIG

ENGINEERING OUR WORLD

In partnership with American Society of Civil Engineers

Presented by Bechtel Corporation

Dream Big |

Using Dream Big in Outreach

Show

Show the 42-minute film

Show one or more of the educational webisodes

Conduct

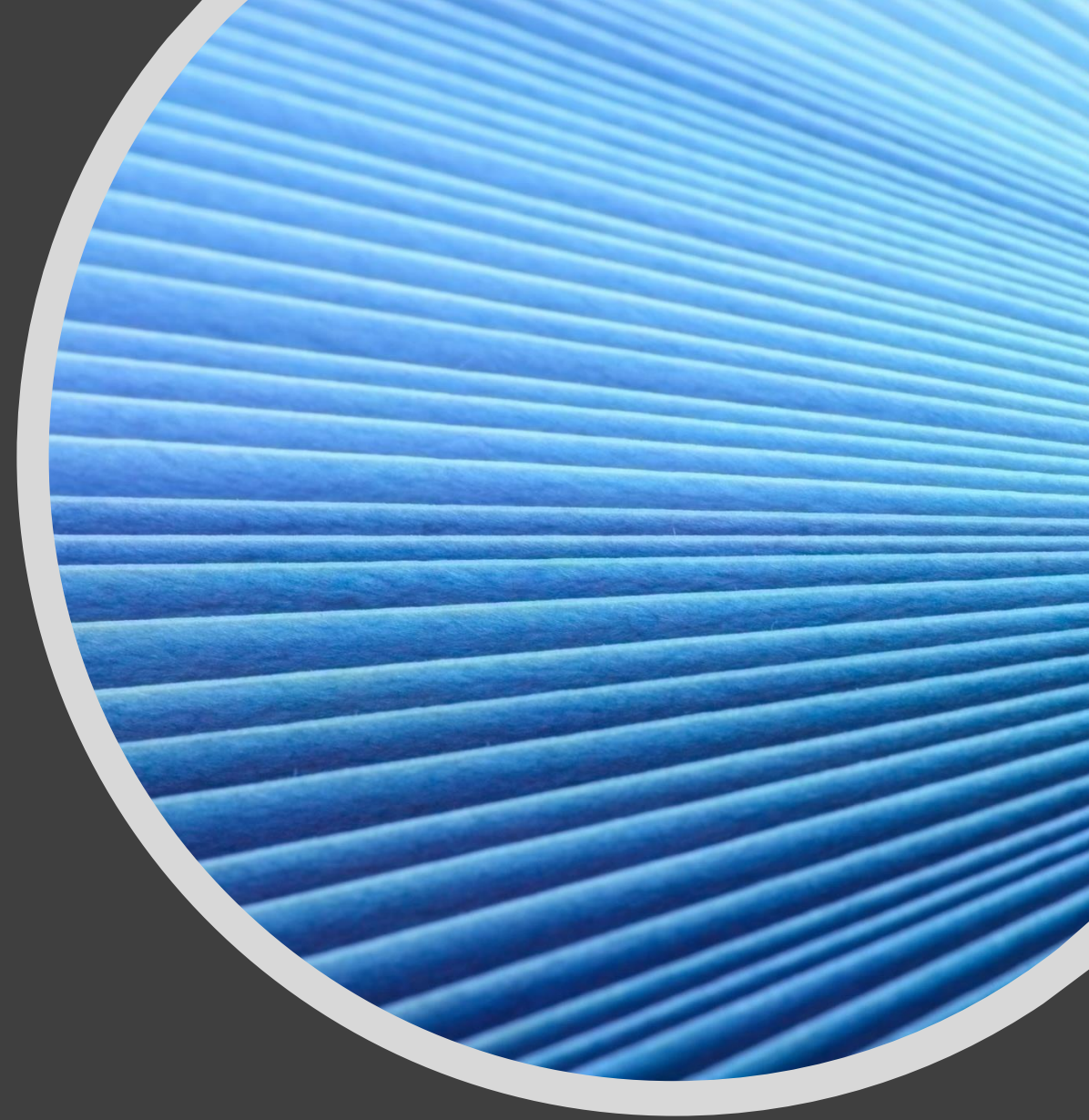
Conduct hands-on activities

- 65 different activities can be found at www.discovere.org/dreambig
- Revamped activities and how-to videos available through www.asce.org/pre-college_outreach

Discuss

Conduct a virtual discussion of the engineering seen in the film/webisodes

Offer suggestions on how to work on the activities



Activity Use in Virtual Outreach

- Have the teacher assign an activity for kids to do in the classroom or at home
- Log in to discuss with an engineer
- Activities can be found at either www.asce.org/pre-college_outreach or Discovere.org/dreambig
- The video playlist can be found at <https://www.youtube.com/playlist?list=PLA61bxD8Jg-0V3ExN9sHkUYIrdKqSgfXJ>



Contacts:

Jeannine Finton, jfinton@asce.org,
703-295-6310

Jill Sanders, jsanders@asce.org,
703-295-6404

Mary Jane Dodge, MacGillivray
Freeman Films,
mjdodge@macfreefilms.com



5.2 Outreach to Student Chapters

TALKING POINTS:

5/2020

Region/Section/Branch Outreach to Student Chapters

Region Board of Governors (RBOG) and/or Section/Branch Boards shall include outreach to Student Chapters to strengthen the relationship between students, professional members, and the Society. As professionals and ASCE leaders we add significant value to students' experience by supporting their activities, offering advice about transitioning from college to career, and raising awareness about the benefits of continued ASCE membership.

Key Strategic Points

- Successful transition of Student Members to Associate Members is extremely important to the lifecycle and 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 individual Student Chapters.

Show Your Support for Faculty and Practitioner Advisors

- Sections/Branches are responsible for appointing two Practitioner Advisors to serve as liaisons between Sections/Branches and the Student Chapters. Consider that one be a Younger Member recently out of school and preferably someone who graduated from the same school.
- Reach out to Faculty and Practitioner Advisors at least twice a year, typically in the first few weeks of each academic semester or quarter and again midway through. Encourage Practitioner Advisors to have regular contact with their respective student leaders. Contact student@asce.org to find out who the current advisors are.
- Be a mentor to Faculty and/or Practitioner Advisors, particularly if the chapter is struggling.
- Encourage Practitioner and Faculty Advisors to attend the Practitioner and Faculty Advisor Training Workshop (PFATW) hosted each year by the Committee on Student Members.
- **During the 2020-2021 Academic Year, make a commitment to support your assigned Chapter leaders virtually. They will be grateful for this and other means of connecting the Chapter and local professionals in new and engaging ways!

Work Directly with Students, if able. Virtually if not.

- Set a goal that a Director, Governor or equivalent appointee visits every student chapter in your section or branch in person or virtually this year. Deliver a presentation about ASCE -- standard templates are available from staff.
- Request and review each Student Chapter's Annual Report and/or have students present their Annual Report PowerPoint format to you. Access them through the ASCE Annual

Reports portal.

- Hold a section, branch or board meeting on campus or virtually, and invite students to attend and/or offer to help the student chapter host a joint meeting of professionals and students.
- Attend the Workshop for Student Chapter Leaders (WSCL), held during the Multi-Region Leadership Conferences (MRLC).
- Join a team of region and local champions in support of a [Student Conference](#) or volunteer your help as a competition judge or speaker. Conference dates, hosts, and contact information is available online

Provide Financial and Organizational Support

- Consider establishing a student activities sub-committee to coordinate with the Student Chapters and Student Conferences.
- 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 or hosting a Region Student Conference.
- Provide additional focused support for struggling Student Chapters.

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

Student Outreach

Region Leaders Make a Difference!

ASCE

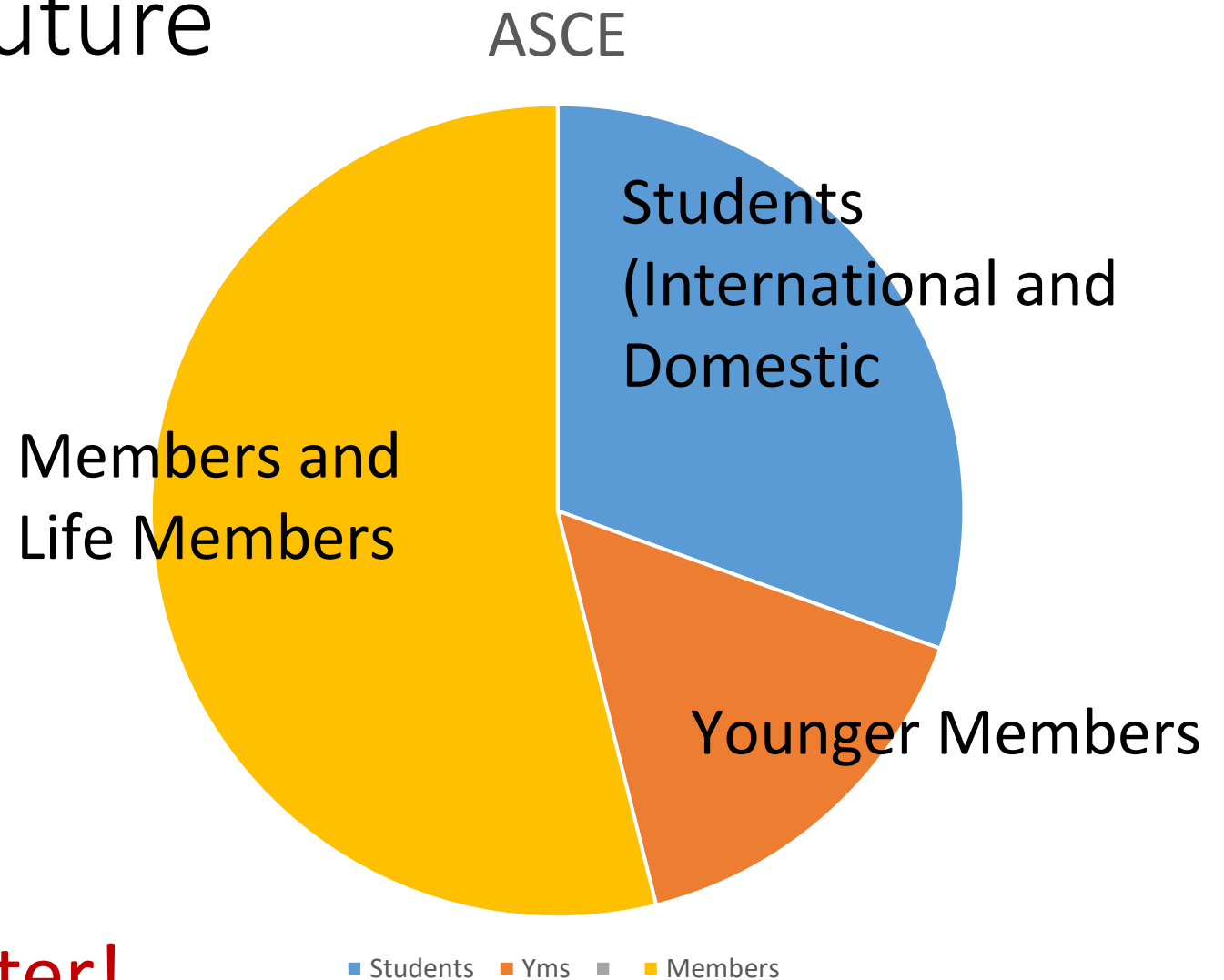


Investing in ASCE's Future

- 152,926 Total members⁽²⁰¹⁸⁾
- 49,203 Student Members

Many students don't understand the value of continuing ASCE membership after graduation

We must do better!



Build Relationships that Last

- Who is the Faculty Advisor? How are you supporting him/her?
- Appoint 2 Practitioner Advisors
 - Hold them accountable for engagement
- Encourage teamwork between PAs/ FAs/ and students
- Communicate regularly with PAs and FAs
- Support, encourage, and honor success!!
- Nominate Leaders for PA/FA and Leader Awards



Give Students Your Time

- Invite Students to present to your Boards
- Understand your Chapters' successes and challenges
- Attend student meetings. In-person AND virtual
- Hold a Section, Branch or Board Meeting on Campus



*Helping beats
selling!*

Communicate Strategically!

- Know your objectives
- Be helpful, encouraging, aspirational, collegial, conversational, values driven/altruistic
- Practice a 15-30 second elevator speech to set the context for talking points
- Use Key Messages and supporting examples to get their attention

Make Friends.

Advance Your Career.

Shape the Profession



Support and Attend Student Conferences

Money is ALWAYS Appreciated!

- Listen to their concerns
- Anticipate their needs
- Link students to scholarships
- Provide travel stipends
- Provide mentoring and funding for struggling chapters

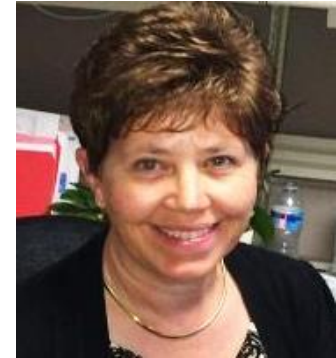


ASCE Student and Younger Member Programs



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5.3 Pre-College Outreach

TALKING POINTS:

8/2020

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.

The 2020-21 school year will be vastly different than previous years, with few (or no) opportunities for in-school visits. Unless a COVID-19 vaccine is developed it is unlikely that schools will feel comfortable with field trips. However they may be quite open to having guest presenters and may have urgent needs for mentors and judges to assist with high school capstone projects and competitions such as Future City.

Key Points

- **All ASCE Sections, Branches, and Student Chapters should identify at least one person to be an “Outreach Champion”. Outreach Champions play a key role in informing changes to outreach procedures, which will be ongoing through the 2020-21 school year.**
 - Outreach Champions, identified to ASCE Headquarters as such, provide a conduit between activities at the local level, and best practices/resources that are available through ASCE Headquarters.
 - Champions are invited to monthly information shares (Info Segments) which are recorded and available for future reference at https://www.asce.org/pre-college_outreach_training/.
 - Champions work with ASCE Headquarters to identify local contacts when we receive requests from teachers and students.
 - Email your list of Champions to Jeannine Finton, jfinton@asce.org.
- What we know that teachers asked for in the spring that they will likely want in the upcoming school year:
 - Online resources such as videos
 - Online chats with engineers
 - Screen sharing demonstrations that show how engineers use technology to develop solutions
 - Judges and mentors for the Future City competition which will be entirely virtual for the 2020-21 school year. <http://discovere.org/our-programs/future-city>
 - Schools may need physical support as well. Schools in low-income areas asked for help photocopying packets for students who lacked internet access.

- As we learn more we will share this information with Outreach Champions.
- Everyday Engineering: STEM@Home
 - ASCE has begun revamping several of the activities developed for Dream Big (see below) to showcase how they can be done at home.
 - In addition to activity write ups there are “how-to” videos on YouTube for each activity.
 - ASCE Headquarters would like to have videos that show a diverse set of engineers conducting the activities. Interested people should contact Jeannine Finton, jfinton@asce.org.
 - Links to the activities, videos, and other information can be found at http://www.asce.org/pre-college_outreach/.
- The Dream Big suite of materials are a fundamental starting place for any type of pre-college outreach, whether or not the film itself will be used. <http://discovere.org/dreambig>
 - There are several short webisodes on several exciting engineering topics including autonomous vehicles, clean water, wind and earthquake engineering found in the “Media Assets” area.
 - The “Activities” tab will bring you to 65 hands-on activities, searchable by grade level and topic.
- Civil Engineering Clubs—We will explore a virtual format for the upcoming year.
- As always, visit ASCE’s online Pre-College Outreach Volunteer Center for information and resources to support your outreach efforts: http://www.asce.org/pre-college_outreach/

For more information, email outreach@asce.org.

ASCE Pre-College Outreach

http://www.asce.org/pre-college_outreach/

Outreach Champions

Objective: Have at least one person from every ASCE Section/Branch/Student Chapter identified and registered with ASCE Headquarters



Two-way communication

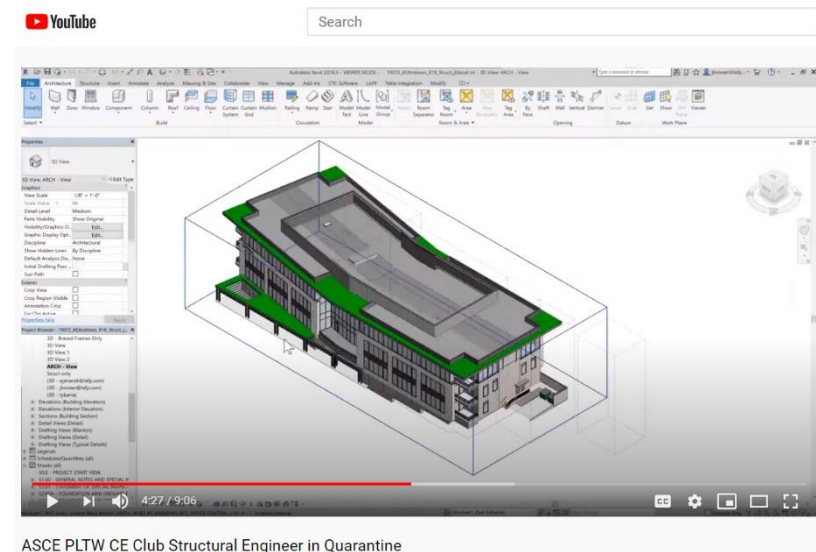
Sharing Best Practices across Sections/Branches

Identifies local contacts to respond to requests from students and teachers

Send the name and email of potential contacts to Jeannine Finton, jfinton@asce.org

Requests from Teachers

- * Online chats with engineers
- * Screen sharing demonstrations that show how engineers use technology to develop solutions
- * Judges and mentors for the Future City competition which will be entirely virtual for the 2020-21 school year.
<http://discovere.org/our-programs/future-city>
- * Schools may need physical support as well.
- * Outreach champions will be informed as new requests come in.



Online Resources

- * What Do Civil Engineers Do? YouTube Video
- * Dream Big Media Assets



- * Everyday Engineering:
STEM@Home

- * Engineering activities to do at home
- * How-to videos



Civil Engineering Clubs

- * ASCE is still receiving requests to start new clubs and is exploring how to best conduct a virtual offering.
- * High School Program (some middle schools)
- * Engineer mentor and faculty advisor
- * Step by step instructions, promotional materials, and more
- * Modules on Bridges, Water Resources, Transportation, and Sustainability

http://www.asce.org/civil_engineering_club/

Dream Big—More than a film



Visit the website: <http://discovere.org/dreambig>

Brochures, Activity Guides, and Swag

<http://www.asce.org/pre-college-resources/>



Staff Support

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Administrator, Communications

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Chapter 6 **STUDENT RETENTION/TRANSITION**

6.1 Younger Member Retention

TALKING POINTS:

May 2020

Attracting, retaining and encouraging the engagement of members age 35 and under is vital to the continued health of ASCE. It is every member's job to help younger members see that membership in ASCE is of personal value and importance to every civil engineer.

ASCE volunteers and staff have been working for several years to understand how young professionals view ASCE and Society membership, to offer programs and services young civil engineers value, and to position ASCE as an association that recognizes the changing marketplace and is responsive to the evolving needs of its next generation of members. This knowledge is particularly important at the local level where lasting impressions are made. ASCE's leaders in its Regions, Sections, Branches, Younger Member groups, Student Chapters, and Institutes must all work together to build a culture of inclusiveness that invites young people to the table and engages them in the most important work of the organization. This is true both inside and outside of the US.

Getting Started:

Young people are selective about the organizations they join, preferring those that give them enjoyable experiences where they can have a voice and make a difference. Communication that is authentic and collegial, and individual access to opportunities for engagement are essential in building trust with this group of members. Competition for their time, talents, and resources is vast, making it essential that the value of membership is clear and well defined from the start. Young people have enormous resources literally at their fingertips, giving them the ability to customize the experiences they bring into their lives and carefully choose experiences that align with their values.

Communication Goals:

- Listen and seek to understand the perspective of young professionals. They have a lot to offer that will propel the organization forward and help us succeed.
- Position ASCE as an essential resource for networking, industry knowledge, professional development, and career advancement
- Be welcoming and accessible to young professionals, inviting them to make a difference in the profession through ASCE
- Demonstrate that ASCE seeks and values contributions from young professionals
- Motivate young professionals to engage with the Society in ways that reflect their unique personal interests
- Encourage members of Younger Member groups to continue their engagement with ASCE at the Section or Branch level as they advance in their careers

Your Elevator Speech:

Your civil engineering career can take you anywhere! ASCE membership offers you more resources and activities in the civil engineering profession than any other association. These are the tools you'll use to develop your technical specialty, build your knowledge base and enhance your leadership skills. Along the way, you'll also develop an invaluable network and make lasting friendships with colleagues throughout the country and around the world. ASCE helps you discover, explore, and capitalize on endless opportunities to grow as a professional and a person. ASCE is where civil engineers come together to shape the future of our profession.

Key Messages for Young Professionals:

- **Make Friends.** ASCE helps you find and connect with a network of friends, colleagues and mentors of all experience levels who share your passion to change the world.
- **Advance Your Career.** Membership in ASCE gives you the tools and opportunities to advance your career and develop personally.
- **Shape the Profession.** ASCE's Younger Members shape the profession by participating in ways that fit their interests, availability, and aspirations.

What Else Should You Do?

- Ask for their help. Especially now, young civil engineering professionals have experience and an outlook for the future that can help our organization navigate through the challenges of our time.
- Gain knowledge about the activities and interests of the Younger Member Forums/Groups linked to your Region/Section/Branch. Build relationships that help these groups thrive and help their members see the pathway to greater opportunity in ASCE beyond their YM group. Encourage transition activities that introduce smooth pathways to Sections and Branch participation. Extend personal invites to YMs in their mid to late 30s to fleet up and bring new ideas with them.
- Remove layers in your organizations so that the ideas, innovations, and communications styles of young people bubble up and change the way that ASCE operates. Focus on programming and activities that fill the needs of young professionals who are anticipating the future of civil engineering and want to be prepared for that future. Encourage and challenge them to participate or lead in programming decisions. Place experienced volunteers with less experienced volunteers, to pass the mantle of responsibility on to the next generation.
- Support Younger Members as they face career challenges, evaluate career pathways leading up to mid-career, and make other choices impacting their lives, such as marriage and family. Provide activities that accommodate personal life choices.
- Encourage and groom young professionals to become the future leaders of every organizational entity of ASCE. Create opportunities to shadow current leaders, provide leadership training, and assign leadership tasks to help them build skills needed to succeed.
- Tell Younger Members about the opportunities for professional growth through ASCE sponsored programming designed especially for them. Encourage them to register for free **Career Booster Webinars**, attend a summer weekend **Younger Member Leadership Symposium**, watch for

Power Skills Workshops happening in cities around the country, sign up for **Mentor Match** to be mentored or mentor others, and check out the career information online in the **Career By Design** center.

- In everything that you say to and do with young professionals, drive home the point that we value their perspective, encourage their voice in the profession and see Younger Members as the future of ASCE.

Resources

For additional information, contact [Leslie Payne](#), Director of Student and Younger Member Programs



Master Your Future



Rensselaer Polytechnic Institute
October 18, 2018

Robin A. Kemper, P.E., LEED AP, F.SEI, F.ASCE
ASCE President-Elect

Civil Engineers in Demand

11%

Projected Growth
in Employment of
Civil Engineers
from 2016 – 2026
(Bureau of Labor Statistics)



“As infrastructure continues to age, **civil engineers will be needed** to rebuild bridges, repair roads and upgrade levees and dams ...”

Civil Engineering is an Exciting Profession



**THE AMERICAN
SOCIETY OF CIVIL
ENGINEERS CHOSE
THIS LANDMARK
AS ONE OF
THE 7 WONDERS OF
THE MODERN WORLD**

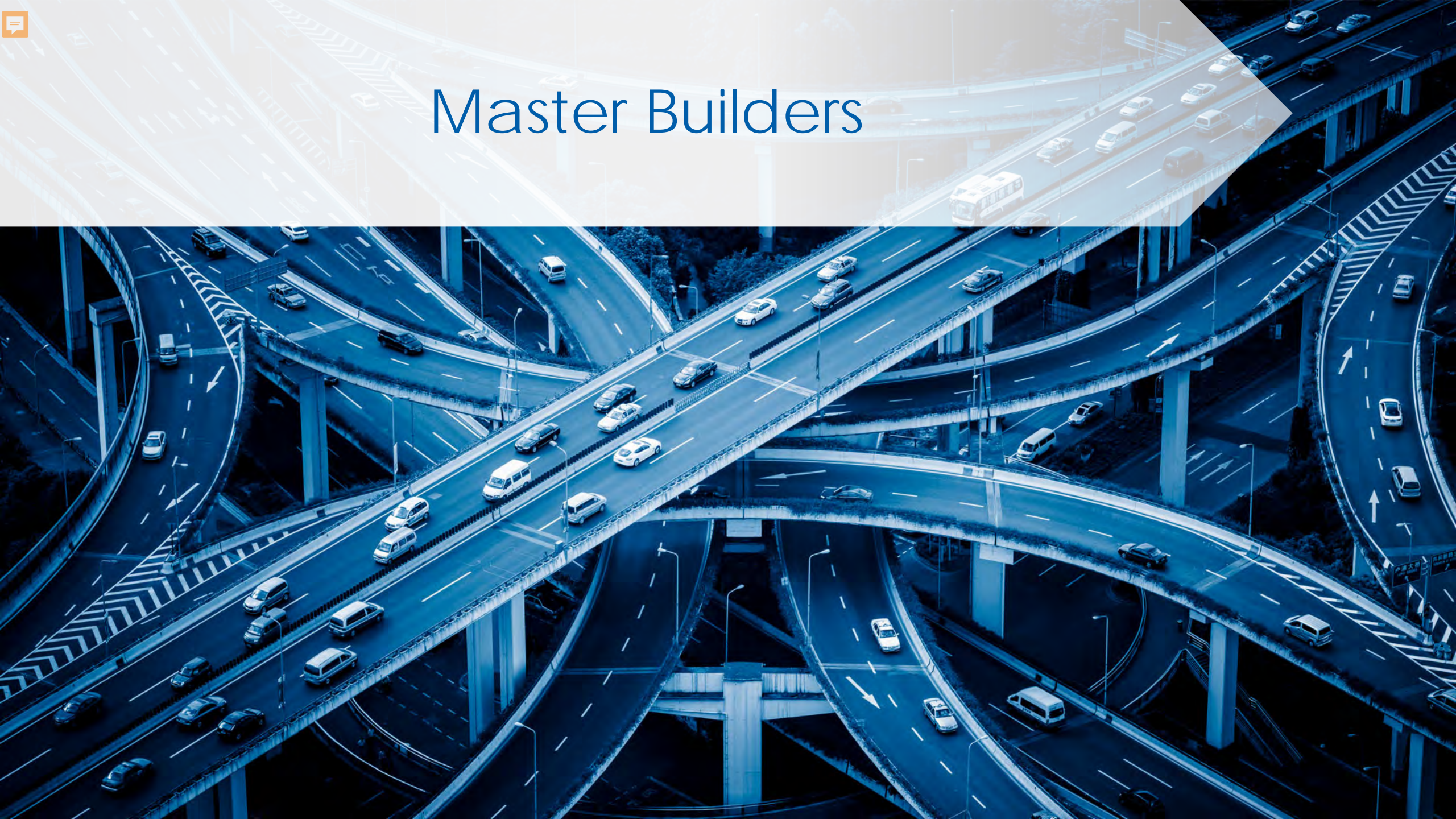


Our Vision





Master Builders





Stewards of the Environment



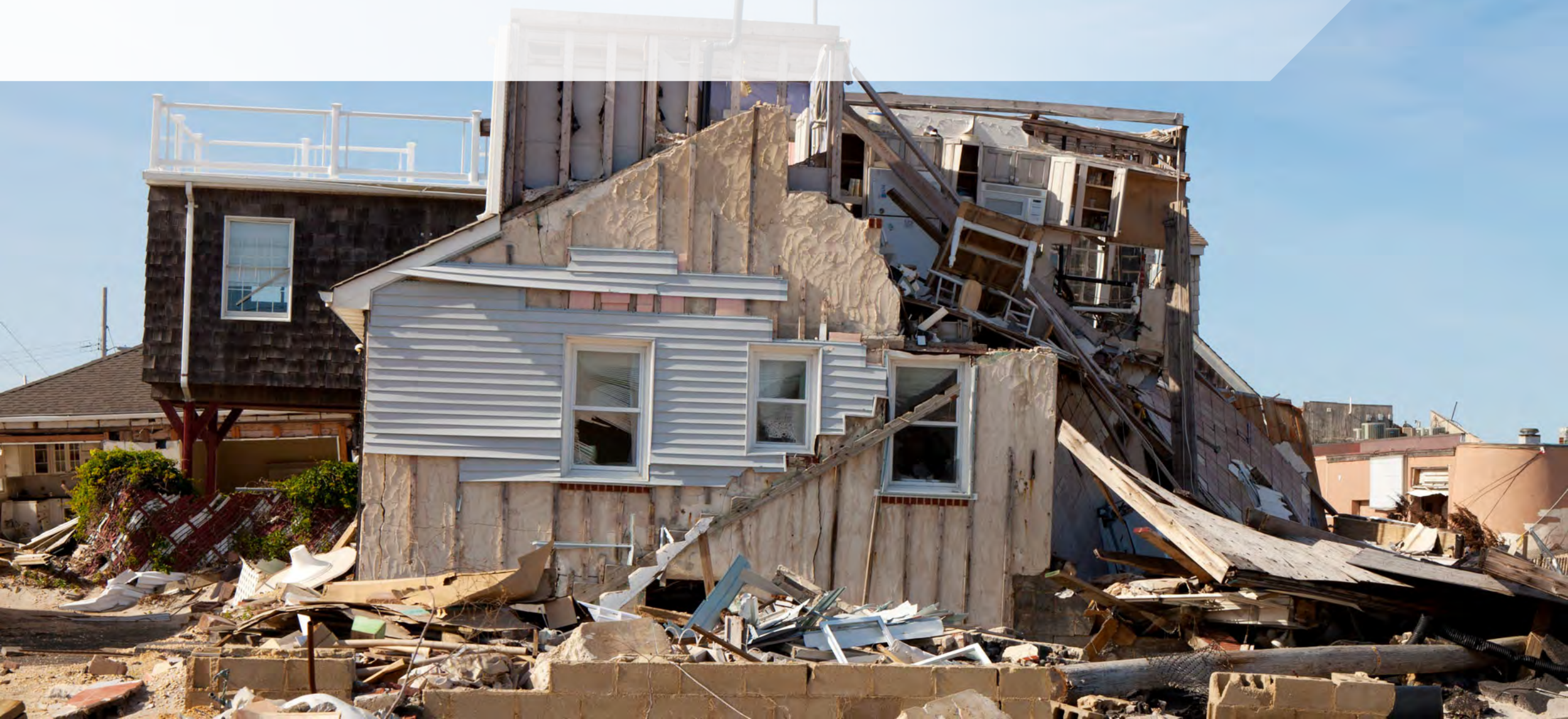


Innovators





Managers of Risk and Uncertainty





Leaders in Public Policy





Your Career





Your Road Map



Should You Get a P.E.?



Do You Need a Master's Degree?

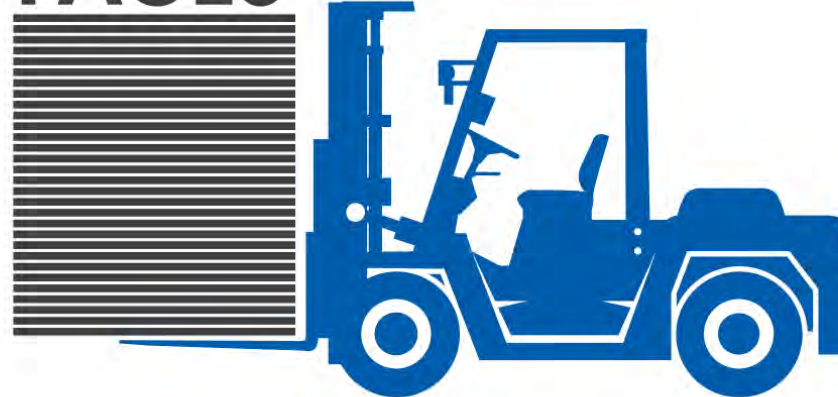
Technical knowledge is exploding.

1995



2016

888
PAGES



Minimum Design Loads for Buildings and Other Structures, ASCE/SEI 7-16



Now What?



Should You Specialize?



**ARCHITECTURAL
ENGINEERING
INSTITUTE**



**CONSTRUCTION
INSTITUTE**



**COASTS, OCEANS,
PORTS & RIVERS
INSTITUTE**



**ENGINEERING
MECHANICS
INSTITUTE**



**ENVIRONMENTAL &
WATER RESOURCES
INSTITUTE**



**GEO-
INSTITUTE**



**STRUCTURAL
ENGINEERING
INSTITUTE**



**TRANSPORTATION
& DEVELOPMENT
INSTITUTE**



**UTILITY ENGINEERING
& SURVEYING
INSTITUTE**



Career Resources

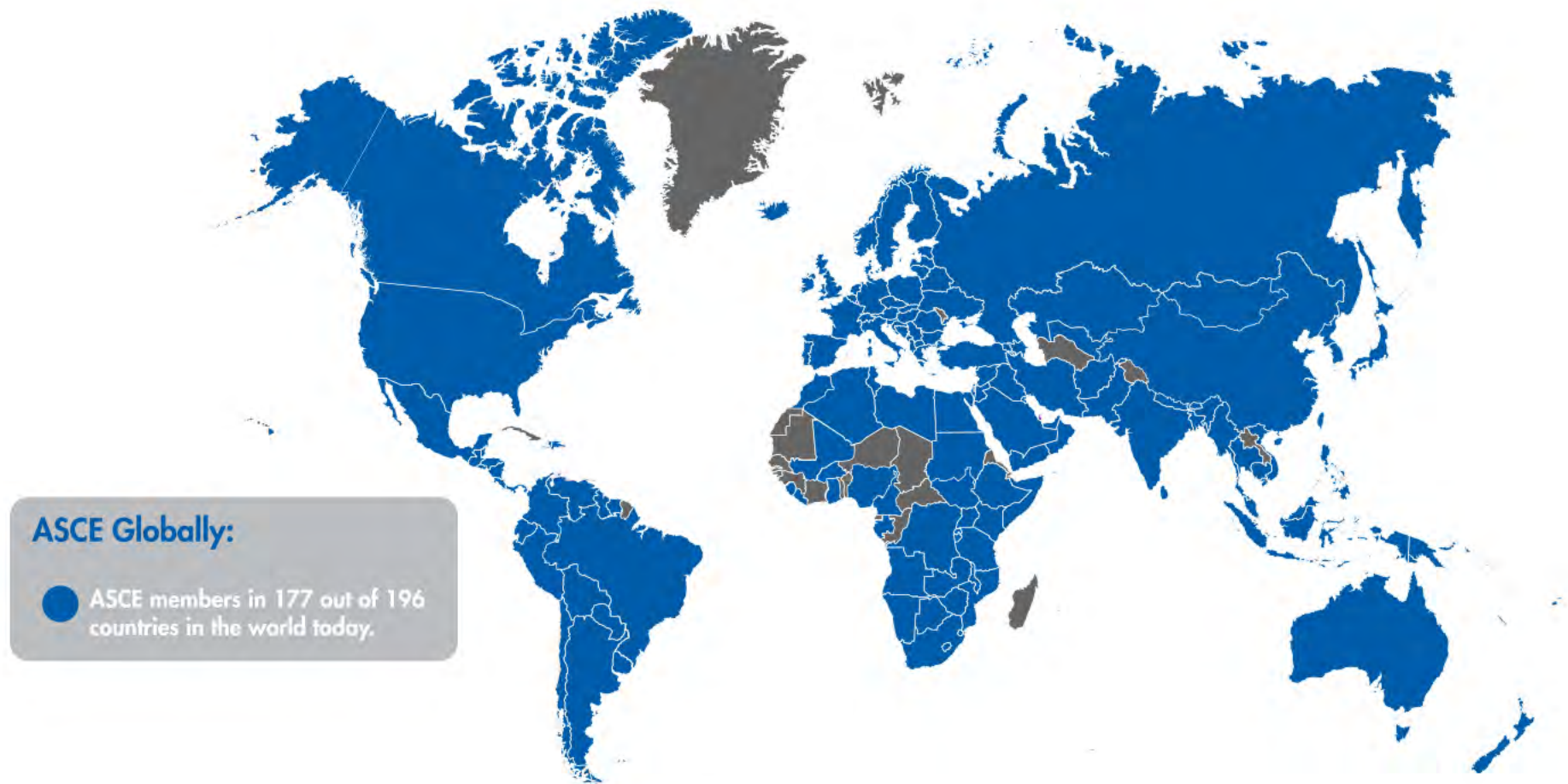


ASCE Career by Design

The screenshot displays the ASCE Career by Design website. At the top, the logo reads "ASCE CAREER by DESIGN". Navigation links include "ASCE.org", "Code of Conduct", "Younger Members", "Sign In", and a search icon. A central banner features the text "Make friends. Advance your career. Shape the profession. Stay connected." Below this are three featured articles: "Developing Your Professional Confidence", "Negotiating Your Salary", and "Navigating Office Culture for the First Time". The "Discussions" section contains a sign-in prompt and a graphic for "ASCE MENTOR MATCH POWERED BY ASCE COLLABORATE". The "Tweets" section shows a tweet from ASCE Headquarters celebrating the 2019 OPAL award-winner, Ross Corotis, with a photo and a "CONGRATULATIONS OPAL HONOREES" graphic.

A portal for recent graduates and Younger Members
collaborate.asce.org/careerbydesign

We've Got Your Back





Invaluable Network for Lasting Friendships





ASCE[®]

AMERICAN SOCIETY OF CIVIL ENGINEERS

STAY CONNECTED WITH ASCE

Transferable Leadership Skills



A World of Opportunities



Help Shape Public Policy





ASCE Opens Doors





Member Benefits



Technical Institutes

Webinars

Codes & Standards

CE Mag & ASCE News

Conferences & Training

Career Resources

AccessEngineering



Dream Big



INTRODUCING THE ENGINEERS OF TOMORROW



WHO ATTEMPT TO DESIGN A BRIDGE
STRONG ENOUGH TO SUPPORT A TRUCK

MACGILLIVRAY FREEMAN'S
**DREAM
BIG**

#DreamBigFilm

#ascemademe





Questions?

6.2 Student Member Transition after Graduation

TALKING POINTS:

5/2020

Attracting student members and motivating them to learn more about the value of ASCE after graduation is vital to the continued health of the Society. It is every member's job to let students know that membership in ASCE can be personally rewarding and make a difference in the early career development of every civil engineer.

*The Member Communities Committee, its Constituent Committees, and ASCE staff are actively engaged in this challenging issue. These entities oversee several Society activities supporting local engagement with students and the retention of early career professionals age 35 and younger. STAY Grants, Student Conference support activities, the Younger Member Leadership Symposium and activities related to greater younger member engagement with the Society Board of Direction are examples of their efforts. **This year, virtual programming is being planned to provide continuous high-level engagement and community-building throughout the year.*

Getting Started:

The KEYS to encouraging student transition from ASCE Student Member to ASCE Associate Member are ENGAGEMENT and COMMUNICATION. ENGAGEMENT leads to valuable CONNECTIONS between students and professionals. Communications goals and KEY MESSAGES reflect researched-based interests of students and younger members as outlined in the results of the 2017 Student Survey and the 2019 Younger Member Survey.

Communication Goals:

- Position ASCE as an essential resource for career advancement and personal development
- Be welcoming and accessible to students to set the stage for future interactions with ASCE
- Demonstrate that ASCE seeks and values contributions from students and young professionals
- Motivate students to join/maintain membership in ASCE as they journey from student to early career professional.

Your Elevator Speech:

Your civil engineering career can take you anywhere! ASCE membership offers you access to more resources and opportunities in the civil engineering profession than any other association. These are the tools you'll use to develop your technical specialty, build your knowledge base and enhance your leadership skills. Along the way, you'll also develop an invaluable network and make lasting friendships with colleagues throughout the country and around the world. ASCE helps you discover, explore, and capitalize on endless opportunities to grow as a professional and a person. ASCE is where civil engineers come together to shape the future of our profession.**Although COVID-19 has interrupted many face-to-face interactions, ASCE is using leading edge technologies to bring people together around provide highly professional content valuable for every stage of a civil engineers career.

Key Messages for Students:

- **MAKE FRIENDS** - ASCE helps you find and connect with a network of friends, colleagues and mentors of all experience levels who share your passion to change the world.
- **ADVANCE YOUR CAREER** - Membership in ASCE gives you the tools and opportunities to advance your career and develop personally.
- **SHAPE THE PROFESSION** - ASCE's students and young professionals can shape the profession by choosing opportunities for volunteering or leadership that fit their interests, availability and aspirations.

What Else Should You Do?

- Learn the status of the health of the student chapters linked to your organization. Assign practitioner advisors where needed, and support their participation in the annual Practitioner and Faculty Advisors Training Workshop. Help ensure that your Practitioner Advisors (assigned from Sections/Branches// Younger Member Groups) are involved with their Student Chapters. These advisors should report to students what's happening in the local ASCE branch/section and Younger Member group and encouraging students to get to know the leaders of these groups. They should also be reporting to the ASCE Professional Members on what is happening in the Student Chapter and identifying where opportunities for collaboration and networking exist.
- Plan to hold in persona and/or virtual activities with students at their university or elsewhere. Be focused and committed at these events to be completely engaged with 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. Help them. 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** not just their chapter, but also the Society. Invite them to be part of your local group.
- Learn where your Region's Student Conferences are being held and collaborate with a team of local, regional, and Society leaders to champion greater visibility of ASCE and engagement with students at these important events. Opportunities to judge, form sessions about transitioning from college to career, exhibit ASCE and Younger Member opportunities, provide financial support and sponsorship for key student events, such as the Awards Banquet or Welcome event are options for creating a positive, visible ASCE presence.
- Consider hosting a 'welcome to the profession ceremony,' 'pinning ceremony' or other symbolic activity focused on educating students about ASCE after graduation and showing them the value of continued affiliation with ASCE as an Associate Members after graduation. Focus on maintaining contact with students beyond graduation and sharing contact information with Sections or Branches or Younger Member groups in the local area where students accept their first jobs or attend graduate school.
- In everything that you do with students, ensure the messages of "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 the Student Transition and Younger Member Retention Sub-Committee Chair, [Will Manion](#) or [Leslie Payne](#), Director of Student and Younger Member Programs



Student Transition

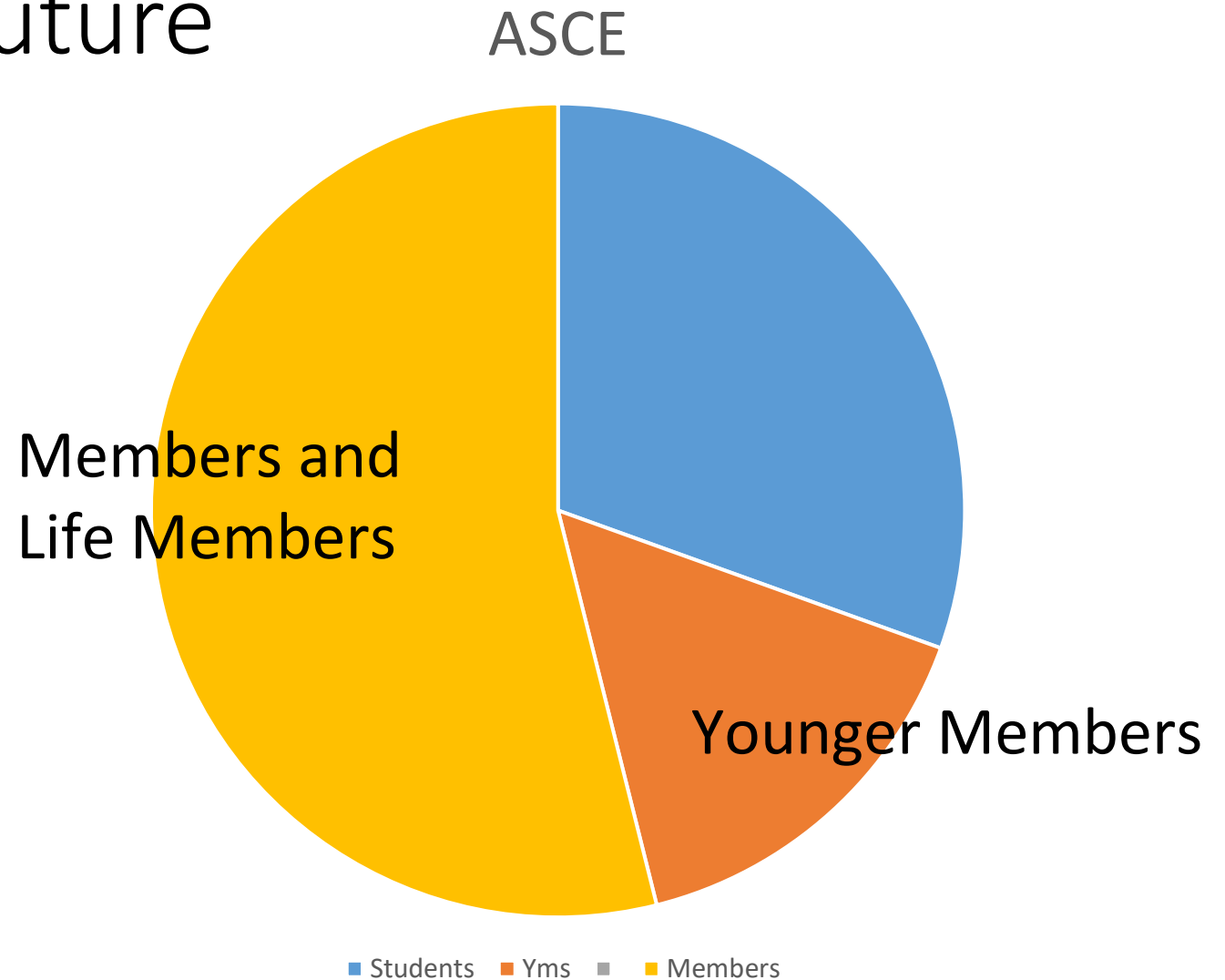
Fostering Life-Long Engagement with ASCE

Investing in ASCE's Future

- 47,654 Student Members*
- 31 percent of ASCE's membership

Most students don't have a clear understanding of the value of being an ASCE member beyond graduation.

*2018



A Win-Win Proposition

Students want
career
information

Life after college?

Personally
Rewarding



Professionally
Valuable

Professionals
have knowledge
and experience

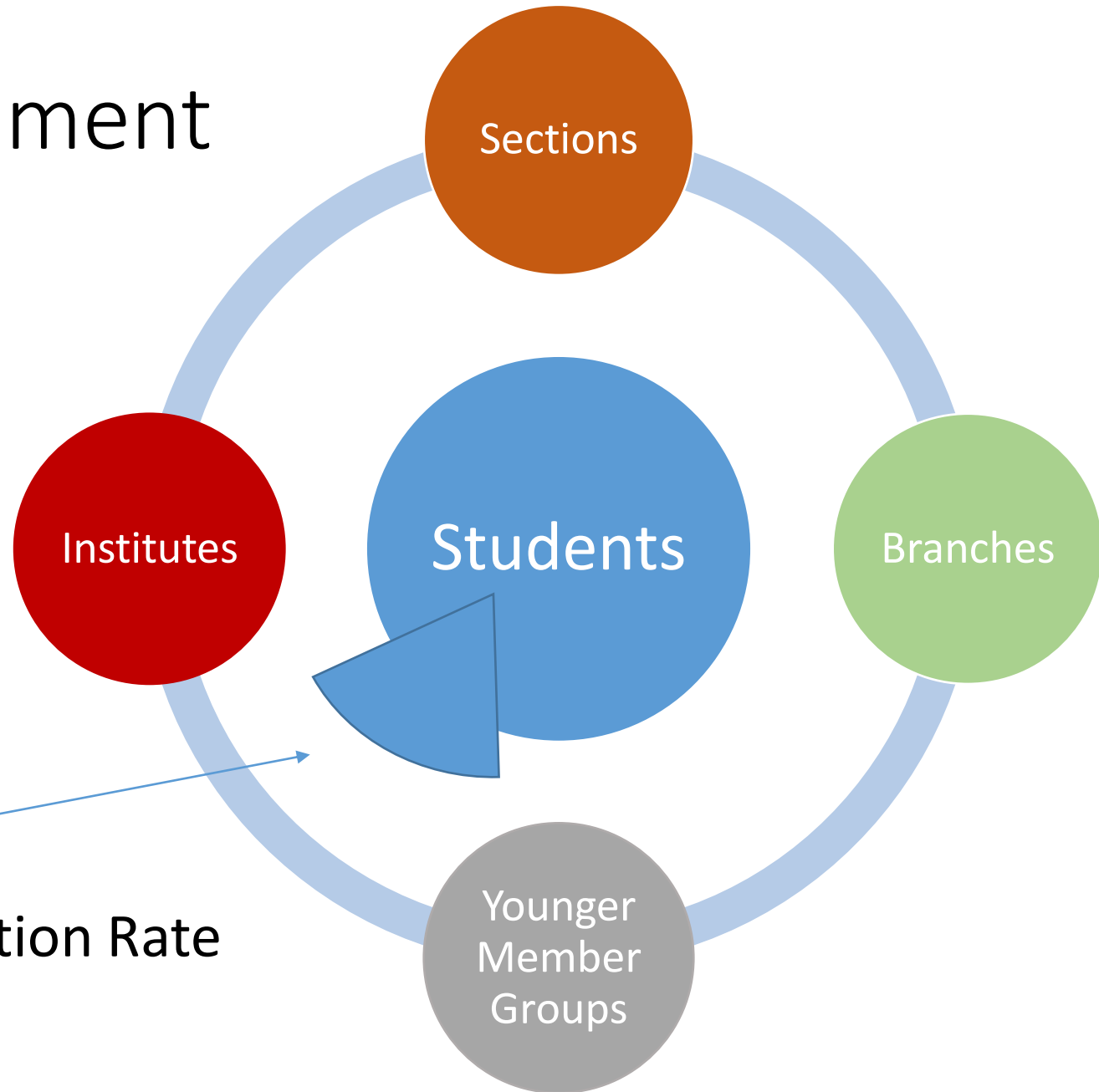
*Professional
Technical &
Personal Challenges*

Strategic Engagement

We all share the responsibility for retaining students after graduation

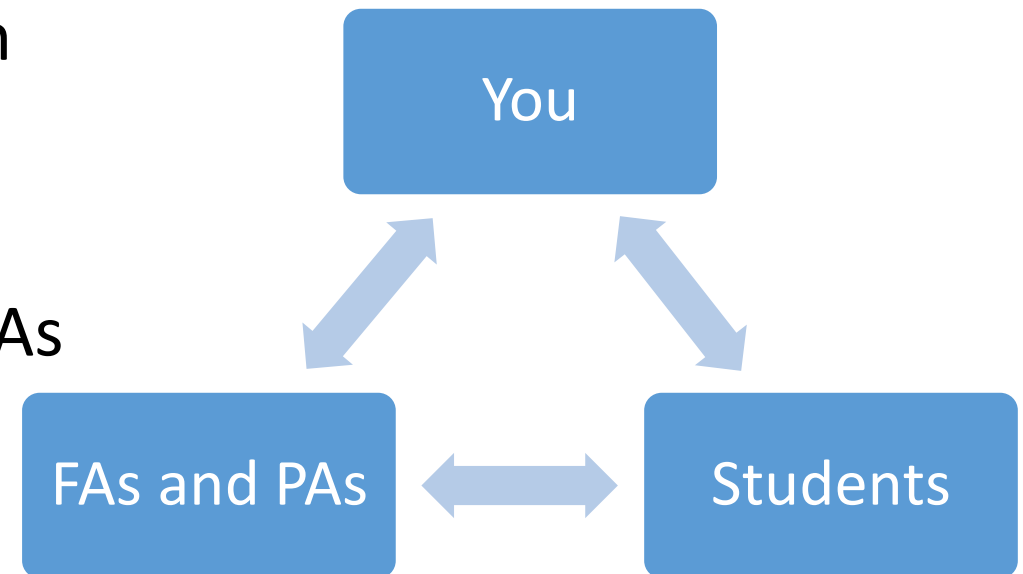
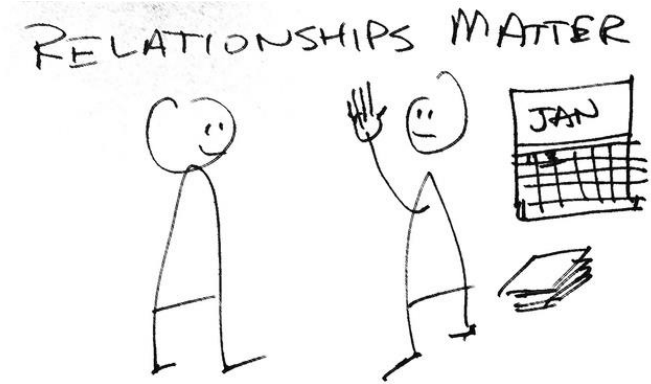
17%

Average Student Transition Rate
2019



Build Relationships that Last

- How are you supporting Faculty Advisors?
- Appoint 2 Practitioner Advisors
 - Hold them accountable for engagement
- Encourage a leadership team approach between PAs/ FAs/ and students
- Communicate regularly with PAs and FAs
- Encourage and support!!



Give Students Your Time

- Know the Successes and Challenges of your Chapter(s)
- Be available. Talk about how membership in ASCE has helped your career
- Plan strategic activities – both in-person and virtual
- Fun with a purpose!



Helping beats selling!

STAY With ASCE!

“When you join ASCE after graduation, you become part of the largest professional civil engineering network in the world. As part of our community, you will have access to our industry’s most comprehensive communication, networking, and learning resources!” – ASCE Member Resource Guide 2015



ASCE

Chapter 7 **PROFESSIONAL AND LEADERSHIP**

7.1 Developing Leaders

TALKING POINTS:

7/2020

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

- Local involvement offers many opportunities for members to use and enhance their leadership skills. Being involved in a local 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 programs and courses to develop leadership skills.

Resources

The ASCE website's "Leadership Training" page lists ASCE's newest leader development programs created with our early-career professionals in mind: <https://www.asce.org/leadership-training/>. Early-career

professionals are encouraged to get involved in one of the following programs to develop their leadership skills and advance their career:

- ASCE's Power Skills Workshops consist of expert-led, in-depth, interactive courses designed to provide young professionals with training in leadership and interpersonal skills: <https://www.asce.org/power-skills-workshops/>
- Younger Member Leadership Symposia (YMLS); for younger members, by younger members, is a three-day experiential leadership workshop to help young civil engineers succeed and lead in the workplace: <https://www.asce.org/event/2020/younger-member-leadership-symposia/>
- Career Booster Webinar Series; includes free webinars designed to give young professionals an in-depth look into leadership skills that will help you stand out among your peers as you navigate your career: <https://www.asce.org/leadership-training/>

Additional leadership development resources offered by ASCE include:

- ASCE's Continuing Education Department offers in-person seminars, distance learning, and webinars on leadership topics: http://www.asce.org/continuing_education/
 - ASCE offers a two-day "Leadership Development for the Engineer" seminar several times throughout the year at various locations.
 - A variety of seminars and webinars are available anytime On-Demand, including "Release the Leader Within You and Others: The 7 Qualities of Effective Leaders" and "Leadership Development."
- Government Relations (GR) and Public Relations (PR) University
 - Participants in the hands-on Government Relations and Public Relations University workshops learn how to elevate or expand your Section or Branch's public policy presence at the local and state levels through the use of ASCE's tools and resources and/or receive an introduction to public relations and a how-to for working with the media. The training prepares ASCE members to successfully promote the profession to the media by covering topics including public affairs; the importance of messaging; how to interview with a reporter; and the principles of communication.
 - Sections and branches interested in GR and/or PR University should contact the Government Relations Office at govwash@asce.org or 202-789-7850 to request a program.
- Legislative Fly-In: http://www.asce.org/legislative_fly-in/
 - An intensive two-day program held every spring in Washington, DC that provides participants with an inside look at the political process.
 - Open to ASCE Key Contacts and is by application.
 - Attendees meet with elected officials to advocate for technical and professional issues.
 - A half-day pre-Legislative Fly-In workshop is offered exclusively to Younger Members to help orient them to public policy and provide additional prep-time before their Hill visits.
- Journal of Management in Engineering: <http://ascelibrary.org/meo/>
 - A publication for researchers and practitioners to share contemporary issues associated with management and leadership for the civil engineer.
- Professional Skills Series in Leadership and Management: <http://www.asce.org/supercharge-your-career/>

- A leadership training program available at a low cost to Sections, Branches and Younger Member Councils.
- ASCE provides the course content, while local groups are responsible for securing a facilitator and organizing the course locally.
- Courses provide guidance, training and practical leadership and management concepts for civil engineers with less than 10 years of experience.
- The courses cover the following topics:
 - [Career Development](#): Structure and develop your career for success
 - [Leadership](#): Manage and lead others
 - [Project Management](#): Initiate, organize, and control projects
 - [Communication](#): Learn effective written and verbal communication
 - [Change & Innovation](#): Be an agent of change and innovation
- Sections and Branches: http://www.asce.org/regions_sections_branches/
 - Gain access to additional leadership training opportunities such as the Multi-Region Leadership Conference and the Presidents and Governors Forum, and more.

Developing Leaders



A large, grey, multi-lobed thought bubble with a drop shadow is centered on the page. It contains the text 'civil engineers are global leaders building a better quality of life.' in a dark blue, bold, sans-serif font. The bubble has several smaller, overlapping circles at its base, suggesting a trail of thought or a connection to other ideas.

**“civil engineers are
global leaders
building a better
quality of life.”**





ASCE's Leadership Training



www.asce.org/leadership-training/



ASCE's Leadership Training



www.asce.org/leadership-training/

- **Power Skills Workshops**



ASCE's Leadership Training



www.asce.org/leadership-training/

- Power Skills Workshops
- **Younger Member Leadership Symposia (YMLS)**



www.asce.org/leadership-training/

- Power Skills Workshops
- Younger Member Leadership Symposia (YMLS)
- **Career Booster Webinar Series**



Additional leadership development resources:

- **Continuing Education**

Additional leadership development resources:

- Continuing Education
- **Government Relations and Public Relations University**

Additional leadership development resources:

- Continuing Education
- Government Relations and Public Relations University
- **Legislative Fly-In**

Additional leadership development resources:

- Continuing Education
- Government Relations and Public Relations University
- Legislative Fly In
- **Journal of Management in Engineering (JME)**

Additional leadership development resources:

- Continuing Education
- Government Relations and Public Relations University
- Legislative Fly In
- Journal of Management in Engineering (JME)
- **Professional Skills Series in Leadership and Management**

Additional leadership development resources:

- Continuing Education
- Government Relations and Public Relations University
- Legislative Fly In
- Journal of Management in Engineering (JME)
- Professional Skills Series in Leadership and Management
- **Sections & Branches**

- <https://www.asce.org/leadership-training/>
- <https://www.asce.org/power-skills-workshops/>
- <https://www.asce.org/event/2020/younger-member-leadership-symposia/>
- http://www.asce.org/continuing_education/
- GR & PR University – email govwash@asce.org
- http://www.asce.org/legislative_fly-in/
- <http://ascelibrary.org/meo/>
- <http://www.asce.org/supercharge-your-career/>
- http://www.asce.org/regions_sections_branches/

7.2 Ethics

TALKING POINTS:

3/2020

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 the ability to "develop courses of action to ethical dilemmas in complex situations" and to "advocate for ethical behavior in the practice of civil engineering" as skills that are required for entry into the practice of civil engineering at the professional level
- Corruption in the global construction industry is a huge economic burden, and ASCE is 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 a requirement for a minimum of 15 hours of documented continuing professional development per year, including ethics training, as a condition for maintaining status as a licensed professional engineer.

Resources

- The ASCE Code of Ethics is available online at: http://www.asce.org/code_of_ethics/. Complaint forms and information about reporting Code of Ethics violations are also available on this web page.
- The ASCE Ethics Hotline (800-548-2723 x6151) is available for members to call with ethics questions.
- The Order of the Engineer includes engineers who have received a symbolic ring after taking a voluntary oath to practice engineering with integrity and high professional standards. ASCE is a link of the Order, and Sections and Branches can host their own induction ceremonies with

assistance from ASCE Headquarters by contacting calbornoz@asce.org. See more at www.order-of-the-engineer.org or www.asce.org/Order_of_the_Engineer.

- Regular live and on-demand seminars and webinars are available. 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.
- 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 column in the monthly "Departments" section of *Civil Engineering* magazine at www.asce.org/cemagazine/, or see both current and past column topics at <http://www.asce.org/a-question-of-ethics/>.
- Ethicana is the centerpiece of the Global Anti-Corruption Education and Training Project. ASCE was a major contributor to that project and utilizes the case study video and training material to highlight ethical challenges in the global construction industry. The video can be viewed and training material downloaded for free at <http://www.ethicana.org/>.
- The Engineer's Charter is a pledge to abide by and support adoption of anti-corruption principles and a zero-tolerance policy toward bribery, fraud, and corruption. Read and sign the Charter at <http://www.asce.org/engineer-s-charter/>. Copies of the Charter in English, Spanish, Chinese, and Arabic may also be downloaded from that page. (English version attached.)
- Additional resources: 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.

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

Ethics for Civil Engineers



Sections and Branches play an important role in ASCE's efforts to

- increase members' awareness of their ethical responsibilities and
- provide them with tools to help them meet those responsibilities.



<http://www.asce.org/code-of-ethics/>

ASCE Ethics Hotline:
800-548-2723 x6151



www.ethicana.org



www.asce.org/engineer-s-charter



www.order-of-the-engineer.org



www.asce.org/order_of_the_engineer

To host a ceremony, contact
professional@asce.org

Additional ethics resources:

- Live and on-demand webinars at www.asce.org/continuing_education
- Articles by ASCE's General Counsel at www.asce.org/a-question-of-ethics
- www.asce.org/public_policy_statements
- professional@asce.org

Chapter 8 ASCE SUPPORTING PROGRAMS

8.1 ASCE Foundation

TALKING POINTS:

2020

ASCE Foundation

Summary

Summary

The ASCE Foundation is creating a culture of philanthropy to support ASCE activities that build a stronger civil engineering profession to meet tomorrow's global challenges. As civil engineers, we are natural leaders and community builders. We can further impact our world by making a gift to the ASCE Foundation that will support the civil engineers of tomorrow.

Key Points

The ASCE Foundation has committed to providing nearly \$1.0 million in programmatic support to ASCE in fiscal year 2021.

- Your gifts to the Foundation fund ASCE activities within four broad categories: Student Activities, Education, Leadership and Engineering Programs.
- Gifts in 2020 are funding the following ASCE activities:

Student Activities

- ASCE Student Conferences
- National Concrete Canoe Competition
- Workshop for Student Chapter Leaders
- AEI Student Design Competition
- CI Student Days

Leadership

- Younger Member Programs
- Diversity and Inclusion Programs
- Workshops for Section and Branch Leaders
- Multi-Regional Leadership Conferences
- Section Grants for 100th Anniversary Celebrations

Education Activities

- ExCEED Teaching Workshops
- Pre-College Outreach

- Dream Big Outreach
- Future World Vision

Engineering Programs Support

- Infrastructure Economic Policy Study
- Sustainable Infrastructure and Resiliency Initiatives
- Disaster Response Fund
- SEI Futures Fund
- EWRI Pioneers in Groundwater Award

Join the more than 4,000 civil engineers who have already demonstrated their leadership within the profession and make your charitable gift to the ASCE Foundation, this year.

Online Resources

To find out more about the ASCE Foundation at www.ascefoundation.org including:

- To learn more about the Foundation: <http://www.ascefoundation.org/about-us/>
- What programs are being funded: <http://www.ascefoundation.org/what-we-fund/>
- Different ways to give: <http://www.ascefoundation.org/ways-to-give/>
- Annual Reports: https://www.ascefoundation.org/2018_annual_report

Learn more about the Foundation, and the programs it supports, by following them on social media:

- www.facebook.com/ASCEFoundation
- <https://instagram.com/ascefoundationphil/>

Contact the Foundation staff at 703-295-6342, or ascefoundation@asce.org, with your questions.



ASCE
FOUNDATION

Your Foundation, Your Future

June 2020

ASCE
FOUNDATION

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*Trustee, **Region 10***



MISSION

The ASCE Foundation develops resources to build a stronger profession to meet tomorrow's national and global challenges.



WHAT DO WE DO

The Foundation raises money to fund ASCE programs within four broad categories:

- Education
- Leadership
- Student Activities
- Engineering Programs

EDUCATION



- ExCEEd Teaching Workshop
- Future World Vision
 - *An Immersive Storytelling Experience*
- Pre-College Outreach



LEADERSHIP

- Younger Member Leadership Symposium
- Diversity & Inclusion Programs
- Workshops for Section and Branch Leaders (MRLC)
- Student Engagement
- Leadership Training
- Section 100th Anniversary Grants
- MRLC Grants for Section, Branch, Younger Member and Student activities



STUDENT ACTIVITIES



- National Concrete Canoe Competition
- Workshop for Student Chapter Leaders
- ASCE Student Conferences
- AEI Student Design Competition
- CI Student Days

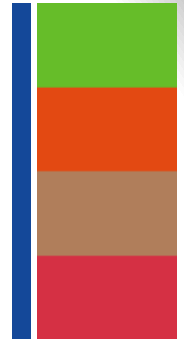
ENGINEERING PROGRAMS

- Infrastructure Economic Policy Study
- Disaster Response Fund
- Sustainable Infrastructure and Resiliency Initiatives
- EWRI Pioneers in Groundwater Award
- SEI Futures Fund



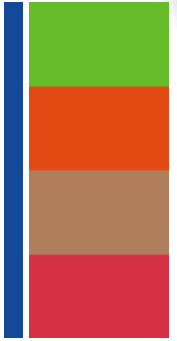
Supported Programs

Look for the following logo or statement in ASCE documents, articles and materials to identify Foundation funded programs.



MADE
POSSIBLE
WITH FUNDING FROM | ASCE
FOUNDATION

Your Leadership Role



- Give an annual gift! (100% participation goal!)
- Give a “stretch” gift as a major gift.
- Designate the Foundation as a bequest or IRA/retirement plan beneficiary.
- Support the work of the Foundation and promote philanthropy to the membership.

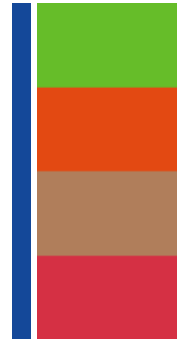


WAYS TO GIVE

- Online
- Mail
- Gift of Securities
- Employer Match
- Sustainers Circle Monthly Gift
- Legacy Gift in your estate plan
- Honorarium or Speaker Fee

Staff

- **Christine Williams, Aff.M.ASCE**
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- **Miranda Hosseini**
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- **Phil the Hedgehog**
• *Foundation Mascot*



Thank you for
your support of
the ASCE
Foundation!

