Overview

The Utility Engineering & Surveying Institute of ASCE, established on October 1, 2015, is organized under the American Society of Civil Engineers, a 501 (c) (3) non-profit association created in 1852. The purpose of this report is to present to the UESI membership a summary of the Institute’s activities and progress during the period of October 1, 2015 to September 30, 2016 (FY2016), as specified by article 6.0.1.5 of the UESI bylaws:

_The President shall make available to the membership an annual report for the preceding fiscal year within ninety (90) days of the conclusion of the subject fiscal year._

Governance

At the ASCE Board of Direction (BOD) Meeting held in Portland, OR on September 27, 2016, the ASCE BOD approved the selection of Joseph Castronovo, P.E., F. ASCE as UESI President and James Anspach, P.G. (ret), F. ASCE as President-elect starting on October 1, 2016. Two new UESI Board of Governors (BOG) were also approved, Lynn Osborn, P.E., F. ASCE and David Widmer, L.S., M. ASCE. Mr. Osborn and Mr. Widmer have replaced Kristina L. Swallow, P.E., ENV SP, F. ASCE and David F. Garber, PLS, P.E., F. ASCE who were the first BOG members to roll-off the UESI BOG. Kristina Swallow will become the ASCE President-elect on October 1, 2016 and David Garber will continue to play an active role in UESI as the Chair of UESI's Surveying & Geomatics Division. Randy Hill, P.E., F. ASCE will assume the role of UESI Past President in FY2017.

Many thanks to the outgoing members of the UESI Board for their service to UESI in its first year of operation, and welcome to the new UESI Governors!

The UESI bylaws were initially approved by the ASCE BOD at their Board meeting in New York City last October 2015 were revised and approved at the ASCE BOD on September 27, 2016. The revisions to the UESI bylaws were to strengthen the structure of the BOG and specifically the UESI BOG Officers (President, President-elect, and Past President). There will be one final UESI bylaws update, September 2017, and the Institute initiates voting by the UESI membership during Spring 2018.

The UESI Board of Governors oversees the Institute’s five active Divisions:
Pipelines Division
Executive Committee
Publications
Advisory Committee
Pipelines Infrastructure
Pipeline Location and Installation
Pipeline Planning and Design
Pipeline Safety and Risk Management
Trenchless Installation of Pipelines
Underground Pipeline Asset Management

Surveying & Geomatics Division
Executive Committee
Publication Committee
Committee on Spatial Data Accuracy
Committee on Spatial Data Applications
Surveying Committee
Education Committee

Utility Risk Management Division
Executive Committee
Utility Investigations Committee
Utility Coordination Committee
Data Management & Security Committee
Education Committee
Utility Risk Research Council

Asset Management Division (new for 2016-2017)
Executive Committee
Water Infrastructure Asset Management Committee
Energy Infrastructure Asset Management Committee
Utility Infrastructure Asset Management Committee

Standards Division
Executive Committee
Standards Committees will be formed on a case by case basis to review proposed standards submitted to the Standards Division Executive Committee.
ANNUAL REPORT TO THE UESI MEMBERSHIP FOR FISCAL YEAR 2016

UESI 2015-2016 BOARD OF GOVERNORS

Randy Hill  Joseph Castronovo  James Anspach  David Garber

David Totman  Cesar Quiroga  Kristina Swallow  Ralph Carpenter

John Galleher  Eriks Ludins
Membership

There are two ways to become an UESI member: individuals can join ASCE and select UESI as one of their Institutes (ASCE/UESI membership), or they may choose to be members of UESI only (UESI-only membership). UESI membership provides: member discount on UESI publications (25%), UESI journals subscriptions (75%), and UESI conferences ($100) and webinars registrations; the ability to nominate members for elected positions on the UESI Board of Governors, to vote in UESI elections (starting in FY2017), and to apply to join UESI technical committees and UESI local chapters. Members will also receive the UESI newsletter, and access to valuable resources and information on the UESI website.

The primary reason for becoming a member of UESI is be part of a technical community that one identifies with, interact with, and contribute to the vision and goals of the Institute.

Membership dues to join UESI are:

ASCE member –free as your first Institute; and $30/year as your secondary Institute.

UESI Member only - $135 per calendar year

Student membership is free.

UESI also has an Organizational membership. Organizational membership cost is $2,000 per calendar year.

UESI in its first year of operation has grown to over 1,500 members. The Institute is targeting membership growth to reach 3,000 by September 30, 2017.
ORGANIZATION MEMBERSHIP

Organizational Members can be any organization or company including design firms, companies, associations, government agencies, universities and other organizations that support the mission and objectives of the UESI. Organization Members will have direct access to the UESI membership, other organizational members and UESI cooperating organizations.

Organizational Member benefits include:

- Organization profile (name/logo, description, weblink) listed on the UESI Organization Member page.
- Welcome announcement with Organization name/logo and weblink in one issue of UESI e-newsletter distributed to all UESI members.
- Use of UESI Organization Member logo to promote your affiliation with UESI.
- Recognition at UESI conferences as an UESI Organization Member.
- UESI Organization Member wall plaque.
- Prominent exposure of your firm’s logo at UESI conferences.
- One reduced-fee-admission for an employee to any national UESI event.
- Discounts on UESI publications through ASCE.
- Two individual UESI-only memberships.
- A special exhibitor discount of $100 off at a UESI conference.
- Ten (10) exhibit hall passes at UESI conferences.

Conferences

UESI is responsible for the annual Pipelines Conference. The 2016 the Conference was held in Kansas City, Missouri at the Sheraton Kansas City Hotel at Crowne Center on July 17-20, 2016.

The Pipelines 2016 Conference held four (4) pre-conference workshops:

- The Large Diameter Pipeline Forum
- Manual of Practice for Horizontal Auger Boring Projects
- Manual of Practice for Water Pipeline Condition Assessment
- Pressure Pipe Prioritization, Inspection, Assessment & Management Workshop

All four pre-conference workshops were well attended and received outstanding reviews from the attendees.

The Pipelines Conference also had pre-conference business meetings that included:

- UESI Board of Governor Meeting
- UESI Pipelines Division Executive Committee (ExCOM) Meeting
- UESI Surveying & Geomatics Division ExCOM Meeting
- UESI Utility Risk Management Division ExCOM Meeting
- Task Committee on Thrust Restraint Design of Buried Pipe
- Task Committee on Sustainable Design of Pipelines
- Pilot-Tube and Other Guide Boring Methods
ANNUAL REPORT TO THE UESI MEMBERSHIP FOR FISCAL YEAR 2016

- Task Committee on Seismic Design of Buried Pipelines
- Task Committee on Pipe Bedding Backfill & Trenching Shoring
- Trenchless Installation of Pipelines Technical Committee
- Pipelines Location & Installation (PLI) Technical Committee
- Update of Pipe Bursting Manual of Practice 112
- As-Built Standards Committee Meeting
- Task Committee of the Creation of the UESI Asset Management Division

On Monday, July 18th, the Pipelines Conference started with presentations from ASCE 2016 President Mark W. Woodson, P.E., L.S., D.WRE, F. ASCE, the Mayor of Kansas City, Mayor Sly James, and keynote speaker, Terry Leeds, P.E., M. ASCE, Director of Kansas City Water Services.

On Tuesday, there was the Awards Luncheon where Henry H. Bardakjian, P.E., M. ASCE received the 2016 Stephen D. Bechtel Pipelines Engineering Award and the ASCE Pipelines Division Award of Excellence was given to Terrance L. Moy, P.E., F. ASCE. The guest speaker for the Tuesday Luncheon was Rex Hudler, the Kansas City Royals commentator and veteran professional baseball player. Tim Kennedy, P.E., M.ASCE, Pipeline Division Chair, presented the “State of the Pipeline Division” message and Randy Hill, UESI President provided an update on UESI activities during the first nine months of operation.

On Wednesday, the closing Keynote Speaker was Eleanor Allen, P.E., BCEE, M.ASCE, CEO for Water for People.

The conference had eight (8) tracks and for the first time the Pipelines Conference had a Surveying & Geomatics track to incorporate the Surveying & Geomatics and Utility Risk Management papers and presentations. All the tracks were well attended and the Surveying & Geomatics track had an average 40+ people per session. The conference also had an Ethics training session for the professional engineers in attendance that would need PDHs for ethics as part of their professional license renewal.
Photos from the 2016 Pipelines Conference

Henry H. Bardakjian receiving the 2016 Stephen D. Bechtel Pipelines Engineering Award

UESI Board Member, David Totman

Pipelines Division ExCOM with ASCE President-elect, Kristina Swallow

Richard Mueller (left), Conference co-Chair

Tim Kennedy, Pipelines ExCOM Chair

Eleanor Allen, CEO of Water for People
Publications

UESI is responsible for two technical Journals:


In addition to journal publications, UESI also publishes Manual of Practice and Conference Proceedings. Currently there are over 30 publications covering pipelines and surveying topics available through ASCE on our website.

<table>
<thead>
<tr>
<th>Advances in Underground Pipeline II</th>
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<tbody>
<tr>
<td>Trenchless Pipeline Projects</td>
</tr>
<tr>
<td>Pipeline Safety, Reliability, Rehabilitation</td>
</tr>
<tr>
<td>New Pipeline Technologies, Security, and Safety</td>
</tr>
<tr>
<td>Horizontal Auger Boring Projects</td>
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<tr>
<td>Pipe Bursting Projects</td>
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<tr>
<td>Pipe Ramming Projects</td>
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<tr>
<td>Manhole Inspection and Rehabilitation</td>
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<tr>
<td>Inspecting Pipeline Installation</td>
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<tr>
<td>Belowground Pipeline Networks for Utility Cables</td>
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<tr>
<td>Buried Flexible Steel Pipe</td>
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<td>Trenchless Renewal of Culverts and Storm Sewer</td>
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<tr>
<td>ICPTT 2009</td>
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<td>CORS and OPUS for Engineers</td>
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<tr>
<td>ICPTT 2011</td>
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<tr>
<td>Steel Penstocks (MOP 79) 2e</td>
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<tr>
<td>ICPTT 2013</td>
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<tr>
<td>Pipeline Design HDD MOP108 2e</td>
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<tr>
<td>Potable Water MOP 132</td>
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<tr>
<td>Pipelines 2001</td>
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<tr>
<td>Pipelines 2002</td>
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<td>Pipelines 2005</td>
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<td>Pipelines 2006</td>
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<tr>
<td>Pipelines 2015</td>
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<td>Pipelines 2016</td>
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</tbody>
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Below are some of the newer Institute publications.
Awards

UESI is responsible for two ASCE National Awards, they include:

**Stephen D. Bechtel Pipeline Engineering Award** - To recognize outstanding achievements in pipeline engineering, the Bechtel Foundation donated funds to support this award in honor of the contributions made by Stephen D. Bechtel, F. ASCE, to the engineering profession and for his noteworthy advancements in the design and construction of pipelines throughout the world. The award was established by the ASCE Board of Direction in October 1970.

**Surveying and Mapping Award** – To recognize the individual who has made a definite contribution during the year to the advancement of surveying and mapping either in teaching, writing, research, planning, design, construction or management. These contributions were made in the form of papers or other written presentations, or in some instances through notable performance, long years of service, or specific actions which have served to advance surveying and mapping.

A third award was established when the Pipelines Division was part of ASCE Technical Activities Committee is now part of UESI:

**Award of Excellence of the Pipeline Division** - The award, established in 1988 by the Pipeline Division, is given to a Fellow, Member or Associate Member if ASCE who is adjudged by the Executive Committee of the Pipeline Division to have given outstanding continuous and conspicuous service to the Profession, ASCE, and the Pipeline Division.
UESI Division Activities (2015-2016)

Pipelines Division

The Pipelines Conference was held in Kansas City, MO and had 775 registered attendees and generated over $657,000 in gross revenues. The conference had 67 exhibitors and 17 sponsors. Specific details on the conference can be found on the conference section of this report.

The Pipelines 2017 Conference will be held at the JW Marriott Hotel in Scottsdale, AZ in August 2017. The UESI Pipeline Division and UESI BOG approved the 2018 Pipelines Conference which will be held in Toronto, Canada.

Manual of Practice 106 – Manual of Practice for Horizontal Auger Boring Projects was completed and submitted to ASCE publications in August 2016.

The Pipelines Technical Committee on Seismic Design of Pipelines submitted a grant to NIST to develop three pre-standards:

1. Seismic Design of Buried Pipelines
2. Characterization Geo-hazards for Buried Pipeline Design
3. Product Acceptance Guidelines for Seismically Resilient Pipelines

The project, if awarded will span a three-year period. Final decision on the grant awardees will be made in February 2017.

Surveying & Geomatics Division

The Surveying & Geomatics Division activities included developing of a new Manual of Practice for Surveying Engineering that is due for release in 2017. The document contains 14 chapters of all aspects of surveying and will be used by practicing civil engineers in the field. The division is also preparing a half-day workshop at the Pipelines 2017 conference.

The Division is also working on a new surveying conference that will be held in 2018 at Cal Poly at Pomona, CA.

Finally, the Division was instrumental in developing a track at the Pipelines 2016 conference that focused on surveying issues of importance to pipeline engineers.
Utility Risk Management Division

The UESI Utility Risk Management Division (URMD) was created from a technical committee that was housed in the Construction Institute (CI). During 2015-16 year, the Division was busy developing their technical committees, working on documents that were initiated within CI, and attending utility related conferences to present and promote UESI. The following are the highlights of the past year:

- Several URMD ExCOM members are attending the AASHTO meetings in Orlando the first week of May 2016 to promote the Institute. Over 50 people expressed an interest to joining UESI.
- On May 18, 2016 the New Jersey Department of Transportation held its annual Design Summit. Over 400 representatives from every consulting firm in NJ were in attendance. A member of the URMD ExCOM gave a presentation on UESI at this summit.
- The Division worked on the Surface Utility Engineering (SUE) Prequalification’s document that targeted to be published by ASCE before the end of 2016.
- The Utility Risk Management Division ExCOM members were involved in a week-long training course on Utility Engineering that was hosted by the Trenchless Technology Center (TTC) at Louisiana Tech University (LTU). The course was great success and TTC will be working with ASCE to expand the program and to also take it other cities in the country.

UESI Chapters

UESI created five (5) Institute Chapters shown below with an additional 11 under development or looking to form a new Chapter. The creation of these Chapters will be of great assistance in promotion of UESI’s vision and goals, growth of the Institute and reaching out to the membership.

UESI Chapters Activities

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Location</th>
<th>UESI Leads</th>
<th>Status</th>
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<tbody>
<tr>
<td>Broward County</td>
<td>FL</td>
<td>Marta Alonso</td>
<td>Active</td>
</tr>
<tr>
<td>East Central Florida</td>
<td>FL</td>
<td>Alec Grkovic</td>
<td>Active</td>
</tr>
<tr>
<td>Illinois Section</td>
<td>IL</td>
<td></td>
<td>Active</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>FL</td>
<td>Chris Zavatsky</td>
<td>Active</td>
</tr>
<tr>
<td>Orange County</td>
<td>CA</td>
<td>Shawn Clark</td>
<td>Active</td>
</tr>
<tr>
<td>Texas Section</td>
<td>TX</td>
<td>Cesar Quiroga</td>
<td>Meeting in October</td>
</tr>
<tr>
<td>Philadelphia Section</td>
<td>PA</td>
<td>Brian Gieda</td>
<td>Just initiated paperwork</td>
</tr>
<tr>
<td>Minnesota Section</td>
<td>MN</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Montana Section</td>
<td>MT</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Orange County FL</td>
<td>FL</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Section</td>
<td></td>
<td></td>
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<tr>
<td>Las Vegas Section</td>
<td>NV</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Birmingham Branch</td>
<td>AL</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Hawaii Section</td>
<td>HI</td>
<td></td>
<td>Follow-up</td>
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UESI Chapters Activities (continued)

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Location</th>
<th>UESI Lead</th>
<th>Status</th>
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</thead>
<tbody>
<tr>
<td>LA Section</td>
<td>CA</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Louisville Branch</td>
<td>KY</td>
<td></td>
<td>Follow-up</td>
</tr>
<tr>
<td>Michigan Section</td>
<td>MI</td>
<td>Teresa Kline</td>
<td>Initiated effort</td>
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</table>

Communications

UESI produced a quarterly newsletter (In the Pipeline) to provide timely information to the membership regarding activities of the Institute, upcoming events and deadlines. In 2017 the Institute will establish a new Institute newsletter that will focus on activities across all the Divisions; the current Pipelines newsletter will continue to be published.

In the first year of operation, the Institute created its website. The focus of the first year was to develop content and news stories involving our members and UESI Divisions activities.

The site also includes an on-line UESI membership application and an on-line technical committee membership application. In addition to these UESI-specific areas, the integration with the ASCE site provides immediate access to other areas of general interest.

Marketing

UESI’s success requires continued recognition of the new institute and its purpose, so the plan for 2017 will be to continue to use ASCE’s support with internal marketing tools and placing advertisements in publications that our members and potential members read on a regular basis.

In addition, UESI will exhibit at conferences and will present at other organization events to reach out to potential new members.

Exhibiting

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
<th>Date</th>
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<tbody>
<tr>
<td>Pipelines 2017</td>
<td>Phoenix, AZ</td>
<td>August 6-9, 2017</td>
</tr>
<tr>
<td>ESRI</td>
<td>San Diego, VA</td>
<td>July 10-14, 2017</td>
</tr>
<tr>
<td>NASTT No-Dig</td>
<td>Washington, DC</td>
<td>April 9-13, 2017</td>
</tr>
<tr>
<td>UCT</td>
<td>Ft. Worth, TX</td>
<td>Jan 31- Feb 2, 2017</td>
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Finances

For the first two years of operation UESI will be supported by ASCE budgeting process called Program Assessment & Evaluation System (PAES). ASCE will provide funding support to UESI to operate the administrative aspects of the Institute and fund the technical divisions. In addition, funding sources from organizational memberships, secondary UESI memberships, new publications and gifts will supplement the budget as well. In FY2018, UESI will operate within the financial model of the ASCE Institutes.
Looking forward, UESI is expecting to significantly expand its program of activities and continue to grow its membership to exceed its target of 3,000 by September 2017.

Summary

UESI is clearly moving in the right direction with productive and active activities focused on the growth of the Institute and providing values to our membership and engineering community. This is mostly due to the dedication and the hard work of its volunteers and the UESI staff. I wish to personally thank the UESI staff; John Segna, P.E., F.ASCE and Frank Kim, Aff.M.ASCE for their hard work in the start-up operations of the new Institute. Also, I want to thank the Pipeline Division, the Surveying & Geomatics Division, and The Utility Risk Management Division Executive Committees and UESI Board members for their dedication and contributions to a successful inaugural year.

As you move into our second year, and under the direction of Joe Castronovo, UESI will start to establish better connections to the Pipeline, Utility and Surveying industry, and will add its newest technical Division, the Asset Management Division. Expand its continuing education program, add new specialty conferences, and grow the Institute membership.

There are many ways UESI members can help the Institute:

- By renewing your membership
- By encouraging other professionals to join UESI
- By attending the annual Pipelines Conference
- By getting involved in UESI technical committee work
- By suggesting or offering webinars and/or submitting abstracts to our conferences
- By encouraging organizations to become members (Organizational Members) of UESI
- By sending us short articles, pictures, video, and announcements for the UESI newsletter and the UESI website
- By giving a (tax deductible) voluntary contribution to UESI when renewing your membership

With strong support, engagement and participation from our members, I am confident that UESI will become stronger and the organization of choice for members in the pipelines, utility and surveying community. It was truly an honor to serve as UESI’s first President and I will continue to serve and support the Institutes in the years to come.

Respectfully submitted,

Randall C. Hill, P.E., D.WRE, F. ASCE
UESI 2016 President